



METAL WORKS™

Torsion Spring
Ceiling Panels

Inspiring Great Spaces®

Armstrong®
CEILING & WALL SOLUTIONS

So Many CHOICES

MetalWorks™ Torsion Spring panels provide a monolithic visual with downward accessibility in a variety of metal and laminate finishes.

For the wood enthusiast, we offer PureWood™ veneers in three standard finishes. Reflections™ Laminates offer a durable wood-look option as well. Standard and custom color options mean the sky's the limit.

Traditional 24" x 24" panels and 24" x 96" planks, along with new 48" x 48" panels and custom sizes, create options that can seamlessly connect interiors with exteriors.

Custom MetalWorks™ Torsion Spring
panels in Reflections™ laminate finish Belbien
Alston & Bird LLP, Atlanta, GA





▲ MetalWorks™ Torsion Spring panels with PureWood™ veneer in Light Cherry

PureWood™ Veneers for the WOOD ENTHUSIAST

MetalWorks™ Torsion Spring panels in PureWood™ real wood veneers offer the durability of metal with a natural finish in a variety of sizes.

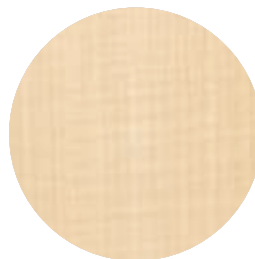


- Monolithic visual with 100% downward accessibility
- Five standard panel sizes install with pre-slotted standard 15/16" suspension system
- Interior panels feature swing-down accessibility
- Easy to install, fully concealed visual on standard suspension system
- PureWood™ real wood veneers available in three standard finishes and perforations for interior installations
- NRC values up to 0.90 with fiberglass infill panels (select perforation patterns)

PUREWOOD™
VENEER FINISHES
Interior Only



Maple (NMP)

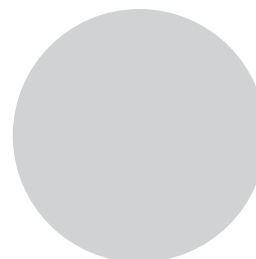


Light Cherry (NLC)

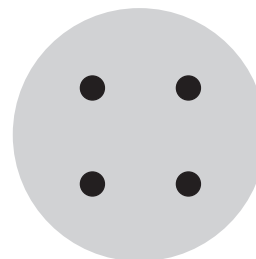


Dark Cherry (NDC)

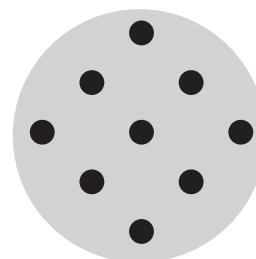
PUREWOOD
PERFORATION OPTIONS
(1:1 scale shown)



M1 (Unperforated)



M14 (Rg 3205)



M18 (Rd 3210)

ReflectionsTM LAMINATES

Choose a superior wood-look visual. And now, two ReflectionsTM finishes can even connect your interior and exterior designs, bringing the outdoors in.



▲ MetalWorksTM Torsion Spring exterior panels

▼ Custom MetalWorksTM Torsion Spring ceiling and wall panels in ReflectionsTM laminate finish Rock Maple; Dover High School, Dover, DE



REFLECTIONS™
LAMINATE FINISHES
Interior Only



Rock Maple (LRM)



Arctic Maple (LAM)



Light Cherry (LLC)



Pecan (LPC)



Wild Cherry (LWC)



Mineral Forest (LMF)



Walnut (LWN)



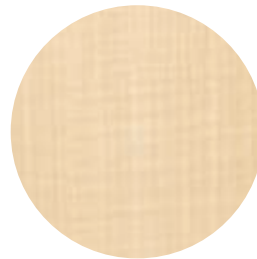
Natural Maple (LNMP1E)



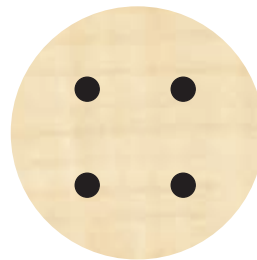
Natural Oak (LNO1E)

REFLECTIONS
LAMINATE FINISHES
Interior & Exterior

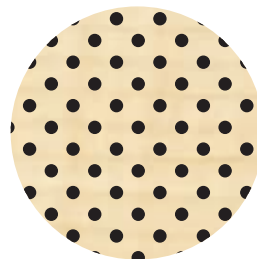
REFLECTIONS LAMINATE
PERFORATION OPTIONS
(1:1 scale shown)



