

# Archco™ 300 Epoxy Primer Spray Application Specifications

### 1.0 Scope

1.1 This specification covers the external surface preparation and coating of storage tanks and vessels.

## 2.0 Material and Storage

- 2.1 Material shall be Denso Archco exterior coating system as manufactured by Denso North America, 9710 Telge Road, Houston, TX 77095 (Tel) 281-821-3355 (Fax) 281-821-0304 or 90 Ironside Crescent Unit 12, Toronto, Ontario, Canada M1X1M3 (Tel) 416-291-3435 (Fax) 416-291-0898. E-mail: info@densona.com.
- 2.2 Material shall meet the physical properties of the attached product data sheet.
- 2.3 Storage of the material shall be in a warm dry place, between 40°F (4°C) to 95°F (35°C). The containers shall be stored up right.

# 3.0 Equipment

- 3.1 Equipment shall be a single-component airless spray unit with a recommended 70:1 pressure ratio (minimum of 68;1) and a recommended hose length of 100 ft (30.6 m) at 1/2" (12.7 mm) diameter (maximum 150'). A Graco mastic gun with a 27 thou to 31 thou tip size is recommended.
- 3.2 Archco 400 Thinner is recommended to clean the equipment.
- 3.3 Wet film thickness gauges.

### 4.0 Surface Preparation

- 4.1 All contaminants shall be removed from the steel surface to be coated. Oil and grease should be removed in accordance with SSPC SP-1 using detergent, emulsion, or a fresh-water power wash.
- 4.2 Material for abrasive cleaning shall be the appropriate blend of grit to produce an angular surface profile of 2.5 - 3 mils (0.063 - 0.075 mm).
- 4.3 APPLICATION CONDITIONS: Surface should be dry, above 40°F (4°C) and at least 5° F (-15°C) above the

dew point.

SURFACE PREPARATION: Remove all grease, oil, dirt, dust or other contaminants.

NORMAL SERVICE: SSPC – SP2 and SP3 Hand and Power Tool Cleaning.

CORROSIVE SERVICE: SSPC – SP6 Commercial Blast Cleaning or SSPC – SP10 Near-White Metal Blast Cleaning.

IMMERSION SERVICE: SSPC – SP10 Near-White Metal Blast Cleaning.

CONCRETE SERVICE: Surfaces should be lightly sandblasted and/or acid etched. If acid etching is used, the surface should be rinsed with fresh water and allowed to dry thoroughly before application of the Archco 300 Epoxy Primer. Note: Concrete must be cured for at least 28 days prior to application of Archco 300 Epoxy Primer.

PREVIOUSLY PAINTED SURFACES: Remove all grease, oil, dirt, dust or other contaminants. Surface must be clean and dry. Remove all rust, rust scale, chalk, and loose peeling paint by SSPC – SP2 or SP3 Hand or Power Tool Cleaning, or SSPC – SP7 Brush-Off Blast Cleaning.

RECOMMENDED TOP COAT: Topcoat with Archco 65 Acrylic Urethane, Archco 381 High-Gloss Hybrid Exterior Topcoat, or Archco 390 Siloxane Topcoat.

- 4.4 Blasted surfaces must be blown down to insure all loose debris is removed from blasted surfaces and anchor profile prior to application of coating. The Contractor shall check the surface profile depth by using a suitable surface profile gauge (Press-O-Film Gauge or equal).
- 4.5 After blasting, an approved rust inhibitor and chloride remover and holding primer, such as Archco 300 Epoxy, may be used to hold the blast until the coating application can be completed. Metal areas that develop flash rust due to exposure to moisture shall be given a sweep blast to return them to their original blasted condition prior to coating.

### 5.0 Application

5.1 The surface shall have no condensation, precipitation or any other forms of contamination on the blasted surface prior to coating.

- 5.2 The substrate should be dry and above 40°F (4°C) for application of Archco 300. The substrate temperature must be a minimum of 5°F (3°C) above the dew point temperature before proceeding with the coating operation.
- 5.3 Each component (A and B) shall be thoroughly mixed using an air-driven Jiffy mixer or equivalent prior to spraying. If using airless spray technique, add Part B to the Part A container and mix thoroughly until a uniform color is achieved. If a thinner viscosity is desired, add Archco 400 E Thinner to the mixture and continue to mix. It is recommended that no more than 10% by weight be added. Once mixed, the system is ready for spraying.
- 5.4 Using the prescribed equipment (Section 3.0), Archco shall be applied using a wet-on-wet technique to the specified Dry Film Thickness (DFT). Archco 300 can be applied in one or two coats from 4 - 8 mils (102 - 203 microns).
- 5.5 The thickness of Archco 300 should be checked continuously by wet film gauge to achieve the minimum/ maximum film thickness specified. Notification to the applicator of any inadequately coated sections must be made immediately and repaired.

## 6.0 Inspection

- 6.1 The finished coating shall be smooth and of uniform millage with no holidays. All surfaces shall have the required minimum/maximum DFT. In general, the surface of the coating shall be no rougher than the base or substrate material.
- 6.2 After Archco 300 has cured to a hard cure condition, the owner's representative and/or contractor's inspector should measure the film thickness by magnetic gauge.
- 6.3 Denso and/or the owner's representative immediately upon completion of the work shall make final inspection of the completed application. Notification of all defects must be made within a reasonable time frame from completion of the work to allow for all repairs within the allowed time frame for the project.
- 6.4 Recoating: If a second coat is required and the initial coat passes the cure test, the surfaces shall be roughened by sweep blasting. If the coating is soft, no surface preparation is required. 5 hours @ 77°F (25°F) or until tack is almost gone, whichever is first.

# 7.0 Safety Precautions

- 7.1 Follow the guidelines detailed in the Safety Data Sheets (SDS).
- 7.2 Keep containers closed when not in use. In case of spillage, absorb with inert material and dispose of in accordance with applicable regulations.
- 7.3 No open flames, smoking or welding will be allowed in the immediate vicinity during the spray application of Archco

- 300 Epoxy Tank Lining.
- 7.4 Always refer to project specifications as they may supercede Denso specifications.



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