Installation Guide

WBT has pioneered the innovation of cabletray/basket tray in the last decade. Products such as Shaped Tray, PreForm, WBTForm and NoSplice have allowed users and installers to provide cleaner, faster and better engineered installs. Our solutions and products are made in the USA and our service and support can assist with any install or product selection questions that you may have.

This Installation guide covers the most popular and standard installation questions that may come up. If you have any further questions, please contact our sales team at **888-4WB TRAY** for assistance. Thank you for utilizing WBT, home of Performance Cabletray™.

WBT LLC

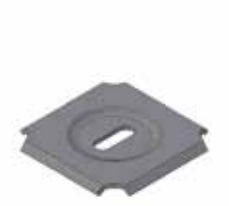
Splice Methods

WBT offers numerous splice options for traditional tray/tray splicing. **All splice hardware is UL Classified,** and requires no additional bonding or jumpers for UL compliance.

SPLICE KIT

DOUBLE SPLICE

GROUND SPLICE



WASHER SUPPORT

CORNER SPLICE

BAR SPLICE

WASHER SUPPORT PLUS

HORIZONTAL FITTING SPLICE

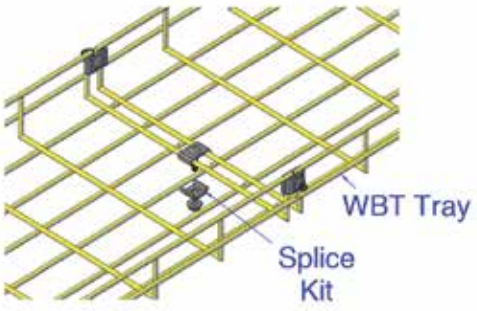
Field - Common Splicing Methods

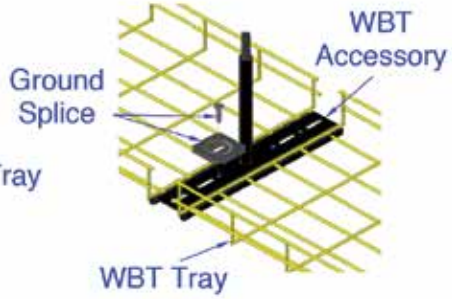
Most common is the Splice Kit and Double splice. These are 3 piece splices that utilize bolt and nut to securely attach and bond tray sections. The Double Splice cuts the required number of splice hardware down to a minimal number versus traditional splice kits, reducing labor and installation. Double splice is only for tray depths 4" and larger. Splice Kit is utilized on all sizes of tray.

Ground Splice is utilized along with the 'NoSplice' line of WBT supports. It is the quickest way to attach tray to support, utilizing a washer support and self threading screw.

Corner Splice and Radius Corner Splice are used when tray sections are joined to make a 90 degree horizontal transition.

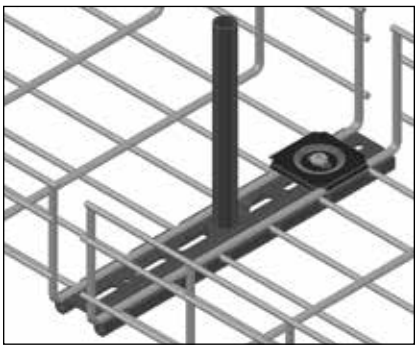
Bar Splice is utilized to add additional rigidity to tray splices, or when tray's are offset and angles *(hand bend)*, or space exist between the trays being spliced





WBT NoSplice

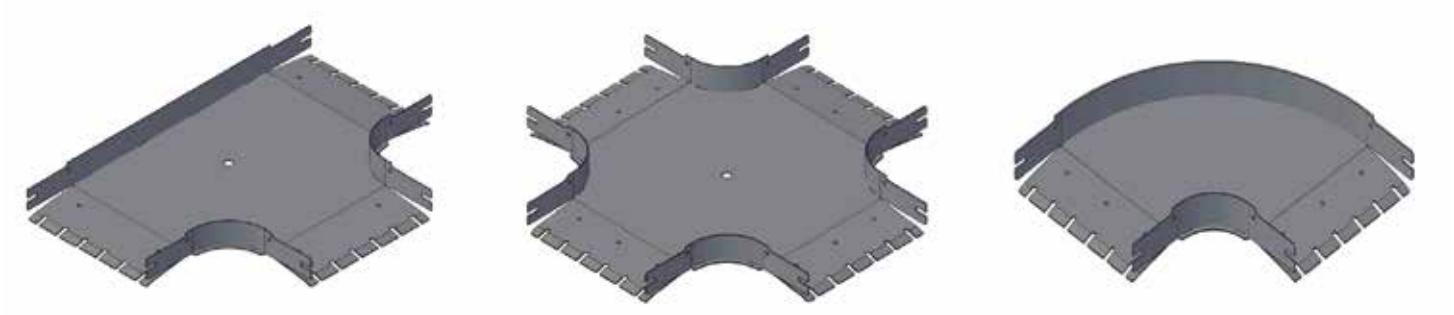
NoSplice was designed by WBT to eliminate both the material costs *(approved splice hardware)*, as well as the labor associated with the traditional splicing of individual tray sections. The NoSplice is available in ceiling mount applications, as the hardware acts as both tray support, and splice point. **NoSplice is UL Classified** as an equipment ground. The ends of the tray fit into channels at the margins of the NoSplice support, then *(supplied)* Ground Splice is secured to the support. When utilizing the NoSplice, supports must be placed approximately every 5 feet, as the supports must match with tray ends.



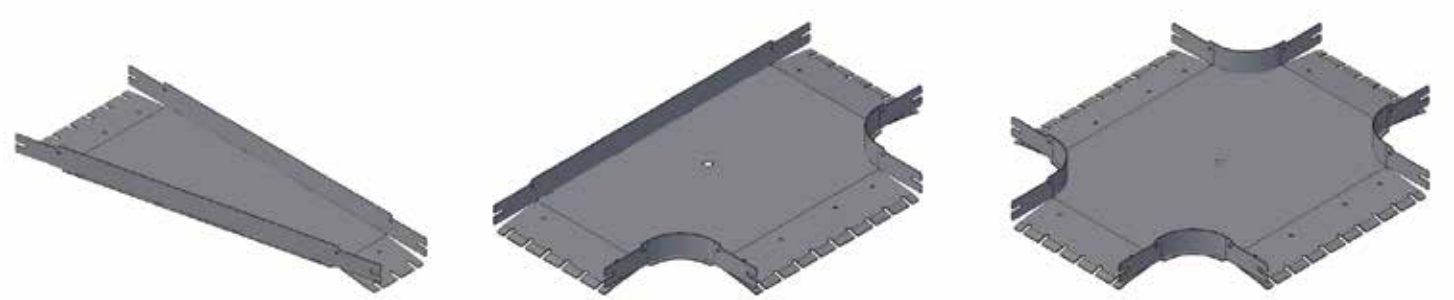
WBT PreForm

PreForm was designed by WBT to eliminate the lengthy amount of time to field configure tray when making horizontal tray bends, and provide a standard for tray installations where the installer variability would be eliminated, as each and every tray configuration would look identical, as a properly engineered solution should. PreForm reduces installation time up to 90% in many installs. PreForm **is UL Classified**. Each configuration of radius, intersection, tee, reduction or other custom install ships complete with steel bottom, poly *(UL rated 94V-0 flame rating)* and attachment hardware.

PreForm in sizes larger than 12", WBT offers a punched hole to support the PreForm *(Center Hanger supplied by WBT is optional)* in the center, versus having to support each of the trays coming to the transition point.



TEE **INTERSECTION** **RADIUS**

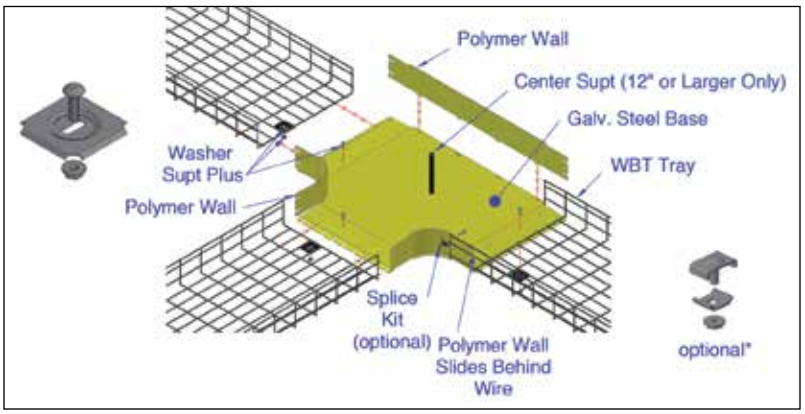


REDUCER **REDUCING TEE** **REDUCING INTERSECTION**

Installing WBT PreForm

General installation of WBT PreForm uses the Washer Supt Plus Method of attachment. The installer may add a splice kit attachment between the polymer sides and the tray sides but it is not necessary.

WBT offers the option to add a center support to provide additional support for WBTForm fittings on tray sizes 12" and larger. Center support NOT included.

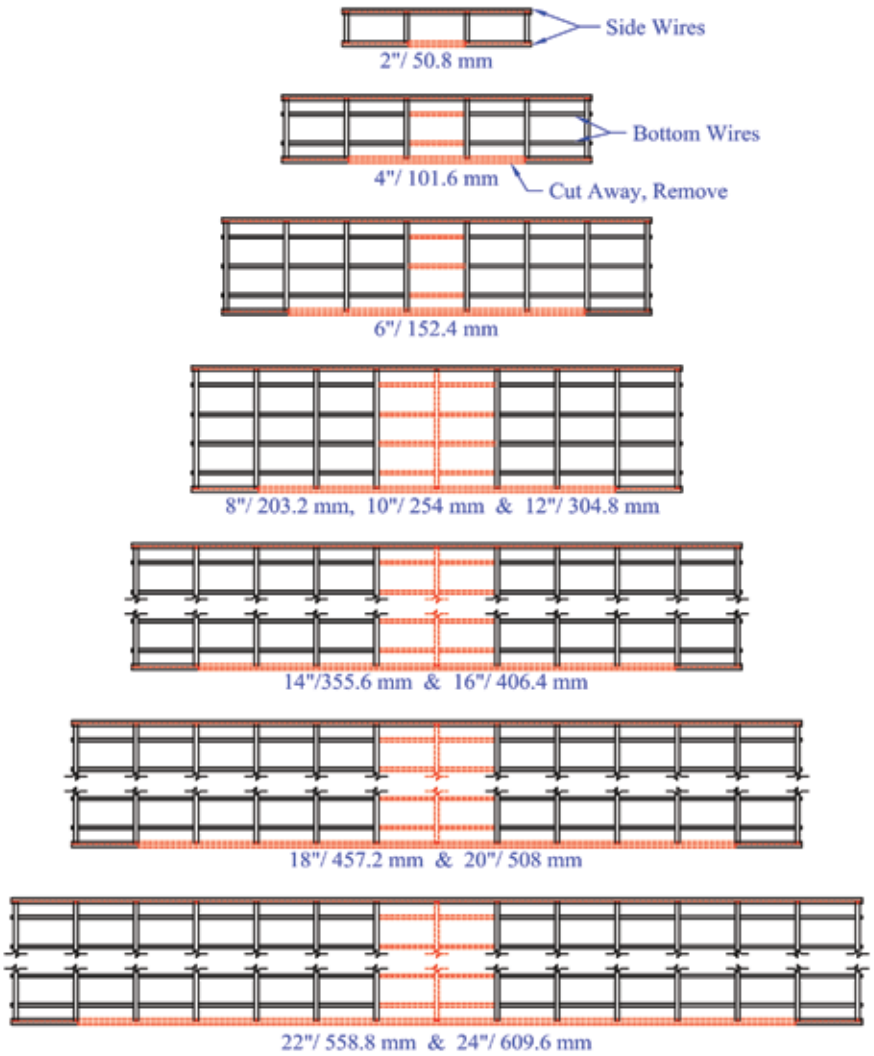


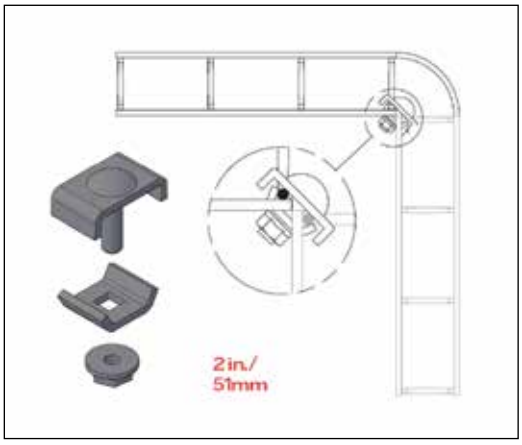
‘Old School’ Cut and Configure (Horizontal)

