Andalusia Design Specification Guide

Maze

Etch™ Parametric Wall System



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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.

ETCH

The days of the traditional 2x2 wall tiles are over!

Andalusia Design's Etch is a highly-configurable wood wall system that gives designers the freedom to create seamless, visually-interesting patterns for their clients' spaces.

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

ETCH STYLES

Etch is offered in both standard configurable and customizable pattern styles. A few key Etch system attributes:

- Wood base material options include veneered, stained plywood and painted MDF
- Standard and custom CNC-etched patterns that can be fit to your exact wall dimensions
- Option to integrate and mix materials and colors across the pattern, including wood, metal and composites
- Add dimension and visual interest with 3D tile inserts
- Intelligent panelization minimizes visually-obstructive seams







A detailed design that transforms a wall into a visual journey. Meticulously crafted to create a complex pattern, Maze adds a playful and engaging element.



ETCH - WHAT IS MAZE PATTERNING AND HOW DOES IT WORK?

The Maze patterns draw inspiration from the intricate and interconnected paths found in natural and man-made labyrinths. These designs evoke a sense of movement and complexity, creating dynamic visual interest.

A. Design Generation

Each Maze pattern is generated using advanced parametric design techniques. This allows for endless customization, ensuring each pattern can be tailored to fit specific design needs, whether in scale, orientation, or complexity.

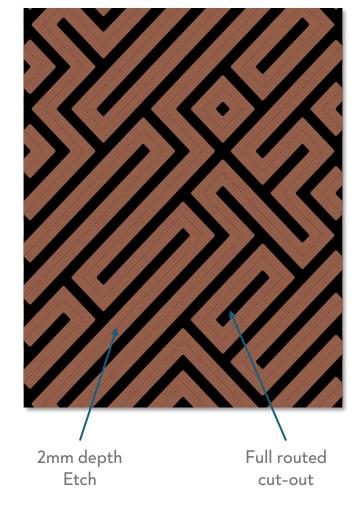
B. Precision Cutting

Our Maze patterns are etched into high-quality plywood or MDF using state-of-the-art CNC technology. This precision allows for the intricate details of the Maze design to be faithfully rendered.

C. Multiple Etch Depths

The Maze patterns use varying etch depths to create a striking contrast. Different depths give the design a sense of dimensionality, with deeper cuts providing shadow and visual weight, while shallower etches offer subtle textural differences.

Maze Pattern in MDF



ETCH – WHAT IS MAZE PATTERNING AND HOW DOES IT WORK?

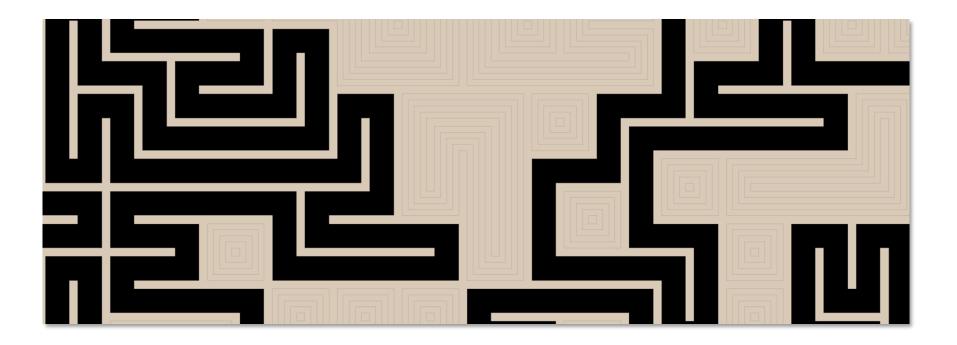
D. Light, Shadow and Color Interplay

The varying depths of the etchings interact with light to produce a dynamic visual effect. As light moves across the surface, shadows are cast from the deeper cuts, enhancing the perception of depth and adding a tactile quality to the pattern.

E. Material Selection and Mixing

The choice of material—whether a natural wood veneer or painted MDF—also influences the contrast. Natural wood grains can add an organic complexity to the pattern, while painted surfaces can highlight the crispness of the etched lines.

For function, designers can create voids and/or integrate composite materials.

