

Georgia-Pacific Wood Products LLC

## ForceField® Air and Water Barrier System Submittal Form

### Manufacturer:

Georgia-Pacific Wood Products  
133 Peachtree Street NE  
Atlanta, GA 30303

### Description:

The ForceField® air and water barrier system from Georgia-Pacific consists of structural engineered wood sheathing panels laminated with a proprietary air and water barrier. Once the panels are installed on a structure and the panel seams are taped with ForceField® seam tape, it creates a code-compliant, integrated wall system for residential or light commercial construction that eliminates the need for house wrap.

### Primary Uses:

ForceField Air and Water Barrier System functions as a combination wall sheathing, water-resistive, and air barrier. The sheathing seams are sealed with ForceField brand seam tape to protect the wall from water intrusion.

ForceField Air and Water Barrier System may be used for walls in International Building Code (IBC) Type V construction permitted in accordance with the International Residential Code (IRC).

ForceField Air and Water Barrier System can be used under a wide range of attached and rain screen cladding systems. These include cavity brick and claddings such as wood, vinyl, and composite siding.

### Available Sizes:

- 3'-11<sup>7</sup>/<sub>8</sub>" (1.216 m) x 7'-11<sup>7</sup>/<sub>8</sub>" (2.435 m) – sized for 4' x 8'
- 3'-11<sup>7</sup>/<sub>8</sub>" (1.216 m) x 97<sup>1</sup>/<sub>8</sub>" (2.466 m)
- 3'-11<sup>7</sup>/<sub>8</sub>" (1.216 m) x 8'-11<sup>7</sup>/<sub>8</sub>" (2.740 m) – sized for 4' x 9'
- 3'-11<sup>7</sup>/<sub>8</sub>" (1.216 m) x 109<sup>1</sup>/<sub>8</sub>" (2.771 m)
- 3'-11<sup>7</sup>/<sub>8</sub>" (1.216 m) x 9'-11<sup>7</sup>/<sub>8</sub>" (3.044 m) – sized for 4' x 10'
- 3'-11<sup>7</sup>/<sub>8</sub>" (1.216 m) x 121<sup>1</sup>/<sub>8</sub>" (3.076 m)

Building Code Performance Categories, Panel Thickness:  
7/16 CAT, 0.418 (10.61 mm)

### Limitations:

Do not use abutted to general stone or masonry without providing a minimum of a 1/2" gap.

Do not install ForceField tape in temperatures less than 20° F or if panel surface has frost or ice.

In wall covering systems requiring multiple layers of water-resistive barriers, ForceField Air and Water Barrier System is intended to replace only the first water-resistive barrier layer.

### Technical Data:

ForceField meets Exposure 1 – OSB suitable for uses not permanently exposed to the weather. Panels classified as Exposure 1 are intended to resist the effects of moisture on structural performance as may occur due to construction delays, or other conditions of similar severity.

ForceField meets applicable sections of ICC-ES AC 310, Acceptance Criteria for Water Resistive Membranes Factory-Bonded to Wood-Based Structural Sheathing Used as Water-Resistive Barriers, and ASTM D5651 Standard Test Method for Surface Bond Strength of Wood-Base Fiber and Particle Panel Materials.

The ForceField® air and water barrier system was tested in accordance with ASTM E 2357, Standard Test Method for Determining Air Leakage of Air Barrier Assemblies.

ForceField tape should be used for sealing joints and penetrations. The tape is a minimum 3 inches wide and .009 inches thick. The tape has been tested in accordance with PSTC 101 Peel Adhesion of Pressure Sensitive Tape and PSTC 131 *Breaking Strength and Elongation of Pressure Sensitive Tapes*.

Georgia-Pacific® AT Flashing Tape can be used for sealing openings and material transitions is a pressure sensitive adhesive-based product designed to adhere to ForceField without primer or conditioning. The flashing tape is a minimum 4 inches wide and .012 inch thick, meeting or exceeding the requirements specified in AAMA 711, *Voluntary Specification for Self Adhering Flashing Used for Installation of Exterior Wall Fenestration Products*.

ForceField is recognized by APA-The Engineered Wood Association Product Report PR-N136 as a building code and energy code compliant structural wood sheathing, water-resistive barrier and air barrier.

