

Andalusia Design
Specification Guide

Street Grid

Perforate™ Parametric
Wall and Ceiling System



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

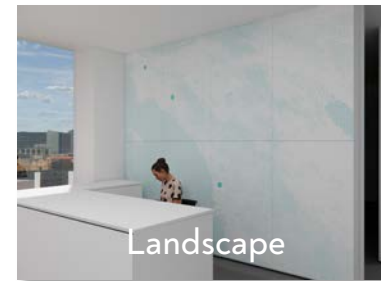
Andalusia Design's Perforate metal wall and ceiling system is a highly-configurable platform that gives designers the freedom to create unique perforated patterns for their client's spaces.

Driven by Andalusia's parametric design engine and in-house digital fabrication, Perforate is ideal for brand-forward, high-traffic areas for commercial and hospitality applications. Designs and hole patterns can be specified and optimized for both aesthetic and budget.

PERFORATE OPTIONS

Perforate is offered in standard configurable and customizable pattern styles. Key Perforate system attributes:

- Available in steel and aluminum, in a variety of standard and custom powder coated finishes
- Standard and custom fiber-laser cut patterns can be fit to your exacting wall and ceiling dimensions
- Option to integrate backlighting with acrylic diffuser to create a dynamic visual effect
- Option to add a composite backing for sound absorption
- Fits into standard grid configurations or can be customized





Whether celebrating a hometown or highlighting a place, the Street Grid style provides a captivating feature that reflects the character of specific locations.

PERFORATE – HOW DOES STREET GRID MAPPING WORK?

Andalusia's parametric software gives users the ability to not only map any street grid to their Perforate surface, but also fine-tune design variables to meet their aesthetic and budgetary requirements.

A. Choose a street grid. You can choose a large geographic area or zoom in to focus on a more specific location.

B. Andalusia's parametric street grid mapping tool takes a grayscale image of the grid and turns it into a hole pattern that accurately reflects the street grid

C. Users are able modify the variables to optimize for design taste, functional requirements and budgetary constraints, including:

- Resolution (density of holes)
- Contrast (size of holes)
- Positive or Negative image
- Hole type (circle, square, triangle, etc.) to optimize visual interest
- Backlighting, acoustic backing or open
- Material and finish

Base grayscale image of Lower Manhattan



Perforate with circle hole patterns; aluminum powder coat (copper color); backlit



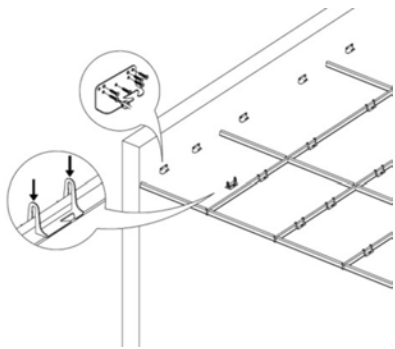
DESIGN STEP 1: CHOOSE YOUR STREET GRID LOCATION AND ZOOM LEVEL

Andalusia can take images of any street grid location at nearly any scale. For urban environments, the more you zoom in, the more detail emerges. For smaller populations, the more you zoom out, the more detail emerges.

