

**USG CEILINGS PLUS®
PLANX™ UNIVERSAL**
LINEAR METAL PANEL SYSTEM

INSTALLATION GUIDE



CEILINGS PLUS®

USG CEILINGS PLUS® PLANX™ UNIVERSAL

LINEAR METAL PANEL SYSTEM

OVERVIEW

Enter Planx™ Universal - Innovative ceiling designs brought to you by USG Ceilings Plus. In this manual we'll show you how to perform the installation the right way, the first time. Go ahead, install with a smile.

The purpose of this installation manual is to provide you with general steps and procedures on how to properly and safely install Planx™ Universal ceiling systems as well as how to address various field conditions.

Please read this entire manual and familiarize yourself with all procedures before you begin. If you have been supplied with project drawings specific to your order, make sure you have a thorough understanding of those. Any details within those documents will supersede this manual. Work area must be clear of debris and obstacles to ensure a safe and fast installation.

PLEASE WORK SAFELY!

FOR MORE INFORMATION

PRODUCT INFORMATION

For the most up-to-date product information, visit usg.com or cgcinc.com

CUSTOMER SERVICE

USG: 800 950-3839

CGC: 800 387-2690

TECHNICAL SERVICE

800 USG.4YOU (847-4968)

WEBSITES

usg.com

cgcinc.com

USG CEILINGS PLUS® PLANX™ UNIVERSAL

LINEAR METAL PANEL SYSTEM

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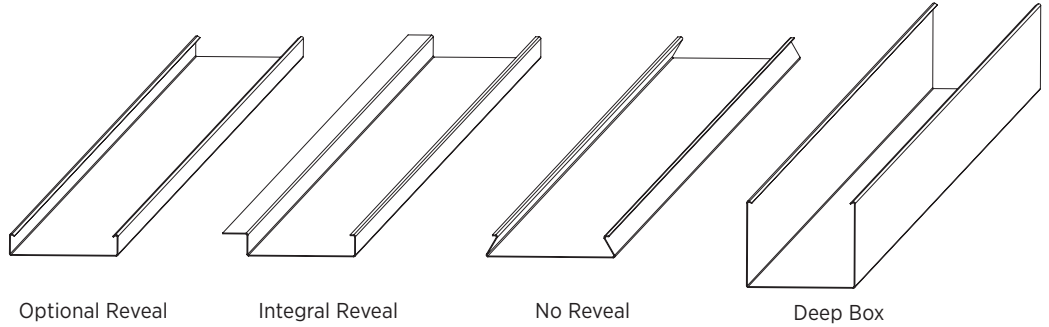
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PREPARATION

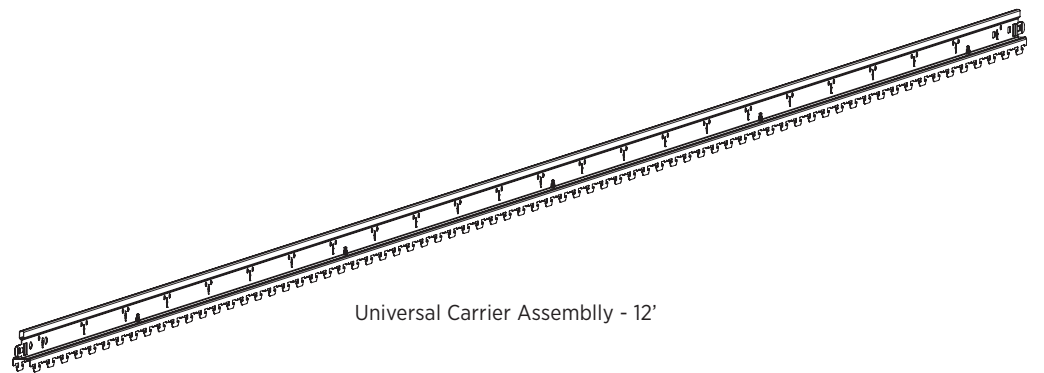
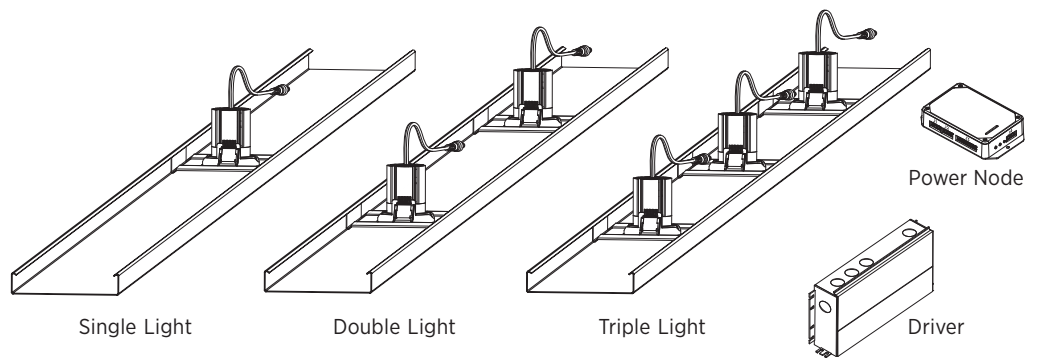
COMPONENT IDENTIFICATION

TYPICAL SUPPLIED COMPONENTS

PLANX™ UNIVERSAL



+ ILLUMINANCE™



PREPARATION

TOOLS

STANDARD TOOLS



Safety Goggles



Hard Hat



White Cotton Gloves



Tape Measure



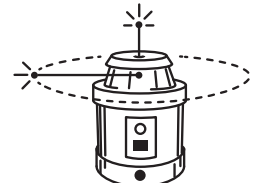
Square



Lineman Wire Cutters

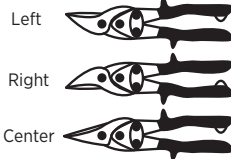


Hanger Wire

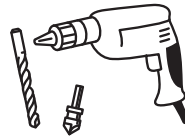


Laser Level

FIELD MODIFICATION TOOLS



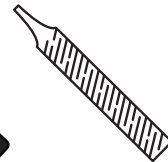
Srips Set



Drill with 1/8" Diameter
Standard & Counter-Sink Bits



Stiff Scraper



File



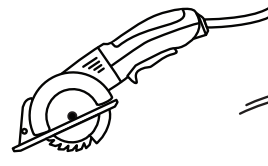
Electric Screwdriver



Working Gloves



Power Shears

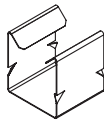


Hand Saw

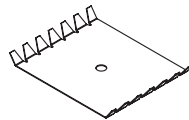


Rotary Saw

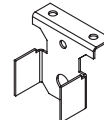
AVAILABLE ACCESSORIES



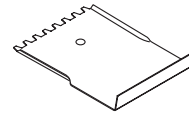
Panel Security/Closure Clip
Deep Box



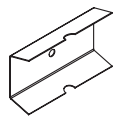
Panel Splice
Optional Reveal/Integral Reveal



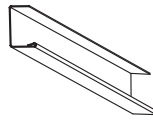
Cut Panel
Retention Clip



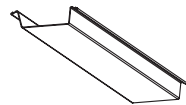
Panel Splice
No Reveal



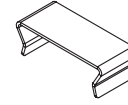
Perimeter U-Mold
Hold Down Clip



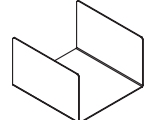
Perimeter U-Mold
12' Long



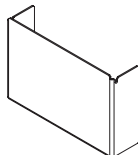
Snap-Loc Insert
Optional Reveal
12' Long



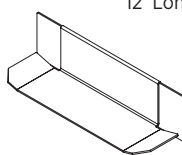
Panel Retention Clip
No Reveal
(exterior and seismic applications)



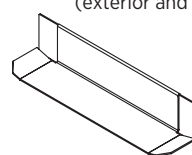
Panel Splice
Deep Box



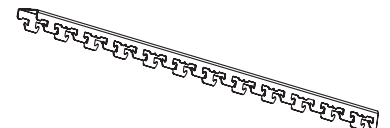
Panel End Cap
Deep Box



Panel End Cap
No Reveal



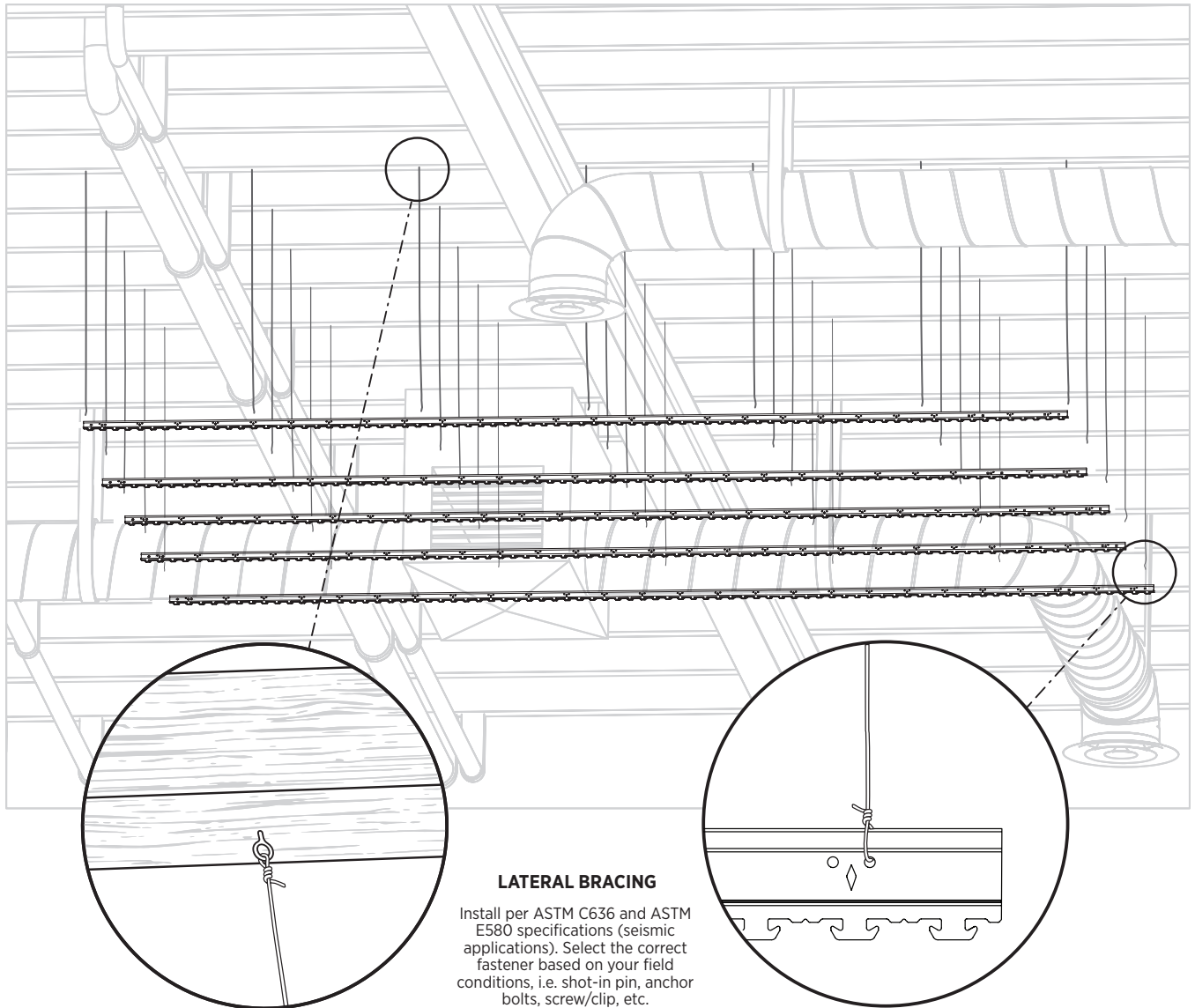
Panel End Cap
Optional Reveal/Integral Reveal



Carrier Channel Universal - 8'
(for wall application)

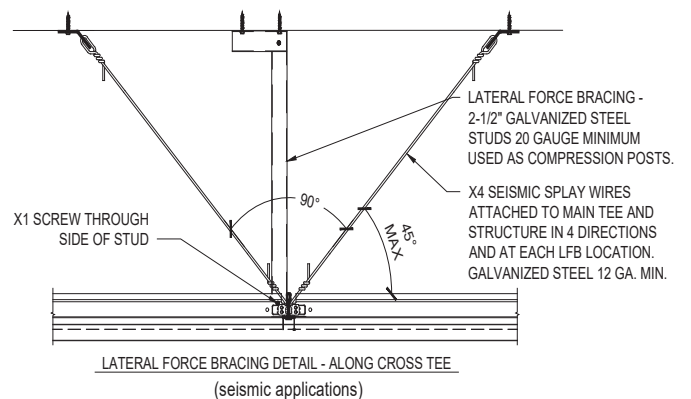
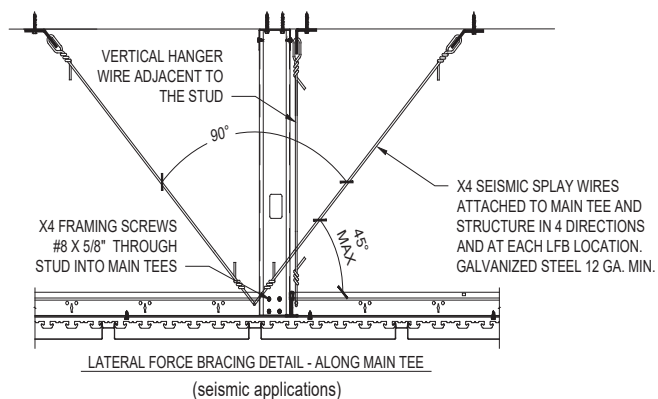
GENERAL INSTALLATION

INSTALL HANGER WIRE AND MAIN TEES



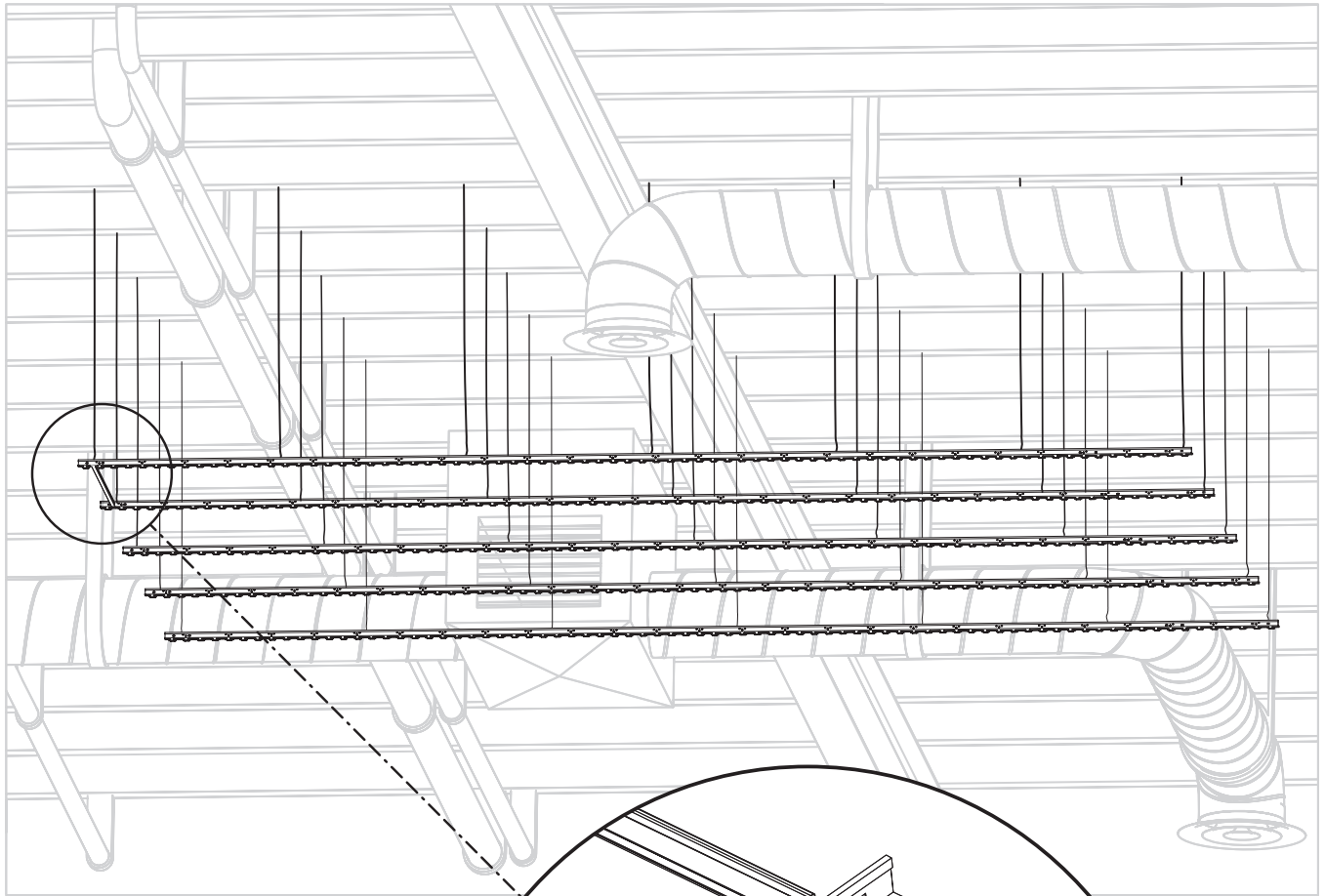
LATERAL BRACING

Install per ASTM C636 and ASTM E580 specifications (seismic applications). Select the correct fastener based on your field conditions, i.e. shot-in pin, anchor bolts, screw/clip, etc.

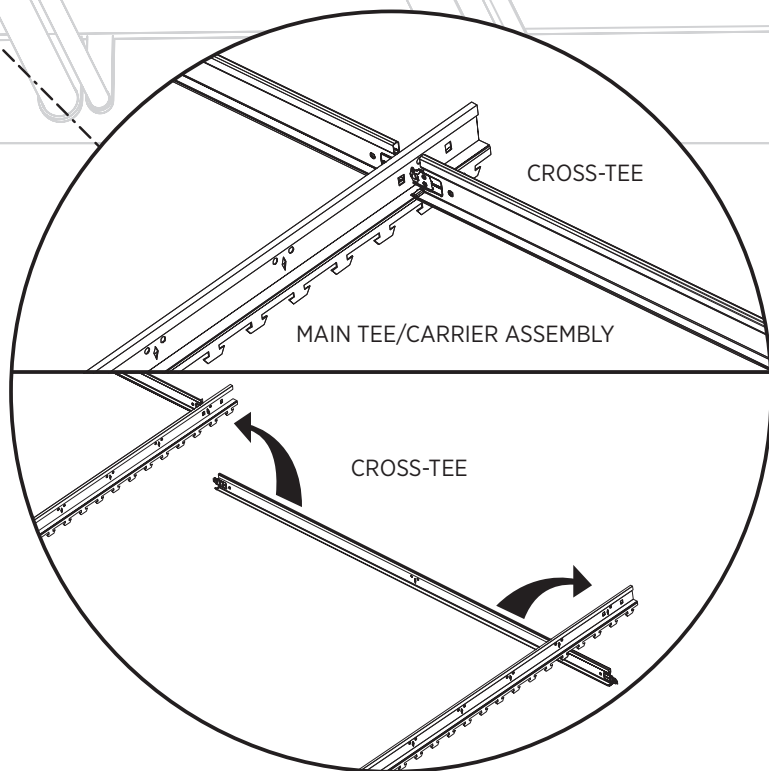


GENERAL INSTALLATION

INSTALL CROSS TEES

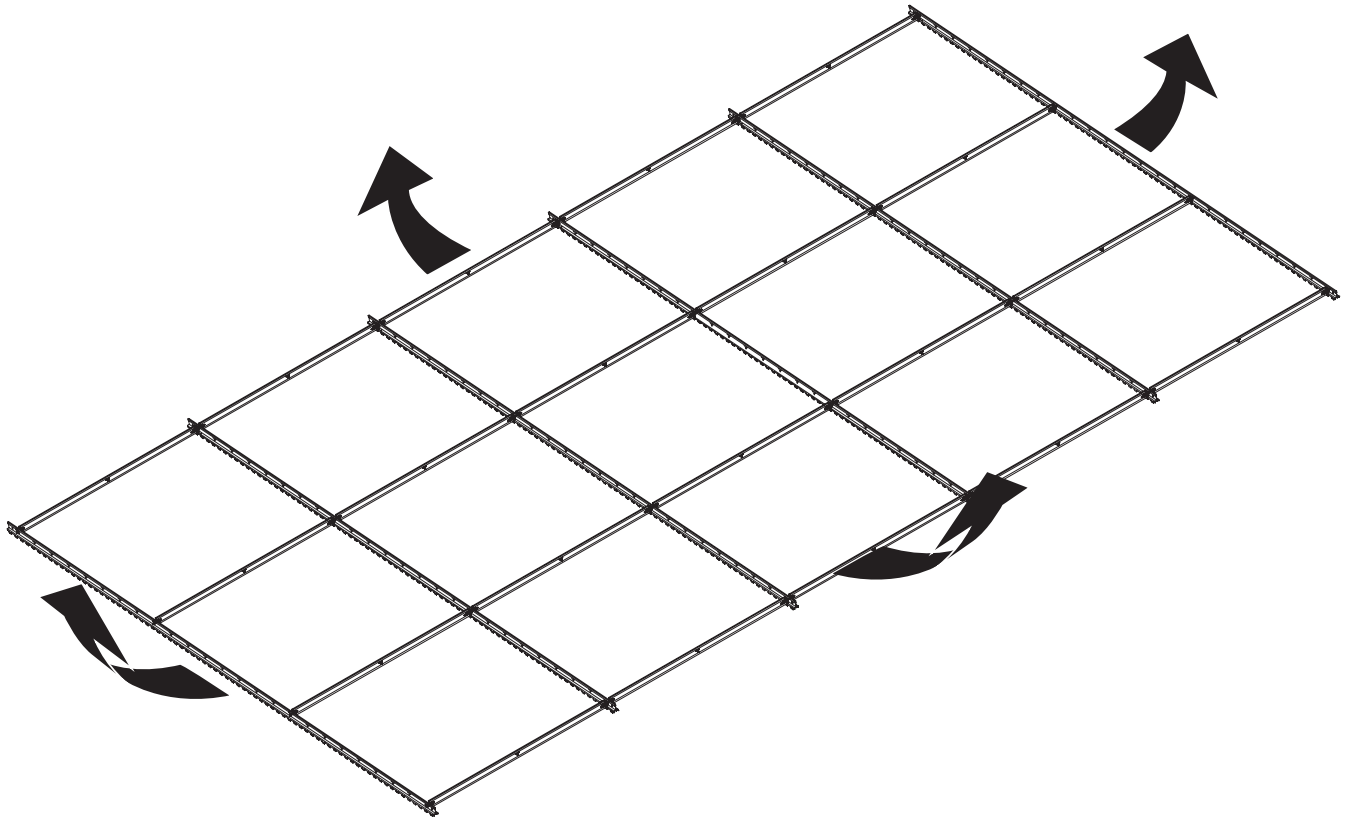


Install cross-tees into main tees with 48" maximum \varnothing spacing. Follow installation drawing layout.

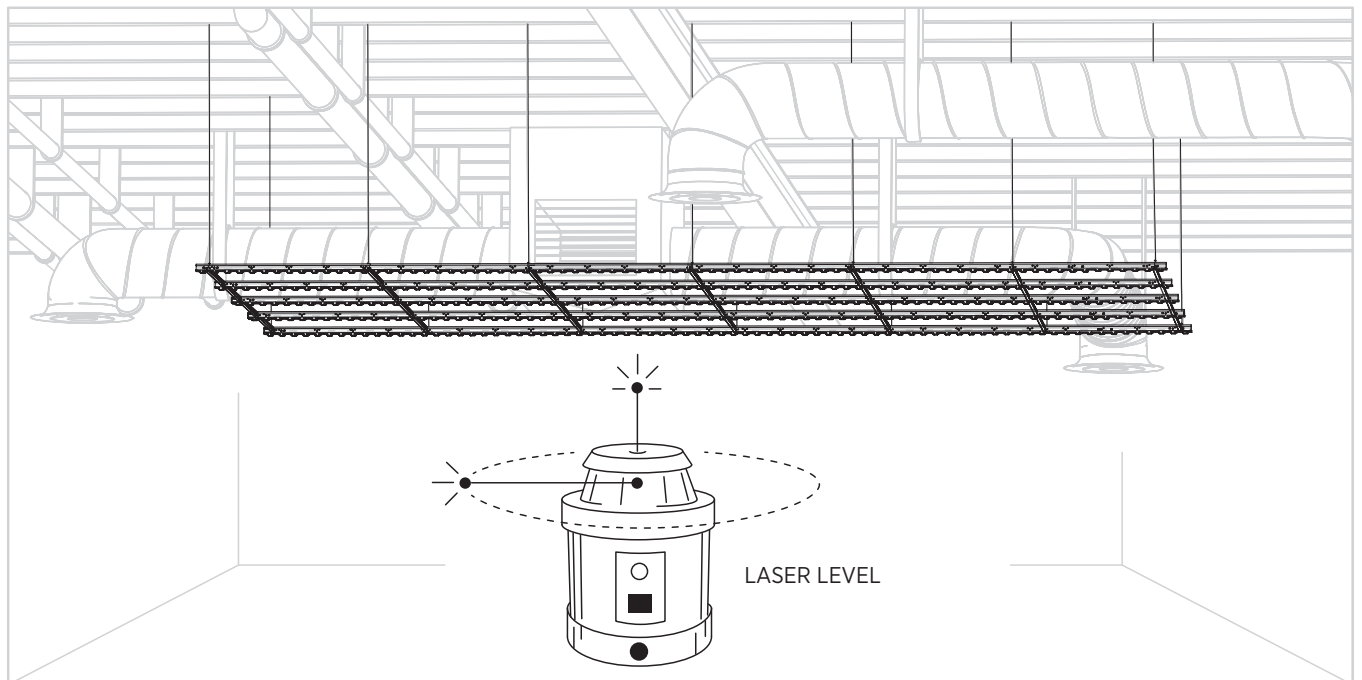


GENERAL INSTALLATION

LEVEL GRID SYSTEM

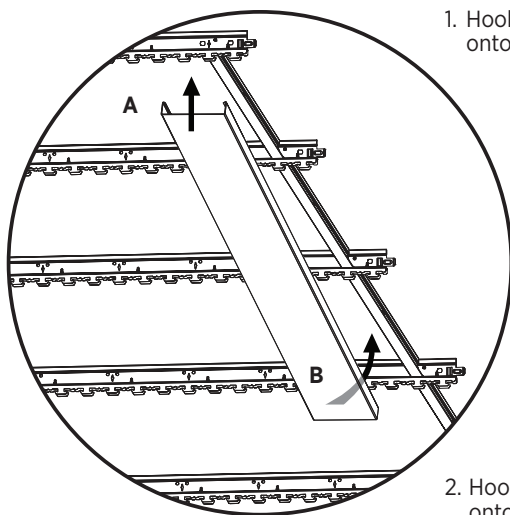
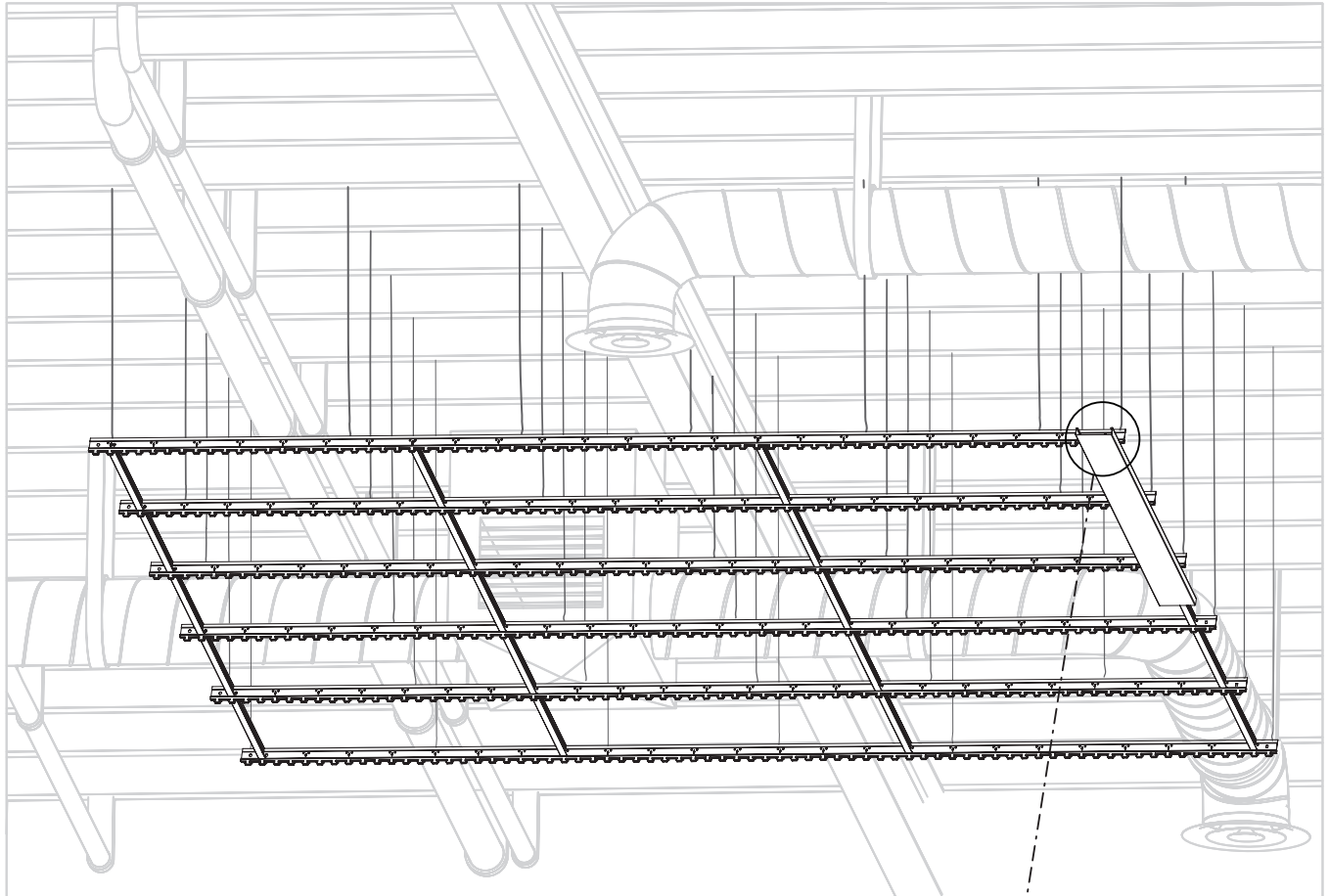


Use laser level to ensure whole grid is leveled to a 1/8" maximum variance.

