



TECHNICAL BULLETIN No. 1008

DATE: DECEMBER 14, 2001

**SUBJECT: R-TECH X R-VALUES for
INTERIOR CONCRETE WALL APPLICATIONS**

R-TECH X™ is Insulfoam's new generation product that is used when Type X polystyrene products are specified. R-TECH X consists of polymer film laminates that are heat fused to a high quality polystyrene core. One of the polymeric facers used in the manufacture of R-TECH is reflective and carries a very low emissivity rating. When this low emittance surface is placed toward an air space additional thermal resistance or R-Value is developed in an application.

Many concrete and masonry walled structures follow the structural application with a layer of insulation placed between furring strips followed by an interior finish of drywall. In these large commercial applications the furring strips are sized to two inches so as to accommodate 2" polystyrene insulation that provides for an R-value of R-10. R-TECH X can achieve the desired R-values by placing a 1 7/8" thick product in the space created by the furring strips and utilizing the air space between the R-TECH X and the gypsum wallboard.

The American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) have determined that when a dead air space is bounded by a material that has a low emissivity that the air space increases its capacity as an insulator and its R-Value increases. This is exactly what occurs in the above application of R-TECH X. Using the features of R-TECH X the R-value for the above is calculated to be the equivalent of placing 2" of Type X extruded polystyrene in the same wall assembly.

If there are questions regarding the data presented in this document and or questions pertaining to the use of Insulfoam's R-TECH X, please feel free to contact Insulfoam-Technical Center @1/800-469-8870.

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