

OWENS-CORNING FIBERGLAS 15250/OWE Insulations For Mechanical Systems BuyLine 1615/OWE

Recommended Insulation Standards

ASHRAE 90.1-1989 Energy Efficient Design of New Buildings

This new National Voluntary Consensus Standard was developed under the auspices of the American Society of Heating, Refrigeration, and Air-Conditioning Engineers, of which Owens-Corning Fiberglas Corporation is an active member. ASHRAE 90.1 provides minimum insulation thickness standards for service water heating systems; heating, ventilating, and air-conditioning systems; and storage tanks and equipment.

Owens-Corning Supports these minimum thickness standards as adequate to ensure acceptable levels of energy conservation in most new commercial and institutional buildings. These minimum thickness standards are related to guide specifications for Owens-Corning's insulations for mechanical systems as shown in the printed Sweet's Catalog 15250/OWE.

NAIMA Economic Thickness Standards

While ASHRAE insulation thickness standards are considered acceptable minimums, optimum energy cost-effectiveness is more likely to be achieved by applying economic insulation thickness standards such as those published by the North American Insulation Manufacturers' Association (NAIMA).

Economic thickness is defined as that which provides owners with the lowest possible annual aggregate cost of energy, of insulation, and of equipment used to produce energy.

As a member of NAIMA, Owens-Corning supports its economic thickness standards for industrial insulation systems. These standards are shown in the printed Sweet's Catalog 15250/OWE.

Insulating for Personnel Protection

Sometimes the main reason for insulating is to protect workers or building occupants from the risk of contact with heated pipes or equipment. In such cases, thickness requirements will seldom be sufficient to achieve optimum operating economics. If controlling energy cost is a key concern, economic insulation thickness standards should govern; these standards will likely provide more than adequate protection to personnel working in the area of heated systems.

Insulation thickness is considered sufficient for personnel protection purposes when its surface temperature as installed on a heated surface does not exceed 140F.

Recommended insulation thicknesses for personnel protection are listed in the printed Sweet's Catalog 15250/OWE.

Insulation Property Specifications

Owens-Corning's insulations for mechanical systems comply with all widely used industry and military specifications as listed for each product in this electronic publication. These include:

ASTM C 547, Standard Specification for Mineral Fiber Preformed Pipe Insulation.

Fiberglas® pipe insulation meets required thermal values to 850F maximum operating temperature.

ASTM C 612, Standard Specification for Mineral Fiber Block and Board Thermal Insulation.

Fiberglas Insul-Quick®, Type 1000 and TIW insulations meet all specification requirements to maximum operating temperatures of 850F or 1000F (depending on the product).

ASTM C 553, Standard Specification for Mineral Fiber Blanket Thermal Insulation.

Fiberglas Type 701, All-Service Duct Wrap, Type 1000, and TIW Types I and II insulations meet Types I through VI of this specification as listed in the printed Sweet's Catalog 15250/OWE.

HH-I-558B, Mineral Fiber Boards, Blankets, and Pipe Covering. Fiberglas pipe insulation meets Type III requirements of this specification. Fiberglas equipment insulations meet Types I and II requirements.

ASTM C 533, Standard Specification for Calcium Silicate Insulation.

Owens-Corning Pink Calcium Silicate pipe, block, and V-grooved block insulations comply with all specification requirements to maximum operating temperatures of 1200F.

For further discussion of specification compliance issues see the printed Sweet's Catalog 15250/OWE.

Capabilities and Resources

Owens-Corning Fiberglas Corporation is the world's leading manufacturer of glass fiber insulations, which it sells under the Fiberglas® trademark. It is also a major manufacturer of calcium silicate insulations.

Founded in 1938 and becoming a public corporation in 1952, the company employs 16,000 people, operates manufacturing plants in all parts of the United States, and has subsidiaries and affiliates in many foreign countries.

Since the company's founding, research has played a major role in its growth and in the acceptance of its products. Over four hundred scientists, engineers and support staff help maintain the company's technological leadership at the 650-acre Owens-Corning Technical Center at Granville, Ohio, one of the most up-to-date industrial research and development complexes in the country.

Owens-Corning serves its end-user customers through a knowledgeable and responsive field sales organization. Working closely with a national network of professional distributors, they build strong customer relationships through their ability to listen, then provide solutions to customers' technical and business problems. The company's focus remains concentrated on being the most efficient producer of mechanical and industrial insulations, helping through competitive leadership to provide top quality products and service along with total customer satisfaction.