

INSTALLATION GUIDE

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GENERAL

This document is intended as a practical guide for the proper installation of Vericom's Wire Basket Tray system. Cable tray system design shall comply with National Electrical Code® (NEC®) Article 392, NEMA VE 1, and NEMA FG 1 and follow safe work practices as described in NFPA 70E. Further, it is recommended that installers follow all guidelines and best practices found in NEMA VE 2 Cable Tray Installation Guidelines.

Installation and maintenance of cable tray wiring systems shall be conducted only by qualified personnel. For the purposes of this guideline, a qualified person is one who is familiar with electrical construction. In addition, that person is:

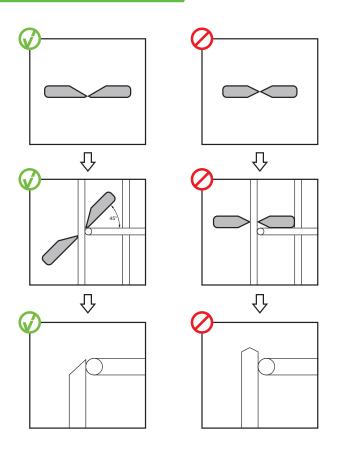
- a) Trained and authorized to test, energize, clear, ground, tag, and lock out circuits, in accordance with established safety practices, and
- b) Trained in the proper care and use of protective equipment, such as insulated rubber gloves, hard hats, safety glasses or face shields, dust masks, and flash-resistant clothing, in accordance with established safety practices.

!WARNING!

Do not use a cable tray as a walkway, ladder, or support for people; cable tray is a mechanical support system for cables and raceways. Using cable trays as walkways can cause personal injury and can damage cable tray and installed cables.

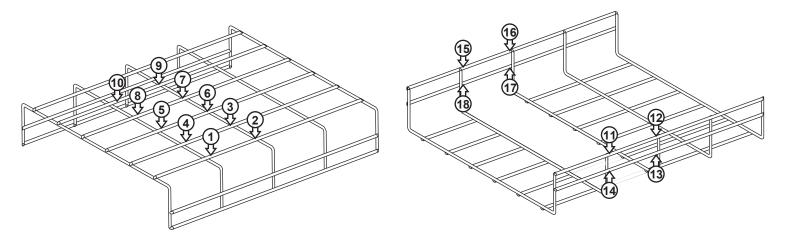


CUTTING



- For best results, use side action bolt cutters to produce a clean cut. Do not use center cut style cutters, as they will leave a rough, burred cut that can damage cables and/or cause personal injury.
- Position cutters against the perpendicular wire at approximately a 45° angle. Angle all cuts away from the new end and cut cleanly through the wire in one cut.

• Position the tray upside down on a flat, horizontal surface. Cut the bottom wires first in the order as shown. Flip the tray over to cut the side wires, starting at the top and working down.



• If necessary, grind away any burrs or protruding sharp edges and apply touch up paint.



SPLICING

Vericom offers several hardware options for splicing together two tray sections. Use the following table to determine the number of splice kits required for each tray size:

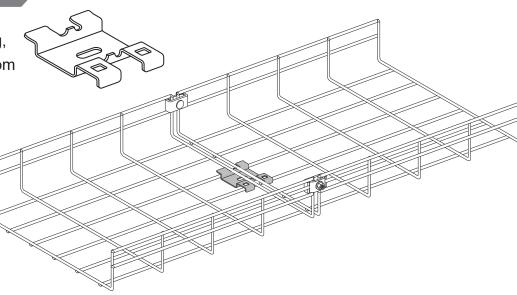
Tray Depth	Tray Width - number of splices									
	2 in (50 mm)	4 in (100 mm)	6 in (150 mm)	8 in (200 mm)	12 in (300 mm)	16 in (400 mm)	18 in (450 mm)	20 in (500 mm)	24 in (600 mm)	
2 in	2	3	3	3	4	4	4	4	4	
4 in	n/a	3	3	3	4	4	4	4	4	
6 in	n/a	n/a	n/a	n/a	4	4	4	4	4	

Washer Splice Kit

The most universal splice kit option, it can be used with all tray sizes and in all locations (side and bottom).

Snap-In Splice Clip

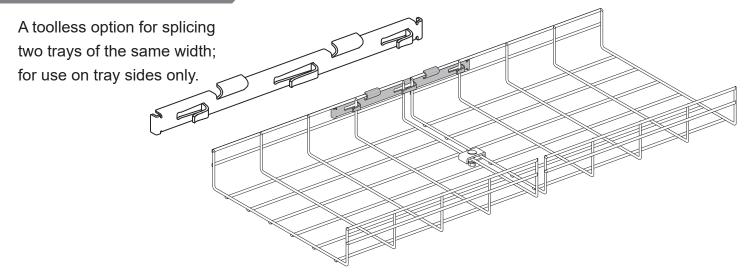
A toolless option for splicing, only to be used on the bottom of trays.





Bar Splice Kit

Quick Splice Bar



Corner Splice Kit

Used at horizontal 90° bends, crosses, and T-junctions.



Radius Splice

Depth dependent – be sure to use a radius splice with the same depth as the tray.

Center Clip

Used to connect two sections of basket tray at any angle; also used to secure two halves of one tray section formed into a horizontal bend.

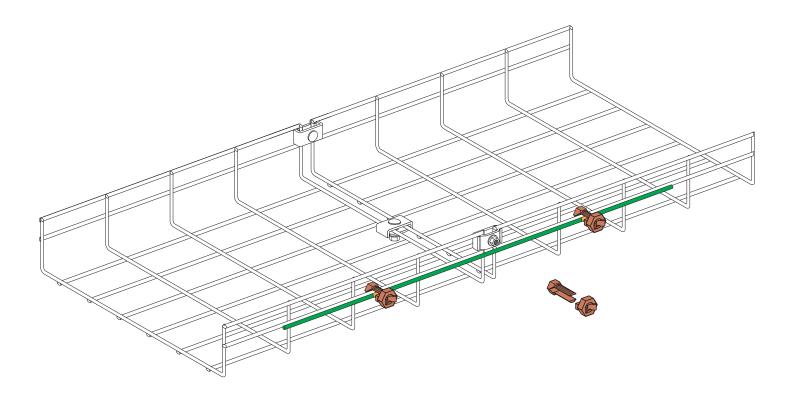




GROUNDING

Per NEC392, cable tray systems must be properly bonded (sections 259.96 and 250.96). To meet this requirement, Vericom recommends the following:

- Each tray section should be bonded to an adjoining section using listed bonding jumpers or a continuous ground wire and clamps (such as a copper ground bolt).
- Powder coated tray requires the removal of the coating in the clamping area in order to create a bond.
- Cable tray should be bonded to the building or facility grounding system every 50' – 60'.





