2020



**SIPS** (Structurally Insulated Panels) is a recently new method of wall construction. Refer to the SIPS manufacturer for more detailed information regarding approved sidings. Hard coat stucco requires that it be securely attached to framing members (studs). Since SIPS do not incorporate studs, meeting this requirement is not possible. Hard coat stucco can still be done on SIPS. Some SIPS manufacturers recommend increasing the amount of ring shank nails by 25%. This could impact the furring of the lath and should be considered. The lath supports the stucco and furring allows cement encasement of the lath: this should not be compromised. The SMA provides the following recommendations for cement plaster (stucco) on SIPS construction.

**THREE-COAT STUCCO:** Three-coat stucco (9-11 pounds per square foot) should use wood screws with a wafer style head In lieu of ring shank nails. Lath attachment spacing should approximate framing (16 inches vertically and 6 inches horizontally). Attachment should not negate manufacturer's furring. The screw should fully penetrate the outer wood-based layer of the SIPS and engage two or more strands of lath.

**ONE-COAT STUCCO:** One-Coat stucco is lighter (5-6 lbs. per foot) than three-coat stucco. Horizontal screw fastener spacing may be extended to 24 inches on center, but should remain 6 inches on center vertically. Fasteners between vertical rows to hold lath down is acceptable.

## SIP (Structural Insulated Panels)



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AVERAGE DIRECT WITHDRAWL (PULLOUT) - Ibs.				
SCREW SIZE	7/16" OSB	5/8" OSB	3/4" OSB	
#6 Deck Screw	177	272	324	
#8 Deck Screw	182	309	359	
#10 Deck Screw	198	355	363	
#12 Roofing Screw	190	312	360	
#14 Roofing Screw	177	340	393	
These values are ultimate values. Appropriate safety factors should be applied to obtain design values.				

AVERAGE LATERAL WITHDRAWL (SHEAR) - Ibs.				
SCREW SIZE	7/16" OSB	5/8" OSB	3/4" OSB	
#6 Deck Screw	198	273	295	
#8 Deck Screw	118	197	224	
#10 Deck Screw	143	260	301	
#12 Roofing Screw	436	581	561	
#14 Roofing Screw	466	630	797	
These values are ultimate values. Appropriate safety factors should be applied to obtain design values.				

Withdrawal Charts: Provided by the SIPS industry & for informational purposes only.

## SIPS & Stucco CAVEATS:

- The SMA does **not** recommend the use of staples to attach lath for SIPS
- Use approved Fluid or Sheet good water barriers over SIPS prior to installing a lath
- The water-resistant barriers shall be lapped a minimum 2 inches horizontally and 4 inches vertically. Exceeding minimums is recommended.
- The water-resistant barrier(s) and flashings should be installed in a "shingle-fashion".
- Nail-Flange windows should be installed and flashed per SMA recommendations
- Flangeless windows and doors mandate perimeters with casing beads, backer rod and sealant.
- Roof to wall connections should be flashed per SMA (see Kickouts)
- All stucco terminations and penetrations shall be flashed to prevent water entry.
- Weep Screeds are required at the base of SIPS walls.
- Fire-ratings are possible with 7/8 inch cement upon approval of the local building department.
- Ring shank nails may be used for one-coat stucco if spacing is 16 inches on center
- Stucco is not recommended over SIPS at soffits or ceilings.
- One-piece control joints should be "over" continuous lath.
- Specific stucco or SIPS manufacturers recommendations supersede SMA recommendations
- For more information refer to <u>www.SIPS.org</u> and <u>www.stuccomfgassoc.om</u>

Established in 1957, the SMA is an industry wide not-for-profit trade association dedicated to promotion and education of the stucco industry. The SMA can provide no warranty, express or implied, due to variables. The user must verify local codes and the suitability of thees recommendations.