



FOOD PROCESSING



ISSUES AND CHALLENGES

**PITTSBURGH
CORNING**
FOAMGLAS®
INSULATION

*Undisputed Performance.
Unmatched Versatility.™*

The FOAMGLAS® Insulation Solution

In addition to the product and complementary, high-performance accessory products, Pittsburgh Corning's Technical Services staff provides product, application and materials testing, standardized and customized specifications, on-site customer assistance and installation guidance.

We offer industry-leading technical services expertise. Contact us to learn how we can help you regarding:

- Pre-installation specification/application review sessions
- Field start-up assistance
- Heat-flow analysis
- Energy analysis calculations
- Energy survey service
- Competitive product analysis and assessment
- Accessory product review and assessment

Thermal Insulation is Critical to your Facility's Success

Insulation plays a key role in the performance of food and beverage processing and low-temperature storage facilities. It is often used in a number of applications. Thermal insulation is necessary for cold process applications, such as the performance of anhydrous ammonia service.

It is also used to protect chilled water lines and to protect against condensation. Insulation is key in above-ambient applications such as hot oil service and must provide resistance to stress crack corrosion of any stainless steel piping and equipment, especially in wash-down areas.

Insulation also plays a critical role in the building itself. It can be used to insulate and support high-load-bearing floors, and in floors and walls to provide critical temperature control in cold-storage facilities. When used in a roofing system, insulation helps to resist moisture from entering the building and keeps building contents (food products) dry.

The FOAMGLAS® Insulation Solution

Pittsburgh Corning Corporation has been an industry leader in industrial insulation systems for more than six decades. The company manufactures FOAMGLAS® insulation for use in a variety of applications ranging in temperature from -450° F to +900° F (-268° C to +482° C).

With protective jacketing, FOAMGLAS® insulation is accepted for specification by the U.S. Department of Agriculture (USDA) for both wall and pipe-system installations.

The key characteristics of FOAMGLAS® insulation that benefit food and beverage manufacturing plants include:

Inorganic Composition—It is composed of glass cells and contains no fibers, chlorofluorocarbons (CFCs) or hydrochlorofluorocarbons (HCFCs). It provides the highest level of resistance to various chemicals and acids that are common in food and beverage processing.

Moisture and Water Vapor Resistance—Water intrusion is the single-most destructive force for an insulation system. FOAMGLAS® insulation is 100% impermeable to moisture in both liquid and vapor forms and is unaffected by the elements. It performs despite the wet environment, varying temperatures and high humidity conditions that are prevalent in these industries. This is a major benefit because of wash downs and the humidity resistance needs of cold temperature storage areas.

Fire and Smoke Resistance—Because it is composed of glass cells, FOAMGLAS® insulation will not burn and will not promote or contribute to toxic smoke or flame spread. It provides excellent protection for personnel and the facility because it won't absorb flammable liquids and, in the case of a fire, will not burn and emit lethal gases such as carbon monoxide, carbon dioxide, hydrochloric acid, nitrous oxides, formaldehyde and acrylonitrile like other insulation materials.



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Vermin Resistant—It is resistant to vermin and microbes and will not provide an environment of sources of food and water in which they can flourish. This is critical in the food processing industry.

High Compressive Strength—Whether it's a tank base or piping application, FOAMGLAS® insulation provides exceptional compressive strength to protect against high loads and the physical abuse that can be caused by workers and equipment in the facility.

Dimensionally Stable—Under a variety of temperatures and humidity conditions, FOAMGLAS® insulation remains dimensionally stable to provide a long life of high performance.

The unique diversity of properties that is provided by FOAMGLAS® insulation offers an unmatched combination of benefits to the specifier and facility owner. With billions of square feet of FOAMGLAS® insulation having been installed throughout the world in a variety of industries and operating temperatures, it has been proven in the field to provide:

- Constant, long-term performance and energy efficiency
- Minimal maintenance/repair/replacement of insulation or facility infrastructure, reducing life-cycle costs
- Enhanced process control
- Corrosion resistance and fire resistance that protects the insulated equipment and helps to minimize subsequent plan shutdown time

- Proven durability in high-humidity environments as well as in underground and exterior applications
- The manufacturing of FOAMGLAS® insulation puts no stress on the atmosphere's ozone layer, while its long-term thermal efficiencies reduce energy demand and the effects of burning fossil fuels on the environment

Ask for your FREE Energy Analysis Report

The primary reasons for insulation system failure include specifying a permeable material that allows moisture to enter the system and using an improper insulation thickness.

Let Pittsburgh Corning take the guesswork out of the equation. FOAMGLAS® Insulation has solved problems in a variety of applications to help companies save money on insulation maintenance and replacement, reduce personnel risk and maintain better process control.

Energy Analysis Report (EAR)—helps to ensure that you specify a system that will meet your requirements. Developed with customer-specific data subjected to computer analysis and other calculations, an EAR will assist systems designers in specifying the proper insulation thicknesses that will help to:

- Save money by minimizing lost energy and the need for maintenance and/or replacement
- Provide increased process control

- Maintain safe surface temperatures for personnel protection
- Minimize surface condensation
- Reduce CO² emissions
- Ensure long-term performance
- Offer general peace of mind to the specifier and building owner

Energy Survey Service—Assists in the planning for building renovations and also identifies deteriorating insulation systems. It helps to determine payback periods for reinsulated systems. This will evaluate the performance of existing thermal insulation on piping and equipment. They are conducted on-site and can result in:

- energy savings
- condensation-ice control

These are free services offered to prospective clients.

Contact Pittsburgh Corning at

1-800-359-8433 or visit us on the

Web at www.foamglasinsulation.com

for answers to your specification

and installation questions.

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KEMA CERTIFICATE**



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