



CORPORATE HEAD OFFICE
Specialty Polymer Coatings
#101, 20529 – 62nd Avenue, Langley, BC, CANADA V3A 8R4
Tel: (604) 514-9711 • Fax: (604) 514-9722

U.S.A. HEAD OFFICE
Specialty Polymer Coating USA, Inc
22503 FM521, Angleton, Texas, 77515, USA
Tel: (281) 595-3530 • Fax: (281) 595-3717

Effective: February 18, 2005

SPECIALTY POLYMER COATINGS, INC. (SPC) APPLICATION

SPECIFICATION FOR USE OF SP-3888[®] CARTRIDGE FOR COATING REPAIRS

STEEL SUBSTRATE

I. GENERAL

- 1.1 SP-3888[®] Cartridge coating is a 100% solids, epoxy manufactured and marketed by **Specialty Polymer Coatings, Inc.** (“SPC”), #101 - 20529 - 62nd Avenue, Langley, B.C., Canada, V3A 8R4, Telephone: (604) 514-9711, Fax: (604) 514-9722, and applied by SPC approved applicators.
- 1.2 This specification is applicable to the use of SP-3888[®] Cartridges with a PPM heavy-duty manual dispenser and optional static mixer for coating repairs. This system is recommended for the repair of pinholes and holidays of 300 mm (12 inches) or less in diameter.

II. PACKAGING

- 2.1 SP-3888[®] Cartridges - 0.450 Litre: consists of 300 ml of Base and 150 ml of Hardener.
- 2.2 Heavy Duty Manual Dispensers: PPM 300X Manual Dispenser.
- 2.3 Static Mixers: #623-0624-00 3/3 ID x 24 Element - optional.

III. SURFACE PREPARATION

- 3.1 Repair areas shall be roughened using carborundum cloth, sandpaper, file, or surface grinder.
- 3.2 The adjacent coating should be abraded for a minimum distance of 25 mm (1”) to ensure inter-coat adhesion.
- 3.3 If necessary on larger repairs, feather the edges of the adjacent coating.

SP-3888[®] CARTRIDGE APPLICATION SPECIFICATION

III. SURFACE PREPARATION (cont.)

- 3.4 Wipe with a clean cloth to remove dust. A dust respirator should be worn for all sanding or grinding activities.
- 3.5 All surfaces to be coated shall be clean and completely dry prior to the application of the coating.

IV. APPLICATION

- 4.1 The minimum surface temperature for coating is 10°C (50°F). The substrate temperature must be a minimum of 3°C (5°F) above the dew point temperature.
- 4.2 The area to be coated should be preheated in cold temperature conditions. The appropriate preheat temperature and cure time can be determined from the attached SP-3888[®] Spray and Brush Grade Curing Table. The maximum preheat temperature shall not exceed 100°C (212°F). For some applications, post-heating may be required to achieve an adequate cure depending upon ambient temperature, pipe wall thickness, and other variables. The coating must not be allowed to freeze before an adequate cure is reached. Preheating and post-heating may also be utilized if an accelerated cure time is required.
- 4.3 Preheating may be accomplished by either flame heating the surface with a propane torch prior to blasting or by the use of an induction coil or catalytic infrared heater subsequent to blasting and prior to coating. Post-heating can only be done using an induction coil or catalytic infrared heater.
- 4.4 Eject the required amount of coating material from the cartridge onto a clean tray using the manual dispenser.
- 4.5 Hand-mix the product with a stir stick until the coating colour becomes uniform with no streaks.
- 4.6 Apply the coating to the required thickness on the area to be repaired using a spatula or paintbrush.
- 4.7 Extend the coating to at least 25 mm (1 inch) over the surrounding pre-roughened coating.

