

## **PART 1 - GENERAL**

### **1.1 DESCRIPTION**

- .1 This section covers the construction of the new electrical shed, including all excavation and backfill, concrete footings and foundations, concrete floor slab, and completed building enclosure including door, roofing, pre-finished wood siding, gable end vents, and painting, as detailed on the drawings and outlined in the specifications.

### **1.2 RELATED WORK**

- .1 Contractor will coordinate work with other trades responsible for related work.

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS**

- .1 Materials specified herein shall be of the best quality available for the use intended. Materials deemed by the Departmental Representative as being unsuitable shall be rejected and replaced by acceptable material.
- .2 Materials shall conform to the requirements and details indicated on the drawings and to the latest standards of the following regulatory agencies.
  - .1 Canadian Government Specification Board;
  - .2 Canadian Standards Association;
  - .3 Canadian Lumbermen's Association Standard Grading Rules;
  - .4 Plywood Manufacturer's Association of British Columbia;
  - .5 British Columbia Lumber Manufacturer's Association;
  - .6 National Building Code of Canada.
- .3 Dimension Lumber: to CSA 0141 and species group to CSA 086 as listed and to National Grades Authority Standard Grading Rules 1970 - Grade category as follows:
  - .1 Structural light framing: species Group D, No. 1 grade.
- .4 Plywood shall be as follows:
  - .1 Interior plywood shall be good one side (G1S), waterproof, Canadian Softwood, conforming to CSA Standard 0151, latest revision.
  - .2 Exterior plywood shall be Canadian Softwood Plywood, (CSP) sheathing grade (SHG), conforming to CSA Standard 0151, latest edition.
- .5 Wood preservative in accordance with Section 06 05 73.

**PART 2 - PRODUCTS**  
**(CONT'D)**

**2.1 MATERIALS**  
**(Cont'd)**

- .6 Pre-Finished Wood Siding:
  - .1 Clapboard Siding: Western Lodgepole Pine or Eastern Spruce, No. 1 select or better grade, factory finished, saw texture, rabbeted bevel profile, cove or V-joint pattern, free of large knots, knot holes, or loose knots, maximum moisture content of 12%. Size: 5/8 inch (16mm) thickness, 6 inch (150mm) width. Selection of colour by Departmental Representative.
  - .2 Moldings and trim: Western Lodgepole Pine or Eastern Spruce, No. 1 select or better grade, factory finished same as siding, as indicated on drawings.
  - .3 Strapping: Softwood Lumber, kiln dried, pressure treated.
  - .4 Nails: Mechanically galvanized, to securely and rigidly retain the work permanently in position, pre-finished baked-on coating to match siding finish.
  - .5 Exterior Sheathing Membrane: CAN-CGSB 51.32m, Spun bonded olefin sheeting, conforming to ASTM D3575, single ply laminated and coated.
  - .6 Sealant: Thermoplastic, color to exactly match siding.
  
- .7 Nails, spikes and staples to CSA Bill-1974; galvanized for exterior work, interior highly humid areas and for treated lumber; plain finished elsewhere. Use spiral thread nails except where specified otherwise.
  
- .8 Paint:
  - .1 Exterior Door and Building Trim: 1 primer coat Exterior Latex House Paint Primer; 2 finish coats of Exterior Latex House Paint; Colour white.
  - .2 Concrete Floors: 2 coats MPI INT 3.2B Alkyd floor enamel low gloss finish.
  - .3 Interior walls and ceilings: one (1) primer coat of enamel undercoat CGSB 1-GP-38 M; two (2) finish coats of flat paint CGSB 1-GP-108 M; Colour White.
  
- .9 Asphalt Shingled Roof:
  - .1 Shingles shall be #1 quality mineral surfaced asphalt, square butt shingles, 3 in 1 type, 10.25 kg/m<sup>2</sup> to CSA Specification A-123-1. Selection of colour by Departmental Representative. Eave flashing strip shall be No. 15 asphalt saturated felt layed in two piles lapped 480 mm and cemented together, or 20 kg roll roofing.
  - .2 Self-adhered roofing underlayment, 1.0 mm thickness, 914 mm roll width, rubberized asphalt adhesive backed with layer of high density cross laminated polyethylene.
  - .3 Plastic cement shall conform to CGSB 37-GP-5.
  - .4 Nails shall be 25 mm long No. 10 corrosive resistant annular ringed with 10 mm head.

**PART 2 - PRODUCTS**  
**(CONT'D)**

**2.1 MATERIALS**  
**(Cont'd)**

- .9 (cont'd)
- .5 Staples shall not be less than 19 mm long, 16 gauge, with not less than 25 mm crown.
  - .6 Asphalt primer to CGSB 37-GP-9.
- .10 Steel Doors and Frames:
- .1 Hot dipped galvanized steel sheet: to ASTM A653M, ZF75, minimum base steel thickness in accordance with CSDMA Table 1 - Thickness for Component Parts.
    - .1 Provide doors and hardware according to the following:  
45 x 914 x 2134mm insulated, galvanized, painted steel door c/w thermally-broken painted pressed steel frame and the following hardware:

