METALWORKS™ Tegular

Panel Installation Details

Flush Tegular

Existed Tee Suspension System

7835 "C" Channel

7835SC Spreader Channel

Prelude XL 15/16" Exposed Tee

5/16" Square Tegular

Existed Tee Suspension System

7835 "C" Channel

7835SC Spreader Channel

1/4" Shim Suspension System Above Molding

5/8" Square Tegular

Existed Tee Suspension System

7835 "C" Channel

7835SC Spreader Channel

9/16" Shim Suspension System Above Lower Molding Flange

Notes: See LA-295518 for MetalWorks cutting instructions. Refer to MetalWorks Edge Cap instructions LA-297304 for more information on installing Edge Caps with cut MetalWorks panels. See LA-297074 for MetalWorks 2' x 2' Faceted Square Tegular panels on Prelude grid.
METALWORKS™ Edge Cap

Assembly and Installation Instructions

1. DESCRIPTION

MetalWorks Edge Caps are break-formed steel sections that are used to finish edges of panels that have been cut to fit grid openings that are less than 2’ x 2’. Caps are available for use with 5/16” Square Tegular MetalWorks panels sized for 15/16” wide grid and 9/16” wide grid or for use with MetalWorks Vector® panels. Edge Caps are available in White (WH), Silver Grey (SG), Gun Metal Grey (MY) and Black (BL) for use with MetalWorks Effects™ Finishes.

2. DESIGN LIMITATIONS

MetalWorks Edge Caps are sized to match the factory length of the panel edge. They are most appropriate for use on installations where the cut edge of the panel is parallel to the factory edge, either at the perimeters of an installation or where a panel in the field of the ceiling is reduced in size. Edge Caps are not to be used at curved wall conditions.

3. PANEL PREPARATION

3.1 Measure the size of the grid opening at both sides.

3.2 For Tegular panels, mark the panel face 1/16” shorter than the dimensions measured.

3.3 For Vector panels, mark the panel face 5/8” greater than the dimensions measured.

3.3.1 Note that the perforation pattern may be directional.

3.3.2 When working with Vector panels, the side with the springs attached is always the first side to be removed.

3.4 Cut the panel as marked. Be sure to closely follow the line. If any portion of the cut edge extends beyond the cut line, the edge cap will not seat properly.

3.5 For Vector panels only – cut away about 1/2” of the reverse Tegular edges at the cut side of the panel.

4. EDGE CAP APPLICATION

4.1 Slide the Edge Cap onto the cut panel.

4.2 Install the panel into the ceiling grid.

4.2.1 For vector panels only – bend the locking tabs to engage the grid or wall molding flange.

4.3 Where panels are cut to match angled walls, two edge caps would have to be used, and they would need to be altered to properly finish the cut panel condition.
1. GENERAL

1.1. Product Description
MetalWorks is a collection of metal ceiling panels marketed by Armstrong World Industries, Inc. either through the normal distribution system, or through the Architectural Specialties Group. The collection consists of steel and aluminum ceiling panels with a variety of edge details. Cutting procedures will be similar regardless of panel material or edge configuration.

1.2. Cutting Options
Four different types of equipment are recommended for cutting these metal panels. Each has its own set of advantages and limitations, and will be presented in order of preference based on speed.

⚠️ CAUTION
Cut edges of metal parts can be extremely sharp! Handle metal carefully to avoid injury. Always wear safety glasses and gloves when working with metal.

1.2.1. BAND SAW
An electric band saw equipped with a fine-toothed blade (14-18 tpi) is the fastest method for cutting border panels. For 24” x 24” panels, the saw must have a throat depth of at least 12” to allow a cut anywhere on the face of the panel. Practicality for other size panels will depend on size and required direction of cut. Price is about $700.00 for a 12” saw.

1.2.1.1. Procedure
Mark the cut line on the face of the panel and feed through the saw face up. Shimming the back of hollow panels is not normally required.

1.2.1.2. Disadvantages
Band saws are not part of the normal “tool kit” of an acoustical installer. Although readily available, they tend to be more expensive than the other options listed here. Band saws are less portable than the other options and will require that the panels be moved to the saw, cut, and then moved back to the installation site. This distance may not be great, but labeling of the panels may be necessary to ensure that they return to the correct location.

1.2.2. ELECTRIC SHEARS
These electric shears resemble a drill motor attached to a pair of scissors blades. There are actually three blades; one movable centered between two stationary. When used, the tool removes a strip of material about 1/4” wide. They produce a clean cut, and are more portable than the band saw. Price is about $200.00.

1.2.2.1. Procedure
Mark the cut line on the face of the panel. Use aviation snips to remove a section of the edge material on the waste side of the cut line. This step is required to provide access to the face for the shears. Cut the panels face up.

NOTE: To prevent scratching the face of the panel, observe the direction that the 1/4” band of waste material takes as it coils up in front of the cut. Position successive panels so that this coil moves across the scrap portion of the panel.

1.2.2.2. Disadvantages
Shears are not quite as fast as the band saw. Cordless models are not yet available, so the typical headaches and safety issues associated with corded tools apply.

1.2.3. DUCT SNIPS
The duct snip is essentially a manual version of the electric shears, and sells for about $18.00.

1.2.3.1. Procedure
Follow the procedures described in section 1.2.2.1.

1.2.3.2. Disadvantages
The duct snip is extremely slow and laborious. It is the tool of last choice, and is listed here for consideration only when other options are not available and only for a very limited number of cuts.

1.1.2. AVIATION SNIPS
Both left cut and right cut aviation snips will be required for notching operations and for cutting holes for penetrations through the panel face. Standard aviation snips cost about $12.00 a pair.

1.1.2.1. Procedure – Notching
Snips are used as needed to cut through the edge detailing on panels to provide clearance for shears or to ease corners. Application will vary depending on edge detail.

1.1.2.2. Procedure – Penetrations
Cutouts in the center of the panel are created by first drilling or punching a hole near the center and then cutting in a spiral pattern to the finished size and shape. Exercise caution during this procedure as the hand will be in close proximity to the cut edge of the panel.