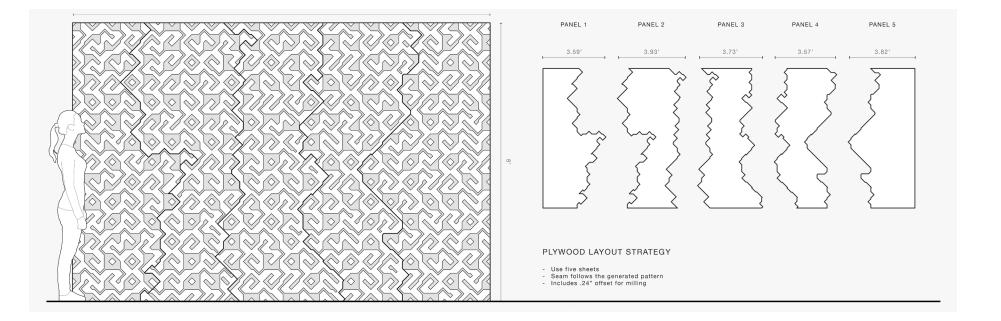


ETCH – TAKING WALL TILING TO THE NEXT LEVEL

Using the novel combination of parametric design and advanced digital fabrication techniques, Andalusia takes wall tiling to the next level!

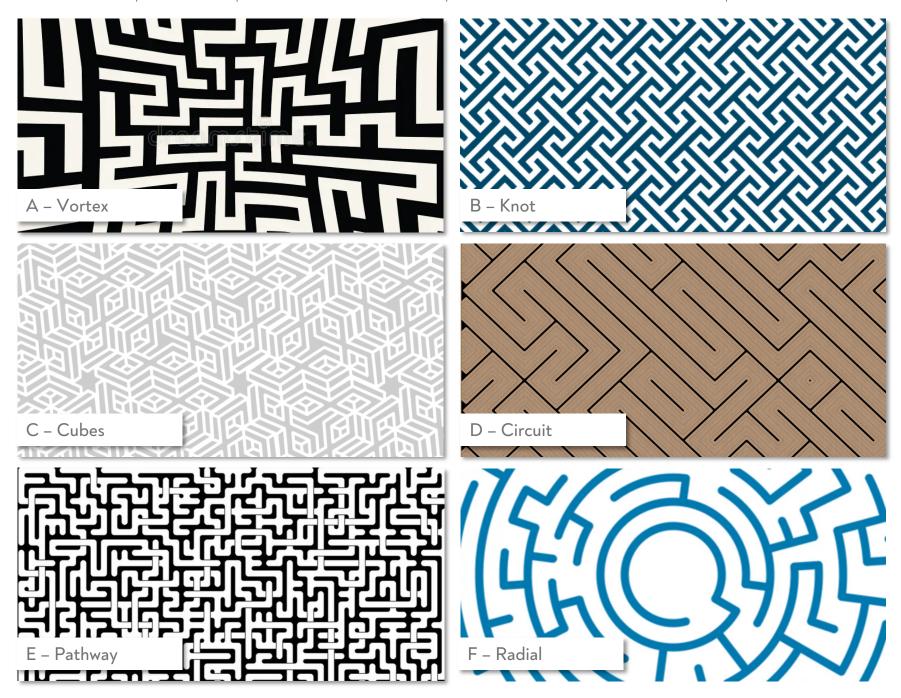
SEAMLESS WALL DESIGN

Intelligent patterning and panelization helps create a smooth, uninterrupted visual flow across the entire wall. The completed system is shipped in custom pieces to the job site. The result is a seamless, visually-cohesive design that is easier for a contractor to install.



