WoodWorks® Grille – Classics System

Assembly and Installation Instructions

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Armstrong®
World Industries

1. GENERAL

1.1 Product Description

The WoodWorks® Grille – Classics system is a solid wood ceiling system available in a variety of standard slat widths, depths, and finishes. Both the nominal 12" x 96" panels and installation system are provided by Armstrong. Panels must be installed with heavy-duty Prelude® 15/16" suspension system with a dowel or backer, or backer and dowel combination. Custom finishes, and slat heights, as well as a flexible backer for curved applications, are offered through Armstrong. For applications where the WoodWorks Grille – Classics system is to be installed on a slope, contact TechLine for further instructions and drawing details.

IMPORTANT NOTE: Due to the tight spacing between slats, panels with 9 slats must be installed using the direct screw-attach method instead of clips.

1.2 Material and Surface Finish

Slats, backers, and dowels are constructed from solid poplar. Slats have a semi-gloss coating or painted finish. Backers and dowels have a black factory finish.

1.3 Storage and Handling

All ceiling components should be stored in a dry interior location and should remain in the original packaging prior to installation to avoid damage. The materials must be stored off the floor in a flat, level condition. Do not store in unconditioned spaces with humidity greater than 55% or lower than 25%, or with temperatures above 86°F or lower than 50°F. Use proper care when handling to avoid damage or soiling. WoodWorks Grille – Classics panels can be cleaned with a soft dry cloth.

CAUTION: Use proper care and caution when handling suspension systems due to the sharp edges on all exposed clips.

1.4 Site Conditions

Building areas that will receive a ceiling must be free of construction dust and debris. Installation of the products must be carried out where the temperature is between 50°F and 86°F and relative humidity levels maintained between 25% RH and 55% RH. These temperature and humidity conditions must be met throughout the lifetime of the ceiling.

Real wood and wood composite products are natural building materials and they will react to changes in humidity. (Wood tends to contract with lower humidity and expand with higher humidity.)

Wood may also have a tendency to warp, twist, or bow due to the natural stresses in the components and these humidity changes. Be aware of these natural tendencies when evaluating the products. It is also necessary for the area to be enclosed, and for the HVAC systems to be functioning and in continuous operation. All wet work (plastering, concrete, etc.) must be complete and dry. These products cannot be used in exterior applications.

To ensure that the ceiling panels have stabilized to the current building conditions, prior to their installation, the panels must be placed in an environmentally stable building location for a minimum of 72 hours.

1.5 Color

WoodWorks Grille – Classics panels are made of solid wood and are available in a variety of standard finishes. Custom options are available. Natural variations in color and grain are characteristic of wood products. To maximize visual consistency, panels should be unpacked and examined collectively to determine the most desirable arrangement for installation.

1.6 Ordering Considerations

Be sure to account for extra material that is normally needed for wood installations. When installing WoodWorks Grille – Classics panels, you should consider ordering at least 5% extra material.

Up to 10% more may be needed for odd size or diagonal installations. It is the customer's responsibility to plan each layout and order the correct amount of installation material needed, taking into account the design.

1.7 Fire Performance

As with other architectural features located at the ceiling, WoodWorks Grille – Classics panels may obstruct or skew the planned fire sprinkler water distribution pattern, or possibly delay or accelerate the activation of the sprinkler or fire detection systems by channeling heat from a fire either toward or away from the device. Designers and installers are advised to consult a fire protection engineer, NFPA 13, and their local codes for guidance where automatic fire detection and suppression systems are present.

2. PANELS AND ACCESSORIES

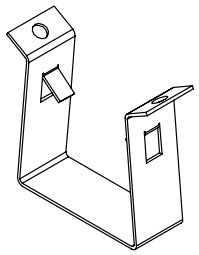
2.1 Wood Slats

WoodWorks® Grille – Classics panels are available in a variety of standard slat heights and widths as well as custom options.

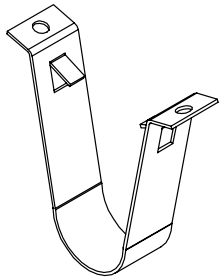
2.2 Backer Clips and Dowel Clips

Metal spring clips are used to attach panels to 15/16" black Prelude® T-Bar suspension system ***(Fig 1)***.

NOTE: Backer clips are to be used with grille panels that have a backer and dowel combination ***(Fig 2)***.



(Fig 1) *Backer Clip*



(Fig 2) *Dowel Clip*

2.3 Finish Options For Cut Ends

5457GAL1_ _ _: Gallon size stain to finish cut ends

5457QT1_ _ _: Quart size stain to finish cut ends

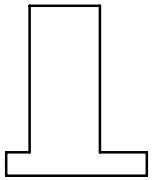
2.4 Touch-Up Markers & Fill Stick

By others – to be used to touch up any scratches or dings on slats.

2.5 Trim Accessories

Wood trim options are available in coordinating slat finishes:

- Ledgers for wall molding trim
- Junctions for panel joints (one size available to work with all slat heights) ***(Fig 3)***



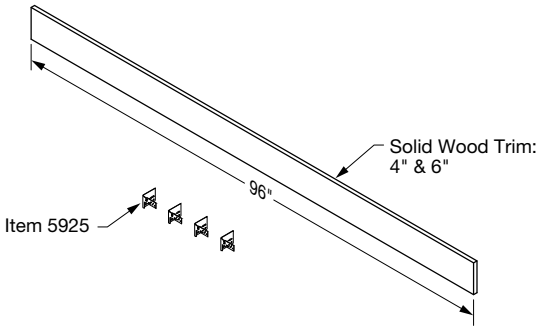
(Fig 3)

- End caps for exposed panel ends (multiple sizes available to work with specific slat heights) ***(Fig 4)***



(Fig 4)

- 4" Solid Wood Trim (7146H4L96_ _ _) and 6" Solid Wood Trim (7146H6L96_ _ _) ***(Fig 5)***



(Fig 5)

2.6 Acoustical Infill Panel Option

11" x 48" infill panels, Item 6657, can be used for additional acoustics. They slide on top of the WoodWorks Grille – Classics slats between two backers, but some field cutting of these infill panels will need to be done so that they fit properly at the ends of the panels.

24" x 24" infill panels, Item 5823, should be used with dowel-only panels.

3. INSTALLATION

Before starting any WoodWorks Grille – Classics ceiling installation, be sure to confirm any seismic requirements that may need to be met for your project and follow the recommended installation instructions.

3.1 Non-Seismic Installation

3.1.1. Suspension System Wall-to-Wall

Use heavy-duty 15/16" Prelude® XL® T-Bar suspension system, main beams, cross tees, and wall molding to support the WoodWorks Grille – Classics panels. All installations should follow ASTM C636. All references to suspension component duty ratings are per ASTM C636.

The suspension system is directional. WoodWorks Grille – Classics slats install perpendicular to the main beams. Refer to the reflected ceiling plan to determine the suspension system layout to ensure main beams run perpendicular to the panel length.

Hangers and bracing are to comply with all local code requirements. The suspension system must be properly installed and leveled using no less than 12-gauge galvanized steel wire. The suspension system must be leveled to within 1/4" in 10' and must be square to within 1/16" in 2'. Installation on suspension systems that do not meet this tolerance will produce unacceptable panel alignment.

