ANDALUSIA

Installation Guide

Perforate™ Portal

ANDALUSIA DESIGN

Andalusia Design is a manufacturer of specialty ceiling, wall and space divider solutions. We combine the power of parametric design with best-in-class digital fabrication capabilities to deliver high-design architectural systems with unparalleled speed and efficiency. We have a large showroom and vertically-integrated manufacturing facility in Austin, TX, USA.

PERFORATE

Andalusia Design's Perforate system is a parametrically-designed, highly-configurable solution for your feature wall and ceiling system designs.

Driven by Andalusia's parametric design engine and in-house digital fabrication, Perforate is ideal for brand-forward, high-traffic areas across a variety of commercial and hospitality applications.

CONFIGURATIONS

Andalusia's parametric design software allows you to modify your surface designs in real-time.

Key parameters to think about during the design phase:

- Surface Design: Choose from a variety of Styles or create your own custom version

- Mounting Method: Wall, ceiling or wall-to-ceiling

- Material Type: Aluminum, steel of varying thicknesses

- Material Finish: Powder-coat, raw aluminum

- Pricing: A variety of perforation options allow you to balance pricing and aesthetic


FLOW

MONET

TRIANGLES
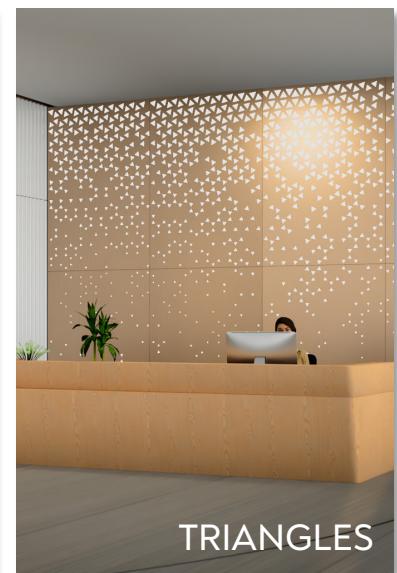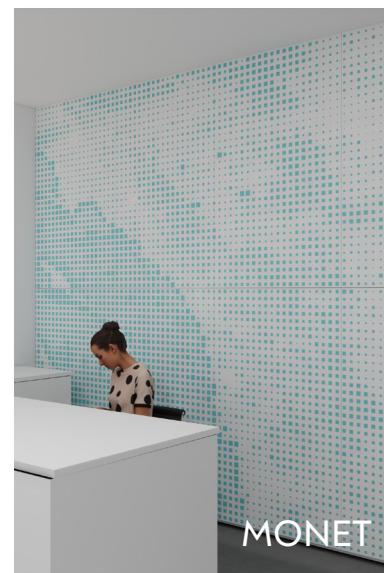
INSTALLATION OVERVIEW

Andalusia's Perforate Portals deliver fast, contractor-friendly installs for wall-to-ceiling perforated metal applications with integrated lighting and acoustics

Panels install directly into 15/16" T-grids for the ceiling and onto structure for wall

Torsion spring ceiling panels and drop-and-lock wall panels allow for quick installation with predictable labor estimates

Ceiling/wall panels, lighting and acoustic backing are delivered as a coordinated system

Panels remain fully removable for plenum / wall access and future maintenance

INTEGRATED LED
BACKLIGHTING SHEETS

KNOCKOUTS FOR LED
THROUGH-WIRING

LIGHTING PAN

CEILING GRID
BY OTHERS

ACRYLIC DIFFUSER

TORSION SPRINGS
PROVIDED BY ANDALUSIA

PERFORATED METAL
CEILING TILE
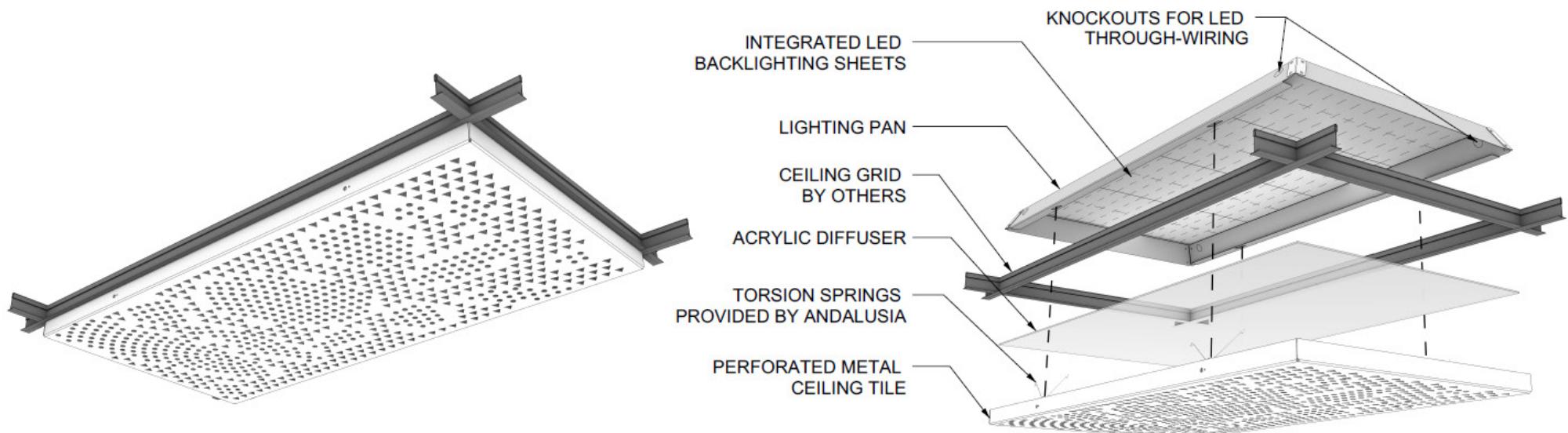
INSTALLATION HARDWARE

Andalusia provides individually-numbered tiles and the associated hardware required to attach the tiles to standard 15/16" grid systems and walls. Contractor will need to install a standard 15/16" ceiling grid and provide appropriate blocking for the wall.

HARDWARE PROVIDED BY ANDALUSIA

Screws

Spacer

Wall saddles

Saddle clips
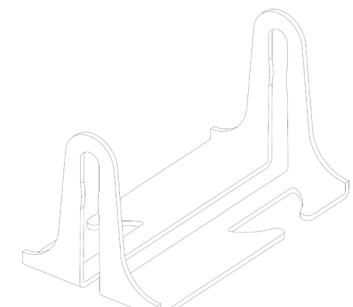
Ceiling Tiles (sizes vary; individually-numbered with torsion springs)

OTHER COMPONENTS (varies by application)

Acrylic panels are provided cut to size and pre-installed for many backlighting applications

Backlighting pan provided for lighting application – cut to size to match grid / panel
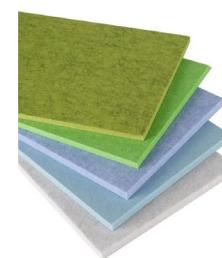
Felt panels are provided cut to size and pre-installed for many acoustic applications

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INSTALLING THE CEILING GRID

Andalusia will provide / use the schematic for how the standard grid system is laid out

The contractor is responsible for installing the grid. We recommend using the Armstrong Prelude XL 15/16" ceiling grid system or equivalent.

