ISO-FLEX® 750U-HL

High-load deck coating system

Master Builders Technologies

DESCRIPTION:

ISO-FLEX® 750U-HL coating systems are cold, liquid-applied, polyurethane elastomeric deck coatings. The high-load systems consist of a urethane membrane, an integral surface texture, aggregate-loaded intermediate coat and a lockcoat.

For service conditions exposed to direct sunlight, an aliphatic urethane lockcoat is required.

PACKAGING:

ISO-FLEX 750U-HL is available in 1.75 gallon (6.6 liter) and 5 gallon (18.9 liter) units.

STANDARD COLOR:

Base Coat: Mortar Gray.
Topcoat: Mortar Gray.
(Special colors available upon request.)

BASIC USE:

Typical applications for ISO-FLEX 750U-HL traffic deck coating systems include ramps, turn areas, and entrances and exits for parking garages. These systems will provide a high traction surface under both pedestrian and vehicular traffic.

ADVANTAGES:

- The system develops a continuous bond to properly prepared substrates and protects from water and/or chloride penetration. The system is also resistant to most common chemicals.
- The high-load systems have excellent physical properties, including weather and abrasion resistance.
- System components are capable of curing at lower temperatures. Conact your local Master Builders representative for details.

TECHNICAL DATA:

(Field Properties May Vary)

Property	Test Method	Base Coat	Intermediate Coat	Lock Coat
Weight per galllon	—	9.5 pounds/gallon	9.5 pounds/gallon	8.6 pounds/gallon
Hardness (Shore A)	ASTM D2240	70 to 80	80 to 90	80 to 90
Viscosity *@ 75 degrees F (23.9 degrees C)*	Brookfield RVT No. 5 @ 20 RPM	2000 to 5000 cps.	5000 to 7000 cps.	1000 to 3000 cps.
Flash Point	ASTM D56	110 degrees F (43.3 degrees C)	200 degrees F (93.3 degrees C)	110 degrees F (43.3 degrees C)
Cure Time *@ 70 degrees F (21.1 degrees C)*	ASTM C920	24 hours	24 hours	24 hours
Abrasion Resistance	ASTM D4060 Tabor 1000 rev. CS 17 Wheel	Loss 0.01 g	Loss 0.01 g	Loss 0.01 g
Weathering Resistance	2000 hours, Atlas Weather-O-Meter	Slight yellowing, chalking	Slight yellowing, chalking	No visual effect
Permeability	ASTM E398	1.6 perms	1.6 perms	1.6 perms
Peel Adhesion	ASTM C794	50 pli	—	—
Ultimate Elongation	ASTM D412	350 %	150%	130 %
Tensile Strength	ASTM D412	1200 psi	2300 psi	2000 psi
Tear Resistance	ASTM D1004-66	150 pli	180 pli	270 pli
Weight Loss	ASTM D756	4%	—	28%
Solids Content	—	96%	100%	72%
Pot Life *@ 77 degrees F (25 degrees C)*	ASTM C603	30 minutes	20 minutes	1 hour
Shelf Life (in sealed containers) @ 77 degrees F (25 degrees C)	—	6 months	1 year	1 year
Chemical Resistance (based on total system)	No effect on System from Common Oils, Salts, Alkalies, Motor Oil, Anti-Freeze, Gasoline, Mineral Spirits.			

NOTE:
TECHNICAL DATA, shown above, is based on performance of new material only. Once applied, material properties are likely to be affected over time due to environmental factors such as aggressive UV exposure and/or extreme temperatures.

ISO-FLEX 750U-HL RECOMMENDED SYSTEMS:

	750U-HL (HVT)	750U-HL (MVT)
Base Coat	**25 to 30 mils**	**25 to 30 mils**
Intermediate Coat	**20 mils**	**15 mils**
Sand (16/30 grit)	**1 pound/foot^2**	**3/4 pound/foot^2**
Lock Coat	**10 mils**	**10 mils**

LIMITATIONS:

- ISO-FLEX 750U-HL systems are designed for application in relatively thin mil film thicknesses. Cured membrane mil thickness variations are to be expected due to small differences in substrate porosity and profile, as well as the practical tolerance limitations of the application procedures.
- Application must be to clean, sound, dry substrates at temperatures above 40 degrees F (5 degrees C). Curing compounds, mold release agents, sealer, or other contaminants may interfere with adhesion.
- Adequate ventilation, as recommended by the manufacturer, must be provided in installation areas.

PRECAUTIONS:

To ensure safe installation of the ISO-FLEX 750U-HL system, please refer to the Material Safety Data Sheets (MSDS) that accompany each product shipment.

INSTALLATION:

Preliminary:
Surfaces to receive ISO-FLEX 750U-HL systems must be clean, dry, sound, relatively smooth and free of voids, ridges and sharp projections. New concrete surfaces should be properly cured as recommended by manufacturer.

Surface Preparation:
Shotblasting must be employed to provide a sound, clean substrate. In areas where shotblasting is not feasible, consult the manufacturer for other methods of surface preparation.

Detailing:
Joints or cracks should be pretreated prior to general application by sealing, grinding out and sealing, or overbanding with compatible ISO-FLEX products as recommended by the system manufacturer. Terminations and penetrations should also be sealed prior to general application.

APPLICATION GUIDELINES:

- All surfaces to be coated must receive an application of an ISO-FLEX primer to ensure adequate adhesion. Primer type, and coverage rates will vary depending upon substrate conditions. Consult the manufacturer for additional primer information.
- The application of all ISO-FLEX coating materials is rigidly controlled through the use of grid systems, and film thickness monitoring. All phases of the installation are fluid applied and backrolled to ensure an even distribution of material across the premeasured grid.
- A wear-balanced system should be provided throughout the project, as recommended by the system manufacturer. ISO-FLEX 750U-HL systems are designed to provide maximum wear and abrasion resistance in high traffic areas. Lighter duty service areas will receive slightly less material.
- After the substrate has been properly prepared, the base coat is squeegee-applied at a dry film thickness of 25 to 30 mils.
- An intermediate coat is applied to the cured base coat. Prior to cure of the intermediate coat, it is saturated with silica sand, which provides the abrasion resistance and nonskid characteristics to the total system. When the intermediate coat is cured, the excess silica sand is removed and a single component, aliphatic urethane lock coat is applied.
- Adequate cure times must be permitted before the system is exposed to traffic conditions (a minimum of 27 hours at @ 70 degrees F or 21.1 degrees C). As with any fluid applied material, the rate of cure will vary depending upon temperature and other climatic conditions. Contact your local Master Builders representative for details.

MAINTENANCE:

ISO-FLEX 750U-HL systems may be easily repaired while in service using methods recommended by the manufacturer.

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