

The Importance of Mock-ups for Thin Veneer Installations

2018 4th Quarter Newsletter

The increasing use of thin veneer masonry in commercial construction has necessitated the need to perform mock-ups to better identify means and methods for the installing contractors. This increased use has also required that the specifying architect/engineer critique the relationship of all the elements of the exterior wall construction. Those elements include, but are not limited to the following:

- 1. The framing construction, i.e. studs, structural steel and sheathing ; including spacing and locations
- 2. Load deflection requirements
- 3. Continuous exterior insulation, cavity wall insulation, air and moisture barrier, drainage/rain screen courses
- 4. Fenestrations, dissimilar materials
- 5. Flashing requirements
- 6. Control requirements and placement
- 7. Weights and dimensions of the thin veneer materials
- 8. Transitions in façade planes at pilasters, corbelling, insets, eyebrows etc
- 9. Fastener placement, types, lengths and strengths required
- 10. ????

Mock-ups provide installers of thin veneer systems some understanding of the potential concerns and issues that could result in performance failures. The process aides in determining installation sequencing and coordination with other trades. Mock-ups most importantly establish a means of comparison of the accepted field panel to the actual installation. Future investigations in cases of performance issues and/or in progress observations are thus provided a base line.



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Project Case Study

The Cass County Government Building in Logansport, IN was built in 1979 with a mix of precast concrete panels and brick. Issues with water leakage and related damages resulted in the decision to remove the precast panels of the building. These precast panels were then slated to be replaced with the same Belden Brick blend from the original installation in a thin veneer application. The **TABS Wall System** was specified for the installation of the thin brick. To meet energy concerns, the architect specified the Smartci System from Advanced Architectural Products.

The mock-up reveal that the typical 24" O.C. horizontal spacing of the Smartci System would not adequately provide fastener connections at the window for the **TABS Wall System's** accommodation of the cast stone. Additional girts were added.





Original Cladding

Removal of Precast



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Installation in Progress



Completed Project