

## Product Description

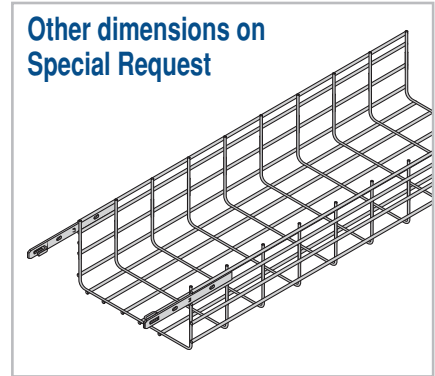
ACROFIL® is a welded wire mesh cable management system produced from high strength steel wires. ACROFIL is produced by first welding a net, forming the channel, and then finishing. The 50mmX100mm wire spacing permits continuous airflow to help prevent heat buildup. In addition this unique open design prevents the buildup of dust, contaminants and bacterial proliferation.

ACROFIL is produced in standard 3m lengths and is supplied in 2 standard depths: 50 and 100mm.

ACROFIL is offered in nine different widths:

50 mm,	400mm,
100mm,	450mm,
150mm,	500mm,
200mm,	600mm
300mm.	

Special sizes are available to meet your unique requirements.



### [Standard Finish] Zinc Plated (ZP) – (AS 1789)

Channel, fittings and components are electroplated generally in accordance with AS 1789. Fasteners are electroplated generally in accordance with AS 1897.

### Hot Dip Galvanised (HG) – (AS/NZS 4680)

Coatings are applied generally in accordance with AS/NZS 4680. The thickness of the coating is dependent on the material thickness of the component being galvanised. It should be noted that due to the galvanising process, the thickness of the coating will vary over the surface and should be taken into account during component assembly. It may be necessary to remove excess build-up prior to use.

### 316 Type Stainless Steel (SS)

Corrosive resistant stainless steel with no additional surface treatment. This material option provides the best corrosion resistance available. Stainless steel is used primarily in marine environments or food processing facilities.

### Other – Powder Coated (PC), Galvabond (GB), Plain (PL) and Grade 304 Stainless Steel (SS304).

When specific applications require other commercially available finishes, they can be supplied according to specification.

### How To Order

Part numbers shown in the catalog are for the standard zinc plated finish. For special order finishes, add the finish code as a suffix.

### Example

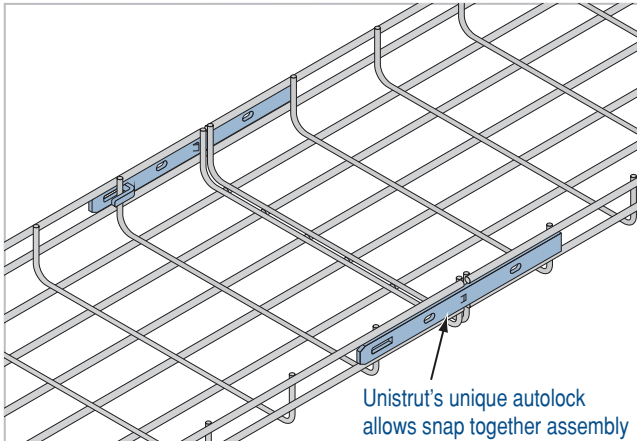
AF50-300 is zinc plated.  
AF50-300-SS is stainless steel type 316.

### Masses and Dimensions

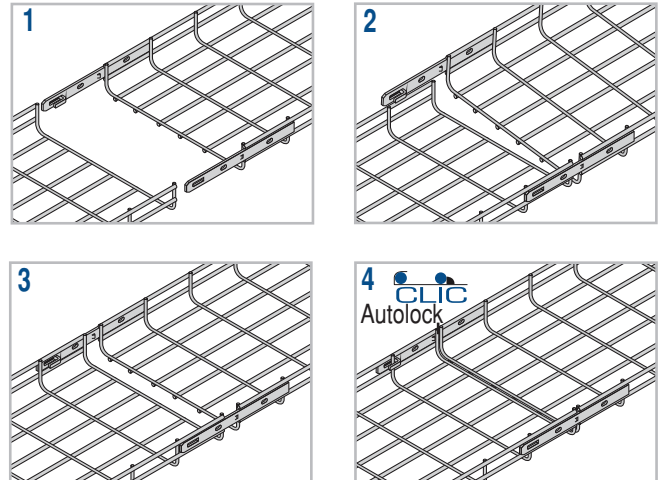
Masses given for all material are approximate shipping weights. All dimensions subject to commercial tolerance variations.

Self-Splicing Straight Lengths

ACROFIL's exclusive autolock splicing system makes connecting ACROFIL fast and simple. The Autolock, or self splicing bars which come pre-installed on ACROFIL systems, eliminates the need for a typical nut and bolt type connection. For proper grounding of ACROFIL please refer to page 66.

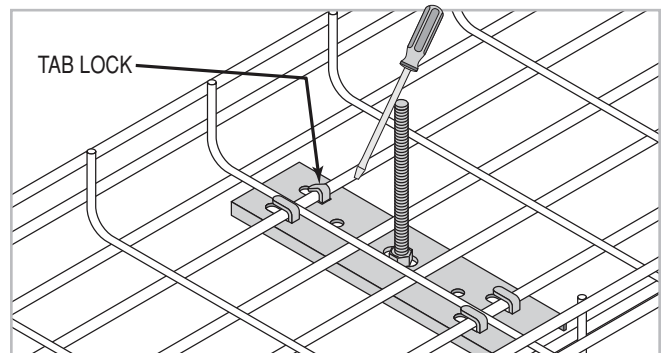
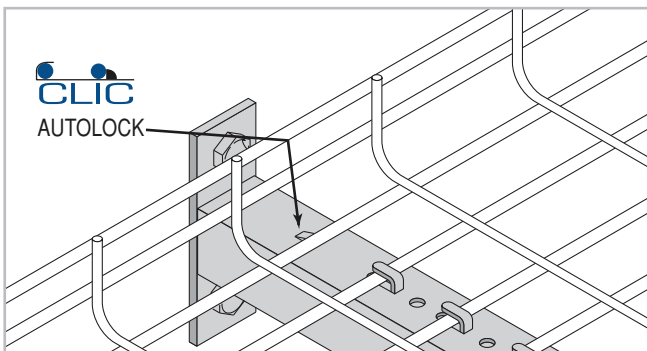


ACROFIL Assembly - AF50, AF100, & AF150



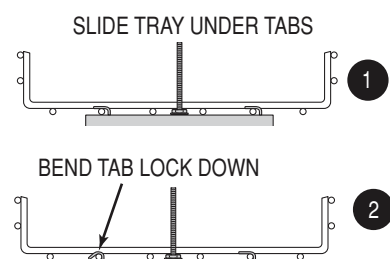
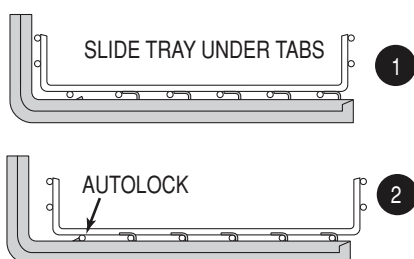
- Step 1** Align the trays as shown.
- Step 2** While raising the rear edge of the male connection, slide the tray forward, but do not engage the locking clip.
- Step 3** Push the rear locking clip over the back edge of the tray.
- Step 4** Slide the tray forward to engage both front and rear locking clips.

Accessory Assembly



Many of the ACROFIL wire basket accessories feature the unique autolock. Just slide the tray under the tabs and then push down to engage the autolock. No tools, bending, or attachments are required for a secure connection.

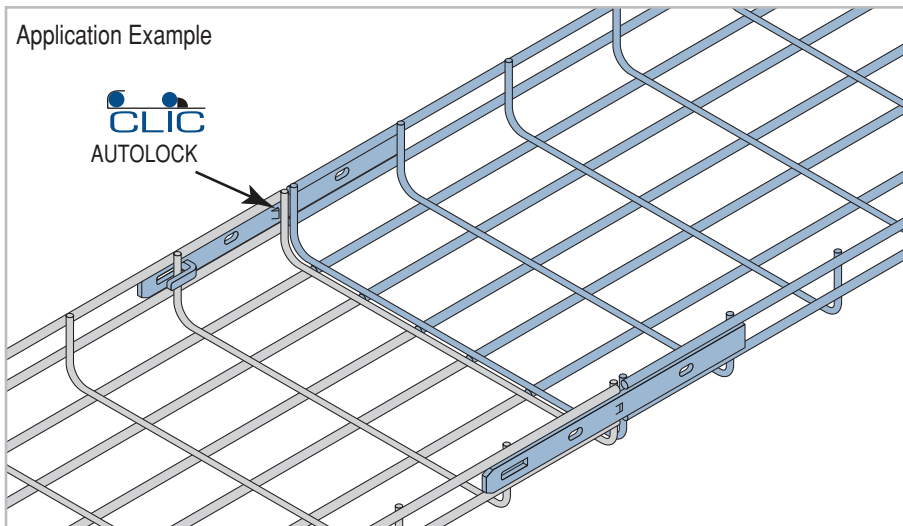
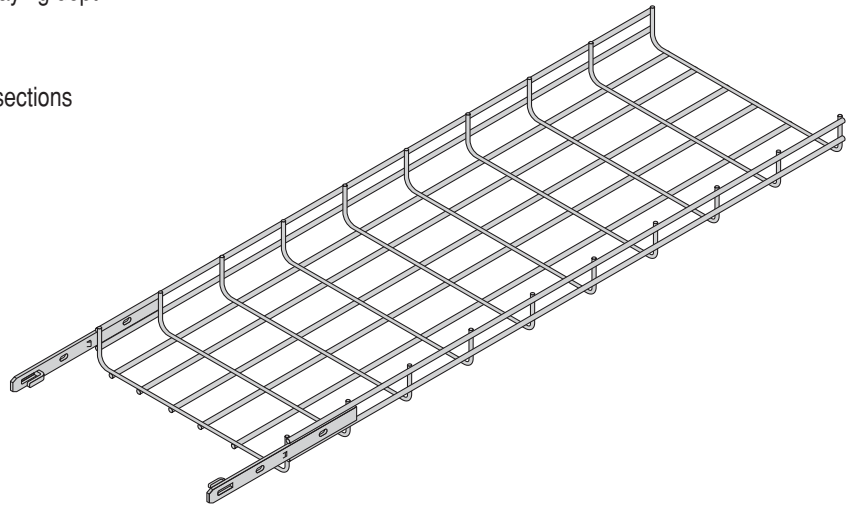
For accessories which use the tab lock, the tray is secured by using a screw driver to gently bend one of the tabs down over the tray.



# ACROFIL® – DOUBLE ROD REINFORCED TRAY (50MM DEPTH)

## Double Rod Reinforced Tray (50mm Depth) [AF50-{W}]

- Double rod reinforced tray has a 50mm cable laying depth
- Standard length of tray is 3m
- Standard finish is zinc plated
- No hardware is necessary to connect straight sections
- For continuous grounding use AF-GCLIP (See page 66.)



Part Description		Width Nominal (mm)	Depth (mm)	Wt. (kg) (piece)	Loading (kg/m)		
					1.5m Span	2.0m Span	2.5m Span
	AF50-50	50	50	1.9	25.1	17.8	13.1
	AF50-100	100	50	2.6	34.2	23.3	17.2
	AF50-150	150	50	3.6	56.3	36.6	27.8
	AF50-200	200	50	4.2	58.7	39.2	29.8
	AF50-300	300	50	5.5	64.0	39.3	29.0
	AF50-400	400	50	8.1	89.4	49.4	36.5
	AF50-450	450	50	8.8	97.5	53.9	39.8
	AF50-500	500	50	9.5	105.4	63.0	46.5
	AF50-600	600	50	10.8	114.9	68.7	50.7

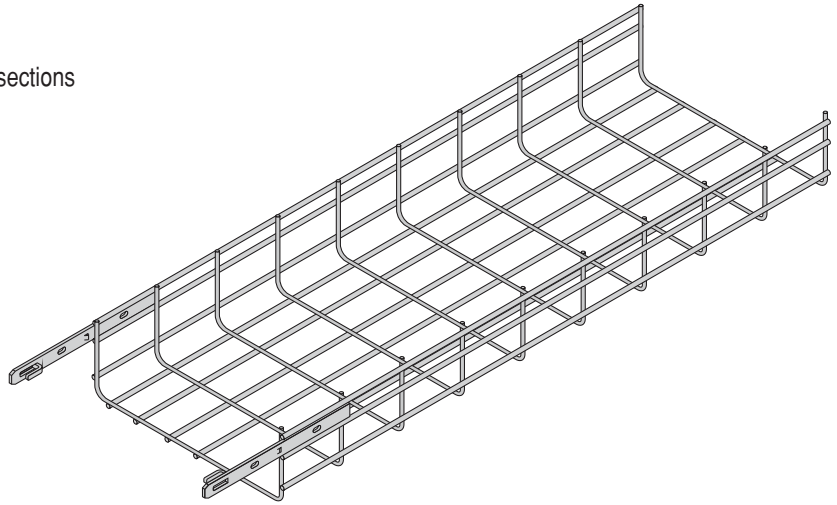
Load Values are determined by IEC61537 testing. Copies of load tests available upon request.

Safety Factor 1.7

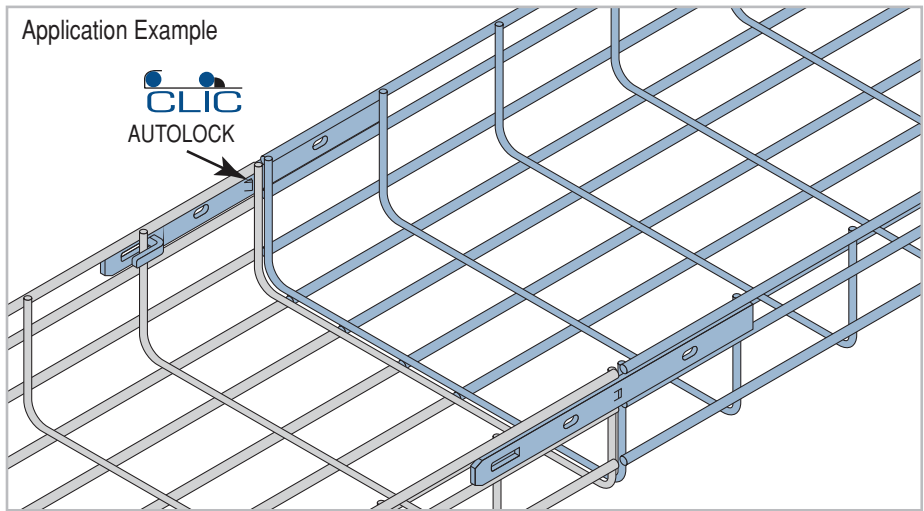
# ACROFIL® – TRIPLE ROD REINFORCED TRAY (100MM DEPTH)

## Triple Rod Reinforced Tray (100mm Depth) [AF100-(W)]







- Triple rod reinforced tray has a 100mm cable laying depth
- Standard length of tray is 3m
- Standard finish is zinc plated
- No hardware is necessary to connect straight sections
- For continuous grounding use AF-GCLIP  
(See page 66.)



Cable Support Systems



Acrofil Wire Basket

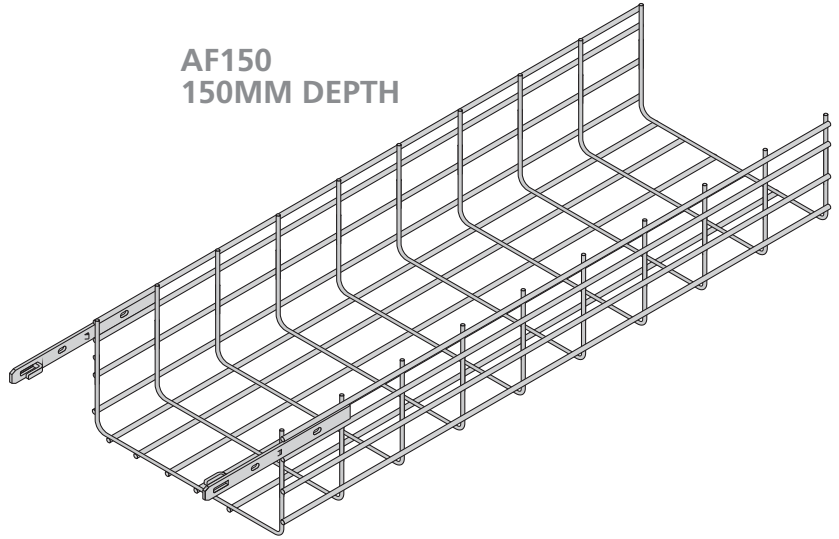
Part Description	Width Nominal (mm)	Depth (mm)	Wt. (kg) (piece)	Loading (kg/m)		
				2.0m Span	2.5m Span	3.0m Span
 AF100-100	100	100	4.2	69.6	54.2	41.2
 AF100-200	200	100	5.5	78.4	58.4	46.4
 AF100-300	300	100	8.1	109.9	85.0	67.4
 AF100-400	400	100	9.5	129.3	96.1	76.3
 AF100-500	500	100	10.8	151.0	119.7	95.0
 AF100-600	600	100	17.6	164.6	130.5	103.6

Load Values are determined by IEC61537 testing. Copies of load tests available upon request.  
Safety Factor 1.7

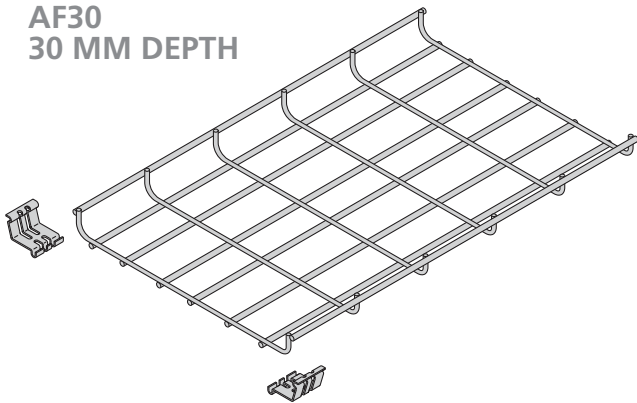
## Other Products Available at Special Request

- Quadruple rod reinforced tray (150mm depth)
- Heavy duty cable tray
- Single rod tray available (30mm depth)

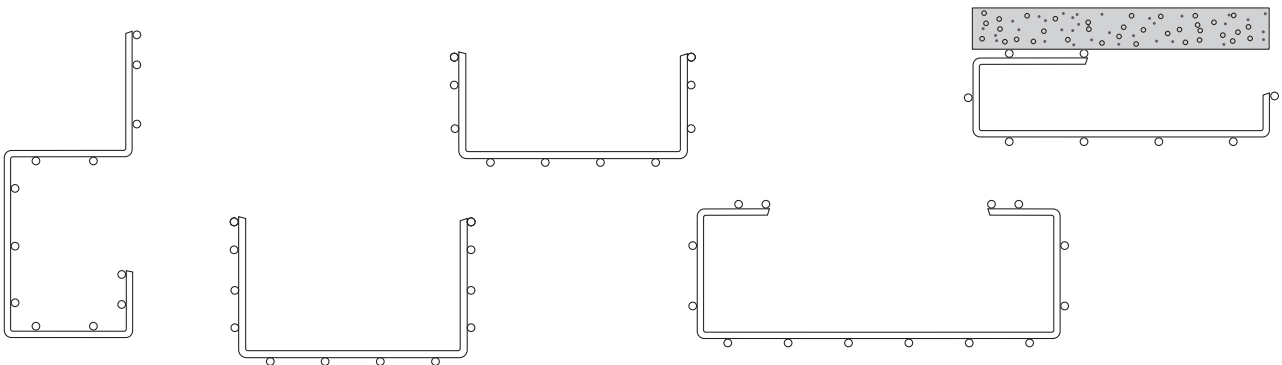
AF150  
150MM DEPTH



AF30  
30 MM DEPTH



## Custom Made Tray Examples



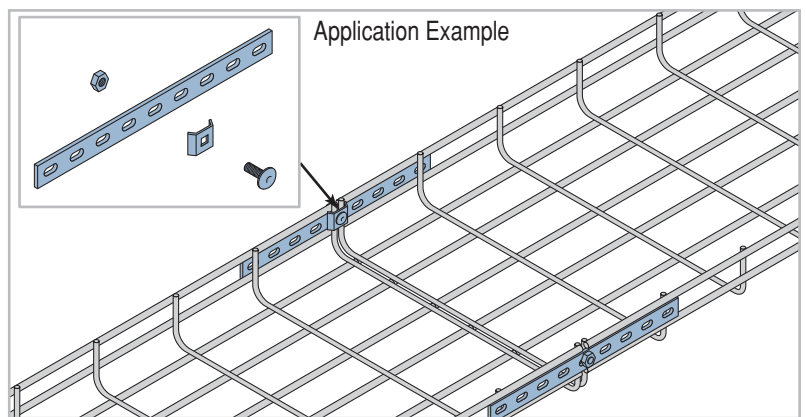
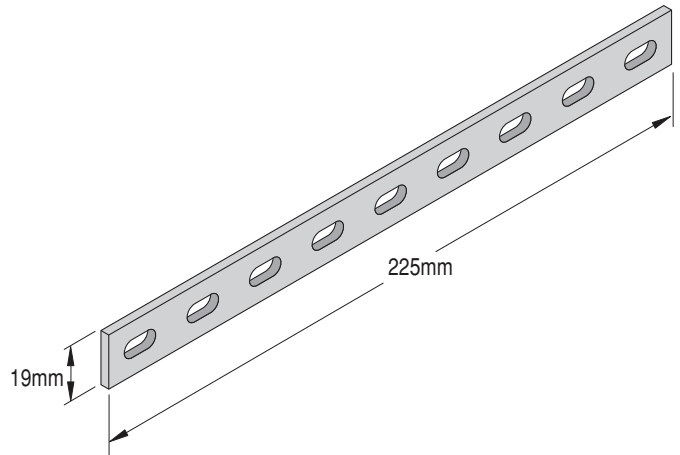
**AF-SPLICE**

Weight: 0.13kg/each

- Splice bar connector is 19mm x 225mm long
- Standard finish is zinc plated
- Connect using AF-KITCH3 (sold separately)
- Bend 90° for use as an angle connector

NOTES:

1. Always place nut on outside of tray
2. For use with AF50, AF100 & AF150 tray
3. The splice connector is used connect remnant sections of tray cut from standard lengths and to field fabricate fittings.