1 Mortise Lockset ML2065 NSA	630
3 Hinges TA 314 114 x 101 NRP	630
1 Threshold HC 2005 AB	Alum
1 Weatherstrip 316 AS (2 x H, 1 x W)	C28
1 Door Closer EN281PS	689
    - .2 Locks and Latches:
      - .1 Bored and preassembled locks and latches: to CAN/CGSB-69.17, 400 bored lock, grade 1, designed for function and keyed as stated in Hardware Schedule.
      - .2 Mortise locks and latches: CAN/CGSB-69.29, series 1000 mortise lock, designed for function and keyed as stated in Hardware Schedule.
      - .3 Lever handles: plain design.
      - .4 Roses: round.
      - .5 Normal strikes: box type, lip projection not beyond jamb.
      - .6 Cylinders: key into keying system as directed.
      - .7 All corresponding cylinders to be removable.
      - .8 Finished to BHMA 626.
    - .3 Butts and hinges: to CAN/CGSB-69.18, designated by letter A and numeral identifiers, followed by size and finish, listed in Hardware Schedule.
    - .4 Door bottom seal: heavy duty, door seal of extruded aluminum frame and hollow closed cell neoprene weather seal, surface mounted with drip cap closed ends, clear anodized finish.
    - .5 Thresholds: to ANSI/BHMA A 156.21 extruded aluminum mill finish, serrated surface, with lip and vinyl door seal insert.
    - .6 Weatherstripping, head and jamb seal: extruded aluminum frame and solid closed cell neoprene insert, clear anodized finish.

## **PART 2 - PRODUCTS (CONT'D)**

### **2.1 MATERIALS (Cont'd)**

- .10 (cont'd)
  - .7 Doors shall be stiffened, insulated and sound deadened with a solid slab of polyurethane core completely filling the inside of the door.
- .11 Insulation:
  - .1 Ceiling and wall insulation to be batt insulation as noted on the drawings.
  - .2 Rigid insulation, extruded polystyrene, 38mm thickness, R-value: 7.5.
- .12 Concrete to Section 03 30 00 and steel reinforcing to Section 03 32 00.
- .13 Aluminum thread plate: to CSA HA.4
- .14 Continuous Ridge Vent: minimum 285 mm wide durable, copolymer plastic ridge vent, providing minimum 357 cm<sup>2</sup>/m net free vent area, capable of accepting fiberglass-reinforced asphalt shingle cap over for shingle finish.
- .15 Through vents from eaves to be provided between all roof trusses.
- .16 Perforated vinyl soffitt.

## **PART 3 - EXECUTION**

### **3.1 WORK OF OTHER TRADES**

- .1 Examine all drawings, details and specifications to coordinate work with the work of other trades. No claim for any extra will be entertained for delays occasioned by such activities.

### **3.2 WORKMANSHIP**

- .1 Rough and finished carpentry shall be executed by workers skilled in the trade. All work shall be neatly and accurately erected, scribed and fitted to produce closed joints and connections. Only expert workmanship will be accepted and work which, in the opinion of the Departmental Representative, is not of first class quality, will be rejected and replaced at no cost to the Canada.
- .2 Install rough blocking securely to preset anchor bolts. Blocking shall be of the proper size to accurately align to adjoining surfaces to receive cant boards, frames and other items detailed on the drawings and to be installed under this section.

**PART 3 - EXECUTION**  
**(CONT'D)**

**3.2 WORKMANSHIP**  
**(Cont'd)**

- .3 Finish carpentry to receive paint or varnish finishes shall be neatly erected, joined, sanded and have all nail heads set and puttied, ready for finishing.

**3.3 EXCAVATION AND BACKFILL**

- .1 Excavate and backfill as required to provide finish grades shown.
- .2 Compact material under floor slab to 95 % proctor density.
- .3 Departmental Representative to approve all backfill and compaction prior to construction of building floor. Finished grade around the building to be graded away from building to provide positive drainage.

**3.4 CONCRETE WORK**

- .1 Do concrete work to conform to standards set forth in the Section 03 30 00.

**3.5 INSTALLATION OF PRE-FINISHED SIDING**

- .1 Install siding and accessories to manufacturer's printed instructions.
- .2 Install screen at bottom of base trim.
- .3 Install siding for natural watershed.
- .4 Install siding in straight aligned lengths, set level with plumb ends and corners.
- .5 Achieve siding joints no less than 32 inches (812mm) apart in adjoining boards and distribute evenly over wall surface.
- .6 Miter external and internal corners: Install corner strips, closures, frieze boards, skirt boards and trim.
- .7 Fasten siding securely to wood batten substrate.
- .8 Face nail 1 inch (25mm) from bottom of siding board directly into wood strapping, drive nail head just flush with siding surface; do not indent or penetrate painted coating.

**PPART 3 - EXECUTION  
(CONT'D)**

**3.6 PAINING**

- .1 Apply paint material to CGSB 85-GP series standards and in accordance with materials manufacturer's recommendations.

**3.7 ASPHALT SHINGLES**

- .1 Install shingles, self-adhered roofing underlayment, and eave flashings in accordance with manufacturer's recommendations.
- .2 Self-adhered roofing underlayment to be installed to a width of 914 mm on eaves for full perimeter of roof.

**3.8 METAL DOOR FRAME**

- .1 Install steel door frames plumb, square, level and at correct elevation. Insulate exterior frames with batt insulation. Secure anchors and connections to adjacent construction.
- .2 Install metal doors and hardware in accordance with manufacturer's instructions.