Insulation Outlook Magazine is continuing its special product series with the following Industrial Product Guide. While the magazine typically discusses projects and products in general terms, we created this guide to help our readers learn more about available products. The information in this guide comes directly from insulation manufacturers and distributors.

In this issue, we asked companies to submit their most popular, commonly requested products for industrial use. We hope these guides make your research easier and help you on your next project.

If you have missed one of our recent reader guides, they are posted online at www.insulation.org/io/columns.

*Disclaimer: NIA is an insulation trade association and does not test or endorse products or companies. The information included in this section is based on submissions from NIA member companies and NIA cannot verify their accuracy. This section includes both free listings, and enhanced listings paid for by the manufacturers. These listings are provided for educational purposes. Readers should always verify that any products they are considering meet the unique needs of their systems and that the claims stated by the manufacturers are accurate.

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- ROCKWOOL Technical Insulation: ProRox MA 960 NA and ProRox SL 960 NA
- Specialty Products & Insulation: Pamrod HATS®
**Product Name:** Aerocel Insulation  
**Type of Insulation Material:** Elastomeric EPDM insulation and accessory Items: tapes, coatings, support systems, fitting covers, and fitting insulation  
**Recommended Application:** Acoustical, commercial, refrigeration, industrial, LNG, marine, OEM, and HVAC duct systems  
**Description:** Aerocel USA provides EPDM elastomeric insulation for preformed tubes, sheets and rolls, and fittings. Accessory items of adhesives, insulation tapes, protective coatings, and hanger inserts.  
**Company Name:** Aeroflex Insulation USA, Inc.

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**Product Name:** Pyrogel  
**Type of Insulation Material:** Flexible aerogel blanket  
**Recommended Application:** Hydrocarbon, chemical processing, and steam distribution  
**Description:** Pyrogel’s class-leading thermal performance and mechanical toughness delivers advantages through its speed of application, reusability, and space savings. Pyrogel’s versatile format provides superior resistance to water and unmatched CUI defense.  
**Company Name:** Aspen Aerogels

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**Product Name:** Panel Insulation Systems  
**Type of Insulation Material:** Fully encapsulated closed cell foam  
**Recommended Application:** All industrial applications  
**Description:** Panel Insulation Systems provide a fast and easy 3-step installation process for tanks, vessels, or systems requiring reliable thermal and CUI protection. The durability, waterproof, and chemical properties of the panels ensure optimized performance to lower overall cost of ownership.  
**Company Name:** Dragon Jacket Insulation

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**Product Name:** Vinaflex® Noise Barrier  
**Type of Insulation Material:** Acoustical barrier  
**Recommended Application:** LNG, HVAC, mechanical piping  
**Description:** Designed to meet the physical and performance requirements of virtually any acoustical application. The Vinaflex® line is a flexible, mass loaded vinyl barrier engineered for efficient sound isolation.  
**Company Name:** GLT Products

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**Foster® 90-61**  
**CRYOLAR™ 1K Vapor Stop**  
- Proven In-Field Performance You Can Trust  
- Easier & Faster ONE Component Application  
- Saves Labor, Time & Money  
- Superior Application Consistency  
- Extremely Low Permeance  
- Use at temperatures down to -320°F
**Product Name:** Foster® 95-50 FLEXTRA® Sealant  
**Type of Insulation Material:** Vapor barrier sealant  
**Recommended Application:** Below-ambient insulation systems  
**Description:** Foster® 95-50 FLEXTRA® Sealant has continually been the trusted choice of engineers and insulation contractors for use as the vapor barrier sealant on all types of insulation materials to prevent the migration of water vapor into the insulation system.  
**Company Name:** H.B. Fuller Construction Products Inc.

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**Product Name:** Goodtemp Thermal Insulation  
**Type of Insulation Material:** Expanded perlite pipe cover and block  
**Recommended Application:** Thermal insulation for LNG, petrochem, power generation  
**Description:** Goodtemp is the preferred hydrophobic thermal insulation in LNG terminals, petrochem, and power generation due to its effectiveness in combating corrosion for over 30 years.  
**Company Name:** Howred Corp.