**Bend & Intersection Bars**

**AF-TBAR1100**

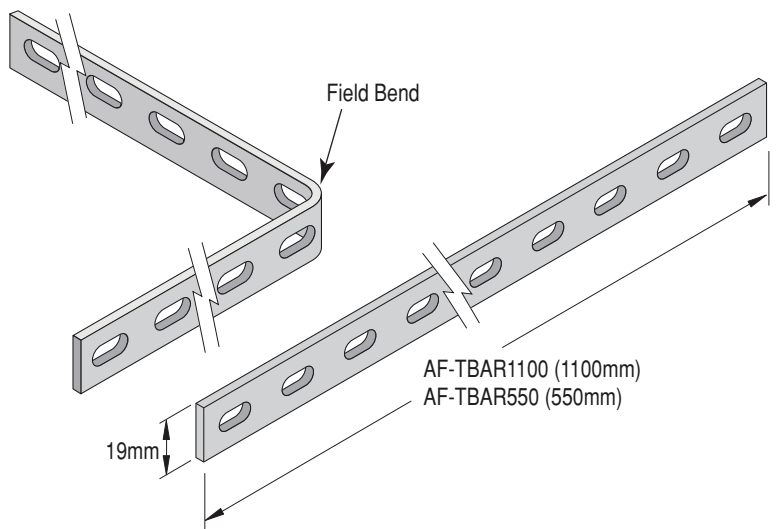
Weight: 0.65/each

- AF-TBAR1100 connector is 19mm x 1100mm long
- Connect using AF-KITCH3 (sold separately)
- Bend 90° for use as an angle connector

**AF-TBAR550**

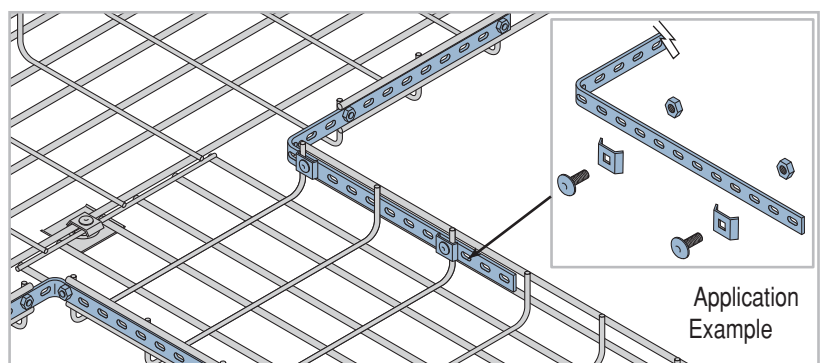
Weight: 0.32 kg/each

- AF-TBAR550 connector is 19mm x 550mm long
- Connect using AF-KITCH3 (sold separately)



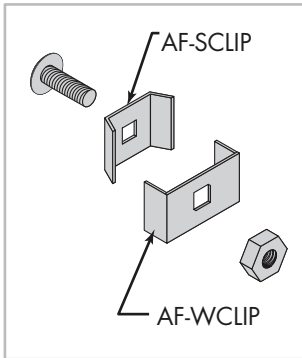
NOTES:

1. Always place nut on outside of tray
2. For use with AF50, AF100 & AF150 tray
3. Used for tees which require a heavier support
4. These bars are normally cut to appropriate length

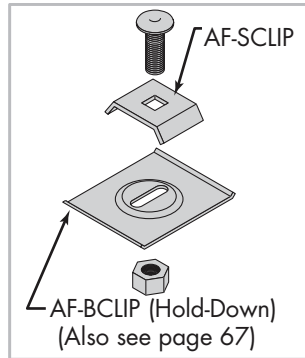


## Connector Hardware Overview

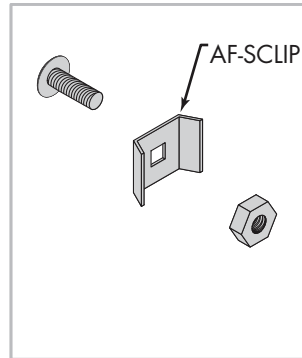
### AF-KITCH1



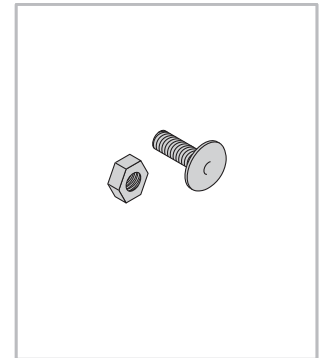
### AF-KITCH2



### AF-KITCH3



### AF-EG-CBN



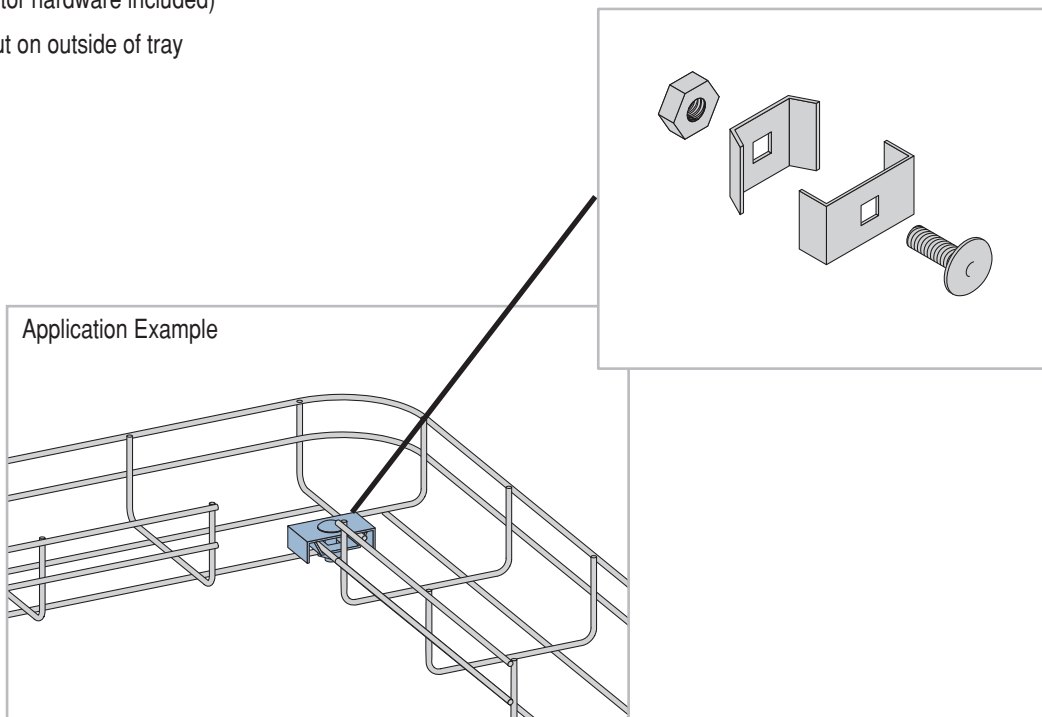
Part Kit	Weight (kg)	NO./ PKG
AF-KITCH1	0.32	10
AF-KITCH2	0.53	10
AF-KITCH3	0.20	10
AF-EG-CBN	0.09	10

Single Part	Weight (kg)	NO./ PKG
AF-SCLIP	0.20	10
AF-WCLIP	0.31	10
AF-BCLIP	0.92	10

## Connector Kit [AF-KITCH1]

- Standard bar connector is 30mm x 18mm
- Standard finish is zinc plated
- Sold in packs of 10  
(AF-EG-CBN connector hardware included)

NOTE: Always place nut on outside of tray

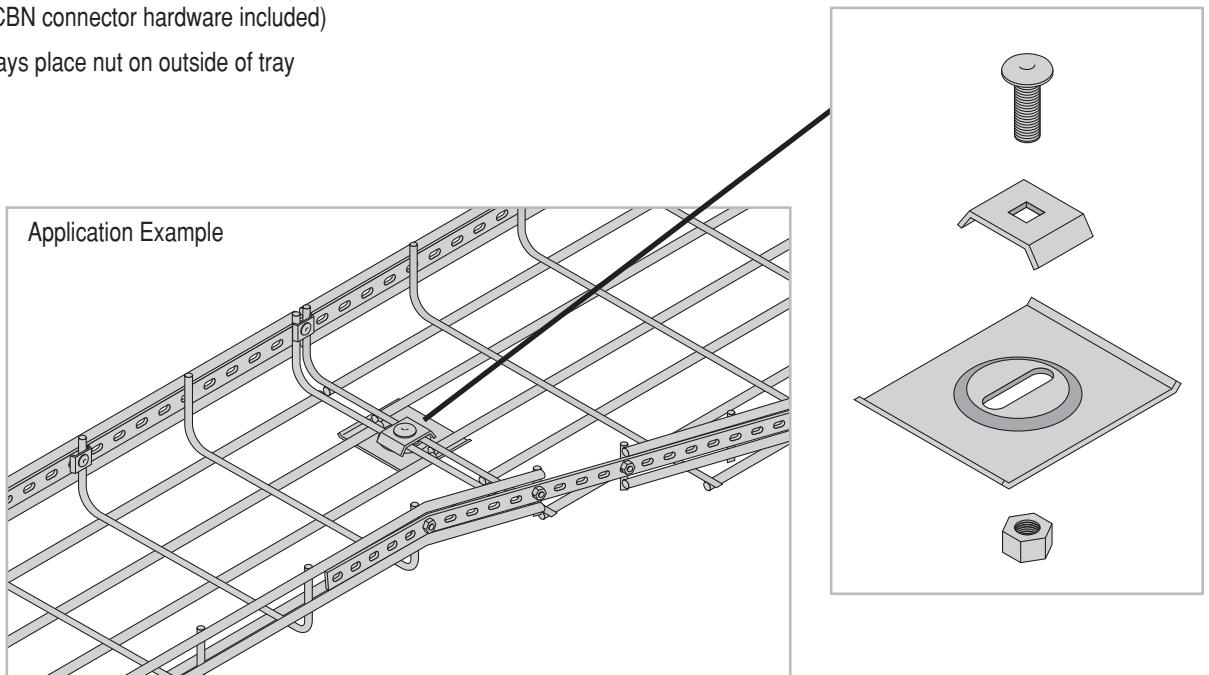




**Connector Kit [AF-KITCH2]**

- Bottom connector is 50mm x 60mm
- Standard finish is zinc plated
- Sold in packs of 10  
(AF-EG-CBN connector hardware included)

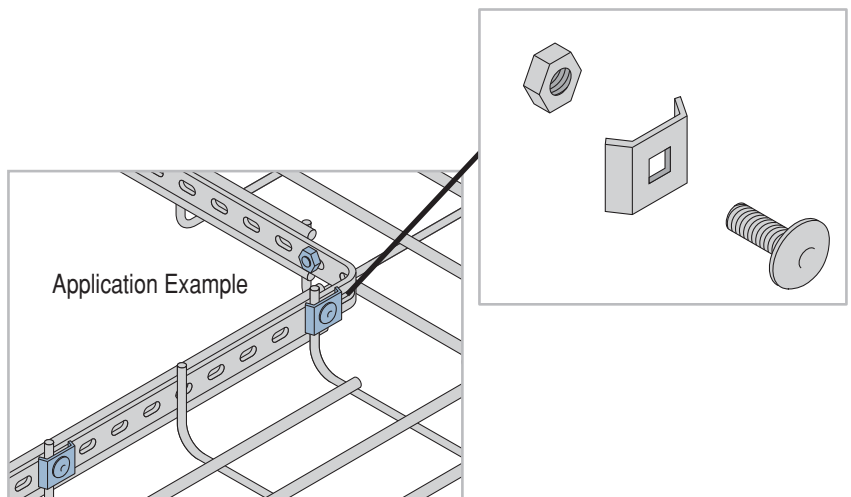
NOTE: Always place nut on outside of tray



**Connector Kit [AF-KITCH3]**

- Universal connector is 18mm x 24mm
- Standard finish is zinc plated
- Sold in packs of 10  
(AF-EG-CBN connector hardware included)

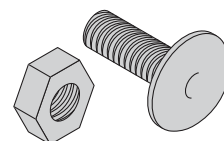
NOTE: Always place nut on outside of tray



**Connector Hardware [AF-EG-CBN]**

- M6 x 20 Carriage bolt
- M6 Hex nut
- Standard finish is zinc plated
- Sold in packs of 10 each

NOTE: Always place nut on outside of tray

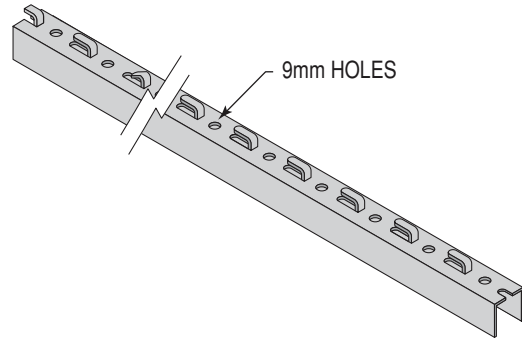




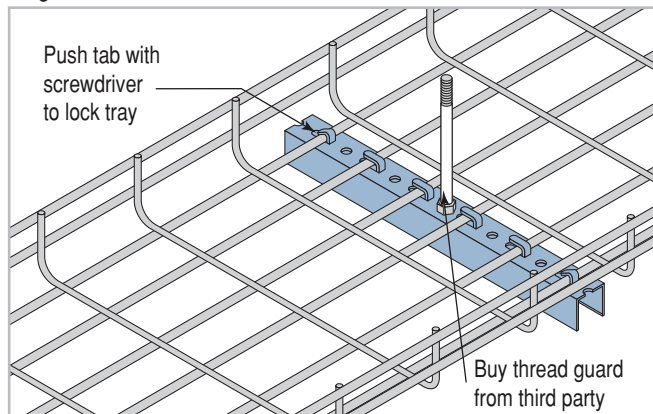
## U Support Bracket [AF-USB-3M]

Weight: 3.1 kg/each

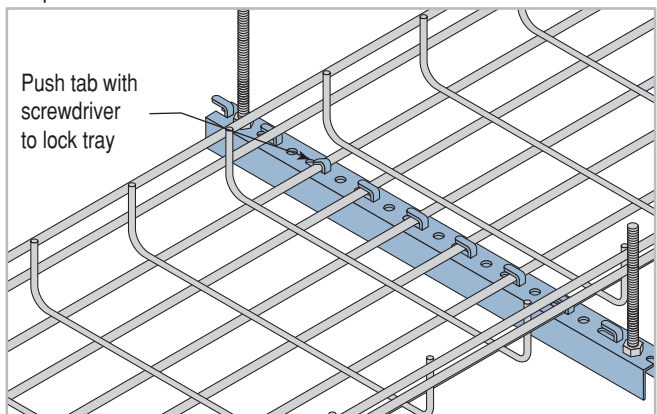
- U support bracket 24mm x 24mm channel
- Standard finish is zinc plated
- Support is 3m long, customer cuts to size as needed
- Cut lengths 150mm wider than tray width for trapeze
- Cut lengths 25mm shorter than tray width for single rod support
- Unique grip system requires only a push of a screwdriver to fasten the tray to the supports



Single Rod

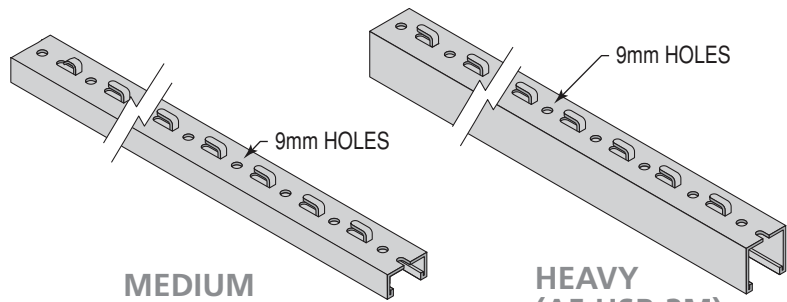


Trapeze



## Support Bracket Medium [AF-MSB-3M] & Heavy [AF-HSB-3M]

- Heavy support bracket is 41mm x 41mm strut, Medium support bracket is 41mm x 21mm strut
- Standard finish is zinc plated
- Support is 3m long, customer cuts to size as needed
- Cut lengths 150mm wider than tray width for trapeze
- Cut lengths 25mm shorter than tray width for single rod support
- Unique grip system requires only a push of a screwdriver to fasten the tray to the supports