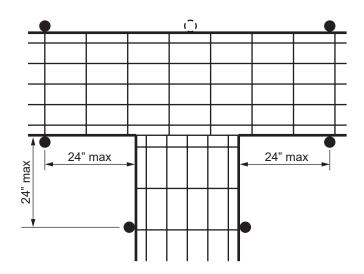
SUPPORT

Support Spacing

In addition to supporting tray every 5' - 7', it is recommended to add support locations near each field-fabricated junction and transition, as these areas may have been weakened by the required cutting/ removing of wire sections. The following diagrams provide guidance in locating these additional supports and estimating the total number of supports needed. However, note that shallow and/or narrow trays may not require as many additional supports, while deeper and wider trays may need more. Further, the unique circumstances of any given installation environment should be considered.

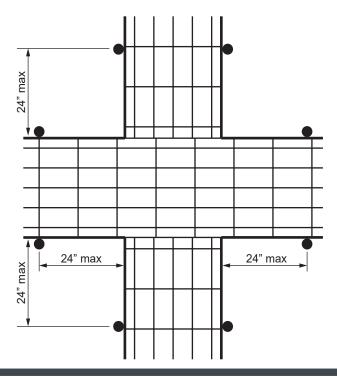
Horizontal Tee

Additional support recommended at the back of tee (as shown by dotted circle) or under tee for 4" and 6" deep trays that are 18" and wider.



Horizontal Cross

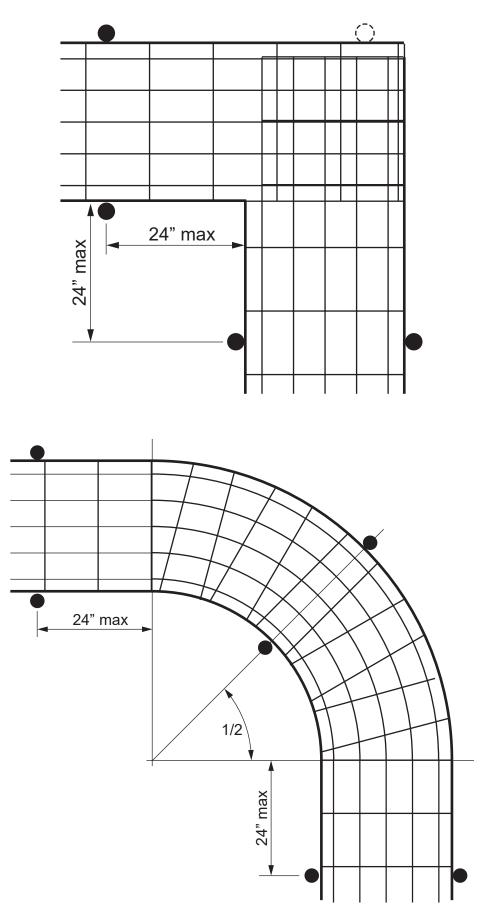
On 24" wide tray, the recommended distance is 18" max.





90° Junction / Bend

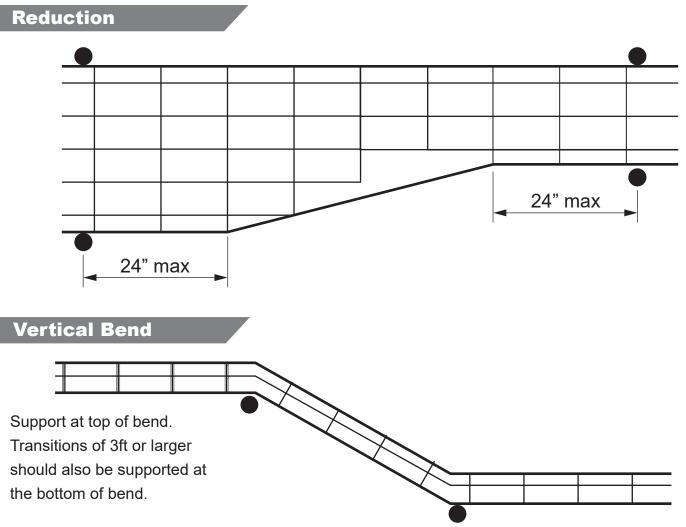
Additional support recommended at the back of junction (as shown by dotted circle) or under junction for 4" and 6" deep trays that are 18" and wider.



Horizontal Sweep

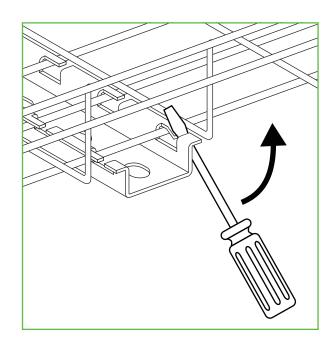
Center support not required on trays less than 12" wide and sweeps less than 45°.





Support Installation

When attaching wire basket tray to any slotted support structure, be sure to bend a few of the tabs down to lock the wire basket in place.

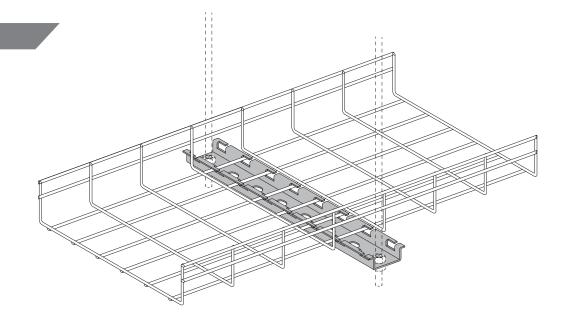




Ceiling Mounting

Cross Bar

Compatible with threaded rod up to 3/8" dia. (not included).

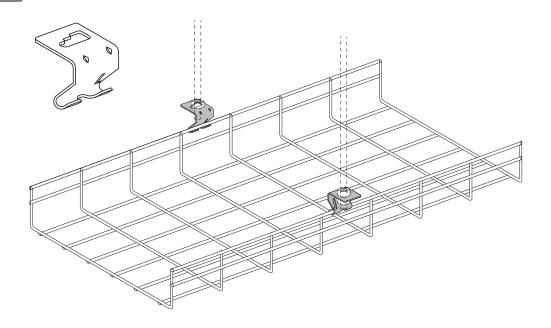


Hanging Clip

For use with tray up to 12" wide.

Two clips required per support location.

Compatible with threaded rod up to 3/8" dia. (not included).

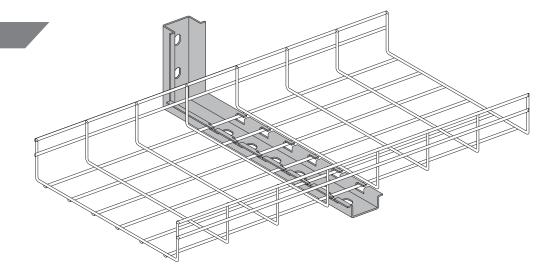






L Bracket

For use with any tray up to 16" wide in any depth.

