

► Recommended Installation For 3-Coat Stucco Over CMU's With EPS Foam

January 2014

The application of lath and stucco over CMU's must always be done with great care. As compared to other wall constructions, CMU's have a high thermal mass and hence do not expand or contract appreciably on a daily basis. However, the stucco cladding will heat up and cool on a daily basis with subsequent expansion and contraction. Therefore, it is important that provision be made to allow the stucco to move relative to the CMU's, when there is WRB (weather resistant barrier) or EPS foam between stucco and CMU's.

Therefore, Structa Wire has the following instructions for the application of its products over CMU's:

1. Twin Track laths, either SFCR II – Twin Track or Mega Lath, must be utilized. Fastening must be at the Twin Track locations so that relative movement may occur, but there is no risk of disengagement when the relative movement occurs.
2. Concrete nails or pins must be applied at the Twin Track locations spaced every 16 inch horizontally. The nails or pins may be hand driven or by power actuated tool. Extreme care must be taken to ensure that the head of the nail or pin is driven flush with the surface of the CMU, or surface of the EPS foam. The head diameter must be minimum 3/8 inch.
3. In locations where Twin Tracks are not available for desired fastening, a stucco washer must be added to the nail or pin. Again, care must be exercised to ensure that the nail head and washer are driven flush with the CMU or surface of the EPS foam – and that it is not under-driven. Conversely, the fastener cannot be overdriven so that the washer is deformed. The stucco must be able to slide over the fastener/washer location without being locked around either the washer or the nail head. If there is any concern that the washer/nail combination is sitting too proud, then a piece of peel and stick, approximately 2 inch square, should be applied over the washer/nail head so that the stucco does not lock around either.
4. Expansion joints must be applied strictly in accordance with ASTM C1063. Specifically, they must delineate areas not more than 144 ft², nor exceed 18 ft. in either direction, nor exceed a length-to-width ratio of 2-1/2 to 1. The control joints must be wire tied to the lath and the lath must be cut behind the control joint.
5. Control joints must also be applied where an expansion joint occurs in the base wall.
6. Further consideration must also be given at all penetrations, such as windows, doors, etc., to ensure that control joints or other detailing is provided to allow thermal movement of the stucco to prevent the creation of high thermal stresses which could cause cracking of the stucco.
7. When EPS foam is utilized, it must be partially glued to the CMU's to prevent it sliding.
8. Fastener type and specifications – diameter and length – must be per Engineer of Record and must comply with tension and shear loading requirements for the geographic location and stucco mass.

If you require further information, please do not hesitate to reach out to us at 1-800-887-4708.