NOTE: Schematics should have been derived from final field measurements for wall-to-wall applications. Please validate field conditions PRIOR TO ORDER.
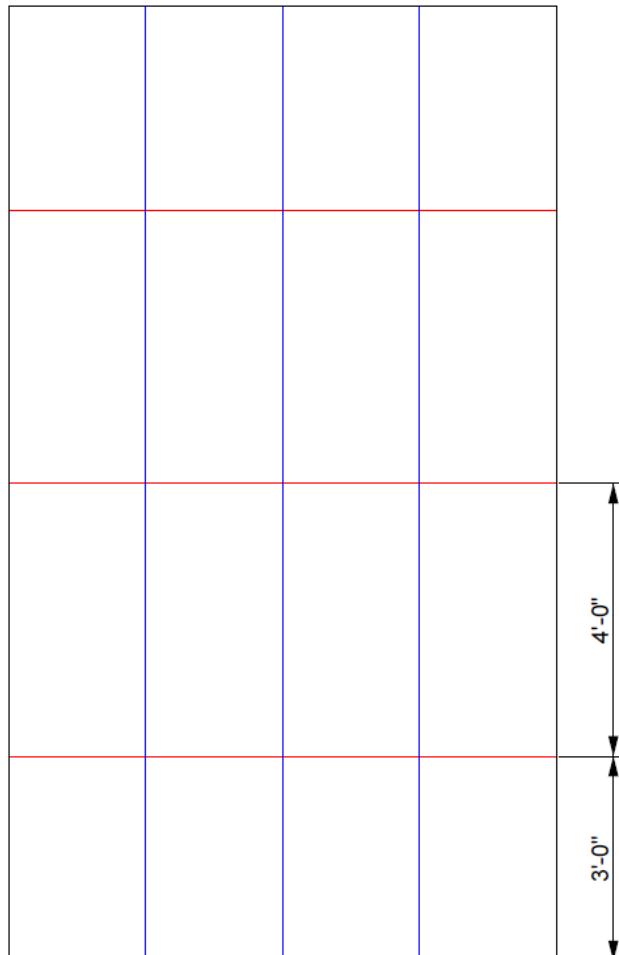
The contractor should install the main beams and cross T's per the grid specifications.

Verify that the grid is level and square to prevent any misalignment or fit issues with the Perforate tiles.
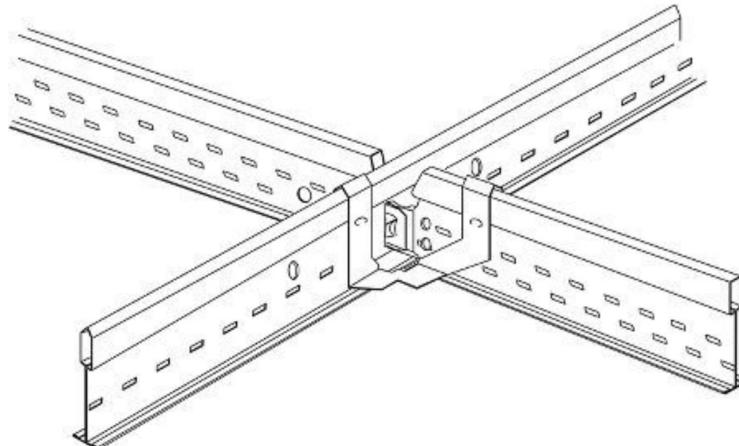
Check the installed grid for any damages, misalignment, or uneven surfaces. The grid should be stable and secure, as this will directly impact the appearance and stability of the Perforate tiles. .

MARKING GRID ACCESSORIES (*non-lighting applications ONLY)

0'-9"

4'-0"

3'-0"

0'-9"

0'-9"
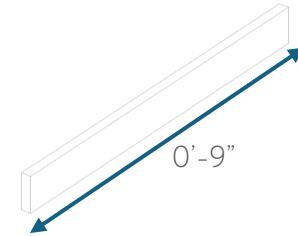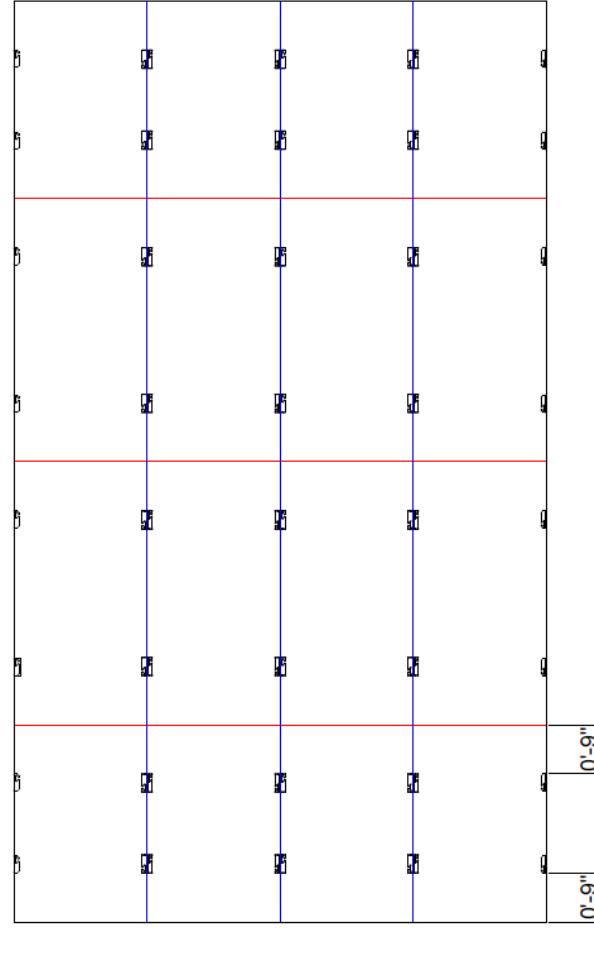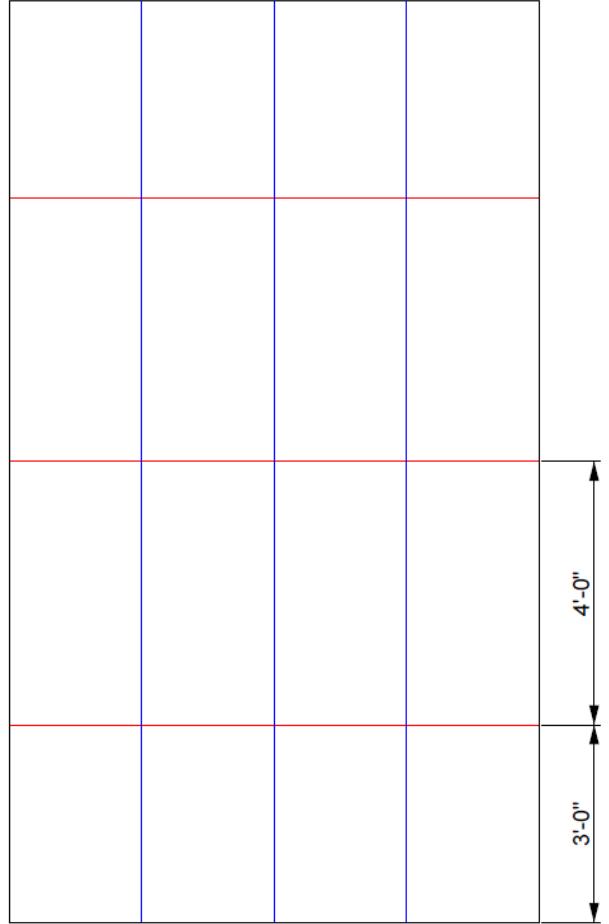
A spacer will be provided by Andalusia to measure and mark the saddle clip and wall saddle locations per the schematic

ADDING GRID ACCESSORIES (*non-lighting applications ONLY)

Perforate tiles use torsion springs to clip into and engage with the grid. Saddle clips (provided by Andalusia) must be installed to capture the torsion spring mechanism.