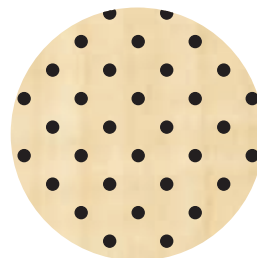
M1 (Unperforated)



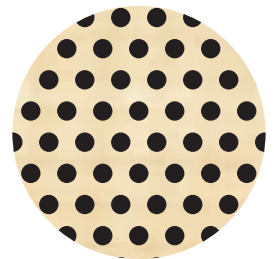
M14 (Rg 3205)



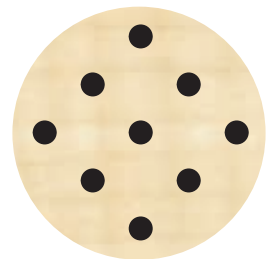
M15 (Rd 1612)



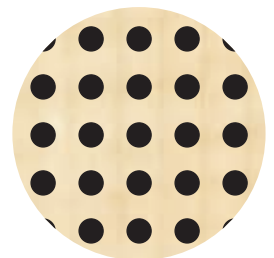
M16 (Rd 1607)



M17 (Rv 3223)



M18 (Rd 3210)



M19 (Rg 3220)



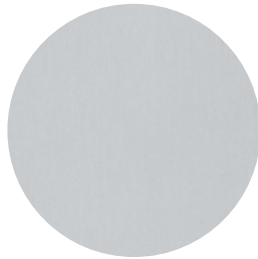
▲ MetalWorks™ Torsion Spring panels; Berklee College of Music Student Center, Boston, MA

Impactful COLORPLAY

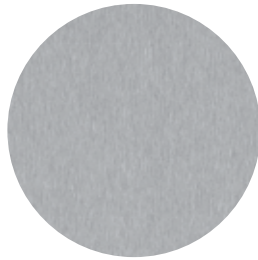
Choose from popular metal-look finishes and perforations, or custom colors and perforations, to empower your design. Select finishes on unperforated panels are part of the Sustain™ ceiling systems portfolio, meeting today's most stringent sustainability compliance standards.



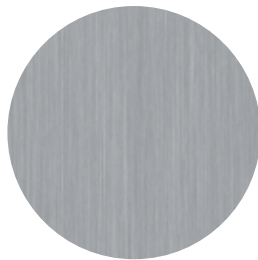
METALWORKS™
Interior Only



Satin Anodized (SAA)



Lacquer Mill (LMA)

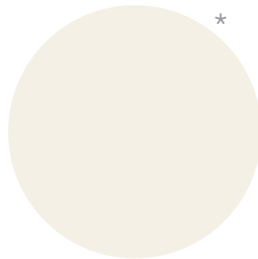


Brushalume (BAA)

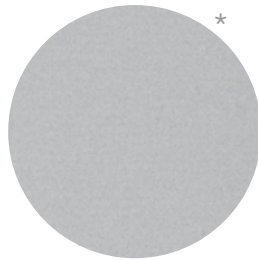


Custom Colors
Available

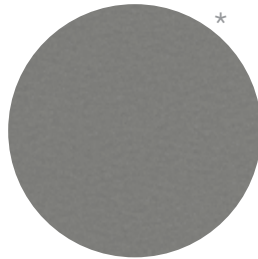
METALWORKS
Interior & Exterior



Whitelume (WHA)



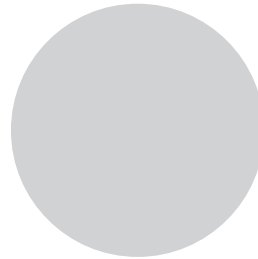
Silverlume (SIA)



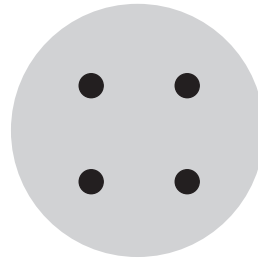
Gun Metal (MYA)

* Part of the Sustain™
portfolio, meeting today's
most stringent sustainability
compliance standards

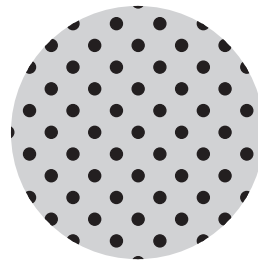
METALWORKS
PERFORATION OPTIONS
(1:1 scale shown)