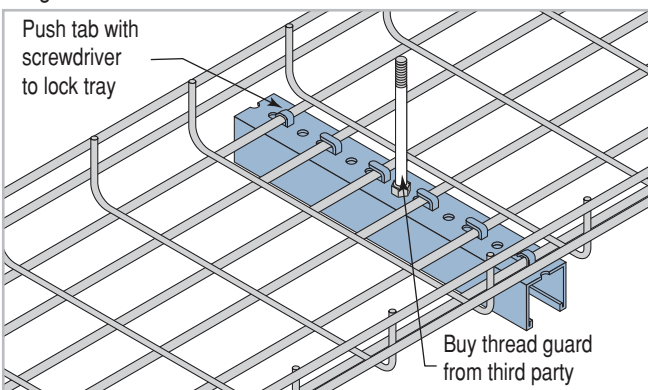
**MEDIUM (AF-MSB-3M)**

Weight 5.4 kg/each

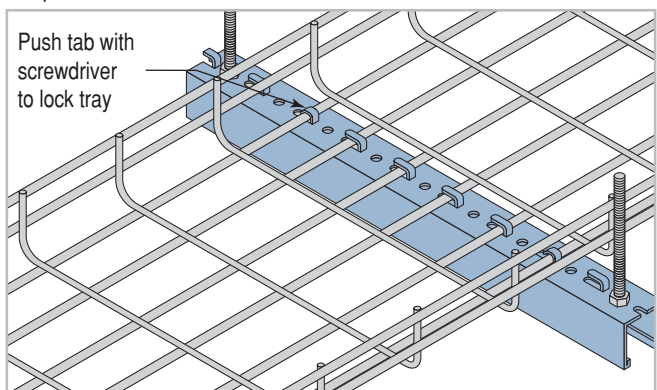
**HEAVY (AF-HSB-3M)**

Weight: 7.5 kg/each

Single Rod



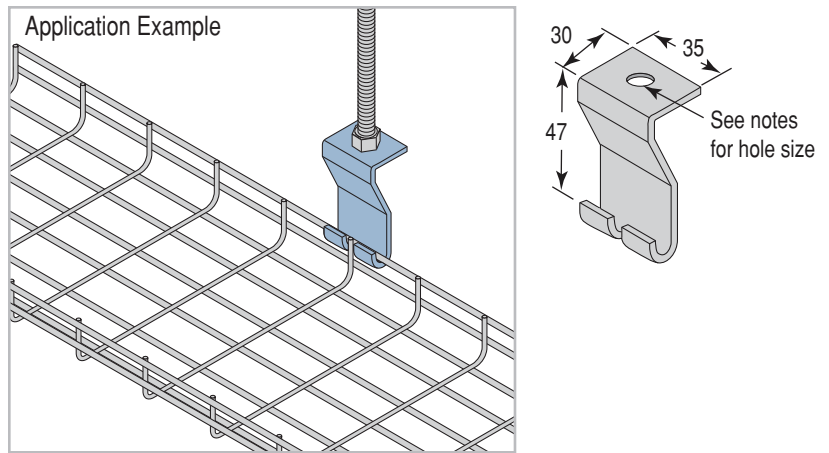
Trapeze



**Drop Rod Clip [AF-SIDECLIP]**

Weight: 0.06 kg/each

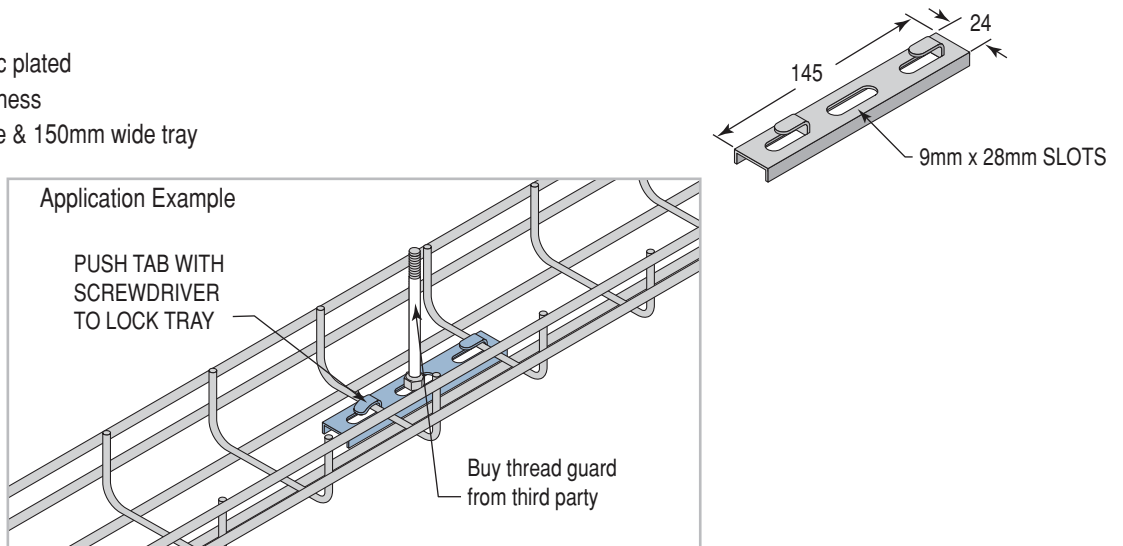
- Standard finish zinc plated
- 2mm Bracket thickness
- For all widths of tray
- Use AF-SIDECLIPM8 for 8mm Rod
- Use AF-SIDECLIPM10 for 10mm Rod



**Drop Rod Clip [AF-RODCLIP1]**

Weight: 0.05 kg/each

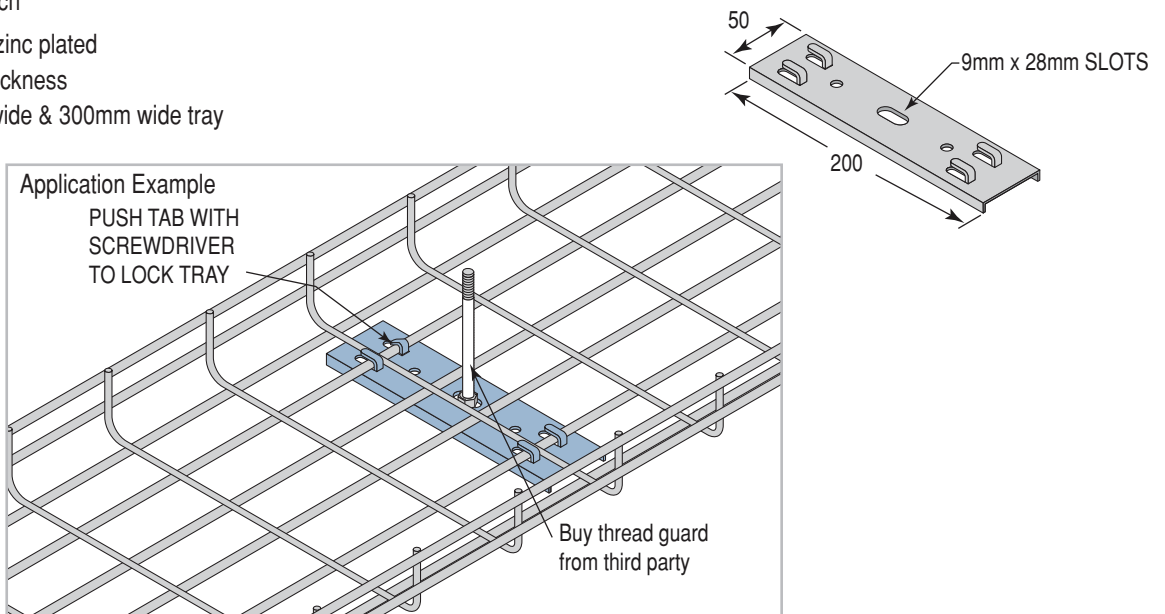
- Standard finish zinc plated
- 2mm Bracket thickness
- For all 100mm wide & 150mm wide tray



**Drop Rod Clip [AF-RODCLIP2]**

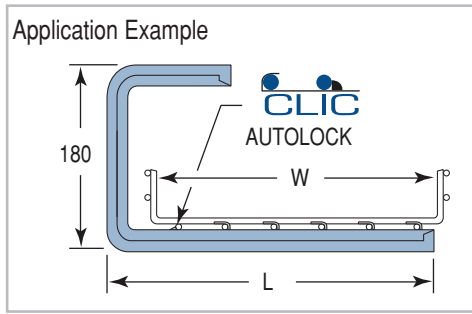
Weight: 0.18 kg/each

- Standard finish zinc plated
- 2mm Bracket thickness
- For all 200mm wide & 300mm wide tray

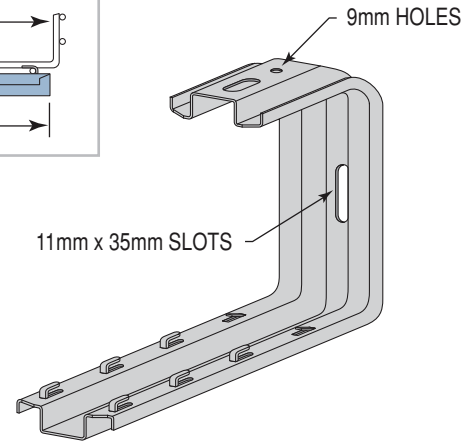


## Ceiling Clip [AF-CCA-(W)]

- For attaching tray to ceiling
- Standard finish Galvabond Z275
- Easy mounting of the cable tray using grips and autolock

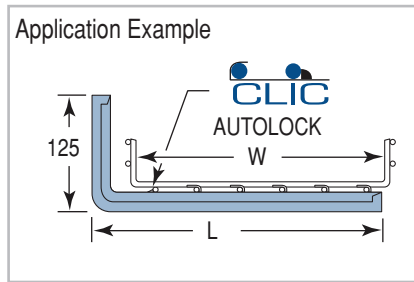


Part No.	Tray Size (W) (mm)	Length (L) (mm)	Weight (kg)	Load (kN)
AF-CCA-100	100	145	0.59	1.08
AF-CCA-150	150	195	0.67	0.78
AF-CCA-200	200	245	0.75	0.59
AF-CCA-300	300	345	0.90	0.39
AF-CCA-400	400	445	1.05	0.29

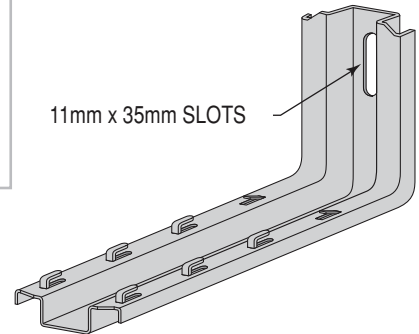


## Wall Clip [AF-CPA-(W)]

- For attaching tray to wall
- Standard finish Galvabond Z275
- Easy mounting of the cable tray using grips and autolock



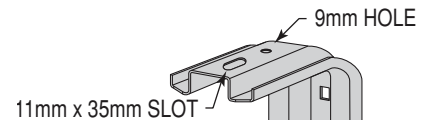
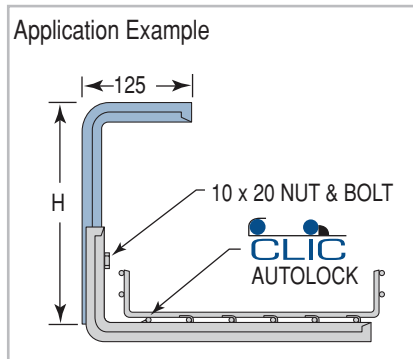
Part No.	Tray Size (W) (mm)	Length (L) (mm)	Weight (kg)	Load (kN)
AF-CPA-100	100	145	0.37	1.28
AF-CPA-150	150	195	0.44	1.28
AF-CPA-200	200	245	0.52	0.88
AF-CPA-300	300	345	0.67	0.59
AF-CPA-400	400	445	0.82	0.49



## Pendant [AF-PPA-(H)]

- Standard finish is Galvabond Z275
- For attaching tray to ceiling. Used with wall clip AF-CPA Series

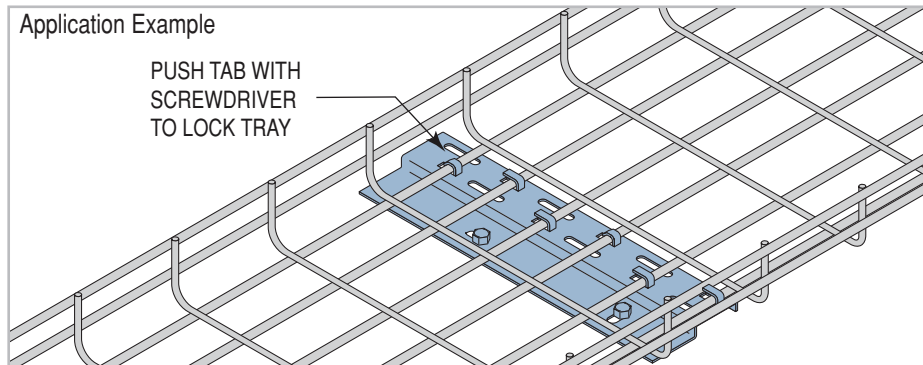
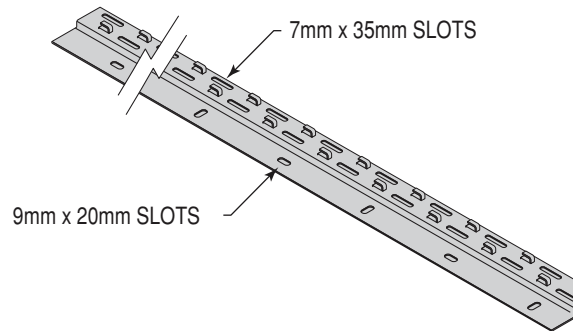
Part No.	Height (H) (mm)	Weight (kg)
AF-PPA-150	150	0.32
AF-PPA-250	250	0.50
AF-PPA-350	350	0.59
AF-PPA-450	450	0.77
AF-PPA-550	550	0.91
AF-PPA-650	650	1.04



**ZED [AF-ZBAR-3M]**

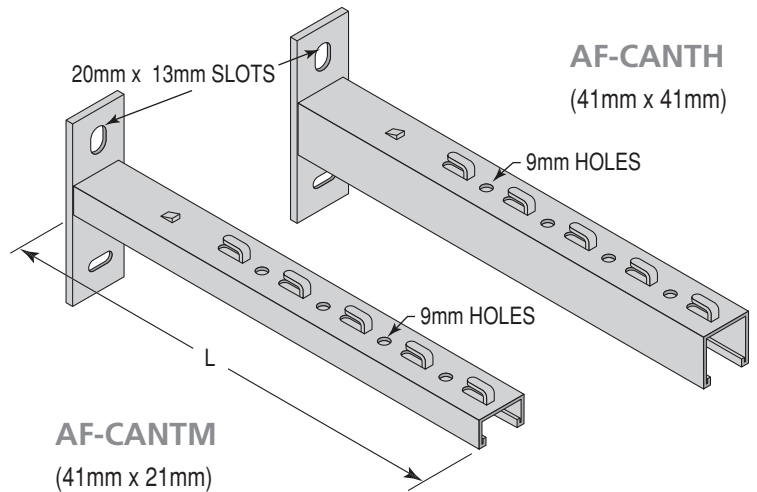
Weight: 4.8 kg/each

- ZED floor or wall mounted support is 13mm x 89mm
- Standard finish Galvabond Z275
- Support is 3m long, customer cuts to size as needed
- Unique grip system requires only a push of a screwdriver to fasten the tray to the supports

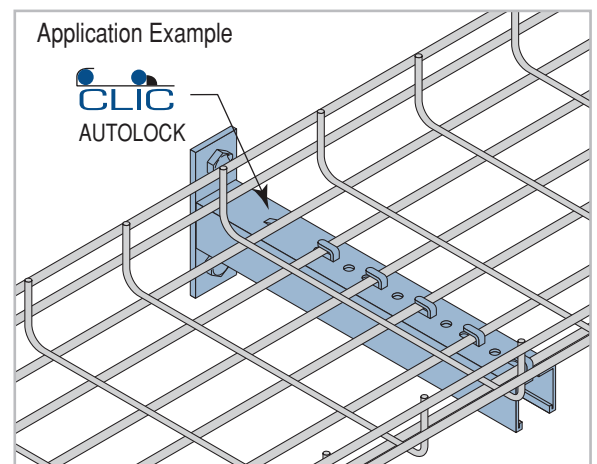


**Cantilever Medium [AF-CANTM-(W)] & Heavy [AF-CANTH-(W)]**

- Standard finish is Hot Dipped Galvanised
- Cantilever arm support 41mm x 41mm or 41mm x 21mm strut
- Unique Auto-Lock system requires no hardware to fasten the tray to the supports
- Use Strut Profile to support other items below the support bracket using strut hardware



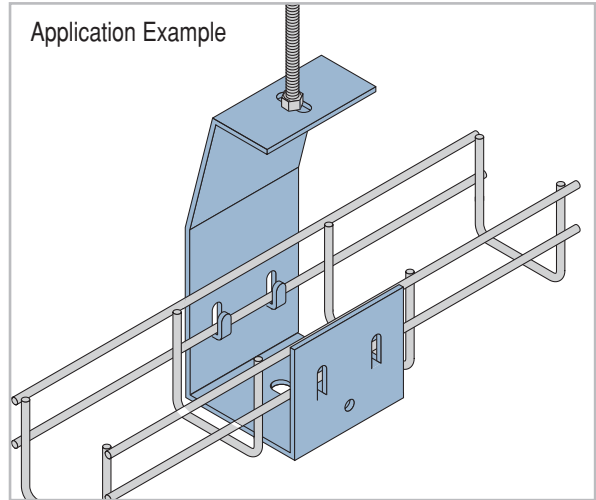
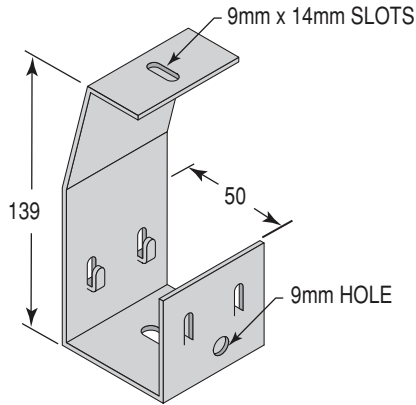
Part No.	Channel Size (mm)	Tray Width (W) (mm)	Length (L) (mm)	Weight (kg)	Load (kN)
AF-CANTM-150	41 x 21	150	186	0.45	2.45
AF-CANTM-200	41 x 21	200	236	0.52	1.77
AF-CANTM-300	41 x 21	300	336	0.66	1.57
AF-CANTH-200	41 x 41	200	236	0.72	4.41
AF-CANTH-300	41 x 41	300	336	0.95	3.34
AF-CANTH-400	41 x 41	400	436	1.29	2.65
AF-CANTH-500	41 x 41	500	536	1.52	2.65
AF-CANTH-600	41 x 41	600	636	1.78	2.16



## Hanger [AF-HGR-50]

- Standard finish is Galvabond Z275
- Ceiling or center hung with threaded rod

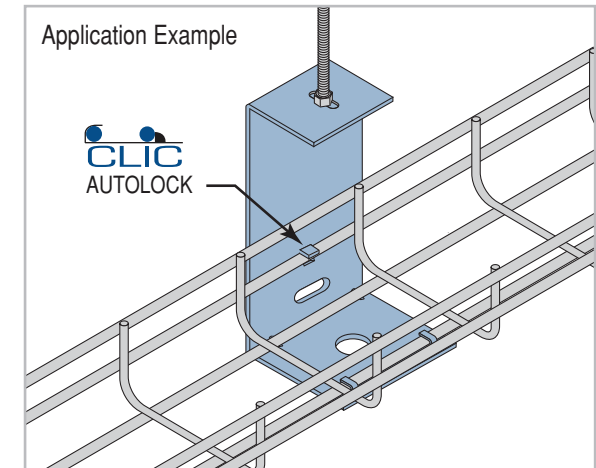
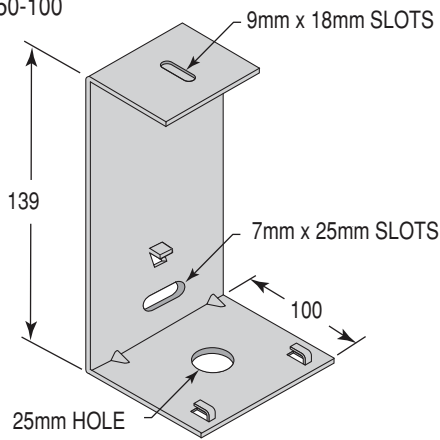
NOTE: For use with AF50-50 only



## Hanger [AF-HGR-100]

- Standard finish is Galvabond Z275
- Ceiling or center hung with Unirod steel threaded rod

