WHY FOAM INSULATION?

Foam is the most efficient form of insulation available anywhere. Think about the effectiveness of some common foam products that we use on a regular basis:

The Foam Coffee Cup..Just 1/8" of Foam With An R-Value Less Than One.

Go to your favorite convenient store and buy a cup of coffee. Hold the foam cup in one hand and pour yourself a cup of steaming hot coffee with the other hand. Go ahead...you won't burn your hand. The foam cup will barely be warm to the touch. (If the foam was a bit thicker, it is doubtful if you could feel whether the coffee was hot or cold, only the steam would give it away) We think you'll agree that just 1/8" of foam is a pretty effective insulator. Now put some fiberglass in your hand, and pour boiling coffee into it. Would you feel it? Which would you think is a better insulator, foam or fiberglass?

The advantages of **closed-cell foam** compared to **open-cell foam** include its strength, higher R-value, and its greater resistance to the leakage of air or water vapor. The disadvantage of the closed-cell foam is that it is denser, requires more material, and therefore, is more expensive. Even though it has a better R-value, typically the cost per R is still higher than open-cell foam. The choice of foam can also be based on the requirements for the other performance or application specific characteristics such as strength, vapor control, available space, etc. **Open-cell** SPF has an R-value around 3.6 per inch and typically uses water as the blowing agent. **Closed-cell** SPF has an R-value of around 6.9 per inch (aged R-value) and uses high R-value blowing agents. Both types of foam are commonly used in most building applications and the choice for which to use can depend on many of the factors discussed above. Some foams are inappropriate in specific applications. For example, you typically would not use open-cell foam below grade or in flotation applications where it could absorb water; this would negate its thermal performance because water is a poor insulator compared to air. Closed-cell foam would be a good choice where small framing sizes need the greatest R-value per inch possible. Closed-cell foam would be used for roofing applications.

RECOMMENDED PRODUCT APPLICATIONS for **OPEN CELL FOAM**

• Walls • Unvented Attics • Ceilings• Floors • Vented Attics
• Unvented Crawl Spaces • Vented Crawl Spaces

RECOMMENDED PRODUCT APPLICATIONS for **CLOSED CELL FOAM**

• Walls • Unvented Attics • Ceilings• Floors • Vented Attics • Piping
• Unvented Crawl Spaces• Hot Tubs • Vented Crawl Spaces • Foundations
• Concrete Slab • Ducts • Tanks• Cold Storage • Freezers • Coolers