

Part 1 General

1.1 REFERENCES

- .1 ASTM International
 - .1 ASTM A123/A123M-08, Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
 - .2 ASTM A653/A653M-08, Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvanealed) by the Hot-Dip Process.
- .2 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB 51.34-M86, Vapour Barrier, Polyethylene Sheet for Use in Building Construction and amendment.
- .3 Canadian Standards Association (CSA)
 - .1 CSA B111-1974 (R2003), Wire Nails, Spikes and Staples.
 - .2 CAN/CSA O80 Series-08 (R2012), Wood Preservation.
 - .3 CSA O112.9-10 (R2014), Evaluation of Adhesives for Structural Wood Products (Exterior Exposure).
 - .4 CSA O121-08 (R2013), Douglas Fir Plywood.
 - .5 CSA O141-05 (R2014), Softwood Lumber.
 - .6 CSA O151-09 (R2014), Canadian Softwood Plywood.
 - .7 CSA O325-07 (R2012), Construction Sheathing.
- .4 National Lumber Grades Authority (NLGA)
 - .1 NLGA Standard Grading Rules for Canadian Lumber (2007 edition).
- .5 Underwriters Laboratories of Canada
 - .1 CAN/ULC S102-07, Standard Method of Test for Surface Burning Characteristics of Building Materials and Assemblies.

1.2 SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for wood products and accessories and include product characteristics, performance criteria, physical size, finish and limitations.
- .3 Shop Drawings:
 - .1 Submit drawings stamped and signed by professional engineer registered or licensed in Province of Manitoba.

1.3 QUALITY ASSURANCE

- .1 Lumber by grade stamp of an agency certified by Canadian Lumber Standards Accreditation Board.

- .2 Plywood, particleboard, OSB, and wood based composite panels in accordance with CSA and ANSI standards.

1.4 DELIVERY, STORAGE, AND HANDLING

- .1 Deliver, store, and handle materials in accordance with Section 01 61 00 - Common Product Requirements and with manufacturer's written instructions.
- .2 Deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Store materials off ground in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect wood from nicks, scratches, and blemishes.
 - .3 Replace defective or damaged materials with new.

Part 2 Products

2.1 FRAMING STRUCTURAL AND PANEL MATERIALS

- .1 Lumber: Softwood, S4S, moisture content 19% (S-dry) or less in accordance with following standards:
 - .1 CSA O141.
 - .2 NLGA Standard Grading Rules for Canadian Lumber.
- .2 Furring, blocking, nailing strips, strapping, grounds, rough bucks, cants, curbs, fascia backing and sleepers:
 - .1 Use S2S or S4S materials.
 - .2 Board sizes: "Standard" or better grade.
 - .3 Dimension sizes: "Standard" light framing or better grade.
 - .4 Post and timbers sizes: "Standard" or better grade.
- .3 Plywood: CSA O325.
- .4 Douglas fir plywood (DFP): CSA O121, standard construction.
- .5 Canadian softwood plywood (CSP): CSA O151, standard construction.
- .6 Preservative treated wood: To CAN/CSA O80 Series.
- .7 Fire retardant treated plywood: Pressure treated.
 - .1 Surface burning characteristics to CAN/ULC S102:
 - .1 Flame spread: Maximum 25.
 - .2 Smoke developed: Maximum 25.

2.2 ACCESSORIES

- .1 Polyethylene vapour barrier: To CAN/CGSB 51.34, Type 1, 0.15 mm (6 mil) thick.
- .2 Gasket: EPDM, with P-shaped profile; for sealing between existing stone walls and new wood stud walls. Provide in sizes appropriate for gaps to be sealed.

- .3 Sealants: In accordance with Section 07 92 00 - Joint Sealants.
- .4 General purpose adhesive: CSA O112.9.
- .5 Nails, spikes and staples: CSA B111.
- .6 Bolts: 12.5 mm diameter unless indicated otherwise, complete with nuts and washers.
- .7 Proprietary fasteners: Toggle bolts, expansion shields and lag bolts, screws and lead or inorganic fibre plugs, recommended for purpose by manufacturer.
- .8 Fasteners: Hot dipped galvanized steel to ASTM A123/A123M or ASTM A653/A653M for high humidity and treated wood locations, unfinished steel elsewhere.