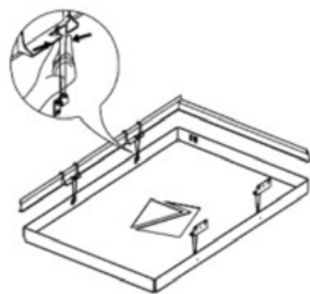


DESIGN STEP 2: CHOOSE YOUR APPLICATION – CEILING, WALL OR WALL-TO-CEILING

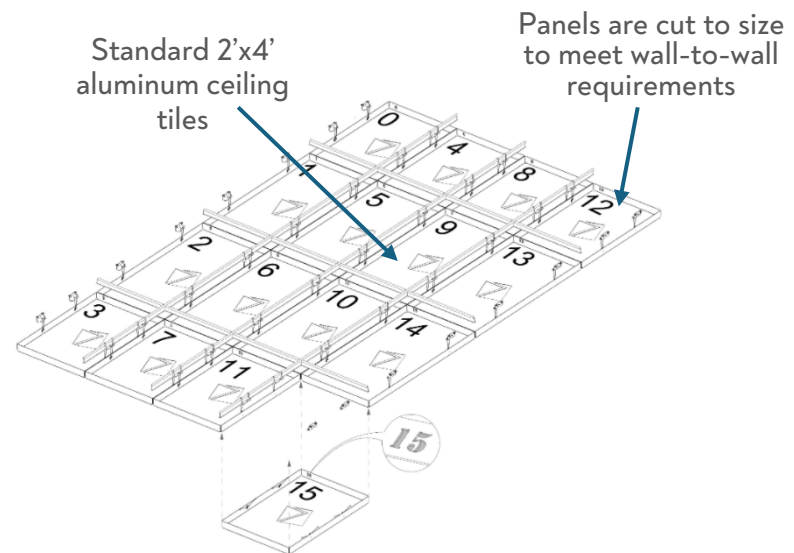
Perforate can be used for wall, ceiling and wall-to-ceiling applications. Wall and ceiling materials and installation differ slightly, but both work with standard installation components and are easy to install.



