



**wedi<sup>®</sup> corp.**

**wedi TECH TIP April 2007**

**FOAM BACKER BOARD SYSTEMS**

Dear valued wedi Customer,

In this April edition of the wedi Tech Tip I would like to inform you about the properties and characteristics of different foam backer board systems available in our tile industry.

Basically we can see two different foam types used for backer boards in our marketplace:

1. **Extruded Polystyrene ( XPS, wedi )**
2. **Expanded Polystyrene ( EPS, Easyboard and others )**

The physical differences of both types are due to the different manufacturing processes. **XPS** is made using polystyrene granulate and an FCKW free blowing agent which helps injecting the foam into a block form creating a naturally dense and closed cell consistency of the finish material. XPS backer boards like wedi building panel **are 100% waterproof, water vapor retarding** and **so dense** that they **can be used on heavy duty floors**. They provide **excellent flexural and breaking strength** allowing for a solid wall backer board installation. Working on the jobsite with XPS boards means cuts are **always clean and straight**, little dust occurs.

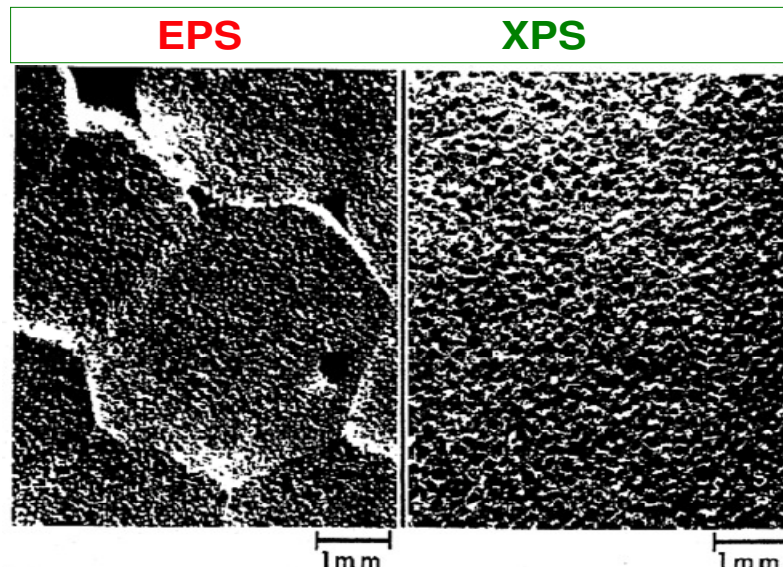
When producing **EPS** the granulate is expanded to little small balls using a blowing agent. The small balls are then glued to a block using hot steam. This method creates a foam product 80% cheaper in manufacturing compared to the XPS. The **EPS** is a open cell foam which **is not waterproof or water vapor retarding** like the XPS is. Another disadvantage of EPS is the **lack of density** making it critical for use in flooring installations. If EPS is produced with higher densities it **will loose its flexural and breaking strength** which would lead to backer board failures on framework wall-ceiling installations. When installers cut EPS backer boards, they will notice that it does not cut clean and rough panel edges are natural due to the ball structure of the foam. More dust and foam debris occurs. EPS is traditionally used for packaging material (white foam) due to minimal cost of raw material.

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EPS and XPS



Dear customer, we at wedi know for more than 25 years that we need to invest the 80% higher material cost for XPS into our product to create a liable backer board for our tile applications in wet areas such as showers and steam rooms.

Kind Regards,

Bastian

Bastian Lohmann

Technical Sales Manager wedi Corporation