Part 3 Execution

3.1 EXAMINATION

- .1 Verify conditions of substrates are acceptable for product installation in accordance with manufacturer's written instructions.
 - .1 Visually inspect substrate.
 - .2 Inform Departmental Representative of unacceptable conditions.
 - .3 Proceed with installation only after unacceptable conditions have been remedied.

3.2 FRAMING

- .1 Select exposed framing for appearance. Install lumber and panel materials so that grade-marks and other defacing marks are concealed or are removed by sanding where materials are left exposed.
- .2 Make provisions for erection loads, and for sufficient temporary bracing to maintain structure safe, plumb, and in true alignment until completion of erection and installation of permanent bracing.
- .3 Install members true to line, levels and elevations, square and plumb.
- .4 Construct continuous members from pieces of longest practical length.
- .5 Construct framing members full length without splices.
- .6 Install spanning members with "crown-edge" up.
- .7 Place miscellaneous blocking, furring, strapping, canting, nailing strips, framing and sheathing where indicated on 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 Construct double joist headers at floor and ceiling openings and under wall stud partitions that are parallel to floor joists. Frame rigidly into joists.
- .9 Use dust collectors and high quality respirator masks when cutting or sanding wood panels.

- .10 Frame, anchor, fasten, tie, and brace members to provide necessary strength and rigidity.
- .11 Countersink bolts where necessary to provide clearance for other work.

3.3 FURRING AND BLOCKING

- .1 Install furring and blocking as required to space-out and support wall and ceiling finishes, siding, electrical equipment mounting boards, door stops, bathroom accessories, fire extinguisher brackets, architectural hardware, and other work as required.
- .2 Install furring to support siding applied vertically where there is no blocking and where sheathing is not suitable for direct nailing.
 - .1 Align and plumb faces of furring and blocking to tolerance of 1:600.
- .3 Install rough bucks, nailers, and linings to rough openings as required to provide backing for frames and other work.
- .4 Install wood cants, fascia backing, nailers, curbs, and other wood supports as required and secure using galvanized steel fasteners.
- .5 Install sleepers as indicated.

3.4 SHEATHING

- .1 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.

3.5 CLEANING

- .1 Progress Cleaning: Clean in accordance with Section 01 74 11 - Cleaning.
- .2 Leave Work area clean at end of each day.
- .3 Final Cleaning: Upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.
- .4 Waste Management: Remove waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

3.6 PROTECTION

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by rough carpentry installation.

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 Architectural Woodwork Manufacturers Association of Canada (AWMAC) and Architectural Woodwork Institute (AWI)
 - .1 Architectural Woodwork Standards, 2nd edition, 2014.
- .2 ASTM International
 - .1 ASTM A123/A123M-08, Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
- .3 Canadian Standards Association (CSA)
 - .1 CSA B111-74 (R2003), Wire Nails, Spikes and Staples.
 - .2 CSA O141-05 (R2014), Softwood Lumber.
- .4 National Lumber Grades Authority (NLGA)
 - .1 Standard Grading Rules for Canadian Lumber, 2014.

1.2 SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Shop Drawings:
 - .1 Indicate details of construction, profiles, jointing, fastening and other related details.
 - .2 Indicate materials, thicknesses, finishes, and hardware.
- .3 Samples:
 - .1 Provide duplicate samples of wood materials proposed for incorporation in Work, indicating species and grade, and showing representative grain and colour.

1.3 QUALITY ASSURANCE

- .1 Lumber by grade stamp of agency certified by Canadian Lumber Standards Accreditation Board (CLSAB).

