

METALWORKS™ Torsion Spring Shapes

Downlight Integration Installation Instructions

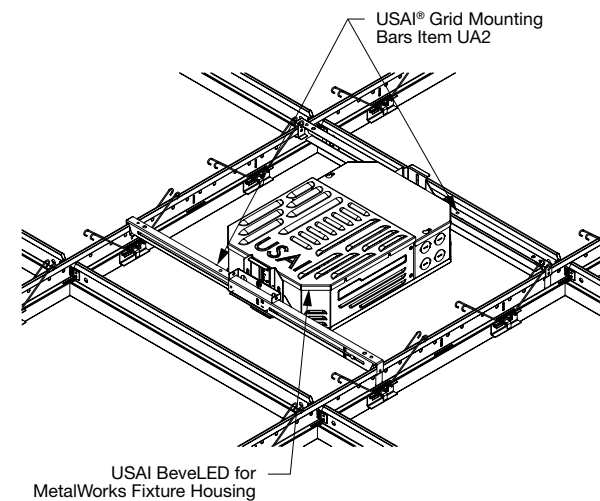
This installation guide is a supplement to the standard METALWORKS™ Torsion Spring Shapes installation instructions.

1. SOLUTION OVERVIEW

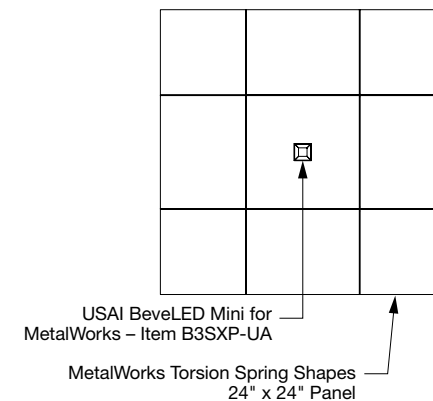
The following guidelines enable installation of various USAI® Lighting fixtures with Armstrong METALWORKS™ Torsion Spring Shapes panels – eliminating the need for modification of the grid system and independent suspension of the light fixture (*Fig 1 and 2*).

The installation of this ceiling and the integrated lighting solution will require coordination between the ceiling contractor and the electrical contractor. METALWORKS Torsion Spring Shapes panels with the downlight integration is a progressive installation, meaning the lights and the ceiling panels must be installed at the same time. The general contractor should work with the electrical contractor and ceiling contractor to clearly assign responsibilities.

These instructions represent the METALWORKS Torsion Spring Shapes panels with the factory cut-out listed in the chart at the end of the instructions. Other METALWORKS Torsion Spring Shapes Panels items are not included as part of this standard integration solution.



(Fig 1)



(Fig 2)

2. DESIGN AND INSTALLATION CONSIDERATIONS

2.1 System Modifications

2.1.1 There is no need for grid or panel modification when the METALWORKS™ Torsion Spring Shapes panels with the factory cut-out are used. These panels are specified in the chart at the end of the instructions.

2.1.2 METALWORKS Torsion Spring Shapes panels without the factory cut-out should not be field cut to try and replicate the visual. Using the METALWORKS Torsion Spring Shapes panels with the factory cut-out will ensure the optimal visual result.

2.2 Suspension System

2.2.1 2' x 2' Layout

A standard 2' x 2' grid layout with slotted mains, slotted 4' cross tees, and slotted 2' cross tees is recommended to achieve maximum design adaptability within the system.

This grid layout will accommodate all METALWORKS Torsion Spring Shapes panels except for the Hexagon panel group. The 2' x 2' grid layout is required for system stability regardless of panel layout.

Slotted Prelude Main beams (7301TS) installed at 48" O.C., with Slotted 4' Prelude cross tees perpendicular to the main beams at 2' O.C., and Slotted 2' Prelude cross tees spanning the midpoints of the 4' cross tees (Fig 3).

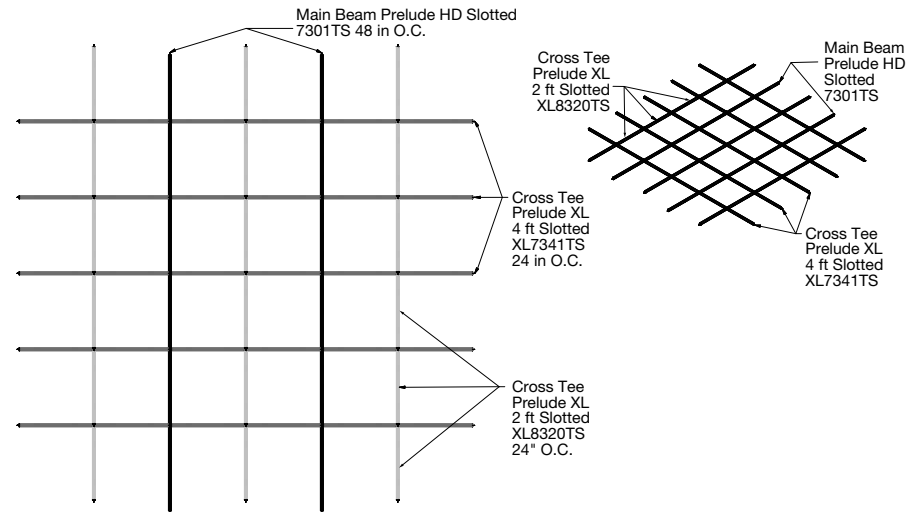
2.2.2 15" x 30" Cross-Hatched Layout

A 15" x 30" cross-hatched grid layout is required for installation of the 30" Hexagon panels.

