

CERAMIC FIBER MODULES TO 3000°F

RATH manufactures a complete line of custom stack bonded modules using the highest purity alumino-silicate, alumino-zirconia-silicate and ALTRA® high alumina fibers for application temperatures between 2000°F and 3000°F. Rath's interactive engineering approach allows us to work closely with the customer to select the appropriate materials, densities, thickness and anchors for the application. Our field service engineers can provide heat flow analysis, installation supervision or a turnkey retrofit of an existing furnace.

Temperature Range

- ▲ 2000 - 2300°F Alumino-Silicate
- ▲ 2300 - 2450°F Alumino-Zirconia-Silicate
- ▲ 2400 - 2750°F ALTRA® Combi & ALTRA® 97
- ▲ 2600 - 3000°F Full thickness ALTRA® 72

Module Density

- ▲ 8 to 12 pcf

Module Sizes - (6", 8", 10", 12" thick)

- ▲ Standard 12" x 12"
- ▲ Giant - 12" x 24", 12 x 36", 12" x 48"
- ▲ Custom - designed to fit your application
- ▲ Veneering

Anchor Types (304, 310, 316 stainless)

- ▲ Internal - one shot weld on
- ▲ Bolt Thru
- ▲ External pre-weld
- ▲ Special - Silicon carbide, ceramic

Engineering Services

- ▲ Heat Flow Analysis
- ▲ Material Selection
- ▲ Custom Layout for new and retrofit
- ▲ Auto CAD Insulation Drawings
- ▲ Turn Key installation and supervision
- ▲ Thermal Imaging Services
- ▲ Preventative Maintenance



**ALTRA® 72 Modules
Roof Installation**



**1450°C ALTRA® 97 Modules
Graphite Fiber Thermal Processing**

The test data shown are based on average results on production samples and are subject to normal variation on individual tests. The test data cannot be taken as minimum or maximum values for specification purposes. ASTM test procedures used when applicable.