

West Fraser OSB Concrete Edge Form West Fraser Timber Co. Ltd.

PR-N414 Revised May 4, 2023

Products: West Fraser Engineered Strand Concrete Form Facers
West Fraser Timber Co. Ltd., 885 West Georgia Street, Suite 1500, Vancouver, BC V6C 3E8,
Canada
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Basis of the product report:

- ASTM D2718, Standard Test Methods for Structural Panels in Planar Shear (Rolling Shear)
- ASTM D3043, Standard Test Methods for Structural Panels in Flexure
- PS 2-18. Performance Standard for Wood Structural Panels
- APA Panel Design Specification
- APA Report T2020P-14 and other qualification data

2. Product description:

West Fraser Engineered Strand Concrete Form Facers (OSB concrete edge forms) are made with strands of various species and strand classifications in accordance with the inplant manufacturing standard approved by APA. West Fraser Engineered Strand Concrete Form Facers are available in 1-1/4-inch (31.5-mm) thickness and common finished dimensions of 11-7/8 inches (302 mm) in width and 16 feet (4.9 m) in length. Other dimensions with the minimum width of 3-1/2 inches (89 mm) may be available.

3. Design properties:

Table 1 lists the allowable panel load capacities (based on the wet-use design capacities) in a format that is typical for concrete forming tables. Table 2 lists the allowable panel wet-use design capacities for the concrete forming panels.

4. Product installation:

The 1-1/4-inch (31.5-mm) West Fraser Engineered Strand Concrete Form Facers recognized in this report shall be used in accordance with the allowable panel load capacities and allowable design capacities contained in Tables 1 and 2 of this report, and the recommendations from APA Design/Construction Guide, *Concrete Forming*, Form V345 (www.apawood.org/resource-library).

Limitations:

- a) The 1-1/4-inch (31.5-mm) West Fraser Engineered Strand Concrete Form Facers recognized in this report shall be designed in accordance with the applicable engineering practices using the allowable panel load capacities and allowable panel design capacities specified in this report, and the equations from APA Design/Construction Guide, Concrete Forming, Form V345 (see link above).
- b) The 1-1/4-inch (31.5-mm) West Fraser Engineered Strand Concrete Form Facers recognized in this report are produced by West Fraser Timber Co. Ltd. at the West Fraser facility in High Level, Alberta, Canada, under a quality assurance program audited by APA.
- c) This report is subject to re-examination in one year.

Identification:

The 1-1/4-inch (31.5-mm) West Fraser Engineered Strand Concrete Form Facers described in this report are identified by a label or stamp bearing the manufacturer's name and/or trademark (West Fraser), the APA assigned plant number (540), the product thickness, the APA logo, the report number PR-N414, and a means of identifying the date of manufacture.

Table 1. Allowable Stress Design (ASD) Load Capacities of the West Fraser Engineered Strand Concrete Form Facers^(a) (WET)

| Concrete Form Facers (WET) | | | | | | | | | | | |
|---------------------------------|---------------------------------|--------|--|--------|-------|---------------|----------------|--------|-------|--------|--|
| Panel Thickness, in. (mm) | Support Spacing, in. (mm) | | Allowable Load Capacities, lbf/ft² (kN/m²) | | | | | | | | |
| | | | Strength Axis | | | Strength Axis | | | | | |
| | | | Across Supports | | | | Along Supports | | | | |
| | | | L/360 L/270 | | L/360 | | L/270 | | | | |
| | 8 | (203) | 1,345 | (64.4) | 1,345 | (64.4) | 1,230 | (58.9) | 1,230 | (58.9) | |
| | 12 | (305) | 835 | (40.0) | 835 | (40.0) | 760 | (36.4) | 760 | (36.4) | |
| | 16 | (406) | 605 | (29.0) | 605 | (29.0) | 530 | (25.4) | 550 | (26.3) | |
| | 19.2 | (488) | 495 | (23.7) | 495 | (23.7) | 390 | (18.7) | 435 | (20.8) | |
| 1-1/4 | 24 | (610) | 390 | (18.7) | 390 | (18.7) | 220 | (10.5) | 290 | (13.9) | |
| (31.5) | 30 | (762) | 305 | (14.6) | 305 | (14.6) | | | | | |
| | 32 | (813) | 280 | (13.4) | 285 | (13.6) | | | | | |
| | 36 | (914) | 245 | (11.7) | 245 | (11.7) | | | | | |
| | 40 | (1016) | 185 | (8.9) | 220 | (10.5) | | | | | |
| | 48 | (1219) | 125 | (6.0) | 160 | (7.7) | | | | | |

⁽a) Based on the wet design capacities shown in Table 2, including a duration-of-load factor of 1.25.

Table 2. Allowable Stress Design (ASD) Panel Design Capacities for West Fraser Engineered Strand Concrete Form Facers (WET)

| | a condicte i dilli i docio (VVL | • , | | | | | |
|---------------------|--|----------------------------------|--------------|------------------------------------|-------------|--|--|
| Panel | | Allowable Values ^(a) | | | | | |
| Thickness, in. (mm) | Property | Strength Axis Across Supports | | Strength Axis Parallel to Supports | | | |
| | Stiffness, EI, lbf-in. ² /ft (N-mm ² /mm) | 1,890,000 | (17,800,000) | 480,000 | (4,520,000) | | |
| 1-1/4 (31.5) | Allowable Moment Capacity, F _b S, lbf-in./ft (N-mm/mm) | 3,050 | (1,131) | 1,550 | (575) | | |
| | Allowable Shear Capacity, F _s Ib/Q, Ibf/ft (N/mm) | 350 | (5.11) | 320 | (4.67) | | |

⁽a) Adjusted from characteristic value by a factor of safety and a reduction for moisture content.

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