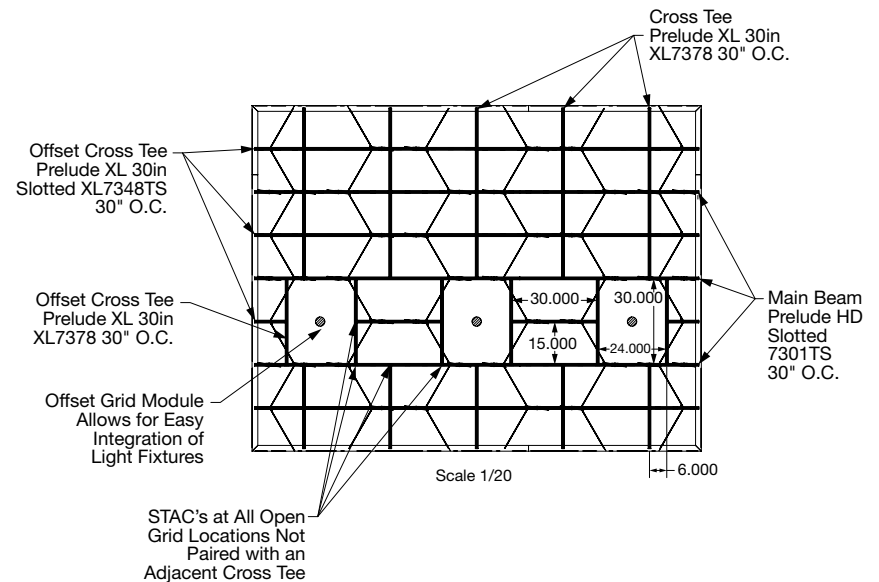
Standard 15" x 30" Grid Layout: Slotted Prelude Main beams (7301TS) installed at 30" O.C., with standard 30" Prelude cross tees perpendicular to the main beams at 30" O.C., and Slotted 30" Prelude cross tees spanning the midpoints of the standard 30" cross tees.

Light Fixture Grid Layout: a slight change in grid design will need to occur where the lights will be positioned. Main beams will stay 30" O.C., but the cross tee installation will change based on the lighting layout. The 30" cross tees perpendicular to the main beams must be 24" apart to house the light fixture. The space in between light fixtures will follow the standard 15" x 30" grid installation stated above. STAC clips are needed at all open grid locations not paired with an adjacent cross tee (Fig 4).

Alternative Light Fixture Grid Layout: if light fixture locations are not known during design, alternating 15" x 30" and 24" x 30" grid modules can be used across the entire ceiling for maximum flexibility. STAC clips are needed at all open grid locations not paired with an adjacent cross tee.



(Fig 3)



(Fig 4)

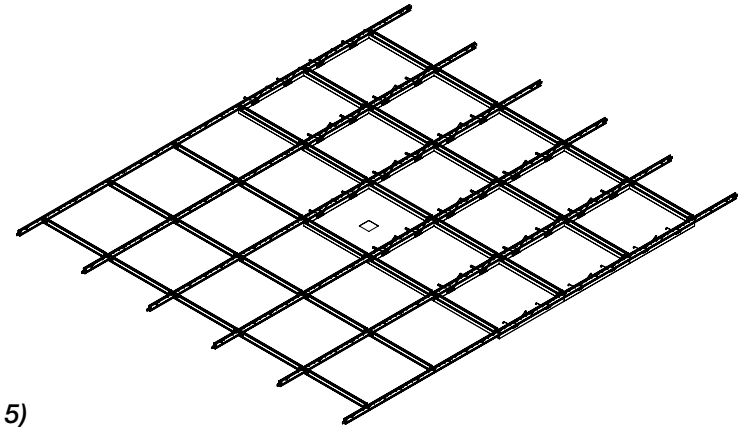
3. INSTALLATION OF THE ASSEMBLY

Install the last full-size METALWORKS™ Torsion Spring Shapes panel that the light will integrate next to per the standard installation instructions.

Install the METALWORKS Torsion Spring Shapes panel that the light will integrate into per the standard installation instructions (*Fig 5*).

The compatible light fixture and driver should be installed by a qualified electrician in accordance with the lighting manufacturer's installation instructions (*Fig 6*).

Once the factory cut-out panel and light have been installed, resume installation of the full-size METALWORKS Torsion Spring Shapes panels following the standard installation instructions (*Fig 7*).



