

Securea

Spray Applied Coatings

Polyurea

The most secured aromatic Polyurea coating

Securea is a two component, 100% solids elastomeric, aromatic pure Polyurea coating. It sets and cures rapidly to form highly durable film, exhibiting a high degree of abrasion and chemical resistance.

Securea is formulated to achieve an optimum balance of physical properties, such as outstanding tensile strength, tear strength, impact resistance and elongation. Its high durometer finish also exhibits excellent thermal stability. **Securea** is applied using high pressure, plural-component equipment, enabling to yield a tough, yet flexible film of DFT of 1mm and above.

Securea is a 1:1 ratio, highly cross linked coating, providing a dense, tight film with good chemical resistance to a wide range of acids and bases. It also exhibits excellent hydrolytic stability to withstand a wide range of temperature extremes, in dry or aqueous environments because of its rapid gel time. **Securea** can be applied in high moist areas without fear of blistering, common with many coating systems.

Application areas:

- Internal & external pipeline coatings
- Waste water treatment linings
- Industrial floor coatings
- Tank linings
- Secondary containment areas.
- Truck bed liners
- Water park and play grounds
- Car park decks
- Marine & Off shore installations.
- Water Proofing & Roof coatings

Application Method & Spray Equipment:

- Securea must be applied utilizing a high pressure plural component pump such as Graco Reactor equipped with a propler gun.
- The application equipment must be capable to have the capacity to continuously maintain high temperatures and high pressures.
- Low pressures or temperatures can result in poor mixing of Securea and subsequent failure of the coating system.
- During spray application, the spray pressures between resin and hardner components should be balanced. The difference must not be greater than 10-15%. If this difference is greater, an off ratio situation may occur, resulting in blisters, pinholes and soft or brittle films.

Available colours:

- Grey, tan and black
- Custom colours on request

Grades:

- Securea SC : Pure Polyurea coatings for general purposes.
- Securea FC : Pure Polyurea for floor coatings.
- Securea HC : Hybrid Polyurea

Typical properties

Properties	Standard	Securea SC	Securea FC	Securea HC
Solids by volume	ASTM D - 2697	100%	100%	100%
VOC Contents	Calculated	0 gm per litre	0 gm per litre	0 gm per litre
Tensile strength	ASTM D - 412	27.0 N/mm ²	25.0 N/mm ²	20.0 N/mm ²
Adhesion - Primed Steel	ASTM D - 4541	10.5 N/mm ²	10.5 N/mm ²	10.5 N/mm ²
Adhesion - Primed Concrete	ASTM D - 4541	06.5 N/mm ²	06.5 N/mm ²	06.5 N/mm ²
Recoverable Elongation	ASTM D- 638	400%	380%	400%
Surface hardness, Shore D	ASTM D - 2240	45 -50	45 -50	45 -50
Water vapour Permeability	ASTM E- 96	0.24 gm / m ² / 24 hrs.	0.24 gm / m ² / 24 hrs.	0.24 gm / m ² / 24 hrs.
Salt spray (6000 hrs)	ASTM B-117-73	Passes	Passes	Passes
Impact resistance	ASTM D - 2794	Passes	Passes	Passes
Tear Strength	ASTM D - 624	670 PLI	380 PLI	350 PLI
Abrasion resistance (weight loss)	ASTM D - 4060	0 .010 gm.	0 .010 gm.	0 .010 gm.
Cathodic Disbondment	ASTM G-8 & G - 95	No disbondment	No disbondment	No disbondment
Flexibility	ASTM D - 522	Passes	Passes	Passes
Accelerated weathering (2000 hrs)	ASTM G - 53	No effect	No effect	No effect
Temperature resistance		-100 to 93 degree C	-100 to 93 degree C	-100 to 93 degree C
Chemical Resistance : (2000 hrs)10% NaOH, 50%NaOH,10%H2SO4	ASTM -3912	No visible effect	No visible effect	No visible effect

Surface preparation:

Concrete:

- Decontaminate the surface as per ASTM D - 4258.
- Abrasive blast clean as per ASTM D - 4259.
- Surface must be free of condensation and moisture before coating.
- Primer recommended: Cipoxy - 16

Steel:

- Decontaminate the surface as per SSPC SP-1
- Abrasive blast clean as per SSPC SP-10
- Surface must be dry and dust free before coating.
- Primer recommended : ACPC 60

Application Procedure:

- Apply 50 microns DFT of PU primer (ACPC 60) on steel surfaces
- Apply 100 microns DFT of Epoxy primer (Cipoxy - 16) on concrete surfaces
- Allow to dry for 4 hours.
- Stir Resin (Part A) thoroughly for 30 minutes just prior to use.
- Stir Hardner (Part B) thoroughly for 15 minutes just prior to use.
- Apply Securea mix by plural component airless spray equipment
- Application to be carried out by Graco "Reactor".

Health & Safety:

- Wear chemical goggles and hand gloves.
 - Provide forced air ventilation.
 - Follow precautions as per OSHA regulations.
 - In case of skin contact, wash thoroughly with plenty of soap and water.
 - In case of eye contact immediately flush with clean water and get medication.
- .TDS of other grades of Securea is available on request.