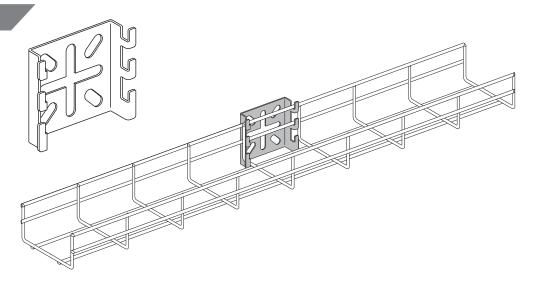


Shelf Wall Bracket

For used with any tray up to 18" wide in any depth.

Wall Mount Bracket

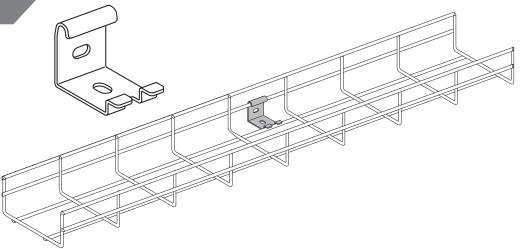
For mounting 2" and 4" wide tray only.





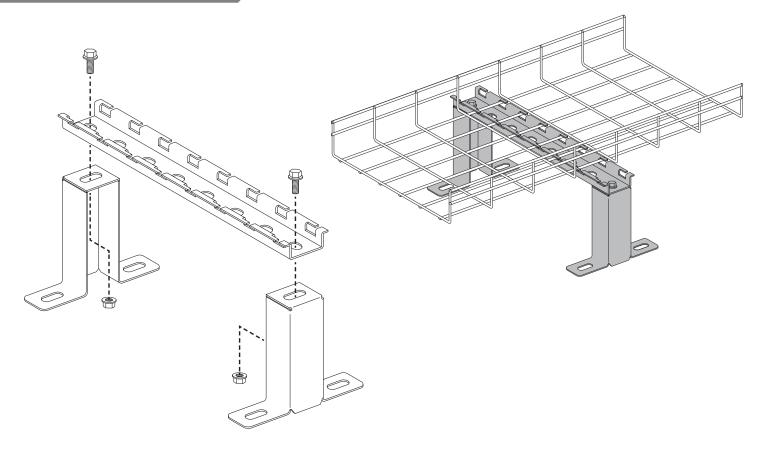
Wall Clip

For mounting 2" and 4" wide tray only.



Floor/Cabinet Mounting

Stand-Off Kit

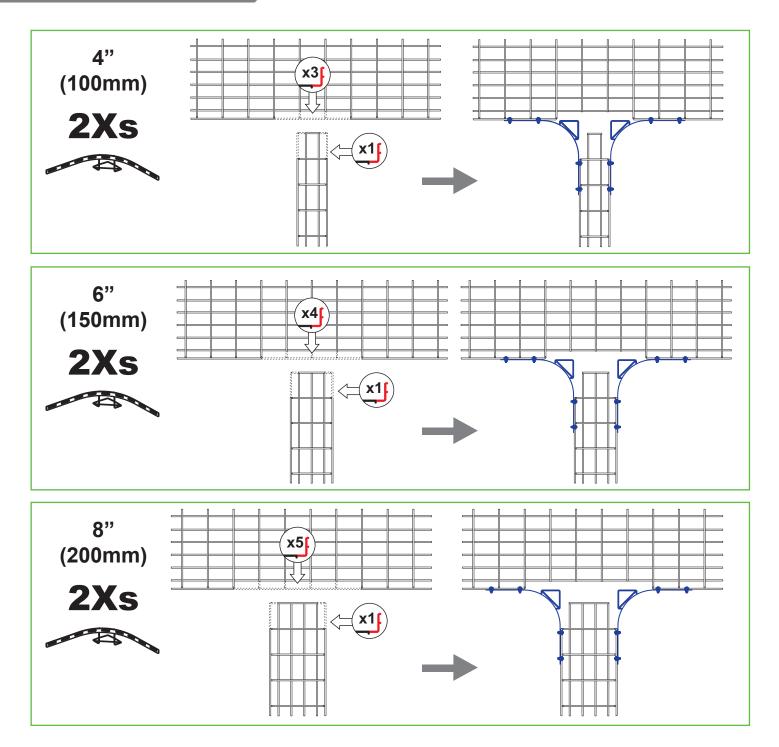




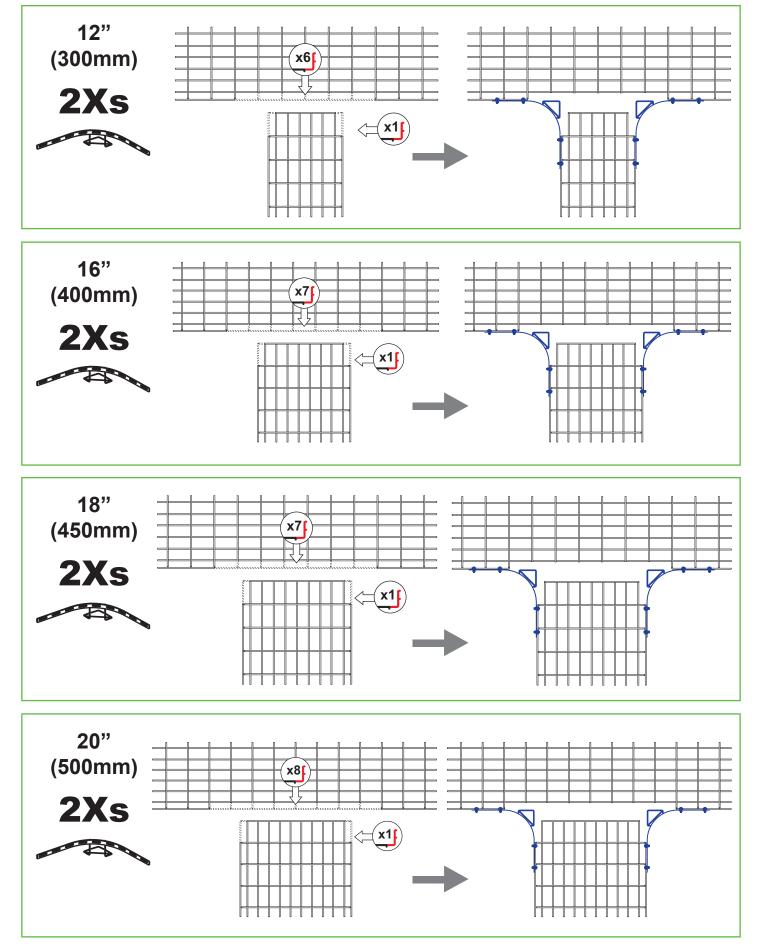
FIELD-FABRICATING JUNCTIONS AND TRANSITIONS

Any tray width and depth can be field-fabricated by cutting and removing sections to form T, Y, or 90° junctions, 90° bends, sweeps, vertical bends, or tray width reductions. Be sure to follow the guidelines for cutting in the previous section to prevent cutting/snagging cables and/or personal injury.

