AWDI, LLC
11231 US HIGHWAY ONE - SUITE 382
NORTH PALM BEACH, FL 33408
561-691-6224 • FAX 561-420-0142
e-mail: jjervis@awdi.com

Comments relating to Energy Star Draft 2, Version 6.0 – Program Requirements
Product Specification for Residential Windows, Doors and Skylights

AWDI appreciates the refinements made in the criterion as published in Draft2. There are two areas on which we need to comment.

FLASHING
1. On line 208 you stated: *Note: In some installation scenarios, proper flashing may not be possible. For products likely to be installed in such scenarios, manufacturers may omit flashing details.*

We take exception to this change. There are no installation scenarios in which proper flashing is not possible. To admit so would be to admit that installing replacement windows cannot be done in a manner that will control water and air infiltration. By definition, they will leak. There is no scenario where a window installation cannot be properly flashed - just window manufacturers who don't know how, or are unwilling to instruct their customers on how. There are even products that have been developed to eliminate this problem widely available in Europe and in the U.S

The whole issue with installation this Directive is attempting to address is that in-service performance of windows must be kept at a high level if energy consumption is to be reduced across the board. Installation failure caused by improper flashing or missing flashing will hurt the higher performing products and reduce their result to sub par performance. AWDI has conducted laboratory tests of this fact, using industry standard tests, and the results prove conclusively that poor installation (improperly flashed) will reduce in-service performance by more than 50%.

The R-5 window performance you are seeking will be reduced to R-2 in the situations you are allowing. And, to not identify them specifically creates the opportunity for poor performance to be defended by quoting your own directive.

2. Your directive further supports the erroneous premise that specific instructions cannot be given by allowing "generic" instructions. On line 175 you state: *EPA understands that the manufacturer cannot write installation instructions for every situation and that generic instructions covering the most common situations are acceptable to fulfill this requirement.*

One size does not fit all. This has always been the problem with practices that become a singular standard. The standard then becomes prescriptive requiring interpretation, and then the interpretation becomes debatable, and the results fail too often because no one tells anyone how to achieve the prescribed result.

AWDI, as have others, has spent the last 25 years collecting specific methods to achieve the results found in the prescriptive standards and practices and the code requirements. This is what the WIXSYS.com solution attempting to make available. AWDI offers "Performance-based" instructions, made specific to more than 30 situations to cover most, if not all conditions.

Moreover, AWDI has proved our approach in the laboratory tests mentioned above. Using ASTM 2112, the installed R5 window performed worse than an R2 in the opening. Using the AWDI approach, we maintained the in service performance at the R5 level. It all came down to performance based methods outperforming prescriptive – "one size fits all" methods. No matter who prepares the instructions for compliance with Directive 6 they cannot be generic. We have long lived with too many failure rates from "generic" instructions glued to the back of a window or door.

Bottom line: There are no situations where proper flashing is not possible. To state so gives an excuse for failed installation and undermines achievement of the goals and effectiveness of Directive 6. Also, while many may feel generic instructions work for new construction where there is 100% control of the interface; generic cannot work effectively for retrofit. There must be specifics on how to re-build the window/wall interface to effectively manage water, moisture, air, thermal and vapor dynamics. It can be done and is now being done.

With these concessions, you are demanding compliance with a directive that excuses failure. Do not cop out now.

LIABILITY

Of course manufacturers fear liability – mostly because they have little or no control over who installs their windows and how. This situation is what the installation portion of Directive 6 portends to help mitigate. Letting installers know what needs to be done and some instruction on how to achieve it will better prepare the contractor to deal with the needs of the installation.

But perhaps most helpful is that the manufacturer can call attention to their recommendations and hold the installer accountable to those recommendations and not always be the default responsible party when the installation fails.

Most laws already hold manufacturers/dealers responsible for the performance either through code requirements, consumer protection or common law warranty tenets. Therefore it seems only logical that the manufacturer, and also the dealer, would benefit from taking an active role in stating what is required for proper performance in the field and then holding the contractor to that standard.

Sincerely

John H. Jervis
Executive Directive
AWDI, LLC