

# METALWORKS™ Torsion Spring

## Downlight Integration Installation Instructions

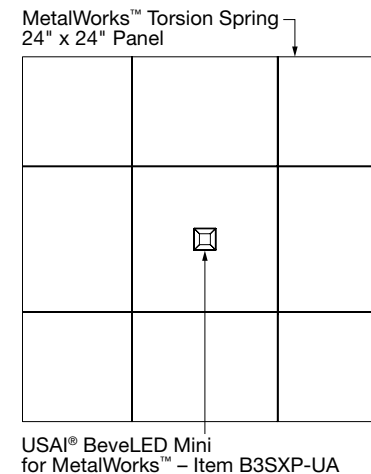
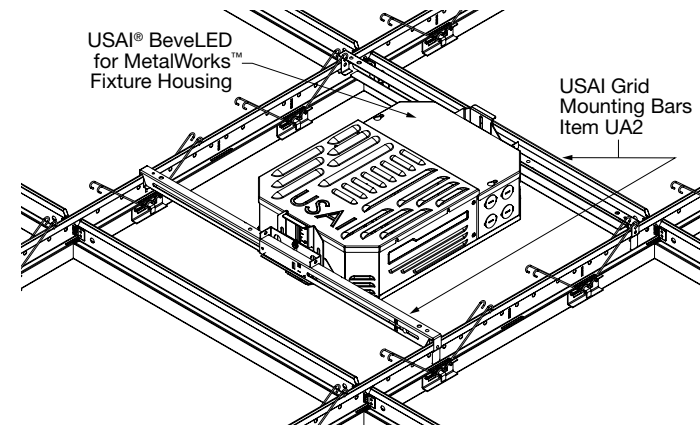
This installation guide is a supplement to the standard METALWORKS™ Torsion Spring installation instructions.

### 1. SOLUTION OVERVIEW

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

The installation of this ceiling and the integrated lighting solution will require coordination between the ceiling contractor and the electrical contractor. METALWORKS Torsion Spring 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 panels with the factory cut-out listed in the chart at the end of the instructions. Other METALWORKS Torsion Spring items are not included as part of this standard integration solution.



(Fig 1)

## 2. DESIGN AND INSTALLATION CONSIDERATIONS

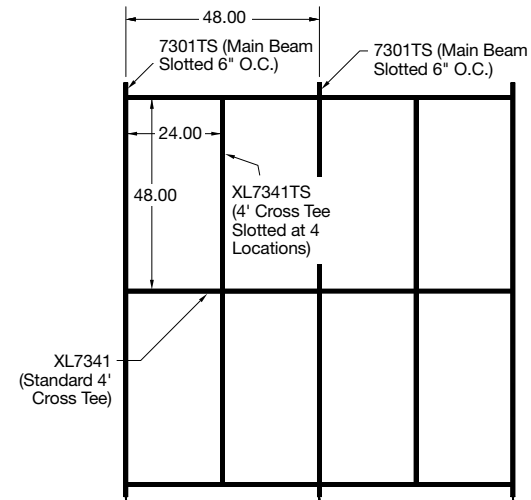
### 2.1 System Modifications

**2.1.1** There is no need for grid or panel modification when the METALWORKS™ Torsion Spring 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 panels without the factory cut-out should not be field cut to try and replicate the visual. Using the METALWORKS Torsion Spring panels with the factory cut-out will ensure the optimal visual result.

### 2.2 Suspension System

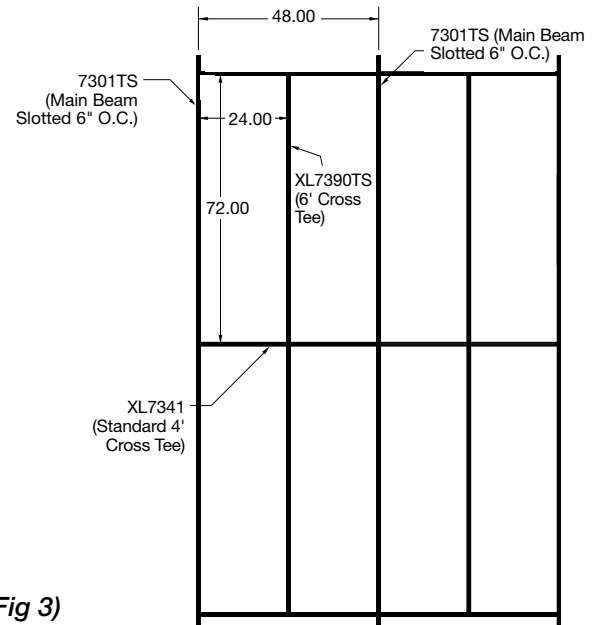
**2.2.1** For 2' x 2' and 2' x 4' panels: Prelude® XL® HD main beams that are pre-slotted 6" O.C. (item 7301TS) for Torsion Spring panels are installed every 48" O.C. Then 48" Prelude cross tees (item XL7341) shall intersect the main beams at 90 degrees every 48". Then a 48" Prelude cross tee that is slotted (item XL7341TS) at four locations shall be bridged in at the center of the 48" cross tees to run parallel with the main beams (*Fig 2*). Springs on the panel will be inserted into main beams and cross tee slots.



