stiffy

ROD SUPPORTS

100 SERIES ELECTRICAL SUPPORTS

200 SERIES LOW VOLTAGE SUPPORTS

300 SERIES CAST-IN-PLACE SUPPORTS

400 SERIES SLAB-ON-GRADE SUPPORTS

Labor Saving Solutions
Designed by professionals for professionals!

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

SINCE 1977

CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

ARROW

A DISTRIBUTOR OF STIFFY PRODUCTS

www.arrowwire.com

(800) 659-3655

Manufacturers of Engineered Support Solutions Since 1977

A division of Tomarco Contractor Specialties, we have been creating labor saving attachment solutions for over 40 years. CEAS offers installers a wide array of custom support solutions for electrical, low voltage, mechanical and plumbing applications that have re-established the bar for the industry.

Each Stiffy support is made specifically to order. Our distributors carry a limited inventory because most products are produced on a just-in-time basis. The CEAS manufacturing department has the ability to custom fabricate supports quickly and accurately. Most orders ship from our manufacturing facility within 24 to 48 hours from the time the order is received. This enables contractors to custom tailor their support packages for each project.

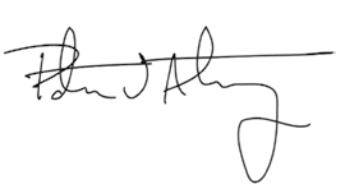
CEAS is an affiliate of ISAT Seismic Bracing, an industry leader in pre-engineered seismic bracing systems for Mechanical, Electrical and Plumbing contractors. ISAT employs an extensive engineering and technical support staff, including Structural Engineers with stamps in most states.

CEAS products work on jobsites because they are designed on jobsites. When unique product applications arise, CEAS has the ability to react quickly with prototypes and provide engineered product submittals that are approved by a Structural Engineer.

During the preconstruction phase of your next project, contact your local CEAS distributor. Whether it is overhead, below a computer floor, mounted to a wall or cast into concrete, CEAS will help to create the most labor saving and cost effective engineered attachment solution specific to your application.

We look forward to working with you on your next project.

Respectfully,



Patrick Armstrong
Vice President
CEAS Attachments

Table of Contents

Product Index - Stiffy 100 Series Rod Supports

Fig. 100 thru 119 - Single Hung Stiffy Supports

Fig. 100
Stiffy Straight Rod

Fig 101
Stiffy Stacker

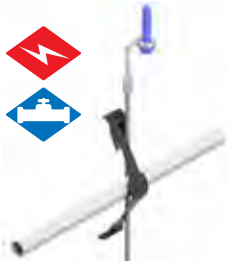


Fig 102
Threaded Stiffy

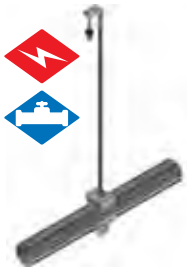


Fig 104
Threaded Stiffy
with Hanger

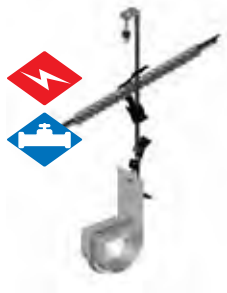


Fig 105
Threaded Stiffy with Hard
Concrete Footprint

Fig 106
Stiffy Temp
Power Support

Fig 107
Stiffy Snap
Clip

Fig 108
Stiffy Insulated
Pipe Stacker

Fig 109
Stiffy Clip-on
Insulated Pipe
Stacker

Fig 110
Stiffy Threaded
Insulated Pipe
Stacker

Fig 111
Stiffy SER
Stacker

Fig. 120 thru 130 - Stiffy Trapezes

Fig 120
Stiffy Crossbar
Trapeze

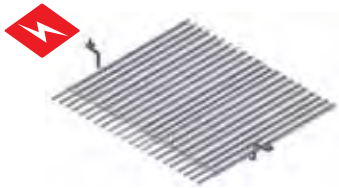


Fig 121
Stiffy Trapeze

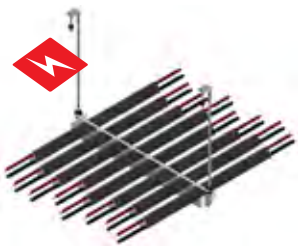


Fig 123
Stiffy Cradle
Crossbar Trapeze

Fig 124
Stiffy Snap-in
Trapeze

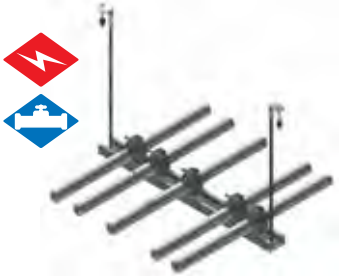


Fig 125
Stiffy Strut
Trapeze

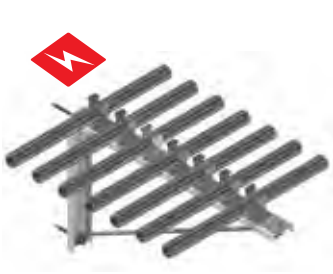


Fig 127
Stiffy Wall Mounted
Snap-in Trapeze

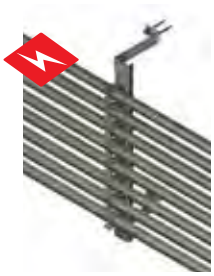


Fig 128
Stiffy Snap-in
Wall Rack

Fig 129
Stiffy HD Crossbar
Trapeze

Stiffy Trapezes (Cont.)

Fig 130
Stiffy HD 2-Tier
Crossbar Trapeze

Fig 131
Stiffy Snap Trapeze

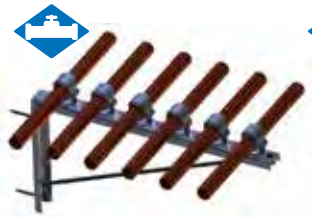


Fig 132 - Stiffy Wall
Mount Snap Trapeze

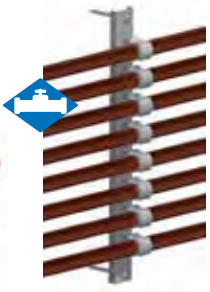


Fig 133
Stiffy Snap
Wall Rack

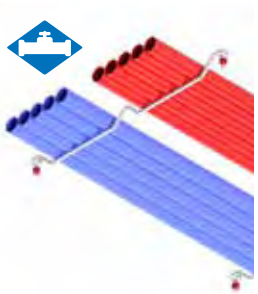


Fig 134
Stiffy PEX
Piping Trapeze

Fig. 140 thru 145 - Stiffy Box Supports

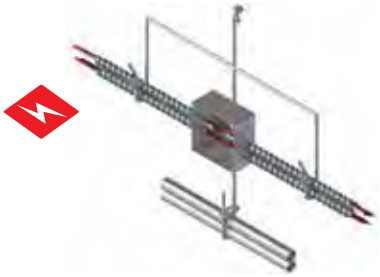


Fig 140
Stiffy Multi Stacker Support

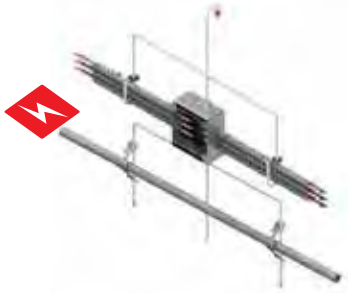


Fig 144
2-tier Stiffy Multi Stacker Support

Fig. 160 thru 199 - Misc Supports

Fig 160
Stiffy Stud
Spanner

Fig 161
Stiffy Gripper

Fig 162
Fixed Stiffy
Stud Spanner

Fig 163
Adjustable
Stud Spanner

Fig 180
Stiffy Round
Duct Support

Fig 190
Push Rod
Pre-Fabricated Trapeze

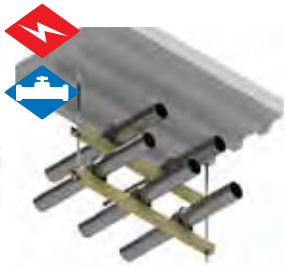


Fig 191
Push Rod 2-Tiered
Pre-Fabricated Trapeze

Fig 191
Push Rod Single
Clevis or J Hanger

Fig 195
Stiffy Gull Wing Line
Set Support

Fig 196
Stiffy Line
Set Support

Product Index - Stiffy 200 Series Rod Supports

Fig. 200 thru 219 - Stiffys with Comfort Cradles

Fig 200
Stiffy with
Comfort Cradle

Fig 201
Stiffy Clip-on
Comfort Cradle

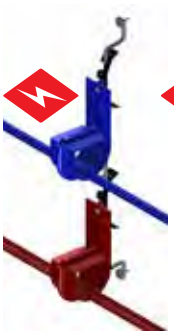


Fig 202
Stiffy Wall
Rack Support

Fig 203
Stiffy Fixed Wall
Rack Support

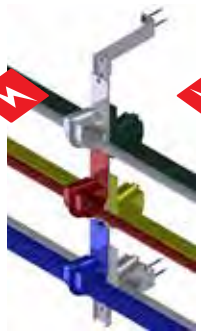


Fig 204
Stiffy Double Wall
Rack Support

Fig 205
Stiffy "Shorty"
Comfort Cradle

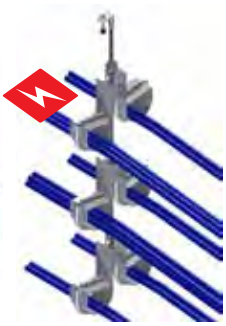


Fig 206
Stiffy Data Tree

Fig. 220 thru 239 - Low Voltage Trapezes

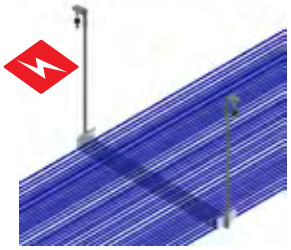


Fig 220
Stiffy Low Voltage
Trapeze

Fig 222
Stiffy LV Triangle
Trapeze

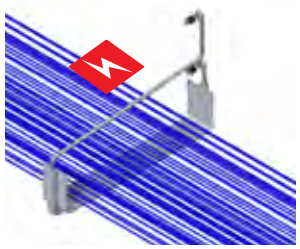


Fig 223
Stiffy Wall Mount
Trapeze

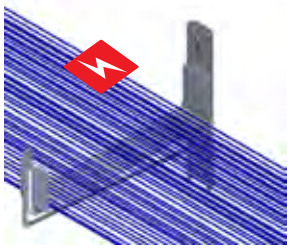


Fig 224
Stiffy Wall Mount
Trapeze

Fig. 240 thru 259 - Misc Low Voltage Supports

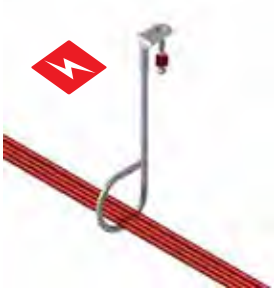


Fig 240
Bridle Ring Stiffy

Fig 241
Stiffy D-Ring

Fig 250
Stiffy Wall Sleeves

Fig 251
Stiffy DAS Antenna
Support

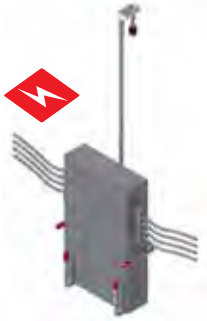


Fig 252
Stiffy Module
Support

Product Index - Stiffy 300 Series Rod Supports

Fig. 300 thru 339 - Form Poured Cast-in-Place Stiffy Supports

Fig 300
Cast-in-Place
Stiffy Tree

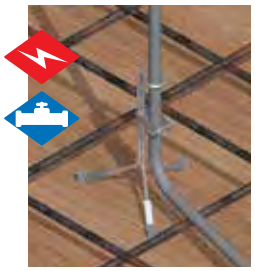


Fig 301
Single Loop CIP
Stiffy Tree

Fig 302
Double Loop
CIP Stiffy Tree

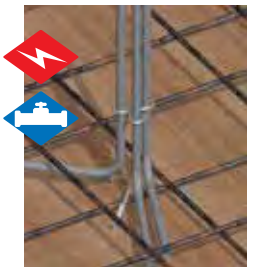


Fig 303
Triple Loop
CIP Stiffy Tree

Fig 304
Single Loop CIP
Stiffy with "V"

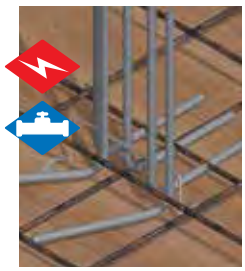


Fig 310
CIP Stiffy
Trapeze

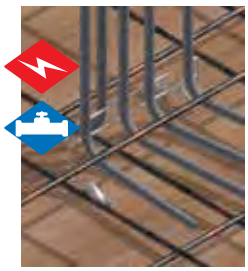


Fig 311
CIP 2 Tiered
Stiffy Trapeze

Fig 312
CIP Stiffy
Loop Trapeze

Fig 313
CIP Stiffy 2 Tiered
Loop Trapeze

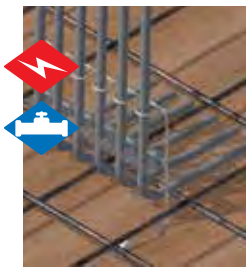


Fig 314
Stiffy Snap-in
CIP Trapeze

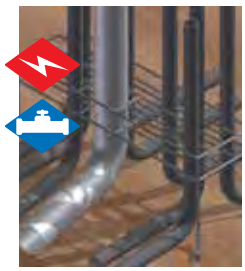


Fig 316
CIP Stiffy Cage

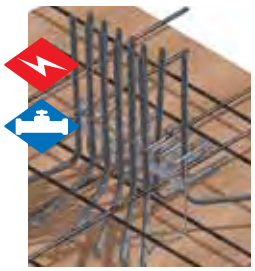


Fig 317
Stiffy Snap-in
Back-to-Back
CIP Trapeze

Fig 320
CIP Stiffy
Street
90 Support

Fig 321
CIP Stiffy
Billy Chair
Support

Fig 322
Table Top
"Turtle" Box
Support

Fig 323
Stiffy Rebar
Hook CIP
Box Support

Fig 324
Stiffy CIP Channel
Box Support

Fig 330
Stiffy Cast-in-Place
Deck Sleeve

Fig 331
Stiffy Single Row CIP
Deck Sleeve

Product Index - Stiffy 300 Series Rod Supports

(Continued) Fig. 300 thru 339—Form Poured Cast-in-Place Stiffy Supports

Fig 332
Stiffy Double Row CIP
Deck Sleeve

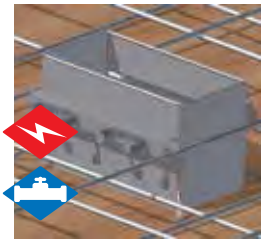


Fig 333
Stiffy Cast-in-Place
Strut Block Out

Fig 336
Stiffy Anchor
Bolt

Fig 337
Stiffy Cast-in-Place
Strut Anchor

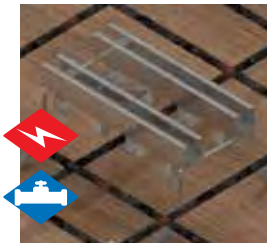


Fig 338
Stiffy Cast-in-Place
Double Strut Anchor

Fig. 340 thru 379—Steel Deck Cast-in-Place Stiffy Supports

Fig 340
Steel Deck Stiffy
Tree

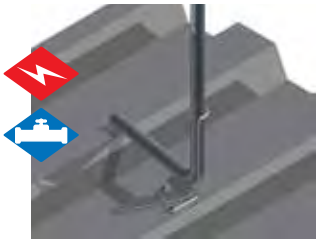


Fig 341
Steel Deck Stiffy
Tree with Loop

Fig 351
Steel Deck CIP 2
Tiered Stiffy Trapeze

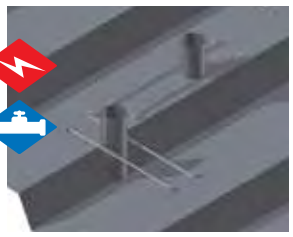


Fig 370
Stiffy Metal
Deck Sleeve

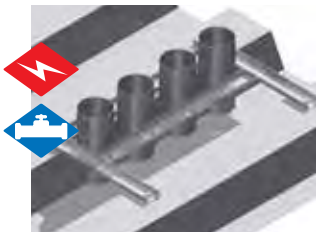


Fig 371
Stiffy Single Row
Metal Deck Sleeve

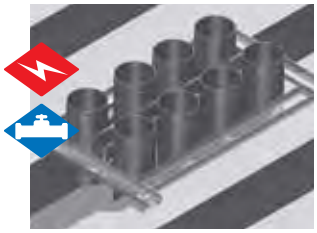


Fig 372
Stiffy Double Row
Metal Deck Sleeve

Fig. 380 thru 399—Steel Deck Drop thru Supports

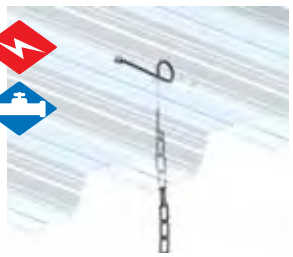


Fig 380
Cast-in-Place Stiffy
Jack Chain Loop

Fig 381
Cast-in-Place Stiffy Straight
Rod with Pigtail Loop

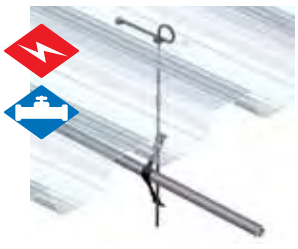


Fig 382
Cast-in-Place Stiffy Threaded
Rod with Pigtail Loop

Product Index - Stiffy 400 Series Rod Supports

BUY AMERICAN ACT COMPLIANT

Fig. 400-409 Slab-on-Grade Stiffy Stake Supports

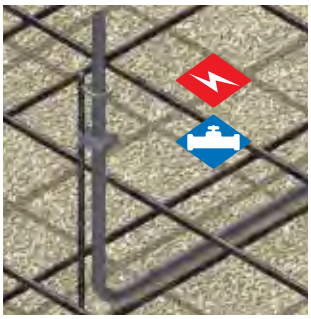


Fig. 401
Single Loop

Fig. 402
Double Loop

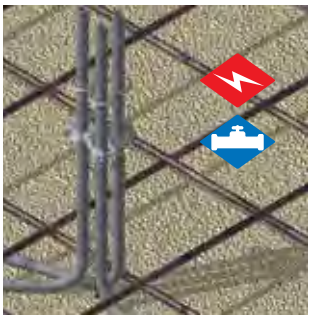


Fig. 403
Triple Loop

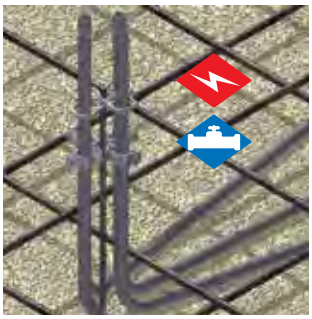


Fig. 404
Quad Loop

Fig. 410-419 Slab-on-Grade Stiffy Trapeze Supports

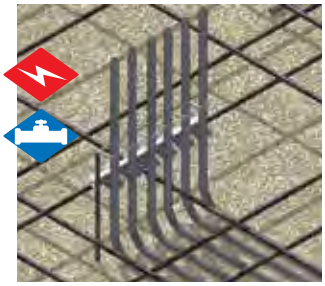


Fig. 410
Stiffy Snap-in
Slab-on-Grade Trapeze

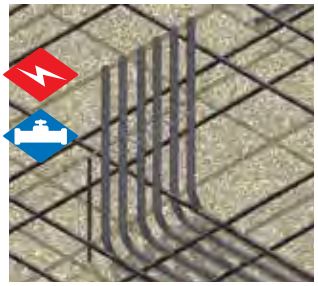


Fig. 414
Stiffy Single Loop
Slab-on-Grade Trapeze

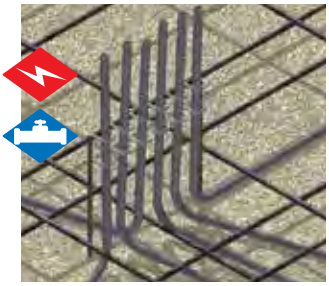


Fig 415
Stiffy Do.uble Loop
Slab-on-Grade Trapeze

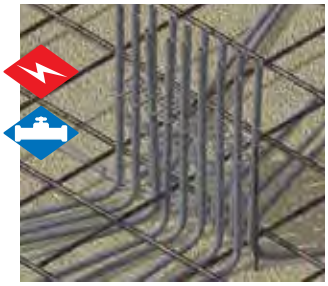


Fig. 417
Stiffy Back-toBack
Slab-on-Grade Trapeze

Fig. 420-460 Slab-on-Grade Other Supports

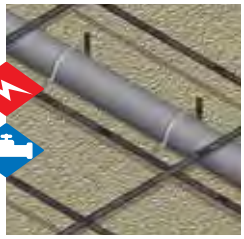


Fig. 420 Stiffy
Slab-on-Grade Candy
Cane Pipe Support

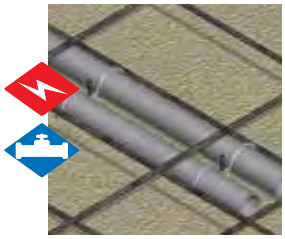


Fig. 421 Stiffy
Slab-on-Grade Double
Candy Cane Pipe Support

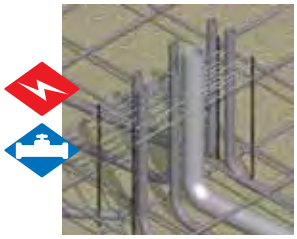


Fig. 430
Stiffy Slab-on-Grade
Panel Cage Support

Fig. 450
Stiffy Slab-on-Grade
Single Column
Trench Rack

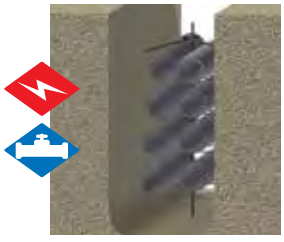


Fig. 451
Stiffy Slab-on-Grade
Double Column
Trench Rack

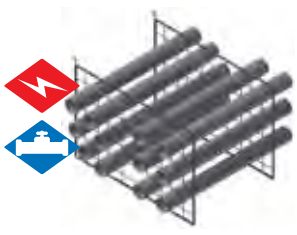


Fig. 452
Stiffy Trench Rack

Just Push It!!! PUSH ROD HANGER

Patented

The Original
Blue Banger Hanger
ICC ESR3599

US Pat #'s
6,240,697 B1
7,093,400 B1

Revolutionary patented insert design beyond the Blue Banger Hanger

The Push Rod Hanger Inserts were engineered from the original, patented Blue Banger Hanger. That's right, the insert that changed the anchoring industry just got even better. The Push Rod Overhead Attachment System features a revolutionary patented auto-lock chamber that locks in threaded rod. Installers will quickly realize the labor savings benefits of simply pushing threaded rod into the Push Rod Auto-Lock Insert instead of turn threading. But wait, it gets even better, the threaded rods themesleves include patented Engagement Markings that confirm full engagment. No second guessing, no installer error. Plus, just like the Blue Banger Hanger cousin, Push Rod Hanger's reduce inventory because each insert accomodates multiple rod sizes that can be changed after installation.

How's that for innovation?

To order Push Rods and pre-fabricated components turn to pages 86 through 91

Just Push It!!!

1/2" 3/8"

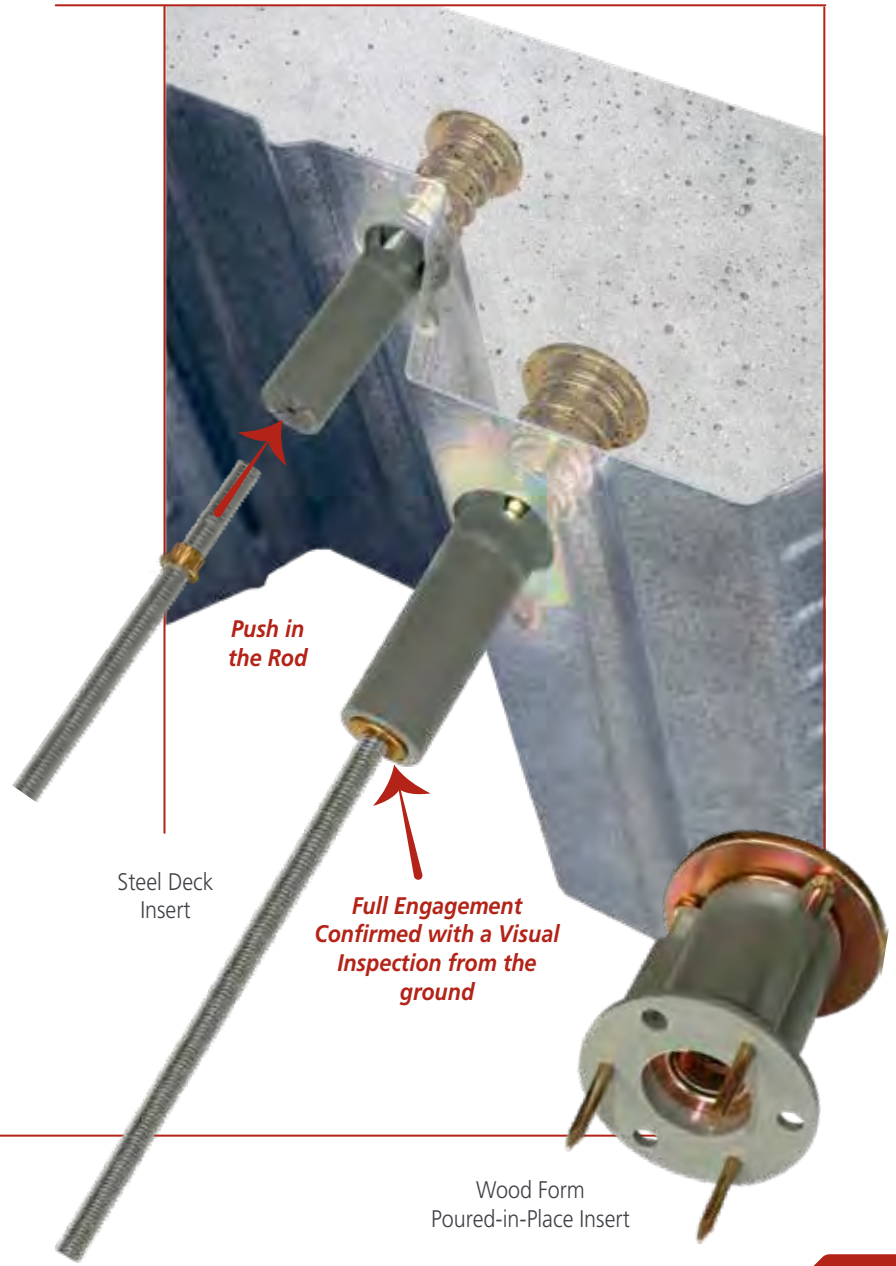
Push to engage, reverse thread to change rod sizes.

Factory pre-asssembled rods with precisely placed Engagement Markings. CEAS Assemblies with Engagement Markings MUST be used with the PUSH ROD.

Load values achieved when Engagement Marking is flush up against protruding plastic sleeve.

Takes the guess work out of installation.

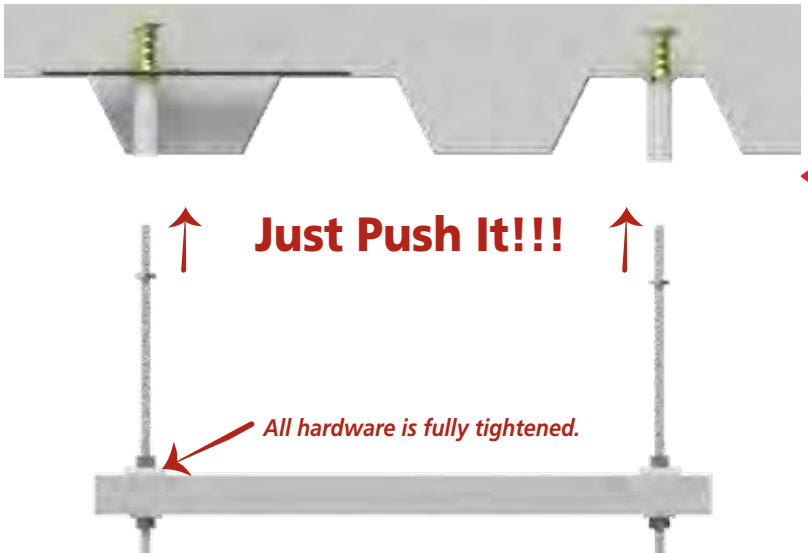
NO INSTALLER ERROR.



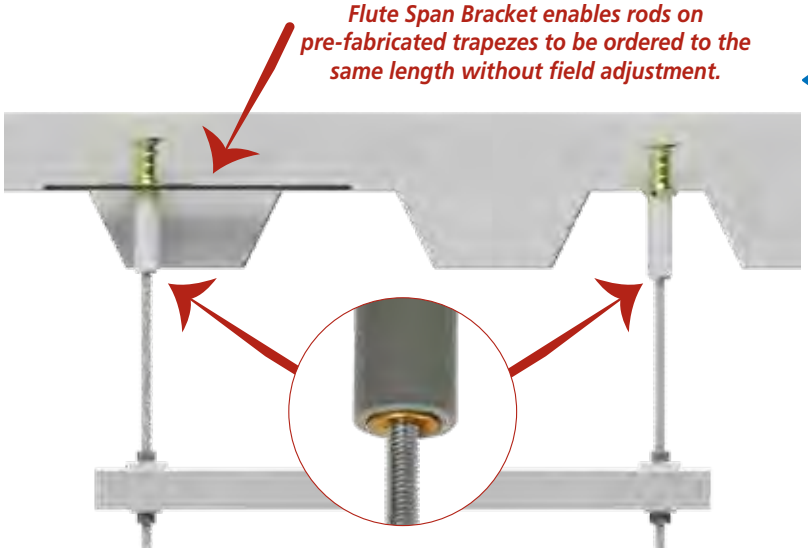
Revolutionary Push Rod Overhead Attachment System

How do you reduce field installation labor costs?
Use the Push Rod Overhead Attachment System!!!

Hanger material arrives on the jobsite ready to be installed. No time wasted assembling components. ***Just grab it and Push It!***



Trapezes and Assemblies can be labeled to correspond with specific locations on drawings.



Engagement Confirmed

US Pat. #9,181,691 B2

SEISMICALLY QUALIFIED FOR USE IN CRACKED CONCRETE

Patented Push-Lock Concrete Anchor Inserts

PRSDI - Steel Deck Insert

Push Rod For Pre-Poured Concrete Steel Deck Inserts

To order Push Rods and pre-fabricated components turn to pages 86 through 91

PRSDI's are installed prior to pouring, reducing installation and material costs and increasing strength values. (Ideal for gravity & seismic anchorage)

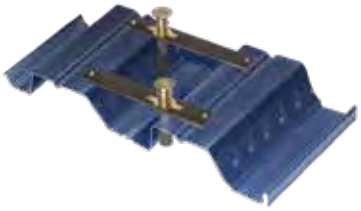
Just Push It!!!
- No threading - simply PUSH ROD (Installs fast and secure)
- Saves labor costs
- Fits both 3/8" and 1/2" threaded rod
- Eliminates the need and cost of couplings

CEAS Engagement Markings
- Patented Engagement Markings confirm full engagement (eliminates guessing)
- Fits both 3/8" and 1/2" Threaded Rod
- Eliminates the need and cost of couplings

Machined Steel Insert with Large Flanged Head
- Provides excellent shear values for overhead attachments
- Insert installed height of two inches can be used through or between ribs
- Patented grooved insert body prevents component seperation even if the plastic flute is broken off prior to pour

Three Inch Plastic Sleeve
- Keeps internal threads clean
- Extended length makes insert easy to locate even with fireproofing below the deck
- Plastic sleeve provides guidance to align threaded rod with internal auto-lock chamber
- UL plenum rated for use in air handling spaces

Optional Flute Span Bracket
- Allows the PRSDI to be installed at the side of the flutes
- Enables the PRSDI to realize the higher capacity that is achieved in the upper flute
- Positions all inserts on the project at the same elevation to eliminate multiple thread rod lengths and improve the accuracy of off site prefabrication



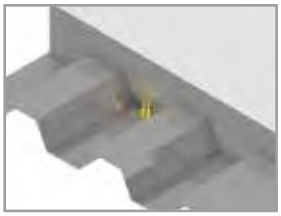
SEISMICALLY QUALIFIED FOR USE IN CRACKED CONCRETE

It doesn't get any easier than this...

Easy Installation (See Installation Tools on Page 91)

Drill it

Bang it



Pour Concrete

Push Rod

Confirm Engagement

- The hammer blow must force the plastic sleeve thru the decking so it fully grips the bottom side to hold the insert vertical.
- The spring pressure on the deck washer expands the plastic flange to create resistance so the insert withstands pre-pour impact and remains upright.
- Push to Engage. Factory pre-asssembled rods with precisely placed Engagement Markings confirm full engagement.
- Load values achieved when indicator strip is up against protruding plastic sleeve.

PRPIP - Poured-in-Place Insert

Push Rod For Wood Form Concrete Decks

To order Push Rods and pre-fabricated components turn to pages 86 through 91

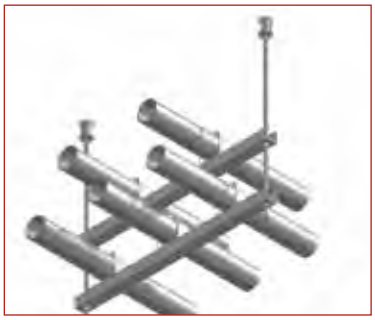
Pour-in-Place inserts are used on wood form poured decks and installed prior to pouring concrete, reducing installation and material costs. Nails Easily Break off

Just Push It!!!
- No threading - simply PUSH ROD (Installs fast and secure)
- Saves labor costs
- Fits both 3/8" and 1/2" threaded rod
- Eliminates the need and cost of couplings

CEAS Engagement Markings
- Patented Engagement Markings confirm full engagement (eliminates guessing)
- Fits both 3/8" and 1/2" Threaded Rod
- Eliminates the need and cost of couplings

Machined Steel Insert with Large Flanged Head
- Provides excellent shear values for overhead attachments
- Insert installed height of two inches complies with typical design specifications

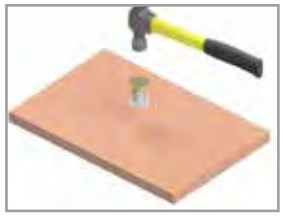
Plastic Attachment Inserts with Nails
- Grey plastic ring acts as insert locator when forms are removed
- Plastic ring creates countersunk recess to keep threads clean from pour residue
- Nails are easily removed with a hammer
- UL plenum rated for use in air handling spaces



No drilling concrete, No using rod couplers, No special inspection, No installer error!

SEISMICALLY QUALIFIED FOR USE IN CRACKED CONCRETE

Easy Installation (See Installation Tools on Page 91)

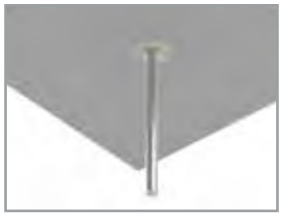


Hammer to Wood Form

Pour Concrete

Break off Nails

Push Rod



Confirm Engagement

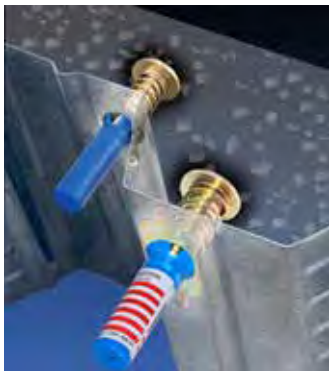
- Hammer PRPIP to wood deck before the concete pour. The nails hold the insert in place.
- Once the wood deck is removed, the PRPIP nails can easily be removed with a hammer blow.
- Push to Engage. Factory pre-asssembled rods with precisely placed Engagement Markings confirm full engagement.
- Load values achieved when indicator strip is up against protruding plastic sleeve.

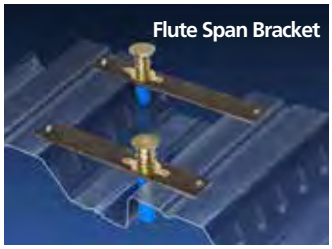
The Original, Patented

BLUE BANGER HANGER

US Pat #'s
6,240,697 B1
7,093,400 B1

- *No special inspection*
- *Installs fast and secure*
- *Fully cracked concrete tested for vertical and dynamic seismic loading*
- *Backed By: ICC Report ESR-3599 Granted Under AC446*





SDI - Steel Deck Insert

For Pre-Poured Concrete Steel Deck Inserts

SDI's are installed prior to pouring, reducing installation and material costs and increasing strength values.

See Installation Tools on Page 91

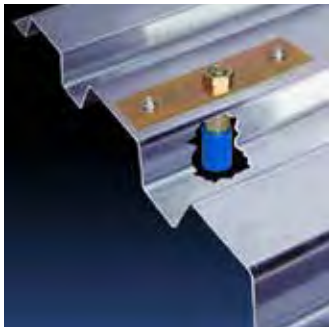
PART#	PART #	HOLE DIA	BOX QTY
HEA-SDI143812	1/4", 3/8" and 1/2" Steel Deck Insert	13/16" - 7/8"	100
HEA-SDI381258	3/8", 1/2" and 5/8" Steel deck Insert	1-1/8" - 1-3/16"	50
HEA-SDI5834	5/8" and 3/4" Steel deck Insert	1-3/16" - 1-1/4"	50
HEA-FSB1	Flute Span Bracket for SDI143812		Bulk
HEA-FSB2	Flute Span Bracket for SDI381258		Bulk
HEA-FSB3	Flute Span Bracket for SDI5834		Bulk

PIP - Poured-in-Place Insert

For Wood Form Concrete Decks

Poured-in-Place inserts are used on wood form poured decks and installed prior to pouring concrete, reducing installation and material costs.

PART#	PART #		BOX QTY
PIP143812	1/4", 3/8" and 1/2"	Poured-in-Place Insert	200
PIP381258	3/8", 1/2" and 5/8"	Poured-in-Place Insert	150
PIP5834	5/8" and 3/4"	Poured-in-Place Insert	150



RDI - Roof Deck Insert

For No-Concrete Steel Decks

Roof Deck Insert anchors have a low profile attachment plate that does not protrude into roofing membrane. Fully assembled for field installation.

PART#	PART #	HOLE DIA	BOX QTY
RDI143812	1/4", 3/8" and 1/2" Roof Deck Insert	13/16" - 7/8"	50

Add "BAA" to the end of the part number for the Buy American Act compliant insert

Patented Concrete Anchor Inserts

SEISMICALLY QUALIFIED FOR USE IN CRACKED CONCRETE

oshpd

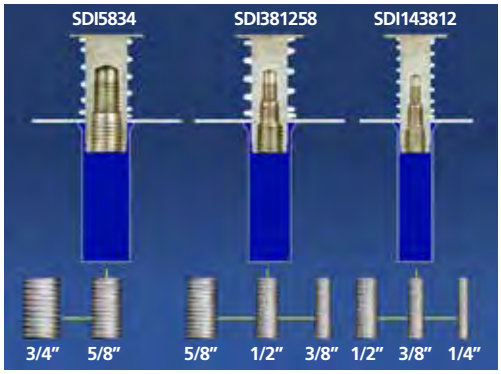
FM Approved

UL Approved File Number E240801

ICC ES

BUY AMERICAN ACT COMPLIANT

- No drilling concrete,
- No using rod couplers,
- No special inspection
- No installer error!



ELECTRICAL/LOW VOLTAGE APPLICATIONS

MECHANICAL/PLUMBING APPLICATIONS

stiffy tool

Overhead Attachment Tool for Concrete, Wood and Steel Applications

The newly remastered Stiffy .27 caliber powder actuated tool makes overhead attachment applications easier than ever.

Shown with the Stiffy Fixed Pole Tool and a Stiffy Straight Rod Support

Designed by Professionals for Professionals

Ball Lock Design for User Safety

NOISE

Suppressed Noise is Perfect for Hospitals, Tenent Improvement, Occupied or Enclosed Areas Without Distruption or Hearing Discomfort

Stiffy Fig 100 | Wedgy Fig 600 | Stiffy Fig 105 | Wedgy Fig 641

Overhead Attachment Solutions

Stiffy Performance Advantages

- Powerful - Popular .27 caliber 10 shot strip loads provide all the drive-ability needed for professional applications.
- Minimal field maintenance and no tools are required to remove nosepiece and piston to clean the barrel.
- Heavy duty manual indexing lever provides positive feed engagment for reliability and eliminates load skipping.
- Compact & lightweight design (under 5 lbs) is far easier to manuever and easily fits in tight spaces.
- Durable ringless piston with 1-1/2" overdrive prevents breakage in thick fireproof applications.
- Actuated by an upward pole impact motion against work surface.
- Fixed length or telescoping pole tools easily remove to change lengths or for lockable tool storage to prevent theft.

Superior DRIVE-ABILITY without the NOISE!

Shown with Stiffy Telescoping Pole Tool plus Side Car and Wedgy Cable Support

Stiffy Side Car

- Patent pending Stiffy Side Car saves time and labor
- Keeps plenty of pre-assembled cable supports right on the pole so you can work quickly and efficiently
- Works with both telescoping and fixed length Stiffy overhead pole tools

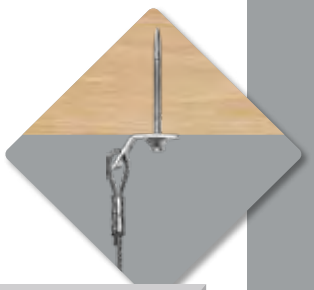
Stiffy Telescoping Pole Tool

- Easy installation from the ground for high reach applications (safer than ladders)
- Aircraft quality aluminum
- Ergonomic foam comfort grip
- Choose 2 or 3 stage (3'-6', 6'-12', 6'-18', 8'-24')

Stiffy Fixed Length Pole Tool

- Provides easy installation from the ground (safer than ladders)
- Reinforced fiberglass with ergonomic rubber comfort grip
- Choose standard fixed lengths (4', 6', 8', 10', 12')

Stiffy Timberpin Nosepiece



- Fastest way to secure to wood structures
- 2-1/2" extended nosepiece

DESCRIPTION	ORDER #	DESCRIPTION	ORDER #
Stiffy Tool	STTOOL	Fixed Length Stiffy Pole	
Stiffy Timber Pin Nosepiece	ST212	4' Fixed Length Pole	POLV4
Stiffy Side Car	STSC	6' Fixed Length Pole	POLV6
Telescoping Stiffy Pole		8' Fixed Length Pole	POLV8
2 Stage 3' - 6'	POLTV36	10' Fixed Length Pole	POLV10
2 Stage 6' - 12'	POLTV612	12' Fixed Length Pole	POLV12
3 Stage 6' - 18'	POLTV618	Custom Length	Special Order
3 Stage 8' - 24'	POLTV824		

BUY AMERICAN ACT COMPLIANT

SAVES TIME
SAVES LABOR

Patented POWDER-PUFF

Powder Actuated Tool & Accessories

(Pat # 7,575,139 B2)

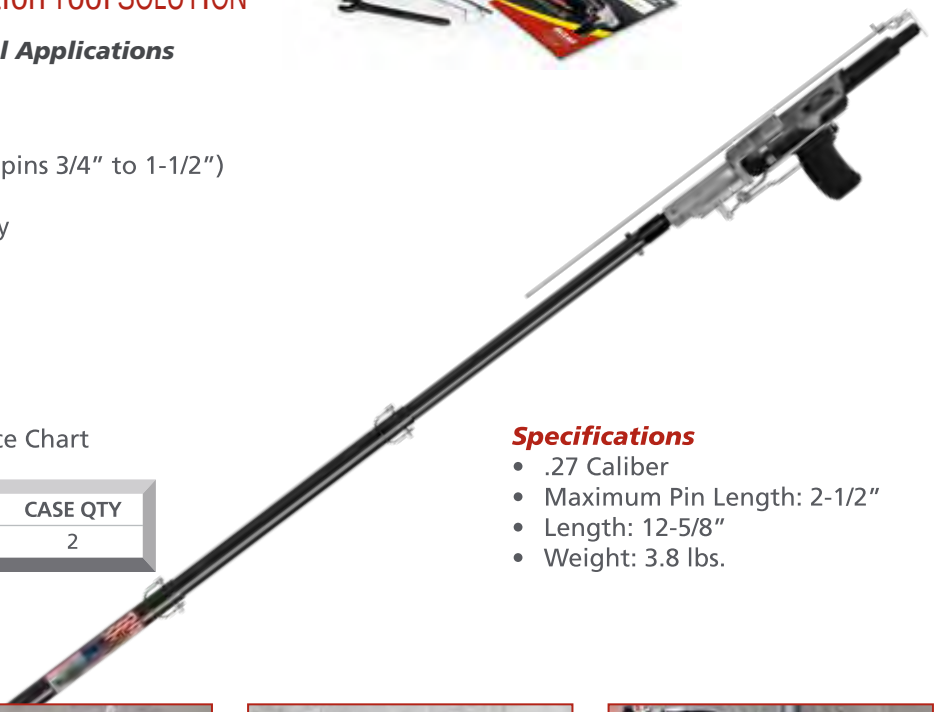
The SILENT, Indoor, Construction Tool SOLUTION

Concrete, Masonry, Wood and Steel Applications

Kit Includes

- PowderPuff Powder Actuated Tool
- Red Universal Nosepiece (For Drivepins 3/4" to 1-1/2")
- Tool Belt and Holster
- Storage Tool Box with Pull Out Tray
- Safety Glasses
- Flat Head Screwdriver Tool
- Open End Wrench
- Cleaning Brush
- Cleaning Fluid
- Instruction Manual
- Nosepiece/Drivepin Quick Reference Chart

DESCRIPTION	PART #	BOX QTY	CASE QTY
PowderPuff Kit	HEA-PPKIT	1	2



Specifications

- .27 Caliber
- Maximum Pin Length: 2-1/2"
- Length: 12-5/8"
- Weight: 3.8 lbs.

SQUEEZE NUTS

For Channel and Strut

Fits All Size Channels

Threadfirst

CROSS SECTION
1 Tool de-burrs 1/4", 3/8" and 1/2" ATR

Before

Threadfirst Tool

After

Concrete Connections

Illustrations are not to scale.

*001 & *002
Pin with 3/4" Embedment and 90° Footprint

*01 & *011
Pin with 1" Embedment and 90° Footprint

*02 & *021
Pin with 1-1/4" Embedment and 90° Footprint

*13
Pin with PowderPuff Standoff and 90° Hard Concrete Footprint

*03
Wedge Anchor with 90° Footprint

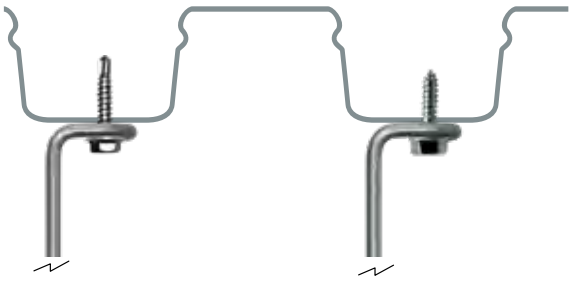
*04
Tapcon Screw Anchor with 90° Footprint

Option#	Description	Part #	Substrate	Embed.	Reference	Tension	Shear
*001	Powers 1" x 0.145" Smooth Shank (0.300" Head Dia.)	50090	3000psi NWC Concrete	3/4"	ESR-2024	95	125
*002	Powers 1" x 0.157" Spiral Shank (8mm Head Dia.)	50205	2500psi NWC Concrete			120	170
*01	Powers 1-1/4" x 0.145" Smooth Shank (0.300" Head Dia.)	50092	3000psi NWC Concrete	1"		130	155
			3000psi LWC Over 3" Metal Deck			120	290
*011	Powers 1-1/4" x 0.157" Spiral Shank (8mm Head Dia.)	50208	2500psi NWC Concrete			195	245
			3000psi LWC Over 1-1/2" Metal Deck			200	410
			3000psi LWC Over 3" Metal Deck			120	305
*02	Powers 1-1/2" x 0.145" Smooth Shank (0.300" Head Dia.)	50094	3000psi NWC Concrete	1-1/4"		155	165
			3000psi LWC Over 3" Metal Deck			190	340
*021	Powers 1-1/2" x 0.157" Spiral Shank (8mm Head Dia.)	50207	2500psi NWC Concrete			310	385
			3000psi LWC Over 1-1/2" Metal Deck			210	415
			3000psi LWC Over 3" Metal Deck			140	370
*03	1/4" x 3-1/4" Powers SD1 Wedge Anchor	7404SD1	3000psi NWC Concrete	1-1/2"	ESR-2818	1449	601
			3000psi LWC Over 3" Metal Deck			869	601
*031	3/8" x 3" Powers SD1 Wedge Anchor	7413SD1	3000psi NWC Concrete	2"		435	490
			3000psi LWC Over 3" Metal Deck			261	294
*04	1/4" x 2-1/4" Tapcon Screw Anchor (1/4" Dia. Hole in Concrete Required)	24292	3000psi NWC Concrete	2"	ESR-2202	183	341
			3000psi LWC Over 3" Metal Deck			110	249
*041	3/8" x 3" Tapcon Screw Anchor (3/8" Dia. Hole in Concrete Required)	50403	3000psi NWC Concrete	2-3/4"		358	464
			3000psi LWC Over 3" Metal Deck			215	298
*13.1	PowderPuff Standoff with Powers 1" x 0.157" Spiral Shank (8mm Head Dia.)	50205	2500psi NWC Concrete	3/4"	ESR-2024	120	170
*13	PowderPuff Standoff with Powers 1-1/4" x 0.157" Spiral Shank (8mm Head Dia.)	50208	2500psi NWC Concrete	1"		195	245
			3000psi LWC Over 1-1/2" Metal Deck			200	410
			3000psi LWC Over 3" Metal Deck			120	305
*13.2	PowderPuff Standoff with Powers 1-1/2" x 0.157" Spiral Shank (8mm Head Dia.)	50207	2500psi NWC Concrete	1-1/4"		310	385
			3000psi LWC Over 1-1/2" Metal Deck			210	415
			3000psi LWC Over 3" Metal Deck			140	370

Footnotes:
1- Allowable loads listed are based on the capacities listed on the ICC report for the applicable substrate.

Steel Connections

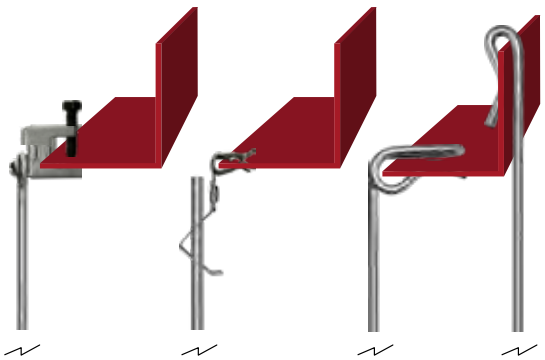
Illustrations are not to scale.



*06
HWH Self Drilling Screw with 90° Footprint

**07
HWH Sharp Point Screw with 90° Footprint

*061 HWH Self Drilling Screw through a 2hr rated wall



*09
Wide Mouth Beam Clamp with Sidemount Footprint

*12
360° Hammer-on Beam Clamp with Straight Rod

*16 Stiffy
Hammer-on Beam Clamp

*17 Stiffy
Pull Down Beam Clamp

Option#	Description	Part #	Substrate		Tension	Shear
*06	#10 x 1-1/4" HWH Self Drilling Screw	HWHT10114	18g Sheet Metal	ESR-1408	148	326
			16g Sheet Metal		194	398
			14g Sheet Metal		280	412
*061	#14 x 2" HWH Self Drilling Screw	HWHT104400	18g Sheet Metal		107	288
			16g Sheet Metal		206	517
			14g Sheet Metal		281	613
*07	#10 x 1-1/4" HWH Sharp Point Screw	HWHS10114	20g Sheet Metal	Calcs	105	222
*09	WIDE MOUTH BEAM CLAMP	BC	1/2" Max Steel Flange	UL	100	
*12.1	360° HAMMER-ON BEAM CLAMP	70824	1/8" - 1/4" Steel Flange		200	
*12.2		70858	5/16" - 1/2" Steel Flange			
*12.3		708912	9/16" - 3/4" Steel Flange			
*16	STIFFY HAMMER-ON BEAM CLAMP	SFSH	1/8" - 3/4" Steel Flange		200	
*17	STIFFY PULL DOWN BEAM CLAMP	SFSPD	1/8" - 5/16" Steel Flange		233	

Wood Connections

Illustrations are not to scale.

*07
HWH Sharp
Point Screw with
90° Footprint

*08
Timberpin
with 90°
Footprint

*14
Stiffy Wood
Pull Down
Footprint

*18
Hex Lag
with 90°
Footprint

*18
Hex Lag with
Sidemount
Footprint

Option#	Description	Part #	Substrate	Reference	Tension
***07**	#10 x 1-1/4" HWH Sharp Point Screw	HWHS10114	2" x 4" Douglas Fir (3/4" Embedment)	Calcs	109
***08**	CEAS Timberpin 2-1/2" x 0.169 Ring Shank Nail with 0.300" Head Diameter	SF90TP250	Min 5" x 11" Glulam Beam	UL	100
			Min 2" x 6" Douglas Fir		
***14**	Stiffy Wood Pull Down Footprint	SFWPD	2" Nominal Lumber	UL	100
***18**	1/4" X 2-1/2" Hex Lag	HLG14212	Douglas Fir or Glulam	Calcs	216

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

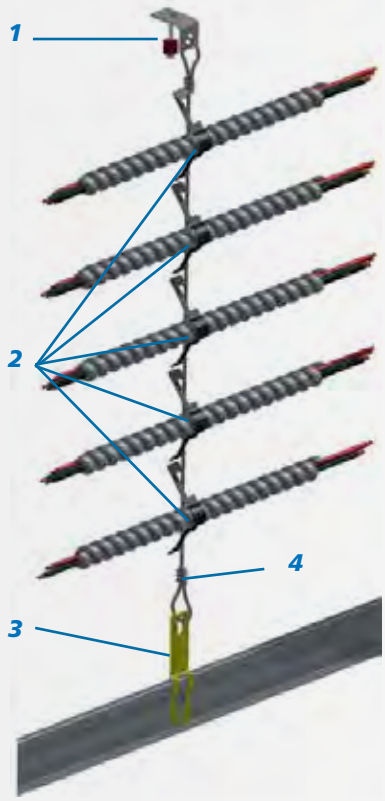
100 SERIES ELECTRICAL SUPPORTS

JOBSITE PROBLEM MEETS STIFFY SOLUTION

Real-world Jobsite Innovation

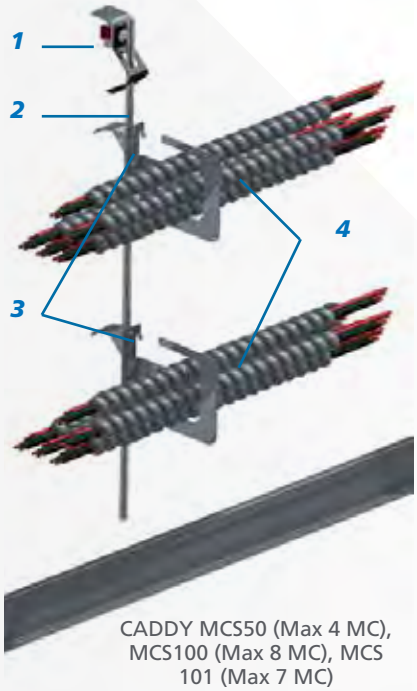
Job Site Problem 1

Ceiling wire using bat wing clips



Job Site Problem 2

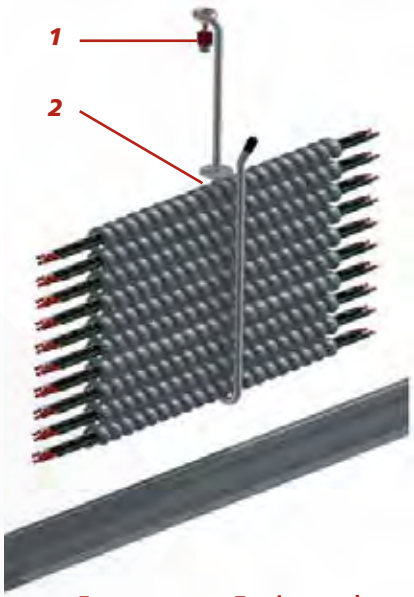
Pin, CADDY 708AB, Pencil Rod and CADDY MCS100



CADDY MCS50 (Max 4 MC), MCS100 (Max 8 MC), MCS 101 (Max 7 MC)

Stiffy Solution

Fig 101 Stiffy Stacker



Fasteners are Engineered pre-assembled to the support

Job Site Problem 1

Step 1 - Install Ceiling Wire

Step 2 - Climb up a ladder and attach each individual MC cable

Step 3 - Return to the location (after T-bar Grid is installed), climb a ladder & attach the banana clip. (Per NEC 300.11)

Step 4 - Tie the ceiling wire to the clip

Job Site Problem 2

Step 1 - Assemble components (Cut Rod, Attach Clip, Insert Fastener)

Step 2 - Install Pencil Rod Assembly

Step 3 - Climb up a ladder and attach each individual MC Support

Step 4 - Climb up a ladder and attach each individual MC Cable

Stiffy Solution

Step 1 - Install Fig 101 Stiffy Stacker from the ground using a pole tool

Step 2 - Install the MC or EMT into the support and pull down the restraint washer.

It doesn't get any easier than this...

	Job Site Problem 1	Job Site Problem 2	Stiffy Solution
Engineered as an assembly	No	No	Yes
Can be ordered for multiple sizes of MC and EMT	No	Just small MC. Not available for EMT.	Yes
UL Listed for MC and EMT	No	No	Yes
NEC 300.11 compliant	Yes. Only when a Banana Clip is used to secure the wire to the T-bar Grid.	No	Yes
Pre-staked with several Engineered Attachment options	No	No	Yes
UL listed engineered attachment options for concrete, wood, metal and steel	No	No	Yes
Quick to install	No. Very labor intensive to install the batwing clips. Also, per NEC 300.11 the ceiling wire must be secured at the top as well as bottom which requires a second trip to the same location.	No. First the pin, clip and rod have to be cut and assembled. Then the MCS100s are attached. Finally	Yes

MC/AC Weight Tables

ALUMINUM MC CABLE 120V and 480Y/277V

Trade Size	Approx Weight/1000 Feet (Lbs.)	Armor Min O.D.	Size Callout
120V Conductors			
14-2 Solid	90	0.47	*01 White
14-3 Solid	110	0.48	*01 White
14-4 Solid	130	0.51	*01 White
12-2 Solid	120	0.495	*01 White
12-3 Solid	150	0.53	*01 White
12-4 Solid	180	0.565	*01 White
10-2 Solid	170	0.56	*01 White
10-3 Solid	215	0.6	*02 Black
10-4 Solid	260	0.645	*02 Black
10-2 Solid	170	0.56	*01 White
10-3 Solid	215	0.6	*02 Black
10-4 Solid	260	0.645	*02 Black
8-2 Stranded	265	0.635	*02 Black
8-3 Stranded	260	0.685	*02 Black
8-4 Stranded	415	0.835	*03 Blue
6-2 Stranded	370	0.795	*03 Blue
6-3 Stranded	480	0.855	*04 Orange
6-4 Stranded	595	0.945	*04 Orange
4-3 Stranded	690	1.035	*05 Pink
4-4 Stranded	870	1.135	*06 Teal
3-3 Stranded	815	1.025	*05 Pink
3-4 Stranded	1025	1.12	*06 Teal
2-3 Stranded	1000	1.18	*06 Teal
2-4 Stranded	1260	1.295	*07 Wine
1-3 Stranded	1195	1.185	*06 Teal
480Y/277V Conductors			
8-2 Stranded	329	0.635	*01 White
8-3 Stranded	432	0.685	*01 White
8-4 Stranded	511	0.835	*03 Blue
6-2 Stranded	462	0.795	*03 Blue
6-3 Stranded	594	0.855	*04 Orange
6-4 Stranded	595	0.945	*04 Orange

HCF MC-AP TYPE MC ALL PURPOSE HOSPITAL CARE

Trade Size	Approx Weight/1000 Feet (Lbs.)	Armor Min O.D.	Size Callout
12-2 Solid	110	0.445	*01 White
12-3 Solid	134	0.48	*01 White
12-4 Solid	180	0.515	*01 White
10-2 Solid	162	0.52	*01 White
10-3 Solid	202	0.565	*02 Black
10-3 Solid	266	0.67	*02 Black

LIGHTWEIGHT STEEL MC CABLE

Trade Size	Approx Weight/1000 Feet (Lbs.)	Armor Min O.D.	Size Callout
12-2 Solid	147	0.495	*01 White
12-3 Solid	186	0.53	*01 White
10-2 Solid	222	0.56	*01 White
10-3 Solid	268	0.6	*02 Black
10-3 Solid	313	0.645	*02 Black

ISOLATED GROUND LIGHTWEIGHT STEEL MC CABLE

Trade Size	Approx Weight/1000 Feet (Lbs.)	Armor Min O.D.	Size Callout
12-2 Solid	186	0.53	*01 White
12-3 Solid	223	0.565	*02 Black
12-4 Solid	330	0.58	*02 Black
10-2 Solid	268	0.6	*02 Black
10-3 Solid	313	0.645	*02 Black
10-4 Solid	391	0.67	*02 Black

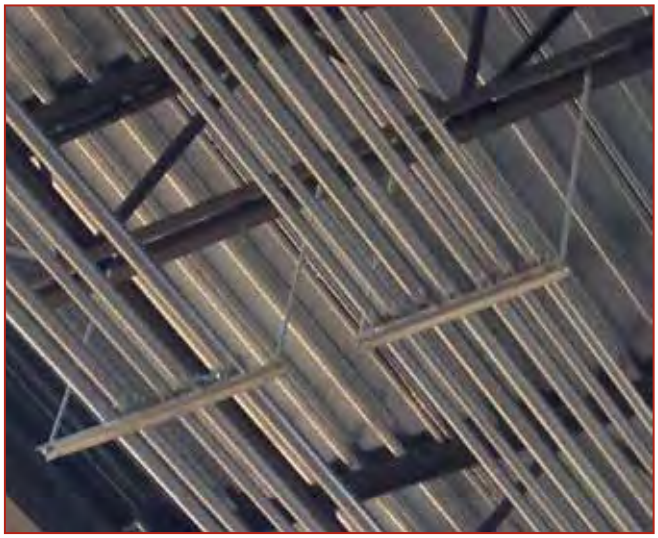
ALUMINUM AC CABLE 120 VOLT

Trade Size	Approx Weight/1000 Feet (Lbs.)	Armor Min O.D.	Size Callout
12-2 Solid	100	0.467	*01 White
12-3 Solid	130	0.489	*01 White
12-4 Solid	155	0.52	*01 White
10-2 Solid	135	0.476	*01 White
10-3 Solid	180	0.5	*01 White
10-4 Solid	225	0.541	*01 White
10-2 Solid	135	0.476	*01 White
10-3 Solid	180	0.5	*01 White
10-4 Solid	225	0.541	*01 White
8-2 Stranded	210	0.604	*02 Black
8-3 Stranded	275	0.637	*02 Black
8-4 Stranded	355	0.695	*02 Black
6-2 Stranded	260	0.7	*03 Blue
6-3 Stranded	395	0.739	*03 Blue
6-4 Stranded	500	0.807	*03 Blue
4-3 Stranded	590	0.885	*04 Orange
4-4 Stranded	760	0.971	*04 Orange
3-3 Stranded	720	0.99	*05 Pink
3-4 Stranded	930	1.085	*05 Pink
2-3 Stranded	885	1.014	*05 Pink
2-4 Stranded	1150	1.115	*05 Pink

EMT Weight Tables

EMT CONDUIT SCHEDULE (Lbs/LF)										
	Trade Size = Diameter									
	1/2"	**3/4"**	**1"**	**1-1/4"**	**1-1/2"**	**2"**	***2-1/2"***	***3"***	***3-1/2"***	***4"***
Callout »	*08 Gray	*09 Brown	*10 Green	*11 Yellow	*12 Red	*13 Purple				
O.D. »	0.706	0.922	1.163	1.51	1.74	2.197	***2.875***	***3.5***	***4***	***4.5***
Qty.										
1	0.54	0.92	1.38	2.33	**3.36**	**4.78**	***6.28***	***9.60***	***11.94***	***13.07***
2	1.08	1.84	2.76	**4.66**	**6.72**	**9.56**				
3	1.62	2.76	**4.14**	6.99						
4	2.16	3.68	5.52	**9.32**						
5	2.70	**4.60**	6.90							
6	3.24	5.52	8.28							
7	3.78	6.44	**9.66**							
8	4.32	7.36								
9	**4.86**	8.28								
10	5.40	**9.20**								
11	5.94									
12	6.48									
13	7.02									
14	7.56									
15	8.10									
16	8.64									
17	9.18									
18	**9.72**									

* Conduit per linear foot weight is based on the weight of the EMT plus conductors per the IBC/CBC.



Basic Element Pipe Weight Table

Steel Pipe Data: Schedule 40							
Pipe Dia. Inch	**Schedule**	**Pipe Weight Empty Lbs/Lf**	**Weight of Water Lbs/Lf**	**Pipe Weight Full Lbs/Lf**	**Insulation Thickness* Inch**	**Insulation Weight Lbs/Lf**	**Pipe Weight Full & Insulated Lbs/Lf**
1/2.	40	0.85	0.13	0.98	1”	0.46	1.45
3/4”	40	1.13	0.23	1.36	1”	0.43	1.79
1”	40	1.70	0.37	2.07	1”	0.6	2.67
1-1/2”	40	2.70	0.88	3.58	1”	0.66	4.24
2”	40	3.60	1.45	5.05	1”	0.84	5.89

* Fiber Glass Pipe Insulation With ASJ

Steel Pipe Data: Schedule 80							
Pipe Dia. Inch	**Schedule**	**Pipe Weight Empty Lbs/Lf**	**Weight of Water Lbs/Lf**	**Pipe Weight Full Lbs/Lf**	**Insulation Thickness* Inch**	**Insulation Weight Lbs/Lf**	**Pipe Weight Full & Insulated Lbs/Lf**
1/2.	80	1.09	0.10	1.19	1”	0.46	1.65
3/4”	80	1.47	0.19	1.66	1”	0.43	2.09
1”	80	2.17	0.31	2.48	1”	0.6	3.08
1-1/2”	80	3.63	0.77	4.40	1”	0.66	5.06
2”	80	5.02	1.28	6.30	1”	0.84	7.14

* Fiber Glass Pipe Insulation With ASJ

Type K Copper Tubing						
Dia. Inch	**Pipe Weight Empty Lbs/Lf**	**Weight of Water LBS/Lf**	**Pipe Weight Full Lbs/Lf**	**Insulation Thickness Inch**	**Insulation Weight* Lbs/Lf**	**Pipe Weight Full & Insulated Lbs/Lf**
1/2.	0.34	0.09	0.43	1”	0.46	0.89
3/4”	0.64	0.19	0.83	1”	0.43	1.26
1”	0.84	0.34	1.18	1”	0.6	1.78
1-1/2”	1.36	0.74	2.1	1”	0.66	2.76
2”	2.06	1.31	3.37	1”	0.84	4.21

* Fiber Glass Pipe Insulation With ASJ

Type L Copper Tubing						
Dia. Inch	**Pipe Weight Empty Lbs/Lf**	**Weight of Water LBS/Lf**	**Pipe Weight Full Lbs/Lf**	**Insulation Thickness Inch**	**Insulation Weight* Lbs/Lf**	**Pipe Weight Full & Insulated Lbs/Lf**
1/2.	0.29	0.1	0.39	1”	0.46	0.85
3/4”	0.46	0.21	0.66	1”	0.43	1.09
1”	0.66	0.36	1.01	1”	0.6	1.61
1-1/2”	1.14	0.77	1.91	1”	0.66	2.57
2”	1.75	1.34	3.09	1”	0.84	3.93

* Fiber Glass Pipe Insulation With ASJ

Support Spacing Requirements

How to Determine Maximum Support Spacing

Step 1:
Determine weight per linear foot of the run being supported.
- Refer to pages 11-12 of this section for weights

Step 2:
Determine the capacity of the CEAS support
- Support capacities are included in the individual product data sheets

Step 3:
Verify that the weight per linear foot of the utilities supported does not exceed the requirements for seismic bracing.
- Refer to page 13 for the seismic restraint requirements

Step 4:
Calculate the spacing requirements based on the capacity of the support or use the requirements set forth in the applicable building code

Support Capacity Vs. Code Requirements—Use whichever is more stringent!