## ForceField Air and Water Barrier System Performance Properties

Panel Exposure Durability Classification	DOC PS 2	Exposure 1
Panel Grade	DOC PS 2	7/16 CAT
Water Resistive Barrier	ICC ES AC 310	Meets/exceed requirements
Surface Bond of Overlay to Panel	ASTM D5651	35.2 psi
Water Penetration	ASTM E331	Pass
Water Vapor Transmission	ASTM E96 (Water Method)	2.75 perms for laminated panel
Air Barrier Assembly (penetrated wall assembly)	ASTM E 2357	.0009 cfm/ft <sup>2</sup> @75 pa
Seam Tape Evaluation	PSTC 101 Peel Adhesion PSTC 131 Breaking Strength/Elongation	5.98 N/10 mm width 68.0 N/10 mm width 190 (%)
Flashing Tape Evaluation	AAMA 711	Pass
Surface Burning Characteristics	ASTM E84	Flame spread: 125 Smoke development: 120 Meets Class III

### Sustainable Design Contributions:

- Low Emitting Material: No added urea formaldehyde
- ForceField panels are made from wood sourced through a system that is third-party certified to the Sustainable Forestry Initiative® procurement standard
- Regional Materials: ForceField is made in the USA at the following locations Allendale, SC; Fordyce, AR; Hosford, FL

### ForceField Air and Water Barrier System Installation

**Nailing the Panels:** The weather barrier side of ForceField panels should face outside of the frame. Spacing of 1/8" should be maintained at all edges and end joints. Use a minimum 6d common nail spaced 6" o.c. along panel edges and 12" o.c. at intermediate supports. If pneumatic nail guns are used, be sure to set air pressure to drive nail heads flush or a maximum 1/16" below the panel surface to avoid loss of nail holding and shear strength, and to avoid creating a potential point of water entry. Guidelines are included on the panel surface to aid in locating supports for nailing.

**Cutting the Panels:** When cutting ForceField panels with a circular saw, the panels should be positioned with the weather barrier side facing down to help prevent edge fraying. Whenever possible the cut edge of the panel should be installed toward the ground. If the panel's cut edge is vertical or facing away from the ground, tape that edge immediately after installation with ForceField seam tape.

**Taping the Panel Seams:** ForceField seam tape from Georgia-Pacific must be used to seal the seams between sheathing panels, around openings, penetrations and material transitions. Tape substitutions are not covered by the warranty. For best performance results, immediate sealing of joints with tape is required. Before the application of tape, ensure that the sheathing surfaces are free from moisture, dirt and other debris. Center the tape over

the seam. ForceField seam tape is a contact tape requiring pressure to adequately seal. Apply modest pressure on the tape surface with your hand or a J-roller to ensure that constant bonding occurs between the tape and the panel and to eliminate wrinkles and air bubbles to achieve the proper seal. Whenever tape splices occur, a 2" overlap should be used. Sequence tape application such that the vertical tape is overlying or underlying the horizontal joint tape to ensure a shingle-type application. At T-joints, the tape should overlap by 1".

### Storage and Handling

**Handling in Transit:** Take precautions to protect panel ends and edges during shipment. If ForceField panels are shipped on open truck beds, cover them with a tarp.

**Storage on the Jobsite:** Whenever possible, store ForceField panels under a roof. Use pieces of lumber to weight down the top panel in a stack to reduce warpage from humidity. If moisture exposure is expected, cut steel bands on bundles to prevent edge damage. Outside Storage: If ForceField panels must be stored outside, stack them on a level platform supported by at least three 4x4s to keep them off the ground. Place one 4x4 in the center and the other two 12 to 16 inches from the ends. Never leave panels or the platform in direct contact with the ground. Cover the stacks loosely with plastic sheets or tarps. Anchor the covering at the top of the stack, but keep it open and away from the sides and bottom to ensure good ventilation. Tight coverings prevent air circulation and when exposed to sunlight may promote mold or mildew.

### Warranty

ForceField is covered by a lifetime limited warranty. For terms and conditions, please refer to our lifetime limited warranty available at [www.gpforcefield.com](http://www.gpforcefield.com).

## Submittal Approvals

Submitted to: \_\_\_\_\_

Job Name: \_\_\_\_\_

Submitted By: \_\_\_\_\_

Date: \_\_\_\_\_



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[www.gpforcefield.com](http://www.gpforcefield.com)  
Technical Service Hotline: 866-249-3639