

Partie 1 General

1.1 RELATED REQUIREMENTS

- .1 The list of Work in this division is indicative but non-limiting. It does not exclude Work described in other specification divisions shown on the drawings or required for full execution of the Work as intended on the drawings.
- .2 Section 03 30 00 Poured-in-place Concrete (see structural engineers plans and drawings for concrete pits).
- .3 Section 06 10 01 Structural Carpentry .
- .4 Section 07 44 56 Mineral fibre reinforced cemetitious panels.
- .5 Division 08 36 12 Metal Sectional Doors.
- .6 Division 26 Electricity.

1.2 REFERENCES

- .1 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-1.40-97, Primer, Structural Steel, Oil Alkyd Type. Anticorrosive Structural Steel Alkyd Primer.
- .2 Green Seal Environmental Standards (GSES)
 - .1 Standard GS-03-93, Anti-Corrosive Paints.
 - .2 Standard GS-11-97, Architectural Paints.
 - .3 Standard GS-36-00, Commercial Adhesives.
- .3 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
 - .1 Material Safety Data Sheets (MSDS).
- .4 The Master Painters Institute (MPI)
 - .1 Architectural Painting Specification Manual - February 2004.
 - .1 MPI number 79, Primer, Alkyd, Anticorrosive for Metal.
 - .2 MPI EXT 5.1 A to Z, Structural Steel and Metal Fabrications.
- .5 American National Standards Institute (ANSI):
 - .1 ANSI MH14.1-1987 Industrial Loading Dock Boards.
 - .2 ANSI MH29.1-1994 Industrial Scissor Lifts.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.

- .2 Product Data:
 - .1 Submit manufacturer's printed product literature and datasheet and include product characteristics, performance criteria, physical size, finish and limitations.
 - .2 Submit two copies WHMIS MSDS - Material Safety Data Sheets in accordance with Section 01 35 29.06 - Health and Safety Requirements.
- .3 Submit shop drawings and indicate:
 - .1 Dimensions of pit and required clearances.
 - .2 Arrangement of storage tank, pump, jacks mechanical linkages and valves and piping, with sizes and working pressure.
 - .3 Details of cylinder, plunger, pump, motor, valves and operating station, showing names of manufacturers, type or style designations, part numbers, and hp and rpm of motor.
 - .4 Factory test data of cylinder containing complete information covering test, cylinder material, inside and outside diameters and maximum test pressure.
 - .5 Details of electrical equipment.
 - .6 Shop drawings indicating general layout, sizes, materials and finish, required clearances, attachments, installation details, rough installation measurements, operation, controls, hydraulic groups and wiring diagrams and connections.
- .4 Quality control submittals: submit following in accordance with Section 01 45 00 - Quality Control.
 - .1 Manufacturer's Instructions: submit manufacturer's installation instructions and special handling criteria, installation sequence, cleaning procedures and cleaning.
 - .2 Manufacturer's Field Reports: submit to manufacturer's written reports within 3 days of review, verifying compliance of Work, as described in PART 3, FIELD QUALITY CONTROL.
- .5 Closeout Submittals:
 - .1 Provide operation and maintenance data for dock lift maintenance for incorporation into manual specified in Section 01 78 00 - Closeout Submittals and include.
 - .1 Complete description and sequence of operation together with wiring diagrams showing electrical connections, manufacturer's instructions covering maintenance requirements, and parts catalogue giving complete list of repair and replacement parts with cuts and identifying numbers.
 - .2 Dimensioned drawing of lift installation as installed.

1.4 QUALITY ASSURANCE

- .1 Dock levelers: To ANSI MH14.1-1987
- .2 Pre-Installation Meetings: convene pre-installation meeting one week prior to beginning work of this Section, with Departmental Representative Pre-Installation Meetings: convene pre-installation meeting one week prior to beginning work of this Section, with

Departmental Representative in accordance with Section 01 32 16.07 - Construction Progress Schedule - Bar (GANTT) Chart to verify project requirements.

- .3 Qualifications:
 - .1 Manufacturer: specialized in the fabrication of specified products with minimum 30 years experience.
 - .2 Manufacturer ISO certified and ongoing improvement programs.
 - .3 Manufacturer associated with LODEM, establishing ANSI standards.
 - .4 Manufacturer's welding process to A.W.S.D11 98 specifications.
 - .5 Installer: specialized in the field with 5 years experience.

1.5 DELIVERY, STORAGE AND HANDLING

- .1 Packing, shipping, handling and unloading:
 - .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements.
- .2 Gestion et élimination des déchets
 - .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

1.6 EXTRA MATERIALS

- .1 Provide maintenance materials in accordance with Section 01 78 00 - Closeout Submittals.
- .2 Provide complete set of tools necessary to maintain and adjust every part of lift.
- .3 Provide high pressure cartridge refill type grease gun and extra cartridge of recommended lubricant, if equipment pressure gun lubricated.

1.7 ACCEPTABLE PRODUCTS AND MATERIALS

- .1 Where a particular brand name is stipulated, see Instructions to Bidders for procedure for requesting approval of substitute materials and products

Partie 2 Products

2.1 MATERIALS

- .1 Elevating dock:
 - .1 Hydraulic operating system, quiet, smooth cycling. Electro-hydraulic lifting, remote mounted control station. Below platform lifting capacity. Hydraulic platform free fall protection system limited to 76 mm. Unit supplied with 1 HP motor. Motor mounted under platform.

