

Part 1 General

1.1 REFERENCES

- .1 American National Standards Institute (ANSI)
 - .1 ANSI A208.1-[99], Particleboard.
 - .2 ANSI A208.2-[02], Medium Density Fibreboard (MDF).
 - .3 ANSI/HPVA HP-1-[2004], Standard for Hardwood and Decorative Plywood.
- .2 American Society for Testing and Materials International (ASTM)
 - .1 ASTM E1333-[96(2002)], Standard Test Method for Determining Formaldehyde Concentrations in Air and Emissions Rates from Wood Products Using a Large Chamber.
- .3 Architectural Woodwork Manufacturers Association of Canada (AWMAC) and Architectural Woodwork Institute (AWI)
 - .1 Architectural Woodwork Quality Standards Illustrated, 8th edition, Version 1.0 [2003].
- .4 Canada Green Building Council (CaGBC)
 - .1 LEED Canada-NC Version 1.0-[2004], LEED (Leadership in Energy and Environmental Design): Green Building Rating System Reference Package For New Construction and Major Renovations.
- .5 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-11.3-[M87], Hardboard.
- .6 Canadian Plywood Association (CanPly)
 - .1 The Plywood Handbook [2005].
- .7 Canadian Standards Association (CSA International)
 - .1 CSA B111-[74(R2003)], Wire Nails, Spikes and Staples.
 - .2 CAN/CSA-G164-[M92(R2003)], Hot Dip Galvanizing of Irregularly Shaped Articles.
 - .3 CSA O121-[M89(R2003)], Douglas Fir Plywood.
 - .4 CAN/CSA O141-[91(R1999)], Softwood Lumber.
 - .5 CSA O151-[04], Canadian Softwood Plywood.
 - .6 CSA O153-[M1980(R2003)], Poplar Plywood.
 - .7 CSA Z760-[94], Life Cycle Assessment.
- .8 Forest Stewardship Council (FSC)
 - .1 FSC-STD-01-001-[2004], FSC Principle and Criteria for Forest Stewardship.
- .9 National Hardwood Lumber Association (NHLA)
 - .1 Rules for the Measurement and Inspection of Hardwood and Cypress [1998].
- .10 National Lumber Grades Authority (NLGA)

- .1 Standard Grading Rules for Canadian Lumber [2005].
- .11 South Coast Air Quality Management District (SCAQMD), California State (SCAQMD)
 - .1 SCAQMD Rule 1113-[04], Architectural Coatings.
 - .2 SCAQMD Rule 1168-[05], Adhesives and Sealants Applications.
- .12 Underwriters Laboratories of Canada (ULC)
 - .1 CAN4-S104-[80(R1985)], Standard Method for Fire Tests of Door Assemblies.
 - .2 CAN4-S105-[85(R1992)], Standard Specification for Fire Door Frames, meeting the Performance Required by CAN4-S104.

1.2 SUBMITTALS

- .1 Submit Submittal submissions: in accordance with Section [01 33 00 - Submittal Procedures].
- .2 LEED Submittals: in accordance with Section [01 35 21 - LEED Requirements].
- .3 Shop Drawings Submittals: in accordance with Section [01 33 00 - Submittal Procedures].
 - .1 Indicate details of construction, profiles, jointing, fastening and other related details.
 - .2 Indicate materials, thicknesses, finishes and hardware.

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.
- .3 Separate Price: Wood materials certified by Forestry Stewardship Council, in compliance with LEED Credit MR 7.
- .4 Separate Price: Provide Forestry Stewardship Council Chain of Custody certificates for wood materials in compliance with LEED Credit MR 7.

1.4 DELIVERY, STORAGE, AND HANDLING

- .1 Deliver, handle, store and protect materials in accordance with Section [01 61 00 - Common Product Requirements].
 - .1 Protect materials against dampness during and after delivery.
 - .2 Store materials in ventilated areas, protected from extreme changes of temperature or humidity.

1.5 LEED REQUIREMENTS

- .1 See Section 01 35 21 - LEED Requirements.