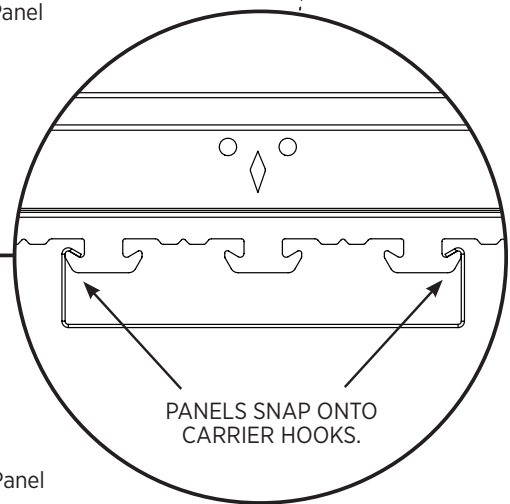


GENERAL INSTALLATION

INSTALL OPTIONAL REVEAL PANELS TO GRID



1. Hook side "A" of Panel onto Carrier.

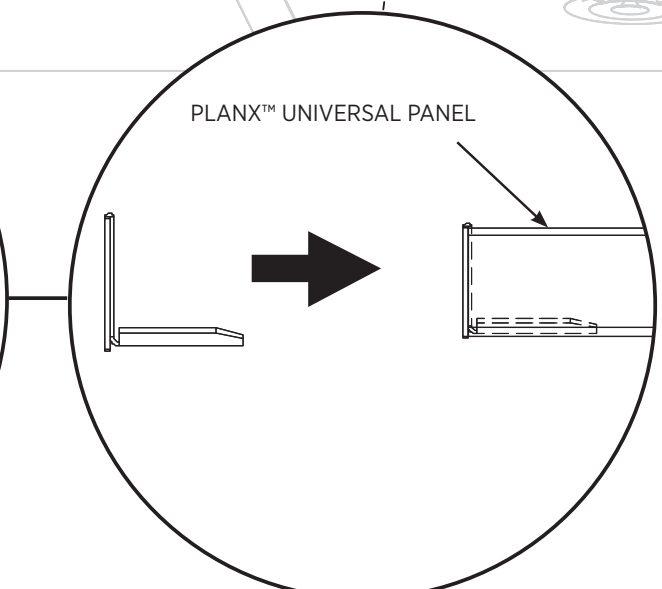
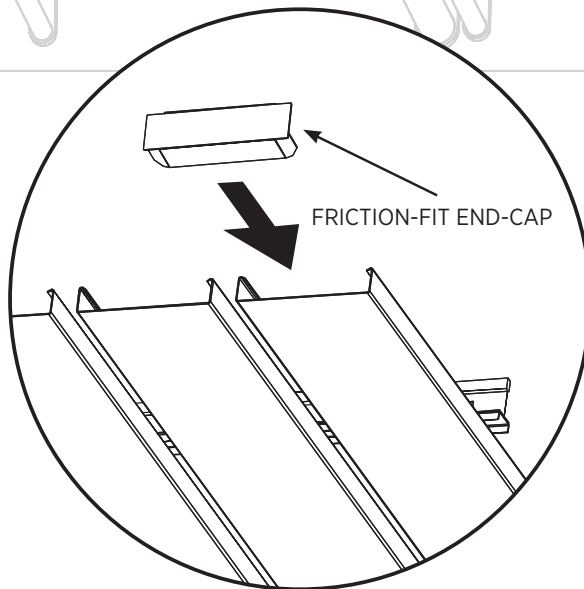
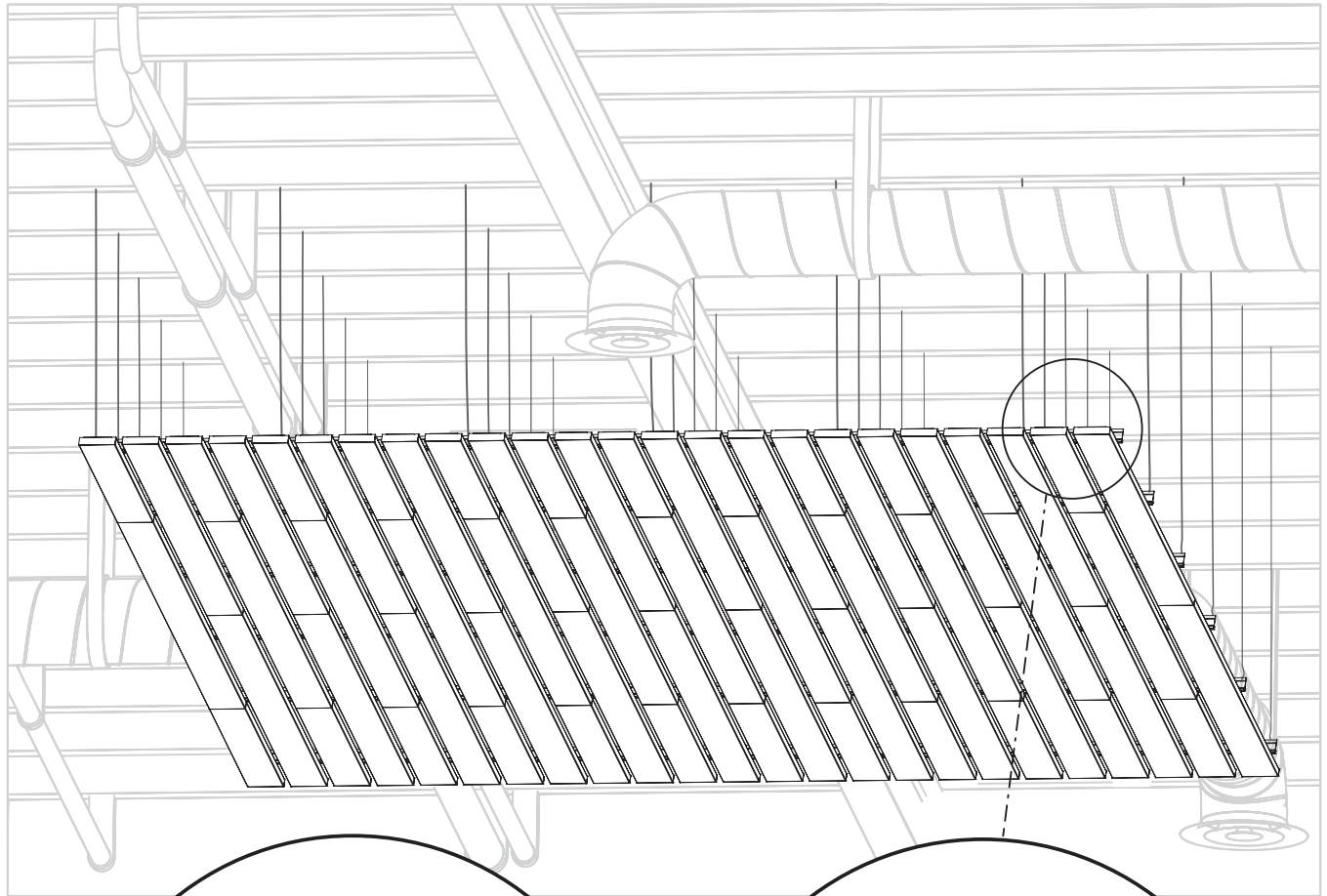


2. Hook side "B" of Panel onto Carrier.

PANELS SNAP ONTO CARRIER HOOKS.

GENERAL INSTALLATION

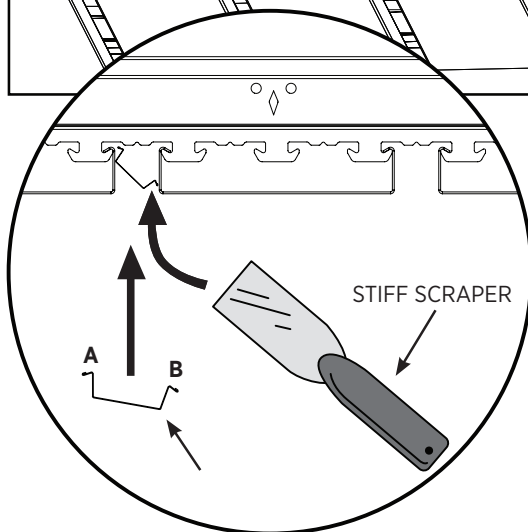
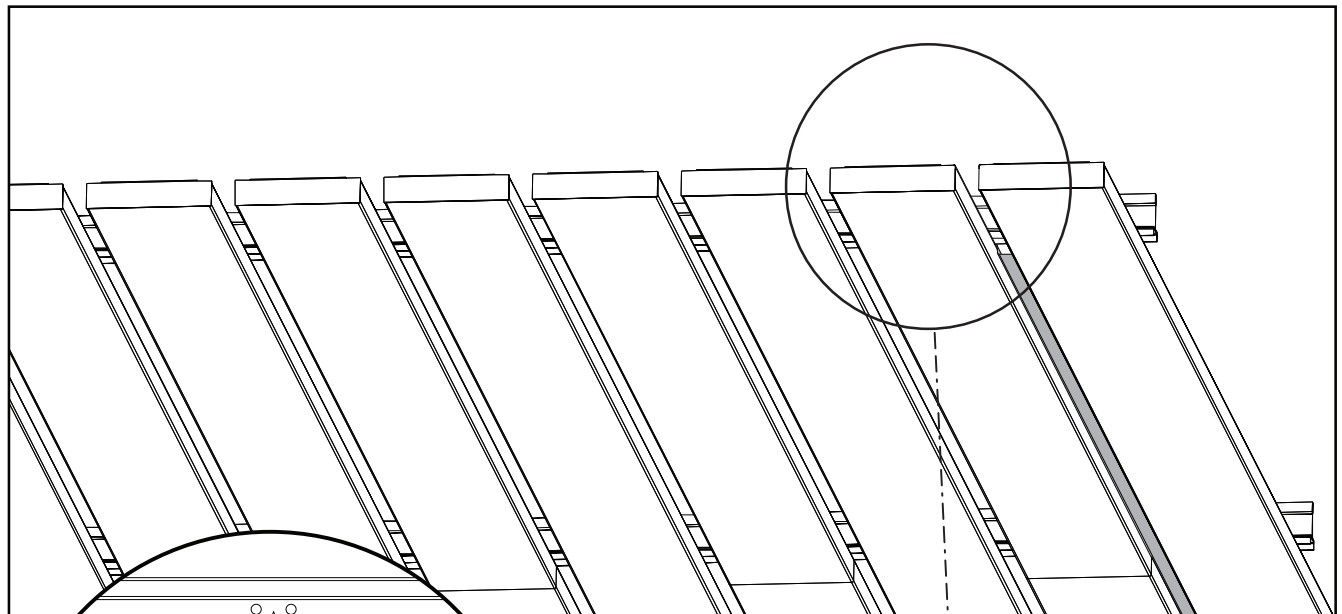
INSTALL END-CAPS – OPTIONAL REVEAL SYSTEM



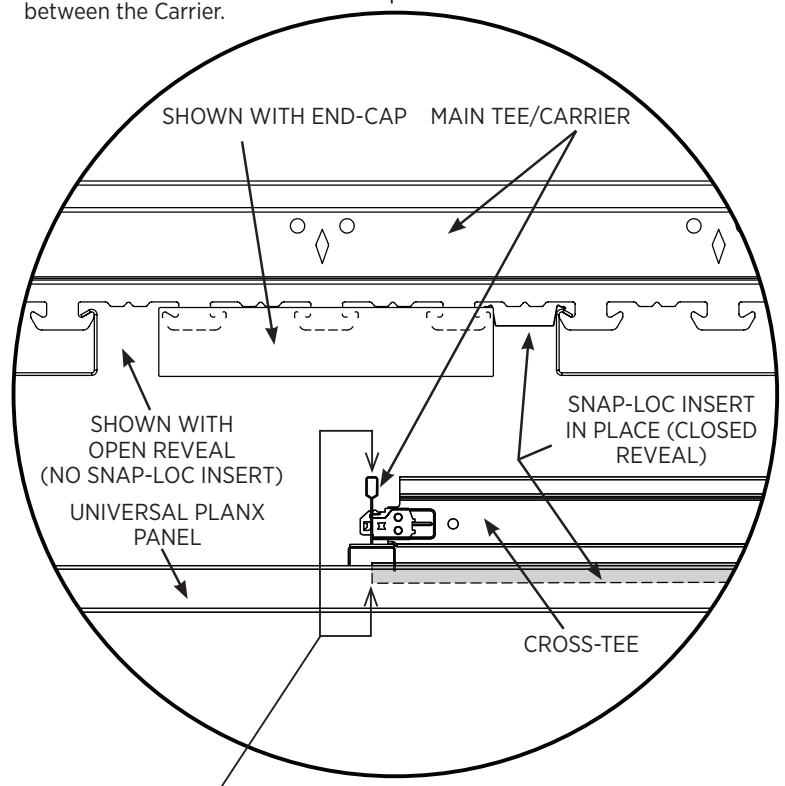
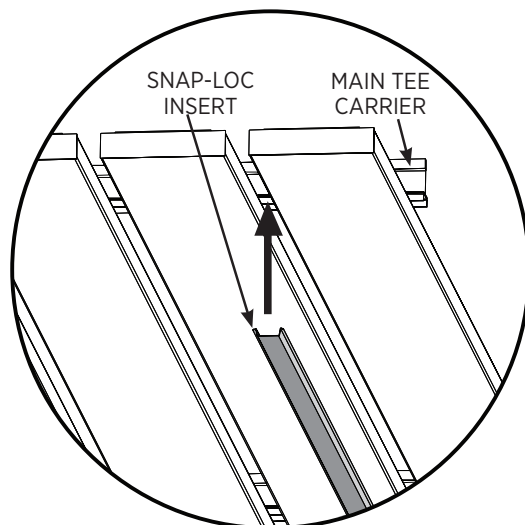
Insert End-Caps at end of Panel.

GENERAL INSTALLATION

INSTALL SNAP-LOC INSERT - OPTIONAL REVEAL SYSTEM



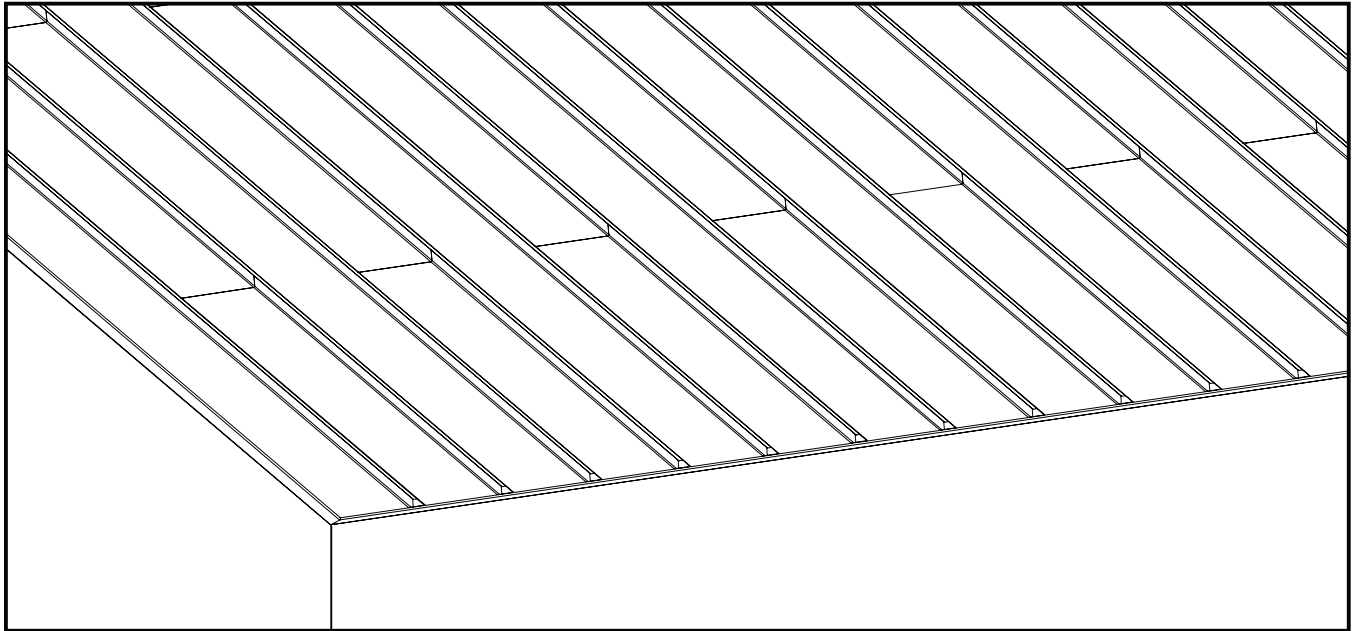
1. Raise and rotate Snap-Loc insert into position with edge "A" in place as shown.
2. Press Snap-Loc insert with scraper at Carrier, then press insert side "B" gently between the Carrier.



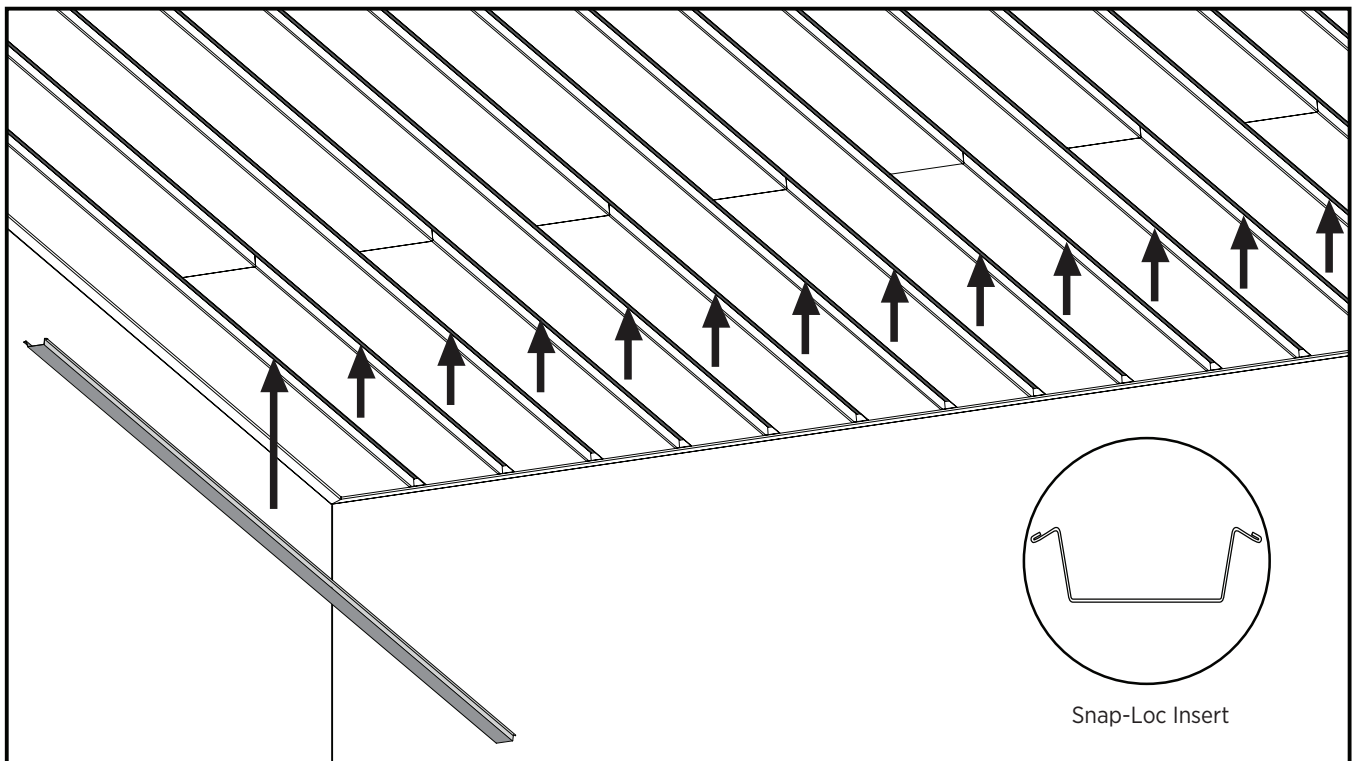
Note: Align start of Snap-Loc at Main Tee center crossing (better support).

GENERAL INSTALLATION

INSTALL SNAP-LOC INSERT - OPTIONAL REVEAL SYSTEM



Fully installed optional-reveal system with open reveal.

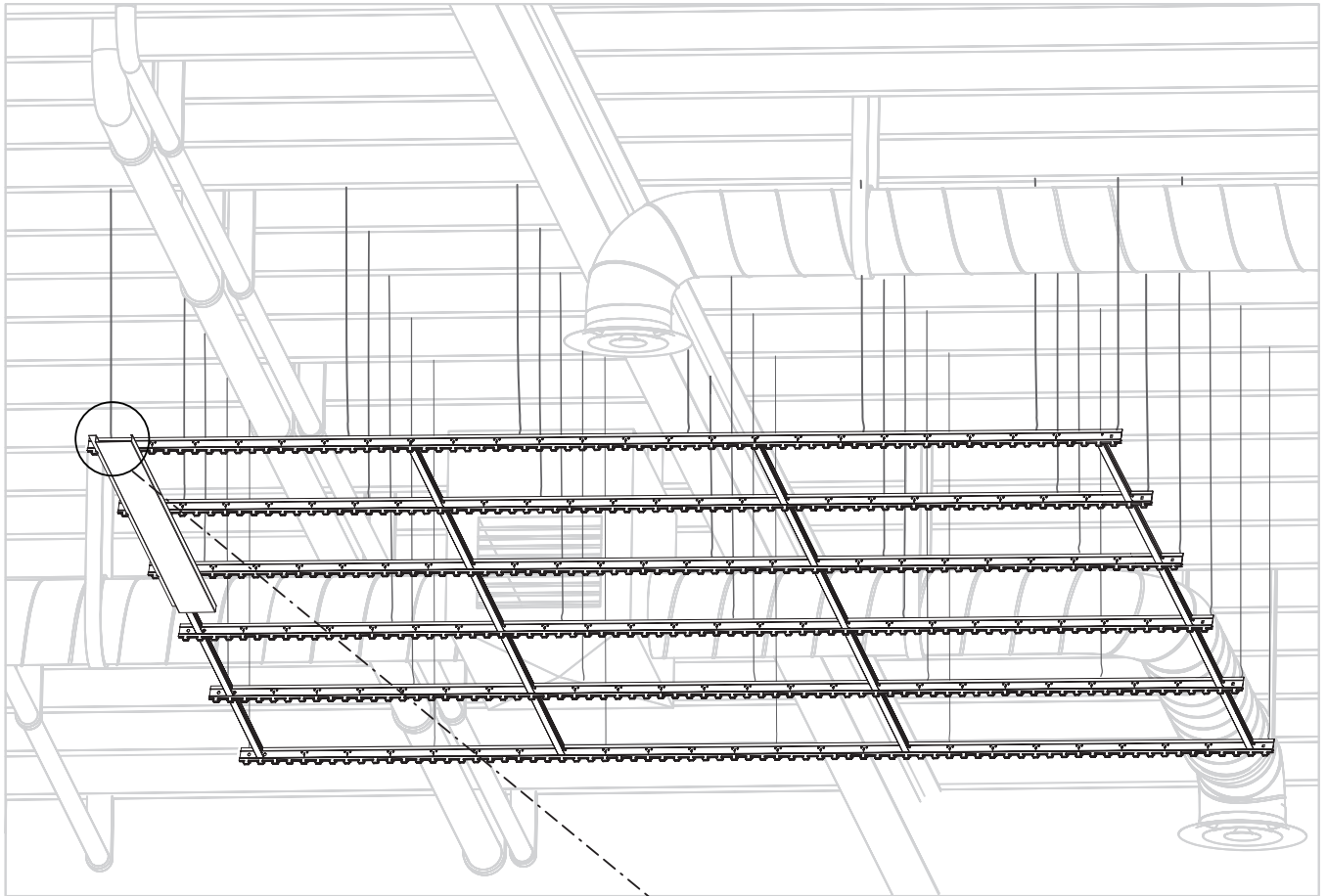


Snap-Loc Insert

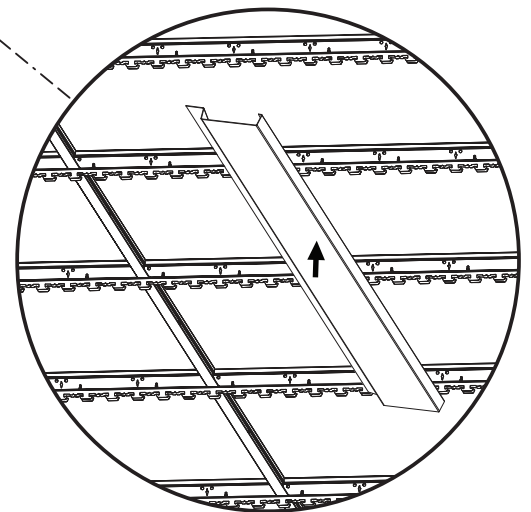
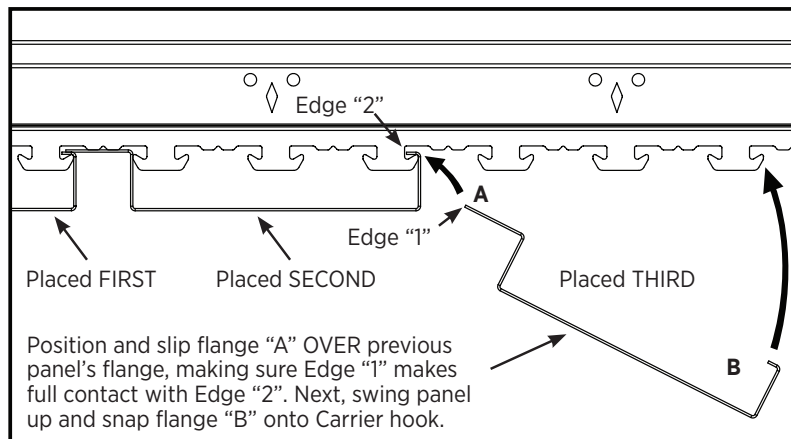
Snap-Loc Installment: See page 11

GENERAL INSTALLATION

INSTALL INTEGRAL REVEAL PANELS TO GRID (LEFT-TO-RIGHT)