1.4 DELIVERY, STORAGE, AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and with manufacturer's written instructions.
- .2 Deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Store materials off ground, indoors, in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect wood products from nicks, scratches, and blemishes.

- .3 Replace defective or damaged materials with new.

Part 2 Products

2.1 MATERIALS

- .1 Softwood lumber: S4S, moisture content 19% or less in accordance with following standards:
 - .1 CSA O141.
 - .2 NLGA Standard Grading Rules for Canadian Lumber, Appearance grade.
 - .3 AWMAC Custom grade.
 - .4 Match grain and species of original installation for replaced or spliced wood.
- .2 Hardwood lumber: Moisture content 15% or less, and in accordance with:
 - .1 National Hardwood Lumber Association (NHLA), FAS Grade.
 - .2 AWMAC Custom grade.
 - .3 Match grain and species of original installation for replaced or spliced wood.

2.2 ACCESSORIES

- .1 Nails: To CSA B111; sinker head, stainless steel finish.
- .2 Wood screws: Stainless steel, type and size to suit application.
- .3 Adhesive and Sealants: In accordance with Section 07 92 00 - Joint Sealants.

2.3 FABRICATION

- .1 Fabricate to AWMAC Premium standards.
- .2 Shop prepare and identify components for grain matching during site erection.
- .3 When necessary to cut and fit on site, provide materials with ample allowance for cutting. Provide trim for scribing and site cutting.

Part 3 Execution

3.1 EXAMINATION

- .1 Verify conditions of substrates are acceptable for wood products.
 - .1 Visually inspect substrate.
 - .2 Inform Departmental Representative of unacceptable conditions.
 - .3 Proceed with installation only after unacceptable conditions have been remedied.

3.2 INSTALLATION

- .1 Perform finish carpentry to AWMAC Premium Standards.

- .2 Employ methods the same as exhibited in existing work.
- .3 Scribe and cut as required, fit to abutting walls, and surfaces, fit properly into recesses and to accommodate piping, columns, fixtures, outlets, or other projecting, intersecting or penetrating objects.
- .4 Form joints to conceal shrinkage.

3.3 CONSTRUCTION

- .1 Fastening:
 - .1 Position items of finished carpentry work accurately, level, plumb, true and fasten or anchor securely.
 - .2 Design and select fasteners to suit size and nature of components being joined.
 - .3 Set finishing nails to receive filler. Where screws are used to secure members, countersink screw in round smooth cut hole and plug with wood plug to match material being secured.
 - .4 Replace items of finish carpentry with damage to wood surfaces including hammer and other bruises.
- .2 Standing and running trim:
 - .1 Butt and cope internal joints of baseboards to make snug, tight joint. Cut right angle joints of casing and base with mitred joints.
 - .2 Fit backs of baseboards and casing snugly to wall surfaces to eliminate cracks at junction of base and casing with walls.
 - .3 Make joints in baseboard, where necessary using a 45° scarf type joint.
 - .4 Install door and window trim in single lengths without splicing.
- .3 Handrails, wall rails, and crown mouldings:
 - .1 Install handrails, wall rails, and crown mouldings in locations indicated.
 - .2 Make joints hair line, dowelled and glued.
 - .3 Install brackets as indicated.
 - .4 Install metal backing plates between studs at bracket locations to ensure proper support for brackets and bolts or self-tapping screws.
 - .5 Secure using counter sunk screws plugged with matching wood plugs.
- .4 Door frames and jambs:
 - .1 Shop prepare and identify components for matching during site assembly.
 - .2 Shop cut, trim, and prime/clear seal frames to the greatest extent possible.
 - .3 When necessary to cut and fit on site, provide materials with ample allowance for site cutting and scribing.

3.4 CLEANING

- .1 Progress Cleaning: Clean in accordance with Section 01 74 11 - Cleaning.
- .2 Leave Work area clean at end of each day.

- .3 Final Cleaning: Upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.
- .4 Waste Management: Remove waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

3.5 PROTECTION

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by finish carpentry installation.

END OF SECTION