- flooring, laid crosswise or diagonally, ¹⁵/₃₂-inch (12 mm) wood structural panel or ¹/₂-inch (12.7 mm) particleboard.
- Planks not less than 4 inches (102 mm) nominal in width set on edge close together and well spiked and covered with 1-inch (25 mm) nominal dimension flooring or ¹⁵/₃₂-inch (12 mm) wood structural panel or ¹/₂-inch (12.7 mm) particle-board.

The lumber shall be laid so that continuous lines of joints will occur only at points of support. Floors shall not extend closer than $^{1}/_{2}$ inch (12.7 mm) to walls. Such $^{1}/_{2}$ -inch (12.7 mm) space shall be covered by a molding fastened to the wall and so arranged that it will not obstruct the swelling or shrinkage movements of the floor. Corbelling of masonry walls under the floor shall be permitted to be used in place of molding.

2304.11.4 Roof decks. Roofs shall be without concealed spaces and roof decks shall be constructed in accordance with Section 2304.11.4.1 or 2304.11.4.2. Other types of decking shall be an alternative that provides equivalent fire resistance and structural properties. Where supported by a wall, roof decks shall be anchored to walls to resist forces determined in accordance with Chapter 16. Such anchors shall consist of steel bolts, lags, screws or *approved* hardware of sufficient strength to resist prescribed forces.

2304.11.4.1 Cross-laminated timber roofs. Cross-laminated timber roofs shall be not less than 3 inches (76 mm) nominal in thickness and shall be continuous from support to support and mechanically fastened to one another.

2304.11.4.2 Sawn, wood structural panel, or glued- laminated plank roofs. Sawn, wood structural panel, or glued-laminated plank roofs shall be one of the following:

- Sawn or glued laminated, splined or tongue-andgroove plank, not less than 2 inches (51 mm) nominal in thickness.
- 2. 1¹/₈-inch-thick (32 mm) wood structural panel (exterior glue).
- 3. Planks not less than 3 inches (76 mm) nominal in width, set on edge close together and laid as required for floors.

2304.12 Protection against decay and termites. Wood shall be protected from decay and termites in accordance with the applicable provisions of Sections 2304.12.1 through 2304.12.7.

2304.12.1 Locations requiring waterborne preservatives or naturally durable wood. Wood used above ground in the locations specified in Sections 2304.12.1.1 through 2304.12.1.5, 2304.12.3 and 2304.12.5 shall be naturally durable wood or *preservative-treated wood* using waterborne preservatives, in accordance with AWPA U1 for above-ground use.

TABLE 2304.11
MINIMUM DIMENSIONS OF HEAVY TIMBER STRUCTURAL MEMBERS

		MINIMUM NOMINAL SOLID SAWN SIZE		MINIMUM GLUED- LAMINATED NET SIZE		MINIMUM STRUCTURAL COMPOSITE LUMBER NET SIZE	
SUPPORTING	HEAVY TIMBER STRUCTURAL ELEMENTS	Width, inch	Depth, inch	Width, inch	Depth, inch	Width, inch	Depth, inch
Floor loads only or combined floor and roof loads	Columns; Framed sawn or glued-laminated timber arches that spring from the floor line; Framed timber trusses	8	8	6 ³ / ₄	81/4	7	71/2
	Wood beams and girders	6	10	5	10 ¹ / ₂	51/4	91/2
Roof loads only	Columns (roof and ceiling loads); Lower half of: wood-frame or glued-laminated arches that spring from the floor line or from grade	6	8	5	81/4	51/4	71/2
	Upper half of: wood-frame or glued-laminated arches that spring from the floor line or from grade	6	6	5	6	51/4	51/2
	Framed timber trusses and other roof framing; ^a Framed or glued-laminated arches that spring from the top of walls or wall abutments	4 ^b	6	3 ^b	6 ⁷ / ₈	3 ¹ / ₂ ^b	51/2

For SI: 1 inch = 25.4 mm.

a. Spaced members shall be permitted to be composed of two or more pieces not less than 3 inches nominal in thickness where blocked solidly throughout their intervening spaces or where spaces are tightly closed by a continuous wood cover plate of not less than 2 inches nominal in thickness secured to the underside of the members. Splice plates shall be not less than 3 inches nominal in thickness.

b. Where protected by approved automatic sprinklers under the roof deck, framing members shall be not less than 3 inches nominal in width.