MAX SUPPORT CAPACITY	WEIGHT PER LINEAR FOOT OF THE SUSPENDED UTILITY[1] ***Maximum Support Spacing = Support Capacity ÷ Weight Per Linear Foot***													
	3.5 Lbs/LF	4 Lbs/LF	4.5 Lbs/LF	5 Lbs/LF	5.5 Lbs/LF	6 Lbs/LF	6.5 Lbs/LF	7 Lbs/LF	7.5 Lbs/LF	8 Lbs/LF	8.5 Lbs/LF	9 Lbs/LF	9.5 Lbs/LF	10 Lbs/LF
20 Lbs Capacity	5’-8”	5’	4’-5”	4’	4’-7”	3’-4”	3’	2’-10”	2’-8”	2’-6”	2’-4”	2’-2”	2’-1”	2’
30 Lbs Capacity	8’-6”	7’-6”	6’-8”	6’	5’-5”	5’	4’-7”	4’-3”	4’	3’-9”	3’-6”	3’-4”	3’-1”	3’
40 Lbs Capacity		10	8’-10”	8’	7’-3”	6’-8”	6’-1”	5’-8”	5’-4	5’	4’-8”	4’-5”	4’-2”	4’
50 Lbs Capacity				10’	9’-1”	8’-4”	7’-8”	7’-1”	6’-8”	6’-3”	5’-10”	5’-6”	5’-3”	5’
60 Lbs Capacity						10’	9’-2”	8’-6”	8’	7’-6”	7’	6’-8”	6’-3”	6’
70 Lbs Capacity								10’	9’-4”	8’-9”	8’-2”	7’-9”	7’-4”	7’
80 Lbs Capacity										10’	9’-4”	8’-10”	8’-5”	8’

Footnotes:
1-The weight per linear foot is based on the total weight of utilities suspended. See weight tables on pages 7 and 8.

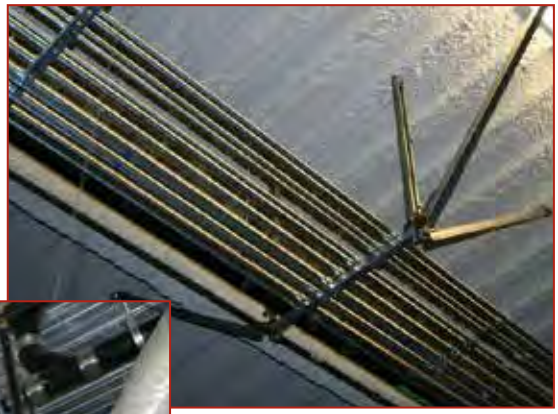
Or

PRODUCT	MAXIMUM SUPPORT SPACING	CODE REFERENCE
Type AC Cables	4-1/2’	NEC 2005 (Article 320.30)
Type MC Cables	6’	NEC 2005 (Article 330.30)
EMT Conduits	10’	NEC 2005 (Article 358.30)

Seismic Bracing Requirements

2012 IBC and 2013 CBC SEISMIC BRACING REQUIREMENTS FOR ELECTRICAL SERVICES		
Seismic Design Category	**Ip**	**Service Bracing Requirements**
A and B	All	No Bracing Required
C	1	No Bracing Required
C	>1.0	Brace Conduit Greater Than 2.5” Trade Size
		Brace Trapeze Assemblies Supporting More Than 10 Lbs/LF
		Restrain Floor Mounted Equipment
		Brace All Suspended Equipment
D, E, F	1	Brace Conduit Greater Than 2.5” Trade Size
		Brace Trapeze Assemblies Supporting More Than 10 Lbs/LF
		Brace Equipment > 4’ Above Floor or Wp > 400 LBS
D, E, F	>1.0	Brace Conduit Greater Than 2.5” Trade Size.
		Brace Trapeze Assemblies Supporting More Than 10 Lbs/LF
		Restrain Floor Mounted Equipment
		Brace All Suspended Equipment
EXCEPTIONS	ALL	Light Fixtures Suspended From the Structure And Having Attachments Designed To Accommodate 1.4 x Weight in Both the Vertical and Horizontal Directions and With 360° Range of Motion

Note: Ip refers to Importance Factor of the component.

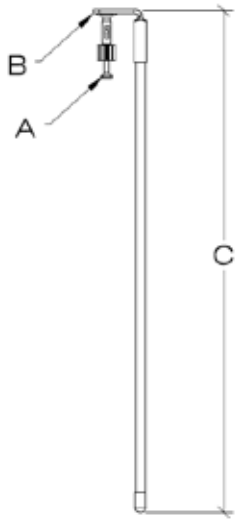


Seismic Bracing Requirements

2012 IBC and 2013 CBC BRACING REQUIREMENTS FOR PLUMBING and PROCESS PIPING SERVICES		
Seismic Design Category	**Ip**	**Service Bracing Requirements**
A and B	All	No Bracing Required
C	1.0	No Bracing Required
Steel Or Copper Piping Systems		
C	>1.0	Brace All Pipe Greater Than 2" Diamter Exceptions: Pipe With Non-Hazardous Content - Copper Vent Lines < 3-1/2" Diameter
		Brace All Trapeze Assemblies Supporting Loads >10 Lbs/Lf
D, E, F	1.0	Brace All Pipe > 3" Diameter
	>1.0	Brace All Pipe > 1" Diameter Exceptions: Pipe With Non-Hazardous Content With An Operating Weight < 5 lbs/lf.; - Sch. 40 Steel Vent Lines < 2" Diameter - Full Sch. 40 Steel Lines < 1-1/2" Diameter - Copper Vent Lines < 3-1/2" Diameter
	>1.0	Brace All Trapeze Assemblies Supporting Loads > 10 Lbs/Lf
EXCEPTIONS	All	Piping Systems Designed And Braced in Accordance with ASME B31.
Cast Iron, Glass Or Non-Ductile Plastic Piping Systems		
D, E, F	All (Except C = 1.0)	Brace All Pipe With Non-Hazardous Content With An Operating Weight > 5 lbs/lf: - No-Hub Cast Iron Gravity Lines > 2" Diameter - No-Hub Cast Iron Vent Lines > 3" Diameter

Note: Ip refers to Importance Factor of the component.

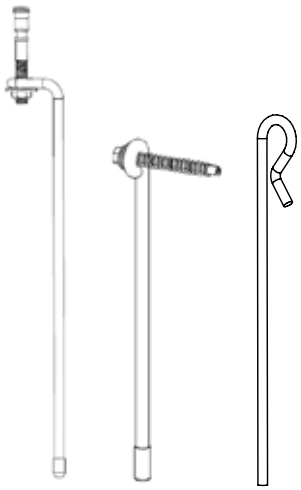
Fig. 100 Stiffy Straight Rod



- The rigid connection eliminates the need to attach to ceiling grid per NEC Article 300-11
- Zinc plated rod for corrosion resistance
- Designed as a rigid method of support for Mechanical, Electrical and Plumbing systems
- Max load: 70# per support
- Use Stiffy Grippers—Fig 161 for the attachment of MC/EMT
- Use Clip-on Comfort Cradles—Fig 201 for the support of Low Voltage Cabling
- UL listed hardware

Tip...Check out the Fig 161 Stiffy Grippers. 2-sided "Bat Wing" clips to support EMT and MC.

Shown with PowderPuff Pin A=13 and Hard Concrete Footprint B=011



A=03 B=01 | A=06 B=02 | A=17 B=02

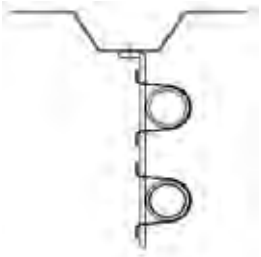
Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B	C	D	Qty
Fig 100					
Fig 100					
Fig 100					

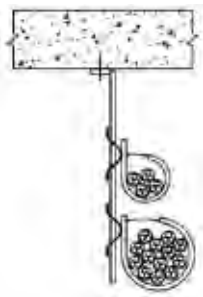
A		B		C	D	
*00	No Fastener	*01 90° Footprint	*011 Hard Concrete Footprint	Drop Length (Inches)	Safety End Cap	
*01	1-1/4" Power Actuated Pin—1" Embedment				*01	Yes
*02	1-1/2" Power Actuated Pin—1-1/4" Embed				*02	No
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)					
*03.1	3/8" x 3" Wedge Anchor (2" Embed)					
*04	1/4" x 1-3/4" Concrete Screw Anchor	*012 Gas Tool Footprint	*02 Sidemount Footprint			
*04.1	3/8" x 1-3/4" Concrete Screw Anchor					
*06	#10 Hex Washer Head Self Driller					
*07	#10 Hex Washer Head Sharp Point					
*08	Timberpin (Wood Applications)					
*09	Wide Mouth Beam Clamp	*03 Threaded End (1/2" of Threads)	*04 Straight Rod			
*13	1-1/4" PowderPuff Pin—1" Embedment					
*14	Stiffy Wood Pull Down Attachment					
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange					
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange					
*25	Other—Please Specify	*10 Other-Please Specify				

Additional Fastener Options are Shown on Pages 19-21

Tip...For data cabling supports don't forget to check out the Fig 201.



Stiffy Supporting Conduit

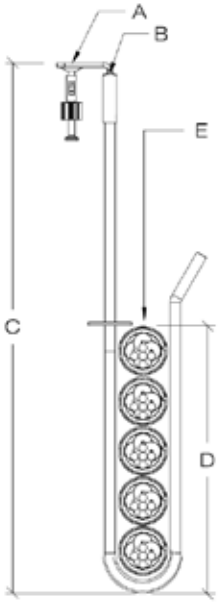


Stiffy Supporting Clip-on Cradles

Application Examples

Fig. 101 Stiffy Stacker

Tip...Take a look at the Fig 120 to support MC horizontally.



- The rigid connection eliminates the need to attach to ceiling grid per NEC Article 300-11
- Zinc plated rod for corrosion resistance
- Supports EMT, MC/AC and Flexible Conduit
- Spaces cables to avoid bundling and NEC de-rating issues
- Max load: 70# per support
- Refer to project building code to determine max weight/LF without seismic restraints
- UL listed hardware

***Patented Design**

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

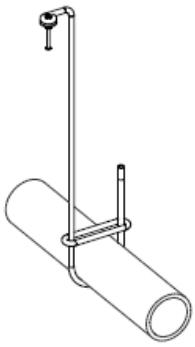
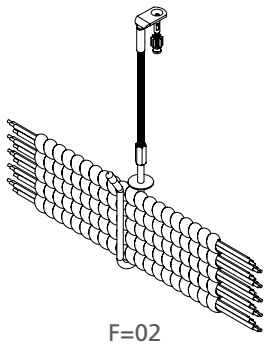


Fig 101 Supporting 2" EMT

Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

	A	B	C	D	E	F	Qty
Fig 101							
Fig 101							
Fig 101							



F=02
Threaded Adjustable
Version Shown

A		B		C	D
*00	No Fastener	*01  90° Footprint	*011  Hard Concrete Footprint	Drop Length (Inches)	Return Lenth (Inches)
*01	1-1/4" Power Actuated Pin—1" Embedment				
*02	1-1/2" Power Actuated Pin—1-1/4" Embed				
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)				
*03.1	3/8" x 3" Wedge Anchor (2" Embed)				
*04	1/4" x 1-3/4" Concrete Screw Anchor	*012  Gas Tool Footprint	*02  Sidemount Footprint		
*04.1	3/8" x 1-3/4" Concrete Screw Anchor				
*06	#10 Hex Washer Head Self Driller				
*07	#10 Hex Washer Head Sharp Point				
*08	Timberpin (Wood Applications)				
*09	Wide Mouth Beam Clamp	*03  Threaded End (1/2" of Threads)	*04  Straight Rod		
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)				
*13	1-1/4" PowderPuff Pin—1" Embedment				
*14	Stiffy Wood Pull Down Attachment				
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange	*10 Other-Please Specify			
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange				
*25	Other—Please Specify				

E			F	
*01	White	(.430 thru .560 diameter) 14-3, 14-4, 12-2, 12-3, 12-4 and 10-2 MC/AC	*01	Fixed Length
*02	Black	(.560 thru .690 diameter) Standard MC Sizes: 10-3, 10-4, 8-2, 8-3.	*02	Threaded Adjustable Version
*03	Blue	(.700 thru .830 diameter) MC/AC		
*04	Orange	(.840 thru .970 diameter) MC/AC		
*.05	Pink	(.980 thru 1.11 diameter) MC/AC		
*06	Teal	(1.12 thru 1.250 diameter) MC/AC		
*07	Wine	(1.260 thru 1.390 diameter) MC/AC		
		Refer the Tech Section for MC/AC Diam.		
*08	Gray	1/2" EMT		
*09	Brown	3/4" EMT		
*10	Green	1" EMT		
*11	Yellow	1-1/4" EMT		
*12	Red	1-1/2" EMT		
*13	Purple	2" EMT		
*14	Other	Specify Size		

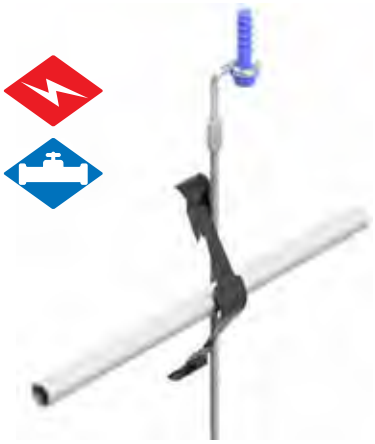
Additional Fastener Options are Shown on Pages 19-21

Application Examples

CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

It's What We Do!

Fig. 102 Threaded Stiffy

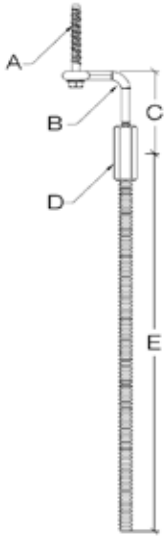


- The rigid connection eliminates the need to attach to ceiling grid per NEC Article 300-11
- Available with 1/4" or 3/8" All Thread Rod
- Zinc plated rod for corrosion resistance
- Designed as a rigid method of support for Mechanical, Electrical and Plumbing systems
- Max load: 70# per support
- Designed for use where friction connections are not allowed
- FYI… When Stiffy Grippers (Fig 161) are connected to all thread rod a "Friction Connection" does not exist
- UL listed hardware

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

Tip…Check out the Fig 161 Stiffy Grippers. 2-sided "Bat Wing" clips to support conduit and MC.



Shown with Wedge Bolt A=03, 90° Footprint B=01 and 3/8" ATR C=03

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B	C (3" Typ)	D	E	Qty
Fig 102						
Fig 102						
Fig 102						

Shown with Hammer-on Beam Clamp

A		B	C	D		E
*00	No Fastener	*01  90° Footprint	Drop Length[1] (Inches) 3" Typical	*01	No Coupler	All Thread Rod Length (Inches)
*01	1-1/4" Power Actuated Pin—1" Embedment			*02	1/4" Coupler	
*02	1-1/2" Power Actuated Pin—1-1/4" Embed			*03	1/4" x 3/8" Rod Coupler (Used with 3/8" ATR)[2]	
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)					
*03.1	3/8" x 3" Wedge Anchor (2" Embed)					
*04	1/4" x 1-3/4" Concrete Screw Anchor	*012  Gas Tool Footprint				
*04.1	3/8" x 1-3/4" Concrete Screw Anchor					
*06	#10 Hex Washer Head Self Driller					
*07	#10 Hex Washer Head Sharp Point					
*08	Timberpin (Wood Applications)					
*09	Wide Mouth Beam Clamp	*02  Sidemount Footprint				
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)					
*13	1-1/4" PowderPuff Pin—1" Embedment					
*14	Stiffy Wood Pull Down Attachment					
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange	*10 Other Please Specify				
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange					
*25	Other—Please Specify					

Additional Fastener Options are Shown on Pages 19-21

Footnotes:
1—The overall threaded length is 1/2" on the Stiffy rod.

2—In order to transition to 3/8" ATR a reducing coupler is used for A=01 and 02 Footprints.

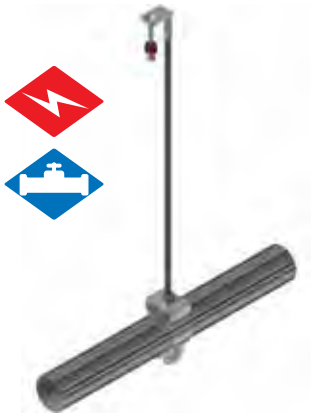
A=03 B=01

A=06 B=01

Shown with A=01 Powder Actuated Pin

Application Examples

Fig. 104 Threaded Stiffy with Hanger

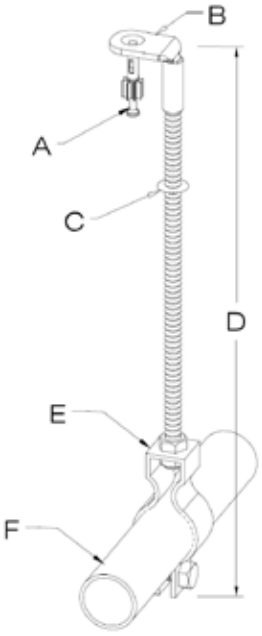


- Available with 1/4" or 3/8" All Thread Rod
- Zinc plated rod for corrosion resistance
- For use with steel/copper pipe, conduit and MC
- Max load: 70# per support
- UL listed hardware

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

Threaded Stiffy with 3/8" ATR and a Loop Hanger



Shown with New Hard Concrete 3/8" ATR and a Conduit Hanger

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B	C	D	E	F	Qty
Fig 104							
Fig 104							
Fig 104							

Tip...Check out the Fig 125 to support utilities on a trapeze.

A		B		C		D	E	F	
*00	No Fastener	*01 90° Footprint	*011 Hard Concrete Footprint	*01	1/4" ATR	Drop Length (Inches)	*01 Conduit Hanger[3]	Hanger Size	
*01	1-1/4" Power Actuated Pin—1" Embedment *(B = 011)*[1]	*012 Gas Tool Footprint	*02 Sidemount Footprint	*02	3/8" ATR[2]		*02 Loop Hanger[4]	*01	1/2"
*02	1-1/2" Power Actuated Pin—1-1/4" Embed *(B = 011)*[1]	*03 Threaded End (1/2" of Threads)	*04 Straight Rod				*03 Clevis Hanger	*02	3/4"
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)	*10 Other-Please Specify					*04 J-Hanger[5]	*03	1"
*03.1	3/8" x 3" Wedge Anchor (2" Embed)							*04	1-1/4"
*04	1/4" x 1-3/4" Concrete Screw Anchor							*05	1-1/2"
*04.1	3/8" x 1-3/4" Concrete Screw Anchor							*06	2"
*06	#10 Hex Washer Head Self Driller							*07	2-1/2"
*07	#10 Hex Washer Head Sharp Point							*08	3"
*08	Timberpin (Wood Applications)							*09	3-1/2"
*09	Wide Mouth Beam Clamp							*25	Other-Please Specify
*12	Adjustable Hammer-on BC Rotates 360° (Specify Flange Thickness)								
*13	1-1/4" PowderPuff Pin—1" Embedment *(B = 011)*[1]								
*14	Stiffy Wood Pull Down Attachment								
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange								
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange								
*25	Other—Please Specify								

For felted hangers add an "F" to the order option. [6]

For zinc coated clevis hangers add a "Z" to the order option.

Example:
02 = 3/4" Hanger
02F = 3/4" Felted Hanger
02Z = 3/4" Zinc Coated Hanger

Additional Fastener Options are Shown on Pages 19-21

Footnotes:
1 - When Power Actuated Fasteners (A=01, 02 or 13) and (B=01-90° Footprint) are selected the B=011 New Hard Concrete Footprint will be used by default.
2 - In order to transiton to 3/8" ATR a reducing coupler is used for B=01 and 02 Footprints. New Hard Concrete Footprint B=011, is available in 1/4" and 3/8".
3 - Conduit Hangers 1/2" thru 1-1/2" EMT are sized for 1/4" ATR. 2" and 2-1/2" are sized for 3/8" ATR.
4 - 1/2" thru 2-1/2" Loop Hangers come with 3/8" top connectors.
5 - All J-Hangers are zinc coated
6 - When ordering felt lined hangers for pipe sizes 3-1/2" or under, order the next largest size to allow for the thickness of the felt lining.

Per the Uniform Plumbing Code and California Plumbing Code
- 1/2" thru 4" diameter pipe requires3/8" all thread rod
- 5" thru 8" diameter pipe requires 1/2" all thread rod
- 10" thru 12" diameter pipe requires 5/8" all thread rod

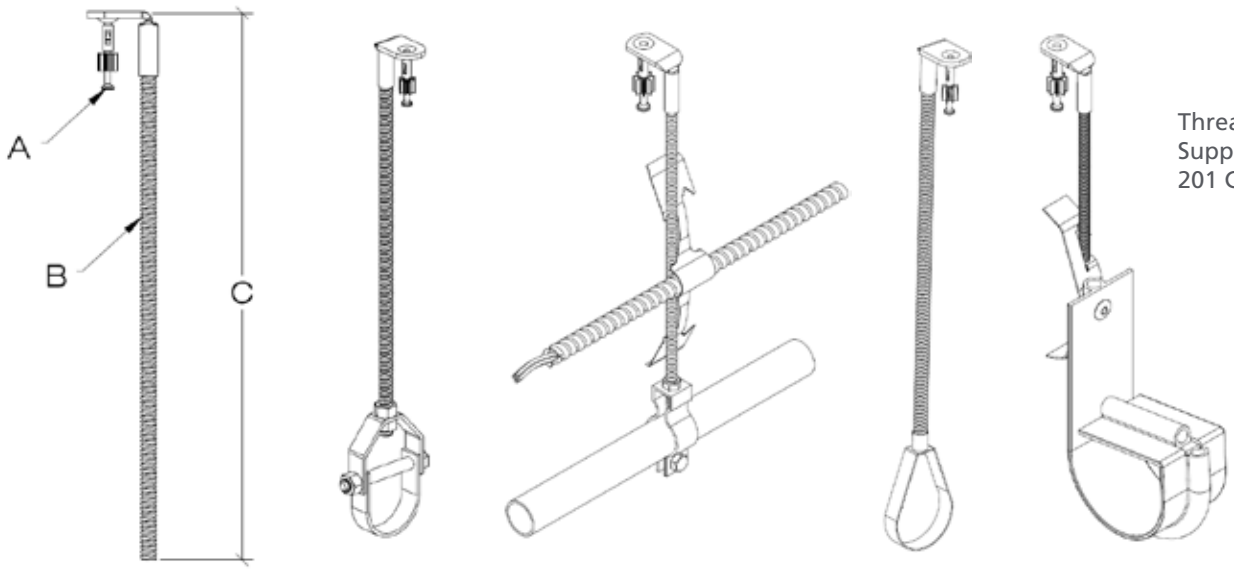
Refer to pages 25 and 26 for pipe weights

Application Examples

Fig. 105

Threaded Stiffy with Hard Concrete Footprint

- Stiffy Hard Concrete Footprint excels in tough concrete applications
- Designed as a support for Mechanical, Electrical and Plumbing
- The rigid connection eliminates the need to attach to ceiling grid per NEC Article 300-11
- Refer to the Fig 104 order form for pipe weight tables
- Zinc plated rod for corrosion resistance
- Designed as a rigid method of support for overhead applications
- For use with pipe, conduit, MC, j-boxes and clip-on cradles
- Max load: 70# per support
- UL listed hardware
- FYI… When Stiffy Grippers (Fig 161) are used to support conduit on all thread rod, a "Friction Connection" does not exist



Threaded Stiffy Supporting Fig 201 Clip-on Cradle

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

Tip...Check out the Fig 125 to support utilities on a trapeze.

	A	B	C	Qty
Fig 105				
Fig 105				
Fig 105				

A		B		C
*01	1-1/4" Power Actuated Pin—1" Embedment	*01	1/4" All Thread Rod	Drop Length (Inches)
*02	1-1/2" Power Actuated Pin—1-1/4" Embed.	*02	3/8" All Thread Rod	
*25	Other—Please Specify			

Application Examples

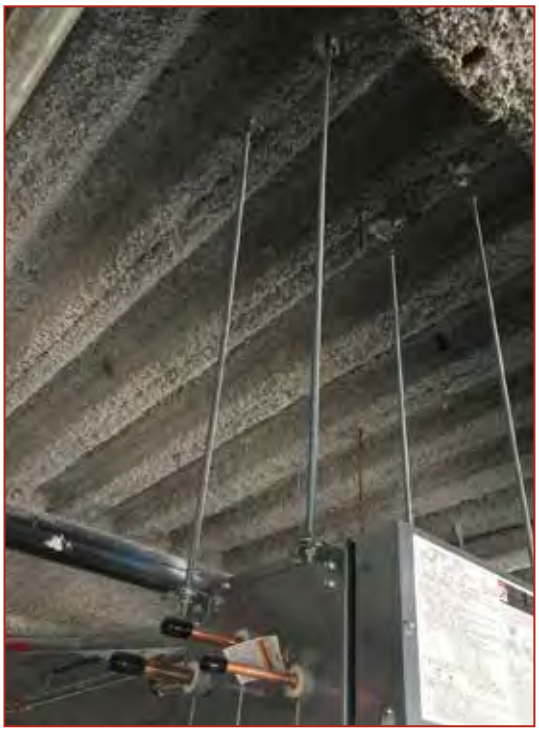
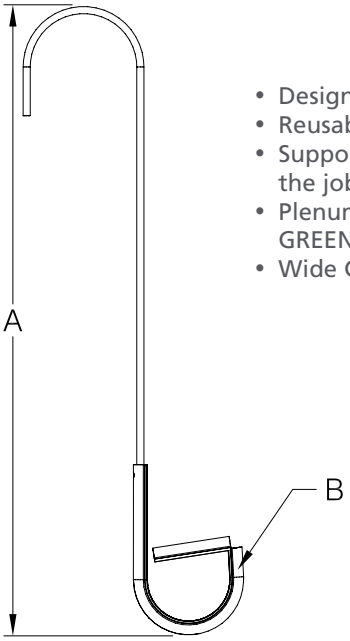


Fig. 106

Threaded Temp Power Support



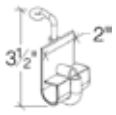
- Designed to support temporary power cords off of the ground
- Reusable design
- Supports are simply hooked over any existing structural element on the jobsite
- Plenum rated plastic cradles are available in RED, WHITE, BLUE, GREEN and YELLOW
- Wide Cradle offers exceptional support and reduces crimping

BUY AMERICAN ACT COMPLIANT

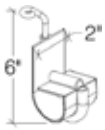
Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

A	B	
Drop Length (Inches)	*01	1” Cradle
	*02	2” Cradle
	*03	3-1/2” Cradle
	*04	6” Cradle
	R	Red
	B	Blue
	G	Green
	Y	Yellow
	BK	Black

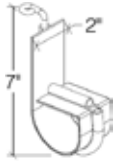
Dimensions:



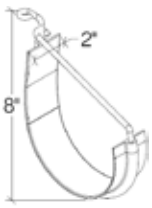
1” Cradle



2” Cradle



3-1/2” Cradle



6” Cradle

***Standard cradles come in white. Specify custom colors.**

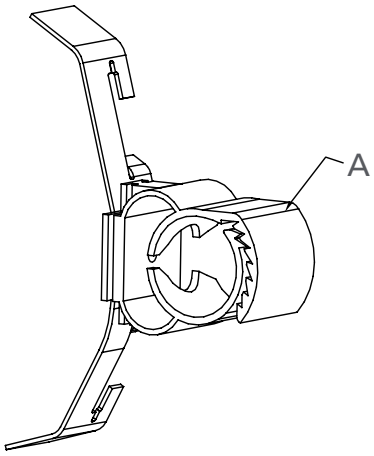
Example:
02 = White 2” Cradle
02R = Red 2” Cradle

	A	B	Qty
Fig 106			
Fig 106			
Fig 106			

Application Examples

Fig. 107 Stiffy Snap Clip

Shown attached to a Stiffy Fig 104 with 3/8" ATR Supporting a Clevis Hanger.



- Supports A/C Tubing, Refrigeration, PEX, Med Gas, Copper and Steel Pipe, EMT, MC/AC and Flexible Conduit
- Engineered as a complete assembly
- Works on 1/4" and 3/8" All Thread or Smooth Rod
- No time wasted in the field with unnecessary assembly
- Quick installation
- Refer to project building code for seismic requirements
- UL Listed Components
- Engineering services are available to design anchors and trapeze assemblies per project requirements when requested
- Snaps can be installed around insulated pipes to maintain continuous insulation

c UL us LISTED

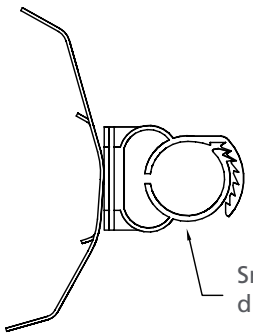
BUY AMERICAN ACT COMPLIANT

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

A					
Input the appropriate value preceded by an (*)					
Trade Size	EMT[1]		Sch 40 Steel[2]		Type K Copper[2]	
	Size	Wt/LF	Size	Wt/LF	Size	Wt/LF
1/4"	-		*12		*10	
3/8"	-		*17		*12	
1/2"	*17	.054	*20	0.98	*15	0.43
5/8"	-		-		*17	
3/4"	*22	0.92	*25	1.36	*22	.83
1"	*28	1.38	*32	2.07	*28	1.18
1-1/4"	*36		*40		*32	

Footnotes:
1-EMT weights are calculated with 40% conductor fill.
2-Sch 40 Steel Copper weights are calculated as full of water.

	A	Qty
Fig 107		
Fig 107		
Fig 107		



Snap-in clip available in different diameters (See A)

Tip...Check out the Fig 102 or Fig 105 for the quickest way to support 3/8" Threaded Rod.

Application Examples

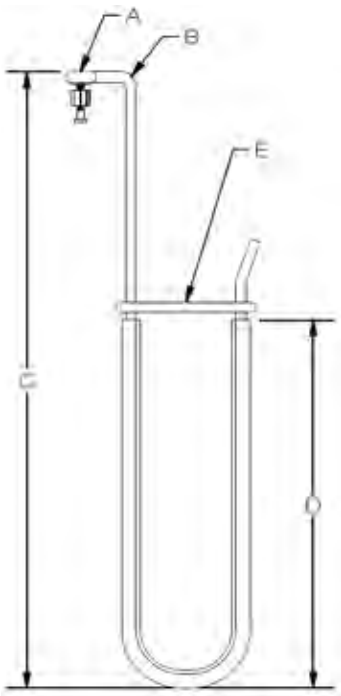
Fig. 108 Stiffy Insulated Pipe Stacker

A=01 B=01

- Zinc plated rod for corrosion resistance
- Supports Line Sets and Insulated Refrigerant Piping
- 2" wide Plenum Rated plastic bearing surface reduces the pressure on the insulation.
- Max load: 70# per support
- Engineered submittal documents stamped by an engineer.
- Refer to project building code to determine max weight/ LF without seismic restraints

***Patent Design**

BUY AMERICAN ACT COMPLIANT



Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

	A	B	C	D	E	Qty
Fig 108						
Fig 108						
Fig 108						

Tip...Take a look at the Fig 195 and Fig 196 to support refrigeration piping on a trapeze.

A		B		C	D	E	
*00	No Fastener	*01	*011	Drop Length (Inches)	Return Length (Inches)	*01	1" Opening
*01	1-1/4" Power Actuated Pin—1" Embedment *(B = 011)*[7]					*015	1.5" Opening
*02	1-1/2" Power Actuated Pin—1-1/4" Embed *(B = 011)*[7]	90° Footprint	Hard Concrete Footprint			*02	2" Opening
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)					*025	2.5" Opening
*03.1	3/8" x 3" Wedge Anchor (2" Embed)					*03	3" Opening
*04	1/4" x 1-3/4" Concrete Screw Anchor	*012	*02			*035	3.5" Opening
*04.1	3/8" x 1-3/4" Concrete Screw Anchor					*04	4" Opening
*06	#10 Hex Washer Head Self Driller	Gas Tool Footprint	Sidemount Footprint			*045	4.5" Opening
*07	#10 Hex Washer Head Sharp Point					*05	5" Opening
*08	Timberpin (Wood Applications)					*055	5.5" Opening
*09	Wide Mouth Beam Clamp	*03	*04			*06	6" Opening
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)					*065	6.5" Opening
*13	1-1/4" PowderPuff Pin—1" Embedment *(B = 011)*[7]	Threaded End (1/2" of Threads)	Straight Rod				
*14	Stiffy Wood Pull Down Attachment						
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange	*10 Other-Please Specify					
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange						
*25	Other—Please Specify						

Additional Fastener Options are Shown on Pages 19-21

Application Examples

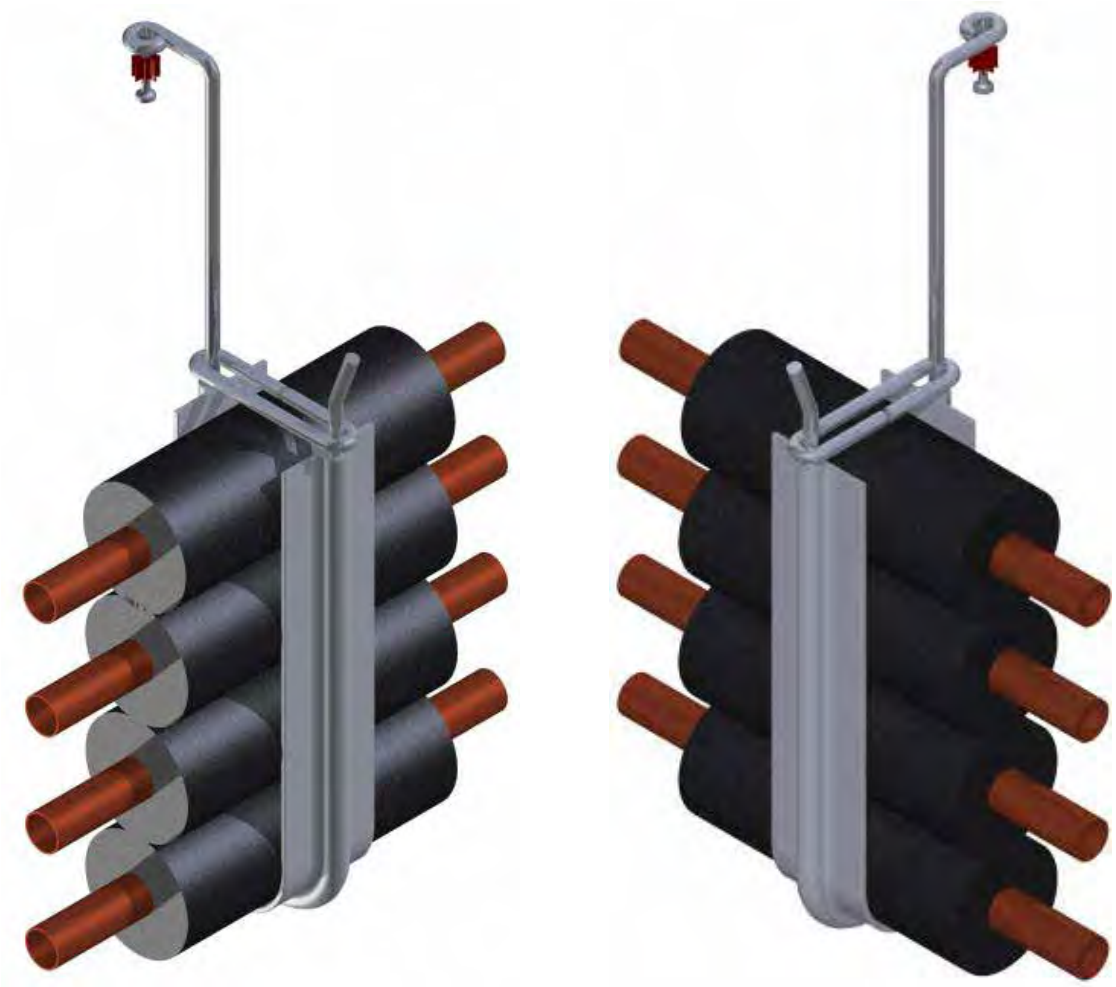
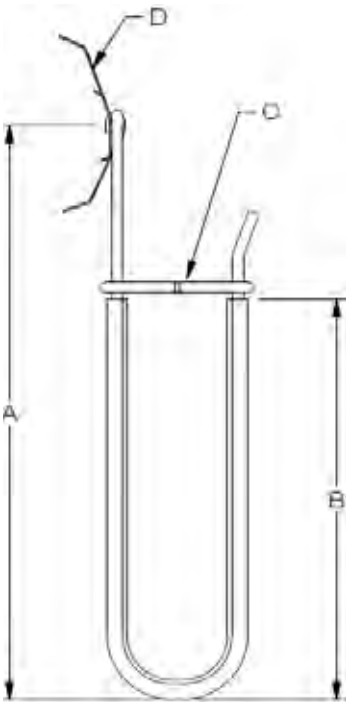


Fig. 109 Stiffy Clip-on Insulated Pipe Stacker

A=01 B=01

- Zinc plated rod for corrosion resistance
- Supports Line Sets and Insulated Refrigerant Piping
- 2" wide Plenum Rated plastic bearing surface reduces the pressure on the insulation.
- Spring Steel Clip can be ordered for 1/4" or 3/8" rod.
- Max load: 50# per support
- Engineered submittal documents stamped by an engineer.
- Refer to project building code to determine max weight/LF without seismic restraints

***Patent Design



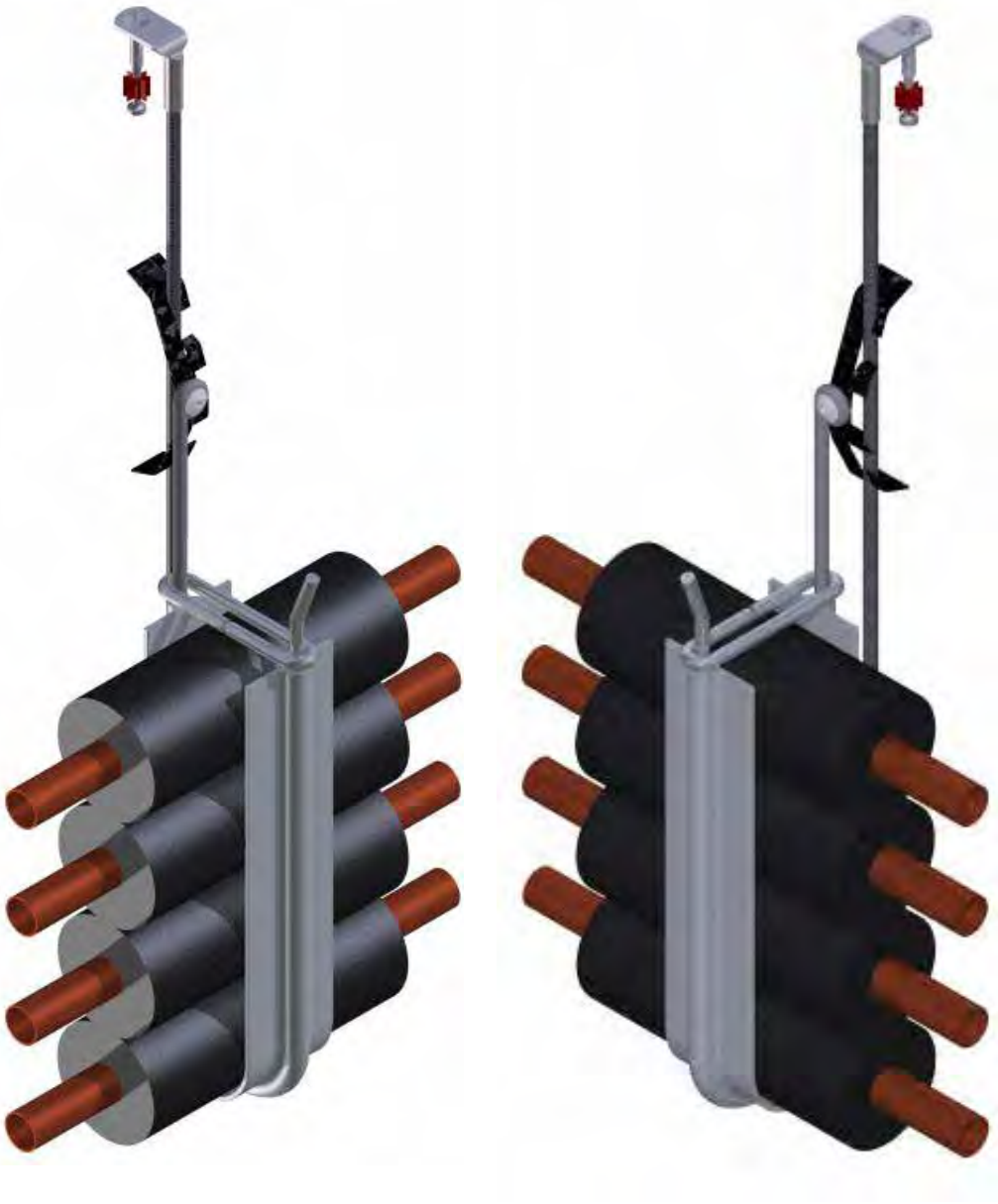
Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B	C	D	Qty
Fig 109					
Fig 109					
Fig 109					

Tip...Take a look at the Fig 195 and Fig 196 to support refrigeration piping on a trapeze.

A	B	C		D	
Drop Length (Inches)	Return Length (Inches)	*01	1" Opening	*01	1/4" Spring Steel Clip
		*015	1.5" Opening	*02	3/8" Spring Steel Clip
		*02	2" Opening		
		*025	2.5" Opening		
		*03	3" Opening		
		*035	3.5" Opening		
		*04	4" Opening		
		*045	4.5" Opening		
		*05	5" Opening		
		*055	5.5" Opening		
		*06	6" Opening		
		*065	6.5" Opening		

Application Examples



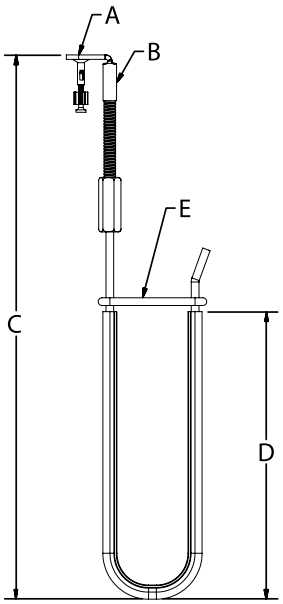
CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

It's What We Do!

Fig. 110 Stiffy Threaded Insulated Pipe Stacker

- Zinc plated rod for corrosion resistance
- Supports Line Sets and Insulated Refrigerant Piping
- 3/8" Threaded Rod can be cut to length in thefield.
- 2" wide Plenum Rated plastic bearing surface reduces the pressure on the insulation.
- Max load: 70# per support
- Engineered submittal documents stamped by an engineer.
- Refer to project building code to determine max weight/LF without seismic restraints

***Patent Design**



Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

	A	B	C	D	E	Qty
Fig 110						
Fig 110						
Fig 110						

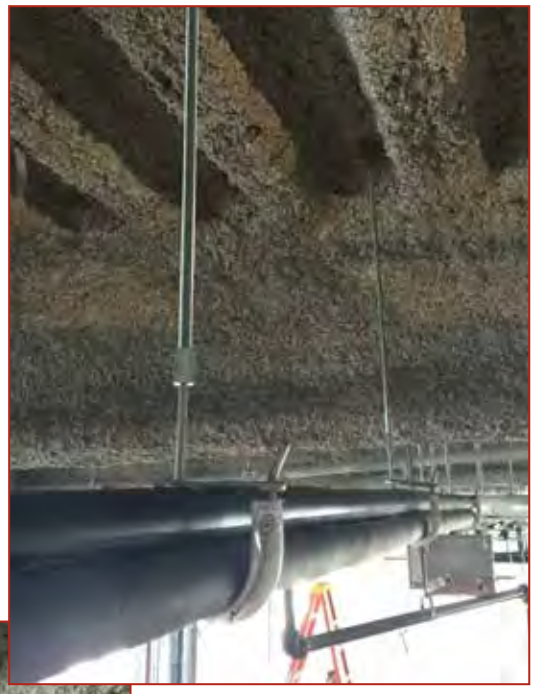
Tip...Take a look at the Fig 195 and Fig 196 to support refrigeration piping on a trapeze.

A		B		C	D	E	
*00	No Fastener	*01 90° Footprint	*011 Hard Concrete Footprint	Drop Length (Inches)	Return Length (Inches)	*01	1" Opening
*01	1-1/4" Power Actuated Pin—1" Embedment (B = 011)[2]					*015	1.5" Opening
*02	1-1/2" Power Actuated Pin—1-1/4" Embed (B = 011)[2]					*02	2" Opening
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)					*025	2.5" Opening
*03.1	3/8" x 3" Wedge Anchor (2" Embed)					*3	3" Opening
*04	1/4" x 1-3/4" Concrete Screw Anchor	*012 Gas Tool Footprint	*02 Sidemount Footprint			*035	3.5" Opening
*04.1	3/8" x 1-3/4" Concrete Screw Anchor					*4	4" Opening
*06	#10 Hex Washer Head Self Driller					*045	4.5" Opening
*07	#10 Hex Washer Head Sharp Point					*05	5" Opening
*08	Timberpin (Wood Applications)					*055	5.5" Opening
*09	Wide Mouth Beam Clamp	*03 Threaded End (1/2" of Threads)	*04 Straight Rod			*06	6" Opening
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)					*065	6.5" Opening
*13	1-1/4" PowderPuff Pin—1" Embedment (B = 011)[2]						
*14	Stiffy Wood Pull Down Attachment						
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange	*10 Other Please Specify					
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange						
*25	Other—Please Specify						

Footnotes:
1—When Power Actuated Fasteners (A=01, 02 or 13) and (B=01 90° Footprint) are selected, the B=011 Hard Concrete Footprint will be used by default.
2—In order to transition to 3/8" ATR a reducing coupler is used for B=01 and 02 Footprints. Hard Concrete Footprints are available in 3/8".

Additional Fastener Options are Shown on Pages 19-21

Application Examples



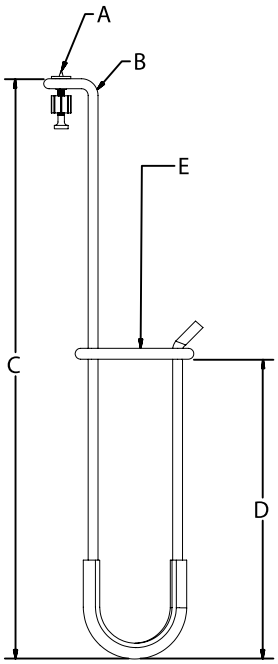
CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

It's What We Do!

Fig. 111 Stiffy Threaded SER Stacker

- Zinc plated rod for corrosion resistance
- Supports Service Entrance Cable fast and effectively
- SER Stackers can be ordered with threaded rod to enable the supports to be cut to length in the field
- 2" wide Plenum Rated plastic bearing surface reduces the pressure on the cables
- Max load: 70# per support
- Submittal documents stamped by an engineer
- Refer to project building code to determine max weight/LF without seismic restraints

***Patent Design**



Tip...Take a look at the Fig 123 to support Service Entrance Cable horizontally.

Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

	A	B	C	D	E	F	Qty
Fig 111							
Fig 111							
Fig 111							

BUY AMERICAN ACT COMPLIANT

F=02
Threaded Adjustable
Version Shown

A		B		C	D	E		F	
*00	No Fastener	*01 90° Footprint	*011 Hard Concrete Footprint	Drop Length (Inches)	Return Length (Inches)	*01	3/4" Opening	*01	Fixed Length
*01	1-1/4" Power Actuated Pin—1" Embedment *(B = 011)*[2]					*02	1" Opening	*02	Threaded Adjustable Version
*02	1-1/2" Power Actuated Pin—1-1/4" Embed *(B = 011)*[2]	*012 Gas Tool Footprint	*02 Sidemount Footprint			*03	1-1/4" Opening		
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)					*04	1-1/2" Opening		
*03.1	3/8" x 3" Wedge Anchor (2" Embed)	*03 Threaded End (1/2" of Threads)	*04 Straight Rod			*05	1-3/4" Opening		
*04	1/4" x 1-3/4" Concrete Screw Anchor	*10 Other Please Specify				*06	2" Opening		
*04.1	3/8" x 1-3/4" Concrete Screw Anchor								
*06	#10 Hex Washer Head Self Driller								
*07	#10 Hex Washer Head Sharp Point								
*08	Timberpin (Wood Applications)								
*09	Wide Mouth Beam Clamp								
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)								
*13	1-1/4" PowderPuff Pin—1" Embedment *(B = 011)*[2]								
*14	Stiffy Wood Pull Down Attachment								
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange								
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange								
*25	Other—Please Specify								

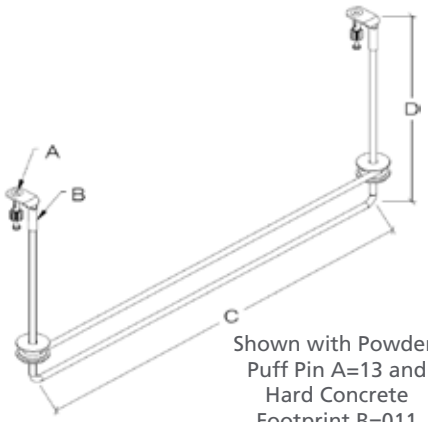
Footnotes:
1—When Power Actuated Fasteners (A=01, 02 or 13) and (B=01 90° Footprint) are selected, the B=011 Hard Concrete Footprint will be used by default.
2—In order to transition to 3/8" ATR a reducing coupler is used for B=01 and 02 Footprints. Hard Concrete Footprints are available in 3/8".

Additional Fastener Options are Shown on Pages 19-21

Application Examples

Fig. 120 Stiffy Crossbar Trapeze

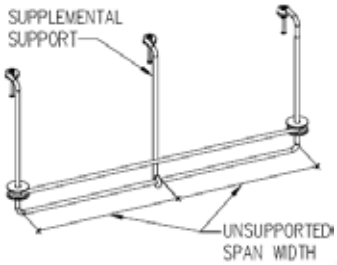
- Supports MC/AC and Flexible Conduit
- Reduces the expense of costly trapezes
- UL listed hardware
- Run cables high and tight to avoid other trades
- Restraint washers hold crossbar in place
- Max load per trapeze: 100 Lbs (Refer to table below)
- Refer to page 28 for project building code and seismic requirements.



Shown with Powder-Puff Pin A=13 and Hard Concrete Footprint B=011

Tip...Take a look at the Fig 101 to stack MC vertically.

Max Capacity Based on Span	
12" Span	50#
14" Span	40#
16" Span	30#
18" Span	20#
*Add supplemental support to reduce max unsupported span width	



Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B	C	D	E	Qty
Fig 120						
Fig 120						
Fig 120						

Tip..."Rollers" can be added to the crossbar to help the MC slide through the supports. Just ask!

A		B		C	D	E	
*00	No Fastener	*01 90° Footprint	*011 Hard Concrete Footprint	Width (Inches)	Drop Length (Inches)	Supplemental Support	
*01	1-1/4" Power Actuated Pin—1" Embedment					*01	Yes
*02	1-1/2" Power Actuated Pin—1-1/4" Embed					*02	No
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)						
*03.1	3/8" x 3" Wedge Anchor (2" Embed)						
*04	1/4" x 1-3/4" Concrete Screw Anchor	*012 Gas Tool Footprint	*02 Sidemount Footprint				
*04.1	3/8" x 1-3/4" Concrete Screw Anchor						
*06	#10 Hex Washer Head Self Driller						
*07	#10 Hex Washer Head Sharp Point						
*08	Timberpin (Wood Applications)						
*09	Wide Mouth Beam Clamp	*03 Threaded End (1/2" of Threads)	*04 Straight Rod				
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)						
*13	1-1/4" PowderPuff Pin—1" Embedment						
*14	Stiffy Wood Pull Down Attachment						
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange	*10 Other-Please Specify					
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange						
*25	Other—Please Specify						

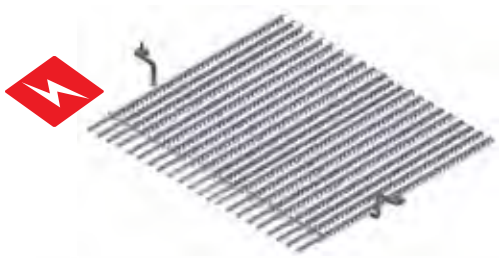
c UL us LISTED

BUY AMERICAN ACT COMPLIANT

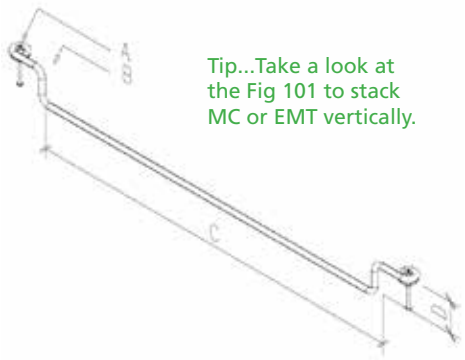
Additional Fastener Options are Shown on Pages 19-21

Application Examples

Fig. 121 Stiffy Trapeze

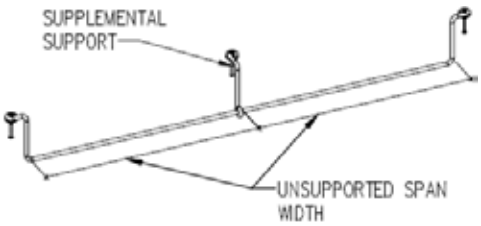


- Supports EMT, MC/AC and Flexible Conduit
- Reduces the expense of costly trapezes
- UL listed hardware
- Run cables high and tight to avoid other trades
- Guides cables vertically on walls
- Max load per trapeze: 100 Lbs (Refer to table below)
- Refer to page 28 for project building code and seismic requirements.



Tip...Take a look at the Fig 101 to stack MC or EMT vertically.

Max Capacity Based on Span	
12" Span	50#
14" Span	40#
16" Span	30#
18" Span	20#
*Add supplemental support to reduce max unsupported span width	



Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B	C	D	E	Qty
Fig 121						
Fig 121						
Fig 121						

Wall Attachment

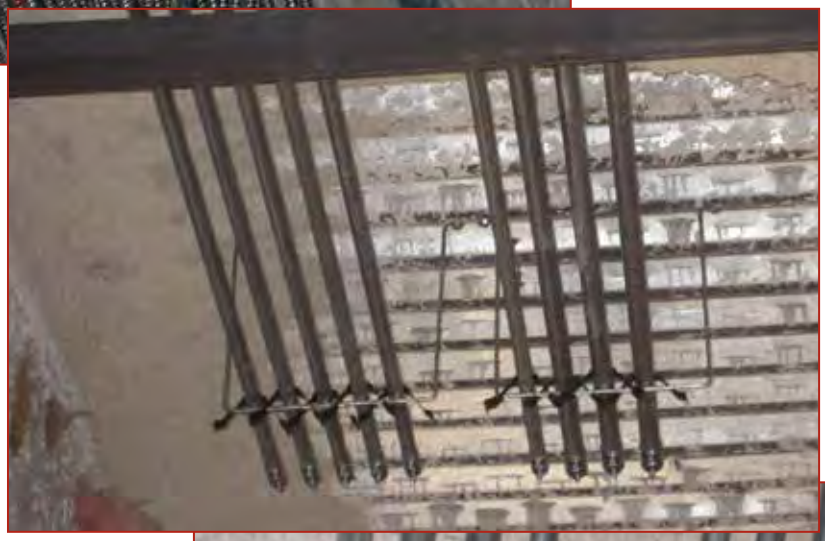
A		B		C	D	E	
*00	No Fastener	*01 90° Footprint	*011 Hard Concrete Footprint	Width (Inches)	Drop Length (Inches)	Supplemental Support	
*01	1-1/4" Power Actuated Pin—1" Embedment					*01	Yes
*02	1-1/2" Power Actuated Pin—1-1/4" Embed					*02	No
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)						
*03.1	3/8" x 3" Wedge Anchor (2" Embed)						
*04	1/4" x 1-3/4" Concrete Screw Anchor	*012 Gas Tool Footprint	*02 Sidemount Footprint				
*04.1	3/8" x 1-3/4" Concrete Screw Anchor						
*06	#10 Hex Washer Head Self Driller						
*07	#10 Hex Washer Head Sharp Point						
*08	Timberpin (Wood Applications)						
*09	Wide Mouth Beam Clamp	*03 Threaded End (1/2" of Threads)	*04 Straight Rod				
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)						
*13	1-1/4" PowderPuff Pin—1" Embedment						
*14	Stiffy Wood Pull Down Attachment						
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange	*10 Other-Please Specify					
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange						
*25	Other—Please Specify						

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

Additional Fastener Options are Shown on Pages 19-21

Application Examples



CEAS

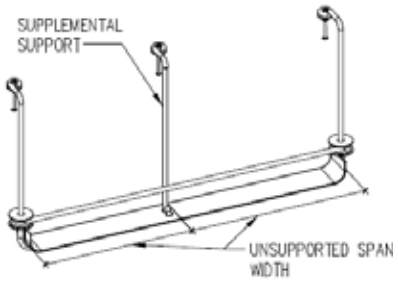
CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

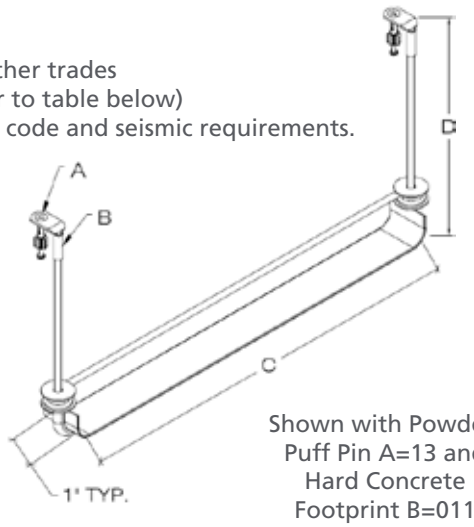
It's What We Do!

Fig. 123 Stiffy Cradle Crossbar Trapeze

- Supports Service Entrance Cable, MC/AC and Flexible Conduit
- Reduces the expense of costly trapezes
- Eliminates 1 or 2-hole straps
- UL listed hardware
- UL listed for use in plenums
- Run cables high and tight to avoid other trades
- Max load per trapeze: 100 Lbs (Refer to table below)
- Refer to page 28 for project building code and seismic requirements.

Max Capacity Based on Span	
12" Span	50#
14" Span	40#
16" Span	30#
18" Span	20#
*Add supplemental support to reduce max unsupported span width	





Shown with Powder-Puff Pin A=13 and Hard Concrete Footprint B=011

Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

Tip...Take a look at the Fig 111 to stack Service Entrance Cable vertically.

	A	B	C	D	E	Qty
Fig 123						
Fig 123						
Fig 123						

A		B		C	D	E	
				Width (Inches)	Drop Length (Inches)	Supplemental Support	
*00	No Fastener	*01	*011			*01	Yes
*01	1-1/4" Power Actuated Pin—1" Embedment	90° Footprint	Hard Concrete Footprint			*02	No
*02	1-1/2" Power Actuated Pin—1-1/4" Embed						
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)						
*03.1	3/8" x 3" Wedge Anchor (2" Embed)						
*04	1/4" x 1-3/4" Concrete Screw Anchor	*012	*02				
*04.1	3/8" x 1-3/4" Concrete Screw Anchor	Gas Tool Footprint	Sidemount Footprint				
*06	#10 Hex Washer Head Self Driller						
*07	#10 Hex Washer Head Sharp Point						
*08	Timberpin (Wood Applications)						
*09	Wide Mouth Beam Clamp	*03	*04				
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)	Threaded End (1/2" of Threads)	Straight Rod				
*13	1-1/4" PowderPuff Pin—1" Embedment						
*14	Stiffy Wood Pull Down Attachment						
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange	*10 Other-Please Specify					
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange						
*25	Other—Please Specify						

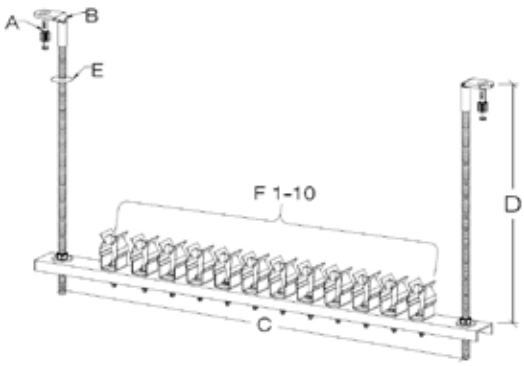
Additional Fastener Options are Shown on Pages 19-21

Application Examples

Fig. 124 Stiffy Snap-in Trapeze

Shown with Wide Mouth BC A=09 and Threaded Footprint B=03

- Supports Pipe, EMT, MC/AC and Flexible Conduit
- Prefabricated trapezes save time and money
- No time wasted in the field with unnecessary assembly
- Quick installation
- Refer to page 28 for project building code and seismic requirements.
- UL listed hardware
- Engineering services are available to design anchors and trapeze assemblies per project requirements when requested



Shown with PowderPuff Pin A=13 and Hard Concrete Footprint B=011

Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

Max Capacity Based on Span	
24" Span	100#
36" Span	80#

	A	B	C	D	E	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	Qty
Fig 124																
Fig 124																
Fig 124																

A	
*00	No Fastener
*01	1-1/4" Power Actuated Pin—1" Embedment *(B = 011)*[5]
*02	1-1/2" Power Actuated Pin—1-1/4" Embed *(B = 011)*[5]
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)
*03.1	3/8" x 3" Wedge Anchor (2" Embed)
*04	1/4" x 1-3/4" Concrete Screw Anchor
*04.1	3/8" x 1-3/4" Concrete Screw Anchor
*06	#10 Hex Washer Head Self Driller
*07	#10 Hex Washer Head Sharp Point
*08	Timberpin (Wood Applications)
*09	Wide Mouth Beam Clamp
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)
*13	1-1/4" PowderPuff Pin—1" Embedment *(B = 011)*[5]
*14	Stiffy Wood Pull Down Attachment
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange
*25	Other—Please Specify

B		
*01	 90° Footprint	*011  Hard Concrete Footprint
*012	 Gas Tool Footprint	*02  Sidemount Footprint
*03	 Threaded End (1/2" of Threads)	*10 Other Please Specify

C	D	E	
Width (Inches)	Drop Length (Inches)	*01	1/4" ATR
		*02	3/8" ATR[4]

F1 - F10			
Conduit Size		Conduit Spacing	Wt/Lf[1]
*00	No Conduit		
*01	1/2" EMT[2]	1-1/2" O.C.	0.54
*02	3/4" EMT[2]	1-3/4" O.C.	0.92
*03	1" EMT[2]	2" O.C.	1.38
*04	1-1/4" EMT[3]	2-1/4" O.C.	2.33
*05	1-1/2" EMT[3]	2-1/2" O.C.	3.36

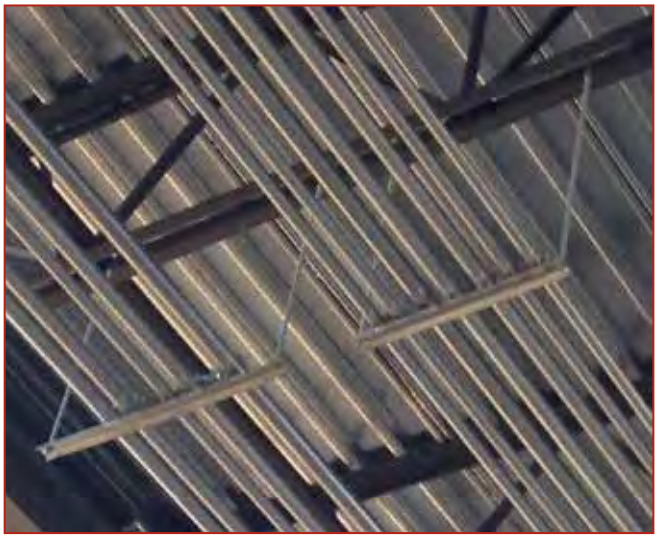
c UL us LISTED

BUY AMERICAN ACT COMPLIANT

Footnotes:
1- EMT weights are calculated with 40% conductor fill
2- Snap in style conduit supports are used for 1/2" EMT thru 1" EMT
3- Conduit Clips are used for 1-1/4" and 1-1/2" EMT
4- In order to transition to 3/8" ATR a reducing coupler is used for B=01 and 02 Footprints. New Hard Concrete Footprint B=011, is available in 1/4" and 3/8".
5- When Power Actuated Fasteners (A=01, 02 or 13) and (B=01-90° Footprint) are selected the B=011 New Hard Concrete Footprint will be used by default.