SP-3888[®] CARTRIDGE APPLICATION SPECIFICATION

V. SAFETY PRECAUTIONS

- 5.1 The contractor will provide safe and secure scaffolding for ready access to work areas.
- 5.2 SP-3888[®] Cartridge coating is **HARMFUL IF ABSORBED THROUGH SKIN, INHALED OR SWALLOWED**. Personal protective equipment is required. Refer to the **Material Safety Data Sheets**.
- 5.2.1 Chemical resistant gloves with a long cuff that will overlap the clothing sleeves should be worn when handling this product. The glove/clothing overlaps should be sealed by tape. Check with the glove manufacturer to determine the proper glove type.
 - 5.2.2 Wear an appropriate, properly fitted vapour respirator (NIOSH / OSHA approved) during application where vapour / mist are likely to be encountered, e.g. confined spaces and during winter construction or when the substrate is preheated. For outdoor application and areas with adequate ventilation, the use of a respirator is normally not required. Follow the respirator manufacturer's recommendations. A dust respirator should be worn for any activity such as sanding or grinding of cured coating.
 - 5.2.3 Wear splash proof chemical safety goggles and /or face shield.
 - 5.2.4 Wear impervious boots.
 - 5.2.5 Long-sleeved clothing is to be worn over regular clothing to cover all exposed areas of arms, legs or torso during mixing and application of the coating. Breathable clothing, such as cotton or disposable coveralls, is recommended.
 - 5.2.6 Emergency eyewash and a shower should be in close proximity, where possible. A barrier cream may be used, in conjunction with the stated protective measures, as an additional safeguard against skin contact.
- 5.3 Keep the containers closed when not in use. In case of spillage, absorb with inert material and dispose of in accordance with Federal, Provincial, and Municipal regulations in Canada and Federal, State, and County regulations in the United States of America.
- 5.4 No open flames, smoking or welding will be allowed in the immediate vicinity during the application of SP-3888[®] Cartridge Coating.
- 5.5 All personnel on the application crew shall be informed of regulations regarding smoking, auto traffic restrictions, the meaning of warning bells, horns and whistles, fire warnings and restricted areas. Members of the coating crew shall maintain good personal hygiene, wash thoroughly after exposure to the coating application, particularly before eating or going on breaks.

SP-3888[®] CARTRIDGE APPLICATION SPECIFICATION

VI. MATERIALS

- 6.1 SP-3888[®] Cartridges must be sealed prior to use.
- 6.2 **NO** amount of SP-3888[®] Cartridges shall be given, sold or exchanged without express written permission from SPC.
- 6.3 The acceptable shipping and storage temperature range for SP-3888[®] Cartridges is between 5°C (41°F) to 40°C (104°F).
- 6.4 Store SP-3888[®] Cartridges in a cool, dry, well-ventilated area. Keep the lids sealed. The Shelf Life is a maximum of 24 months in unopened containers.

VII. SUBSTRATE TYPES

- 7.1 This specification is applicable to standard steels only.
- 7.2 Exotic metals, stainless steel or other special types of steel or alloys may require different consideration as to surface preparation and SPC formulations. Notification of the use of such metals must be made to SPC.

VIII. CLEANING

- 8.1 If cleaning is necessary, the following materials can be used:
 - Use SP-100 Equipment Wash to clean uncured material on spatulas.
 - Use SP-110 Tool Cleaner to clean cured material on objects such as putty knives or mixing blades.
 - Brushes must be disposed of after use. **DO NOT** attempt to clean and re-use.

SP-3888® CARTRIDGE APPLICATION SPECIFICATION

IX. INSURANCE

- 9.1 The contractor will provide all necessary insurance to protect itself and its employees during the application of SP-3888® Cartridge coating.
- 9.2 SPC will provide all necessary coverage to protect SPC Employees on site.

X. DISPOSAL

- 10.1 Dispose of empty Base and Hardener containers according to Federal, Provincial, and Municipal regulations in Canada and Federal, State, and County regulations in the United States of America. Allow all mixed material to complete gel prior to disposal.

SPECIALTY POLYMER COATINGS, INC. (SPC)

Corporate Head Office

#101 – 20529 – 62nd Avenue
Langley, BC, CANADA V3A 8R4

Phone: (604) 514-9711
Fax: (604) 514-9722

U.S.A. Head Office

22503 FM 521
Angleton, TX USA 77515

Phone: (281) 595-3530
Fax: (281) 595-3717