

# GEMINITE VACUUM CAST BOARDS & SHAPES

## H<sub>SiC</sub> – SERIES

### PHYSICAL PROPERTIES

COLOUR	GREY
NOMINAL DENSITY	26 pcf
MAX TEMP RATING	2300°F
CONTINUOUS USE LIMIT	2200°F
MELTING POINT	3200°F
MODULUS OF RUPTURE	159 psi
COMPRESSIVE STRENGTH	
@ 5% DEFORMATION	55 psi
@ 10% DEFORMATION	76 psi
LINEAR SHRINKAGE	
24HRS @ 1500°F	0.4%
24HRS @ 1800°F	1.4%
24HRS @ 2000°F	2.5%
24HRS @ 2200°F	2.8%
24HRS @ 2400°F	2.8%

### CHEMICAL ANALYSIS

SILICA, SiO <sub>2</sub>	47
ALUMINA, Al <sub>2</sub> O <sub>3</sub>	41
CALCIUM OXIDE, CaO	5
SILICON CARBIDE, SiC	1
LOSS OF IGNITION	5-8
ORGANIC MATERIAL	4-7

### THERMAL CONDUCTIVITY ASTM 201

(BTU-IN/HRS-FT<sup>2</sup>-°F)

MEAN TEMPERATURE	
@ 500°F	0.57
@ 1000°F	0.80
@ 1500°F	1.13
@ 2000°F	1.60

**NOTE:** DURING THE INITIAL HEAT-UP OF CERAMIC BOARDS AND SHAPES, A SMALL AMOUNT OF ORGANIC BINDER WILL START TO BURN OUT AT APPROXIMATELY 450°F (232°C). ONCE THIS MATERIAL HAS BURNED OFF, THERE WILL BE NO FURTHER 'OFF GASSING'. CAUTION SHOULD BE EXERCISED DURING THIS PERIOD.