PRODUCT OVERVIEW

BranchClad™ Interior is a sculptural wall panel system that combines advanced manufacturing with geometric customization to produce beautiful and visually striking interior spaces. The system features Branch Composite Core™— made up of 3D printed carbon fiber polymer matrix encapsulated in robotically milled foam insulation. Branch Composite Core™ panels are finished with beautiful architectural plaster finishes.

BranchClad™ Interior panels are three-dimensional, offering unprecedented design freedom that traditional flat finishes cannot match. Add depth, texture, and pattern to create signature spaces. These panels leverage an innovative and material-efficient additive manufacturing process that eliminates waste and maximizes the potential of your interior space. High quality materials provide premium structure and surface to accompany your unique architectural inspiration.

Branch Technology's fabrication technology embraces digital manufacturing techniques that transform Rhino, SketchUp, Revit and other CAD based digital models into robotic programs that result in high-fidelity physical products. Branch Technology also offers helpful design guides, 3D modeling services, and technical design assistance upon request.

APPLICATIONS

- Interior design and architectural features
- Renovation of existing interiors
- Wall paneling, room dividers, feature walls
- Sculptural installations, artistic concept realization
- Custom interior forms, colors, textures, and patterns
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FEATURES & BENEFITS

- Mass-customization
- 3D design freedom
- Durable and long-lasting
- Large format panel size
- High-impact interior design
- Zero waste in 3D printing
- Ease of installation
- Manufactured in the USA
- Creates signature spaces

PANEL CHARACTERISTICS

Maximum Panel Size	4' X 10'*
Minimum Panel Size	3' x 3'
Maximum Panel Depth	12 7/8" **
Maximum Panel Depth with Carrier	17 3/8" **
Maximum Design Articulation	8"
Panel Weight 4" 8" 12"	*** ≈13-17 PSF ≈19-24 PSF ≈25-31 PSF
Approximate Carrier Weight	≈4.5 PSF***
Joints	3/4" or 1"
Deflection Limit	L/240
Typical Finish Thickness	3/8"
Finish Compressive Strength ASTM C109	10,000 PSI (68,9478kPa)
Finish Flexural Strength ASTM C947	690 PSI (4,757 kPa)
Finish Tensile Strength ASTM C307	550 PSI (3,792 kPa)

Maximum dimensions or units unless noted otherwise.

* Vertical or horizontal orientation.

** Depth will vary depending on articulation and/or aluminum rainscreen carrier system components.

*** Panel weights will vary per articulation and/or aluminum rainscreen carrier system components. Weight listed is based on a 4'x10' panel.

DESCRIPTION OF COMPONENTS

1 ALUMINUM CARRIER SYSTEM
Horizontal Rails
Vertical Rails
Brackets
Fasteners

2 BRANCH COMPOSITE CORE™
Closed Cell Rigid Spray Polyurethane Foam
Carbon Fiber Reinforced Polymer Matrix
Internal Metal C-Channel for Attachment

ARCHITECTURAL FINISH SYSTEM
3 Premium Plaster
Premium Stucco
Premium Drywall

INSULATION PERFORMANCE

ASTM E84 Surface Burning Characteristics of Building Materials on Closed Cell Rigid Spray Polyurethane Foam(SPF)

Intertek Report No. 1007456745AT-001A, dated 06/01/2012.

Also published under **NFPA 255, UL 723, UBC 8-1.**

FLAME SPREAD INDEX	SMOKE DEVELOPED INDEX
25	250
This material is **CLASS 1 OR CLASS A RATED**. *Panel depth not to exceed an average thickness of 10.5 inches (267 mm) per NFPA 285 compliance.	

ASTM C1029 Standard Specification for Spray-Applied Rigid Cellular Polyurethane Thermal Insulation.

ASTM C518 Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus. R-value at 75°F is 6.45/in.

FINISH PERFORMANCE

ASTM C109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars

ASTM C307 Standard Test Method For Tensile Strength Of Chemical-Resistant Mortar, Grouts, And Monolithic Surfacings

ASTM C348 Standard Test Method for Flexural Strength of Hydraulic-Cement Mortars

ASTM C273 Standard Test Method for Shear Properties of Sandwich Core Materials

ASTM C672 Standard Test Method for Scaling Resistance of Concrete Surfaces Exposed to Deicing Chemicals

ASTM C531 Standard Test Method for Linear Shrinkage and Coefficient of Thermal Expansion of Chemical-Resistant Mortars, Grouts, Monolithic Surfacings, and Polymer Concretes.

