

PRODUCT DESCRIPTION

FT-2202 is a fast setting, rapid curing, two component aromatic polyurea that is flexible, abrasion-resistant, and impact-resistant.

USES

- Railroad Bridge Deck Waterproofing
- Primary and Secondary Containment
- Plaza Decks, Split Slabs, Green Roofs, PRMA
- Planters, Tunnels, Underground Vaults
- Beverage/Food Processing Plants, Cold Storage

ADVANTAGES

- 0 VOCs - 100% solids
- No noxious odors
- No primer required for carbon or mild steel metal substrates
- Excellent thermal stability
- Withstands constant water immersion
- Can be installed in below-freezing temperatures*
- USGBC, EQ Credit 4.2: Low-emitting VOC Compliant Materials

*Polyurea gel time is relatively unaffected by ambient or substrate temperature and may be installed in temperatures down to -20°F (-29°C). However, for applications where a primer layer is required, the cure times for primer may be significantly extended. Contact Freedom Chemical Corporation Technical Service for information on primer recommendations for cold weather applications. Additionally, for application of polyurea onto concrete substrates in below freezing conditions, additional evaluation and testing of the substrate must be performed to ensure that high moisture content is not trapped in the substrate. When a concrete substrate is at or below the freezing point of water, the electronic moisture meters typically used to measure moisture content will give a false reading of "0%". Contact Freedom Chemical Corporation Technical Service for additional information and guidance.

COLOR

Standard color is Tan (Color Code "750"). Additional colors are available upon request.

Note: FreedomTuff aromatic polyureas are UV stable, but are known to darken or change color when exposed to UV and/or sunlight. This discoloration has little to no effect on the integrity of the product.

APPROVALS/STANDARDS

Meets the requirements of AREMA Ch. 8, Part 29.9.10 (Cold Liquid-Applied Elastomeric Membrane)

TYPICAL PHYSICAL PROPERTIES

Property	Test Method	Value
Mix Ratio by Volume	NA	1:1
Gel Time @ 68°F	ASTM D1640	7-12 seconds
Tack Free Time @ 68°F	ASTM D1640	15-25 seconds
Recoat Window	Internal	6 hours
Pedestrian Traffic	Internal	30 minutes
Vehicular Traffic	Internal	60 minutes
Solids Content	ASTM D6511	100%
VOC	ASTM D6511	0 g/l
Shore Hardness	ASTM D2240	>50D
Tensile Strength	ASTM D412	>3,000 psi
Elongation	ASTM D412	>275%
Tear Strength, Die C	ASTM D624	>450 pli
Water Vapor Permeance	ASTM E96, Procedure B	<1 US Perms
Water Absorption	ASTM D570	<4%
Hydrostatic Pressure Resistance	ASTM D5385	>1.0 psi
Adhesion to Steel	ASTM D4541	>290 psi
Adhesion to Concrete	ASTM D7234	>150 psi

FREEDOMTUFF™ FT-2202

Property	TestMethod	Value
Ballast Impact	AREMA Ballast Impact	No Damage (9.2-28.1 kips, 2 million cycles)
Resistance to Penetration	ASTM D1883 (Modified)	<0.10 inches (600 lbf @ 40°F, 77°F, & 100°F)
Low Temperature Crack Bridging	ASTM C1305	Pass @ 50 Cycles
Extensibility after Heat Aging	ASTM C1522	Pass

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

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.

COVERAGE RATES

Material coverage rates shall be in accordance with project specification requirements or Freedom Chemical Corporation's Installation Procedure document(s), whichever is more stringent.

PACKAGING

104-gallon kit:

- Part A: 52 gallons liquid in 55-gallon drum
- Part B: 52 gallons liquid in 55-gallon drum

MIXING & APPLICATION

Refer to appropriate Installation Procedure document(s) for detailed instructions.

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.

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 65°F to 90°F 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.