For wall-to-wall applications, Andalusia provides wall saddles that should be applied to the drywall

Andalusia provides saddle clips that clip into the standard 15/16" grid system
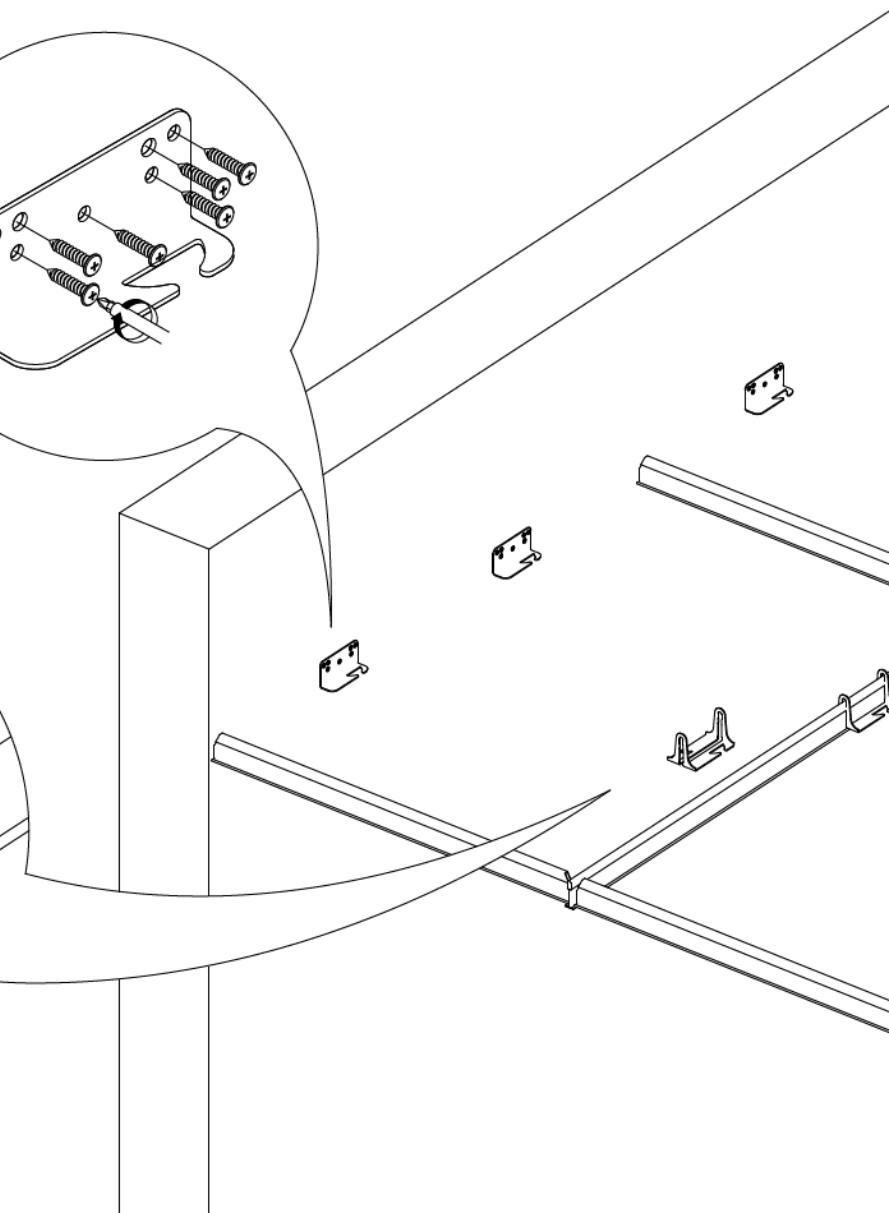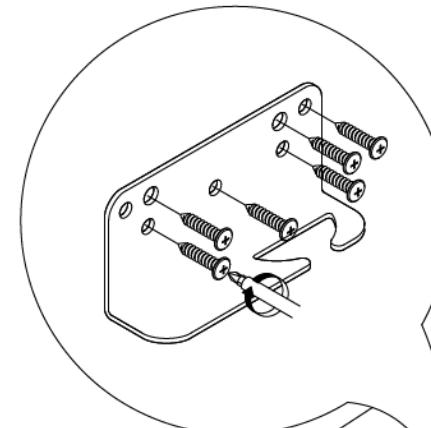
CEILING MOUNT WITH BACKLIGHTING

Unlike many other perforated metal systems on the market, our backlighting pan solution comes fully wired with an array of LEDs, resulting in a faster, cleaner installation.

Andalusia's backlighting pan comes with slots for torsion spring engagement – you don't need a slotted grid or extra hardware when using Andalusia backlighting.
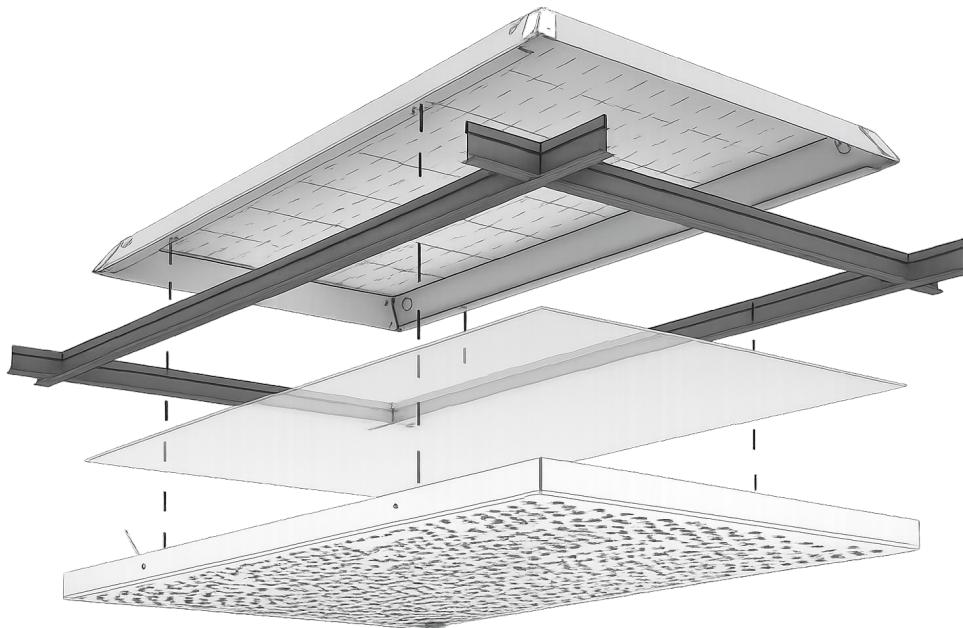
Exploded view of lay-in lighting pan, grid, acrylic diffuser and Perforate panel
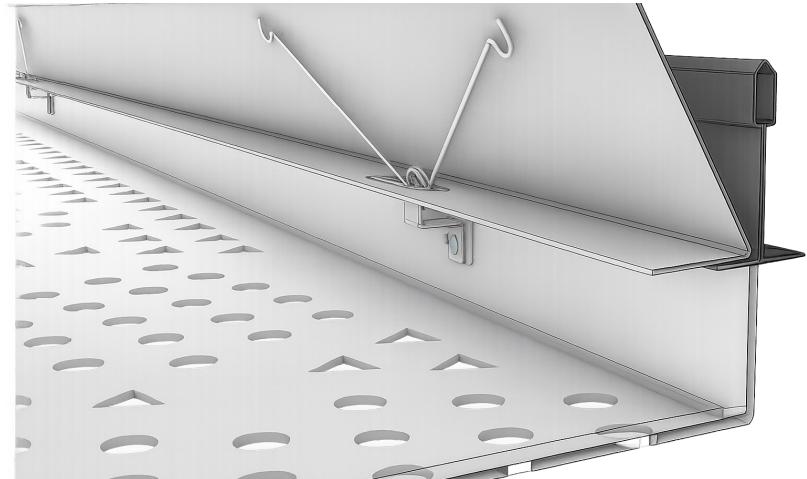
Torsion springs engage directly to slots in the lighting pan

