



95-2012 ADDENDUM 1

CONSTRUCTION OF COLD STORAGE BUIKING AT WHITTIER PARK –
836 ST. JOSEPH

ISSUED: April 2~~3~~ 2012
BY: Anh Duong
TELEPHONE NO. (204) 391-0872

URGENT

**PLEASE FORWARD THIS DOCUMENT TO
WHOEVER IS IN POSSESSION OF THE BID
OPPORTUNITY**

**THIS ADDENDUM SHALL BE INCORPORATED
INTO THE BID OPPORTUNITY AND SHALL
FORM A PART OF THE CONTRACT
DOCUMENTS**

Template Version: A20070419

Please note the following and attached changes, corrections, additions, deletions, information and/or instructions in connection with the Bid Opportunity, and be governed accordingly. Failure to acknowledge receipt of this Addendum in Paragraph 8 of Form A: Bid may render your Bid non-responsive.

PART E – SPECIFICATIONS

- | | | |
|------|--------------------|---|
| Add: | E2 to read: | <u>Doors</u> |
| E2.1 | | Steel Sections: Door sections shall be constructed from galvanized sheet steel, a corrosion-resistant embossed steel no less than 04.mm thick, coated with approximately 55% aluminum, 1.6% silicon, with the balance being zinc. |
| E2.2 | | Door sections shall be manufactured by a continuous formed-in-place polyurethane lamination process, resulting in a homogeneous sandwich of even textured polyurethane insulation of metal/foam/metal construction to form a section 41mm thick. Sections shall be rolled-formed to produce a thermal break preventing heat or cold conductivity. Sections shall have an RSI of 2.32. |
| E2.3 | | Joints between sections shall be designed with pivotable round horizontal links to eliminate accumulated water from flowing down the inside of the door when opened. |
| E2.4 | | Sections shall be equipped with 1.6mm steel end caps for bracket and end hinge attachment. |
| E2.5 | | Exterior Finish Embossed steel sections shall be mill finished to accept field painting. |
| | E3 | <u>Hardware</u> |
| E3.1 | | Weather Seals: Thermalplastic rubber tube seal shall be fitted inside every joint between the sections to prevent air infiltration. <ul style="list-style-type: none"> i. Top section of the door shal be EPDM rubber sealing strip to provide firm seal against the header when the door is in the closed position. ii. door with an opening width wider than 6mm shall be provide with an EPDM rubber head flexible seal fitted to aluminum extruded strip. This flexible seal shall provide proper seal against header doorframe regardless of outside/inside temperature variances. |

- E3.2 EPDM Rubber Severe Weather Blade-Type Jamb Seal: This seal shall attach to the nylon jamb seal retainer to form a weather-tight seal against the outside skin of the door.
- E3.3 EPDM Double-bottom Sealing Weather-strip: This combination double flanged "o" type bottom weather-strip shall conform to minor irregularities in the floor.
- E3.4 Track: Track shall be 76mm heavy gauge galvanized steel designed for clearances shown. Provide complete track assembly including brackets, bracing, and reinforcing for rigid support of the track for the required door type and size. Slope tracks at proper angle from vertical to ensure tight closure at jambs when the door is closed. Weld or bolt to track supports. Vertical tracks shall be 2.2mm thick, horizontal tracks shall be 2.2m thick and additional reinforced.
- E3.5 Reinforcements and Supports: Provide galvanized steel track, reinforcement and support members. Secure, reinforce, and support tracks as required for size and weight of door to provide strength and rigidity, and to ensure against sag, sway, and detrimental vibration during opening and closing of doors.
- i. Support and attach tracks and attached to wall. Support horizontal (ceiling tracks) with continuous angle welded in accordance with manufacturer's specification for size and weight of door.
- E3.6 Counterbalancing System: All doors shall be equipped with helical wound torsion springs having a minimum spring life of 25, 000 cycles. Spring material shall be made of high tensile music wire.
- E3.7 Trussing: Doors shall be engineered to withstand 96kg/m² wind load. Trussing for wind reinforcement is standard on doors wider than 6m, doors over 760mm height utilize a reinforced truss.
- E3.8 Torsion Shaft: All doors shall be supplied with 34mm solid steel shaft keyed the entire shaft length, in accordance with manufacturer's specifications.
- E3.9 Roller Brackets: Provide heavy-duty fully adjustable roller brackets to each end reinforcement place per manufacturer's recommendations. The adjustable roller brackets are to provide an easy adjustment of the doors to the jamb to achieve the proper seal. Use self-tapping fasteners to secure brackets to the door sections.
- i. Provide heavy-duty, rust resistant hardware, with galvanized fasteners, to suit type of door.
- E3.10 Bottom Corner Brackets: All bottom corner brackets shall be equipped with adjustable roller brackets (except reinforced heavy duty bottom corner bracket) all brackets shall feature the locking wedge on the cable fastener for complete adjustments (except reinforced heavy duty bottom corner bracket, which shall use a clamp).
- E3.11 Rollers: Provide heavy-duty rollers, with 10 steel ball bearings in case-hardened steel races. Extend roller shaft through both brackets where double brackets are required. Provide roller tires to suit size of track.
- E3.12 Step Handles: Provide aluminum cast recessed step plate on outside door with attaching lift handle for inside of door.
- E3.13 Locks: Provide an interior slide bolt.
- E3.14 Cable Drums: Provide cast aluminum cable drums grooved to receive the proper diameter cable for the weight of the door with two (2) extra safety wraps and dual locking screws.
- E3.15 Cable Drums: Galvanized aircraft type rated at 50, 000 cycles or better.