3.1.1.1 For Panels Weighing Less Than 3lbs/SF

- Item 7301 12' main beams are installed 48" O.C. with hanger wires supporting at no more than 48" O.C. along the mains
- XL7341 4' cross tees installed at 24" O.C., intersecting the main beam at 90° every 24", creating a 24" x 48" module
- XL8320 2' cross tees must install parallel to the main, at the midpoints on the 4' cross tee, creating a 24" x 24" module

3.1.1.2 For Panels Weighing Greater Than or Equal to 3 LBS/SF

- Item 7301 12' main beams are installed 24" O.C. with hanger wires supporting at no more than 48" O.C. along the mains
- XL8320 2' cross tees must install perpendicular to the main, every 24" creating a 24" x 24" module

3.1.2 The 24" x 24" suspension system module is required to keep the WoodWorks® Grille – Classics panels perpendicular to the main beams and backers aligned along the suspension system for clip attachment. See the last page of this document for a grid ceiling layout example.

3.1.3 Refer to the reflected ceiling plan for the finished height of the ceiling. Add the overall height of the WoodWorks Grille – Classics panel to determine the elevation of the suspension system. Remember to account for any infill panel weight in addition to panel weight to determine total system weight. The WoodWorks Grille – Classics panel height and weight are listed on the data sheet.

3.1.4 Install wall molding along the perimeter at the established suspension system elevation.

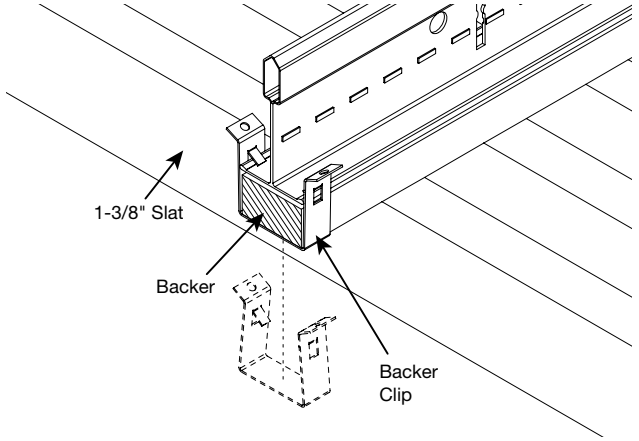
3.1.5 Refer to the reflected ceiling plan to determine the panel orientation and size. Backers or dowels must be aligned with the main beams or cross tees. The first main beam should be no more than 12-1/2" off the wall and then 24" or 48" O.C. across the installation. In addition to the above requirements, also follow ASTM C636 requirements.

3.1.6 Additional cross tees can be installed in the system, as needed, for mechanical fixtures such as lights and speakers. Additional wires may also be required for support.

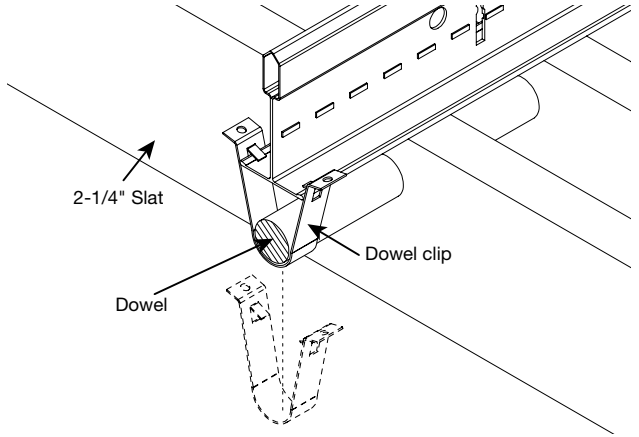
3.2 WoodWorks Grille – Classics Panel Installation

Use heavy-duty 15/16" Prelude® XL® T-Bar suspension system, main beams, cross tees, and wall molding to support the WoodWorks Grille – Classics panels.

3.2.1 WoodWorks Grille – Classics panels are installed in sequence across the room. The first row of panels will have the male side towards the wall. Backer/dowel may need to be trimmed for proper panel alignment ***(Figs 6 & 7)***.

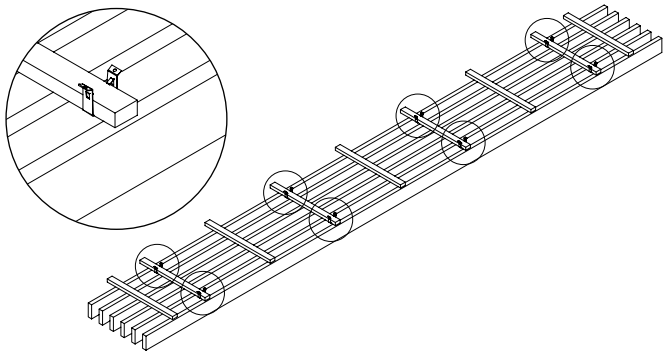


(Fig 6) *Backer Assembly*



(Fig 7) *Dowel Assembly*

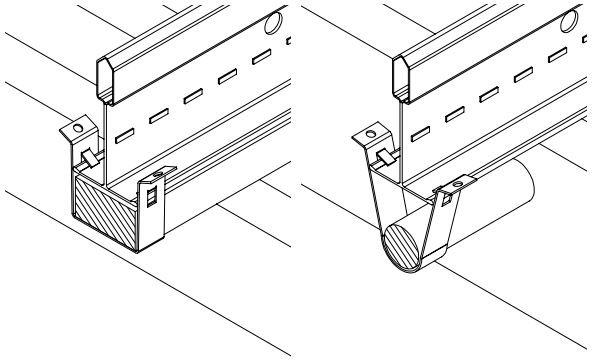
3.2.2 The WoodWorks® Grille – Classics panel is attached to the suspension system with a clip. Attach two clips on every hanging backer (backer that aligns with the suspension system). This should total 8 clips per full-size panel ***(Fig 8)***.



(Fig 8)

3.2.3 Begin at one wall, raise the panel up against the suspension system, and align the backers/dowels with the suspension system.

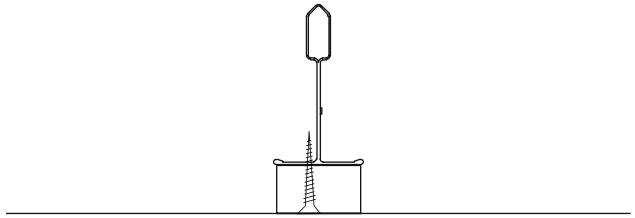
Push upwards on the clip to engage the clip tabs onto the suspension system flange. Make sure both clip tabs engage the suspension system flange ***(Fig 9)***.



(Fig 9)

3.2.4 Continue installing WoodWorks Grille – Classics panels — male to female — across the room.

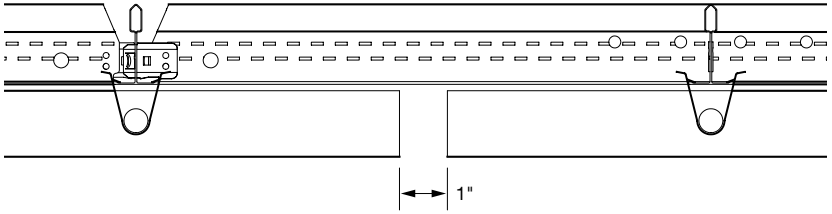
3.2.5 WoodWorks Grille – Classics panels with backers can be direct screw-attached to the suspension system using standard #6 × 1-1/4" bugle head hi-lo drywall screws ***(Fig 10)***. To ensure easy installation and prevent splitting, it is required to pre-drill 3/32" holes in the hanging backers.