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**Product Name:** TRYMER® PIR  
**Type of Insulation Material:** Polyisocyanurate  
**Recommended Application:** Industrial and commercial pipe, vessel, equipment, and duct applications  
**Description:** TRYMER® PIR features one of the lowest k-factors among pipe insulations: 0.19 BTU-in/hr-ft²°F at 75°F mean temperature and can be used over a broad temperature range from -297°F to 300°F.  
**Company Name:** ITW Insulation Systems

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**Product Name:** Thermo-1200™  
**Type of Insulation Material:** Calcium silicate  
**Recommended Application:** High-temperature pipe and equipment in chemical processing, power generation, steam distribution, and petroleum refining  
**Description:** Thermo-1200™ is a high-temperature, water-resistant Type I calcium silicate designed to inhibit water absorption and contains XOX Corrosion Inhibitor®, a proprietary corrosion inhibiting formula that helps prevent corrosion under insulation.  
**Company Name:** Johns Manville Industrial Insulation Group

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**Product Name:** CLAF Reinforced Metallized Products  
**Type of Insulation Material:** Polyethylene/polypropylene reinforced reflective insulation  
**Recommended Application:** Radiant barrier, insulation backing, building products  
**Description:** CLAF reinforced metallized fabrics are lightweight options for many different applications. CLAF PE mesh is laminated to PET, OPP, and LDPE films and is also available as a stand-alone metallized mesh.  
**Company Name:** JX Nippon ANCI, Inc.

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**Product Name:** K-FONIK Industrial Acoustic System  
**Type of Insulation Material:** Elastomeric  
**Recommended Application:** Cold-service acoustic systems  
**Description:** The K-FONIK Industrial ISO 15665-compliant sound control system is designed to minimize risk of CUI and reduce noise generated by pipes, valves, compressors, pumps, and flanges.  
**Company Name:** K-FLEX USA
Type of Insulation Material: Fiber glass

Recommended Application: Knauf Insulation Elevated Temperature Board 1000° with ECOSE Technology is used for boiler walls, hot precipitators, hot ductwork, cylindrical tanks, prefabricated panel systems, towers, stacks, and industrial ovens.

Description: Knauf Insulation Elevated Temperature Board 1000° with ECOSE Technology is a lightweight insulation (2.8 PCF, 44.9 kg/m) bonded with ECOSE Technology. The product is manufactured as a semi-rigid board form, which provides superior handling properties and insulating effectiveness at minimum cost.

ECOSE Technology is a revolutionary binder chemistry that enhances the sustainability of our products. The “binder” is the bond that holds our fiber glass product together and gives the product its shape and brown color. ECOSE Technology is a plant-based, sustainable chemistry that replaces the phenol/formaldehyde (PF) binder traditionally used in fiber glass products. Products using ECOSE Technology are formaldehyde-free and have reduced global warming potential.

PRODUCT FEATURES
- Low emitting for indoor air quality considerations

SUSTAINABILITY
Knauf Insulation’s products used for thermal insulating purposes recover the energy that it took to make them in just hours or days, depending on the application. Once installed, the product continues to save energy and reduce carbon generation as long as it is in place.

Fiber glass insulation with ECOSE Technology contains 3 key ingredients:
- Recycled glass content, verified annually by UL Environment;
- Sand, one of the world’s most abundant resources; and
- Our green chemistry initiative ECOSE Technology, which is validated to be formaldehyde-free.

Temperature Range and Physical Property Information:
Knauf Elevated Temperature Board 1000° is suitable for systems operating at temperatures from 0°F to 1000°F (-18°C to 538°C).

Company Name: Knauf Insulation

Website: http://www.knaufinsulation.us/en

Sometimes the best amenities are the ones you don’t see
**Product Name:** Manson Alley-K 1000° Pipe Insulation

**Type of Insulation Material:** Fiber glass

**Recommended Application:** Plumbing, HVAC, and process piping. Alley-K applications include domestic hot and cold water, roof drain leaders, sanitary drains, heating, hot-water heating, chilled water, process hot, cold, and dual temperature, steam, steam condensate, and refrigerated lines operating up to 1000°F.

**Description:** Alley-K is a preformed insulation product composed of high quality glass fibers bonded together with a thermosetting resin. The ASJ jacket is reinforced with glass fibers and comes with a factory-applied, self-sealing lap closure system (SSL).

**Company Name:** Manson Insulation

**Product Name:** SureShotII Pin Welding System

**Type of Insulation Material:** Used in conjunction with/fastening of fiber glass, mineral wool, ceramic fiber, duct-board, and various "flat" materials

**Recommended Application:** Wherever positive, mechanical, welded fastening is required

**Description:** Ultra-light, pin/stud welding system; dual power: 110 volt or 220 volt; application of weld studs, insulation nails, duct pins, and more. For use on steel, stainless, and aluminum. Three-year warranty included.

**Company Name:** MIDWEST Fasteners, Inc.

**Product Name:** FireMaster® DryerWrap

**Type of Insulation Material:** Encapsulated Fiber Duct Wrap

**Recommended Application:** DryerWrap insulation for multifamily housing

**Description:** A flexible wrap system developed for dryer venting ducting in multi-unit housing where dryer exhaust ducting passes through multiple fire-rated compartments before venting to outside the building.

