

# Capabilities & Services

Andalusia Design



## 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.

## ANDALUSIA TEAM

Andalusia was founded by entrepreneurs with deep experience in architectural products, including acoustics, lighting, controls, specialty ceiling and wall systems, window shades and materials.

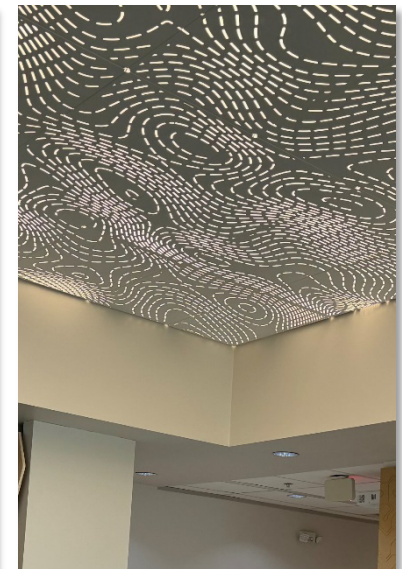
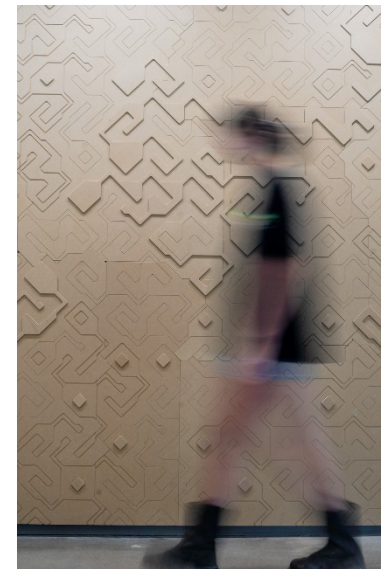
The founding team saw an opportunity to leverage advances in design and manufacturing technologies to provide 'custom' systems with greater flexibility and efficiency.

Andalusia's diverse team consists of some of the best and brightest parametric, architectural and industrial designers and operators who strive to deliver premium products and customer experiences.

## WHAT'S IN A NAME?

The name "Andalusia" was chosen to reflect a rich heritage of architectural and design innovation rooted in the Andalusian region of Spain. This area is renowned for its blend of Moorish, Gothic, and Renaissance influences, which have given rise to some of the most iconic examples of architecture in the world.

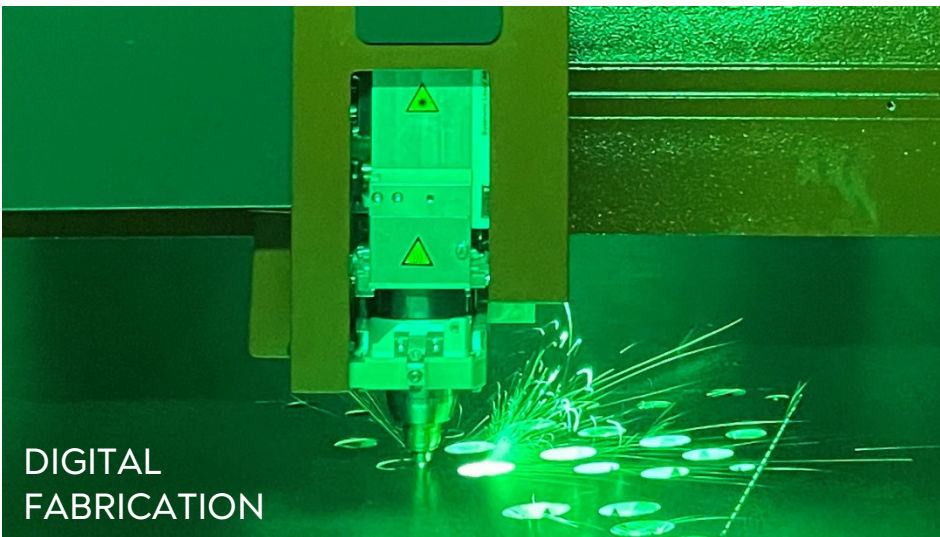
With Andalusia, we aim to evoke the spirit of creativity and cultural fusion that defines the region. Our designs are a modern interpretation of the principles that have made Andalusian architecture timeless: the use of geometric precision and incorporation of organic forms that resonate with the surrounding environment. We strive to bring a touch of this elegance and innovation to contemporary architectural projects.



