



Begley Overhead Doors Limited

February 2, 2011

Specifications: Wood Flush Overhead Sectional Torsion Spring door

I General

1. Related Work:
 - a. Steel (Plate, angle and channel) door frames: Sections (05-----)
 - b. Electrical power supply and disconnect: Sections (16-----)
2. Quality Assurance: a. Welding to comply with CSA W59 standard. Welders to be Canadian Welding Bureau approved in accordance with the requirements of CSA W47. File or grind exposed welds smooth and flush without leaving grinding marks and paint with zinc based paint.
3. Submittals:
 - a. Submit shop drawings in accordance with section (01-----)
 - b. Indicated materials, operating mechanisms, required clearances (and electrical connections).
4. Warranty
 - a. Provide a 2 year unconditional warranty on all materials and workmanship.

II Materials

1. Lumber: to CSA 0141-1970, yard lumber, S4S, (C grade or better) (Economy grade exterior grade softwood to AWMAC, Division 400).
2. Plywood: exterior grade Fir Plywood creozone laminate, interior grade Marandie or Launa mahogany BS1 BS 1455. *Spec note: Use 2.1.2 for facing of flush doors.*
3. Finish paint: Two coats of high gloss oil base paint to CGSB1-GP-59M, (----) colour as selected.
4. Nails and staples: to CSA B111-1974, galvanized finish.
5. Adhesive: to CSA 0122 series - M1977.

6. Doors: (Flush panel doors constructed of lumber core framing 32 mm (1-1/4") thick plywood faces glued and stapled to both sides of overall 44 mm (1-3/4") thickness. (Stile and rail panel doors constructed of lumber framing 32 mm (1-1/4") thick plywood panels assembled using mortise and tenon joinery, glued and stapled to framing.) Exposed surfaces sanded smooth before painting.

III Hardware

1. Track: Standard lift 76mm (3") galvanized steel angle mounted, 2.6mm (.090") gauge for torsion lifting, including ancillary hardware items.
2. Rollers: 76mm (3") super duty steel rollers c/w sealed roller bearings.
3. Roller brackets: Minimum 2.5mm (.098") gauge galvanized steel, through-bolt construction.
4. Hinges: heavy duty Collier or equal 3.1 mm (.120") gauge galvanized steel, through-bolt construction.
5. Truss bas: 64mm (2-1/2") high x 51mm (2") wide heavy 1.2 mm (.047") gauge galvanized steel, through-bolt construction.
6. Oil tempered torsion spring minimum 25,000 cycles, complete with 25mm (1") diameter solid steel shaft with 6mm (1/4") keyways full width of door. Morse flange type roller ball bearings with dust-proof seal and grease nipples, 16,754 kp (2,430 psi) load, 2400 rpm and 5 mm (3/16") diameter aircraft cable with 1,905 kg (4,200 lbs.) nominal breaking strength.
7. Double contact extruded neoprene weatherstripping for door sill section, full width.
8. Finish ferrous hardware items with minimum zinc coating of 300 g/m² (10 oz./sq.ft.) to CSA G164-1965 (R1972).

IV Electrical Operators

1. (Electrical centre push-pull trolley type (gear) drive operator, (208 volt) (3 phase) 3/4 HP, with emergency release arm and cable located within arm's reach.

Spec note: Certain types of electrical operators are recommended for certain types of doors. For industrial vertical lift and high lift doors, specify jack shaft for large doors, trolley drive for small door; for underground parking doors, specify trolley drive only.

2. Electrical motors, controller units, remote pushbutton stations, relays and other electrical components: to CSA and ULC approval with CSA enclosure type (NEMA 12). *Spec note: Check environmental conditions for requirements of dust, vapour and waterproof enclosures to electrical components.*
3. Power supply: (208v/575v), (3 phase), 60 HZ. *Spec note: Check with electrical engineers regarding available voltage; also inform them about approximate size of motor so that necessary allowances may be made in calculations of electrical loads for the building and local power distribution panelboards.*
4. Controller units with integral motor reversing starter, (3) heater elements for overload protection, controls relays as applicable. (1) pushbutton station. *Spec note: Check requirements and if necessary include pushbuttons in the controller unit. Indicate number of pushbuttons needed.*
5. Remote pushbutton stations: (surface) mounted, in (1) location, with, "Open-Stop-Close" pushbuttons.
6. Safety photo sensor (sending and receiving units) designed to identify pedestrians or vehicles travelling through opening. Typically installed on interior side of opening, close to overhead door.
7. Door speed: (300) mm per second.
8. Control transformer for 24 volt AC control voltage.
9. Mounting brackets: galvanized steel, size and gauge to suit conditions.
10. Overhead door can be opened from exterior by keys, card system, radio control or by others.

V. Installation

1. Install doors and equipment in frame prepared by others.
2. Install electrical motor, controller units, pushbutton stations, relays and other electrical equipment required for door operation.
3. Installation includes low voltage electrical wiring only. Power supply located near door opening, supplied by others
4. Adjust operable parts for correct function.
5. Adjust weatherstripping to form a weathertight seal.