(Fig 10)

3.3 WoodWorks Grille – Classics Reveal

3.3.1 WoodWorks Grille – Classics panels will have a 1" reveal between panel ends. This uniform spacing and alignment is maintained by the 15/16" suspension system assembly ***(Fig 11)***.

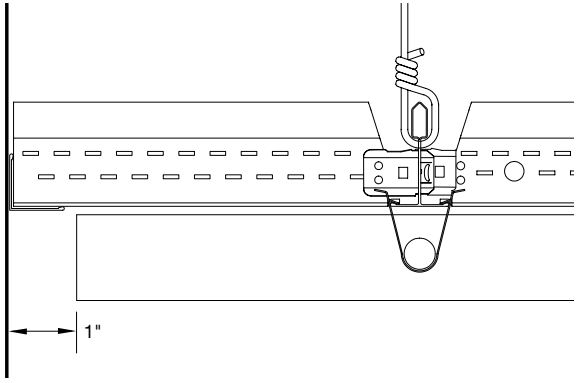


(Fig 11)

3.4 WoodWorks® Grille – Classics Borders

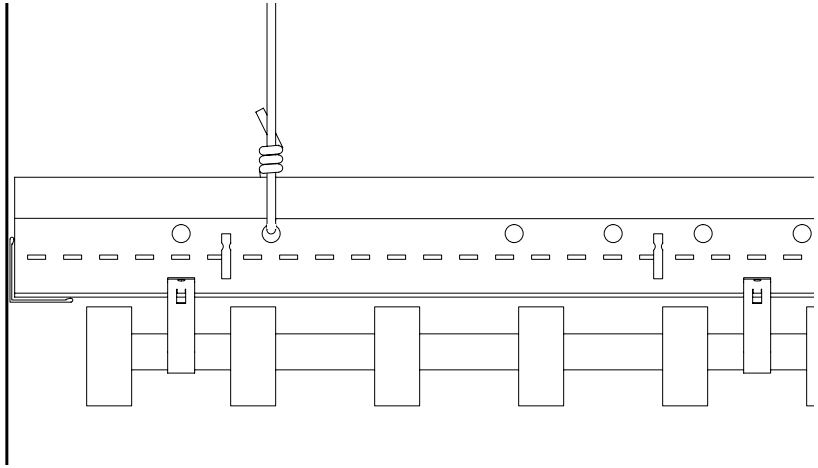
3.4.1 Refer to the ceiling plan for border panel size and spacing.

3.4.2 The border where the panel ends meet the wall should have allowance for a 1" border in the ceiling plan ***(Fig 12)***.



(Fig 12)

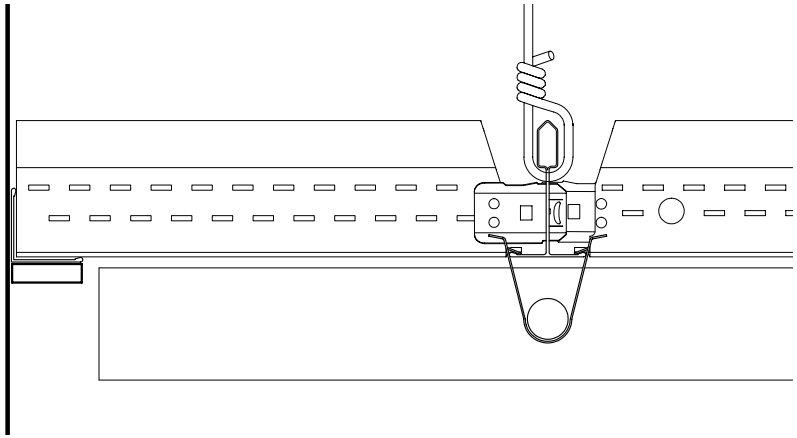
3.4.3 The border where panel sides meet the wall is determined by the first and last slat that is installed. These panels should be mechanically fastened in place to maintain the border ***(Fig 13)***.



(Fig 13)

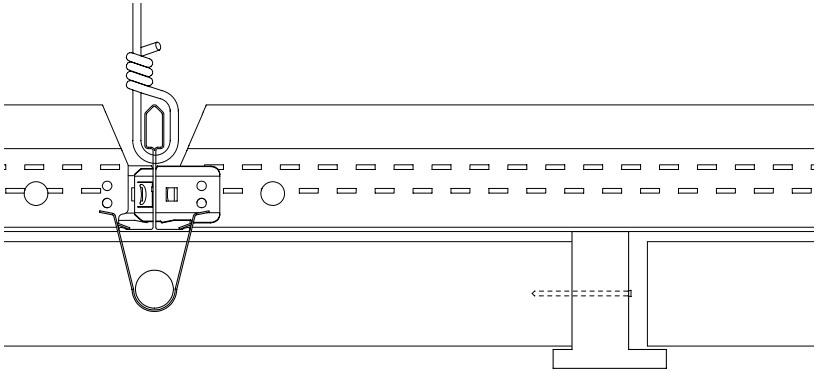
3.5 WoodWorks® Grille – Classics Accessories

3.5.1 Ledger trim can be used to cover the wall molding with the same finish as the WoodWorks Grille – Classics panel. The ledger can be fastened to the molding with adhesive or screwed from above with 1/4" long screws ***(Fig 14)***.



(Fig 14)

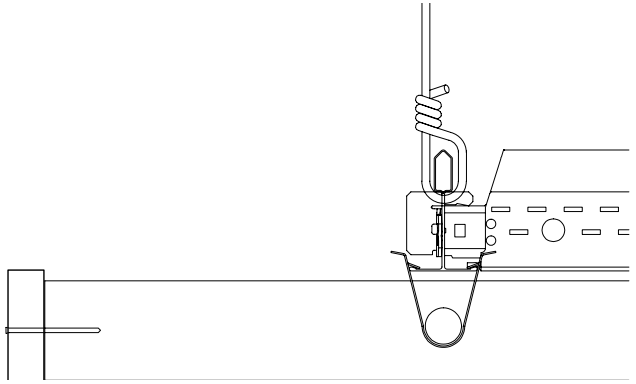
3.5.2 Junction trim can be used between WoodWorks Grille – Classics panels to fill the 1" reveal. This option will be specified on the ceiling plan. The junction trim must be installed progressively as the panels are installed. Install the first row of WoodWorks Grille – Classics panels. Place the shorter flange of the junction trim against the panel slats. Use 1-1/2" 4d finish nails every 16" to fasten the junction trim to the panel end. Install the next row of panels. The panel end will fit part way into the deeper side of the junction. This panel end will float free in the junction trim to allow for expansion and contraction of the WoodWorks Grille – Classics panels ***(Fig 15)***.



