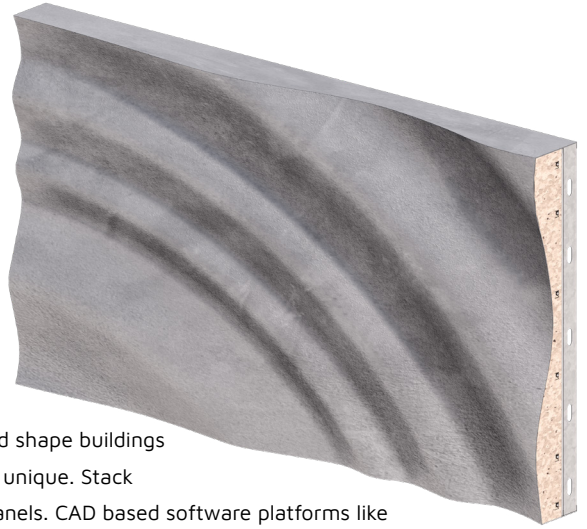


PRODUCT OVERVIEW

StoPanel® 3DP powered by Branch Technology is a fully prefabricated panelized wall system that includes all the building envelope control layers integrated with a unique, fully customizable 3D printed filled and milled shape that is lightweight, structurally robust and easy to install. The system features Branch CompositeCore™— a digitally manufactured structure made up of 3D printed carbon fiber polymer matrix and robotically milled foam insulation. Branch CompositeCore™ panels are finished in an array of Stucco finishes. Branch’s unique Cellular Fabrication (C-Fab®) 3D printing process allows for unprecedented creativity as virtually any shape or form can be created at a large scale. StoPanel® 3DP can be used for exterior wall cladding for new construction.

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.



CODE COMPLIANCE

- ASTM E119** Fire Tests of Building Construction & Materials Engineering Analysis Project No. 1JJB05184, dated 08/16/2021.
- NFPA 285** Fire Propagation of Exterior Wall Assemblies. Intertek Report No. L4963.01-121-24-RO, dated 01/02/21.
- NFPA 268** Ignitability Of Exterior Wall Assemblies Using A Radiant Heat Energy Source. Intertek Report No. L4963.02-121-24 RO, dated 01/27/2022.
- ASTM E330** Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference. Intertek Report No. M9288.01-550-44 R1, dated 03/23/22.
- ASTM E331** Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference. Intertek Report No. M9288.02-550-44 R1, dated 03/23/22.
- ASTM E84** Surface Burning Characteristics of Building Materials. All Sto finishes and Closed Cell Rigid Spray Polyurethane Foam are individually tested and Class A rated.

FEATURES & BENEFITS

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

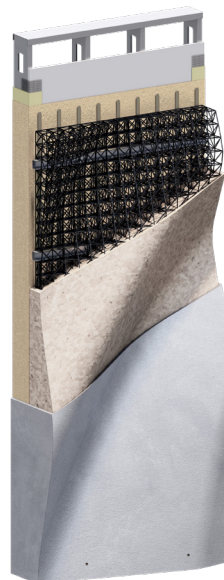
StoPanel® 3DP PANEL CHARACTERISTICS

Maximum Panel Size	10' X 45' *
System Depth	18 7/8"
Branch CompositeCore™ Depth	12"
CompositeCore™ Articulation	Up to 8" *
Total System Weight	***
4"	≈8 PSF
8"	≈9 PSF
12"	≈11 PSF
Seams	3/4" or 1"
Deflection Limit	L/240min

Maximum dimensions or units unless noted otherwise.
 * Vertical or horizontal orientation.
 ** Depth will vary per articulation and back-up wall components.
 *** Panel weights will vary per articulation and back-up wall components.
 Weight is based on a 10'x45' panel.

DESCRIPTION OF COMPONENTS

StoPanel® 3DP is an integrated exterior wall system. See Sto's website for full assembly details:
https://www.stocorp.com/sto_systems/stopanel-3dp/





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.**

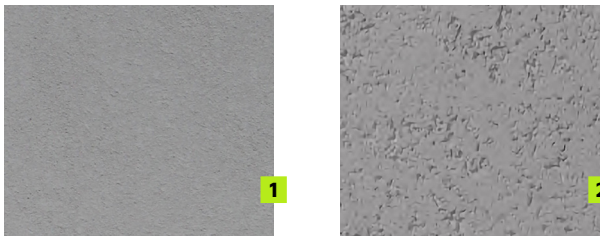
FLAME SPREAD INDEX	SMOKE DEVELOPED INDEX
25	250
This material is CLASS 1 OR CLASS A RATED.	
<small>*Panel depth not to exceed an average thickness of 10.5 inches (267 mm) per NFPA 285 compliance.</small>	

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 6.5/in.

FINISH TEXTURES

StoPanel® 3DP 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 dimensional articulation. Refer to the Sto Corp. website for more information.



1. StoSignature 10, 2. StoSignature Stone 20

COLOR

StoPanel® 3DP 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™ 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™ 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 BranchClad™ 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

INSTALLATION

Branch Technology, in partnership with Sto, offers a national network of StoPanel affiliates in every major construction market. These experienced fabricators manufacture StoPanel prefabricated wall systems to tested specifications in quality controlled facilities across the country. This ensures consistency in quality and design regardless of where the project is located. The wall system and components must be engineered to meet code requirements for each project. Installation shall be in accordance with manufacturer's erection instructions and approved shop drawings.

MAINTENANCE

StoPanel® 3DP powered by Branch Technology 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

The prefabricated wall system is intended to be designed, engineered and fabricated by a third-party as an exterior wall panel compliant with applicable building codes. Sto Corp. warrants that for a period of 5 years, measured from the project's Completion Date, products manufactured or sold by Sto, when properly applied to a Panel that was properly designed, engineered, fabricated and installed, will be free from defects in manufacture.

BRANCH TECHNOLOGY
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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 beyond Branch Technology's control. Improper use of this product or use as part of an improperly designed or constructed larger assembly or building may void the warranty and result in serious damage to this product, and to the structure of the building or its components.