CEILING MOUNT WITH ACOUSTIC INFILL

Perforate with acoustic material backing is a high-performance panel system that combines precision-perforated aluminum face panels with acoustic backing integrated directly to the back of the panels

Acoustic backing can be design-forward PET or cost-effective commodity infill
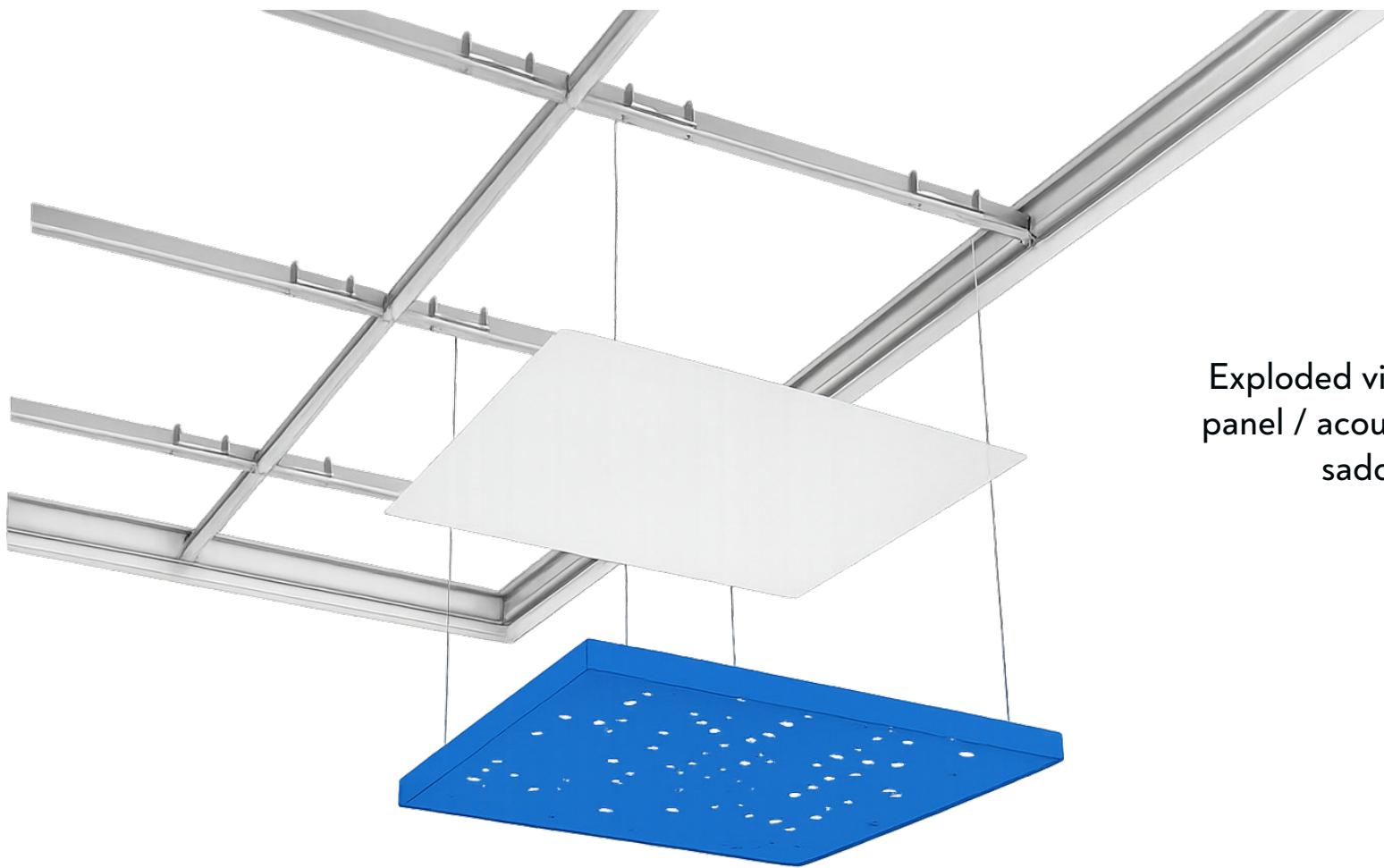
Exploded view of the Perforate panel / acoustic infill / Grid with saddle clip stack

CEILING TILE LAYOUT AND NUMBERING

Perforate ceiling tiles are usually all unique, so must be installed in the correct order. All tiles are numbered and are positioned according to the project schematic.