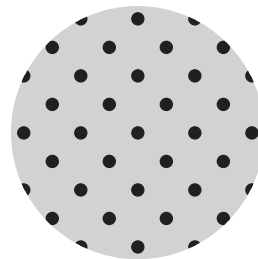
M1 (Unperforated)



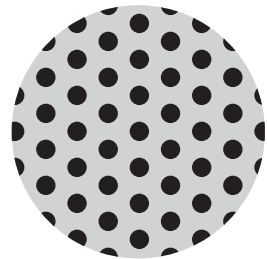
M14 (Rg 3205)



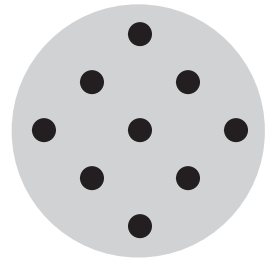
M15 (Rd 1612)



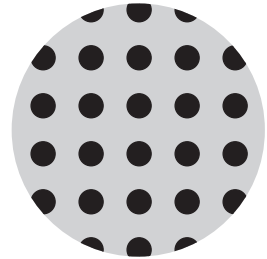
M16 (Rd 1607)



M17 (Rv 3223)



M18 (Rd 3210)



M19 (Rg 3220)

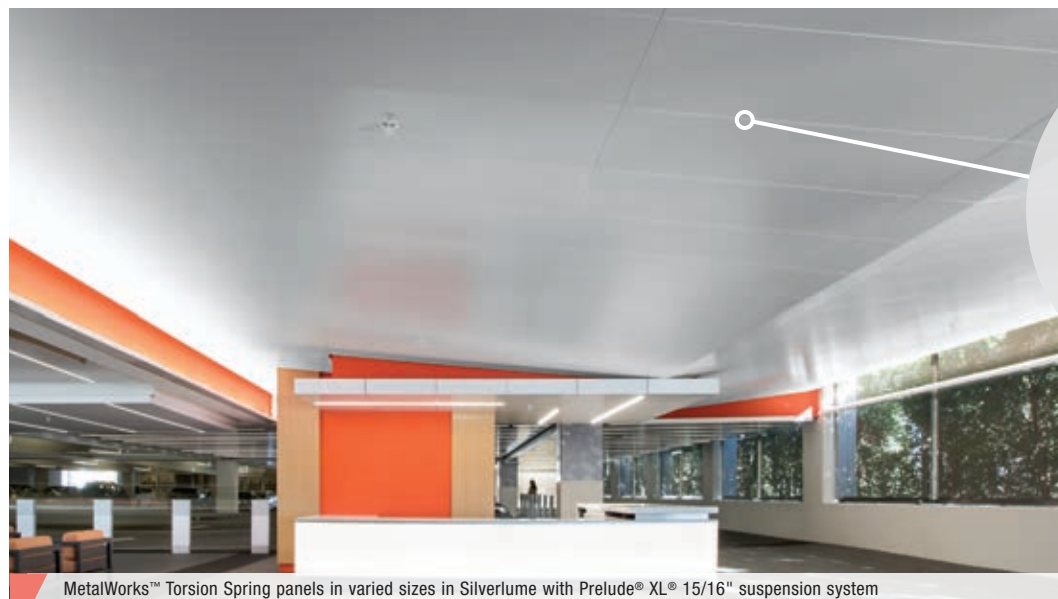


Custom Perforations
Available

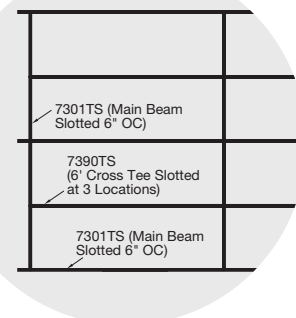
METALWORKS™ Torsion Spring/ Torsion Spring Exterior

smooth texture

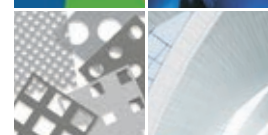
CAD/Revit® drawings at:
armstrongceilings.com



MetalWorks™ Torsion Spring panels in varied sizes in Silverlume with Prelude® XL® 15/16" suspension system




plus...
capabilities
to do more



armstrongceilings.com/capabilities
See more photos at:
armstrongceilings.com/photogallery

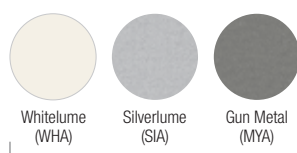
Large-size concealed panels offer a monolithic visual with 100% downward accessibility.