Additional Fastener Options are Shown on Pages 19-21

Application Examples



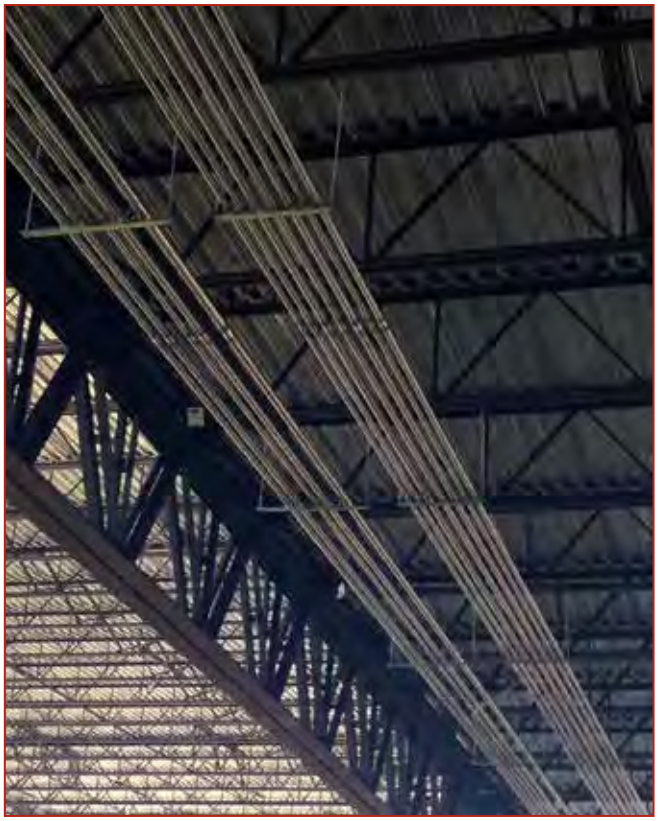
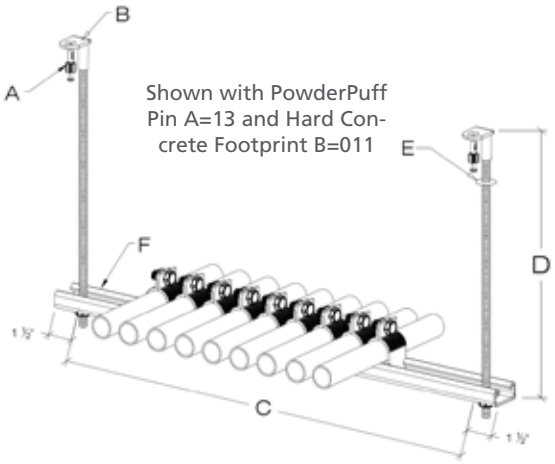


Fig. 125 Stiffy Strut Trapeze

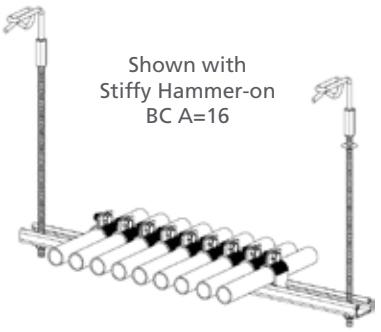
- Supports Pipe, EMT, MC/AC and Flexible Conduit
- Prefabricated trapezes save time and money
- No time wasted in the field with unnecessary assembly
- Quick installation
- Max load per trapeze: 100 Lbs
- Refer to page 28-29 for project building code and seismic requirements.
- UL listed hardware
- Engineering services are available to design anchors and trapeze assemblies per project requirements when requested



Shown with PowderPuff Pin A=13 and Hard Concrete Footprint B=011

Tip...Take a look at the Fig 101 to stack MC or EMT vertically.

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	



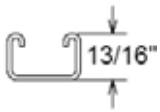
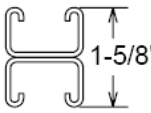
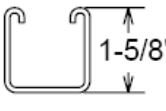
Shown with Stiffy Hammer-on BC A=16

	A	B	C	D	E	F	Qty
Fig 125							
Fig 125							
Fig 125							

A	
*00	No Fastener
*01	1-1/4" Power Actuated Pin—1" Embedment *(B = 011)*[2]
*02	1-1/2" Power Actuated Pin—1-1/4" Embed *(B = 011)*[2]
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)
*03.1	3/8" x 3" Wedge Anchor (2" Embed)
*04	1/4" x 1-3/4" Concrete Screw Anchor
*04.1	3/8" x 1-3/4" Concrete Screw Anchor
*06	#10 Hex Washer Head Self Driller
*07	#10 Hex Washer Head Sharp Point
*08	Timberpin (Wood Applications)
*09	Wide Mouth Beam Clamp
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)
*13	1-1/4" PowderPuff Pin—1" Embedment *(B = 011)*[2]
*14	Stiffy Wood Pull Down Attachment
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange
*25	Other—Please Specify

B		
*01	 90° Footprint	*011  Hard Concrete Footprint
*012	 Gas Tool Footprint	*02  Sidemount Footprint
*03	 Threaded End (1/2" of Threads)	*10 Other Please Specify

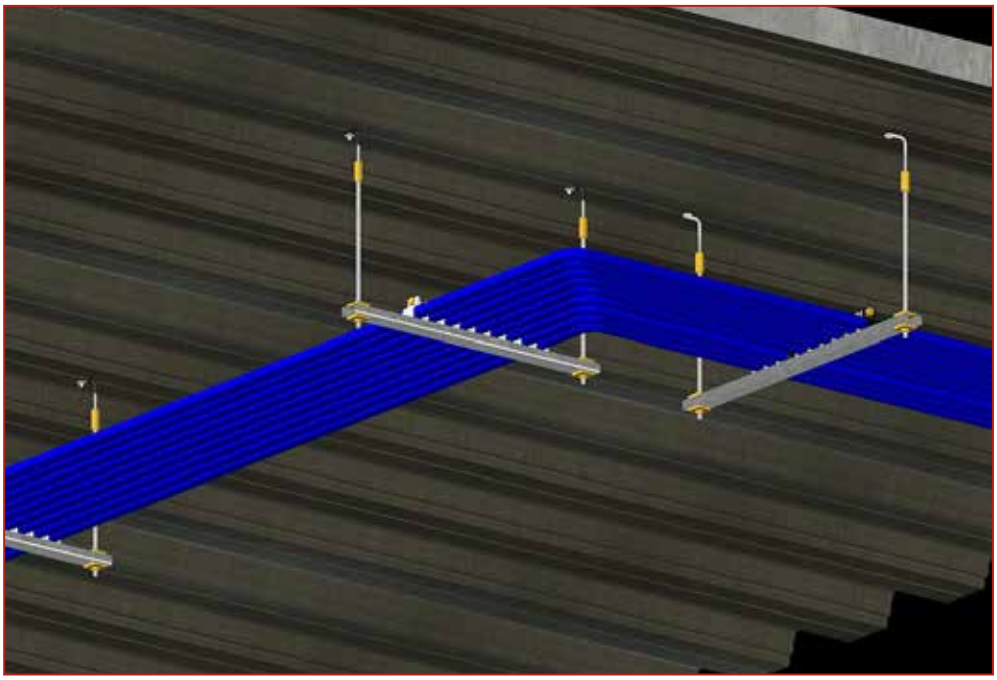
C	D	E	
Width (Inches)	Drop Length (Inches)	*01	1/4" ATR
		*02	3/8" ATR[1]

F	
Strut Profile	
*01	 13/16"
*02	 1-5/8"
*03	 1-5/8"

Footnotes:
1- In order to transition to 3/8" ATR a reducing coupler is used for B=01 and 02 Footprints. New Hard Concrete Footprint B=011, is available in 1/4" and 3/8".
2- When Power Actuated Fasteners (A=01, 02 or 13) and (B=01-90° Footprint) are selected the B=011 New Hard Concrete Footprint will be used by default.
3- Solid strut used for trapezes

Additional Fastener Options are Shown on Pages 19-21

Application Examples



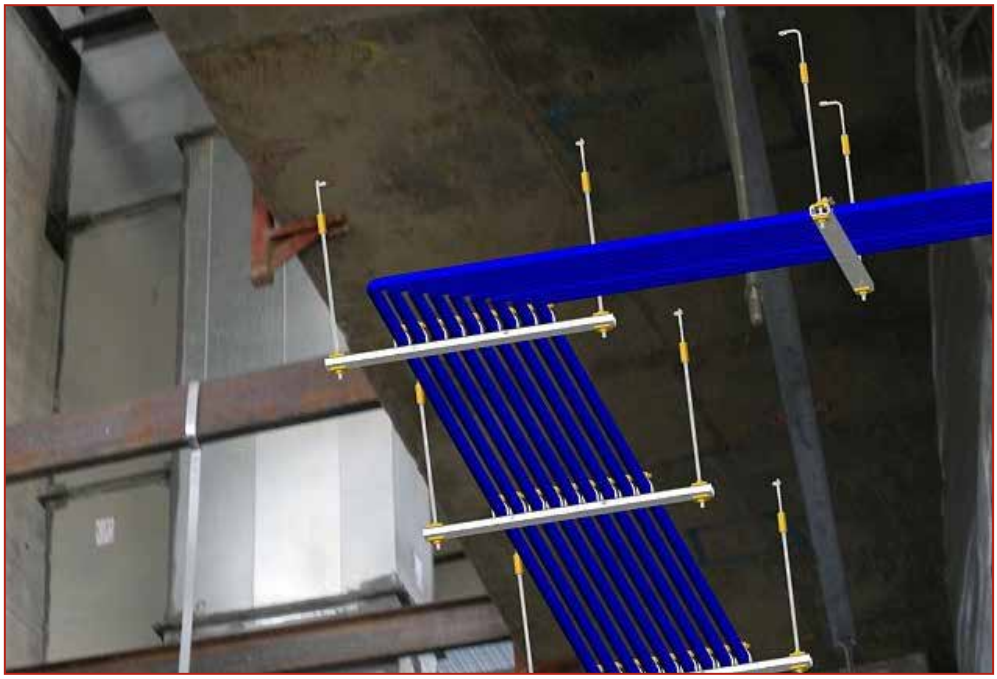
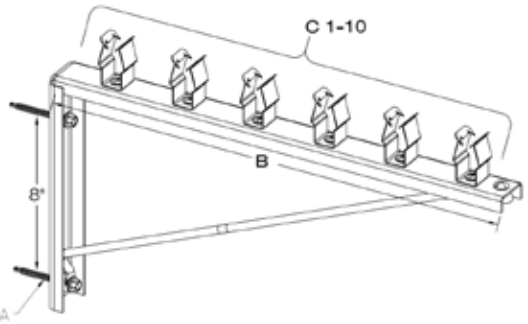


Fig. 127 Stiffy Wall Mounted Snap-in Trapeze

Stiffy Fig 127 Shown Supporting EMT

- Supports Pipe, EMT, MC/AC and Flexible Conduit
- Prefabricated trapezes save time and money
- No time wasted in the field with unnecessary assembly
- Quick installation
- Refer to page 28 for project building code and seismic requirements.
- UL listed hardware
- Engineering services are available to design anchors and trapeze assemblies per project requirements when requested



Tip...Take a look at the Fig 101 to stack MC or EMT vertically.

Max Capacity Based on Span	
16" Span	80#
18" Span	67#

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

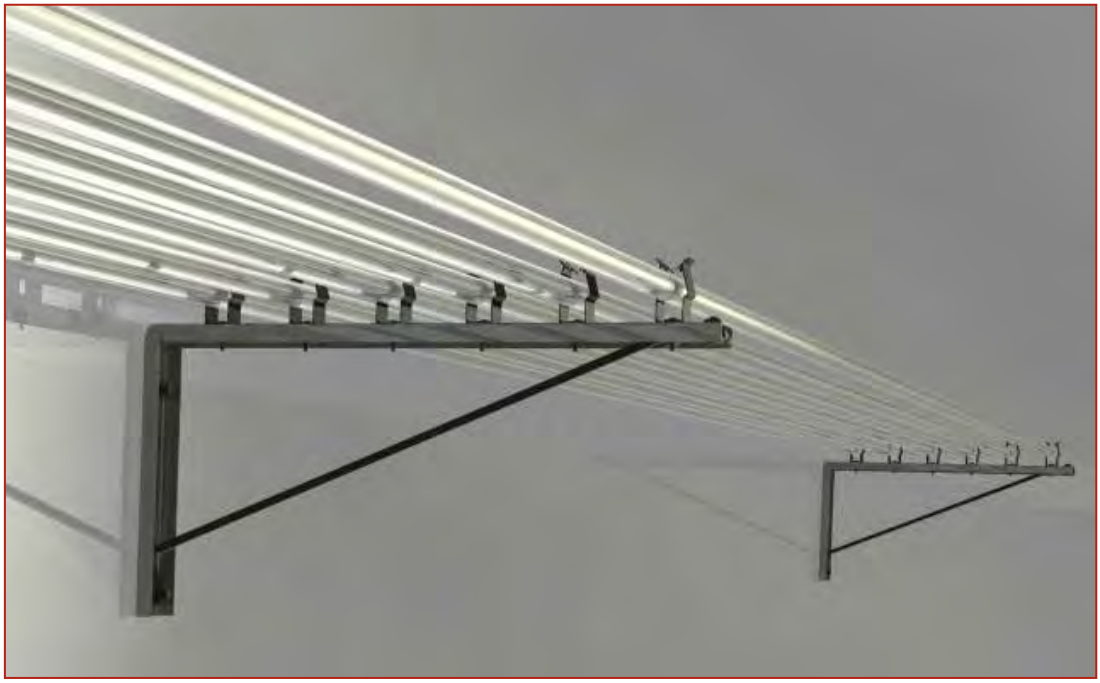
	A	B	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	Qty
Fig 127													
Fig 127													
Fig 127													

A		B	C 1 thru 10			
			Conduit Size		Conduit Spacing	WT/LF[1]
*00	No Fastener	Width (Inches)	*00	No Conduit		
*01	1-1/4" Power Actuated Pin—1" Embedment		*01	1/2" EMT[2]	1-1/2" O.C.	0.54
*02	1-1/2" Power Actuated Pin—1-1/4" Embed		*02	3/4" EMT[2]	1-3/4" O.C.	0.92
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)		*03	1" EMT[2]	2" O.C.	1.38
*03.1	3/8" x 3" Wedge Anchor (2" Embed)		*04	1-1/4" EMT[3]	2-1/4" O.C.	2.33
*04	1/4" x 1-3/4" Concrete Screw Anchor		*05	1-1/2" EMT[3]	2-1/2" O.C.	3.36
*04.1	3/8" x 1-3/4" Concrete Screw Anchor					
*06.1	#14 x 2-1/2" 1/4" Hex Washer Head Self Driller					
*08	Timberpin (Wood Applications)					
*13	1-1/4" ***PowderPuff*** Pin—1" Embedment					
*25	Other—Please Specify					

Footnotes:
1—EMT weights are calculated with 40% conductor fill.
2—Snap-in style conduit supports are used for 1/2" EMT thru 1" EMT
3—Conduit Clips are used for 1-1/4" and 1-1/2" EMT

Additional Fastener Options are Shown on Pages 19-21

Application Examples

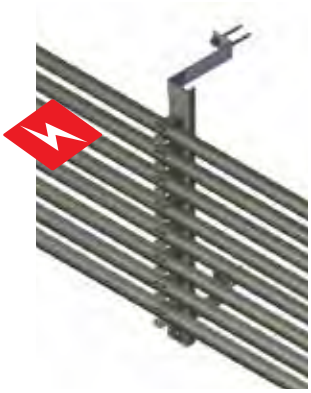


CEAS

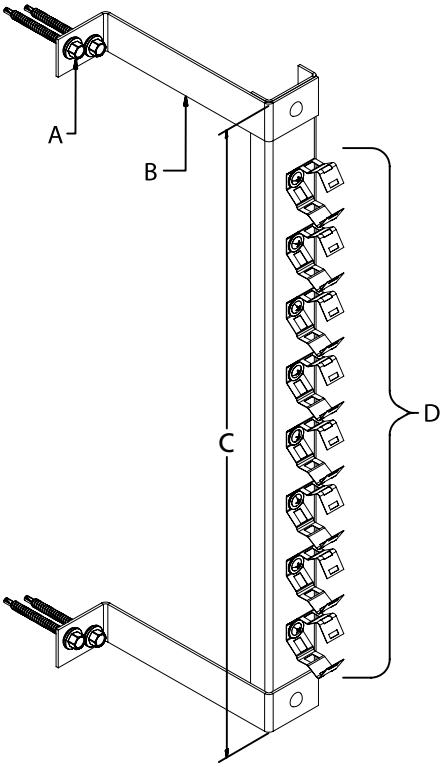
CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

It's What We Do!

Fig. 128 Stiffy Snap-in Wall Rack



- Supports Pipe, EMT, MC/AC and Flexible Conduit
- Prefabricated trapezes save time and money
- No time wasted in the field with unnecessary assembly
- Quick installation
- Refer to page 28 for project building code and seismic requirements.
- UL listed hardware
- Engineering services are available to design anchors and trapeze assemblies per project requirements when requested



Shown with the standoff bracket

Shown without the standoff bracket

Tip...Take a look at the Fig 101 to stack MC or EMT vertically.

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

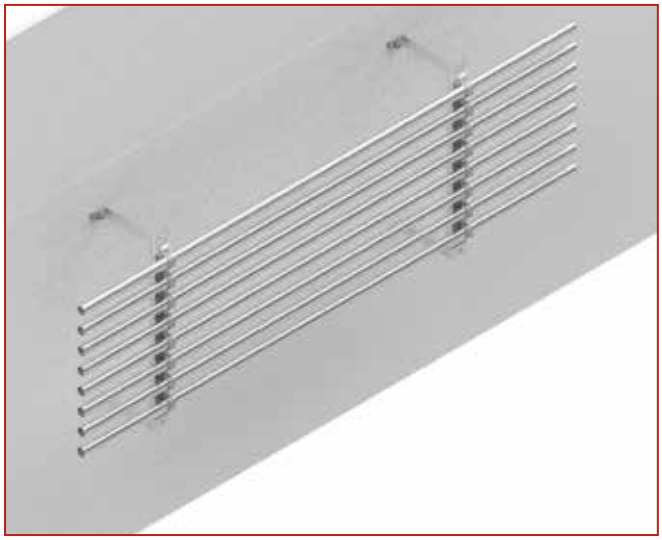
	A	B	C	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	Qty
Fig 128														
Fig 128														
Fig 128														

A		B		C	D 1 thru 10			
*00	No Fastener	5" Offset Bracket		Width (Inches)	Conduit Size		Conduit Spacing	WT/LF[1]
*01	1-1/4" Power Actuated Pin—1" Embedment	*00	No		*00	No Conduit		
*02	1-1/2" Power Actuated Pin—1-1/4" Embed	*01	Yes		*01	1/2" EMT[2]	1-1/2" O.C.	0.54
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)				*02	3/4" EMT[2]	1-3/4" O.C.	0.92
*03.1	3/8" x 3" Wedge Anchor (2" Embed)				*03	1" EMT[2]	2" O.C.	1.38
*04	1/4" x 1-3/4" Concrete Screw Anchor				*04	1-1/4" EMT[3]	2-1/4" O.C.	2.33
*04.1	3/8" x 1-3/4" Concrete Screw Anchor				*05	1-1/2" EMT[3]	2-1/2" O.C.	3.36
*06.1	#14 x 2-1/2" 1/4" Hex Washer Head Self Driller							
*08	Timberpin (Wood Applications)							
*13	1-1/4" ***PowderPuff*** Pin—1" Embedment							
*25	Other—Please Specify							

Footnotes:
1-EMT weights are calculated with 40% conductor fill.
2-Snap-in style conduit supports are used for 1/2" EMT thru 1" EMT
3-Conduit Clips are used for 1-1/4" and 1-1/2" EMT

Additional Fastener Options are Shown on Pages 19-21

Application Examples



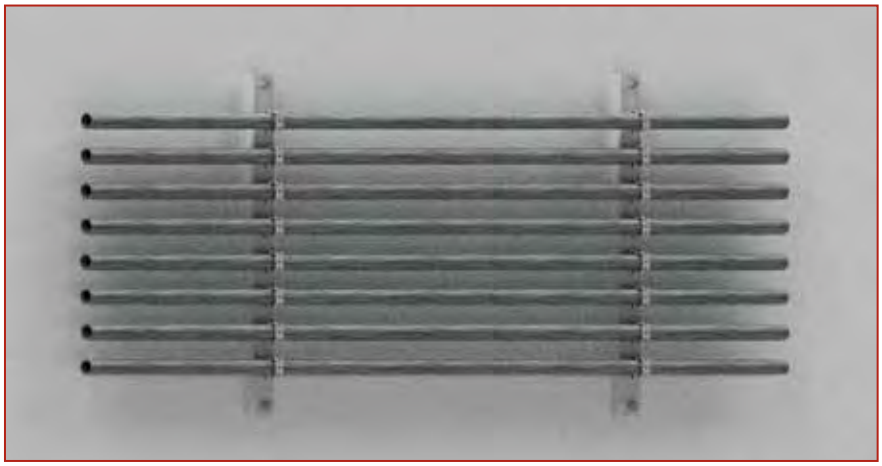
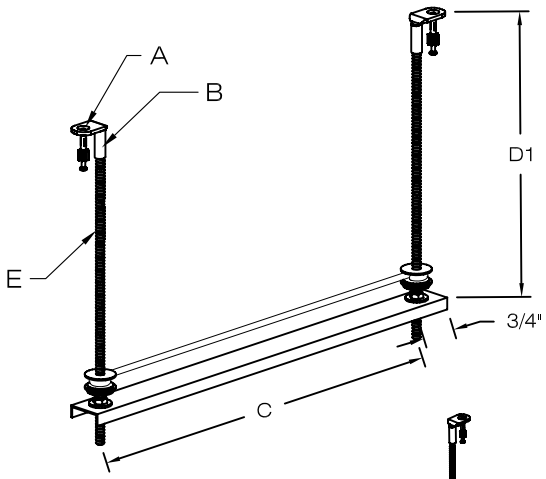


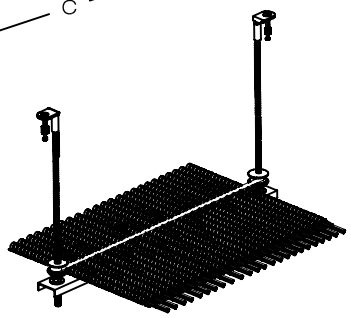
Fig. 129 Stiffy HD Crossbar Trapeze

- Supports MC/AC and Flexible Conduit
- Prefabricated trapezes save time and money
- No time wasted in the field with unnecessary assembly
- Quick installation
- Refer to page 28 for project building code and seismic requirements.
- UL listed hardware
- Engineering services are available to design anchors and trapeze assemblies per project requirements when requested



Tip...Take a look at the Fig 101 to stack MC or EMT vertically.

Max Capacity Based on Span	
24" Span	100#
36" Span	80#



Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

	A	B	C	D	E	Qty
Fig 129						
Fig 129						
Fig 129						

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

A		B		C	D	E	
*00	No Fastener	*01  90° Footprint	*011  Hard Concrete Footprint	Width (Inches)	Drop Length (Inches)	*01	1/4" ATR
*01	1-1/4" Power Actuated Pin—1" Embedment *(B = 011)*[2]					*02	3/8" ATR[1]
*02	1-1/2" Power Actuated Pin—1-1/4" Embed *(B = 011)*[2]	*012  Gas Tool Footprint	*02  Sidemount Footprint				
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)						
*03.1	3/8" x 3" Wedge Anchor (2" Embed)	*03  Threaded End (1/2" of Threads)	*04  Straight Rod				
*04	1/4" x 1-3/4" Concrete Screw Anchor						
*04.1	3/8" x 1-3/4" Concrete Screw Anchor	*10 Other-Please Specify					
*06	#10 Hex Washer Head Self Driller						
*07	#10 Hex Washer Head Sharp Point						
*08	Timberpin (Wood Applications)						
*09	Wide Mouth Beam Clamp						
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)						
*13	1-1/4" PowderPuff Pin—1" Embedment *(B = 011)*[2]						
*14	Stiffy Wood Pull Down Attachment						
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange						
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange						
*25	Other—Please Specify						

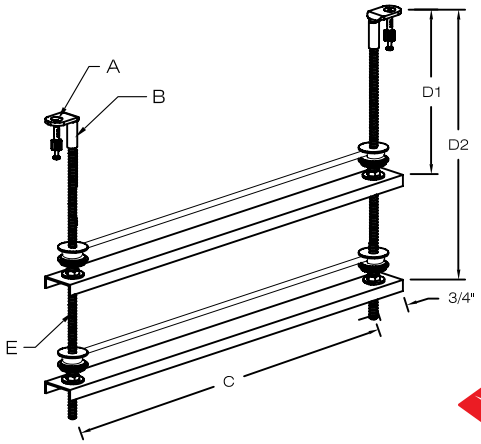
Footnotes:
1-In order to transition to 3/8" ATR a reducing coupler is used for B=01 and 02 Footprints. New Hard Concrete Footprint B=011, is available in 1/4" and 3/8".

2-When Power Actuated Fasteners (A=01, 02 or 13) and (B=01-90° Footprint) are selected the B=011 New Hard Concrete Footprint will be used by default.

Additional Fastener Options are Shown on Pages 19-21

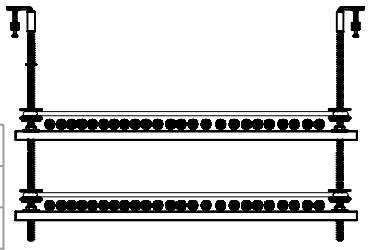
Fig. 130 Stiffy HD 2-Tier Crossbar Trapeze

- Supports MC/AC and Flexible Conduit
- Prefabricated trapezes save time and money
- No time wasted in the field with unnecessary assembly
- Quick installation
- Refer to page 28 for project building code and seismic requirements.
- UL listed hardware
- Engineering services are available to design anchors and trapeze assemblies per project requirements when requested



Tip...Take a look at the Fig 101 to stack MC or EMT vertically.

Max Capacity *Per Tier* Based on Span	
24" Span	100#
36" Span	80#



Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable*	

	A	B	C	D1	D2	E	Qty
Fig 130							
Fig 130							
Fig 130							

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

A	
*00	No Fastener
*01	1-1/4" Power Actuated Pin—1" Embedment *(B = 011)*[2]
*02	1-1/2" Power Actuated Pin—1-1/4" Embed *(B = 011)*[2]
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)
*03.1	3/8" x 3" Wedge Anchor (2" Embed)
*04	1/4" x 1-3/4" Concrete Screw Anchor
*04.1	3/8" x 1-3/4" Concrete Screw Anchor
*06	#10 Hex Washer Head Self Driller
*07	#10 Hex Washer Head Sharp Point
*08	Timberpin (Wood Applications)
*09	Wide Mouth Beam Clamp
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)
*13	1-1/4" PowderPuff Pin—1" Embedment *(B = 011)*[2]
*14	Stiffy Wood Pull Down Attachment
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange
*25	Other—Please Specify

B		
*01	 90° Footprint	*011  Hard Concrete Footprint
*012	 Gas Tool Footprint	*02  Sidemount Footprint
*03	 Threaded End (1/2" of Threads)	*04  Straight Rod
*10 Other-Please Specify		

C	D	E	
Width (Inches)	Drop Length (Inches)	*01	1/4" ATR
		*02	3/8" ATR[1]

Footnotes:
1-In order to transition to 3/8" ATR a reducing coupler is used for B=01 and 02 Footprints. New Hard Concrete Footprint B=011, is available in 1/4" and 3/8".

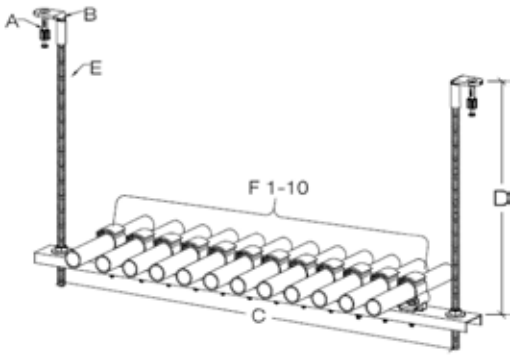
2-When Power Actuated Fasteners (A=01, 02 or 13) and (B=01-90° Footprint) are selected the B=011 New Hard Concrete Footprint will be used by default.

Additional Fastener Options are Shown on Pages 19-21

Fig. 131 Stiffy Snap Trapeze

Shown with Wide Mouth BC A=09 and Threaded Footprint B=03

- Supports A/C Tubing, Refrigeration, PEX, Med Gas, Copper and Steel Pipe, EMT, MC/AC and Flexible Conduit
- Engineered as a complete assembly
- No time wasted in the field with unnecessary assembly
- Quick installation
- Refer to project building code for support spacing and seismic requirements
- UL Listed Components
- Snaps can be installed around insulated pipes or spacers can be supplied so insulation can be notched around the support
- Larger Sized Snaps are available to be installed around insulation



Shown with PowderPuff Pin A=13 and New Hard Concrete Footprint B=01

Max Capacity Based on Span	
24" Span	100#
36" Span	80#

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

	A	B	C	D	E	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	Qty
Fig 131																
Fig 131																
Fig 131																

A	
*00	No Fastener
*01	1-1/4" Power Actuated Pin—1" Embedment *(B = 011)*[2]
*02	1-1/2" Power Actuated Pin—1-1/4" Embed *(B = 011)*[2]
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)
*03.1	3/8" x 3" Wedge Anchor (2" Embed)
*04	1/4" x 1-3/4" Concrete Screw Anchor
*04.1	3/8" x 1-3/4" Concrete Screw Anchor
*06	#10 Hex Washer Head Self Driller
*07	#10 Hex Washer Head Sharp Point
*08	Timberpin (Wood Applications)
*09	Wide Mouth Beam Clamp
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)
*13	1-1/4" PowderPuff Pin—1" Embedment *(B = 011)*[2]
*14	Stiffy Wood Pull Down Attachment
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange
*25	Other—Please Specify

B		
*01	 90° Footprint	
*011	 Hard Concrete Footprint	
*012	 Gas Tool Footprint	
*02	 Sidemount Footprint	
*03	 Threaded End (1/2" of Threads)	
*10 Other Please Specify		

C	D	E	
Width (Inches)	Drop Length (Inches)	*01	1/4" ATR
		*02	3/8" ATR[1]

To add insulation spacers: Add an "I" to the order option followed by the insulation thickness. Example: *2812 = 1" copper with 2" of insulation.

F1 Thru F10 — Input the appropriate value preceded by an (*)						
Trade Size	EMT[3]		Sch 40 Steel[4,5]		Type K Copper[4,5]	
	Size	Wt/LF	Size	Wt/LF	Size	Wt/LF
1/4"	-		*10		*10	
3/8"	-		*17		*10	
1/2"	*17	0.54	*20	0.98	*15	0.43
5/8"	-		-		*17	
3/4"	*22	0.92	*25	1.36	*22	0.83
1"	*28	1.38	*32	2.07	*28	1.18
1-1/4"	*36		*40		*32	
1-1/2"	*40	3.36	*47	3.58	*40	2.1
2"	*51	4.78	*59	5.05	*51	3.37

Footnotes:
1—In order to transition to 3/8" ATR a reducing coupler is used for B=01 and 02 Footprints. New Hard Concrete Footprint B=011, is available in 1/4" and 3/8".
2—When Power Actuated Fasteners (A=01, 02 or 13) and (B=01-90° Footprint) are selected the B=011 New Hard Concrete Footprint will be used by default.
3—EMT weights are calculated with 40% conductor fill.
4—Sch 40 Steel and Copper weights are calculated as full of water.
5—Larger Sized Snaps are available to be installed around insulation.

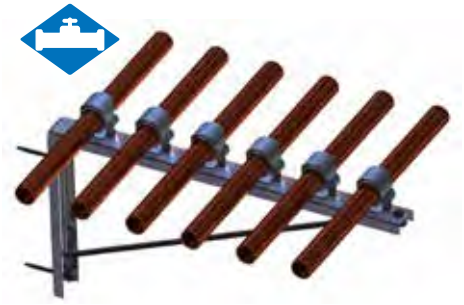
Additional Fastener Options are Shown on Pages 19-21

Application Examples

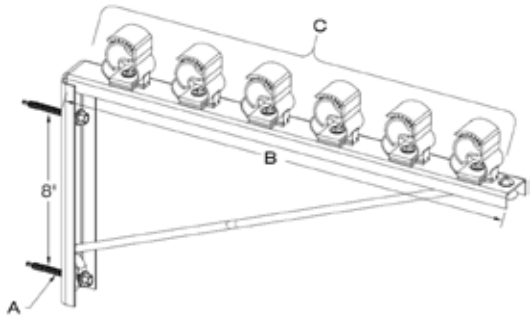
CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

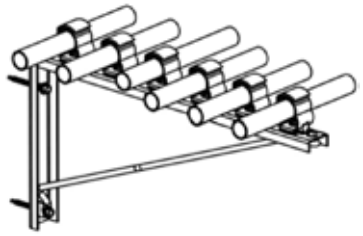
It's What We Do!

Fig. 132 Stiffy Wall Mount Snap Trapeze



- Supports A/C Tubing, Refrigeration, PEX, Med Gas, Copper and Steel Pipe, EMT, MC/AC and Flexible Conduit
- Engineered as a complete assembly
- No time wasted in the field with unnecessary assembly
- Quick installation
- Refer to project building code for support spacing and seismic requirements
- UL Listed Components
- Snaps can be installed around insulated pipes to maintain continuous insulation
- Larger Sized Snaps are available to be installed around insulation





Stiffy Fig 132 Shown Supporting EMT

Max Capacity Based on Span	
16" Span	80#
18" Span	67#

Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable*	

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

	A	B	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	Qty
Fig 132													
Fig 132													
Fig 132													

A		B
*00	No Fastener	Width (Inches)
*01	1-1/4" Power Actuated Pin—1" Embedment	
*02	1-1/2" Power Actuated Pin—1-1/4" Embed.	
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)	
*03.1	3/8" x 3" Wedge Anchor (2" Embed)	
*04	1/4" x 1-3/4" Concrete Screw Anchor	
*04.1	3/8" x 1-3/4" Concrete Screw Anchor	
*06.1	#14 x 2-1/2" 1/4" Hex Washer Head Self Driller	
*08	Timberpin (Wood Applications)	
*13	1-1/4" ***PowderPuff*** Pin—1" Embedment (B=05)[2]	
*15	Other—Please Specify	

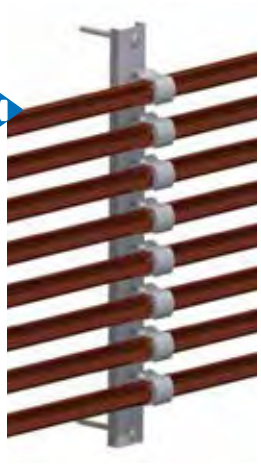
To add insulation spacers: Add an "I" to the order option followed by the insulation thickness.
Example:
*2812 = 1" copper with 2" of insulation.

Footnotes:
1—EMT weights are calculated with 40% conductor fill.
2—Sch 40 Steel and Copper weights are calculated as full of water.
3—Larger Sized Snaps are available to be installed around insulation.

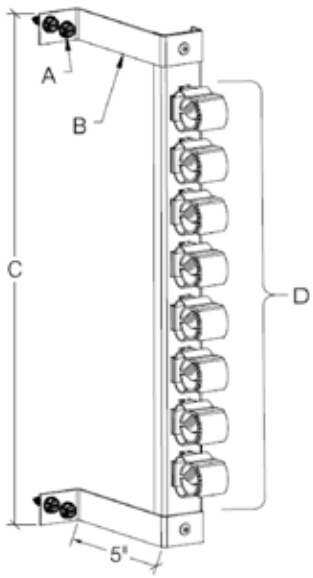
C1 Thru C10						
Input the appropriate value preceded by an (*)						
Trade Size	EMT[1]		Sch 40 Steel[2,3]		Type K Copper[2,3]	
	Size	Wt/LF	Size	Wt/LF	Size	Wt/LF
1/4"	-		*10		*10	
3/8"	-		*17		*10	
1/2"	*17	0.54	*20	0.98	*15	0.43
5/8"	-		-		*17	
3/4"	*22	0.92	*25	1.36	*22	0.83
1"	*28	1.38	*32	2.07	*28	1.18
1-1/4"	*36		*40		*32	
1-1/2"	*40	3.36	*47	3.58	*40	2.1
2"	*51	4.78	*59	5.05	*51	3.37

Additional Fastener Options are Shown on Pages 19-21

Fig. 133 Stiffy Snap Wall Rack



- Supports A/C Tubing, Refrigeration, PEX, Med Gas, Copper and Steel Pipe, EMT, MC/AC and Flexible Conduit
- Engineered as a complete assembly
- No time wasted in the field with unnecessary assembly
- Quick installation
- Refer to project building code for support spacing and seismic requirements
- UL Listed Components
- Snaps can be installed around insulated pipes to maintain continuous insulation
- Larger Sized Snaps are available to be installed around insulation



Shown with the standoff bracket

Shown without the standoff bracket

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

	A	B	C	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	Qty
Fig 133														
Fig 133														
Fig 133														

A		B		C
*00	No Fastener	5" Offset Bracket		Width (Inches)
*01	1-1/4" Power Actuated Pin—1" Embedment	*00	No	
*02	1-1/2" Power Actuated Pin—1-1/4" Embed.	*01	Yes	
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)			
*03.1	3/8" x 3" Wedge Anchor (2" Embed)			
*04	1/4" x 1-3/4" Concrete Screw Anchor			
*04.1	3/8" x 1-3/4" Concrete Screw Anchor			
*06.1	#14 x 2-1/2" 1/4" Hex Washer Head Self Driller			
*08	Timberpin (Wood Applications)			
*13	1-1/4" ***PowderPuff*** Pin—1" Embedment			
*15	Other—Please Specify			

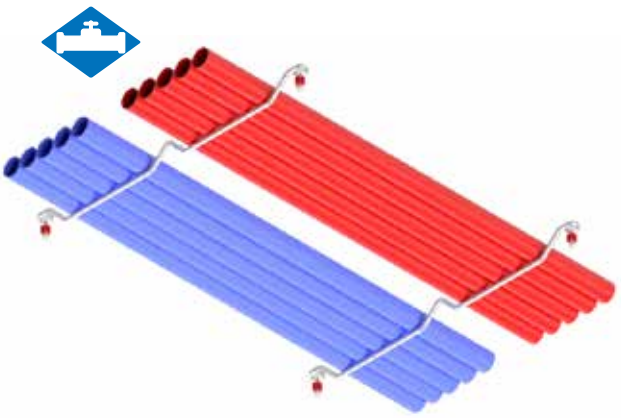
To add insulation spacers: Add an "I" to the order option followed by the insulation thickness.
Example:
*2812 = 1" copper with 2" of insulation.

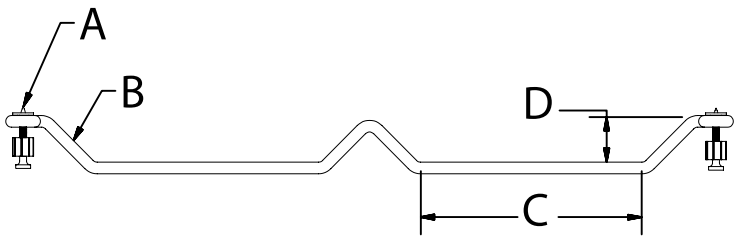
Footnotes:
1—EMT weights are calculated with 40% conductor fill.
2—Sch 40 Steel and Copper weights are calculated as full of water.
3—Larger Sized Snaps are available to be installed around insulation.

D1 Thru D10						
Input the appropriate value preceded by an (*)						
Trade Size	EMT[1]		Sch 40 Steel[2,3]		Type K Copper[2,3]	
	Size	Wt/LF	Size	Wt/LF	Size	Wt/LF
1/4"	-		*10		*10	
3/8"	-		*17		*10	
1/2"	*17	0.54	*20	0.98	*15	0.43
5/8"	-		-		*17	
3/4"	*22	0.92	*25	1.36	*22	0.83
1"	*28	1.38	*32	2.07	*28	1.18
1-1/4"	*36		*40		*32	
1-1/2"	*40	3.36	*47	3.58	*40	2.1
2"	*51	4.78	*59	5.05	*51	3.37

Additional Fastener Options are Shown on Pages 19-21

Fig. 134 Stiffy PEX Trapeze



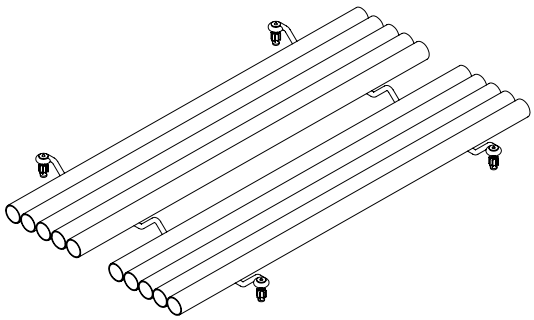


- Supports PEX piping high and tight overhead or vertically on walls
- Reduces the expense of costly trapezes
- Max load per trapeze: 50 Lbs (Refer to table below)
- Fasteners are included and designed to support the loads referenced in the capacity table.

Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

Max Capacity Based on Span	
12" Span	50#
14" Span	40#
16" Span	30#
18" Span	20#
*Add supplemental support to reduce max unsupported span width	

	A	B	C	D	Qty
Fig 134					
Fig 134					
Fig 134					



A		B		C	D
*00	No Fastener	*01 90° Footprint	*011 Hard Concrete Footprint	Width (Inches)	Drop Length (Inches)
*01	1-1/4" Power Actuated Pin—1" Embedment				
*02	1-1/2" Power Actuated Pin—1-1/4" Embed				
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)				
*03.1	3/8" x 3" Wedge Anchor (2" Embed)				
*04	1/4" x 1-3/4" Concrete Screw Anchor	*012 Gas Tool Footprint	*02 Sidemount Footprint		
*04.1	3/8" x 1-3/4" Concrete Screw Anchor				
*06	#10 Hex Washer Head Self Driller				
*07	#10 Hex Washer Head Sharp Point				
*08	Timberpin (Wood Applications)				
*09	Wide Mouth Beam Clamp	*03 Threaded End (1/2" of Threads)	*04 Straight Rod		
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)				
*13	1-1/4" PowderPuff Pin—1" Embedment				
*14	Stiffy Wood Pull Down Attachment				
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange	*10 Other-Please Specify			
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange				
*25	Other—Please Specify				

BUY AMERICAN ACT COMPLIANT

Additional Fastener Options are Shown on Pages 19-21

Application Examples

GCEAS

CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

It's What We Do!

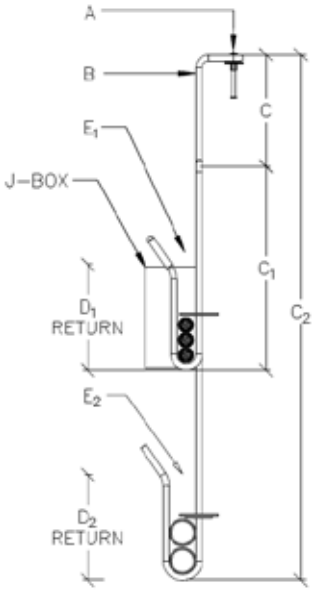
Fig. 140 Stiffy Multi Stacker Support

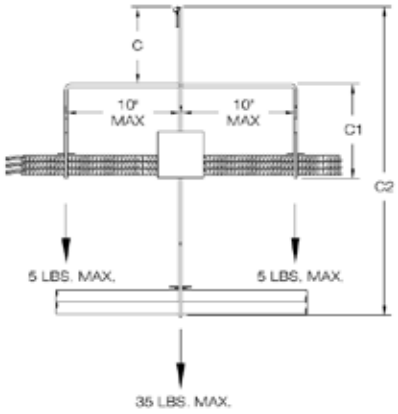
- Zinc plated rod resists corrosion
- Supports EMT, MC/AC and Flexible Conduit
- Spaces cables to avoid bundling and NEC de-rating issues
- Max load: 50# per support
- UL listed hardware

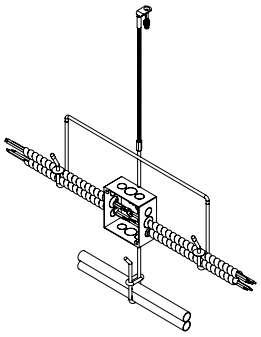
******Patented Design***

c UL us LISTED

BUY AMERICAN ACT COMPLIANT







F=02
Threaded Adjustable
Version Shown

Contractor:	Ship to Address:
PO#	Order Date:
****All Orders are Custom and Therefore Non-cancellable and Non-returnable***	

	A	B	C	C1	D1	E2	C2	D2	E2	F	Qty
Fig 140											
Fig 140											
Fig 140											

***To order the Multi Support with no stacker returns input "0" for the return length (D*) and opening size (E*).**

A		B		C-C2	D1-D2	E1-E2			F	
*00	No Fastener	*01  90° Footprint	*011  Hard Concrete Footprint	Drop Length (Inches)	Return Length (Inches)	*01	White	(.430 thru .560 diameter) 14-3, 14-4, 12-2, 12-3, 12-4 and 10-2 MC/AC	*01	Fixed Length
*01	1-1/4" Power Actuated Pin—1" Embedment					*02	Black	(.560 thru .690 diameter) Standard MC Sizes: 10-3, 10-4, 8-2, 8-3.	*02	Threaded Adjustable Version
*02	1-1/2" Power Actuated Pin—1-1/4" Embed					*03	Blue	(.700 thru .830 diameter) MC/AC		
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)					*04	Orange	(.840 thru .970 diameter) MC/AC		
*03.1	3/8" x 3" Wedge Anchor (2" Embed)	*012  Gas Tool Footprint	*02  Sidemount Footprint			*.05	Pink	(.980 thru 1.11 diameter) MC/AC		
*04	1/4" x 1-3/4" Concrete Screw Anchor					*06	Teal	(1.12 thru 1.250 diameter) MC/AC		
*04.1	3/8" x 1-3/4" Concrete Screw Anchor					*07	Wine	(1.260 thru 1.390 diameter) MC/AC		
*06	#10 Hex Washer Head Self Driller					Refer to the Tech Section for MC/AC Diam.				
*07	#10 Hex Washer Head Sharp Point					*08	Gray	1/2" EMT		
*08	Timberpin (Wood Applications)					*09	Brown	3/4" EMT		
*09	Wide Mouth Beam Clamp	*03  Threaded End (1/2" of Threads)	*04  Straight Rod			*10	Green	1" EMT		
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)					*11	Yellow	1-1/4" EMT		
*13	1-1/4" PowderPuff Pin—1" Embedment					*12	Red	1-1/2" EMT		
*14	Stiffy Wood Pull Down Attachment	*10 Other-Please Specify				*13	Purple	2" EMT		
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange					*14	Other	Specify Size		
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange									
*25	Other—Please Specify									

Additional Fastener Options are Shown on Pages 19-21

Application Examples

CEAS

CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

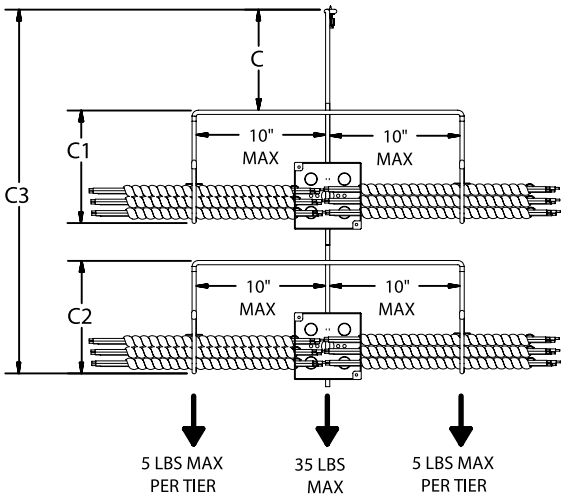
It's What We Do!

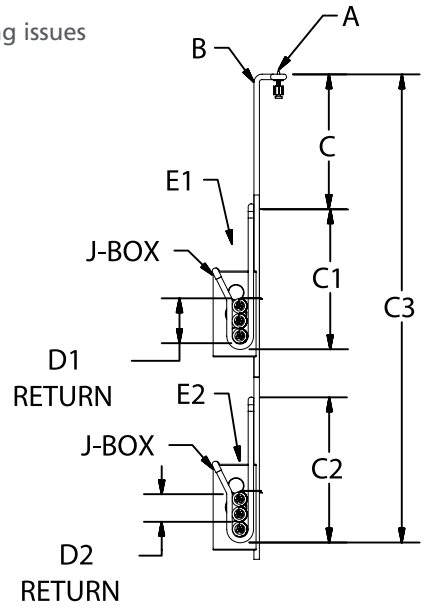
Fig. 144

2 Tier Stiffy Multi Stacker Support

***Patented Design

- Zinc plated rod resists corrosion
- Supports EMT, MC/AC and Flexible Conduit
- Spaces cables to avoid bundling and NEC de-rating issues
- Max load: 50# per support
- UL listed hardware





Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable	

c UL us LISTED

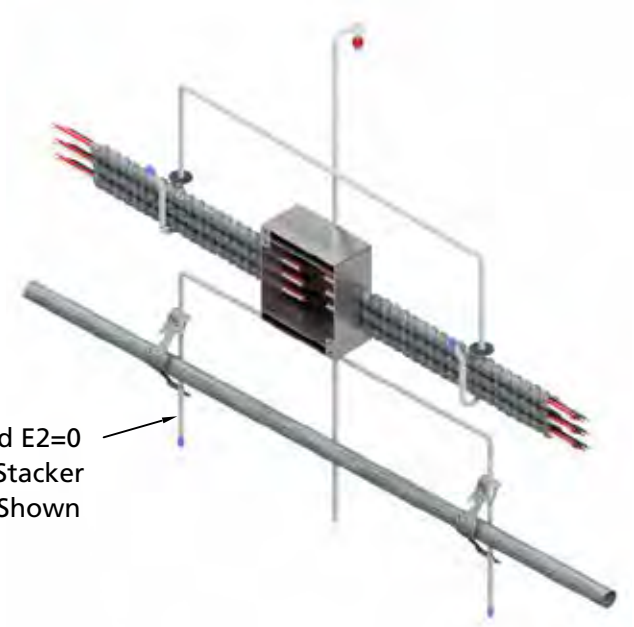
BUY AMERICAN ACT COMPLIANT

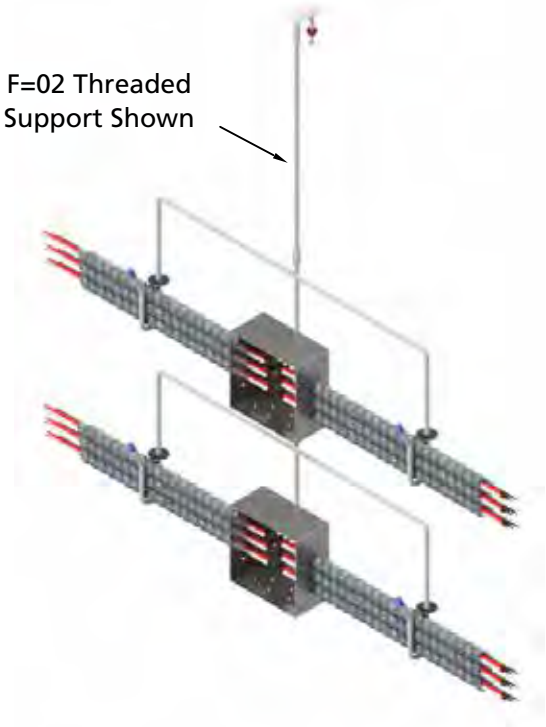
	A	B	C	C1	D1	E1	C2	D2	E2	C3	F	QTY
Fig 144												
Fig 144												
Fig 144												

To order the Multi Support with no stacker returns input "0" for the return length (D) and opening size (E*).

A		B		C-C3	D1-D2	E1-E2			F	
*00	No Fastener	*01  90° Footprint	*011  Hard Concrete Footprint	Drop Length (Inches)	Return Length (Inches)	*01	White	(.430 thru .560 diameter) 14-3, 14-4, 12-2, 12-3, 12-4 and 10-2 MC/AC	*01	Fixed Length
*01	1-1/4" Power Actuated Pin—1" Embedment					*02	Black	(.560 thru .690 diameter) Standard MC Sizes: 10-3, 10-4, 8-2, 8-3.	*02	Threaded Adjustable Version
*02	1-1/2" Power Actuated Pin—1-1/4" Embed					*03	Blue	(.700 thru .830 diameter) MC/AC		
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)					*04	Orange	(.840 thru .970 diameter) MC/AC		
*03.1	3/8" x 3" Wedge Anchor (2" Embed)					*.05	Pink	(.980 thru 1.11 diameter) MC/AC		
*04	1/4" x 1-3/4" Concrete Screw Anchor	*012  Gas Tool Footprint	*02  Sidemount Footprint			*06	Teal	(1.12 thru 1.250 diameter) MC/AC		
*04.1	3/8" x 1-3/4" Concrete Screw Anchor					*07	Wine	(1.260 thru 1.390 diameter) MC/AC		
*06	#10 Hex Washer Head Self Driller					Refer to the Tech Section for MC/AC Diam.				
*07	#10 Hex Washer Head Sharp Point					*08	Gray	1/2" EMT		
*08	Timberpin (Wood Applications)					*09	Brown	3/4" EMT		
*09	Wide Mouth Beam Clamp	*03  Threaded End (1/2" of Threads)	*04  Straight Rod			*10	Green	1" EMT		
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)					*11	Yellow	1-1/4" EMT		
*13	1-1/4" PowderPuff Pin—1" Embedment					*12	Red	1-1/2" EMT		
*14	Stiffy Wood Pull Down Attachment					*13	Purple	2" EMT		
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange	*10 Other-Please Specify				*14	Other	Specify Size		
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange									
*25	Other—Please Specify									

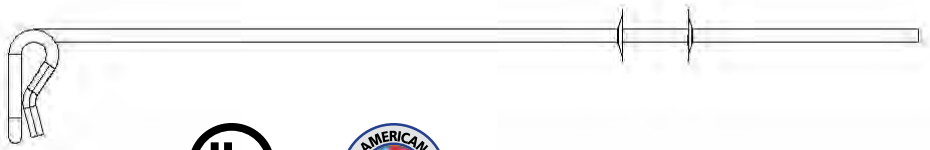
Application Examples

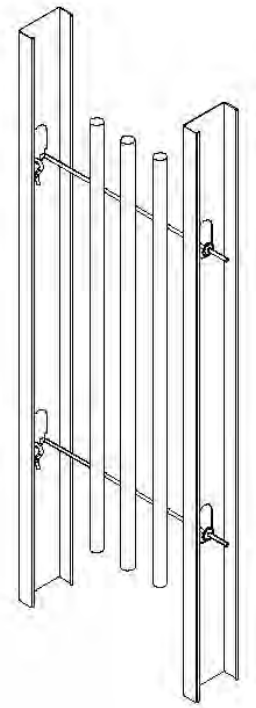




CEAS
CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS
It's What We Do!

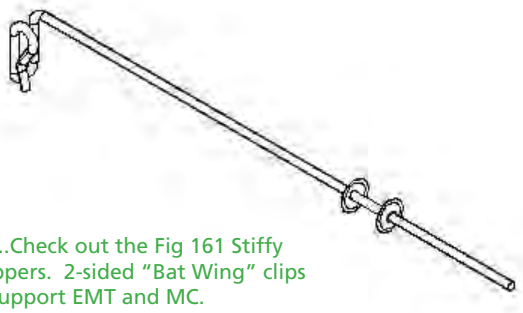
Fig. 160 Stiffy Stud Spanner



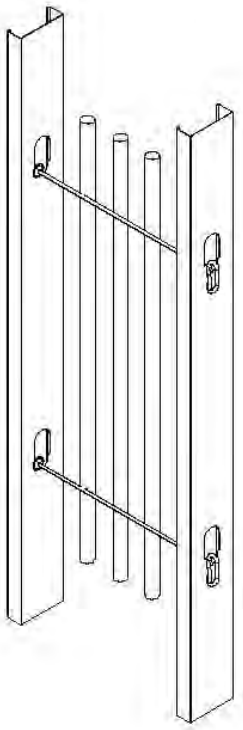


- Zinc plated rod for corrosion resistance
- Secures EMT, MC/AC and Flexible Conduit between studs
- Quick installation
- No screws required
- Innovative fastener loop secures the support to metal studs
- Use Stiffy Grippers—Fig 161 for attachment

***Patented Design**



Tip...Check out the Fig 161 Stiffy Grippers. 2-sided "Bat Wing" clips to support EMT and MC.



Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

	A
*01	16" Spanner
*02	24" Spanner

	A	Qty
Fig 160		
Fig 160		
Fig 160		

Application Examples

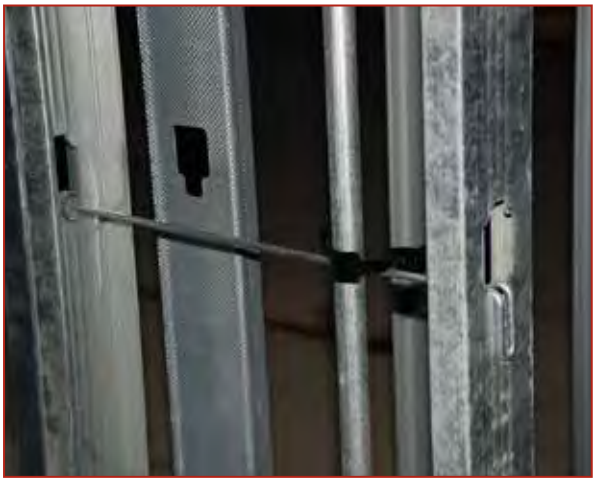
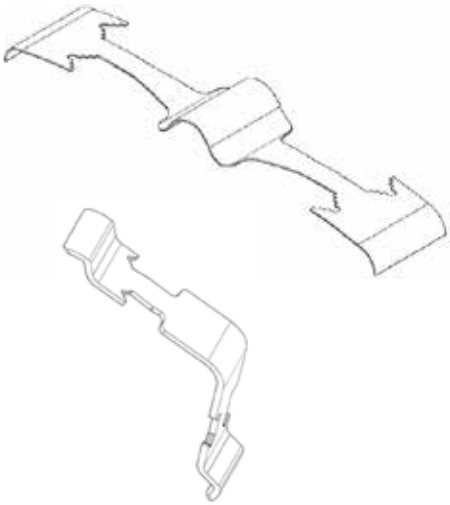


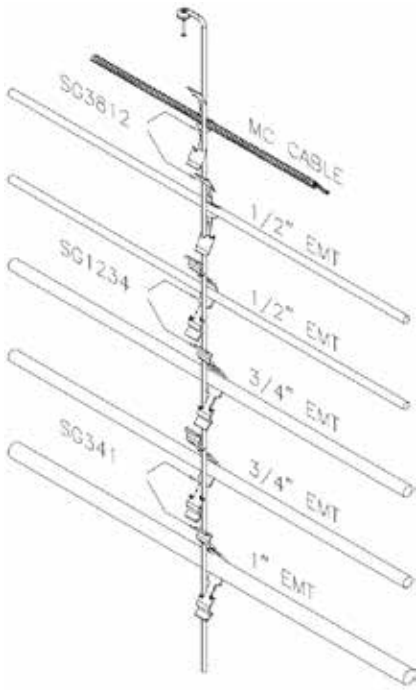
Fig. 161 Stiffy Gripper

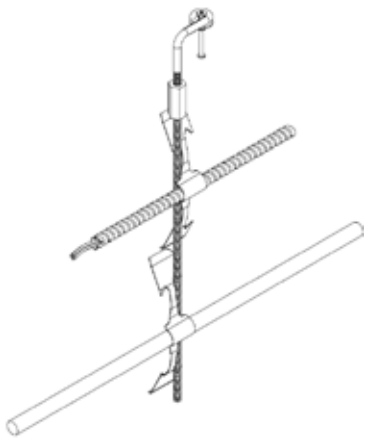


- 1 STIFFY GRIPPER = 2 SIZES
- Each Stiffy Gripper works on 2 sizes of EMT, MC/AC or Flexible Conduit
- 3 Sizes: (3/8"-1/2"), (1/2"-3/4") and (3/4"-1")
- Reduce jobsite inventory
- Quick installation
- Max support spacing for Type AC cables not to exceed 4-1/2'
  (Per 2005 NEC® Article 320.30)
- Max support spacing for Type MC cables not to exceed 6'
  (Per 2005 NEC® Article 330.30)
- Max support spacing for EMT not to exceed 10' (Per 2005 NEC® Article 358.30)
- UL Listed

******Patented Design***

SG3812 = CADDY® KX and K8
SG1234 = CADDY® K8 and K12
SG341 = CADDY® K12 and K16





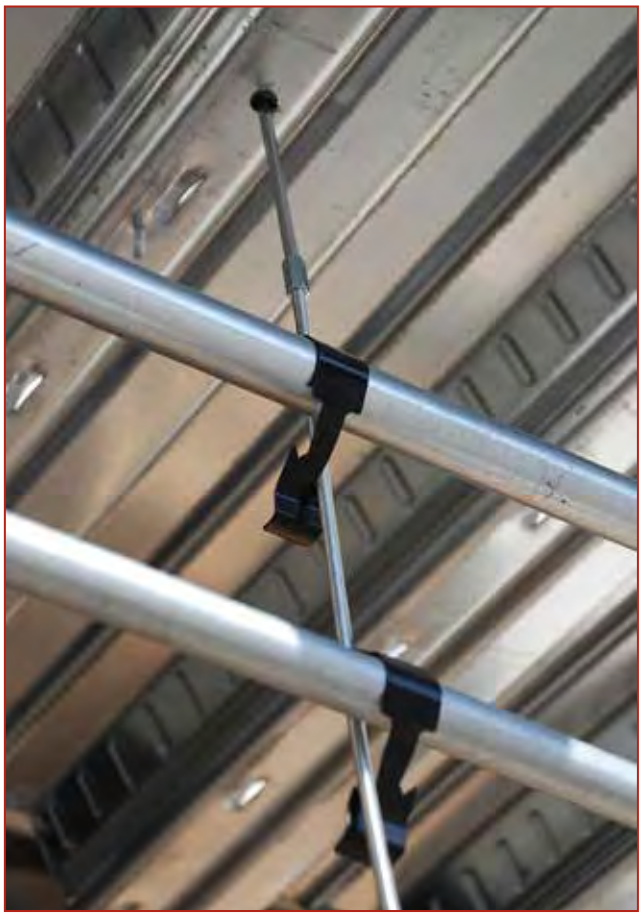
Contractor:	Ship to Address:
PO#	Order Date:
*****All Orders are Custom and Therefore Non-cancellable and Non-returnable***	

EMT or MC/AC Size	12 thru 8 Gauge Ceiling Wire up to 1/4" Rod	Std Box Qty
14-2 (.433-.475 O.D.)	**SG3812**	100
4-3 (.453-.500 O.D.)	**SG3812**	100
12-2 (.467-.510 O.D.)	**SG3812**	100
12-3 (.489-.535 O.D.)	**SG3812**	100
1/2" EMT	**SG3812 or SG1234**	100
3/4" EMT	**SG1234 or SG341**	100
1" EMT	**SG341**	100
***For MC/AC weights and O.D. refer to page 7 of the Technical Section**		

	A
***01**	SG3812
***02**	SG1234
***03**	SG341

	A	Qty
Fig 161		
Fig 161		
Fig 161		

Application Examples



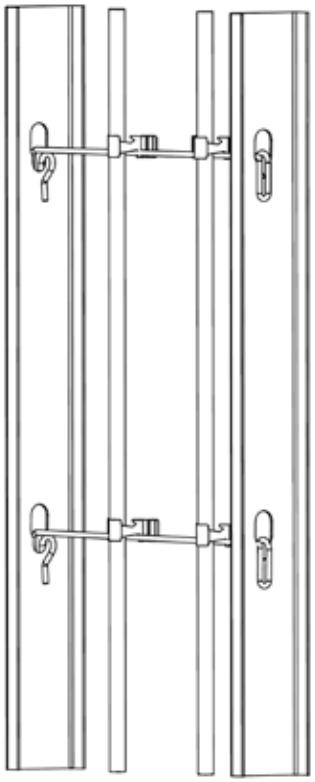
CEAS

CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

It's What We Do!

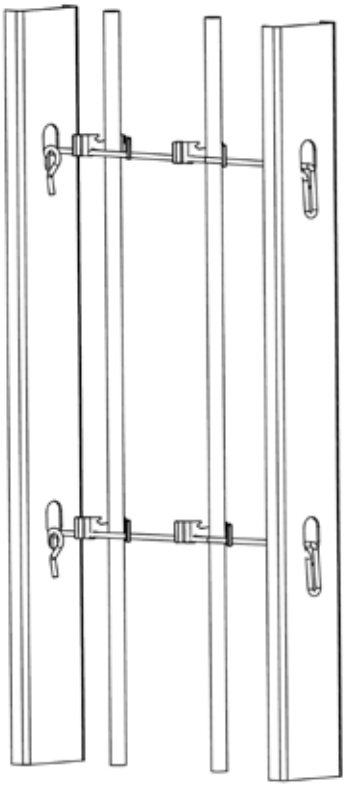
Fig. 162 Stiffy Fixed Stud Spanner

- Fixed widths provide positive engagement on both studs.
- Zinc plated rod for corrosion resistance
- Secures EMT, MC/AC and Flexible Conduit between studs
- Quick installation
- No screws required
- Innovative fastener loop secures the support to metal studs
- Use Stiffy Grippers—Fig 161 for attachment



***Patented Design**

Tip...Check out the Fig 161 Stiffy Grippers. 2-sided "Bat Wing" clips to support EMT and MC.



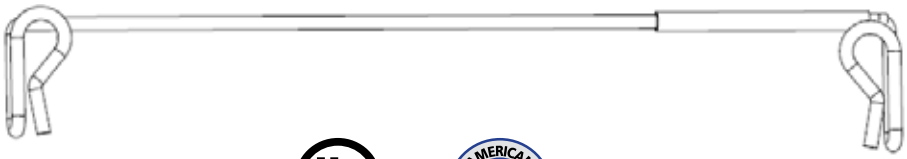
Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

A	
*01	16" Fixed Length Spanner
*02	24" Fixed Length Spanner

	A	Qty
Fig 162		
Fig 162		
Fig 162		

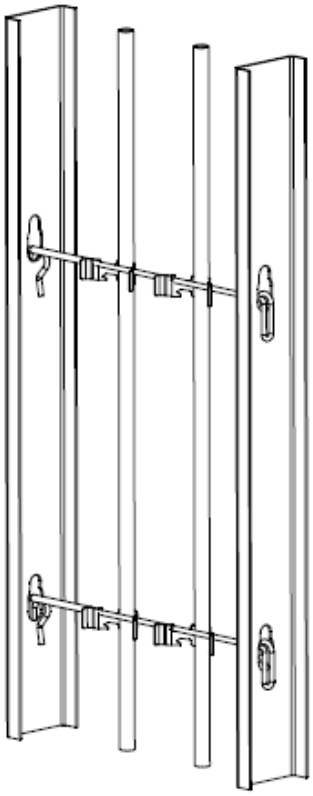
Fig. 163

Stiffy Adjustable Stud Spanner



c UL us LISTED

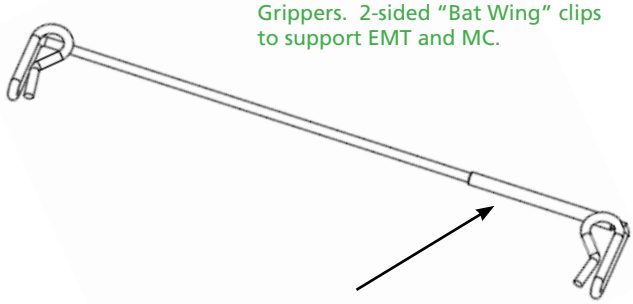
BUY AMERICAN ACT COMPLIANT



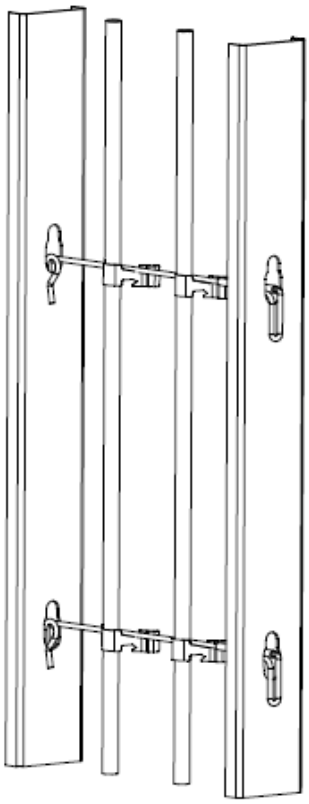
- Zinc plated rod for corrosion resistance
- Secures EMT, MC/AC and Flexible Conduit between studs
- Quick installation
- No screws required
- Innovative fastener loop secures the support to metal studs
- Use Stiffy Grippers—Fig 161 forattachment

******Patented Design***

Tip...Check out the Fig 161 Stiffy Grippers. 2-sided "Bat Wing" clips to support EMT and MC.



