



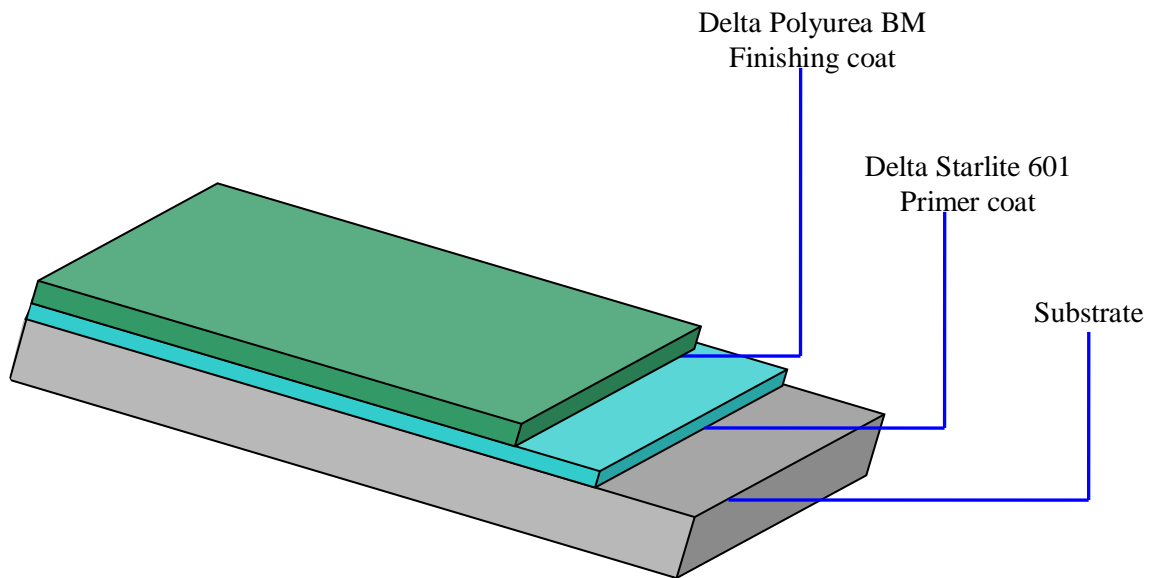
# Delta Intercontinental Pte Ltd

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## Delta Polyurea BM

### Blast Mitigation Polyurea

#### SYSTEM DESIGN





# Delta Polyurea BM

## DESCRIPTION

A two-component, 100% solids aromatic polyurea for interior or exterior concrete and metal surfaces to protect personnel by making the building less vulnerable to threats of explosion and ballistics.

## USES

- Used as a blast-resistant coating for existing structures and effectively contain debris in the case of an explosion and greatly reduce injuries and death from flying debris and ideally suited for both ballistic and explosive threats.
- As a blast mitigating and anti defragmenting protective liner
- Typical applications include:
  - Infrastructure
  - Military bases
  - Transportation
  - Entertainment centre

## ADVANTAGES

- 100% solids with zero VOC.
- Excellent elongation properties.
- Good chemical resistance.
- Seamless, resilient, will not crack.
- Excellent corrosion protection.
- Low permeability.
- Fast reactivity and cure time with no catalysts.
- Applicable in temperatures from -30°C to 70°C.
- Almost immediate return-to-service time.
- Can incorporate anti-slip finish.

## FINISH

Low sheen.

## COLOUR

Standard medium gray. Custom colours, blended to match any RAL number, are available upon request.

## SURFACE PREPARATION

Substrates to be coated must be structurally sound, clean and free from any contamination.

Concrete – preparation by diamond disc grinding or grit blasting

Steel – wire brush, hydro or grit blasting as per required.

## APPLICATION

Applied utilising high pressure, heated plural component spray proportioning equipment that is capable of supplying correct pressure and heat for the appropriate hose length on a consistent basis applied in a cross directional method.

For concrete substrate,

- Primer coat of Delta Starlite 601 @ 0.30kg/m<sup>2</sup>.
- Spray on finishing coat of Delta Polyurea BM @ 6.324kg/m<sup>2</sup> (Avg 6mm thk)

## TECHNICAL & APPLICATION DATA

Solids by volume	100%
Volatile Organic Compound	0gm / lit
Tensile Strength @ 25°C ASTM D-412 (MPa)	12 to 15
Elongation @ 25°C ASTM D-412 (%)	600 – 700
Hardness (Shore D)	30 to 40
Flexibility (3mm mandrel ASTM 1737)	Pass
Tear Strength (Die C ASTM D-624) (KN/m)	100 to 110
Fire Rating UBC	Class 2
Flash Point Pensky Martin	>93°C
Service Temperature Range (Dry)	-32°C - 170°C
Service Temperature (Immersion in Water)	80°C
Abrasion Resistance ASTM D-4060 (Taber CS17 1000mg/1000Rev)	<15mg loss
Weight Per Litre in Kg	A: 0.56, B: 0.52
Viscosity (cps) @ 25°C	B: 900
Viscosity (cps) @ 25°C	B: 115
Gel Time (Adjustable)	10 -15 secs
Tack Tree Time (125µ)	60-120secs
Post Cure Time	24 Hours
Volume Ratio (A : B)	1 to 1
Block Temperature	60°C to 70°C
Hose Temperature (A and B)	60°C to 70°C



Constant Pressure	136 Bar
Recommended Dry Film Thickness	6mm to 10mm
No. Of Coats	1
No. Of Components	2

#### **MAINTENANCE**

Remove chemical spillage immediately, regular washing or water jetting.

#### **STORAGE CONDITION AND SHELF LIFE**

All components of Delta Polyurea BM have a shelf life of 12 months in original unopened packing, stored in dry enclosed place without exposing to direct sunlight and at temperature between 15°C to 35°C, protected from frost.

#### **PACKAGING**

380 lit set

Comprises of: Part A – 190 lit  
Part B – 190 lit

#### **SAFETY**

Product contains isocyanates and curatives. Do not take internally. May irritate eyes and skin. Ensure adequate ventilation and avoid inhaling vapours. Always use with suitable personal protective equipment.