



DELTAShield F 500

HIGH PERFORMANCE, HIGH GLOSS, RAPID CURING PROTECTIVE FLOOR COATING

DESCRIPTION

DELTAShield F 500 is a high performance, rapid curing, self levelling, high gloss flooring product based on the latest polyaspartic / polyurea technologies.

DELTAShield F 500 provides excellent colour and gloss retention and is resistant to most fuels, oils, solvents, and cleaners. **DELTAShield F 500** can be applied using an airless spray gun or rollers.

With a tack free time of 60 minutes re-use times are incredibly short saving customers' costly down time.

DELTAShield F 500 can be pigmented and can incorporate colored flakes or aggregates. When applied clear **DELTAShield F 500** provides a superior anti-yellowing top-coat sealer.

TYPICAL USES

- ✓ As a seamless rapid application, 1 product, 1 application, commercial and Industrial flooring system
- ✓ Aircraft hangers
- ✓ Warehouse flooring
- ✓ Restaurants and kitchens
- ✓ Retail shops and shopping malls
- ✓ Hospital flooring
- ✓ Car park decks
- ✓ As a self-leveling, high gloss sealing coat for flake and quartz decorative flooring
- ✓ As a non-yellowing sealer for stone and timber
- ✓ As a refurbishment coat over old epoxy or polyurethane floors

FEATURES

- ✓ Extremely fast cure and re-use times
- ✓ Excellent colour and gloss retention
- ✓ Excellent self levelling characteristics.
- ✓ Cures to a very clear finish when not pigmented
- ✓ Excellent abrasion resistance
- ✓ Self-priming
- ✓ Excellent adhesion to concrete substrates
- ✓ Excellent chemical resistance
- ✓ Resistant to most chemicals, solvents, acids and caustics
- ✓ Can be used for indoor and outdoor applications
- ✓ Stable over a wide temperature range
- ✓ Displays good flexibility and impact resistance compared to standard epoxies.
- ✓ UV Stable in clear or pigmented form.



PRODUCT INFORMATION

PROCESSING PROPERTIES	DATA
Mixing ratio of Comp. A to Comp. B	1:1 by volume
Material consumption - approximate L / m ²	0.25ml @ 250 µm (Substrate dependent)
Recommended thickness [µm]	125 - 1000
Recommended layer thickness [µm]	Up to 500
Pot life at 20°C [min.]	45 - 50
Tack free time @ 20°C, 57% humidity [min.]	45
Pedestrian traffic after [h]	Light use: 4 Heavy use: 8 -10
Full Cure (Normal loading) [h]	12
Temperature range for application (ambience) [°C]	+5 - +50
Temperature range for application (substrate) [°C]	+5 - +50
Over coat window (h)	8

PHYSICAL PROPERTIES	DATA
Chemical Base	- Polyaspartic / Polyurea technology
Solids content [%]	DIN EN ISO 3251 97
Viscosity [mPa*s] @ 25°C	DIN EN ISO 3219 / A3 Comp. A: 100 Comp. B: 1940 Mix: approx. 570
Density [g/cm ³] @ 20°C	DIN EN ISO 2811-1 / ASTM D-1217 Comp. A: 1.18 – 1,22 Comp. B: 1.07 – 1.11 Mix: 1.15
Density [g/cm ³]	EN ISO 1183 / ASTM D-792 1.23 ± 0.02
Tensile strength [Mpa]	ISO 37-2005 / ASTM D-638 ≥ 16

PHYSICAL PROPERTIES	DATA
Elongation at tear [%]	ISO 37-2005 / ASTM D-638 ≥ 20
Hardness [Shore D]	ISO 868-2003 / ASTM D-2240 75
Rebound resilience [%]	ISO 4662 / ASTM ≥ 5
Taber Abrasion [mg]	ASTM D-4060 < 30 (Wheel CS17 / 1.000g / 1000 cycles)



Colour fastness	DIN EN ISO 105-B06	No chalking, no dis-coloration, no cracking and no blistering.
Colour fastness	ASTM G154a / ISO 4892	After approx. 500 hours: No chalking, no dis-coloration, no cracking and no blistering.
Storage conditions [°C]	DIN EN 12701 / ASTM	10 – 30 (in closed original drums, stored at dry and well-ventilated place. Avoid freezing)
Shelf life	-	Approximately 12 months

APPLICATION NOTES

The B - side component should always be thoroughly power stirred prior to use. For colored applications; add DELTA Pigment to the B - side component only at a rate of 15% by volume. Power stir thoroughly before combining the A and B components.

Combine the A side and B-side components and power stir again before applying to substrate.

The mixing ratio of comp A to comp B is 1:1 by volume. To ensure full physical characteristics are achieved within the finished coating use graduated beakers / containers to ensure accurate 1:1 by volume mixing of component A and component B.

DELTAshield F 500 can be applied by airless spray gun or with short haired rollers. DELTA recommends using 8 - 13 mm Nap Mohair roller in the widest format possible.

In the event **DELTAshield F 500** is to be pigmented in a very light colour be aware that additional coats may be necessary to achieve the required hiding power. When using very light colours such as light grey or white the pigment loading can be increased by an additional 5% (to 20%) by volume of the B-side component.

Take note that the tack free and curing times of **DELTAshield F 500** are influenced by the environmental conditions at the time of the application. Heat and humidity will accelerate the reactivity and curing of the **DELTAshield F 500**. In hot and humid environments only mix small amounts of product at a time to enable full application of mixed product. In cold environments the tack free and cure times can be extended considerably especially in environments less than 10C.

Att: When applying **DELTAshield F 500** using a roller do not “over work” the product. Roll it out and leave it so it can self-level. Continuously rolling over the product will inhibit the products self-levelling properties.

PACKAGING

DELTAshield F 500 is supplied in 5 or 20 kg packaging for each component individually.

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user’s responsibility to satisfy himself, by his own investigations and testing, the suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. Due to the large number of variables that can affect the product and the application process that are out of the control of DELTA Coatings International LLC no warranty of any kind, express or implied is given. The liability of DELTA Coatings International LLC for any claims is limited to the purchase value of the material.

Version 190623