

# ForceField® Weather-Resistive Barrier OSB Georgia-Pacific Wood Products LLC

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Products: Georgia-Pacific ForceField® Weather-Resistive Barrier OSB Georgia-Pacific Wood Products LLC, 133 Peachtree Street, NE, Atlanta, Georgia 30303 (404) 652-4000 www.buildgp.com

## Basis of the product report:

- 2020 Florida Building Code (FBC), Building: Sections 1404.2 Water-resistive barrier, 1505 Fire Classification, and 1507 Requirements for Roof Coverings
- 2020 FBC, Residential: Sections R703.2 Water-resistive barrier, R902 Fire Classification, and R905 Requirements for Roof Coverings
- 2020 FBC, Energy Conservation: R402.4 Air leakage (Mandatory), C402.5 Air leakagethermal envelope (Mandatory), and C402.5.1 Air barriers
- US DOC PS2-10 Performance Standard for Wood-Based Structural-Use Panels recognized by the 2020 FBC, Building, and 2020 FBC, Residential
- APA Panel Design Specification
- Qualification reports and other qualification data

## 2. Product description:

Georgia-Pacific ForceField® weather-resistive barrier OSB products consist of Georgia-Pacific 7/16 through 19/32 Performance Category oriented strand board panels manufactured in accordance with the in-plant manufacturing standard approved by APA and adhered with a factory-applied proprietary overlay. The Exposure 1 OSB complies with US DOC PS 2 for wood structural panels.

Georgia-Pacific ForceField weather-resistive barrier OSB products have been evaluated for compliance with the Florida Building Code (FBC), Building (FBCB), and FBC, Residential (FBCR), for use as a combination of wall sheathing, water-resistive barrier, and air barrier, and a combination of roof sheathing and roof underlayment. Georgia-Pacific ForceField weather-resistive barrier OSB products have also been evaluated in accordance with ASTM D5651, Standard Test Method for Surface Bond Strength of Wood-Base Fiber and Particle Panel Materials, and ASTM E2357, Standard Test Method for Determining Air Leakage of Air Barrier Assemblies. Georgia-Pacific ForceField weather-resistive barrier OSB products have not been evaluated for use in the High-Velocity Hurricane Zones (HVHZ).

When installed with ForceField seam tape described in this section in accordance with the installation requirements specified in Section 4 of this report, Georgia-Pacific ForceField weather-resistive barrier OSB products shall be permitted for use outside of the HVHZ in:

- a) Walls of Type V construction in the FBCB and FBCR as an alternative to the water-resistive barrier required in Chapter 14 of the 2020 FBCB and Chapter 7 of the 2020 FBCR.
- b) Roofs with a pitch of 2:12 or greater for Type III and Type V construction in the FBCB and FBCR as a combination roof sheathing and roof underlayment with the following limitations:
  - 1) For installations under the FBCB, Type III-A and Type V-A shall be in accordance with FBCB Table 601 footnotes b and d,
  - Enclosed attic and rafter spaces shall be ventilated in accordance with applicable code except where unvented assemblies are permitted by Section R806.5 of the FBCR.

ForceField seam tape used for sealing joints and penetrations is a pressure-sensitive, coated polymeric film. The tape is minimum 3 inches wide and 0.003 inch 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*, for Type A, Class Level 3.

The Georgia-Pacific flashing tape 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 minimum 4 inches wide and 0.012 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*, for Type A, Class Level 3.

The manufacturing processes and quality assurance of the Georgia-Pacific ForceField weather-resistive barrier OSB products are documented in the in-plant manufacturing standard approved by APA.

# 3. Panel performance properties:

Georgia-Pacific ForceField weather-resistive barrier OSB products meet the design properties specified in APA *Panel Design Specification*, Form D510, dated May 2012, for Exposure 1 panels with a span rating of 24/16, 32/16, or 40/20 as designated in the panel trademark.

Georgia-Pacific ForceField water-resistive barrier OSB products shall be designed for wind uplift at a design span not exceeding the span rating shown in the trademark in accordance with Sections 1609 and 2304.8.2 of the FBCB, and R301.2.1 of the FBCR. Roof coverings shall be mechanically fastened to the panels to resist the design wind uplift.