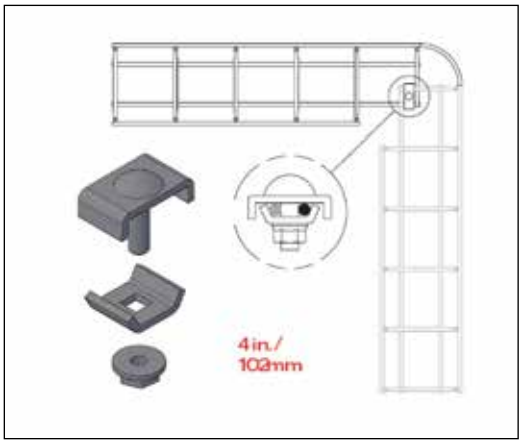
The alternative to WBT PreForm is the tried and true field configuration by cutting and removing linear wires and then re-splicing to create field fabrications.

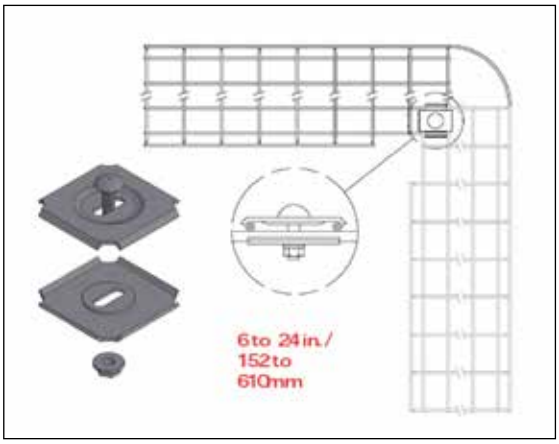
Creating Small 90 Degree Cut and Bend Radius Fittings

1. Cut one vertical side and bottom wires as shown per tray size
2. Slowly configure tray to appropriate radius bend desired, and uncut corners meet
3. Fasten bend location with either Splice Kit, Double Splice, or Washer Supports as shown.





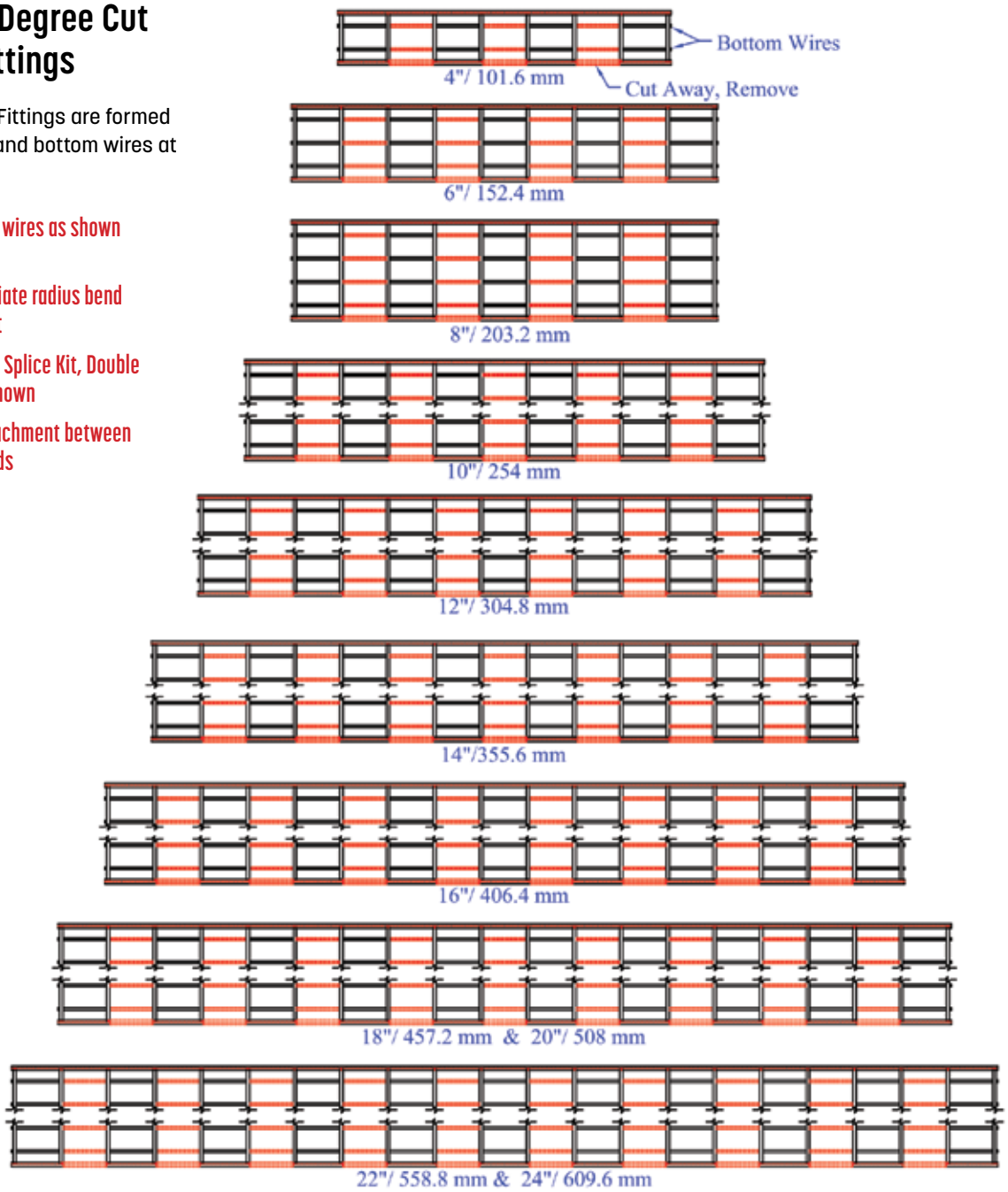




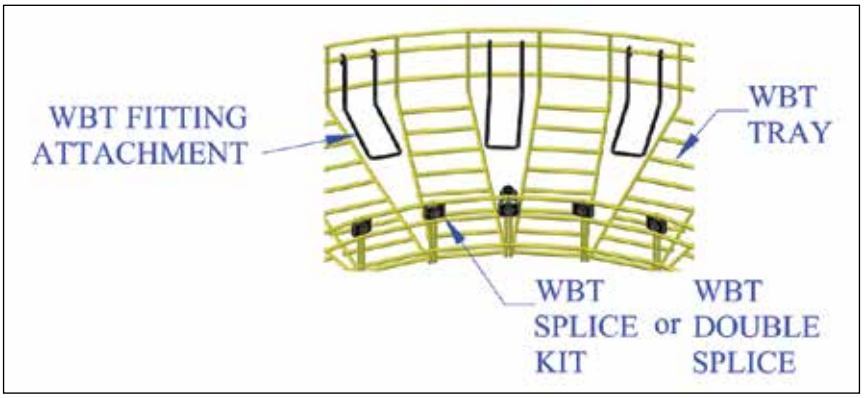
Creating Larger 90 Degree Cut and Bend Radius Fittings

90 Deg Cut and Bend Radius Fittings are formed by removing both side wires and bottom wires at the necessary bend location.

1. Cut one vertical side and bottom wires as shown per tray size
2. Slowly configure tray to appropriate radius bend desired, and uncut corners meet
3. Fasten bend location with either Splice Kit, Double Splice, or Washer Supports as shown
4. Option to match WBT Fitting Attachment between removed sections to fill tray voids

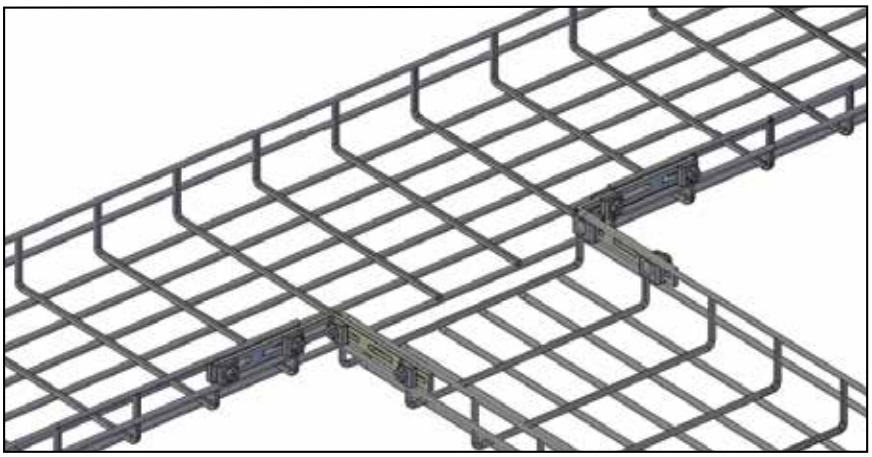


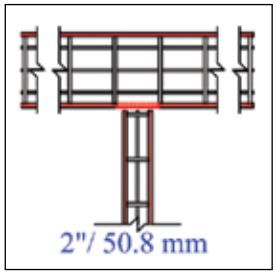
WBT Fitting Attachment Installation

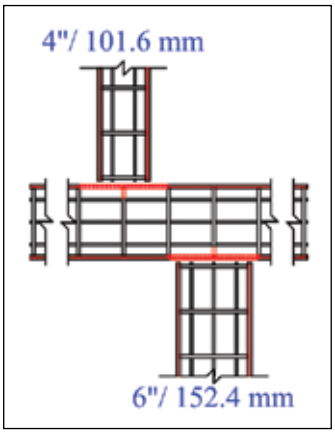


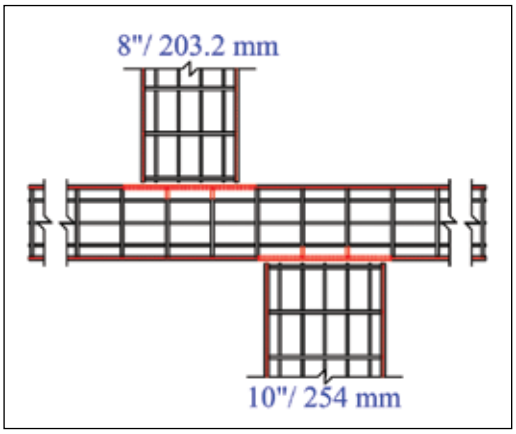
Creating a Corner Splice Connection

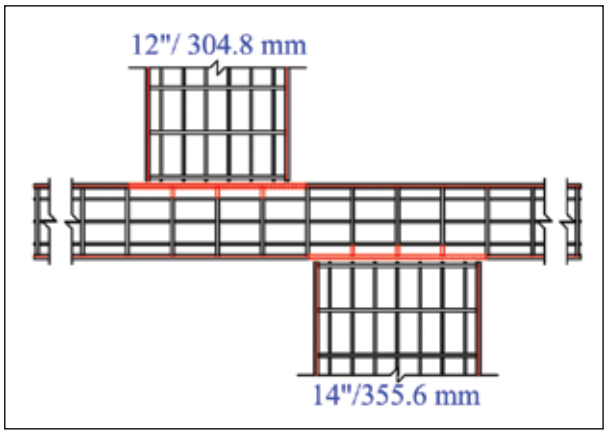
1. Cut the side and bottom wires as shown per tray size
2. Connect the trays with Corner Splice Kits