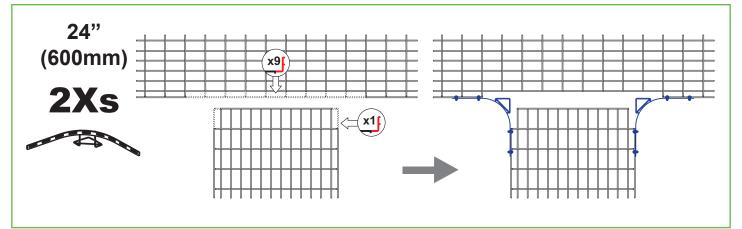
T Junctions: Option 1



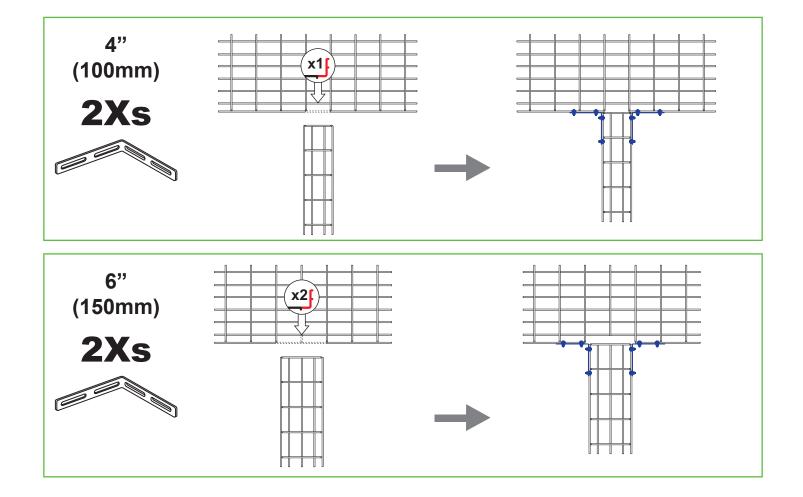




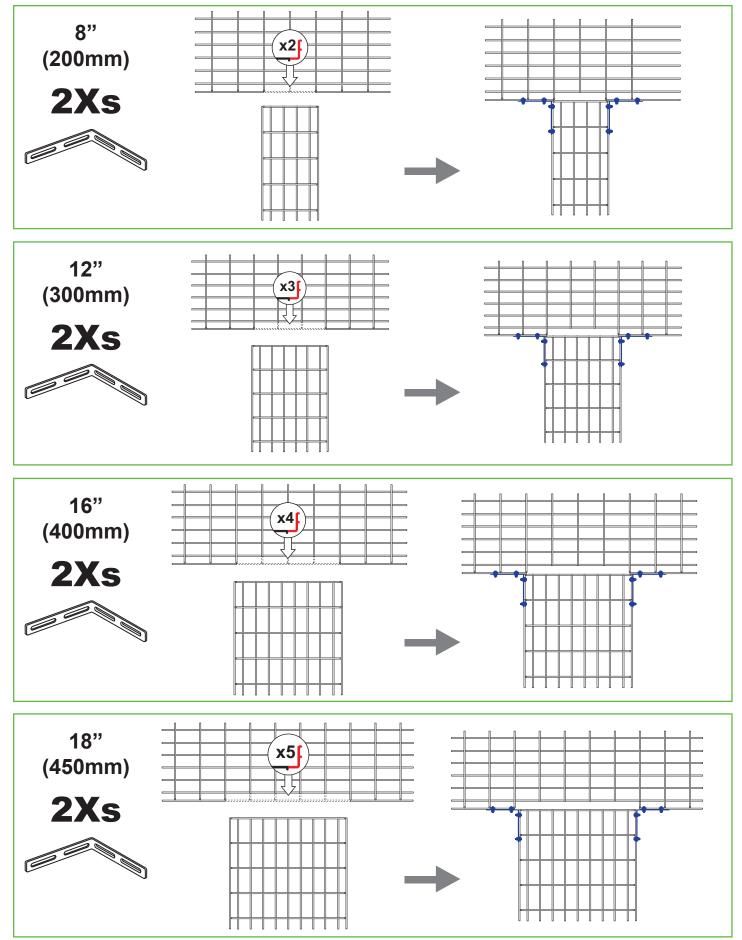




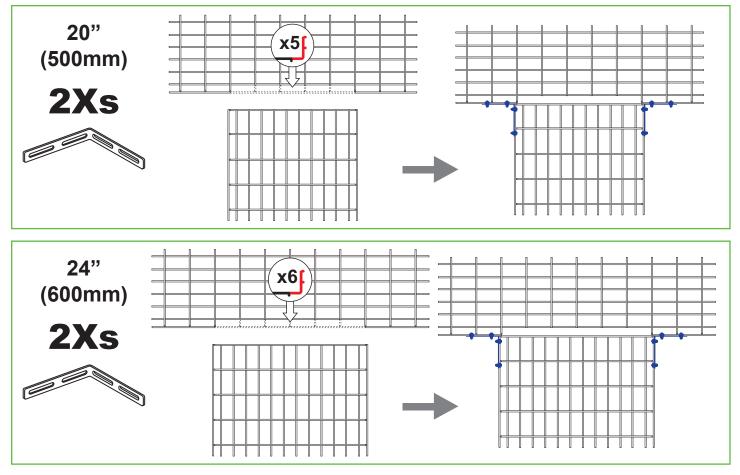
T Junctions: Option 2



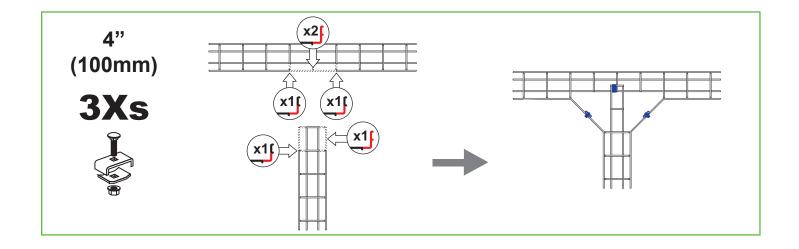




