

Polyflex 311FR

polyurea

WASSER[®]
ADVANCED COATINGS TECHNOLOGY

Product Description

Wasser Polyflex 311 FR is a high performance, 100% solids, polyurea membrane developed for applications that require a flame resistant, spray applied coating. Wasser Polyflex 311FR meets fire and smoke development standards when tested to ASTM E84. It is recommended for industrial applications for use on concrete or steel. It may be combined with other materials to produce geo-membrane liners, wear surfaces and high strength composites.

Product Features

- No VOC, low odor
- Can be used to repair or replace existing membrane
- Meets class 1 fire standards
- Meets ULC-S668 fire standard
- Excellent resistance to thermal impact
- Excellent chemical protection
- Immediate return to service

Area of Use

Substrates

- Steel
- Concrete/CMU
- Ductile Iron
- Geo-textile fabrics
- Galvanized Metal
- Aluminum/Non-Ferrous Metals
- Polyurethane spray foam

Possible Uses

- Excellent for garage and parking decks
- Mining industries
- Secondary containment
- Protective coating over polyurethane foam
- Pipe application
- Application on geo-textile fabric to form retention and overflow ponds.
- Roofing

Ready Reference Information

Color: Several Colors

Type of cure: 2 component

Resin Type: Polyurea

***Solids by volume:** 100%

***Solids by weight:** 100%

V.O.C. None

Recommended dry film thickness/coat:
30-100 mils (762-2500 µm)

Theoretical Coverage:
At 1 mil: 1,604 ft²/gal (At 25 µm: 39.4m²/l)

Ratio: 1:1

Catalyst: WP311A

Pot Life: N/A

DRY TIMES

Gel Time	10-15 seconds
Tack Free	20-30 seconds
Re-coat Maximum¹	12 hours
Hard Dry	8 hours
Immerse	24 hours

Recommended System

Wasser Polyflex 111 PU Primer
Wasser Polyflex 311FR

¹Scuff sanding or apply WP-50 Activator before re-coating with Wasser Polyflex 311 FR outside of this time frame.

**Note: Other systems are available. Contact your Wasser Representative to answer any questions*

Surface Preparation

See Wasser's Polyflex Elastomeric Coatings Installation Procedure.

Application Information

Plural component heated pump: In order to obtain the optimum results outlined below, system must be capable of applying at pressures greater than 2,500 psi and at temperatures of 140 - 160°F.

Before application, the receiving coat surface must be cleaned of dirt, soluble salts, dust, oils, grease, chalking, and other contaminants. Normal preparation includes vacuum, blow-off, SSPC-SP-1 "solvent cleaning". This product is normally applied over previously primed surfaces.

Take care to ensure that proper film thickness is achieved. For more information, consult the Steel Structures Painting Council (SSPC) publication, Good Painting Practice.

Performance Testing Data

Properties	Test Method	
Fire Test:	Pass	ULC S-668
Fire Test:	Class 1	ASTM E-84
Dielectric strength	433 V/mil	ASTM D-149-97a
Crude oil Permeability:	= 0.6g/(h.m2)	ULC-S668
Shore Hardness, D:	45	ASTM D-2240
Ultimate Elongation %:	350-400	ASTM D-412-C
Tensile Strength, psi:	1500-2000	ASTM D-638
Tear Strength, pli:	340-380	ASTM D-624-C
Mandrel Bend Test: at 49°F (9°C), (Mandrel ¾")	Pass	ASTM D-522-93a
Impact Resistance:	Direct: 77°F > 160 in-lb Reverse: 77°F > 160 in-lb Direct: -4°F > 160 in-lb Reverse: -4°F > 160 in-lb	ASTM D-2794

Taber abrasion resistance:	Abrasion wheel type	Average weight loss
(ASTM D-4060) 1000 cycles, 1000g load	CS - 10	N.D.
	CS - 17	22.9 mg
	H - 18	N.D.

Ordering Information

Product Numbers:	WP311 A (Catalyst) WP311FR B (Resin)
Package Size:	5 gallon pails (10 gallon sets) 55 gallon drums (110 gallon drum sets) Order in sets only
Shelf Life:	1 year
Flash Point:	300.2° F (149°C)

Safety Precautions

Precaution:

See the material safety data sheet and product label for complete safety and precaution requirements.

"The following is made in lieu of all warranties, expressed or implied: Manufacturer's obligation shall be to replace such quantity of the product proven to be defective.

The manufacturer shall not be liable for any injury, loss or damage, direct or incidental or consequential, arising out of the use of or the inability to use the product.

Before using, the user shall determine the suitability of the product for the intended use and the user assumes all risk and liability whatsoever in connection therewith.

All values shown are approximations. Values indicated are for guide purposes only, as actual values can change due to application conditions, application methods, environmental conditions etc.

The information contained herein is subject to change without notice." Contact your Wasser Representative for current Product Data Sheets.