

Andalusia Design  
Specification Guide

# Pinwheel

Etch™ Parametric  
Wall 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.

### ETCH

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

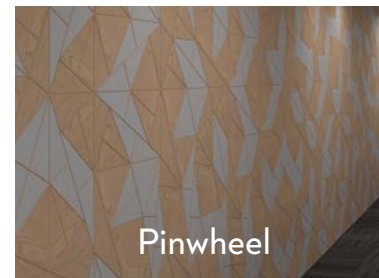
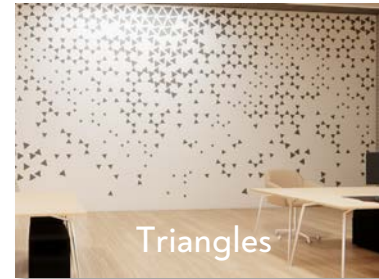
Andalusia Design's Etch is a highly-configurable wood wall system that gives designers the freedom to create seamless, visually-interesting patterns for their clients' spaces.

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



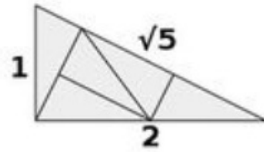


Welcome to Pinwheel,  
a playful variant of the  
Etch system! Pinwheel  
features a tessellated  
pattern that forms a  
unique pinwheel tile  
grid, adding a dynamic  
touch to any space.

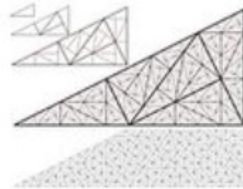
## ETCH – WHAT IS PINWHEEL PATTERNING?

Pinwheel is a design built using a repeated fractal computation that creates a distinctive system. Novel tile patterns can be created by applying color or materials to the elements before running the computation.

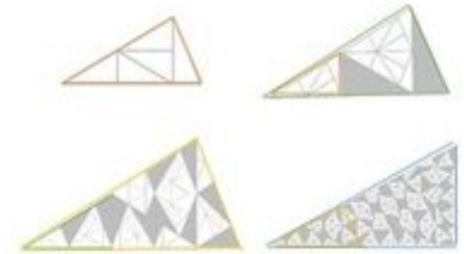
A. Pinwheel starts with a right triangle



B. Tessellated pattern emerges from a single triangle repeated to form a unique, aperiodic pinwheel tile grid.



C. Crafted from MDF or plywood, Pinwheel patterns can be intricately etched by our CNC and incorporate a variety of materials, offering endless patterns and design possibilities.

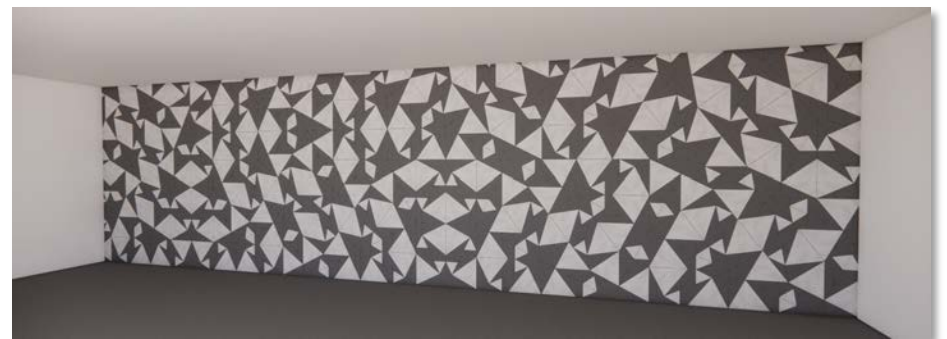
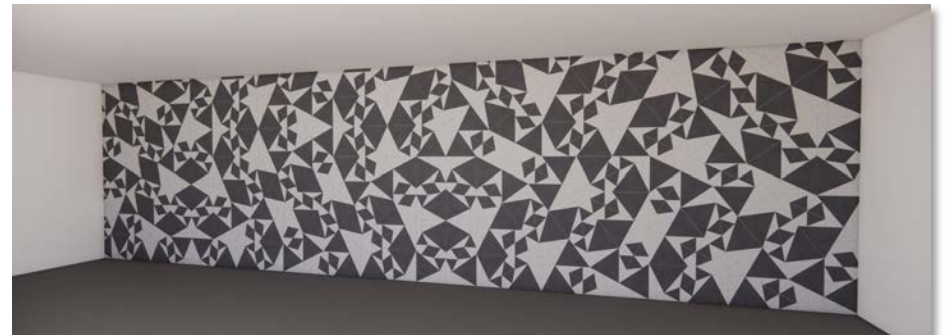
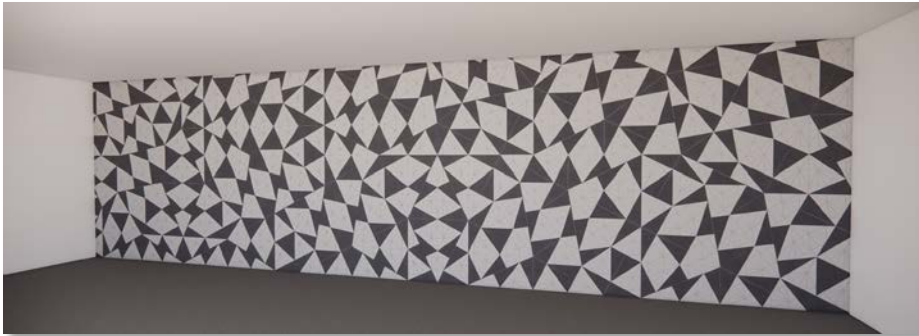