2D schematic

Tile numbering

0	4	8	12
1	5	9	13
2	6	10	14
3	7	11	15
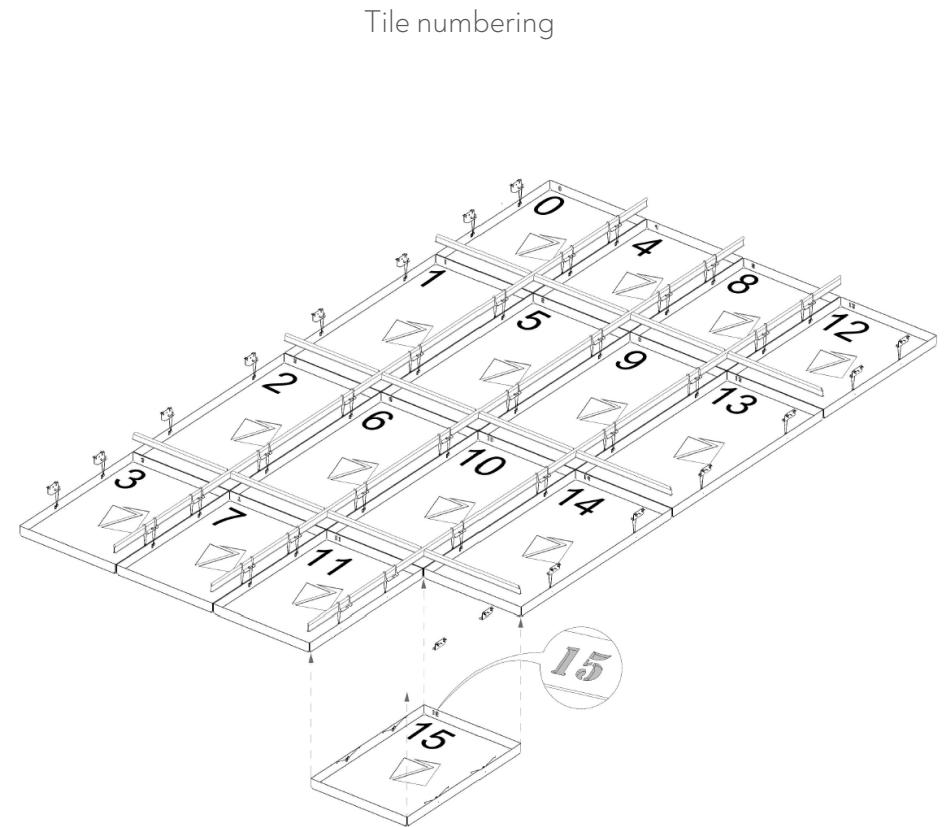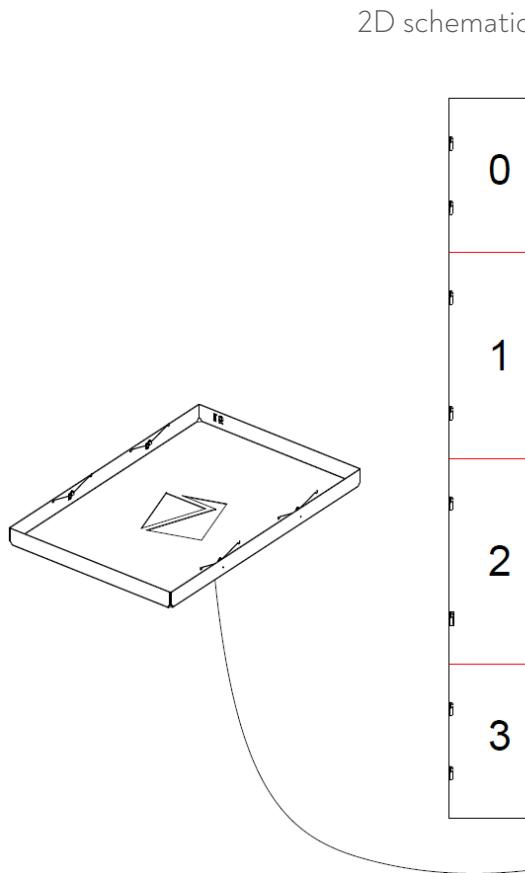
INSTALLING THE CEILING TILES

Perforate tiles use torsion springs to clip into and engage with the grid. Saddle clips or the LED backlighting pan must be installed to capture the torsion spring mechanism. Once fully engaged, the tile can be pushed vertically into the grid.

1. Position the 2'x4' Perforate tile below the desired grid location

2. Align the tile so that the torsion springs are directly above the saddle clips.

3. With the tile positioned, compress the torsion springs by pushing the tile upward into the grid opening.

4. Guide the springs into the saddle clips, allowing them to expand and lock the tile into place.

5. Ensure all four corners are securely engaged.

6. A firm push may be required to fully seat the springs in the clips.

7. Once installed, check the tile for alignment. If adjustment is needed, carefully compress the torsion springs and reposition the tile until proper alignment is achieved.

Squeeze the torsion spring and hook it through the appropriate saddle location on the grid / wall
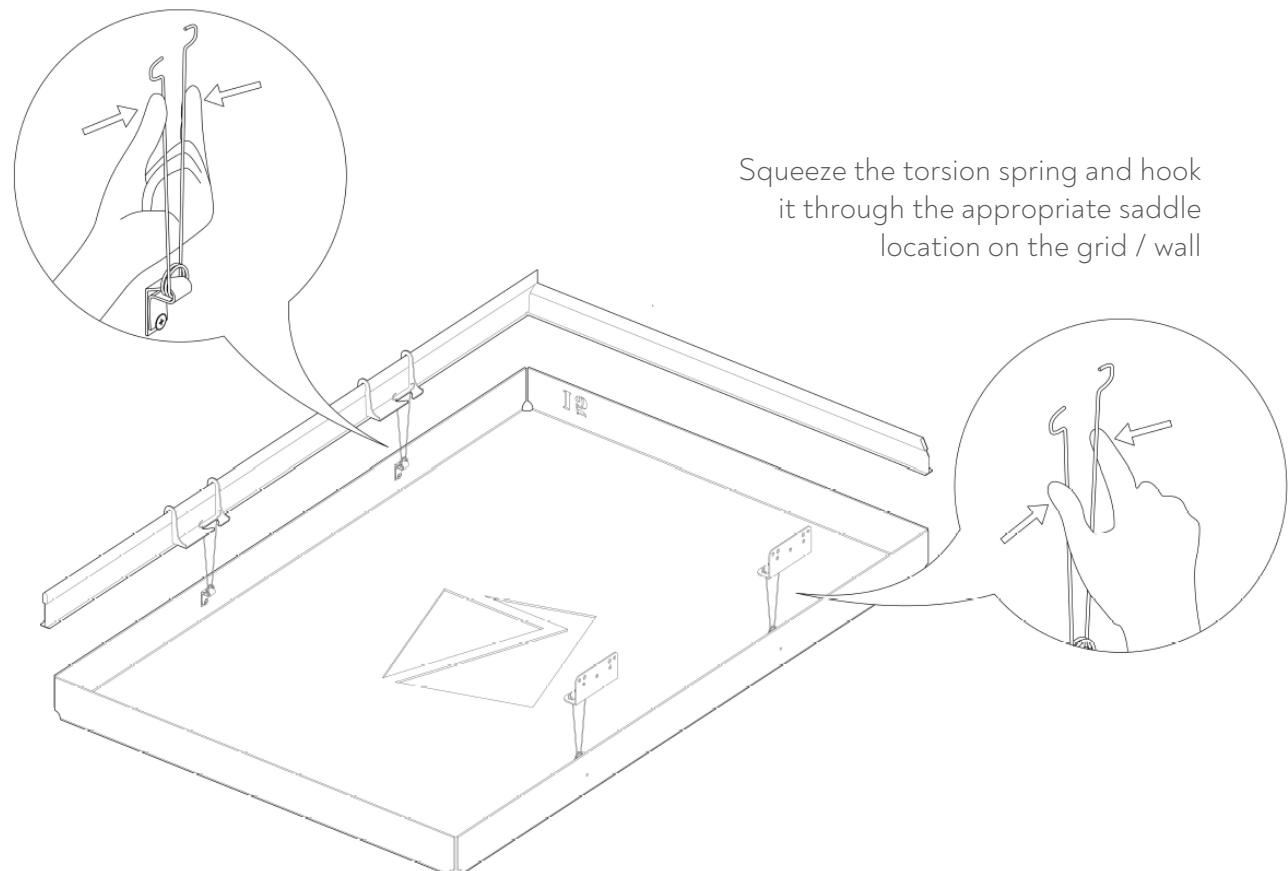
INSTALLATING THE WALL MOUNTING SYSTEM

Andalusia will provide the schematic for where the mounting rails and associated blocking need to be located at the time of shop drawings.