(Fig 15)

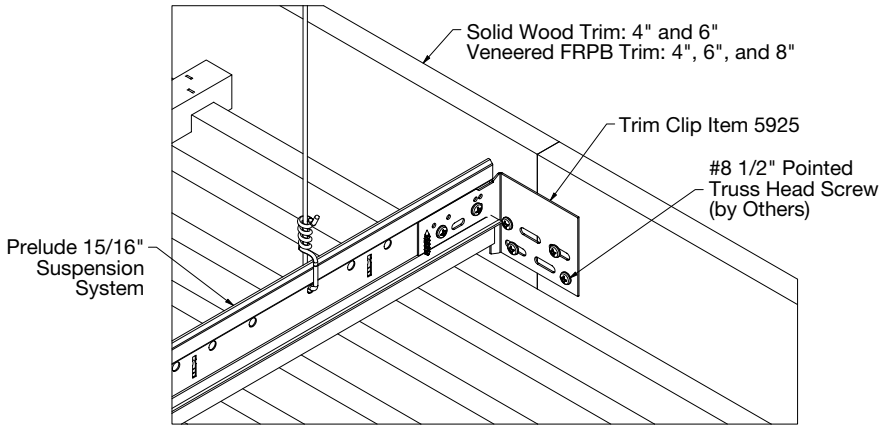
3.6 WoodWorks Grille – Classics Trim

3.6.1 End caps can be used as trim for the panel end when the installation is not wall to wall, a floating cloud, or trim around a fixture. Cut the end cap trim to fit, as required, and use 1-1/4" 3d finish nails every 16" to fasten the end cap to the panel end ***(Fig 16)***.



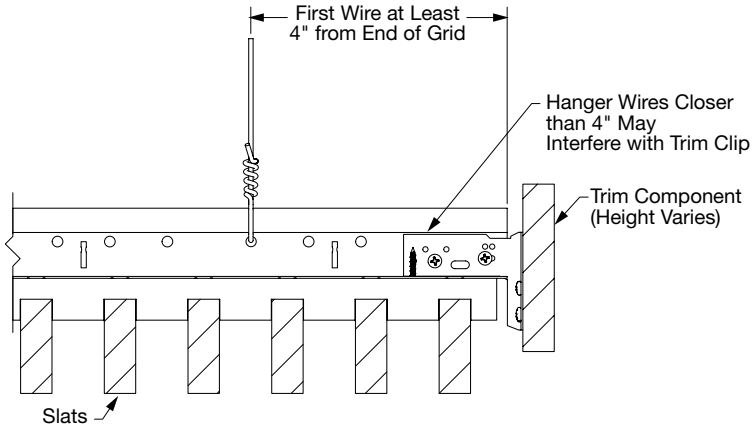
(Fig 16)

3.6.2 For discontinuous or cloud installations, 4" and 6" solid wood trims are available in coordinating finishes. These trim pieces are to be used in clouds with straight perimeter borders only, no curves. Cut the trim to fit as required and join the pieces with a biscuit joint. Use a #20 biscuit and wood glue to join two pieces of trim together on a straight run or at a mitered corner. Use one biscuit for 4" trim and two biscuits with 6" trim. A finishing pin nail can be used to hold your mitered corners together while your biscuit joint dries. Item 5925 trim clip (4 clips included with each 8' trim) which is used to fasten trim to the suspension system every 2' O.C. aligning with 24" x 24" grid module, can also be used to attach straight pieces together at the joint once biscuit and glue have been applied ***(Fig 17)***.



(Fig 17)

Use #8 × 1/2" pointed truss head screws (by others) to attach Trim Clip (Item 5925) to trim. It is recommended that hanger wires are no less than 4" from the perimeter to allow the Trim Clip (Item 5925) to fasten to the grid without interference ***(Fig 18)***.



(Fig 18)

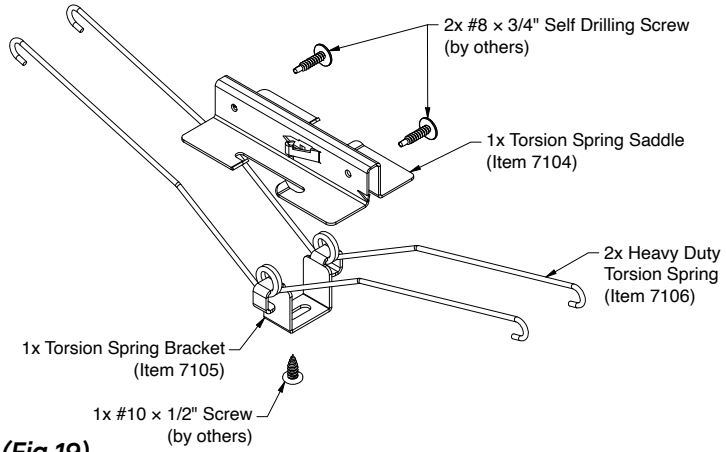
3.7 Mechanical Fixtures

3.7.1 Mechanical fixtures such as lights, speakers, and sprinklers should be installed into the acoustical suspension system before installing the WoodWorks® Grille – Classics panels. Fixtures can be installed at the suspension system height or flush with the bottom of the panel. Fixture weight or housing must be supported by the acoustical suspension system. Install additional cross tees for support, as needed. Refer to the ceiling plans for specific details. WoodWorks Grille – Classics panels can be cut to fit around fixture openings. Use the WoodWorks Grille – Classics end cap to trim the cut slats, or sand and stain, or paint exposed field-cut edges to match the panel finish.

3.7.2 For installations with Armstrong Integrated Lighting, refer to the supplemental Armstrong Integrated Lighting for WoodWorks Grille installation instructions for additional details and requirements.

3.8 Access Options

3.8.1 Before beginning, ensure all necessary tools and accessories are available as shown ***(Figs 19 & 20)***.



(Fig 19)

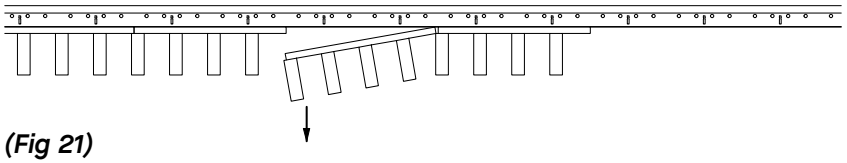
Accessories and Quantities Needed Per Panel Size
(All components to be ordered separately)

Torsion Spring Saddles (Item #7104)	**Torsion Spring Bracket** (Item #7105)	**Torsion Springs** (Item #7106)	**#10 × 1/2" Wood Screw** (By others) to fasten torsion spring bracket to backer	**#8 × 3/4" Self-tapping Screw** (By others) to fasten saddles to suspension system
4	4	8	4	4

Other Tools Needed
A drill and a size 1/8" drill bit will be needed to pre-drill backers prior to fastening the spring bracket to backers. This will minimize splitting or damage to backers. Drill extender with a magnetic tip may be required depending on the depth of the blades.

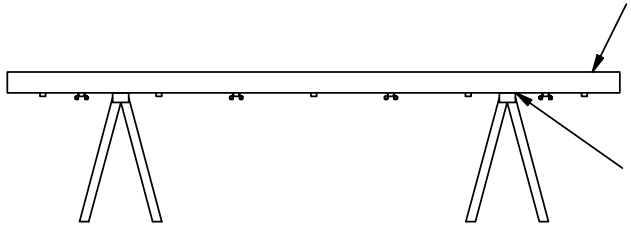
(Fig 20)

3.8.2 All panels are installed following the standard grille installation instructions. Identify and temporarily mark the panel intended for conversion. After installation is complete, remove the panel to be converted into an access door. Due to the panel's male-to-female construction, to uninstall the panel, lower the "female" side several inches to create an angle, then shift the entire panel horizontally toward the lowered side. This movement disengages the "male" backers from the adjacent panel, allowing panel to be safely cleared from the opening ***(Fig 21)***.

