PART 1 - GENERAL

1.1 Related Sections

.1 Section 05 55 50 Miscellaneous Fabrications.

1.2 References

.1 Canadian Standards Association(CSA)
.1 CAN/CSA-O141-05 (R2014), Softwood Lumber.
.2 CSA O80 SERIES-15, Wood Preservation.

.2 National Lumber Grading Authority (NLGA)
.1 NLGA, Standard Grading Rules for Canadian Lumber 2017.

.3 American Wood Protection Association (AWPA)
.1 Book of Standards 2018.

1.3 Quality Assurance

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

1.4 Source Quality Control

.1 The Contractor shall submit, for approval to the Departmental Representative, the location of the Wood Preserving Plant at which the dimension timber is to be treated. This submission shall be within seven (7) days of award or call-up.

.2 The Contractor shall facilitate the inspection of the process by the Departmental Representative and, notwithstanding the Contractor's notice of treatment and whether or not the process is inspected by a representative of the Departmental Representative at the time and place of treatment, the Departmental Representative reserves the right to reject, at the point of delivery, any or all timber that does not meet the requirements of the specification.

.3 Ordering of material is to follow the requirements of the contract such that field cutting of treated material is essentially avoided and is used as a last resort and only if authorized by the Departmental Representative.

.4 Wood Preserving Plant shall:
.1 Follow the requirements for quality control procedures outlined in CSA-080.
.2 Carry out inspection of all treated timber to AWPA M2 and supplementary requirements as per Clause 4 of CSA-080.

.5 For all products treated with preservatives by pressure impregnation, reports shall be provided to the Departmental Representative at no cost containing all applicable information outlined in Part 7 of AWPA M2.
.1 Results of treatment of each and every charge is required.
.2 Retention analysis shall be by the assay method.
.3 When timber is pressure treated a second time, results of both treatments are required.
.4 All reports shall be:
.1 certified by an authorized officer of the treatment plant.
.2 in the format and the order presented in Part 7 of AWPA M2.
.3 in metric (S.I.) units.

.6 No treated timber shall be incorporated into the work until all results meet or exceed the requirements specified. No payment will be made for material incorporated into the work until the results are received and approved by the Departmental Representative.

PART 2 - PRODUCTS

2.1 Dimension Timber

.1 Lumber: to CSA O141, smooth sawn, S-dry moisture content 19% or less to meet requirements of Wood Preserving Plant, grade stamped in accordance with NLGA and scheduled for use as follows:
.1 Dimension Timber (stringers, fascia boards, decking, and bracing), to be No.1/No.2 grade.
.2 All dimension timber, including decking, stringers, bracing and fascia boards, will be to actual dimensions indicated on drawing.

2.2 Preservative Treatments

.1 Treat to CSA 080, commodity standard 080.1 Table 1 and 2 and its referenced standards, with the following minimum assay retention.

SPECIES	Retention CCA kg/m³	AZCA kg/m³
Dimension Timber		
(Fascia, Stringers – Table 22, Use UC5A)		
Coast Douglas Fir Western/Eastern Hemlock	24	30
(Decking, Cross-bracing – Table 10, Use UC4.1)		
Hemlock, Douglas Fir	6.4	6.4

Note: Creosote is not acceptable.

Dry the decking, stringers and bracing to max. 25% moisture content after treatment.

2.3 Accessories

.1 Wood screws: to be AISI Type 316 Stainless Steel. Gauge and length as indicated and to suit application.

.2 Stainless Steel Strap Hinges: Marine grade, heavy duty, electropolished, 18-8 alloy, 16 gauge, 150 by 38 mm open size. Supply complete with #8 by 38 long stainless steel wood screws.

.3 Peel-and-stick rubber membrane. Thermoplastic polyolefin membrane complete with pre-applied adhesive and tape.

PART 3 - EXECUTION

3.1 Installation

.1 Install wood members true to line, levels and elevations, square and plumb.

.2 Construct continuous members from pieces of longest practical length.

.3 Install spanning members with "crown-edge" up.

.4 Install and secure as indicated on plans using SS Screws and galvanized bolts, nuts, and washers as specified under Section 05 55 50, Miscellaneous Fabrications.

.5 Countersink bolts where necessary to provide clearance for other work.

.6 Holes for screws to be bored 1.5 mm smaller diameter than screw. Holes for screws to be bored to a depth 50 mm less than its length.

3.2 Field Treatment

.1 The Contractor shall adhere to the following:

.1 Handle pressure treated material in a manner that will avoid damage which may expose untreated material. Rejection of any damaged material may result and replacement will be required at the Contractor's expense.

.2 Fill all bolt holes with preservative immediately after boring. Use a pressurized container with hose to apply preservative, or some alternate method acceptable to the Departmental Representative.

.3 Fill all unused bored holes and spike or screw holes with tight fitting treated wooden plugs.

3.3 Cutting

.1 Field cuts, if authorized by the Departmental Representative, are to receive three (3) liberal coats of the applicable preservative applied to dry wood on each application.

3.4 Field Quality

.1 Timber which contains rot, splits exposing untreated wood, excessive wane, or timbers which cannot be fastened in the work so as to be structurally sound or if, in the opinion of the Departmental Representative, will not last the life of the unit, are unacceptable.

.2 The Departmental Representative reserves the right to carry out field testing of treated timber for penetration and retention of preservative. Timber not meeting the requirements of the specification may be rejected for use under the contract.

END OF SECTION