Contractor will apply fasteners thru pre-existing holes in the rails to the substrate.

0.50" FROM EDGE

0.50" FROM EDGE

225.25" OPENING WIDTH

28.03" 28.03" 28.03" 28.03" 28.03" 28.03" 28.03" 28.03"

0.50" ABOVE TOEKICK

HORIZONTAL DATUM ½" ABOVE TOEKICK

MIDDLE MOUNTING RAILS

LEFT EDGE MOUNTING RAIL   RIGHT EDGE MOUNTING RAIL
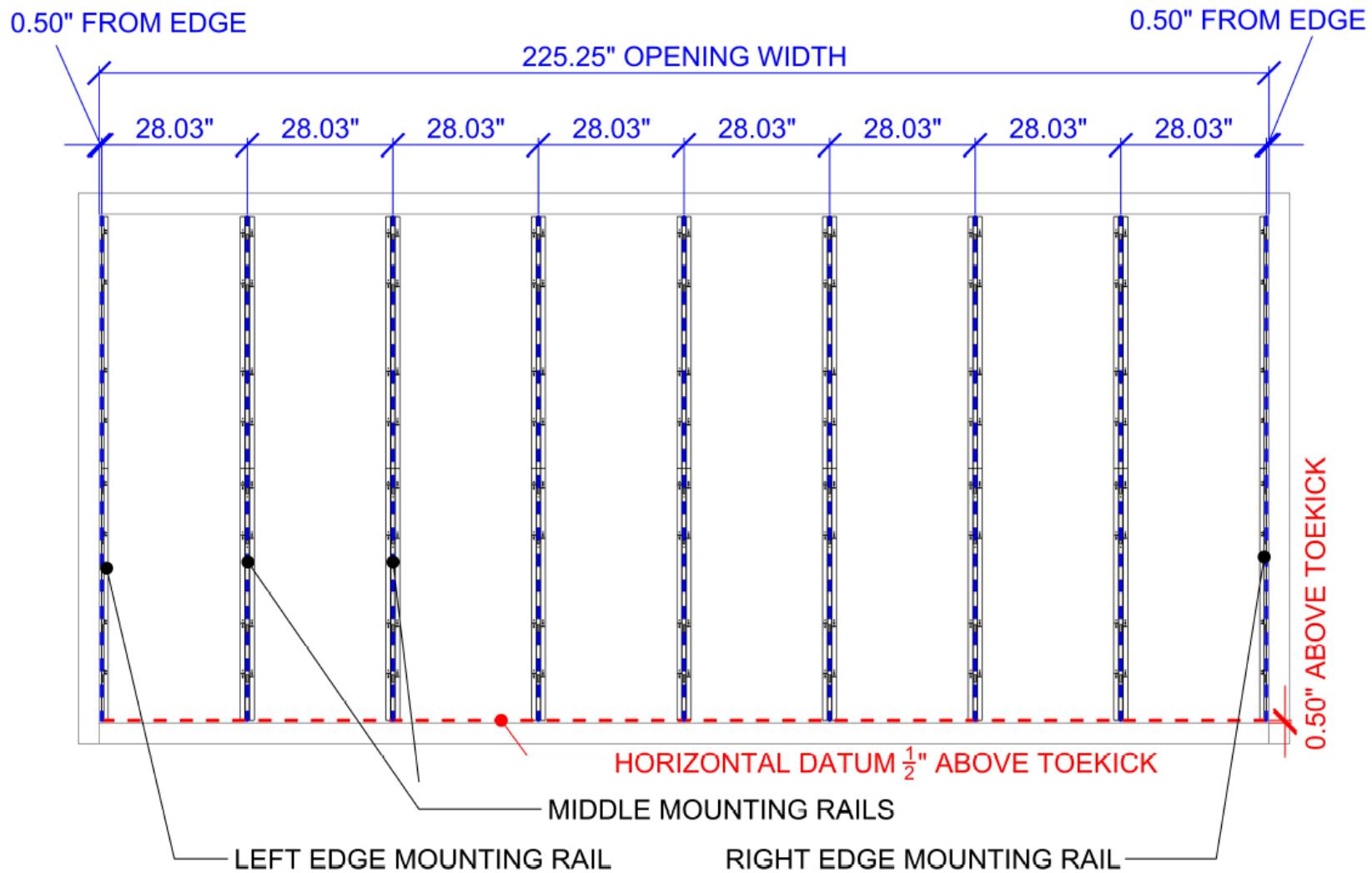
# INSTALLATING THE WALL LIGHTING PANS (*if applicable)

Lighting pans will install to the wall between mounting rails.

Lighting pans come with pre-drilled holes for fastening to wall substrate.

Each lighting pan comes pre-wired. The pans in each column will be connected using jumper wires. The lead wire will connect to power supply.

Andalusia will provide the final diagrams and schematics at time of install.
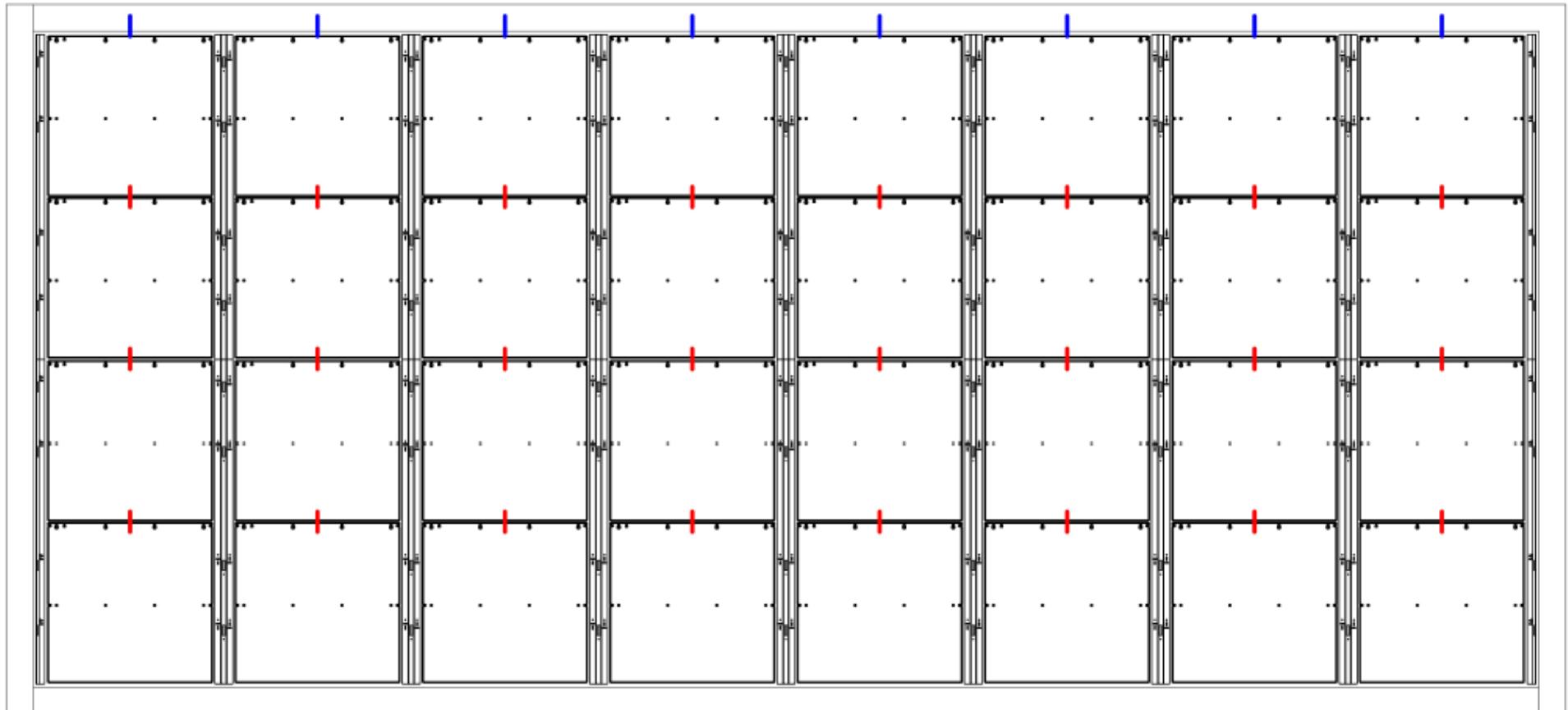
INSTALLATING THE DIFFUSER OR FELT (*if applicable)