KEY SELECTION ATTRIBUTES

- Now available with PureWood™ real wood veneers in three standard finishes 
- MetalWorks Torsion Spring is part of the Sustain™ portfolio and meets the most stringent sustainability compliance standards today
- Choose from a variety of standard panel sizes that install with pre-slotted standard 15/16" suspension system
- 48" x 48" panels are available as a premium option
- Interior panels feature swing-down accessibility
- For exterior applications, choose from two standard panel sizes that install with 15/16" G90 suspension system
- Reflections™ laminate finishes provide superior wood-look visual with printed vinyl bonded to aluminum; visuals other than the ones shown are also available
- NRC values up to 0.90 with fiberglass infill panels (select perforation patterns)

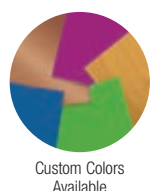
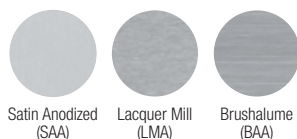
COLOR SELECTION Due to printing limitations, shade may vary from actual product.

MetalWorks™ – Interior and Exterior

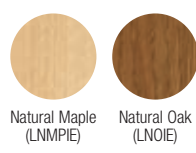


Part of the Sustain™ portfolio, meeting sustainability compliance standards

MetalWorks – Interior Only



Reflections™ Laminate Finishes – Interior and Exterior



Reflections Laminate Finishes – Interior Only

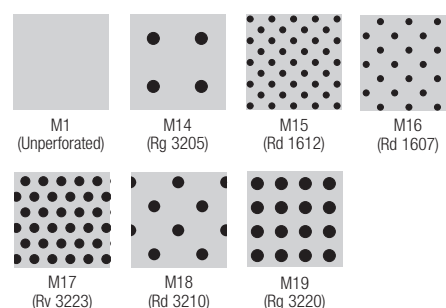


PureWood Veneer Finishes – Interior Only

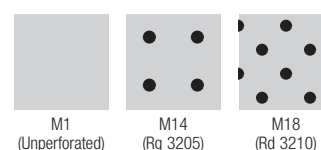


PERFORATION OPTIONS (1:2 scale shown)

Painted and Laminate Perforations



PureWood Perforation Options (1:2 scale shown)



METALWORKS™ Torsion Spring/ Torsion Spring Exterior

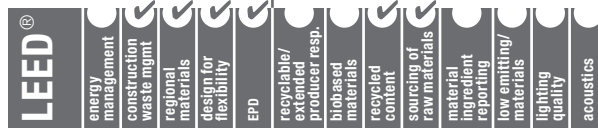
smooth texture

Declare™
Living Building
Challenge Compliant

SUSTAIN™
High Performance
Sustainable
Ceiling Systems
Unperforated (M1)

UP TO **90%** RECYCLED CONTENT

For LEED contribution contact TechLine



VISUAL SELECTION

| Edge Profile | Item No. ♦ | Dimensions (Inches) W x L Custom Sizes Available |
|---|-----------------------|---|
| METALWORKS™ Torsion Spring Square with Acoustical Fleece | | |
| Torsion Spring Square 15/16" | 7209 _ _ _ _ _ | 24 x 24" |
| | | |
| | 7210 _ _ _ _ _ | 24 x 48" |
| | 7211 _ _ _ _ _ | 24 x 72" |
| | 7212 _ _ _ _ _ | 24 x 96" |
| | 7213 _ _ _ _ _ | 30 x 30" |
| Exterior Panels | | |
| | 7225 _ _ _ _ _ | 24 x 24" |
| | 7226 _ _ _ _ _ | 24 x 48" |

NOTE: 48 x 48" panels are available as a premium option

♦ When specifying or ordering, include the appropriate perforation and color suffix with the item number (e.g., 7209 M 1 4 L M A).

* Light reflectance is for unperforated Whitelume.