Steel Sleeve provides adjustability



Contractor:	Ship to Address:
PO#	Order Date:
*****All Orders are Custom and Therefore Non-cancellable and Non-returnable***	

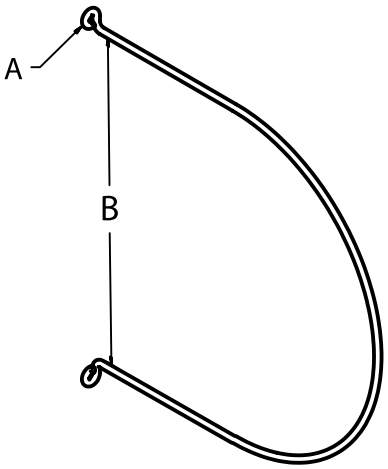
A	
*01	16" Adjustable Stud Spanner (15" - 17")
*02	24" Adjustable Stud Spanner (23"- 25")

	A	Qty
Fig 163		
Fig 163		
Fig 163		

Fig. 180 Stiffy Round Duct Support

Sidemount Application Shown

- Dramatically reduces the installation timeof Round Duct.
- Designed to be install as a sidemount support as illustrated or horizontal trapeze mounted.
- A.K.A. "The Kazak"
- Zinc plated rod for corrosion resistance
- Engineered submittal documents stamped by an engineer.
- Support Capacities are based on Safety Factors in excess of the requirements of SMACNA.
- Refer to project building code to determine max weight/LF without seismic restraints.



Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B	Qty
Fig 180			
Fig 180			
Fig 180			

A		Anchor Capacities[2]		B
*00	No Fastener	Sidemount	Trap Mount	Round Duct Size
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)[1]	110#	220#	
*03.1	3/8" x 3" Wedge Anchor (2" Embed)	215#	430#	
*04	1/4" x 1-3/4" Concrete Screw Anchor	869#	1738#	
*04.1	3/8" x 1-3/4" Concrete Screw Anchor	261#	522#	
*15	Other—Please Specify			

Additional Fastener Options are Shown on Pages 19-21

Support Capacities	
Sidemount	150#
Trapeze Mounted	300#

Footnotes:
1- Not for used in seismic design categories C (Ip=1.5), D, E or F where cracked concrete must be considered.
2- Capacities listed are for the fasteners only. Refer to the Support Capacities.

ROUND HVAC DUCT - GALVANIZED STEEL (WEIGHTS PER LINEAR FOOT)

Diameter (in.)	22 GA.			20 GA.			18 GA.		
	Duct Weight Per Linear Ft (Lbs/Ft.)	Insulation Thickness (in.)	Insulated Duct Wt. Per Linear	Duct Weight Per Linear Ft (Lbs/Ft.)	Insulation Thickness (in.)	Insulated Duct Wt. Per Linear Ft	Duct Weight Per Linear Ft (Lbs/Ft.)	Insulation Thickness (in.)	Insulated Duct Wt. Per Linear Ft (Lbs/Ft.)
12	4.9	2	5.6						
14	5.7	2	6.5						
16	6.5	2	7.5						
18	7.3	2	8.5	8.6	2	9.8			
20	8.1	2	9.4	9.5	2	10.8	12.4	2	13.7
22	8.9	2	10.3	10.5	2	11.9	13.7	2	15.1
24	9.7	2	11.3	11.4	2	13.0	14.9	2	16.5
26	10.5	2	12.2	12.4	2	14.1	16.1	2	17.8
28	11.3	2	13.2	13.4	2	15.2	17.4	2	19.2
30	12.1	2	14.1	14.3	2	16.3	18.6	2	20.6
32	13.0	2	15.1	15.3	2	17.4	19.9	2	22.0
34	13.8	2	16.0	16.2	2	18.4	21.1	2	23.3

Application Examples

CEAS

CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

It's What We Do!

Just Push It!!!

PUSH ROD HANGER

Patented Push-Lock Concrete Anchor Inserts

SEISMICALLY QUALIFIED FOR USE IN CRACKED CONCRETE

US Pat. #9,181,691 B2

How to Order

Step 1 - Determine the type and quantity of inserts required for the project.
Step 2 - Complete and sign this form.
Step 3 - Review project information and determine the prefabricated support or threaded rod requirements.
- This information may not be available when the inserts are ordered due to the project coordination schedules.
- Once the dimensions are known, complete the applicable order forms on pages 7-10.

Step 4 - Issue a PO# for the material with applicable CEAS product order forms.
Step 5 - Material is delivered to the project assembled and ready to be pushed into place.

PRPIP3812

Poured-in-Place Insert (for wood form decks)

Add "BAA" to the end of the part number for Buy American Act compliant

Qty	Part Number	Description
	CEA-PRPIP3812	Push Rod SDI 3/8" & 1/2" (150/box)

PRSDI3812

Steel Deck Insert (for pre-poured concrete)

Add "BAA" to the end of the part number for Buy American Act compliant

Qty	Part Number	Description
	CEA-PRSDI3812	Push Rod SDI 3/8" and 1/2" (50/box)
	FSB3	Flute Span Bracket for PRSDI3812

Contractor:	Project Name and Address:
PO#	Order Date:
**All Orders are Custom and Therefore Non-cancellable and Non-returnable	

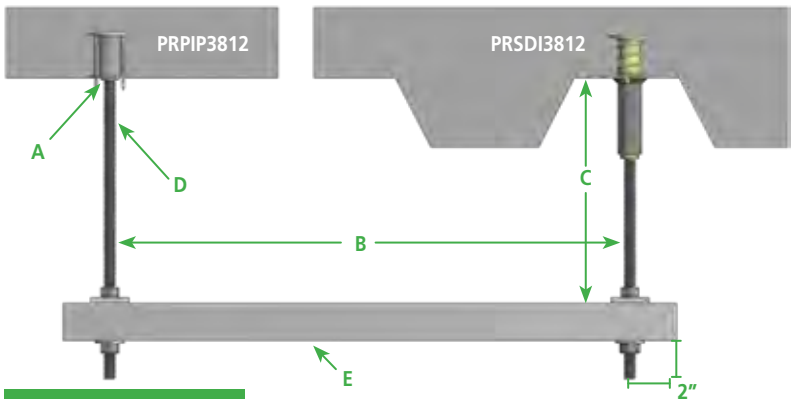
Intent to Purchase: The Push Rod Overhead Attachment System is only sold with Rods and/or assemblies with engagement markings manufactured by CEAS or ISAT, divisions of Tomarco Contractor Specialties. As such, this order form serves as a Letter of Intent to purchase the remaining components of the assemblies from Tomarco Contractor Specialties or its subsidiaries.
FAILURE TO PURCHASE THE NECESSARY COMPONENTS TO COMPLETE THE PUSH ROD OVERHEAD ATTACHMENT SYSTEM VOIDS ALL WARRANTIES AND CEAS TECHNICAL DATA AND COULD CREATE AN UNSAFE ATTACHMENT.

The signee acknowledges the requirement to purchase Push Rod components with Engagement Markings for the project referenced above. MATERIAL WILL NOT BE SHIPPED WITHOUT A SIGNED COPY OF THIS DOCUMENT.

Printed Name _____ **Authorized Signature** _____

Fig. 190 Pre-Fabricated Trapeze

Shown with PRSDI3812
Engagement Mark (A = 02)

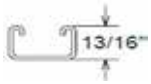
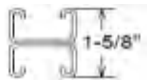
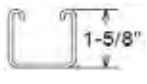
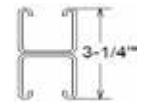


*Rod lengths are measured from the bottom of concrete

- Grab the trapeze and Just Push It!!!
- Supports Pipe, Conduit and HVAC Duct
- Prefabricated trapezes save time and money
- No time wasted in the field with unnecessary assembly
- Refer to project building code to determine when seismic bracing is required
- Trapeze assembly capacities are all reviewed and confirmed by a Structural Engineer
- The Push Rod insert is Seismically Qualified for use in cracked concrete
- Trapeze assemblies can be manufactured in any configuration. Just send us the drawings.

Contractor:	Project Name and Address:
PO#	Order Date:
**All Orders are Custom and Therefore Non-cancellable and Non-returnable	

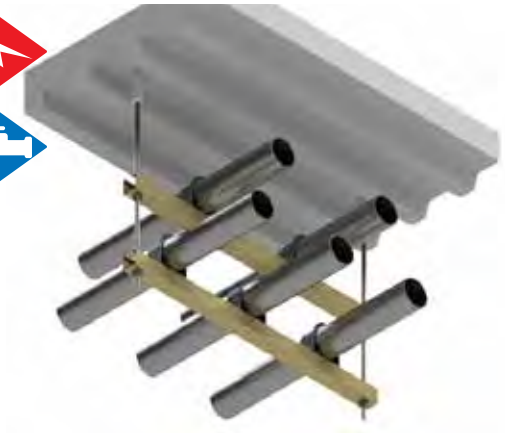
	A	B	C	D	E	Qty
Fig 190						
Fig 190						
Fig 190						

A		B[1]	C[2]	D		E[3]		
*00	No Engagement Mark	Width (Inches)	Drop Length (Inches)	*01	3/8" ATR	Strut Profile		
*01	PRPIP3812 Engagement Mark			*02	1/2" ATR	A1	13/16" x 1-5/8" 14g Strut	
*02	PRSDI3812 Engagement Mark			*25	Other	A2	B2B 13/16" x 1-5/8" 14g Strut	
*25	Other Anchor-Please Specify					B1	1-5/8" x 1-5/8" 12g Strut	
						B2	B2B 1-5/8" x 1-5/8" 12g Strut	
						C1	3-1/4" x 1-5/8" 12g Strut	
						C2	B2B 3-1/4" x 1-5/8" 12g Strut	

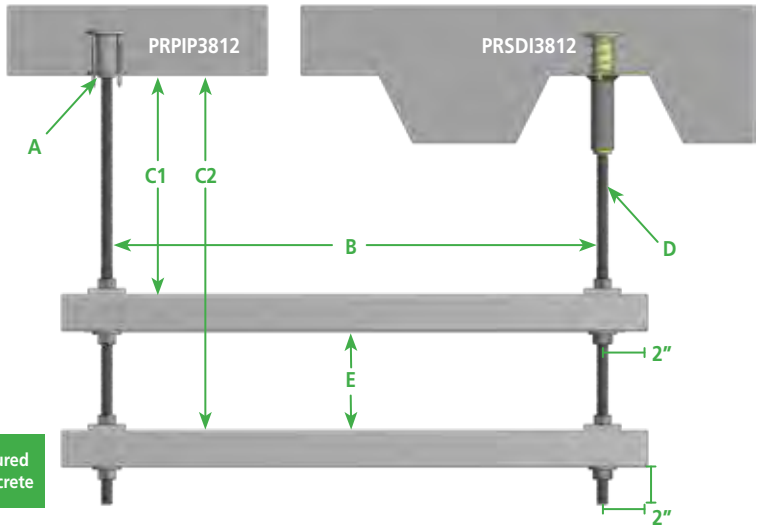
Footnotes:
1) Solid strut without holes is used for trapezes.
2) "C" Dimension is measured from the bottom of structure to the top of the trapeze. The engagement length into the Push Rod does not need to be accounted for.
3) Trapezes ordered with 3/8" and 1/2" ATR are built with 9/16" holes. Trapezes with 5/8" ATR are drilled out to accept rod.

SEISMICALLY QUALIFIED FOR USE IN CRACKED CONCRETE

Fig. 191 2-Tiered Pre-Fabricated Trapeze



Shown with PRSDI3812
Engagement Mark (A = 02)



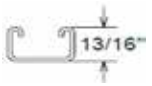
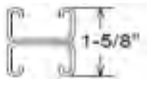
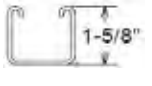
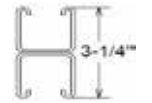
*Rod lengths are measured from the bottom of concrete

- Grab the trapeze and Just Push It!!!
- Supports Pipe, Conduit and HVAC Duct
- Prefabricated trapezes save time and money
- No time wasted in the field with unnecessary assembly
- Refer to project building code to determine when seismic bracing is required
- Trapeze assembly capacities are all reviewed and confirmed by a Structural Engineer
- The Push Rod insert is Seismically Qualified for use in cracked concrete
- Trapeze assemblies can be manufactured in any configuration. Just send us the drawings.

Contractor:	Project Name and Address:
PO#	Order Date:
**All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B	C1	C2	D	E	Qty
Fig 191							
Fig 191							
Fig 191							

A		B[1]	C1 & C2[2]	D		E[3]
*00	No Engagement Mark	Width (Inches)	Drop Length (Inches)	*01	3/8" ATR	Strut Profile
*01	PRPIP3812 Engagement Mark			*02	1/2" ATR	
*02	PRSDI3812 Engagement Mark			*25	Other	
*25	Other Anchor-Please Specify					

A1	13/16" x 1-5/8" 14g Strut	
A2	B2B 13/16" x 1-5/8" 14g Strut	
B1	1-5/8" x 1-5/8" 12g Strut	
B2	B2B 1-5/8" x 1-5/8" 12g Strut	
C1	3-1/4" x 1-5/8" 12g Strut	
C2	B2B 3-1/4" x 1-5/8" 12g Strut	

Footnotes:
1) Solid strut without holes is used for trapezes.
2) "C" Dimension is measured from the bottom of structure to the top of the trapeze. The engagement length into the Push Rod does not need to be accounted for.
3) Trapezes ordered with 3/8" and 1/2" ATR are built with 9/16" holes. Trapezes with 5/8" ATR are drilled out to accept rod.

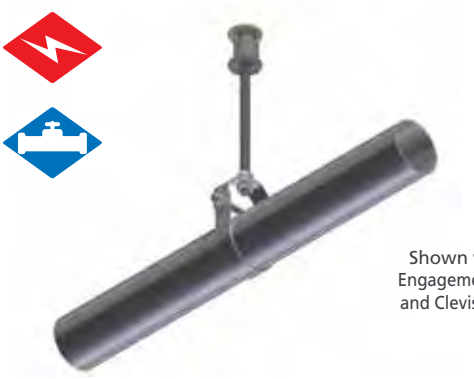
SEISMICALLY QUALIFIED FOR USE IN CRACKED CONCRETE

ELECTRICAL/LOW VOLTAGE APPLICATIONS

MECHANICAL/PLUMBING APPLICATIONS

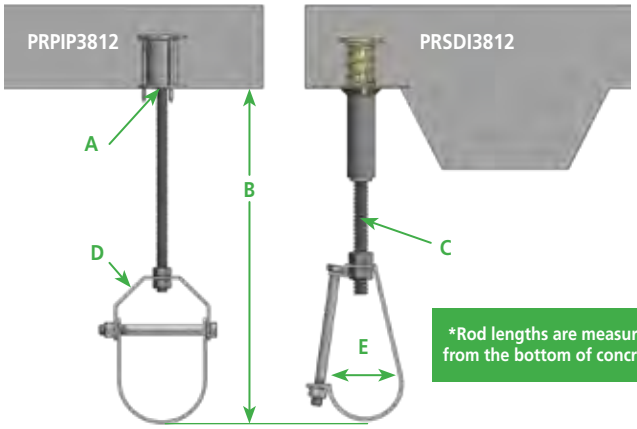
Fig. 192

Pre-Fabricated Single Clevis or J Hanger



SEISMICALLY QUALIFIED FOR USE IN CRACKED CONCRETE

Shown with PRPIP3812 Engagement Mark (A = 01) and Clevis Hanger (D = 03)



*Rod lengths are measured from the bottom of concrete

- Grab the hanger and Just Push It!!!
- Supports Pipe and Conduit
- Prefabricated hangers save time and money
- No time wasted in the field with unnecessary assembly
- Refer to project building code to determine when seismic bracing is required
- Assembly capacities are all reviewed and confirmed by a Structural Engineer
- The Push Rod insert is Seismically Qualified for use in cracked concrete

Contractor:	Project Name and Address:
PO#	Order Date:
**All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B	C	D	E	Qty
Fig 192						
Fig 192						
Fig 192						

A		B	C¹		D²		E	
*00	No Engagement Mark	Width (Inches)	*01	3/8" ATR	*01	Conduit Hanger²	Hanger Size	
*01	PRPIP3812 Engagement Mark		*02	1/2" ATR			*01	1/2"
*02	PRSDI3812 Engagement Mark		*03	5/8" ATR			*02	3/4"
*25	Other Anchor-Please Specify		*04	3/4" ATR			*03	1"
			*25	Other			*04	1-1/4"
					*02	Loop Hanger³	*05	1-1/2"
							*06	2"
							*07	2-1/2"
							*08	3"
							*09	3-1/2"
					*03	Clevis Hanger	*10	4"
							*11	5"
							*12	6"
							*13	8"
							*25	Other - Please Sepcify
					*04	J-Hanger⁴	For felted hangers add an "F" to the order option.⁵	

Footnotes:

1 - Reducing rod couplers are used where rod size does not equal anchor diameter.
2 - Conduit Hangers 1/2" thru 1-1/2" EMT are sized for 1/4" ATR. 2" and 2-1/2" are sized for 3/8" ATR.
3 - 1/2" thru 2-1/2" Loop Hangers come with 3/8" top connectons.
4 - All J-Hangers are zinc coated
5 - When ordering felt lined hangers for pipe sizes 3-1/2" or under, order the next largest size to allow for the thickness of the felt lining.

Per the Uniform Plumbing Code and California Plumbing Code
- 1/2" thru 4" diameter pipe requires 3/8" all thread rod
- 5" thru 8" diameter pipe requires 1/2" all thread rod
- 10" thru 12" diameter pipe requires 5/8" all thread rod

Refer to pages 25 and 26 for pipe weights

For zinc coated clevis hangers add a "Z" to the order option.

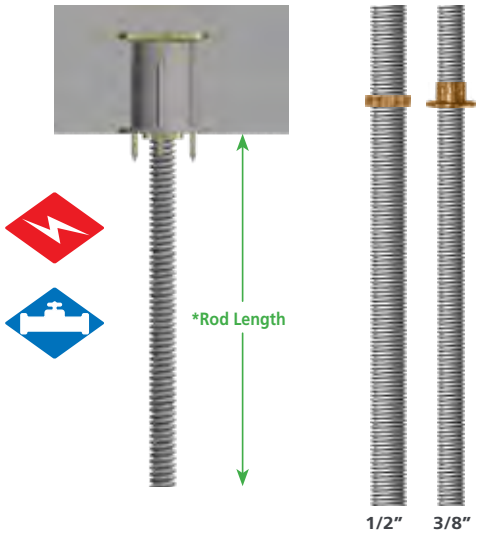
Example:
02 = 3/4" Hanger
02F = 3/4" Felted Hanger
02Z = 3/4" Zinc Coated Hanger

Just Push It!!!

PUSH ROD HANGER

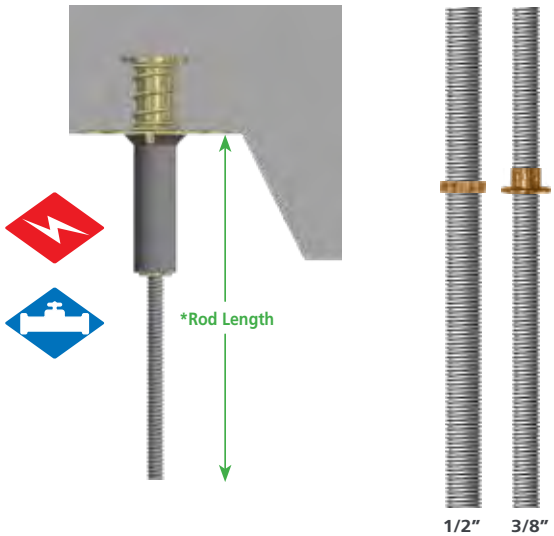
Patented Push-Lock Concrete Anchor Inserts

PRPIP3812



3/8" Threaded Rod with Engagement Markings for PRPIP3812		
QTY	Part Number	Description
	CEA-PRPIPR3824	PRPIP Threaded Rod - 3/8" x 24"
	CEA-PRPIPR3836	PRPIP Threaded Rod - 3/8" x 36"
	CEA-PRPIPR3848	PRPIP Threaded Rod - 3/8" x 48"
	CEA-PRPIPR3860	PRPIP Threaded Rod - 3/8" x 60"
	CEA-PRPIPR3872	PRPIP Threaded Rod - 3/8" x 72"
	CEA-PRPIPR3884	PRPIP Threaded Rod - 3/8" x 84"
	CEA-PRPIPR3896	PRPIP Threaded Rod - 3/8" x 96"
	CEA-PRPIPR38108	PRPIP Threaded Rod - 3/8" x 108"
	CEA-PRPIPR38118	PRPIP Threaded Rod - 3/8" x 118"
1/2" Threaded Rod with Engagement Markings for PRPIP3812		
QTY	Part Number	Description
	CEA-PRPIPR1224	PRPIP Threaded Rod - 1/2" x 24"
	CEA-PRPIPR1236	PRPIP Threaded Rod - 1/2" x 36"
	CEA-PRPIPR1248	PRPIP Threaded Rod - 1/2" x 48"
	CEA-PRPIPR1260	PRPIP Threaded Rod - 1/2" x 60"
	CEA-PRPIPR1272	PRPIP Threaded Rod - 1/2" x 72"
	CEA-PRPIPR1284	PRPIP Threaded Rod - 1/2" x 84"
	CEA-PRPIPR1296	PRPIP Threaded Rod - 1/2" x 96"
	CEA-PRPIPR12108	PRPIP Threaded Rod - 1/2" x 108"
	CEA-PRPIPR12118	PRPIP Threaded Rod - 1/2" x 118"
Custom Threaded Rod Lengths		
QTY	Part Number	
		Rod Diameter / Length (Inches)
	CEA-PRPIPR	
	CEA-PRPIPR	
	CEA-PRPIPR	

PRSDI3812



3/8" Threaded Rod with Engagement Markings for PRSDI3812		
QTY	Part Number	Description
	CEA-PRSDIR3824	PRSDI Threaded Rod - 3/8" x 24"
	CEA-PRSDIR3836	PRSDI Threaded Rod - 3/8" x 36"
	CEA-PRSDIR3848	PRSDI Threaded Rod - 3/8" x 48"
	CEA-PRSDIR3860	PRSDI Threaded Rod - 3/8" x 60"
	CEA-PRSDIR3872	PRSDI Threaded Rod - 3/8" x 72"
	CEA-PRSDIR3884	PRSDI Threaded Rod - 3/8" x 84"
	CEA-PRSDIR3896	PRSDI Threaded Rod - 3/8" x 96"
	CEA-PRSDIR38108	PRSDI Threaded Rod - 3/8" x 108"
	CEA-PRSDIR38118	PRSDI Threaded Rod - 3/8" x 118"
1/2" Threaded Rod with Engagement Markings for PRSDI3812		
QTY	Part Number	Description
	CEA-PRSDIR1224	PRSDI Threaded Rod - 1/2" x 24"
	CEA-PRSDIR1236	PRSDI Threaded Rod - 1/2" x 36"
	CEA-PRSDIR1248	PRSDI Threaded Rod - 1/2" x 48"
	CEA-PRSDIR1260	PRSDI Threaded Rod - 1/2" x 60"
	CEA-PRSDIR1272	PRSDI Threaded Rod - 1/2" x 72"
	CEA-PRSDIR1284	PRSDI Threaded Rod - 1/2" x 84"
	CEA-PRSDIR1296	PRSDI Threaded Rod - 1/2" x 96"
	CEA-PRSDIR12108	PRSDI Threaded Rod - 1/2" x 108"
	CEA-PRSDIR12118	PRSDI Threaded Rod - 1/2" x 118"
Custom Threaded Rod Lengths		
QTY	Part Number	
		Rod Diameter / Length (Inches)
	CEA-PRSDIR	
	CEA-PRSDIR	
	CEA-PRSDIR	

SEISMICALLY QUALIFIED FOR USE IN CRACKED CONCRETE

Contractor:	Project Name and Address:
PO#	Order Date:
**All Orders are Custom and Therefore Non-cancellable and Non-returnable	

Just Push It!!!

PUSH ROD HANGER

INSTALLATION TOOLS and ACCESSORIES

Installation tools and accessories for Push Rods and Blue Banger Hangers.

- Save labor and Reduces Back Strain

	PART#	DESCRIPTION
A	CEA-POLMKEY36	3'-6' Telescoping Install Tool w/Keyless Chuck
B	CEA-SDDHS1	30" Deck Driller with 13/16" Hole Saw (1)
	CEA-SDDHS2	30" Deck Driller with 1-3/16" Hole Saw (2)
C	CEA-SDDSB4	30" Deck Driller with 3/16 - 7/8" Step Bit (1)
	CEA-SDDSB5	30" Deck Driller with 1/4" - 1-3/8" Step Bit (2)
D	CEA-PIPINSTALL1	Bazooka PIP Install Tool (3)
	CEA-PIPINSTALL2	Bazooka PIP Install Tool (4)
E	CEA-BBDP1	13/16" Deck Punch with Tip (1)
	CEA-BBDP2	1-3/16" Deck Punch with Tip (2)
F	CEA-SB4	3/16 - 7/8" Step Bit (1)
	CEA-SB5	1/4" - 1-3/8" Step Bit (2)
G	CEA-HS1	13/16" Hole Saw Only (1)
	CEA-HS2	1-3/16" Hole Saw Only (2)
	CEA-HSA	Arbor for Hole Saw Only
H	CEA-HSC1	13/16" Carbide Tip Hole Saw Only (1)
	CEA-HSC2	1-3/16" Carbide Tip Hole Saw Only (2)
	CEA-HSCA	Arbor for Carbide Tip Hole Saw Only

1 For use with SDI143812 and RDI143812
2 For use with SDI381258, SDI5834, and Push Rod PRSDI3812
3 For use with PIP143812 only
4 For use with PIP143812, PIP381258, PIP5834 and Push Rod PRPIP3812

ID Tabs for Push Rods and Blue Banger Hangers - Easily ID different trades or systems

- Saves time
- Quick installation
- Multiple colors available
- Eliminates confusion between multiple systems and trades
- Labels can be adhered or notes with a marker
- Provides easy identification from the ground

PART#	DESCRIPTION
HEA-PT 38125A	FLUORESCENT YELLOW
HEA-PT 38125B	FLUORESCENT PINK
HEA-PT 38125C	FLUORESCENT BLUE
HEA-PT 38125D	FLUORESCENT PURPLE
HEA-PT 38125E	FLUORESCENT RED
HEA-PT 38125F	FLUORESCENT ORANGE
HEA-PT 38125G	WHITE
HEA-PT 38125H	GREEN (PMS 354)
HEA-PT 38125I	BROWN (PMS 469)
HEA-PT 38125J	NAVY BLUE (PMS 274)
HEA-PT 38125K	GREY (COOL GREY)
HEA-PT 38125L	FLUORESCENT GREEN

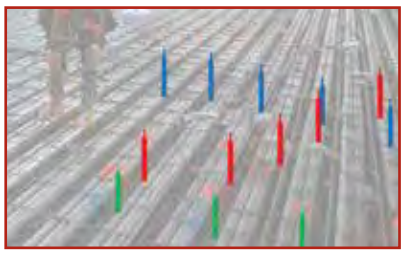
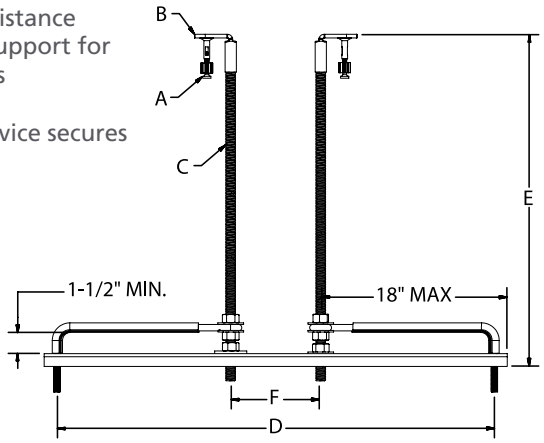
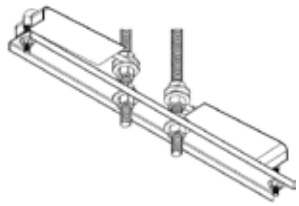


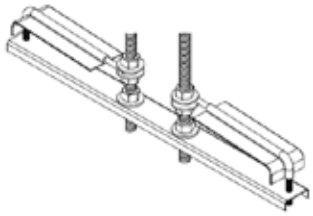
Fig. 195 Stiffy Gull Wing Line Set Support

- Zinc plated rod for corrosion resistance
- Designed as a rigid method of support for Line Sets and Refrigeration Lines
- Max load: 70# per support
- 2" wide plenum rated plastic device secures the insulated lines in place
- Assembly can be fabricated to accommodate field conditions



Tip...Take a look at the Fig 108 through Fig 110 to stack refrigeration piping on a support.





Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

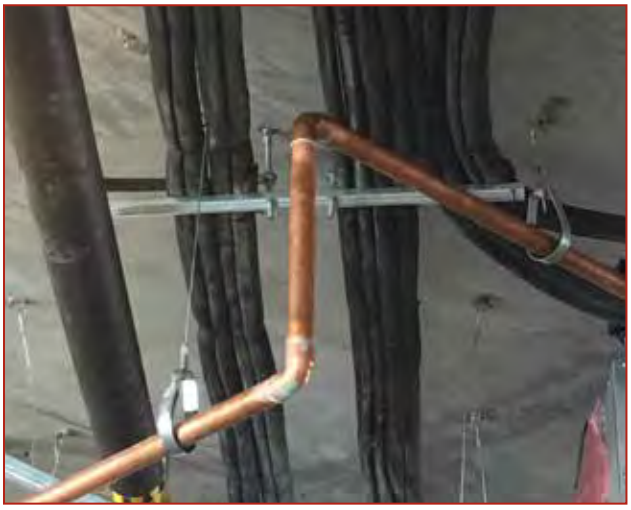
	A	B	C	D	E	F	Qty
Fig 195							
Fig 195							
Fig 195							

A		B		C		D	E	F[3]
*00	No Fastener	*01 90° Footprint	*011 Hard Concrete Footprint	*01	3/8" ATR[1]	Trapese Width (Inches)	Drop Length (Inches)	Rod Spacing (Inches)
*01	1-1/4" Power Actuated Pin—1" Embedment *(B = 011)*[2]			*02	1/2" ATR			
*02	1-1/2" Power Actuated Pin—1-1/4" Embed *(B = 011)*[2]	*012 Gas Tool Footprint	*02 Sidemount Footprint					
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)							
*03.1	3/8" x 3" Wedge Anchor (2" Embed)							
*04	1/4" x 1-3/4" Concrete Screw Anchor							
*04.1	3/8" x 1-3/4" Concrete Screw Anchor							
*06	#10 Hex Washer Head Self Driller							
*07	#10 Hex Washer Head Sharp Point							
*08	Timberpin (Wood Applications)							
*09	Wide Mouth Beam Clamp	*03 Threaded Rod (1/2" of Threads)	*10 Other Please Specify					
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)							
*13	1-1/4" PowderPuff Pin—1" Embedment *(B = 011)*[2]							
*14	Stiffy Wood Pull Down Attachment							
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange							
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange							
*25	Other—Please Specify							

Footnotes:
1 - In order to transition to 3/8" ATR a reducing coupler is used for B=01 and 02 Footprints. Hard Concrete Footprint B=011, is available in 1/4" and 3/8".
2 - When Power Actuated Fasteners (A=01, 02 or 13) and (B=01-90° Footprint) are selected the B=011 Hard Concrete Footprint will be used by default.
3- Be sure to consider the spacing requirements of the fasteners when determining the rod spacing.

Additional Fastener Options are Shown on Pages 19-21

Application Examples



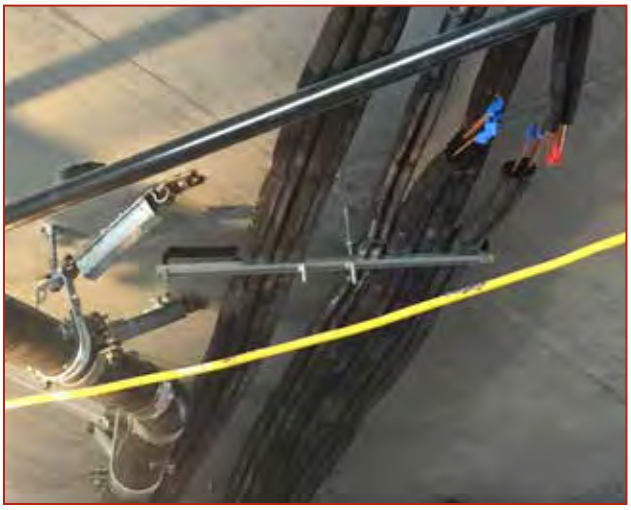
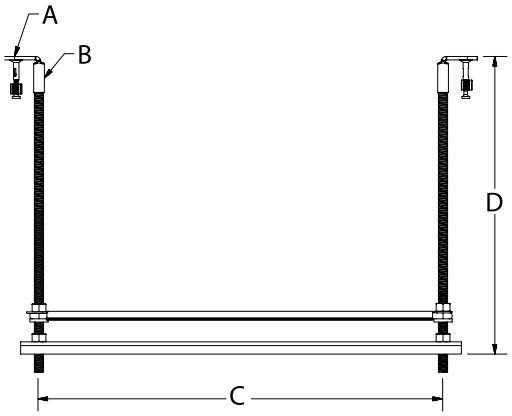


Fig. 196 Stiffy Line Set Support

- Zinc plated rod for corrosion resistance
- Designed as a rigid method of support for Line Sets and Refrigeration Lines
- Max load: 100# per support
- 2" wide plenum rated plastic device secures the insulated lines in place
- Assembly can be fabricated to accommodate field conditions

Tip...Take a look at the Fig 108 through Fig 110 to stack refrigeration piping on a support.



Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

	A	B	C	D	E	Qty
Fig 196						
Fig 196						
Fig 196						

A		B		C	D	E	
*00	No Fastener	*01 90° Footprint	*011 Hard Concrete Footprint	Width (Inches)	Drop Length (Inches)	*01	1/4" ATR
*01	1-1/4" Power Actuated Pin—1" Embedment *(B = 011)*[2]					*02	3/8" ATR[1]
*02	1-1/2" Power Actuated Pin—1-1/4" Embed *(B = 011)*[2]					*03	1/2" ATR
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)						
*03.1	3/8" x 3" Wedge Anchor (2" Embed)						
*04	1/4" x 1-3/4" Concrete Screw Anchor	*012 Gas Tool Footprint	*02 Sidemount Footprint				
*04.1	3/8" x 1-3/4" Concrete Screw Anchor						
*06	#10 Hex Washer Head Self Driller						
*07	#10 Hex Washer Head Sharp Point						
*08	Timberpin (Wood Applications)						
*09	Wide Mouth Beam Clamp	*03 Threaded Rod (1/2" of Threads)	*04 Straight Rod				
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)						
*13	1-1/4" PowderPuff Pin—1" Embedment *(B = 011)*[2]						
*14	Stiffy Wood Pull Down Attachment						
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange	*10 Other Please Specify					
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange						
*25	Other—Please Specify						

Footnotes:
1 - In order to transition to 3/8" ATR a reducing coupler is used for B=01 and 02 Footprints. Hard Concrete Footprint B=011, is available in 1/4" and 3/8".
2 - When Power Actuated Fasteners (A=01, 02 or 13) and (B=01-90° Footprint) are selected the B=011 Hard Concrete Footprint will be used by default.

Additional Fastener Options are Shown on Pages 19-21

Application Examples

CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

It's What We Do!

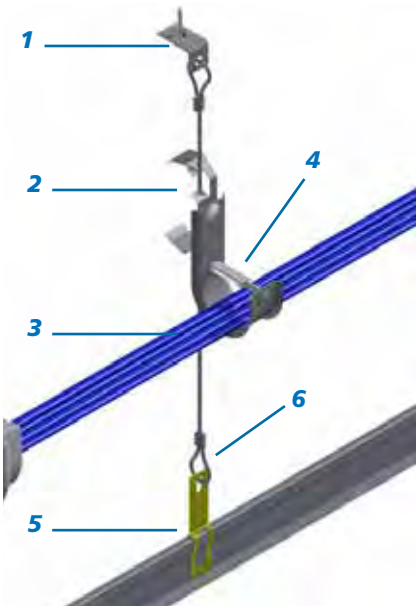
JOBSITE PROBLEM MEETS STIFFY SOLUTION

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

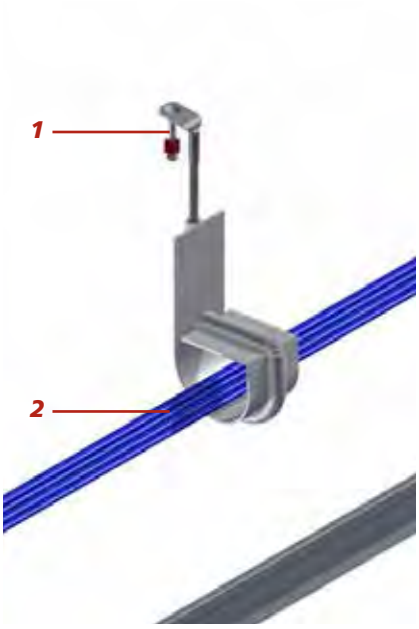
Job Site Problem

Typical T-Bar Installation



Stiffy Solution

Fig 200 Comfort Cradle



Job Site Problem

Step 1 - Install Ceiling Wire

Step 2 - Climb up a ladder and attach the data support

Step 3 - Climb up a ladder and install the cable

Step 4 - Install Restraint Clip

Step 5 - ***Return to the location*** (after the T-bar Grid is installed), climb a ladder and attach the banana clip. (Per NEC 300.11)

Step 6 - Tie the ceiling wire to the clip

Installer must revisit every support

Stiffy Solution

Step 1 - Install the Stiffy from the ground

Pre-assembled Saves labor

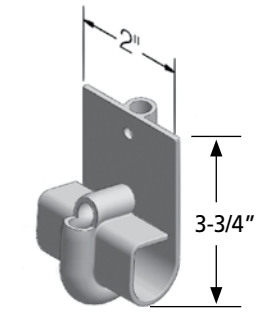
Step 2 - PULL the cable through the Stiffy

No need to revisit - The rigid connection to the structure satisfies the requirements of NEC 300.11.

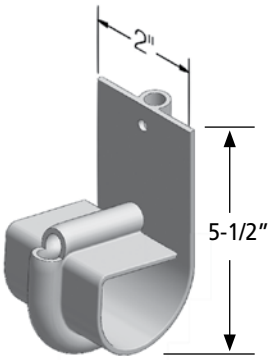
It doesn't get any easier than this...

	Job Site Problem	*Stiffy Solution*
Engineered as an assembly	No	Yes
NEC 300.11 compliant	Yes. Only when a Banana Clip is used to secure the wire to the T-bar Grid.	Yes
Pre-staked with several Engineered Attachment options	No	Yes
UL listed engineered attachment options for concrete, wood, metal and steel	No	Yes
Quick to install	No. Very labor intensive to install the batwing clips. Also, per NEC 300.11 the ceiling wire must be secured at the top as well as bottom which requires a second trip to the same location.	Yes

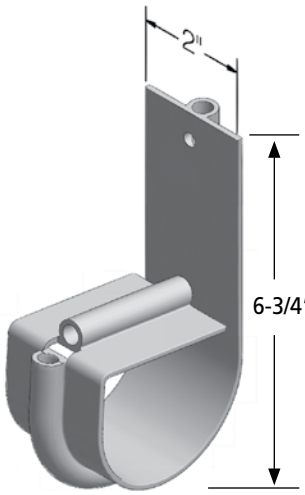
Low Voltage Product Data & Fill Capacities - Technical Data



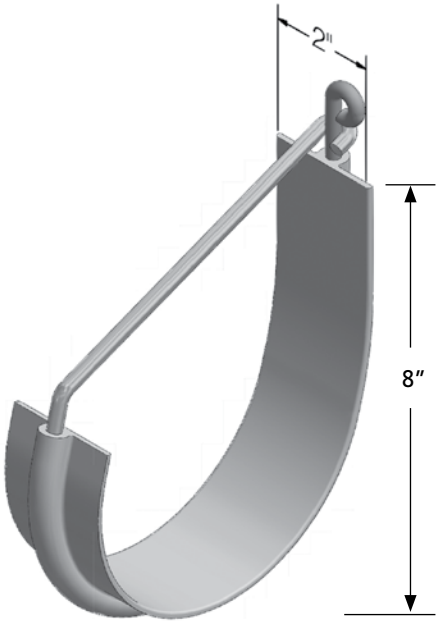
1" Comfort Cradle



2" Comfort Cradle

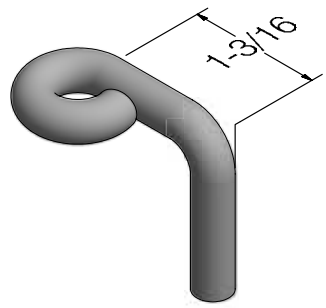


3-1/2" Comfort Cradle



6" Comfort Cradle

PRODUCT	AREA (sq. in.)	CAT 5E O.D. = .214 Weight = 28 Lbs/1000ft		CAT 6A O.D. = .246 Weight = 31.1 lbs/1000ft	
Comfort Cradle Fill Capacities[1]					
		100% Fill	70% Fill	100% Fill	70% Fill
1" Comfort Cradle	0.785	21	15	16	11
2" Comfort Cradle	3.142	87	61	66	46
3-1/2" Comfort Cradle	9.621	267	187	202	141
6" Comfort Cradle	28.274	786	550	595	417
Trapeze Fill Capacities[1]					
		100% Fill	50% Fill	100% Fill	50% Fill
6" Wide x 3" Deep	18	500	250	378	189
8" Wide x 3" Deep	24	667	333	504	252
10" Wide x 3" Deep	30	834	417	631	315
12" Wide x 3" Deep	36	1000	500	757	378
14" Wide x 3" Deep	42	1167	583	883	441
16" Wide x 3" Deep	48	1334	667	1009	504
18" Wide x 3" Deep	54	1500	750	1136	568
Cable Weight Totals					
Quantity of cables for 5 Lbs/ft		178		160	
Quantity of cables for 10 Lbs/ft		357		321	



Stiffy 90° Footprint

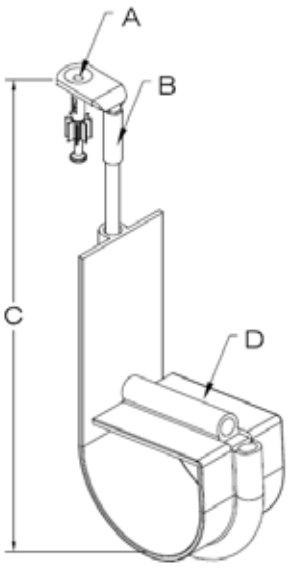
Maximum Support Spacing Illustration for Data Cables

Non-continuous supports may not exceed spacing of 5' per TIA 569-C.9.7

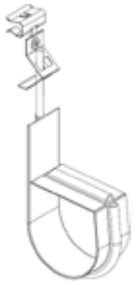
Footnotes:
1-Refer to product pages for individual support capacities.

Fig. 200 Stiffy with Comfort Cradle

- Nonconductive Plenum Rated 2" wide polypropylene Comfort Cradle with Locking Restraint Latch
- Max support spacing: 4-5' O.C.
- The rigid connection eliminates the need to attach to ceiling grid per NEC Article 300-11
- Max load for support rod: 70#
- Max load for cradle: 50#
- UL listed hardware
- UL listed for use in plenums
- Fill capacity for low voltage applications:
  - 1" cradle: Up to 15ea CAT5E or 11ea CAT6A. (70% Fill)
  - 2" cradle: Up to 61ea CAT5E or 46ea CAT6A. (70% Fill)
  - 3-1/2" cradle: Up to 187ea CAT5E or 141ea CAT6A. (70% Fill)
  - 6" cradle: Up to 550ea CAT5E or 417ea CAT6A. (70% Fill)
- Cradles are available in RED, WHITE, BLUE, GREEN, YELLOW and BLACK
- 2" Wide Cradle offers exceptional support and reduces crimping
- Ideal for use with CAT 5e, CAT 6, CAT 6A, CAT 7 and Fiber Optic Cables
- Refer to page 97 for technical data




A=11 B=02


A=12 B=04


A=01 B=02

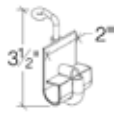
Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

	A	B	C	D	Qty
Fig 200					
Fig 200					
Fig 200					

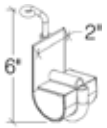
c UL us LISTED

BUY AMERICAN ACT COMPLIANT

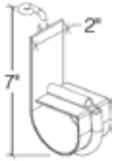
A		B		C	D	
*00	No Fastener	*01 90° Footprint	*011 Hard Concrete Footprint	Drop Length (Inches)	*01	1" Cradle
*01	1-1/4" Power Actuated Pin—1" Embedment				*02	2" Cradle
*02	1-1/2" Power Actuated Pin—1-1/4" Embed				*03	3-1/2" Cradle
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)				*04	6" Cradle
*03.1	3/8" x 3" Wedge Anchor (2" Embed)					
*04	1/4" x 1-3/4" Concrete Screw Anchor	*012 Gas Tool Footprint	*02 Sidemount Footprint		R	Red
*04.1	3/8" x 1-3/4" Concrete Screw Anchor				B	Blue
*06	#10 Hex Washer Head Self Driller				G	Green
*07	#10 Hex Washer Head Sharp Point				Y	Yellow
*08	Timberpin (Wood Applications)				BK	Black
*09	Wide Mouth Beam Clamp	*03 Threaded End (1/2" of Threads)	*04 Straight Rod			
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)					
*13	1-1/4" PowderPuff Pin—1" Embedment					
*14	Stiffy Wood Pull Down Attachment					
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange	*10 Other-Please Specify				
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange					
*25	Other—Please Specify					



1" Cradle

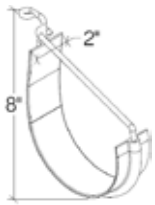


2" Cradle



3-1/2" Cradle

Dimensions:



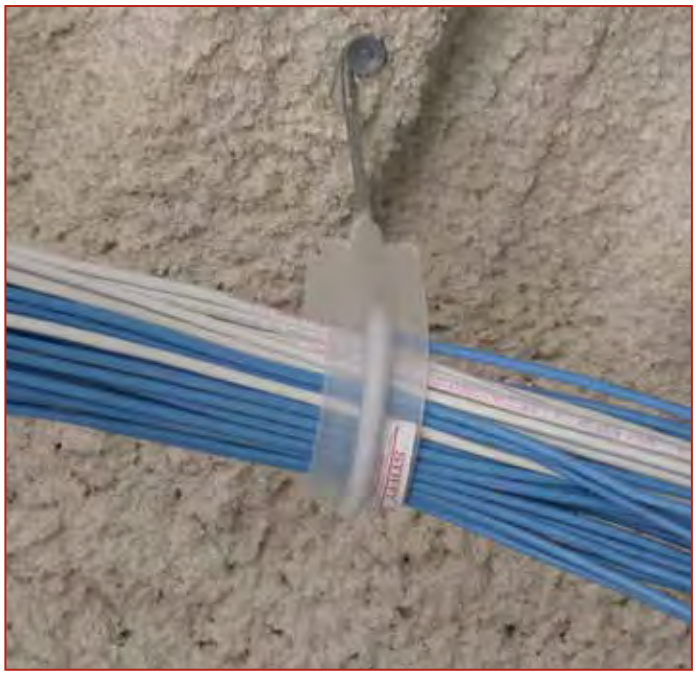
6" Cradle

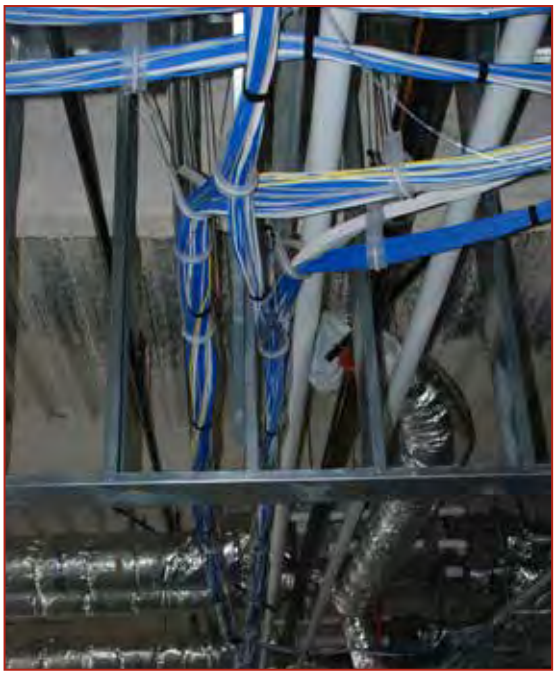
***Standard cradles come in white. Specify custom colors.**

Example:
02 = White 2" Cradle
02R = Red 2" Cradle

Additional Fastener Options are Shown on Pages 19-21

Application Examples



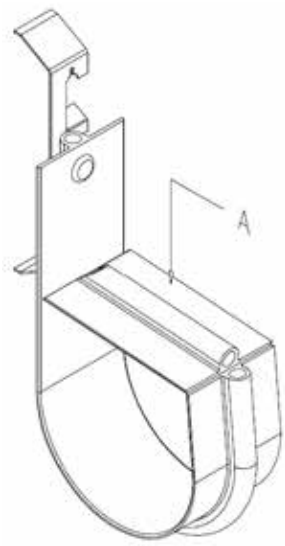


CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

It's What We Do!

Fig. 201 Stiffy Clip-on Comfort Cradle

- Nonconductive Plenum Rated 2" wide polypropylene Comfort Cradle with Locking Restraint Latch
- Max support spacing: 4-5' O.C.
- When used with Stiffy Rod Supports the rigid connection eliminates the need to attach to ceiling grid per NEC Article 300-11
- UL listed hardware
- UL listed for use in plenums
- Fill capacity for low voltage applications:
  - 1" cradle: Up to 15ea CAT5E or 11ea CAT6A. (70% Fill)
  - 2" cradle: Up to 61ea CAT5E or 46ea CAT6A. (70% Fill)
  - 3-1/2" cradle: Up to 187ea CAT5E or 141ea CAT6A. (70% Fill)
  - 6" cradle: Up to 550ea CAT5E or 417ea CAT6A. (70% Fill)
- Cradles are available in RED, WHITE, BLUE, GREEN, YELLOW and BLACK
- 2" Wide Cradle offers exceptional support and reduces crimping
- Ideal for use with CAT 5e, CAT 6, CAT 6A, CAT 7 and Fiber Optic Cables
- Refer to page 97 for technical data
- Available for 3/8" dia all thread rod



Tip...Check out the Fig 100 Stiffy Straight Rod to support your Comfort Cradles.

1" Comfort Cradle

2" Comfort Cradle

3-1/2" Comfort Cradle

6" Comfort Cradle

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

A		
*01	1" Cradle	100/Box
*02	2" Cradle	50/Box
*03	3-1/2" Cradle	30/Box
*04	6" Cradle	25/Box

R	Red	*Standard cradles come in white. Specify custom colors. Example: 02 = White 2" Cradle 02R = Red 2" Cradle
B	Blue	
G	Green	
Y	Yellow	
BK	Black	

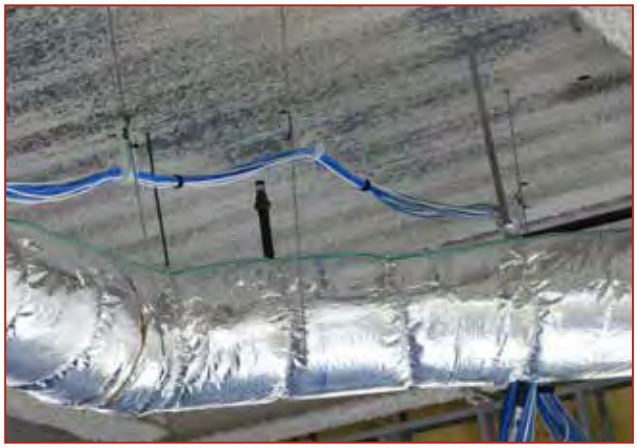
c UL us LISTED

BUY AMERICAN ACT COMPLIANT

Wall Ceiling

	A	Qty
Fig 201		
Fig 201		
Fig 201		

Application Examples



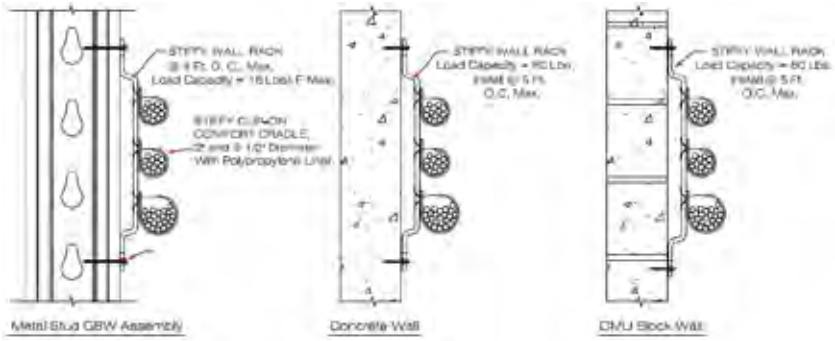
CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

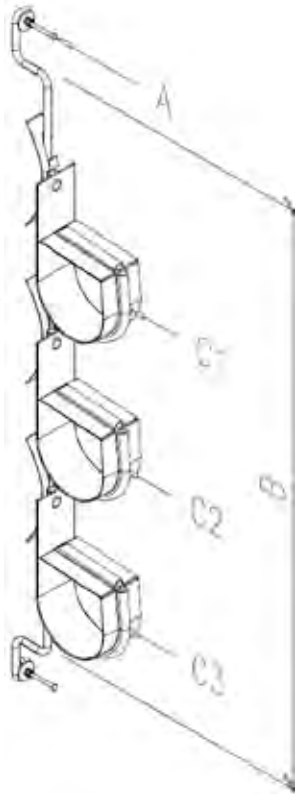
It’s What We Do!

Fig. 202 Stiffy Wall Rack Support

Tip...Systems can be separated by color.

- Replaces expensive Cable Tray and Eliminates Seismic Bracing.
- Saves space for coordination
- Install Fig 100 or Fig 200 where supports can not attach to wall
- Max load: 80 Lbs
- UL listed hardware
- UL listed for use in plenums
- 1" Offset from wall standard
- More than 5ea Comfort Cradles allowed as long as the load limitations listed above are not exceeded.
- Cradles are available in RED, WHITE, BLUE, GREEN, YELLOW and BLACK
- 2" Wide Cradle offers exceptional support and reduces crimping.
- Ideal for use with CAT 5e, CAT 6, CAT 6A, CAT 7 and Fiber Optic Cables
- Refer to page 97 for technical data.
- Refer to page 28 for project building code and seismic requirements





Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

c UL us LISTED

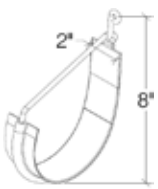
BUY AMERICAN ACT COMPLIANT

Tip...Value Engineer cable tray out of your project by using Stiffy wall mounted racks.

	A	B	C1	C2	C3	C4	Qty
Fig 202							
Fig 202							
Fig 202							

A		B	C1,2,3, & 4	
*00	No Fastener	Drop Length (Inches)	*00	No Cradle
*01	1-1/4" Power Actuated Pin—1" Embedment	2" 3¾" 1" Cradle	*01	1" Cradle
*02	1-1/2" Power Actuated Pin—1-1/4" Embed.		*02	2" Cradle
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)		*03	3-1/2" Cradle
*03.1	3/8" x 3" Wedge Anchor (2" Embed)	2" 5½" 2" Cradle	*04	6" Cradle
*04	1/4" x 1-3/4" Concrete Screw Anchor			
*04.1	3/8" x 1-3/4" Concrete Screw Anchor		R	Red
*06.1	#14 x 2-1/2" 1/4" Dia. Hex Washer Head Self Driller		B	Blue
*08	Timberpin (Wood Applications)		G	Green
*13	1-1/4" ***PowderPuff*** Pin—1" Embedment	2" 6¾" 3-1/2" Cradle	Y	Yellow
*25	Other—Please Specify		BK	Black

Minimum Dimensions:



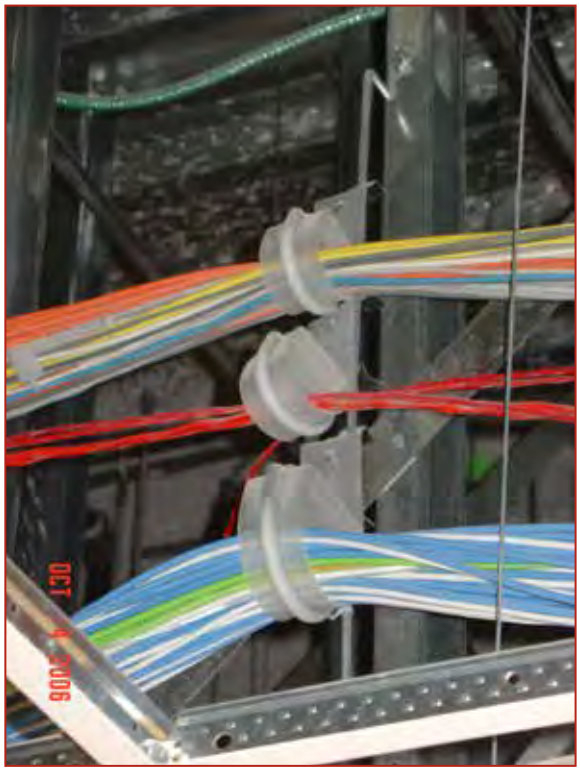
6" Cradle

*Standard cradles come in white. Specify custom colors.

Example:
02 = White 2" Cradle
02R = Red 2" Cradle

Additional Fastener Options are Shown on Pages 19-21

Application Examples



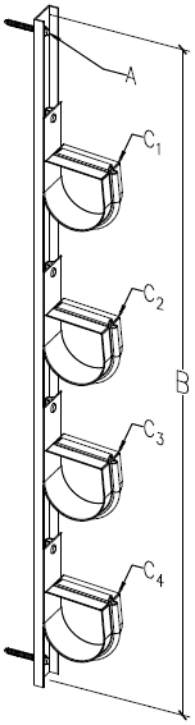
CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

It's What We Do!

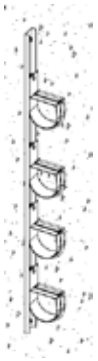
Fig. 203 Stiffy Fixed Wall Rack Support

Tip...Systems can be separated by color.

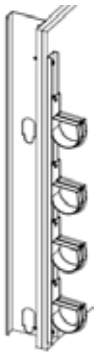
- Replaces expensive Cable Tray and Eliminates Seismic Bracing.
- Saves space for coordination
- Install Fig 100 or Fig 200 where supports can not attach to wall
- Max load: 80 Lbs
- UL listed hardware
- UL listed for use in plenums
- 1" Offset from wall standard
- More than 5ea Comfort Cradles allowed as long as the load limitations listed above are not exceeded.
- Cradles are available in RED, WHITE, BLUE, GREEN, YELLOW and BLACK
- 2" Wide Cradle offers exceptional support and reduces crimping.
- Ideal for use with CAT 5e, CAT 6, CAT 6A, CAT 7 and Fiber Optic Cables
- Refer to page 97 for technical data.
- Refer to page 28 for project building code and seismic requirements



CMU Block Wall



Concrete Wall



Metal Stud Wall

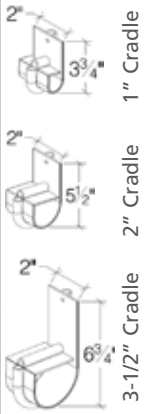
c UL us LISTED

BUY AMERICAN ACT COMPLIANT

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

Tip...Value Engineer cable tray out of your project by using Stiffy wall mounted racks.

	A	B	C1	C2	C3	C4	Qty
Fig 203							
Fig 203							
Fig 203							

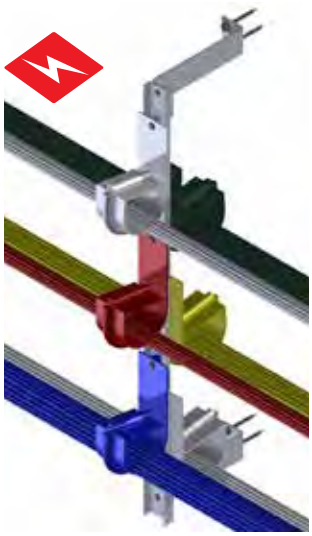
A		B	C1,2,3, & 4	
*00	No Fastener	Drop Length (Inches)	*00	No Cradle
*01	1-1/4" Power Actuated Pin—1" Embedment		*01	1" Cradle
*02	1-1/2" Power Actuated Pin—1-1/4" Embed.		*02	2" Cradle
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)		*03	3-1/2" Cradle
*03.1	3/8" x 3" Wedge Anchor (2" Embed)		*04	6" Cradle
*04	1/4" x 1-3/4" Concrete Screw Anchor			
*04.1	3/8" x 1-3/4" Concrete Screw Anchor		R	Red
*06.1	#14 x 2-1/2" 1/4" Dia. Hex Washer Head Self Driller		B	Blue
*08	Timberpin (Wood Applications)		G	Green
*13	1-1/4" ***PowderPuff*** Pin—1" Embedment		Y	Yellow
*25	Other—Please Specify		BK	Black

*Standard cradles come in white. Specify custom colors.

Example:
02 = White 2" Cradle
02R = Red 2" Cradle

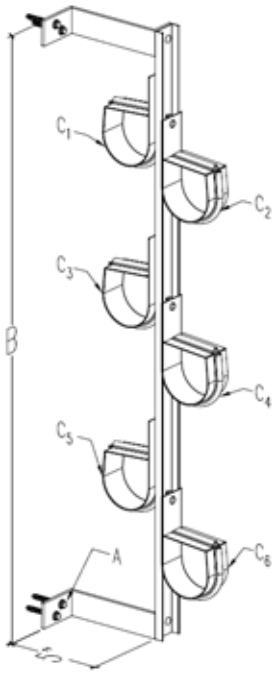
Additional Fastener Options are Shown on Pages 19-21

Fig. 204 Stiffy Double Wall Rack Support

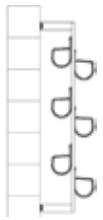


Tip...Systems can be separated by color.

- Replaces expensive Cable Tray and Eliminates Seismic Bracing.
- Saves space for coordination
- Install Fig 100 or Fig 200 where supports can not attach to wall
- Max load: 80 Lbs
- Refer to page 9 for project building and seismic requirements
- UL listed hardware
- UL listed for use in plenums
- 1" Offset from wall standard
- More than 5ea Comfort Cradles allowed as long as the load limitations listed above are not exceeded.
- Cradles are available in RED, WHITE, BLUE, GREEN, YELLOW and BLACK
- 2" Wide Cradle offers exceptional support and reduces crimping.
- Ideal for use with CAT 5e, CAT 6, CAT 6A, CAT 7 and Fiber Optic Cables
- Refer to page 97 for technical data.
- Refer to page 28 for project building code and seismic requirements



Concrete Wall



CMU Block Wall

Metal Stud Wall

Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

Tip...Value Engineer cable tray out of your project by using Stiffy wall mounted racks.

	A	B	C1	C2	C3	C4	C5	C6	Qty
Fig 204									
Fig 204									
Fig 204									

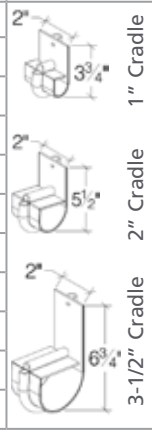
c UL us LISTED

BUY AMERICAN ACT COMPLIANT

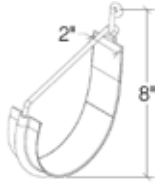
A	
*00	No Fastener
*01	1-1/4" Power Actuated Pin—1" Embedment
*02	1-1/2" Power Actuated Pin—1-1/4" Embed.
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)
*03.1	3/8" x 3" Wedge Anchor (2" Embed)
*04	1/4" x 1-3/4" Concrete Screw Anchor
*04.1	3/8" x 1-3/4" Concrete Screw Anchor
*06.1	#14 x 2-1/2" 1/4" Dia. Hex Washer Head Self Driller
*08	Timberpin (Wood Applications)
*13	1-1/4" ***PowderPuff*** Pin—1" Embedment
*25	Other—Please Specify

B

Drop Length (Inches)



Minimum Dimensions:



6" Cradle

C1,2,3,4,5 & 6	
*00	No Cradle
*01	1" Cradle
*02	2" Cradle
*03	3-1/2" Cradle
*04	6" Cradle
R	Red
B	Blue
G	Green
Y	Yellow
BK	Black

*Standard cradles come in white. Specify custom colors.

