



OSB Information Sheet

Residential Floor, Wall & Roof Applications

General

West Fraser OSB panels are APA – The Engineered Wood Association certified panels manufactured to Department of Commerce Voluntary Product Standard PS 2, which is recognized by 1) the International Building Code, 2) the International Residential Code, 3) the International Code Council Evaluation Service (ICC-ES) Evaluation Report ESR-2586, and 4) the HUD Use of Materials Bulletin No. 40c. The APA trademark also indicates the panel grade, span rating, bond classification, and mill number. West Fraser markings include the production date and time and may also include the product brand.

Sheathing Grades

Rated Sheathing is designed for subfloor, wall, and roof sheathing applications. Rated Sturd-I-Floor is designed specifically for use in single-layer floor construction beneath carpet and pad and other approved floor coverings. PointSIX® is a patented tapered edge exclusive to West Fraser's TruFlor® and Durastrand® Sturd-I-Floor.

Storage and Handling

West Fraser OSB panels should be properly stored, handled, kept dry, and protected during construction to ensure expected in-service performance. Refer to the latest version of APA's Engineered Wood Association Construction Guide, E30.

Bond Classification

West Fraser OSB Rated Sheathing and Sturd-I-Floor are manufactured in accordance with PS 2 and are produced with an Exposure 1 bond classification suitable for uses not permanently exposed to the weather. Panels are intended to resist the effects of moisture on structural performance during active construction. Exposure to moisture can cause cosmetic changes like edge swell, surface flaking, mold, and mildew.

Installation

General

West Fraser OSB panels can be used for floor, wall, and roof construction, each having specific requirements. All Rated Sheathing and Sturd-I-Floor panels must be spaced 1/8" minimum along panel ends and edges. Refer to APA D481 for situations that may require a space greater than 1/8". Panels marked Sized for Spacing are manufactured undersized to allow for an 1/8" minimum gap between panels. When panels become acclimated, gaps that were initially present may have closed due to normal moisture-related panel expansion (see APA M300). For large buildings with continuous sections of panels exceeding 80 feet in length, a 3/4" expansion joint is required. Refer to APA U425 for details. Avoid heavy construction loading when the panels have been exposed to substantial wetting and have not yet fully dried.

For complete installation recommendations and requirements, refer to the APA's Engineered Wood Association Construction Guide E30, the local building code, or the design professional.

Floor

West Fraser produces Rated Sheathing and Rated Sturd-I-Floor for subfloor applications.

The T&G edges of West Fraser's TruFlor, Durastrand, Stabledge®, and Pinnacle® Sturd-I-Floor panels are self-spacing. Subfloor panels with the pointSIX tapered edge should be installed with the tapered side up. All subflooring should be installed with the grade stamped side facing down. Floor panels are to be installed with the long dimension perpendicular to supports, continuous over two or more spans, and must have a minimum width of 24".

Rated Sturd-I-Floor with T&G edges is designed specifically for use in single-layer floor construction beneath carpet and pad. For hardwood, vinyl, thin resilient, glued-down carpet, ceramic tile flooring, or lightweight concrete with flooring on top, refer to the latest version of APA's Engineered Wood Association

Construction Guide, E30 for additional requirements. PointSIX is a patented tapered edge exclusive to West Fraser TruFlor and Durastrand Sturd-I-Floor.

For West Fraser's Trubord™ Rated Sheathing used for subfloor applications, the long panel edges should be 1) supported with blocking, 2) covered with a separate layer of underlayment having edges offset a minimum 2" from the subfloor edges below, 3) covered with 1-1/2" of lightweight concrete, or 4) covered with 3/4" thick wood strip flooring installed perpendicular to the unsupported edge.

Wall

Panel orientation (horizontal or vertical) does not affect wall assembly shear capacity since shear capacity is based on panel thickness. Panels branded as TallWall®, Windstorm®, and QuakeZone® are intended to be installed vertically.

Roof

Roof panels are to be installed with the long dimension perpendicular to supports, continuous over two or more spans, and have a minimum width of 24". Edge support is required for roof panels with a width less than 24" per APA R275 or E30. See APA E30 for roof panels installed parallel to supports. Cover roof sheathing without delay with a code-approved roofing underlayment. If any edge swelling occurs prior to roof underlayment installation, all uneven edges should be sanded flat.