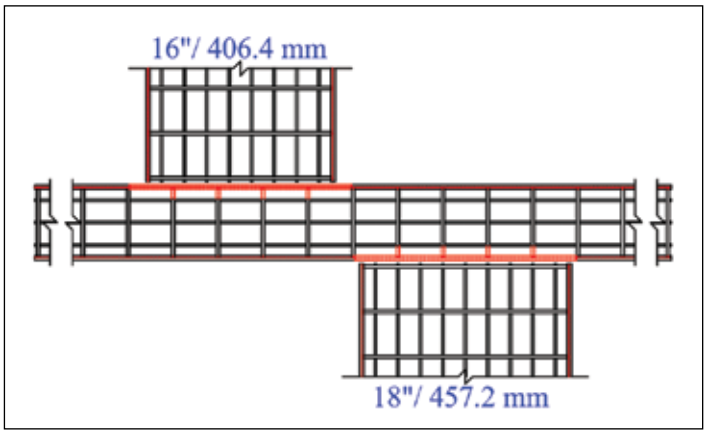


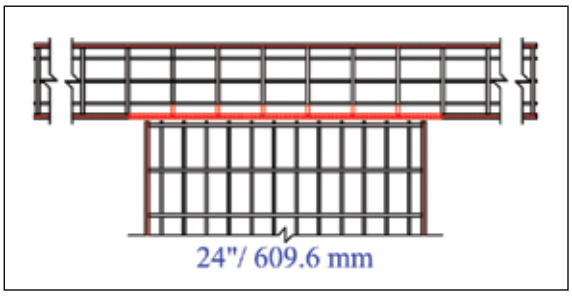


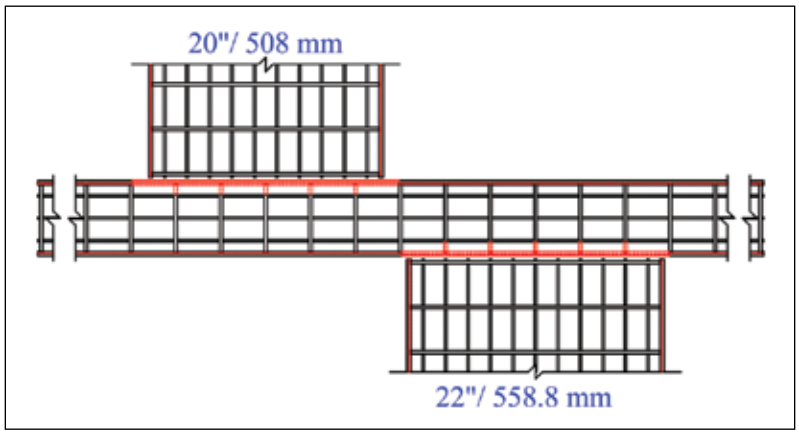




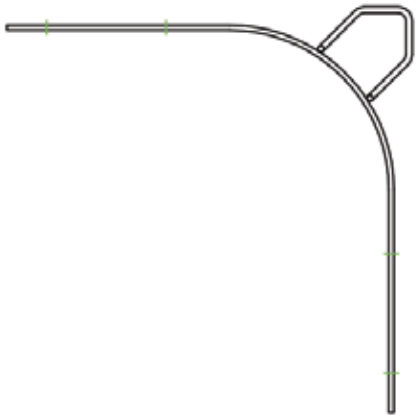








Installing a Radius Corner Splice

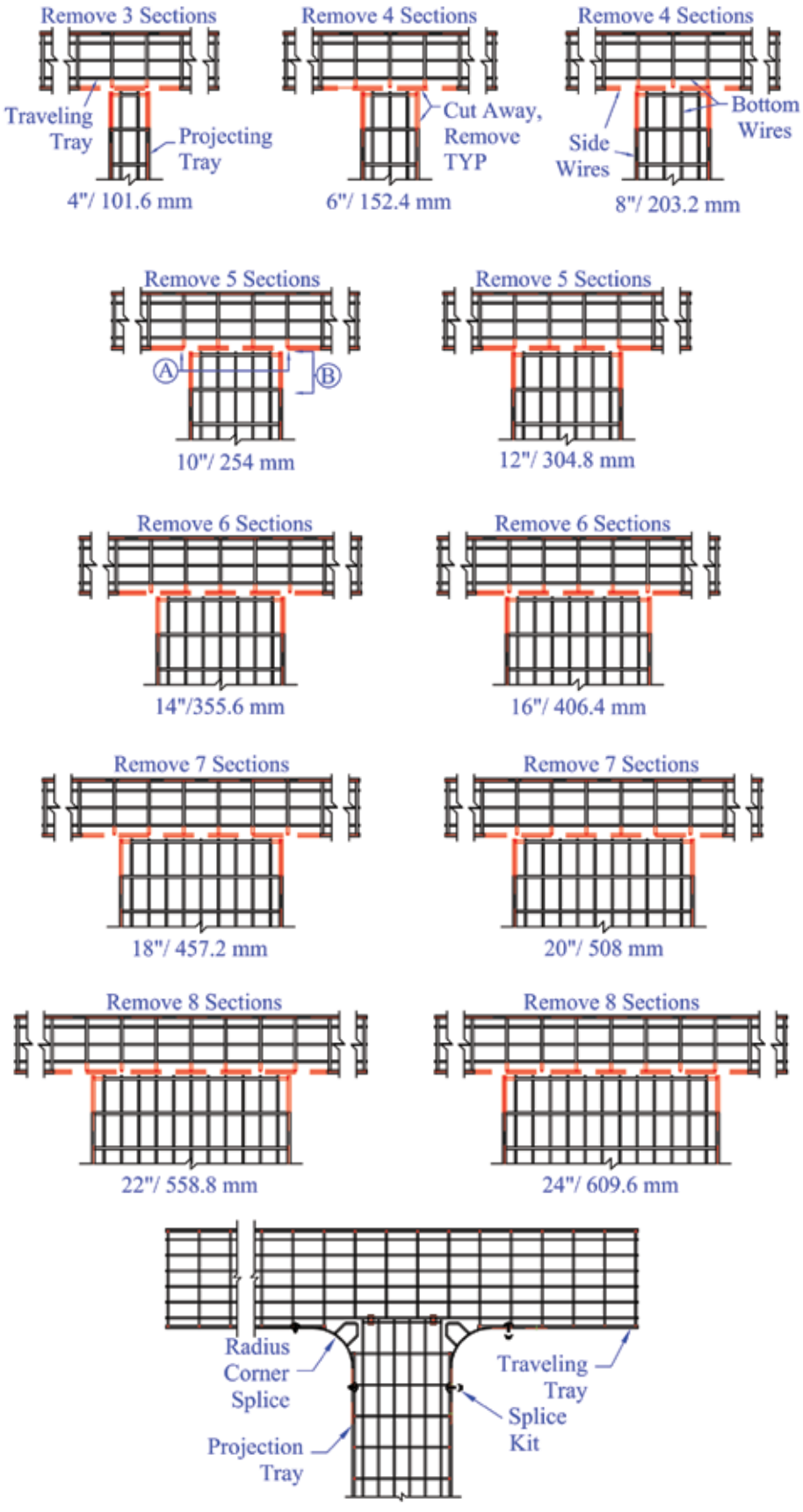


1. Remove wires on both sides of Projecting Tray as shown
2. Remove wires from Traveling Tray as indicated per tray size. *(These are only recommend ations actual installation may vary depending on nature of the installation.)*