## CAPABILITIES & SERVICES OVERVIEW



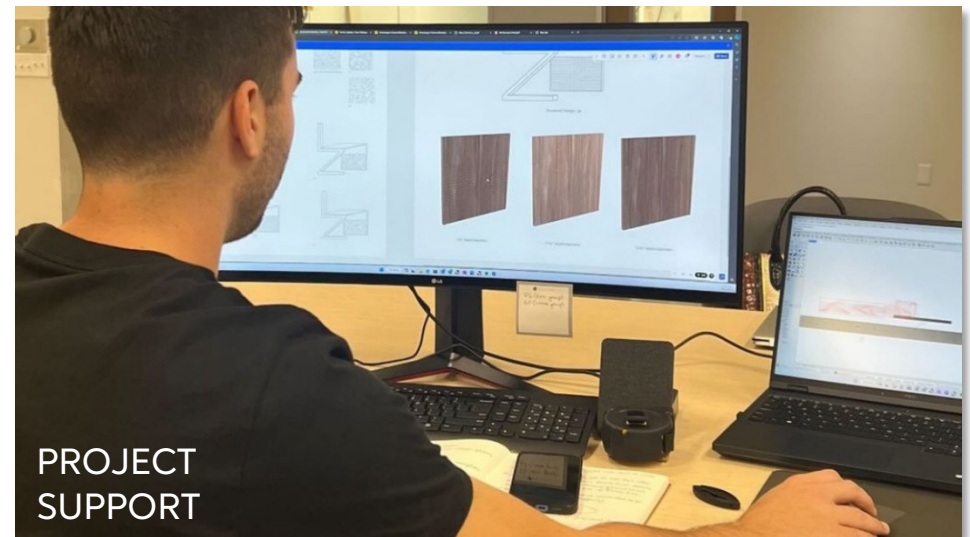
Andalusia products are designed parametrically by our in-house design team to create highly responsive and flexible systems that can be modified in real-time.



Our vertically-integrated factory in Austin, TX, offers best-in-class digital fabrication equipment – we can work with a variety of materials, including metal, wood and composites.



Our experienced team of engineers, industrial designers and manufacturing experts ensure that all products have the right form, fit and finish for every application.



Starting as early as the conceptual design phase, we provide a breadth of services to help support the design, specification and delivery of Andalusia products.



# PARAMETRIC DESIGN

Andalusia leverages parametric design to improve the speed, efficiency and flexibility of the architectural design and manufacturing process. Parametric design represents a significant shift in design methodology, moving from traditional linear approaches to more dynamic, algorithm-driven processes.

## WHAT IS PARAMETRIC DESIGN?

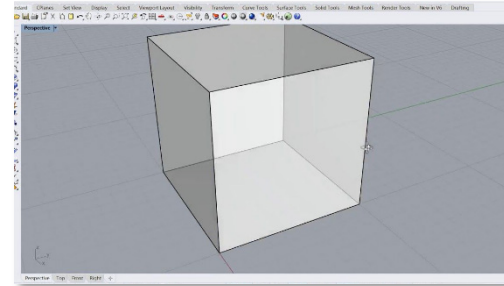
Parametric design lets designers create a wide range of shapes and patterns that automatically adjust when parameters are changed.

Instead of manually adjusting each element of a design (like traditional CAD), parametric design uses dynamic models where a single change can ripple through the entire structure, maintaining relationships and ensuring consistency in the design.

