

# **PRODUCT OVERVIEW**

BranchClad<sup>™</sup> Stucco is a rainscreen system that offers mass-customized design articulation. The system features Branch CompositeCore<sup>™</sup>— a digitally manufactured structure made up of 3D printed carbon fiber polymer matrix and robotically milled foam insulation. Branch CompositeCore<sup>™</sup> panels are finished in an array of Stucco finishes.

Unleash your creativity with sculptural panels. Designers can create 3D patterns and shape buildings to activate new levels of innovation and ultimate design freedom. All panels can be unique. Stack bond or running bond panel layouts can be achieved with the rectangular shaped panels. CAD based software platforms like Rhino, SketchUp and Revit can be used to contour and shape the facade design surfaces. Branch offers helpful design guides, evaluation software, 3D modeling, and design assistance upon request.

### APPLICATIONS

- New construction building enclosures
- Renovation/Re-clad of existing building enclosure
- Open joint system rainscreen
- Sealed joint barrier system
- Interior cladding and feature wall finish

### **FEATURES & BENEFITS**

- Design Freedom
- Lightweight
- High R-Value (R-6 per inch)
- Zero Waste in 3D Printing
- Prefabricated
- Ease of Installation
- Highly Customizable Finishes
- Manufactured in the USA
- High fidelity to digital design

### BranchClad<sup>™</sup> Stucco **PANEL CHARACTERISTICS**

Maximum Panel Size	4' X 8'*
Minimum Panel Size	3' x 3'
Panel Depth	13″**
System Depth	17 1/4″**
CompositeCore <sup>™</sup> Articulation	8″
Total System Weight	***
4″	≈6 PSF
8″	≈7 PSF
12″	≈9 PSF
Panel Weight	≈8 PSF***
Seams	3/4" or 1"
Deflection Limit	L/240

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'x8' panel



### CODE COMPLIANCE

**ASTM E119** Fire Tests of Building Construction & Materials. Engineering Analysis 1AJP00295.000, dated 03/24/2022.

**NFPA 285** Fire Propagation of Exterior Wall Assemblies. Intertek Report No. L4963.01-121-24-R0, dated 12/30/2020. Expanded capabilities per Engineering Analysis 1AJP00295, dated 03/24/2022.

**ASTM E84** Surface Burning Characteristics of Building Materials. Stolit Finish, Closed Cell Rigid Spray Polyurethane Foam, and Exterior Grade Backer Board are individually tested and Class A rated.

### **DESCRIPTION OF COMPONENTS**

#### 1 ALUMINUM RAINSCREEN CARRIER SYSTEM Horizontal Rails Vertical Rails

Vertical Rails Brackets Fasteners

#### BRANCH COMPOSITECORE<sup>TM</sup>

Closed Cell Rigid Spray Polyurethane Foam Carbon Fiber Reinforced ABS Polymer Matrix Internal Metal C-Channel for Reinforcing Exterior Grade Backer Board

#### 3 STO FINISH SYSTEM

Sto BTS Plus Base Coat Sto Reinforcing Mesh Sto Textured Finishes and Coatings



#### 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  $75^{\circ}$ F is 6.5/in.

### **FINISH TEXTURES**

BranchClad<sup>TM</sup> Stucco can be finished in most Sto Corp. architectural finishes. Customized finish surface textures combine high-quality proven finishes with application techniques that are fully tested and appropriate for sculptural articulation. Refer to the Sto Corp. website for more information.



1. StoSignature 10, 2. StoSignature Stone 20

### COLOR

BranchClad<sup>™</sup> Stucco finish textures and colors are fully customizable setting a new standard for facade design. Refer to Sto Corp.'s website for a wide range of colors and palettes.

https://www.stocorp.com/sto-color/

#### **ATTACHMENT**

BranchClad<sup>™</sup> Stucco is a rainscreen assembly that depends on a concealed aluminum rail system over appropriate building layers. Its function is to support the panel, drain rainwater, conceal fasteners and accommodate building movement. Rails support a fiber backer panel on which the finished Branch CompositeCore<sup>™</sup> rides and gains necessary deflection limits. All panel fasteners are concealed within the cavity. The attachment system and components must be engineered to meet code requirements for each project.

#### SUSTAINABILITY

Branch Technology is a leader in innovative prefabricated 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 BranchCladTM puts our earth 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 for long term energy and carbon savings for in-use buildings
- Lower carbon footprint than concrete 3D printing methods
- This products Environmental Product Declaration (EPD) has been certified by UL.

#### INSTALLATION

BranchClad<sup>™</sup> Stucco panels are prefabricated and 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 over the appropriate building layers. Install BranchClad<sup>™</sup> Stucco panels to the metal rail supports starting at the bottom coursing. Coordinate flashing and sheet metal work to provide weather appropriate conditions at wall terminations. Installation shall be in accordance with manufacturer's instructions and approved shop drawings.

#### MAINTENANCE

BranchClad<sup>™</sup> Stucco requires little to no maintenance. 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 recoat application with a finish installer. Sealants and other building components must be maintained to prevent water infiltration into or behind the system.

#### WARRANTY

Branch Technology warrants that BranchClad<sup>TM</sup> components be free from major defects in manufacturing for a period of 1 year to commence on the date of substantial completion. Longer durations warranties are available.

## BRANCH TECHNOLOGY 1530 Riverside Drive Building B Chattanooga, TN 37406 Tel: 423-682-8800



#### www.branchtechnology.com

ATTENTION: This product assembly is intended for use by qualified professional contractors, not consumers, as a component of a larger construction assembly as specified by a qualified design professional, general contractor or builder. It should be installed in accordance with specifications provided by Sto Corp. Branch Technology provides a component of this system. Branch Technology disclaims all, and assumes no, liability for on-site inspections, for its products applied improperly, or by unqualified persons or entities, or as part of an improperly designed or constructed building, for the nonperformance of adjacent building components or assemblies, or for other construction activities beyondBranch Technology's control. Improper use of this product or use as part of an improperly designed or constructed building may void the warranty and result in serious damage to this product, and to the structure of the building or its components.