VIEW A

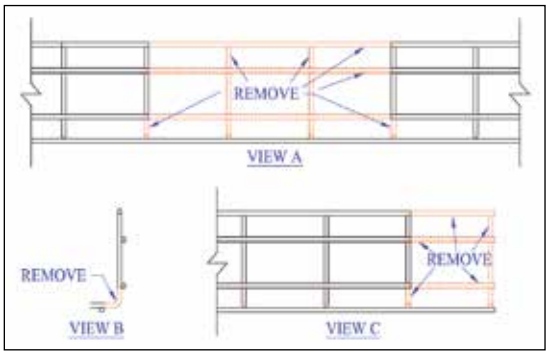
VIEW B

3. Install WBT Radius Corner Splice with Splice Kits on each side of splice.

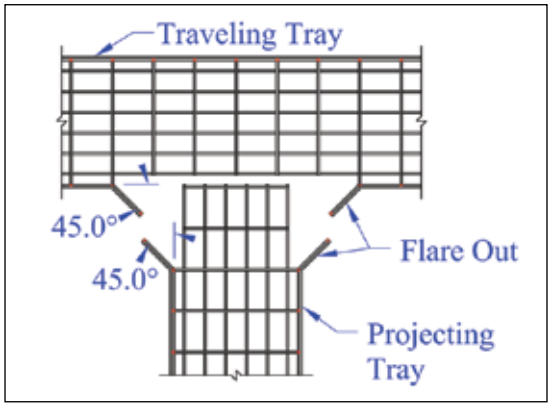


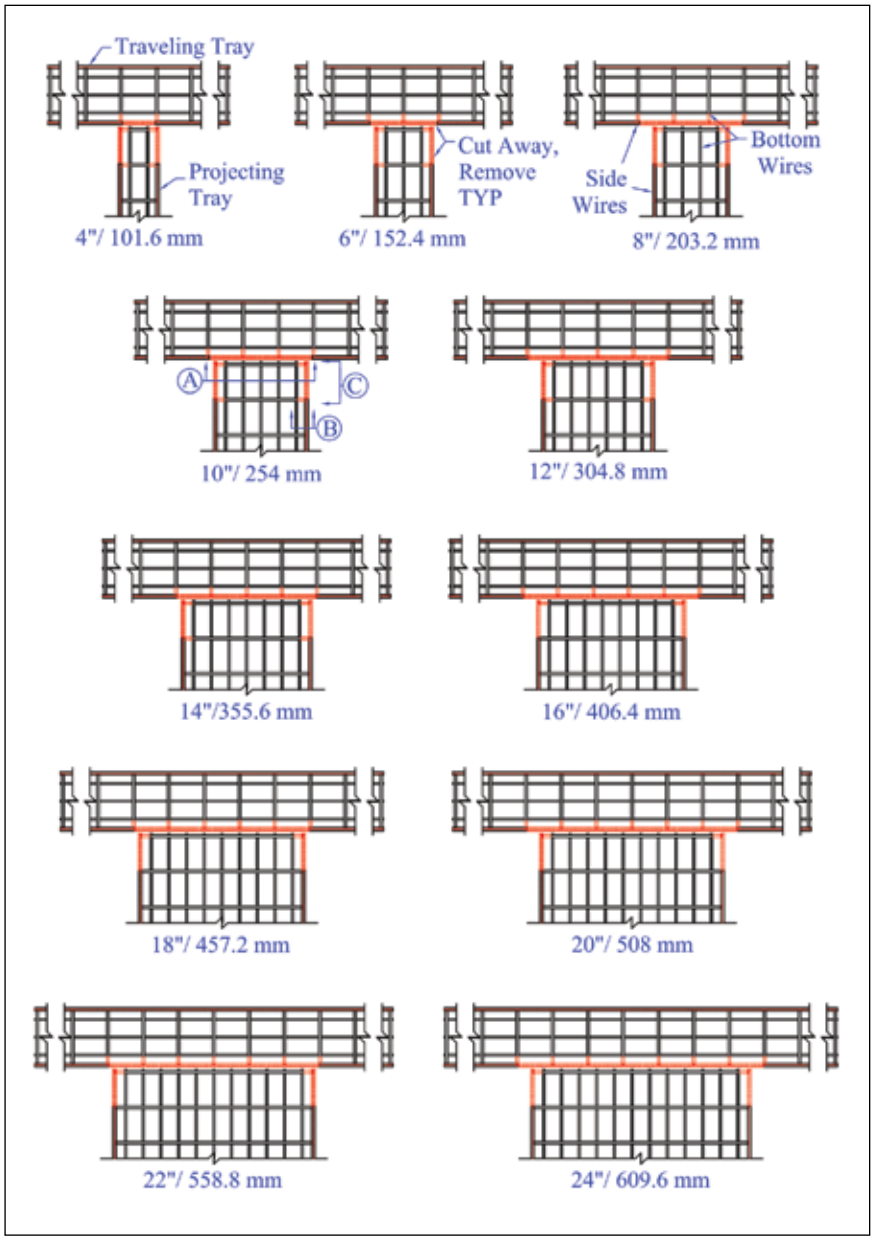
Creating a Radius Tee Fitting

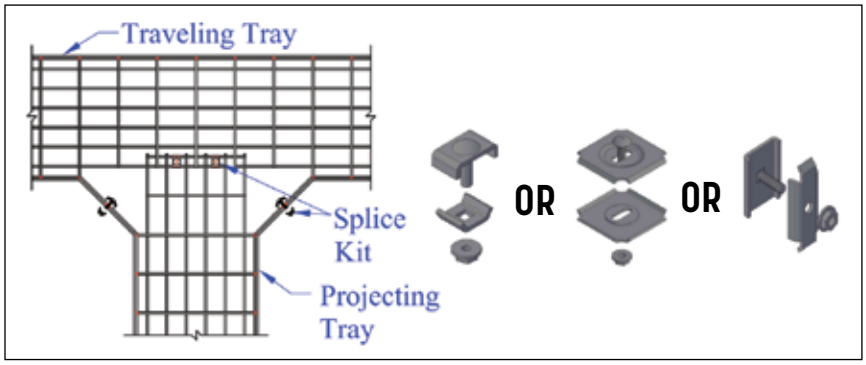
1. Cut the side and bottom wires as shown per tray size



2. Flare out remaining side wires to a 45 degree both trays
3. Slide projecting tray underneath traveling tray until flared ends meet
4. Fasten bottom wires of intersecting trays with either a Splice Kit or Horizontal Fitting Splice
5. Attach side wires together with either a Splice Kit or Double Splice Kit as shown

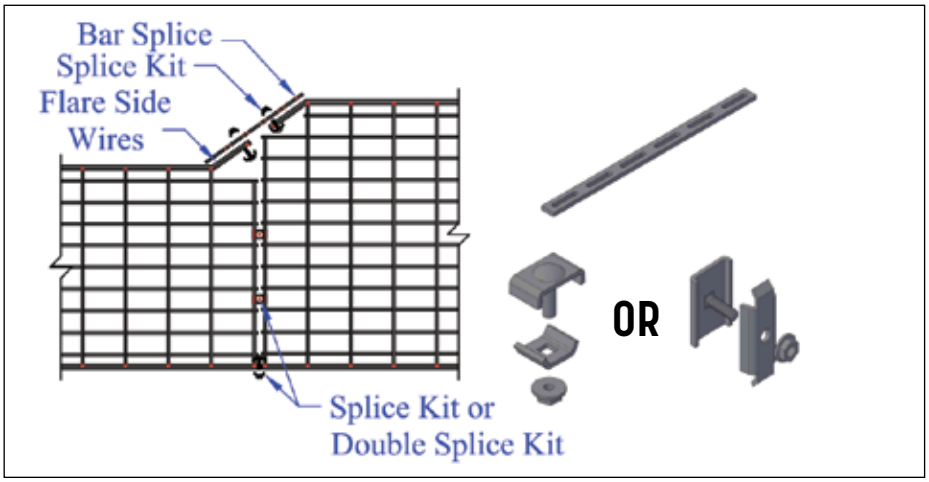




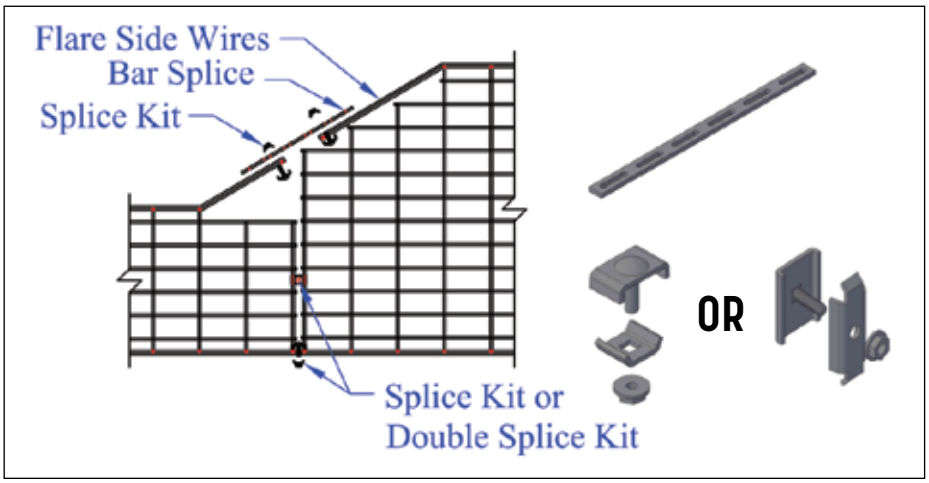


Creating a Reducer Fitting

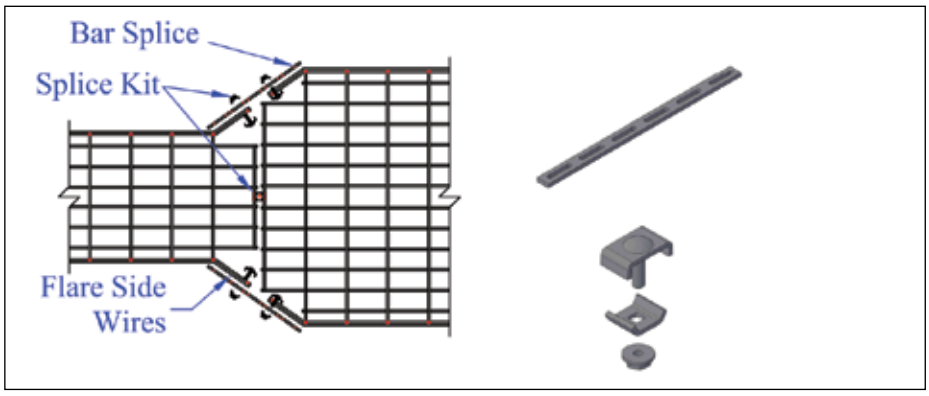
1. Cut the side and bottom wires as shown
2. Flare out remaining side wires to meet together on both trays
3. Fasten bottom wires and uncut side wires of Reducing Trays with either a Splice Kit or Double Splice Kit
4. Attach cut side wires together with a Bar Splice and a Splice Kit as shown



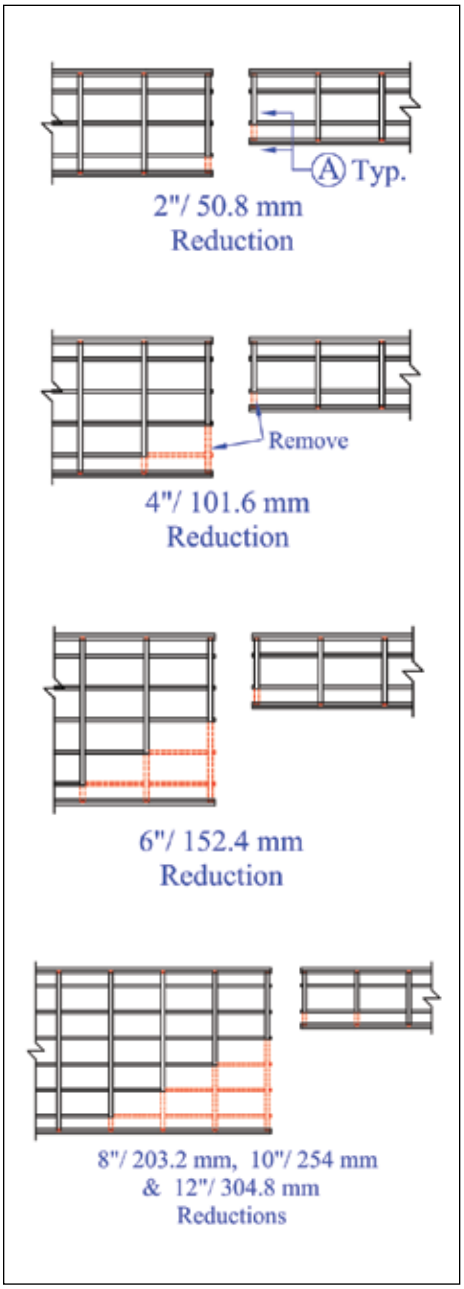
Single Side 2", 4" and 6" Reduction

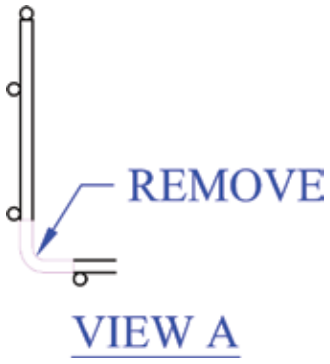


Single Side 8", 10" and 12" Reduction



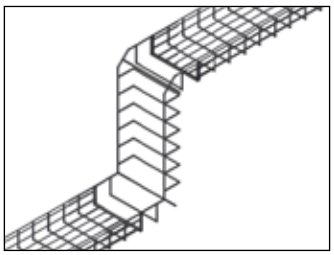
Double Side Center Reduction (Option 2)

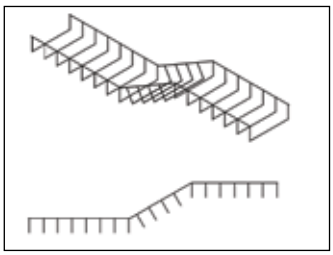




WBT Transition

Transition was designed to eliminate the variability of field cutting tray to configure for Vertical transitions. Simply cut to length the vertical you need, and splice to existing horizontal tray segments for a clean and engineered installation.