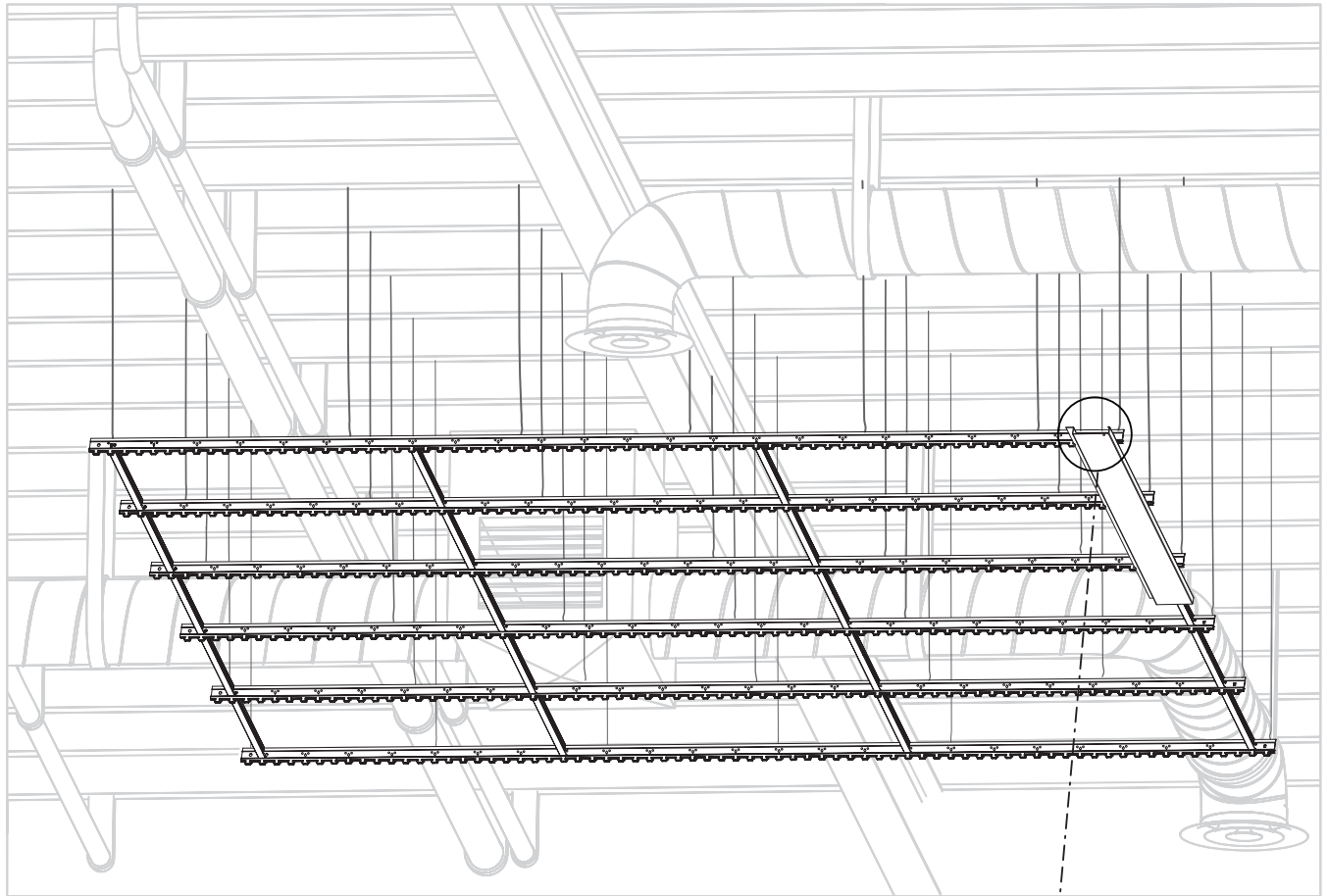
INSTALLATION ORDER SHOWN: **Left-to-Right**



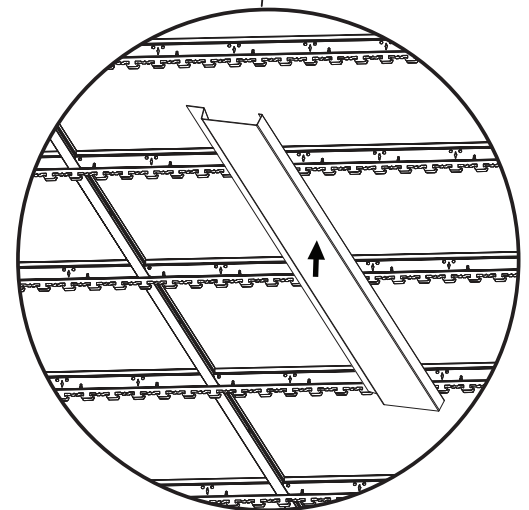
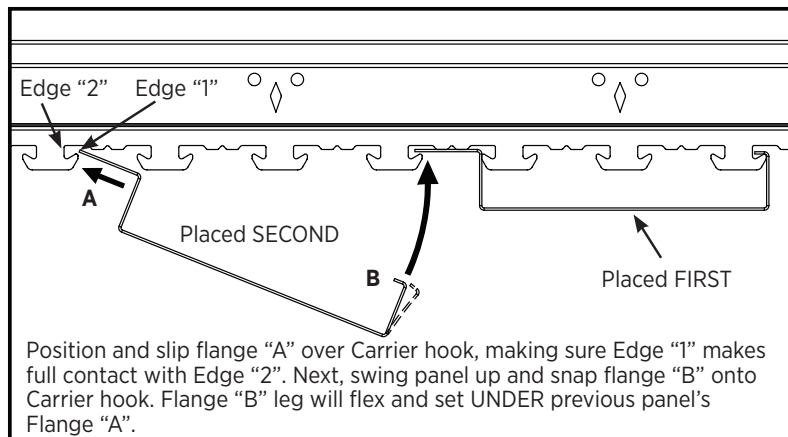
The Planx® Universal Integral Reveal System is fully accessible - see page 32 for panels removal.

GENERAL INSTALLATION

INSTALL INTEGRAL REVEAL PANELS TO GRID (RIGHT-TO-LEFT)



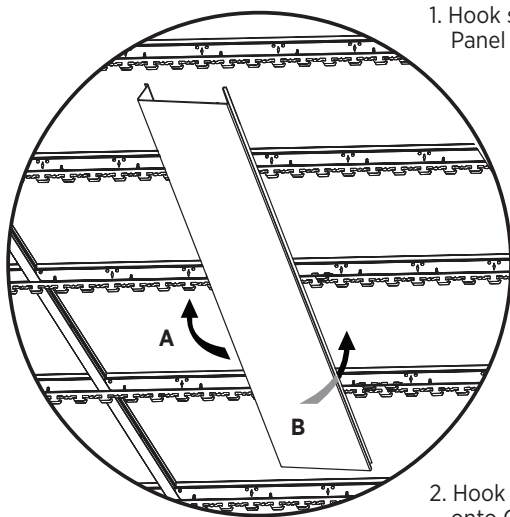
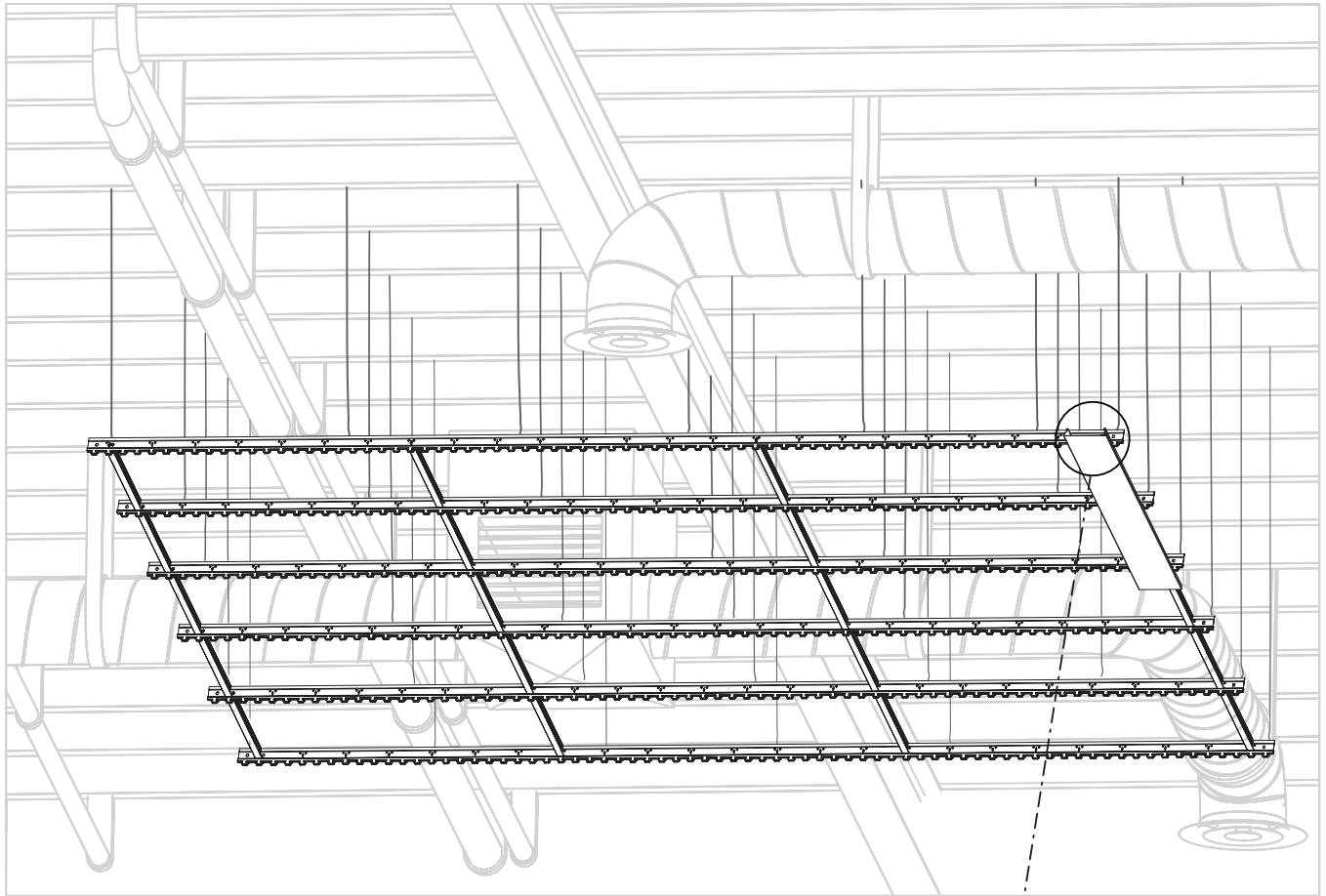
INSTALLATION ORDER SHOWN: **Right-to-Left**



The Planx® Universal Integral Reveal System is fully accessible - see page 32 for panels removal.

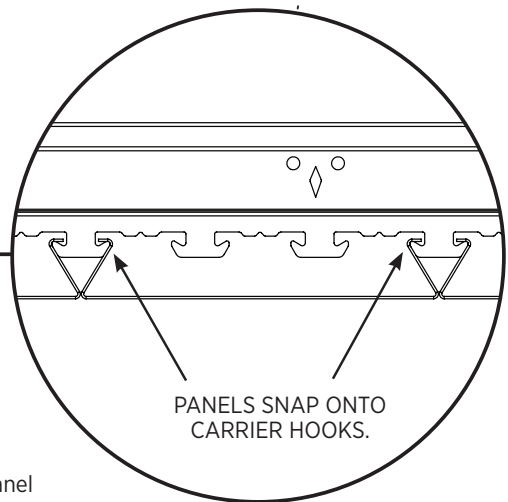
GENERAL INSTALLATION

INSTALL NO-REVEAL PANELS TO GRID



1. Hook side "A" of Panel onto Carrier.

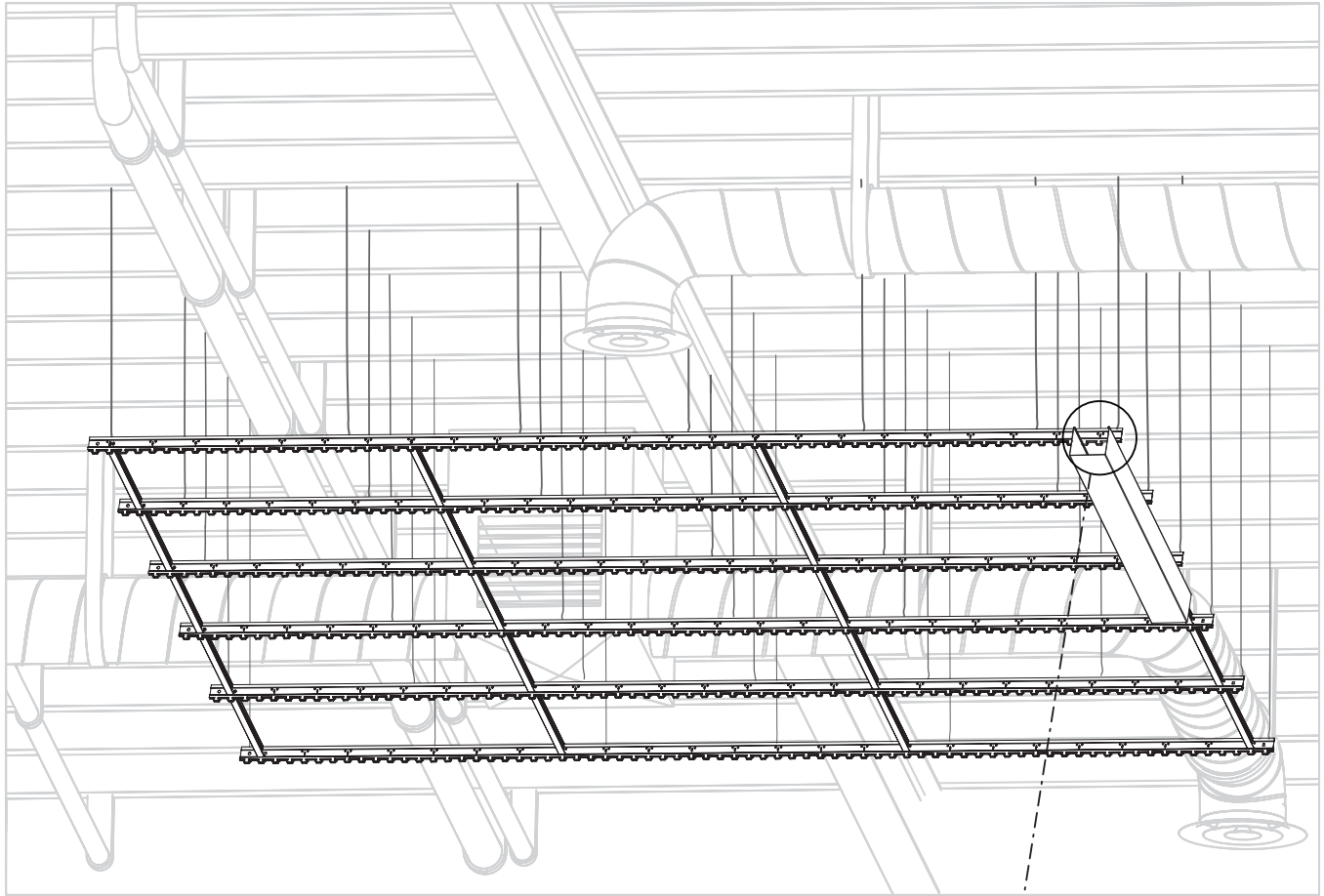
2. Hook "B" side of Panel onto Carrier.



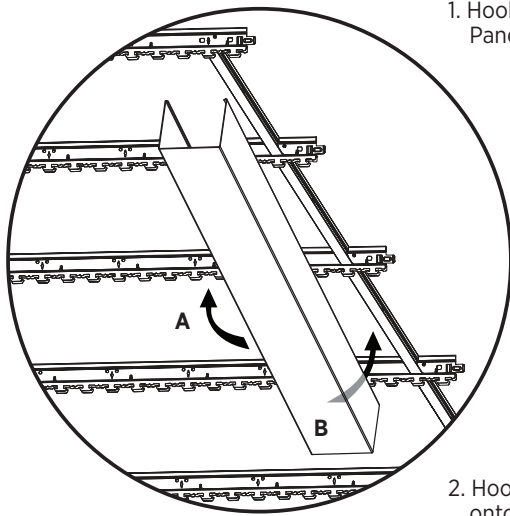
PANELS SNAP ONTO CARRIER HOOKS.

GENERAL INSTALLATION

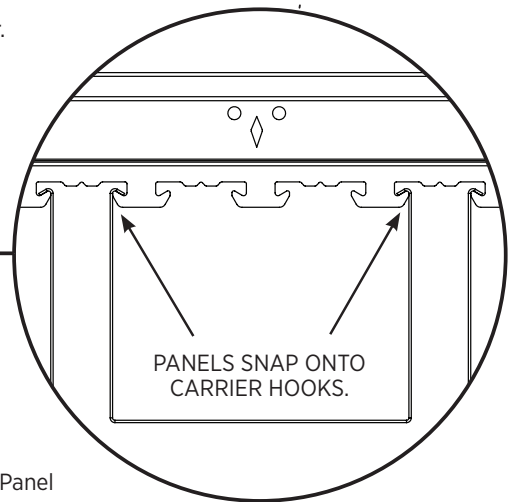
INSTALL DEEP BOX PANELS TO GRID



1. Hook side "A" of Panel onto Carrier.

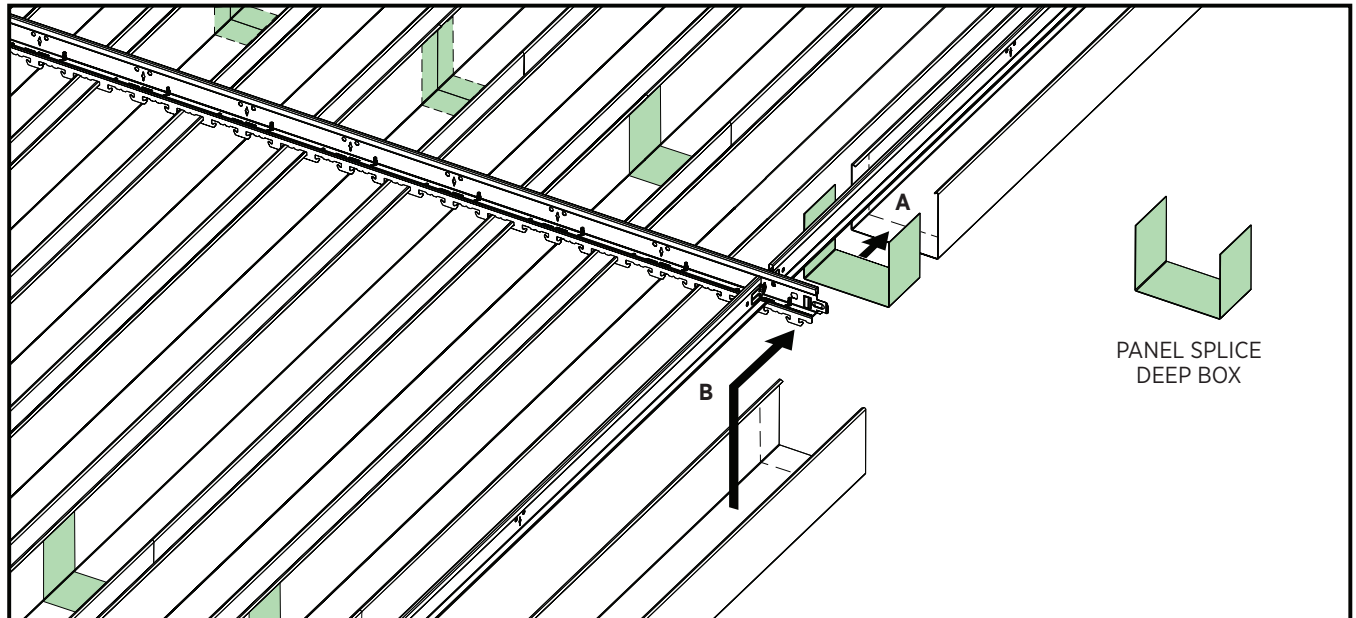


2. Hook "B" side of Panel onto Carrier.

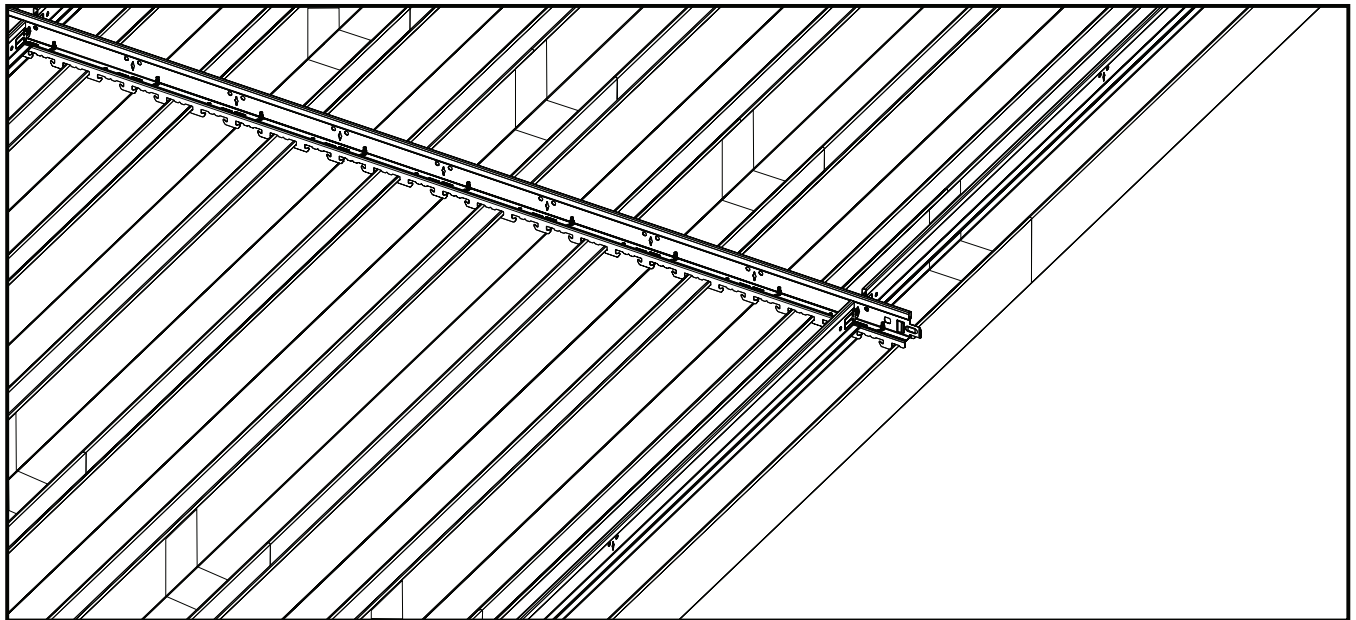


GENERAL INSTALLATION

SPLICE INTEGRATION FOR DEEP BOX PANELS



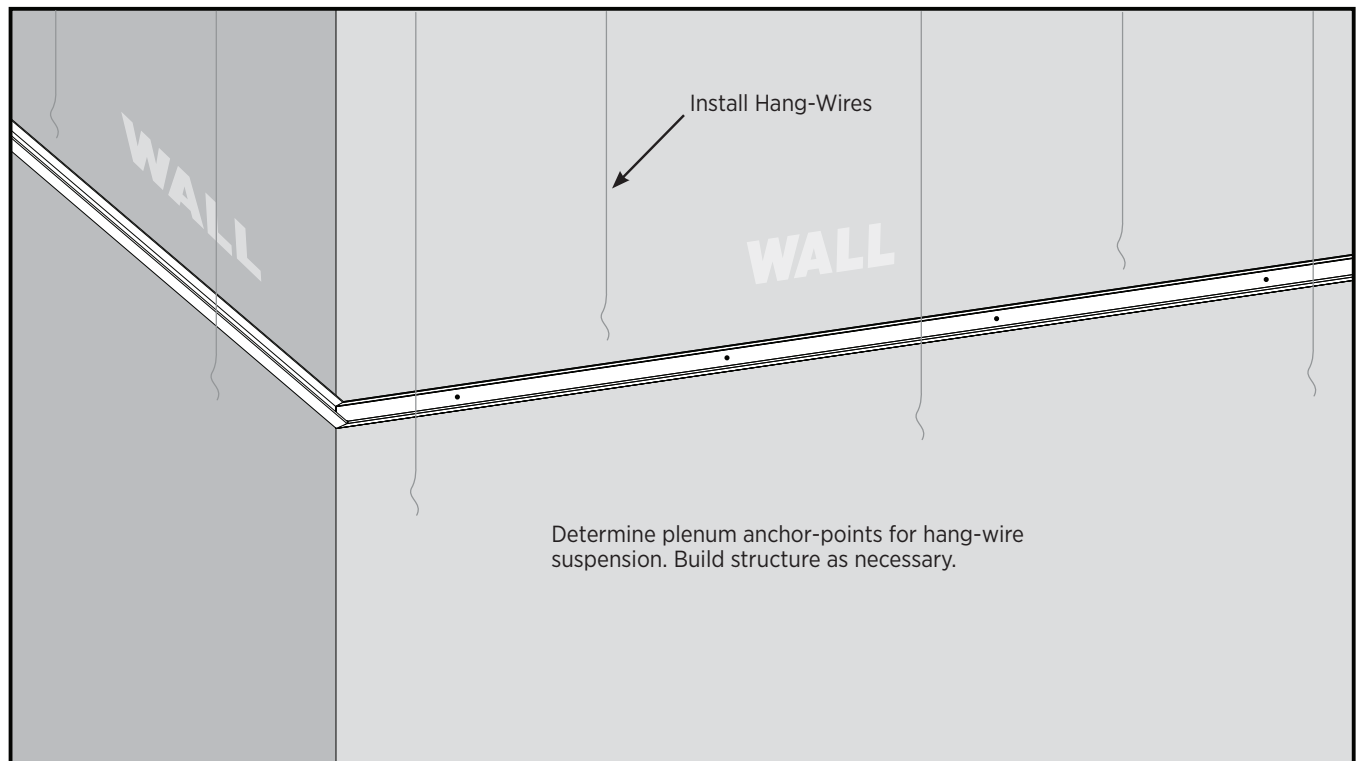
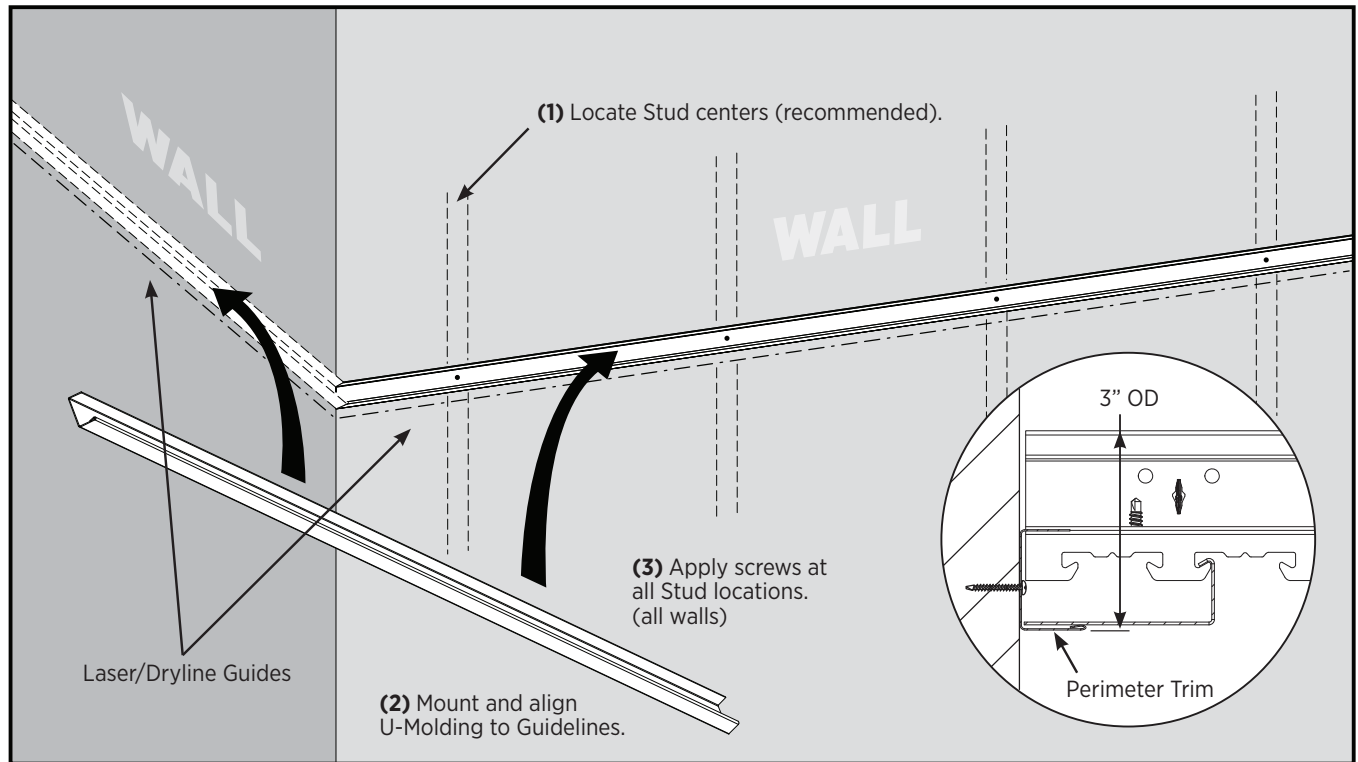
1. Slide "A" Splicer into mounted Panel. Splice must be centered with the Panel's edge.
2. Install "B" serial Panel and then slide onto Splice, flush to existing Panel.