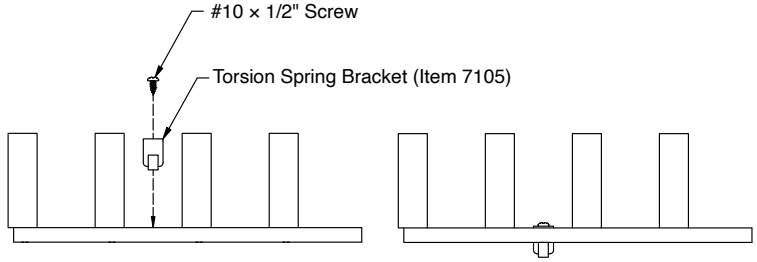


(Fig 21)

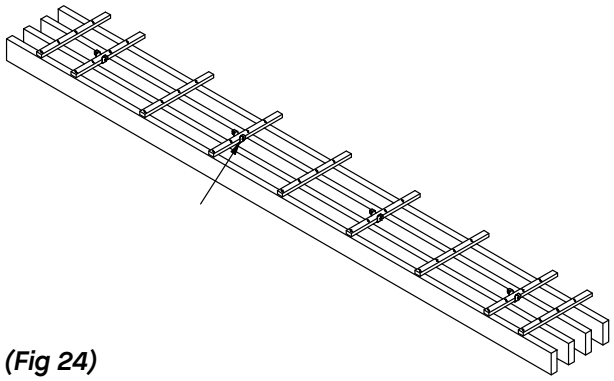
Using the torsion spring bracket (Item 7105) and #10 × 1/2" screw, modify the panels according to the details shown ***(Figs 22 – 24)***.



(Fig 22) Flip panels upside down to install torsion spring brackets to panel backers. Place upside down on saw horses, ensuring the top of the wood slats rests on the saw horses, not the backers.

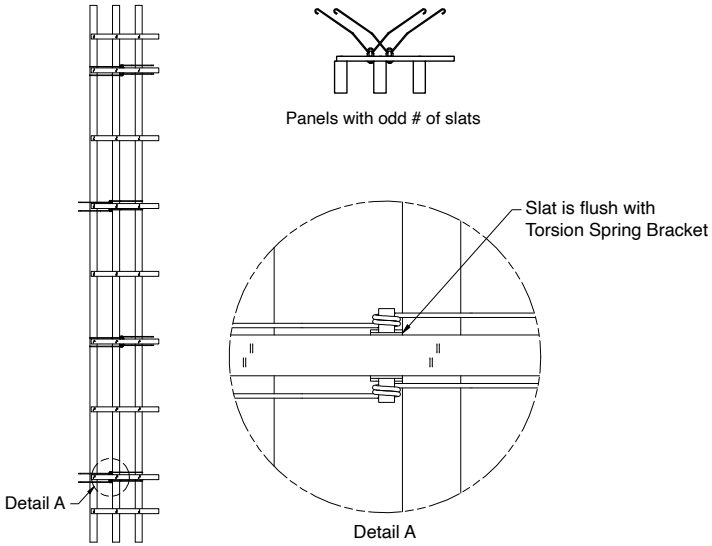


(Fig 23) Screw-attach the torsion spring brackets to panel backers. Take care not to bend the bracket tabs while installing.

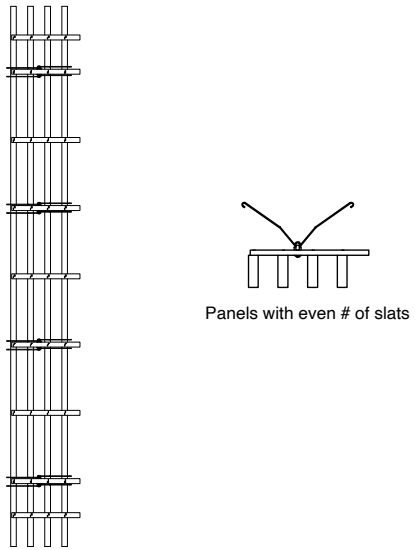


(Fig 24)

On each hanging backer, position the torsion spring brackets (Item 7105) based on the total number of slats in your panel as shown ***(Figs 25 & 26***).

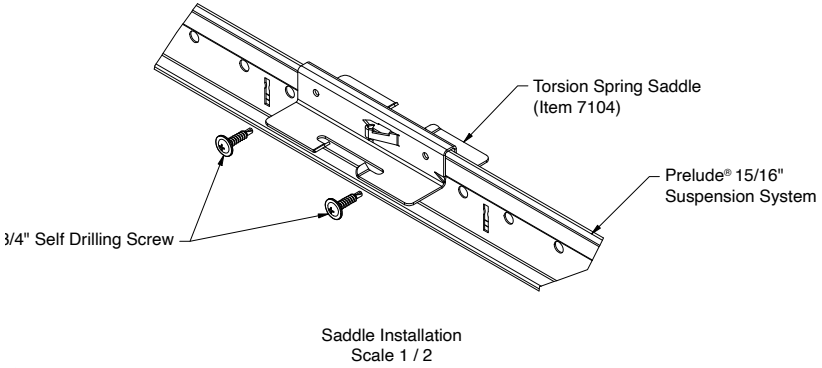


(Fig 25) For panels with an odd number of slats, alternate the position of every other torsion spring brackets on either side of the central slat. Ensure the bracket is flush to the side of the slat.



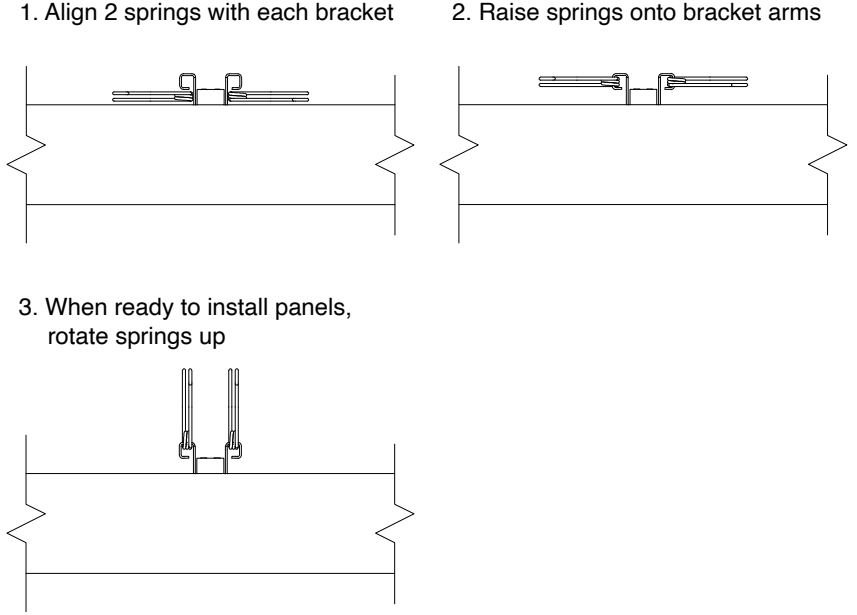
(Fig 26) For panels with an even number of slats, place torsion spring brackets centered on hanging backers.

3.8.3 Measure the exact bracket locations on the modified panel. Use these dimensions to position the saddles on the grid so they are perfectly aligned to receive the springs. Once the position is verified, secure each mounting saddle to the suspension system using a #8 x 3/4" self-tapping screw (by others) ***(Fig 27)***.