Georgia-Pacific ForceField water-resistive barrier 7/16 Performance Category OSB products have been tested in accordance with ASTM E96, *Standard Test Methods for Water Vapor Transmission of Materials*.

When manufactured to comply as facing materials for structural insulated panels (SIPs) in accordance with Section R610.3 of the 2020 FBCR, the water-resistive barrier properties of the Georgia-Pacific ForceField water-resistive barrier OSB products are not affected by the manufacturing processes.

## 4. Product installation:

Georgia-Pacific ForceField weather-resistive barrier OSB products recognized in this report shall be installed in accordance with recommendations provided by the manufacturer in ForceField™ Installation Guide for Residential Projects, Literature Item 622131, dated 2020.

When used in roof applications, Georgia-Pacific ForceField weather-resistive barrier OSB products recognized in this report comply with Sections 1507.1.1.1 Method 3 of the FBCB, and R905.1.1 Method 3 of the FBCR, when installed in accordance with Section 3 of this report and recommendations provided by the manufacturer.

#### Fire-resistant construction:

- a) Georgia-Pacific ForceField weather-resistive barrier OSB products meet Class II (or B) flame spread index and smoke-developed index when tested in accordance with ASTM E84, Standard Test Method for Surface Burning Characteristics of Building Materials.
- b) Georgia-Pacific ForceField weather-resistive barrier OSB products meet a Class A fire classification as the underlayment for roof assemblies covered with ASTM D3018, Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules, Class A asphalt fiberglass shingles when tested in accordance with ASTM E108, Standard Test Methods for Fire Tests of Roof Coverings.
- c) Georgia-Pacific ForceField weather-resistive barrier OSB products are permitted to be used with nonclassified roof coverings in accordance with Table 1505.1 footnote b and Sections 1505.5 of the FBCB and R902.1 of the FBCR.

### 6. Limitations:

- a) Georgia-Pacific ForceField weather-resistive barrier OSB products recognized in this
  report shall be used in a design span not exceeding the span rating shown in the
  trademark.
- b) Georgia-Pacific ForceField weather-resistive barrier OSB products are limited to dry service conditions where the average equilibrium moisture content of sawn lumber is less than 16%.
- c) Georgia-Pacific ForceField weather-resistive barrier OSB products have not been evaluated for use in the HVHZ of the FBCB and FBCR.
- d) When used as roof assemblies and coverings, Georgia-Pacific ForceField weatherresistive barrier OSB products are limited to a slope of not less than 2 units vertical in 12 units horizontal (17% slope).
- e) Georgia-Pacific ForceField weather-resistive barrier OSB products meet a Class A fire classification as the underlayment for roof assemblies covered with ASTM D3018 Class A asphalt fiberglass shingles.
- f) Georgia-Pacific ForceField weather-resistive barrier OSB products are produced by Georgia-Pacific Wood Products LLC at the manufacturing facilities in Clarendon, SC, Fordyce, AR, and Hosford, FL, and under a quality assurance program audited by APA.
- g) This report is subject to re-examination in one year.

#### 7. Identification:

Georgia-Pacific ForceField water-resistive barrier OSB products described in this report are identified by a label or stamp bearing the manufacturer's name and/or trademark (Georgia-Pacific), the APA assigned plant number (532 for the Clarendon, SC plant, 475 for the Fordyce, AR plant, and 500 for the Hosford, FL plant), the product thickness and span rating, the APA logo, the report number PR-N136, and a means of identifying the date of manufacture.



Figure 1. Typical ForceField Mark

APA – The Engineered Wood Association is an approved national standards developer accredited by American National Standards Institute (ANSI). APA publishes ANSI standards and Voluntary Product Standards for wood structural panels and engineered wood products. APA is an accredited certification body under ISO/IEC 17065 by Standards Council of Canada (SCC), an accredited inspection agency under ISO/IEC 17020 by International Code Council (ICC) International Accreditation Service (IAS), and an accredited testing organization under ISO/IEC 17025 by IAS. APA is also an approved Product Certification Agency, Testing Laboratory, Quality Assurance Entity, and Validation Entity by the State of Florida, and an approved testing laboratory by City of Los Angeles.

### **APA - THE ENGINEERED WOOD ASSOCIATION**

# **HEADQUARTERS**

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