Deep box Splices installed at every Panel joint.

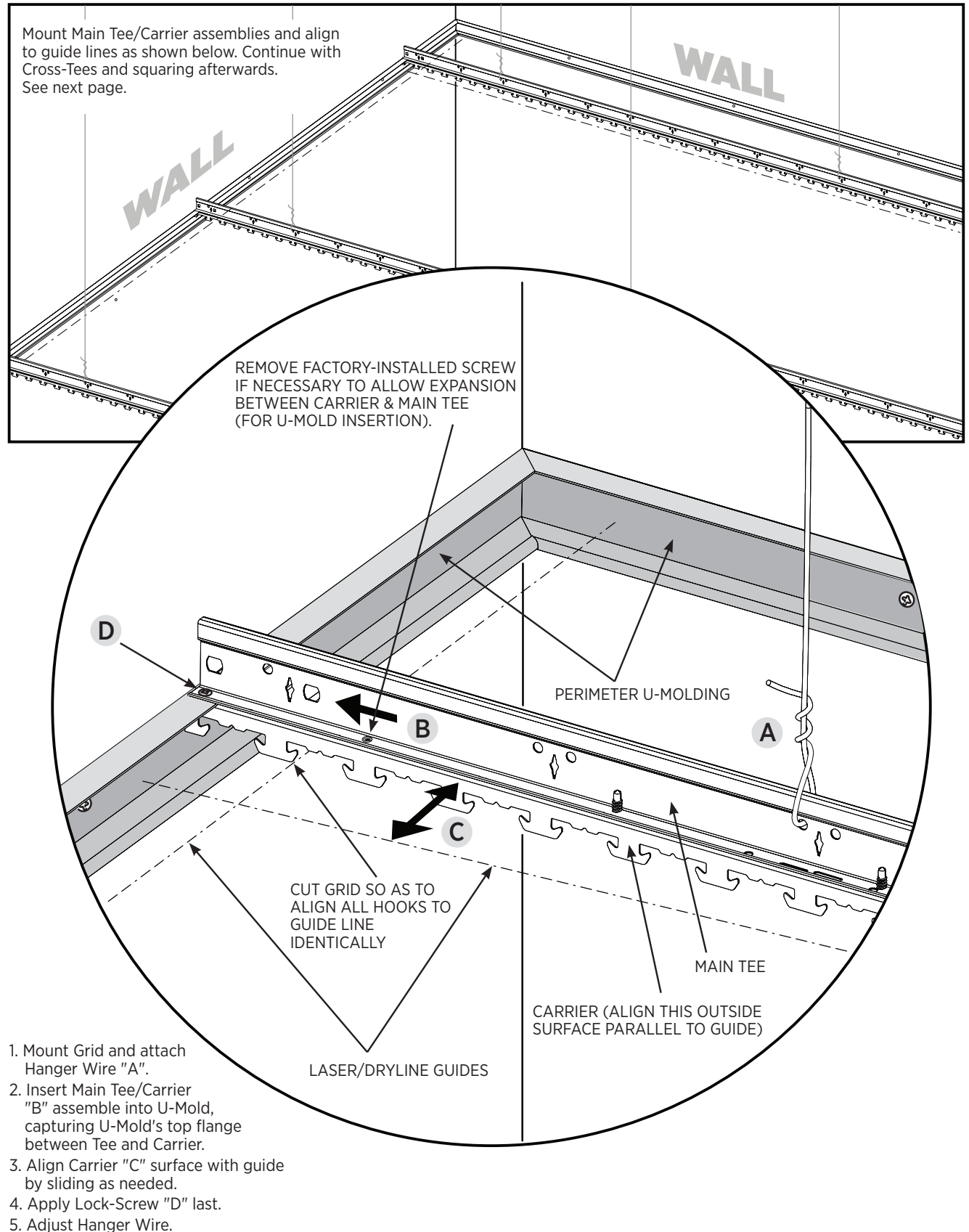
CEILING WALL-TO-WALL INSTALLATION

INSTALL U-MOLD CHANNELS TO WALLS
(OPTIONAL-REVEAL SHOWN)



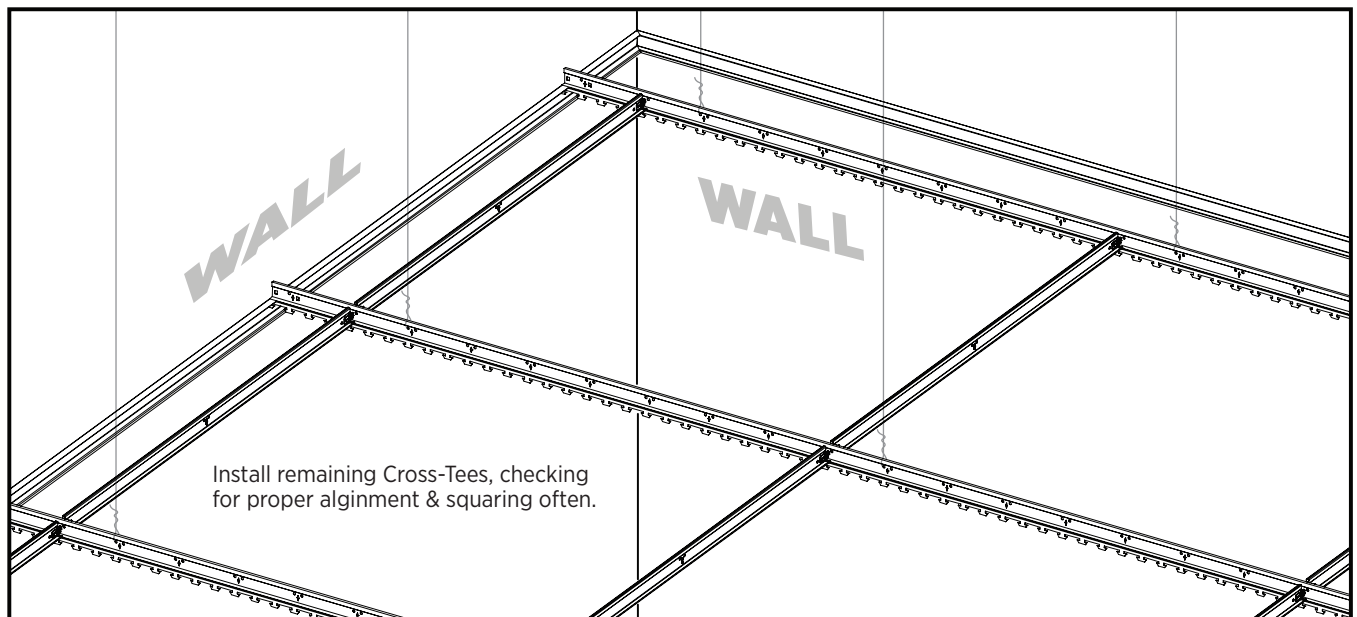
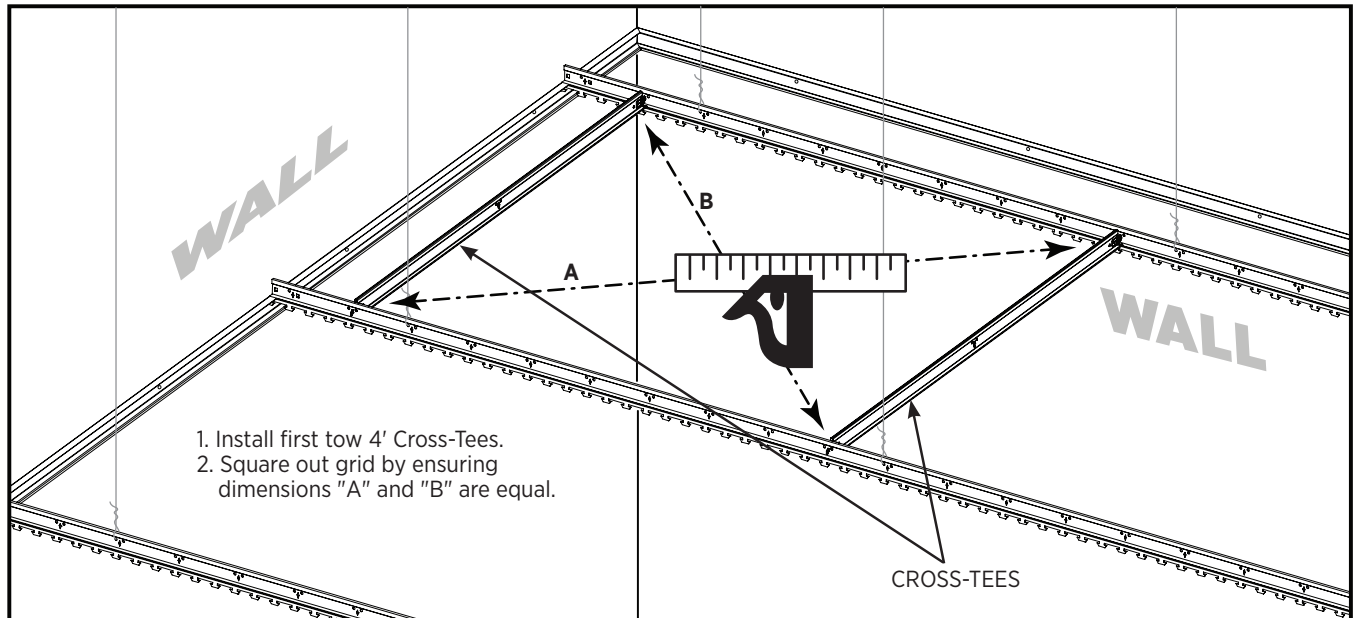
CEILING WALL-TO-WALL INSTALLATION

INSTALL AND ALIGN MAIN CARRIERS



CEILING WALL-TO-WALL INSTALLATION

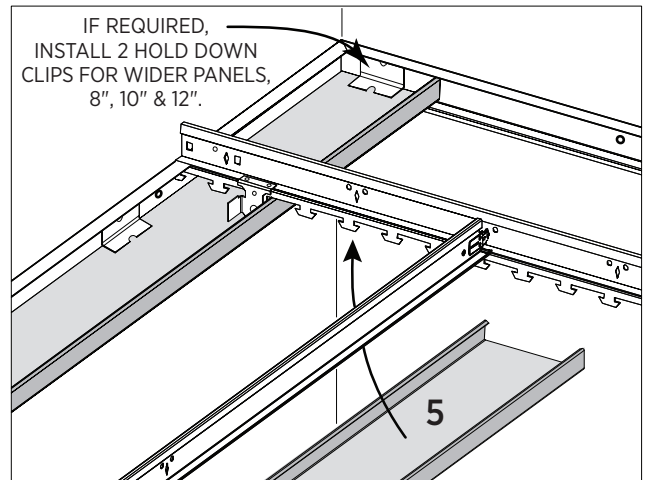
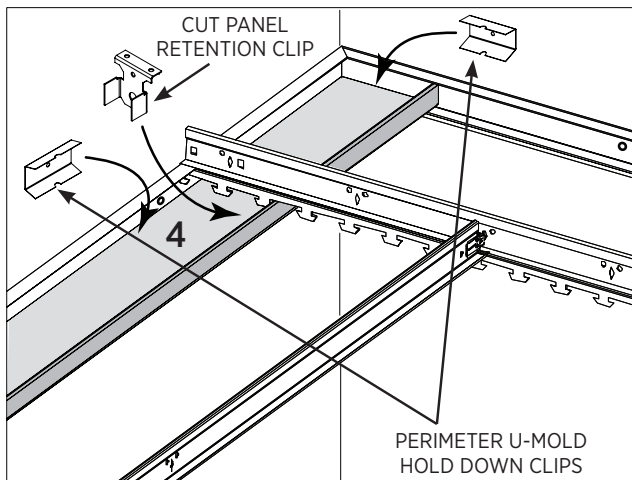
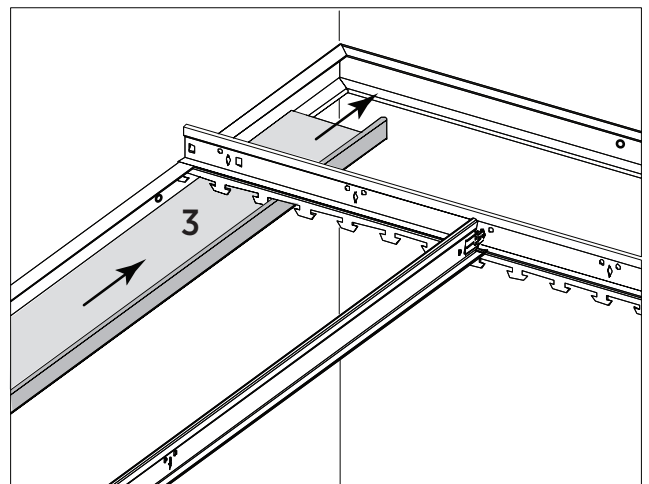
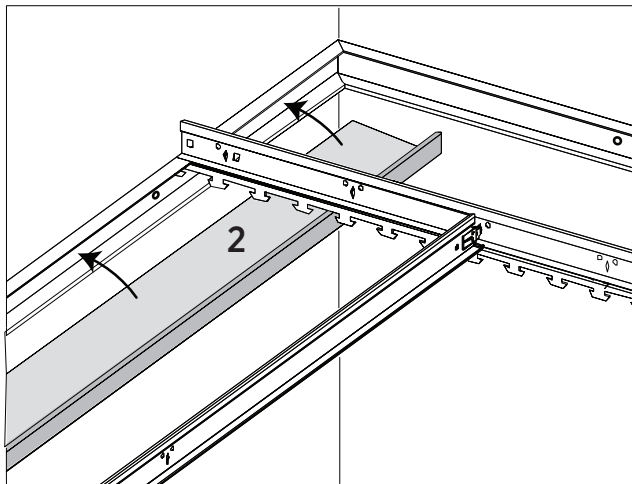
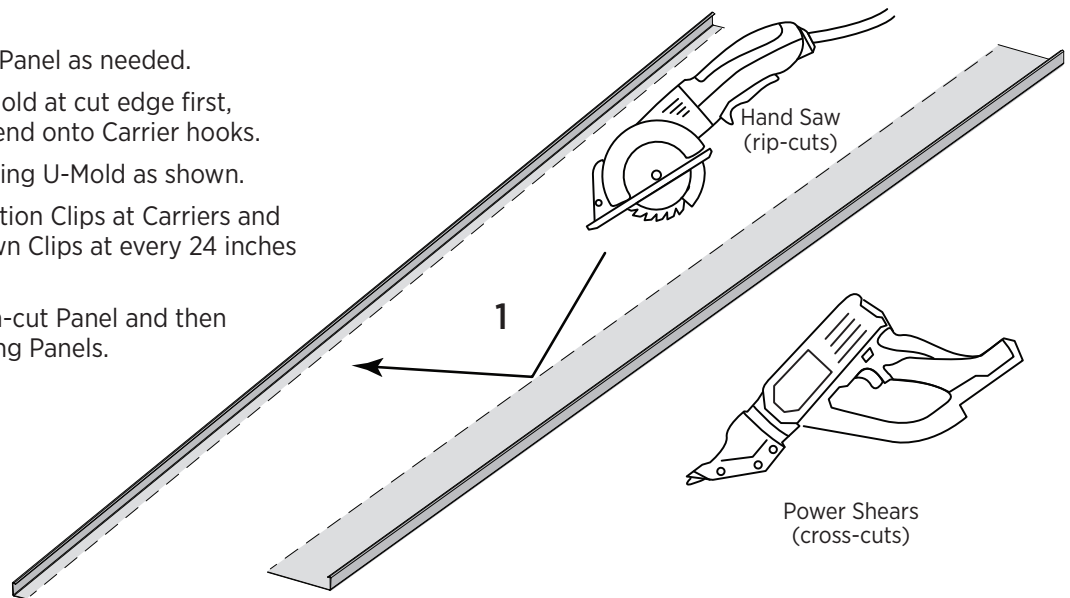
INSTALL CROSS-TEES AND SQUARE GRID



CEILING WALL-TO-WALL INSTALLATION

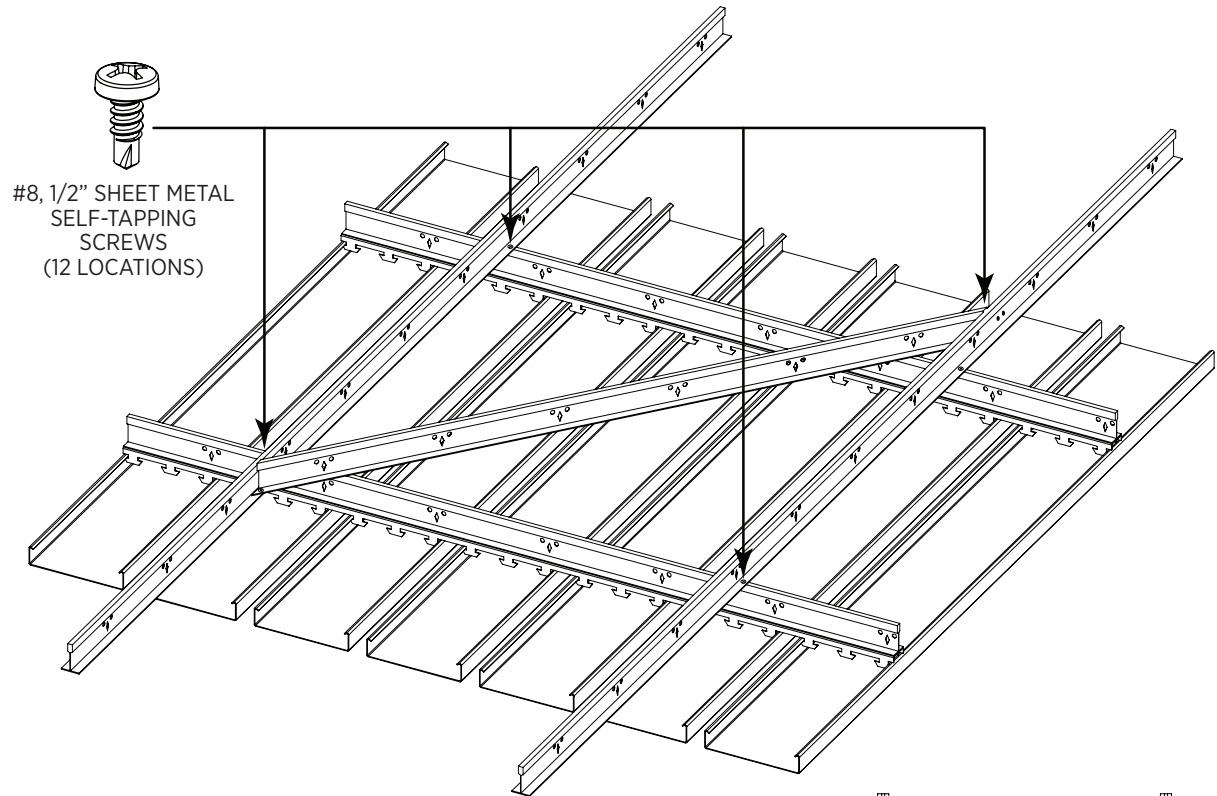
FIELD-CUT AND INSTALL PERIMETER PANELS

1. Measure and cut/trim Panel as needed.
2. Mount Panel onto U-Mold at cut edge first, then snap its flanged end onto Carrier hooks.
3. Slide Panel into opposing U-Mold as shown.
4. Install cut Panel Retention Clips at Carriers and perimeter U-Mold Down Clips at every 24 inches as shown.
5. Proceed with next non-cut Panel and then continue with remaining Panels.

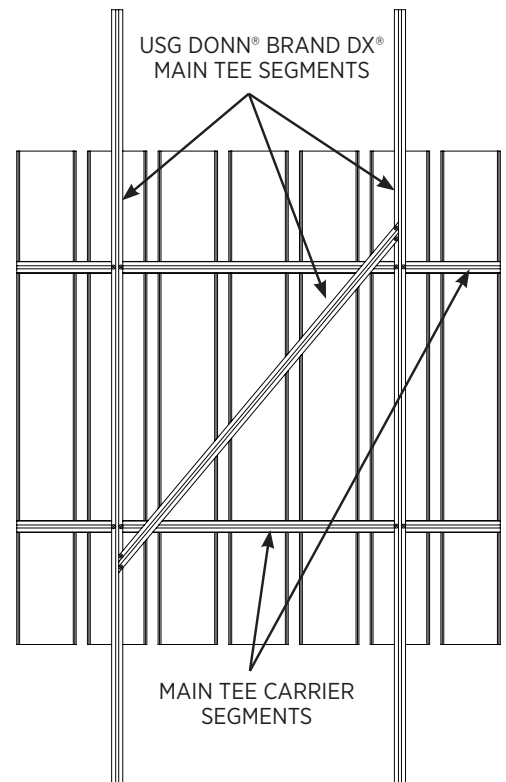
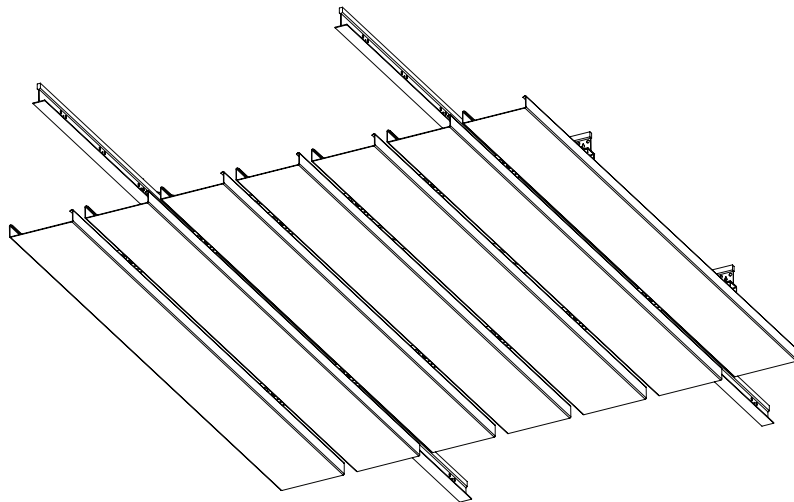


PLENUM ACCESS

ACCESS DOOR CONSTRUCTION – FIELD WORK

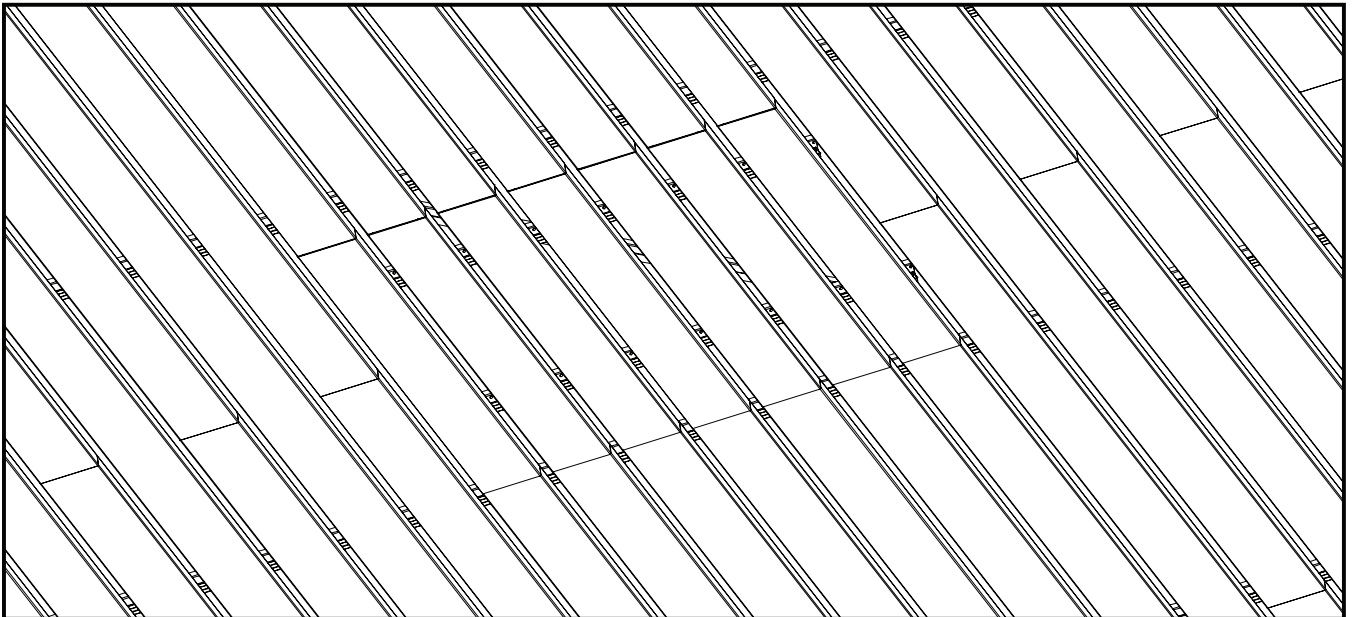
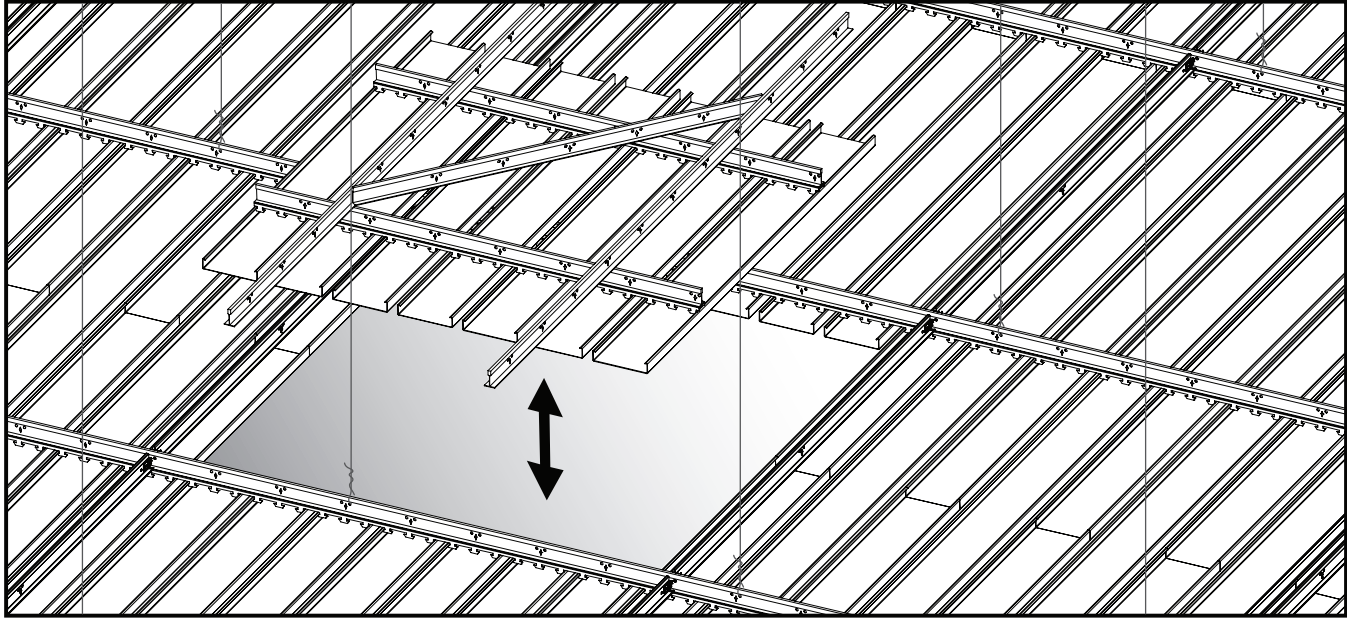


