

PREMIER PANELS & OFF-GASSING

One of the questions that has frequently been brought up in discussions about Premier Building Systems Structural Insulated Panels is “Do the panels emit any harmful gases such as formaldehyde?”

The answer to this question is difficult, because the initial reaction is to say that the panels emit no harmful gasses. This, for the most part, is correct. There are very little, almost immeasurable, amounts of gasses, such as formaldehyde, that can be attributed to the use of PBS panels. So the more correct answer to this question is yes, the panels do emit extremely small amounts of gasses such as formaldehyde.

To put this all in to context, one must realize what is in the air every day. It is a well documented fact that we typically measure 0.03 ppm of formaldehyde in both outdoor and indoor air. Oriented Strand Board (OSB), the wood component in our panels, is manufactured using phenolic adhesives. The American Plywood Association (APA) and our suppliers have evaluated the OSB by placing large quantities of it in a testing chamber and found that the maximum amount of formaldehyde measured was 0.07 to 0.10 ppm. These amounts are the same for exterior grade plywood, which is also bonded with phenolic type adhesives. Due to these low values, HUD does not require labeling of these structural sheathings as formaldehyde sources.

Formaldehyde is found around us all the time. Plywood and OSB are not going to cause most people any sensitivity problems. Major sources of formaldehyde typically found in the home are from particle board or pressed wood used in furniture, cabinets and shelving and carpeting.

Are other gasses emitted from the panels? Again, as science becomes able to measure trace amounts of chemicals in the parts per million and parts per billion, yes other almost immeasurable, chemicals can be found in the panels. Large scale tests were conducted on structural insulated panels to measure VOC (volatile organic compound) emissions. Panels using expanded polystyrene cores and bonded to OSB with structural urethane adhesives, like PBS uses, show extremely low amounts of VOC emissions.

Chemically sensitive individuals have occupied homes utilizing PBS panels and have had no reactions what so ever.

For more information on the off gassing of OSB refer to the website www.apawood.org. This is the website of APA – The Engineered Wood Association. They have a Technical Report - Structural Wood Panels and Formaldehyde, which addresses inquiries concerning the release of formaldehyde gas from APA-trademarked structural panel products. This report summarizes the results of research on this subject.