PRODUCT DATA SHEET

FT-4350 MD/HD/XD (metric)

FREEDOM Chemical® Corporation

PRODUCT DESCRIPTION

FT-4350 is a two component hand-applied aromatic polyurethane used as a protective combined anti-skid waterproof coating with good abrasion resistance and aggregate retention.
FT-4350 used as part of the **THORGRIP™ & DEFENDERDECK™** Systems and may include a Part "C" filler to increase film thickness when used in conjunction with larger aggregates.

USES

- Parking Structures, Rooftop Garages
- Commercial, Retail, Institutional
- Bridge Decks

ADVANTAGES

- Excellent abrasion and chemical resistance
- Excellent for low temperature applications
- No noxious odors
- Excellent thermal stability
- USGBC LEED, EQ Credit 4.2: Low-emitting VOC

PACKAGING & YIELD

System	FT-4350 QTY	Part "C" Filler	Yield
FT-4350	11.36 L	none	11.36 L
DEFENDERDECK™ MD	13.61 kg	none	12.30 L
DEFENDERDECK™ HD	13.61 kg	13.61 kg bag	18.93 L
DEFENDERDECK™ XD	9.07 kg	13.61 kg bag	14.38 L

TYPICAL PHYSICAL PROPERTIES

Property	Test Method	Value
Mix Ratio	Internal	1A:3B
Pot Life @ 20°C	ISO 9514	30 ± 10 minutes
Tack Free Time @ 20°C	ASTM D1640	1 hour
Recoat Window	Internal	24 hours
Pedestrian Traffic	Internal	12 hours
Vehicular Traffic	Internal	24 hours
Solids Content	ASTM D6511	100%
VOC	ASTM D6511	0 g/l
Shore Hardness	ASTM D2240	70D ± 2
Tensile Strength	ASTM D412	20.7 ± 1.4 MPa
Elongation	ASTM D412	60% ± 10
Tear Strength, Die C	ASTM D624	61.3 ± 8.8 N/mm
Tear Strength, Die T	ASTM D624	17.5 ± 3.5 N/mm

The values stated in this Product Data Sheet are based on system processing under controlled laboratory conditions. Equipment configuration and/or field application conditions may produce variances in the installed product values

COVERAGE RATE

Material coverage rates shall be in accordance with project specification requirements or Freedom Chemical Corporation's Installation Procedure document(s), whichever is more stringent.
When used as part of the **THORGRIP™ & DEFENDERDECK™** System, the nominal coverage rates are:

System	kg per m²	Thickness	Kit Coverage
DEFENDERDECK™ MD	~1.12	1.02 mm	12.1 m²
DEFENDERDECK™ HD	~2.93	2.03 mm	9.3 m²
DEFENDERDECK™ XD	~4.39	3.05 mm	4.6 m²

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SURFACE PREPARATION

Concrete Surfaces: Provide clean, dry, and sound concrete substrate. Concrete shall be allowed to cure for a minimum of 28 days. If less than 28 days, a PH-resistant and moisture vapor reducing primer will be required. Contact Freedom Chemical Company Technical Service for additional information.

Prepare concrete surfaces in accordance with SSPC-SP13/NACE No. 6 and achieve a Concrete Surface Profile of at least 3, measured using ICRI CSP Chips.

After surface preparation and prior to the application of Freedom Chemical Corporation products, test surface tensile strength of prepared concrete surfaces in accordance with ASTM D7234 and/or ASTM C1583. Minimum surface tensile strength shall be 300 psi. Refer to SSPC-SP13/NACE No. 6, Section 6, Table 2 for additional information.

Metal Surfaces: Provide clean, dry, and sound metal substrate. Prepare metal surfaces in accordance with SSPC-SP10/NACE No. 2 and achieve a 4-6 mil blast profile, measured using a Surface Profile Gauge.

All Surfaces: Grinding is only permitted in areas that are inaccessible to standard abrasive blast equipment.

SHELF LIFE & STORAGE

Shelf life is one (1) year from the date of manufacture in original, unopened, factory-sealed containers under specified storage conditions.

Shipping and storage temperatures is 18°C to 32°C at (or below) 50% Relative Humidity. Avoid freezing temperatures. Do not store containers directly on ground. Always store on pallets or otherwise elevated.

Do not open containers until ready to use. Partially filled containers should be purged of air using nitrogen blanketing and sealed tightly when not in use.

MIXING & APPLICATION

Refer to appropriate Installation Procedure document(s) and project specifications for detailed instructions. A third component (aggregate mix) may be required to create a slurry for non-slip applications.

DO NOT mix partial containers of multi-component materials. DO NOT dilute under any circumstances.

Part "B" should be mixed individually to fully disperse pigment prior to combining with Part "A". Once mixed, pour Part "B" into clean, appropriately sized container. While mixing, pour Part "A" into previously transferred Part "B". Mix until a homogeneous mixture and color is obtained (typically 1-2 minutes), taking care not to encapsulate air into mixture. Immediately transfer into smaller containers or pour onto substrate to prolong working time.

CLEAN UP

User is responsible for reading, understanding, and following all recommendations on SDS. Dispose of all packaging and containers in accordance with local, state, and federal laws and regulations. Excess liquid materials should be mixed and allowed to cure. Once cured, dispose of cured material in accordance with local, state, and federal laws and regulations.

LIMITATIONS

Care shall be taken when applying Freedom Chemical Corporation products over substrates containing trapped moisture and/or where moisture vapor drive is present (i.e., metal pan decks, split slab membranes, etc.). Refer to Installation Procedure document(s) for substrate treatment prior to placement of any coatings.

Excess moisture vapor in concrete slabs may cause polyurea coating to delaminate, discolor, and/or cure improperly.