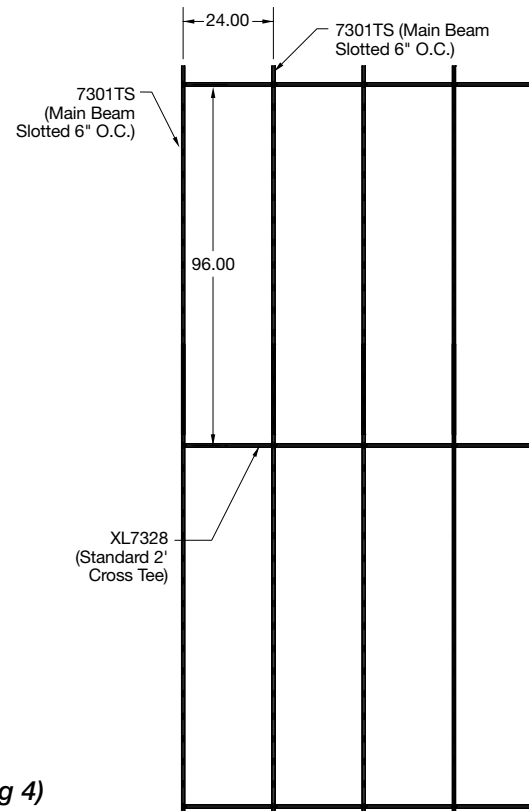
(Fig 2)

**2.2.2** For 2' x 6' panels: Prelude® XL® HD main beams that are pre-slotted 6" O.C. (item 7301TS) for Torsion Spring panels are installed every 48" O.C. Then 48" Prelude cross tees (item XL7341) shall intersect the main beams at 90 degrees every 72". Then a 72" Prelude cross tee that is slotted (item XL7390TS) at three locations shall be bridged in at the center of the 48" cross tees to run parallel with the main beams (**Fig 3**). Springs on the panel will be inserted into main beams and cross tees.

**2.2.3** For 2' x 8' panels: Prelude XL HD main beams that are pre-slotted 6" O.C. (item 7301TS) for Torsion Spring panels are installed every 24" O.C. Then 24" Prelude cross tees (item XL7328) shall intersect the main beams at 90 degrees every 96" (**Fig 4**). Springs on the panel will be inserted into main beams only.



(Fig 3)



(Fig 4)

### 3. INSTALLATION OF THE ASSEMBLY

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

Install the METALWORKS Torsion Spring 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 panels following the standard installation instructions (*Fig 7*).

### 4. LIGHT FIXTURES

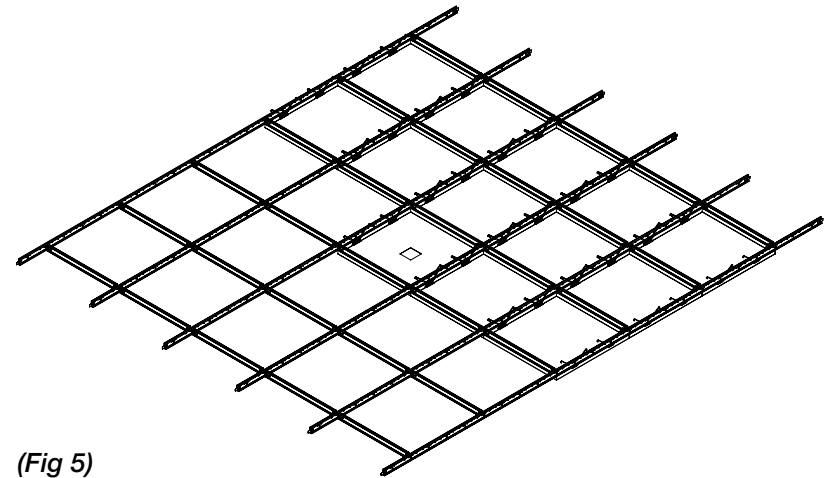
Compatible with USAI® Lighting BeveLED® 2.2 for METALWORKS and BeveLED® Mini for METALWORKS light fixtures. For detailed lighting information, contact your local USAI representative.