## WHY IS PARAMETRIC DESIGN USEFUL?

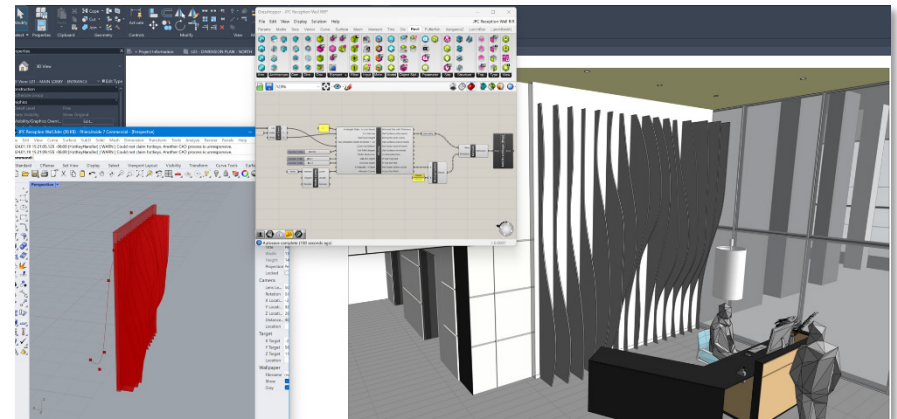
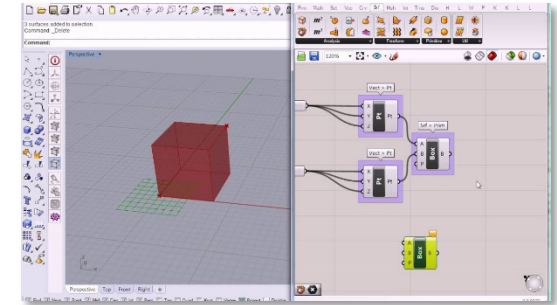
Parametric design allows designers to handle complexity and customization with ease. Designers can iterate quickly and test various configurations.

Parametric design can help reduce waste for sustainability efforts, facilitate cross-functional team collaboration, allow for real-time pricing feedback, and give confidence that the product will meet all specifications, even in the early phases of design.



Traditional CAD modeling requires users to manually create and manipulate objects

Parametric design uses 'behind-the-scenes' software algorithms to create and manipulate objects in CAD

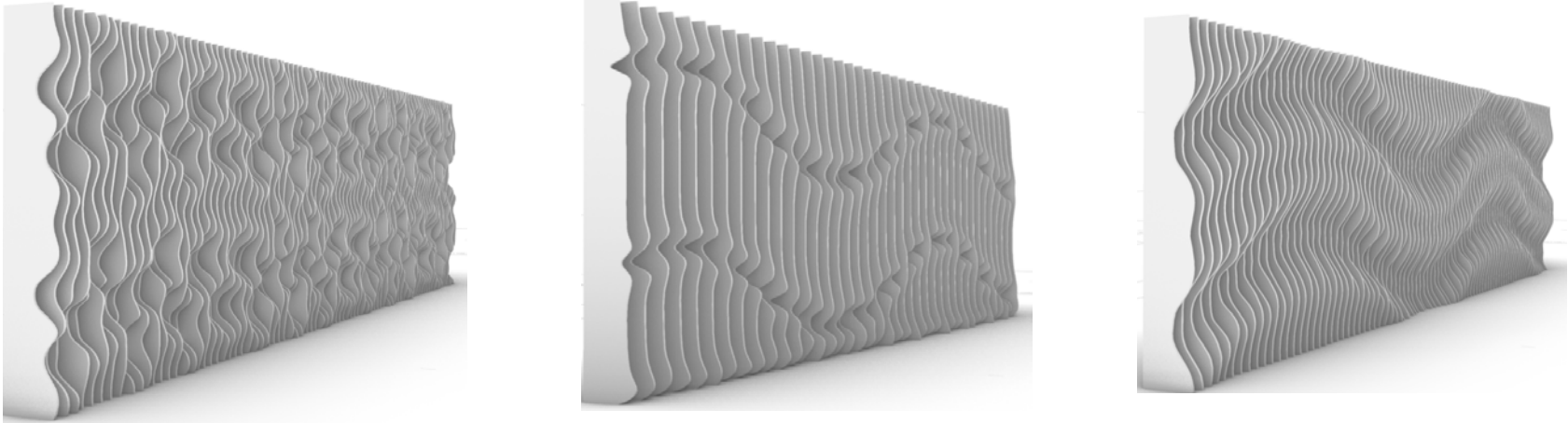


Parametric modeling of your design allows for more effective collaboration, easier design changes, real-time pricing feedback, sustainability optimization and so much more!

## PARAMETRIC DESIGN

At Andalusia Design, parametric design is a cornerstone of the creative process, enabling the development of intricate architectural products that are both aesthetically pleasing and highly functional. Andalusia utilizes parametric design to craft and modify unique patterns and surfaces for specialty ceiling and wall applications.