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- .2 LEED Submittals: Submit LEED supporting documentation in accordance with Section 01 35 21 - LEED Requirements.
 - .3 Waste Management and Disposal: Dispose of packaging and waste materials in appropriate on-site bins for recycling and disposal in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
 - .4 Resource Reuse: Salvage and reuse existing deconstructed materials in accordance with LEED Materials and Resources Credit MR 3.1 & 3.2 – Resource Reuse.
 - .5 Recycled Content: Supply building materials with recycled materials (post consumer plus ½ post-industrial content) in accordance with LEED Materials and Resources Credits MR 4.1 & 4.2 – Recycled Content.
 - .6 Regional Materials: Supply building materials that are regionally extracted, harvested, or recovered within 800km of the project location when shipped by truck, or within 2400km of the project location when shipped by rail, in accordance with LEED Materials and Resources Credit MR 5.1 & 5.2 – Regional Materials.
 - .7 FSC Certified Wood: (Separate Price). Supply a minimum of 50% (by cost) of wood-based materials that are produced from FSC sources in accordance with LEED Materials and Resources Credit MR 7 – Certified Wood.
 - .8 Indoor Environmental Quality Credit EQ 4 – Low - Emitting Materials.
 - .1 LEED Indoor Environmental Quality Credit EQ 4.1 – Low-Emitting Materials: Adhesives and Sealants.
 - .1 Low VOC complying with SCAQMD Rule #1168, Latest edition.
 - .2 LEED Indoor Environmental Quality Credit EQ 4.2 – Low-Emitting Materials: Paints and Coatings.
 - .1 Architectural paints, coatings and primers applied to interior walls and ceilings to Green Seal Standard GS-11, latest edition.
 - .2 Anti-corrosive and anti-rust paints applied to interior ferrous metal substrates to Green Seal Standard GS-03, latest edition.
 - .3 Clear wood finishes, floor coatings, stains and shellacs applied to interior elements to SCAQMD Rule 1113, latest edition.
 - .3 LEED Indoor Environmental Quality Credit EQ 4.3 – Carpet: To meet or exceed requirements of the Carpet and Rug Institute's Green Label Indoor Air Quality Test Program.
 - .4 LEED Indoor Environmental Quality Credit EQ – 4.4 Low-Emitting Materials: Composite Wood and Laminate Adhesives.
 - .1 No added urea-formaldehyde resins.
 - .2 Adhesives for fabrication of laminated assemblies to contain no urea-formaldehyde.

Part 2 Products

2.1 WALL PANEL MATERIAL (MDF)

- .1 Medium-Density Fibreboard (MDF) panels: Arreis by SierraPine or approved equivalent in accordance with B6 Substitutes.
 - .1 Material:
 - .1 100% Post-Industrial recycled content.
 - .2 No added urea-formaldehyde.
 - .3 Binder: Urea formaldehyde-free adhesive system.
 - .2 Conformance: ANSI A208.2, industrial-grade MDF.
 - .3 Certifications:
 - .1 SCS Certified: 100% Post-industrial recycled wood fibre.
 - .2 Separate Price: Forestry Stewardship Council (FSC) certified.
 - .4 Physical Properties:
 - .1 Moisture Content: 4-6% oven-dry basis.
 - .2 Density: 769 kg/m².
 - .3 Internal Bond: 0.79 N/mm².
 - .4 Water Absorption: 8% average, 24hr soak.
 - .5 Thickness Swell: 5% average, 24hr soak.
- .2 MDF to have 6mm bevelled edges.

2.2 CEILING TRELLIS

- .1 Separate Price: Salvaging of wood for ceiling trellis and construction of ceiling trellis is to be a Separate Price #3.
- .2 Manufacture from salvaged studs and joists from deconstruction of existing building.
- .3 Assemble in accordance with Architectural drawings.
- .4 Select straight members, de-nail and plane smooth.
- .5 Shop Assemble.
- .6 Finish with varnish. Coordinate to 09 91 23 – Painting.

2.3 ACCESSORIES

- .1 Nails and staples: to CSA B111; galvanized to CAN/CSA-G164 for exterior work, interior humid areas and for treated lumber; [stainless steel] finish elsewhere.
- .2 Wood screws: type and size to suit application.

Part 3 Execution

3.1 INSTALLATION

- .1 Do finish carpentry to Quality Standards of the Architectural Woodwork Manufacturers Association of Canada (AWMAC), except where specified otherwise.
- .2 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.
- .3 Form joints to conceal shrinkage.

3.2 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. Use proprietary devices as recommended by manufacturer.
 - .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.

3.3 SCHEDULES

- .1 MDF wall panelling:
 - .1 As indicated in room schedule and drawings.

END OF SECTION