

ILLUSTRIMUM™ M1155 FSI

DESCRIPTION

Food production and processing facilities require an easy to clean sterile environment. In addition, the complex infrastructure needs to be protected from corrosion and damage caused by high humidity, and harsh cleaning products.

ILLUSTRIMUM™ M1155 FSI is designed to provide existing facilities with a quick return-to-service refurbish option that is a high performance seamless protection against corrosion, water damage, chemical and abrasion in the harshest of environments.

ILLUSTRIMUM™ M1155 FSI is a spray applied membrane that can be used to create a seamless transition between different building materials. High tear strength reduces the chance of cracking and peeling commonly encountered with epoxy finishes.

ILLUSTRIMUM™ M1155 FSI creates a permanent monolithic layer over walls, ceilings and floors to provide a watertight seal and eliminate areas where mold or bacteria can grow and multiply.

ILLUSTRIMUM™ M1155 FSI is a 100% solids, high performance, polyurea elastomer is ideally suited over steel, wood, concrete and gypsum board substrates.

ILLUSTRIMUM™ M1155 is a fast-curing, two-component, spray-applied aliphatic polyurea ideally suited for use in food, agricultural, and cannabis producing facilities on substrates such as steel, wood, concrete and gypsum board. For new and existing projects where application time allows, **PRECIDIUM™ 745D FSI** is recommended for optimum chemical and stain resistance.

FEATURES and BENEFITS

- **High-Performance**
 - excellent substrate protection using a seamless waterproof membrane
 - resistant to cracking or peeling under high-flex conditions
 - remains flexible over wide temperature range
 - non porous surface provides resistance to bacterial and fungal development
 - excellent abrasion resistance
 - excellent chemical resistance
 - high moisture tolerance
 - reduced life-cycle costs

- **100% Solids**
 - solvent-free, zero VOC
 - cures without shrinkage
 - low odour
 - food safe
 - environmental sustainability
 - will not hydrolyze, leach or contaminate other materials
- **UV Resistance**
 - excellent colour and high gloss retention
 - high durability for interior and exterior use
- **Fast-Curing, One-Step Coating**
 - serves dual purpose as base and top coat
 - excellent adhesion to varied properly prepared substrates (steel, wood, concrete, gypsym board)
 - vertical or horizontal application
 - cost and time advantages
 - reduced application steps

IDEAL USES

Quick Return-to-Service Applications:

- Seamless waterproofing of floors, walls and ceilings
 - cannabis production operations
 - food processing facilities
 - agricultural facilities
- Interior/exterior applications requiring colour stability
 - brighten or change colour while improving aesthetic longevity and life-cycle costs
- Interior/exterior applications to prohibit water damage
 - prevent substrate deterioration, devaluation of structures, and interruption of occupancy
- Surfaces requiring frequent cleaning and sterilization
 - food plants
 - commercial kitchens
 - hospitals and health care centres
 - cannabis operations
 - retail stores
 - schools
- Fast cure mitigates effects of various application temperatures and ambient conditions
 - refrigerated food storage cases
 - walk-in coolers and freezers
 - food service shelving

PROPERTIES*

Mix Ratio (volume)	1:1 (Resin:ISO)
Resin Viscosity	700-1200 cps
ISO Viscosity	300-900 cps
Gel	15 seconds
Tack Free	30 seconds
Handling	2 minutes
Durometer Hardness	60D
UV Weathering	Excellent
Tensile	2,000 PSI

Elongation	100%
ASTM D412	
Tear	450 pli
ASTM D624	
Colour:	White/Tintable
Gloss:	High
UV Resistance:	Excellent
Mil Thickness:	Application Specific

*Approximate values only. Should not be considered specifications. This data sheet is intended for general information only.

ILLUSTRUM™ M1155 FSI

PROPERTY	TEST METHOD	VALUE
Resin Viscosity	ASTM D445	700-1200 cps
Iso Viscosity	ASTM D445	300-900 cps
Mix Ratio Resin:Iso		1:1 by volume
Gel Time	ASTM D1640	15 seconds
Tack Free	ASTM D1640	30 seconds
Handling Time	ASTM D1640	2 minutes
Recoat Time		12 hours
Light Traffic		1 hour
Return to Service		1 day
Tensile Strength	ASTM D638	2000 psi
Tensile Elongation	ASTM D638	100%
Tear Strength	ASTM D624	450 pli
Flexibility-Conical Mandrel Bend	ASTM D522	Pass
Durometer Hardness	ASTM D2240	60D
Impact Resistance	ASTM D2794	>160 inlb
UV Weathering	ASTM G154	Excellent
Taber Abrasion (CS-17, 1kg load)	ASTM D4060	105 mg loss
Food Safe Compliance	Manufacturer's Certification	Yes

STORAGE

Ideally store between 15°C and 30°C in a dry place for product integrity. Store in tightly sealed containers to protect from moisture and foreign materials.

APPLICATION

For details on appropriate primers and surface preparation for the substrate(s) on your project, contact Quantum Chemical for detailed instructions.

APPLICATION EQUIPMENT*

Equipment	Regulated High-Pressure Proportioner 1:1 mix ratio by volume
Heat Settings	Line/Pre-Heaters 140-170° F Hose Heat 140-170° F Pressure 2000 psi
Gun	Graco Fusion AP or equivalent

*The above application information is for generic purposes only. The product applicator can answer specific questions regarding application and equipment.