

DESIGNFlex™ Shapes – LYRA®, CALLA®, OPTIMA®, ULTIMA®, METALWORKS™ Panels

Design and Installation Considerations

This system is unique to the ceilings industry. These considerations only apply to Armstrong® DESIGNFlex™ Shapes panels and grid components. Please completely read all instructions before beginning installation to avoid potential re-work.

Installation videos for this system are available at: www.armstrongceilings.com/shapesinstallation. Contact TechLine for additional questions.

1. GENERAL

1.1 Layouts

1.1.1 Ceiling Plan Drawing and Bill of Materials (BOM) from the pattern gallery are drawn in ceiling plan view and are not Reflected Ceiling Plans (RCP's). The naming terminology of panels and brackets is based on the face view of the product.

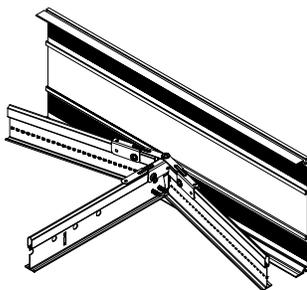
1.1.2 Angle measures are communicated as nominal. Ceiling plan drawings must use Armstrong's nominal 45, 60, and 75 panels and brackets that align with the 6" On Center (O.C.) rout hole spacing of the mains.

1.2 Wall-to-Wall Installations

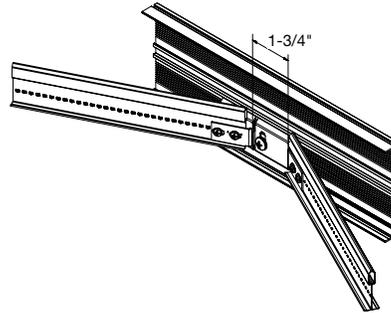
Due to variability of wall conditions, installing full-size panels at the borders is not recommended.

1.3 Floating Perimeters/Trim for Discontinuous Ceilings

1.3.1 Design layouts must have grid intersections occur directly at the perimeter utilizing the Perimeter Angle Clip (PAC).



Or have at least 1-3/4" between single grid connections to the trim utilizing AXTBC's.



1.3.2 4" Axiom® or higher is recommended to prevent interference with the upper flange of the Axiom and the installation of the Perimeter Angle Clip.

1.3.3 Layouts that have grid connecting to the trim at an angle change (corner) will require the Axiom Perimeter Corner Clip (PCC). The PCC is only compatible with the AX4SPLICEB Axiom Splice Plate, and cannot be used in conjunction with Corner Posts.

1.3.4 If creating DESIGNFlex Shapes clouds, it is recommended that the Axiom be ordered as custom to ensure the proper grid and trim interface.

1.3.5 When ordering custom Axiom for full-size panels or full-size modules (2' or 4' O.C.) it must be specified at time of order that the Axiom is for DESIGNFlex Shapes so that the proper adjustments can be made to the shop drawings.

1.3.6 Based on the design layout, independent support of the Axiom is recommended for installation purposes.

2. PANEL INSTALLATION

2.1.1 Plenum

A minimum of 6" of clearance above the grid is recommended for all installations and will allow all panel sizes and shapes to be installed without interference. **NOTE:** MEP fixtures may require more space and may determine the minimum plenum height for the installation.

2.1.2 Cut Panels within the Field

Only full-size panels should be used within the field of the installation. Only perimeter panels can be field-cut to size.

2.1.3 Color/Finish Directionality Consideration

Panels such as Lyra®, Calla®, and Woodgrain products have a directional finish. When using these products, use care when combining DESIGNFlex™ Shapes panels with square and rectangles.

3. FIXTURE INTEGRATION

3.1.1 Fixtures requiring TechZone® Yoke (TZYK) are not compatible with this system.

3.1.2 All TechZone layouts require technical zones that run parallel with main beam direction.

3.1.3 Use caution when combining TechZone panels that have a directional finish and DESIGNFlex™ Shapes panels that have a directional finish (Lyra®, Calla®, and Woodgrain products).

4. LIGHTS

4.1.1 Troffer lay-in light fixtures can be integrated into Right Triangle designs which use Corner Brackets and perpendicular XL® cross tees to create 2' x 2', and 2' x 4' modules.

4.1.2 45°, 60°, and 75° Shapes do not use grid components that create 2' x 2', 2' x 4' modules that are traditionally used to support certain fixtures. Reference the fixture manufacturer's instructions for installation details.

4.1.3 Pendant lighting, sprinklers, and other mechanical items must be independently supported.

5. SLOPES

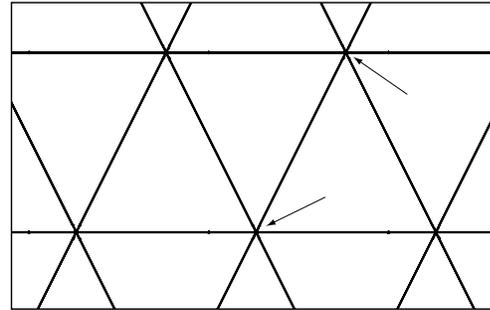
Sloped installations of DESIGNFlex Shapes are not recommended or warranted.

6. SITE CONDITIONS

DESIGNFlex Shapes cannot be installed in exterior spaces.

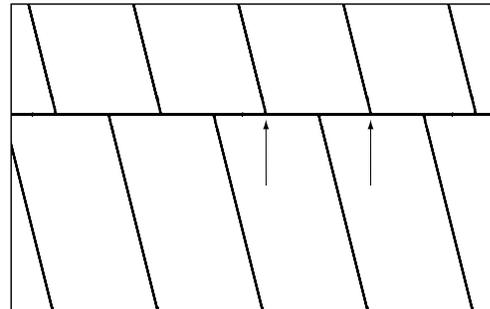
7. SEISMIC INSTALLATIONS

7.1.1 For ceiling installation areas over 1,000 SF, layouts with back to back (opposing) bracket connections to the main beams can be braced following standard spacing guidelines.



Opposed Bracket Connection

If single bracket connections occur (no opposing bracket occupying the same route hole) consult a professional engineer for lateral force bracing placement.



Unopposed Bracket Connection

7.1.2 Ceiling areas over 2,500 SF should have separation by bulkhead or partition wall braced to structure.

7.1.3 Lyra® and Optima® panels with main beam spacing of 4' O.C. will require Maximum Hold Down Clips (PMHDC) over all field panels due to the weight of the panels. This will require a progressive install as the clips must be placed over the panels after they are installed. These panels will also no longer be accessible. For these reasons, it is recommended that Calla® or Ultima® panels be used in seismic installations when possible.

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.

For the latest product selection and specification data, visit armstrongceilings.com/shapes.

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