

## ICC Design No. WPC-1560-02

**ESL-1560** 

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This listing is subject to renewal March 2026.

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Applicant: USG CORPORATION

**Product:** USG <sup>1</sup>/<sub>2</sub>-INCH STRUCTO-CRETE<sup>®</sup> BRAND STRUCTURAL PANELS

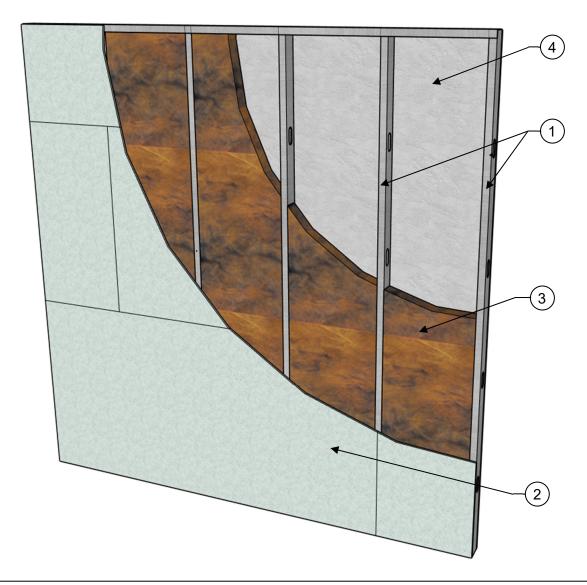
Standard: ASTM E119 (UL 263) / CAN/ULC-S101