D. When extrapolated across the surface, the result is an intricate, unique and cohesive design



## ETCH – ENDLESS DESIGN POSSIBILITIES OF PINWHEEL

With Andalusia's parametric Pinwheel system, designers can create detailed etching patterns and integrate a variety of materials, colors and finishes. We offer standard solutions in our Pinwheel library and offer the flexibility to easily develop unique solutions for clients!

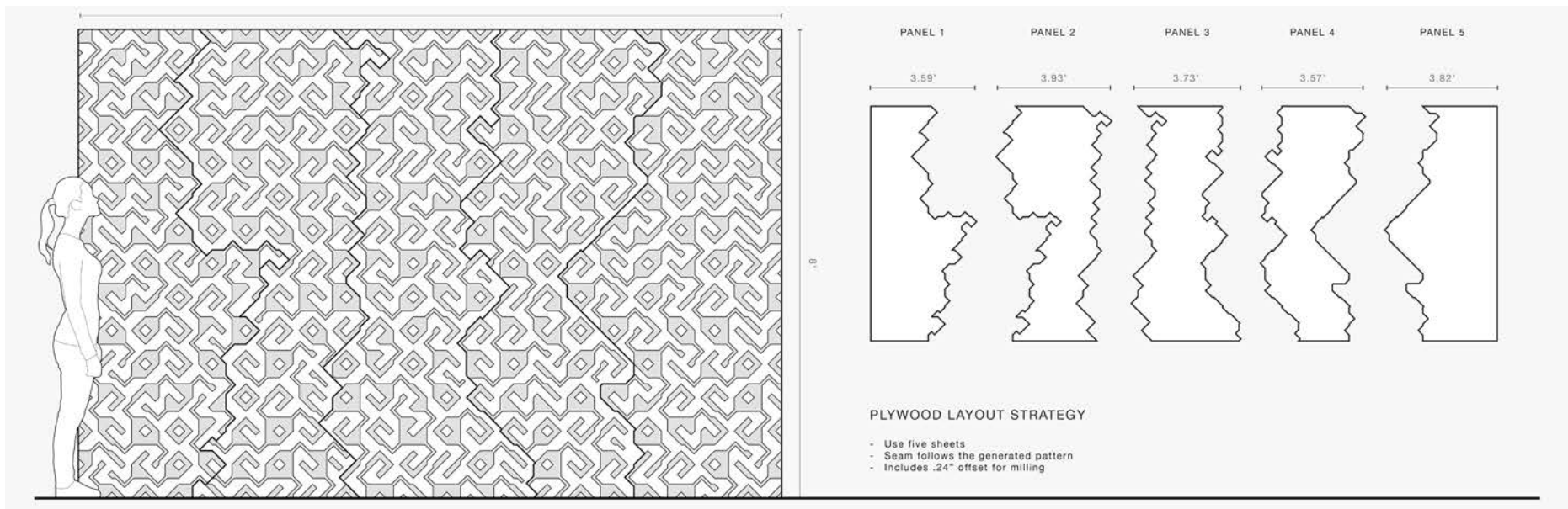


## ETCH – TAKING WALL TILING TO THE NEXT LEVEL

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

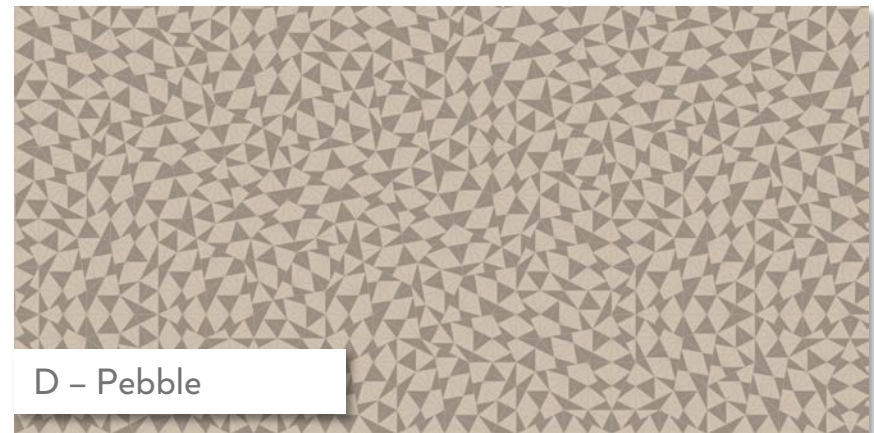
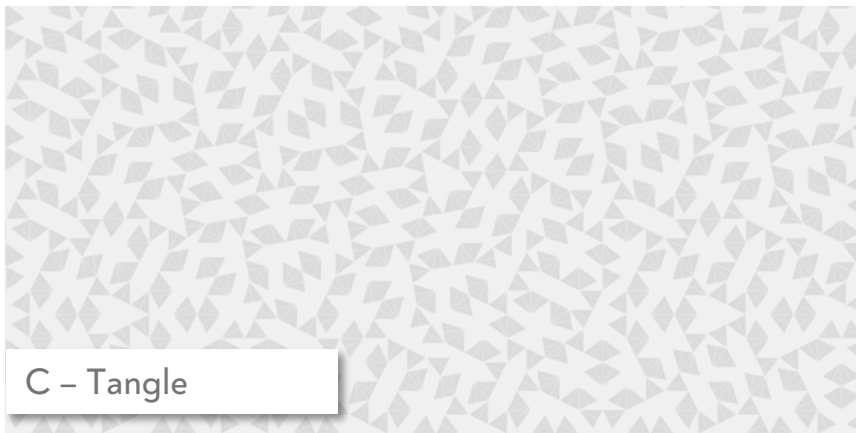
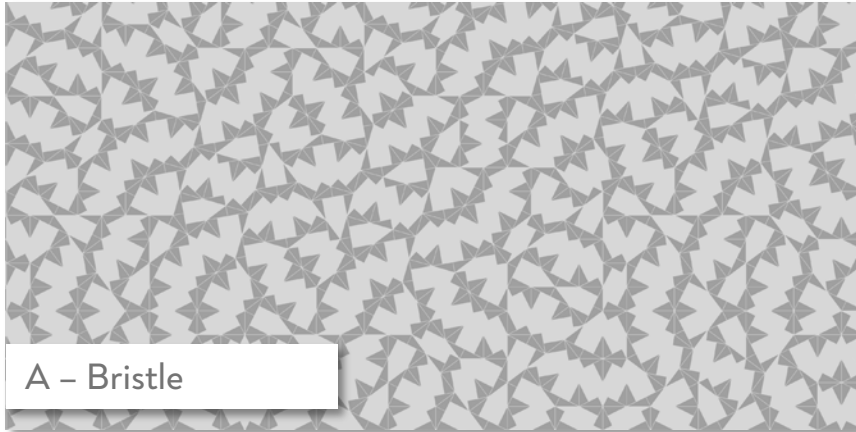
### SEAMLESS WALL DESIGN

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.



