



## TECHNICAL DATA SHEET – DENSIT® WEARFLEX 500 CHEMICALLY BONDED QUARTZ-CERAMIC

Revised: 04/2019

### DESCRIPTION

Densit® WearFlex 500 wear resistant linings provide excellent protection against moderate wear at temperatures up to 400°C (750°F).

### CONSUMPTION AT 25 MM

Densit® WearFlex 500 Binder	30 kg/m <sup>2</sup>
Wear 500 sand	32.5 kg/m <sup>2</sup>
Densit® Anchoring mesh	1.1 m <sup>2</sup> /m <sup>2</sup>
Densit® Curing Compound	0.25 l/m <sup>2</sup>

### CONSUMPTION AT 40 MM

Densit® WearFlex 500	45 kg/m <sup>2</sup>
Wear 500 sand	49 kg/m <sup>2</sup>
Densit® Anchoring mesh	1.1 m <sup>2</sup> /m <sup>2</sup>
Densit® Curing Compound	0.25 l/m <sup>2</sup>

### SPECIFICATION

- Install mesh
- Mix one bag Densit® WearFlex 500 Binder and one bag Wear 500 sand for 1 minute
- Add water and mix for 8 minutes
- Trowel mix onto mesh
- Apply Densit® Curing Compound
- For more details refer to the “Densit® WearFlex Manual”

Densit® WearFlex 500 is a trowellable two-component dry mortar.

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 500 should be installed on a standard expanded metal mesh welded on the steel casing.

### TECHNICAL DATA

PROPERTIES	STANDARD	DENSIT® WEARFLEX 500
Density - kg/m <sup>3</sup> (lb/ft <sup>3</sup> )	EN 1015-6	2400 (150)
Compressive strength - MPa	EN 12190	100
Flexural strength - MPa	EN 196-1	16
Dynamic E-modul - MPa	EN	70-80 10 <sup>3</sup>
Casting shrinkage - vol. %		0.2
Thermal conductivity - w/m°C		1.5
Coeff. of thermal expansion - 1/°C (1/°F)	EN 1770	10x10 <sup>-6</sup> (5.6x10 <sup>-6</sup> )
Heat capacity - KJ/kg°C		0.9-1.0
Max. service temperature - °C (°F)		400 (750)
Abrasion resistance - cm <sup>3</sup> /50cm <sup>2</sup>	DIN 52108	5 - 6
Erosive resistance - min/cm <sup>3</sup>		55
Chemical composition - % CaO % SiO <sub>2</sub> % Al <sub>2</sub> O <sub>3</sub> + TiO <sub>2</sub> % Fe <sub>2</sub> O <sub>3</sub> % Cr <sup>6+</sup>	EN 196-10	18 80 1 <0.2 <0.0002
Bag size Densit® WearFlex 500 Binder - kg		22.8
Bag size Wear 500 Sand - kg		25
Pallet size Densit® WearFlex 500 Binder - kg		1140
Pallet size Wear 500 Sand - kg		1250

The figures given are typical values.

Please contact ITW Performance Polymers or the nearest distributor for further information.