** Unperforated Whitelume light reflectance

*** Perforated Whitelume light reflectance

PERFORMANCE

Dots represent high level of performance.

| Light Reflect* | Springs per Panel |
|-------------------|-------------------|
| 0.77 | 4 |
| 0.77 | 4 |
| 0.77 | 6 |
| 0.77 | 6 |
| 0.77 | 4 |
| 0.77** 0.61*** | 4 |
| 0.77** 0.61*** | 4 |

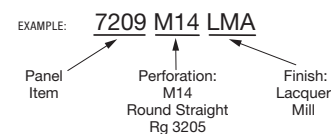
ACOUSTICAL INFORMATION

| Perforation | | NRC with acoustical fleece | NRC with 1" fiberglass infill panel†† |
|-------------|--------------|----------------------------|---------------------------------------|
| M1† | Unperforated | — | — |
| | Rg 3205 | 0.55 | 0.85 |
| | Rd 1612 | 0.70 | 0.90 |
| | Rd 1607 | 0.70 | 0.80 |
| | Rv 3223 | 0.70 | 0.90 |
| | Rd 3210 | 0.65 | 0.85 |
| | Rg 3220 | 0.75 | 0.90 |

† Available for exterior applications

†† Maximum NRC achieved with acoustical infill (item 8200100 or 5823).

For infill panel information, refer to Pg. 156.



PHYSICAL DATA

Material

Aluminum – thickness 0.040"

Aluminum – thickness 0.060" (item 7226 only)

Surface Finish

Reflections™ laminates: Vinyl-faced membrane
Painted finishes: Factory-applied polyester paint
Custom colors and finishes available.

Fire Performance

If a composite test report is needed, Class A test reports are available for aluminum Torsion Spring painted and metal finishes, along with Class B test reports for both PureWood™ veneer and Reflections laminate finishes.

Fire performance for other finishes will vary depending on the required finish.

Code Considerations

The International Mechanical Code requires that materials used in or forming part of an air plenum, have a flame spread index of 25 or less and a Smoke Developed Index of 50 or less on all surfaces of the material including those surfaces that may be exposed by cutting the material. Exception: The IBC states, "Materials having a thickness less than 0.036 inches (0.9mm) applied directly to the surface of walls or ceilings shall not be required to be tested."

Panels finished with PureWood veneers, Reflections laminates, and paint finishes typically have a thickness less than 0.036 inches (0.9mm). These finishes are applied directly to the Class A aluminum substrate.

Acoustical Options

Perforated panels are supplied with a black fiberglass fleece to absorb sound.

Recycled Content

Minimum 25%. Up to 90% recycled content available.

Design Considerations

Anodized and Lacquer Mill finishes may vary in shade between production runs as well as over time. Sizes can be mixed and matched on non-perforated panels only.

30" x 30" panels have a directional finish that is perpendicular to the main beams; all other panel sizes have a directional finish that is parallel to the main beams.

MetalWorks™ steel and aluminum panels are made at different manufacturing facilities that use different paint systems. Because of this, similar colors, i.e., White and Whitelume, are not exact color matches. Please consider this when designing adjacent spaces with multiple MetalWorks products.

For PureWood finishes, variation among panels may occur due to the natural characteristics of the wood and grain.

Wind Uplift Performance

24" x 24" and 24" x 48" panels noted as exterior on this document tested for wind uplift Classes 30, 60, and 90. Specific installation instructions to meet these classes are available. For more information, visit armstrongceilings.com or contact TechLine customer support at 1 877 276-7876.

Design Support

Project management assistance is available by calling TechLine customer support at 1 877 276-7876.

Seismic Restraint

MetalWorks Torsion Spring panels have been engineered, tested, and approved for application in all seismic areas when installed per Armstrong Ceilings installation instructions.

Warranty

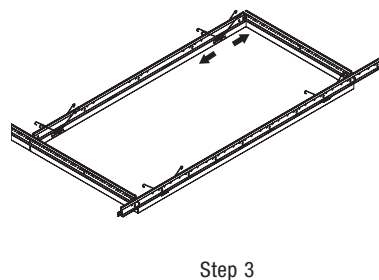
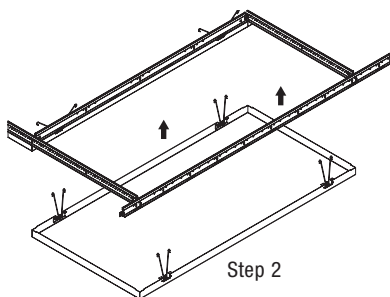
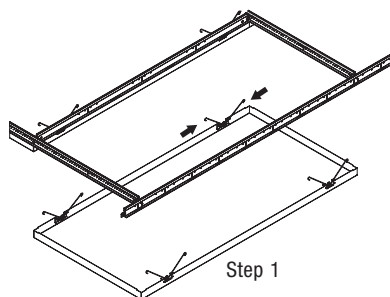
One (1) year limited warranty.
Details at armstrongceilings.com

