July 21, 2014

California Energy Commission 1516 Ninth Street Sacramento, CA 95814-5512

Re: Docket number 14-BSTD-O1, High Performance Walls



The American Architectural Manufacturers Association (AAMA) represents 260 North American window, door and skylight manufacturers and industry suppliers. AAMA developed "InstallationMasters," the country's preeminent window installers training program. Our interests are strongly tied to all aspects of the home and commercial building and renovation industries. Before explaining how the proposed code change for high performance walls impacts the installation of vinyl windows, please note the following product acceptance and attributes:

- Vinyl windows and doors account for 67% of all conventional residential windows sold in the U.S.
- Since the late 1980s, more than 20 life-cycle evaluations indicate that vinyl products perform favorably in terms of energy efficiency, thermal-insulating value, low contribution to greenhouse gases and product durability.

While the proposed high performance walls offer energy savings to homeowners, the dimensional change in increasing wall width from a 2x4" to a 2x6" stud and increased spacing from 16" to 24" o.c. presents an unintended consequence that will likely result in higher energy bills for homeowners. With the current design and location of nail fins, all of the weight of the glass would be placed over the 2" of insulation unsupported. This alignment would lead to stress cracking of the glass and corner weld. In addition, the frames could misalign, resulting in difficult sash operation, as well as air and water leaks.

The greater wall width would require vinyl window manufacturers and sash and frame profile producers to undergo costly and lengthy (18-24 month) product and process redesigns. The following equipment would require major modification and investment:

- Four tools at \$50,000 for a total of \$200,000
- \$1,000,000 in new extrusion dies

Manufacturers would also be faced with testing scheduling challenges at laboratories that now have long lead times due to the modest housing recovery and a steady remodeling market.

Please consider a delay of 2 years before implementing the proposed high performance wall code change. Otherwise, California builders and homeowners will be denied access to a proven energy efficient product that would complement the savings of high performance walls, rather than compromise the savings.

Sincerely,

Rich Walker AAMA President and CEO