Andalusia saddle clips are added to standard ceiling grid



Torsion spring mechanism locks ceiling panels in place



Wall-mounted system uses simple Drop and Lock mechanism

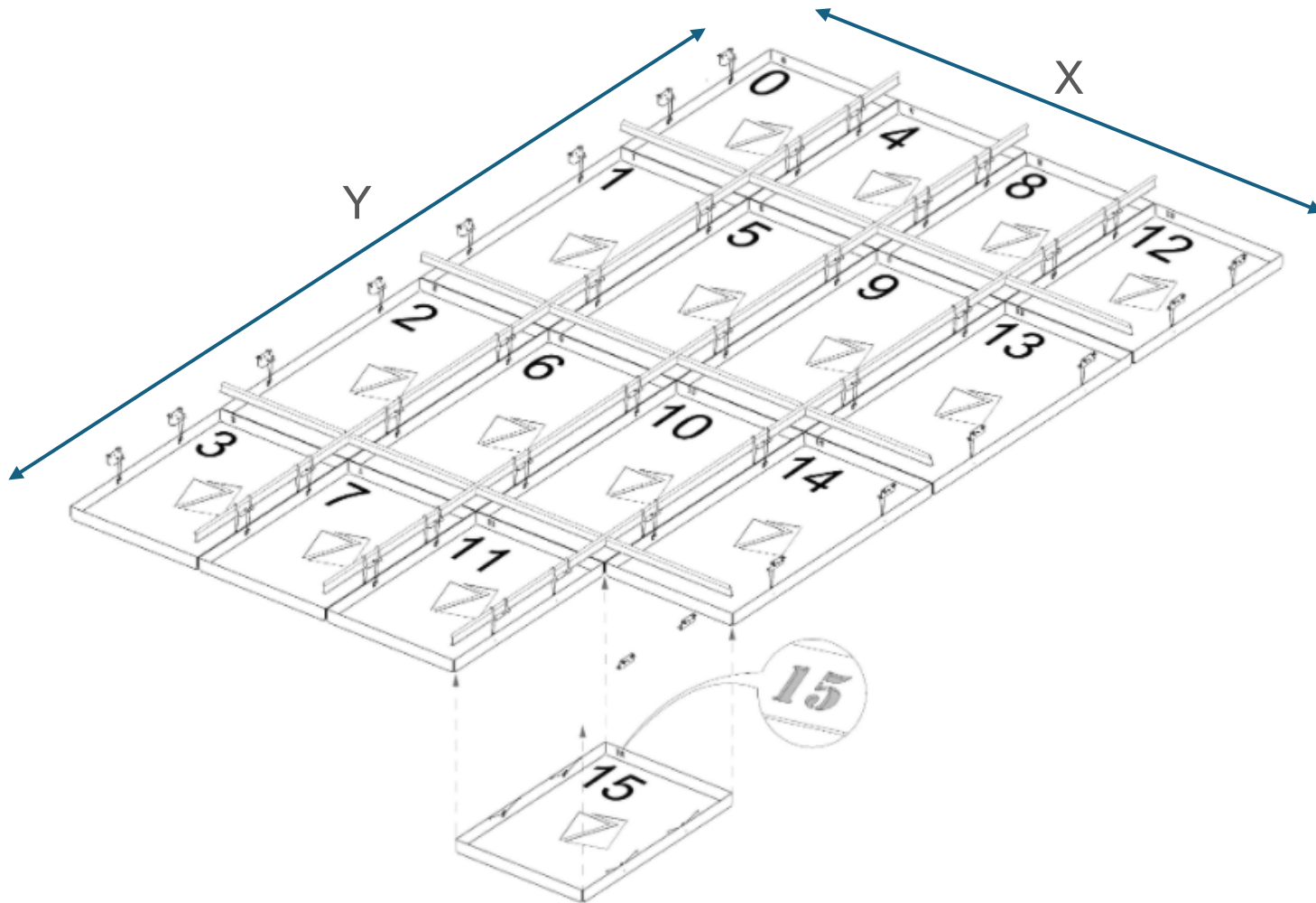


All tiles are numbered with the associated final schematic to ensure ease-of-installation

DESIGN STEP 3: DETERMINE YOUR ARRAY SIZE

Determine the dimensions of your wall and/or ceiling plane. Andalusia will typically work with standard 2'x4' grid tile sizes for ceilings and 4'x4' tiles for walls, but can accommodate different sizes, including near edge conditions.

Measure the overall dimension of your Street Grid array – X and Y dimensions.



DESIGN STEP 4: DETERMINE YOUR ASPECT RATIO

The size of your Perforate Street Grid array will impact your perforated system's resolution and aspect ratio.

Original image



Determine if you want to LOCK the aspect ratio of the original Street Grid image or if you want to FILL the space with perforations

Note: The larger your wall or ceiling system, you can achieve more resolution of your full Street Grid with fewer perforations per area

FILL - Fill the wall or ceiling plane



LOCK - Lock the aspect ratio of the original image



DESIGN STEP 5: CHOOSE AN IMAGE RESOLUTION

Your Perforate image resolution (or perforations per inch) can impact your aesthetic and price point. The fewer holes per array, the less time it spends on our fiber laser, thus the less expensive it is. But you sacrifice resolution. Below are examples of systems going from lower resolution / lower cost (1) to higher resolution / higher cost (4).



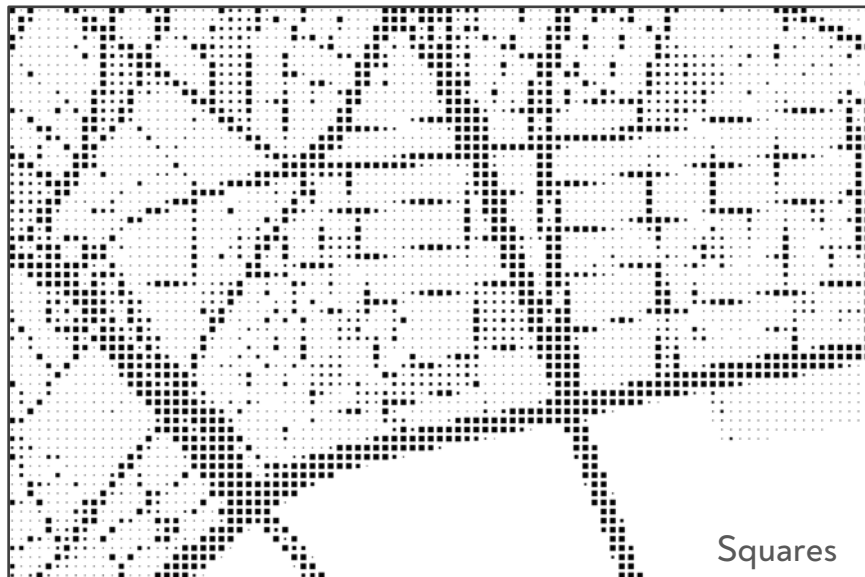
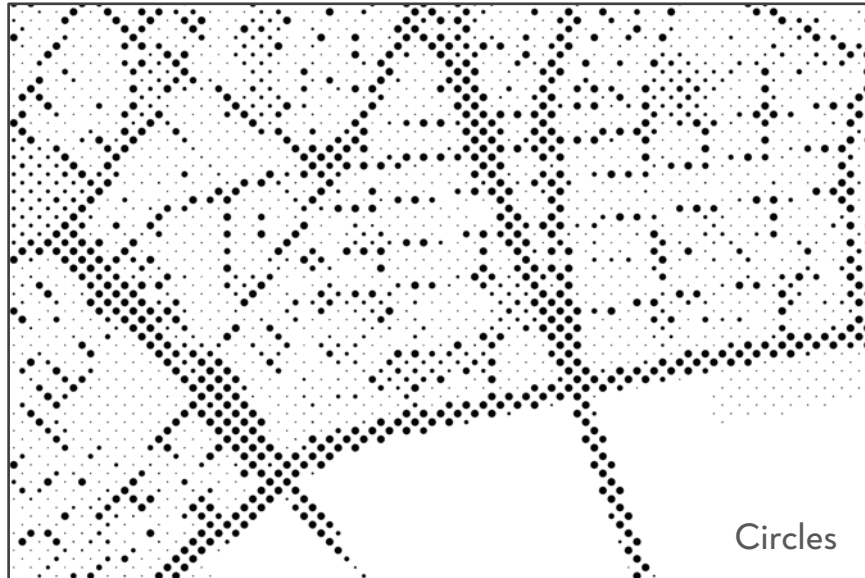
GOOD DETAIL



