

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>
2004-155/A-1	Roof Plan

E2. OUTLINE SPECIFICATIONS – ROOF AREA “C” ONLY

- E2.1 Strip existing tar and gravel roof down to deck and dispose of old roof, removing only that section of roof that can be completely re-roofed in the same day.
- E2.2 Over a clean, dry deck surface, apply a two ply vapor retarder membrane with the first ply in ribbons of hot asphalt and with the second ply fully mopped to the first ply.
- E2.3 Install 2.7 inches polyisocyanurate insulation panels complete with ½” laminated fibreboard fully mopped to the vapor retarder and overlay with one half (½”) inch of fibreboard insulation fully mopped with joints staggered and in a brick pattern.
- E2.4 Provide new roof drain and sleeve complete with screen.
- E2.5 Over the insulation, install a new four (4) ply roof membrane assembly complete with a two ply reinforcing stripping at the perimeter extending same to match existing. Allow to cure, then aluminize with Tremco Double Duty aluminizer paint.
- E2.6 Restore coping joint at parapet as required, reinforce with mastic and membrane, then aluminize.
- E2.7 Re-install perimeter flashing along north parapet.

Note: The Contractor shall take all necessary precautions to ensure a safe work place and shall maintain and erect warning signs and barriers to alert public and users attending the facility. All roofing work shall be in accordance with Workplace Safety and Health Rules and Regulations and all applicable Codes, Laws and By-Laws.

E3. SCOPE OF WORK DETAILS

Work described in this section shall pertain to Roof Area "C" only and entails the removal of existing B.U.R. down to deck including metal flashing on north parapet and re-roofing with a new four (4) ply Built-Up Roof membrane assembly complete with insulation and gravel.

- E3.1 Carefully remove metal flashing at north parapet and save for re-use. Strip existing B.U.R. down to deck taking care to remove only that section of roof that can be completely closed in the same day.
- E3.2 Over a clean dry deck install a two (2) ply vapor retarder membrane. The first ply shall be installed in ribbons of hot asphalt to the deck. The second ply shall be fully mopped to the first ply. Care shall be taken not to damage the vapor retarder membrane and any damage must be repaired prior to installation of insulation.
- E3.3 Adjust/provide proper blocking, curbs, etc. to accommodate changes in roofing system. Provide new cant all around, replace drain, provide sleeves/extensions as required.
- E3.4 Over the vapor retarder membrane, fully mop new insulation panels consisting of 2.7" polyisocyanurate insulation complete with 1/2" laminated fibreboard plus an additional one half (1/2") inch layer of fibreboard over top, fully mopped to the polyisocyanurate insulation. All insulation panels shall be installed in a brick pattern with joints staggered.
- E3.5 Over the insulation, install a new four (4) ply roof membrane, then re-gravel using fresh, clean, dry roofing gravel.
- E3.6 Perimeter stripping shall be reinforced with a 2 ply application of mastic and membrane, then aluminize after curing with Tremco Double Duty Aluminizer Paint.
- E3.7 Re-install metal flashing on north parapet wall.
- E3.8 Recoat with mastic and mesh coping joints and make weathertight. Aluminize the repairs upon curing.
 - (a) All roof area opened must be completely re-roofed, including application of gravel in the same day. Areas exposed to moisture shall be removed and re-roofed at no cost to the City.
 - (b) In the event of sudden and/or unexpected showers, glaze coating shall be used and shall be applied at a minimum rate of 30 pounds per square to the new roof.
 - (c) Overnight Protection: If, for any reason, the gravelling process cannot be completed in the same day, all new roofing felts must be protected and shall be glazed coated at 30lb/square.
 - (d) The Contractor is responsible for ensuring the watertightness of the roof and that tie-ins are not compromised.

Clean Up

Following completion of the work herein specified, the Contractor shall remove all equipment, surplus materials from the Site, leaving same in a neat and tidy condition and satisfactory to the City/Contract Administrator. At the end of each working day site clean up is mandatory.

Safety

The Contractor shall ensure that equipment left on Site, hazardous to the public/users, in particular kettles used for heating asphalt, shall be enclosed/protected by a snow fence with a warning sign preferably painted on sheet metal and affixed to the snow fence. All kettles must also be padlocked if left overnight on Site.

E4. MATERIALS

All Materials used shall be new and of the best quality equipment such as kettles shall be in good working condition. The quoted price shall be on materials specified. Wherever, in these specifications a material is specified, use only such items unless written approval for substitutions of an approved equal is obtained from the Contract Administrator.

- E4.1 Mastic used shall be fibremat self-reinforcing asphalt mastic.
- E4.2 Reinforcing membranes shall be woven glass membrane conforming to CGSB 37-GP-63M.
- E4.3 Roofing asphalt shall be Type II. Bitumen (a) shall not be heated to or above the actual flash point, (b) shall not be heated and held above the finished blowing temperature for more than four (4) hours.
- E4.4 Protective membranes shall be #15 perforated roofing asphalt felts conforming to CSA 123.6.
- E4.5 Roofing gravel shall be from 1/4"Ø to 5/8" Ø clean and round and free from earth and/or other foreign matter.
- E4.6 Insulation shall be polyisocyanurate insulation with laminated fibreboard. Fibreboard shall be as manufactured by Domtar or approved equal.