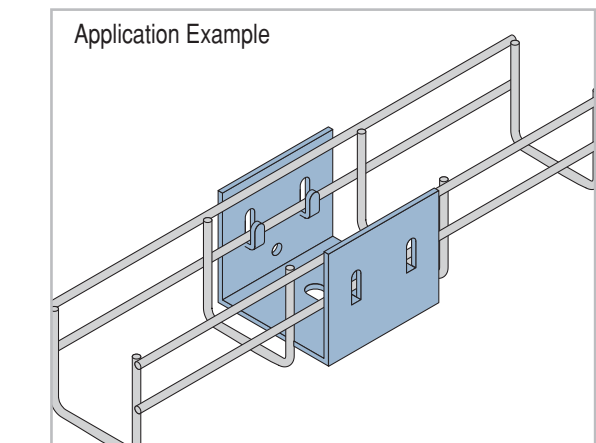
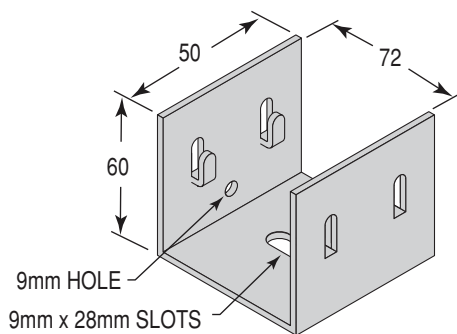
NOTE: For use with AF50-100 or AF100-100 only



## Wall Bracket [AF-WB-50]

- Standard finish is Galvabond Z275

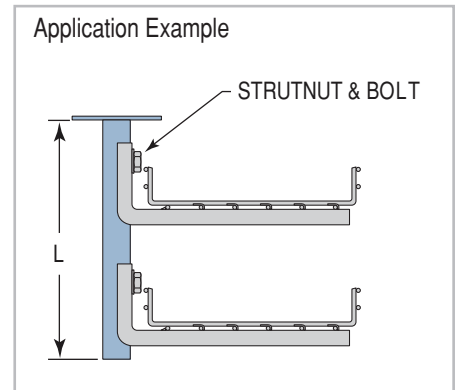
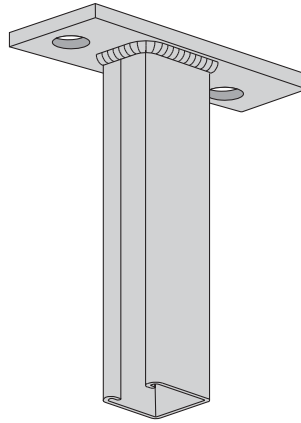
NOTE: For use with AF50-50 only



**Single Channel Pendant [P2663-(L)]**

- Standard finish is zinc plated

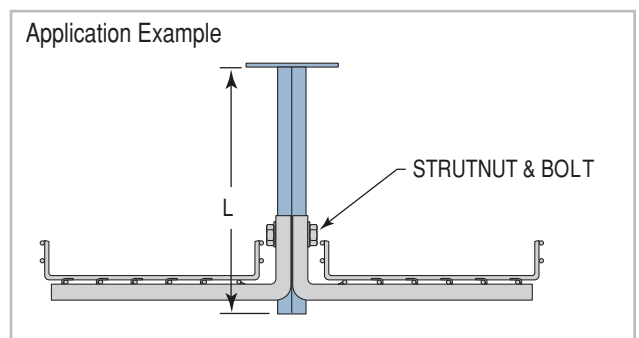
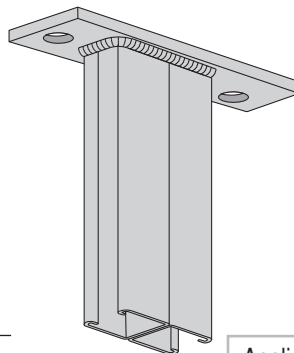
Part No.	Length (L) (mm)	Design Uniform Load (kN)	Weight (kg)
P2663-250	250	3.01	1.02
P2663-400	400	1.88	1.43
P2663-550	550	1.36	1.86
P2663-700	700	1.06	2.29



**Back-to-Back Channel Pendant [P2542 thru P2546]**

- Standard finish is zinc plated

Part No.	Length (L) (mm)	Design Uniform Load (kN)	Weight (kg)
P2542	305	7.57	2.28
P2543	460	5.22	3.14
P2544	610	3.98	4.00
P2545	760	3.21	4.87
P2546	915	2.67	5.74

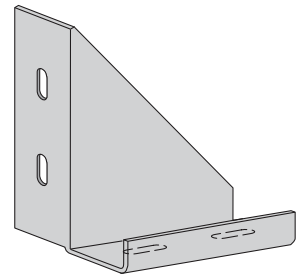


# ACROFIL® – HANGING BRACKETS

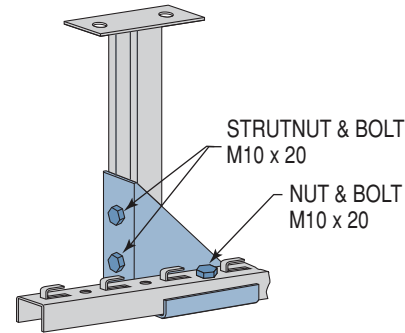
## Hanging Bracket [AF-AB-USB]

Weight: 0.28 kg/each

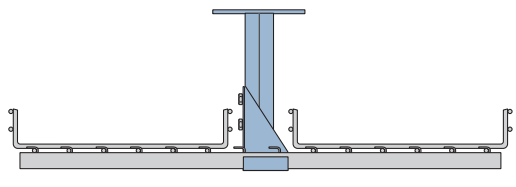
- Standard finish is Galvabond Z275
- For use with AF-USB-3M Support Bracket Channel see page 48



Application Example



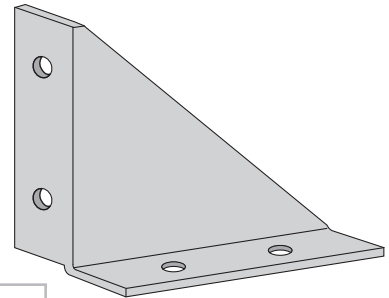
Application Example



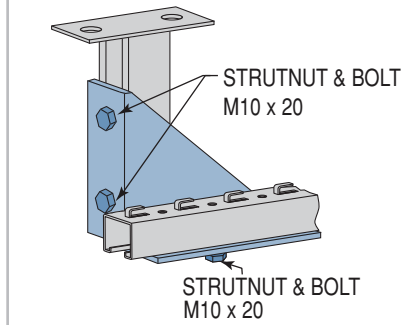
## Hanging Bracket [AF-AB-HSB]

Weight: 0.50 kg/each

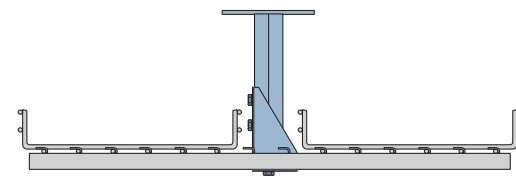
- Standard finish is Galvabond Z275
- For Use with:
  - AF-MSB-3M Medium Support Bracket Strut
  - AF-HSB-3M Heavy Support Bracket Strut see page 48



Application Example



Application Example

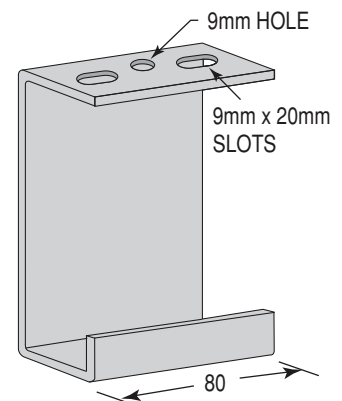
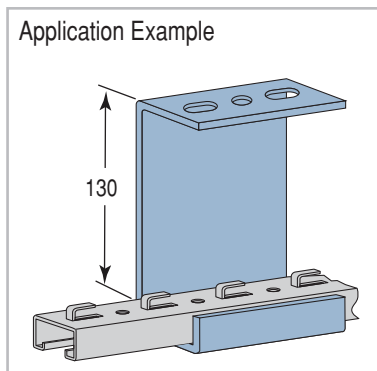


## Hanging Bracket [AF-CB-MSB]

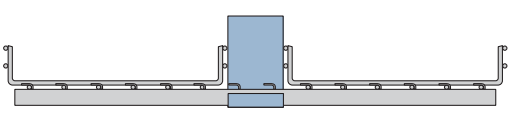
Weight: 0.66 kg/each

- Standard finish is Galvabond Z275
- For Use with:
  - AF-MSB-3M Medium Support Bracket Strut see page 48

Application Example



Application Example

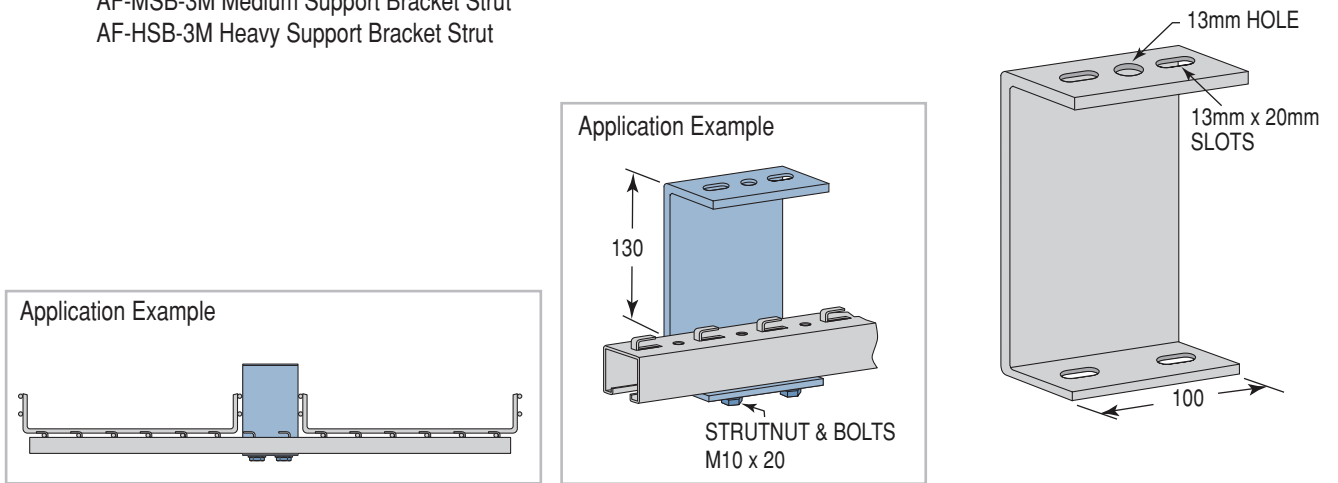




**Hanging Bracket [AF-CB-HSB]**

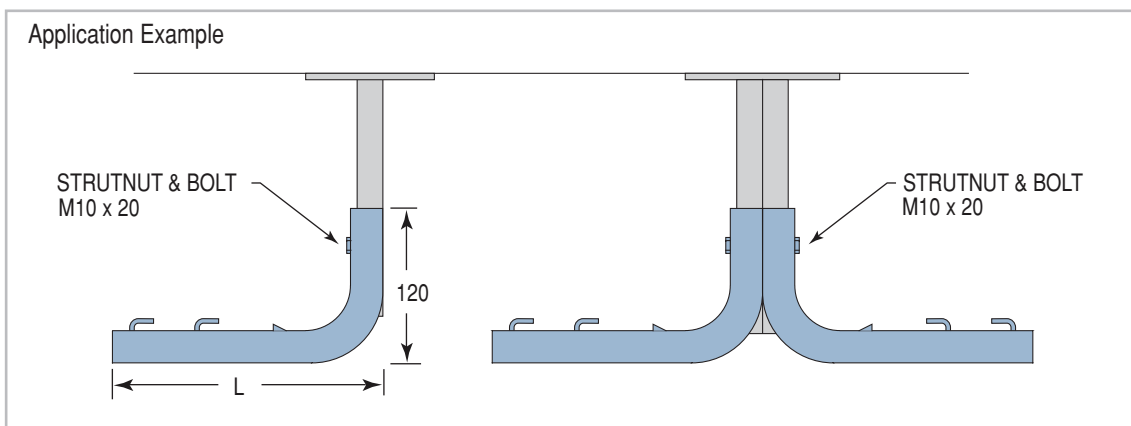
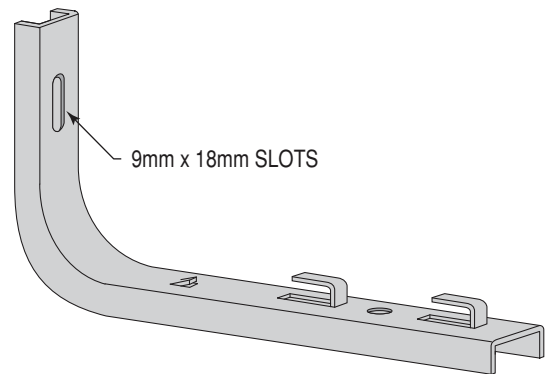
Weight: 1.35 kg/each

- Available in hot-dipped galvanized
- For Use with:
  - AF-MSB-3M Medium Support Bracket Strut
  - AF-HSB-3M Heavy Support Bracket Strut



**Bracket [AF-CMA-(W)]**

- Standard finish is Galvabond Z275
- Mounted on cantilever arms or channels
- Easy mounting of the bracket using grips and autolock
- Designed for use with new/existing 41mm strut framing



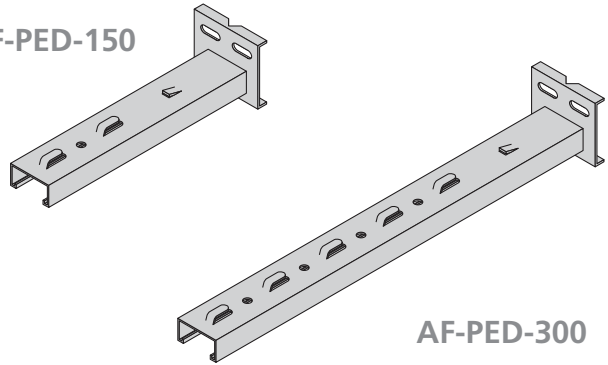
Part No.	Tray Width (W) (mm)	Length (L) (mm)	Wt (kg)	Load (kN)
AF-CMA-100	100	133	0.36	1.27
AF-CMA-150	150	183	0.45	1.03
AF-CMA-200	200	233	0.50	0.78
AF-CMA-300	300	333	0.68	0.59
AF-CMA-400	400	433	0.82	0.39

# ACROFIL® – PEDESTAL BRACKETS

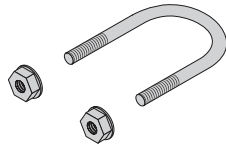
## Pedestal Brackets [AF-PED-150] & [AF-PED-300]

- Channel use on pedestal for raised floor
- Attach to pedestal using U-Bolt & nuts (included)

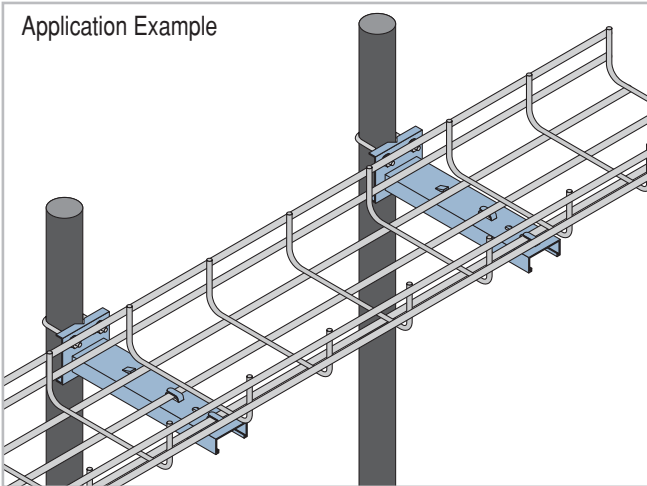
AF-PED-150



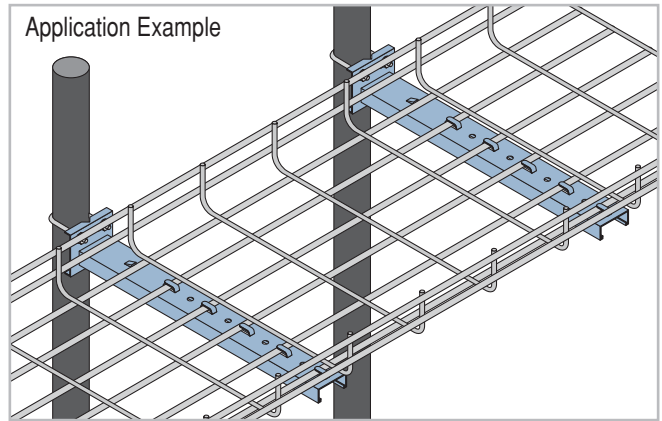
AF-PED-300



Application Example

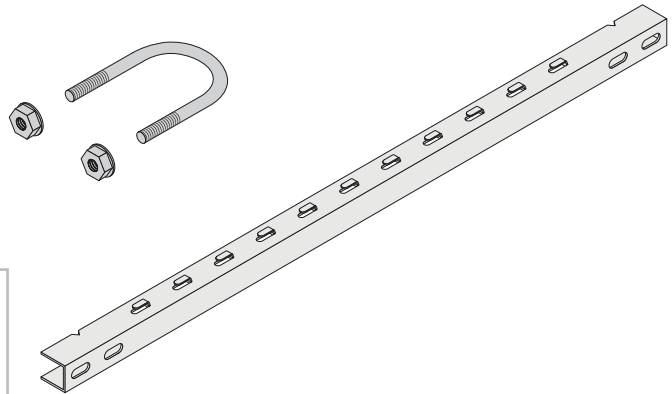


Application Example

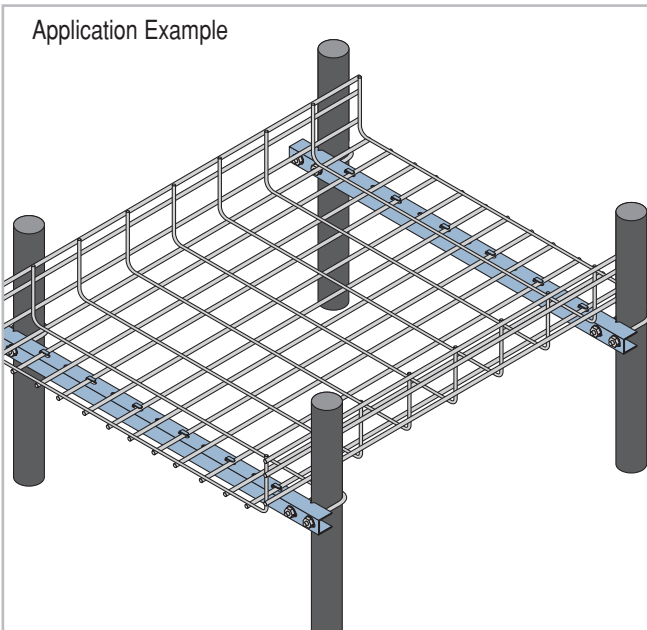


## Pedestal Kit [AF-PED-KIT]

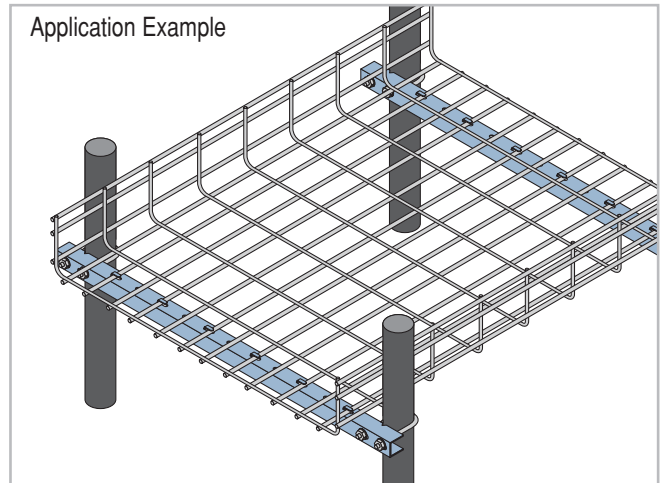
- Channel use on pedestal for raised floor
- Attach to pedestal using U-Bolt & nuts (included)