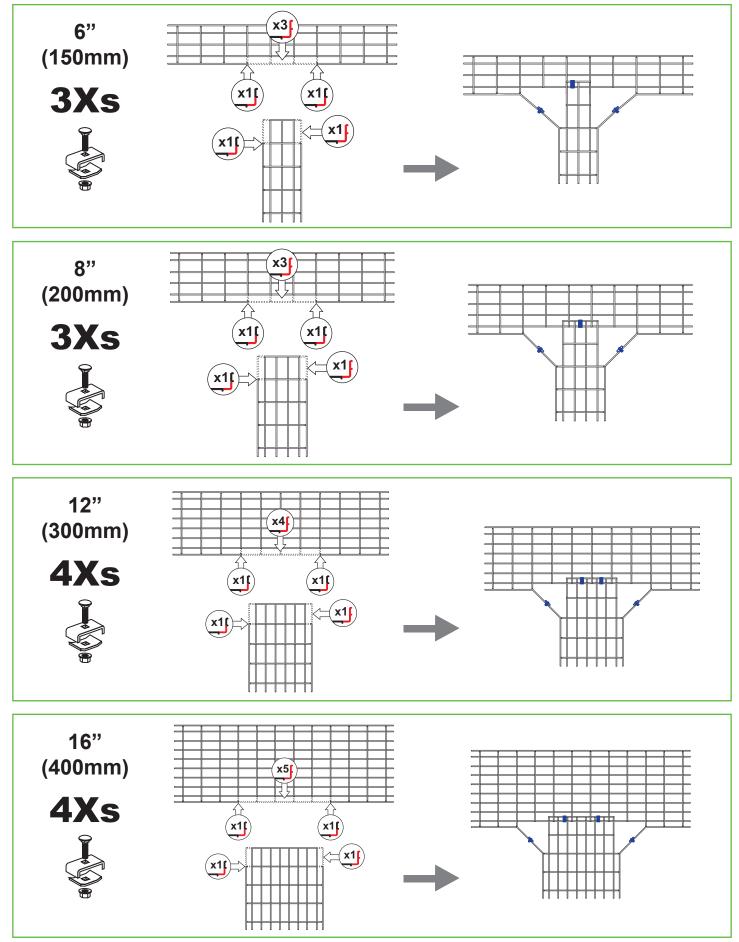




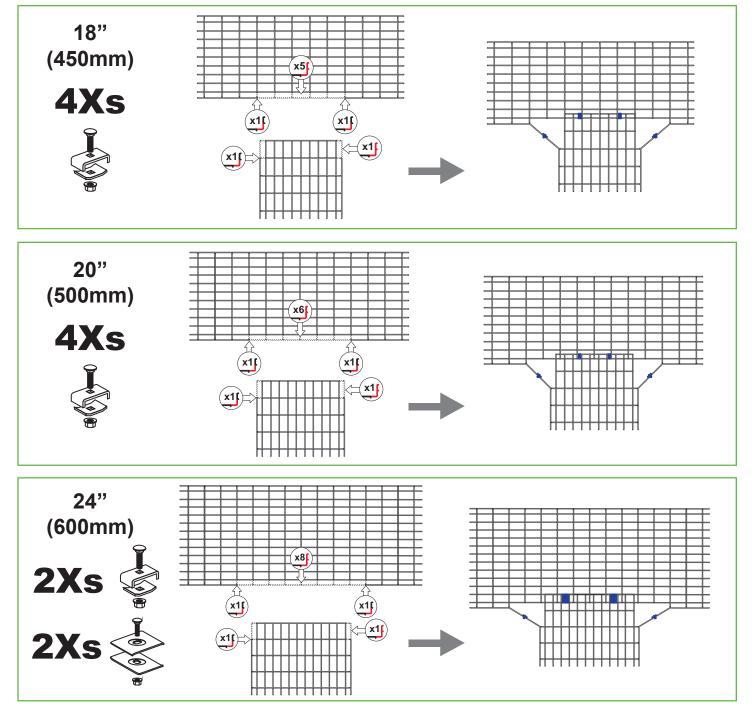
Y Junctions



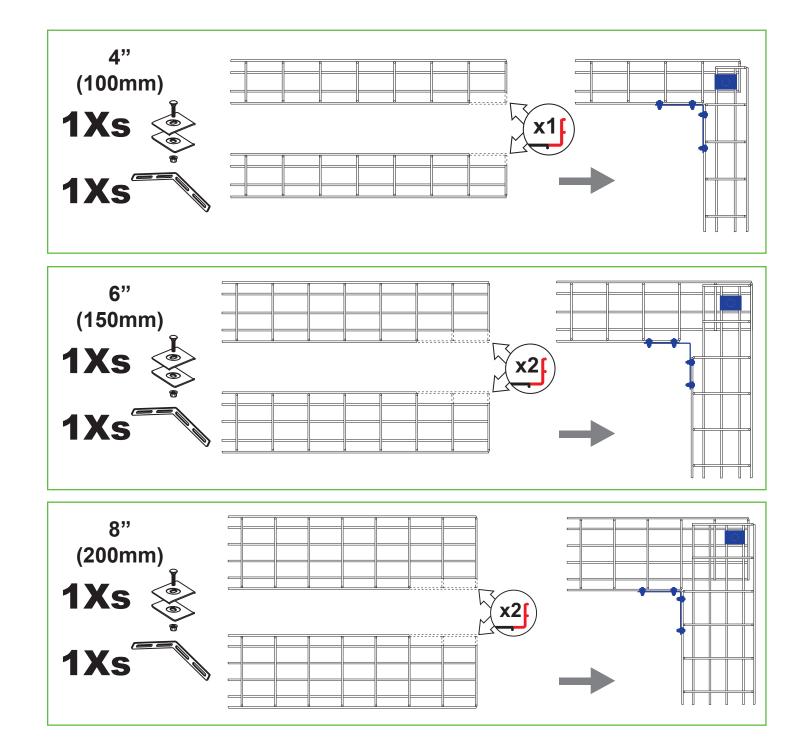




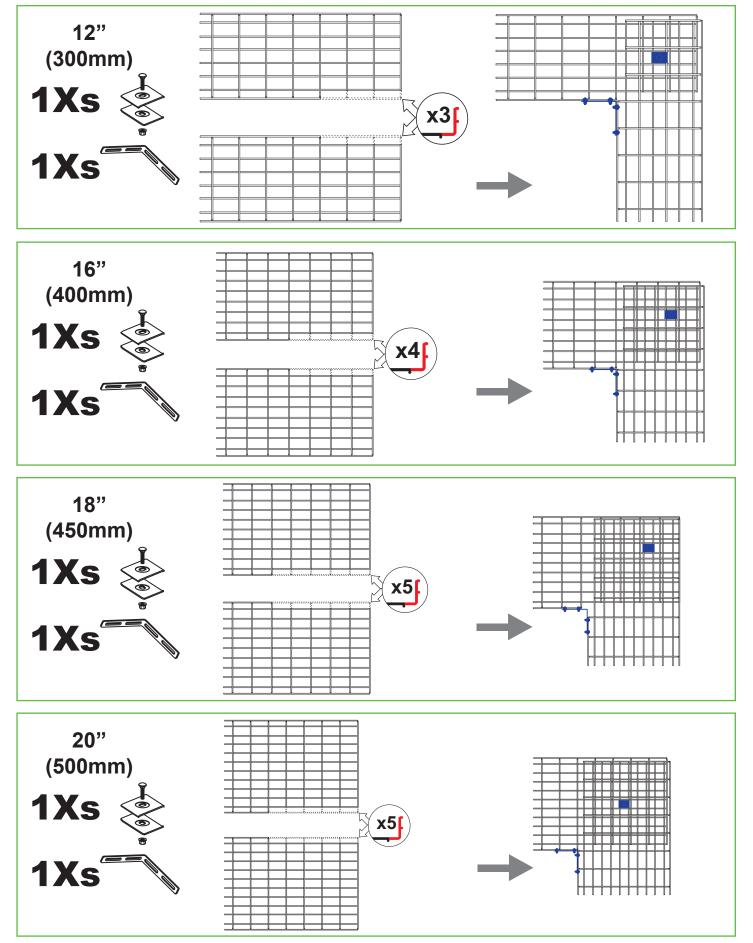




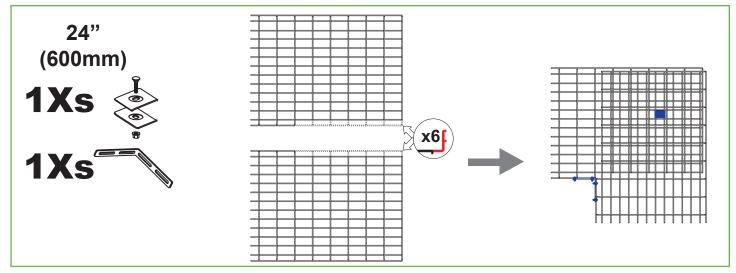






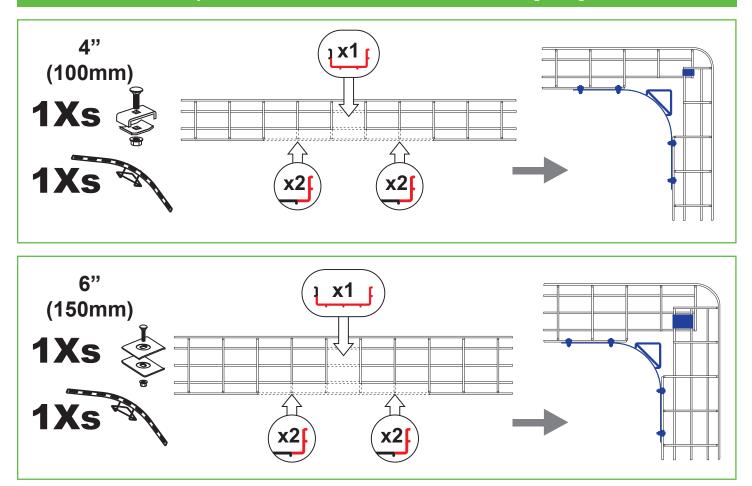




