

## DELTA EM™ MODULES

**Delta EM™ Modules** have the highest insulating value achievable in a ceramic fiber lining. Each module is comprised of folded blanket under compression to insure a tight seal and a "spring-back" action not found in typical wallpaper linings.

Noted features of an **EM™ Module** lining are:

- Fast & Easy installation
- Low heat storage and fuel costs
- Self-Supporting internal hardware reduces structural steelwork vs. castable or brick linings.
- Bolt-On and Shoot-On style attachment methods provide ease of installation.
- Thermal shock resistance speeds up heat ups and cool downs for quick turn-around times.
- Manufactured in the USA with Unifrax Blanket

Typical Applications for **EM™ Modules** are:

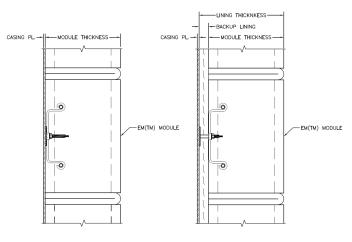
- Stress Relieving Furnaces
- Annealing Furnaces
- Car Bottom & Heat Treating Furnaces
- Process Heaters
- Reheat Furnaces
- Kiln & Boiler Linings
- Incineration Equipment
- Stack Linings
- Soaking Pit Covers
- Ladle Covers & Ladle Preheaters
- Forge Furnaces

Size & Densities Available

- 8, 9.3, 10.7, 12 (Lbs/Ft<sup>3</sup>)
- Standard Size 12" x 12" in thicknesses from 4" to over 12"
- Standard anchoring method 5/16-18 UNC (304ss) welded to 2" sq. CS plate.
- Designed for new construction



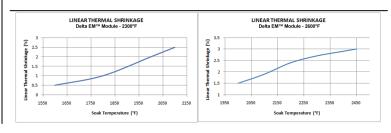
#### TYPICAL INSTALLTION METHODS



No-Backup Lining

Backup Lining

#### EM<sup>™</sup> Module Shrinkage Data





### Corporate Office

Ph: 281.391.1320 / Toll Free 800.430.2226 Fax: 281.391.2015 Web: http://www.deltarefractories.com Email: DRISales@deltarefractories.com

#### Mailing Address 21557 Provincial B

21557 Provincial Blvd Katy, Texas 77450



## DELTA EM™ MODULES

#### **Typical Product Parameters**

Chemical Composition	Grade (Recommended Operating Temperature)		
	1800°F (1800°F)	2300°F (2150°F)	2600°F (2450°F)
Al <sub>2</sub> O <sub>3</sub>	31-35%	43-47%	23-31%
SiO <sub>2</sub>	50-54%	53-57%	53-55%
ZrO <sub>2</sub>	5%	—	15-17%
Fe <sub>2</sub> O <sub>3</sub>	1.3%	Trace	—
TiO <sub>2</sub>	1.7%	Trace	_
MgO	*0.5%	—	—
CaO	≤ 7.5%	—	—
Na <sub>2</sub> O <sub>3</sub>	—	< 0.5%	—
Alkali	—	0.05%	—
Leachable Chlorides		< 10 ppm	< 10 ppm
Other Inorganics		0.85%	_



Corporate OfficePh:281.391.1320 / Toll Free 800.430.2226Fax:281.391.2015 Web: http://www.deltarefractories.com Email: DRISales@deltarefractories.com

# <u>Mailing Address</u> 21557 Provincial Blvd Katy, Texas 77450