**Company Name:** Morgan Advanced Materials – Thermal Ceramics

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**Product Name:** Manson Alley-K 1000° Pipe Insulation

**Type of Insulation Material:** Polyisocyanurate, mineral wool, fiber glass

**Recommended Application:** Fire protection, agricultural, petrochemical, renewable energy, wastewater, chemical, food and beverage, power, commercial, municipalities, military

**Description:** The RIDGLOK® Vertical Standing Seam Panel Insulation System is custom manufactured for above-ground storage tanks. All structural connections are internal to the system and protected from weather by a double-fold standing seam for a strong water-tight connection.

**Company Name:** MC&I, Inc.

**Product Name:** Manson Alley-K 1000° Pipe Insulation

**Type of Insulation Material:** Fiber glass

**Recommended Application:** Plumbing, HVAC, and process piping. Alley-K applications include domestic hot and cold water, roof drain leaders, sanitary drains, heating, hot-water heating, chilled water, process hot, cold, and dual temperature, steam, steam condensate, and refrigerated lines operating up to 1000°F.

**Description:** Alley-K is a preformed insulation product composed of high quality glass fibers bonded together with a thermosetting resin. The ASJ jacket is reinforced with glass fibers and comes with a factory-applied, self-sealing lap closure system (SSL).

**Company Name:** Manson Insulation

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**Product Name:** SSL II® WITH ASJ MAX FIBERGLAS™ PIPE INSULATION TAILORED TO FIT. TAILORED TO PERFORM.

*Today’s extreme business climate means less time to do more. Your projects don’t wait, and you can’t afford to either. SSL II® with ASJ Max Fiberglas™ Pipe Insulation is designed to seal, protect and insulate—faster and easier than ever before. Our SSL II® closure system provides a superior seal. ASJ Max protects against water and mold growth. The insulation is tailored to fit for copper and iron applications. For extreme timelines, use pipe insulation that is extremely fast and easy to install.*

*To learn more, visit OwensCorning.com/fiberglas-pipe*
**Product Name:** RG 2400 LT Anti-Corrosion Gel

**Type of Insulation Material:** Gel designed to prevent CUI

**Recommended Application:** Ammonia refrigeration piping

**Description:** RG 2400 LT prevents corrosion under insulation on below-ambient piping. It is the product being used by most of the leading food and beverage manufacturers in North America on ammonia piping systems.

**Company Name:** Polyguard Products

**Product Name:** FOAMGLAS® Insulation

**Type of Insulation Material:** Cellular glass

**Recommended Application:** Chilled water, district energy systems

**Description:** FOAMGLAS® insulation is a high-performance, long-lasting solution for chilled water and district energy systems. Impermeable to water and water vapor. Provides constant thermal efficiency throughout the life of the system, greatly reducing long-term energy consumption.

**Company Name:** Owens Corning FOAMGLAS®

**Product Name:** Owens Corning® Thermafiber® Industrial Board

**Type of Insulation Material:** Mineral wool

**Recommended Application:** Boilers, furnaces, vessels, tanks, and precipitators.

**Description:** Thermafiber® Industrial Board is an economical, rigid, mineral wool insulation that offers excellent thermal and acoustical performance. It is used in continuous service up to 1200°F.

**Company Name:** Thermafiber, Inc. (an Owens Corning Company)

**NIA SAFETY HANDBOOKS**

To review all of NIA’s Resources, visit our online bookstore at www.insulation.org/products

**Safety Handbook for Insulation Workers**

Newly updated, this pocket-sized handbook, produced by NIA, offers practical tips for workers looking to maintain a safe working environment. The handbook contains both English and Spanish versions of the text. New sections include heat-illness prevention, fall protection, and distracted driving. An employee acknowledgement form makes it appropriate for use in a company safety program.

Members: 1–25 copies, $4.00 each; 26+ copies, $3.00 each

Non-members: 1–25 copies, $8.00 each; 26+ copies, $6.00 each

**Safety Handbook for Distributors and Fabricators**

This pocket-sized handbook, produced by NIA, offers practical tips for maintaining a safe environment for distributor and fabricator workers. The handbook contains both English and Spanish versions of the text. Topics include general safety rules, compressed gases, hand and power tools, lockout/tagout, cold pot safety, and much more. An employee acknowledgement form makes it appropriate for use in a company safety program.

Members: 1–25 copies, $4.00 each; 26+ copies, $3.00 each

Non-members: 1–25 copies, $8.00 each; 26+ copies, $6.00 each
**Type of Insulation Material:** Microporous flexible insulation

**Recommended Application:** High-temperature process piping

**Description:** Microtherm microporous insulation is inorganic, non-combustible, with remarkably low thermal conductivity at high temperatures. These properties make flexible versions of Microtherm, such as Overstitched and Floppy Panels, ideally suited to consistently deliver superior performance in process piping applications year after year.