PET felt or acoustic infill will be pre-installed to Perforate panels. We will provide guidance on additional adhesion in-field to help secure the felt.

Acrylic diffusers will either be shipped embedded in its correct panel or will be installed onsite using adhesives or magnets, depending on site conditions and material.

(1) Magnet at panel center

DO NOT COVER PERFORATION OPENINGS WITH MAGNET

(4) Magnets at Panel Corners
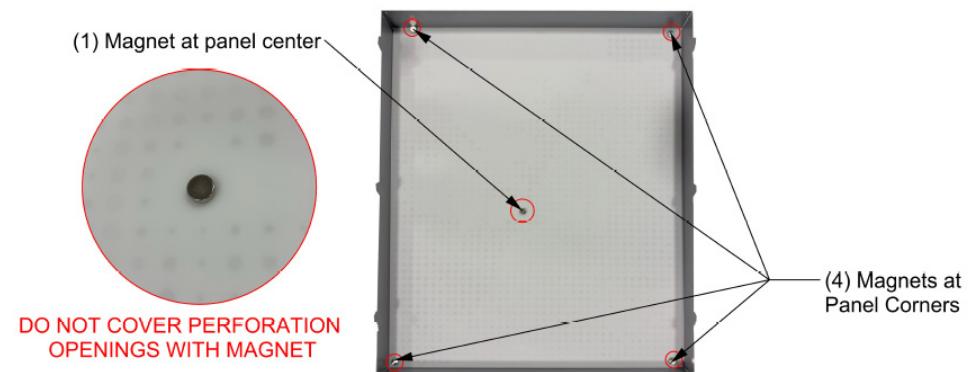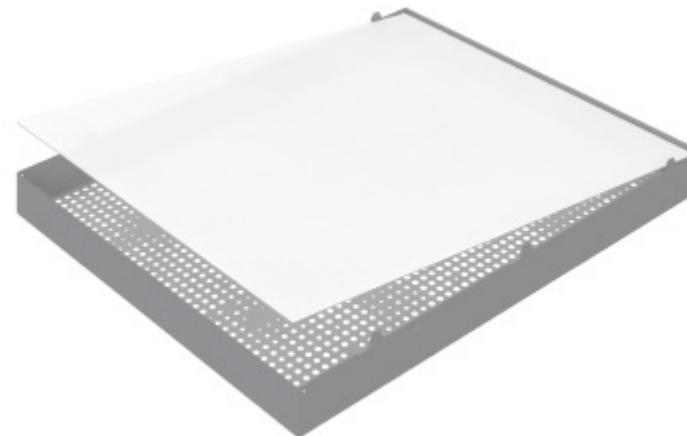
WALL TILE INSTALLATION