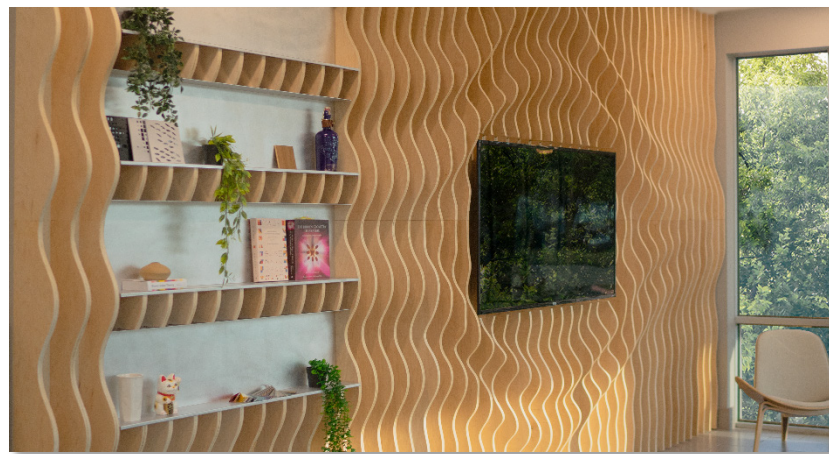
The slat arrays shown here are driven by the same parametric code, which allows for creating different surface patterns.



## RESPONSIVE DESIGNS

By manipulating parameters – like shape, size, spacing, surface characteristics and materials – Andalusia’s parametric design platform automatically generates production-ready designs.

Additionally, when you integrate components, logos or other elements into the structure, the system will not only accommodate the elements, but also ‘respond’ to them, resulting in a more purposeful and aesthetically-pleasing system.



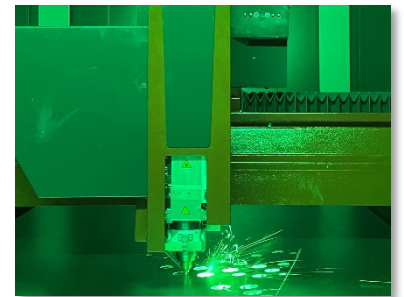
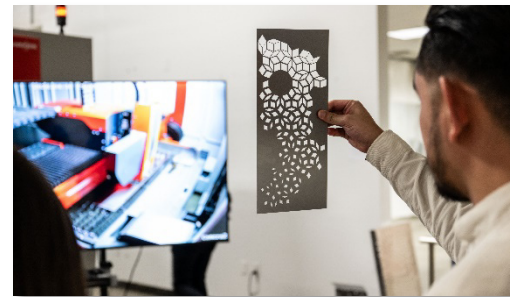
Andalusia’s Contour Slat Wave design automatically ‘responds’ to integrated elements, much like a stone in a stream.



## DIGITAL FABRICATION

Digital fabrication refers to the process of translating digital designs into physical objects through the use of computer-controlled machinery. These tools interpret digital models and execute precise operations, allowing for the creation of complex forms and structures that were once impossible or prohibitively expensive to build.

Andalusia offers best-in-class, large-scale production equipment for processing metal, wood and composites.

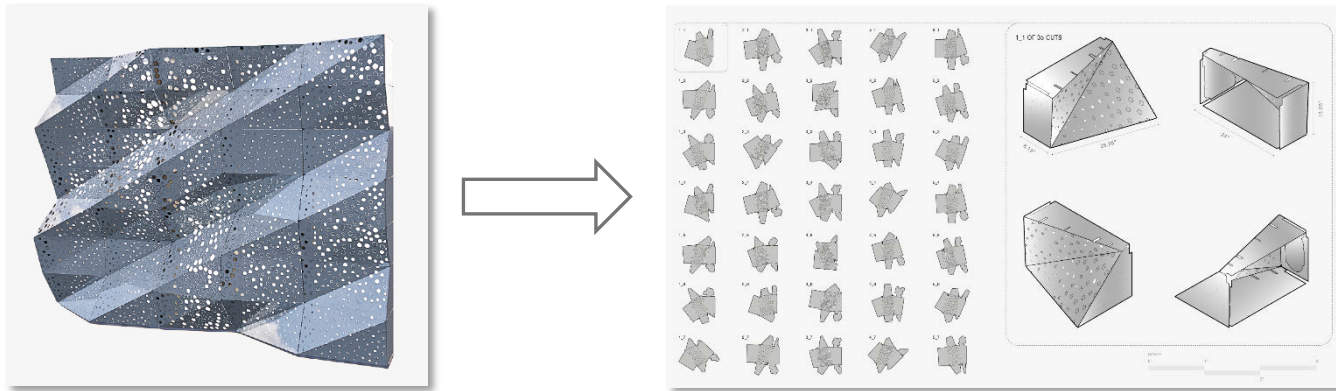


Andalusia's wood working facility is centered around large format, multi-axis CNC cutters (top). Full infeed / outfeed capability and automated material handling (bottom left) on the CNC enables high-throughput production automation. Finishing equipment includes saws, sanders, hardware / joining assembly stations and automated paint and stain lines (bottom right).

