

PART E
SPECIFICATIONS

PART E - SPECIFICATIONS

GENERAL

E1. APPLICABLE SPECIFICATIONS, STANDARD DETAILS AND DRAWINGS

- E1.1 *The City of Winnipeg Standard Construction Specifications* in its entirety, whether or not specifically listed on Form B: Prices, shall apply to the Work.
- E1.1.1 *The City of Winnipeg Standard Construction Specifications* is available in Adobe Acrobat (.pdf) format on the Information Connection page at The City of Winnipeg, Corporate Finance, Materials Management Division internet site at <http://www.winnipeg.ca/matmgt>.
- E1.1.2 The version in effect three (3) Business Days before the Submission Deadline shall apply.
- E1.1.3 Further to GC:2.4(d), Specifications included in the Bid Opportunity shall govern over *The City of Winnipeg Standard Construction Specifications*.
- E1.2 The following Drawings are applicable to the Work:

<u>Drawing No.</u>	<u>Drawing</u>
E1	Degreasing Room – Floor Repair

E2. SURFACE PREPARATION

- E2.1 The work shall be coordinated with Winnipeg Transit Department activities. All work shall be carried out in a continuous manner from surface preparation to membrane curing so that the affected area is not out of service longer than is necessary. The City will not allow any area to be barricaded until the Contractor has the membrane products in his possession.
- E2.2 The surface shall receive a light to medium blast – tracking in order to lift the areas of membrane which have debonded, yet at the same time to allow bonded areas to remain intact. Degreasing products shall be used to remove all existing oil stains on the floor.
- E2.3 After completion of blast tracking the areas of membrane showing signs of debonding shall be removed using wire brush sanding to remove all loose materials. These areas shall be considered as incidental to surface preparation. No additional payments will be made for this work.
- E2.4 Payment for surface preparation shall be on a square foot basis and shall include all labour, equipment and material as necessary to carry out work as specified.

E3. CONCRETE DECK REPAIRS

- E3.1 In isolated areas the deck may be delaminating. Contractor shall saw cut around these areas, remove the loose material to sound concrete, clean the reinforcing to grey steel, coat the reinforcing with 2 coats epoxy paint or replace reinforcement with new epoxy coated reinforcing bars, apply bonding agent and patch area with approved mortar mix.
- E3.2 In some areas, where the top steel is too high, and/or reinforcing is replaced, the Contractor shall remove the top steel and concrete to a minimum depth of 4". The intent is to increase the concrete cover over the top steel to 3". Reinforcing shall be replaced with new epoxy – coated bars.
- E3.3 Once the upper concrete surface has been removed, all exposed reinforcing shall be cleaned by sandblasting or by power brushing to a commercial grey metal blast and apply two coats of two part compound epoxy coating to the reinforcing.

E3.4 All patching shall be carried out using a Sikafloor concrete repair mortar, or approved equal.

E3.5 Concrete shall meet the following criteria:

E3.5.1 Strength: 25 MPa at 28 days;

E3.5.2 Tension: 1.5 MPa at the time of application of Sikafloor 261

E3.6 Concrete patches adjacent to columns shall be raised approximately one half inches (1/2") to prevent ponding of water.

E3.7 Payments for concrete patching including all labour, equipment, and material as required to carry out work as specified shall be on a square foot basis including all cutting removal, forming and patching.

E4. MEMBRANE BASE COAT

E4.1 Membrane patching is required where the concrete deck is repaired.

E4.2 Concrete surface shall receive a coat of primer and a base coat as per manufacturer's instructions in all areas requiring membrane patches in order to provide an even surface for membrane re-coat application.

E4.3 Application for membrane patching including all labour, equipment and material as required shall be on a square foot basis.

E5. WATERPROOF TRAFFIC MEMBRANE

E5.1 Contractor shall submit proposals for a proven waterproofing traffic membrane. Membrane shall be a urethane product with a flexible type of wearing surface. Membrane coating system shall consist of a primer, a flexible membrane and a flexible traffic wearing surface capable of withstanding heavy equipment traffic and have successful applications in wash bays and wet process areas.

E5.2 The various components of the traffic membrane system must be a proven system that has been used successfully for similar applications for at least ten (10) years. The contractor shall not deviate from manufacturer's recommendations.

E5.3 In areas which are to receive a re-coating of membrane, the existing membrane surface shall be primed according to manufacturer's instructions prior to receiving the membrane coat.

E5.4 Contractor shall submit product data, WHMIS, samples indicating aggregate colour, provide maintenance data (Submittals and O&M Manuals), include recommended cleaning and maintenance procedure, materials and cleaning schedule.

E5.5 Do not apply emulsion system unless uniform minimum 60 F substrate temperature will be kept for duration of job and required curing time;

E5.6 Ensure no open flame heating devices are used.

E5.7 Provide continuous ventilation to protect area against toxic fumes during and after coating application.

E5.8 Protect adjacent work surfaces from damage resulting from work in this section.

- E5.9 Payment for membrane application, including all labour, equipment and material necessary to carry out work as specified (including membrane surface priming and clean up) shall be on square foot basis.