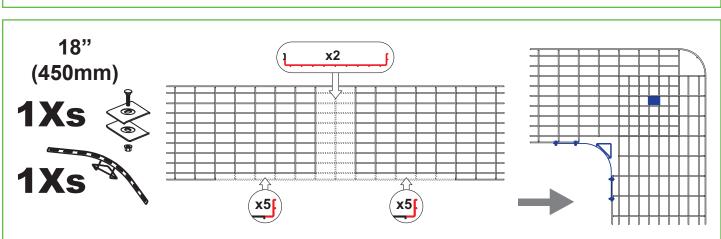


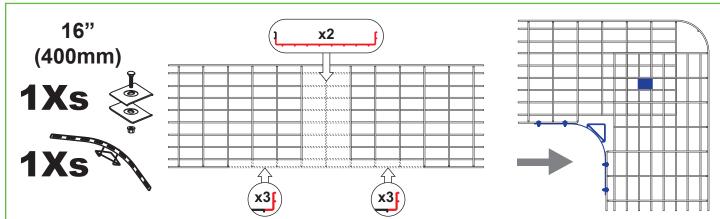
90° Bend: Option 1

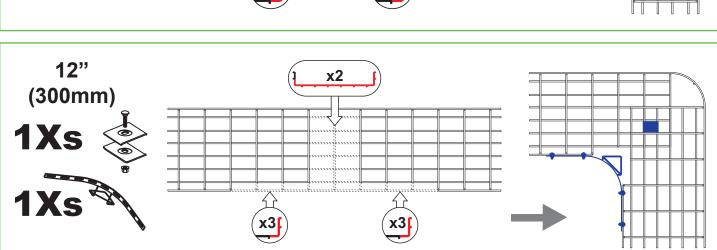
Once the required tray sections have been cut and removed, slowly bend the tray 90° at the center of the cut section to form a right angle.

