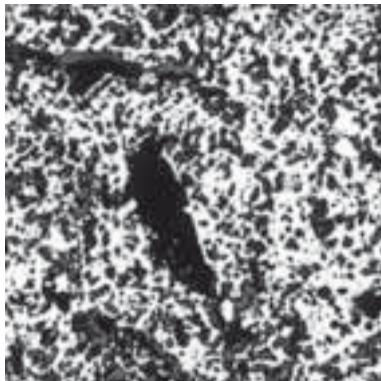


## C 1221

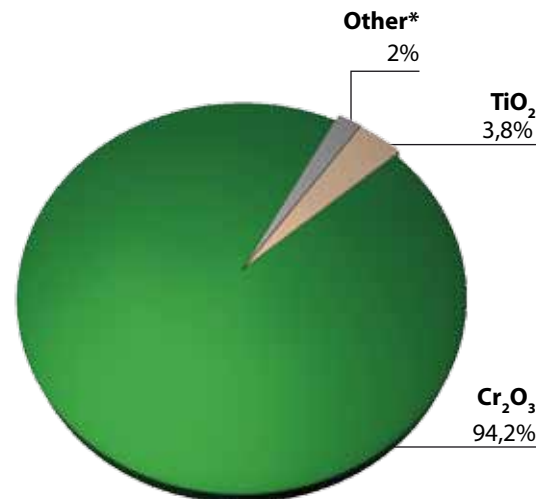
### THE MATERIAL

#### CHEMICAL ANALYSIS



\*Small quantities of SiO, CaO, BO, AlO, MgO, and Alkali

#### TYPICAL CHEMICAL COMPOSITION



C 1221 is a chromic oxide body with unusually high thermal cycling capability, which can be attributed to the C 1221's unique microstructure. The uniform density and single-phase microstructure also produce a refractory with minimum stoning potential. Combined with its outstanding corrosion resistance, this makes C 1221 ideal for use in high-wear areas of furnaces where excellent corrosion resistance and good thermal shock resistance are required.

#### CRYSTALLOGRAPHIC ANALYSIS

Principal phase ..... Chromic Oxide

#### PHYSICAL CHARACTERISTICS

International System	British Standard Units
Bulk density ..... 4.16 g/cm <sup>3</sup>	..... 260 pcf
Open porosity ..... 16%	..... 16%
Cold modulus of rupture ..... 30 MPa	..... 4351 psi
Cold crushing strength ..... 166 MPa	..... 24076 psi
Coefficient of thermal expansion ..... 7.4 10 <sup>-6</sup> K <sup>-1</sup>	..... 4.1 10 <sup>-6</sup> F <sup>-1</sup>
Thermal conductivity at 1000°C ..... 2.6 W.m <sup>-1</sup> .K <sup>-1</sup>	..... 18.0 BTU in hr <sup>-1</sup> ft <sup>-2</sup> F <sup>-1</sup>
Thermal shock resistance ..... medium	..... medium

# C 1221

## THE MATERIAL



Throat cover block

### TYPICAL APPLICATIONS

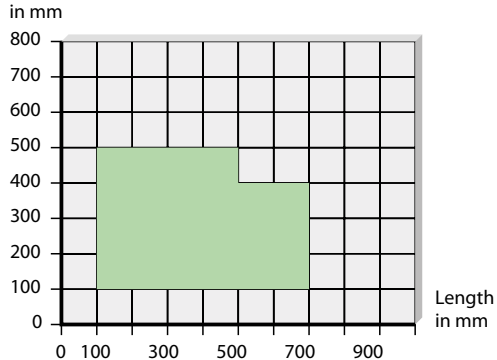
Principal applications include melter throats, flow blocks, bushing blocks, and doghouse areas of furnaces melting glass for the production of reinforcing fibers and textiles (E glass). C 1221 is ideal for throats and bushing blocks.

In virtually all other glasses, C 1221 should be considered for use in throats and other high-wear areas in furnaces melting insulating fiberglass. While dissolved chromic oxide may cause coloration in some glasses, C 1221's superior corrosion resistance can minimize this impact. C 1221 is therefore a viable refractory solution in high-wear areas of the furnace for most glasses (including clear soda-lime glasses).

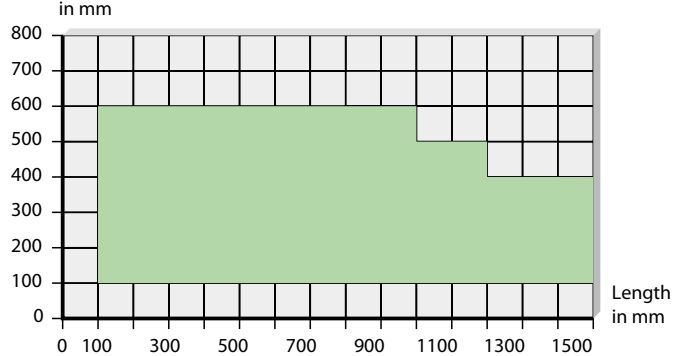
Due to its excellent thermal shock characteristics, C 1221 can also be installed in hot environments such as overcoating.

### SIZE CAPABILITY ESTIMATES

Width in mm Thickness 50 - 100 mm



Width in mm Thickness 150 - 300 mm



The data quoted above provides average values for current production and is not contractual. If further information is required, please contact the Saint-Gobain SEFPRO Marketing Department.