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

Revised: 04/2019

DESCRIPTION

Densit® WearFlex 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® WearFlex 2000 HT	71 kg/m²
Steel fibres *	3.2 kg/m²
Densit® Anchoring mesh	1 m²/m²
Densit® Curing Compound	0.25 l/m²

CONSUMPTION AT 40 MM

Densit® WearFlex 2000 HT	113 kg/m²
Steel fibres*	5.1 kg/m²
Densit® Anchoring mesh	1 m²/m²
Densit® Curing Compound	0.25 l/m²

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

SPECIFICATION

- Install mesh
- Mix dry compound for 1 minute
- Add water and mix for 6 minutes
- Add appropriate steel fibres* and mix another 3 minutes
- Trowel mix onto mesh
- Apply Densit® Curing Compound
- For more details refer to the “Densit® WearFlex Manual”

Densit® WearFlex 2000 HT is a trowellable 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® WearFlex 2000 HT should be installed on a standard expanded metal mesh welded on the steel casing and can even be installed “over head”.

TECHNICAL DATA

PROPERTIES	STANDARD	DENSIT® WEARFLEX 2000 HT
Density - kg/m^3 (lb/ft^3)	EN 1015-6	2900 (181)
Compressive strength - MPa	EN 12190	133
Flexural strength - MPa	EN 196-1	15
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	$6.9x10^{-6}$ ($3.8x10^{-6}$)
Heat capacity - KJ/kg°C		0.9-1.0
Max. service temperature - °C (°F)		1200 (2190)
Shrinkage after firing at 500°C - %		0.1
Shrinkage after firing at 800°C - %		0.3
Shrinkage after firing at 1200°C - %		0.3
Abrasion resistance - cm^3/50cm^2	DIN 52108	0.8-1.0
Erosive resistance - min/cm^3		150
% CaO % SiO_2 Chemical composition - % Al_2O_3 + TiO_2 % Fe_2O_3 % Cr^{6+}	EN 196-10	4-8 4-8 70-90 <0.2 <0.0002
Bag size - kg		25
Bag size - kg		1250

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

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