Weight

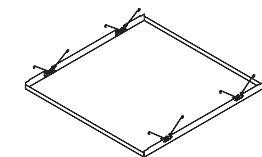
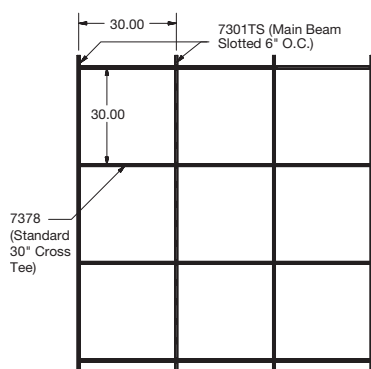
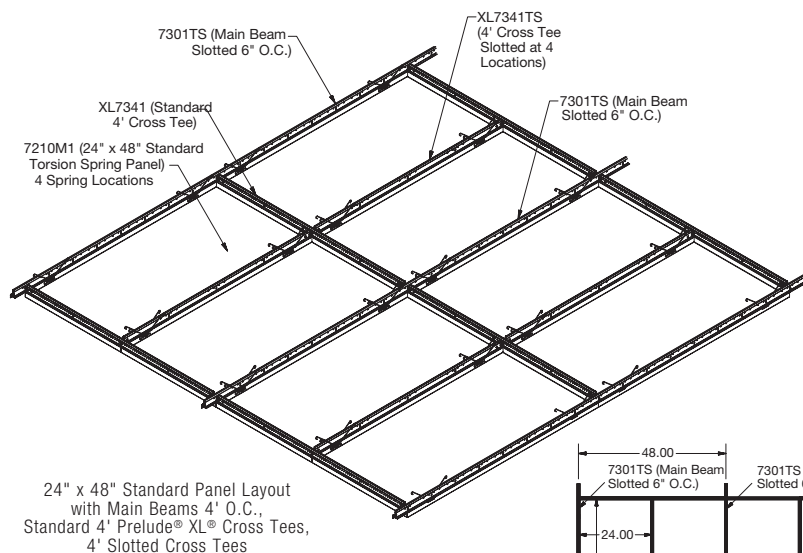
0.69 lbs/SF
0.86 lbs/SF (item 7226)

METALWORKS™ Torsion Spring/ Torsion Spring Exterior Installation Details

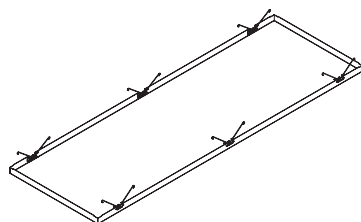
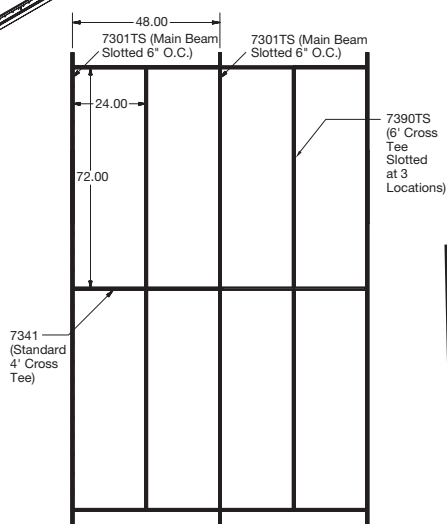
HOW TO INSTALL PANELS



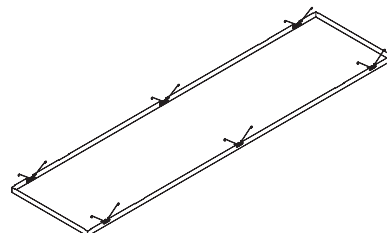
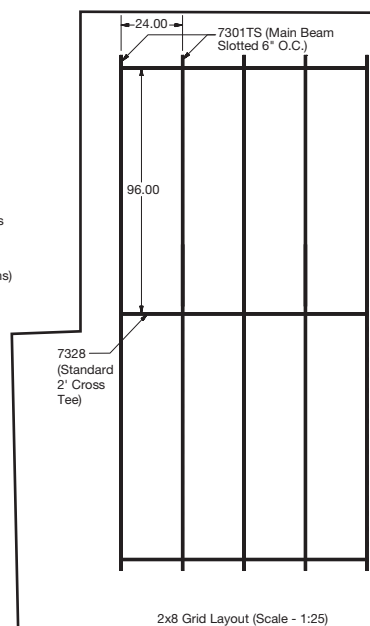
INTERIOR INSTALLATION DETAILS



