



TECHNICAL DATA SHEET – DENSIT® WEARCAST 2000 HT CHEMICALLY BONDED CORUNDUM-CERAMIC

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DESCRIPTION

Densit® WearCast 2000 HT wear resistant linings provide superior protection against heavy erosive wear at temperatures up to 1200°C (2190°F).

CONSUMPTION AT 25 MM

Densit® WearCast 2000 HT	76 kg/m ²
Steel fibres*	3.4 kg/m ²
Densit® Anchoring mesh 1 m ² /m ²	1 m ² /m ²
Densit® Curing Compound	0.25 l/m ²

CONSUMPTION AT 40 MM

Densit® WearCast 2000 HT	121 kg/m ²
Steel fibres *	5.5 kg/m ²
Densit® Anchoring mesh	1 m ² /m ²
Densit® Curing Compound	0.25 l/m ²

* Steel fibre selection depends on temperature and chemical environment. See the data sheet for steel fibres.

SPECIFICATION

- Install mesh
- Install or build mould
- Mix dry compound with water and fibres
- Add water and mix for 6 minutes
- Add appropriate steel fibres* and mix another 3 minutes
- Pour mix into mould under vibration
- Remove mould after adequate curing time

Densit® WearCast 2000 HT is a castable one-component ready-mix delivered in 25 kg bags.

The bags must be stored on a dry stock to maintain the good properties of the compound. The guaranteed shelf life is 14 months from production date. A paddle mixer must be used for mixing the compound. A significant change in consistency of the material (from dry to plastic) must be observed within 3 minutes from addition of water. Avoid Densit® compound to make contact with aluminium or galvanised steel. Densit® WearCast 2000 HT should be cast in suitable moulds with adequate reinforcement like steel bars and expanded metal mesh.

TECHNICAL DATA

PROPERTIES	STANDARD	DENSIT® WEARCAST 2000 HT
Density - kg/m ³ - lb/ft ³	EN 1015-6	3050 (190)
Compressive strength - MPa	EN 12190	170
Flexural strength - MPa	EN 196-1	16
Dynamic E-modul - MPa	ASTM C597	70-80 10 ³
Casting shrinkage - vol. %		0.2
Thermal conductivity - w/m°C		1.5
Coeff. of thermal expansion - 1/°C (1/°F)	EN 1770	6.9x10 ⁻⁶ (3.8x10 ⁻⁶)
Heat capacity - KJ/kg°C		0.9-1.0
Max. service temperature - °C (°F)		1200 (2190)
Abrasion resistance - cm ³ /50cm ²	DIN 52108	0.8-1.0
Erosive resistance - min/cm ³		200
Chemical composition - % CaO % SiO ₂ % Al ₂ O ₃ + TiO ₂ % Fe ₂ O ₃ % Cr ⁶⁺	EN 196-10	6 6 87 <0.3 <0.0002
Bag size - kg		25
Pallet size - kg		1250

*The figures given are typical values.
Please contact ITW Performance Polymers or the nearest distributor for further information.*