

# Durathane 100 EA

Spray Applied Coatings

Durathane 100 EA is a spray applied elastomeric (ASTM D-16, Type V) polyurethane coating, which is recommended as protective coating and lining for concrete and steel structures. It is 100% solids, applied by plural component airless spray equipment. It is ideally suited for the areas where higher DFT is required as a protective barrier. The coating has excellent film build capabilities and can achieve 500 microns to 5000 microns DFT in a single application with multiple passes.

Durathane 100 EA is exceptionally resistant to most chemicals and is resilient to withstand accelerated weathering conditions. It has other remarkable physical properties such as low permeability, excellent adhesion, elongation, tensile strength, flexibility and very high level of abrasion resistance.

It protects against micro biologically induced corrosion (MIC) making it ideal for water and waste water application and has passed stringent toxicity tests as required by Municipal Corporations for their potable water applications.

Durathane 100 EA is applied by plural component spray equipments at ambient temperatures to attain any film thickness in one single application.

**Features:**

- Solventless.
- Setting within few minutes.
- Elastomeric.
- Return to service within 2hrs.
- Low surface friction.
- Very low permeability.
- Excellent abrasion resistance.
- Excellent chemical resistance.
- Tough, yet flexible.
- No film shrinkage.
- Long term stability.
- Application at ambient temperature
- Can be repaired, if damaged.
- Minimum down time : can be put into service within hours.
- Inertness : freedom from embrittlement.
- Resistance to disbondment forces.
- A totally monolithic seamless polymer sheet, virtually fused to substrate.

**Uses:**

- Buried pipelines.
- Water and waste water pipelines.
- Mounded bullets.
- Sea water intake tunnels.
- Reactor containment buildings.
- Cooling tower basins .
- Potable water tanks.
- Reservoirs.
- Concrete tunnels.
- Secondary containment installations.
- Hydro electric penstocks and dam gates.
- Marine vessels and off shore structures.
- Crude and fuel Oil tanks.

**Surface preparation and priming:****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: FB 303.

**Steel:**

- De-contaminate the surface as per SSPC SP-1.
- Abrasive blast clean as per SSPC SP-10.
- Surface must be free of condensation and moisture 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 PU primer (FB 303) 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 Durathane 100 EA mix by plural component airless spray equipment.
- Application to be carried out by Graco “Hydracat” or equivalent spray machines.

**Recommendations:**

Mixing ratio by volume	2A : 1B
Pot life	3 to 5 minutes
Dry to touch	30 minutes
Substrate temperature	5 °C to 60 °C
Return to service	2 hours
Ambient temperature	5 °C to 50° C
Ambient moisture	Max. 90% R.H.
Material temperature	30 °to 35° C
Flash point	Part A : 250° C Part B : 110° C
Cleaning solvents	MEK, Ethyl Acetate
Shelf life	Part A : 1 year Part B : 6 months
Packaging	20 lts. : MS Drums
Theoretical coverage	1 m2 / lt. @ 1mm.
Recommended thickness:	
• Steel	500-1500 microns
• Concrete	1500-3000 microns