HIGH DETAIL

DESIGN STEP 6: PICK A HOLE TYPE

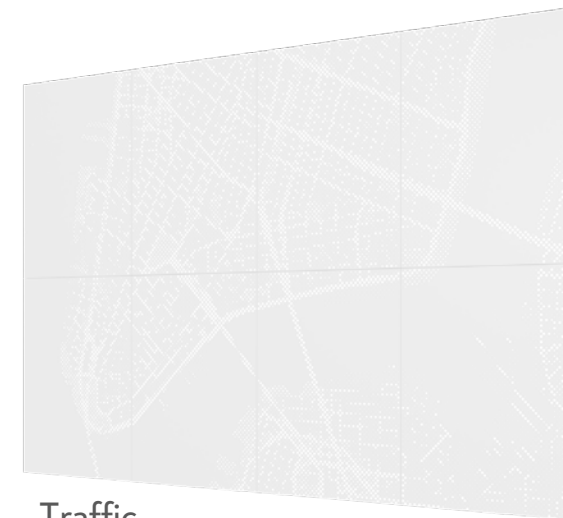
Using Andalusia's advanced laser cutting techniques, you're not limited to circles for your hole patterning – you can choose from circles, squares, diamonds, triangles... or connect with us to make a cool cut just for you!



DESIGN STEP 7: SELECT YOUR COLOR / FINISH

Choose from a variety of standard color / finish options, or work with Andalusia to create something unique!