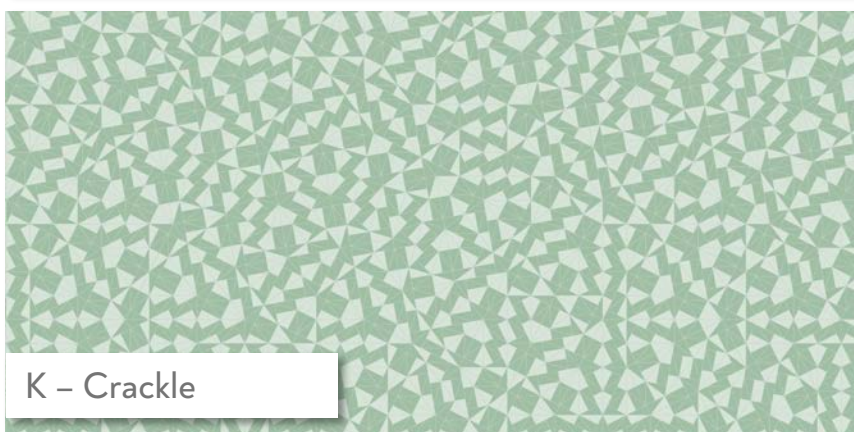
## DESIGN STEP 1: CHOOSE YOUR PATTERN

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 ETCH DETAIL

NO ETCH – Base material with NO Etch Lines

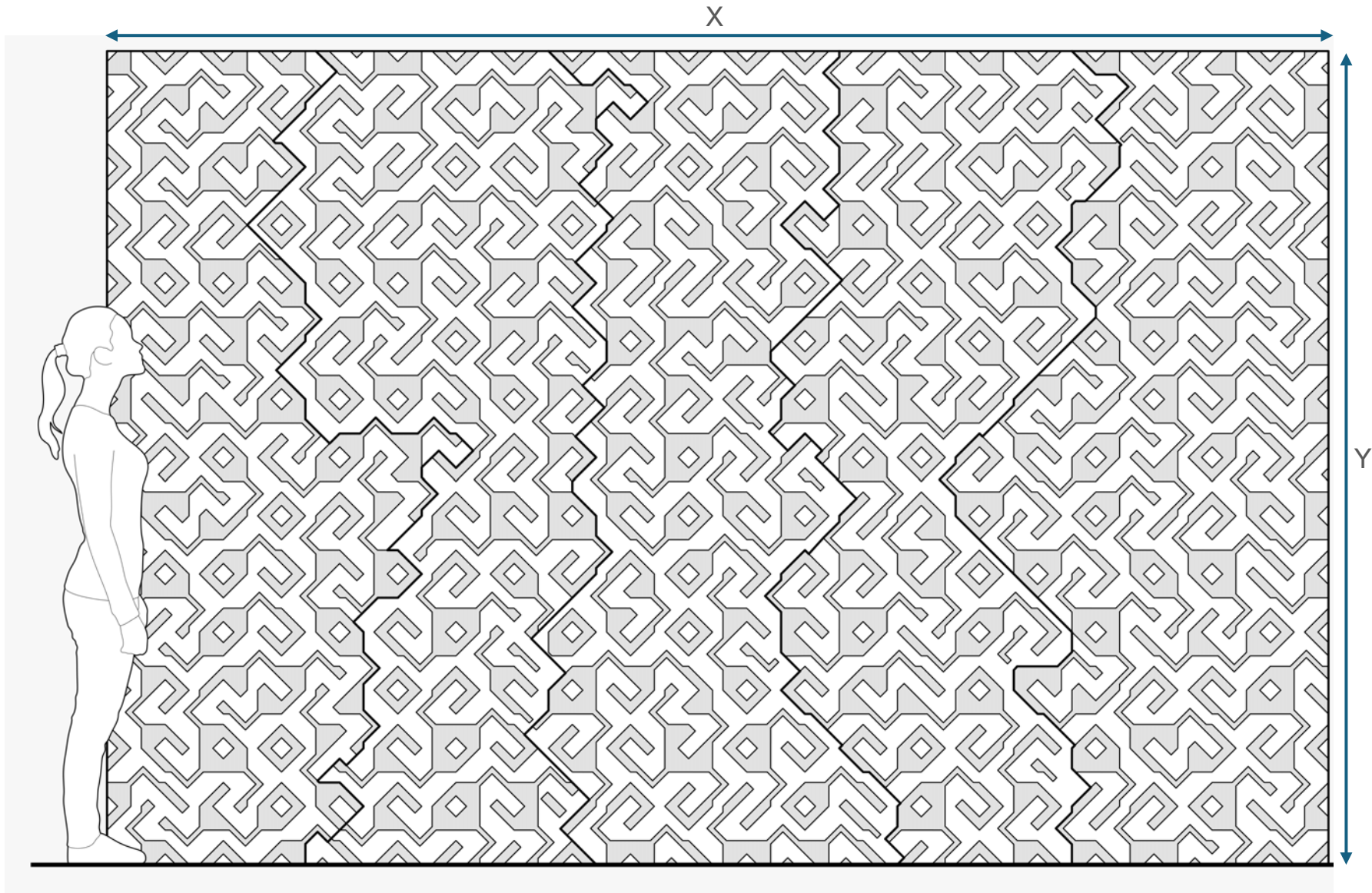


ETCH – Base material with Etch Pinwheel Lines



### 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:

- 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:

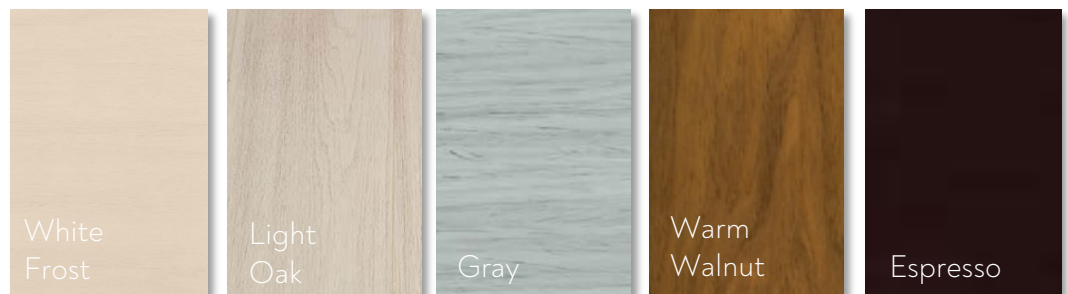
- Uniform strength
- Ease of machining into complex shapes
- Consistent surface quality
- Consistent cut quality

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.



## 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, 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 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!

## PINWHEEL TYPE

- A – Bristle
- B – Shard
- C – Tangle
- D – Pebble
- E – Blossom
- F – Fabric
- G – Labyrinth
- H – Thorn
- I – Prism
- J – Cluster
- K – Crackle
- L – Orbit
- Custom (describe)  
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## BASE MATERIAL

- Plywood
- MDF

## PATTERN DETAIL

- Etch
- No Etch

## ELEMENT SIZE

- Small
- Medium
- Large
- Exact -----

## ARRAY SIZE

- X Dimension  
-----
- Y Dimension  
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## STAIN COLOR (plywood)

- White Frost
- Light Oak
- Gray
- Warm Walnut
- Espresso

## PAINT COLOR (MDF)

- Pure White
- Soft Beige
- Slate Blue
- Sage Green
- Warm Taupe
- Navy Blue
- Slate Gray
- Beechwood Brown
- Matte Black
- Other Finish  
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## CUSTOMIZATION INTEREST

- 3D Tiles
- Wall-to-wall
- Other materials  
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- Integrated components  
(TV, shelving, other)  
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## OTHER QUESTIONS

- Project stage -----
- Approximate SF -----
- Approximate budget / SF -----
- Modeling software -----
- Other unique variables  
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# Need Assistance on your next Project?

Contact us at  
[hello@andalusia.design](mailto:hello@andalusia.design)