

## D-PANEL™ MODULE ASSEMBLY

**D-Panel™ Module Assemblies** can be thought of as “refractory wallpaper”, specially designed for tubular installations. Using proprietary stainless steel hardware, each module in a panel assembly is comprised of folded blanket under compression to insure a tight seal and a “spring-back” action. Module panels are engineered to key themselves into the round diameter of the casing, much like wedge brick is used to build a tight tubular brick ring.

Noted features of a **D-Panel™ Module** lining are:

- Fast & easy installation / no exposed hardware
- Low heat storage and fuel costs
- No dry-out required
- Self-supporting internal hardware reduces structural steelwork vs. castable or brick linings
- End-anchored attachment methods provide versatility for retro-fits & rebuilds with limited drawings needed
- Thermal shock resistance speeds up heat ups and cool downs for quick turn-around times.
- Unique module hardware provides “belt-and-suspenders” redundancy in protection against module loss.
- Manufactured in the USA with domestically-made ceramic fiber blanket

Typical Applications for **D-Panel™ Module Assemblies** are:

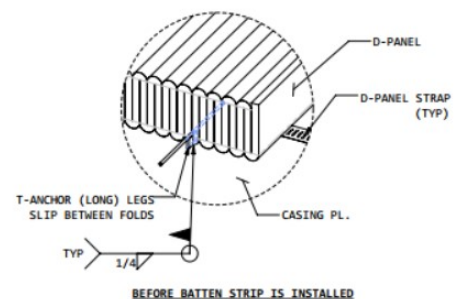
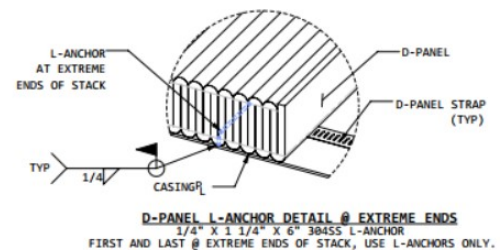
- Flares
- Stacks
- Ducts (horizontal and vertical)
- Thermal Oxidizers
- Kiln & Boiler Linings
- Incineration Equipment

Size & Densities Available

- 8, 9.3, 10.7, 12 (Lbs/Ft<sup>3</sup>)
- 28” to 240” tubular casing diameters
- 304 stainless hardware standard. Higher grades available



### Typical Anchoring Method



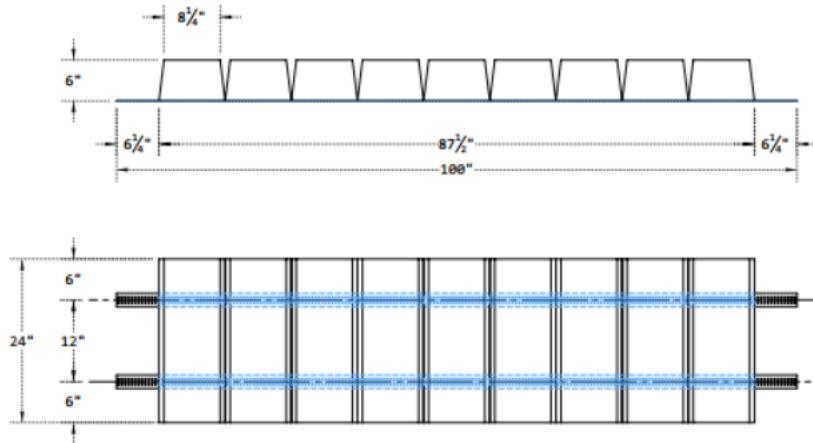
### Corporate Office

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### Sample Panel Construction



ITEM NO. ③  
30 REQ'D AS SHOWN

### Typical Product Parameters

Chemical Composition	Grade (Recommended Operating Temperature)		
	2300°F (2150°F)	2600°F (2450°F)	3000°F (2912°F)
Al <sub>2</sub> O <sub>3</sub>	43-47%	29-31%	72%
SiO <sub>2</sub>	53-57%	53-55%	27%
ZrO <sub>2</sub>	—	15-17%	—
Fe <sub>2</sub> O <sub>3</sub>	Trace	—	0.02%
TiO <sub>2</sub>	Trace	—	0.001%
MgO	—	—	0.05%
CaO	—	—	0.05%
Na <sub>2</sub> O <sub>3</sub>	< 0.5%	—	0.10%
Alkali	0.05%	—	—
Leachable Chlorides	< 10 ppm	< 10 ppm	< 10 ppm
Other Inorganics	0.85%	—	—



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