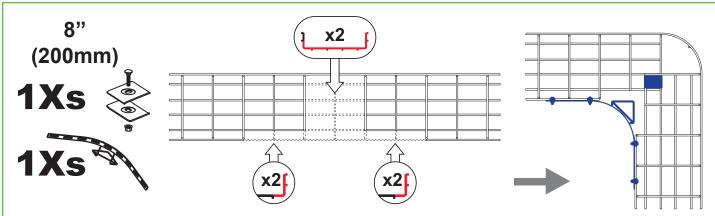


VERICOM°

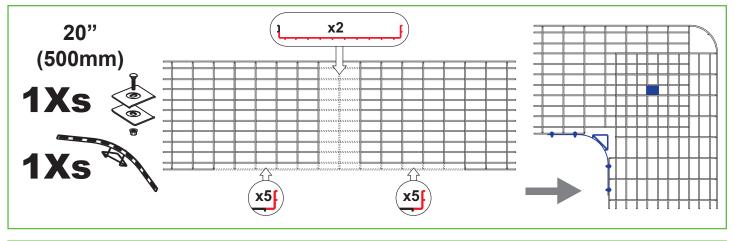


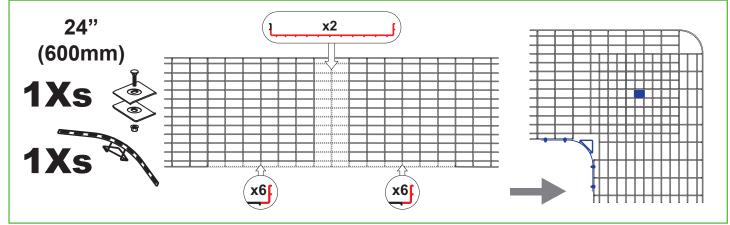






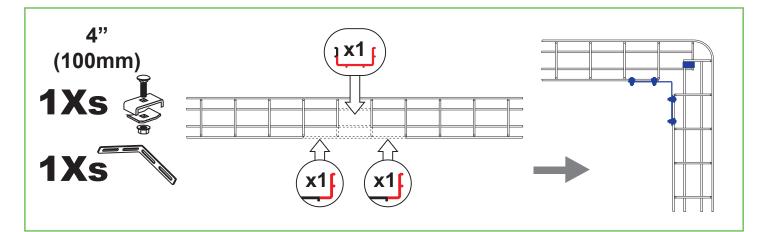




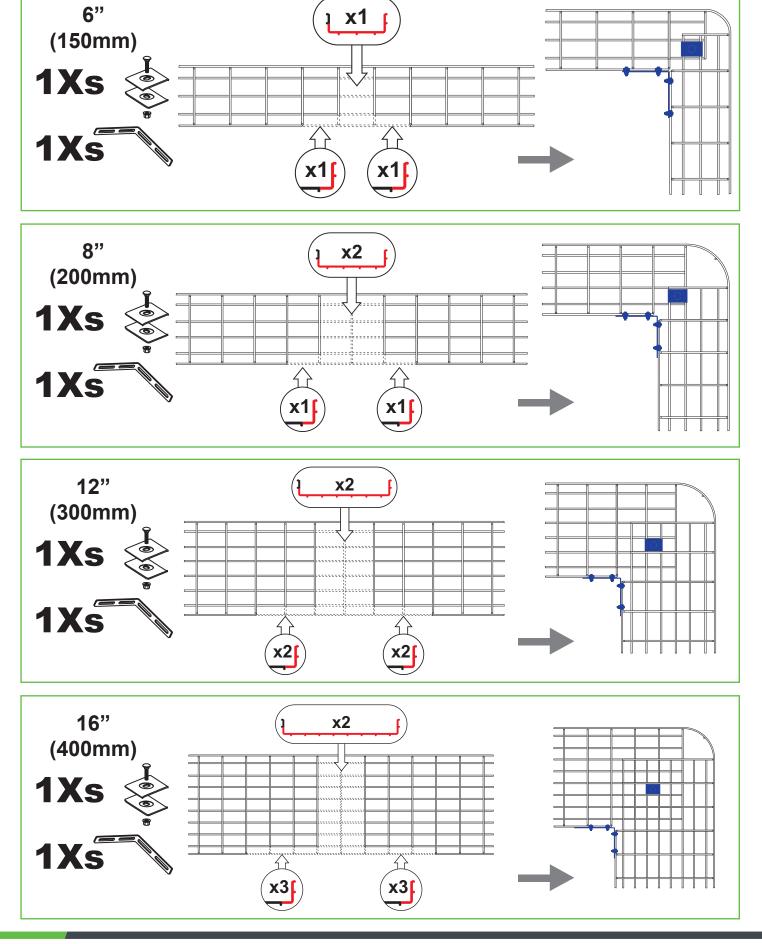


90° Bend: Option 2

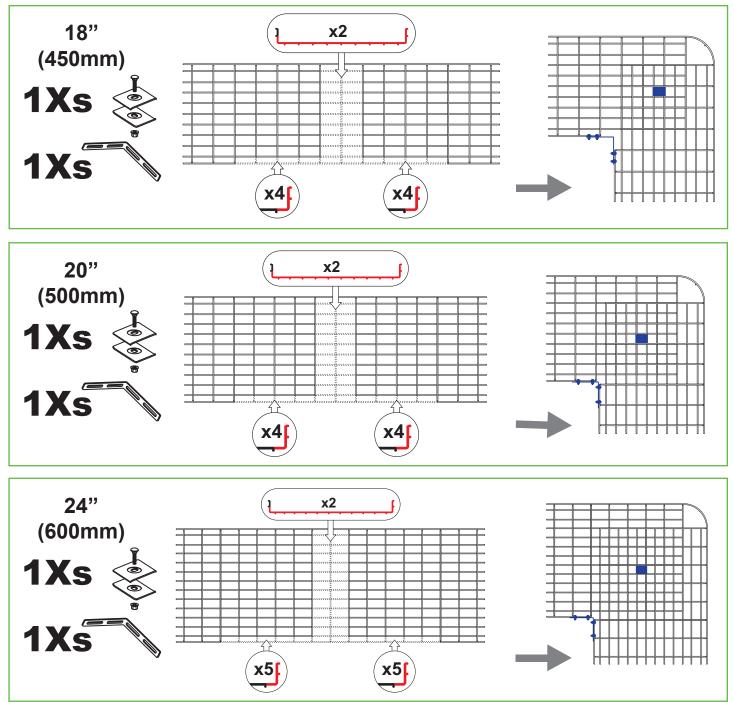
Once the required tray sections have been cut and removed, slowly bend the tray 90° at the center of the cut section to form a right angle.