Suspension System Layout for 30" x 30" Panels



Suspension System Layout for 24" x 72" Panels



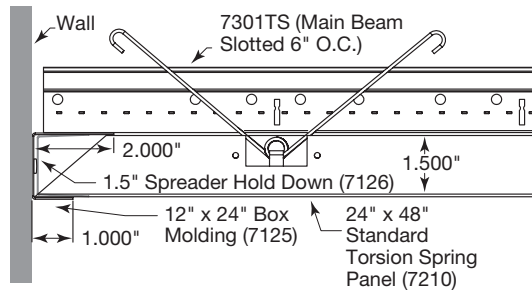
Suspension System Layout for 24" x 96" Panels

METALWORKS™ Torsion Spring/ Torsion Spring Exterior

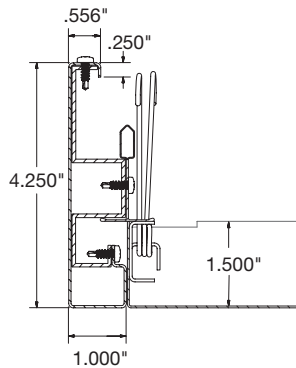
Perimeter Details

INTERIOR WALL PERIMETER DETAILS – For exterior details, consult the MetalWorks Exterior Torsion Spring installation instructions, BPLA-297922, on our web site.