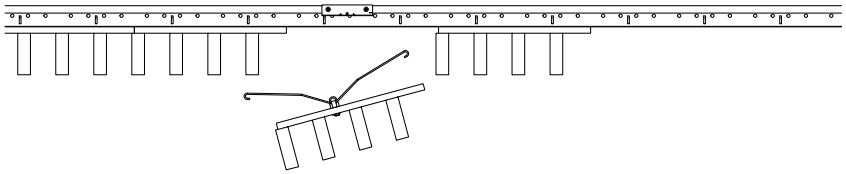
(Fig 27)

3.8.4 Install the torsion springs onto the panel as shown ***(Fig 28)***.

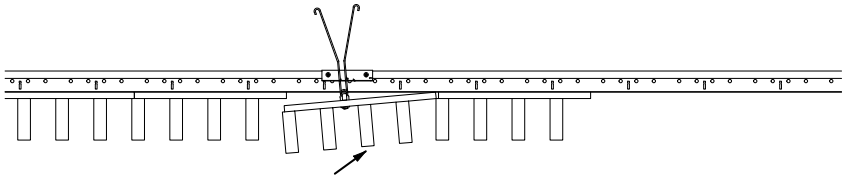


(Fig 28)

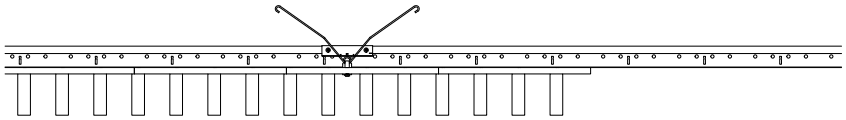
3.8.5 Raise the panel and align each spring with its corresponding saddle slot. Installing the springs progressively across the panel may ease the process. Once springs are engaged, tilt the panel to lead with the "male" side, sliding it horizontally to tuck the protruding backer behind the adjacent "female" panel. Once the joint is engaged, pivot the panel upward until level and push firmly to allow the torsion springs to pull the panel flush into its original position ***(Fig 29)***.



1. Raise panel and align with attached saddles on grid.



2. Compress springs and engage them with saddles. Once hanging, tilt the panel and tuck the backer behind the space above the first slat of the next panel.



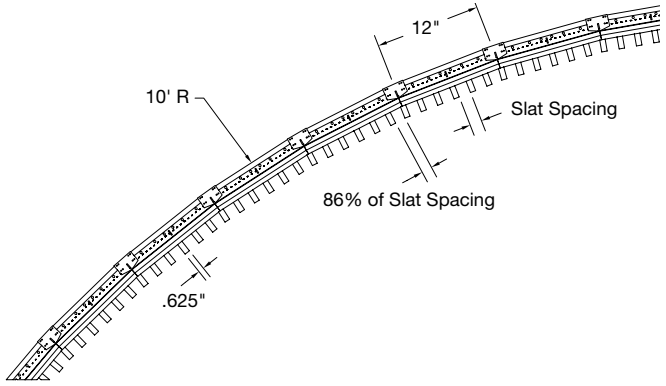
3. Pivot the other side of the panel up into place and allow torsion springs to fully engage, pulling the panel tight to the grid.

(Fig 29)

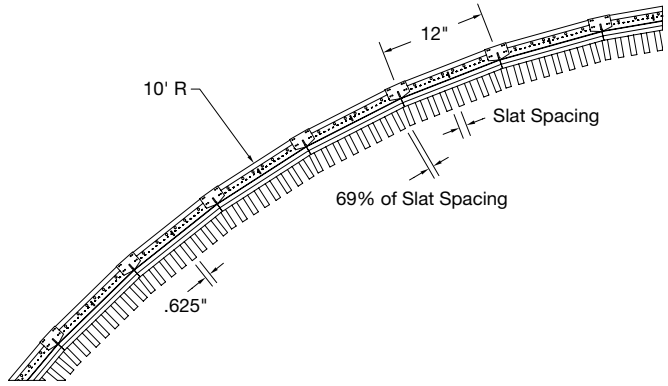
4. WOODWORKS FACETED INSTALLATIONS

Only WoodWorks® Grille – Classics panels with backers (not dowels) must be used for faceted installations.

WoodWorks Grille – Classics panels can be installed to create a faceted ceiling vault or wall-to-ceiling transition. As the radius of the arc gets smaller, slat spacing between panels gets tighter. We recommend extra consideration when planning for faceted installations ***(Figs 30 & 31)***.



(Fig 30)



(Fig 31)

4.1 Faceting a Main Beam

4.1.1 To facet the main beam, field cuts must first be made to the suspension system.

Cut the bulb and web of the main beam at 12" intervals. Use every other cross tee route for reference.

4.1.2 Use a curved template of the appropriate radius to hold the main beam in position as you attach RC2 clips.

4.1.3 Bend the main beam at the field cuts and clamp it to the template.

4.1.4 Position an RC2 radius clip over each cut in the main beam. Screw the RC2 clip over each cut with four #6 × 7/16" sharp point screws per clip — one screw at each corner.

For tips on creating a faceted curved suspension system, see the Drywall Grid Technical Guide, BPCS-3540. A copy is available on the web at *armstrong.com/drywall*

4.2 Faceted Suspension Systems

Faceted main beams are 24" O.C. and cross tees are 24" O.C.

4.2.1 Refer to the reflected ceiling plan and elevation view to determine the suspension system layout and height.

4.2.2 Install wall molding along the perimeter at the determined suspension system elevation. NOTE: Molding along the curved side must be cut, faceted, and fastened to the wall to match the faceted main beams.

4.2.3 Refer to the reflected ceiling plan to determine the panel orientation and size.

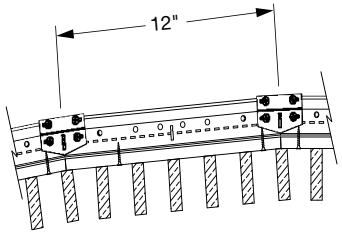
4.2.4 Use 12-gauge hanger wire 48" or 36" (depending on weight of Grille panel lbs/SF) O.C. along the arc to support the main beams.

4.3 WoodWorks® Grille – Classics Panel Faceted Installations

4.3.1 All panels must be direct screw-attached to every faceted main beam. Prior to screw-attaching the backer to the 15/16" suspension system, it is required to pre-drill 3/32" holes in the hanging backers to prevent splitting.

4.3.2 Panel installation should start at the lowest point and work up to the highest point with the male end down.

4.3.3 12" long backers must be aligned with the 12" facet on the main beam. Two screws per backer into each main beam facet are required ***(Fig 32).***



(Fig 32)

4.4 WoodWorks® Grille – Classics Accessories Faceted Installations

Use of WoodWorks Grille – Classics accessories for faceted installations is not recommended. When trim accessories are required, the installer must field miter, join, and attach the trim to exactly match the faceted panels.

4.5 Wall Installations *(Fig 33)*

4.5.1 Panel orientation can be horizontal or vertical and only panels with 2-1/4" slat depths and under are recommended for wall installations.