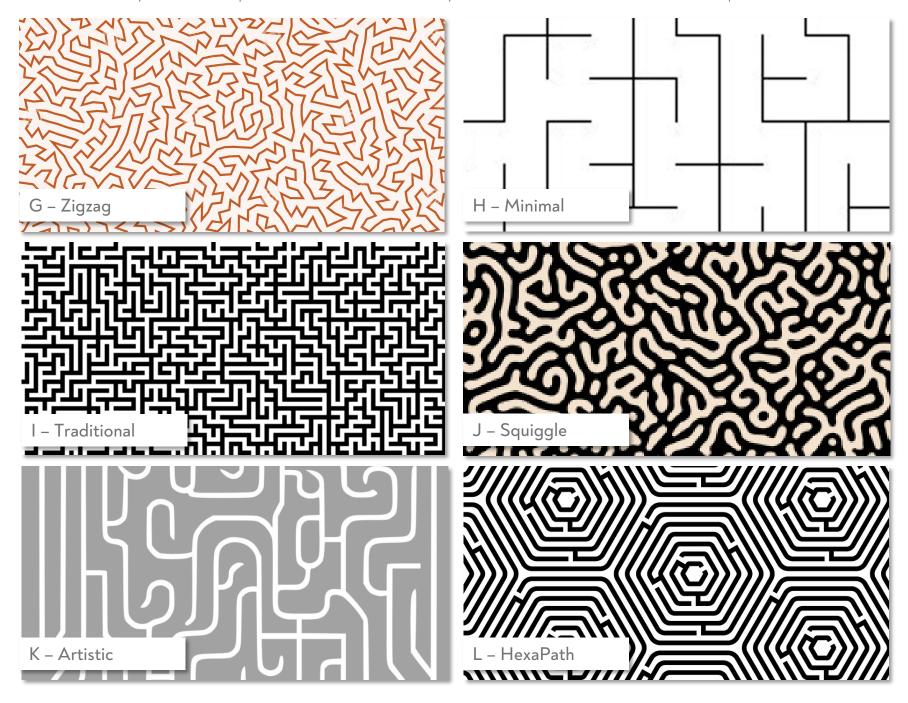
DESIGN STEP 1: CHOOSE YOUR PATTERN

Choose from a variety of standard patterns in Andalusia's library or call us to create a custom tile and pattern.



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DESIGN STEP 2: CHOOSE YOUR MAZE BARRIER AND ETCH DETAIL

Once you have a pattern, you can customize two distinct elements. One is the Maze Barrier, which is a depth route to create a void to add different materials. The other is the Etch Detail, which is an engraving detail to create visually interest.

