

Louisiana-Pacific Corporation Design No. LPB/WPPS 60-01 Loadbearing Wall Assembly LP[®] FlameBlock[®] Fire-Rated OSB Sheathing and LP[®] FlameBlock[®] Plus Fire-Rated OSB Sheathing ASTM E119 Rating: 1 Hour, Restricted Load¹



¹ Restricted to design load for 2x4 construction per national design criteria (e.g. ANSI/AF&PA NDS)

- **1. WALL ASSEMBLY:** Construct a 1 hour rated gypsum wall assembly using the following elements:
 - A. WOOD STUDS Install 2 x 6 wood studs spaced 16 in. on center (oc). Attach each wood stud to top and bottom wood plates using three 16d framing nails at each

location. Construct top plate of two wood studs installed horizontally at the top of the gypsum wall assembly and the bottom plate of a single wood stud. Install 2 x 6 wood studs horizontally as cross-bracing positioned at mid-height of the wall.



- B. GYPSUM BOARD Install one layer of nominal 5/8 in. thick Type X gypsum board, oriented vertically or horizontally. Secure gypsum board using nominal 1-7/8 in. long cup-head drywall nails spaced nominally 8 in. oc.
- C. JOINT TAPE AND COMPOUND (Not Shown) – Install vinyl or casein, dry or premixed joint compound applied to exterior face of gypsum board in two coats to all exposed fastener heads and gypsum board joints. Install min. 2 in. wide paper, plastic, or fiberglass tape embedded in the first layer of compound over joints in gypsum board.
- D. INSULATION Install nominal 5-1/2 in. thick, nominal 2.5 pcf density unfaced mineral fiber batt insulation friction fit between the wood studs (Item 1A).
- E. **CERTIFIED MANUFACTURER** Louisiana-Pacific Corporation

CERTIFIED PRODUCT – Wood Sheathing, Fire Retardant Coated Sheathing

MODEL – LP[®] FlameBlock[®] Fire-Rated OSB Sheathing or LP[®] FlameBlock[®] Plus Fire-Rated OSB Sheathing

Install nominal 48 in. wide x 96 in. tall, nominal 7/16 in. min. thick sheathing with the white side facing out. Install sheathing staggered at gypsum seams. Secure sheathing to wood studs (Item 1A) using 1-7/8 in. long self-drilling drywall screws meeting ASTM C954 spaced 6 in. oc around the perimeter and 12 in. oc in the field. Alternatively, use 8d or 10d nails and the same spacing noted previously.

- F. VAPOR BARRIER (Optional) Install a vapor barrier compliant with International Building Code requirements or other applicable regulatory requirements if those requirements are greater. Fasten vapor barrier over the sheathing (Item 1E) using sufficient fasteners to prevent air pockets in the wrap.
- EXTERIOR WALL COVERING: Optional for interior fire exposure only or when using Fire Retardant Coated Sheathing (Item 1E) of min. 19/32 in. nominal thickness. Install one of the following items on the exterior side of the wall assembly (Item 1):
 - A. STEEL SIDING Install nominal 38-1/2 in. wide x 10 ft. long, 26 GA steel siding with min. 36 in. coverage. Attached siding to wood studs (Item 1A) over the vapor barrier (Item 1F), using 1-7/8 in. long selftapping drywall screws, two per panel per stud.
 - B. T1-11 SIDING Install min. 5/16 in. thick plywood or OSB siding per the manufacturer's published installation instructions.
 - C. FIBER CEMENT BOARD Install min. 5/16 in. thick cellulose fiber-reinforced cement board per the manufacturer's published installation instructions.
 - D. WOOD STRAND OR WOOD FIBER PANEL Install min. 5/16 in. thick zinc borate treated wood strand or wood fiber panel (e.g. LP[®] Smartside[®]) per the manufacturer's published installation instructions.
 - E. WOOD STRAND OR WOOD FIBER LAP SIDING – Install min. 5/16 in. thick zinc borate treated wood strand or wood fiber



Division 06 – Wood, Plastics and Composites 06 16 00 Sheathing 06 16 36 Wood Panel Product Sheathing

lap siding (e.g. LP[®] Smartside[®]) per the manufacturer's published installation instructions.

- F. SOLID WOOD SIDING Install min. 3/8 in. thick solid wood siding per the manufacturer's published installation instructions.
- G. MANUFACTURED STONE VENEER Install min. 5/8 in. thick ICC-ES AC51 compliant manufactured stone veneer in accordance with the approved Code Compliance Research Report and the manufacturer's installation instructions.
- H. CEMENT PLASTER THREE COAT (STUCCO)
 Install three-coat cement plaster (stucco)
 over metal lath or wire fabric lath and
 water resistive barrier as required by the
 International Building Code (IBC).
- CEMENT PLASTER ONE COAT (STUCCO) Install ICC-ES AC11 compliant Omega Products International, Inc., Omega Diamond Wall or Diamond Wall PM Insulating Exterior Stucco Systems, or ICC-

ES AC11 compliant PAREX USA Fiber Reinforced Stucco in accordance with the approved Code Compliance Research Report and the manufacturer's installation instructions.

- 1. Install a water resistive barrier as required by the IBC for installation over wood based sheathing.
- Install metal lath or wire fabric lath as required for compliance with the IBC. Fasten lath through the sheathing to the studs with 1-1/4 in. long, 0.125 in. diameter nails having min. head diameters of 0.355 in., or No. 16 GA corrosion-resistant staples having 15/16 in. crowns. Fasteners spaced 6 in. oc on the studs and perimeter framing.
- 3. Apply stucco coating a min. of 3/8 in. thick in accordance with the approved Code Compliance Research Report and the manufacturer's instructions.