Example:
02 = White 2" Cradle
02R = Red 2" Cradle

Additional Fastener Options are Shown on Pages 19-21

Fig. 205 Stiffy "Shorty" Comfort Cradle

Detail #1 Detail #2 Detail #3 Detail #4 Detail #5

Detail #6 Detail #7 Detail #8 Detail #9 Detail #10

Detail #11 Detail #12 Detail #13

Detail #14 Detail #15 Detail #16

- Nonconductive Plenum Rated 2" wide polypropylene Comfort Cradle with Locking Restraint Latch
- Max support spacing: 4-5' O.C.
- UL listed hardware
- UL listed for use in plenums
- Fill capacity for low voltage applications:
  - 1" cradle: Up to 15ea CAT5E or 11ea CAT6A. (70% Fill)
  - 2" cradle: Up to 61ea CAT5E or 46ea CAT6A. (70% Fill)
  - 3-1/2" cradle: Up to 187ea CAT5E or 141ea CAT6A. (70% Fill)
  - 6" cradle: Up to 550ea CAT5E or 417ea CAT6A. (70% Fill)
- Cradles are available in RED, WHITE, BLUE, GREEN, YELLOW and BLACK
- 2" Wide Cradle offers exceptional support and reduces crimping
- Ideal for use with CAT 5e, CAT 6, CAT 6A, CAT 7 and Fiber Optic Cables
- Refer to page 97 for technical data

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B	Qty
Fig 205			
Fig 205			
Fig 205			

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

A			B	
*01	Detail 1	No Fastener	*01	1" Cradle
*02	Detail 2	#10 x 2-1/2" Hex Washer Head Self Driller	*02	2" Cradle
*03	Detail 3	#10 x 2-1/2" Hex Washer Head Sharp Point	*03	3-1/2" Cradle
*04	Detail 4	Wide Mouth Beam Clamp	*04	6" Cradle
*05	Detail 5	Wide Mouth Beam Clamp - Rotates 360°		
*06	Detail 6	Hammer-on Beam Clamp 3/32"-9/64" Flange	R	Red
*07	Detail 6	Hammer-on Beam Clamp 1/8"-1/4" Flange	B	Blue
*08	Detail 6	Hammer-on Beam Clamp 5/16"-1/2" Flange	G	Green
*09	Detail 6	Hammer-on Beam Clamp 9/16"-3/4" Flange	Y	Yellow
*10	Detail 7	Hammer-on Beam Clamp 3/32"-9/64" Flange - Rotates 360°	BK	Black
*11	Detail 7	Hammer-on Beam Clamp 1/8"-1/4" Flange - Rotates 360°		
*12	Detail 7	Hammer-on Beam Clamp 5/16"-1/2" Flange - Rotates 360°		
*13	Detail 7	Hammer-on Beam Clamp 9/16"-3/4" Flange - Rotates 360°		
*14	Detail 8	Bar Joist Pull Down Clamp 1/16" - 1/4" Flange		
*15	Detail 9	Under Floor Support to 3/4" dia. Round Pedestal		
*16	Detail 10	Under Floor Support to Pedestal - Universal		
*17	Detail 11	Stiffy Hammer-on Beam Clamp 1/8" - 1/4" Flange		
*18	Detail 12	Stiffy Pull Down Beam Clamp 1/16" - 1/4" Flange		
*19	Detail 13	Stiffy Wood Pull Down Beam Clamp - Nominal 2" Lumber		
*20	Detail 14	Flat Mount with No Fastener		
*21	Detail 15	Flat Mount with Fastener #10 x 2-1/2" Hex Washer Head Self Driller		
*22	Detail 16	Flat Mount #10 x 2-1/2" Hex Washer Head Sharp Point		

*Standard cradles come in white. Specify custom colors.

Example:
02 = White 2" Cradle
02R = Red 2" Cradle

Additional Fastener Options are Shown on Pages 19-21

Application Examples

Detail #1

Detail #2

Detail #3

Detail #4

Detail #5

Detail #6

Detail #7

Detail #8

Detail #9

Detail #10

Detail #11

Detail #12

Detail #13

Detail #14

Detail #15

Detail #16

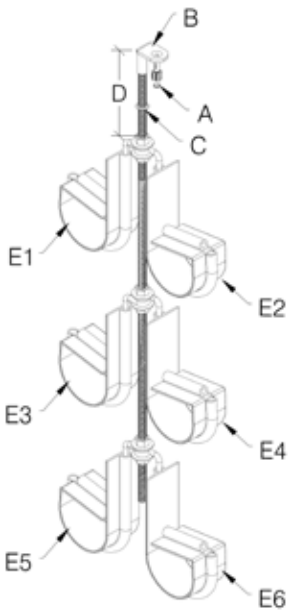
CEAS

CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

It's What We Do!

Fig. 206 Stiffy Data Tree

- Nonconductive Plenum Rated 2" wide polypropylene Comfort Cradle with Locking Restraint Latch
- Max support spacing: 4-5' O.C.
- The rigid connection eliminates the need to attach to ceiling grid per NEC Article 300-11
- Max load for support rod with Stiffy footprint: 70#
- Max load for support rod is governed by the attachment to structure when the all thread rod is attached to a Blue Banger Hanger or other anchor. (B=3)
- Max load for cradle: 50#
- Fill capacity for low voltage applications:
  - 1" cradle: Up to 15ea CAT5E or 11ea CAT6A. (70% Fill)
  - 2" cradle: Up to 61ea CAT5E or 46ea CAT6A. (70% Fill)
  - 3-1/2" cradle: Up to 187ea CAT5E or 141ea CAT6A. (70% Fill)
  - 6" cradle: Up to 550ea CAT5E or 417ea CAT6A. (70% Fill)
- Cradles are available in RED, WHITE, BLUE, GREEN, YELLOW and BLACK
- 2" Wide Cradle offers exceptional support and reduces crimping
- Ideal for use with CAT 5e, CAT 6, CAT 6A, CAT 7 and Fiber Optic Cables
- UL listed hardware
- UL listed for use in plenums

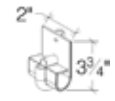


Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

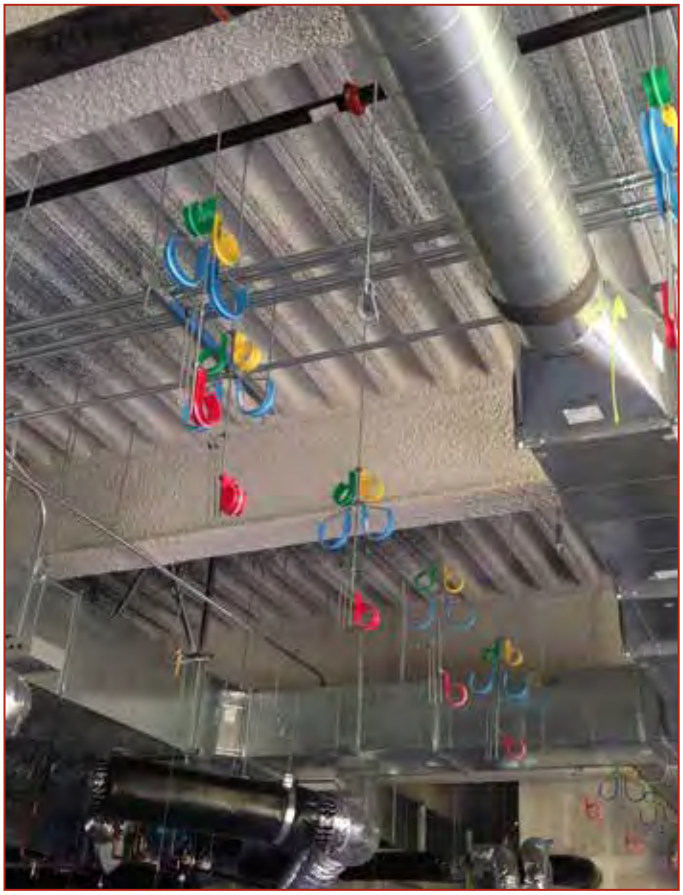
	A	B	C	D	E1	E2	E3	E4	E5	E6	Qty
Fig 206											
Fig 206											
Fig 206											

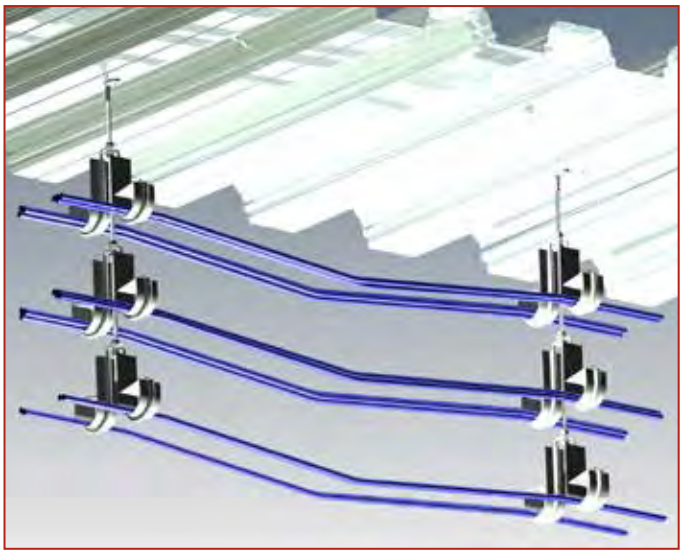
A		B		C		D	E1 - E6	
*00	No Fastener	*01  90° Footprint	*011[2]  Hard Concrete Footprint	*01	1/4" ATR	Drop Length (Inches)	*01	1" Cradle
*01	1-1/4" Power Actuated Pin—1" Embedment *(B=011)*[1]			*02	3/8" ATR		*02	2" Cradle
*02	1-1/2" Power Actuated Pin—1-1/4" Embedment *(B=011)*[1]			*03	1/2" ATR[3]		*03	3-1/2" Cradle
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)						*04	6" Cradle
*03.1	3/8" x 3" Wedge Anchor (2" Embed)							
*04	1/4" x 1-3/4" Concrete Screw Anchor	*012  Gas Tool Footprint	*02  Sidemount Footprint	Minimum Dimensions:  1" Cradle  2" Cradle			R	Red
*04.1	3/8" x 1-3/4" Concrete Screw Anchor						B	Blue
*06	#10 Hex Washer Head Self Driller						G	Green
*07	#10 Hex Washer Head Sharp Point						Y	Yellow
*08	Timberpin (Wood Applications)						BK	Black
*09	Wide Mouth Beam Clamp	*03  Threaded End (1/2" of Threads)	*04  Straight Rod	 3-1/2" Cradle  6" Cradle			*Standard cradles come in white. Specify custom colors. Example: 02 = White 2" Cradle 02R = Red 2" Cradle	
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)							
*13	1-1/4" PowderPuff Pin—1" Embedment *(B=011)*[1]							
*14	Stiffy Wood Pull Down Attachment							
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange	*10 Other-Please Specify						
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange							
*25	Other—Please Specify							

Footnotes:
1-When Power Actuated Fasteners (A=01, 02 or 13) and (B=01-90° Footprint) are selected the B=011 New Hard Concrete Footprint will be used by default.
2-Hard Concrete Footprint B=011, is available in 1/4" and 3/8".
3-C=03 1/2" All Thread rod is available with the B=03 threaded footprint only.

Additional Fastener Options are Shown on Pages 19-21

Application Examples





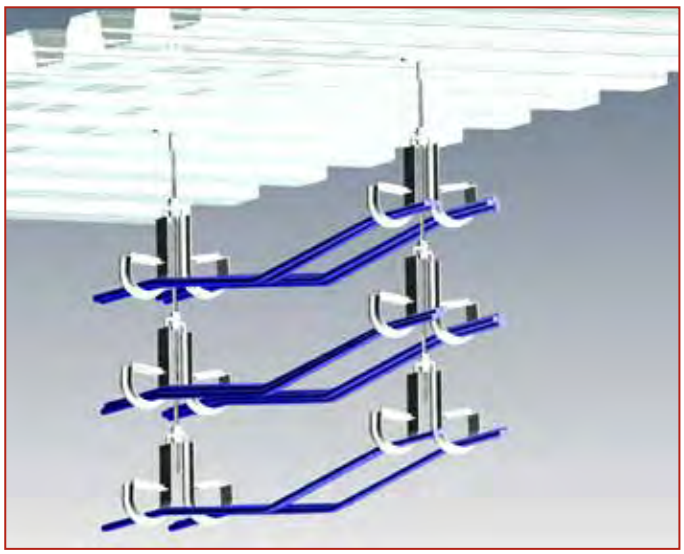
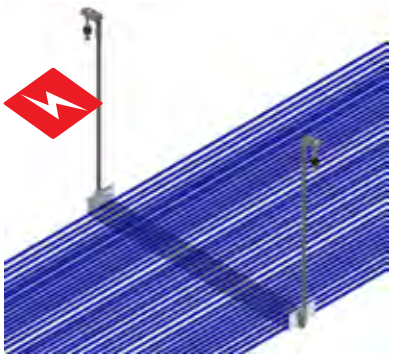
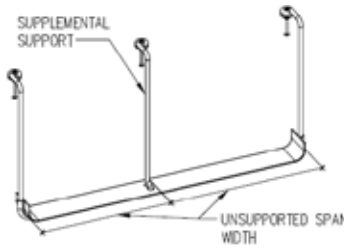
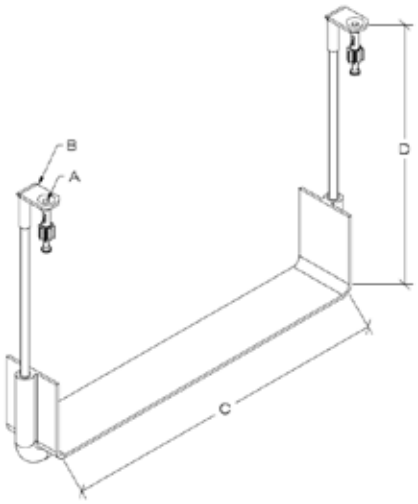


Fig. 220 Stiffy Low Voltage Trapeze





- Replaces expensive Cable Tray and Eliminates Seismic Bracing.
- Max support spacing: 4-5′ O.C.
- Max load per trapeze: 50 Lbs (Refer to table below)
- UL listed hardware for use in plenums
- Trapezes are available in RED, WHITE, BLUE, GREEN, YELLOW and BLACK
- 2″ Wide Cradle offers exceptional support and reduces crimping.
- Ideal for use with CAT 5e, CAT 6, CAT 6A, CAT 7 and Fiber Optic Cables
- Refer to page 28 for project building code and seismic requirements



Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

Max Capacity Based on Span	
12″ Span	50#
14″ Span	40#
16″ Span	30#
18″ Span	20#
*Add supplemental support to reduce max unsupported span width	

	A	B	C (12″ Typ.)	D	E	*F	Qty
Fig 220							
Fig 220							
Fig 220							
*Standard trapezes come in white.							

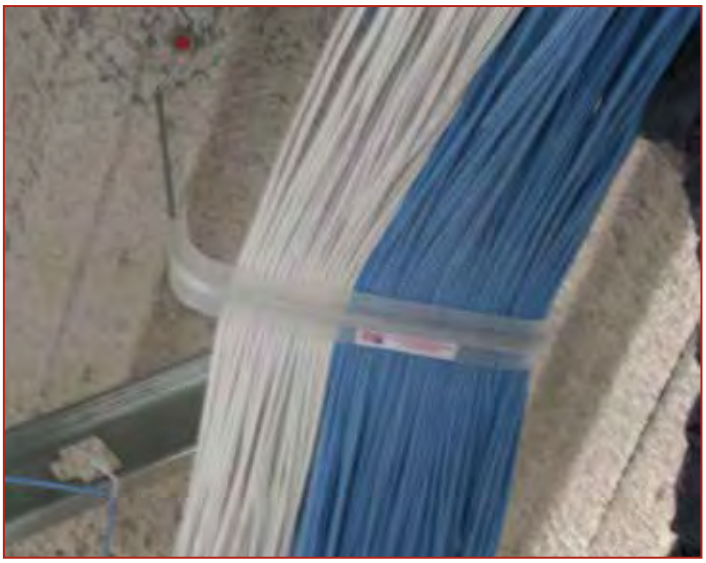
c UL us LISTED

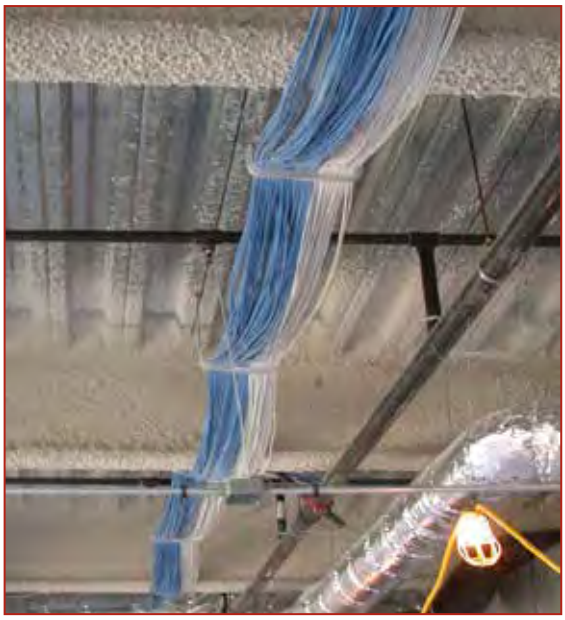
BUY AMERICAN ACT COMPLIANT

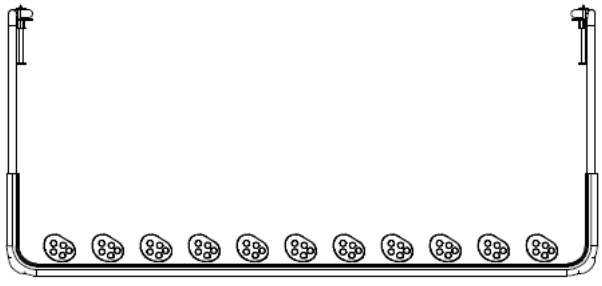
A		B		C	D	E		F	
*00	No Fastener	*01 90° Footprint	*011 Hard Concrete Footprint	Width (Inches)	Drop Length (Inches)	Supplemental Support		*01	White
*01	1-1/4″ Power Actuated Pin—1″ Embedment					*01	Yes	*02	Red
*02	1-1/2″ Power Actuated Pin—1-1/4″ Embed					*02	No	*03	Blue
*03	1/4″ x 3-1/4″ Wedge Anchor (2″ Embed)							*04	Green
*03.1	3/8″ x 3″ Wedge Anchor (2″ Embed)							*05	Yellow
*04	1/4″ x 1-3/4″ Concrete Screw Anchor	*012 Gas Tool Footprint	*02 Sidemount Footprint					*06	Black
*04.1	3/8″ x 1-3/4″ Concrete Screw Anchor								
*06	#10 Hex Washer Head Self Driller								
*07	#10 Hex Washer Head Sharp Point								
*08	Timberpin (Wood Applications)								
*09	Wide Mouth Beam Clamp	*03 Threaded End (1/2″ of Threads)	*04 Straight Rod						
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)								
*13	1-1/4″ PowderPuff Pin—1″ Embedment								
*14	Stiffy Wood Pull Down Attachment								
*16	Hammer-on Beam Clamp 1/8″ - 3/4″ Flange	*10 Other-Please Specify							
*17	Bar Joist Pull Down Clamp 1/16″ - 1/4 Flange								
*25	Other—Please Specify								

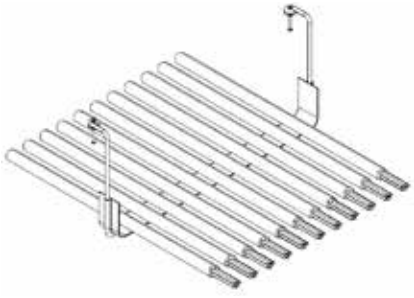
Additional Fastener Options are Shown on Pages 19-21

Application Examples









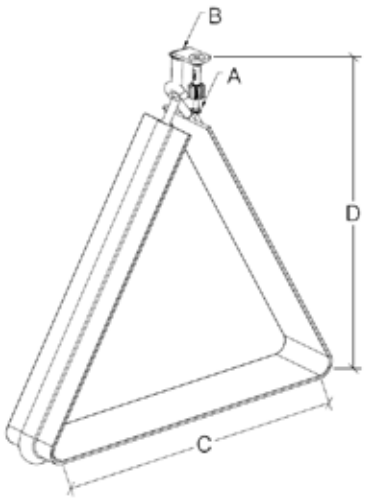
CEAS

CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

It's What We Do!

Fig. 222 Stiffy Low Voltage Triangle Trapeze

- Replaces expensive Cable Tray and Eliminates Seismic Bracing.
- Triangle unlocks to allow cables to be added after installation.
- Max support spacing: 4-5' O.C.
- Max load per trapeze: 50 Lbs (Refer to table below)
- UL listed hardware
- UL listed for use in plenums
- Trapezes are available in RED, WHITE, BLUE, GREEN, YELLOW and BLACK
- 2" Wide Cradle offers exceptional support and reduces crimping.
- Ideal for use with CAT 5e, CAT 6, CAT 6A, CAT 7 and Fiber Optic Cables
- Refer to page 28 for project building code and seismic requirements



Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

Max Capacity Based on Span	
12" Span	50#
14" Span	40#
16" Span	30#
18" Span	20#

	A	B	C (12" Typ.)	D	*E	Qty
Fig 222						
Fig 222						
Fig 222						
*Standard trapezes come in white.						

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

A	
*00	No Fastener
*01	1-1/4" Power Actuated Pin—1" Embedment
*02	1-1/2" Power Actuated Pin—1-1/4" Embed
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)
*03.1	3/8" x 3" Wedge Anchor (2" Embed)
*04	1/4" x 1-3/4" Concrete Screw Anchor
*04.1	3/8" x 1-3/4" Concrete Screw Anchor
*06	#10 Hex Washer Head Self Driller
*07	#10 Hex Washer Head Sharp Point
*08	Timberpin (Wood Applications)
*09	Wide Mouth Beam Clamp
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)
*13	1-1/4" PowderPuff Pin—1" Embedment
*14	Stiffy Wood Pull Down Attachment
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange
*25	Other—Please Specify

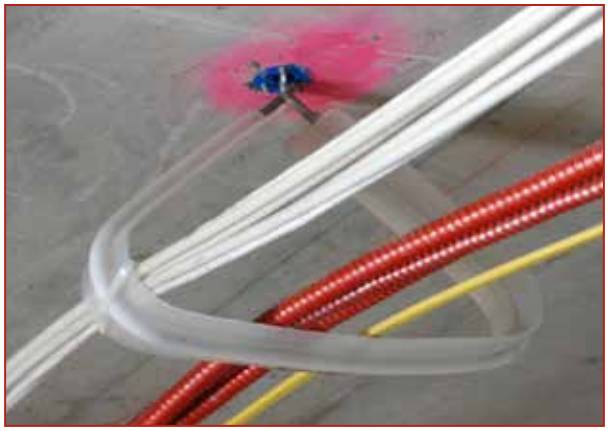
B	
*01  90° Footprint	*011  Hard Concrete Footprint
*012  Gas Tool Footprint	*02  Sidemount Footprint
*03  Threaded End (1/2" of Threads)	*04  Straight Rod
*10 Other-Please Specify	

C	D
Width (Inches)	Drop Length (Inches)

E	
*01	White
*02	Red
*03	Blue
*04	Green
*05	Yellow
*06	Black

Additional Fastener Options are Shown on Pages 19-21

Application Examples

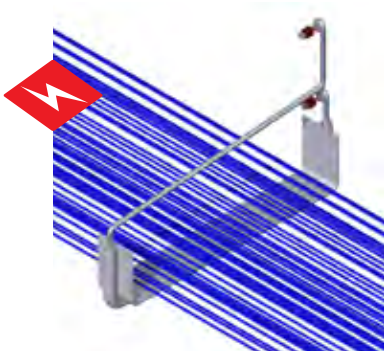


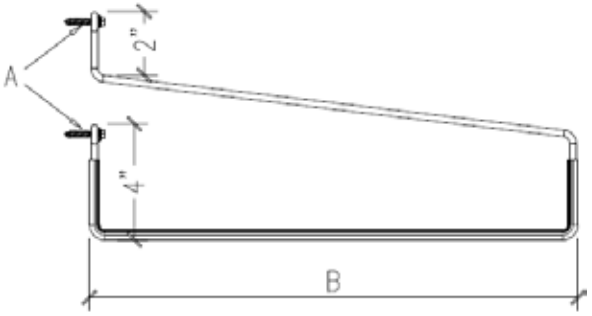
CEAS

CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

It's What We Do!

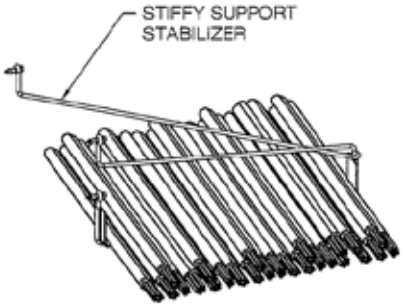
Fig. 223 Stiffy Wall Mount Trapeze





Max Capacity Based on Span	
12" Span	50#
14" Span	40#
16" Span	30#
18" Span	20#

- Replaces expensive Cable Tray and Eliminates Seismic Bracing.
- Saves space for coordination
- Max load: 50# (Refer to table below)
- UL listed hardware
- UL listed for use in plenums
- Trapezes are available in RED, WHITE, BLUE, GREEN, YELLOW and BLACK
- 2" Wide Cradle offers exceptional support and reduces crimping.
- Ideal for use with CAT 5e, CAT 6, CAT 6A, CAT 7 and Fiber Optic Cables
- Refer to page 28 for project building code and seismic requirements



STIFFY SUPPORTING DATA CABLE

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B	C	*D	Qty
Fig 223					
Fig 223					
Fig 223					
*Standard trapezes come in white.					

c UL us LISTED

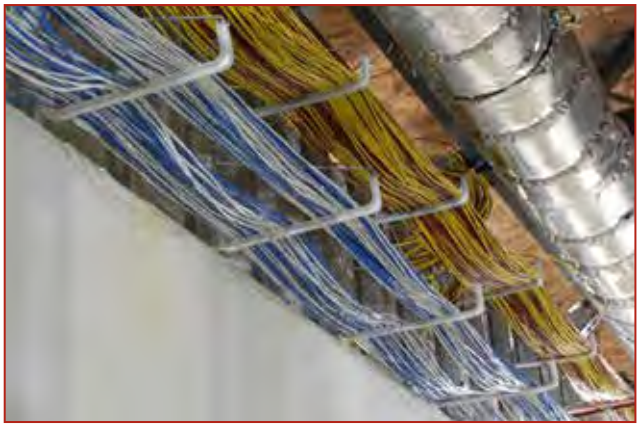
BUY AMERICAN ACT COMPLIANT

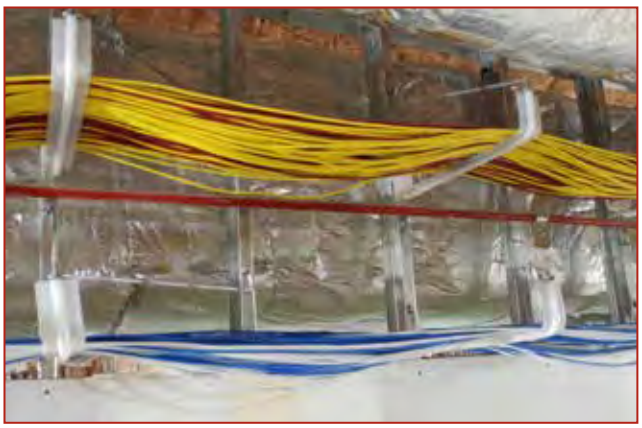
A		B	C		D	
*00	No Fastener	Width (Inches)	Stabilizer Arm		*01	White
*01	1-1/4" Power Actuated Pin—1" Embedment		*00	No Stabilizer Arm	*02	Red
*02	1-1/2" Power Actuated Pin—1-1/4" Embed.		*01	Stud Spacing 16" O.C.	*03	Blue
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)		*02	Stud Spacing 24" O.C.	*04	Green
*03.1	3/8" x 3" Wedge Anchor (2" Embed)				*05	Yellow
*04	1/4" x 1-3/4" Concrete Screw Anchor				*06	Black
*04.1	3/8" x 1-3/4" Concrete Screw Anchor					
*06.1	1/4" x 2-1/2" Hex Washer Head Self Driller					
*07	#14 x 2-1/2" 2-1/2" Hex Washer Head Sharp Point					
*08	Timberpin (Wood Applications)					
*13	1-1/4" ***PowderPuff*** Pin—1" Embedment					
*25	Other—Please Specify					

Stabilizer Arm recommended for wide trapezes to provide stability when pulling cable.

Additional Fastener Options are Shown on Pages 19-21

Application Examples

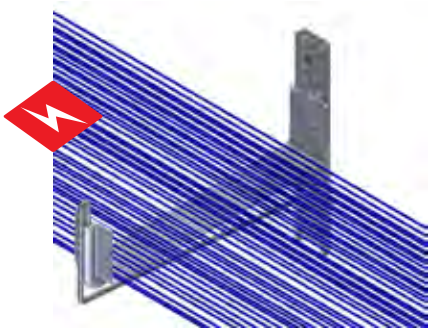


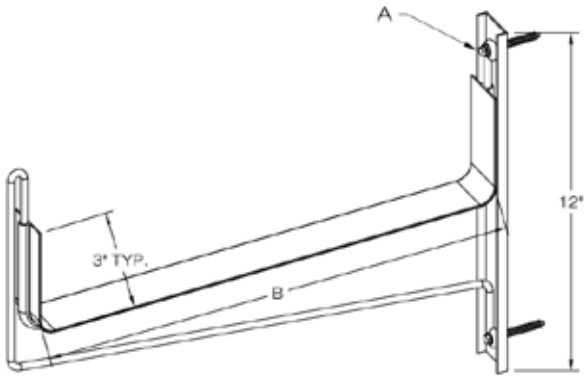


CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

It's What We Do!

Fig. 224 Stiffy Wall Mount Trapeze





- Replaces expensive Cable Tray and Eliminates Seismic Bracing.
- Saves space for coordination
- Max load: 50# (Refer to table below)
- UL listed hardware
- UL listed for use in plenums
- Trapezes are available in RED, WHITE, BLUE, GREEN, YELLOW and BLACK
- 2" Wide Cradle offers exceptional support and reduces crimping.
- Ideal for use with CAT 5e, CAT 6, CAT 6A, CAT 7 and Fiber Optic Cables
- Refer to page 28 for project building code and seismic requirements

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

Max Capacity Based on Span	
12" Span	50#
14" Span	40#
16" Span	30#
18" Span	20#

	A	B	C	*D	Qty
Fig 224					
Fig 224					
Fig 224					
*Standard trapezes come in white.					

A		B	C	D	
*00	No Fastener	Width (Inches)	Depth (Inches)	*01	White
*01	1-1/4" Power Actuated Pin—1" Embedment		(3" Typical)	*02	Red
*02	1-1/2" Power Actuated Pin—1-1/4" Embed.			*03	Blue
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)			*04	Green
*03.1	3/8" x 3" Wedge Anchor (2" Embed)			*05	Yellow
*04	1/4" x 1-3/4" Concrete Screw Anchor			*06	Black
*04.1	3/8" x 1-3/4" Concrete Screw Anchor				
*06.1	1/4" x 2-1/2" Hex Washer Head Self Driller				
*07	#14 x 2/1/2" 1-1/2" Hex Washer Head Sharp Point				
*08	Timberpin (Wood Applications)				
*13	1-1/4" ***PowderPuff*** Pin—1" Embedment				
*25	Other—Please Specify				

Additional Fastener Options are Shown on Pages 19-21

Application Examples

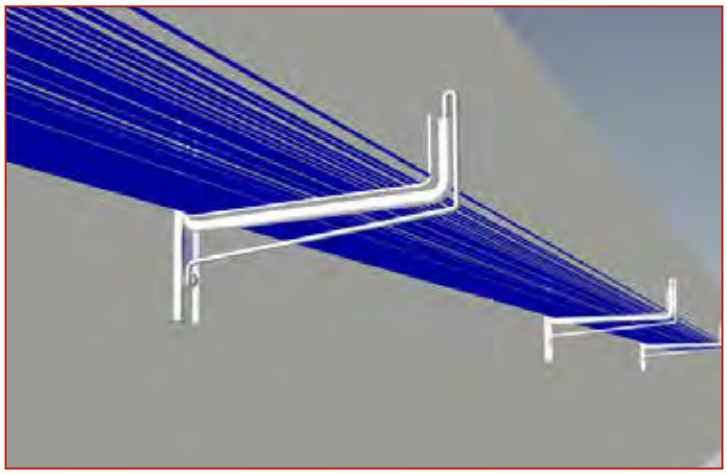
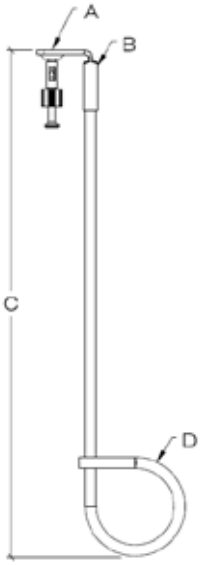
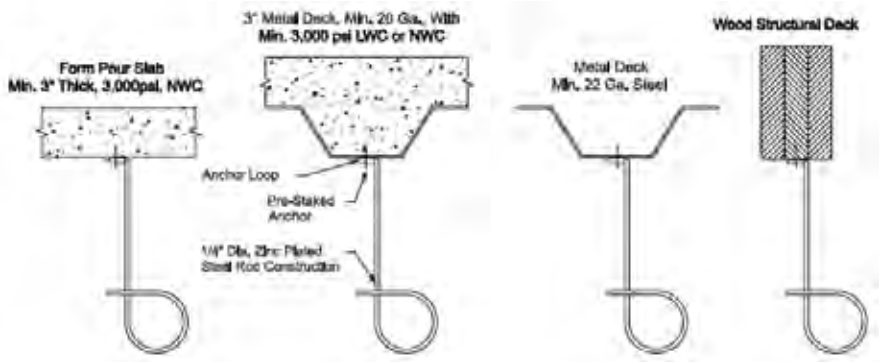


Fig. 240 Stiffy Bridle Ring

Shown with PowderPuff Pin A=13 and Hard Concrete Footprint B=011





- Zinc plated rod for corrosion resistance
- Max static load: 25#
- Max support spacing: 4-5' O.C.
- UL listed hardware

A=03 B=01

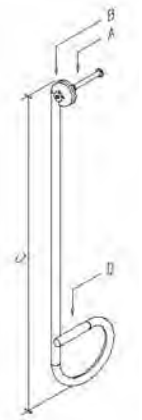
Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B	C	D	Qty
Fig 240					
Fig 240					
Fig 240					

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

A		B		C	D	
*00	No Fastener	*01 90° Footprint	*011 Hard Concrete Footprint	Drop Length (Inches)	*01	2" Ring
*01	1-1/4" Power Actuated Pin—1" Embedment				*02	3" Ring
*02	1-1/2" Power Actuated Pin—1-1/4" Embed				*03	4" Ring
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)				*04	5" Ring
*03.1	3/8" x 3" Wedge Anchor (2" Embed)				*05	6" Ring
*04	1/4" x 1-3/4" Concrete Screw Anchor	*012 Gas Tool Footprint	*02 Sidemount Footprint			
*04.1	3/8" x 1-3/4" Concrete Screw Anchor					
*06	#10 Hex Washer Head Self Driller					
*07	#10 Hex Washer Head Sharp Point					
*08	Timberpin (Wood Applications)					
*09	Wide Mouth Beam Clamp	*03 Threaded End (1/2" of Threads)	*04 Straight Rod			
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)					
*13	1-1/4" PowderPuff Pin—1" Embedment					
*14	Stiffy Wood Pull Down Attachment					
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange	*10 Other-Please Specify				
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange					
*25	Other—Please Specify					

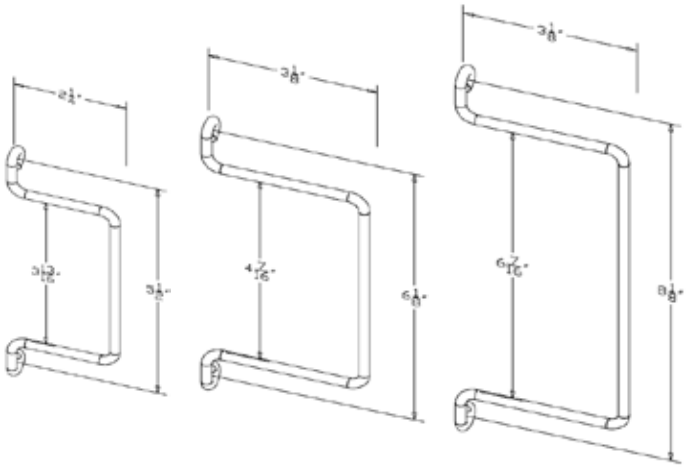


Additional Fastener Options are Shown on Pages 19-21

Fig. 241

Stiffy D Ring

- A quick and cost effective way to route, support and secure cables and jumpers in terminal closets
- Guides cables vertically on walls
- 1/4" zinc coated rod to resist corrosion



Small Medium Large

Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

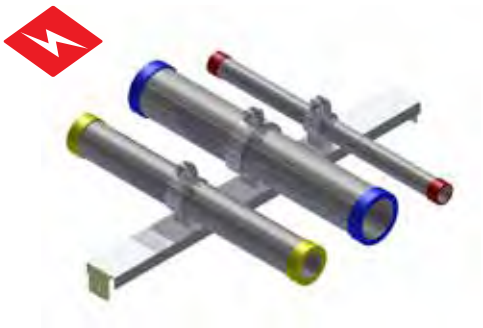
	A	B	Qty
Fig 241			
Fig 241			
Fig 241			

BUY AMERICAN ACT COMPLIANT

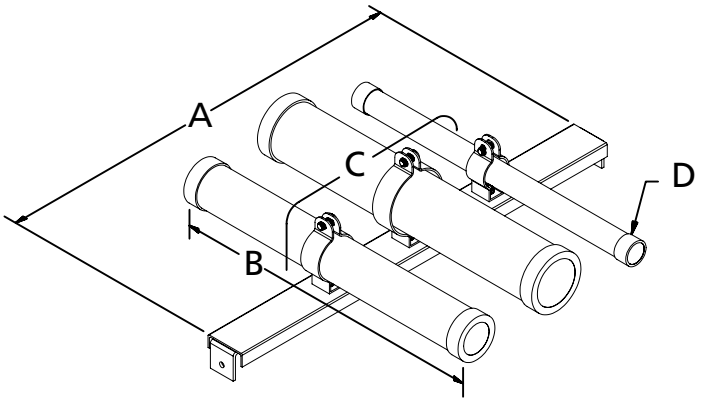
A		B	
*00	No Fastener	*01	Small D-Ring
*01	1-1/4" Power Actuated Pin—1" Embedment	*02	Medium D-Ring
*02	1-1/4" Power Actuated Pin—1-1/4" Embed.	*03	Large D-Ring
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)	To order custom sizes please refer to the Fig 121 Order Form	
*03.1	3/8" x 3" Wedge Anchor (2" Embed)		
*04	1/4" x 1-3/4" Concrete Screw Anchor		
*04.1	3/8" x 1-3/4" Concrete Screw Anchor		
*06	#10 2-1/2" Hex Washer Head Self Driller		
*07	#10 2-1/2" Hex Washer Head Sharp Point		
*08	Timberpin (Wood Applications)		
*25	Other—Please Specify		

Additional Fastener Options are Shown on Pages 10 - 12

Fig. 250 Stiffy Wall Sleeves



- Allows the cabling installer to run cable before drywall is installed.
- Insulating Bushings can be color coded to identify specific cabling systems.
- Wall Sleeves can be ordered in any width or orientation to suit project requirements.
- Engineered submittal documents stamped by an engineer.

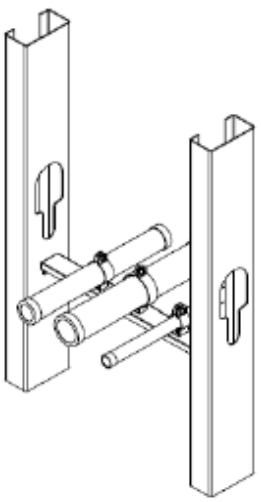


Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable*	

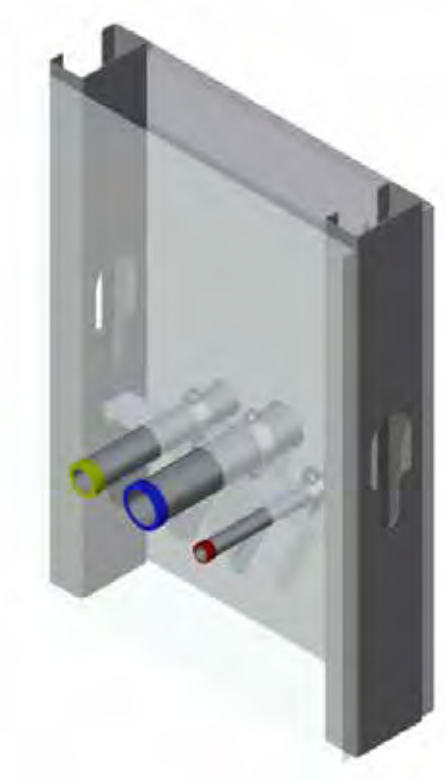
BUY AMERICAN ACT COMPLIANT

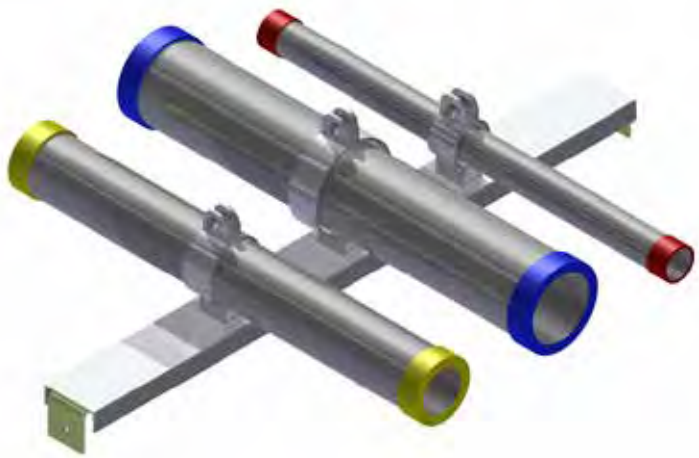
	A	B	C1	D1	C2	D2	C3	D3	C4	D4	C5	D5	C6	D6	Qty
Fig 250															
Fig 250															
Fig 250															

A		B	C1-6		D1-6	
*01	16" Wide	Sleeve Length (Inches)	*01	1/2" EMT	*00	No Bushing
*02	24" Wide		*02	3/4" EMT	*01	White Bushing (Standard)
*03	Other		*03	1" EMT	*01R	Red Bushing
			*04	1-1/4" EMT	*01B	Blue Bushing
			*05	1-1/2" EMT	*01G	Green Bushing
			*06	2" EMT	*01Y	Yellow Bushing
			*07	2-1/2" EMT	*01BL	Black Bushing
			*08	3" EMT		
			*09	3-1/2" EMT		
			*10	4" EMT		



Application Examples



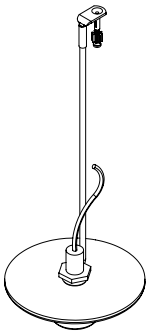


CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

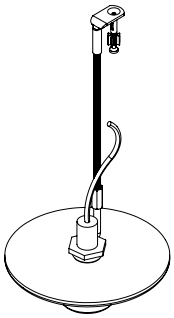
It's What We Do!

Fig. 251 Stiffy DAS Antenna Support

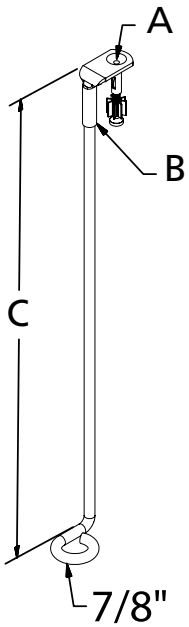
- Dramatically reduces the installation time of DAS Antennas
- Supports can be ordered as a fixed length or adjustable with threaded rod
- Zinc plated rod for corrosion resistance.
- Max load: 70# per support
- Engineered submittal documents stamped by an engineer
- Refer to project building code to determine max weight/LF without seismic restraints



Fixed Length
Version Shown D=01



Threaded Adjustable
Version Shown D=02



Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

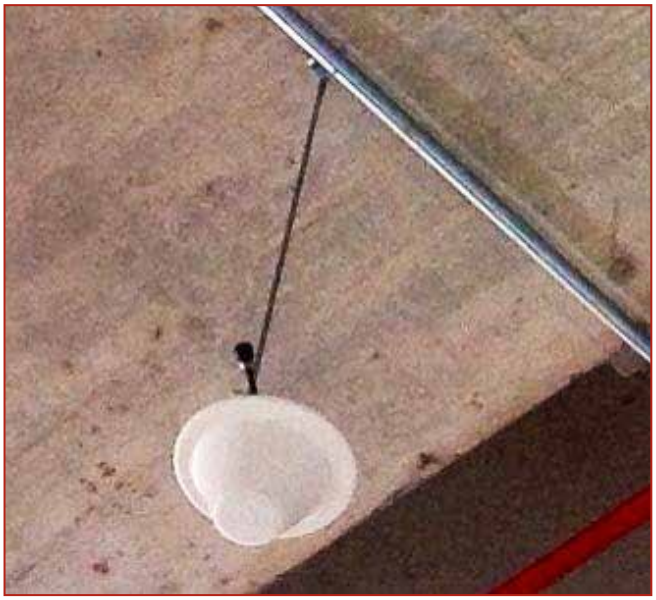
	A	B	C	D	Qty
Fig 251					
Fig 251					
Fig 251					

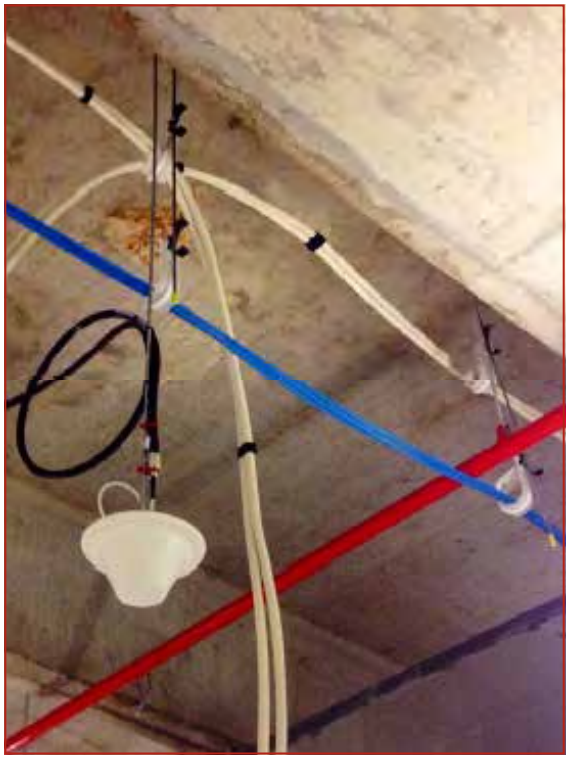
A		B		C	D	
*00	No Fastener	*01	*011	Drop Length (Inches)	*01	Fixed Length
*01	1-1/4" Power Actuated Pin—1" Embedment	90° Footprint	Hard Concrete Footprint		*02	Threaded Adjustable Version
*02	1-1/2" Power Actuated Pin—1-1/4" Embed	*012	*02			
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)	Gas Tool Footprint	Sidemount Footprint			
*03.1	3/8" x 3" Wedge Anchor (2" Embed)	*03	*04			
*04	1/4" x 1-3/4" Concrete Screw Anchor	Threaded End (1/2" of Threads)	Straight Rod			
*04.1	3/8" x 1-3/4" Concrete Screw Anchor	*10 Other-Please Specify				
*06	#10 Hex Washer Head Self Driller					
*07	#10 Hex Washer Head Sharp Point					
*08	Timberpin (Wood Applications)					
*09	Wide Mouth Beam Clamp					
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)					
*13	1-1/4" PowderPuff Pin—1" Embedment					
*14	Stiffy Wood Pull Down Attachment					
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange					
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange					
*25	Other—Please Specify					

Footnotes:
1-When Power Actuated Fasteners (A=01, 02 or 13) and (B=01-90° Footprint) are selected the B=011 New Hard Concrete Footprint will be used by default.
2-Hard Concrete Footprint B=011, is available in 1/4" and 3/8".
3-D=02 1/2" All Thread rod is available with the B=03 threaded footprint only.

Additional Fastener Options are Shown on Pages 19-21

Application Examples



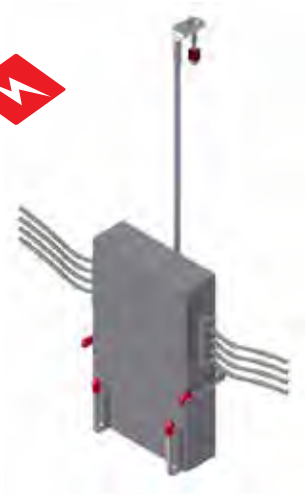


GCEAS

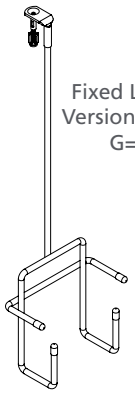
CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

It's What We Do!

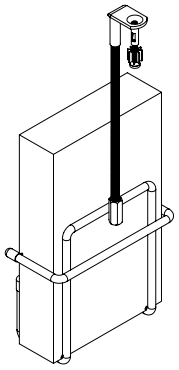
Fig. 252 Stiffy Module Support



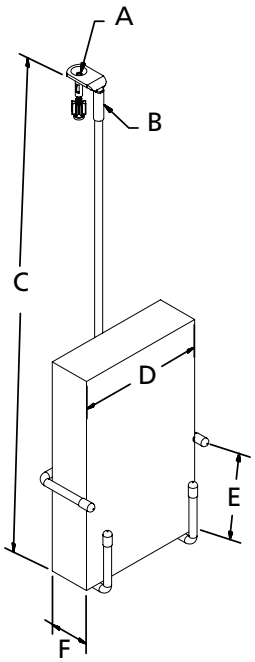
- Dramatically reduces the installation time of Modules
- Supports can be ordered as a fixed length or adjustable with threaded rod
- Supports are custom sized for the specific application
- Zinc plated rod for corrosion resistance.
- Max load: 70# per support
- Engineered submittal documents stamped by an engineer
- Refer to project building code to determine max weight/LF without seismic restraints



Fixed Length Version Shown G=01



Threaded Adjustable Version Shown G=02



Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

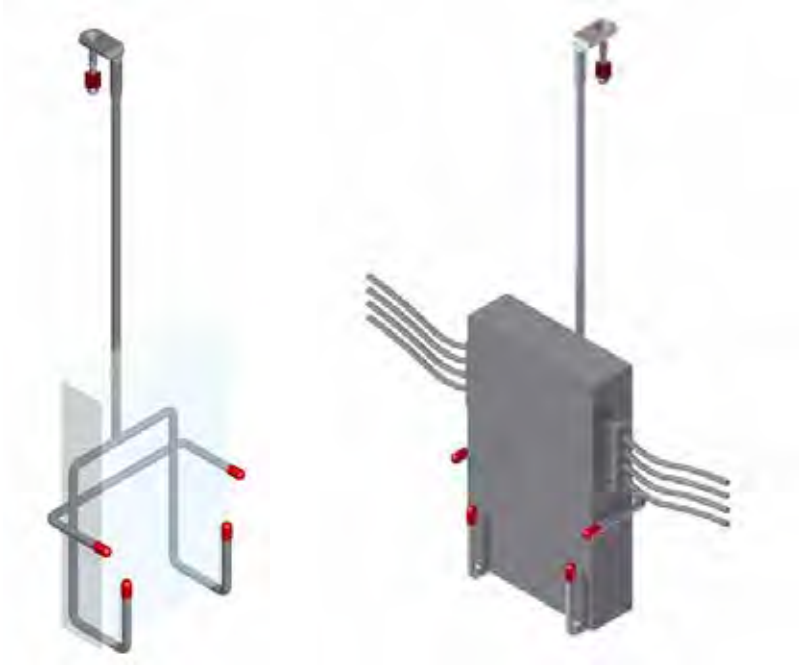
BUY AMERICAN ACT COMPLIANT

	A	B	C	D	E	F	G	Qty
Fig 252								
Fig 252								
Fig 252								

A		B		C	D	E	F	G	
*00	No Fastener	*01  90° Footprint	*011  Hard Concrete Footprint	Drop Length (Inches)	Opening Width (Inches)	Opening Height (Inches)	Opening Depth (Inches)	*01	Fixed Length
*01	1-1/4" Power Actuated Pin—1" Embedment							*02	Threaded Adjustable Version
*02	1-1/2" Power Actuated Pin—1-1/4" Embed								
*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)								
*03.1	3/8" x 3" Wedge Anchor (2" Embed)								
*04	1/4" x 1-3/4" Concrete Screw Anchor	*012  Gas Tool Footprint	*02  Sidemount Footprint	Footnotes: 1-When Power Actuated Fasteners (A=01, 02 or 13) and (B=01-90° Footprint) are selected the B=011 New Hard Concrete Footprint will be used by default. 2-Hard Concrete Footprint B=011, is available in 1/4" and 3/8". 3-G=02 1/2" All Thread rod is available with the B=03 threaded footprint only.					
*04.1	3/8" x 1-3/4" Concrete Screw Anchor								
*06	#10 Hex Washer Head Self Driller								
*07	#10 Hex Washer Head Sharp Point								
*08	Timberpin (Wood Applications)								
*09	Wide Mouth Beam Clamp	*03  Threaded End (1/2" of Threads)	*04  Straight Rod						
*12	Adjustable Hammer-on BC Rotates 360° Specify Flange Thickness)								
*13	1-1/4" PowderPuff Pin—1" Embedment								
*14	Stiffy Wood Pull Down Attachment								
*16	Hammer-on Beam Clamp 1/8" - 3/4" Flange	*10 Other-Please Specify							
*17	Bar Joist Pull Down Clamp 1/16" - 1/4 Flange								
*25	Other—Please Specify								

Additional Fastener Options are Shown on Pages 19-21

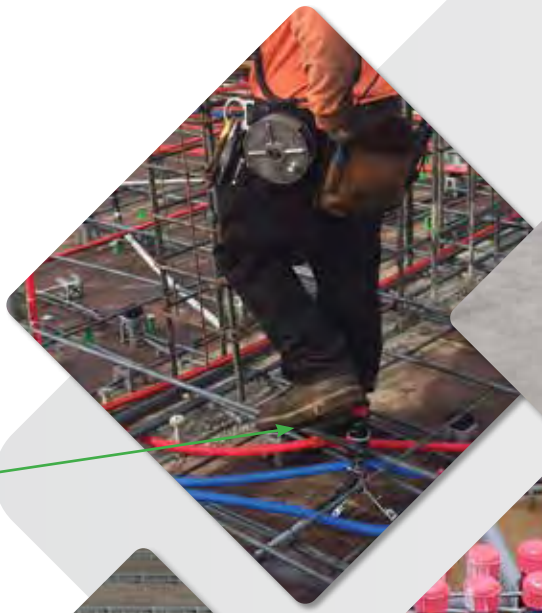
Application Examples



The order dimensions for the module shown are D=5.25 E=3.375 F=2.25

300 SERIES CAST-IN-PLACE SUPPORTS

Safer
Faster Installation
Saves Labor



Rod Buster Rated

Tip...The Stiffy Sock isolates fasteners and eliminates any concern of rust wicking into the structure.

JOBSITE PROBLEM MEETS STIFFY SOLUTION

Real-world Jobsite Innovation

Job Site Problem

Typical Wire Installation

Job Site Problem 1

Decks are clear
Step 1 - Perform Layout
1st layer of rebar installed
Step 2 - Install horizontal conduit
2nd layer of rebar installed
Step 3 - Return to each location when the decks are most dangerous and find tie wire and scrap material

Installer must revisit every support
Dangerous tripping hazard

Stiffy Solution

Fig 302 Stiffy Tree

Stiffy Solution

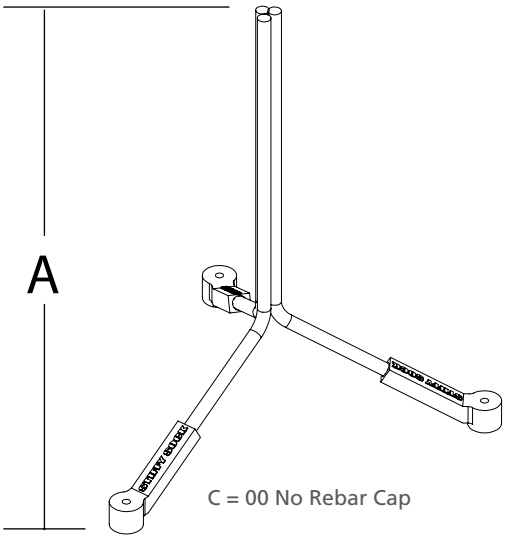
Decks are clear
Step 1 - Perform Layout and install all of the Stiffy Supports with the 90s in a **SAFE** work environment
1st layer of rebar installed
Step 2 - Install horizontal conduit

It doesn't get any easier than this...

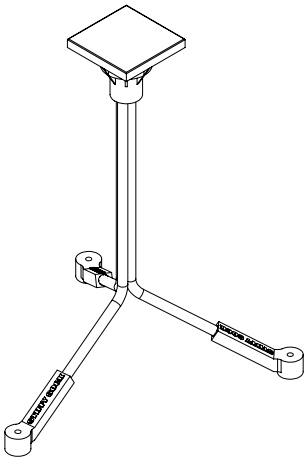
	Job Site Problem	*Stiffy Solution*
Promotes a safe work environment	No - This method puts the installer at an increased risk for trip and impalement hazards	Yes - The supports are installed when the decks are clear thereby reducing the risks of injury
Quick to install	No - It is labor intensive to install tie wire and come up with supports on a deck	Yes
Eliminates support revisit	No - Installer must revisit each location after the second layer of rebar is installed	Yes
Additional Benefits	No	Yes - Install supports that securely hold pipes and boxes in place without costly and dangerous re-work with tie wire Supports 90s, Deck Sleeves and more

BUY AMERICAN ACT COMPLIANT

Fig. 300 Cast-in-Place Stiffy Tree



C = 00 No Rebar Cap

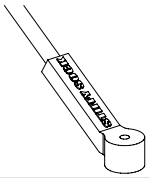
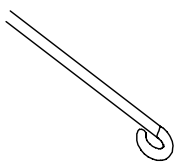


C = 01 With Rebar Cap

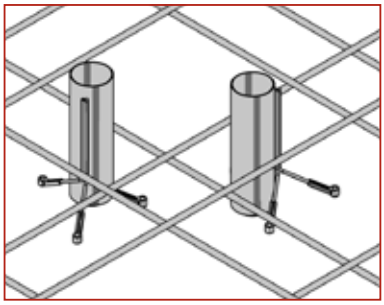
- Stiffy Sock® plastic foot:
  Provides a uniform opening to install fasteners
  Eliminates exposed metal when the forms are removed
- Provides rigid support for deck cans, pipes and conduits in concrete decks prior to the pour
- Eliminates the need to support from rebar or plastic chairs that break
- Constructed with Zinc coated rod to resist corrosion

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

BUY AMERICAN ACT COMPLIANT

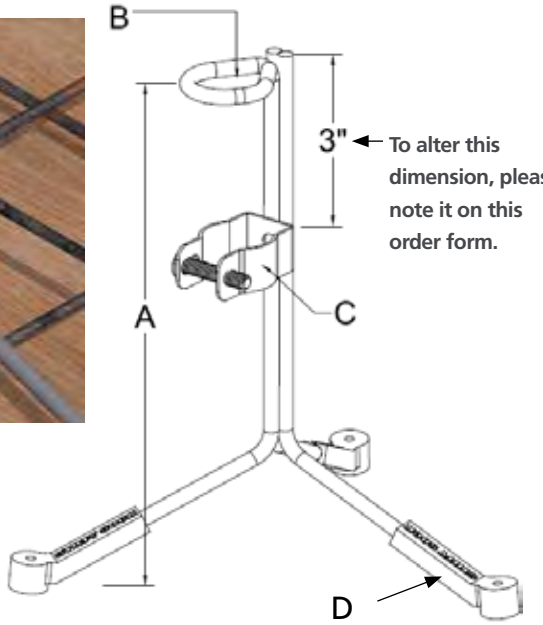
A	B		C	
Height (Inches)	Footprint		Rebar Cap	
	*01	Stiffy Sock	*00	No Rebar Cap
				
	*02	Stiffy Loop	*01	Rebar Cap
				

	A	B	C	Qty
Fig 300				
Fig 300				
Fig 300				



Application Examples

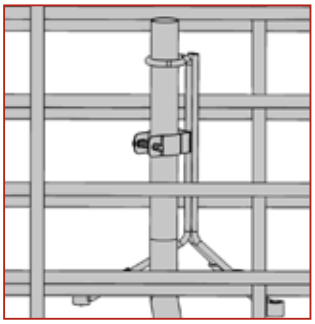
Fig. 301 Single Loop Cast-in-Place Stiffy Tree



- Stiffy Sock® plastic foot:
  - Provides a uniform opening to install fasteners
  - Eliminates exposed metal when the forms are removed
- Provides rigid support for pipes and conduits in concrete decks prior to the pour
- Support loop design eliminates restraint at the top
- Offers many additional uses
- Barely noticeable from below after forms are removed
- Eliminates the need to support from rebar or plastic chairs that break
- Support can extend above the concrete pour to protect the pipe
- Constructed with Zinc Coated Rod to Resist Corrosion

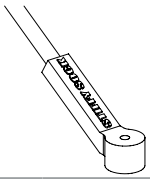
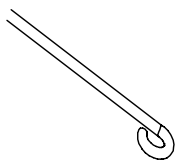
Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B	C	D	Qty
Fig 301					
Fig 301					
Fig 301					



BUY AMERICAN ACT COMPLIANT

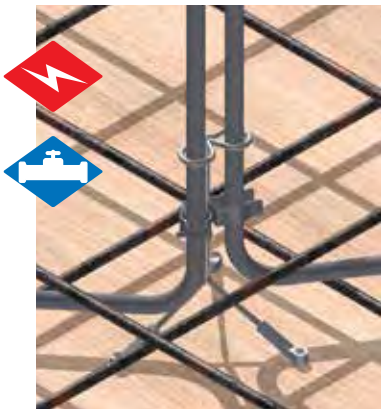
Tip...Check out the Fig 314 or Fig 317 for a quick solution to support multiple pipes.

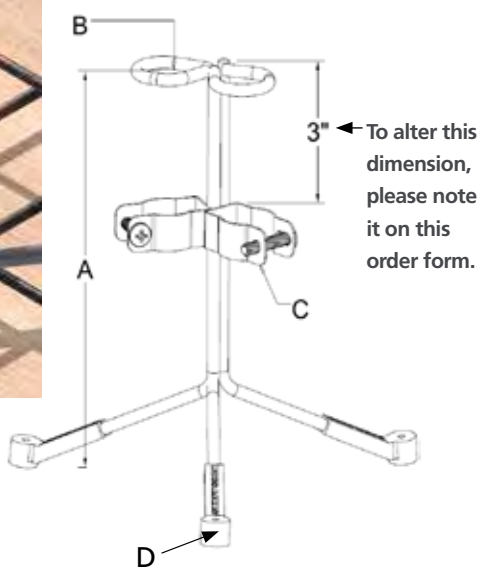
A	B				C		D	
Height (Inches)	Stiffy I.D.		For reference only		Conduit Clip		Footprint	
			GRC/PVC/ENT	PVC Coated Rigid				
	*01	.875"	1/2"(.84 OD)		*00	No	*01	Stiffy Sock
	*02	1.125"	3/4"(1.05" OD)		*01	Yes		
	*03	1.375"		3/4" (1.13" OD)				
	*04	1.50"	1"(1.32" OD)	1" (1.4" OD)				
	*05	1.75"	1-1/4"(1.66" OD)	1-1/4" (1.74" OD)				
	*06	2.125"	1-1/2"(1.9" OD)	1-1/2" (1.98" OD)				
	*07	2.50"	2"(2.38" OD)	2" (2.46" OD)			*02	Stiffy Loop
	*08	3.00"	2-1/2"(2.88" OD)	2-1/2" (2.96" OD)				
	*09	3.625"	3"(3.5" OD)	3" (3.58" OD)				
	*10	4.125"	3-1/2"(4" OD)	3-1/2" (4.08" OD)				
	*11	4.625"	4"(4.5" OD)	4" (4.58" OD)				
	*12	Other-Specify Size						

Footnotes:
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2" nom. Pre-sleeved PEX piping = 1.05" O.D.
- 3/4" nom. Pre-sleeved PEX piping = 1.36" O.D.

Application Examples

Fig. 302 Double Loop Cast-in-Place Stiffy Tree





- Stiffy Sock® plastic foot:
  - Provides a uniform opening to install fasteners
  - Eliminates exposed metal when the forms are removed
- Provides rigid support for pipes and conduits in concrete decks prior to the pour
- Support loop design eliminates restraint at the top
- Offers many additional uses
- Barely noticeable from below after forms are removed
- Eliminates the need to support from rebar or plastic chairs that break
- Support can extend above the concrete pour to protect the pipe
- Constructed with Zinc Coated Rod to Resist Corrosion

Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable*	

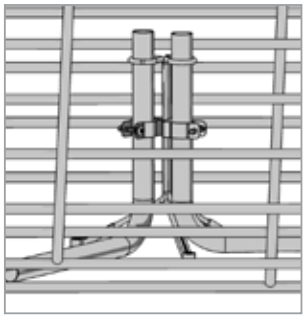
Tip...Check out the Fig 314 or Fig 317 for a quick solution to support multiple pipes.

	A	B1	B2	C	D	Qty
Fig 302						
Fig 302						
Fig 302						

BUY AMERICAN ACT COMPLIANT

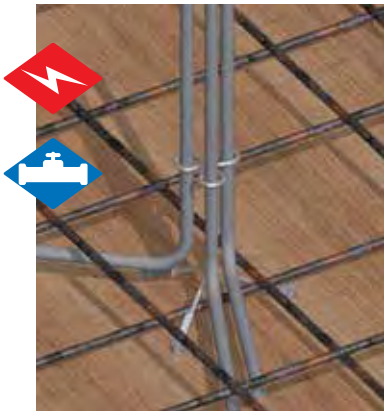
A	B				C		D	
Height (Inches)	Stiffy I.D.		For reference only		Conduit Clip		Footprint	
			GRC/PVC/ENT	PVC Coated Rigid				
	*01	.875"	1/2"(.84 OD)		*00	No	*01	Stiffy Sock
	*02	1.125"	3/4"(1.05" OD)		*01	Yes		
	*03	1.375"		3/4" (1.13" OD)				
	*04	1.50"	1"(1.32" OD)	1" (1.4" OD)				
	*05	1.75"	1-1/4"(1.66" OD)	1-1/4" (1.74" OD)				
	*06	2.125"	1-1/2"(1.9" OD)	1-1/2" (1.98" OD)				
	*07	2.50"	2"(2.38" OD)	2" (2.46" OD)			*02	Stiffy Loop
	*08	3.00"	2-1/2"(2.88" OD)	2-1/2" (2.96" OD)				
	*09	3.625"	3"(3.5" OD)	3" (3.58" OD)				
	*10	4.125"	3-1/2"(4" OD)	3-1/2" (4.08" OD)				
	*11	4.625"	4"(4.5" OD)	4" (4.58" OD)				
	*12	Other-Specify Size						

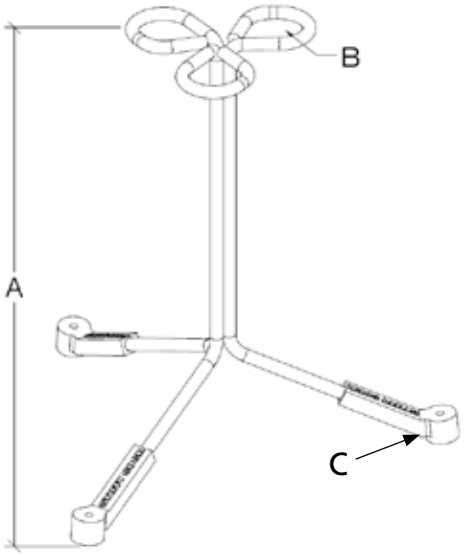
Footnotes:
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2" nom. Pre-sleeved PEX piping = 1.05" O.D.
- 3/4" nom. Pre-sleeved PEX piping = 1.36" O.D.