Application Example



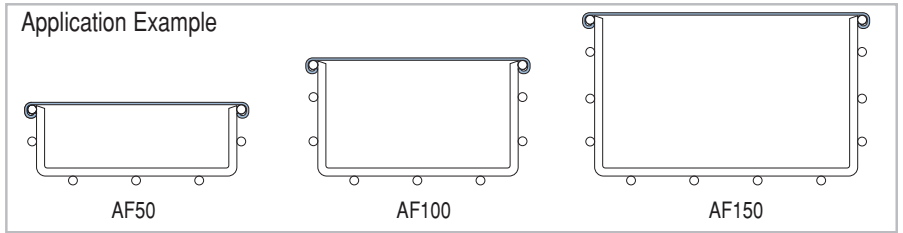
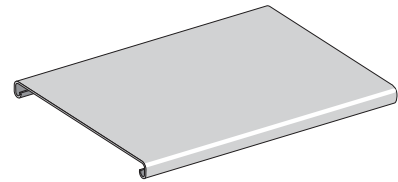
Application Example



**Cover [AF-CVR-(W)]**

- Standard finish is Galvabond Z275
- Length is 3m

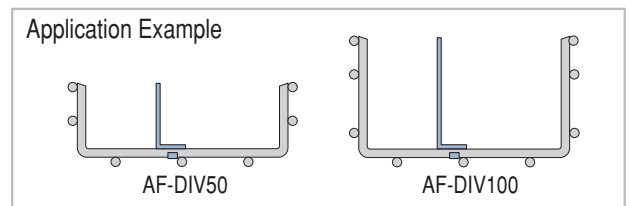
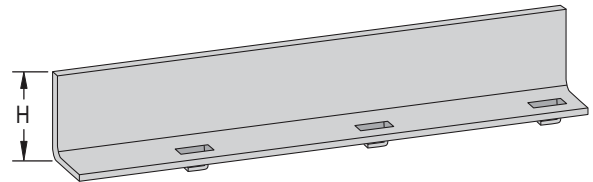
Part	Weight (kg)
AF-CVR-50	2.4
AF-CVR-100	3.6
AF-CVR-150	4.8
AF-CVR-200	6.0
AF-CVR-300	8.4
AF-CVR-400	16.2
AF-CVR-450	18.0
AF-CVR-500	19.8
AF-CVR-600	23.4



**Tray Dividers [AF-DIV50], & [AF-DIV100]**

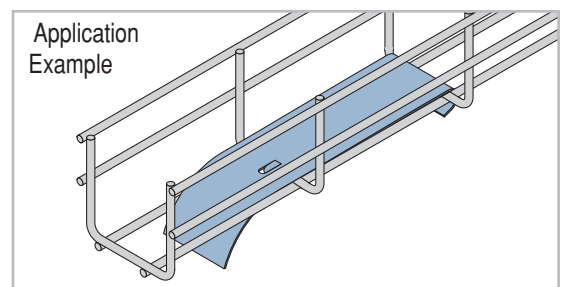
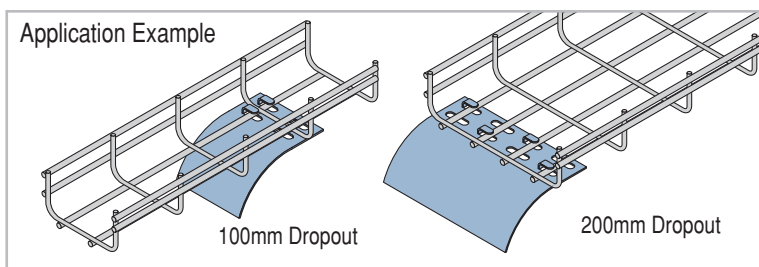
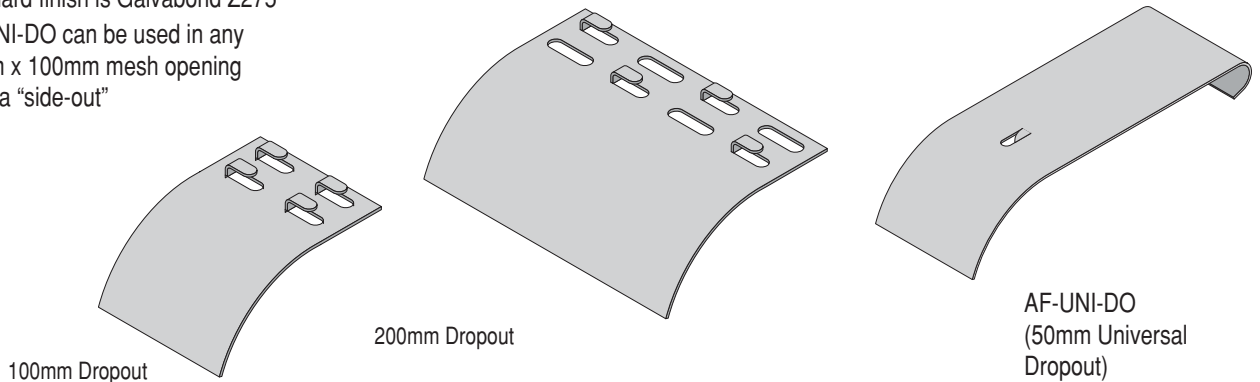
- Standard finish is Galvabond Z275
- Locks into tray with auto-lock tabs (no hardware required)
- Cut "V" notches into bottom flange to make barriers for flat fittings

Part	Height (H) (mm)	Weight (kg)
AF-DIV-50	50	2.4
AF-DIV-100	100	3.6



**Drop Out [AF-(W)DO]**

- Standard finish is Galvabond Z275
- AF-UNI-DO can be used in any 50mm x 100mm mesh opening or as a "side-out"



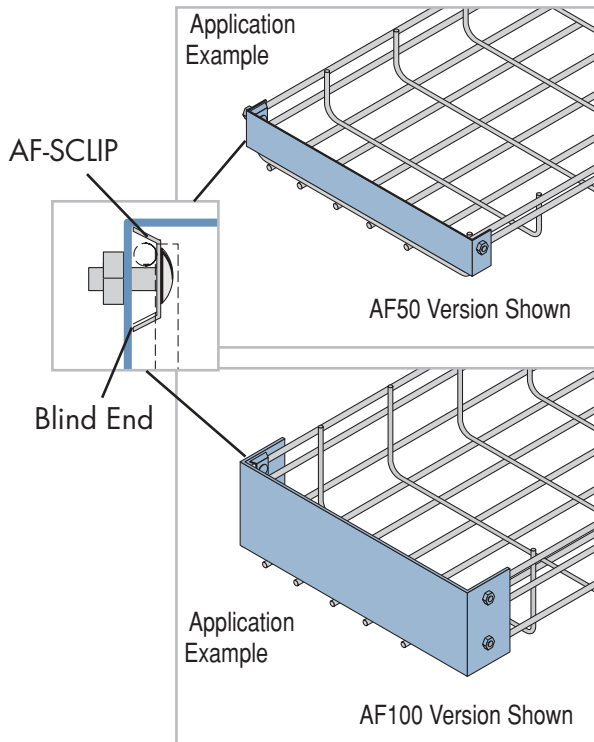
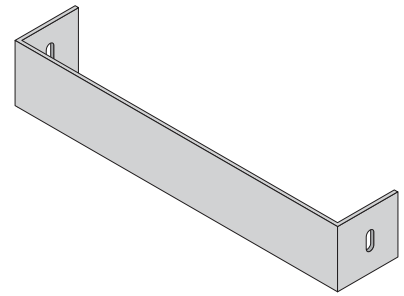
**Blind End [AF(H)-BE(W)]**

- Standard finish is Galvabond Z275
- Standard use per blind end is:  
(2 pc) AF-KITCH3 (sold separately)

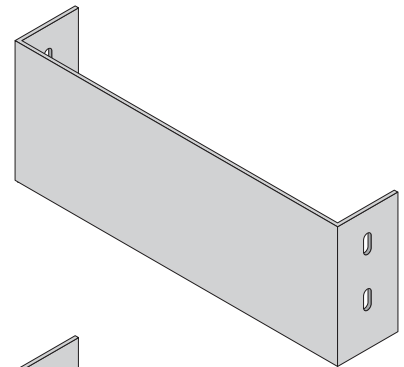
NOTES:

1. Always place nut on outside of tray

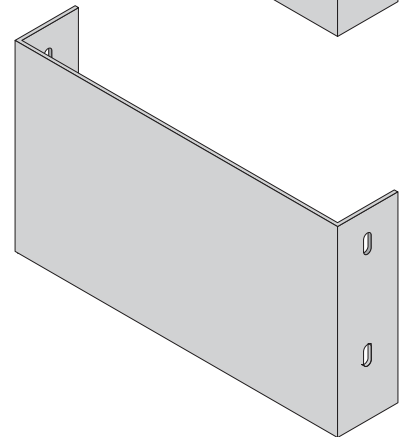
Part	Weight (kg)
AF50-BE100	0.08
AF50-BE150	0.10
AF50-BE200	0.13
AF50-BE300	0.18
AF50-BE400	0.23
AF50-BE450	0.26
AF50-BE500	0.29
AF50-BE600	0.32



Part	Weight (kg)
AF100-BE100	0.24
AF100-BE200	0.29
AF100-BE300	0.34
AF100-BE400	0.44
AF100-BE450	0.49
AF100-BE500	0.54
AF100-BE600	0.65



Part	Weight (kg)
AF150-BE300	0.51
AF150-BE400	0.64
AF150-BE600	0.95

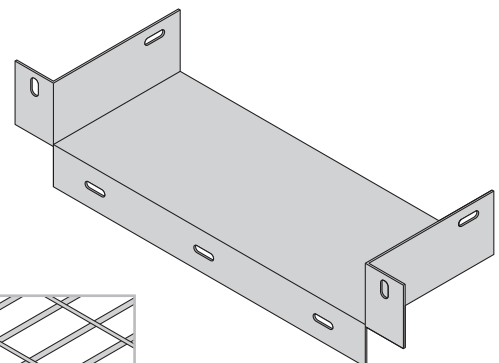
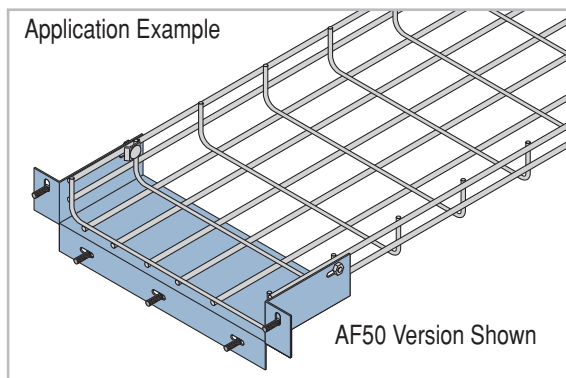


**Box Connector [AF(H)-(W)CB]**

- Standard finish is Galvabond Z275
- Standard use per box connector is:  
(2 pc) AF-KITCH3  
(5 pc) AF-EG-CBN  
(both sold separately)

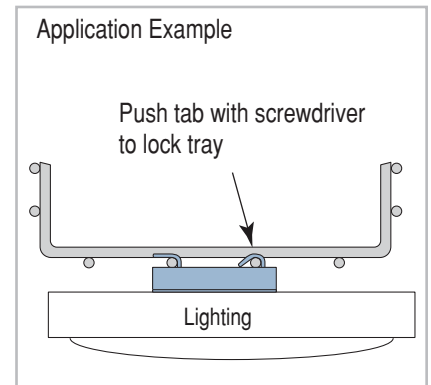
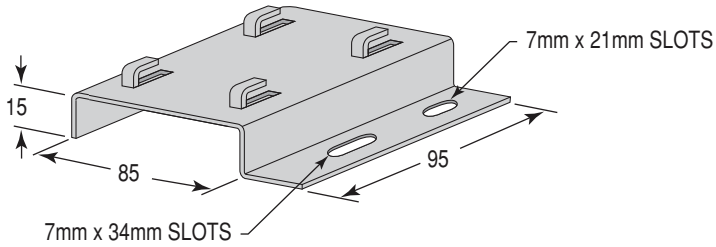
NOTES:

1. Always place nut on outside of tray
2. For use with AF50 & AF100



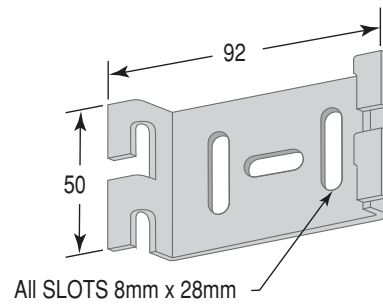
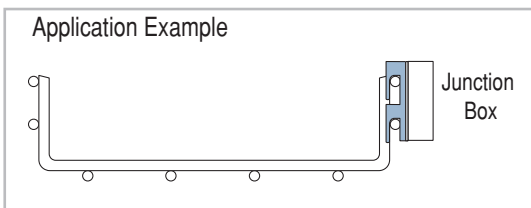
**Lighting Bracket [AF-LIGHTB]**

- Standard finish is Galvabond Z275



**Electrical Box Bracket [AF-JBOX]**

- Standard finish is Galvabond Z275

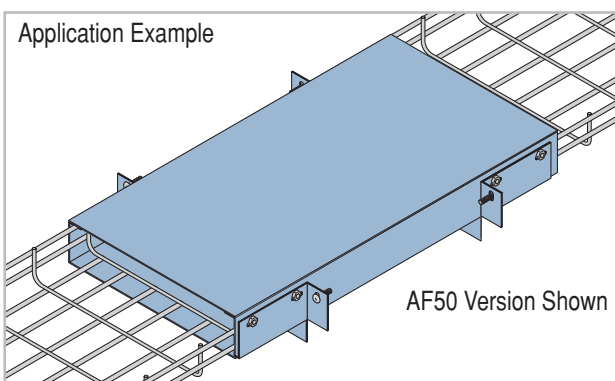
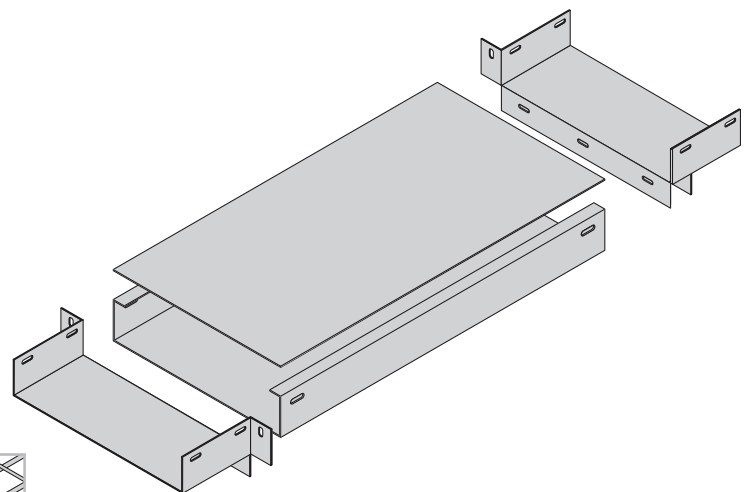


**Wall Sleeve [AF(H)-(W)WS]**

- Standard finish is Galvabond Z275
- Standard use per wall sleeve is:
  - (4 pc) AF-KITCH3
  - (5 pc) 6112-0
  - (4 pc) 5003-1
  - (4 pc) 5009-1
  - (8 pc) EM -CC
  - (all sold separately)

NOTES:

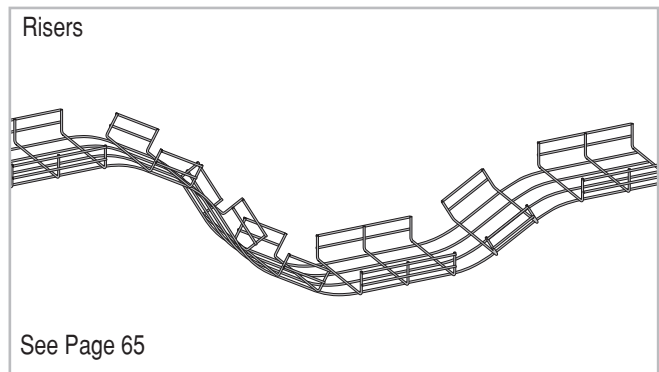
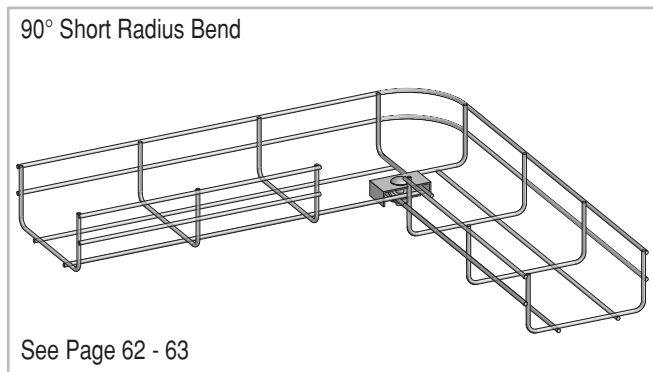
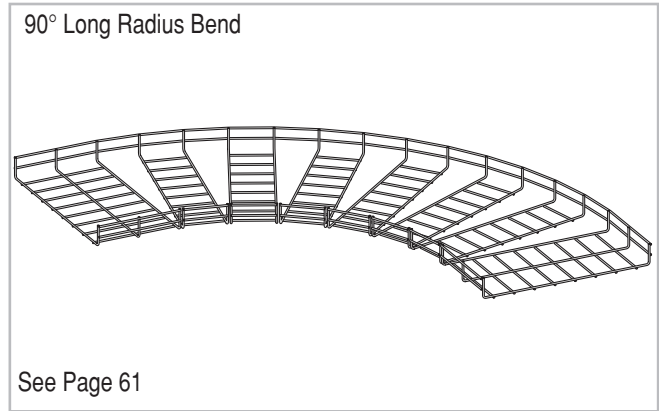
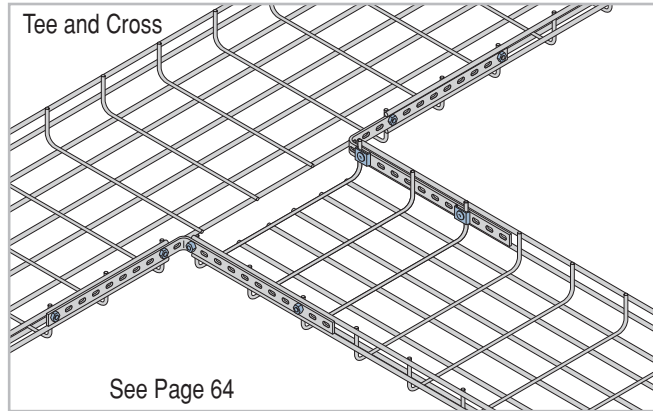
1. Always place nut on outside of tray
2. Example AF50-12WS



## Fittings Overview

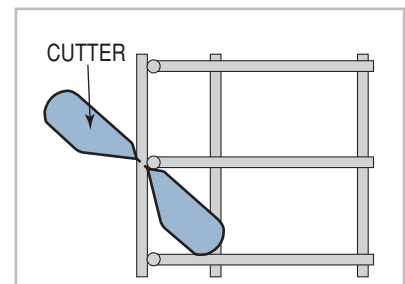
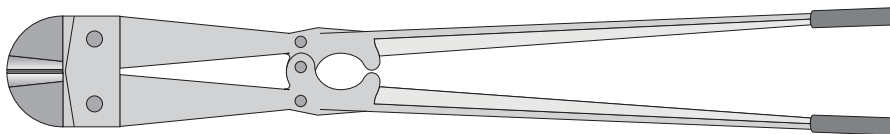
Fittings are typically fabricated on the job.

To determine the fitting hardware required to create a set of fittings, see the following pages



## Cutting Tool [AF-CUTTOOL]

Fittings can be formed easily on-site by cutting the bottom and side wires. Cut the tray bars on an angle as shown in the illustration.



Note: When cutting, keep the remaining sharp edge away from the inside of the tray.