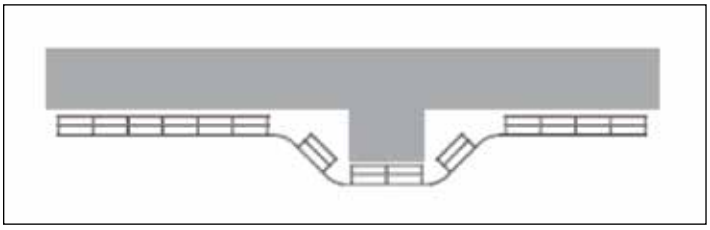


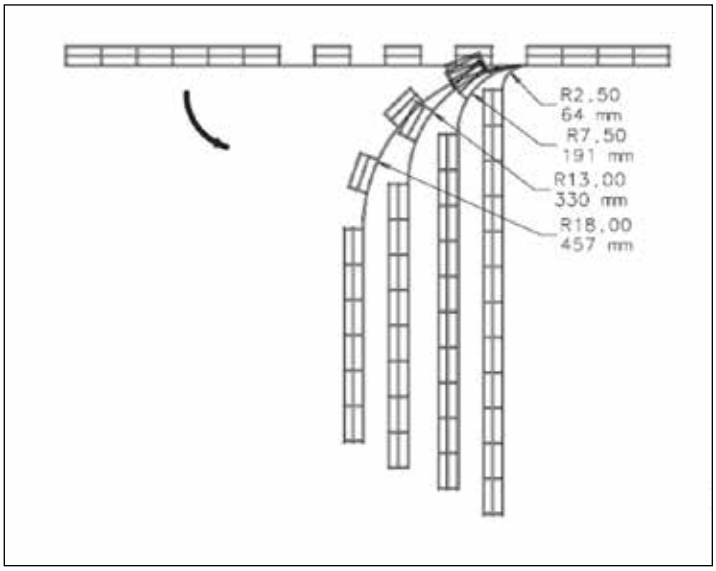


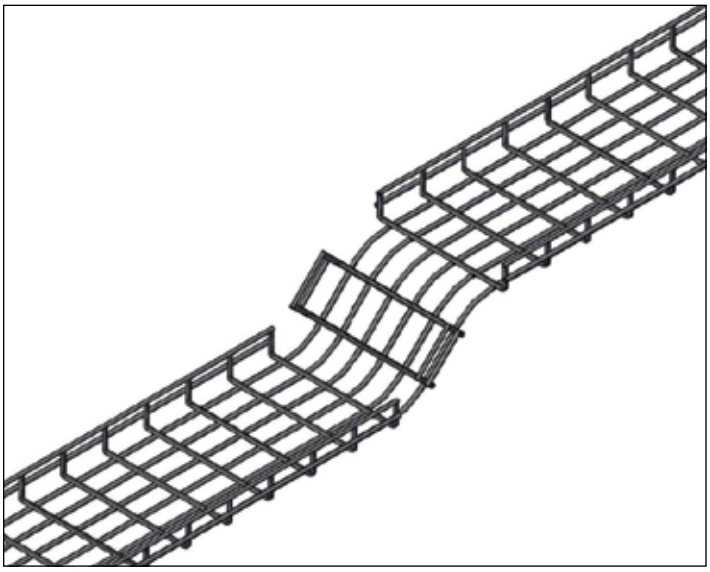
'Old School' Cut and Configure (Vertical)

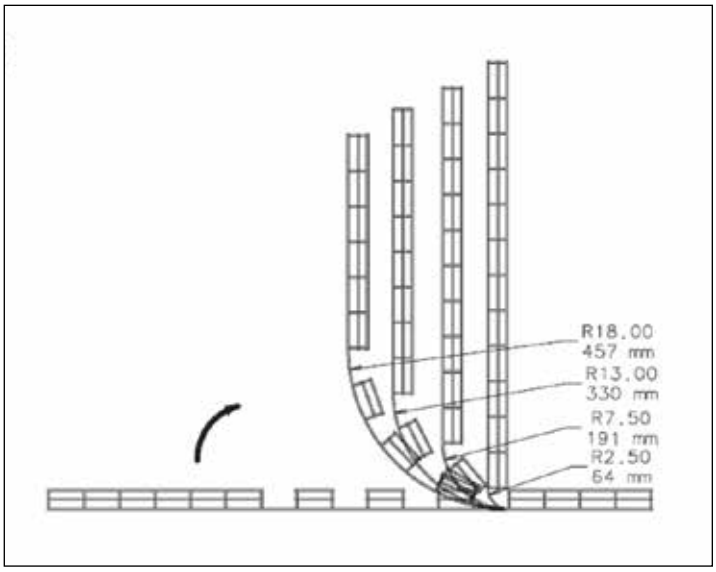
The alternative to WBT Transition is the tried and true field configuration by cutting and removing linear side wires and then bending to create field fabrications.

Creating Vertical Cut and Bend Fittings



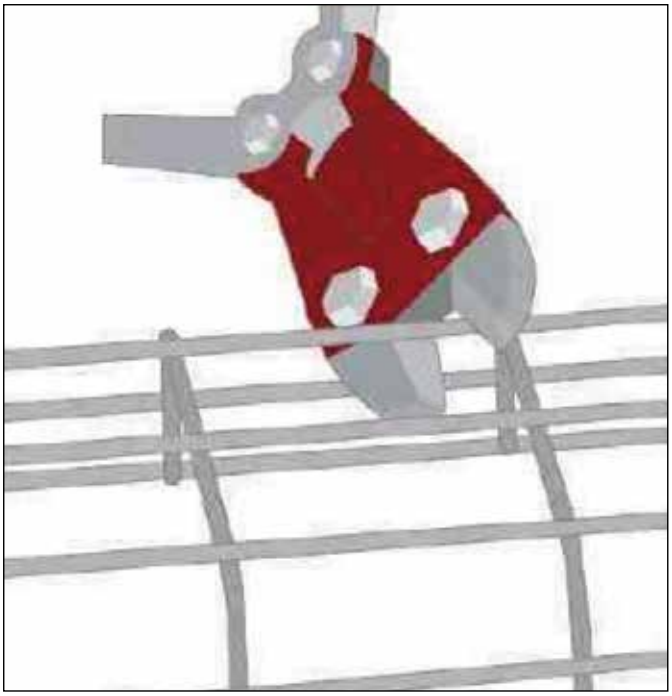




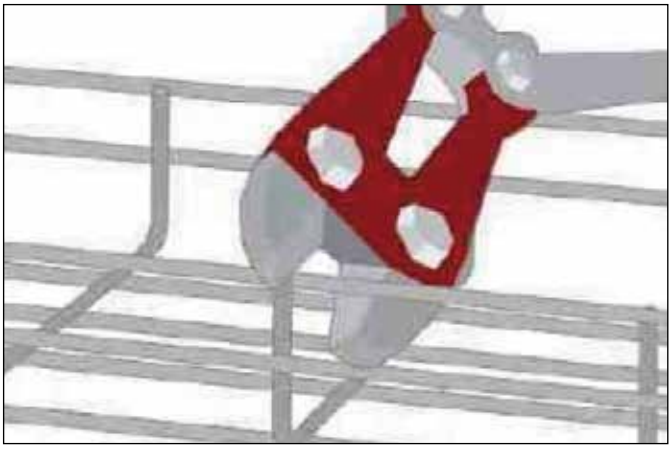


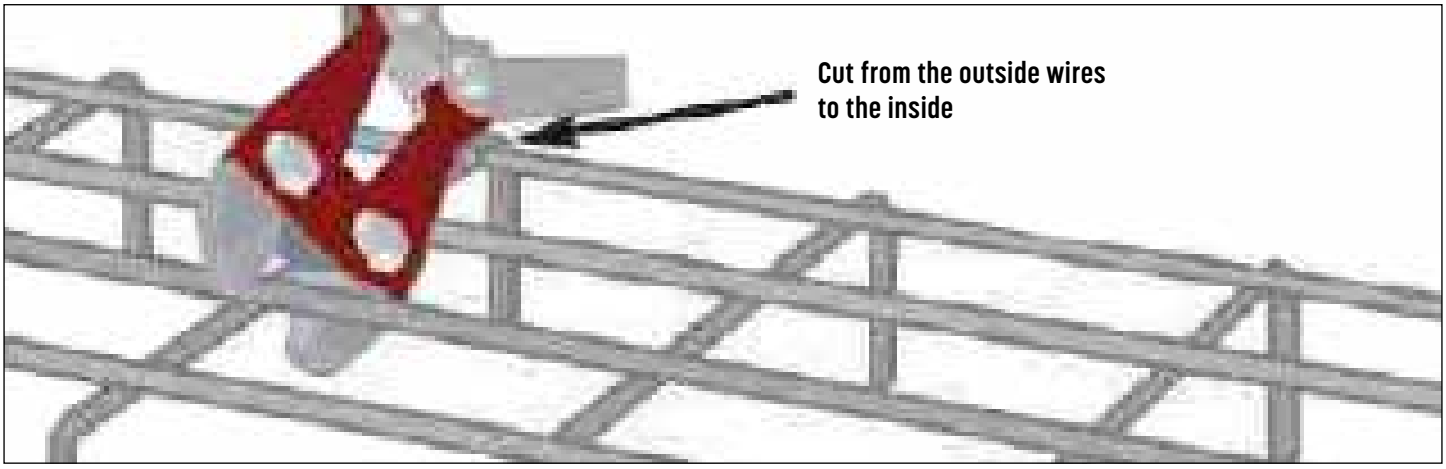
Properly Cutting WBT Cable Tray

When cutting Side Wires, rest the side of the wire shears against the side of the vertical wire you are going to leave. Place the jaws around the wire you are wanting to remove. Cut at an angle away from the new cable tray end. Grind away any purrs or sharp edges. Apply touch up paint where needed.



