

GENERAL: Wood-based sheathing is often used under cement stucco and provides a uniform base acceptable by the SMA with guidelines/recommendations.

- Wood structural panels are recommended by the Engineered Wood Association (APA) to be installed horizontally with edges blocked for best structural performance.
- Wood structural panels may be all-veneer or OSB (APA Form Q370G)
- Wood sheathing and framing should have a moisture content below 19% before lathing
- APA and SMA recommend leaving a 1/8 inch space at panel edge and end joints. This allows panels to expand if they are subjected to higher moisture levels.
- **Rim joists** (floorline) with sheathing bands are recommended to have 1/4 inch gaps to accommodate anticipated floorline shrinkage in the wood framing.
- **Water Barrier:** Code requires a vapor-permeable barrier performance at least equivalent to two (2) layers of Grade D paper. **Exception:** When a drainage mat, fluid applied membrane or a rigid foam with drainage channels is used, one layer may be omitted. The SMA recommends a single layer equal to Grade D over all sheathings with built-in water barriers and joint tape flashing systems.
- **Fire Ratings:** Wood structural panels may be installed under 7/8 inch cement plaster without impacting the fire rating if fasteners are increased in length by an amount equal or greater than the thickness of the wood sheathing.

TABLE 1

**RECOMMENDED THICKNESS AND SPAN RATING FOR
APA RATED SHEATHING FOR STUCCO EXTERIOR FINISH**

Stud Spacing (in.)	Panel Orientation(a)	APA Rated Sheathing(b)	
		Minimum Nominal Thickness (in.)	Minimum Span Rating
16	Horizontal(c)	5/16(d)	20/0
		5/16(e)	Wall-24 oc
		3/8	24/0
	Vertical	7/16(g)	24/16
		15/32(f)	32/16
24	Horizontal	7/16	24/16
	Vertical	19/32(f)	40/20

(a) Strength axis (typically the long panel dimension) perpendicular to studs for horizontal application, or parallel to studs for vertical application.

(b) Recommendations apply to all-veneer plywood or oriented strand board (OSB) panels except as noted.

(c) Blocking recommended between studs along horizontal panel joints.

(d) Plywood panels only.

(e) OSB panels only.

(f) OSB or 5-ply/5-layer plywood panels.

(g) Structural I Rated Sheathing.

Table 1 courtesy of the Engineered Wood Association (APA)

The SMA is an industry wide not-for-profit trade association dedicated to the promotion and education of the stucco industry. The SMA can provide no warranty, express or implied for information contained herein. This is an industry guide paper. Variations from these recommendations from sheathing manufacturers should be followed. The local Building Department has final approval of allowed alternates/variations.