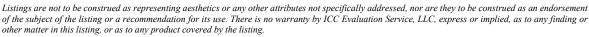
**Assembly** 

Rating: 1-Hour

Load: Load Bearing – See Conditions of Listing Note #4

WPC = Wood, Plastics and Composites









## COMPONENTS OF CONSTRUCTION:

ITEM NO.	COMPONENTS	MATERIALS
1	Wall Framing—	Minimum 3 $^{1}$ / $_{2}$ -inch (88.9 mm) deep, minimum 20 gauge (33 mils) thick, corrosion-protected or galvanized steel channel-shaped studs, spaced at a maximum of 24 inches (609.6 mm) on center, are secured to top and bottom track members (with same gauge thickness as studs) with minimum $^{1}$ / $_{2}$ -inch (12.7 mm) long No. 8 pan head self-drilling screws. Steel studs must have minimum 1 $^{5}$ / $_{8}$ -inch (41.3 mm) flanges and $^{1}$ / $_{2}$ -inch (12.7 mm) returns.
		Note: See Conditions of Listing Item 4 of <u>ESL-1560</u> .
2	First Side Sheathing (Source Side)— Use either A or B	A —%One layer of \$^1/2\$-inch (12.7 mm) thick USG STRUCTO-CRETE® Brand Structural Panels must be secured directly to the framing on the first side of the wall assembly using minimum 1 \$^1/8\$-inch (41.3 mm) long No. 8, wafer head screws with winged-tipped self-drilling points. Corner perimeter screws must be positioned 2 inches (50.8 mm) from the corner with the next screw positioned a maximum of 6 inches (152.4 mm) from the first screw. All subsequent perimeter fasteners must be spaced at a maximum of 8 inches (203.2 mm) on center. Fasteners in the field of the panels must be spaced 12 inches (304.8 mm) on center. STRUCTO-CRETE® Brand Structural Panels may be installed vertically or horizontally to the studs. All vertical seams must fall on studs and must be staggered from one side of the assembly to the opposite sides of the assembly by a minimum of one stud cavity. Horizontal seams are permitted to be left unbacked. STRUCTO-CRETE® Brand Structural Panels edge joints are permitted to be left uncovered without joint compound. Fastener heads are permitted to be left exposed.
		<b>B</b> —One layer of ${}^{3}I_{4}$ -inch (19 mm) thick USG STRUCTO-CRETE® Brand Structural Panels must be secured directly to the framing on the first side of the wall assembly using minimum 1 ${}^{5}I_{8}$ -inch (41.3 mm) long No. 8, wafer head screws with winged-tipped self-drilling points. Corner perimeter screws must be positioned 2 inches (50.8 mm) from the corner with the next screw positioned a maximum of 6 inches (152.4 mm) from the first screw. All subsequent perimeter fasteners must be spaced at a maximum of 8 inches (203.2 mm) on center. Fasteners in the field of the panels must be spaced at a maximum of 12 inches (304.8 mm) on center. STRUCTO-CRETE® Brand Structural Panels may be installed vertically or horizontally to the studs. All vertical seams must fall on studs and must be staggered from one side of the assembly to the opposite sides of the assembly by a minimum of one stud cavity. Horizontal seams are permitted to be left unbacked. STRUCTO-CRETE® Brand Structural Panels edge joints are permitted to be left uncovered without joint compound. Fastener heads are permitted to be left exposed.
3	Cavity Insulation—	A — $\Re$ R-11 glass fiber batt insulation, bearing the UL Classification Marking for surface burning and/or fire resistance, with a minimum thickness of 3 $^{1}/_{2}$ -inch (88.9 mm) is friction fit into each stud cavity. The insulation thickness cannot exceed the stud cavity depth.
	Use either A or B	<b>B</b> — Minimum R-11 mineral fiber insulation, bearing the UL Classification Marking for surface burning and/or fire resistance, with a minimum thickness of 3 $^{1}$ / <sub>2</sub> -inch (88.9 mm) is friction-fit into each stud cavity. The insulation thickness cannot exceed the stud cavity depth.
4	Second Side Sheathing— Use either A or B	A — One layer of \$\frac{5}{8}\$-inch (15.9 mm) USG Sheetrock® Brand Firecode® X (UL Type SCX) gypsum wallboard (GWB) must be secured directly to the framing on the second side of the wall assembly using 1 \$\frac{1}{4}\$-inch (31.2 mm) long Type S bugle-head steel screws (minimum of three (3) exposed threads must protrude through framing members) spaced at a maximum of 8 inches (203.2 mm) on center along the perimeter and in the field of the gypsum board. Fasteners must be spaced a minimum of \$\frac{3}{8}\$-inch (9.5 mm) from the edge of the panel. Gypsum wallboard may be installed vertically or horizontally to the studs. All vertical seams must fall on studs and must be staggered from one side of the assembly to the opposite sides of the assembly by a minimum of one stud cavity. Horizontal seams are permitted to be left unbacked. All GWB tapered joints must be treated with a minimum level 2 finish consisting of nominal 2-inch (50.8 mm) wide paper tape and two layers of USG joint compound. All fasteners head must be covered with two layers of joint compound.  B — One layer of \$\frac{3}{4}\$-inch (19 mm) thick USG STRUCTO-CRETE® Brand Structural Panels must be secured directly to the framing on the second side of the wall assembly using minimum 1 \$\frac{5}{8}\$-inch (41.3 mm) long No. 8, wafer head screws with winged-tipped self-drilling points. Corner perimeter screws must be positioned 2 inches (50.8 mm) from the edge of the wall assembly and the first than the province of the positioned 2 inches (50.8 mm) from the first the first the positioned 2 inches (50.8 mm) from the first the first than the first the first than the first the first than the first t
	Futuris - Fact	(50.8 mm) from the corner with the next screw positioned a maximum of 6 inches (152.4 mm) from the first screw. All subsequent perimeter fasteners must be spaced at a maximum of 8 inches (203.2 mm) on center. Fasteners in the field of the panels must be spaced at a maximum of 12 inches (304.8 mm) on center. STRUCTO-CRETE® Brand Structural Panels may be installed vertically or horizontally to the studs. All vertical seams must fall on studs and must be staggered from one side of the assembly to the opposite sides of the assembly by a minimum of one stud cavity. Horizontal seams are permitted to be left unbacked. STRUCTO-CRETE® Brand Structural Panels edge joints are permitted to be left uncovered without joint compound. Fastener heads are permitted to be left exposed.
5	Exterior Facing Assembly (Not Shown)—	Where the assembly is used as an exterior wall, any exterior facing may be included, as authorized by the authority having jurisdiction, and must be installed in accordance with the manufacturer's installation instructions.

For **SI**: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 lbs./ft<sup>3</sup> = 16.01 kg/m<sup>3</sup>.