



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

Revised: 04/2019

DESCRIPTION

Densit® WearCast 2000 wear resistant linings provide superior protection against heavy erosive wear at temperatures up to 400°C (750°F).

CONSUMPTION AT 25 MM

Densit® WearCast 2000	73 kg/m ²
Steel fibres*	3.3 kg/m ²
Densit® Anchoring mesh	1 m ² /m ²
Densit® Curing Compound	0.25 l/m ²

CONSUMPTION AT 40 MM

Densit® WearCast 2000	117 kg/m ²
Steel fibres*	5.3 kg/m ²
Densit® Anchoring mesh	1 m ² /m ²
Densit® Curing Compound	0.25 l/m ²

* 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 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 should be cast in suitable moulds with adequate reinforcement like steel bars and/or standard expanded metal mesh.

TECHNICAL DATA

PROPERTIES	STANDARD	DENSIT® WEARCAST 2000
Density kg/m ³ - (lb/ft ³)	EN 1015-6	2950 (184)
Compressive strength - MPa	EN 12190	170
Flexural strength - MPa	EN 196-1	23
Dynamic E-modul - MPa	EN	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	10x10 ⁻⁶ (5.6x10 ⁻⁶)
Heat capacity - KJ/kg°C		0.9-1.0
Max. service temperature - °C (°F)		400 (750)
Abrasion resistance - cm ³ /50cm ²	DIN 52108	1 - 1.5
Erosive resistance - min/cm ³		150
Chemical composition -	EN 196-10	
% CaO		18
% SiO ₂		25
% Al ₂ O ₃ + TiO ₂		55
% Fe ₂ O ₃		<0.2
% Cr 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.