Standard Color Palette



Traffic White

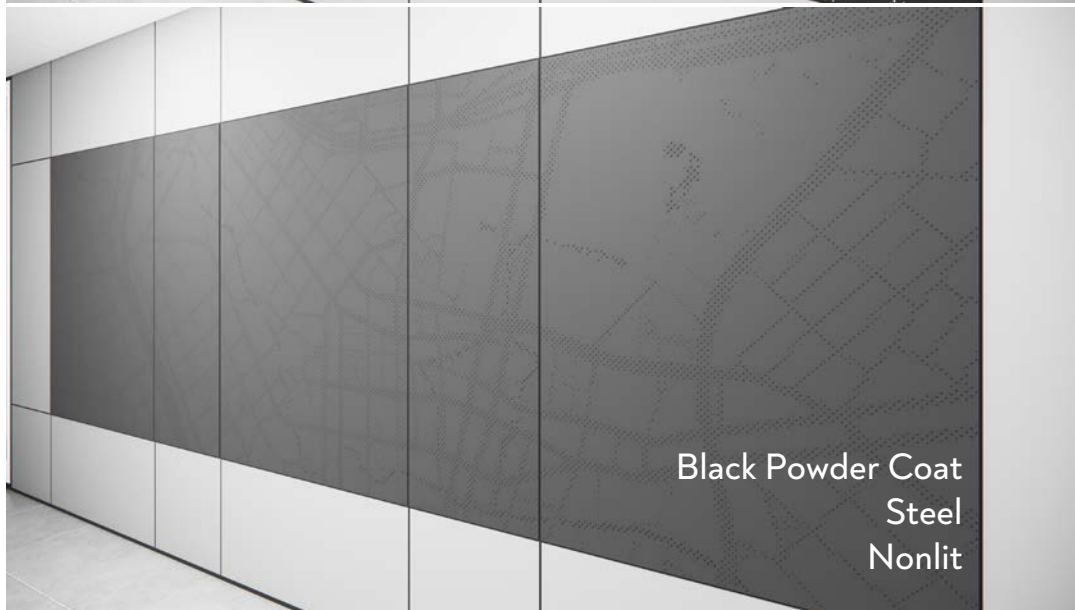
Premium Color Palette



Scarlett Shine

DESIGN STEP 8a: OPTIONAL BACKLIGHTING

Perforate can be enhanced with backlighting to make the Street Grid 'pop'. Backlighting the system adds additional cost and complexity – below are considerations when designing.



- A. Andalusia does not offer its own backlighting solution, but has recommended partners in every region
- B. When specifying backlighting, Andalusia offers a standard acrylic diffuser that is custom fit into each Perforate panel
- C. For most backlighting applications, a sheet LED array with 6" diode spacing is ideal. The LED array must be mounted at least 3" from the panel diffuser.
- D. The more room there is behind the panels, the more opportunities there are for cost-effective lighting solutions. Contact Andalusia to learn more.
- E. Andalusia can work with you to optimize hole sizes and patterns to help achieve any functional lighting requirements you may have

DESIGN STEP 8b: OPTIONAL FELT BACKER

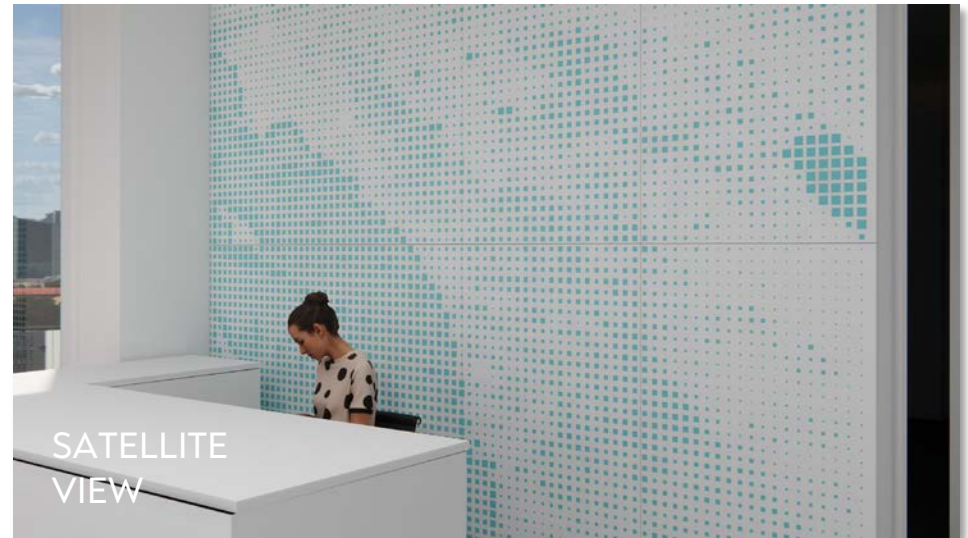
If the Street Grid is in a well-lit area of a space and you're looking to add a pop of color and/or functional acoustic performance, Perforate can be supplied with a standard composite backer. Contact Andalusia for more information on standard and custom options, along with functional specifications.