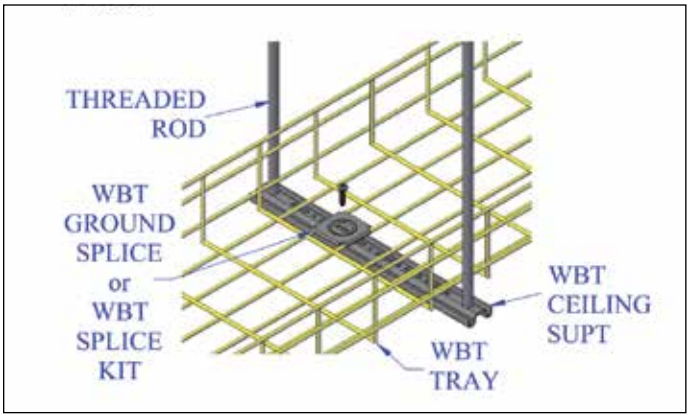
When cutting Bottom Wires, turn tray upside down and cut wires from underside. Again rest the side of the wire shears against the side of the vertical wire you are going to leave. Place the jaws around the wire you are wanting to remove. Cut at an angle away from the new cable tray end. Grind away any purrs or sharp edges. Apply touch up paint where needed.



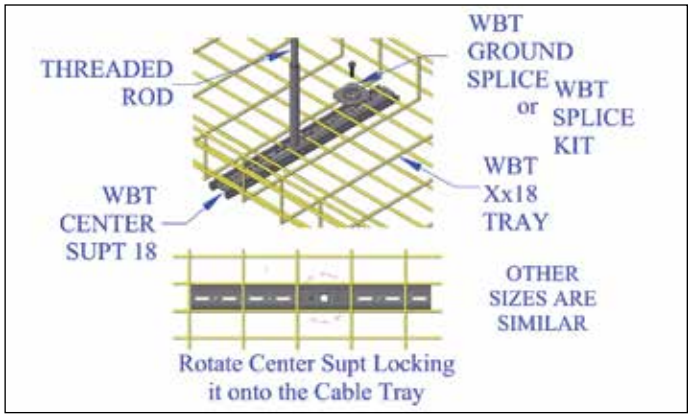


WBT Ceiling and Wall Supports

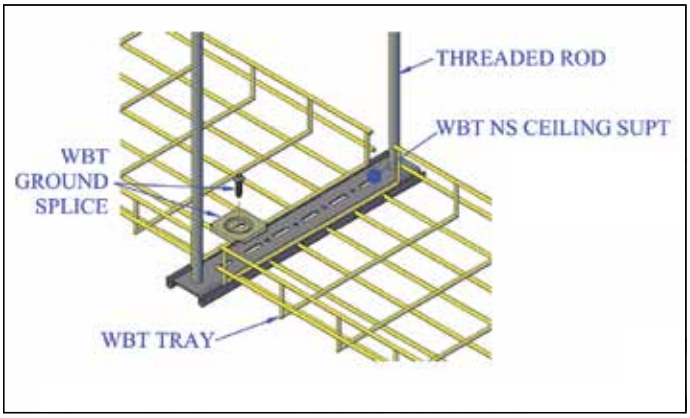
Most installations will support tray every 5 to 6 linear feet. WBT offers a variety of supports *(both standard and NoSplice)* for various install environments. All supports will support threaded rod up to 3/8″, and some up to 1/2″. Please consult WBT with any questions that you may have on standard or custom supports or installation questions.



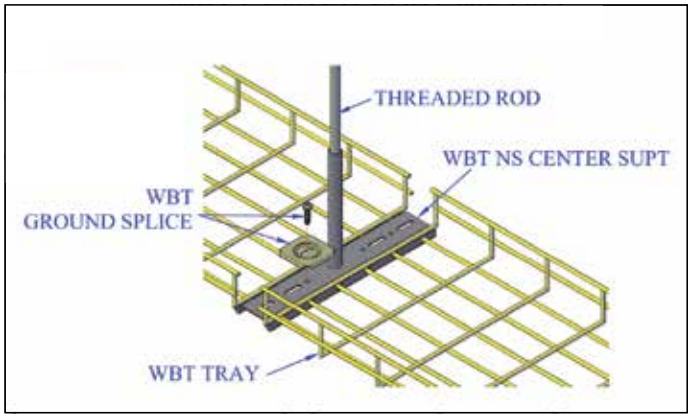
WBT Ceiling Support Install



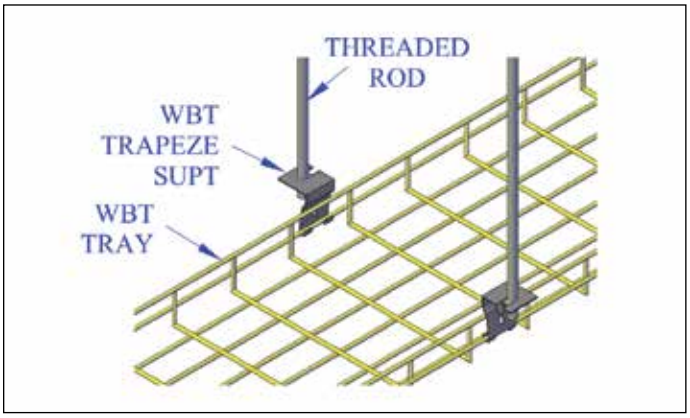
WBT Center Support Install



WBT NoSplice Ceiling Support Install

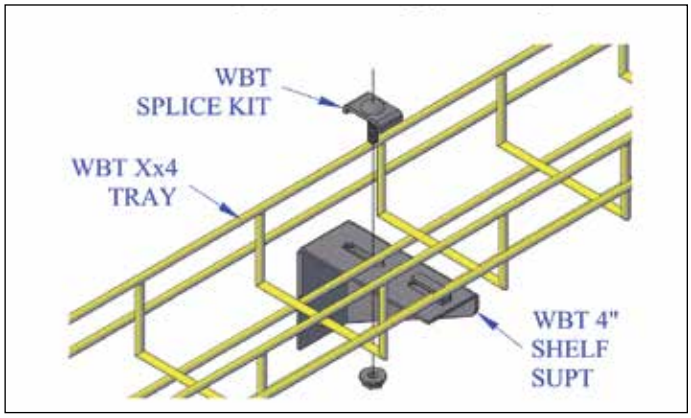


WBT NoSplice Center Support Install

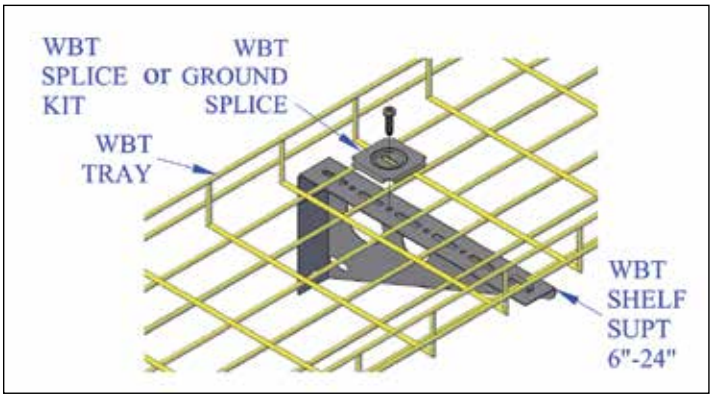


WBT Trapeze Support Install

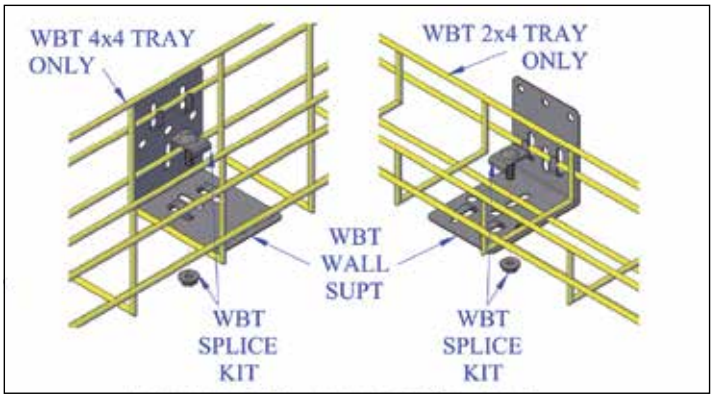
Do NOT install Trapeze Support on top wire.



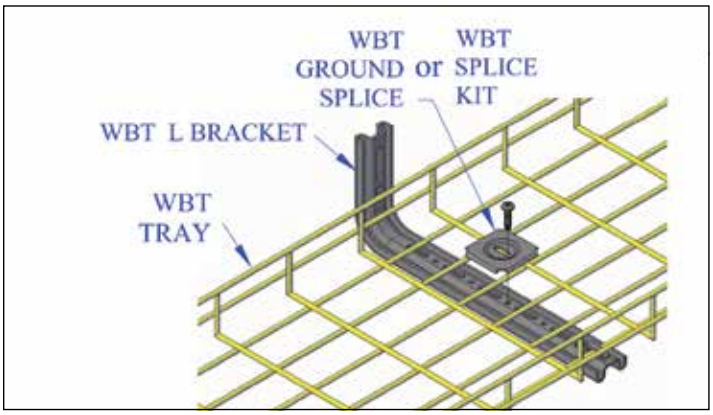
WBT Shelf Support 4 Install



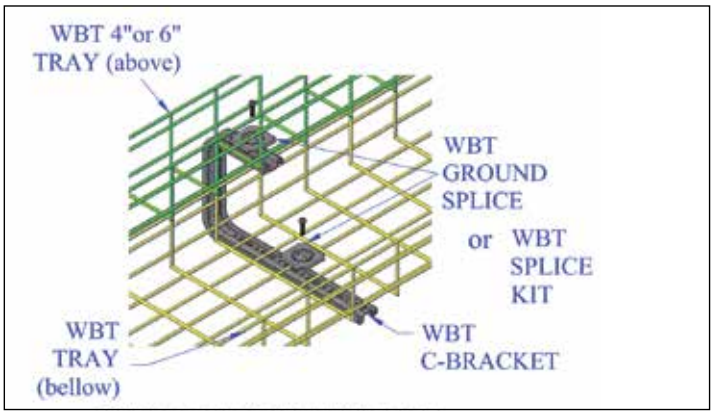
WBT Shelf Support 6-24 Install



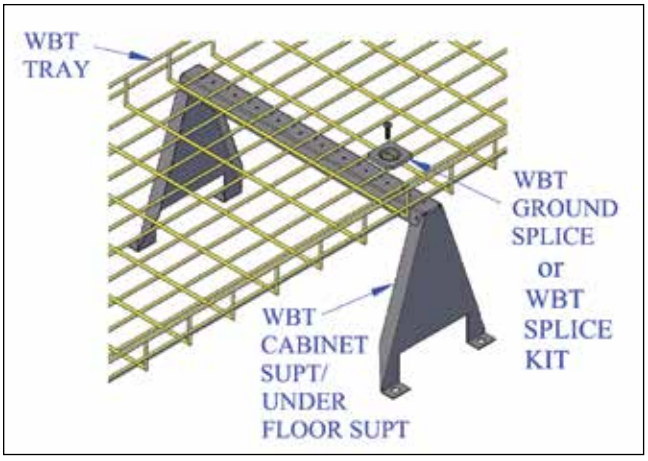
WBT Wall Support Install



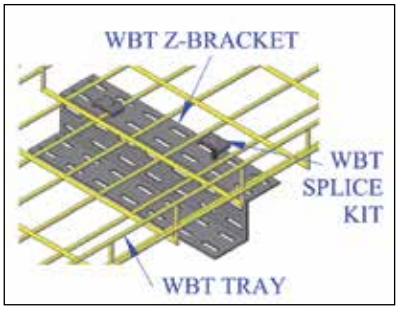
WBT L-Bracket Install



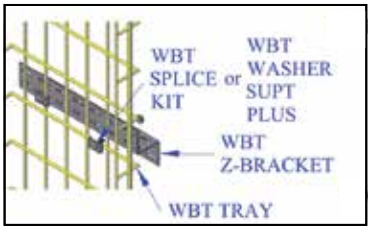
WBT C-Bracket Install



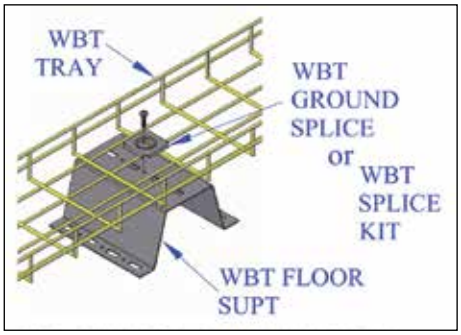
WBT Cabinet Support
WBT Underfloor Support Install