90° Bends - Long Radius

1 CUT THE BOTTOM AND SIDE WIRES

To form 90° bends in the tray, cut out the number of sections shown below based on the width of the tray used.

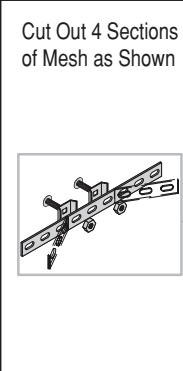
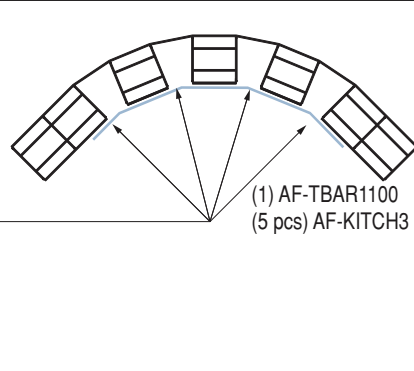
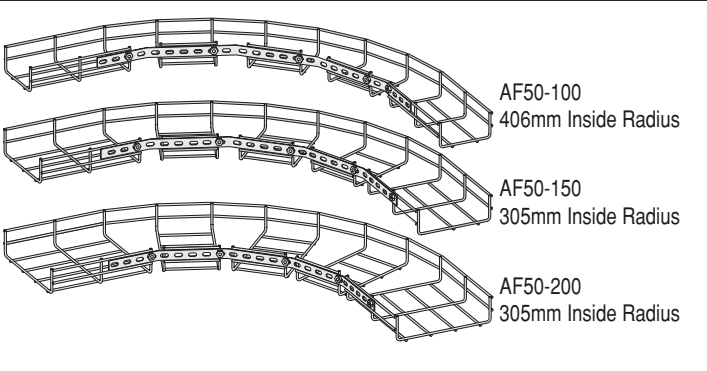
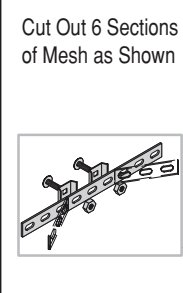
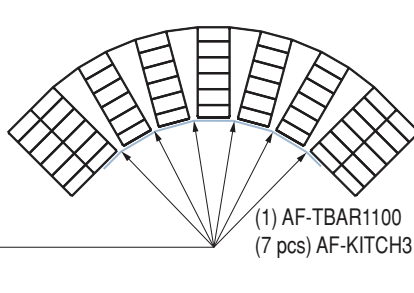
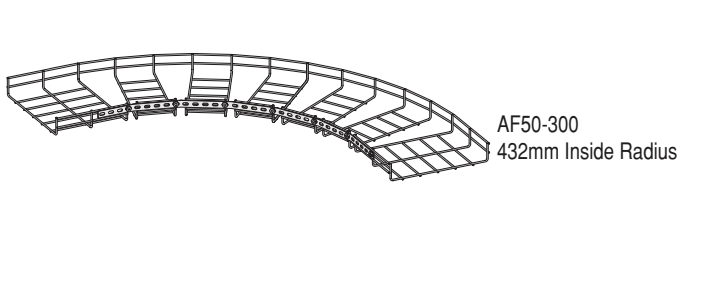
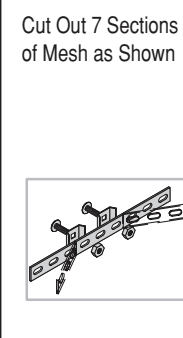
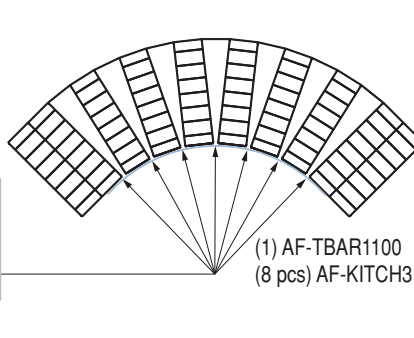
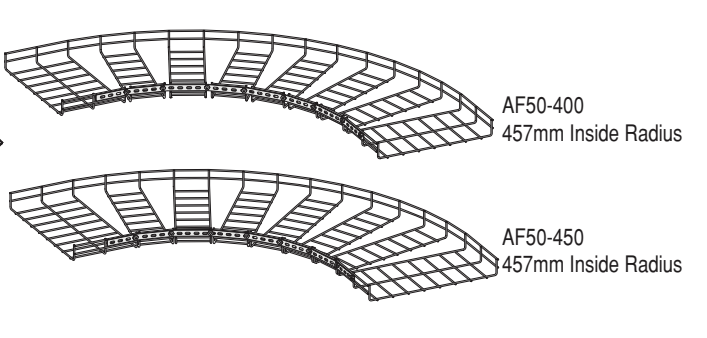
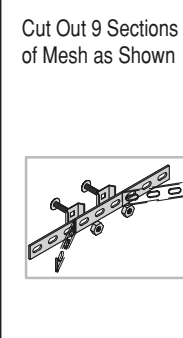
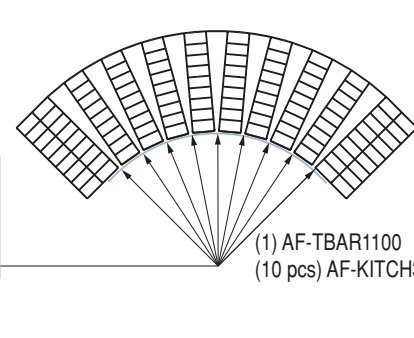
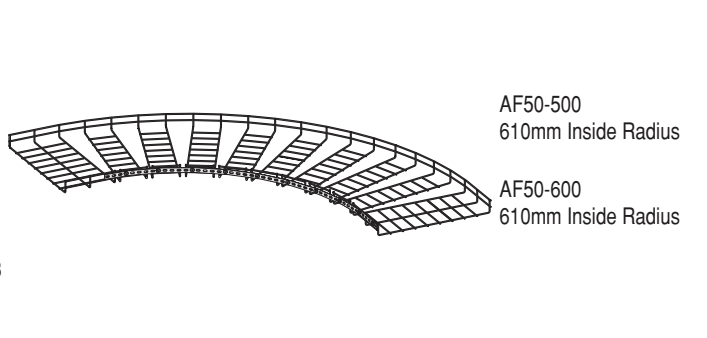
Advantages:

- Use as bonding jumper
- Vertical support of standing sections
- Adjustable radius allowances

2 ASSEMBLE USING APPROPRIATE HARDWARE

Standard hardware is shown with each bend size.

NOTE: Always place nut on outside of tray

<p>Cut Out 4 Sections of Mesh as Shown</p> 	 <p>(1) AF-TBAR1100 (5 pcs) AF-KITCH3</p>	 <p>AF50-100 406mm Inside Radius</p> <p>AF50-150 305mm Inside Radius</p> <p>AF50-200 305mm Inside Radius</p>
<p>Cut Out 6 Sections of Mesh as Shown</p> 	 <p>(1) AF-TBAR1100 (7 pcs) AF-KITCH3</p>	 <p>AF50-300 432mm Inside Radius</p>
<p>Cut Out 7 Sections of Mesh as Shown</p> 	 <p>(1) AF-TBAR1100 (8 pcs) AF-KITCH3</p>	 <p>AF50-400 457mm Inside Radius</p> <p>AF50-450 457mm Inside Radius</p>
<p>Cut Out 9 Sections of Mesh as Shown</p> 	 <p>(1) AF-TBAR1100 (10 pcs) AF-KITCH3</p>	 <p>AF50-500 610mm Inside Radius</p> <p>AF50-600 610mm Inside Radius</p>



# ACROFIL® – 90° SHORT RADIUS BENDS

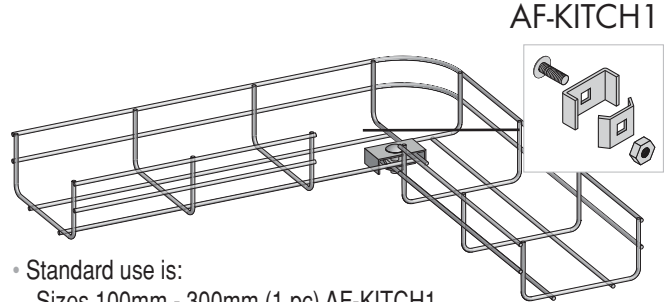
## 90° Bends - Forming Instructions

To form 90° bends in the tray, cut the wires shown in the color shaded area of the drawing which corresponds to the width of the tray used.

### 1 CUT THE BOTTOM AND SIDE WIRES

Bends can be formed easily on-site by cutting the bottom and side wires. The shaded areas indicated should be cut and removed. Then, simply bend ACROFIL cable tray to form a 90° angle and you are ready to install. Make sure you use the appropriate hardware.

### 2 ASSEMBLE USING APPROPRIATE HARDWARE

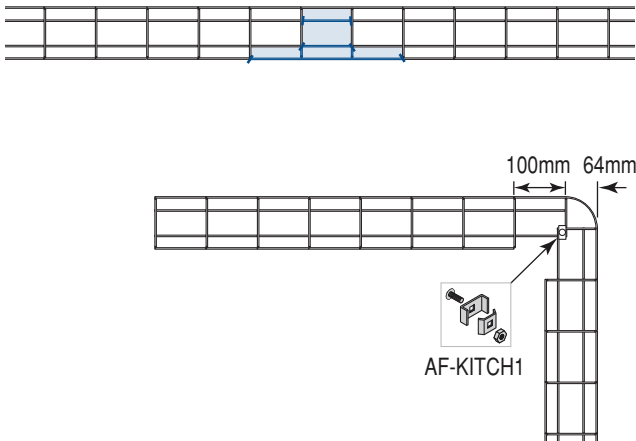


- Standard use is:  
 Sizes 100mm - 300mm (1 pc) AF-KITCH1  
 Sizes 400mm - 600mm (2 pc) AF-KITCH1

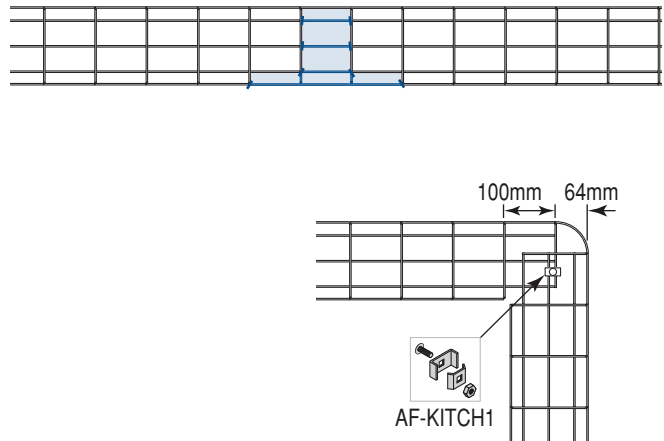
NOTE: Always place nut on outside of tray)

## 90° Bends - Cutting Diagrams

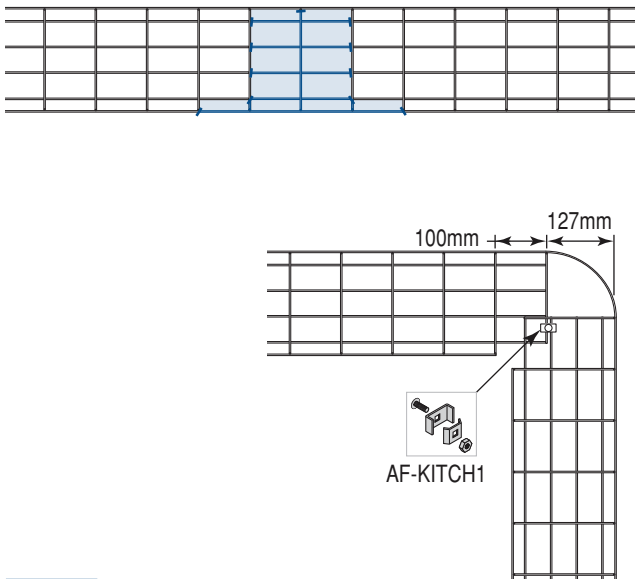
### 100mm



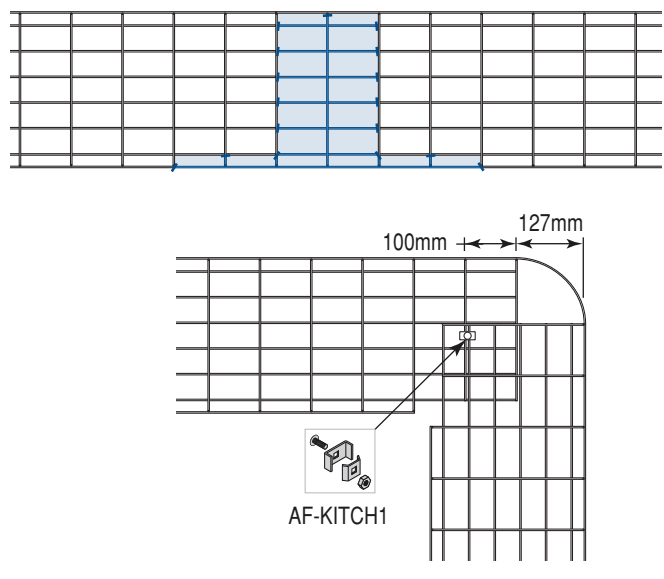
### 150mm



### 200mm

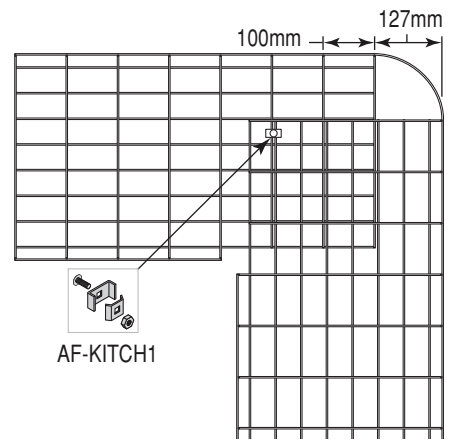
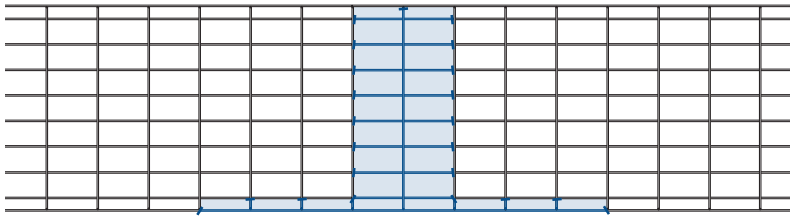


### 300mm

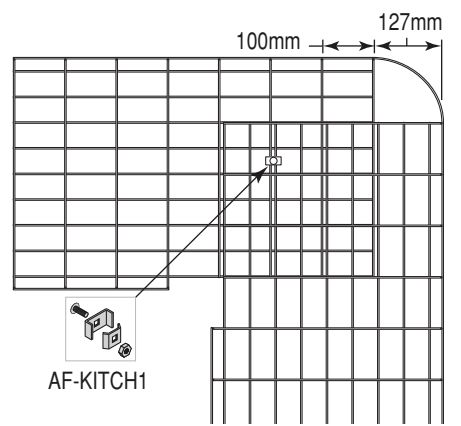
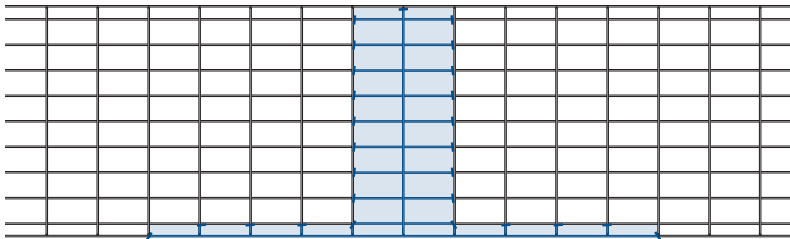


90° Bends - Cutting Diagrams

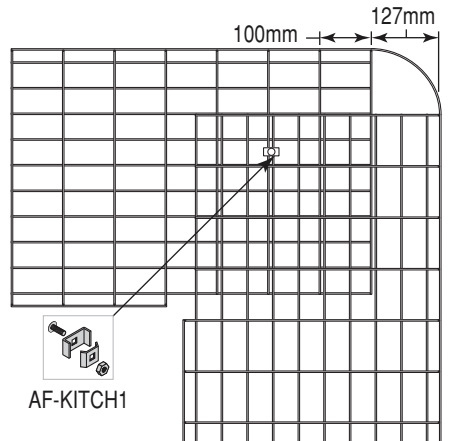
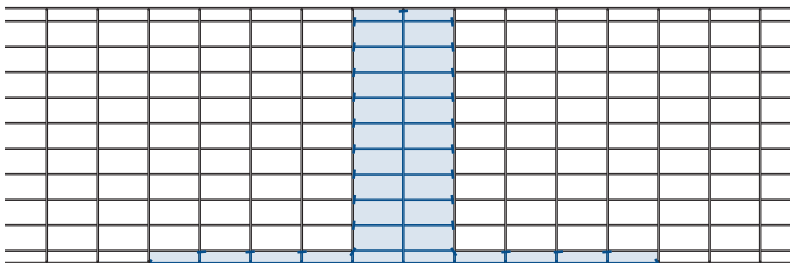
400mm



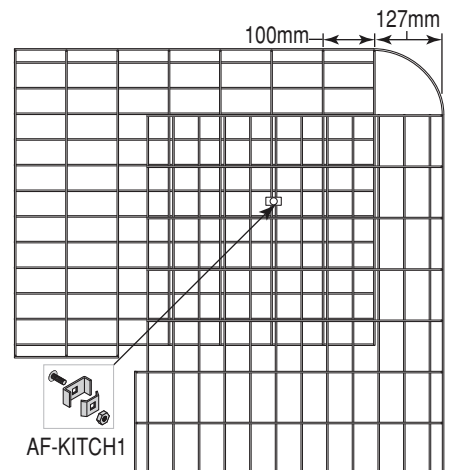
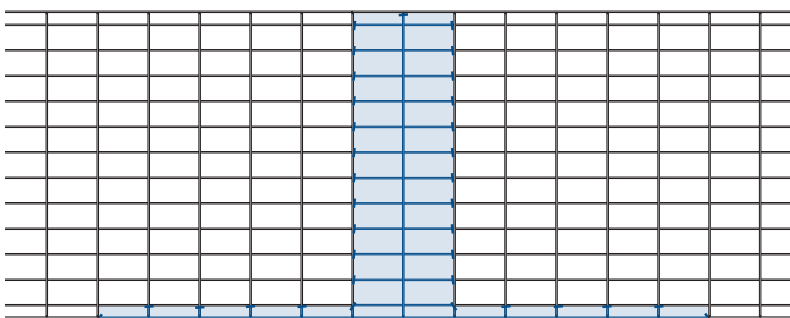
450mm



500mm



600mm

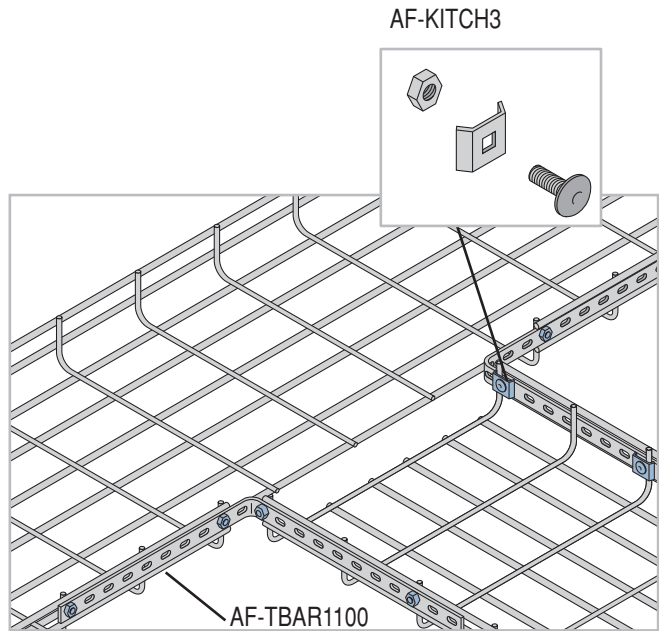
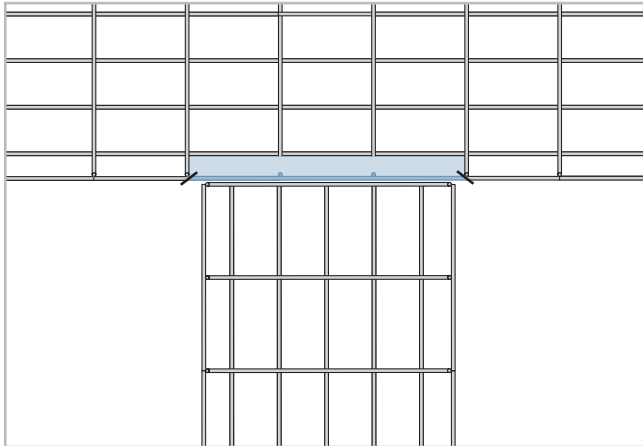


## Standard Tee

- Standard use per tee is:  
(2 pc) AF-TBAR550 or (1 pc) AF-TBAR1100 cut in half  
(8 pc) AF-KITCH3

NOTE: Always place nut on outside of tray

To form a tee, cut the wires marked in blue.