Each Perforate wall tile is individually numbered on the flange

Lift the tile and insert the Flange Hooks into the Mounting Rail Slots

Lower the tile until the tile falls into place

Continue installing in ascending order

TILE NUMBER

MOUNTING RAIL SLOT

FLANGE HOOK
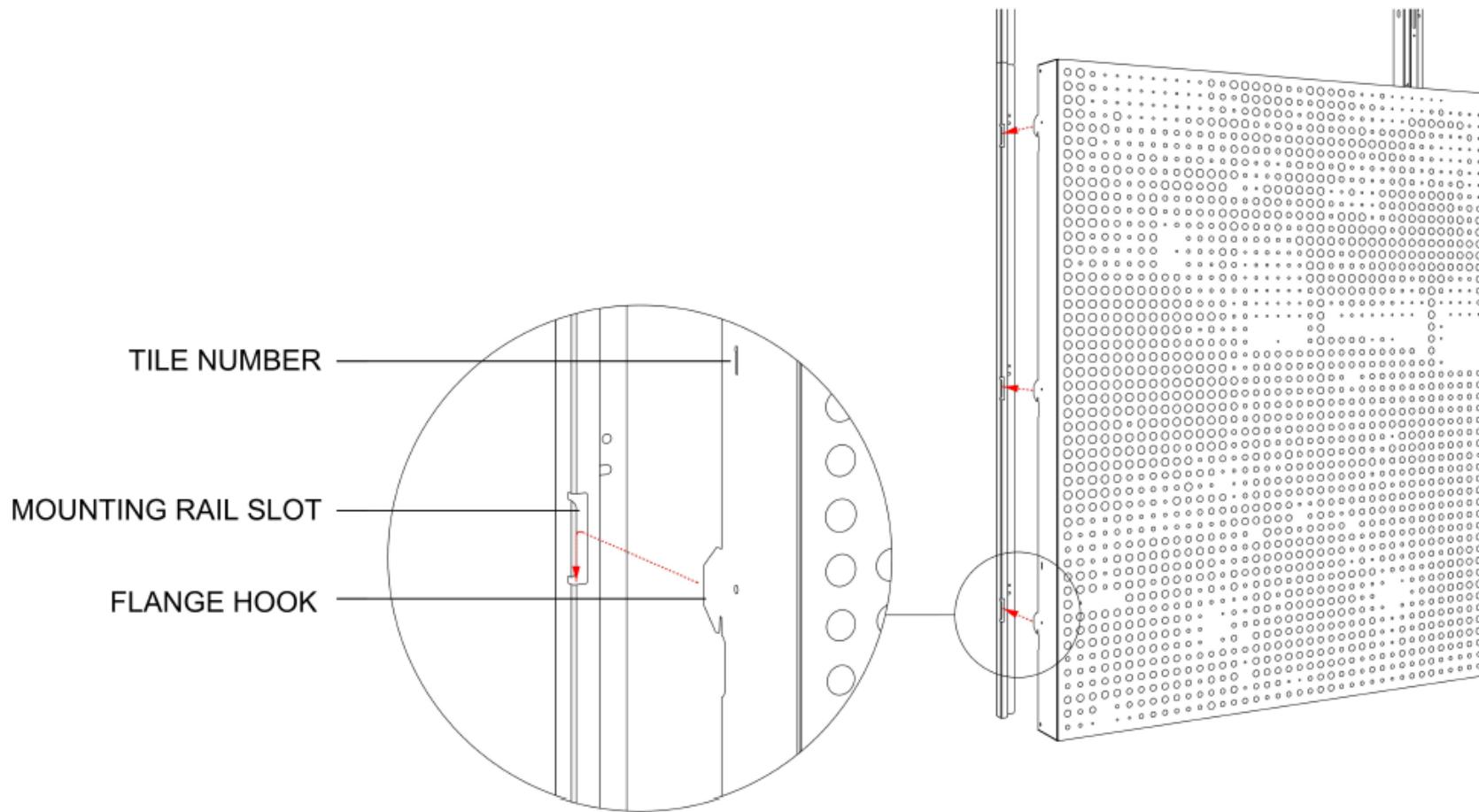
VISUAL CHECKS & FINALIZING THE INSTALLATION

Conduct a thorough visual inspection to ensure all tiles are securely installed and aligned properly. Complete the installation with a final cleaning.
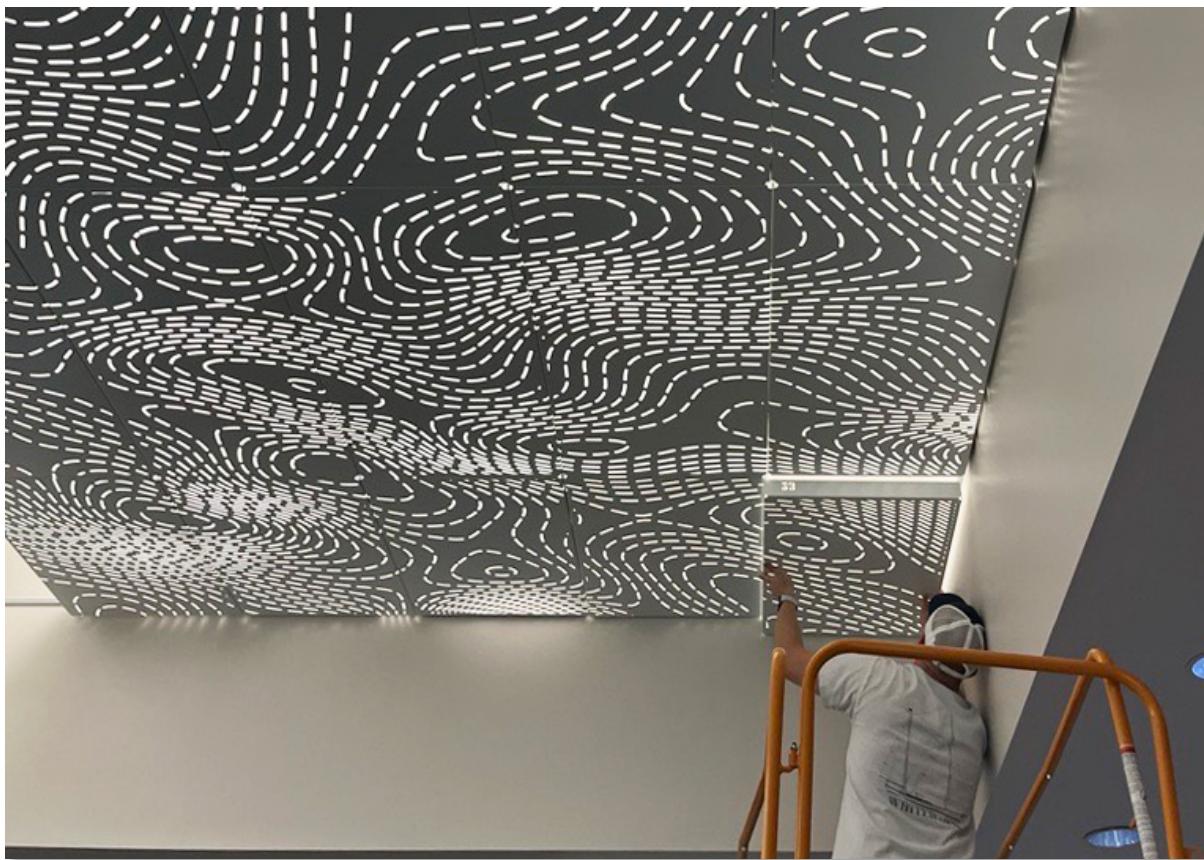
1. Check for any gaps, misalignments, or loose tiles.

2. Make adjustments as necessary.

3. If any tiles appear loose, remove and re-engage the torsion springs to ensure a secure fit.

4. To clean the tiles, use a soft, dry cloth or a vacuum with a brush attachment.

5. Avoid using abrasive materials or cleaning agents that may damage the finish.

6. Periodically check the tiles for any signs of damage or loosening and re-secure if necessary.

MAINTENANCE AND CARE GUIDE

Andalusia Perforate panels are designed to be both durable and visually striking, offering a perfect balance of functionality and aesthetic appeal. Proper care and maintenance will ensure their longevity and preserve their appearance for years to come. This guide provides essential tips and recommendations for maintaining your panels.

- General Maintenance
    - Cleaning Frequency: Clean the panels at least twice a year or as needed depending on environmental conditions. In high-traffic or outdoor areas, more frequent cleaning may be necessary.
    - Regular Dusting: Use a soft, dry microfiber cloth or a feather duster to remove dust and debris from the surface.
    - Periodic Wiping: Wipe the panels with a damp cloth or sponge soaked in a mild detergent. Avoid abrasive materials.
    - Thorough Rinsing: After cleaning, rinse the panels with clean water to remove any soap residue.
    - Drying: Use a clean, dry cloth to wipe off excess water. Allow the panels to air dry completely if located outdoors.
- Stain Removal
    - Mild Stains: Use a diluted solution of mild dish soap and water. Gently scrub the stain using a soft sponge or cloth.
    - Tough Stains: For oil, grease, or other stubborn marks, use a non-abrasive cleaner or degreaser approved for powder-coated finishes.
    - Do Not Use: Harsh chemicals such as acetone, paint thinners, or strong solvents, as they can damage the powder coating.
- Avoiding Damage
    - Sharp Objects: Avoid using sharp tools or abrasive cleaning pads that can scratch the surface.
    - Excessive Force: Do not apply excessive pressure during cleaning, which could lead to surface damage.
    - Environmental Exposure: Minimize prolonged exposure to direct sunlight and harsh environmental conditions to maintain the coating's vibrancy.
    - Chemical Spills: Wipe up any chemical spills immediately with a damp cloth to prevent potential staining or damage.
- Inspection and Repairs
    - Routine Inspections: Inspect the panels periodically for signs of wear, such as chips, scratches, or discoloration.
    - Touch-Up Paint: Use manufacturer-approved touch-up paint for small chips or scratches.
    - Professional Refinishing: For extensive damage, consult a professional for refinishing or re-coating services.
- Warranty Information
    - Andalusia Design provides a limited warranty on all Perforate powder-coated wall panels. Adherence to this maintenance guide is necessary to maintain warranty coverage. For full warranty details, please contact our customer service team.

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Need Assistance on your next Project?

Contact us at
hello@andalusia.design

GFFdesign