- .2 Recessed pit installed dock leveler with the following characteristics:
 - .1 Capacity: 13,636 kg.
 - .2 Vertical travel: Working range up to 305 mm above and 305mm below dock level.
 - .3 Automatic lateral compensation: Compensates for canted truck bed, side to side tilt of up to 102 mm.
 - .4 Ramp safety support.
 - .3 Platform size: 2134 mm wide x 2438 mm long, constructed of non-skid checkered steel plate welded to steel reinforcing members.
 - .1 Welding to A.W.S.D1.1 (2008) standards. All units evaluated in accordance with ANSI MH30.1 (2007).
 - .2 ANSI/NFPA70 certified electric components.
 - .3 Dock support including minimum 6 U-shaped rectangular high tensile steel beams.
 - .4 Provide 457 mm hinged lip, same material as platform.
 - .5 Provide steel tapered toe guards.
 - .6 Provide safety stripping two sides of unit.
 - .7 Power pack: Standard, Motor and integrated pump.
 - .8 Additional accessories.
 - .1 Night lock.
 - .2 Side and rear rubber seals.
 - .3 Outdoor lighting.
 - .4 Remote motor group with 24' (7.315mm) hydraulic hose.
 - .5 Arctic oil (-57 to 150°C)- recommended for temperatures under -7°C / 18°F.
 - .6 Foam insulation.
 - .9 Provide factory prewired, wall-mounted electrical power pack unit consisting of electrical motor, pump, wiring, conduit and oil piping.
- .2 Operating station:
 - .1 Install wall mounted operating station where indicated.
 - .2 Provide pushbutton operating positions, clearly and permanently marked UP. Water and corrosion resistant control station measuring 82mm l x 165mm H x 130 mm p.
 - .3 Power supply:
 - .1 Power supply: 550-600 V, 3 phase, 60 Hz, 1 hp.
 - .2 Electrical service specified in Division 26 – Electricity and Section 26 05 00 - Common Work Results for Electrical, includes: fused disconnect switch with conductors from switch to controller or starter.

2.2 FINISHES

- .1 Paint exposed ferrous metal work unless otherwise specified.
- .2 Free surfaces of rust and coat with rust resistant paint.
- .3 Clean but do not paint surfaces to be field welded.
- .4 Apply two coats of anticorrosive structural steel alkyd primer to CAN/CGSB-1.40 to surfaces of structural members and frame of ramp excepting finished or working surfaces.
 - .1 Primer: maximum VOC limit 250 g/L to Standard GC-03.
- .5 Apply heavy coat of bituminous paint to concealed surfaces before building-in.
 - .1 Adhesives: maximum VOC limit 250 g/L to Standard GS-11.

2.3 ACCESSORIES

- .1 Dock bumpers:
 - .1 To ASTM International:
 - .1 ASTM D624-00(2007), Standard Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers.
 - .2 ASTM D1171-99(2007), Standard Test Method for Rubber Deterioration-Surface Ozone Cracking Outdoors or Chamber (Triangular Specimens).
 - .3 ASTM D2632-01(2008), Standard Test Method for Rubber Property-Resilience by Vertical Rebound.
 - .2 Laminated rubber/tire plies:
 - .1 Bumpers: 200 x 500 mm and 114 mm lip.
 - .2 Pre-drilled anchor holes.
 - .3 Plies compressed between two steel plates 10 mm thick X 76 mm X 76 mm; steel rods 20 mm in diameter welded to plates. Bolted rods not acceptable.
- .2 Dock Seals:

Door dimensions 2438 mm wide x 2438 mm high: two vertical pads 2438 mm high and one header pad 3050 mm long with 305 mm facade, cube shaped. 250 mm projection. C en forme de cube. Projection de 250 mm. Compress truck body 3658 mm to 3962 mm high from ground level, with 1220 dock level. Cover fabric: high performance black poly-vinyl. Yellow glide strips 102 mm wide x 610 mm high. Pleated protectors 102 mm sides.

Partie 3 Execution

3.1 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written recommendations, including product technical bulletins, handling, storage and installation instructions, and datasheets.

3.2 INSTALLATION

- .1 Install dock lift in accordance with manufacturer's instructions.
- .2 Install electrical motors, controller units, pushbutton stations, relays and other electrical equipment required for proper operation.
- .3 Touch up shop primer to bolts, welds, and burned or scratched surfaces at completion of installation.
- .4 Adjust dock operating components to ensure a smooth continuous raising and lowering of platforms.
- .5 Deck surface in normal down position is to be level and flush with surface of surrounding floor.

3.3 FIELD QUALITY CONTROL

- .1 Operating Tests: conduct operating tests for approval of Departmental Representative including.
 - .1 Operation to maximum limits of travel in UP, DOWN directions.
 - .2 Extending dock to rest on bed of variety of trucks or trailers.
 - .3 Demonstration of drop limitation.
 - .4 Demonstration of proper functioning of out-of-level compensation.
 - .5 Demonstration of proper functioning of compensation for variation in compression of truck or trailer springs.
 - .6 Any other test required by Departmental Representative to ensure full compliance with specification requirements.
 - .7 Demonstration of loading capacity.
- .2 Manufacturer's Field Services:
 - .1 Provide manufacturer's field services consisting of product use recommendations and periodic site visits for inspection of product installation in accordance with manufacturer's instructions.

3.4 CLEANING

- .1 Clean in accordance with Section 01 74 11 - Cleaning.

END OF SECTION