Part 1 GENERAL

1.1 Work Included

.1 Roof parapets

.2 Blocking in wall

.3 Wood furring and grounds

.4 Concealed wood blocking for support of items and equipment supported by walls

.5 Wood treatment

1.2 References

.1 CSA O80 - Wood Preservation.

.2 NLGA - Standard Grading Rules for Canadian Lumber.

.3 CSA O121 - Douglas Fir Plywood.

.4 CSA O141 - Softwood Lumber.

.5 CSA O151 - Canadian Softwood Plywood.

1.3 Quality Assurance

.1 Lumber grading agency: NLGA.

.2 Wood treatment: CSA O80.

1.4 Delivery, Storage and Handling

.1 Protect Products of this Section under waterproof coverings.

Part 2 PRODUCTS

2.1 Materials

.1 Softwood lumber: CSA O141, non-structural light grading 19% maximum moisture content.

.2 Plywood: CSA O121 - Douglas fir, CSA O151 - softwood type, CSA O325 - construction sheathing, with waterproof glue.

.3 Fasteners: Electro Hot dipped galvanized steel for exterior, high humidity, and treated wood locations; plain finish elsewhere; size and type to suit condition.

.4 Anchors: Toggle bolt type for anchorage to hollow masonry expansion shield and lag belt type for anchorage to solid masonry or concrete bolts or ballistic fasteners for anchorages to steel.

2.2 Wood Treatment

.1 Wood preservative pressure treatment: CSA O80 using waterborne preservative with 0.30% retainage, manufactured by Wolman.

Part 3 EXECUTION

3.1 Site-Applied Wood Treatment

.1 Apply preservative treatment in accordance with CSA O80 Manufacturer's instructions.

.2 Treat Site-sawn ends.

.3 Allow preservative to cure prior to erecting members.

3.2 Installation

.1 Erect wood framing members level and plumb.

.2 Space framing and furring as noted on the Drawings.

.3 Construct curb members of single pieces.

.4 Curb all roof openings except where prefabricated curbs are provided. Form corners by lapping side members alternately.

.5 Provide blocking, sized to suit, for support of surface mounted accessories and equipment.

.6 Provide wood blocking around each door frame opening.

.7 Place miscellaneous blocking, furring, strapping, canting, nailing strips, framing and sheathing where indicated on the Drawings and as required for secure support of anchorage of other specified materials. Place members true to lines and levels. Secure rigidly in place.

.8 Coordinate the installation of bucks, anchors, blocking, which is to be placed in or behind partitions. Allow such items to be installed after partition framing is complete. Ensure that allowance is made for thickness of wall finish to be applied.

.9 Place sheathing with end joints staggered. Secure sheets over firm bearing. Maintain minimum 1.5 mm and maximum 3 mm spacing between joints on walls. Place perpendicular to framing members.

END OF SECTION

Part 1 GENERAL

1.1 Work Included

.1 Truss design

.2 Prefabricated wood trusses and bridging

.3 Connections to structure, including metal hangers and hold-down brackets

1.2 Standards

.1 Perform work to CAN/CSA-O86 except where specified otherwise.

1.3 Design Criteria

.1 Design roof trusses, bracing and bridging to requirements of CAN/CSA-O86 “Engineering Design in Wood, to environmental loads for buildings. Additional bottom chord loading in accordance with 2005 National Building Code of Canada and as amended by the Manitoba Building Code.

.2 Use loads, load combinations and stress levels in accordance with the 2005 NBC of Canada.

.3 Deflection under live load only shall not exceed 1/240th of span.

1.4 Certificates

.1 Identify lumber by official grade mark containing symbol of grading agency, mill number or name, grade of lumber, species or species grouping or combination designation, rules under which graded and condition of seasoning at time of the manufacture.

1.5 Shop Drawings

.1 Submit Shop Drawings in accordance with CW1100.

.2 Shop Drawings and design briefs are to be designed by a Professional Engineer registered in the Province of Manitoba.

.3 Clearly indicate species, sizes and stress grades of lumber used as truss members. Show pitch, span, camber, member configuration and spacing of trusses. Indicate connector types, thicknesses, sizes, locations and design values. Show bearing details.

1.6 Delivery and Storage

.1 Store trusses on Site in accordance with Manufacturer's instructions. Provide bearing supports and bracing to prevent bending or overturning of trusses during transit and storage.

.2 Provide supports and braces as required to prevent overturning or out-of-plane bending of trusses during shipping, storage and erection.

Part 2 PRODUCTS

2.1 Materials

.1 Lumber to have a maximum moisture content of 15% at time of fabrication.

.2 Connector plates: galvanized sheet steel to ASTM A446-75, grade 'A', with Z600 zinc coating, with holes, plugs, teeth or prongs uniformly spaced and formed.

.3 Fastenings: to CAN/CSA-O86.

.4 All products to be new.

2.2 Fabrication

.1 Fabricate wood trusses in accordance with reviewed shop drawings.

.2 Cut truss members to accurate length, angle and size to provide tight joints on finished trusses.

.3 Assemble truss members in design configuration by securing tightly in jigs or with clamps.

.4 Provide for design camber when positioning truss members.

.5 Connect members using metal connector plates. Connector plates shall be applied under uniform pressure, using mechanical presses; manual application of plates will not be allowed unless approved in writing by the Contract Administrator.

.6 Supply for erection all pre-cut blocking, bridging and tie-down framing anchors.

Part 3 EXECUTION

3.1 Erection

.1 Hoist trusses into position and secured at designated lift points in accordance with the Manufacturer's instructions.

.2 Exercise care to keep out-of-plane bending of trusses to minimum.

.3 Install temporary horizontal and cross bracing to hold trusses plumb and in safe condition until permanent bracing is installed.

.4 Install permanent bracing, bridging and related components prior to application of loads to trusses.

.5 Tighten loose connectors.

.6 Restrict construction loads to prevent overstressing of truss members.

.7 Do not cut or remove chords or other truss members.

.8 Anchor trusses securely against wind uplift, using galvanized steel framing anchors. Toe nailing of trusses will not be acceptable for this purpose.

END OF SECTION