

FIRE AND SMOKE PROTECTION FEATURES

TABLE 722.6.2(1)
TIME ASSIGNED TO WALLBOARD MEMBRANES^{a, b, c, d}

DESCRIPTION OF FINISH	TIME ^e (minutes)
³ / ₈ -inch wood structural panel bonded with exterior glue	5
¹⁵ / ₃₂ -inch wood structural panel bonded with exterior glue	10
¹⁹ / ₃₂ -inch wood structural panel bonded with exterior glue	15
³ / ₈ -inch gypsum wallboard	10
¹ / ₂ -inch gypsum wallboard	15
⁵ / ₈ -inch gypsum wallboard	30
¹ / ₂ -inch Type X gypsum wallboard	25
⁵ / ₈ -inch Type X gypsum wallboard	40
Double ³ / ₈ -inch gypsum wallboard	25
¹ / ₂ -inch + ³ / ₈ -inch gypsum wallboard	35
Double ¹ / ₂ -inch gypsum wallboard	40

For SI: 1 inch = 25.4 mm.

- These values apply only where membranes are installed on framing members that are spaced 16 inches o.c. or less.
- Gypsum wallboard installed over framing or furring shall be installed so that all edges are supported, except ⁵/₈-inch Type X gypsum wallboard shall be permitted to be installed horizontally with the horizontal joints staggered 24 inches each side and unsupported but finished.
- On wood frame floor/ceiling or roof/ceiling assemblies, gypsum board shall be installed with the long dimension perpendicular to framing members and shall have all joints finished.
- The membrane on the unexposed side shall not be included in determining the fire resistance of the assembly. Where dissimilar membranes are used on a wall assembly, the calculation shall be made from the least fire-resistant (weaker) side.
- The time assigned is not a finished rating.

TABLE 722.6.2(2)
TIME ASSIGNED FOR CONTRIBUTION OF WOOD FRAME^{a, b, c}

DESCRIPTION	TIME ASSIGNED TO FRAME (minutes)
Wood studs 16 inches o.c.	20
Wood floor and roof joists 16 inches o.c.	10

For SI: 1 inch = 25.4 mm.

- This table does not apply to studs or joists spaced more than 16 inches o.c.
- All studs shall be nominal 2 × 4 and all joists shall have a nominal thickness of not less than 2 inches.
- Allowable spans for joists shall be determined in accordance with Sections 2308.4.2.1, 2308.7.1 and 2308.7.2.

TABLE 722.6.2(3)
MEMBRANE^a ON EXTERIOR FACE OF WOOD STUD WALLS

SHEATHING	PAPER	EXTERIOR FINISH
⁵ / ₈ -inch T & G lumber ⁵ / ₁₆ -inch exterior glue wood structural panel ¹ / ₂ -inch gypsum wallboard ⁵ / ₈ -inch gypsum wallboard ¹ / ₂ -inch fiberboard	Sheathing paper	Lumber siding Wood shingles and shakes ¹ / ₄ -inch fiber-cement lap, panel or shingle siding ¹ / ₄ -inch wood structural panels-exterior type ¹ / ₄ -inch hardboard Metal siding Stucco on metal lath Masonry veneer Vinyl siding
None	—	³ / ₈ -inch exterior-grade wood structural panels

For SI: 1 inch = 25.4 mm.

- Any combination of sheathing, paper and exterior finish is permitted.