



**SUREFLOW 17EM**

**SUREFLOW 17EM IS A "SELF-FLOW" CASTABLE DESIGNED FOR INSTALLATION BY POURING. WHEN MIXED TO A CONVENTIONAL FOLD CONSISTANCY, SUREFLOW 17EM WILL SELF-FLOW INTO FORMWORK AND DEGAS WITHOUT THE NEED FOR VIBRATION, RODDING OR TAMPING. THIS MATERIAL HAS LOW THERMAL CONDUCTIVITY AND EXCELLENT RESISTANCE TO THERMAL SHOCK. IT IS IDEAL FOR REACTORS, SEAL-POTS AND OVERHEAD LINES, WHEN EASE OF INSTALLATION WITHOUT VIBRATION COMBINED WITH SUPERB PHYSICAL PROPERTIES IS REQUIRED.**

**THE DATA SHOWN IS BASED ON MATERIAL PREPARED TO A CONVENTIONAL FOLD CONSISTANCY AND ALLOWED TO SELF-FLOW INTO FORMWORK WITHOUT VIBRATION OR TAMPING.**

**MAXIMUM SERVICE TEMPERATURE (M.S.T.)** 1370°C

**BULK DENSITY**

|         |           |                     |             |                   |
|---------|-----------|---------------------|-------------|-------------------|
| @ 110°C | 115 - 120 | LBS/FT <sup>3</sup> | 1842 - 1922 | KG/M <sup>3</sup> |
| @ 815°C | 110 - 115 | LBS/FT <sup>3</sup> | 1762 - 1842 | KG/M <sup>3</sup> |

**COLD CRUSHING STRENGTH**

|         |             |        |           |                    |
|---------|-------------|--------|-----------|--------------------|
| @ 110°C | 6000 - 9000 | P.S.I. | 414 - 621 | KG/CM <sup>2</sup> |
| @ 815°C | 5000 - 7000 | P.S.I. | 345 - 483 | KG/CM <sup>2</sup> |

**COLD MODULUS OF RUPTURE**

|         |            |        |         |                    |
|---------|------------|--------|---------|--------------------|
| @ 815°C | 700 - 1000 | P.S.I. | 48 - 69 | KG/CM <sup>2</sup> |
|---------|------------|--------|---------|--------------------|

**PERMANENT LINEAR CHANGE**

|          |                |
|----------|----------------|
| @ 815°C  | -0.1 to -0.3 % |
| @ 1095°C | -0.1 to -0.4 % |

**EROSION LOSS (ASTM C-704)**

@815°C LESS THAN 20 CC (Typically 15 - 16 CC)

**TYPICAL CONDUCTIVITY OR "K" FACTOR**

| <u>MEAN TEMP</u> | <u>BTU/FT<sup>2</sup>/Hr/°F/in</u> | <u>W/mK</u> |
|------------------|------------------------------------|-------------|
| @ 540°C          | 5.0                                | 0.71        |
| @ 815°C          | 5.6                                | 0.80        |
| @ 1095°C         | 6.1                                | 0.87        |

**TYPICAL CHEMICAL ANALYSIS (%)**

| AL <sub>2</sub> O <sub>3</sub> | SiO <sub>2</sub> | Fe <sub>2</sub> O <sub>3</sub> | CaO | MgO | TiO <sub>2</sub> | AlK |
|--------------------------------|------------------|--------------------------------|-----|-----|------------------|-----|
| 56.0                           | 31.9             | 1.3                            | 6.0 | 1.6 | 0.5              | 1.3 |

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