Fasteners

Minimum nail fastener spacing is 6" on center (o.c.) at panel ends and edges and 12" o.c. minimum at intermediate supports. Edge fasteners must be installed 3/8" from panel ends, edges, and corners. Wind and seismic design may require fasteners to be installed closer than the minimum fastener spacing. For information regarding the use of fasteners, see the IBC, IRC, NDS, and APA E30.

Moisture Control/Ventilation

Panels are intended for dry-use moisture conditions where in-service moisture content will be less than 16% over the service life of the panel. The use of water, moisture, and vapor control systems must be integrated into the building design to maintain a dry service environment. Proper attic and crawl space ventilation shall be provided according to the latest version of the International Building Code, International Residential Code, and the International Energy Conservation Code.

Sustainability

We hold third-party verified Sustainable Forest Management and Fiber Sourcing certification. Please see <https://osb.westfraser.com/> for information on third-party certification.

Table 1 – West Fraser OSB Product Line and Span Ratings for Wall Applications^{(a)(b)}

Span Rating	Performance Category	24" Maximum Wall Sheathing Span ^(c)			
		Trubord	TallWall	Windstorm	QuakeZone
24/0 ^(d)	3/8	✓ ^(d)	✓ ^(d)		
Wall 24 ^(e)	7/16		✓		
24/16	7/16	✓		✓	✓
32/16 ^(d)	15/32	✓ ^(d)	✓ ^(d)	✓	
32/16	1/2	✓			
40/20 ^(d)	19/32	✓ ^(d)			

a) All Rated Sheathing conforms to PRP-108 (US), PS 2 (US), ESR-2586 (US), and CSA-0325.0.16 (Canada).
b) All Rated Sheathing has an Exposure 1 Bond Classification.
c) Maximum stud spacing for wind applications. Check local building codes for wind loads.
d) Available in Structural I.
e) Not rated for roof or floor use.

Table 2 – Allowable Floor and Roof Spans for West Fraser OSB Rated Sheathing Panels

Span Rating	Performance Category	Maximum Floor Span (inches) o.c. ^(a)	Maximum Roof Span (inches) o.c.	
			With Edge Support ^(b)	Without Edge Support
24/0	3/8	0	24	19.2 ^(c)
Wall 24 ^(d)	7/16	0	Not for roof use	Not for roof use
24/16		16	24	24
32/16	15/32, 1/2	16	32	28
40/20	19/32	20	40	32
48/24	23/32	24	48	36

- a) Edge support provided by T&G edges, lumber blocking, or a layer of underlayment having edges offset a minimum 2" from the subfloor edges below.
- b) Edge support provided by T&G edges, lumber blocking, or panel clips (one clip at midspan for spans less than 48" on center and two panel clips equally spaced for spans 48" on center).
- c) Maximum span without edge support is 16" for Canadian applications.
- d) Performance Category 7/16 with a span rating of Wall 24 is intended for wall sheathing only.

Table 3 – Allowable Floor and Roof Spans for West Fraser OSB Sturd-I-Floor Panels

Sturd-I-Floor Span Rating ^{(a)(b)}	Performance Category	Maximum Floor Span (inches) o.c.	Maximum Roof Span (inches) o.c.	
			With Edge Support ^(c)	Without Edge Support
20oc	19/32	19.2	32	32
24oc	23/32	24	48	36
32oc	7/8	32	48	40
48oc	1-1/8	48	60	48

- a) Follow finish floor covering manufacturer's installation instructions.
- b) See APA E30 for live load capacities of Sturd-I-Floor used as roof sheathing. The live load capacity for Sturd-I-Floor used for roof applications is less than it is for Rated Sheathing having the same Performance Category.
- c) Edge support provided by T&G edges, lumber blocking, or a second layer of underlayment having edges offset a minimum 2" from the panels edges below.

Manufacturing Locations			
Allendale, SC	APA #559	High Level, AB	APA #540
Barwick, ON	APA #498	Lanett, AL	APA #503
Bemidji, MN	APA #507	Jefferson, TX	APA #504
Chambord, QC	APA #556	Joanna, SC	APA #505
Cordele, GA	APA #501	La Sarre, QC	APA #424
Grande Prairie, AB	APA #454	Nacogdoches, TX	APA #506
Guntown, MS	APA #502		

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