Installation Detail – Wall Perimeter

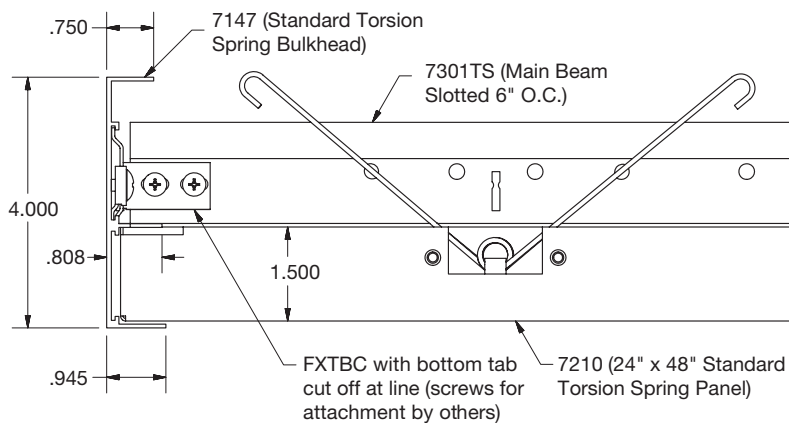


**Installation Detail – Perimeter Trim
(Formed Trim #7131)**

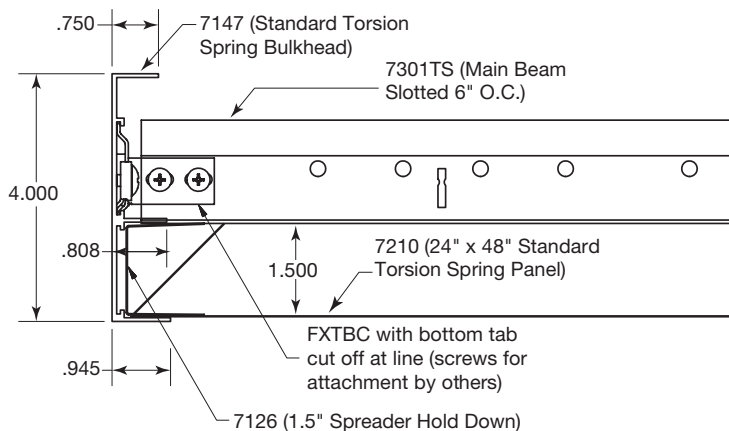


**Installation Detail – Perimeter Trim
(Extruded Trim #7147)**

Full Panels



Cut Panels



METALWORKS™ Torsion Spring/ Torsion Spring Exterior

Accessories

ACCESSORIES

| Item No. ♦ | Description | Dimensions (Inches) Nominal W x L x H | Color | Pieces/ Carton |
|------------|--|--|-------------------------------------|-------------------|
| 7125_ _ _ | Box Molding (for Laminates and PureWood™, Black is recommended) | 2 x 96 x 1.5" | WHA, SIA, MYA, SAA, LMA, BAA, BL | 10 |
| 7147_ _ _ | Torsion Spring Perimeter Trim (Extruded) (for Laminates and PureWood, Black is recommended) | 1 x 120 x 4" | WH, SG, MY, BL | 6 |
| 7131_ _ _ | Torsion Spring Perimeter Trim (Formed) | 1 x 96 x 4.25" | LMA, BAA, SAA | 6 |
| 7126 | Spreader Hold Down | 1 x 10-5/8 x 1-1/2" | N/A | 10 |
| 5823 | BioAcoustic™ Infill Panel | 24 x 24 x 5/8" | Black | 12 |
| 8200100 | 1" Fiberglass Infill Bag | 24 x 24 x 1" | Black (Gloss) | 12 |
| 7129 | Torsion Spring Hook Access Tool | N/A | N/A | 1 |
| 7130 | Torsion Spring Suction Access Tool | N/A | N/A | 1 |

♦ When specifying or ordering, include the appropriate color code with the item number (e.g. 7131 K M A)

METALWORKS™ Torsion Spring/ Torsion Spring Exterior Suspension Systems

SUSPENSION SYSTEMS

| Item No. | Description | Dimensions (Inches) |
|--|---|------------------------|
| 15/16" Prelude® XL® Suspension System – Some items slotted for Torsion Spring. See below. | | |
| 7301TS | Prelude XL 12' HD Main Beam – slotted for Torsion Spring | 144 x 15/16 x 1-11/16" |
| XL7341TS | Prelude XL 4' Cross Tee – slotted for Torsion Spring | 48 x 15/16 x 1-11/16" |
| XL7390TS | Prelude XL 6' Cross Tee – slotted for Torsion Spring | 72 x 15/16 x 1-11/16" |
| XL7378 | Prelude XL 30" Cross Tee | 30 x 15/16 x 1-11/16" |
| XL8320 | Prelude XL 2' Cross Tee | 24 x 15/16 x 1-11/16" |
| XL7341 | Prelude XL 4' Cross Tee | 48 x 15/16 x 1-11/16" |
| Exterior Suspension System | | |
| 15/16" Prelude XL – Some items slotted for Torsion Spring. See below. | | |
| 7301G90ATS | Prelude XL 12' HD Exterior Main Beam – slotted for Torsion Spring | 144 x 15/16 x 1-11/16" |
| XL7341G90ATS | Prelude XL 4' Exterior Cross Tee – slotted for Torsion Spring | 48 x 15/16 x 1-11/16" |
| XL7321G90A | Prelude XL 2' Exterior Cross Tee | 24 x 15/16 x 1-11/16" |

TAKE THE NEXT STEP

1 877 276 7876

Customer Service Representatives
7:45 a.m. to 5:00 p.m. EST
Monday through Friday

TechLine – Technical information, detail drawings,
CAD design assistance, installation information,
other technical services – 8:00 a.m. to 5:30 p.m. EST,
Monday through Friday. FAX 1 800 572 8324
or email: techline@armstrongceilings.com

armstrongceilings.com/commercial

Latest product news
Standard and custom product information
Online catalog
CAD, Revit®, SketchUp® files
A Ceiling for Every Space® Visual Selection Tool
Product literature and samples – express service
or regular delivery
Contacts – reps, where to buy, who will install

YOU INSPIRE™ SOLUTIONS CENTER

1 800 988 2585
email: solutionscenter@armstrongceilings.com
armstrongceilings.com/youinspire

Design Assistance

Collaborative design
Detail drawings
Specifications
Planning and budgeting

Pre-construction Assistance

Layout drawings for standard
and premium products
Project installation recommendations
Contractor installation assistance

you inspire™
solutions center

helping to bring your one-of-a-kind ideas to life

Revit® is a registered trademark of Autodesk, Inc.; SketchUp® is a registered trademark of Trimble Navigation Limited;
LEED® is a registered trademark of the U.S. Green Building Council.
Inspiring Great Spaces® is a registered trademark of AFI Licensing LLC
All other trademarks used herein are the property of AWI Licensing LLC and/or its affiliates
© 2017 AWI Licensing LLC Printed in the United States of America

armstrongceilings.com/torsionspring

Inspiring Great Spaces®

Armstrong®
CEILING & WALL SOLUTIONS