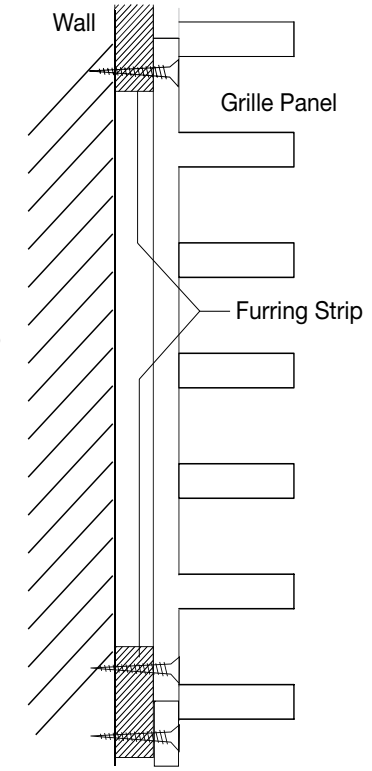
4.5.2 Furring strips should be attached to wall structure and then the WoodWorks Grille – Classics should be attached to the furring. Pre-drill clearance hole in backer.

4.5.3 Furring spacing – for backer panels, furring spacing is 12" O.C. The seam of the two panels should meet at the center of the furring.

4.5.4 For panel attachment, use two screws per backer. Prior to screw-attaching panel, it is required to pre-drill 3/32" holes in the hanging backers to prevent splitting.

4.5.5 WoodWorks Grille – Classics panels can be cut to fit receptacles or other wall fixtures. Use normal woodworking tools to achieve the desired opening. Attach backer (by others) for extra support as needed.

4.5.6 Use the WoodWorks Grille – Classics end cap to trim cut slats, or sand and stain, or paint exposed field cut edges to match the panel finish.



Grille Panel Backer

(Fig 33)

5. CUTTING

When you cut a panel to length, you can use normal woodworking tools (e.g., circular saws, saber saws, coping saws, etc.). Penetrations for sprinklers (or other fixtures) can be accomplished by simple interruption of the wood panels at those locations or by using normal woodworking tools to cut access in the panels.

CAUTION: WOOD DUST. Sawing, sanding, and machining wood products can produce dust. Airborne wood dust can cause respiratory, eye, and skin irritation. The International Agency for Research on Cancer (IARC) has classified wood dust as a nasal carcinogen in humans.

Precautionary measures: If power tools are used, they should be equipped with a dust collector. If high dust levels are encountered, use an appropriate NIOSH-designed dust mask. Avoid dust contact with eyes and skin.

First Aid measure in case of irritation: In case of irritation, flush eyes or skin with water for at least 15 minutes.

6. SEISMIC INSTALLATION

WoodWorks Grille – Classics systems have been engineered and tested for application in all seismic areas based on these installation procedures. The following installation guidelines are required in areas where anticipated seismic activity will be moderate to severe (IBC Seismic Design Categories C, D, E, and F). Consult the local building department to ensure compliance with their unique requirements.

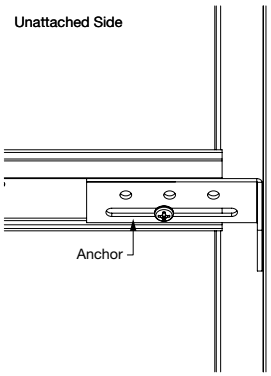
6.1 Suspension System Installation

Use a heavy-duty 15/16" Prelude® XL® T-Bar suspension system to support the WoodWorks Grille – Classics panels as listed in Section 3.2. The installation must, in all cases, conform to the International Building Code Seismic Design Category D, E, and F. Refer to Armstrong Seismic Ceiling Installation Guide BPCS-4141 for more details.

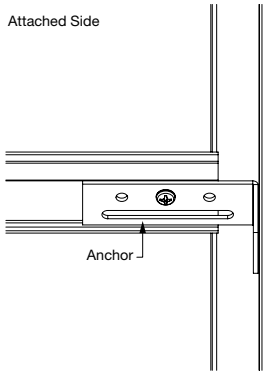
Refer to the reflected ceiling plan to determine the panel orientation and size. Panel weight will determine the suspension system layout (refer to the product data page for panel weights). Backers or dowels must be aligned with the main beams and/or cross tees. The first main beam should be no more than 12-1/2" off the wall and then follow the spacing requirements as shown.

For panels weighing less than 3 LBS/SF:

- Main beams are installed at 48" O.C. with hanger wires supporting at no more than 48" O.C. along the mains
- XL7341 4' cross tees installed at 24" O.C. between the main beams
- XL8320 2' cross tees installed at the midpoints of the 4' cross tees, creating a 24" x 24" module
- All grid connections to the wall are required to use the WoodWorks® Torsion Spring heavy-duty Wall Anchor (Item 7100) in lieu of the BERC2 to meet the attached and unattached wall requirements ***(Figs 34 and 35)***.



(Fig 34)



(Fig 35)

For panels weighing greater than or equal to 3 lbs/SF:

- Main beams are installed at 24" O.C. with hanger wires supporting at no more than 48" O.C. along the mains
- XL8320 2' cross tees installed at 24" O.C. between the main beams, creating a 24" x 24" module
- All grid connections to the wall are required to use the WoodWorks Torsion Spring heavy-duty Wall Anchor (Item 7100) in lieu of the Beam End Retaining Clip (BERC2) to meet the attached and unattached wall requirements ***(Figs 34 and 35)***.

In addition to the requirements noted on previous page, follow ASTM C636 requirements. The requirements listed here represent the manufacturer's minimum acceptable installation recommendation, and may be subject to additional requirements established by the local authority having jurisdiction.

Seismic Rx®
Ceiling installation should conform to basic minimums established in ASTM C636.

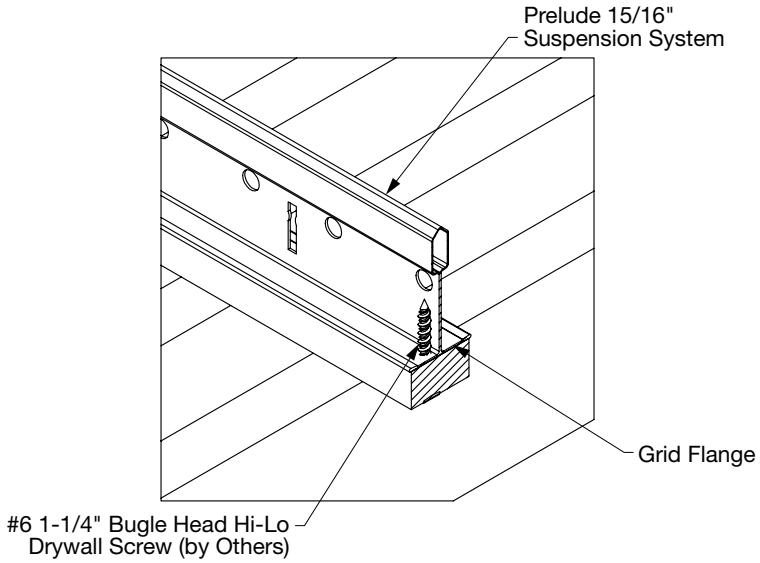
- Minimum 7/8" wall molding
- Suspension system must be attached on two adjacent walls
- Opposite walls require Beam End Retaining Clip (BERC2) with 3/4" clearance
- HD Wall Anchor maintains main beam and cross tee spacing; no other components required
- Heavy-duty systems as identified in ICC-ESR-1308
- Safety wires required on light fixtures
- Perimeter support wires within 8"
- Ceiling areas over 1,000 SF must have horizontal restraint wire or rigid bracing
- Ceiling areas over 2,500 SF must have seismic separation joints or full-height partitions
- Ceilings without rigid bracing must have 2" oversized trim rings for sprinklers and other penetrations
- Changes in ceiling plane must have positive bracing
- Cable trays and electrical conduits must be independently supported and braced
- Suspended ceilings will be subject to special inspection
- Suspension layouts are the same as described in Section 6.1: Suspension System Installation
- Connection to wall – See BPCS-4141 *Seismic Design: What You Need to Know – Code Requirements Seismic Rx Tested Solutions – Seismic Rx Approaches To Category C and D, E, and F Installations*
- Special bracing required – See BPCS-4141 *Seismic Design: What You Need to Know – Code Requirements Seismic Rx Tested Solutions – Bracing and Restraint for Seismic Installations*
- Seismic separation joints – See BPCS-4141 *Seismic Design: What You Need to Know – Code Requirements Seismic Rx Tested Solutions – Seismic Separation Joints*

6.2 WoodWorks® Grille – Classics Panel Installation

WoodWorks Grille – Classics panels must be mechanically secured to the suspension system for installations in IBC Seismic Design Categories C, D, E, and F.