Suggested access door construction method



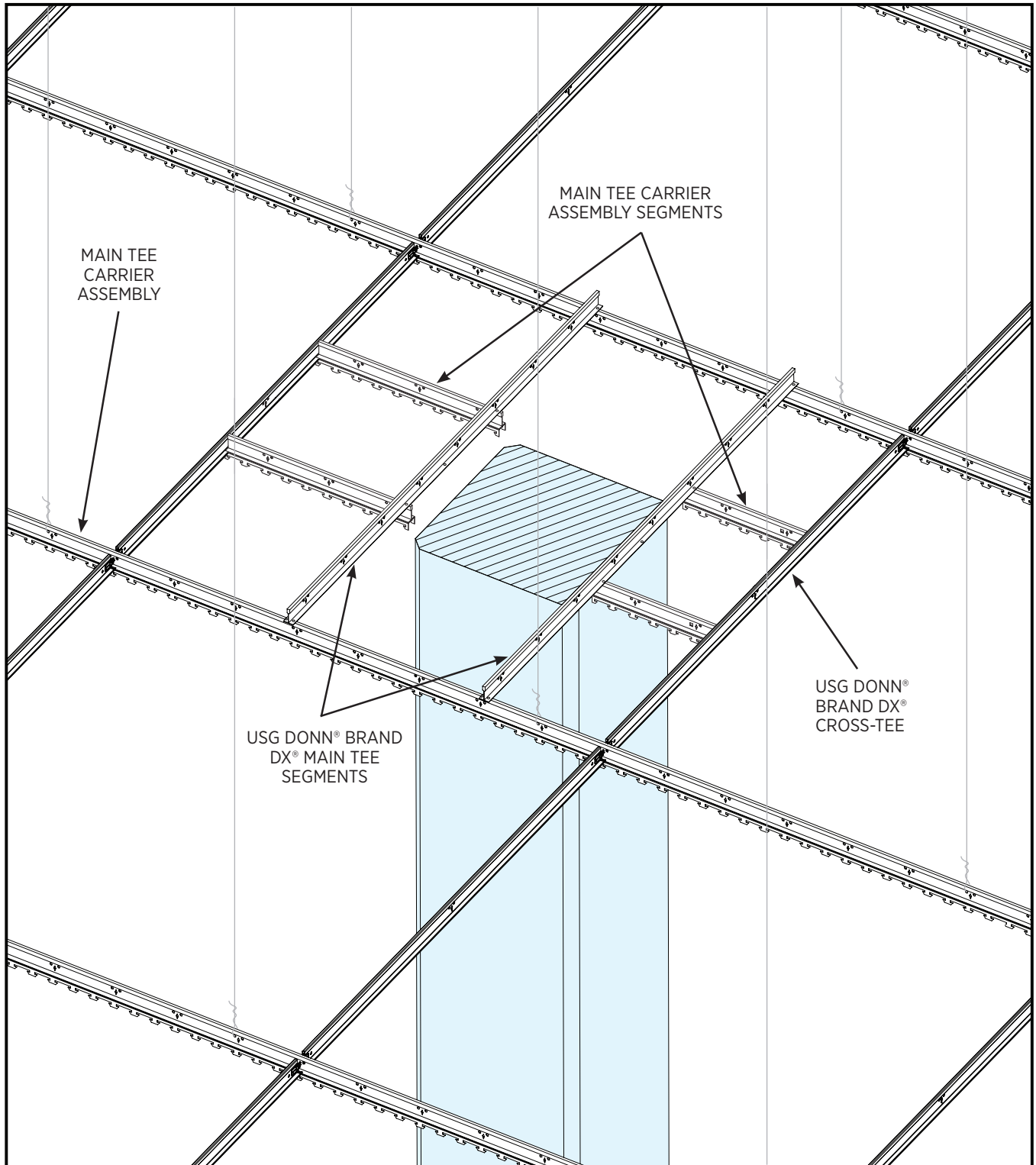
PLENUM ACCESS

ACCESS PORTAL – FIELD WORK



PERIMETER CONDITIONS

GRID FIELD-CUTTING FOR COLUMN INTEGRATION



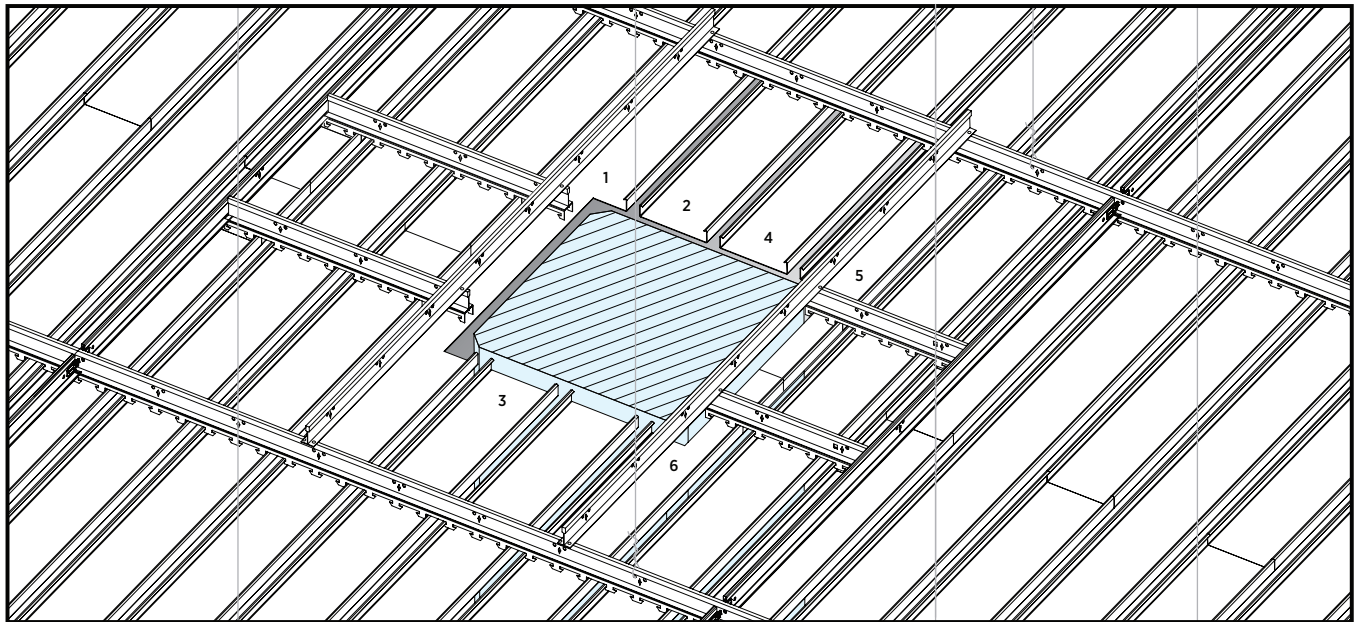
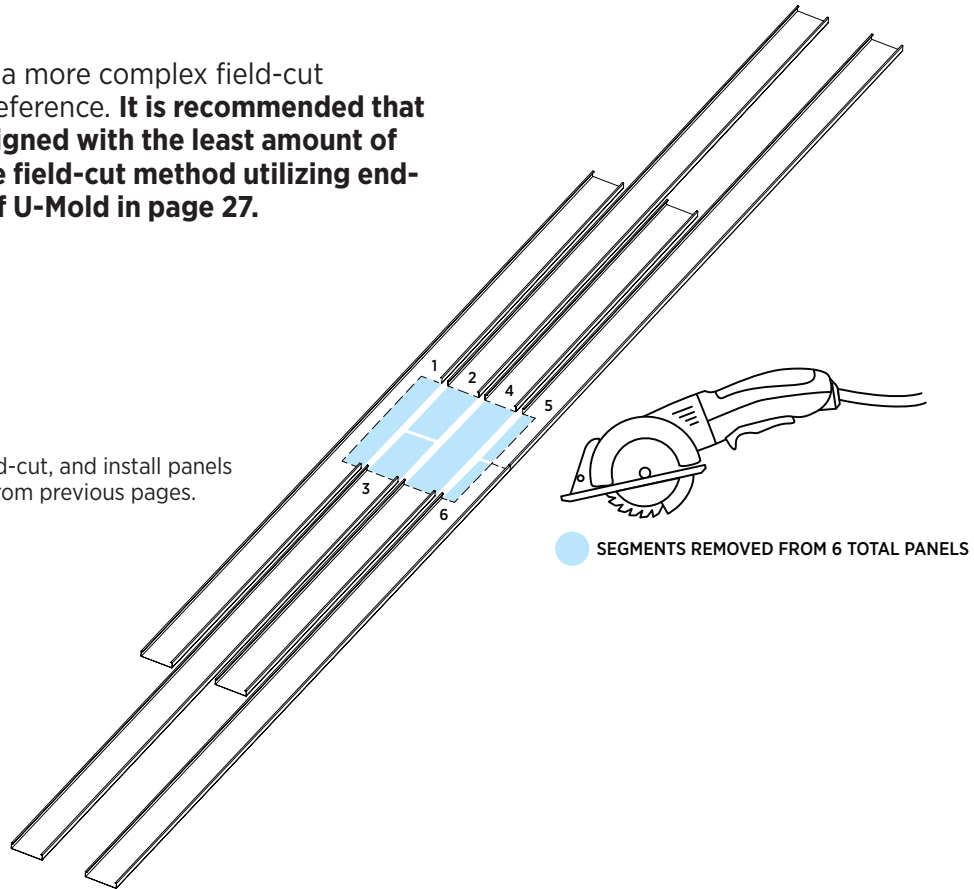
SUGGESTED CONSTRUCTION METHOD FOR PILLAR CLEARANCE

PERIMETER CONDITIONS

PANEL FIELD-CUTTING FOR COLUMN INTEGRATION

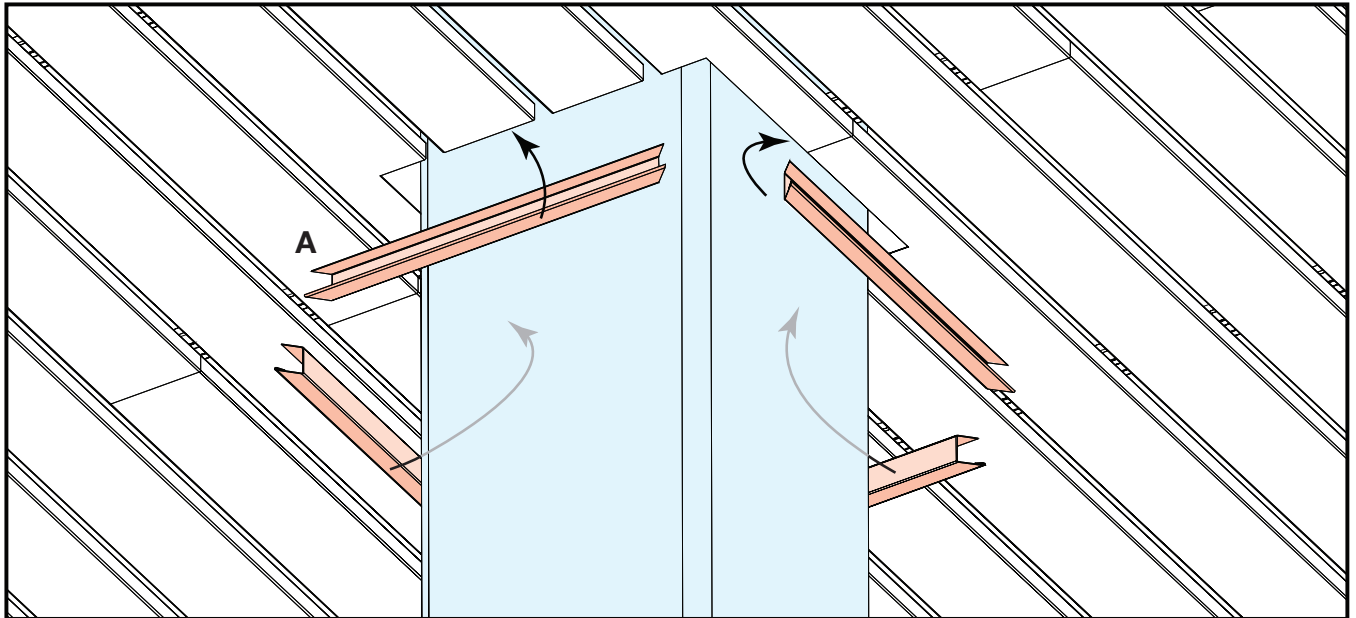
Shown here, is a more complex field-cut operation for reference. **It is recommended that a layout is designed with the least amount of cut panels.** See field-cut method utilizing end-caps instead of U-Mold in page 27.

Measure, mark, field-cut, and install panels using procedures from previous pages.

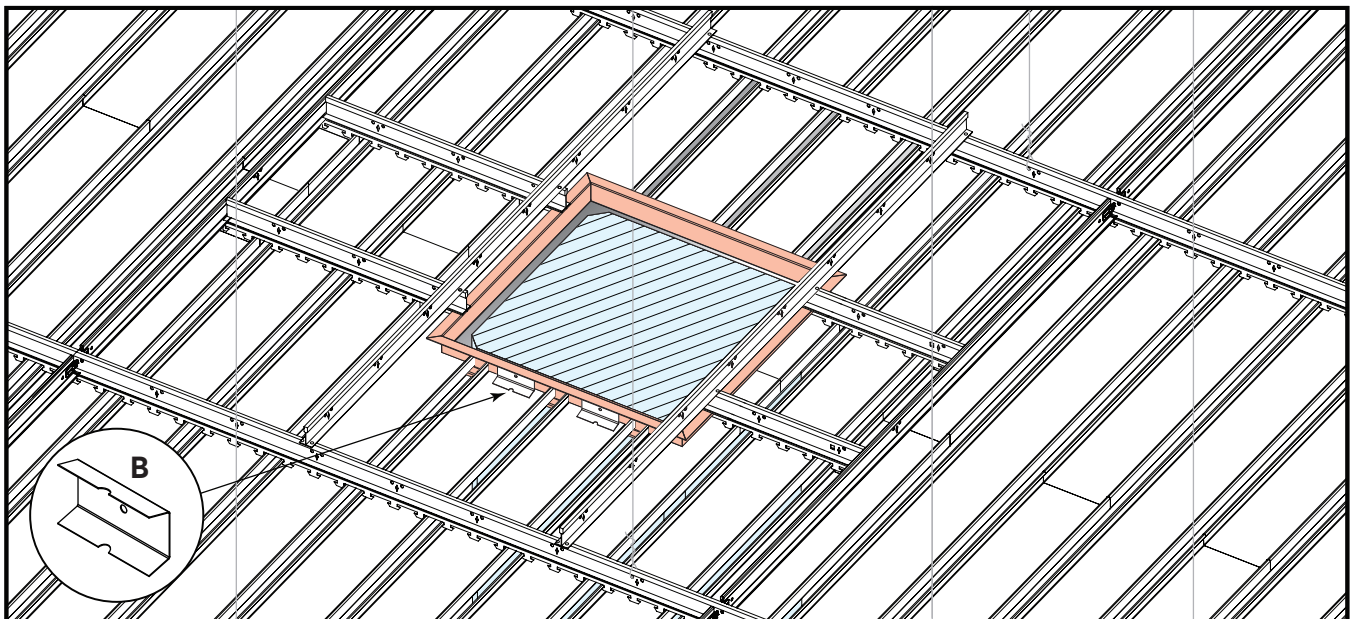


PERIMETER CONDITIONS

U-MOLDING INSTALLMENT FOR COLUMN INTEGRATION



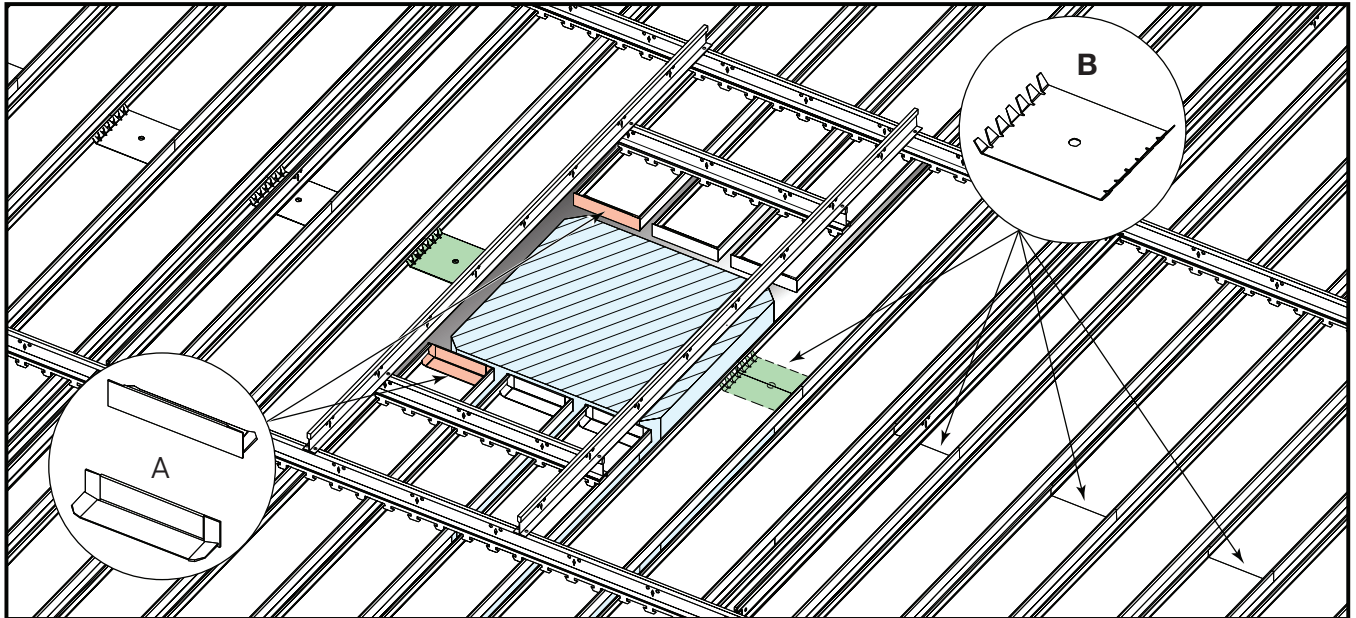
1. Position perimeter U-Molding "A".



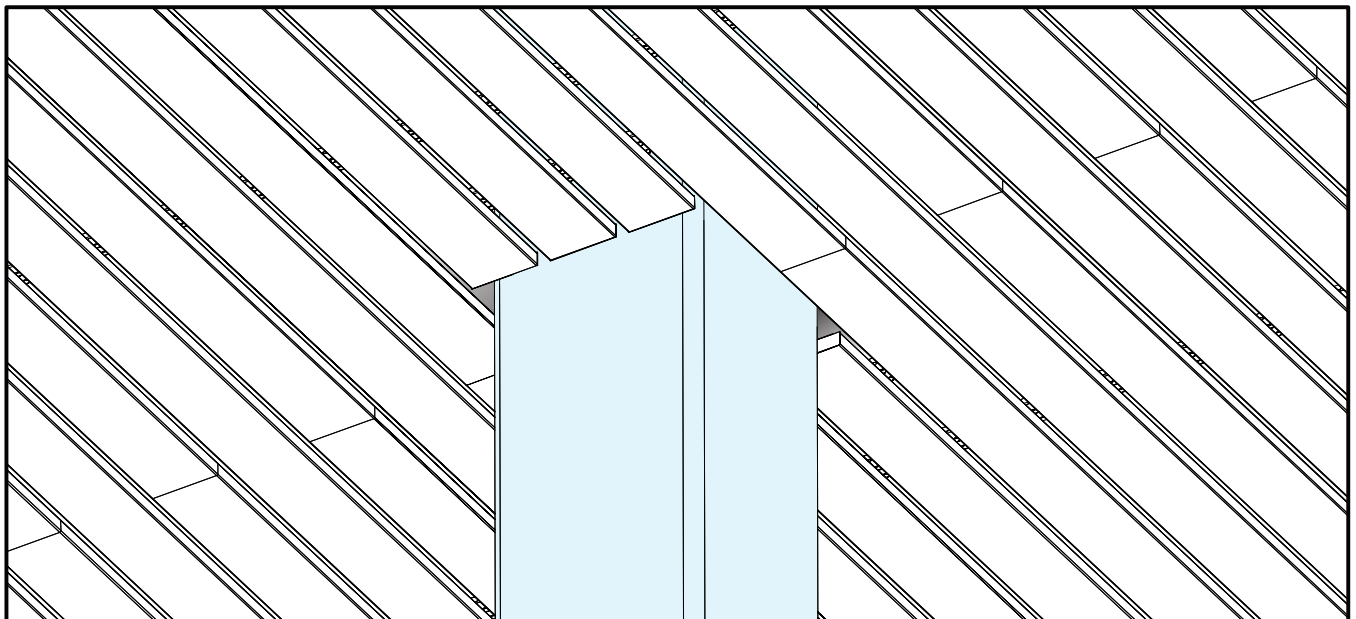
2. Apply perimeter U-Mold Hold Down Clips "B".

PERIMETER CONDITIONS

END-CAP AND SPLICE INSTALLMENT FOR COLUMN INTEGRATION



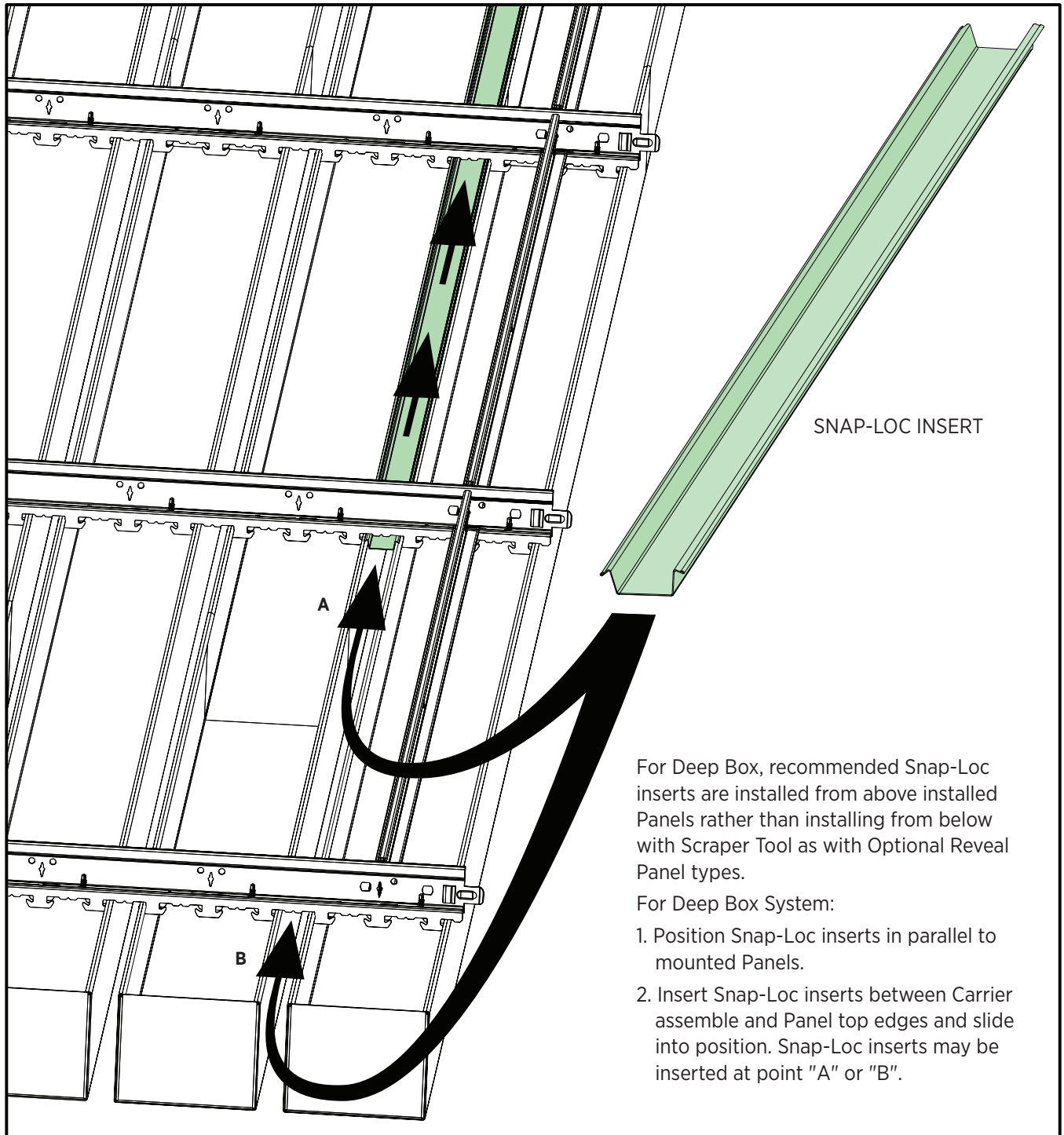
1. Alternate method for pillar clearance: Apply End-Caps "A".
2. Install Splices as shown (Panel joints should ideally exist away from Tees).



Completed Pillar Clearance Using End-Caps.

POST TREATMENT FOR REVEALS

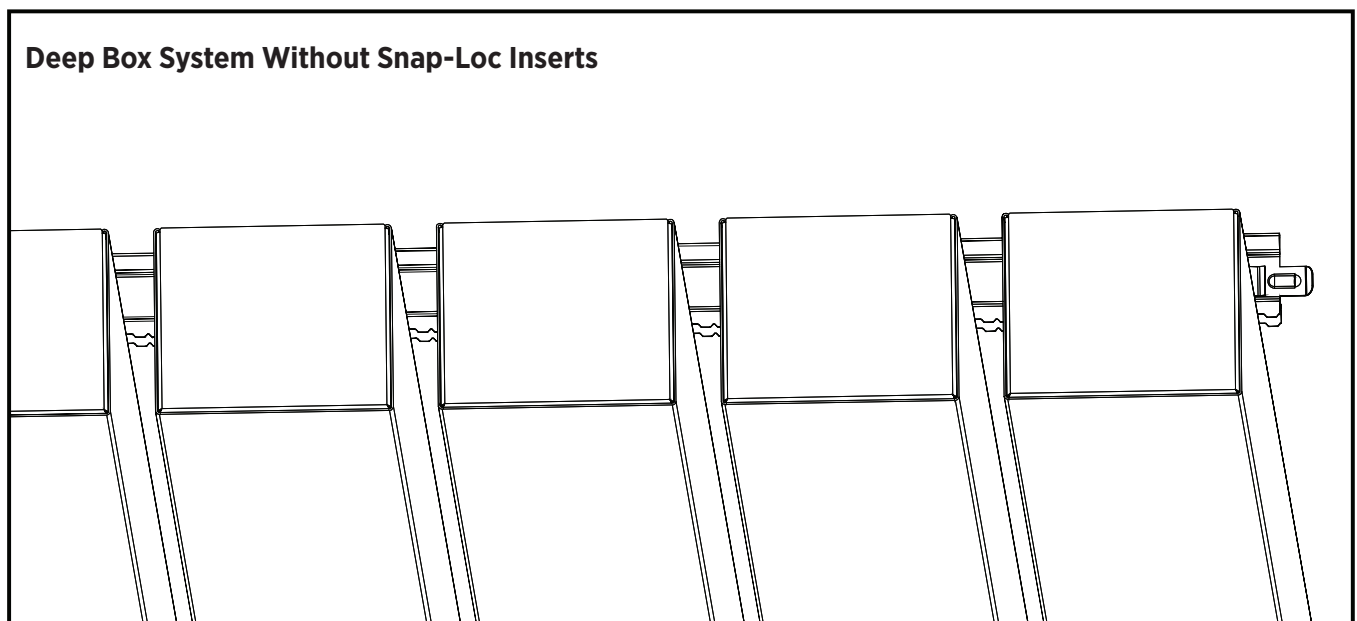
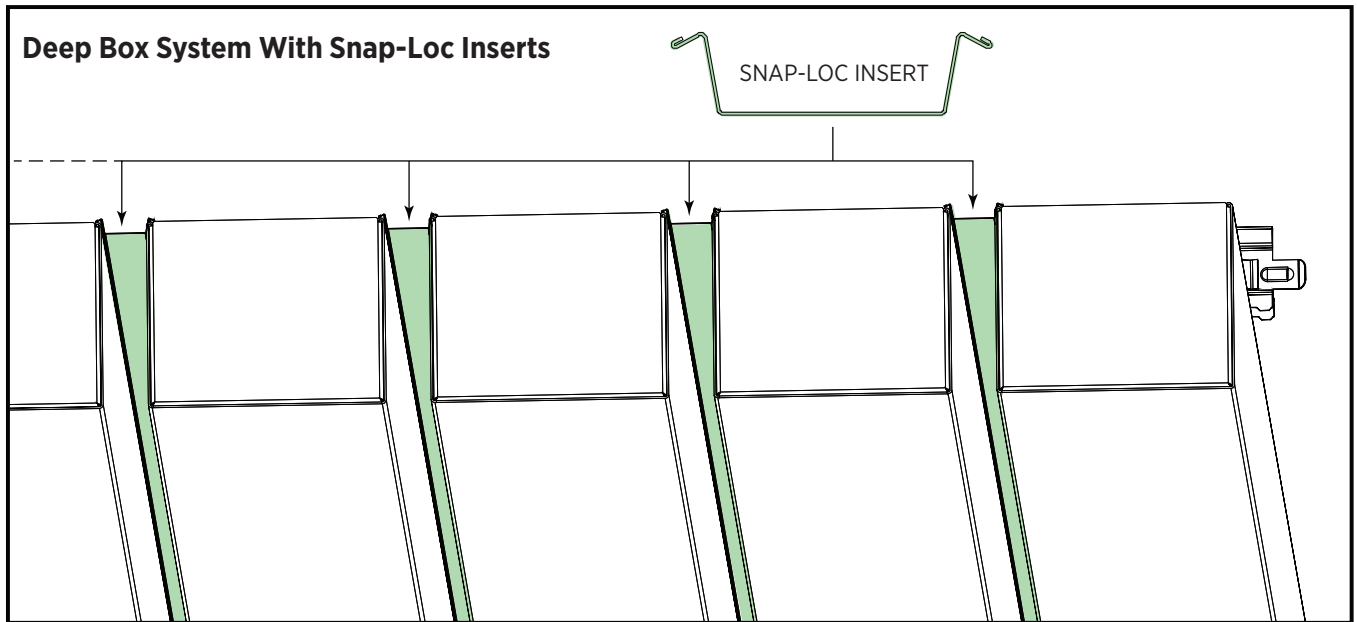
INSTALL SNAP-LOC INSERT - DEEP BOX SYSTEM



Installation Method For Deep Box Only.

