



ASC Adhesives for Roof Sheathing Attachment Project HUD PATH Grant

Summary of October 17, 2006 Meeting at ASC Fall Convention Nashville, TN

Meeting Participants:

Bostik, Jonathan Stuart
Bostik, Mike Chronister
Franklin International, Evan Williams
Heromelt, Werner Hoerrman
Macco, Mark Stypczynski

Adhesive and Sealant Council, Larry Sloan
Adhesive and Sealant Council, Kate Zando
Newport Partners, Jamie Lyons
Newport Partners, Mike Moore

Full contact list for all manufacturers participating in the program can be found at:
<http://www.ascouncil.org/news/newsroom/HUDgrant.cfm>

Discussion Points:

- *Refining Focus, Retrofit vs. New Construction:* Manufacturer consensus was to pursue opportunities in new construction. The manufacturers present associated a larger market opportunity and the potential to realize performance benefits with new construction than with retrofit. One manufacturer cited that ~ 2 consumers a month call in to ask about retrofitting their roofs to increase uplift resistance, versus a robust residential construction market in the Gulf Coast focused on high wind and disaster resistance.
- *BTI Focus Group:* While discussing constructability issues, Larry Sloan referenced the 2003 “Building The Industry” focus group with contractors, which identified that contractors had a very positive response to construction tapes but listed multiple reservations/difficulties with employing construction adhesives. The data collected from this focus group could prove valuable in identifying potential consumer market barriers to the use of adhesives in attaching roof sheathing to roof framing.
- *Future Testing:* Manufacturers expressed interest in testing uplift resistance, durability, and constructability (time and ease of use) of adhesive systems used for attaching roof sheathing to roof framing, specifically in new construction, under Task 3. To this point, much of the focus of testing has been on retrofit application, and little is known regarding the performance of adhesives used in attaching roof sheathing to roof framing in new construction. A suggestion was made to conduct the testing with a manufacturer who has facilities that can approximate uplift testing. Manufacturers were also encouraged to offer suggestions for preliminary testing schemes in which they would be interested in participating.
- *Insurance Industry Research:* The group generally agreed that incentivizing the use of adhesive-strengthened roof assemblies through the insurance industry is a sound approach to showcase the performance benefits of this application. The group acknowledged that this can be a slow, but worthwhile, process. ASC and its contractor Newport Partners will continue to investigate current programs within the insurance industry which recognize and give credit for building techniques which improve wind- and water-resistance of houses, and explore additional opportunities in this area with groups like the Institute for Business and Home Safety (IBHS).

- *Defining the Value-Added Proposition:* The use of adhesive-based roof assemblies significantly increases the strength of existing roof systems, as demonstrated by previous testing and research. Defining the value for new construction assemblies will involve testing on new roofing assemblies to evaluate and document added uplift resistance, and should reference a baseline case of “typical” installation practices (including nail misses). Defining the value of this application will also involve determining and documenting what additional performance benefits can be gained (e.g. added water resistance of the roof assembly, installation advantages), and potential connections to insurance industry incentives.
- *Follow-up items:*
 - ASC: explore construction adhesives used in roof assemblies of the BASF Near Zero Energy Home (NJ) and the Henkel-Cherokee Investment Group home (NC)
 - Newport Partners:
 1. Identify a comprehensive list of codes and standards affecting the use of adhesives in residential roof sheathing to roof framing attachment, including those in Florida and Miami Dade codes (e.g. flame spread, wind uplift, others)
 2. Continue investigation of insurance industry’s recognition of and incentives for increasing roof uplift resistance, other high wind and wind driven rain resistance measures; identify code-plus programs where roof adhesives could be recognized;
 3. Establish APA’s position on warping of roof sheathing that is purported to occur when adhesives are applied to roof sheathing seams (ambient conditions, sheet specifications, new vs. existing assemblies, etc.)
 4. Summarize the results of Virginia Tech’s research into the performance of acrylic tapes in shear walls (when available – December 06?).
 - Manufacturer Participants:
 - Weigh-in on the selection of adhesives which meet the code criteria which will be distributed under Item 1 above
 - Suggest testing possibilities for the latter stages of this project (early 07) in which the manufacturer would have interest in participating. Scope of the preliminary testing is loosely defined and could include structural testing, field trial to investigate constructability, or durability assessment of adhesive-based roof assembly.
- The next project conference call with manufacturers will be held Wednesday December 6th at 2:00 p.m. Eastern Time. More details will follow.