WBT Z-Bracket Install



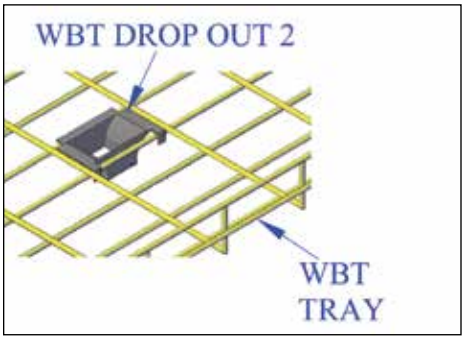
WBT Z-Bracket Vertical Installation



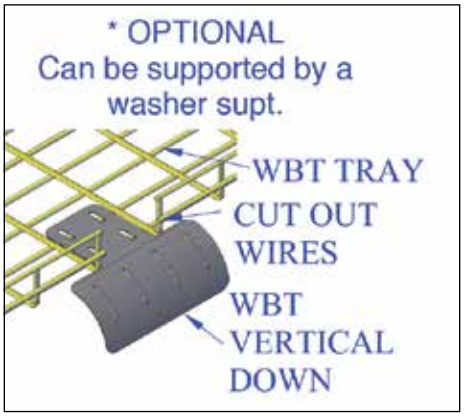
WBT Floor Support Install

WBT Tray (Drop and Exit Accessories)

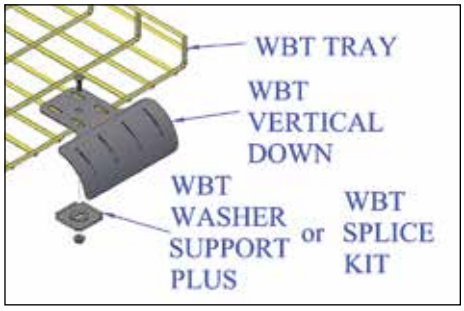
WBT offers various Vertical and Horizontal options for cabling to exit tray pathway.



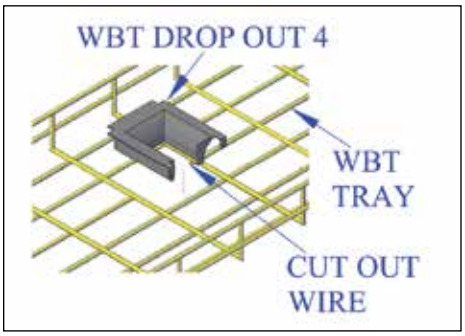
WBT Drop Out 2" Install



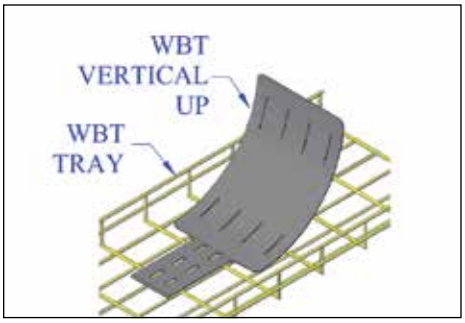
WBT Vertical Down Install



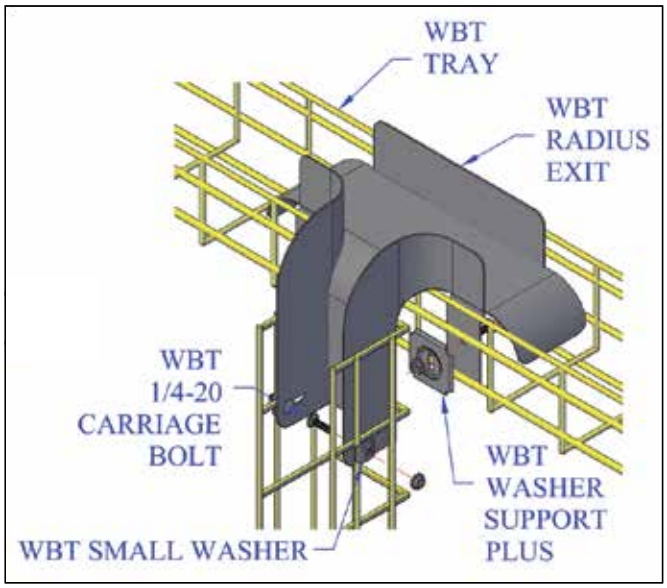
WBT Vertical Down Install with Optional Washer Support Installation



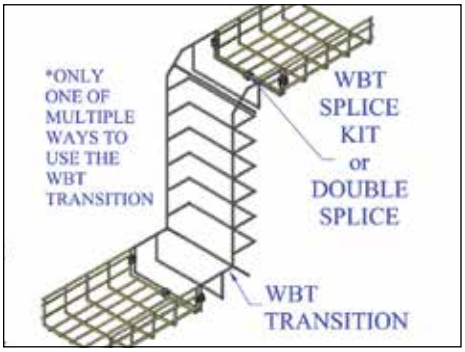
WBT Drop Out 4" Install



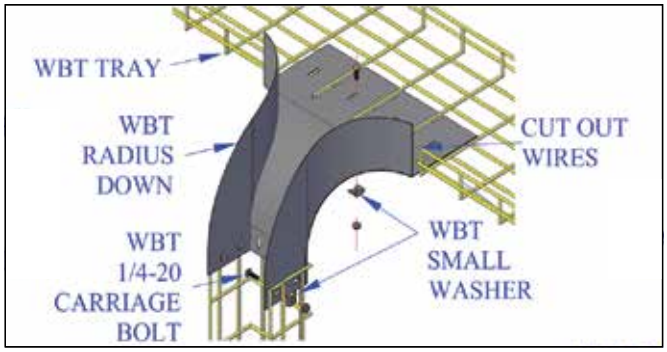
WBT Vertical Up Install



WBT Radius Exit Install



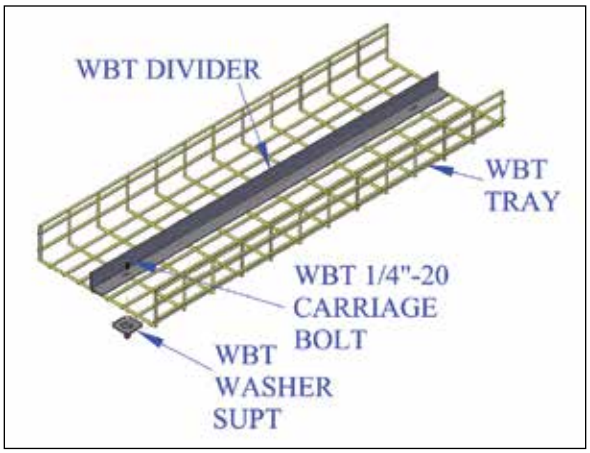
WBT Transition Install



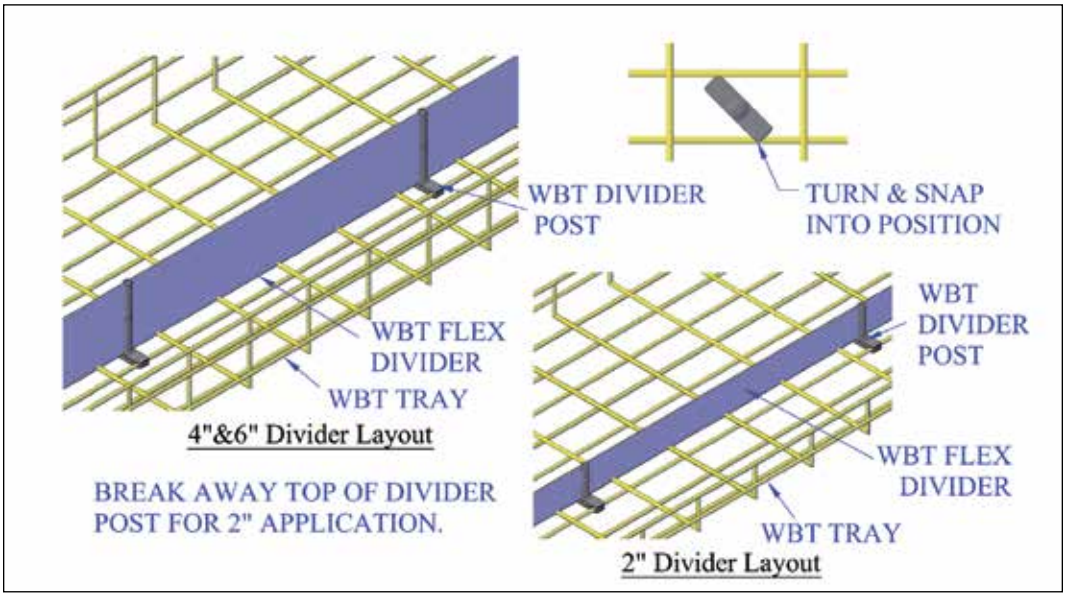
WBT Radius Down Install

WBT Tray (Dividers)

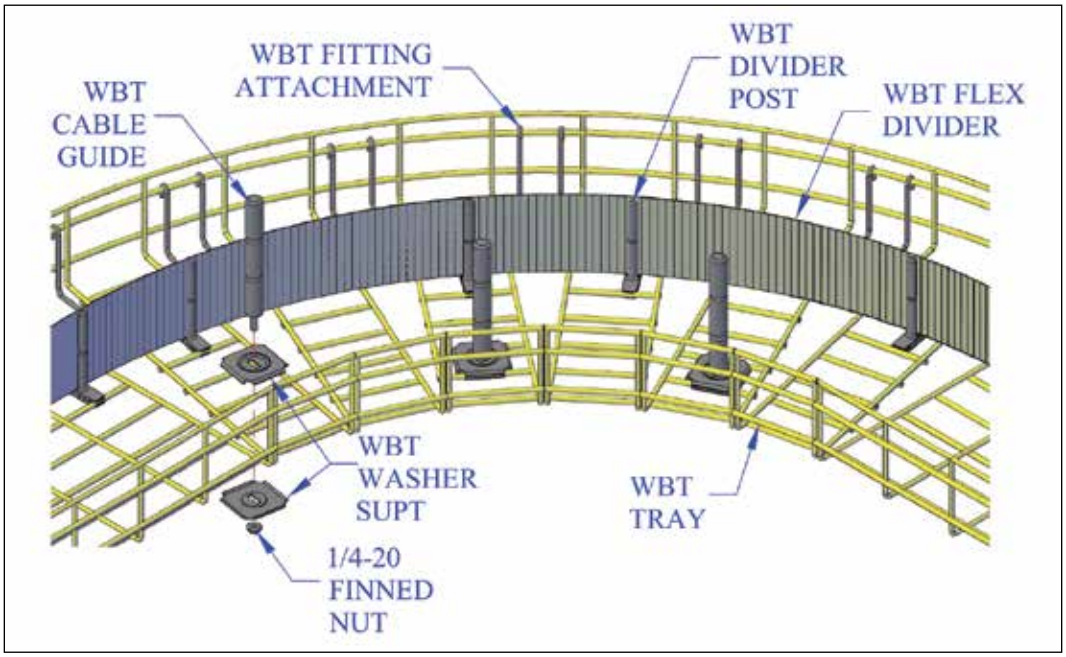
WBT offers standard steel dividers that bolt to tray bottoms, or our new Flexible Divider which allows for the divider to transition from straight section through horizontal curves and back to straight sections.