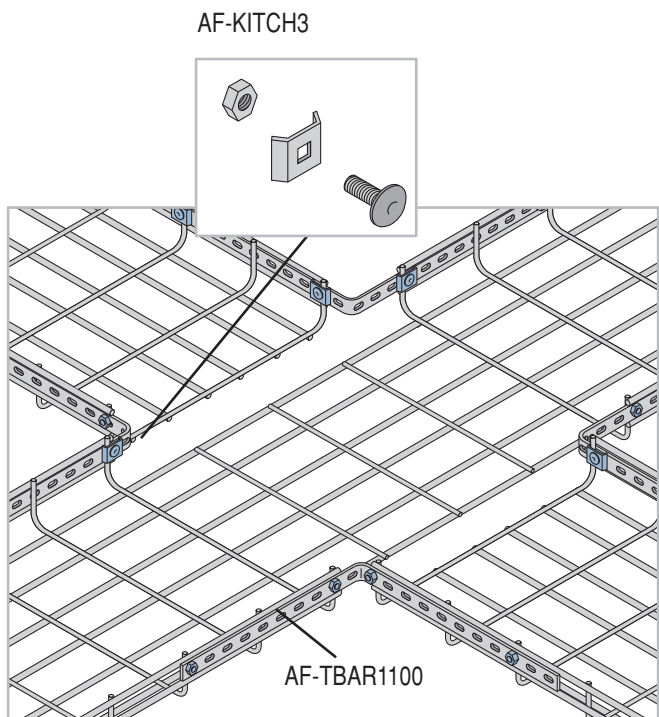
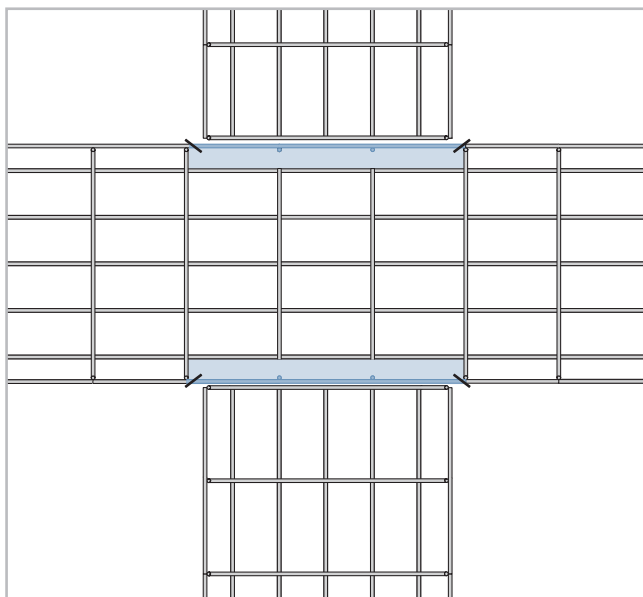


## Cross

- Standard use per cross is:  
(4 pc) AF-TBAR550 or (2 pc) AF-TBAR1100 cut in half  
(16 pc) AF-KITCH3

NOTE: Always place nut on outside of tray

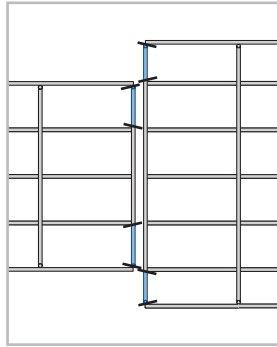
To form a cross, cut the wires marked in blue.



**Reducer**

- Standard use per reducer is:  
 (2 pc) AF-TBAR1100  
 (8 pc) AF-KITCH3  
 (1 pc) AF-KITCH2

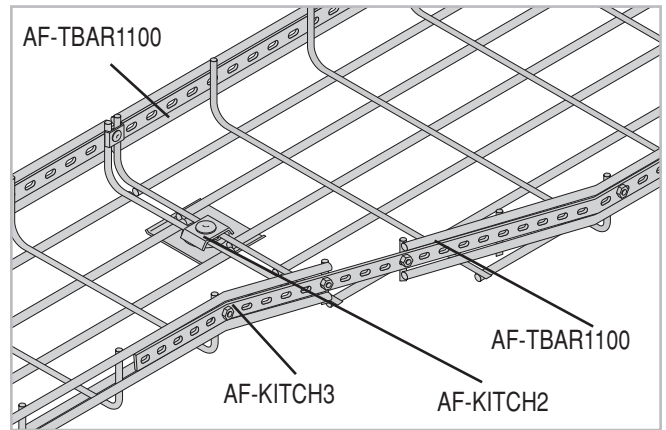
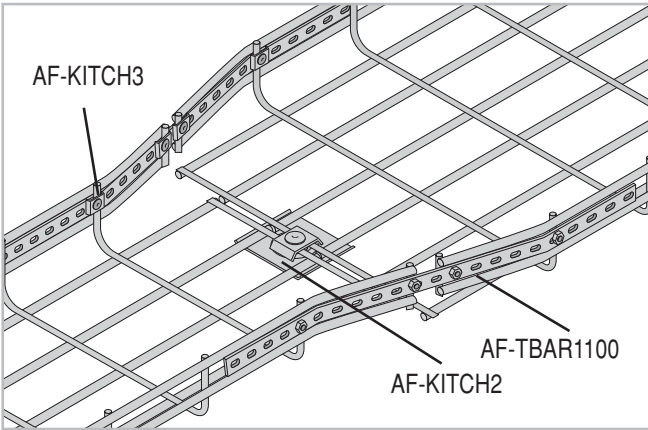
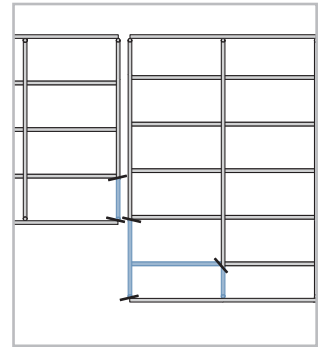
NOTE: Always place nut on outside of tray



**Offset**

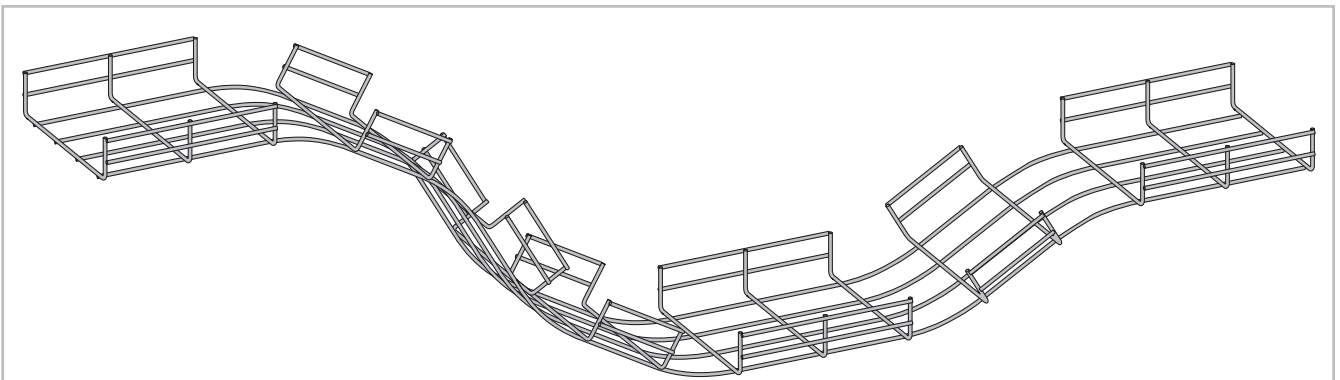
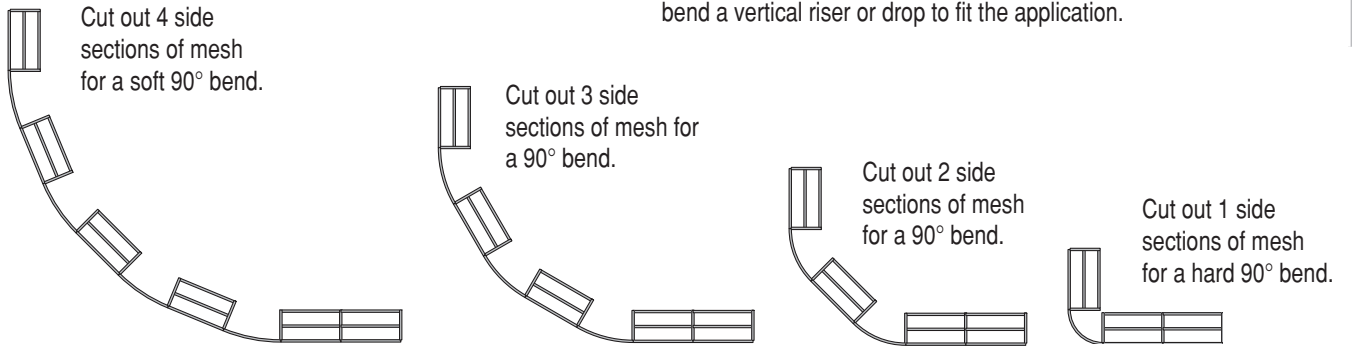
- Standard use per offset is:  
 (2 pc) AF-TBAR1100  
 (8 pc) AF-KITCH3  
 (1 pc) AF-KITCH2

NOTE: Always place nut on outside of tray



**Riser**

Risers and drops can be created to avoid different obstacles in the job path. Simply cut out the required number of side mesh sections and bend a vertical riser or drop to fit the application.



## Grounding

Unistrut recommends use of a separate ground wire for equipment grounding.

Any non-conductive coating to ACROFIL must be removed by the contractor/end-user to maintain electrical continuity.

**Straight Sections** - The grounding of two straight sections requires the use of

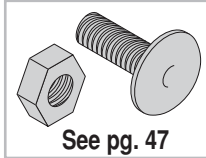
- (2) AF-GCLIP's and
- (2) AF-EG-CBN's.

These items consist of grounding clips and the appropriate hardware, for connecting to the trays. One clip should be placed on both sides of the tray, attached at the self-splicing bar.

### Straights

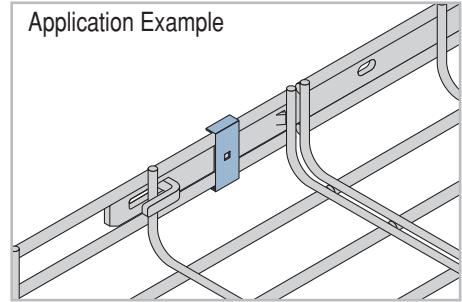
- 2 pcs of AF-GCLIP
- 2 pcs of AF-EG-CBN

AF-EG-CBN



See pg. 47

Application Example

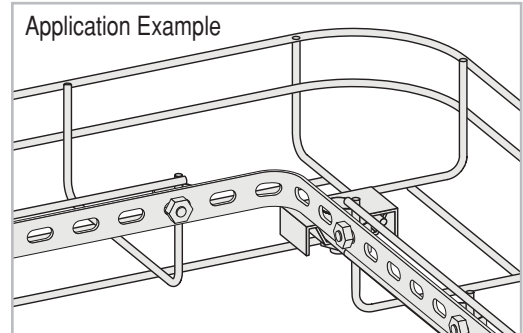


**Fittings** - Grounding of fittings requires special attention. Typically fittings are fabricated in the field by cutting straight sections, thus altering the cross sectional area of the tray. A bonding jumper, and or a AF-TBAR1100 Splice, along with the appropriate hardware must be used on either side of the fitting to ensure electrical continuity.

### Fittings

- AF-TBAR1100 and
- AF-KITCH3s

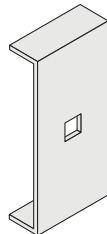
Application Example



### Grounding Clip [AF-GCLIP]

- Standard finish is Galvabond Z275
- Sold in packs of 10
- Connection to splice bars requires a nut and bolt assembly (AF-EG-CBN) purchased separately
- Use on both sides of tray

NOTE: Always place nut on outside of tray

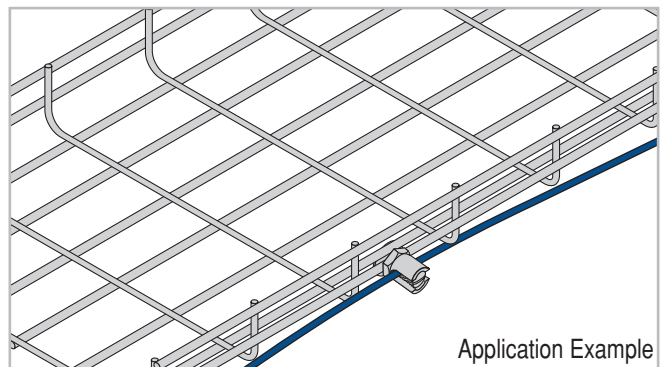
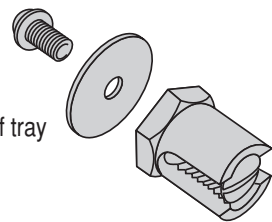


AF-GCLIP's must be utilized if the tray is to be utilized as an equipment ground conductor.

### Grounding Clamp/Split Bolt

- Split bolts are utilised for the attachment of a separate ground wire.

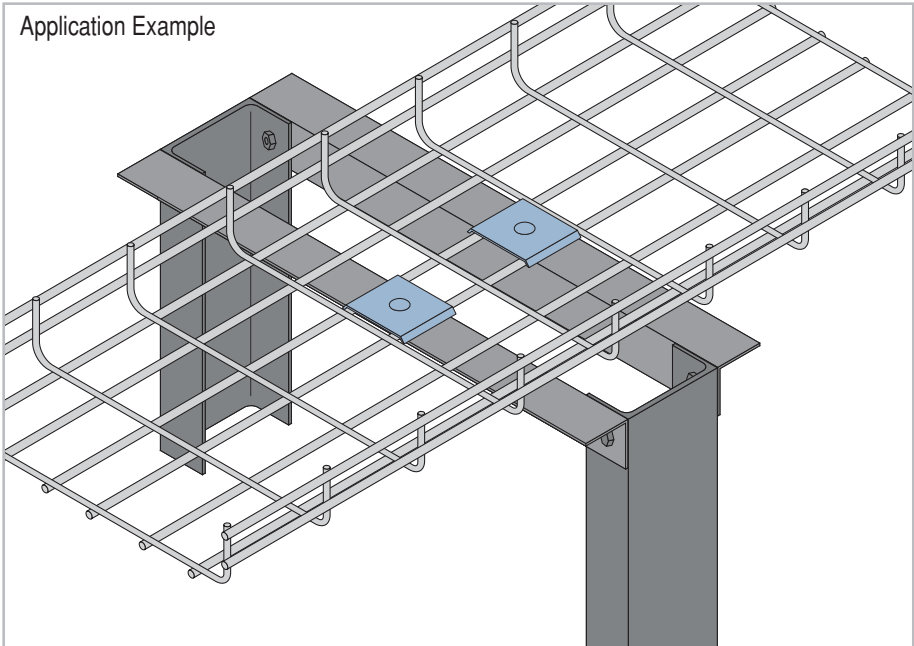
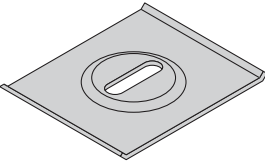
NOTE: Always place nut on outside of tray



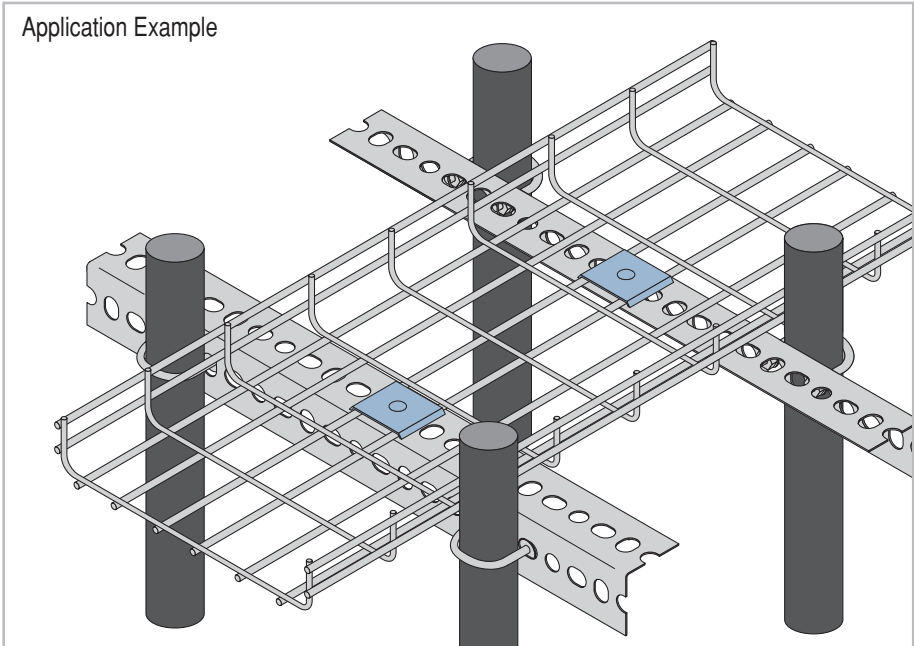
Application Example

AF-BCLIP

- AF-BCLIP used as a hold-down clip

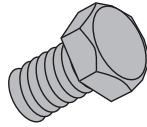


Drill hole in aluminum angle of relay rack.  
Use AF-BCLIP to hold ACROFIL to relay rack using 6 x 20 round head machine screw and bolt and washer.