ASTM C666 Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing.

ASTM E488 Standard Test Methods for Strength of Anchors in Concrete and Masonry Elements.

CODE COMPLIANCE

ASTM E119 Fire Tests of Building Construction & Materials. Engineering Analysis 1AJP00295.000, dated 01/22/2022.

NFPA 285 Fire Propagation of Exterior Wall Assemblies. Intertek Report No. M4330.01-121-24-R0, dated 08/05/2021. Expanded capabilities per Engineering Analysis 1AJP00295, dated 10/12/2021.

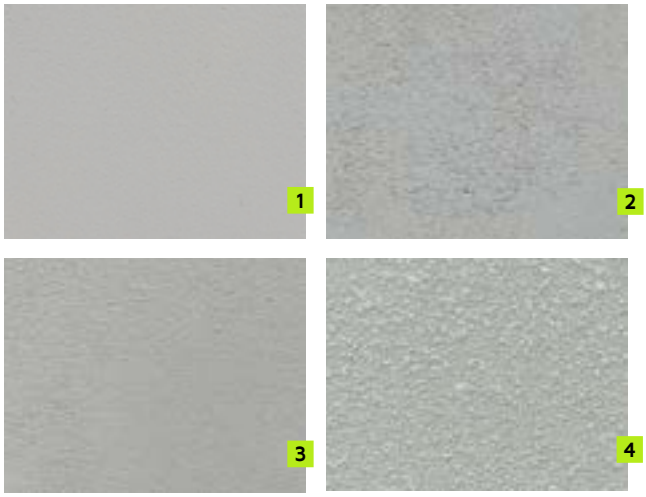
ASTM E84 Surface Burning Characteristics of Building Materials. The hydroscopic color coating finish and closed cell rigid spray polyurethane foam are individually tested and Class A rated.

COLOR

BranchClad™ Interiors can be finished with natural concrete tones, manufacturer's standard colors or custom colors— setting a new standard for design possibilities. Opaque colors have excellent color consistency and retention. As a hydrophobic technology this final finish keeps vertical buildings surfaces clean and attractive.

FINISH TEXTURES

The architectural finish system is a hand-troweled finish, topped with a range of texture options. Large-scale dimensional panel features are complimented with a fine surface texture of your specification.



1. Smooth, 2. Etched, 3. Fine Sand, 4. Medium Sand

ATTACHMENT

BranchClad™ Interiors is an interior wall assembly that attaches to a concealed aluminum rail system and can be attached directly to stud walls or through existing interior wall layers. It serves to support the panels, conceal fasteners, and attach the panels to the substrate wall. Panels ride directly on the rails. All panel fasteners are concealed within the cavity.

INSTALLATION

BranchClad™ panels ship complete with shop-applied finishes and some pre-installed attachment hardware. Pre-cut engineered metal rail supports can be shipped directly to the jobsite and fastened into the substrate wall. Install BranchClad™ panels to the metal rail supports starting at the bottom coursing. Installation shall be in accordance with manufacturer's instructions and approved shop drawings.

MAINTENANCE

Coated with the integrally colored hydrophobic finish, BranchClad™ requires limited maintenance and cleaning. Periodically, finishes may need to be cleaned to remove debris or restore the appearance of the building. Surface residue may be removed with manufacturer approved cleaning methods. Minor scratches may be touched up on-site by matching the finish and coordinating a re-coat application. Repair structural cracks or other damage to the facade immediately. Prevent cracks by adhering to manufacturer approved installation techniques.

SUSTAINABILITY

Branch Technology is a leader in innovative building material systems delivering high-quality products that set a new standard for sustainability. Branch offers long-lasting products that are as robust as they are revolutionary. Here are some ways that BranchClad™ puts our planet first.

- Life Cycle Assessments of Branch Technology Operations
- Environmental Product Declarations
- Zero-waste principals in 3D printing
- Zero/low VOCs in all materials
- Recycled Materials in carrier board
- High insulation value reduces energy and carbon for the life of the building
- Lower carbon footprint than other 3D printing methods
- UL certified Environmental Product Declaration (EPD)

WARRANTY

Branch Technology warrants that BranchClad™ components be free from major defects in manufacturing on the date of substantial completion. Longer durations warranties are available upon request.

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BranchClad™ is made exclusively by Branch Technology.