WBT Divider Install



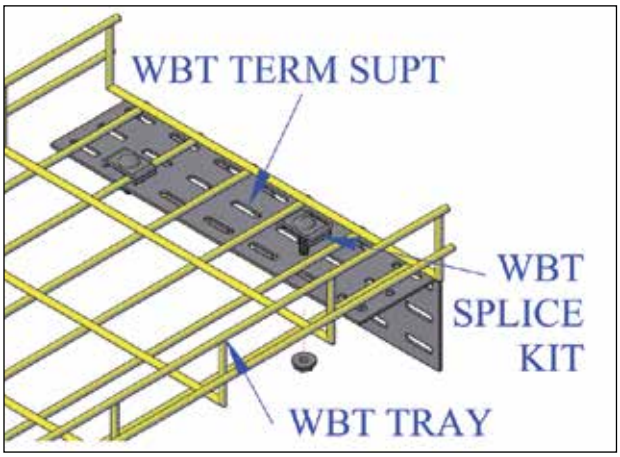
WBT Divider Post and Flex Divider Install



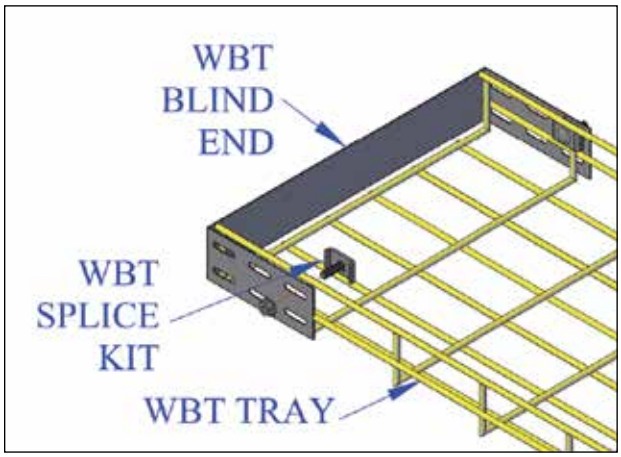
WBT Cable Guide Install

WBT Cable Tray Terminations

There are a couple of different reasons you may need to terminate or tray at the end of a raceway. The most common reason would be at a wall sleeve. For this application we would suggest using WBT Termination Support. This allows the tray to rest on each side of a wall opening where in which the tray can not run through. It can also be used to simple support the end of a raceway run. We also have a accessory know as the Blind End. The Blind End is used to terminate a tray run at any location.



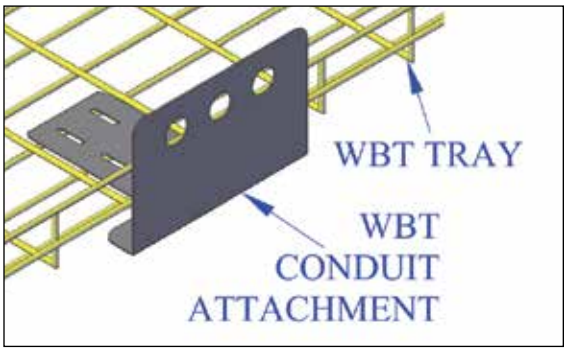
WBT Termination Support Install



WBT Blind End Install

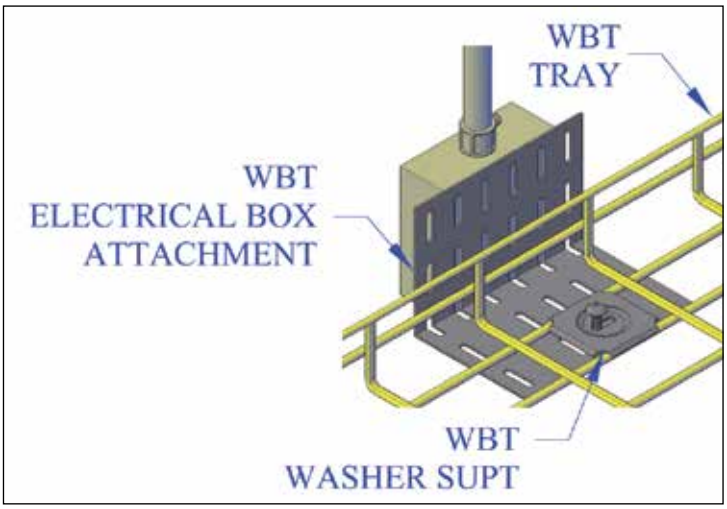
WBT Electrical Attachments

We have electrical attachments to help with your installation. We offer a Conduit Attachment that is used with either 3/4″, 1″, or 1-1/2″ conduit. We also have the Electrical Box Attachment that can be used to attach a electrical box onto the side of your cable tray raceways. Plus we sell a Ground Bolt that can be used at any location of the tray for a ground wire splice.



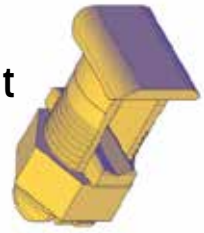
WBT Conduit Attachment Install

***OPTIONAL - Can be supported by a Washer Support, side wire may have to be removed on select tray heights.**



WBT Electrical Box Attachment Install

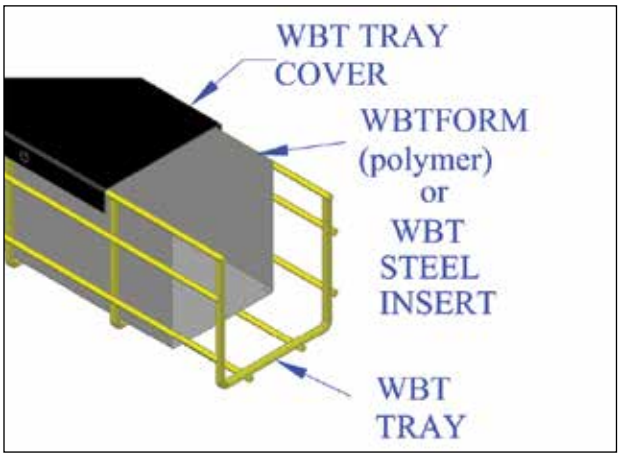
WBT Ground Bolt



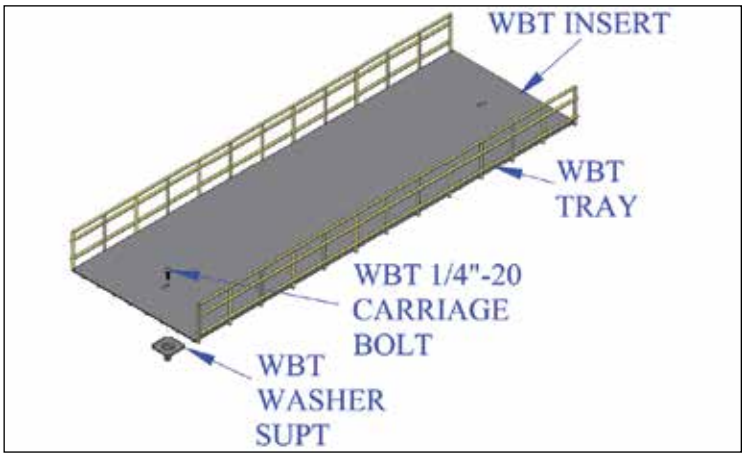
WBT Tray (Inserts and Covers)

Ultimate protection and security is available with inserts *(both UL Poly and steel)* and covers from WBT.

WBTForm was pioneered as the only insert to offer the flexibility to simply roll into the tray bottom, and now WBTForm can cover both vertical sides and bottom to totally encapsulate and protect cabling media. Covers from WBT are available in peaked or flat top, and offer the ease to simply snap on/off, versus tabs that are cumbersome and sharp.



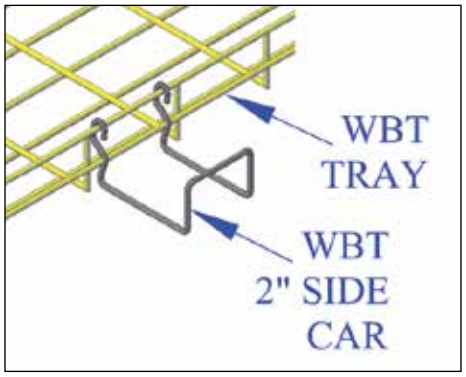
WBTForm and Cover Install



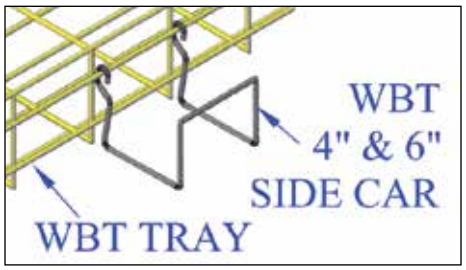
WBT Insert Install

WBT Tray (Accessories)

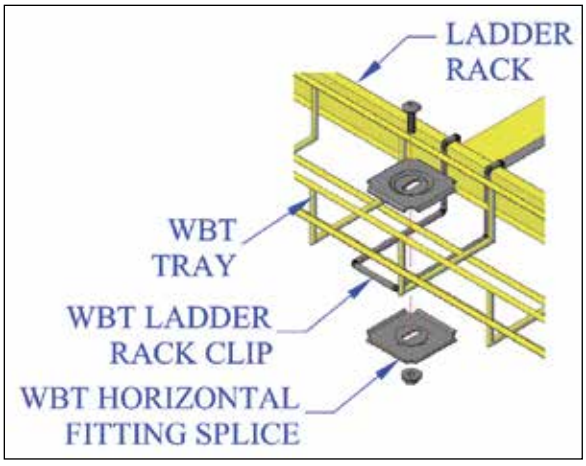
Numerous other accessories are available from WBT. Products and solutions to terminate, attach electrical boxes and conduit and even sidecar to hold additional cabling or duct that sits outside of the tray.



WBT 2" Side Car Install



WBT 4"-6" Side Car Install



WBT Ladder Rack Clip Install

WBT

Custom applications or installation questions, just give us a call.
We're here to help.

Contact us at sales@wbtray.com or toll free 888-4WB TRAY (888-492-8729)