**Introduction to our Products**

Thermal Ceramics is a single-source provider of insulation and refractory technology: fiber, insulating and dense firebricks, monolithics and specialized insulation. Each product line has a number of well-known global brands.

**Fiber:** in blanket, module, paper, vacuum forming, mastic and textile forms for a variety of manufacturing applications. Brands include Superwool®, Kaowool®, Cera®, Pyro-Bloc®, FireMaster®.

**Insulating and Dense Firebrick:** in straight or slab form, in standard or custom-designed shapes. Brands include K®, JM™, TC®, TJM™ and SR™-90.

**Monolithics:** include insulating, general purpose and special duty dense castables. Brands include Tri-Mor®, Kaolite®, Firelite®, Kaocrete®, Firecrete®.

**Specialized Insulation:** microporous, fired dense refractories, including BTU-BLOCK™, Min-K®, Cerox® and Valcor®.

**Pyro-Bloc Offering**

Thermal Ceramics exclusive Pyro-Bloc products have set the standard for quality and versatility in furnace and boiler lining systems since their introduction in 1974. Pyro-Bloc modules are the only “monolithic” ceramic fiber modules on the market. Manufactured from Pyro-Log™, a monolithic ceramic fiber log, they are fabricated into modules that offer superior performance and durability. Pyro-Bloc modules are available uncompressed module densities up to 15 pcf and in three grades:

- **R Grade:** alumina - silica
- **ZR Grade:** alumina - zirconia - silica
- **C Grade:** alumina - silica - chromia

Pyro-Bloc modules combine the insulating material advantages of ceramic fiber with rapid furnace installation. The monolithic fiber is easy to cut and fit around openings and modify in the field. In addition, these modules are lightweight, have low heat storage and provide durable service.

**Pyro-Bloc Y and Y² Modules**
- One shot module design
- Compressed in all directions to maximize module to module and module to shell reducing likelihood of gaps during service

**Pyro-Bloc M and M² Modules**
- Stainless steel support system for quick and easy installation
- Designed for installation over corrosion and vapor barriers, back-up linings

**Pyro-Bloc E and E² Modules**
- Installs quickly over coated shells with or without a vapor barrier
- Larger format allows for economical linings in lower temperature applications

**Pyro-Packing™ and Pyro-Log**
- Uncompressed monolithic ceramic fiber manufactured in R, ZR and C grades, with fiber densities up to 15 pcf
- Used to fill smaller areas or voids in the ceramic fiber linings to eliminate special shapes
Pyro-Bloc HS Module
- Proprietary-hardening agent that enhances hardness and strength with minimal firing, yet allows the module to remain compressible during installation
- Best choice for applications requiring resistance to high mechanical abuse

Pyro-Bloc Plus Module
- Dual component design consisting of a Pyro-Bloc module base with a high temperature fiber veneering module
- Two-layer arrangement provides high temperature capability up to 3000°F

Pyro-Bloc Burner Bloc
- Vacuum-formed sleeve is mounted in the center of the module
- Lightweight, thermally efficient, thermal shock resistant module

Pyro-Bloc Corner Bloc
- Cut into special shapes to go into flues, furnace openings or around corners

Pyro-Bloc T-Bar Module
- Pre-Welded studs or back-up insulation
- Edge grain module installs quickly and is recommended attachment for Corner Blocs used with M modules
- The hardware is inserted between the module during installation

Pyro-Fold™ and Pyro-Stack™ Offering
Thermal Ceramics Pyro-Fold and Pyro-Stack modules incorporate all the advantages of our standard ceramic fiber blanket products in a pre-compressed modular form and offer non-exposed anchoring, economical installation and a positive mechanical attachment. They are produced in various densities and thicknesses using Thermal Ceramics RCF and Superwool blanket products.

Pyro-Fold Modules
- Accordion-folded blanket module that uses the Pyro-Bloc hardware and anchoring systems

Z-Bloc® Modules
- Z-Blok I - Slide Channel that runs perpendicular to the folds, it slides onto a disc or clip that has been attached to the steel casing
- Z-Blok II - C-Channel that runs parallel to the module folds and is typically attached to the steel casing with a welded stud and nut

Unibloc™ Modules
- Economical, folded modules
- Made from a variety of ceramic fiber blankets
- Supplied with or without one of the positive anchor systems or using a planned layout

Pyro-Stack Modules
- Blanket cut and stacked edge-grain that uses the Pyro-Bloc hardware and anchoring systems