

HAND APPLICATION SPECIFICATION

INSTRUCTIONS FOR USE

These instructions are intended as general guidelines for external surface preparation and coating of dry, damp or wet metal substrates and are not intended to replace or override the project specification. Always read the Safety Data Sheet and perform a COSHH assessment prior to use.

STORAGE

- Store Protal 7300™ (UK) upright in original, sealed containers in a dry place at controlled temperatures (+5°C to +35°C).
- If the material is kept too cold, it will become very viscous and will require warming up to temperature above +15°C to facilitate mixing.

EQUIPMENT

- Surface preparation will require equipment for abrasive blast cleaning with the appropriate blend of abrasive media to produce an angular surface profile of 75 µm to 100 µm.
- Mixing of Part A and Part B will require a power drill with appropriate mixing blades or a strong wooden stir stick.
- Recommended coating applicators include: Denso Applicator pads, brushes (100 mm wide), and nap rollers. For damp surfaces, coating application should be by means of short, stiff bristle brush that allows moisture to be displaced.
- Wet film thickness gauge and dry film thickness gauge.

SURFACE PREPARATION

- Remove any contaminants present on the surface to be coated. For oil and grease contamination use non-oily solvent cleaner.
- Prepare all surfaces to be coated by abrasive blast cleaning to a near-white finish (ISO 8501-1 Sa 2 ½, SSPC SP-10 or NACE No. 2). *Note:* Near-white finish is interpreted to mean that all metal surfaces shall be blast cleaned to remove all dirt, mill scale, rust, corrosion products, oxides, paint and other foreign matter. Very light shadow, very light streaks or slight discolourations shall be acceptable; however, at least 95% of the surface shall have the uniform grey appearance of a white metal blast-cleaned surface as defined by Swedish Pictorial Surface Preparation Standard Sa 2 ½ or SSPC VIS-1.
- Ensure a sufficient surface profile depth is reached using suitable surface profile gauge (recommended angular surface profile of 75 µm to 100 µm). Remove all grit and dust.
- Edges of existing coatings should be roughened by sweep blasting (distance of 75 mm is recommended) or suitable power brushing.
- Not more than 4 hours should elapse between preparation and coating application. In the event of flash rusting due to exposure to rain or moisture, give the surface a sweep blast to return to original blasted condition.

IMPORTANT:

Winn & Coales (Denso) Ltd pursue a policy to develop and continually improve all of our products and therefore information given in these instructions for use is intended as a general guide and does not constitute a warranty, specification or risk assessment. Instructions for use are intended to provide sufficiently detailed information to achieve successful installation in normal circumstances. These guidelines may not cover all circumstances; however, our sales personnel are committed to assisting the user in establishing the suitability of the product for its intended purpose and additional specific information, advice and training (including Safety Data Sheets) is available. It is strongly recommended that installation is conducted with due regard to Health and Safety using a safe system of work, including risk assessments and method statements, in accordance with relevant local statutes and regulations. Equipment used for installation must be suitable for the intended use, maintained in a safe condition, inspected for signs of deterioration, and used by competent personnel. Any conflict between these guidelines and the specific project specifications must be resolved by the user before work commences. All rights reserved.

HAND APPLICATION SPECIFICATION**APPLICATION PROCEDURE****1. TEMPERATURE**

The substrate temperature for Protal 7300 (UK) application should be between +5°C to +65°C. For job sites with low temperature, ensure the product is warmed to +15°C to facilitate mixing.

2. MIXING

Use the Protal 7300 (UK) as supplied in pre-weighed packs Part A (base component) with Part B (hardener component).

Start by stirring the base and hardener independently. Add the hardener to the base and mix at a slow constant speed so as to not introduce air into the product until a uniform grey colour is achieved without any visible streaks (make sure all sides and bottom of container are scraped).

3. APPLICATION

Apply the coating immediately after mixing is completed. If applying to damp or wet surfaces, displace water as the coating is stippled on the pipe using a short, stiff bristle brush. Apply the coating by starting at the top and spreading it down and around the pipe in bands beginning from the leading edge of the material to underneath the pipe. Overlap the bands to a minimum of 25 mm and onto existing coating to a minimum of 75 mm. Apply the coating in thin layers building up to the recommended thickness. Use the pad to smooth out any sags or rough edges, valleys or drips. Ensure that the entire surface is covered and pay special attention to welds and bottom surfaces.

Use a wet film thickness gauge to measure the coating thickness throughout the application process to achieve close adherence to the thickness specification. In the absence of thickness specification, a minimum wet film thickness of 750 µm is recommended.

After the coating has cured to a tack-free condition, the owner's representative and/or contractor's inspector should measure the film thickness by magnetic gauge and notify the applicator of their acceptance.

4. OVERCOATING

For overcoating application, ensure this takes place between 3 ½ hours – 7 hours at +23°C from the point of application. Please consult the product Technical Data Sheet for overcoating times at additional temperatures. If the overcoating window has lapsed, roughen up the surface prior to application of the topcoat using 80 grit sandpaper or by sweep blasting. The overcoating window is depended on the application environment and evaluation of the coatings physical condition prior to overcoating is recommended.

INSPECTION/TESTING FOR BACKFILL

- The finished coating shall be generally smooth and free of protuberances or holidays. Ensure all surfaces have the required minimum DFT (recommended DFT is 1000 µm). Inspection of hand application is best performed immediately after application.
- Determine backfill time by using the "thumb nail test". The thumb nail test is defined by when one can no longer make a permanent indentation in the coating with one's thumb nail.
- An acceptable field test to check if the coating has a full chemical cure, a solvent such as Xylene or MEK can be rubbed on the coating. If the gloss/sheen is removed, then the coating has not fully cured.
- Perform spark testing to ensure proper film thickness and for holiday inspection. The recommended voltage is 125V per 25 µm of coating thickness.

HAND APPLICATION SPECIFICATION**INSPECTION/TESTING FOR BACKFILL (CONTINUED)**

- As soon as the work is completed, the owner's representative should make a final inspection. Notification of all defects should be made within a reasonable time frame from completion of the work to allow for all repairs within the allowed time frame of the project.

SAFETY AND ENVIRONMENTAL PRECAUTIONS

- Follow all Health and Safety guidelines detailed in the Safety Data Sheet and job COSHH assessment.
- Wear protective clothing and ensure adequate ventilation. Avoid contact with skin and eyes.
- Keep all containers closed when not in use. In case of spillage, absorb with inert material and dispose of in accordance with applicable regulations.
- Please avoid or minimise waste wherever possible. Cure waste material where possible to reduce hazardous waste. Please do not discard waste material, including packaging, in the surrounding environment. Follow all relevant legislation for disposal.