Two examples quickly show its long-term durability and high thermal resistance.

First, Microtherm Floppy Panel has been installed in subsea pipe-in-pipe flowlines for over 20 years. The Microtherm has not degraded over time and continues to keep the crude oil hot and pumpable while bearing the high pressures of a subsea line. The Microtherm does this without the separate load bearing spacers required by other materials. Microtherm has proven durability to perform for decades.

Second, a producer of specialty pigments had wondered why one of the plants in Eastern Europe seemed to consistently obtain higher yields in their production process. During a revamp they tore out a large heat return duct and found that it had Microtherm on the inner most layers. Because the Microtherm retained more heat in the process, the return gas was much more consistent in temperature. This produced a more fine-tuned process and better overall yields. Now they are using Microtherm Overstitched on the same ducts in other plants worldwide. Consistent temperatures produce a more consistent process with Microtherm.

**Temperature Range:** Microtherm offers an extremely low thermal conductivity over a wide range of temperatures, from cryogenic to 1200°C (2192°F), and is the preferred choice in a multitude of applications where a large temperature reduction is required within a limited space, or when strict heat loss or surface temperature requirements are specified.

**Company Name:** Promat Inc.

**Website:** www.promat.us

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**Type of Insulation Material:** Stone wool

**Recommended Application:** Round and irregularly shaped equipment in intermediate to high temperature ranges—towers, vessels, columns, boilers, and large diameter pipe.

**Description:** ProRox® MA 960 NA is a rolled and faced mineral wool (stone wool) insulation wrap/mat designed for high temperature industrial applications where flexibility is required. The product is ideal for large diameter piping, vessels, ducts, columns, towers, and equipment subject to light mechanical loads and high temperatures.

**PROROX® MA 960 NA:**
- Excellent thermal and acoustic insulation
- Water repellent yet vapor permeable
- Fire resistant (non-combustible)
- Easy to handle and install
- Available with a black fibrous scrim or reinforced foil facing

**Maximum service temperature:** 1200°F

ROCKWOOL offers high-performance stone wool insulation products for demanding industrial and mechanical applications where high temperature, mechanical loads and moisture resistance are concerns. ProRox® products, made from natural stone and recycled content, are engineered to provide superior thermal and acoustical performance and are fire resistant, water repellent, non-corrosive, and resistant to mold. The low thermal conductivity of ProRox products results in energy savings where it’s needed most.

**Company Name:** ROCKWOOL Technical Insulation

**Website:** www.rockwool-rti.com
Type of Insulation Material: Stone wool

Recommended Application: ProRox® SL 960 is a rigid mineral wool (stone wool) insulation board for high temperature industrial applications, such as tank tops, columns, vessels, filters, stacks, chimneys, towers, bag houses, precipitators, breechings, exhaust systems, silencers, scrubbers, fan housings, and economizers.

Description:
ProRox® SL 960 NA is a rigid mineral wool (stone wool) insulation board for high temperature industrial applications subject to light mechanical loads. This high-performance stone wool insulation is made from natural and recycled materials, and is easy to cut, strong and durable, and provides excellent acoustical properties. ProRox® SL 960 boards (slabs) fully comply with the requirements as set by internationally recognized standards, including EN14303, CINI 2.2.01, and ASTM C612 Type IA and IB.

PROROX® SL 960 NA:
- Excellent thermal and acoustic insulation
- Water repellent yet vapor permeable
- Fire resistant (non-combustible)
- Easy to handle and install

Maximum service temperature: 1200ºF

ROCKWOOL offers high-performance stone wool insulation products for demanding industrial and mechanical applications where high temperature, mechanical loads and moisture resistance are concerns. ProRox® products, made from natural stone and recycled content, are engineered to provide superior thermal and acoustical performance and are fire resistant, water repellent, non-corrosive, and resistant to mold. The low thermal conductivity of ROCKWOOL’s ProRox products result in energy savings where it’s needed most.

Company Name: ROCKWOOL Technical Insulation
Website: www.rockwool-rti.com

Don’t let water take hold of your pipes.
Product Name: Pamrod HATS®
Type of Insulation Material: Fabricated with a range of insulation materials
Recommended Application: Vessel and tank heads
Description: Precision engineered tank insulation head segments provide superior thermal performance and substantial labor savings. Machined segments yield a superior fit on single or multilayered systems. Sidewall segments and jacketing also supplied.
Company Name: Specialty Products & Insulation

Serving Commercial, Industrial, Marine and OEM Markets

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