Application Examples

Fig. 303 Triple Loop Cast-in-Place Stiffy Tree





- Stiffy Sock® plastic foot:
  - Provides a uniform opening to install fasteners
  - Eliminates exposed metal when the forms are removed
- Provides rigid support for pipes and conduits in concrete decks prior to the pour
- Support loop design eliminates restraint at the top
- Offers many additional uses
- Barely noticeable from below after forms are removed
- Eliminates the need to support from rebar or plastic chairs that break
- Support can extend above the concrete pour to protect the pipe
- Constructed with Zinc Coated Rod to Resist Corrosion

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

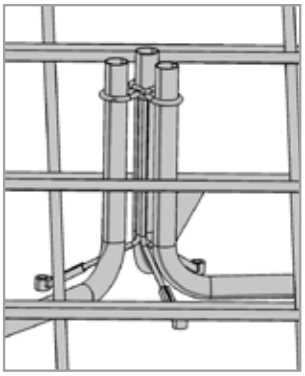
Tip...Check out the Fig 314 or Fig 317 for a quick solution to support multiple pipes.

	A-Height (In.)	Loop I.D.			C	Qty
		B1	B2	B3		
Fig 303						
Fig 303						
Fig 303						

BUY AMERICAN ACT COMPLIANT

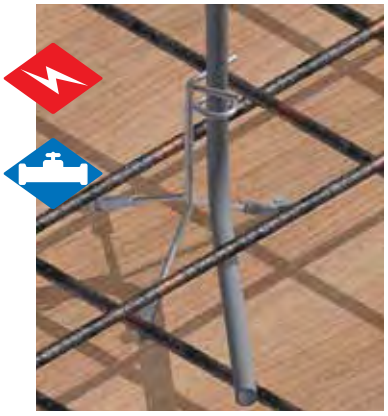
A	B			C	
Height (Inches)	Stiffy I.D.		For reference only		Footprint	
			GRC/PVC/ENT	PVC Coated Rigid		
	*01	.875”	1/2”(.84 OD)		*01	Stiffy Sock
	*02	1.125”	3/4”(1.05” OD)			
	*03	1.375”		3/4” (1.13” OD)		
	*04	1.50”	1”(1.32” OD)	1” (1.4” OD)		
	*05	1.75”	1-1/4”(1.66” OD)	1-1/4” (1.74” OD)		
	*06	2.125”	1-1/2”(1.9” OD)	1-1/2” (1.98” OD)		
	*07	2.50”	2”(2.38” OD)	2” (2.46” OD)	*02	Stiffy Loop
	*08	3.00”	2-1/2”(2.88” OD)	2-1/2” (2.96” OD)		
	*09	3.625”	3”(3.5” OD)	3” (3.58” OD)		
	*10	4.125”	3-1/2”(4” OD)	3-1/2” (4.08” OD)		
	*11	4.625”	4”(4.5” OD)	4” (4.58” OD)		
	*12	Other-Specify Size				

Footnotes:
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2” nom. Pre-sleeved PEX piping = 1.05” O.D.
- 3/4” nom. Pre-sleeved PEX piping = 1.36” O.D.

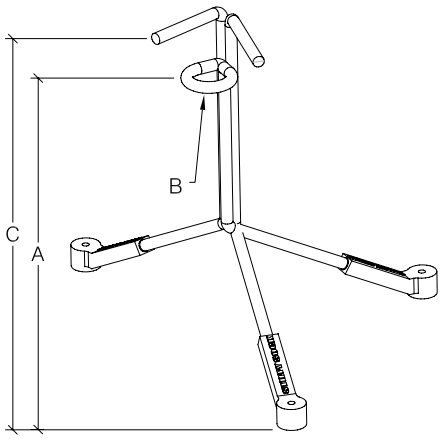


Application Examples

Fig. 304 Single Loop Cast-in-Place Stiffy with "V"



- Provides rigid support for pipes and conduits in concrete decks prior to the pour
- Support loop design eliminates restraint at the top
- Supports 90 degree elbows
- Supports cast-in-place risers
- Offers many additional uses
- Barely noticeable from below after forms are removed
- Eliminates the need to support from rebar or plastic chairs that break
- Support can extend above the concrete pour to protect the pipe
- Constructed with Zinc Coated Rod to Resist Corrosion after froms are removed



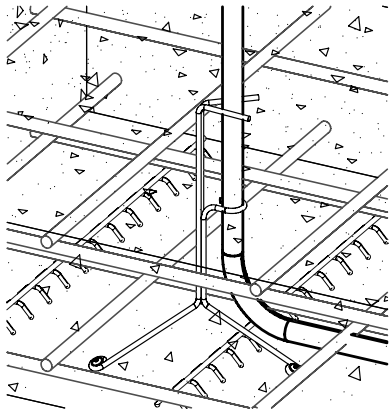
Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

	A-Height (In.)	B-Loop I.D.	C-"V" Height	D	Qty
Fig 304					
Fig 304					
Fig 304					

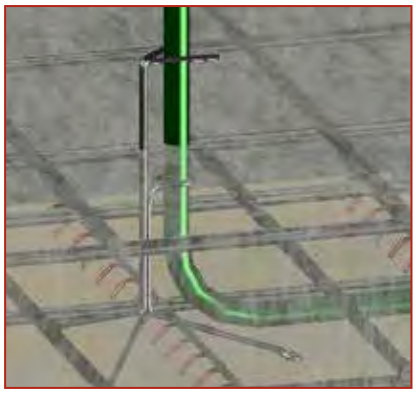
BUY AMERICAN ACT COMPLIANT

A	B				C	D	
Height (Inches)	Stiffy I.D.		For reference only		"V" Height (Inches)	Footprint	
			GRC/PVC/ENT	PVC Coated Rigid		*01	Stiffy Sock
	*01	.875"	1/2"(.84 OD)				
	*02	1.125"	3/4"(1.05" OD)				
	*03	1.375"		3/4" (1.13" OD)			
	*04	1.50"	1"(1.32" OD)	1" (1.4" OD)			
	*05	1.75"	1-1/4"(1.66" OD)	1-1/4" (1.74" OD)			
	*06	2.125"	1-1/2"(1.9" OD)	1-1/2" (1.98" OD)			
	*07	2.50"	2"(2.38" OD)	2" (2.46" OD)		*02	Stiffy Loop
	*08	3.00"	2-1/2"(2.88" OD)	2-1/2" (2.96" OD)			
	*09	3.625"	3"(3.5" OD)	3" (3.58" OD)			
	*10	4.125"	3-1/2"(4" OD)	3-1/2" (4.08" OD)			
	*11	4.625"	4"(4.5" OD)	4" (4.58" OD)			
	*12	Other-Specify Size					

Footnotes:
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2" nom. Pre-sleeved PEX piping = 1.05" O.D.
- 3/4" nom. Pre-sleeved PEX piping = 1.36" O.D.



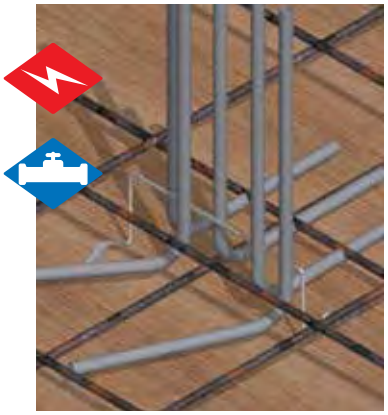
Application Examples

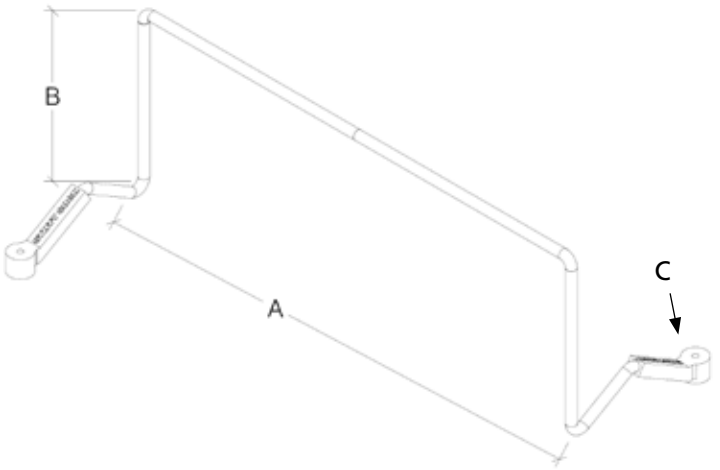





CEAS
CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS
It's What We Do!

Fig. 310 Cast-in-Place Stiffy Trapeze

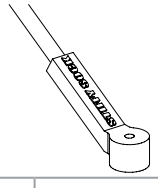
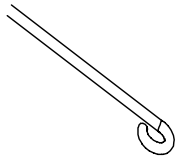




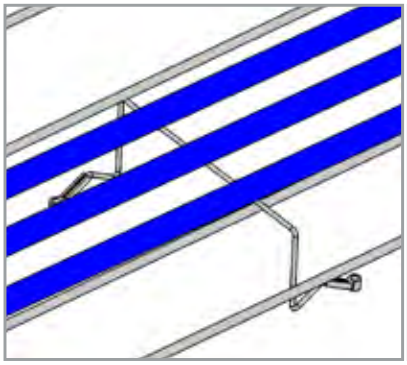
- Stiffy Sock® plastic foot:
  - Provides a uniform opening to install fasteners
  - Reduces exposed metal when the forms are removed
- Provides rigid support for pipes and conduits in concrete decks prior to the pour
- Offers many additional uses
- Barely noticeable from below after forms are removed
- Works great in Post-Tension Decks to keep pipes away from Cables
- Eliminates the need to support from rebar or plastic chairs that break
- Support can extend above the concrete pour to protect the pipe
- Provides a support in Decks when minimal rebar is available to tie off
- Constructed with Zinc Coated Rod to Resist Corrosion

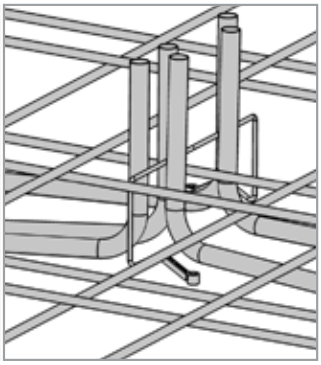
Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

BUY AMERICAN ACT COMPLIANT

A	B	C	
Width (Inches)	Height (Inches)	Footprint	
		*01	Stiffy Sock
			
		*02	Stiffy Loop
			

	A	B	C	Qty
Fig 310				
Fig 310				
Fig 310				

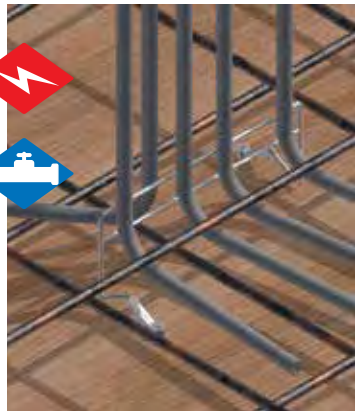


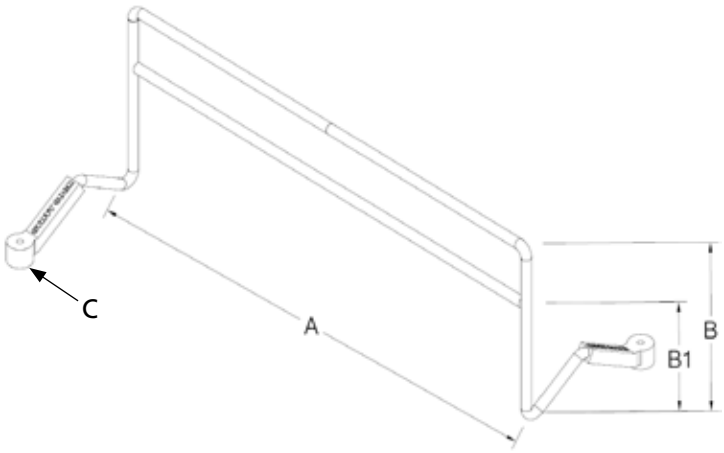


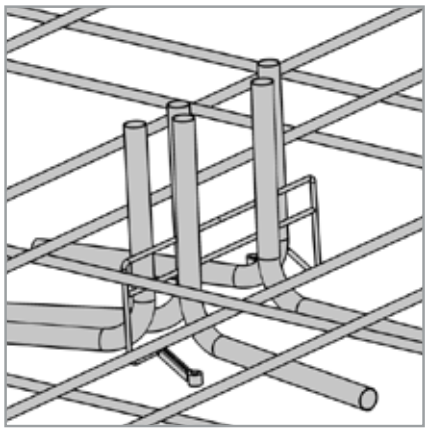
Application Examples

Fig. 311

Cast-in-Place 2-Tiered Stiffy Trapeze



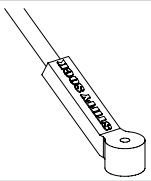
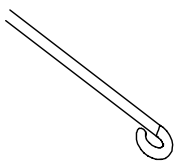




- Stiffy Sock® plastic foot:
  - Provides a uniform opening to install fasteners
  - Reduces exposed metal when the forms are removed
- Provides rigid support for pipes and conduits in concrete decks prior to the pour
- Offers many additional uses
- Barely noticeable from below after forms are removed
- Works great in Post-Tension Decks to keep pipes away from Cables
- Eliminates the need to support from rebar or plastic chairs that break
- Support can extend above the concrete pour to protect the pipe
- Provides a support in Decks when minimal rebar is available to tie off
- Constructed with Zinc Coated Rod to Resist Corrosion

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

BUY AMERICAN ACT COMPLIANT

A	B	C	
Width (Inches)	Height (Inches)	Footprint	
		*01	Stiffy Sock
			
		*02	Stiffy Loop
			

	A	B	B1	C	Qty
Fig 311					
Fig 311					
Fig 311					

Application Examples

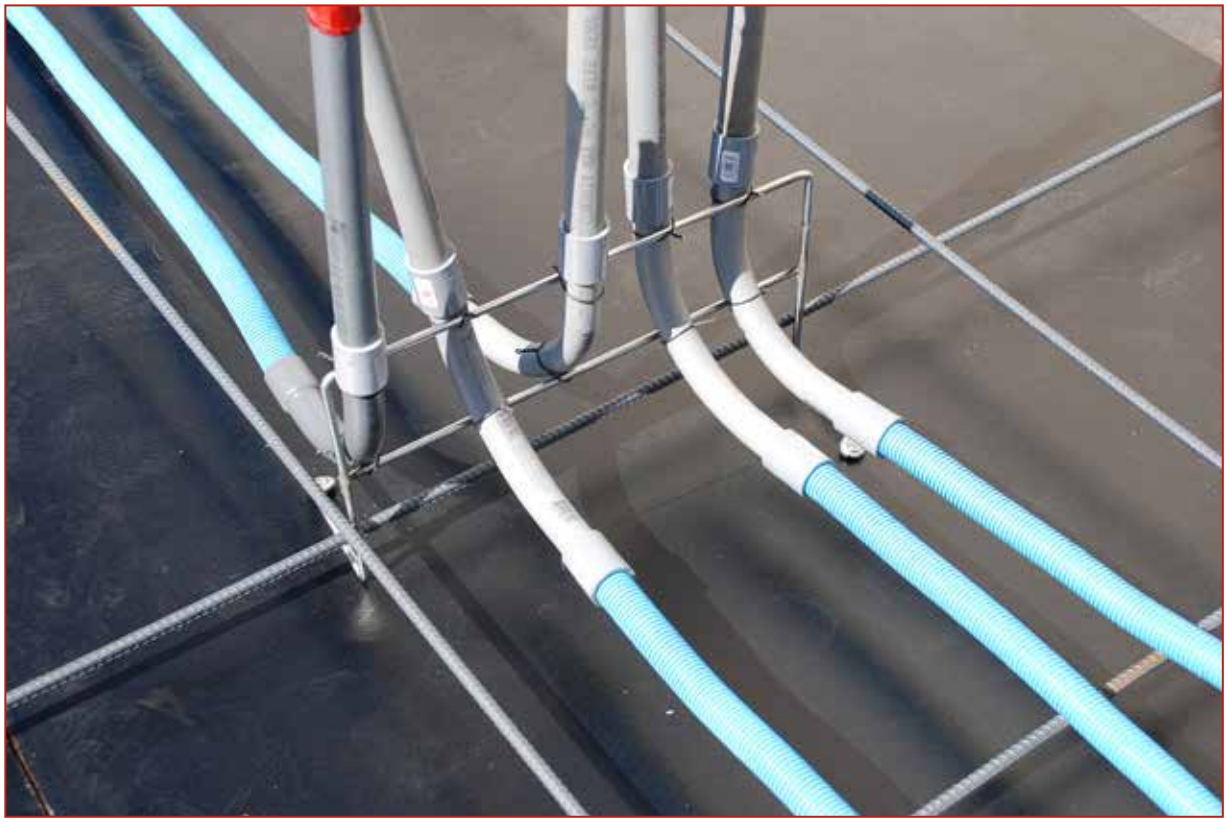
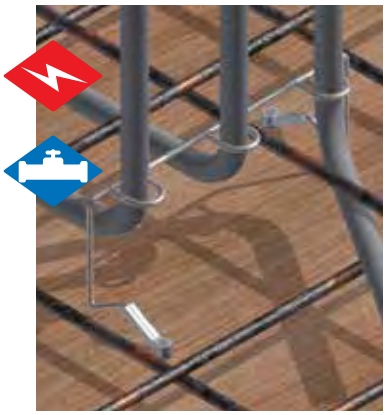
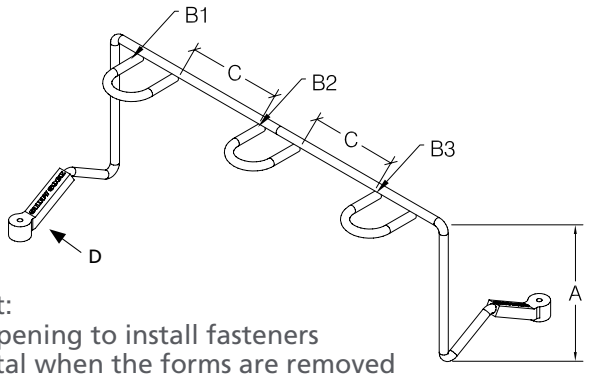


Fig. 312 Cast-in-Place Stiffy Loop Trapeze





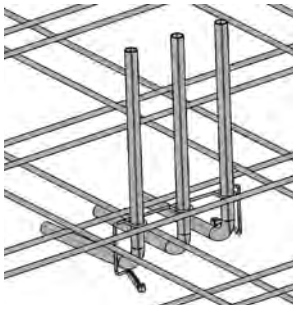
- Stiffy Sock® plastic foot:
  Provides a uniform opening to install fasteners
  Reduces exposed metal when the forms are removed
- Provides rigid support for pipes and conduits in concrete decks prior to the pour
- Support loop design eliminates restraint at the top
- Offers many additional uses
- Barely noticeable from below after forms are removed
- Works great in Post-Tension Decks to keep pipes away from Cables
- Eliminates the need to support from rebar or plastic chairs that break
- Support can extend above the concrete pour to protect the pipe
- Constructed with Zinc Coated Rod to Resist Corrosion

Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable*	

	A	B1	B2	B3	B4	B5	B6	B7	B8	B9	C	D	Qty
Fig 312													
Fig 312													
Fig 312													

A	B			C	D	
Height (Inches)	Stiffy I.D.		For reference only		Spacing	Footprint	
			GRC/PVC/ENT	PVC Coated Rigid			
	*01	.875”	1/2”(.84 OD)		(1/2” min to fit Couplings)	*01	Stiffy Sock
	*02	1.125”	3/4”(1.05” OD)				
	*03	1.375”		3/4” (1.13” OD)			
	*04	1.50”	1”(1.32” OD)	1” (1.4” OD)			
	*05	1.75”	1-1/4”(1.66” OD)	1-1/4” (1.74” OD)			
	*06	2.125”	1-1/2”(1.9” OD)	1-1/2” (1.98” OD)			
	*07	2.50”	2”(2.38” OD)	2” (2.46” OD)		*02	Stiffy Loop
	*08	3.00”	2-1/2”(2.88” OD)	2-1/2” (2.96” OD)			
	*09	3.625”	3”(3.5” OD)	3” (3.58” OD)			
	*10	4.125”	3-1/2”(4” OD)	3-1/2” (4.08” OD)			
	*11	4.625”	4”(4.5” OD)	4” (4.58” OD)			
	*12	Other-Specify Size					

Footnotes:
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2” nom. Pre-sleeved PEX piping = 1.05” O.D.
- 3/4” nom. Pre-sleeved PEX piping = 1.36” O.D.

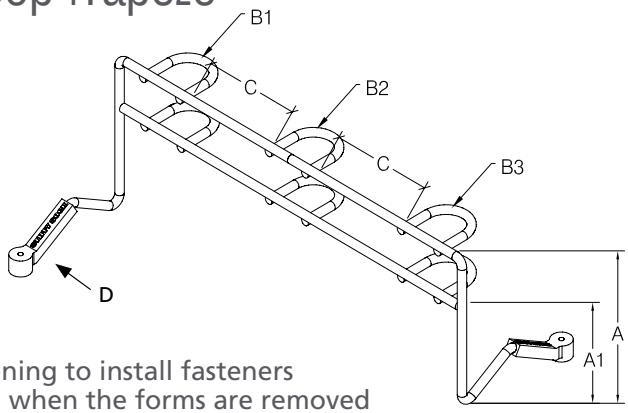


ELECTRICAL/LOW VOLTAGE APPLICATIONS

MECHANICAL/PLUMBING APPLICATIONS

Fig. 313

Cast-in-Place 2-Tiered Stiffy Loop Trapeze



- Stiffy Sock® plastic foot:
  - Provides a uniform opening to install fasteners
  - Reduces exposed metal when the forms are removed
- Provides rigid support for pipes and conduits in concrete decks prior to the pour
- Support loop design eliminates restraint at the top
- Offers many additional uses
- Barely noticeable from below after forms are removed
- Works great in Post-Tension Decks to keep pipes away from Cables
- Eliminates the need to support from rebar or plastic chairs that break
- Support can extend above the concrete pour to protect the pipe
- Constructed with Zinc Coated Rod to Resist Corrosion

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

BUY AMERICAN ACT COMPLIANT

	A	A1	B1	B2	B3	B4	B5	B6	B7	B8	B9	C	D	Qty
Fig 313														
Fig 313														
Fig 313														

A	B			C	D	
Height (Inches)	Stiffy I.D.		For reference only		Spacing	Footprint	
			GRC/PVC/ENT	PVC Coated Rigid			
	*01	.875”	1/2”(.84 OD)		(1/2” min to fit Couplings)	*01	Stiffy Sock
	*02	1.125”	3/4”(1.05” OD)				
	*03	1.375”		3/4” (1.13” OD)			
	*04	1.50”	1”(1.32” OD)	1” (1.4” OD)			
	*05	1.75”	1-1/4”(1.66” OD)	1-1/4” (1.74” OD)			
	*06	2.125”	1-1/2”(1.9” OD)	1-1/2” (1.98” OD)			
	*07	2.50”	2”(2.38” OD)	2” (2.46” OD)		*02	Stiffy Loop
	*08	3.00”	2-1/2”(2.88” OD)	2-1/2” (2.96” OD)			
	*09	3.625”	3”(3.5” OD)	3” (3.58” OD)			
	*10	4.125”	3-1/2”(4” OD)	3-1/2” (4.08” OD)			
	*11	4.625”	4”(4.5” OD)	4” (4.58” OD)			
	*12	Other-Specify Size					

Foot Notes:
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2” nom. Pre-sleeved PEX piping = 1.05” O.D.
- 3/4” nom. Pre-sleeved PEX piping = 1.36” O.D

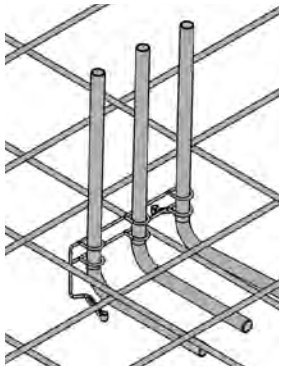
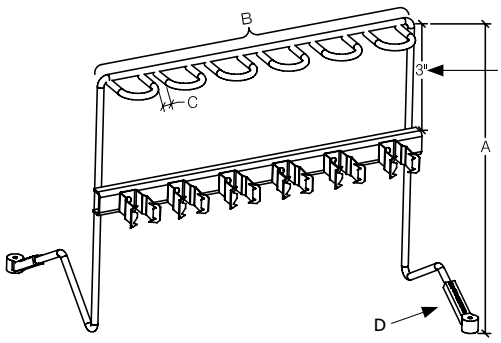
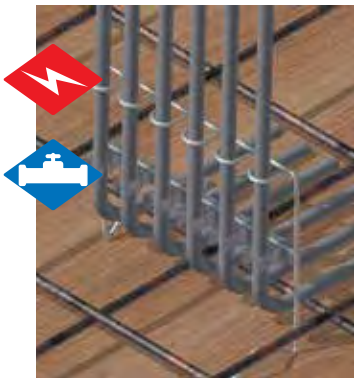


Fig. 314 Stiffy Snap-in Cast-in-Place Trapeze



To alter this dimension, please note it on this order form.

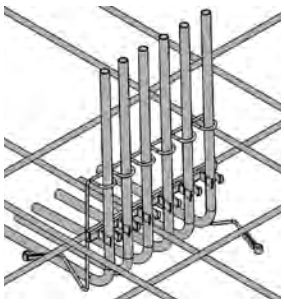
- Stiffy Sock® plastic foot:
  - Provides a uniform opening to install fasteners
  - Reduces exposed metal when the forms are removed
- Provides rigid support for pipes and conduits in concrete decks prior to the pour
- Support loop design eliminates restraint at the top
- Offers many additional uses
- Barely noticeable from below after forms are removed
- Works great in Post-Tension Decks to keep pipes away from Cables
- Eliminates the need to support from rebar or plastic chairs that break
- Support can extend above the concrete pour to protect the pipe
- Constructed with Zinc Coated Rod to Resist Corrosion

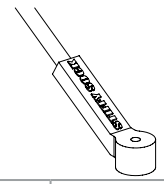


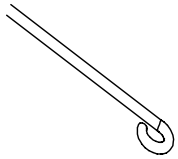
Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B1	B2	B3	B4	B5	B6	B7	B8	B9	C	D	Qty
Fig 314													
Fig 314													
Fig 314													

A	B				C	D	
Height (Inches)	Stiffy I.D.		For reference only		Spacing	Footprint	
			GRC/PVC/ENT	PVC Coated Rigid			
	*01	.875”	1/2”(.84 OD)		(1/2” min to fit Couplings)	*01	Stiffy Sock
	*02	1.125”	3/4”(1.05” OD)				
	*03	1.375”		3/4” (1.13” OD)			
	*04	1.50”	1”(1.32” OD)	1” (1.4” OD)			
	*05	1.75”	1-1/4”(1.66” OD)	1-1/4” (1.74” OD)			
	*06	2.125”	1-1/2”(1.9” OD)	1-1/2” (1.98” OD)			
	*07	2.50”	2”(2.38” OD)	2” (2.46” OD)		*02	Stiffy Loop
	*08	3.00”	2-1/2”(2.88” OD)	2-1/2” (2.96” OD)			
	*09	3.625”	3”(3.5” OD)	3” (3.58” OD)			
	*10	4.125”	3-1/2”(4” OD)	3-1/2” (4.08” OD)			
	*11	4.625”	4”(4.5” OD)	4” (4.58” OD)			
	*12	Other-Specify Size					

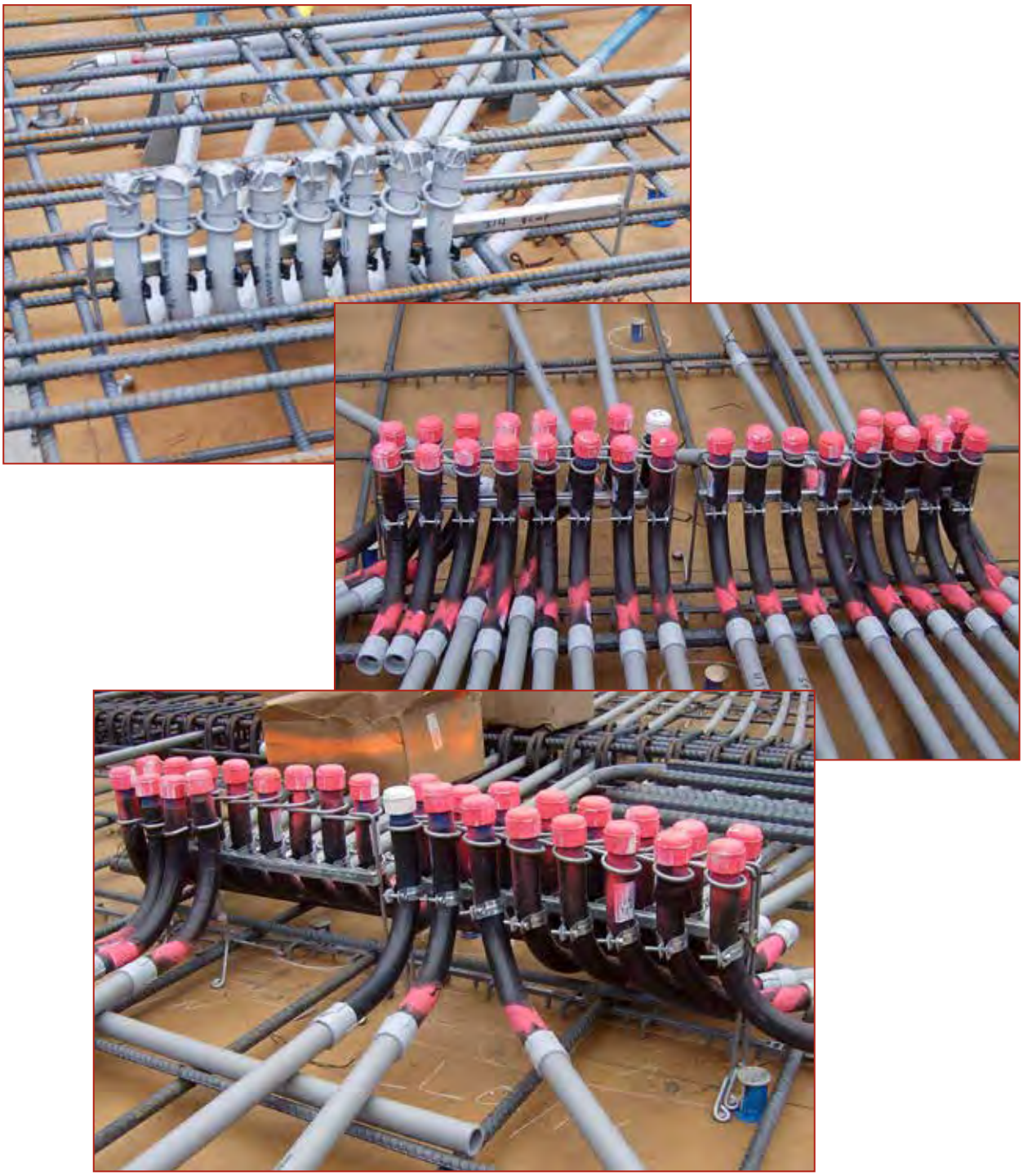






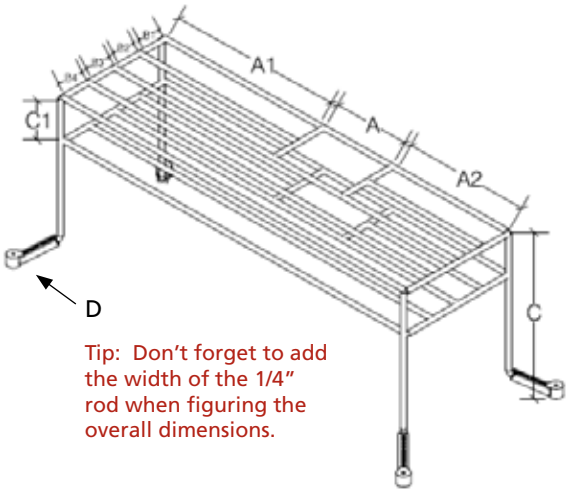
Footnotes:
- Snap in style conduit supports are used for 1/2” and 3/4” GRC/PVC/ENT
- Conduit Clips are used for 1” GRC/PVC/ENT and larger
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2” nom. Pre-sleeved PEX piping = 1.05” O.D.
- 3/4” nom. Pre-sleeved PEX piping = 1.36” O.D.

Application Examples



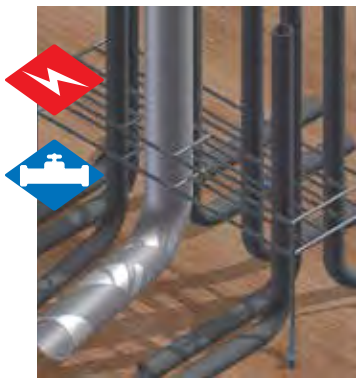
CEAS
CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS
It's What We Do!

Fig. 316 Cast-in-Place Stiffy Cage



Tip: Don't forget to add the width of the 1/4" rod when figuring the overall dimensions.

- Stiffy Sock® plastic foot:
  - Provides a uniform opening to install fasteners
  - Reduces exposed metal when the forms are removed
- Provides rigid support for pipes and conduits in concrete decks prior to the pour
- Support loop design eliminates restraint at the top
- Offers many additional uses
- Barely noticeable from below after forms are removed
- Works great in Post-Tension Decks to keep pipes away from Cables
- Eliminates the need to support from rebar or plastic chairs that break
- Support can extend above the concrete pour to protect the pipe
- Constructed with Zinc Coated Rod to Resist Corrosion

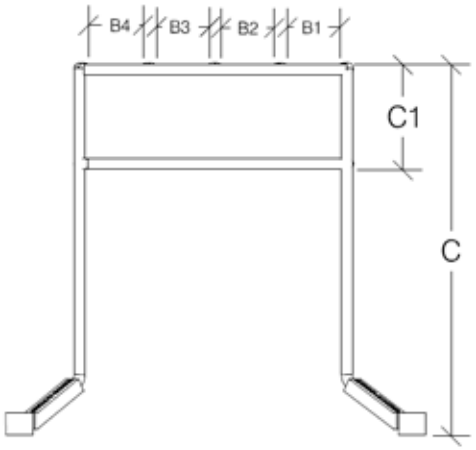


Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	Opening (I.D.)	Length (In.)		Cage Opening				C (In.) Overall Height	C1 (In.) Cage Height	D	Qty
	A	A1	A2	B1	B2	B3	B4				
Fig 316											
Fig 316											
Fig 316											

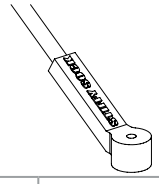
B			
Stiffy I.D.		For reference only	
		GRC/PVC/ENT	PVC Coated Rigid
*01	.875"	1/2"(.84 OD)	
*02	1.125"	3/4"(1.05" OD)	
*03	1.375"		3/4" (1.13" OD)
*04	1.50"	1"(1.32" OD)	1" (1.4" OD)
*05	1.75"	1-1/4"(1.66" OD)	1-1/4" (1.74" OD)
*06	2.125"	1-1/2"(1.9" OD)	1-1/2" (1.98" OD)
*07	2.50"	2"(2.38" OD)	2" (2.46" OD)
*08	3.00"	2-1/2"(2.88" OD)	2-1/2" (2.96" OD)
*09	3.625"	3"(3.5" OD)	3" (3.58" OD)
*10	4.125"	3-1/2"(4" OD)	3-1/2" (4.08" OD)
*11	4.625"	4"(4.5" OD)	4" (4.58" OD)
*12	Other-Specify Size		

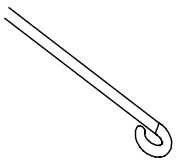
Footnotes:
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2" nom. Pre-sleeved PEX piping = 1.05" O.D.
- 3/4" nom. Pre-sleeved PEX piping = 1.36" O.D.



BUY AMERICAN ACT COMPLIANT

D	
Footprint	
*01	Stiffy Sock
*02	Stiffy Loop





Application Examples

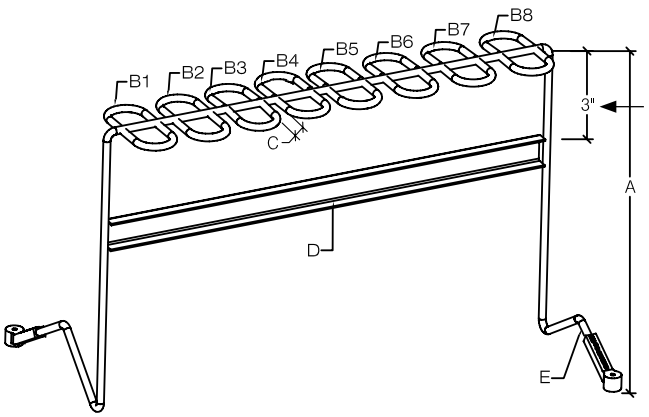
Before the concrete is poured

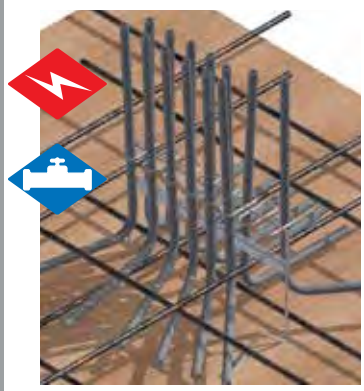
After the concrete is poured

Before the concrete is poured

After the concrete is poured

Fig. 317 Stiffy Snap-in Back-to-Back CIP Trapeze





- Stiffy Sock® plastic foot:
  - Provides a uniform opening to install fasteners
  - Reduces exposed metal when the forms are removed
- Provides rigid support for pipes and conduits in concrete decks prior to the pour
- Support loop design eliminates restraint at the top
- Offers many additional uses
- Barely noticeable from below after forms are removed
- Works great in Post-Tension Decks to keep pipes away from Cables
- Eliminates the need to support from rebar or plastic chairs that break
- Support can extend above the concrete pour to protect the pipe
- Constructed with Zinc Coated Rod to Resist Corrosion

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

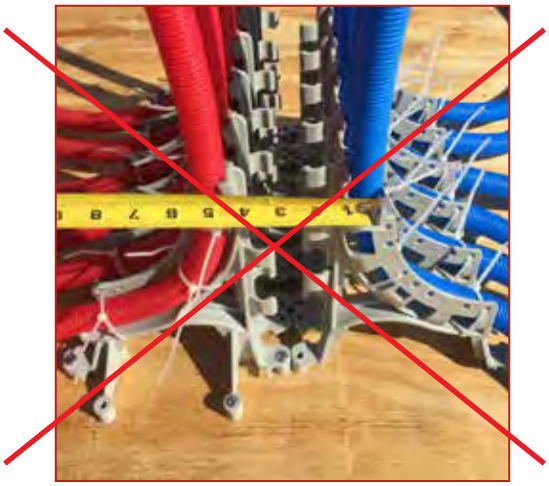
	A	B1	B2	B3	B4	B5	B6	B7	B8	C	D	E	Qty
Fig 317													
Fig 317													
Fig 317													

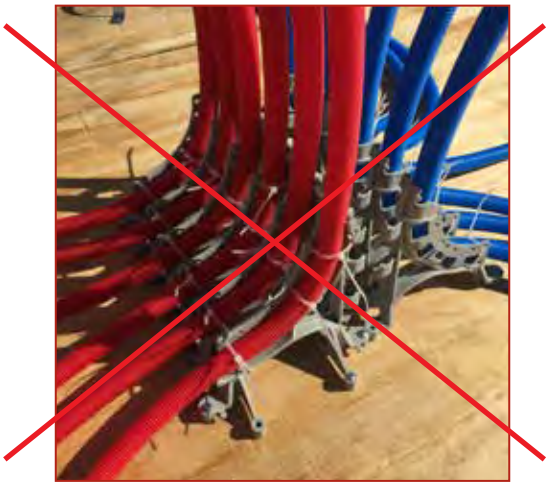
A	B			C	D	E	
Height (Inches)	Stiffy I.D.		For reference only		Spacing	Crossbrace	Footprint	
			GRC/PVC/ENT	PVC Coated Rigid				
	*01	.875”	1/2”(.84 OD)		(1/2” min to fit Couplings)	*01 Channel	*01 Stiffy Loop	*02 Stiffy Sock
	*02	1.125”	3/4”(1.05” OD)					
	*03	1.375”		3/4” (1.13” OD)		*02 Rod Crossbar		
	*04	1.50”	1”(1.32” OD)	1” (1.4” OD)				
	*05	1.75”	1-1/4”(1.66” OD)	1-1/4” (1.74” OD)				
	*06	2.125”	1-1/2”(1.9” OD)	1-1/2” (1.98” OD)				
	*07	2.50”	2”(2.38” OD)	2” (2.46” OD)		*03 2 Rod Crossbar	*03 Dual Loop	*04 Dual Sock
	*08	3.00”	2-1/2”(2.88” OD)	2-1/2” (2.96” OD)				
	*09	3.625”	3”(3.5” OD)	3” (3.58” OD)				
	*10	4.125”	3-1/2”(4” OD)	3-1/2” (4.08” OD)		*04 2 Channel Crossbar		
	*11	4.625”	4”(4.5” OD)	4” (4.58” OD)				
	*12	Other-Specify Size						

Footnotes:
- Snap in style conduit supports are used for 1/2” and 3/4” GRC/PVC/ENT
- Conduit Clips are used for 1” GRC/PVC/ENT and larger
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2” nom. Pre-sleeved PEX piping = 1.05” O.D.
- 3/4” nom. Pre-sleeved PEX piping = 1.36” O.D.

Real World Job-site Innovation

Job Site Problem



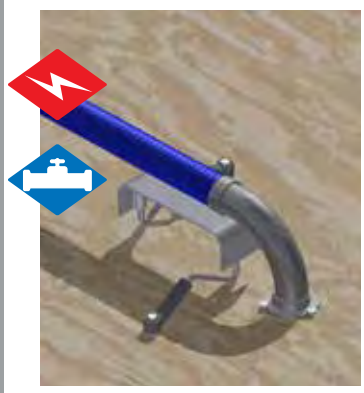


Stiffy Solution

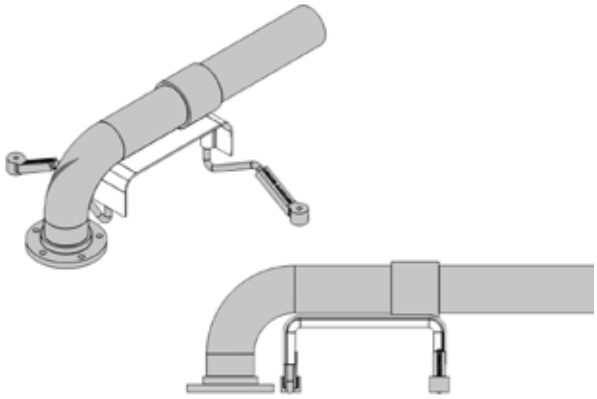
	Job Site Problem	Stiffy Solution
How may pipes and fit within a 3-5/8” x 16” stud bay? (1/2” Pre-Sleeve Pex or 3/4” ENT)	7	**18**
Will two rows fit within a 3-5/8” wall?	No (6” wall required)	Yes
Provides a small footprint on the deck?	No	Yes
Available in different dimensions to accommodate project requirements?	No	Yes
Can be ordered for multiple pipe/conduit sizes?	No	Yes
Pipe and conduits can be fed into the support from any direction?	No	Yes

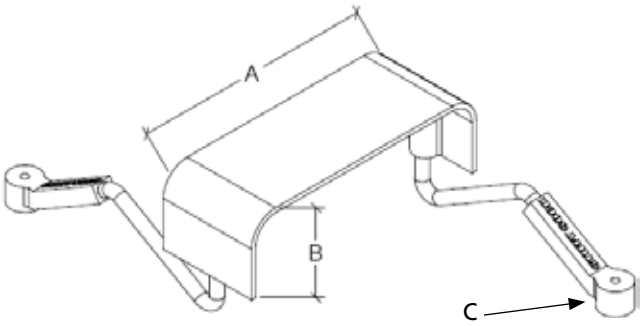
CEAS
CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS
It’s What We Do!

Fig. 320 CIP Stiffy Street 90 Support

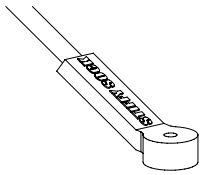
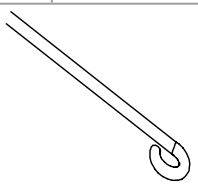


- Stiffy Sock® plastic foot:
  Provides a uniform opening to install fasteners
  Reduces exposed metal when the forms are removed
- Provides rigid support for 90° Street elbows in concrete decks prior to the pour
- Eliminates broken plastic fittings
- Eliminates the need to support from rebar or plastic chairs that break
- Barely noticeable from below after forms are removed
- Constructed with Zinc Coated Rod to Resist Corrosion





Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

A	B		C	
Width (Inches)	Height (Inches) or Red Dot 90° Size		Footprint	
			*01	Stiffy Sock
	*01	3/4” Red Dot 90°		
	*02	1” Red Dot 90°		
			*02	Stiffy Loop
				

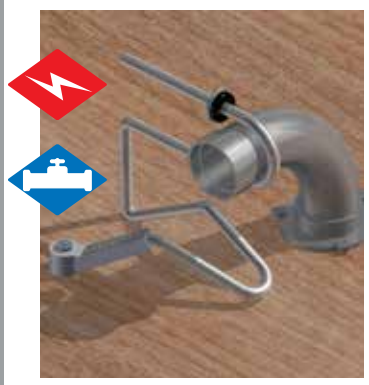
	A	B	C	Qty
Fig 320				
Fig 320				
Fig 320				

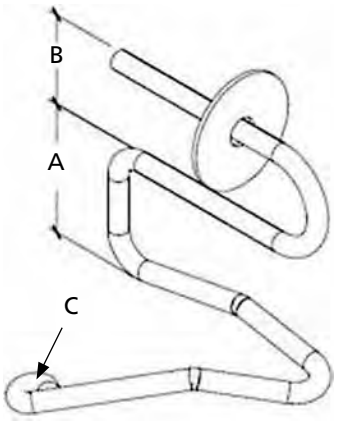
**When ordering Red Dot® 90° supports input 01 or 02.

Application Examples

CEAS
CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS
It's What We Do!

Fig. 321 Cast-in-Place Stiffy Billy Chair Support





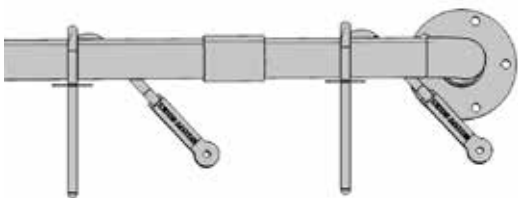
- Stiffy Sock® plastic foot:
  Provides a uniform opening to install fasteners
  Reduces exposed metal when the forms are removed
- Provides rigid support for 90° Street elbows in concrete decks prior to the pour
- Eliminates broken plastic fittings
- Eliminates the need to support from rebar or plastic chairs that break
- Barely noticeable from below after forms are removed
- Constructed with Zinc Coated Rod to Resist Corrosion

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

BUY AMERICAN ACT COMPLIANT

B				C	
Stiffy I.D.		For reference only		Footprint	
		GRC/PVC/ENT	PVC Coated Rigid		
*01	.875”	1/2”(.84 OD)		*01	Stiffy Sock
*02	1.125”	3/4”(1.05” OD)			
*03	1.375”		3/4” (1.13” OD)		
*04	1.50”	1”(1.32” OD)	1” (1.4” OD)		
*05	1.75”	1-1/4”(1.66” OD)	1-1/4” (1.74” OD)		
*06	2.125”	1-1/2”(1.9” OD)	1-1/2” (1.98” OD)		
*07	2.50”	2”(2.38” OD)	2” (2.46” OD)	*02	Stiffy Loop
*08	3.00”	2-1/2”(2.88” OD)	2-1/2” (2.96” OD)		
*09	3.625”	3”(3.5” OD)	3” (3.58” OD)		
*10	4.125”	3-1/2”(4” OD)	3-1/2” (4.08” OD)		
*11	4.625”	4”(4.5” OD)	4” (4.58” OD)		
*12	Other-Specify Size				

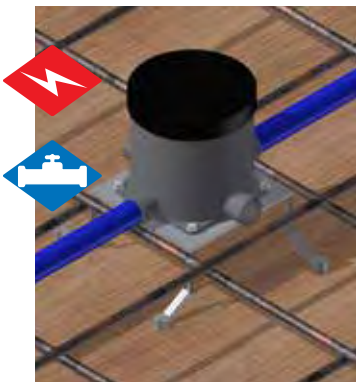
Footnotes:
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2” nom. Pre-sleeved PEX piping = 1.05” O.D.
- 3/4” nom. Pre-sleeved PEX piping = 1.36” O.D.



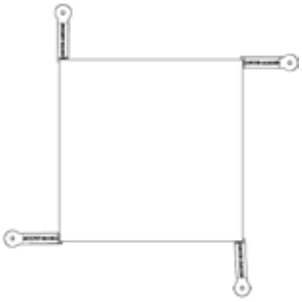
	A-Height (In.)	B-Opening	C	Qty
Fig 321				
Fig 321				
Fig 321				

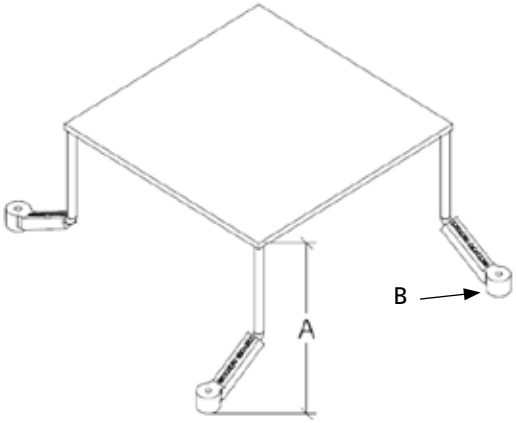
Application Examples

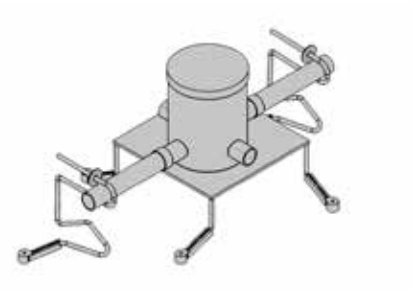
Fig. 322 Stiffy Table Top "Turtle" Box Support



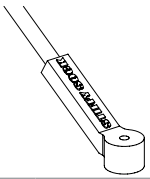
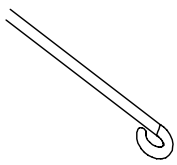
- Stiffy Sock® plastic foot:
  - Provides a uniform opening to install fasteners
  - Reduces exposed metal when the forms are removed
- Provides rigid support for floor boxes in decks prior to the pour
- Select the table elevation so the box is at the finished floor level
- Offers many additional uses
- Table top is 7" x 7" x 1/8" thick standard. Custom sizes available.
- Eliminates the need to support from rebar or plastic chairs that break.
- Barely noticeable from below after forms are removed
- Constructed with Zinc Coated Rod to Resist Corrosion after forms are removed







Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

A	B	
Height (In.)	Footprint	
	*01	Stiffy Sock
		
	*02	Stiffy Loop
		

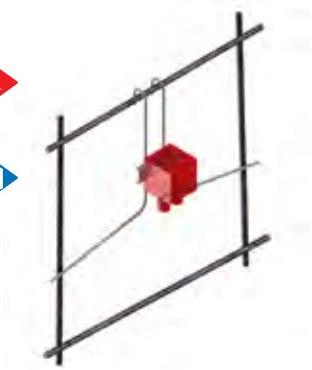
	A	B	Qty
Fig 322			
Fig 322			
Fig 322			
The standard dimension of the table top is 7" x 7". Custom sizes are available. Please specify.			

BUY AMERICAN ACT COMPLIANT

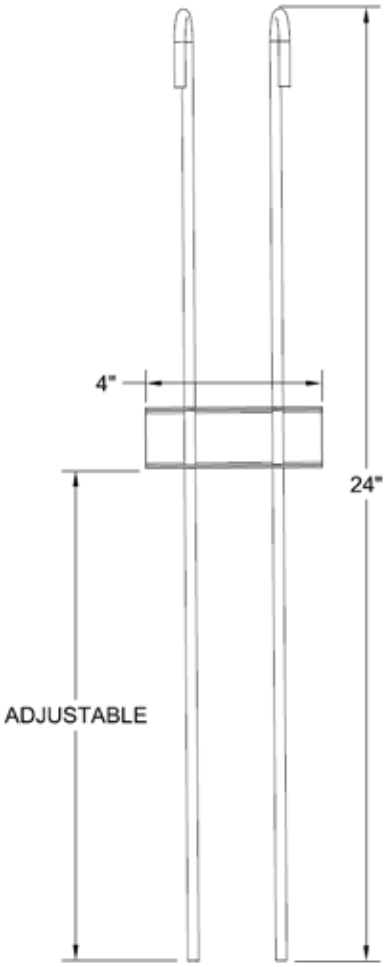
Application Examples

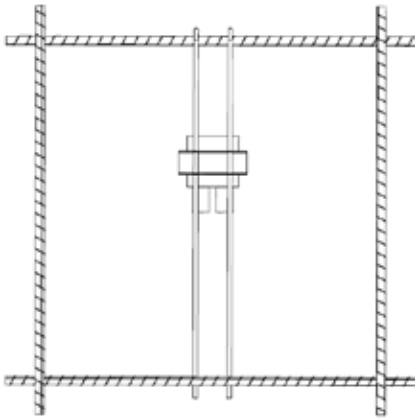
CEAS
CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS
It's What We Do!

Fig. 323 Stiffy Wall Box Support

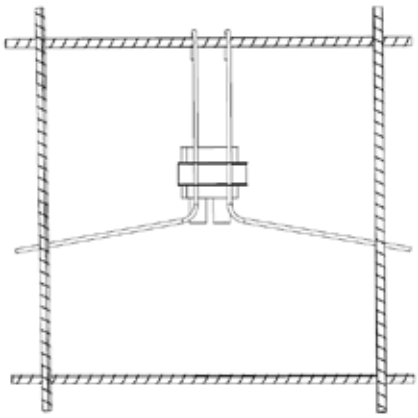


- Ideal solution for installing boxes in shotcrete or gunite walls when forms are not used.
- Provides rigid support for boxes in walls prior to the pour.
- Stiffy legs create spring pressure forcing the box against the concrete form ensuring a clean finished installation.
- Universal design enables the boxes to be supported with no consideration for the rebar.
- Can be mounted both before and after the forms have been installed.
- Eliminates the need to support boxes from inconsistent rebar or drill forms.





Step 1:
Hook the Stiffy to rebar and adjust the elevation of the box.



Step 2:
Spread the legs to set the elevation and use tie wire to secure in place.

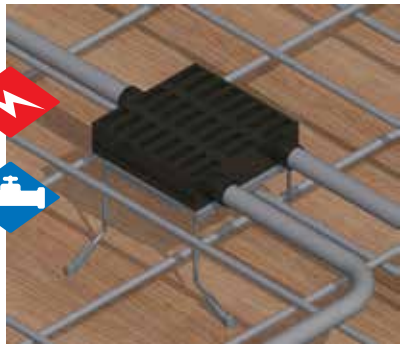
	Qty
Fig 323	
Fig 323	
Fig 323	

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

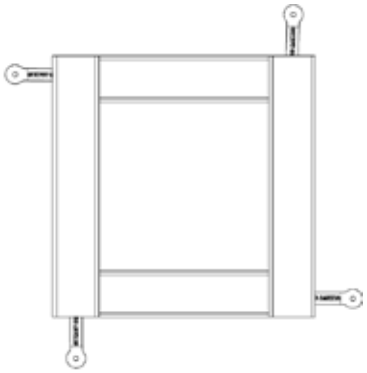
Application Examples

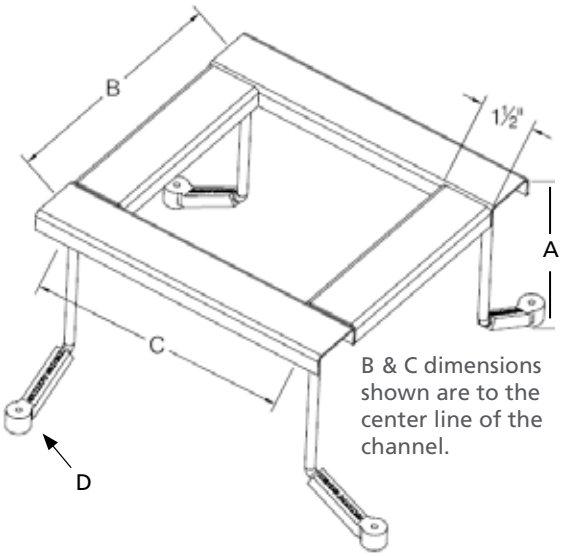
CEAS
CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS
It's What We Do!

Fig. 324 Stiffy Cast-in-Place Channel Box Support

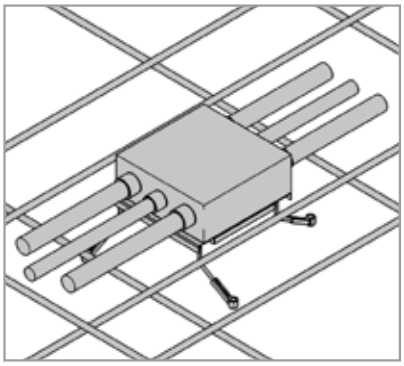


- Stiffy Sock® plastic foot:
  Provides a uniform opening to install fasteners
  Eliminates exposed metal when the forms are removed
- Provides rigid support for floor boxes in decks prior to the pour
- Select the table elevation so the box is at the finished floor level
- Offers many additional uses
- 16g channel mounting surface can be ordered any size.
- Eliminates the need to support from rebar or plastic chairs that break.
- Barely noticeable from below after forms are removed
- Angled feet minimize metal on deck
- Constructed with Zinc Coated Rod to Resist Corrosion after forms are removed



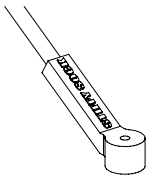
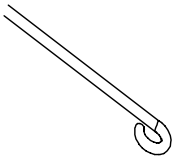


B & C dimensions shown are to the center line of the channel.



Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

BUY AMERICAN ACT COMPLIANT

A	B	C	B
Height (In.)	Width (In.)	Width (In.)	Footprint
			*01 Stiffy Sock
			
			*02 Stiffy Loop
			

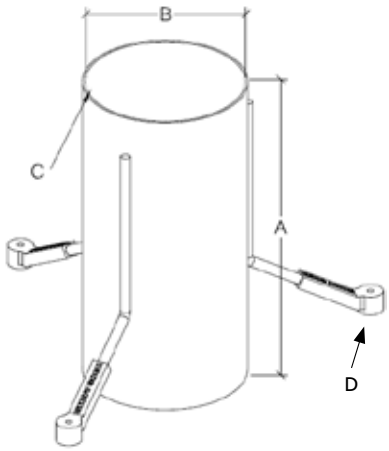
	A	B	C	D	Qty
Fig 324					
Fig 324					
Fig 324					

Application Examples

Fig. 330 Stiffy Cast-in-Place Deck Sleeve

All Sleeves are Manufactured with a Minimum of 18g Steel

- Provides a secure sleeve in concrete decks for Mechanical, Plumbing and Electrical applications
- Stiffy Sock® plastic foot:
  Provides a uniform opening to install fasteners
  Eliminates exposed metal when the forms are removed
- Offers many additional uses
- Heavy Gauge Steel Sleeves resist abuse during concrete pours
- Eliminates rework and reinforcement when using thin deck sleeves



Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B	C	D	Qty
Fig 330					
Fig 330					
Fig 330					

BUY AMERICAN ACT COMPLIANT

A	B		C		D	
Overall Height	Opening Size I.D.		End Caps		Footprint	
	*01	1" (1.049" ID)	*00	No End Caps	*01	Stiffy Sock
	*015	1 1/2" (1.610" ID)	*01	End Cap on Top[1,2]		
	*02	2" (2.067" ID)	*02	End Cap on Bottom[1,2]		
	*025	2 1/2" (2.731" ID)	*03	End Cap on Both Ends[1,2]		
	*03	3" (3.356" ID)				
	*04	4"(4.334" ID)				
	*05	5" (4.8125" ID)			*02	Stiffy Loop
	*06	6" (5.8125" ID)				
	*07	7" (6.8125" ID)				
	*08	8" (7.8125" ID)				
	*09	9" (8.8125" ID)				
	*10	10" (9.8125" ID)				
	*11	11" (10.8125" ID)				
	*12	12" (11.8125" ID)				
	*13	Other—Please specify				

Footnotes:
1– Plastic End Caps are used for 1" through 4" I.D.
2- Sleeves 5" and larger will be taped at the ends when end caps are requested.

Application Examples

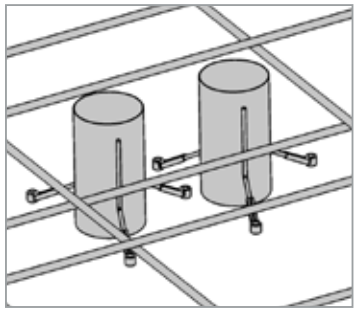
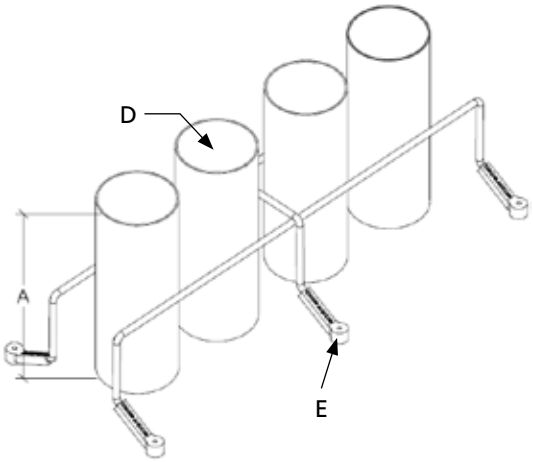
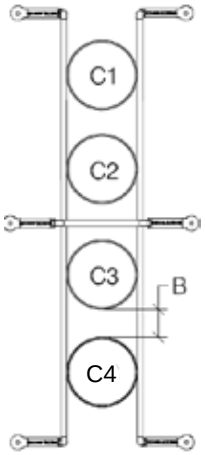


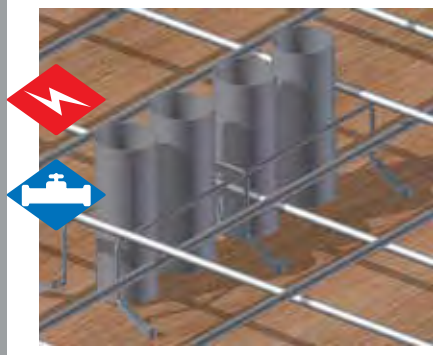
Fig. 331 Stiffy Single Row CIP Deck Sleeve





All Sleeves are Manufactured with a Minimum of 18g Steel

- Provides a secure sleeve in concrete decks for Mechanical, Plumbing and Electrical applications
- Stiffy Sock® plastic foot:
  Provides a uniform opening to install fasteners
  Eliminates exposed metal when the forms are removed
- Prefabricated deck sleeve template provides a quick layout solution for through penetrations
- Sleeve size and spacing can be customized to fit any project condition
- Additional sleeves can be added to the line-up
- Heavy Gauge Steel Sleeves resist abuse during concrete pours
- Eliminates rework and reinforcement when using thin deck sleeves



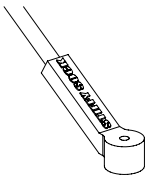
Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

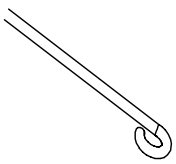
	A	B	C1	C2	C3	C4	C5	C6	C7	C8	D	E	Qty
Fig 331													
Fig 331													
Fig 331													

*To reduce the number of cans required input N/A to any values that do not apply.

A	B	C		D		E	
Overall Height	Sleeve Spacing	Opening Size I.D.		End Caps		Footprint	
		*01	1" (1.049" ID)	*00	No End Caps	*01	Stiffy Sock
		*015	1 1/2" (1.610" ID)	*01	End Caps on Top[1,2]		
		*02	2" (2.067" ID)	*02	End Caps on Bottom[1,2]		
		*025	2 1/2" (2.731" ID)	*03	End Caps on Both Ends[1,2]		
		*03	3" (3.356" ID)				
		*04	4"(4.334" ID)				
		*05	5" (4.8125" ID)				
		*06	6" (5.8125" ID)			*02	Stiffy Loop
		*07	7" (6.8125" ID)				
		*08	8" (7.8125" ID)				
		*09	9" (8.8125" ID)				
		*10	10" (9.8125" ID)				
		*11	11" (10.8125" ID)				
		*12	12" (11.8125" ID)				
		*13	Other—Please specify				

Footnotes:
1– Plastic End Caps are used for 1" through 4" I.D.
2- Sleeves 5" and larger will be taped at the ends when end caps are requested.