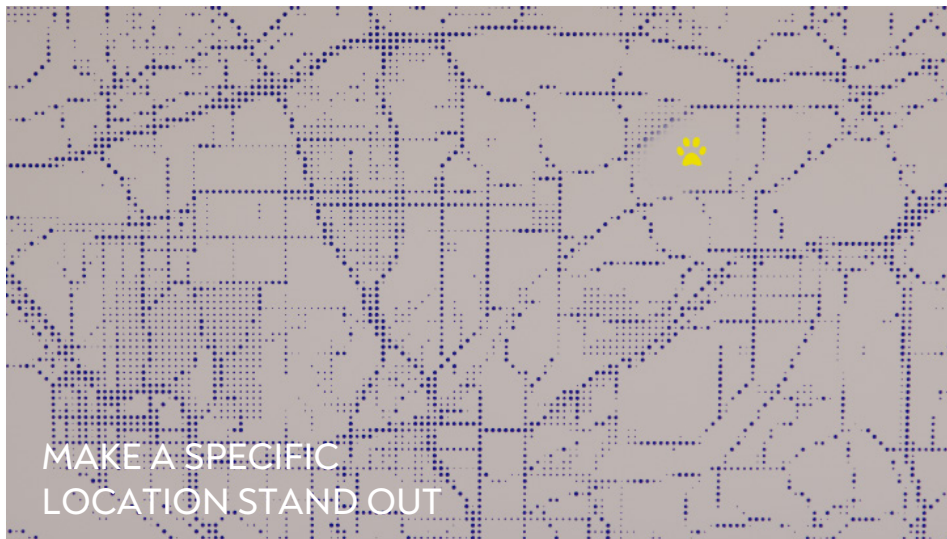
CUSTOMIZATION OPPORTUNITIES



Add a replaceable magnetic center insert that can be used to highlight a brand or location; light it independently with RGB!



If you don't want a grid, but more of an abstract or literal topological or satellite view, no problem!



Company logo, school mascot, iconic landmark... make the location stand out with custom elements embedded within the Street Grid perforations.



Wall-to-wall and wall-to-ceiling applications are easy to work with. Downlights, sprinkler heads and other elements can be added without losing design intent.

SERVICES AND DOCUMENTATION

Below is a list of typical design and technical services, along with the documentation you can expect to receive when designing, specifying, procuring and installing an Andalusia Perforate system.

DESIGN PHASES

Services and Outputs:

- Collaborative and iterative design development, starting as early as concept design
- 3D parametric model development; ability to collaborate in Rhino and Revit or output to any standard CAD platform
- Renderings in Enscape, V-Ray
- Real-time pricing information during design iterations and design-for-budget / VE support
- Thorough product design proposals
- Physical material samples and color swatches
- Custom samples to demonstrate form / function of unique designs
- Assistance with client-facing presentations, as desired

POST-DESIGN / SPEC SUPPORT

Services and Outputs (in addition to Design outputs):

- Technical drawings – elevations, sections, details
- CSI MasterSpec document
- Comprehensive dimensions, thickness, weight information
- Final digital 3D model
- Final contractor net pricing
- Performance data, including ASTM E84 fire ratings, structural data, acoustic analysis, along with necessary supporting test data
- Sustainability certifications, EPD, HPD, Declare
- Detailed step-by-step installation instructions
- Maintenance and warranty information
- Reference part numbers and details
- Andalusia contact information

ONE-PAGE PERFORATE DESIGN CHECKLIST

Let's get started! Fill out the attached form, along with a full pattern in CAD or other medium, and we'll get to work!

APPLICATION

- W – Wall mount
- C – Ceiling
- WC – Wall-to-ceiling

STREET GRID

- City, State

- Attached map image
- Notes (zoom level, etc.)

SIZE

- X Dimension

- Y Dimension

POWDER COAT FINISH

- Signal White
- Traffic White
- Pure White
- Champagne
- Quartz Gray
- Anodized Silver
- Black
- Sea Blue*
- Azure Horizon*
- Copper Ember*
- Vintage*
- Scarlett Shine*
- Tourmaline*
- Ancient Ore*
- RAL _____

* Denotes Premium Finish

HOLE TYPE

- Circle
- Triangle
- Square
- Diamond
- Other

BACKING OPTION

- Backlighting with Acrylic diffuser
- Notes:

- Composite backing
- Color: _____
- Notes:

CUSTOMIZATION INTEREST

- Custom Insert

- Wall-to-wall
- Integrated components (HVAC, sprinklers, etc.)

OTHER QUESTIONS

Project stage _____

Approximate SF _____

Approximate budget / SF _____

Modeling software _____

Other unique variables

Need Assistance on your next Project?

Contact us at
hello@andalusia.design