(Fig 5)

4. LIGHT FIXTURES

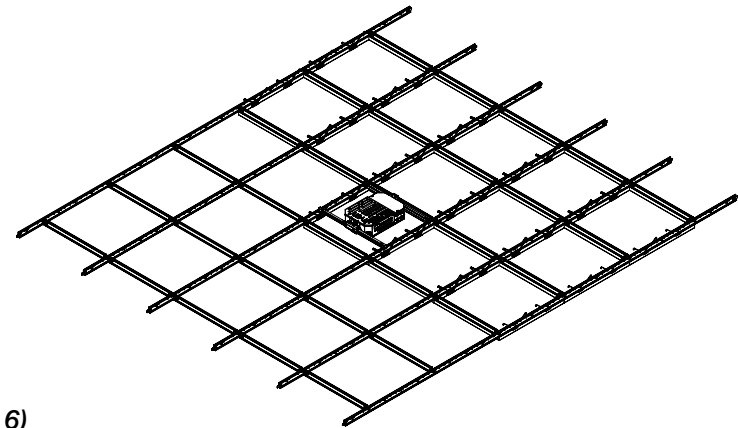
Compatible with USAI® Lighting BeveLED® 2.2 for METALWORKS and BeveLED® Mini for METALWORKS light fixtures. For detailed lighting information, contact your local USAI representative.

5. SEISMIC

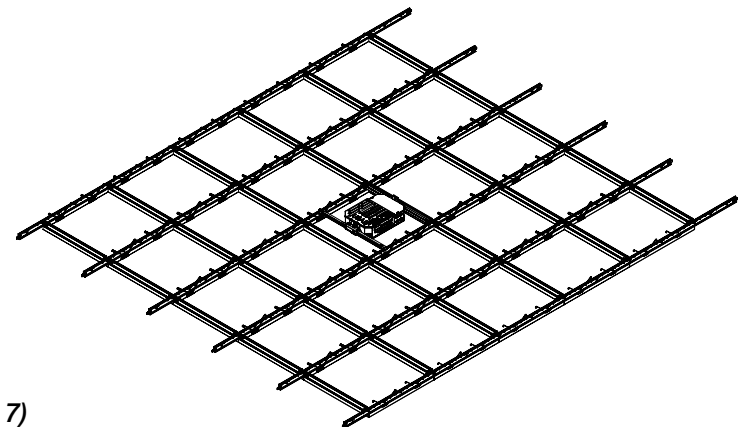
This system has been engineered for application in seismic areas based on the instructions listed in this document and has been successfully tested in applications simulating seismic design categories D, E, and F.

Refer to the lighting manufacturer for the specific instructions on how to install the light fixture in seismic areas.

Certain jurisdictions may have additional requirements for lighting systems. Consult your local authority for specific requirements.



(Fig 6)



(Fig 7)

METALWORKS™ Torsion Spring Shapes Panels				
METALWORKS Panel Item No.	Description	Coordinating USAI® Fixture Family	Coordinating USAI Fixture Part Numbers	USAI Grid Mounting Bars Item No.
8216R01MXXC03XXX	24 x 24" 90° Shape for 3.5" Square Downlight	BeveLED® Mini for MetalWorks	B3SXP-UA	UA2
8216R01MXXC04XXX	24 x 24" 90° Shape for 5" Square Downlight	BeveLED® 2.2 for MetalWorks	B4SXP-UA	UA2
8216R02MXXC03XXX	24 x 48" 90° Shape for 3.5" Square Downlight	BeveLED Mini for MetalWorks	B3SXP-UA	UA2 or UA4
8216R02MXXC04XXX	24 x 48" 90° Shape for 5" Square Downlight	BeveLED 2.2 for MetalWorks	B4SXP-UA	UA2 or UA4
8216R03MXXC03XXX	24 x 72" 90° Shape for 3.5" Square Downlight	BeveLED Mini for MetalWorks	B3SXP-UA	UA2
8216R03MXXC04XXX	24 x 72" 90° Shape for 5" Square Downlight	BeveLED 2.2 for MetalWorks	B4SXP-UA	UA2
8216R04MXXC03XXX	24 x 96" 90° Shape for 3.5" Square Downlight	BeveLED Mini for MetalWorks	B3SXP-UA	UA2
8216R04MXXC04XXX	24 x 96" 90° Shape for 5" Square Downlight	BeveLED 2.2 for MetalWorks	B4SXP-UA	UA2
8217H01MXXC03XXX	30 x 36" Hexagon Shape for 3.5" Square Downlight	BeveLED Mini for MetalWorks	B3SXP-UA	UA2
8217H01MXXC04XXX	30 x 36" Hexagon Shape for 5" Square Downlight	BeveLED 2.2 for MetalWorks	B4SXP-UA	UA2

MORE INFORMATION

For more information, or for an Armstrong Ceilings representative, call 1 877 276-7876.

For complete technical information, detail drawings, CAD design assistance, installation information, and many other technical services, call TechLine customer support at 1 877 276-7876 or FAX 1 800 572-TECH.

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