

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>
A-1	Roof Plan
P-1	Building Photo

E2. EXISTING SERVICES AND UTILITIES

- E2.1 No responsibility will be assumed by the City for correctness or completeness of the drawings with respect to the existing utilities, pipes or other objects either underground or on the surface; the City shall not be liable for the incorrectness and inadequacy thereof. It shall be the responsibility of the Contractor to determine the location of such utilities, pipes and other objects and to make good any damage done to them.

E3. TEMPORARY UTILITIES

- E3.1 All necessary permits, fees and other like expenses as well as the cost of temporary connections to existing facilities shall be arranged and paid for by the Contractor.

E4. DAMAGE TO EXISTING STRUCTURES AND PROPERTY

- E4.1 All necessary precautions shall be exercised by the Contractor so as not to remove, disturb, or damage any existing water pipes, gas pipes, electrical wires, cables, conduits, sewers or other existing facilities and equipment at the site of the work. For all damage incurred thereto in the performance of the work, the Contractor shall upon instructions from and to the satisfaction of the Contract Administrator, either replace and repair such damage, whichever may be deemed necessary in the opinion of, and acceptable to, the Contract Administrator and the cost of which shall be borne entirely by the Contractor.
- E4.2 The Contractor shall also indemnify and save harmless the City from all claims made directly against it in respect to any such damage.
- E4.3 Any damage caused by the negligence of the Contractor or his Sub-Contractors to the adjacent works or properties, shall be promptly repaired by him at his own expense, to the satisfaction of the Contract Administrator.

E5. CLEAN UP

- E5.1 The Contractor shall maintain the site of the Work daily in a tidy condition and free from the accumulation of waste and debris.
- E5.2 Total Performance of the work shall not be attained until the Contractor has cleaned the Site and removed all plant, tools, equipment, waste and debris to the satisfaction of the Contract Administrator.

E6. APPROVED EQUALS OR APPROVED ALTERNATIVES

- E6.1 Further to B6 Substitutes, where brand names occur in this specification, it shall also mean "or approved equal" or "an approved alternative".

E7. MATERIALS

- E7.1 Plywood Sheathing
This shall be construction D Grade fir plywood of a thickness matching that being replaced.
- E7.2 Rubberized Mastic
This shall be Polyroof as manufactured by Tremco Ltd., Polybitumen 570-55 as manufactured by Monsey Bakor, or approved equal.
- E7.3 Aluminium Paint
This shall be Tremco Double Duty or approved equal.
- E7.4 Sealant
This shall be Tremco Tremflex 25.
- E7.5 Attic Vents
These shall be Duroflow as manufactured by Canplast or approved equal. Size to meet those being replaced. Colour is to be selected by Contract Administrator from the standard colour range.
- E7.6 Vent Stack Flashing
Thaler Insulated Stack Jack Flashings with metal cap. Vent flashings to be fully insulated with injected polyurethane insulation. Vent flashing to match roof slope.
- E7.7 Metal Flashing
The flashing (including drip flashing) shall be 24 gauge metal prefinished. Finishes to be selected from the standard stock range of Stelco 8000 series of colours.
- E7.8 Accessories
All nails, bolts, screws and other fasteners etc. as recommended by the manufacturer of the materials for which they are to be applied.
- E7.9 Shingles
Rampart Shingle as manufactured by Emco Building Products Ltd. or approved equal. All flashing and fasteners directly related to the shingle installation as recommended by the manufacturer.
- E7.10 Eave Protection
Valley, eave and rake protection shall be Progard Plus Ice and Waterhshield or approved equal.

E8. ROOFING PROCEDURES

- E8.1 Protect all new work and the existing building and its contents against inclement weather. Supply and install equipment and enclosures necessary to provide this protection from beginning to completion of the work.
- E8.2 Do not apply any roofing during inclement weather or when the temperature is less than +5 Celsius.
- E8.3 Do not expose roofing materials, vulnerable to water or sun damage, in quantities greater than can be weatherproofed in one day. Apply only clean and dry materials during good dry weather conditions. Undertake only that portion of roofing that can be completed in that day. Shutdown operations prior to inclement weather.
- E8.4 Apply roofing over clean and dry surfaces and in accordance to manufacturers application instructions.
- E8.5 Store all materials on the roof in locations to prevent possible blow-offs during high winds.
- E8.6 Cover all exposed deck with tarpaulins in an approved manner once roofing operations are terminated.
- E8.7 Protect the surrounding surfaces against damage from the roofing operations. Where hoisting is necessary protect the buildings by hanging tarpaulins. Should equipment be parked next to the building, protect sod areas with minimum ¾" plywood. Repair any damage to sod as approved by Contract Administrator. Replace any shrubs or plants damaged with same type and size.
- E8.8 Provide protection for the public on walkways, grounds and entrances, etc., at all times. Provide proper warning signs, hoarding, shelters, and barricades as approved by the Contract Administrator.
- E8.9 Remove only the portion of roofing which can be fully completed as specified within that same day.
- E8.10 Inspect all roof decking prior to installation of new roofing system and report all defects or unsuitable conditions to the Contract Administrator.
- E8.11 Inspect the site prior to commencement of work to ensure no anomalies are present ie. lawn damage, etc. Report all anomalies to the Contract Administrator.
- E8.12 All equipment to be in good working order. Locate equipment on site as approved by Contract Administrator.
- E8.13 Follow all applicable safety regulations by Manitoba Health and Safety Act at all times. Follow Manitoba Fall Protection Guidelines.

E9. DESCRIPTION OF WORK

- E9.1 Remove all shingles from the roof without damage or exposure of the interior. Provide plywood under equipment to protect lawn. Protect existing buildings, flower beds, shrubs and trees with tarpaulins and ground sheets.
- E9.2 Remove all shingles, nails and staples from the site. Use magnets to ensure no nails and staples remain on site, upon Contract Administrator request.

- E9.3 Inspect the building structure for dry rot damage or deterioration of existing roof sheathing fascia boards, trimmers, plates and trusses. Report any rot to Contract Administrator immediately prior to the installation of any roofing.
- E9.4 Do not remove more shingles in one day than can be installed with new shingles.
- E9.5 Install prefinished drip edge flashing on all eaves and gable ends.
- E9.6 Ensure adequate attic ventilation is present to meet the local building code. All existing attic venting shall be replaced with roof jacks. Provide additional venting as required to meet all applicable codes. Frame in all abandoned existing vent openings with plywood and wood blocking.
- E9.7 Provide self adhering membrane eave protection with joints lapped minimum 100 mm in all valleys. Extend the membrane a minimum of 1350 mm up both sides of valleys.
- E9.8 Eave protection shall be fully adhered to the wood deck. Extend from eave edge to a minimum of 300 mm inside the inner face of the exterior wall. A minimum width of 1800 mm shall be installed. Install in accordance with manufacturers instructions. Extend the membrane a minimum of 200 mm up gable end walls from the eaves. Install the membrane behind any wall protrusion extending up minimum 200 mm.
- E9.9 Replace existing vent flashing with new flashing. Cut off all risers below the deck and add length extension to accommodate the new flashing. Properly fasten new extensions sufficient to the existing vent piping.
- E9.10 The manufacturers representative may be required to provide additional on site inspections during installation to ensure the manufacturers warranty to the Contract Administrator.
- E9.11 All installation procedures shall be done in strict accordance to the manufacturers guidelines and applicable building codes.
- E9.12 Install all step flashing and other related flashing in accordance with the Manitoba Building Code.
- E9.13 Replace all existing attic vents with new specified item.