Hex Head Set Screws

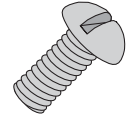
- Standard finish is Zinc Plated



Part No.	Size	Weight/100 (kg)
HHS0620	M6 x 20	0.6
HHS0625	M6 x 25	0.7
HHS0630	M6 x 30	0.8
HHS0820	M8 x 20	1.2
HHS0825	M8 x 25	1.4
HHS0830	M8 x 30	1.5
HHS0840	M8 x 40	1.8
HHS1020	M10 x 20	1.9
HHS1025	M10 x 25	2.1
HHS1030	M10 x 30	2.5
HHS1040	M10 x 40	3.0

Pan Head Screws

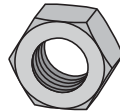
- Standard finish is Zinc Plated



Part No.	Size	Weight/100 (kg)
PHS0620	M6 x 20	0.6
PHS0625	M6 x 25	0.7
PHS0630	M6 x 30	0.8
PHS0825	M8 x 25	1.3

Hexagon Nuts

- Standard finish is Zinc Plated



Part No.	Size	Weight/100 (kg)
HN06	M6	0.2
HN08	M8	0.5
HN10	M10	0.8

Spring Washers

- Standard finish is Zinc Plated



Part No.	Size	Weight/100 (kg)
SW06	M6	0.1
SW08	M8	0.2
SW10	M10	0.3

Flat Washers

- Standard finish is Zinc Plated

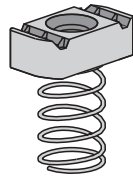


Part No.	Size	Weight/100 (kg)
FW06	M6	0.1
FW08	M8	0.1
FW10	M10	0.3



**Strut Nuts**

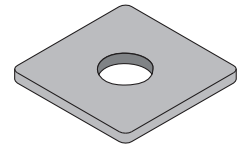
- Standard finish is Zinc Plated



Part No.	For Use With	Size	Weight/100 (kg)
P1006	AF-HSB-3M	M6	3.18
P1007		M8	3.18
P1008		M10	4.54
P4006	AF-MSB-3M	M6	2.73
P4007		M8	2.73
P4008		M10	4.42

**Square Strut Washers**

- Standard finish is Zinc Plated

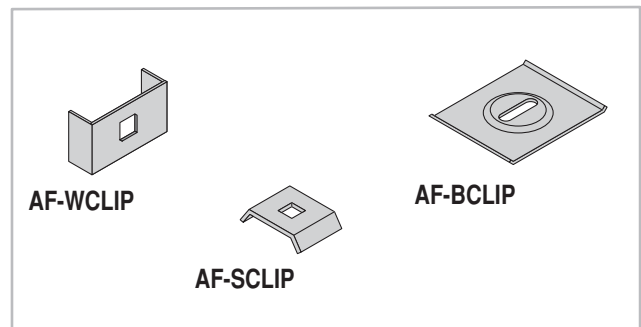


Part No.	Hole Size (mm)	Weight/100 (kg)
P1062	9	7.0
P1063	12	6.8
P1064	14	6.6

**Tray Clips (See Pages 46 - 47 for Connector Kits)**

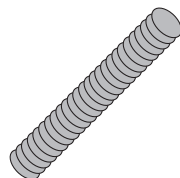
Standard finish is Zinc Plated

Single Part	Weight (kg)	No./ Pkg
AF-SCLIP	0.09	10
AF-WCLIP	0.14	10
AF-BCLIP	0.42	10



**Unirod Steel Threaded Rod**

- Standard finish is Zinc Plated
- Standard Length is 3M



**Unirod Load Data:** Maximum recommended tensile load is based on a factor of safety of 2.5 using the appropriate stress area of thread and ultimate tensile strength of 430 MPa.

Part No.	Description	Max. Recommended Tensile Load (kN)	Mass (kg/m)
UR06	M6	3.47	0.20
UR08*	M8	6.32	0.35
UR10*	M10	10.02	0.50

\* Also available in Hot Dipped Galvanised.

## 1.0 Acceptable Manufactures

Provide "ACROFIL" Wire Basket type of cable management system as manufactured by Unistrut or engineered approved equal.

All cable trays shall be installed in a neat uniform fashion. Installing contractor shall field modify tray system to accommodate the exact routing requirements.

## 2.0 Material/Finishes

Wire basket tray to be fabricated from high strength steel wires.

### 2.1 Acceptable finishes

#### 2.1.a Standard Finish

**Zinc Plated** Steel in accordance with AS 1789

#### 2.1.b Other Finishes

**Hot Dipped Galvanized** – Steel in accordance with AS/NZS 4680

**Galvabond** – AS 1397 with a coating class of Z275.

**SS** – AISI 316L stainless steel.

**SS304** – AISI 304L stainless steel.

## 3.0 - Straight Sections

Straight sections shall be manufactured from high strength steel wires forming 50mm X 100mm openings and shall conform to the following dimensions.

### 3.1 Length

Straight sections shall be supplied in 3m lengths.

### 3.2 Width

Widths shall be 50, 100, 150, 200, 300, 400, 450, 500, or 600 as called out on drawings. (mm)

## 3.3 - Load depths

The load depths shall include 50mm & 100mm as required.

## 4.0 Splices

All straight sections shall be supplied with pre-installed, auto-locking, splices plates, where possible, as per Unistrut "ACROFIL". Trays design shall allow for a snap together type connection and shall require no nut and bolt assembly.

## 5.0 Fittings

All fittings shall be fabricated in the field as required, per manufacturer's recommendations. Radius of the fittings shall be based on the "minimum bending" radius of the cables being installed.

## 6.0 Accessories

Accessories such as blind ends, dropouts, and barriers, etc... shall be installed as specified on drawings.

## 7.0 Supports

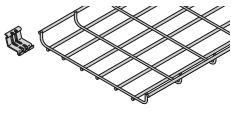
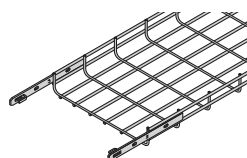
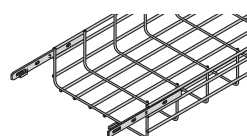
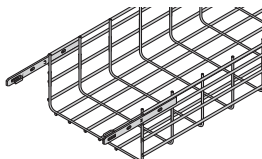
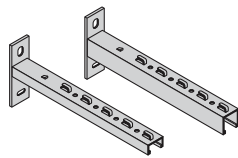
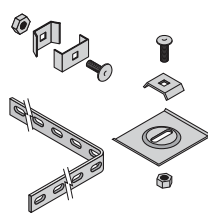
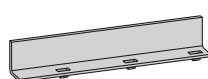
Supports shall include, but are not limited to, center type, trapeze type, wall supports, and floor supports.

### 7.1 Auto Locking

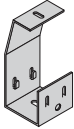
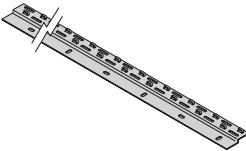
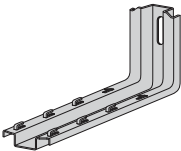
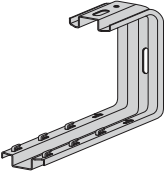
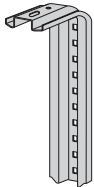
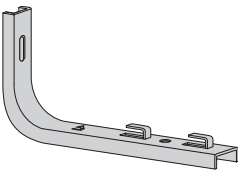
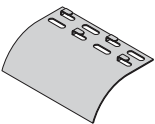
All supports shall be supplied with an Auto locking feature, requiring no special tools for attachment of the trays.

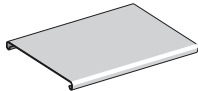
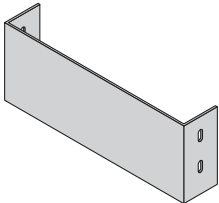
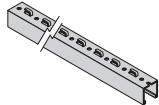
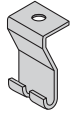
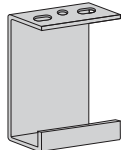

### 7.2 Finish

All supports, including threaded rod and associated hardware shall be zinc plated coated to AS 1789.

Part	Short Name	Description	Part No. Standard	Part No. HDG	Part No. SS	Page No.
	AF30-50	AF30-50 ACROFIL MESH 30X50X3000	4027316	4027348	4027548	44
	AF30-100	AF30-100 ACROFIL MESH 30X100X3000	4027317	4027349	4027549	44
	AF30-150	AF30-150 ACROFIL MESH 30X150X3000	4027318	4027350	4027550	44
	AF30-200	AF30-200 ACROFIL MESH 30X200X3000	4027319	4027351	4027551	44
	AF30-300	AF30-300 ACROFIL MESH 30X300X3000	4027320	4027352	4027552	44
	AF50-50	AF50-50 ACROFIL 50X50X3000	4027321	4027353	4027553	42
	AF50-100	AF50-100 ACROFIL 50X100X3000	4027322	4027354	4027554	42
	AF50-150	AF50-150 ACROFIL 50X150X3000	4027323	4027355	4027555	42
	AF50-200	AF50-200 ACROFIL 50X200X3000	4027324	4027356	4027556	42
	AF50-300	AF50-300 ACROFIL 50X300X3000	4027325	4027357	4027557	42
	AF50-400	AF50-400 ACROFIL 50X400X3000	4027326	4027358	4027558	42
	AF50-450	AF50-450 ACROFIL 50X450X3000	4027327	4027359	4027559	42
	AF50-500	AF50-500 ACROFIL 50X500X3000	4027328	4027360	4027560	42
	AF100-100	AF100-100 ACROFIL 100X100X3000	4027330	4027362	4027562	43
	AF100-200	AF100-200 ACROFIL 100X200X3000	4027331	4027363	4027563	43
	AF100-300	AF100-300 ACROFIL 100X300X3000	4027332	4027364	4027564	43
	AF100-400	AF100-400 ACROFIL 100X400X3000	4027333	4027365	4027565	43
	AF100-500	AF100-500 ACROFIL 100X500X3000	4027335	4027367	4027567	43
	AF100-600	AF100-600 ACROFIL 100X600X3000	4027336	4027368	4027568	43
	AF150-300	AF150-300 ACROFIL 150X300X3000	4027337	4027369	4027569	44
	AF150-400	AF150-400 ACROFIL 150X400X3000	4027338	4027370	4027570	44
	AF150-600	AF150-600 ACROFIL 150X600X3000	4027339	4027371	4027571	44
	AF-CANTM-150-HG	AF-CANTM-150-HG CANT. B. MEDIUM 150MM	4027372	4027372	4027572	51
	AF-CANTM-200-HG	AF-CANTM-200-HG CANT. B. MEDIUM	4027373	4027373	4027573	51
	AF-CANTM-300-HG	AF-CANTM-300-HG CANT. B. MEDIUM	4027374	4027374	4027574	51
	AF-CANTH-200-HG	AF-CANTH-200-HG CANT. B. HEAVY 200MM	4027375	4027375	4027575	51
	AF-CANTH-300-HG	AF-CANTH-300-HG CANT. B. HEAVY 300MM	4027376	4027376	4027576	51
	AF-CANTH-400-HG	AF-CANTH-400-HG CANT. B. HEAVY 400MM	4027377	4027377	4027577	51
	AF-CANTH-500-HG	AF-CANTH-500-HG CANT. B. HEAVY 500MM	4027378	4027378	4027578	51
	AF-CANTH-600-HG	AF-CANTH-600-HG CANT. B. HEAVY 600MM	4027379	4027379	4027579	51
	AF-SPLICE	AF-SPLICE SPLICE BAR 225MM	4027456	4027380	4027580	45
	AF-SCLIP	AF-SCLIP SHORT CLIP A2	4027457	4027381	4027581	69
	AF-WCLIP	AF-WCLIP WIDE CLIP A3	4027458	4027382	4027582	69
	AF-BCLIP	AF-BCLIP BOTTOM CLIP A4	4027459	4027383	4027583	69
	AF-TBAR550	AF-TBAR550 CONNECTIONBAR 550MM	4027522	4027446	4027611	45
	AF-TBAR1100	AF-TBAR1100 CONNECTIONBAR 1100	4027460	4027384	4027584	45
	AF-GCLIP	AF-GCLIP GROUNDING CLIP	4027461	4027385	4027585	66
	AF-SPLICE30	AF-SPLICE30 SPLICE FOR AF30	4027465	4027389	4027589	-
	AF-KITCH1	AF-KITCH1 10X (1NUT 1 BOLT 2 CLAMPS)	4027542	4027450	4027615	46
	AF-KITCH2	AF-KITCH2 10X (1NUT 1BOLT 2CLAMPS)	4027543	4027451	4027616	47
	AF-KITCH3	AF-KITCH3 10X (1NUT 1BOLT 1CLAMP)	4027544	4027452	4027617	47
	AF-EG-CBN	AF-EG-CBN CONNECTOR HARDWARE	4027545	4027453	4027618	47
		AF-DIV30	AF-DIV30 DIVIDER 30MMX3M	4027462	4027386	4027586
AF-DIV50		AF-DIV50 DIVIDER 50MMX3M	4027463	4027387	4027587	57
AF-DIV100		AF-DIV100 DIVIDER 100MMX3M	4027464	4027388	4027588	57

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Part	Short Name	Description	Part No. Standard	Part No. HDG	Part No. SS	Page No.
<b>BRACKET</b> 	AF-B50	AF-B50 AF1-50 BRACKET	4027466	4027390	4027590	–
	AF-JBOX	AF-JBOX BRACKET 50MM	4027467	4027391	4027591	59
	AF-HGR-50	AF-HGR-50 HANGER 50MM WIDE	4027474	–	–	52
	AF-WB-50	AF-WB-50 WALL BRACKET 50MM	4027480	4027404	4027599	–
	AF-HGR-100	AF-HGR-100 HANGER 100MM WIDE	4027484	–	–	52
	AF-LIGHTB	AF-LIGHTB LIGHTING BRACKET	4027490	4027414	4027602	59
<b>ZED</b> 	AF-ZED-100	AF-ZED-100 ZED SUPPORT 100MM	4027491	4027415	4027603	SP
	AF-ZED-150	AF-ZED-150 ZED SUPPORT 150MM	4027492	4027416	4027604	SP
	AF-ZED-200	AF-ZED-200 ZED SUPPORT 200MM	4027470	4027394	4027594	SP
	AF-ZED-400	AF-ZED-400 ZED SUPPORT 400MM	4027471	4027395	4027595	SP
	AF-ZED-3M	AF-ZED-3M ZED SUPPORT 3000MM	4027472	4027396	4027596	51
<b>WALL CLIP</b> 	AF-CPA-100	AF-CPA-100 CPA WALL B. 100MM	4027475	4027399	–	50
	AF-CPA-150	AF-CPA-150 CPA WALL B. 150MM	4027476	4027400	–	50
	AF-CPA-200	AF-CPA-200 CPA WALL B. 200MM	4027477	4027401	–	50
	AF-CPA-300	AF-CPA-300 CPA WALL B. 300MM	4027478	4027402	–	50
	AF-CPA-400	AF-CPA-400 CPA WALL B. 400MM	4027479	4027403	–	50
<b>CEILING CLIP</b> 	AF-CCA-100	AF-CCA-100 CEILING CLIP 100	4027485	4027409	–	50
	AF-CCA-150	AF-CCA-150 CEILING CLIP 150	4027486	4027410	–	50
	AF-CCA-200	AF-CCA-200 CEILING CLIP 200	4027487	4027411	–	50
	AF-CCA-300	AF-CCA-300 CEILING CLIP 300	4027488	4027412	–	50
	AF-CCA-400	AF-CCA-400 CEILING CLIP 400	4027489	4027413	–	50
<b>PENDANT</b> 	AF-PPA-150	AF-PPA-150 PENDANT CPA H150	4027493	4027417	–	50
	AF-PPA-250	AF-PPA-250 PENDANT CPA H250	4027494	4027418	–	50
	AF-PPA-350	AF-PPA-350 PENDANT CPA H350	4027495	4027419	–	50
	AF-PPA-450	AF-PPA-450 PENDANT CPA H450	4027496	4027420	–	50
	AF-PPA-550	AF-PPA-550 PENDANT CPA H550	4027497	4027421	–	50
	AF-PPA-650	AF-PPA-650 PENDANT CPA H650	4027498	4027422	–	50
<b>BRACKET</b> 	AF-CMA-100	AF-CMA-100 CMA BRACKET 100MM	4027500	4027424	4027605	55
	AF-CMA-150	AF-CMA-150 CMA BRACKET 150MM	4027501	4027425	4027606	55
	AF-CMA-200	AF-CMA-200 CMA BRACKET 200MM	4027502	4027426	4027607	55
	AF-CMA-300	AF-CMA-300 CMA BRACKET 300MM	4027503	4027427	4027608	55
	AF-CMA-400	AF-CMA-400 CMA BRACKET 400MM	4027504	4027428	4027609	55
<b>DROP-OUT</b> 	AF-UNI-DO	AF-UNI-DO DROP OUT UNIVERSAL	4027505	4027429	–	57
	AF-100-DO	AF-100-DO DROP OUT 100MM	4027506	4027430	–	57
	AF-150-DO	AF-150-DO DROP OUT 150MM	4027473	4027397	–	57
	AF-200-DO	AF-200-DO DROP OUT 200MM	4027507	4027431	–	57
	AF-300-DO	AF-300-DO DROP OUT 300MM	4027508	4027432	–	57
	AF-400-DO	AF-400-DO DROP OUT 400MM	4027509	4027433	–	57
	AF-500-DO	AF-500-DO DROP OUT 500MM	4027510	4027434	–	57
AF-600-DO	AF-600-DO DROP OUT 600MM	4027511	4027435	–	57	

Part	Short Name	Description	Part No. Standard	Part No. HDG	Part No. SS	Page No.
<b>COVER</b> 	AF-CVR50	AF-CVR50 COVER 50MM	4027512	4027436	–	57
	AF-CVR100	AF-CVR100 COVER 100MM	4027513	4027437	–	57
	AF-CVR150	AF-CVR150 COVER 150MM	4027514	4027438	–	57
	AF-CVR200	AF-CVR200 COVER 200MM	4027515	4027439	–	57
	AF-CVR300	AF-CVR300 COVER 300MM	4027516	4027440	–	57
	AF-CVR400	AF-CVR400 COVER 400MM	4027517	4027441	–	57
	AF-CVR500	AF-CVR500 COVER 500MM	4027518	4027442	–	57
	AF-CVR600	AF-CVR600 COVER 600MM	4027519	4027443	–	57
	AF-CVR450	AF-CVR450 COVER 450MM	4027520	4027444	–	57
<b>BLIND END</b> 	AF50-BE100	AF50-BE100 BLIND END 50x100	4027523	–	–	58
	AF50-BE150	AF50-BE150 BLIND END 50x150	4027524	–	–	58
	AF50-BE200	AF50-BE200 BLIND END 50x200	4027525	–	–	58
	AF50-BE300	AF50-BE300 BLIND END 50x300	4027526	–	–	58
	AF50-BE400	AF50-BE400 BLIND END 50x400	4027527	–	–	58
	AF50-BE450	AF50-BE450 BLIND END 50x450	4027528	–	–	58
	AF50-BE500	AF50-BE500 BLIND END 50x500	4027529	–	–	58
	AF50-BE-600	AF50-BE600 BLIND END 50x600	4027530	–	–	58
	AF100-BE100	AF100-BE100 BLIND END 100X100	4027531	–	–	58
	AF100-BE150	AF100-BE150 BLIND END 100X150	4027532	–	–	58
	AF100-BE200	AF100-BE200 BLIND END 100X200	4027533	–	–	58
	AF100-BE300	AF100-BE300 BLIND END 100X300	4027534	–	–	58
	AF100-BE400	AF100-BE400 BLIND END 100X400	4027535	–	–	58
	AF100-BE500	AF100-BE500 BLIND END 100X500	4027537	–	–	58
AF100-BE600	AF100-BE600 BLIND END 100X600	4027538	–	–	58	
<b>RAIL SUPPORT</b> 	AF-HSB-3M	AF-HSB-3M STRUT SUPPORT M8 3M	4027539	4027447	4027612	48
	AF-MSB-3M	AF-MSB-3M STRUT SUPPORT M8 3M	4027540	4027448	4027613	48
	AF-USB-3M	AF-USB-3M U SUPPORT M8 3M	4027499	4027423	–	48
<b>ROD FIXING</b> 	AF-SIDECLIPM10	AF-SIDECLIPM10 SIDE CLIP M10	4027541	4027449	4027614	49
	AF-SIDECLIPM8	AF-SIDECLIPM8 HANGING CLIP M8	4027468	4027392	4027592	49
	AF-RODCLIP1	AF-RODCLIP1 ROD CLIP 50-150	4027469	4027393	4027593	49
	AF-RODCLIP2	AF-RODCLIP2 ROD CLIP 200-300	4027483	4027407	4027600	49
<b>HANGING BRACKET</b> 	AF-CB-USB	AF-CB-USB HANGING BKT FOR U	4027481	4027405	–	54
	AF-AB-USB	AF-AB-USB ARM HANGING B.	4027482	4027406	–	54
	AF-AB-HSB	AF-AB-HSB HEAVY HANGING BKT	4027521	4027445	4027610	54
<b>CUT TOOL</b> 	AF-CUTTOOL	AF-CUTTOOL CUT TOOL	4027619	–	–	60