POST TREATMENT FOR REVEALS

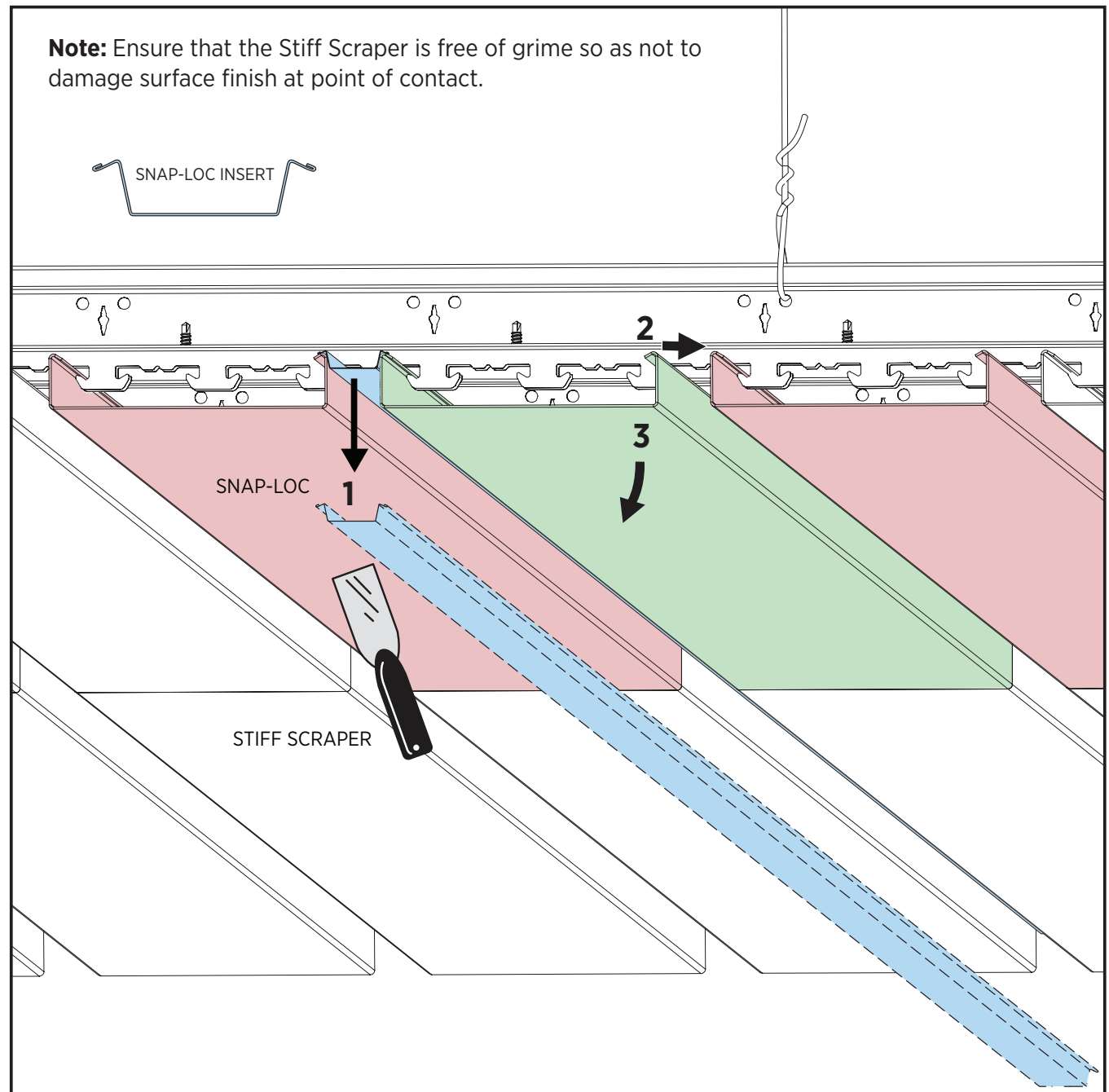
INSTALL SNAP-LOC INSERT – DEEP BOX SYSTEM



For Panels deeper than 2", install Panel security/closure Clip between deep box Panels at Main Tee Carriers.

PANEL REMOVAL PROCEDURES

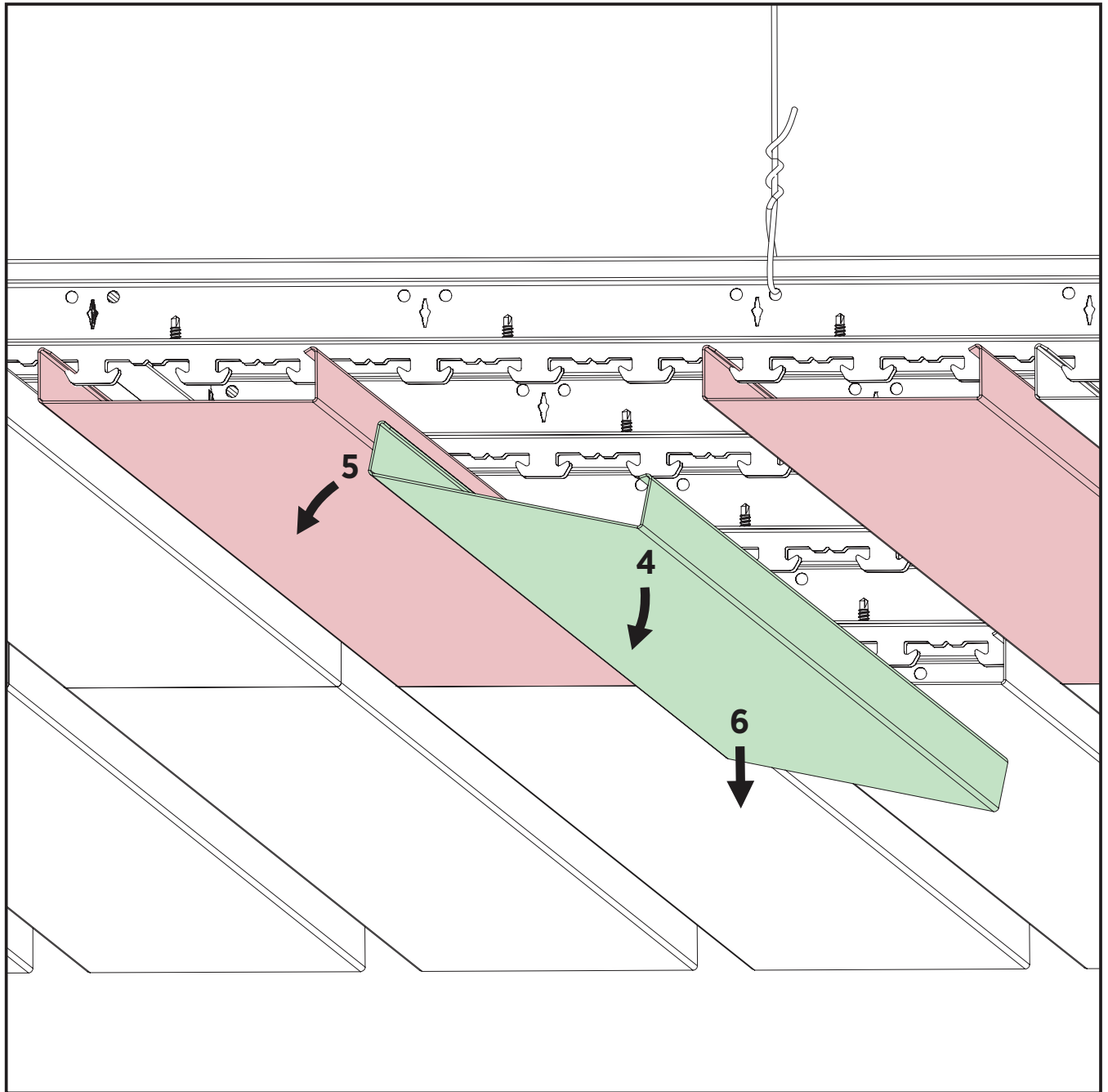
UNINSTALLING PANELS – OPTIONAL REVEAL SYSTEM (WITH SNAP-LOC INSERT REMOVAL)



1. Any existing Snap-Loc inserts must be removed prior to uninstalling Panels.
2. Pull top edge of flange to the right to dislodge from hook.
3. Repeat for all hooks.

PANEL REMOVAL PROCEDURES

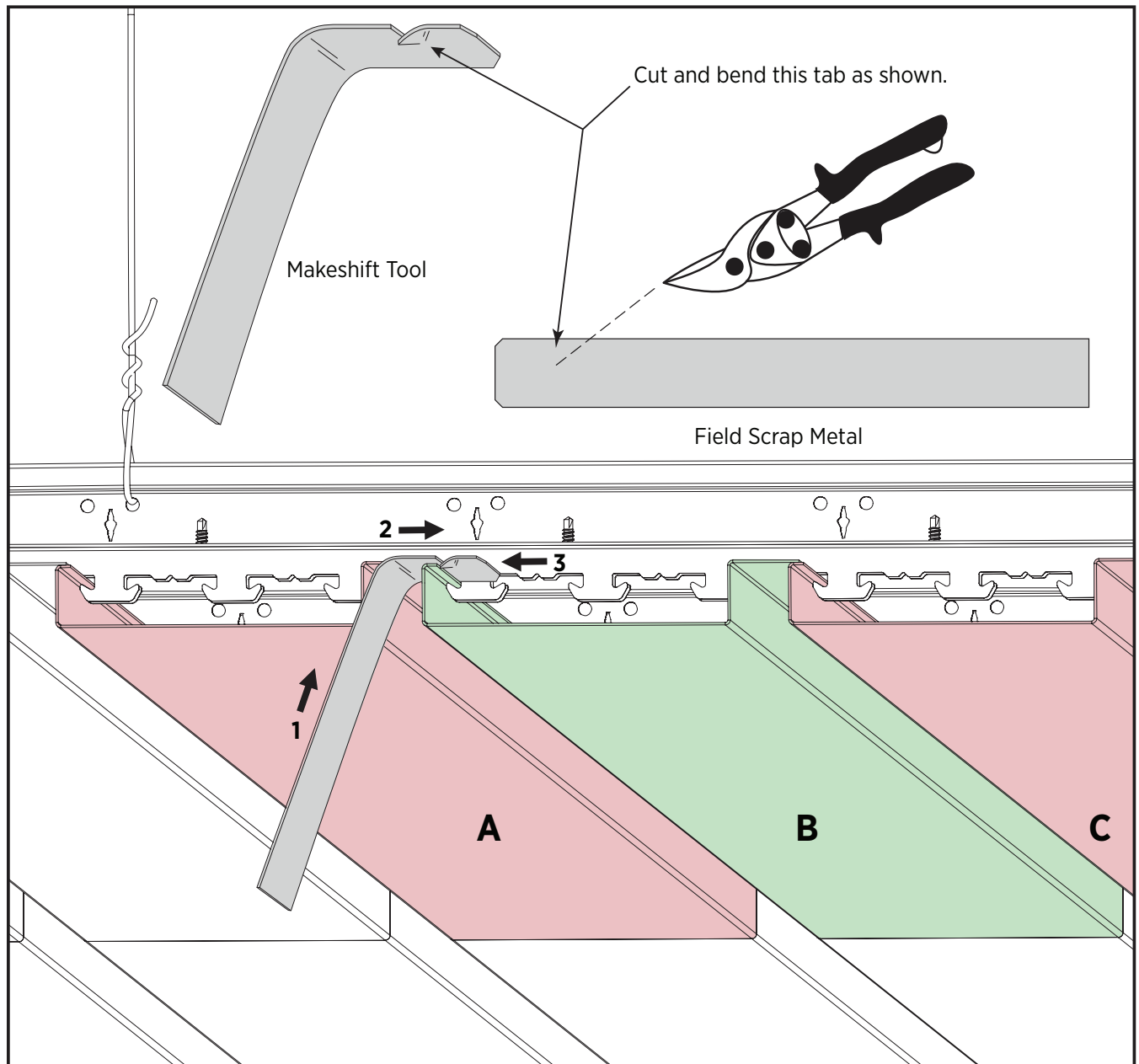
UNINSTALLING PANELS – OPTIONAL REVEAL SYSTEM



4. Swing right edge/side of Panel downward.
5. Dislodge all hooks on left side of Panel.
6. Lower and remove Panel. Repeat for remaining Panels.

PANEL REMOVAL PROCEDURES

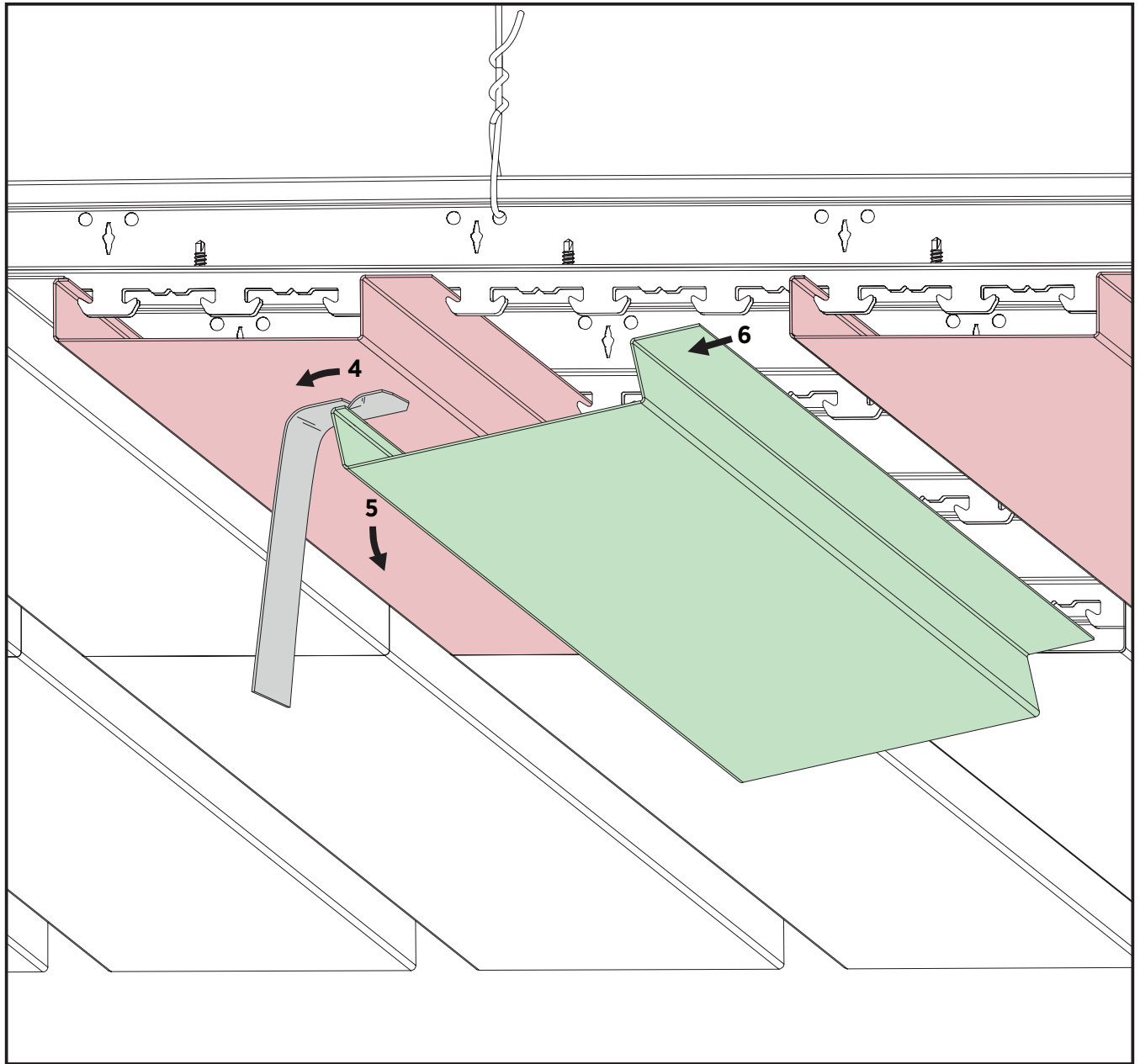
UNINSTALLING PANELS – INTEGRAL REVEAL SYSTEM



1. Insert makeshift tool at reveal of panel "A" and Panel "B".
2. Next, insert tool's tab between right horizontal flange of Panel "A" and left horizontal flange of Panel "B".
3. Pull top, snagged flange of Panel "B" outward, dislodging it from Carrier's hook. Repeat for all hooks.

PANEL REMOVAL PROCEDURES

UNINSTALLING PANELS – INTEGRAL REVEAL SYSTEM

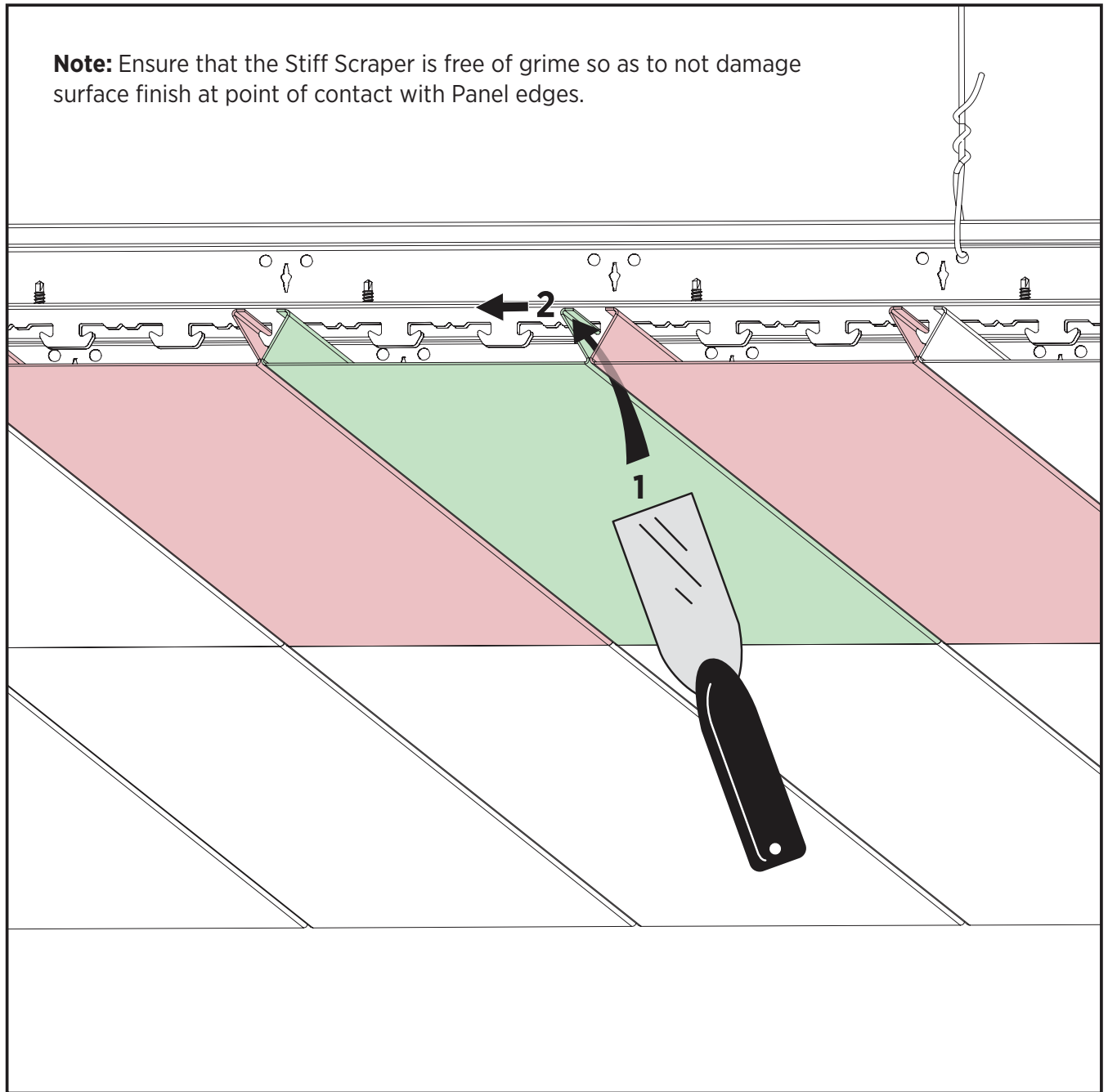


4. Discard tool after dislodging edge from all hooks.
5. Swing left edge/side of Panel downward.
6. Slide right edge outward to the left and down to complete removal.
Remaining Panels can now be removed manually (without tool).

PANEL REMOVAL PROCEDURES

UNINSTALLING PANELS – NO-REVEAL SYSTEM

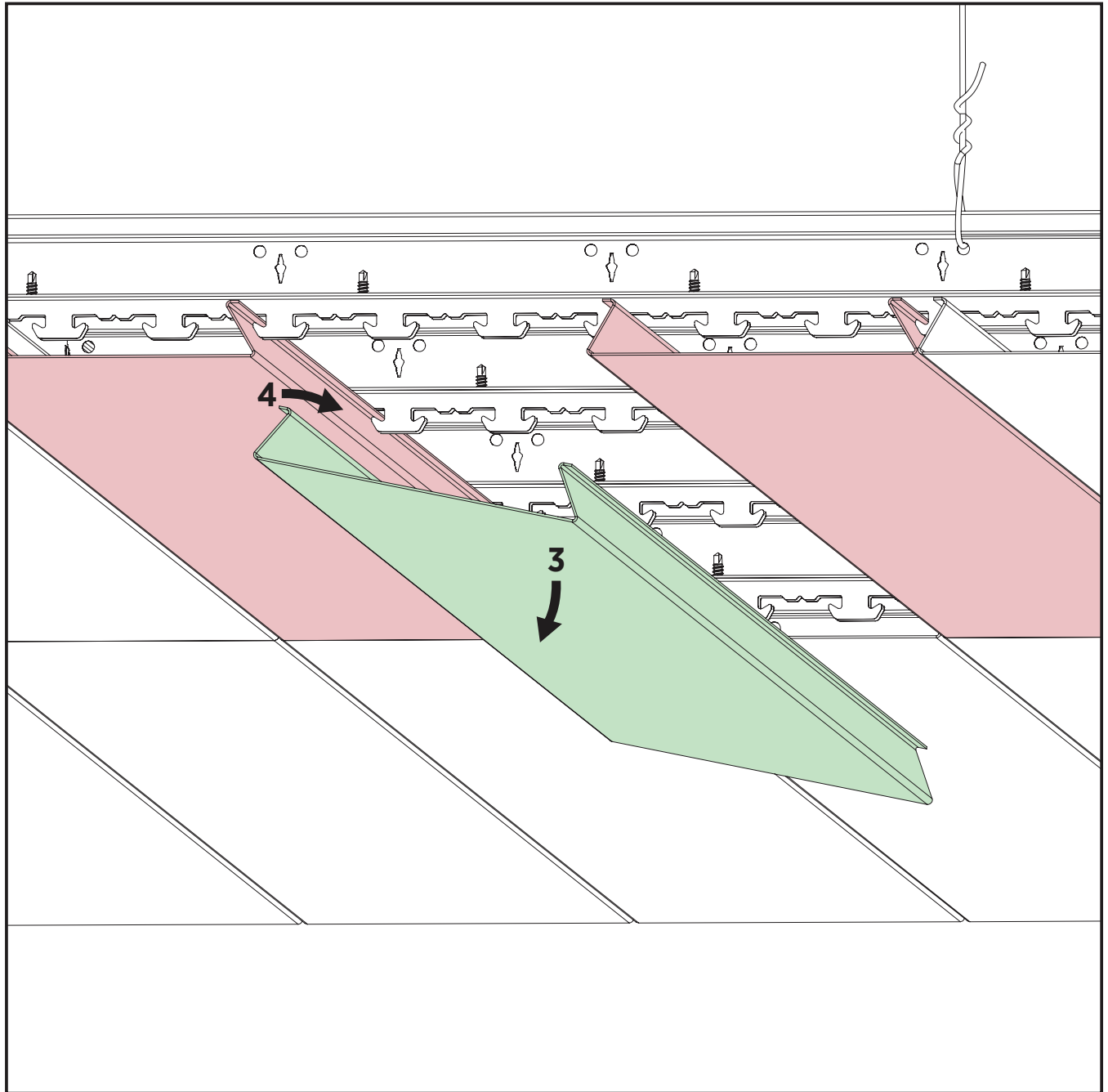
Note: Ensure that the Stiff Scraper is free of grime so as to not damage surface finish at point of contact with Panel edges.



1. Insert Stiff Scraper edge between any two Panels.
2. Next, push top flange inward to dislodge from hook. Repeat for all hooks.

PANEL REMOVAL PROCEDURES

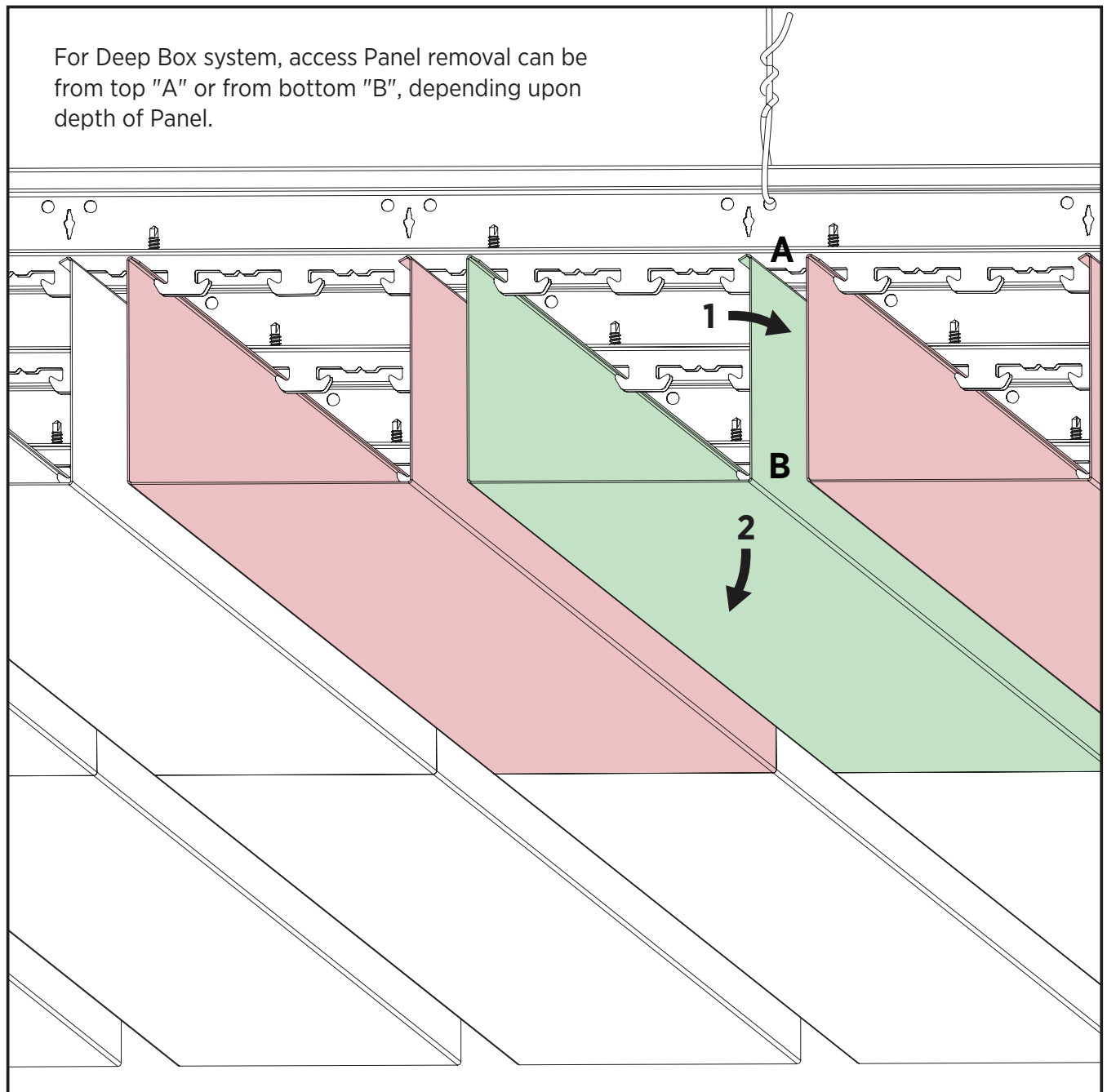
UNINSTALLING PANELS – NO-REVEAL SYSTEM



3. After dislodging all hooks, swing edge/side down.
4. Next, dislodge opposite edge from hooks and lower panel to remove.