E4

Installation

E4.1

Install door, track, and operating equipment complete with necessary hardware, jamb head mold stops, anchors etc.

- i. Mount counterbalance mechanism with manufacturer's fully adjustable ball bearing brackets at each end of the shaft. Furnish torsion shaft centre support bearings as required for size and weight of doors. Unsupported span no to exceed 24.4m.
- ii. Fasten vertical track assembly to framing at not less than 600mm on centre. Hang horizontal track from structural overhead framing with angle or channel hangers, welded and bolt-fastened in place. Provide sway bracing, diagonal bracing, and reinforcing as required for rigid installation of track and door operating equipment.
- iii. Upon completion of installation, including work by other trades, lubricate, test and adjust doors to operate easily, free from warp, twist, or distortion and fitting weather tight for entire perimeter.

Steel Doors and Frames

E5

Materials

E5.1

Frames:

- i. Steel frames to exterior and interior openings 1200mm or less in unsupported width 1.63mm (16 gauge) base thickness.
- ii. Steel frames exterior and interior openings over 1200mm in unsupported width 1.63mm (16 gauge) base thickness c/w rib stiffeners and reinforcing requirements.

E5.2

Doors:

- i. Steel doors to be fabricated from sheet steel 1.6mm (16 gauge) base thickness, commercial grade steel to ASTM A 525-93 finished to ASTM A 526/A 526M-90 (1975) FZ075 wiped zinc finish.
- ii. Door core to be hollow steel: vertically stiffened with steel ribs and all voids filled with semi-rigid fibrous insulation minimum density 24kg/m³. Provide 1.6mm steel for jamb channels, lock pockets and miscellaneous board insulation to CGSB 51-GP-21M-78.
- iii. Boded Core: urethane or isocyanurate board insulation to CGSB 51-GP-21-M-78.
- iiii. Weld continuous steel channel cap and plate to head and sill of door. Door seams to be continuously welded.
- iiiii. Make provision for glazing as indicated and provide necessary glazing stops. Minimum 1.6mm base thickness of steel sheet, finished to ASTM A 525-93 with FZ075 wiped zinc.

E5.3

Provide other door and frame components in accordance with CSDFMA requirements.

E5.4

Primer:

- i. For galvanized steel sheet: CGSB 1-GP-181M-77+Amdt-Mar-78.
- ii. For cold rolled steel sheet: CGSB 1-GP-40M-79, CGSB 1-GP-148M-80.

iii. **all primers to be compatible with paint finish.**

E6

Fabrication

- E6.1 Fabricate doors and frames as detailed to Canadian Steel Door and Frame Manufacturer's Association (CSDFMA), Canadian Manufacturing Specifications for Steel Doors and Frames latest edition, except where specified otherwise. Reinforce door and frames to suit hardware requirements specified in Section 08710 – Door Hardware.
- E6.2 Blank, reinforce, drill and tap doors and frames for mortised hardware. Reinforce doors and frames for surface mounted hardware.
- E6.3 Shop prime cold rolled steel sheet in accordance with CGSB 85-GP-16M.
- E6.4 Apply at factory, touch up primer to doors and frames manufactured from galvanized steel where coating has been removed during fabrication.

E7

Frames

- E7.1 Cut mitres and joints accurately and weld continuously on inside of frame profile.
- E7.2 Grind welded corners and joints to flat plane, fill with metallic paste filler and sand to uniform smooth finish.
- E7.3 Provide adjustable jamb anchors for fixing at floor.
- E7.4 Install three (3) bumpers on strike jamb for each single door and two (2) bumpers at head for pairs of doors.
- E7.5 Fabricate thermally broken frames for exterior doors using steel core, separating exterior portion of frame from interior portion with polyvinyl chloride thermal breaks.
- E7.6 Provide two (2) steel channel or angle removable temporary spreaders welded to jambs at bottom of door opening to maintain proper alignment.

Execution

E8

Installation General

- E8.1 Install in accordance with National Fire Codes, Volume 4, produced by National Fire Protection Association (NFPA) 80.

E9

Frame Installation

- E9.1 Set frames plumb, square, level and at correct elevation.
- E9.2 Secure anchorages and connections to adjacent construction.
- E9.3 Brace frames rigidly in position while building-in. Install temporary horizontal wood spreader at third points of door opening to maintain frame width. Provide vertical support at centre of head for openings over 1200mm wide. Remove temporary spreaders after frames are built-in.

E9.4 Make allowances for deflection of structure to ensure structural loads are not transmitted to frames.

E10 **Finish Repairs**

E10.1 Touch up galvanized finish where damaged during installation with primer.