### 5. SEISMIC

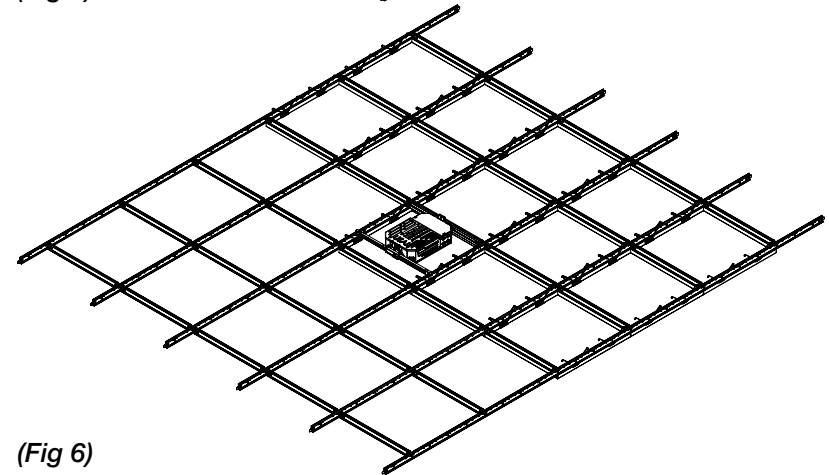
This system has been engineered for application in seismic areas based on the instructions listed in this document and has been successfully tested in applications simulating seismic design categories D, E, and F.

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

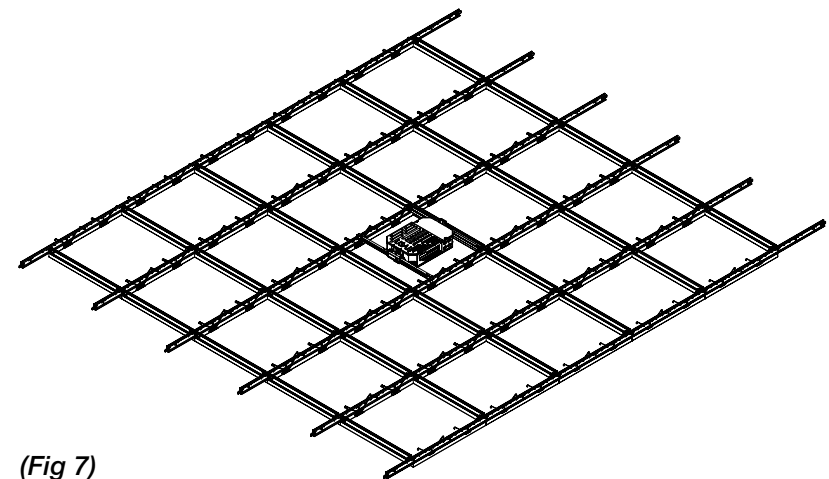
Certain jurisdictions may have additional requirements for lighting systems. Consult your local authority for specific requirements.



(Fig 5)



(Fig 6)



(Fig 7)

<b>METALWORKS™ TORSION SPRING</b>				
<b>METALWORKS Panel Item No.</b>	<b>Description</b>	<b>Coordinating USAI® Fixture Family</b>	<b>Coordinating USAI Fixture Part Numbers</b>	<b>USAI Grid Mounting Bars Item No.</b>
7209MXXC03XXX	24 x 24 x 1-1/2" panel for 3.5" Square Downlight	BeveLED® Mini for MetalWorks™	B3SXP-UA	UA2
7209MXXC04XXX	24 x 24 x 1-1/2" panel for 5" Square Downlight	BeveLED® 2.2 for MetalWorks	B4SXP-UA	UA2
7210MXXC03XXX	24 x 48 x 1-1/2" panel for 3.5" Square Downlight	BeveLED Mini for MetalWorks	B3SXP-UA	UA2 or UA4
7210MXXC04XXX	24 x 48 x 1-1/2" panel for 5" Square Downlight	BeveLED 2.2 for MetalWorks	B4SXP-UA	UA2 or UA4
7211MXXC03XXX	24 x 72 x 1-1/2" panel for 3.5" Square Downlight	BeveLED Mini for MetalWorks	B3SXP-UA	UA2
7211MXXC04XXX	24 x 72 x 1-1/2" panel for 5" Square Downlight	BeveLED 2.2 for MetalWorks	B4SXP-UA	UA2
7212MXXC03XXX	24 x 96 x 1-1/2" panel for 3.5" Square Downlight	BeveLED Mini for MetalWorks	B3SXP-UA	UA2
7212MXXC04XXX	24 x 96 x 1-1/2" panel 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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BPLA-293030-521