PANEL REMOVAL PROCEDURES

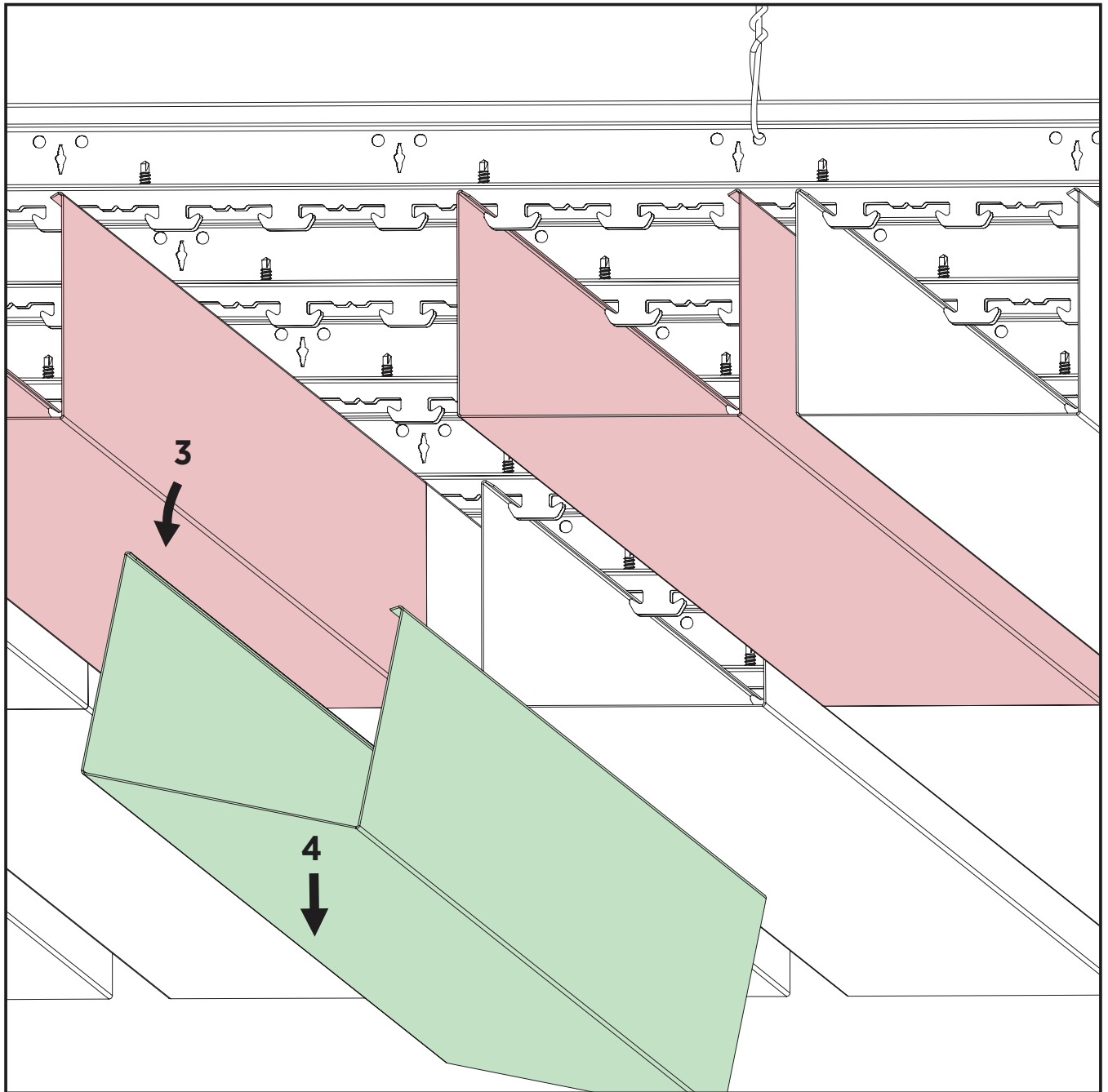
UNINSTALLING PANELS – DEEP BOX SYSTEM



1. Pull top edge flange to the right to dislodge from hook.
2. Repeat for all hooks and swing right edge/side down.

PANEL REMOVAL PROCEDURES

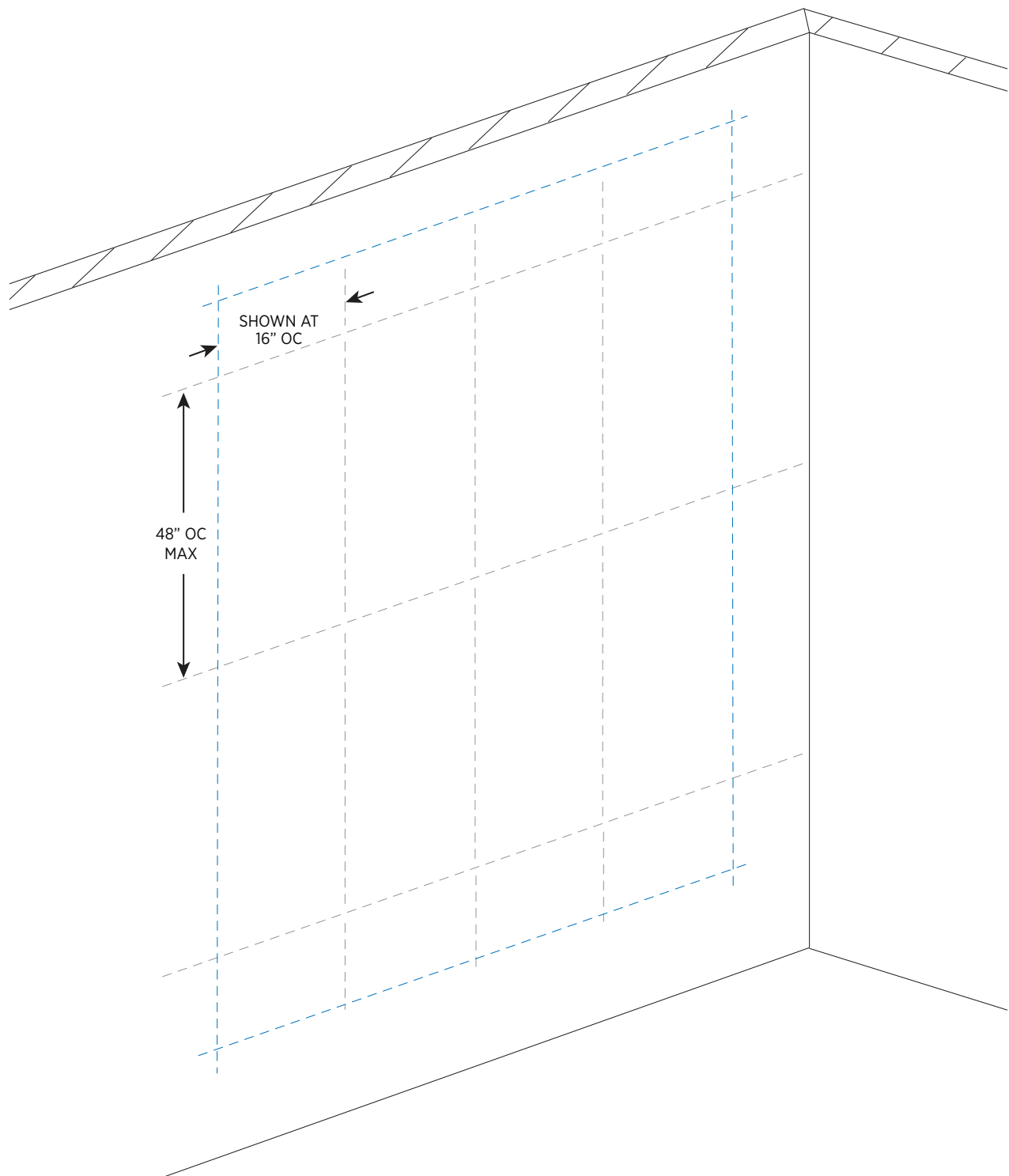
UNINSTALLING PANELS – DEEP BOX SYSTEM



3. Next, dislodge all hooks on left side of Panel.
4. Lower and remove Panel. Repeat for remaining Panels.

PANEL WALL INSTALLATION PROCEDURES

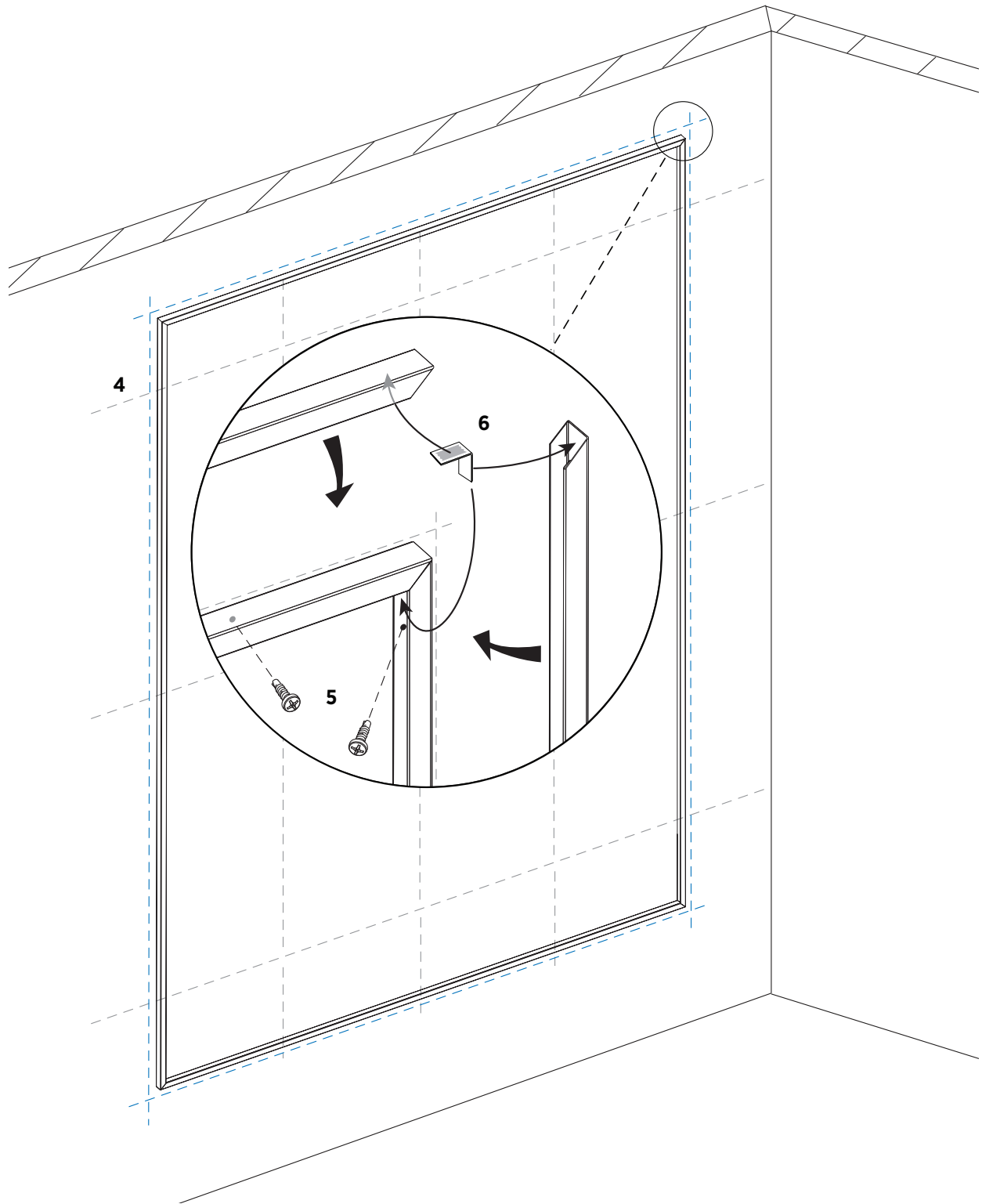
SETTING UP GUIDELINES/DRYLINES - OPTIONAL REVEAL SYSTEM



1. Locate wall studs and set guides lines with a horizontal spacing of 16" to 24" typ. (For carrier screws placement).
2. Set guidelines with a vertical spacing of 48" typ (for carrier placement).
3. Set guidelines for perimeter trim as shown blue dash (see final page for end result).

PANEL WALL INSTALLATION PROCEDURES

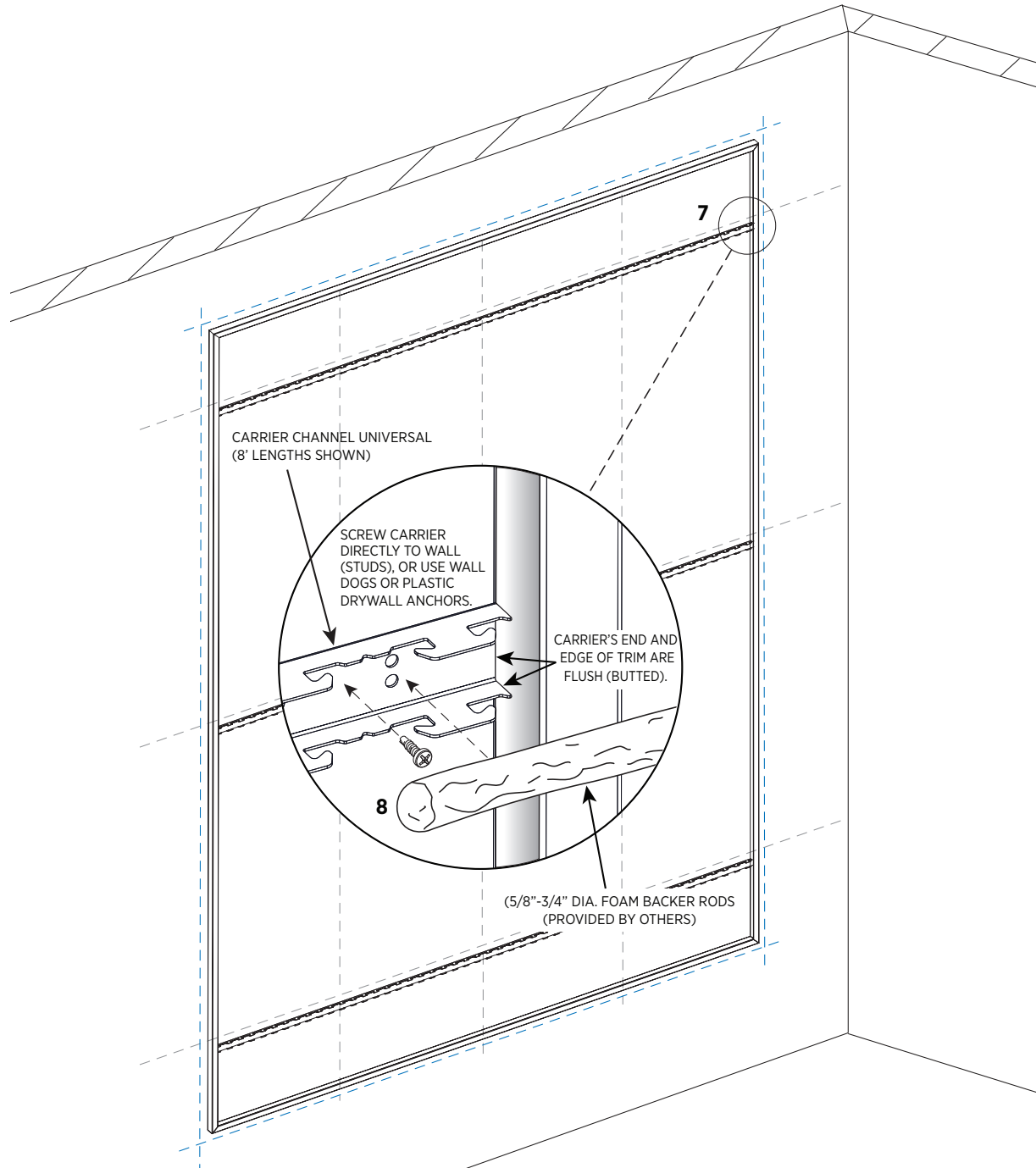
MOUNTING PERIMETER TRIM – OPTIONAL REVEAL SYSTEM



4. Miter and install perimeter trim sections at pre-determined guide lines (blue dash).
5. Apply screws as shown.
6. Apply angle splices at all joints using DC tape.

PANEL WALL INSTALLATION PROCEDURES

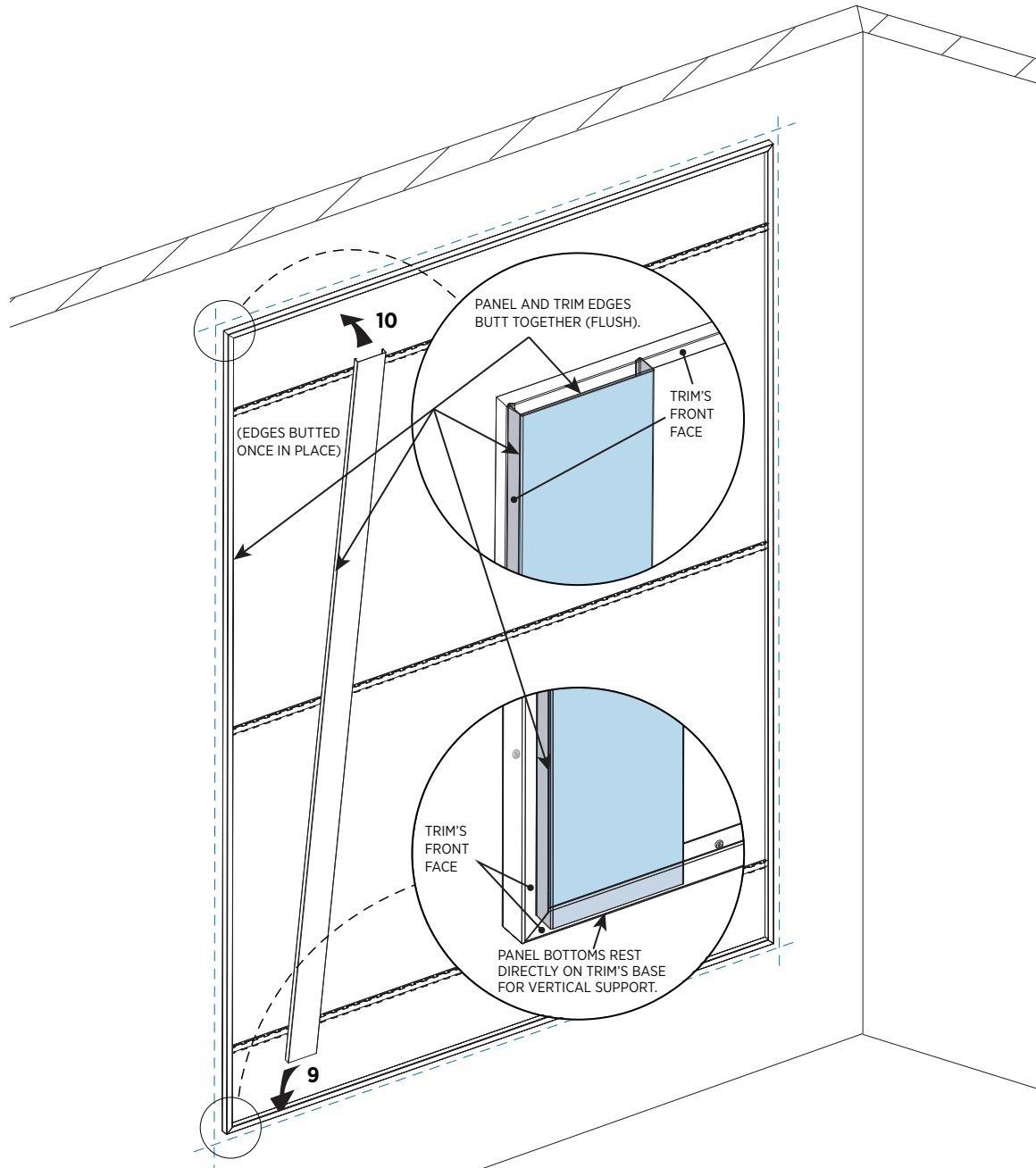
MOUNTING CARRIERS AND FOAM ROD FILLERS – OPTIONAL REVEAL SYSTEM



7. Align carriers via dryline/laser method and secure with screws.
8. Insert foam backer rods into carriers to provide anti-rattle effect to panels.

PANEL WALL INSTALLATION PROCEDURES

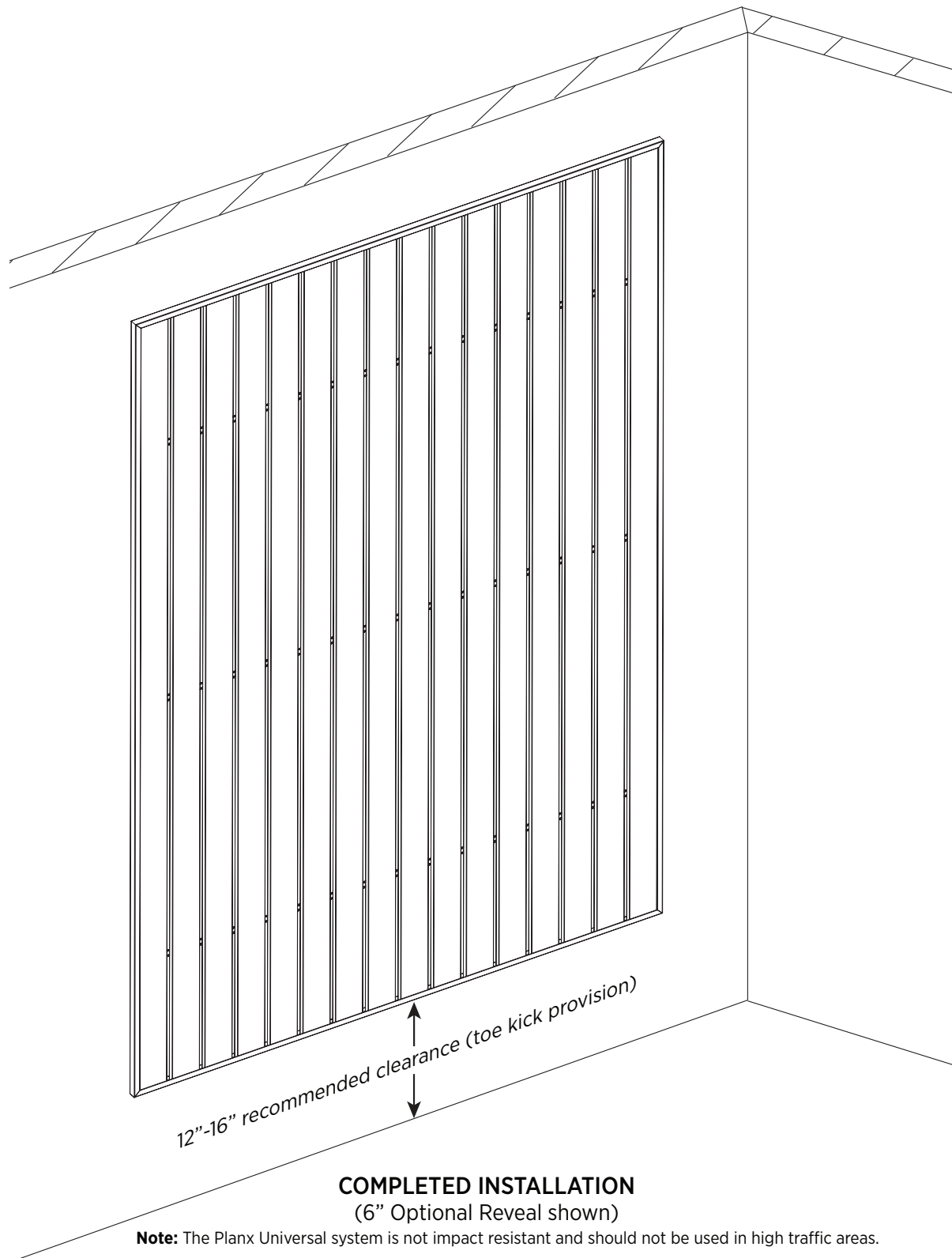
INSTALLING PANELS INSIDE PERIMETER FRAME – OPTIONAL REVEAL SYSTEM



9. Insert panel's bottom end into bottom horizontal trim ensuring bottom touches base of trim.
10. Swing panel inward from top ensuring all hooks engage with hooks. Top and side edges of panels rest flush with trim. Repeat for remaining panels.

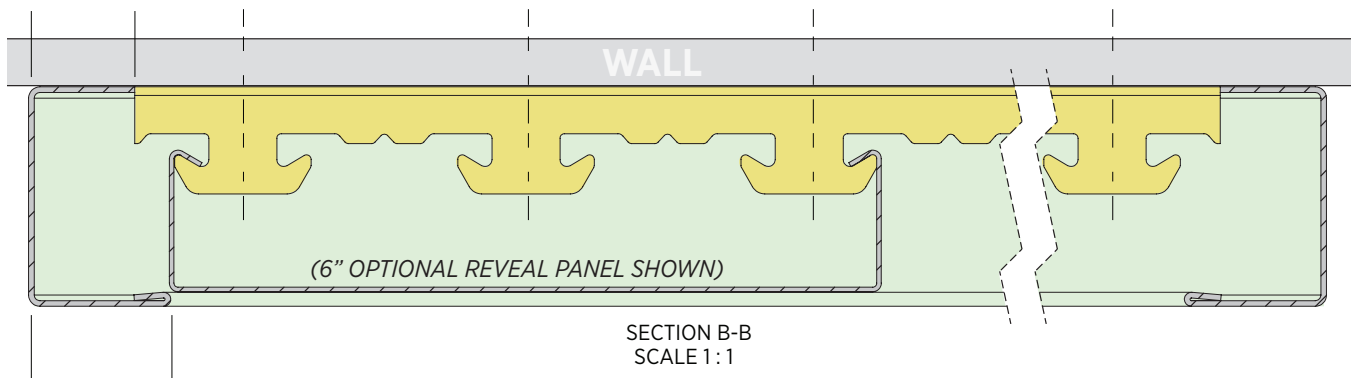
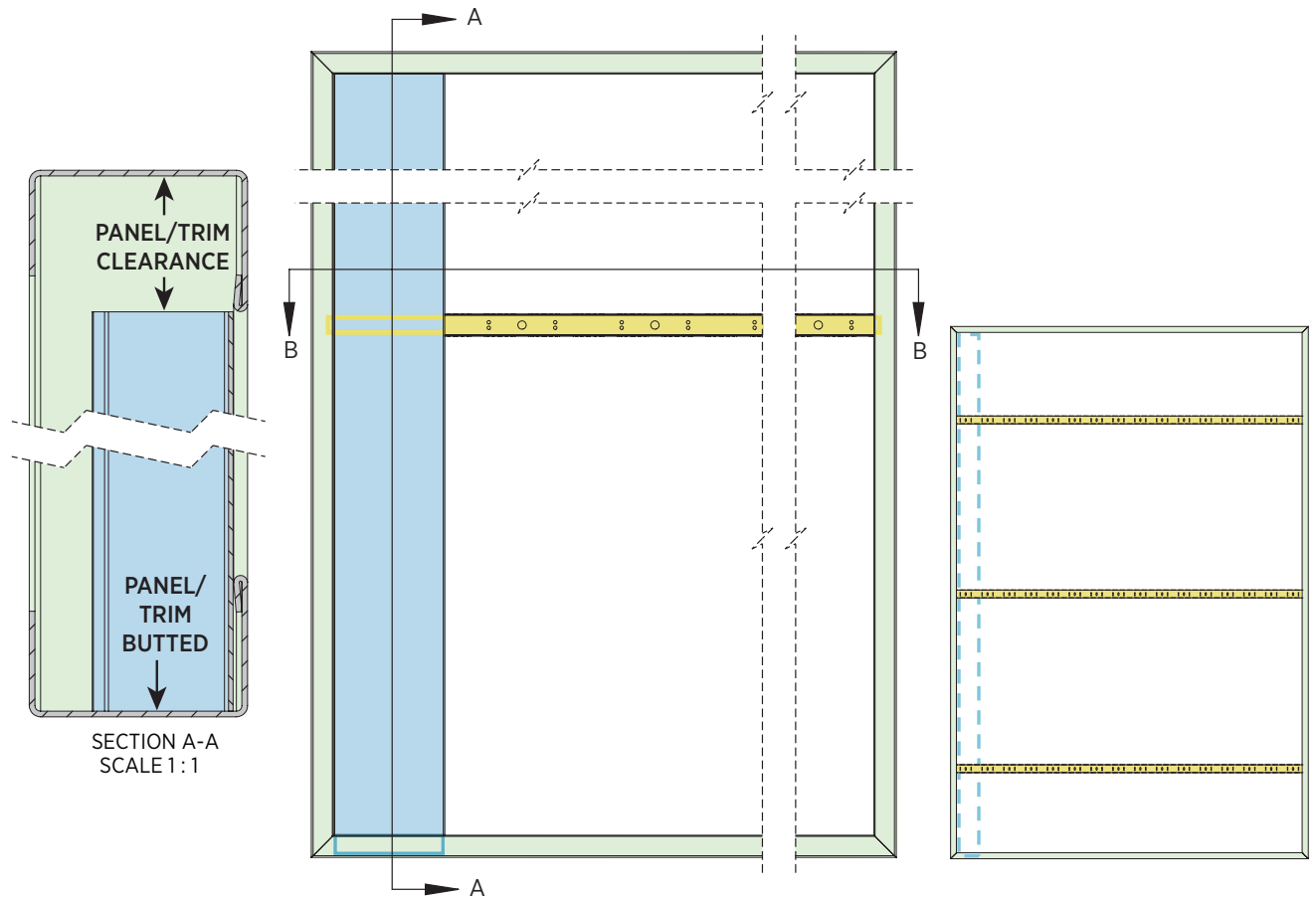
PANEL WALL INSTALLATION PROCEDURES