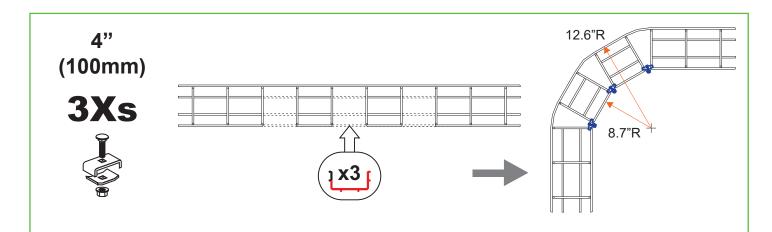


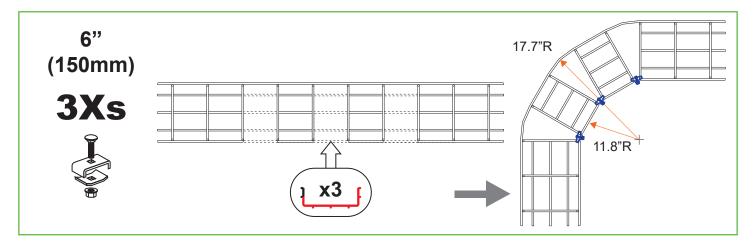


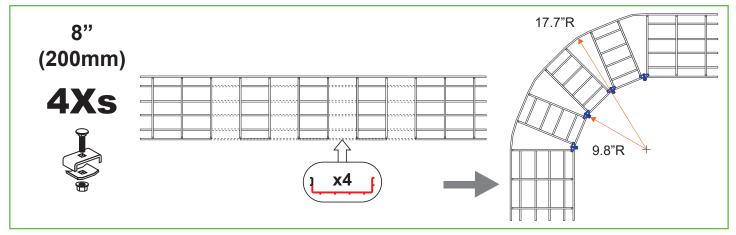




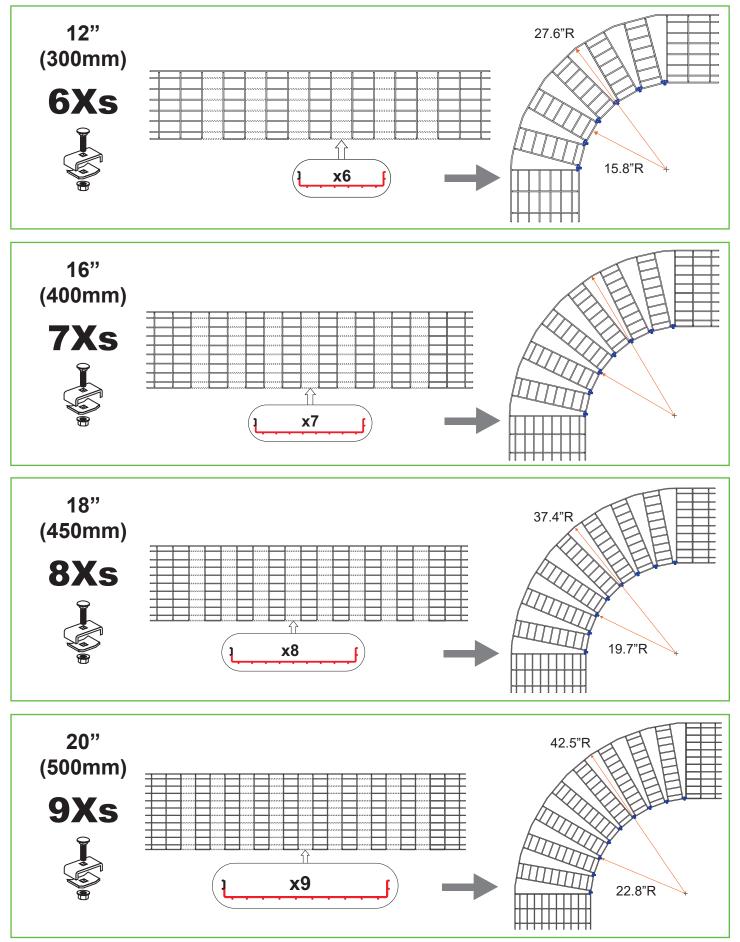
Once the required tray sections have been cut and removed, slowly bend the tray at each cut section until the remaining sections touch.



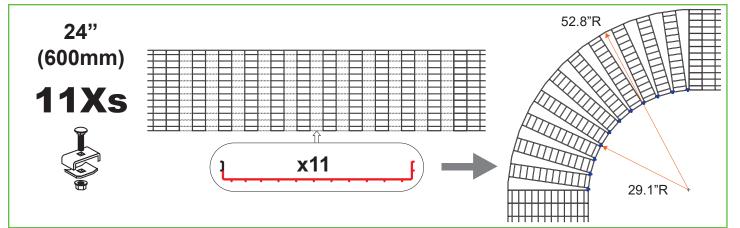




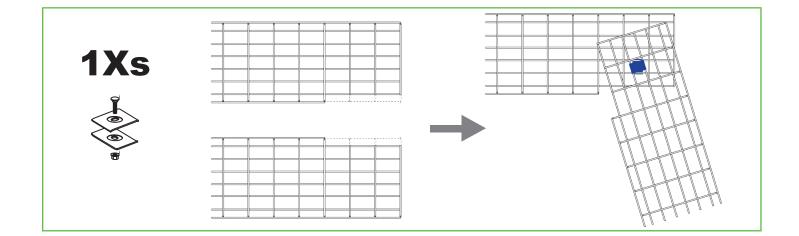




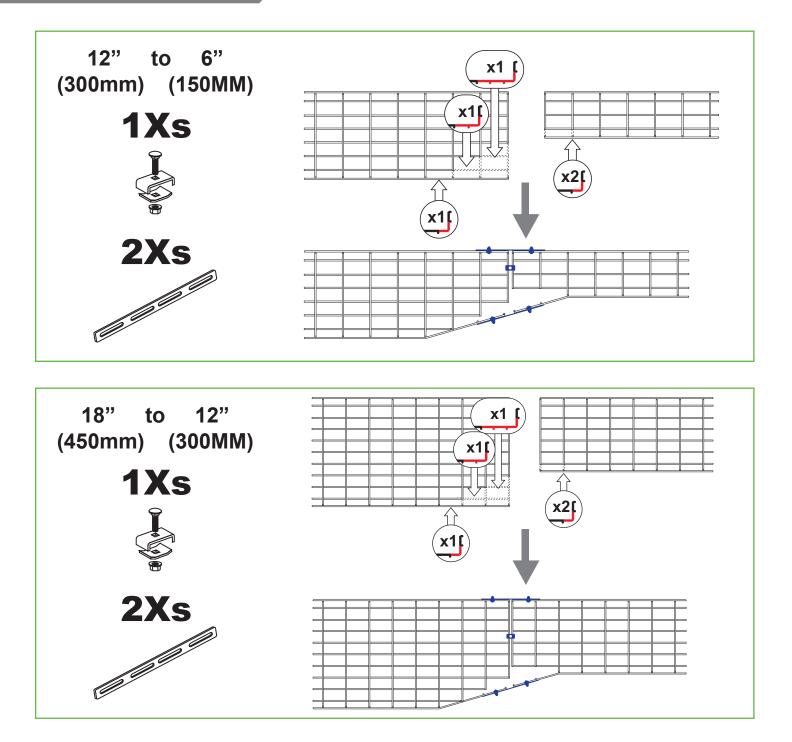




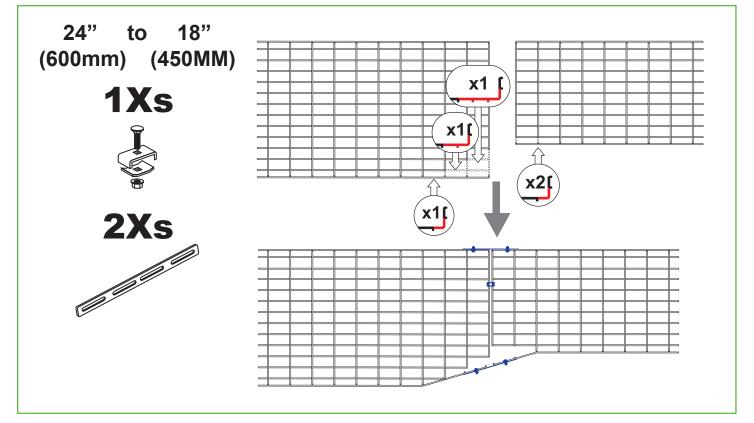
Irregular Junctions



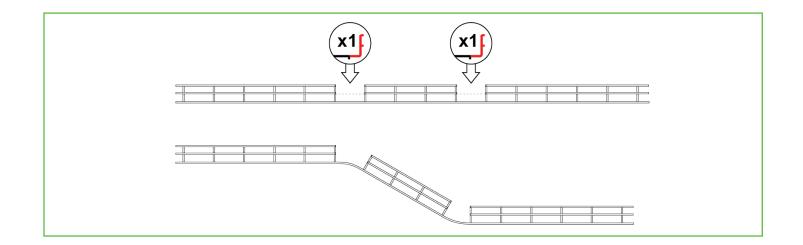








Vertical Bends





The Future Of Technology - Today.

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