BUY AMERICAN ACT COMPLIANT

Application Examples

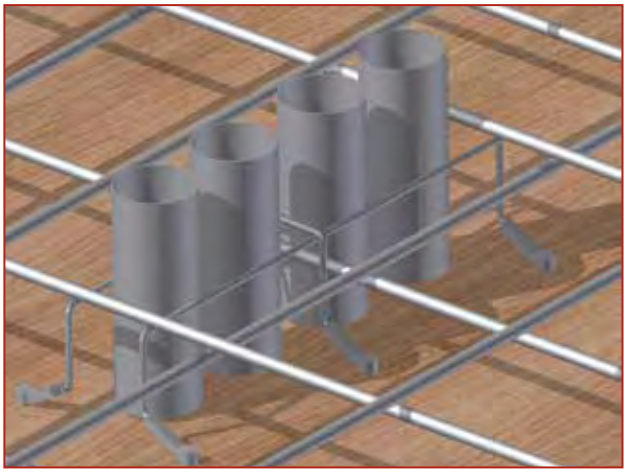
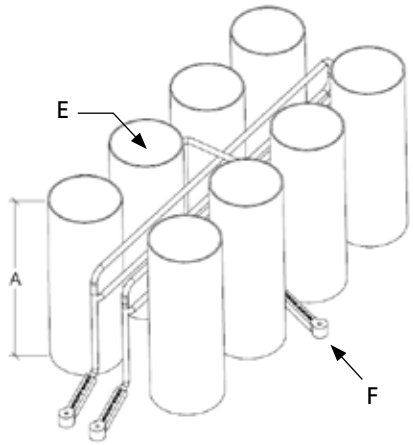
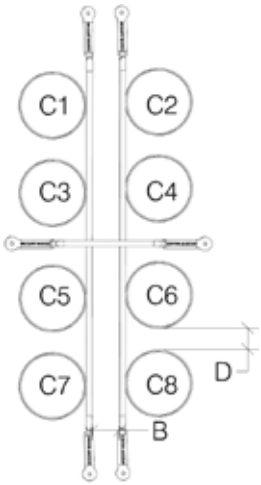


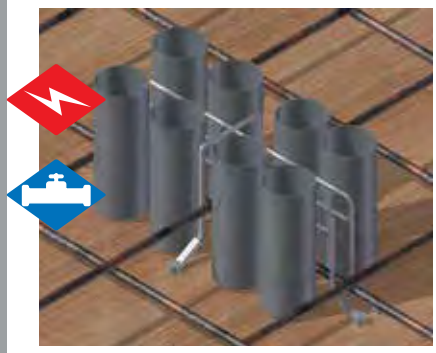
Fig. 332 Stiffy Double Row CIP Deck Sleeve





All Sleeves are Manufactured with a Minimum of 18g Steel

- Provides a secure sleeve in concrete decks for Mechanical, Plumbing and Electrical applications
- Stiffy Sock® plastic foot:
  Provides a uniform opening to install fasteners
  Eliminates exposed metal when the forms are removed
- Sleeve size and spacing can be customized to fit any project condition
- Additional sleeves can be added to the line-up
- Heavy Gauge Steel Sleeves resist abuse during concrete pours
- Eliminates rework and reinforcement when using thin deck sleeves



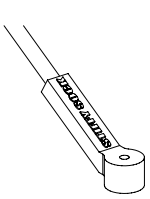
Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

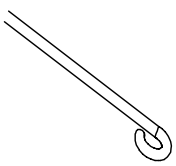
	A	B	C1	C2	C3	C4	C5	C6	C7	C8	D	E	F	Qty
Fig 332														
Fig 332														
Fig 332														

*To reduce the number of cans required input N/A to any values that do not apply.

A	B	C		D		E	
Overall Height	Sleeve Spacing	Opening Size I.D.		End Caps		Footprint	
		*01	1" (1.049" ID)	*00	No End Caps	*01	Stiffy Sock
		*015	1 1/2" (1.610" ID)	*01	End Caps on Top[1,2]		
		*02	2" (2.067" ID)	*02	End Caps on Bottom[1,2]		
		*025	2 1/2" (2.731" ID)	*03	End Caps on Both Ends[1,2]		
		*03	3" (3.356" ID)				
		*04	4"(4.334" ID)				
		*05	5" (4.8125" ID)				
		*06	6" (5.8125" ID)			*02	Stiffy Loop
		*07	7" (6.8125" ID)				
		*08	8" (7.8125" ID)				
		*09	9" (8.8125" ID)				
		*10	10" (9.8125" ID)				
		*11	11" (10.8125" ID)				
		*12	12" (11.8125" ID)				
		*13	Other—Please specify				

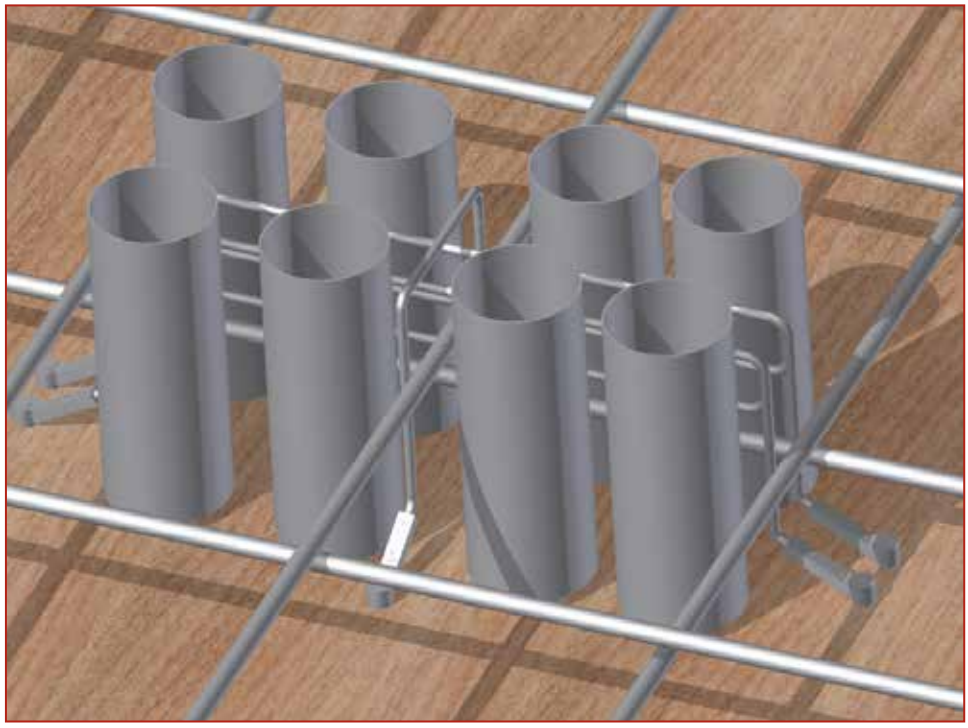
Footnotes:
1– Plastic End Caps are used for 1" through 4" I.D.
2- Sleeves 5" and larger will be taped at the ends when end caps are requested.





BUY AMERICAN ACT COMPLIANT

Application Examples



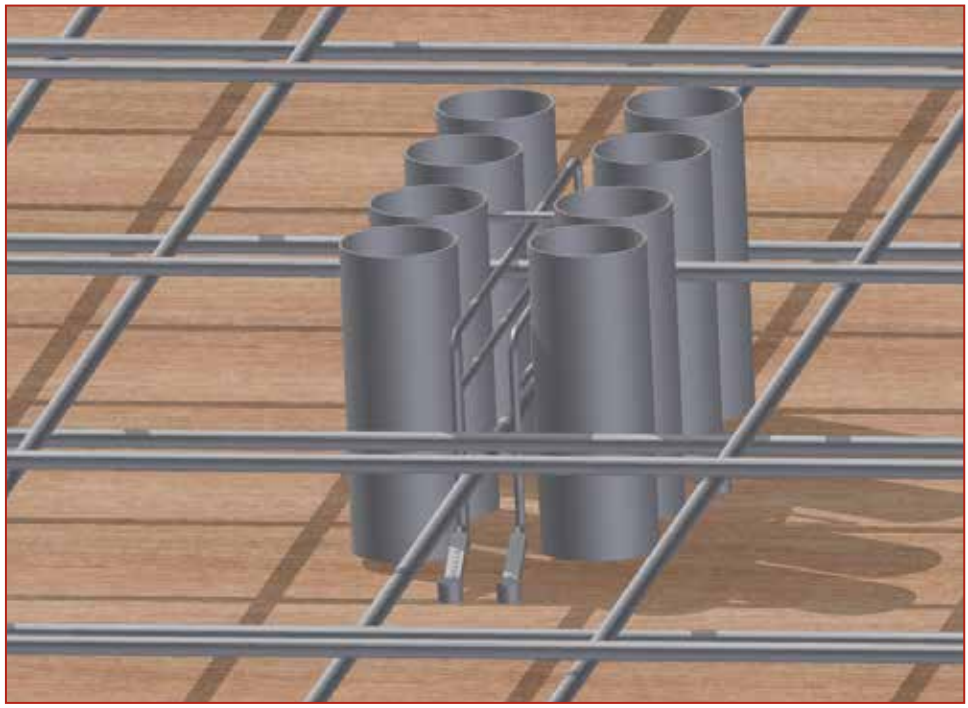
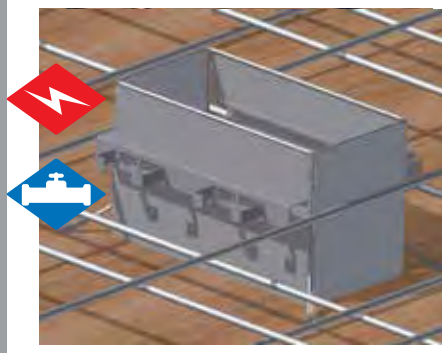
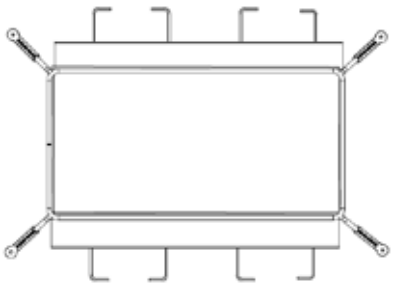
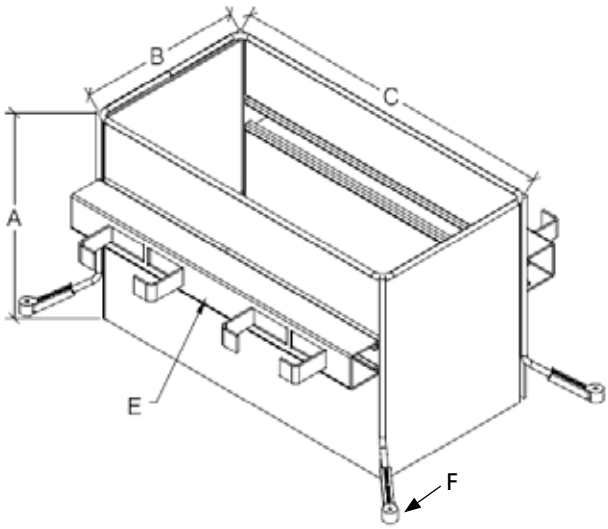


Fig. 333 Stiffy Cast-in-Place Strut Block Out



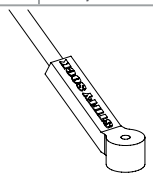
- Provides a secure sleeve in concrete decks for Mechanical, Plumbing and Electrical applications
- Stiffy Sock® plastic foot:
  - Provides a uniform opening to install fasteners
  - Eliminates exposed metal when the forms are removed
- Eliminates anchor edge distance issues when supporting risers
- Block Out size can be customized to fit any project condition
- Reinforced heavy gauge sheet metal resists abuse during concrete pours
- Reduces layout time
- Embedded strut simplifies shaft coordination issues

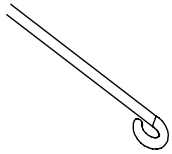




Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

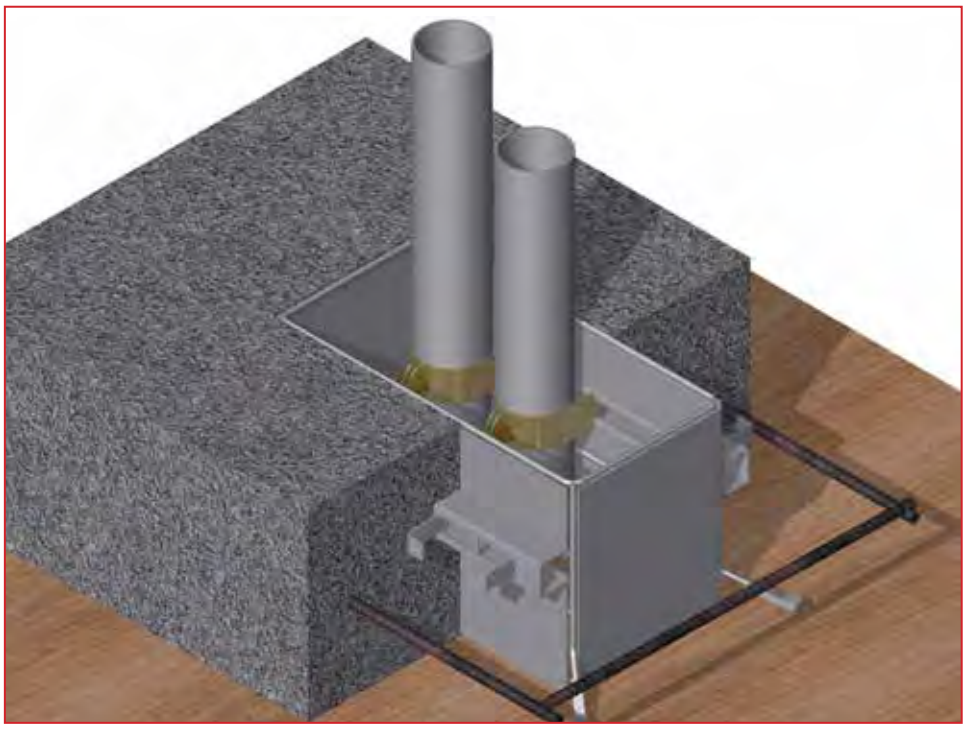
A	B	C	D		E		F	
Height	Width	Length	End Caps		CIP Strut		Footprint	
			*00	No End Caps	*00	No Strut	*01	Stiffy Sock
			*01	End Caps on Top	*01	Strut on All Sides		
			*02	End Caps on Bottom	*02	Strut on Both “B” Dimension Sides		
			*03	End Caps on Both Ends	*03	Strut on One “B” Dimension Side		
					*04	Strut on Both “C” Dimension Sides		
					*05	Strut on One “C” Dimension Side		
							*02	Stiffy Loop

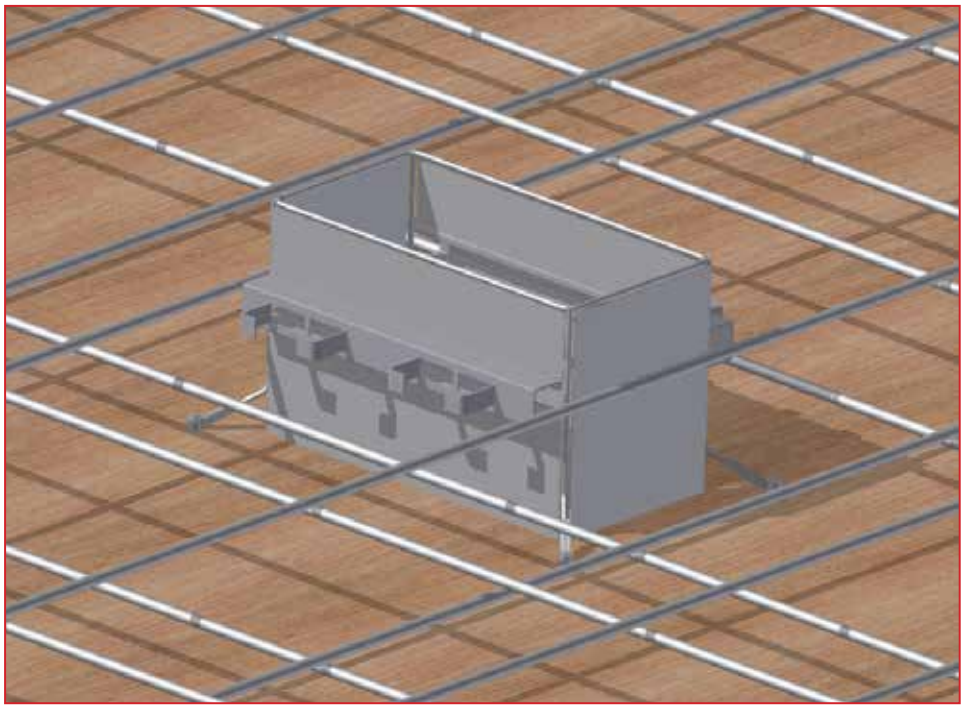




	A	B	C	D	E	F	Qty
Fig 333							
Fig 333							
Fig 333							

Application Examples

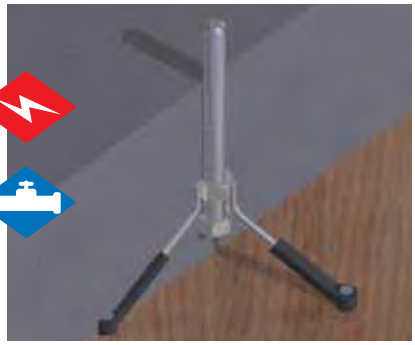


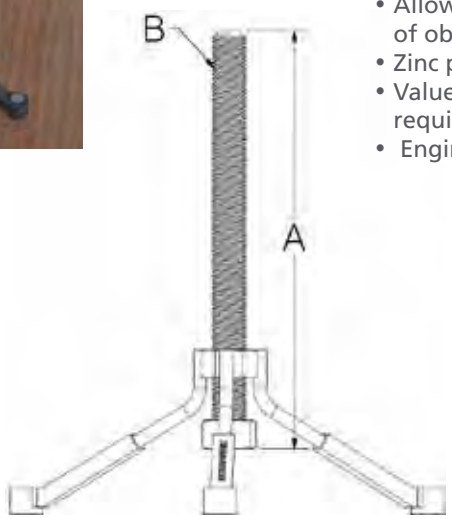


CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

It's What We Do!

Fig. 336 Stiffy Anchor Bolt





- Provides a solid support for Anchor Bolts without tying off of rebar or using cheap plastic supports that break.
- Allows Anchor Bolts to be installed when the decks are clear of obstructions.
- Zinc plated rod for corrosion resistance.
- Values shown are calculated with Cracked Concrete per the requirements of ACI 318.
- Engineered submittal documents stamped by an enginner.

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

BUY AMERICAN ACT COMPLIANT

	A	B	QTY
Fig 336			
Fig 336			
Fig 336			

A	B	
Height	*01	3/8” Bolt
	*02	1/2” Bolt
	*03	5/8” Bolt
	*04	3/4” Bolt
	*05	7/8” Bolt
	*06	1” Bolt

Stiffy Cast-in-Place Anchor Bolt			
Anchor Dia	Min Concrete Thickness	Min Embed	Allowable Load
5/8”	8”	4”	5000
3/4”	9”	5”	5500
7/8”	9”	5”	5500
1”	10”	6”	7500

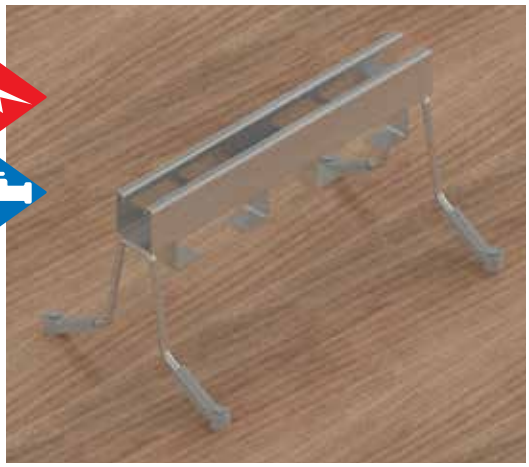
Footnotes:
1 - Calculations based on 4000psi NWC
2 - 8” minimum edge distance
3 - Calculations performed take into consideration cracked concrete per ACI 318

Application Examples

CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

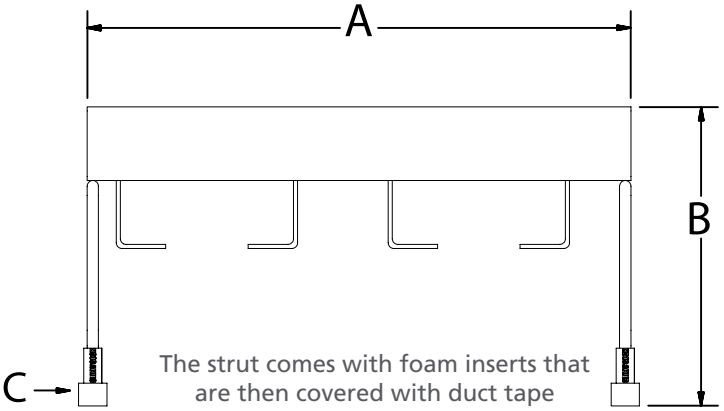
It's What We Do!

Fig. 337 Stiffy Cast-in-Place Strut Anchor

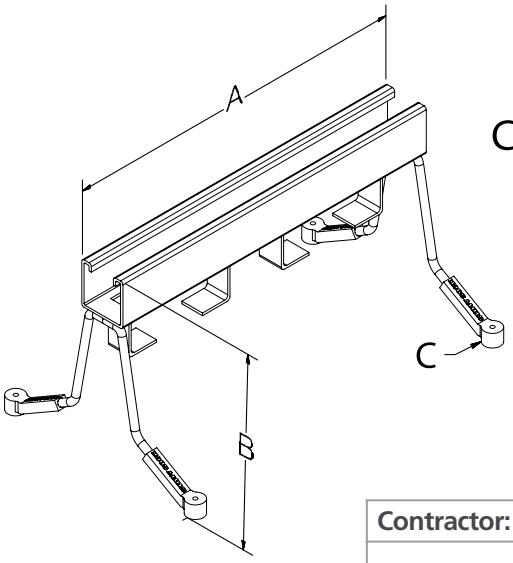


- Strut is finished out to the top of the concrete pour
- Quick solution for attaching stanchions or equipment
- Once the concrete cures simply remove the foam and use a strut nut and bolt to make connection
- Strut can be provided in lengths up to 20'

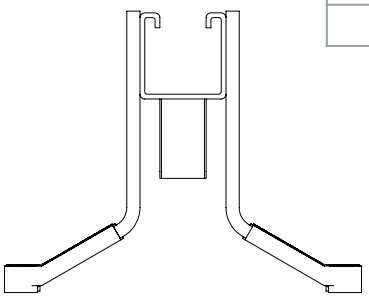
A	B	C
Length	Height	Footprint
		*01 Stiffy Sock
		*02 Stiffy Loop



The strut comes with foam inserts that are then covered with duct tape

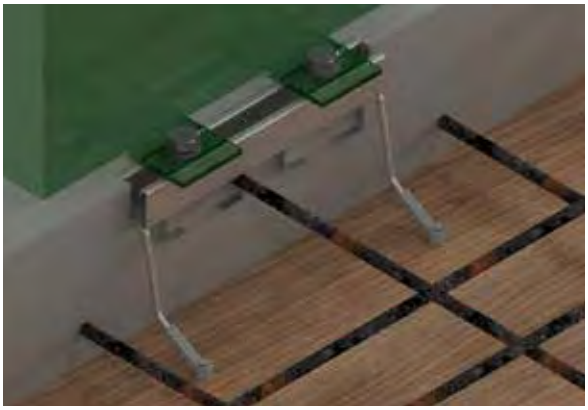


Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	



	A	B	C	Qty
Fig 337				
Fig 337				
Fig 337				

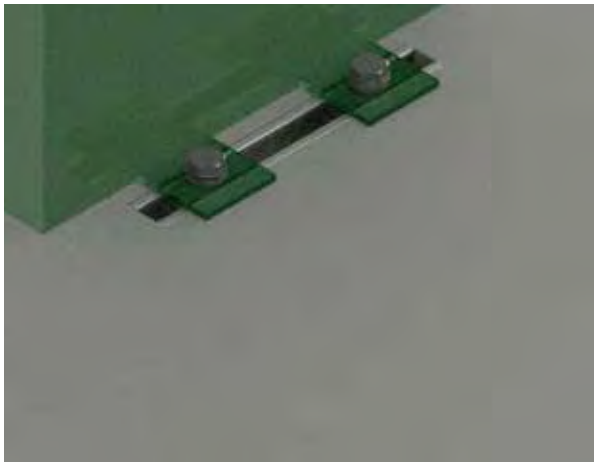
Application Examples



STEP 1

STEP 2

STEP 3

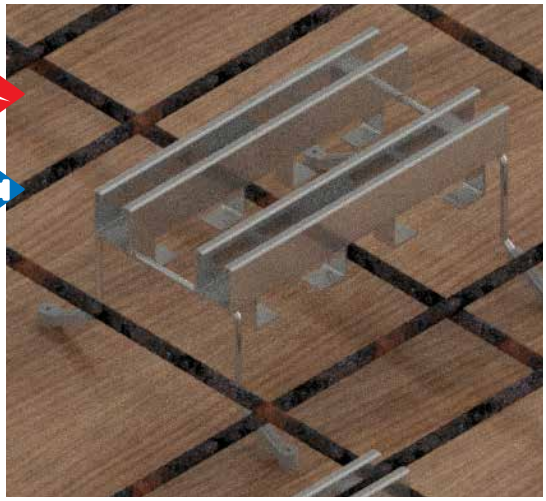


STEP 4

CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

It's What We Do!

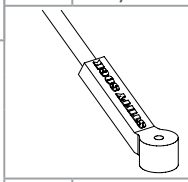
Fig. 338 Stiffy Cast-in-Place Double Strut Anchor



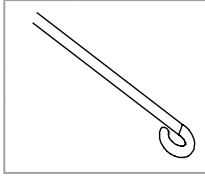
- Strut is finished out to the top of the concrete pour
- Quick solution for attaching stanchions or equipment
- Once the concrete cures simply remove the foam and use a strut nut and bolt to make connection
- Strut can be provided in lengths up to 20'

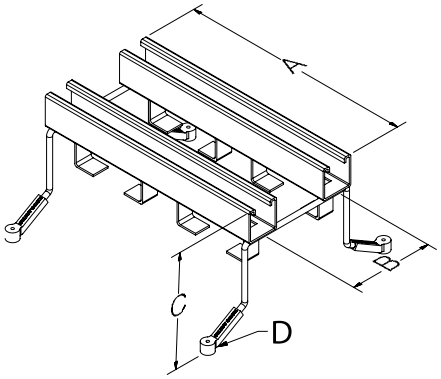
A	B	C	D
Length	Width	Height	Footprint

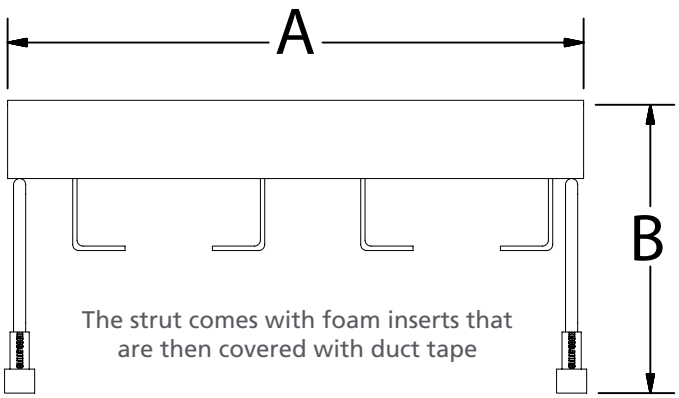
*01	Stiffy Sock



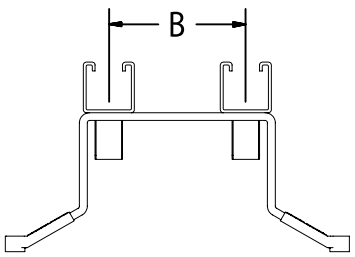
*02	Stiffy Loop







The strut comes with foam inserts that are then covered with duct tape



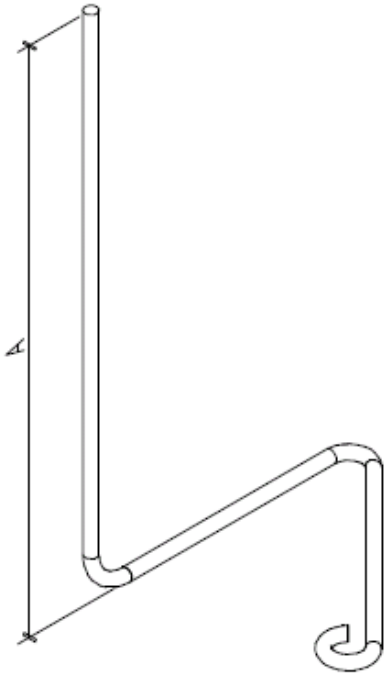
Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

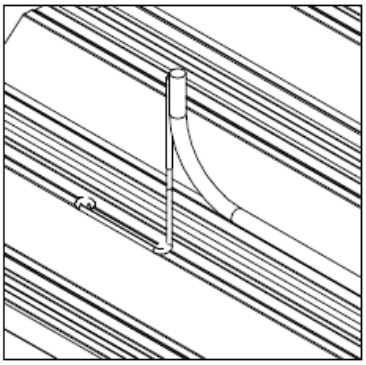
	A	B	C	D	Qty
Fig 338					
Fig 338					
Fig 338					

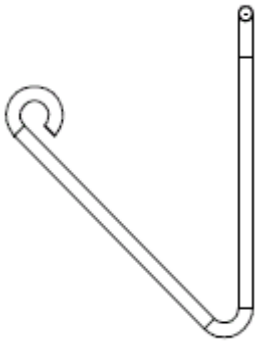
BUY AMERICAN ACT COMPLIANT

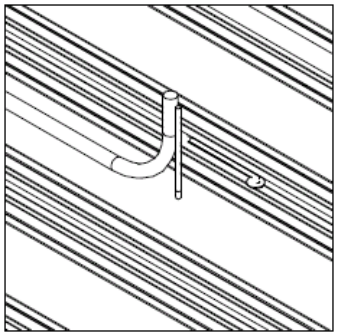
Application Examples

Fig. 340 Steel Deck Stiffy Tree









- Provides rigid support for pipes and conduits in metal pan decks prior to the pour
- Supports 90° elbows that turn up into walls or transformers
- Supports cast-in-place risers
- Offers many additional uses

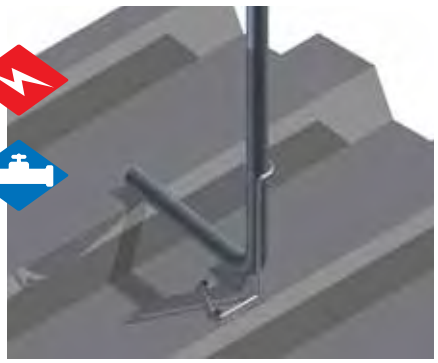
Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

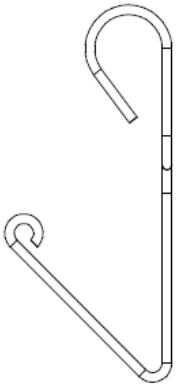
	A-Height (In.)	Qty
Fig 340		
Fig 340		
Fig 340		

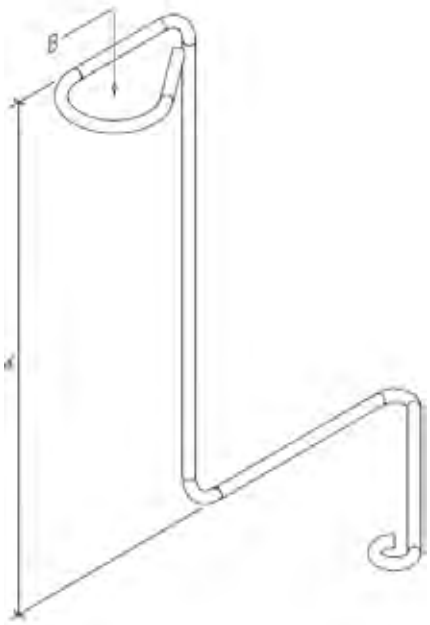
BUY AMERICAN ACT COMPLIANT

Application Examples

Fig. 341 Steel Deck Stiffy Tree with Loop







- Provides rigid support for pipes and conduits in metal pan decks prior to the pour
- Support loop design eliminates restraint at the top
- Supports 90° elbows that turn up into walls or transformers
- Supports cast-in-place risers
- Offers many additional uses
- Support can extend above the concrete pour to protect the pipe

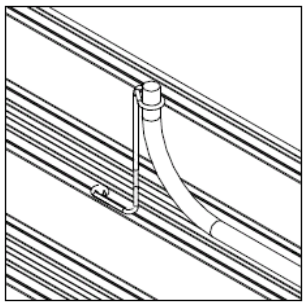
Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

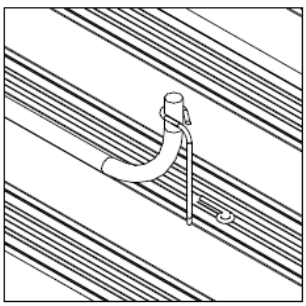
BUY AMERICAN ACT COMPLIANT

B			
Stiffy I.D.		For reference only	
		GRC/PVC/ENT	PVC Coated Rigid
*01	.875"	1/2"(.84 OD)	
*02	1.125"	3/4"(1.05" OD)	
*03	1.375"		3/4" (1.13" OD)
*04	1.50"	1"(1.32" OD)	1" (1.4" OD)
*05	1.75"	1-1/4"(1.66" OD)	1-1/4" (1.74" OD)
*06	2.125"	1-1/2"(1.9" OD)	1-1/2" (1.98" OD)
*07	2.50"	2"(2.38" OD)	2" (2.46" OD)
*08	3.00"	2-1/2"(2.88" OD)	2-1/2" (2.96" OD)
*09	3.625"	3"(3.5" OD)	3" (3.58" OD)
*10	4.125"	3-1/2"(4" OD)	3-1/2" (4.08" OD)
*11	4.625"	4"(4.5" OD)	4" (4.58" OD)
*12	Other-Specify Size		

Footnotes:
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2" nom. Pre-sleeved PEX piping = 1.05" O.D.
- 3/4" nom. Pre-sleeved PEX piping = 1.36" O.D.

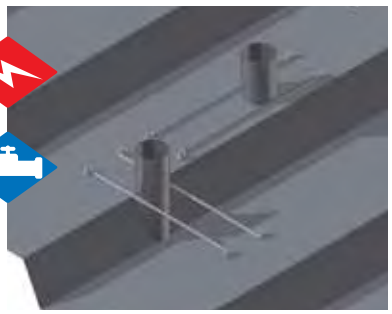
	A-Height (In.)	B-Loop I.D.	Qty
Fig 341			
Fig 341			
Fig 341			

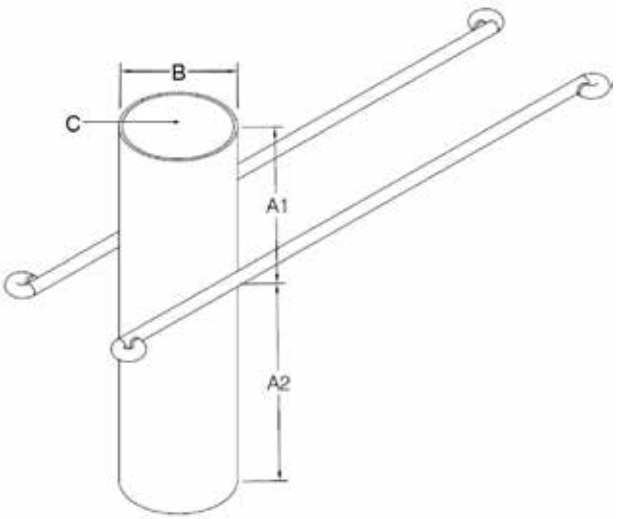




Application Examples

Fig. 370 Stiffy Metal Deck Sleeve





All Sleeves are Manufactured with a Minimum of 18g Steel

- Provides a secure sleeve in concrete decks for Mechanical, Plumbing and Electrical applications
- Offers many additional uses
- Heavy Gauge Steel Sleeves resist abuse during concrete pours
- Eliminates rework and reinforcement when using thin deck sleeves
- Heavy Gauge Steel Sleeves resist abuse during concrete pours
- Reduces layout time

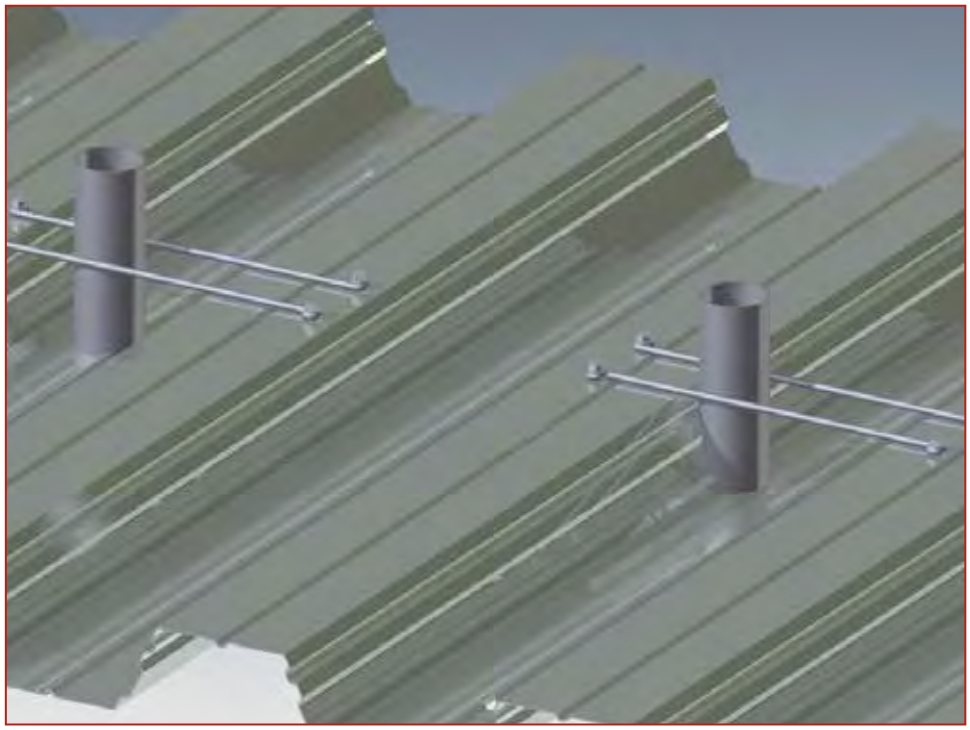
Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

BUY AMERICAN ACT COMPLIANT

	A1	A2	B	C	Qty
Fig 370					
Fig 370					
Fig 370					

A1	A2	B		C	
Height Above Upper Flute	Height Below Upper Flute	Opening Size I.D.		End Caps	
		*01	1" (1.049" ID)	*00	No End Caps
*Angle iron can be used in lieu of rod to support the can into the deck if required by the project.		*015	1 1/2" (1.610" ID)	*01	End Caps on Top[1,2]
		*02	2" (2.067" ID)	*02	End Caps on Bottom[1,2]
		*025	2 1/2" (2.731" ID)	*03	End Caps on Both Ends[1,2]
		*03	3" (3.356" ID)	Footnotes: 1– Plastic End Caps are used for 1" through 4" I.D. 2- Sleeves 5" and larger will be taped at the ends when end caps are requested.	
		*04	4"(4.334" ID)		
		*05	5" (4.8125" ID)		
		*06	6" (5.8125" ID)		
		*07	7" (6.8125" ID)		
		*08	8" (7.8125" ID)		
		*09	9" (8.8125" ID)		
		*10	10" (9.8125" ID)		
		*11	11" (10.8125" ID)		
		*12	12" (11.8125" ID)		
		*13	Other—Please specify		

Application Examples



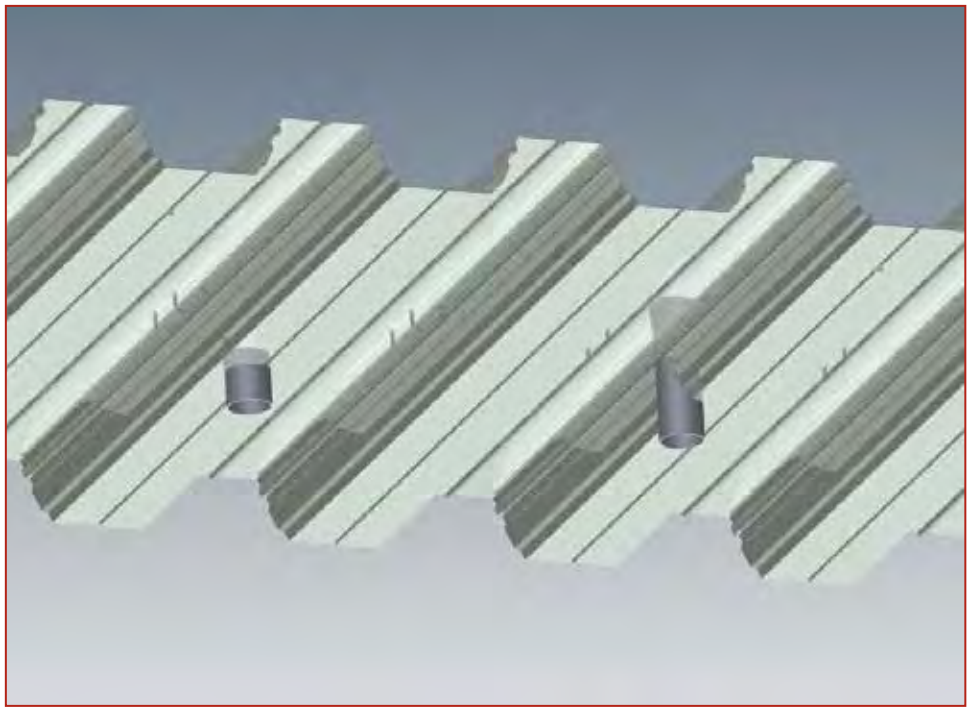
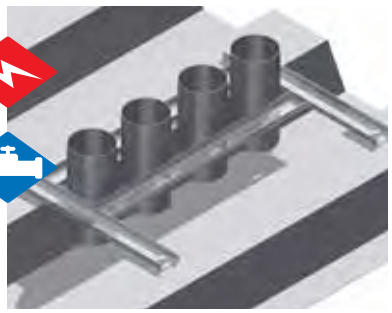
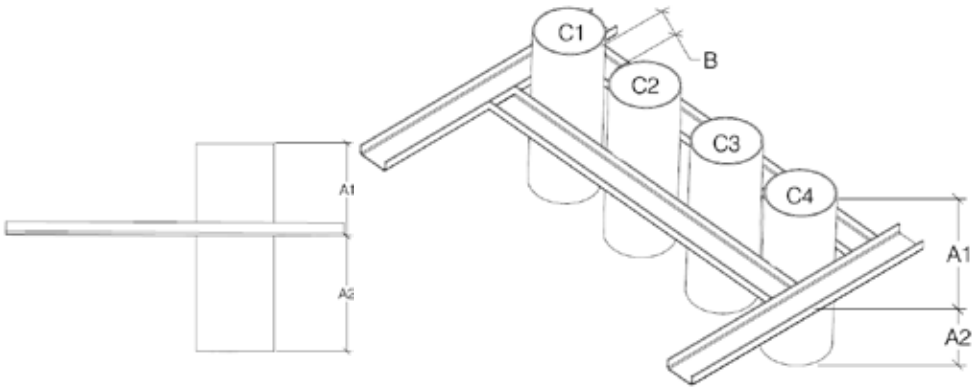


Fig. 371

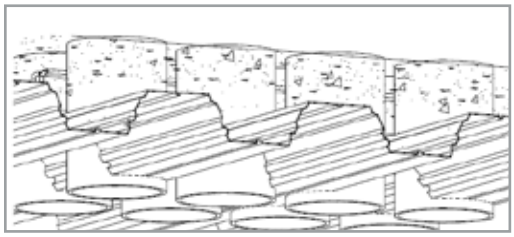
Stiffy Single Row Metal Deck Sleeve





All Sleeves are Manufactured with a Minimum of 18g Steel

- Provides a secure sleeve in concrete decks for Mechanical, Plumbing and Electrical applications
- Offers many additional uses
- Heavy Gauge Steel Sleeves resist abuse during concrete pours
- Eliminates rework and reinforcement when using thin deck sleeves
- Heavy Gauge Steel Sleeves resist abuse during concrete pours
- Reduces layout time



Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

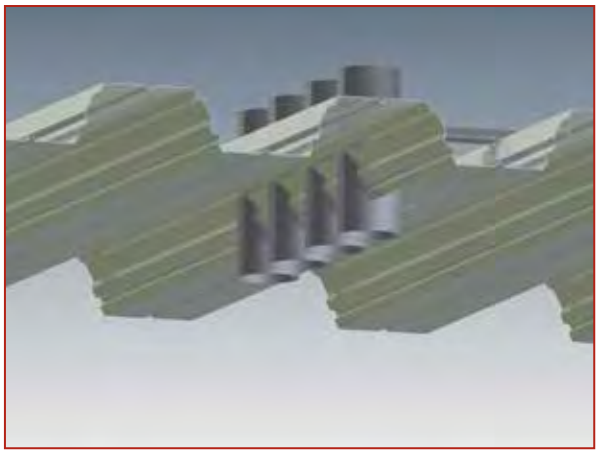
BUY AMERICAN ACT COMPLIANT

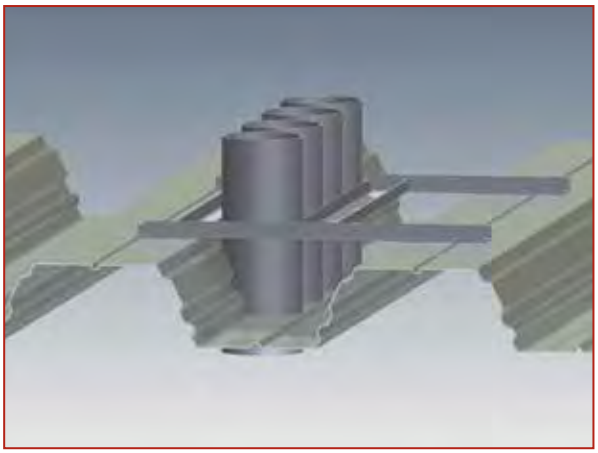
	A1	A2	B	C1	C2	C3	C4	C5	C6	C7	C8	D	Qty
Fig 371													
Fig 371													
Fig 371													

*To reduce the number of cans required input N/A to any values that do not apply.

A1	A2	B	C		D	
Height Above Upper Flute	Height Below Upper Flute	Sleeve Spacing	Opening Size I.D.		End Caps	
			*01	1" (1.049" ID)	*00	No End Caps
			*015	1 1/2" (1.610" ID)	*01	End Caps on Top[1,2]
			*02	2" (2.067" ID)	*02	End Caps on Bottom[1,2]
			*025	2 1/2" (2.731" ID)	*03	End Caps on Both Ends[1,2]
*Angle iron can be used in lieu of rod to support the can into the deck if required by the project.			*03	3" (3.356" ID)	Footnotes: 1– Plastic End Caps are used for 1" through 4" I.D. 2- Sleeves 5" and larger will be taped at the ends when end caps are requested.	
			*04	4"(4.334" ID)		
			*05	5" (4.8125" ID)		
			*06	6" (5.8125" ID)		
			*07	7" (6.8125" ID)		
			*08	8" (7.8125" ID)		
			*09	9" (8.8125" ID)		
			*10	10" (9.8125" ID)		
			*11	11" (10.8125" ID)		
			*12	12" (11.8125" ID)		
			*13	Other—Please specify		

Application Examples





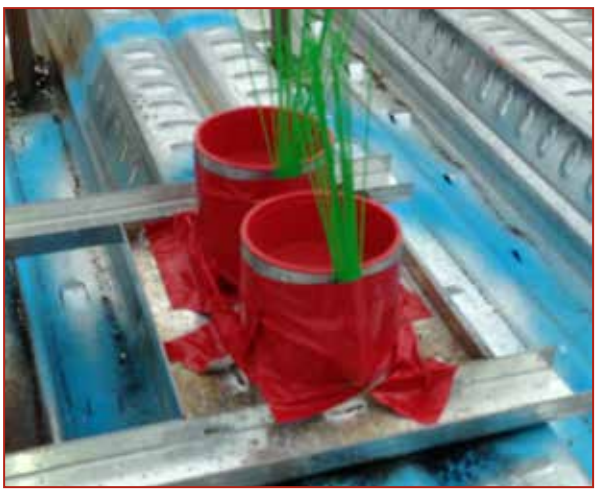
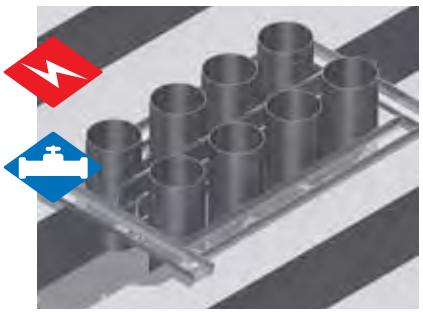
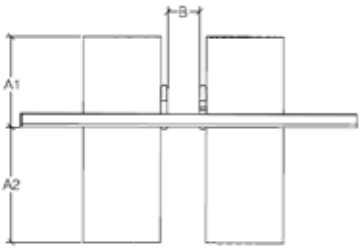
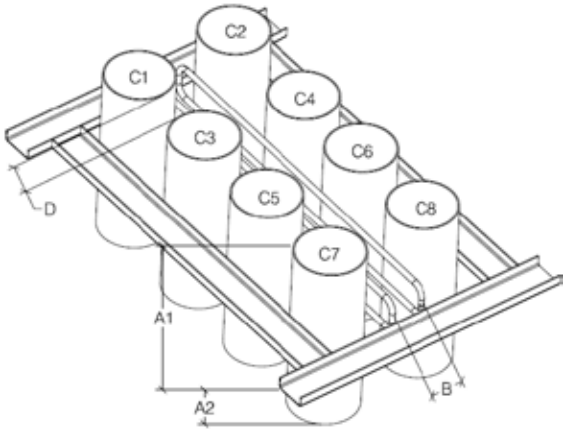


Fig. 372 Stiffy Double Row Metal Deck Sleeve







All Sleeves are Manufactured with a Minimum of 18g Steel

- Prefabricated deck sleeve template provides a quick layout solution for through penetrations
- Sleeve size and spacing can be customized to fit any project condition
- Additional sleeves can be added
- Steel channel frame allows the sleeves to be installed at any location onto metal deck
- Angle iron can be substituted for CRC channel in order to provide reinforcement for the metal deck

Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

BUY AMERICAN ACT COMPLIANT

	A1	A2	B	C1	C2	C3	C4	C5	C6	C7	C8	D	E	Qty
Fig 372														
Fig 372														
Fig 372														

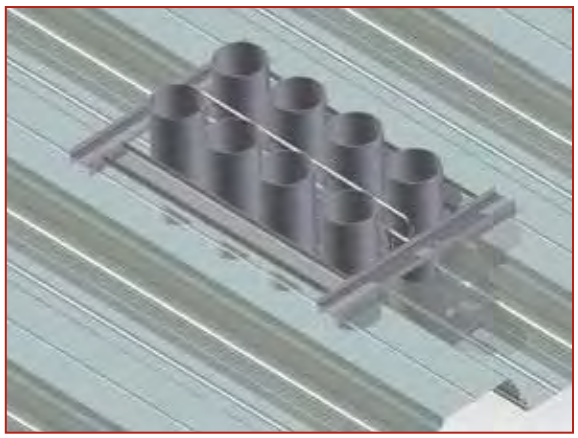
*To reduce the number of cans required input N/A to any values that do not apply.

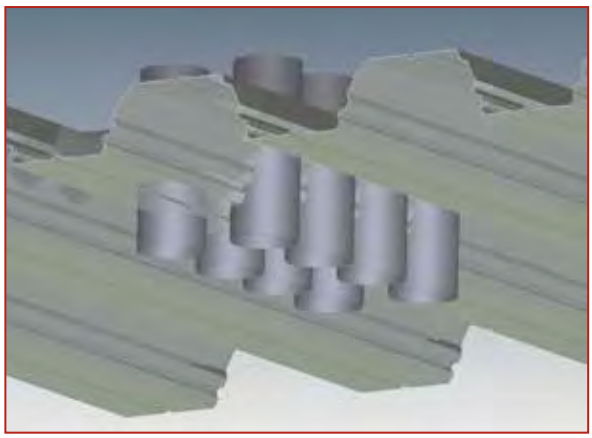
A1	A2	B	C		D	E	
Height Above Upper Flute	Height Below Upper Flute	Sleeve Spacing Between Rows	Opening Size I.D.		Sleeve Spacing	End Caps	
			*01	1” (1.049” ID)		*00	No End Caps
			*015	1 1/2” (1.610” ID)		*01	End Caps on Top[1,2]
			*02	2” (2.067” ID)		*02	End Caps on Bottom[1,2]
			*025	2 1/2” (2.731” ID)		*03	End Caps on Both Ends[1,2]
			*03	3” (3.356” ID)			
			*04	4”(4.334” ID)			
			*05	5” (4.8125” ID)			
			*06	6” (5.8125” ID)			
			*07	7” (6.8125” ID)			
			*08	8” (7.8125” ID)			
			*09	9” (8.8125” ID)			
			*10	10” (9.8125” ID)			
			*11	11” (10.8125” ID)			
			*12	12” (11.8125” ID)			
			*13	Other—Please specify			

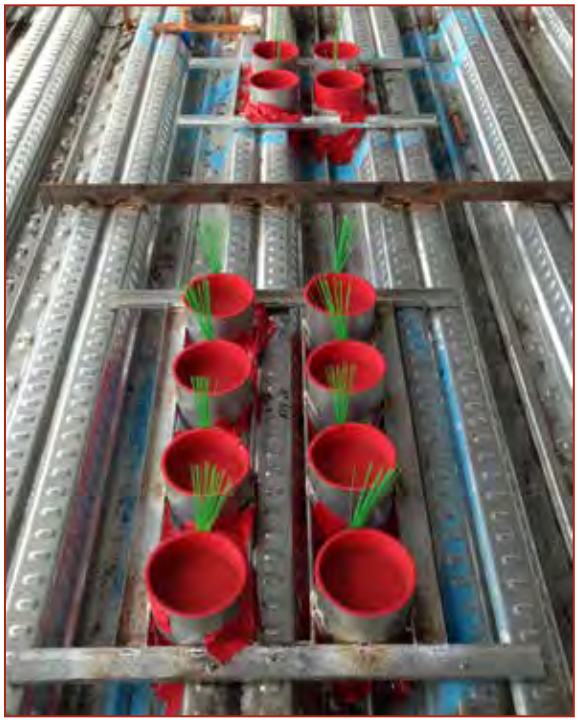
*Angle iron can be used in lieu of rod to support the can into the deck if required by the project.

Footnotes:
1– Plastic End Caps are used for 1” through 4” I.D.
2- Sleeves 5” and larger will be taped at the ends when end caps are requested.

Application Examples







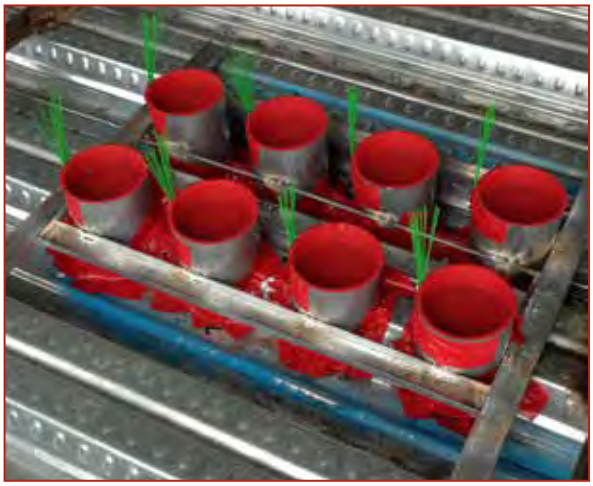
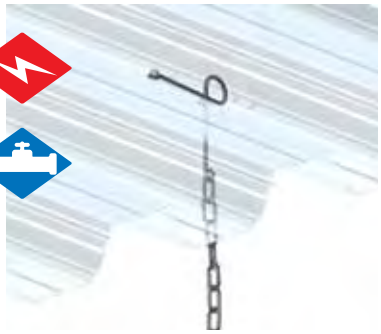
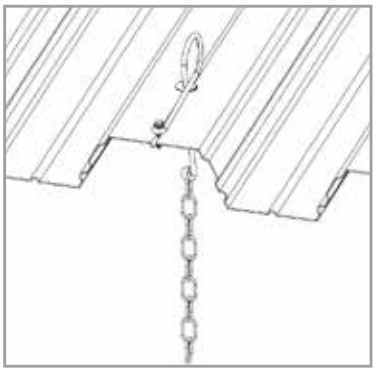
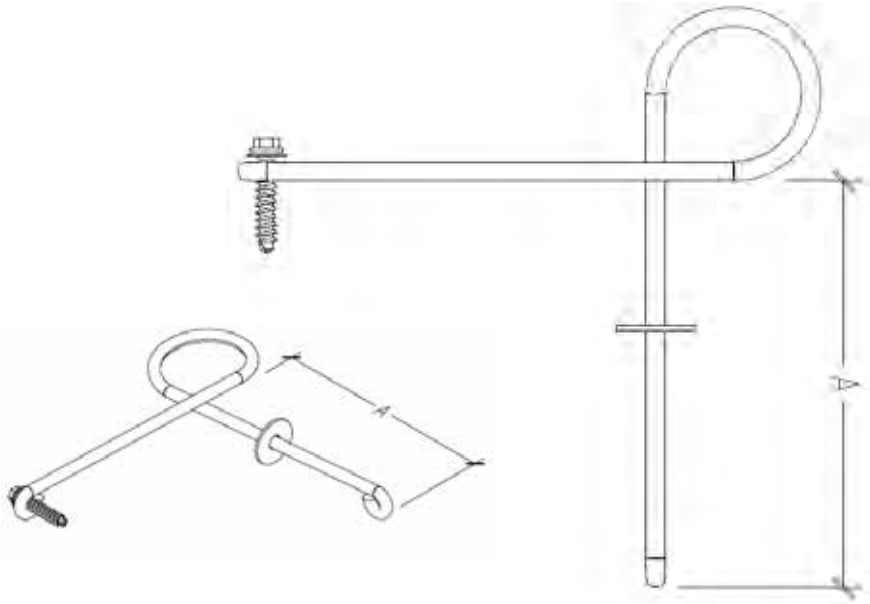


Fig. 380 Cast-in-Place Stiffy Jack Chain Loop







- Designed as a rigid method of support for Mechanical, Electrical and Plumbing systems.
- Punch a hole into the metal pan deck, drop the support through and fasten
- Provides vertical support for jack chain, cable or wire
- Neoprene washer prevents concrete slurry from penetrating the hole when the deck is filled with concrete
- Can be used with or without concrete being poured over the deck
- Comes pre-staked with Hex Washer Head Tek Screws
- Max load in concrete filled deck: 300# per support
- Max load in decks with no concrete fill: 133# per support
- UL Listed

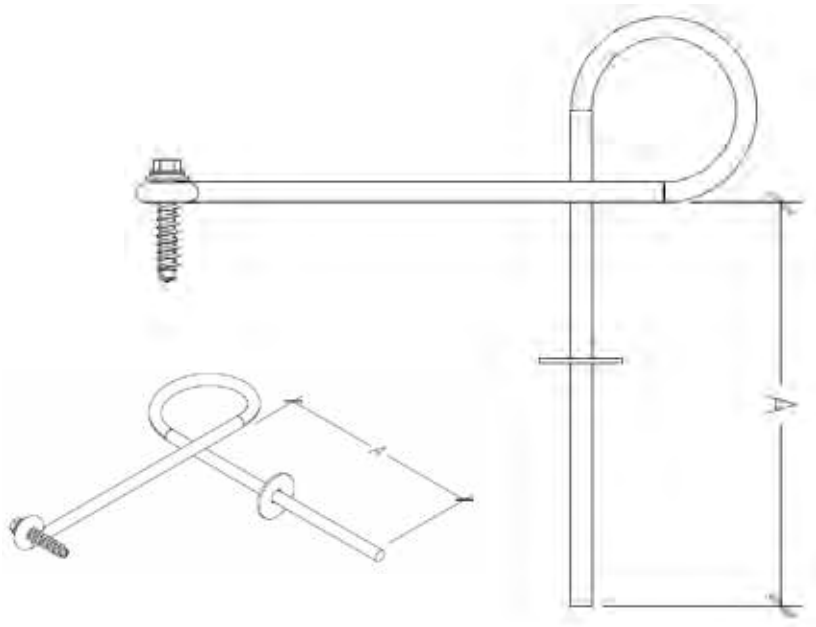
Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A-Height (In.)	Qty
Fig 380		
Fig 380		
Fig 380		

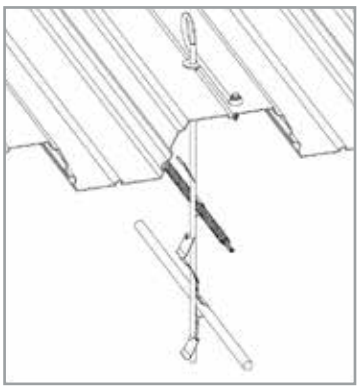
Application Examples

Fig. 381

Stiffy Cast-in-Place Straight Rod with Pigtail Loop



- Punch a hole in the deck and drop this support through
- Zinc plated rod for corrosion resistance
- Designed as a rigid method of support for Mechanical, Electrical and Plumbing systems.
- Can be used with or without concrete being poured over the deck
- Neoprene washer prevents concrete slurry from passing thru the deck
- Max load in concrete filled deck: 300# per support
- Max load in decks with no concrete fill: 133# per support
- UL Listed



Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

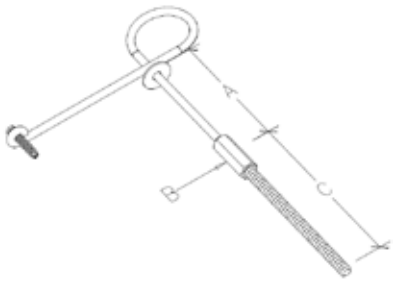
	A-Height (In.)	Qty
Fig 381		
Fig 381		
Fig 381		

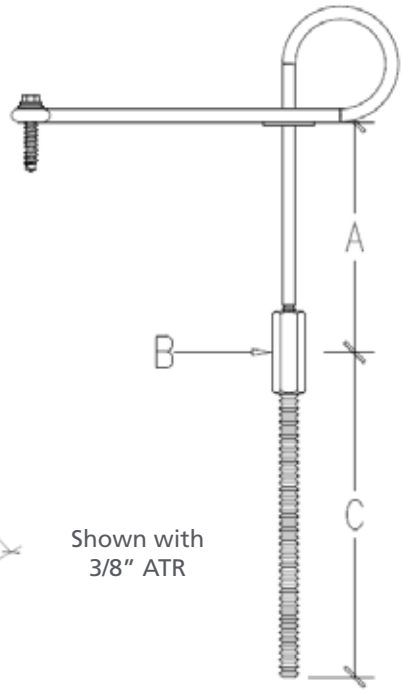
c UL us LISTED

BUY AMERICAN ACT COMPLIANT

Fig. 382

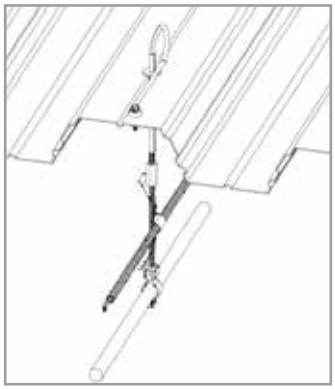
Stiffy Cast-in-Place Threaded Rod with Pigtail Loop





Shown with 3/8" ATR

- Punch a hole in the deck and drop this support through
- Available with 1/4" or 3/8" All Thread Rod
- Zinc plated rod for corrosion resistance
- Designed as a rigid method of support for Mechanical, Electrical and Plumbing systems.
- Can be used with or without concrete being poured over the deck
- Neoprene washer prevents concrete slurry from passing thru the deck
- Recommended where "Friction Connections" are not allowed
- FYI… When Stiffy Grippers (Fig 162) are connected to all thread rod a "Friction Connection" does not exist
- Max load in concrete filled deck: 300# per support
- Max load in decks with no concrete fill: 133# per support
- UL Listed



Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

A	B		C
Drop Length (Inches)	*01	No Coupler[1]	All Thread Rod Length (In.)
	*02	1/4" Coupler	
	*03	1/4" x 3/8" Rod Coupler	
Footnote: 1- Threaded end has 1/2" of threads			

	A	B	C	Qty
Fig 382				
Fig 382				
Fig 382				

c UL us LISTED

BUY AMERICAN ACT COMPLIANT

BUY AMERICAN ACT COMPLIANT

400 SERIES SLAB-ON-GRADE SUPPORTS

It doesn't get any easier than this...

JOBSITE PROBLEM MEETS STIFFY SOLUTION

Real-world Jobsite Innovation

Job Site Problems

Stiffy Solutions

Typical Support

- Time wasted identifying, cutting, and assembling components
- Conduits or pipes are not aligned
- Once the concrete is cured re-work is required to accomplish a proper installation

Fig. 410

- Stiffy Supports arrive on the project and are ready to be installed.
- No valuable field man hours are wasted locating components and wrapping tie wire.
- Supports are made to order for the exact application.
- Conduits or pipes are perfectly aligned
- Once the concrete is cured the result is a clean finished product

Typical Support

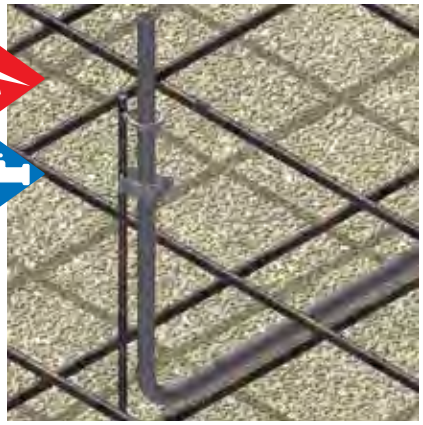
- Time wasted identifying, cutting, and assembling components
- Tie wire can easily slip off allowing the conduit to float during the concrete pour.

Fig. 421

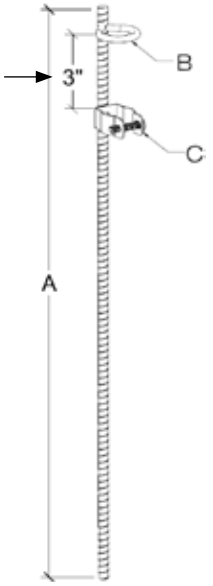
- Stiffy Supports arrive on the project and are ready to be installed.
- No valuable field man hours are wasted locating components and wrapping tie wire.
- Supports are made to order for the exact application.
- Conduits or pipes are perfectly aligned
- Once the concrete is cured the result is a clean finished product
- Multiple conduits or pipes can be secured with a single support

	Job Site Problem	Stiffy Solution
Quick to install	No - Labor intensive, cut parts to size, tie wire - costly	Yes - Delivered as a complete assembly
Addtional Benefits	No	YES Supports 90s in dirt prior to the concrete pour Rebar extends above the loops to allow for installation Support loop design eliminates top restraint
Insures that 90's stay vertical during concrete pours	No	YES

Fig. 401 Single Loop Slab-on-Grade Stiffy Stake



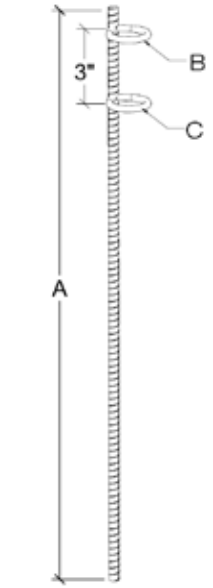
To alter this dimension, please note it on this order form.