FINALIZING INSTALLATION - OPTIONAL REVEAL SYSTEM
(WITHOUT SNAP-LOC INSERTS)



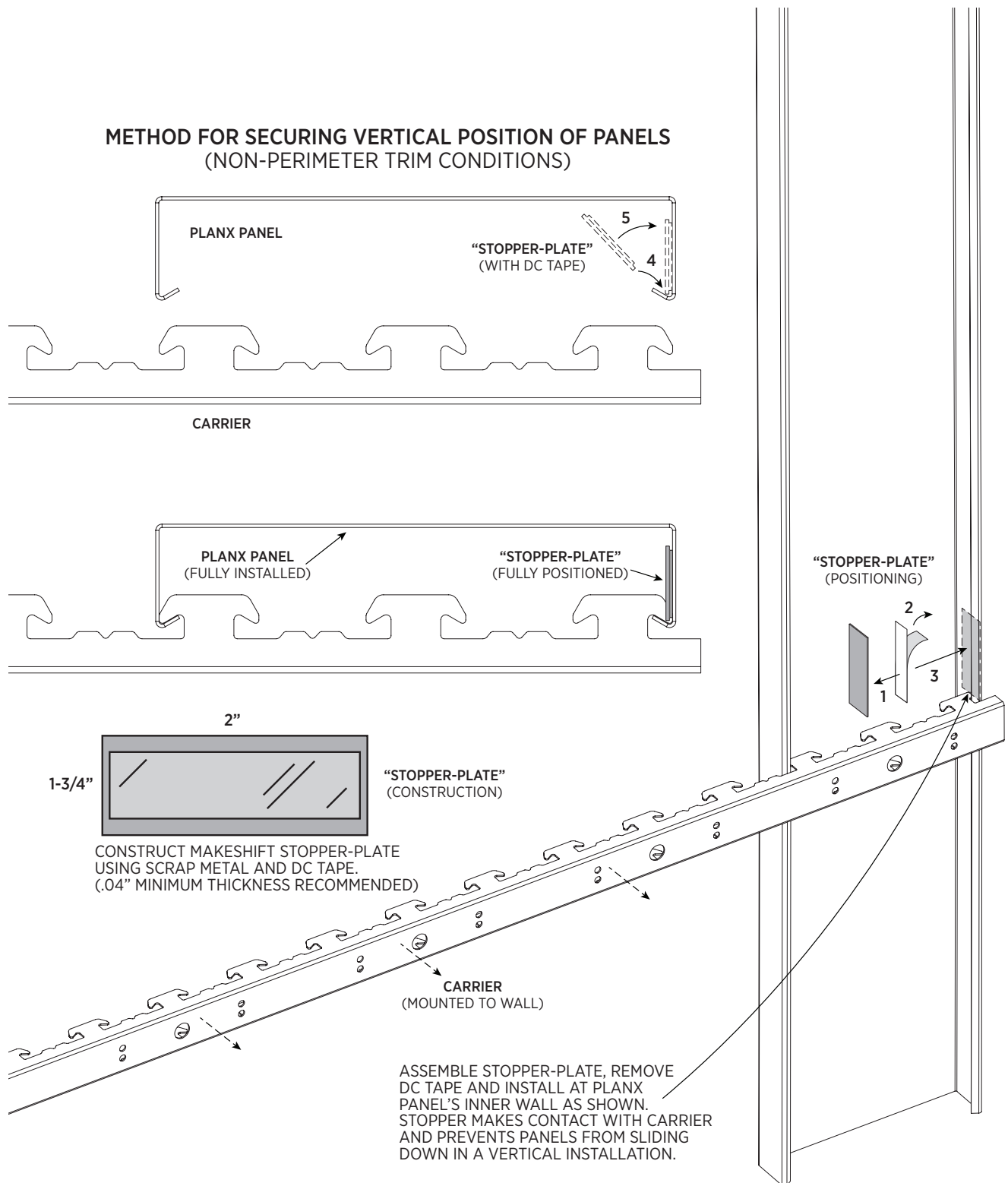
PANEL WALL INSTALLATION PROCEDURES

JOINT DETAILS FOR TRIM, CARRIERS, & PANELS – OPTIONAL REVEAL SYSTEM

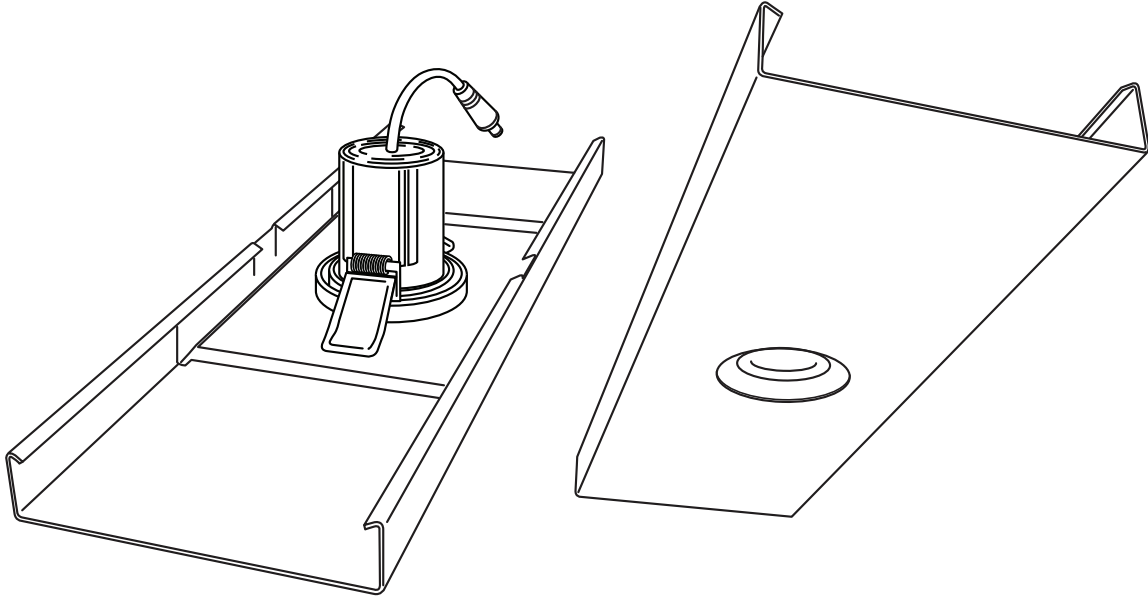


PANEL WALL INSTALLATION PROCEDURES

SECURING VERTICAL POSITION - NON PERIMETER TRIM CONDITION

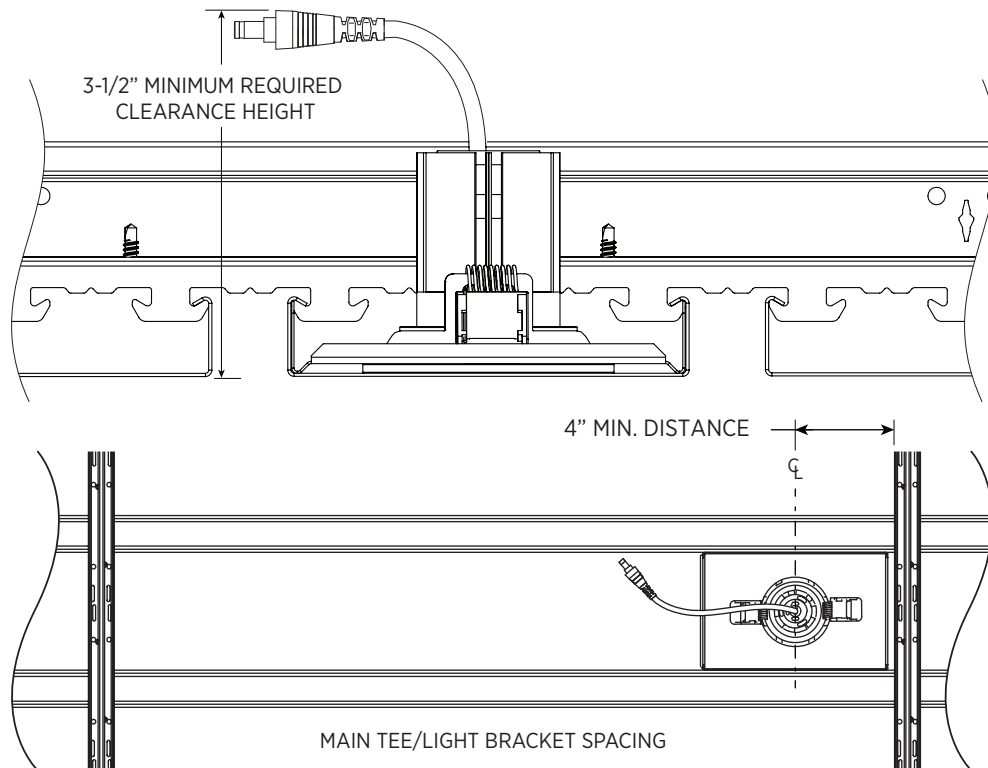


ILLUMINANCE™ PANEL INSTALLATION PROCEDURES

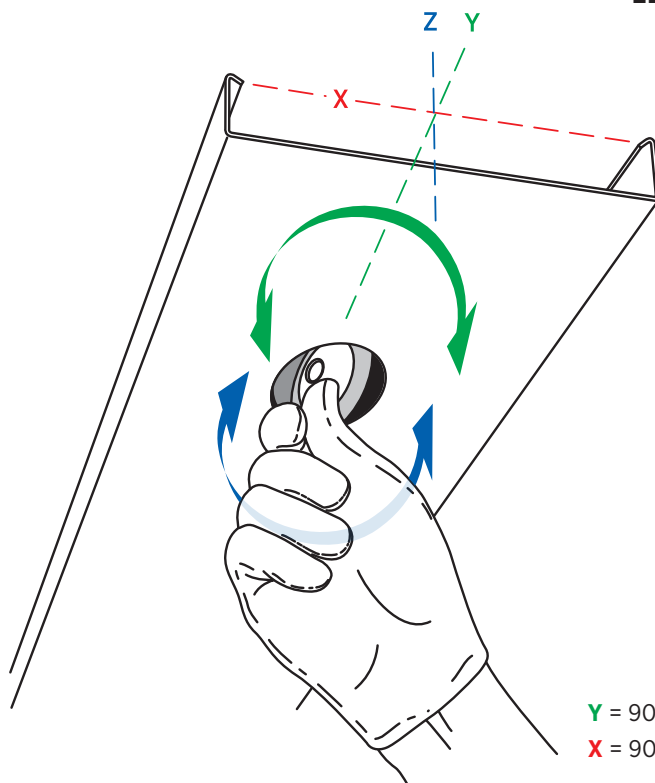


ILLUMINANCE™ PANEL INSTALLATION PROCEDURES

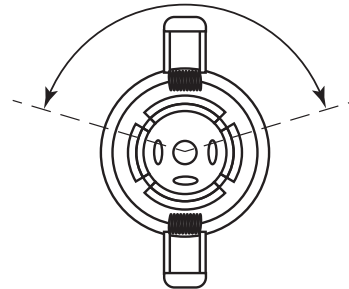
ILLUMINANCE™ PLACEMENT AND ORIENTATION



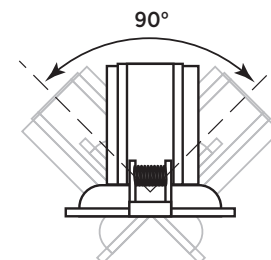
LEGEND



120° on 6" Planx - 360° on 8"-12" Planx



Z = ROTATION (status determines X or Y Axis-in-Effect)

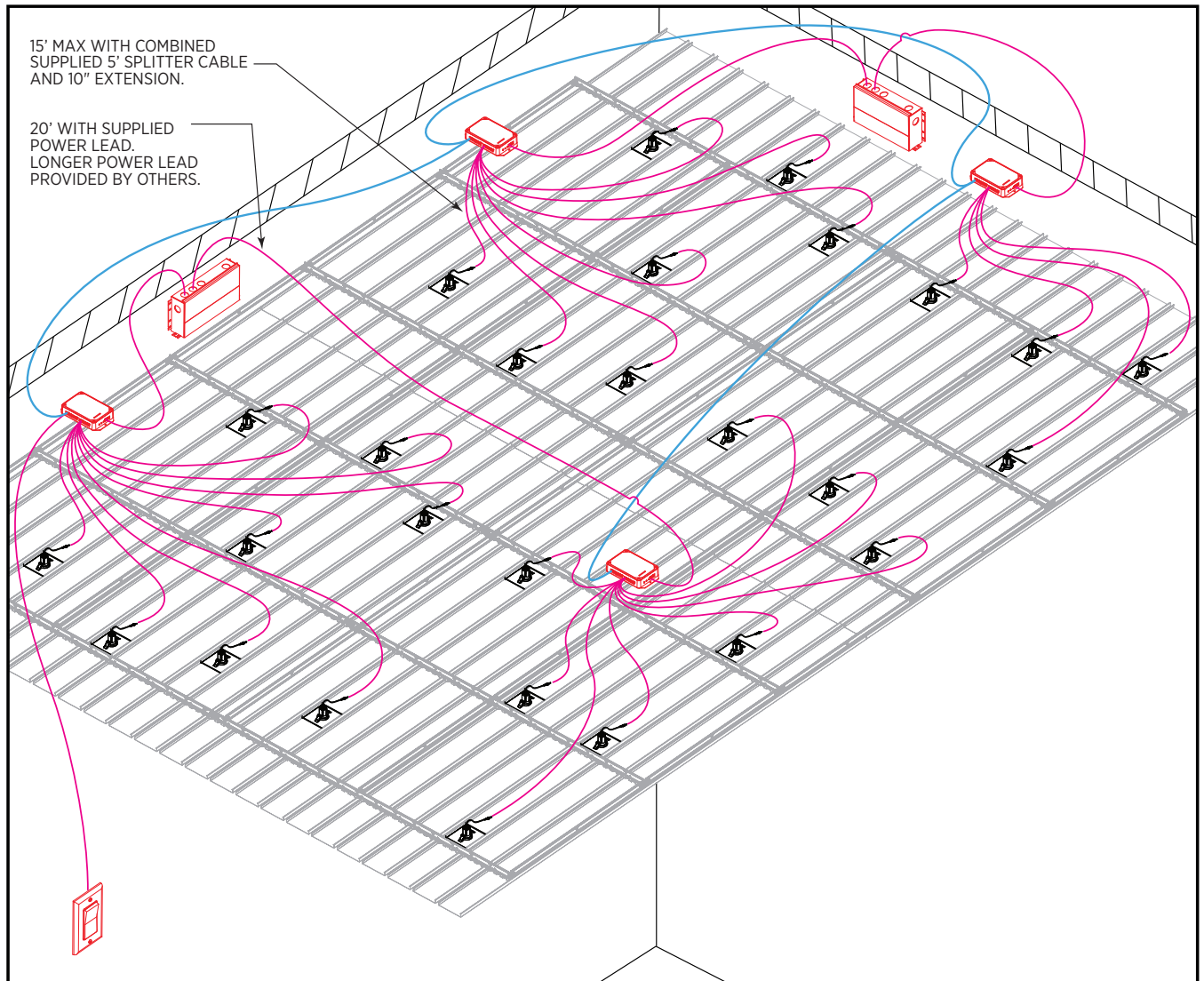


Y = 90° TOTAL TILT (transitions to X depending on Z rotation status)

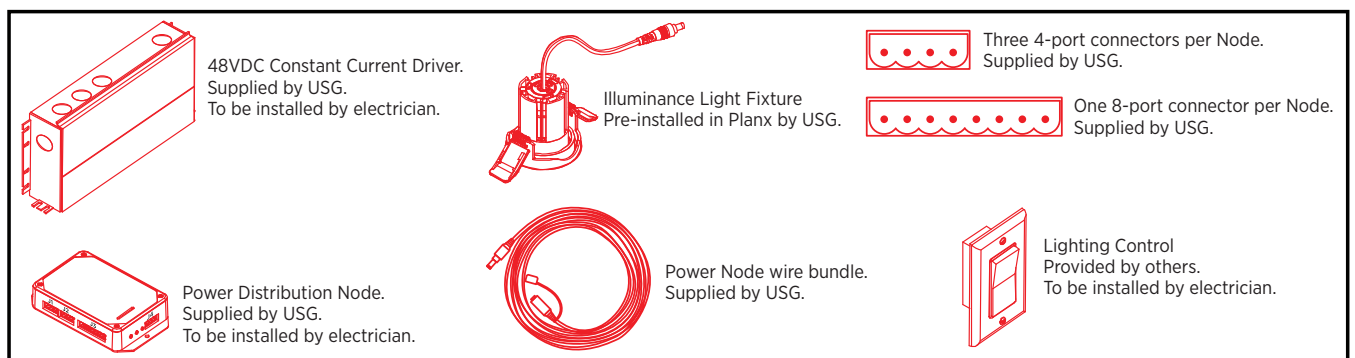
X = 90° TOTAL TILT (transitions to Y depending on Z rotation status)

ILLUMINANCE™ PANEL INSTALLATION PROCEDURES

LED DRIVER AND POWER NODE PLACEMENT

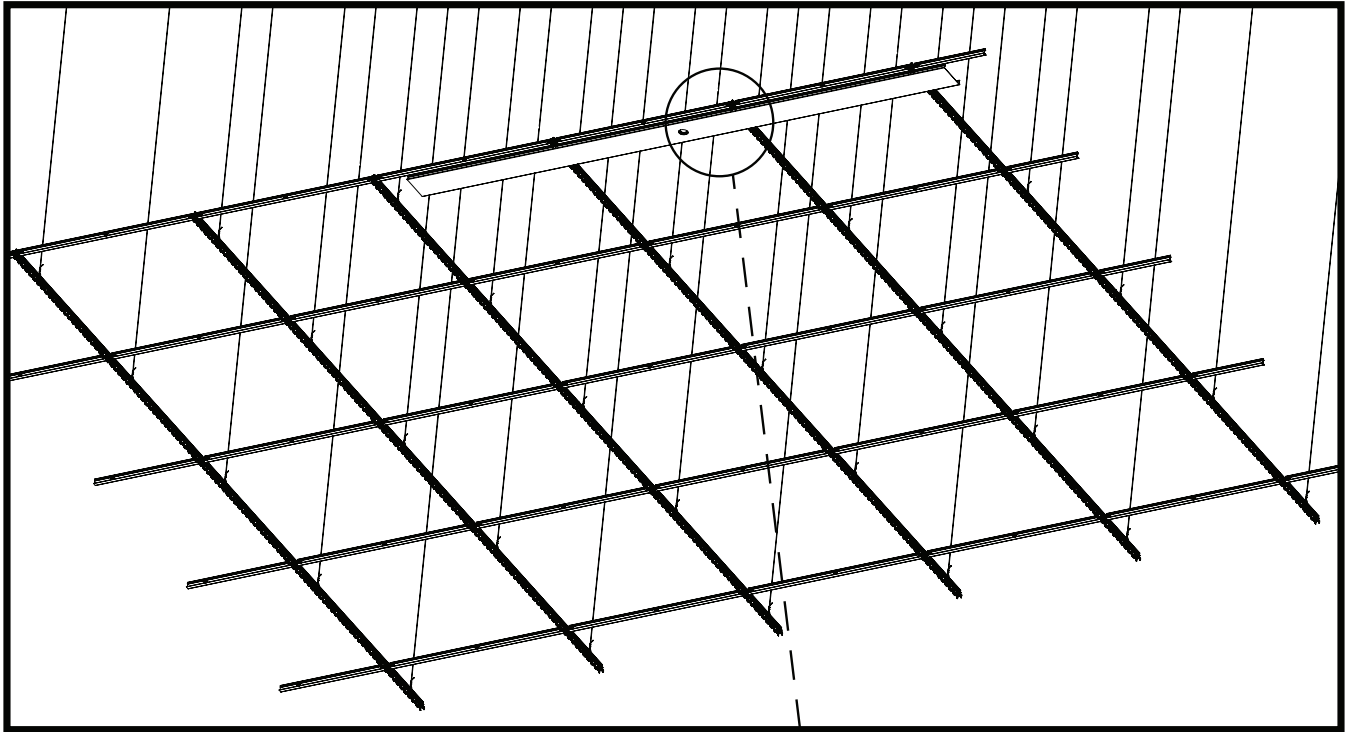


- Lighting Control to Power Node J1 (provided by others)
- Power Node J2 to Down Lights (8 Max.)
- Power Node J1 to Power Node J1 (Daisy Chain)
- Driver to Power Node J4 (2 Max.)

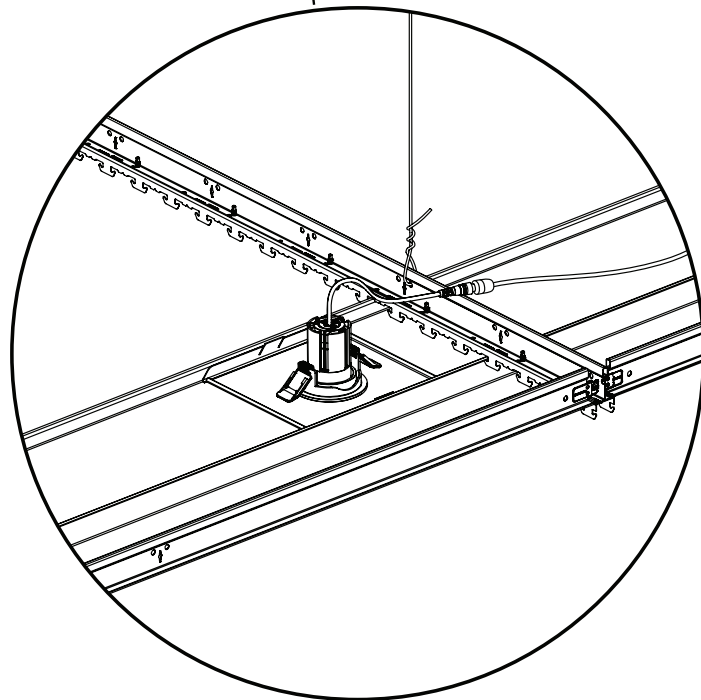


ILLUMINANCE™ PANEL INSTALLATION PROCEDURES

LIGHT FIXTURE-TO-GRID CLEARANCE AND POSITIONING



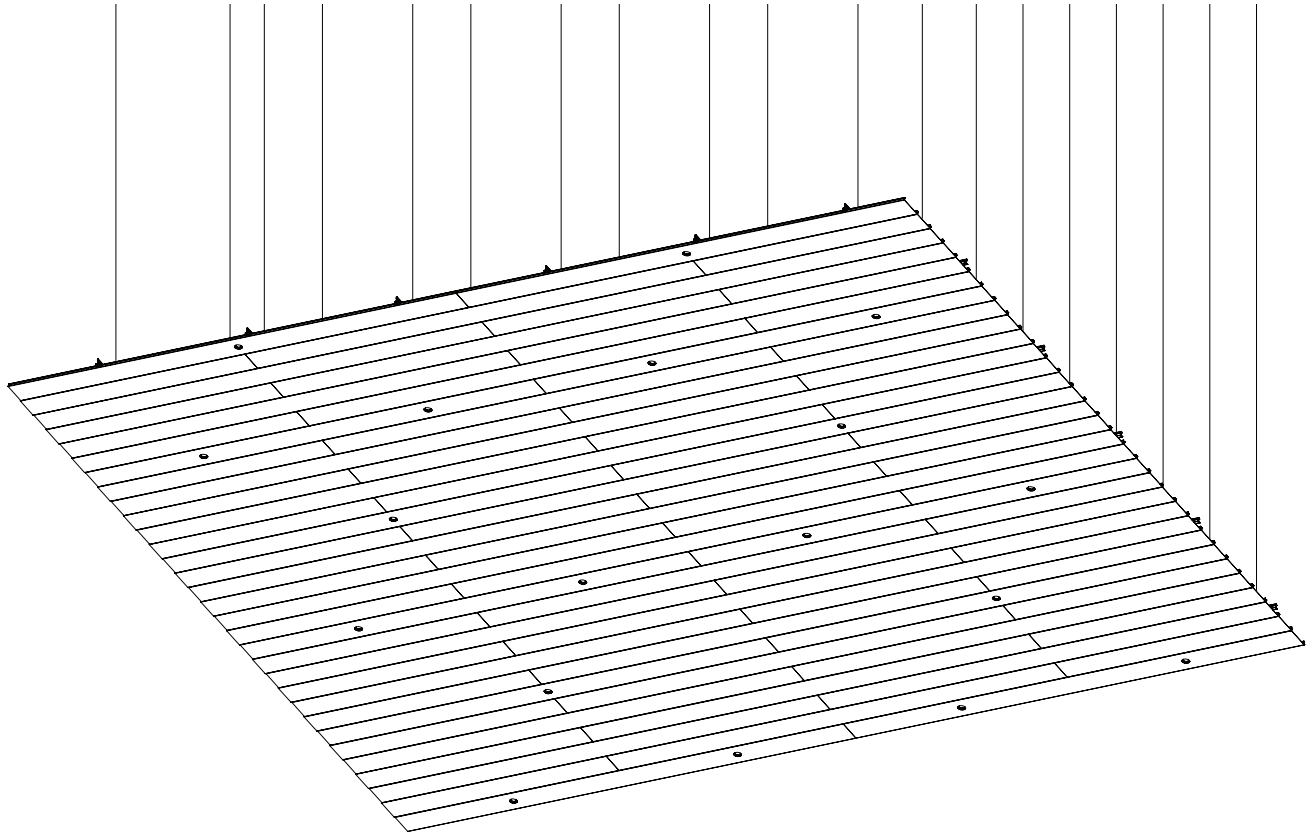
View from below



View from above

ILLUMINANCE™ PANEL INSTALLATION PROCEDURES

FULLY INSTALLED SYSTEM



Panel Types Shown:

1-Light 8" No-Reveal
2-Light 8" No-Reveal
Non-Lit 8" No-Reveal

ADJUST AND CLEAN

1. Adjust ceiling components to provide a consistent finish and appearance in conformity with established tolerances and requirements.
2. Clean exposed surfaces of acoustical metal panel ceilings and walls. Comply with manufacturer's written instructions for cleaning and touch-up of minor finish damage.
3. Remove and replace work that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage, including dented and bent units. Reference USG metal ceilings cleaning guide.

SUPPORT

Contact your sales rep for any additional support.



PRODUCT INFORMATION

For the most up-to-date technical information, visit usgdesignstudio.com or cgcdesignstudio.com

CUSTOMER SERVICE

USG: 800 950-3839
CGC: 800 387-2690

TECHNICAL SERVICE

800 USG.4YOU (874-4968)

WEBSITES

usg.com
cgcinc.com
usgdesignstudio.com
cgcdesignstudio.com
ecomedes.com

SAMPLES/LITERATURE

USG: usg.com
CGC: Contact Local Sales Rep

SAFETY

Safety First! Follow good safety/industrial hygiene practices during installation of all products and systems. Wear appropriate personal protective equipment. Read SDS and literature before specification and installation. Be cautious with exposed sharp edges when handling ceiling system components.

INSTALLATION

Prior to installation, make sure your project complies with any seismic and non-seismic requirements. Must be installed in compliance with ASTM C636, ASTM E580, utilizing standard industry practices and adopting applicable code requirements. Alternative assemblies and installation methods may be utilized when approved by the authority having jurisdiction. USG Ceiling Plus recommends checking with the authority having jurisdiction prior to designing and installing a suspended ceiling system.

LIMITATION

Some commercially acceptable color variation may occur between lots and between different size products of the same color.

LIABILITY

We shall not be liable for any incidental and consequential damages, directly or indirectly sustained, nor for any loss caused by application of these goods not in accordance with current printed instructions or for other than the intended use. Our liability is expressly limited to replacement of defective goods. Any claim shall be deemed waived unless made in writing to us within thirty (30) days from date it was or reasonably should have been discovered. For all terms and conditions, see usg.com/terms-and-conditions.

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