Non Destructive Testing Building Materials Aggregates Concrete Soils

## JOHN H. ROBINSON TESTING, INC.

(A Subsidiary of Urban Engineers, Inc.) 1319 Sassafras Street, Erie, PA 16501 LABORATORY PHONE (814) 454-0195 FAX (814) 453-2020 Sub-Surface Investigatin Field Testing & Inspectio Soil Mechanics Soil Borings Reports

Date:

February 2, 2004

Client:

Gutters, Insulation & More

4002 Main Street

Erie, PA. 16511

Attn:

Mr. Bill Szabo

Re:

"R" Value Evaluation

Concrete Block: air-krete@ foam-filled

Lab Ref.:

Z-04-006

Received:

01-16-2004

Examined with the following results:

Three (3) air-krete® foam-filled concrete block specimens were submitted to testing procedures as outlined in ASTM C-518 to determine their "R" value. The block were first conditioned to ambient laboratory temperature and relative humidity (70 degrees F & 37% RH) for 24 hours prior to performing the test procedure. The block were evaluated in both the 10" direction and the 8" direction to arrive at "R" values indicative of the two primary types of residential masonry units currently being retro-fitted with the insulation product here evaluated.

Masonry Unit Designation	"R" Value
2-core, 10" regular concrete block	25
2-core 8" regular concrete block	18

It must be noted that these derived values do not take into account any "dynamic" influences on the actual building system as constructed. That is to say that the effect of wind, moisture, leakage at mortar joints or expansion joints, presence of waterproofing materials on one or both sides of the block construction, severe humidity differences across the masonry construction or combinations of any of these driving forces have not been taken into account in this evaluation. These influences, if they are to be determined, should be evaluated on a "fully constructed" wall assembly as noted in ASTM C-976 Test Method for Thermal Performance of Building Assemblies by Means of a Calibrated Hot Box.

Respectfully submitted

Dennis R. Smale,

Laboratory Superintendent