Shown with B=01 Conduit Clip

- Provides rigid support for pipes and conduits in dirt and sand prior to the concrete pour
- Support loop design eliminates restraint at the top
- Offers many additional uses
- Support can extend above the concrete pour to protect the pipe
- Rebar extends above the loops to provide a surface to hammer the supports into the soil.

**Important Note: When the rebar legs must penetrate a vapor barrier dip the Stiffy into a bucket of vapor barrier mastic to preserve the seal and eliminate the need to tape the penetrations



Shown with B=02 Stiffy Loop

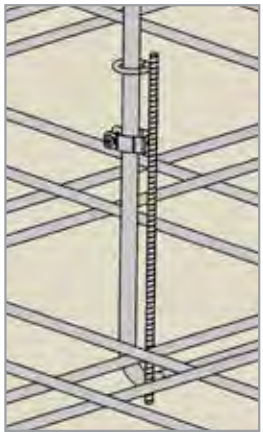
Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B	C	Qty
Fig 401				
Fig 401				
Fig 401				

BUY AMERICAN ACT COMPLIANT

A	B				C	
Height (Inches)	Stiffy I.D.		For reference only		Lower Assembly	
			GRC/PVC/ENT	PVC Coated Rigid	*00	No Lower Assembly
	*01	.875"	1/2"(.84 OD)		*01	Conduit Clip
(22" Typ.)	*02	1.125"	3/4"(1.05" OD)		*02	Loop
	*03	1.375"		3/4" (1.13" OD)		
	*04	1.50"	1"(1.32" OD)	1" (1.4" OD)		
	*05	1.75"	1-1/4"(1.66" OD)	1-1/4" (1.74" OD)		
	*06	2.125"	1-1/2"(1.9" OD)	1-1/2" (1.98" OD)		
	*07	2.50"	2"(2.38" OD)	2" (2.46" OD)		
	*08	3.00"	2-1/2"(2.88" OD)	2-1/2" (2.96" OD)		
	*09	3.625"	3"(3.5" OD)	3" (3.58" OD)		
	*10	4.125"	3-1/2"(4" OD)	3-1/2" (4.08" OD)		
	*11	4.625"	4"(4.5" OD)	4" (4.58" OD)		
	*12	Other-Specify Size				

Footnotes:
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2" nom. Pre-sleeved PEX piping = 1.05" O.D.
- 3/4" nom. Pre-sleeved PEX piping = 1.36" O.D.



Application Examples

CEAS

CONSTRUCTION ENGINEERED ATTACHMENT SOLUTIONS

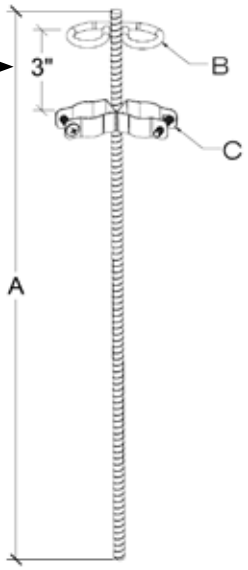
It's What We Do!

Fig. 402 Double Loop Slab-on-Grade Stiffy Stake

- Provides rigid support for pipes and conduits in dirt and sand prior to the concrete pour
- Support loop design eliminates restraint at the top
- Offers many additional uses
- Support can extend above the concrete pour to protect the pipe
- Rebar extends above the loops to provide a surface to hammer the supports into the soil.

**Important Note: When the rebar legs must penetrate a vapor barrier dip the Stiffy into a bucket of vapor barrier mastic to preserve the seal and eliminate the need to tape the penetrations

To alter this dimension, please note it on this order form.



Shown with B=01 Conduit Clip

Shown with B=02 Stiffy Loop

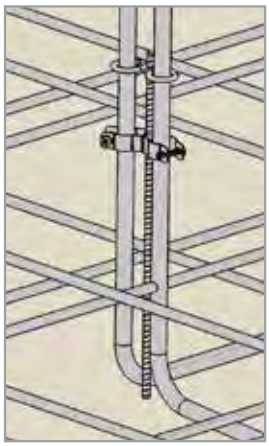
Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B1	B2	C	Qty
Fig 402					
Fig 402					
Fig 402					

BUY AMERICAN ACT COMPLIANT

A	B			C	
Height (Inches)	Stiffy I.D.		For reference only		Lower Assembly	
			GRC/PVC/ENT	PVC Coated Rigid	*00	No Lower Assembly
	*01	.875"	1/2"(.84 OD)		*01	Conduit Clip
(22" Typ.)	*02	1.125"	3/4"(1.05" OD)		*02	Loop
	*03	1.375"		3/4" (1.13" OD)		
	*04	1.50"	1"(1.32" OD)	1" (1.4" OD)		
	*05	1.75"	1-1/4"(1.66" OD)	1-1/4" (1.74" OD)		
	*06	2.125"	1-1/2"(1.9" OD)	1-1/2" (1.98" OD)		
	*07	2.50"	2"(2.38" OD)	2" (2.46" OD)		
	*08	3.00"	2-1/2"(2.88" OD)	2-1/2" (2.96" OD)		
	*09	3.625"	3"(3.5" OD)	3" (3.58" OD)		
	*10	4.125"	3-1/2"(4" OD)	3-1/2" (4.08" OD)		
	*11	4.625"	4"(4.5" OD)	4" (4.58" OD)		
	*12	Other-Specify Size				

Footnotes:
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2" nom. Pre-sleeved PEX piping = 1.05" O.D.
- 3/4" nom. Pre-sleeved PEX piping = 1.36" O.D.

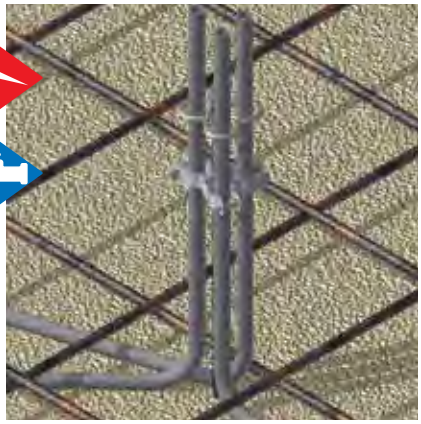


Application Examples



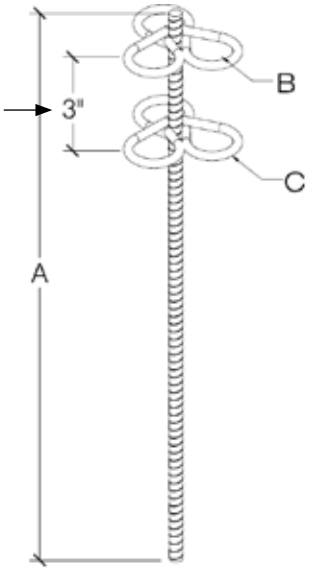



Fig. 403 Triple Loop Slab-on-Grade Stiffy Stake



- Provides rigid support for pipes and conduits in dirt and sand prior to the concrete pour
- Support loop design eliminates restraint at the top
- Offers many additional uses
- Support can extend above the concrete pour to protect the pipe
- Rebar extends above the loops to provide a surface to hammer the supports into the soil.

To alter this dimension, please note it on this order form.

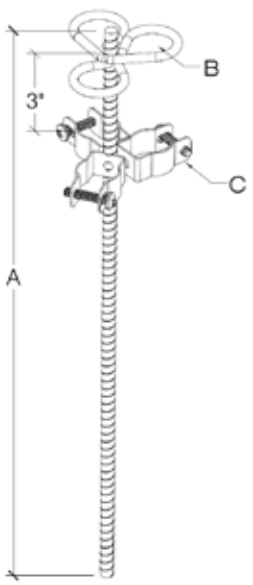


Shown with B=01 Conduit Clip

**Important Note: When the rebar legs must penetrate a vapor barrier dip the Stiffy into a bucket of vapor barrier mastic to preserve the seal and eliminate the need to tape the penetrations

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B1	B2	B3	C	Qty
Fig 403						
Fig 403						
Fig 403						



Shown with B=02 Stiffy Loop

A	B				C	
Height (Inches)	Stiffy I.D.		For reference only		Lower Assembly	
			GRC/PVC/ENT	PVC Coated Rigid	*00	No Lower Assembly
	*01	.875"	1/2"(.84 OD)		*01	Conduit Clip
(22" Typ.)	*02	1.125"	3/4"(1.05" OD)		*02	Loop
	*03	1.375"		3/4" (1.13" OD)		
	*04	1.50"	1"(1.32" OD)	1" (1.4" OD)		
	*05	1.75"	1-1/4"(1.66" OD)	1-1/4" (1.74" OD)		
	*06	2.125"	1-1/2"(1.9" OD)	1-1/2" (1.98" OD)		
	*07	2.50"	2"(2.38" OD)	2" (2.46" OD)		
	*08	3.00"	2-1/2"(2.88" OD)	2-1/2" (2.96" OD)		
	*09	3.625"	3"(3.5" OD)	3" (3.58" OD)		
	*10	4.125"	3-1/2"(4" OD)	3-1/2" (4.08" OD)		
	*11	4.625"	4"(4.5" OD)	4" (4.58" OD)		
	*12	Other-Specify Size				

Footnotes:
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2" nom. Pre-sleeved PEX piping = 1.05" O.D.
- 3/4" nom. Pre-sleeved PEX piping = 1.36" O.D.

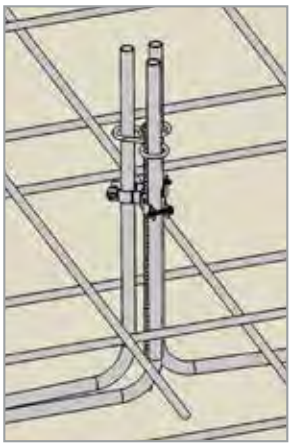
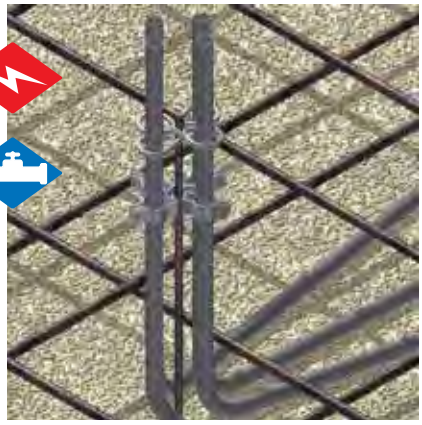
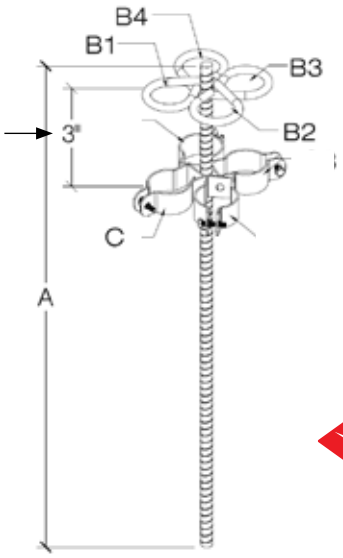


Fig. 404 Quad Loop Slab-on-Grade Stiffy Stake



To alter this dimension, please note it on this order form.



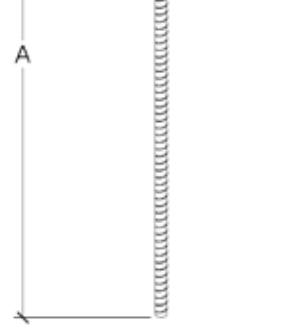
Shown with B=01 Conduit Clip

- Provides rigid support for pipes and conduits in dirt and sand prior to the concrete pour
- Support loop design eliminates restraint at the top
- Offers many additional uses
- Support can extend above the concrete pour to protect the pipe
- Rebar extends above the loops to provide a surface to hammer the supports into the soil.

**Important Note: When the rebar legs must penetrate a vapor barrier dip the Stiffy into a bucket of vapor barrier mastic to preserve the seal and eliminate the need to tape the penetrations

Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B1	B2	B3	B4	C	Qty
Fig 404							
Fig 404							
Fig 404							



Shown with B=02 Stiffy Loop

BUY AMERICAN ACT COMPLIANT

A	B				C	
Height (Inches)	Stiffy I.D.		For reference only		Lower Assembly	
			GRC/PVC/ENT	PVC Coated Rigid	*00	No Lower Assembly
	*01	.875"	1/2"(.84 OD)		*01	Conduit Clip
(22" Typ.)	*02	1.125"	3/4"(1.05" OD)		*02	Loop
	*03	1.375"	1"(1.32" OD)	3/4" (1.13" OD)		
	*04	1.50"		1" (1.4" OD)		
	*05	1.75"	1-1/4"(1.66" OD)	1-1/4" (1.74" OD)		
	*06	2.125"	1-1/2"(1.9" OD)	1-1/2" (1.98" OD)		
	*07	2.50"	2"(2.38" OD)	2" (2.46" OD)		
	*08	3.00"	2-1/2"(2.88" OD)	2-1/2" (2.96" OD)		
	*09	3.625"	3"(3.5" OD)	3" (3.58" OD)		
	*10	4.125"	3-1/2"(4" OD)	3-1/2" (4.08" OD)		
	*11	4.625"	4"(4.5" OD)	4" (4.58" OD)		
	*12	Other-Specify Size				

Footnotes:
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2" nom. Pre-sleeved PEX piping = 1.05" O.D.
- 3/4" nom. Pre-sleeved PEX piping = 1.36" O.D.

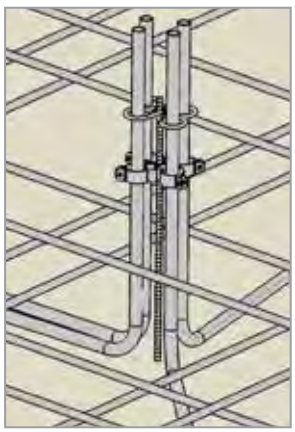
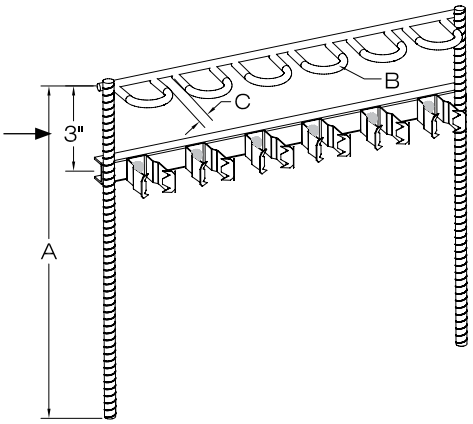
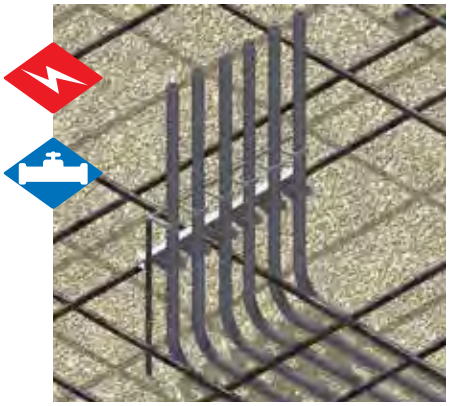


Fig. 410 Stiffy Snap-in Slab-on-Grade Trapeze



- Ideal for electrical panel locations
- Provides rigid support for pipes and conduits in dirt and sand prior to the concrete pour
- Support loop design eliminates restraint at the top
- Offers many additional uses
- Support can extend above the concrete pour to protect the pipe
- Rebar extends above the loops to provide a surface to hammer the supports into the soil

**Important Note: When the rebar legs must penetrate a vapor barrier dip the Stiffy into a bucket of vapor barrier mastic to preserve the seal and eliminate the need to tape the penetrations

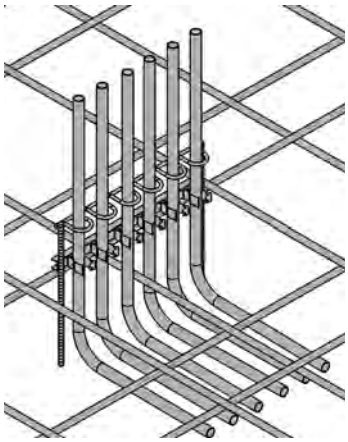


Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

	A	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	C	Qty
Fig 410													
Fig 410													
Fig 410													

A	B			C
Height (Inches)	Stiffy I.D.		For reference only	Spacing
			GRC/PVC/ENT	PVC Coated Rigid	
(22" Typ.)	*01	.875"	1/2"(.84 OD)		(1/2" min to fit couplings)
	*02	1.125"	3/4"(1.05" OD)		
	*03	1.375"		3/4" (1.13" OD)	
	*04	1.50"	1"(1.32" OD)	1" (1.4" OD)	
	*05	1.75"	1-1/4"(1.66" OD)	1-1/4" (1.74" OD)	
	*06	2.125"	1-1/2"(1.9" OD)	1-1/2" (1.98" OD)	
	*07	2.50"	2"(2.38" OD)	2" (2.46" OD)	
	*08	3.00"	2-1/2"(2.88" OD)	2-1/2" (2.96" OD)	
	*09	3.625"	3"(3.5" OD)	3" (3.58" OD)	
	*10	4.125"	3-1/2"(4" OD)	3-1/2" (4.08" OD)	
	*11	4.625"	4"(4.5" OD)	4" (4.58" OD)	
	*12	Other-Specify Size			

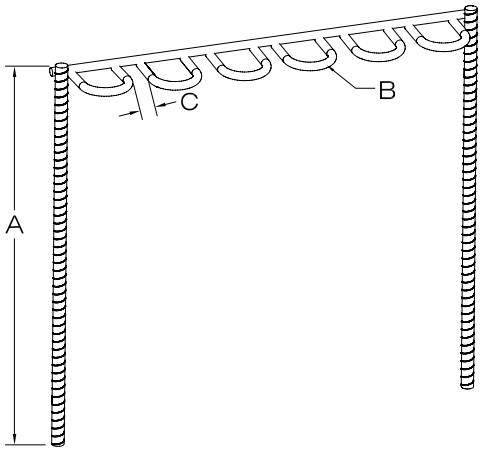
Footnotes:
- Snap in style conduit supports are used for 1/2" and 3/4" GRC/PVC/ENT
- Conduit Clips are used for 1" GRC/PVC/ENT and larger
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2" nom. Pre-sleeved PEX piping = 1.05" O.D.
- 3/4" nom. Pre-sleeved PEX piping = 1.36" O.D.



BUY AMERICAN ACT COMPLIANT

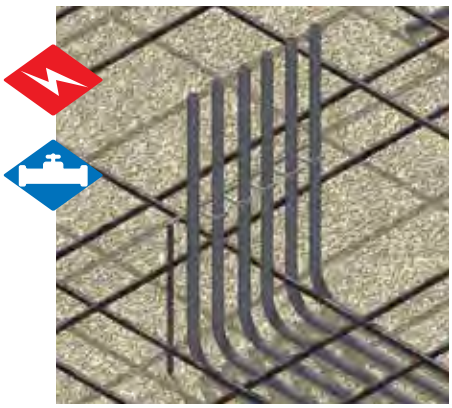
Application Examples

Fig. 414 Stiffy Single Loop Slab-on-Grade Trapeze



- Ideal for electrical panel locations
- Provides rigid support for pipes and conduits in dirt and sand prior to the concrete pour
- Support loop design eliminates restraint at the top
- Offers many additional uses
- Support can extend above the concrete pour to protect the pipe
- Rebar extends above the loops to provide a surface to hammer the supports into the soil

**Important Note: When the rebar legs must penetrate a vapor barrier dip the Stiffy into a bucket of vapor barrier mastic to preserve the seal and eliminate the need to tape the penetrations

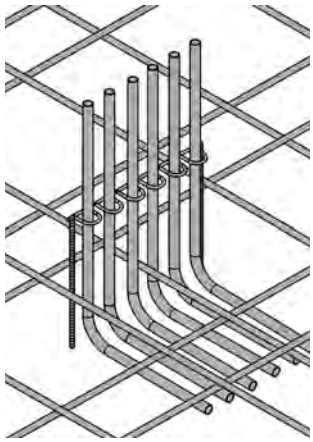


Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

	A	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	C	Qty
Fig 414													
Fig 414													
Fig 414													

A	B				C
Height (Inches)	Stiffy I.D.		For reference only		Spacing
			GRC/PVC/ENT	PVC Coated Rigid	
(22" Typ.)	*01	.875"	1/2"(.84 OD)		(1/2" min to fit couplings)
	*02	1.125"	3/4"(1.05" OD)		
	*03	1.375"		3/4" (1.13" OD)	
	*04	1.50"	1"(1.32" OD)	1" (1.4" OD)	
	*05	1.75"	1-1/4"(1.66" OD)	1-1/4" (1.74" OD)	
	*06	2.125"	1-1/2"(1.9" OD)	1-1/2" (1.98" OD)	
	*07	2.50"	2"(2.38" OD)	2" (2.46" OD)	
	*08	3.00"	2-1/2"(2.88" OD)	2-1/2" (2.96" OD)	
	*09	3.625"	3"(3.5" OD)	3" (3.58" OD)	
	*10	4.125"	3-1/2"(4" OD)	3-1/2" (4.08" OD)	
	*11	4.625"	4"(4.5" OD)	4" (4.58" OD)	
	*12	Other-Specify Size			

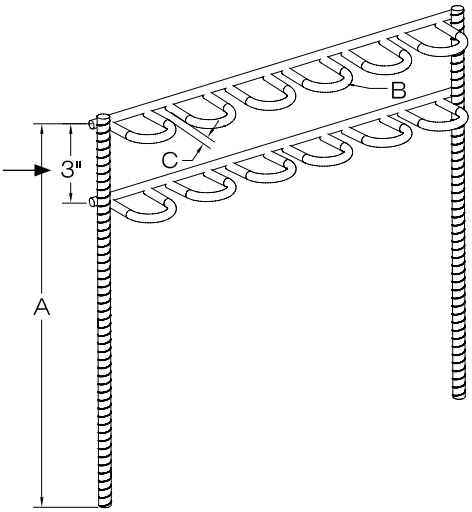
Footnotes:
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2" nom. Pre-sleeved PEX piping = 1.05" O.D.
- 3/4" nom. Pre-sleeved PEX piping = 1.36" O.D.



BUY AMERICAN ACT COMPLIANT

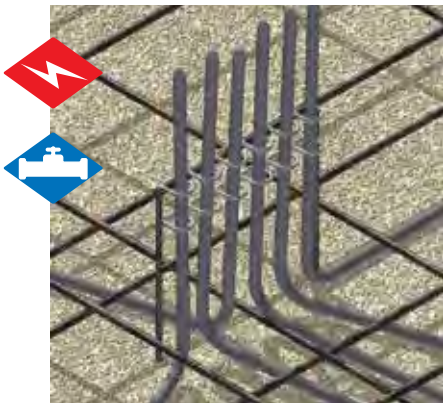
Application Examples

Fig. 415 Stiffy Double Loop Slab-on-Grade Trapeze



- Ideal for electrical panel locations
- Provides rigid support for pipes and conduits in dirt and sand prior to the concrete pour
- Support loop design eliminates restraint at the top
- Offers many additional uses
- Support can extend above the concrete pour to protect the pipe
- Rebar extends above the loops to provide a surface to hammer the supports into the soil

**Important Note: When the rebar legs must penetrate a vapor barrier dip the Stiffy into a bucket of vapor barrier mastic to preserve the seal and eliminate the need to tape the penetrations

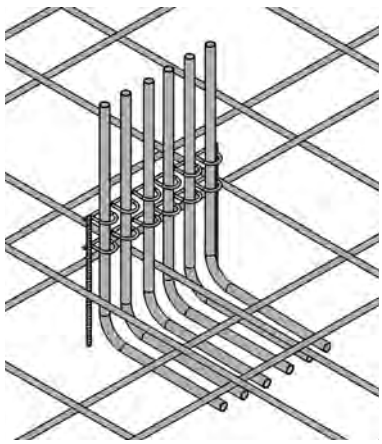


Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	C	Qty
Fig 415													
Fig 415													
Fig 415													

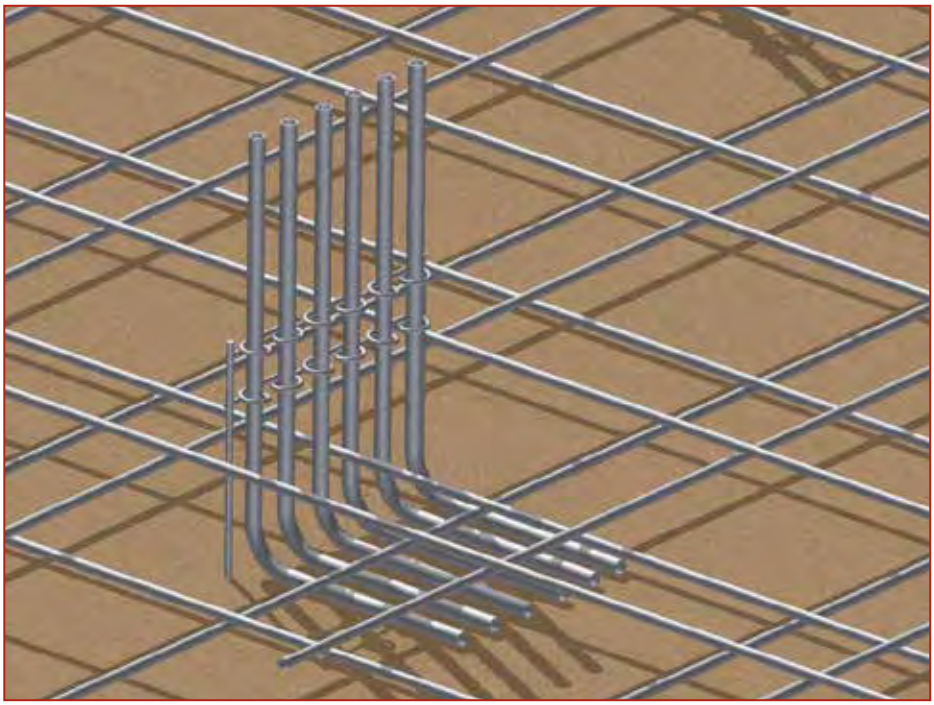
A	B				C
Height (Inches)	Stiffy I.D.		For reference only		Spacing
			GRC/PVC/ENT	PVC Coated Rigid	
(22" Typ.)	*01	.875"	1/2"(.84 OD)		(1/2" min to fit couplings)
	*02	1.125"	3/4"(1.05" OD)		
	*03	1.375"		3/4" (1.13" OD)	
	*04	1.50"	1"(1.32" OD)	1" (1.4" OD)	
	*05	1.75"	1-1/4"(1.66" OD)	1-1/4" (1.74" OD)	
	*06	2.125"	1-1/2"(1.9" OD)	1-1/2" (1.98" OD)	
	*07	2.50"	2"(2.38" OD)	2" (2.46" OD)	
	*08	3.00"	2-1/2"(2.88" OD)	2-1/2" (2.96" OD)	
	*09	3.625"	3"(3.5" OD)	3" (3.58" OD)	
	*10	4.125"	3-1/2"(4" OD)	3-1/2" (4.08" OD)	
	*11	4.625"	4"(4.5" OD)	4" (4.58" OD)	
	*12	Other-Specify Size			

Footnotes:
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2" nom. Pre-sleeved PEX piping = 1.05" O.D.
- 3/4" nom. Pre-sleeved PEX piping = 1.36" O.D.



BUY AMERICAN ACT COMPLIANT

Application Examples



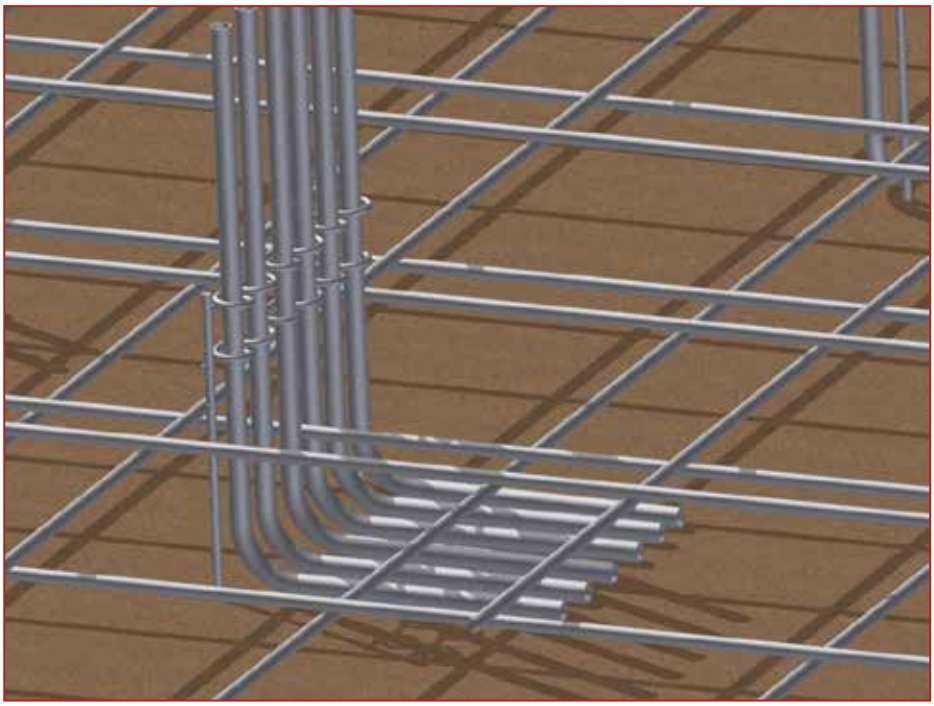
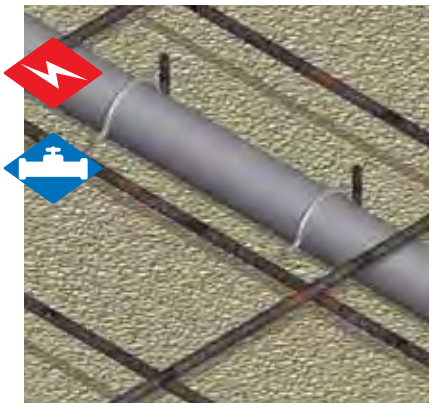


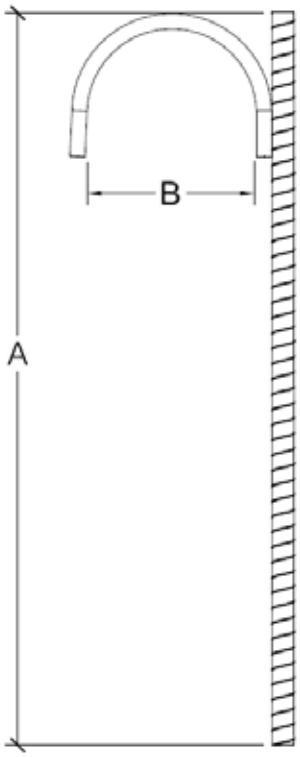
Fig. 420

Stiffy Slab-on-Grade Candy Cane Pipe Support



- Hooks secure conduits in in dirt and sand prior to the concrete pour
- Spacing is easily maintained between conduits
- Offers many additional uses

**Important Note: When the rebar legs must penetrate a vapor barrier dip the Stiffy into a bucket of vapor barrier mastic to preserve the seal and eliminate the need to tape the penetrations

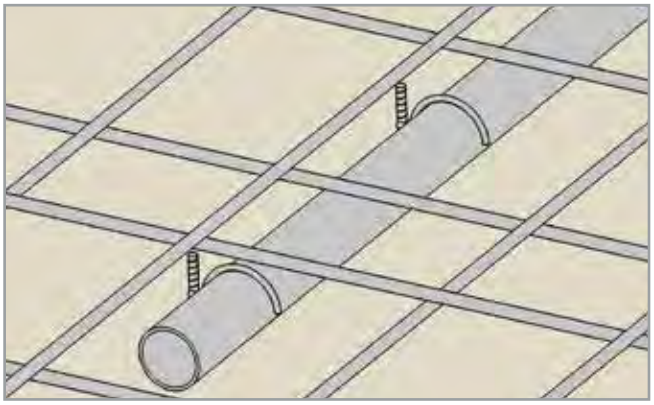


Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

A	B	
Height	Hook I.D.	
(Inches)	*01	1-1/2”
(10” Typ.)	*02	2”
	*03	2-1/2”
	*04	3”
	*05	3-1/2”
	*06	4”
	*11	Other-Specify Size

	A	B	Qty
Fig 420			
Fig 420			
Fig 420			

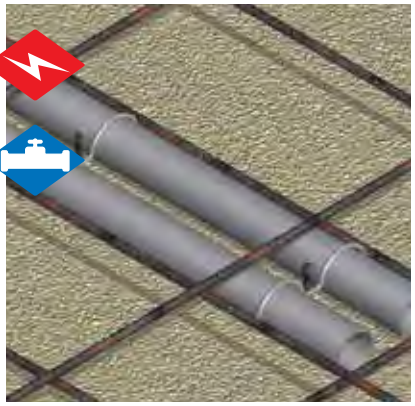
BUY AMERICAN ACT COMPLIANT



Application Examples

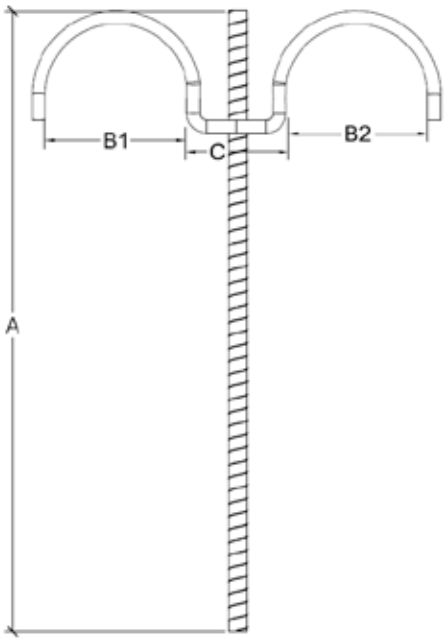
Fig. 421

Stiffy Double Slab-on-Grade Candy Cane Pipe Support



- Hooks secure conduits in in dirt and sand prior to the concrete pour
- Spacing is easily maintained between conduits
- Offers many additional uses

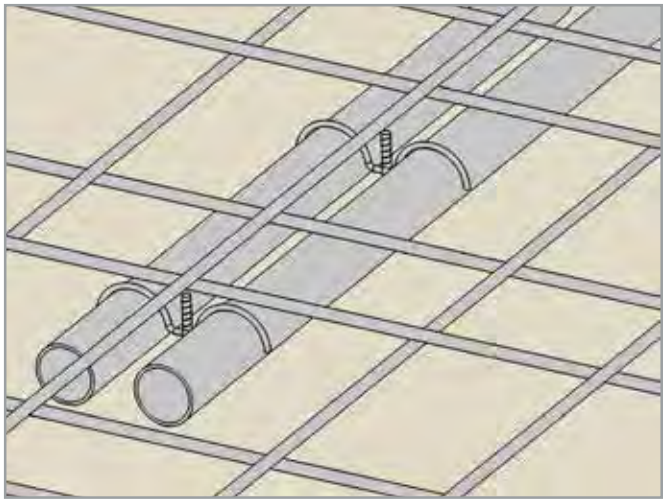
**Important Note: When the rebar legs must penetrate a vapor barrier dip the Stiffy into a bucket of vapor barrier mastic to preserve the seal and eliminate the need to tape the penetrations



Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

	A	B1	B2	C	Qty
Fig 421					
Fig 421					
Fig 421					

A	B1 & B2		C
Height	Hook I.D.		Conduit Spacing
(Inches)	*01	1-1/2”	(7/8” Min)
(10” Typ.)	*02	2”	
	*03	2-1/2”	
	*04	3”	
	*05	3-1/2”	
	*06	4”	
	*11	Other-Specify Size	



Application Examples

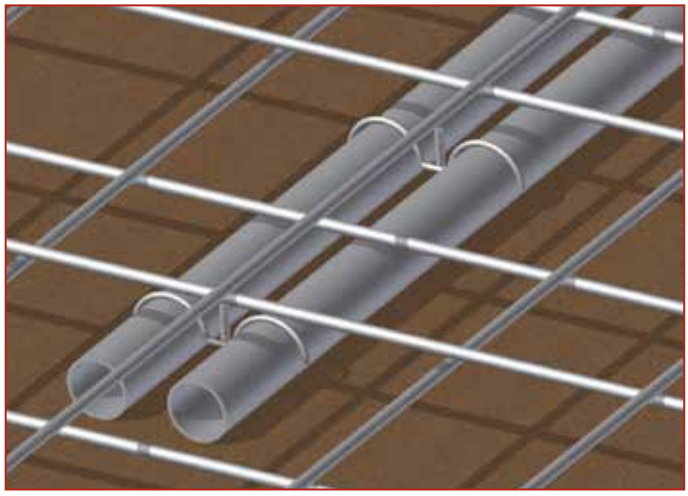
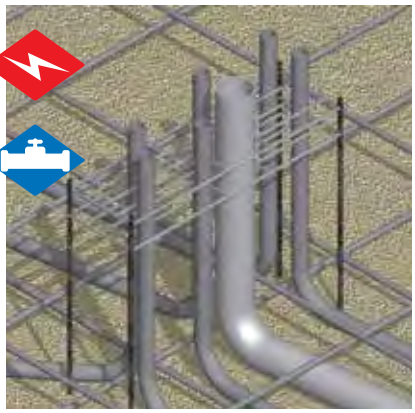
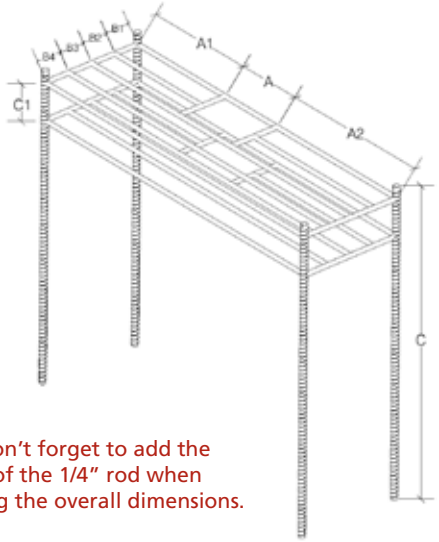


Fig. 430 Stiffy Slab-on-Grade Panel Cage Support



- Provides rigid support for pipes and conduits in dirt and sand prior to the concrete pour
- Cage design accommodates an array of options for terminations into panels
- Offers many additional uses
- Support can extend above the concrete pour to protect the pipe
- Rebar extends above the loops to provide a surface to hammer the supports into the soil



**Important Note: When the rebar legs must penetrate a vapor barrier dip the Stiffy into a bucket of vapor barrier mastic to preserve the seal and eliminate the need to tape the penetrations

Tip: Don't forget to add the width of the 1/4" rod when figuring the overall dimensions.

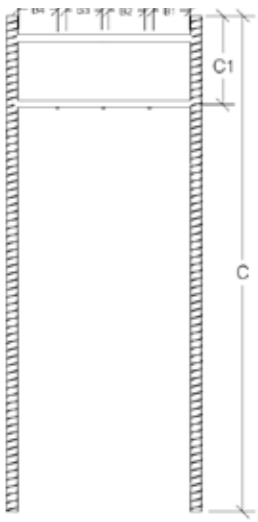
Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

BUY AMERICAN ACT COMPLIANT

	Opening (I.D.)	Length (In.)		Cage Opening				C (In.) Overall Height	C1 (In.) Cage Height	Qty
	A	A1	A2	B1	B2	B3	B4			
Fig 430										
Fig 430										
Fig 430										

*Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.

	Stiffy I.D.	B For reference only	
		GRC/PVC/ENT	PVC Coated Rigid
*01	.875"	1/2"(.84 OD)	
*02	1.125"	3/4"(1.05" OD)	
*03	1.375"		3/4" (1.13" OD)
*04	1.50"	1"(1.32" OD)	1" (1.4" OD)
*05	1.75"	1-1/4"(1.66" OD)	1-1/4" (1.74" OD)
*06	2.125"	1-1/2"(1.9" OD)	1-1/2" (1.98" OD)
*07	2.50"	2"(2.38" OD)	2" (2.46" OD)
*08	3.00"	2-1/2"(2.88" OD)	2-1/2" (2.96" OD)
*09	3.625"	3"(3.5" OD)	3" (3.58" OD)
*10	4.125"	3-1/2"(4" OD)	3-1/2" (4.08" OD)
*11	4.625"	4"(4.5" OD)	4" (4.58" OD)
*12	Other-Specify Size		

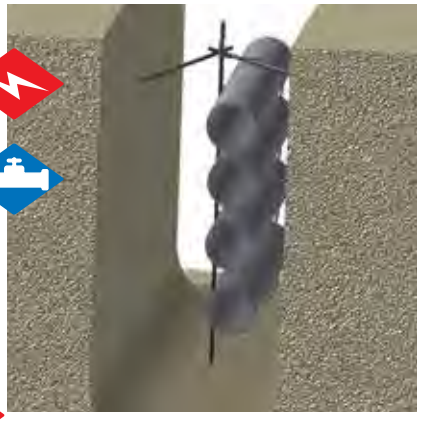


Footnotes:
- Snap in style conduit supports are used for 1/2" and 3/4" GRC/PVC/ENT
- Conduit Clips are used for 1" GRC/PVC/ENT and larger
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2" nom. Pre-sleeved PEX piping = 1.05" O.D.
- 3/4" nom. Pre-sleeved PEX piping = 1.36" O.D.

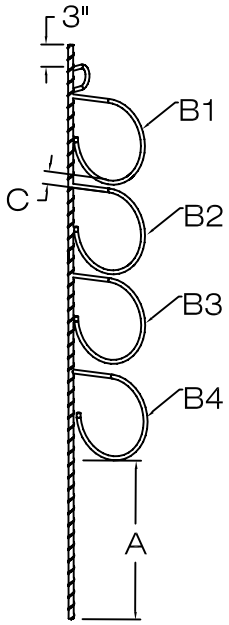
Application Examples

Fig. 450

Stiffy Slab-on-Grade Single Column Trench Rack



- Secures pipes in place while maintaining spacing requirements
- Pipes can be installed into the support before it is installed in the trench
- Once the racks are filled the pipes can be lowered into the trench
- The CEAS Trench Driver can be used to move the loaded racks into the trench and drive it in place.

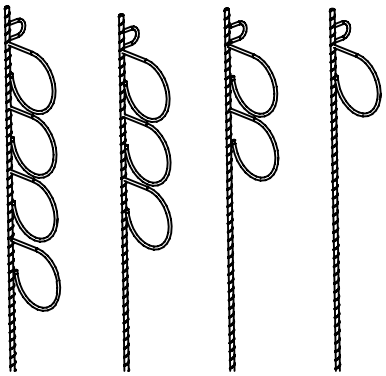


Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

	A	B1	B2	B3	B4	C	Qty
Fig 450							
Fig 450							
Fig 450							

A	B			C
Height (Inches)	Stiffy I.D.		For reference only	Spacing
			GRC/PVC/ENT	PVC Coated Rigid	
	*01	.875"	1/2"(.84 OD)		(1/2" min to fit couplings)
	*02	1.125"	3/4"(1.05" OD)		
	*03	1.375"		3/4" (1.13" OD)	
	*04	1.50"	1"(1.32" OD)	1" (1.4" OD)	
	*05	1.75"	1-1/4"(1.66" OD)	1-1/4" (1.74" OD)	
	*06	2.125"	1-1/2"(1.9" OD)	1-1/2" (1.98" OD)	
	*07	2.50"	2"(2.38" OD)	2" (2.46" OD)	
	*08	3.00"	2-1/2"(2.88" OD)	2-1/2" (2.96" OD)	
	*09	3.625"	3"(3.5" OD)	3" (3.58" OD)	
	*10	4.125"	3-1/2"(4" OD)	3-1/2" (4.08" OD)	
	*11	4.625"	4"(4.5" OD)	4" (4.58" OD)	
	*12	Other-Specify Size			

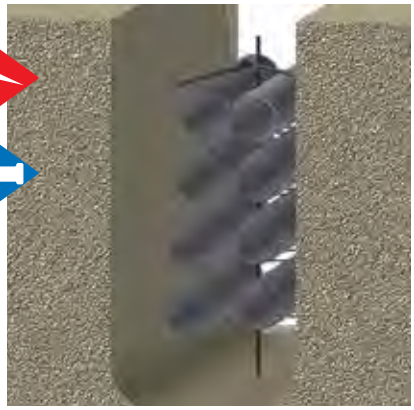
Footnotes:
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2" nom. Pre-sleeved PEX piping = 1.05" O.D.
- 3/4" nom. Pre-sleeved PEX piping = 1.36" O.D.



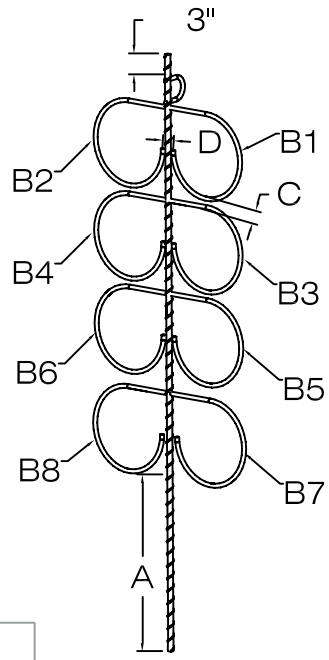
LOOP QUANTITY MAY VARY

Fig. 451

Stiffy Slab-on-Grade Double Column Trench Rack



- Secures pipes in place while maintaining spacing requirements
- Pipes can be installed into the support before it is installed in the trench
- Once the racks are filled the pipes can be lowered into the trench
- The CEAS Trench Driver can be used to move the loaded racks into the trench and drive it in place.



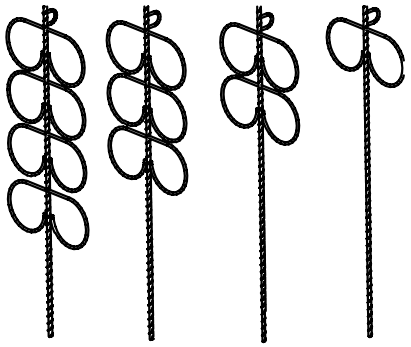
Contractor:	Ship to Address:
PO#	Order Date:
***All Orders are Custom and Therefore Non-cancellable and Non-returnable**	

BUY AMERICAN ACT COMPLIANT

	A	B1	B2	B3	B4	B5	B6	B7	B8	C	D	Qty
Fig 451												
Fig 451												
Fig 451												

A	B			C
Height (Inches)	Stiffy I.D.		For reference only	Spacing
			GRC/PVC/ENT	PVC Coated Rigid	
	*01	.875"	1/2"(.84 OD)		(1/2" min to fit couplings)
	*02	1.125"	3/4"(1.05" OD)		
	*03	1.375"	1"(1.32" OD)	3/4" (1.13" OD)	
	*04	1.50"		1" (1.4" OD)	
	*05	1.75"	1-1/4"(1.66" OD)	1-1/4" (1.74" OD)	
	*06	2.125"	1-1/2"(1.9" OD)	1-1/2" (1.98" OD)	
	*07	2.50"	2"(2.38" OD)	2" (2.46" OD)	
	*08	3.00"	2-1/2"(2.88" OD)	2-1/2" (2.96" OD)	
	*09	3.625"	3"(3.5" OD)	3" (3.58" OD)	
	*10	4.125"	3-1/2"(4" OD)	3-1/2" (4.08" OD)	
	*11	4.625"	4"(4.5" OD)	4" (4.58" OD)	
	*12	Other-Specify Size			

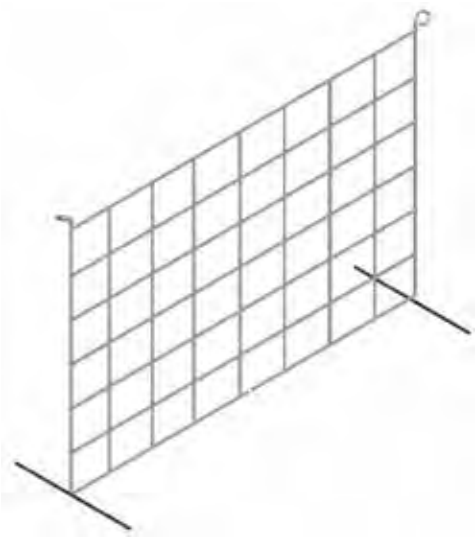
Footnotes:
- Dimensions shown are for conduit OD only. Be sure to oversize the openings to account for couplings.
- 1/2" nom. Pre-sleeved PEX piping = 1.05" O.D.
- 3/4" nom. Pre-sleeved PEX piping = 1.36" O.D.



LOOP QUANTITY MAY VARY

Fig. 452 Stiffy Slab-on-Grade Trench Rack

- Provides a solid support for conduit installed in a trench.
- Enables the installer to do the majority of the work outside of the trench and then lower all of theconduit down at once.
- Zinc plated rod for corrosion resistance
- Custom Made for specific project applications.
- Easily maintain spacing requirements.
- "Mouse Ears" allow stakes to be driven into the side of the trench and eliminates the concern of conduit floatng.

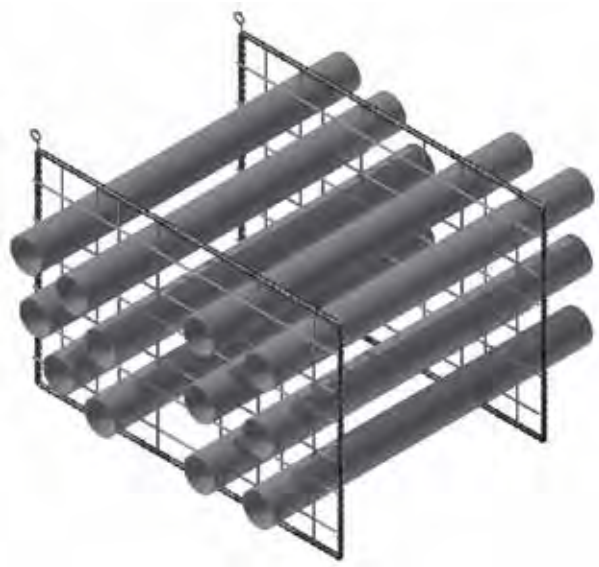


Contractor:	Ship to Address:
PO#	Order Date:
All Orders are Custom and Therefore Non-cancellable and Non-returnable	

To order, provide a sketch of the rack on a separate sheet of paper and CEAS will provide a quote and ETA.

BUY AMERICAN ACT COMPLIANT

Application Examples



INNOVATION SINCE 1977

ELECTRICAL/LOW VOLTAGE-Submittal Request Form

Company Name: _____

Company Address: _____

_____

Contact Name: _____

Contact Telephone: _____

Contact Email: _____

_____

Project Name: _____

Project Address: _____

_____

- ☐ 2009 IBC
- ☐ 2012 IBC
- ☐ 2010 CBC
- ☐ 2013 CBC
- ☐ OSHPD
- ☐ BAA Compliant
- ☐ Other _____

Fastener Options: (Select all that apply)		
Concrete Attachments		
☐	***001**	Powers 1” x 0.145” Smooth Shank (0.300” Head Dia.)
☐	***002**	Powers 1” x 0.157” Spiral Shank (8mm Head Dia.)
☐	***01**	Powers 1-1/4” x 0.145” Smooth Shank (0.300” Head Dia.)
☐	***011**	Powers 1-1/4” x 0.157” Spiral Shank (8mm Head Dia.)
☐	***02**	Powers 1-1/2” x 0.145” Smooth Shank (0.300” Head Dia.)
☐	***021**	Powers 1-1/2” x 0.157” Spiral Shank (8mm Head Dia.)
☐	***03**	1/4” x 3-1/4” Powers SD1 Wedge Anchor
☐	***031**	3/8” x 3” Powers SD1 Wedge Anchor
☐	***04**	5/16” x 2” Tapcon Screw Anchor (1/4” Dia. Hole in Concrete Required)
☐	***041**	3/8” x 2” Tapcon Screw Anchor (3/8” Dia. Hole in Concrete Required)
☐	***13.1**	PowderPuff Standoff with Powers 1 x 0.157” Spiral Shank (8mm Head Dia.)
☐	***13**	PowderPuff Standoff with Powers 1-1/4 x 0.157” Spiral Shank (8mm Head Dia.)
☐	***13.2**	PowderPuff Standoff with Powers 1-1/2 x 0.157” Spiral Shank (8mm Head Dia.)
Steel/Metal Attachments		
☐	***06**	#10 x 1-1/4" HWH Self Drilling Screw
☐	***061**	#14 x 2” HWH Self Drilling Screw
☐	***07**	#10 x 1-1/4” HWH Sharp Point Screw
☐	***09**	Wide Mouth Beam Clamp
☐	***12.1**	360° Hammer-On Beam Clamp (1/8" -1/4" Flange)
☐	***12.2**	360° Hammer-On Beam Clamp (5/16” -1/2” Flange)
☐	***12.3**	360° Hammer-On Beam Clamp (9/16” -3/4” Flange)
☐	***16**	Stiffy Hammer-On Beam Clamp
☐	***17**	Stiffy Pull Down Beam Clamp
Wood Attachments		
☐	***07**	#10 x 1-1/4 HWH Sharp Point Screw “
☐	***08**	CEAS Timberpin -2-1/2” x 0.169 Ring Shank Nail with 0.300” Head Diameter
☐	***14**	Stiffy Wood Pull Down Footprint
☐	***18**	1/4” X 2-1/2” Hex Lag

Data Assemblies: (Select all that apply)					
☐	**Fig 100**	Stiffy Straight Rod	☐	**Fig 221**	Stiffy LV Radius Drop Trapeze
☐	**Fig 102**	Threaded Stiffy	☐	**Fig 222**	Stiffy LV Triangle Trapeze
☐	**Fig 200**	Stiffy with Comfort Cradle	☐	**Fig 223**	Stiffy Wall Mount Trapeze
☐	**Fig 201**	Stiffy Clip-on Comfort Cradle	☐	**Fig 224**	Stiffy Wall Mount Trapeze
☐	**Fig 202**	Stiffy Wall Rack Support	☐	**Fig 240**	Bridle Ring Stiffy
☐	**Fig 203**	Stiffy Fixed Wall Rack Support	☐	**Fig 241**	Stiffy D-Ring
☐	**Fig 204**	Stiffy Double Wall Rack Support	☐	**Fig 250**	Stiffy Wall Sleeves
☐	**Fig 205**	Stiffy “Shorty” Comfort Cradle	☐	**Fig 251**	Stiffy DAS Antenna Support
☐	**Fig 206**	Stiffy Data Tree	☐	**Fig 252**	Stiffy Module Support
☐	**Fig 220**	Stiffy Low Voltage Trapeze			

Additional Products			

Electrical Assemblies: (Select all that apply)		
☐	**Fig 100**	Stiffy Straight Rod
☐	**Fig 101**	Stiffy Stacker
☐	**Fig 102**	Threaded Stiffy
☐	**Fig 104**	Threaded Stiffy with Hanger
☐	**Fig 105**	Threaded Stiffy w/Hard Concrete Foot
☐	**Fig 106**	Stiffy Temp Power Support
☐	**Fig 111**	Stiffy SER Stacker
☐	**Fig 120**	Stiffy Crossbar Trapeze
☐	**Fig 121**	Stiffy Trapeze
☐	**Fig 123**	Stiffy Cradle Crossbar Trapeze
☐	**Fig 124**	Stiffy Snap-in Trapeze
☐	**Fig 125**	Stiffy Strut Trapeze
☐	**Fig 127**	Stiffy Wall Mounted Snap-in Trapeze
☐	**Fig 128**	Stiffy Snap-in Wall Rack
☐	**Fig 129**	Stiffy HD Cross Bar Trapeze
☐	**Fig 130**	Stiffy HD 2-Tier Cross Bar Trapeze
☐	**Fig 140**	Stiffy Multi Stacker Support
☐	**Fig 144**	2-tier Stiffy Multi Stacker Support
☐	**Fig 160**	Stiffy Stud Spanner
☐	**Fig 161**	Stiffy Gripper
☐	**Fig 162**	Fixed Stiffy Stud Spanner
☐	**Fig 163**	Stiffy Adjustable Stud Spanner
☐	**Fig 190**	Pre-Fabricated Trapeze
☐	**Fig 191**	2-Tiered Pre-Fabricated Trapeze
☐	**Fig 192**	Single Clevis or J Hanger

Cast-in-Place Assemblies: (Select all that apply)		
☐	**Fig 333**	Stiffy CIP Strut Block Out
☐	**Fig 380**	Cast-in-Place Stiffy Jack Chain Loop
☐	**Fig 381**	Cast-in-Place Stiffy Straight Rod
☐	**Fig 382**	Cast-in-Place Stiffy Threaded Support
☐	**Fig 336**	Cast-in-Place Stiffy Anchor Bolt
☐	**Fig 337**	Cast-in-Place Stiffy Strut Anchor
☐	**Fig 338**	Cast-in-Place Double Strut Anchor

Blue Banger Hangers & Push Rods: (Select all that apply)		
☐	**PIP143812**	BBH 1/4”, 3/8” and 1/2” Poured in Place
☐	**PIP381258**	BBH 3/8”, 1/2 and 5/8” Poured in Place
☐	**PIP5834**	BBH 5/8” and 3/4” Poured in Place
☐	**SDI143812**	BBH 1/4”, 3/8” and 1/2” Steel Deck Inserts
☐	**SDI381258**	BBH 3/8”, 1/2 and 5/8” Steel Deck Inserts
☐	**SDI5834**	BBH 5/8” and 3/4” Steel Deck Inserts
☐	**RDI143812**	BBH 1/4”, 3/8” and 1/2” Roof Deck Inserts
☐	**PRPIP3812**	Push Rod SDI 3/8” & 1/2”
☐	**PRSIP3812**	Push Rod SDI 3/8” and 1/2”

INNOVATION SINCE 1977

PLUMBING/MECHANICAL-Submittal Request Form

Company Name: _____

Company Address: _____

_____

Contact Name: _____

Contact Telephone: _____

Contact Email: _____

_____

Project Name: _____

Project Address: _____

_____

- ☐ 2009 IBC
- ☐ 2012 IBC
- ☐ 2010 CBC
- ☐ 2013 CBC
- ☐ OSHPD
- ☐ BAA Compliant
- ☐ Other _____

Fastener Options: (Select all that apply)		
	*00	No Fastener
	*01	1-1/4" Power Actuated Pin
	*02	1-1/2" Power Actuated Pin
	*03	1/4" x 3-1/4" Wedge Anchor (2" Embed)
	*03.1	3/8" x 3" Wedge Anchor (2" Embed)
	*04	1/4" x 1-3/4" Concrete Screw Anchor
	*04.1	3/8" x 1-3/4" Concrete Screw Anchor
	*06	#10 Hex Washer Head Self Driller
	*06.1	#14 Hex Washer Head Self Driller
	*07	#10 Hex Washer Head Sharp Point
	*08	Timberpin (Wood Applications)
	*09	Wide Mouth Beam Clamp
	*12	Hammer-on Beam Clamp—360°
	*13	PowderPuff Pin-1" Embedment
	*14	Stiffy Wood Pull Down Attachment
	*16	Hammer-on Beam Clamp 1/8"-3/4" Flange
	*17	Bar Joist Pull Down Clamp 1/16"-1/4" Flange
	*25	Other - Please specify

Mech/Plumbing Assemblies: (Select all that apply)		
	Fig 100	Stiffy Straight Rod
	Fig 102	Threaded Stiffy
	Fig 104	Threaded Stiffy with Hanger
	Fig 105	Threaded Stiffy w/Hard Concrete Foot
	Fig 106	Stiffy Temp Power Support
	Fig 107	Stiffy Snap Clip
	Fig 108	Stiffy Insulated Pipe Stacker
	Fig 109	Stiffy Clip-on Insulated Pipe Stacker
	Fig 110	Stiffy Threaded Insulated Pipe Stacker
	Fig 125	Stiffy Strut Trapeze
	Fig 131	Stiffy Snap Trapeze
	Fig 132	Stiffy Wall Mount Snap Trapeze
	Fig 133	Stiffy Snap Wall Rack
	Fig 134	Stiffy PEX Trapeze
	Fig 180	Stiffy Round Duct Support
	Fig 190	Pre-Fabricated Trapeze
	Fig 191	2-Tiered Pre-Fabricated Trapeze
	Fig 192	Single Clevis or J Hanger
	Fig 195	Stiffy Gull Wing Line Set Support
	Fig 196	Stiffy Line Set Support

Additional Products	

Cast-in-Place Assemblies: (Select all that apply)		
	Fig 300	Cast-in-Place Stiffy Tree
	Fig 301	Single Loop Cast-in-Place Stiffy Tree
	Fig 302	Double Loop Cast-in-Place Stiffy Tree
	Fig 303	Triple Loop Cast-in-Place Stiffy Tree
	Fig 312	Cast-in-Place Loop Trapeze
	Fig 313	Cast-in-Place 2 Tiered Loop Trapeze
	Fig 314	Stiffy Snap-in Cast-in-Place Trapeze
	Fig 330	Stiffy Cast-in-Place Deck Sleeve
	Fig 331	Stiffy Single Row CIP Deck Sleeve
	Fig 332	Stiffy Double Row CIP Deck Sleeve
	Fig 333	Stiffy Cast-in-Place Strut Block Out
	Fig 336	Stiffy Anchor Bolt
	Fig 337	Stiffy Cast-in-Place Strut Anchor
	Fig 338	Stiffy Cast-in-Place Double Strut Anchor
	Fig 370	Stiffy Metal Deck Sleeve
	Fig 371	Stiffy Single Row Metal Deck Sleeve
	Fig 372	Stiffy Double Row Metal Deck Sleeve
	Fig 380	Cast-in-Place Stiffy Jack Chain Loop
	Fig 381	CIP Straight Rod with Pig Tail Loop
	Fig 382	CIP Threaded Straight Rod w/Pig Tail Loop

Slab-on-Grade Assemblies: (Select all that apply)		
	Fig 401	Single Loop Slab-on-grade Stiffy Stake
	Fig 402	Double Loop Slab-on-grade Stiffy Stake
	Fig 403	Triple Loop Slab-on-grade Stiffy Stake
	Fig 404	Quad Loop Slab-on-grade Stiffy Stake
	Fig 410	Stiffy Snap-in Slab-on-Grade Trapeze
	Fig 414	Stiffy Single Loop Slab-on-Grade Trapeze
	Fig 415	Stiffy Double Loop Slab-on-Grade Trapeze
	Fig 420	Stiffy SOG Candy Cane Pipe Support
	Fig 421	Stiffy SOG Double Candy Cane Pipe Sup.
	Fig 430	Stiffy Slab-on-Grade Panel Cage

Blue Banger Hangers & Push Rods: (Select all that apply)		
	PIP143812	BBH 1/4", 3/8" and 1/2" Poured in Place
	PIP381258	BBH 3/8", 1/2 and 5/8" Poured in Place
	PIP5834	BBH 5/8" and 3/4" Poured in Place
	SDI143812	BBH 1/4", 3/8" and 1/2" Steel Deck Inserts
	SDI381258	BBH 3/8", 1/2 and 5/8" Steel Deck Inserts
	SDI5834	BBH 5/8" and 3/4" Steel Deck Inserts
	RDI143812	BBH 1/4", 3/8" and 1/2" Roof Deck Inserts
	PRPIP3812	Push Rod SDI 3/8" & 1/2"
	PRSIP3812	Push Rod SDI 3/8" and 1/2"

Create Your Own Stiffy
Fig. XXX

Stiffy Supports work on jobsites because that is where they are designed. Many of the Stiffy designs that are contained in this product manual were designed from significant input from contractors. If you have an idea for a Stiffy that will take care of a project problem, simply follow the steps below:

Step 1 - Sketch an idea for a new support and request a sample by contact your sales representative.

Step 2 - The concept is reviewed by the CEAS engineering department. Once the concept is approved by engineering a prototype is returned to the jobsite.

Step 3 - The prototype is reviewed by the contractor and application suitability is determined.

Step 4 - Submittal documents including a stamp from a Structural Engineer are provided for the project when requested.

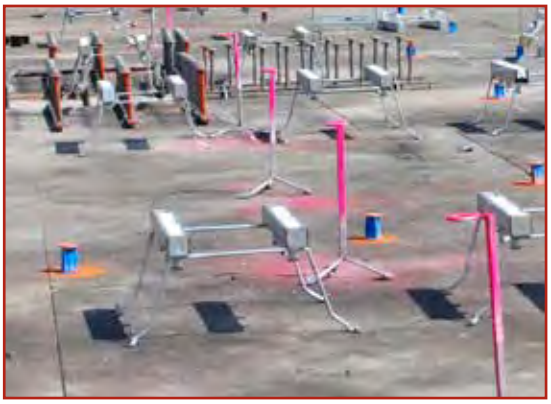
Step 5 - Order is placed and material is shipped to the jobsite ready for installation.

Helpful Tips
- Max capacity of a Stiffy Footprint is 70#
- For fastener options refer to page 6
- Refer to pages 9-10 for EMT and MC weight/linear foot (The weights listed on the EMT tables include the weight of the conductors)
- Total Load / Support = Utility Weight/LF x Support Spacing

Custom Stiffy Examples







INNOVATION SINCE 1977

Create Your Own Stiffy

Fig. XXX

Contractor:	
Contact Name:	
Contact Number:	
Project Name:	
Project Address	

stiffy

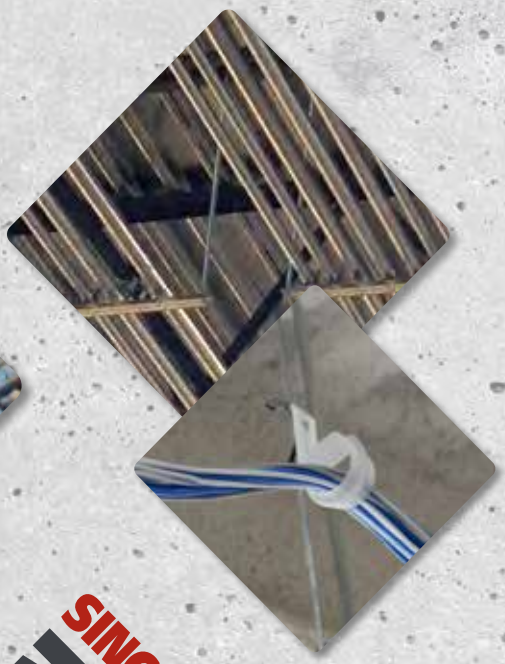
ROD SUPPORTS

100 SERIES ELECTRICAL SUPPORTS

200 SERIES LOW VOLTAGE SUPPORTS

300 SERIES CAST-IN-PLACE SUPPORTS

400 SERIES SLAB-ON-GRADE SUPPORTS



CCEAS

SINCE 1977

CONSTRUCTION SOLUTIONS

ENGINEERED ATTACHMENT

ARROW

A DISTRIBUTOR OF STIFFY PRODUCTS

www.arrowwire.com

(800) 659-3655

c UL us LISTED

BUY AMERICAN ACT COMPLIANT