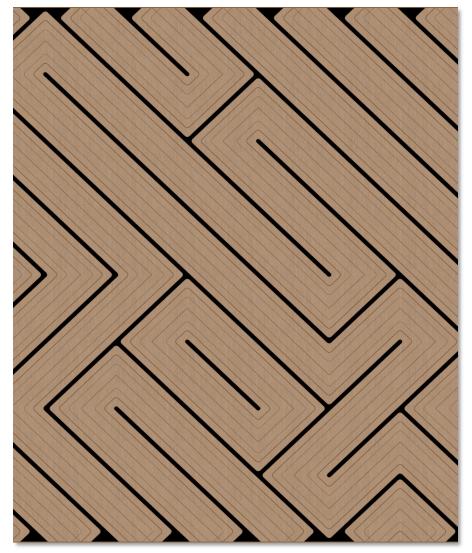
Maze Barriers: LARGE

Etch Detail: LOW



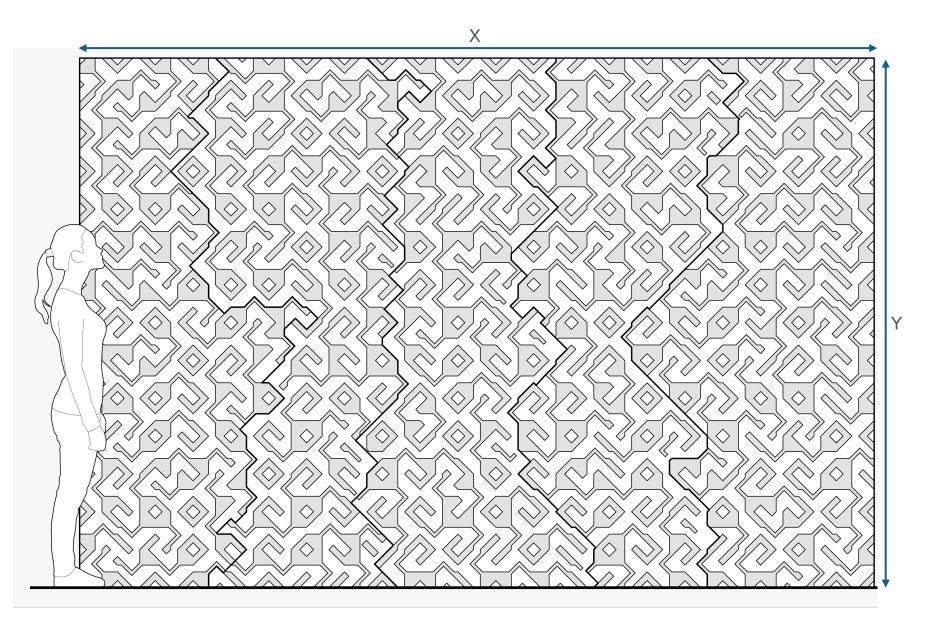
Maze Barriers: SMALL

Etch Detail: HIGH



DESIGN STEP 3: DETERMINE WALL SIZE

Unlike traditional tiling systems, Andalusia's Etch platform doesn't limit you to your standard tile formats for overall array size. Just give us your ideal wall coordinates with your pattern and we'll make it happen!



DESIGN STEP 4: DETERMINE ELEMENT SIZE



Small elements (<3") Higher resolution, more etchings, more inserts Ideal for small areas (< 200 SF)

Medium elements (3"-9")

Good balance for most area sizes (>100 SF)

Large elements (9"+)

Lower resolution, fewer etchings, larger inserts Ideal for large areas (> 200 SF)

DESIGN STEP 5: CHOOSE MATERIALS AND FINISHES

Andalusia sources the best quality plywood and MDF needed for Etch processing, construction, price and aesthetic. All wood is sourced by local distributors and all processing, including cutting, sanding, staining, painting and finishing is done in our Austin, TX, digital fabrication facility.

MATERIAL AND FINISHES

Select a base material:

- $\frac{3}{4}$ " thick plywood
- 3/4" MDF
- Custom options are available

Select a color:

- 5 standard stain options for plywood
- 9 standard color options for MDF
- Custom options are available

Plywood and MDF are optimal materials:

- Uniform strength
- Ease of machining into complex shapes
- Consistent surface quality
- Consistent cut quality

Andalusia sources certified wood, ensuring products are from responsibly managed forests, contributing to environmental sustainability

Standard MDF Paint Colors



Standard Plywood Stains



DESIGN STEP 6: CHOOSE YOUR ELEMENT MATERIAL AND FINISH

The Pinwheel system uses high-quality wood MDF or stained plywood as its base material, but has multiple infill options for tiling. Materials include MDF (same color as base or different color), stained plywood (same finish or different finish), non-woven composites, powder-coated metal or a custom material.

BASE: Stained birch plywood

INSERT: Gray painted MDF



BASE: White painted MDF

INSERT: Gray PET felt

CUSTOMIZATION OPPORTUNITIES



Create an Etch for your client that is on brand. Contact Andalusia to learn more.



Add interesting dimension to your Etch system by replacing elements of your Etch wall with tile inserts.



Using MDF or plywood as the base material, you can add other materials, including different color wood, metal and/or composites based on your aesthetic and functional needs.



Instead of restricting you to a 2x2 grid, we can work with you on full wall-to-wall applications, as well as help integrate elements, such as lighting, outlets, electronics... you name it!

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 Etch 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, VRay
- 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 ETCH 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!

MAZE TYPE	BASE MATERIAL	STAIN COLOR (plywood)	
A – Vortex	Plywood	White Frost	INTEREST
🔲 B – Knot	D MDF	Light Oak	3D Tiles
C – Cubes		Gray	□ Wall-to-wall
	PATTERN DETAIL	Warm Walnut	Other materials
D – Circuit	Etch	Espresso	
E – Pathway	No Etch		Integrated components
🔲 F – Radial		PAINT COLOR (MDF)	(TV, shelving, other)
🔲 G – Zigzag	ELEMENT SIZE	Pure White	
H – Minimal	Small	Soft Beige	OTHER QUESTIONS
I – Traditional	Medium	Slate Blue	Project stage
🗖 J – Squiggle	Large	Sage Green	Approximate SF
🔲 K – Artistic	Exact	Warm Taupe	Approximate budget / SF
🗖 L – HexaPath	ARRAY SIZE	Navy Blue	Modeling software
Custom (describe)	X Dimension	Slate Gray	Other unique variables
		Beechwood Brown	
	Y Dimension	Matte Black	

Other Finish



Need Assistance on your next Project?

Contact us at hello@andalusia.design