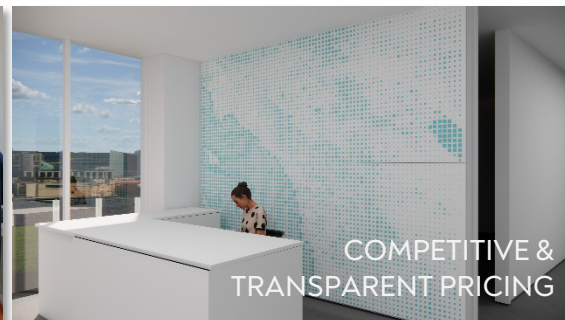
Andalusia's metal working area is anchored by the high-speed, high-power fiber laser cutter (top, bottom left and bottom right close-up), which enables high-resolution, accurate cutting of metals, including architectural steel and aluminum. The automated press brake provides accurate bending. Since all machinery use the same software platform, the process from design to production is fully automated.

## DIGITAL FABRICATION + PARAMETRIC DESIGN

By combining parametric design with digital fabrication, Andalusia is uniquely positioned to fully automate and streamline the design-to-production process. It usually takes weeks to turn around production-ready and approved drawings for clients, but Andalusia can give information on price, lead time and drawings in real-time – as early as the design stages!



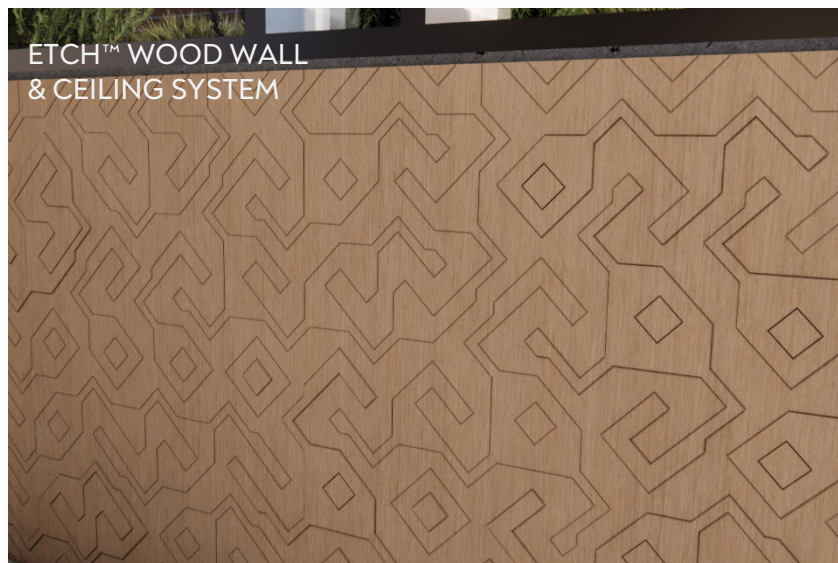
Traditionally, converting a design into production-ready drawings can take weeks. Using parametric design and digital fabrication techniques, Andalusia can deliver drawings for even the most complicated designs in real-time.





## STANDARD PRODUCTS

Andalusia can work with you on highly-custom, specialty ceiling and wall products, but offer a series of parametric product platforms as a starting point for your project.





# PRODUCT STYLES

Designers have near unlimited flexibility with surface designs, but Andalusia offers 'inspiration' in the form of Styles.



Andalusia's Style Guide (left) is a look book that provides inspiration for designers.

Each Style offers unique characteristics and a view into the purpose, variety and configurability of Andalusia's standard products

Andalusia provides Spec Guides (below) for each Style, walking designers through how the Style was constructed and how to specify the Style





## 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 conceptual 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
- Budgetary Price Guides
- Specification Guides

### 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







# Need Assistance on your next Project?

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