6.2.1 Option 1 – Direct Screw Attachment – Panels with Backer Only
This option is for WoodWorks Grille – Classics panels with backers only.

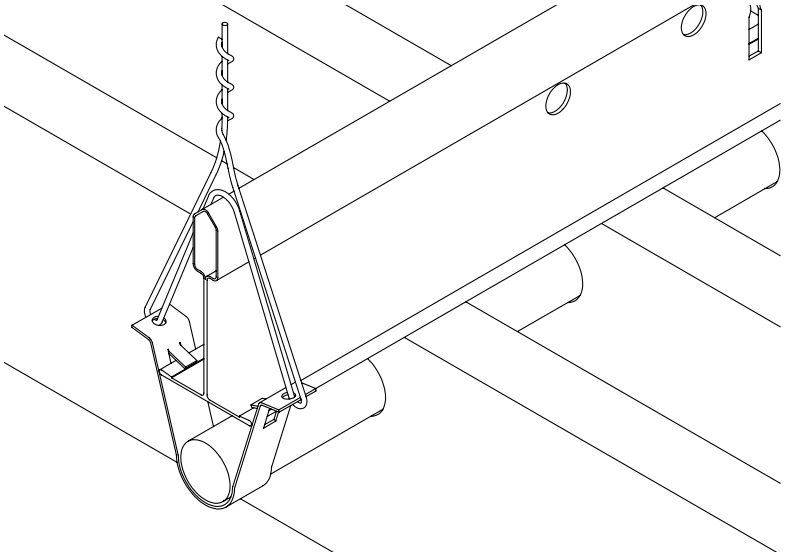
Position the WoodWorks Grille – Classics panels on the suspension system and direct screw-attach to the suspension system using standard #6 × 1-1/4" bugle head hi-lo drywall screws. Prior to screw-attaching panel to the suspension system, it is required to pre-drill 3/32" holes in the hanging backers to ease installation and prevent splitting. Use two screws in each backer that aligns with the suspension system, typically eight fasteners per 8' panel. Panels are accessible with this option ***(Fig 36)***.



(Fig 36)

6.2.2 Option 2 – Clip Attachment – Panels with Dowels Only
This option is for WoodWorks Grille – Classics panels with backers or dowels. Attach the panel to the suspension system as described in Section 3.3. with the appropriate clip. Next, use an 18-gauge wire tie to securely tie the clip to the suspension system. This is a progressive installation and the wire ties should be done in sequence for ease of installation.

- Bend a 10" to 12" piece of wire tie into a V shape
- Slip the wire over the suspension system and insert the wire ends into the holes of the clip
- Next, pull the wire ends up over the bulb of the suspension system and twist to secure the clip to the suspension system, a minimum of three turns
- Wire ties are required on a minimum of eight clips per 8' panel ***(Fig 37)***

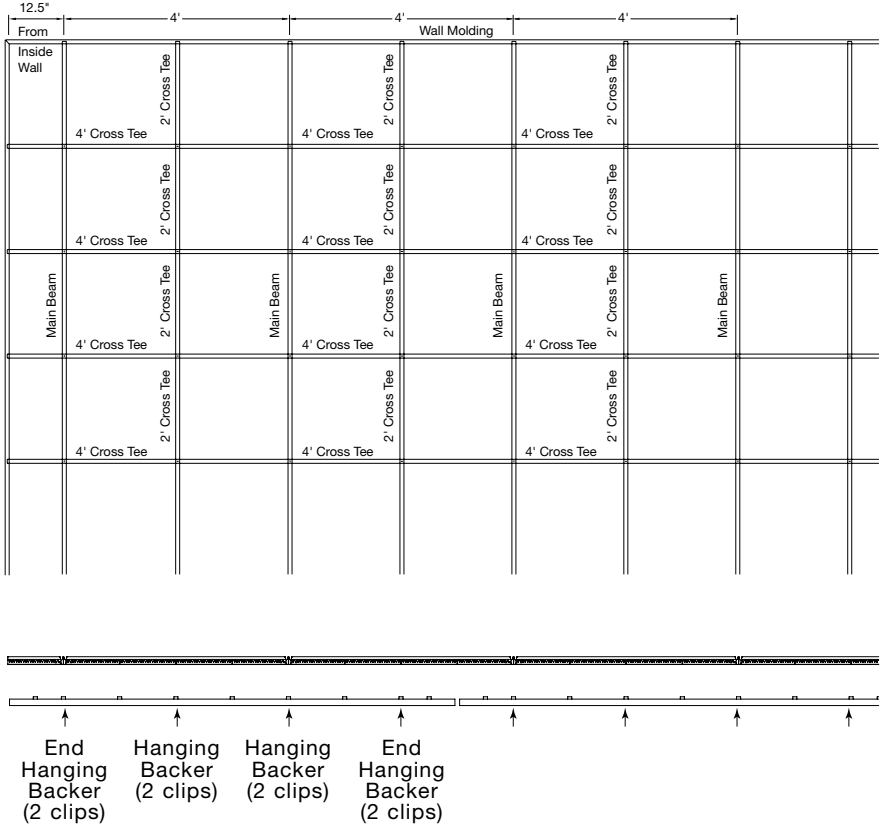


(Fig 37)

WoodWorks Grille – Classics panels installed with this option are not easily accessible.

Testing conducted at the Structural Engineering Earthquake Simulation Laboratory, located at the State University of New York – Buffalo campus, produced satisfactory results with the guidelines listed in Section 6.

7. TYPICAL GRID PLAN (REFER TO SECTION 6.1 FOR GRID LAYOUT REQUIREMENTS FOR SEISMIC INSTALLATIONS) *(Fig 38)*



(Fig 38)

8. CLEANING RECOMMENDATIONS

There are three methods that we recommend for cleaning a WoodWorks® Grille – Classics panel. First, the panels can be vacuumed to remove any dust or dirt that may accumulate on the slats or backers. Second, use a clean, dry, soft cloth to wipe off any dirt or greasy fingerprints. If this does not clean the panel, use a damp, clean, soft white cloth or sponge with a mild detergent to wipe the panel. Third, for scuff marks that may have transferred from the backers or dowels to the slats; use a clean, soft white cloth with either naptha or mineral spirits to clean scuff marks on solid wood slats. We recommend wiping the slats with normal pressure, and do not recommend scrubbing the slats with the cloth.

MORE INFORMATION

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

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