These insulations are made of inorganic glass fibers with a thermosetting resin binder and formed into flexible, semi-rigid or rigid rectangular boards of varying densities and thicknesses between 1" and 4". Types 703 and 705 are available with factory-applied fire-reinforced kraft (FRK) or a white aluminized service-jacket (ASJ) facing. Both facings are vapor retarders and provide a neat, finished appearance in mechanical applications.

Each 700 Series Insulation product has thermal and acoustical physical properties suited to specific construction applications. 701 and 711 products are lightweight, resilient, flexible insulation in sheet form, used on irregular surfaces. 703 insulation is semi-rigid for applications where board-like properties are desired. 705 products are even more rigid for use where strength, abuse resistance and good appearance are required.

Fiberglas® 700 Series Insulation

Features and Benefits

Optimal Thermal Performance
With the range of R-values and thicknesses available, 700 series products can meet most thermal specifications with ease.

Meets Building Code Requirements
Because of its low surface burning characteristics, 700 Series products meet building code requirements for exposed applications. The product can be applied to building surfaces without the need for a separate finish or covering.

Size Availability
700 Series Insulation products are available in a 24" x 48" standard size. 700 Series products can also be furnished pre-cut in sizes up to 48" x 96" to fit specific dimensional requirements. Pre-cut insulation speeds installation and improves labor productivity.

Easy Installation
Lightweight and resilient, 700 Series products are easy to handle, fabricate on the job site and install. 700 Series Insulation’s wide range of product sizes and densities allows for efficient material usage. 700 Series Insulation products can be easily fabricated at the job site. This is especially important when 701 and 711 products are used on irregularly shaped surfaces.

Dimensional Stability
All 700 Series Insulation products are dimensionally stable and will not shrink or warp. Composed of inorganic glass fibers, 700 Series Insulation will not rot or mildew and is noncorrosive to steel, copper and aluminum. These features help assure long term in-place performance.

Design Considerations
Buildings utilizing curtainwall construction may need fire suppression systems, in conjunction with good construction practices, to provide adequate fire protection for the building. Verify with local building code requirements.

The need for and placement of a vapor retarder in commercial construction depends on many factors. The architect or specifier should evaluate the requirements of each project.

When insulation is added to the inside perimeter of a structure, the area outside the insulation becomes exposed to greater temperature extremes. Building structures should be inspected to ensure they can withstand the additional expansion and contraction forces. Check for piping which should be protected against freezing.

Installation
700 Series Insulation can be easily cut with a knife and fit neatly into irregularly shaped areas.

For Vertical Applications
700 Series Insulation can be installed between furring strips, hat channels and Z-shaped furring where a finish will be applied. For exposed applications, the product can be impaled on impaling pins or adhered with adhesive.

For Horizontal Applications
700 Series Insulation can be installed on horizontal surfaces by using impaling pins.

On Curtainwalls
700 Series Insulation is easily installed by mounting on impaling pins or holding in place with supporting clips designed for the application. Follow curtainwall manufacturer’s instructions for clearance.

On Masonry Construction
700 Series Insulation can be installed between wythes, on the interior face with stick pins, or by using appropriate adhesives.
700 Series Insulation can be installed using impaling pins or appropriate adhesives. When using adhesive, follow adhesive manufacturer's recommendations for surface preparation and adhesive pattern. When using impaling pins, follow pin manufacturer's recommendations for surface preparation. Lengths should be selected to ensure tight fit. Protect pin tips where subject to contact. Pins should be located 3-8" from the edge(s) of the board.

Maintaining the integrity of the vapor retarder is important for effective moisture/humidity control. Repair any punctures or tears in the facing by taping with a pressure sensitive foil tape.

Product should be kept dry during shipping, storage and installation.

### Applicable Standards

701 and 703 Insulation products comply with ASTM C 553, Type I, II, III and ASTM C 665, Type I. Federal Specification HH-I-558B has been cancelled and is replaced by ASTM C 553. 703 and 705 Insulation products comply with ASTM C 612, Type 1A and 1B. Federal Specification HH-I-558B has been cancelled and is replaced by ASTM C 612 and ASTM C 553. The thermal resistance values for 700 Series Insulation were tested in accordance with ASTM C 518, R-value for insulation only.

The surface burning characteristics of 700 Series Insulation were derived from products tested in accordance with ASTM E 84. This standard is used solely to determine the fire performance of building materials and should not be used to describe or approve the fire hazard of materials under actual fire conditions. However, the results of these tests may be used as a reference for fire risk assessment that takes into account all of the factors pertinent to an assessment of the fire hazard of a particular end use. Values are reported to the nearest five rating.

The vapor retarder permeance of the FRK and ASJ facings on 700 Series Insulation was developed from tests conducted in accordance with ASTM E 96, desiccant method. It also complies with the MEA 227-83 requirements of New York City.

The noise reduction coefficients of 700 Series Insulation products were derived from tests conducted in accordance with ASTM 423.