

Part 1 General

1.1 REFERENCES

- .1 Definitions:
 - .1 Shingle: tapered slice of wood sawn from block with taper in direction of grain or axial direction.
- .2 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-51.32-, Sheathing, Membrane, Breather Type
 - .2 CAN/CGSB-51.34-, Vapour Barrier, Polyethylene Sheet for Use in Building Construction
- .3 CSA International
 - .1 CSA B111-, Wire Nails, Spikes and Staples
 - .2 CSA O118.2-, Eastern White Cedar Shingles
- .4 Cedar Shake and Shingle Bureau (CSSB)
 - .1 CSSB-, Cedar Shake and Shingle Grading Rules
 - .2 CSSB New Roof Construction Manual for Roof Application Details
 - .3 CSSB Exterior and Interior Wall Manual for Sidewall Application Details

1.2 ACTION AND INFORMATIONAL 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 shingles and shakes and include product characteristics, performance criteria, physical size, finish and limitations.
 - .2 Include information on preservation and restoration of shingles.
- .3 Samples:
 - .1 Submit duplicate full size shingles, of finish and profile specified.

1.3 QUALITY ASSURANCE

- .1 Mock-ups:
 - .1 Construct mock-ups in accordance with Section 01 45 00 - Quality Control.
 - .1 Construct 1200 mm x 1200 mm mock-up where directed by Departmental Representative.
 - .2 Allow 24 hours for inspection of mock-up before proceeding with work.
 - .3 When accepted, mock-up will demonstrate minimum standard of quality required for this work.
 - .1 Approved mock-up may remain as part of finished work.

- .2 Test Reports: submit certified test reports showing compliance with specified performance characteristics and physical properties.
- .3 Certificates: submit product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements and manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Exercise care to avoid damage during unloading and storing.
 - .2 Store materials off ground indoors in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .3 Store and protect shingles and shakes from nicks, scratches, and blemishes.
 - .4 Replace defective or damaged materials with new.
 - .5 Remove only in quantities required for same day use.
- .4 Packaging Waste Management: remove for reuse in accordance with Section 01 74 21 - Construction/Demolition Waste Management

1.5 UNUSED MATERIALS

- .1 Unused shingles remain property of Owner.
- .2 Return unused shingles to Owner Retain packaging or rewrap shingles to form complete bundles.
- .3 Label packages to identify product, quantity and manufacturer/supplier.
- .4 Deliver and store in location designated by Departmental Representative.

Part 2 Products

When materials or products are prescribed by their trademark, see the Instructions to Bidders to find out the procedure concerning the request for approval of materials or substitutes.

2.1 MATERIALS

- .1 Eastern white cedar shingles: to CSA O118.2, 400 mm length, random width, square pattern, A (Extra) Grade.
 - .1 Minimum width allowed: 80 mm
 - .2 Maximum width allowed: 250mm
- .2 Self-adhesive membrane consisting of polyethylene and rubberized asphalt (1.5 mm thick).
 - .1 Acceptable products:

- .1 Grace Ice & Water Shield;
 - .2 SOPREMA Lastobond Shield;
 - .3 Bakor Blue Skin;
 - .4 Substitute materials or products: approved by addendum in accordance with the Instructions to Bidders.
- .3 Nails: Compliant with CSA Standard 0118.1; stainless steel; 2 mm thick; minimum 5-mm diameter head; of a length to penetrate underlay.
- .4 Plastic ventilation grid.
 - .1 Acceptable product:
 - .1 HYPERNET by Solmax;
 - .2 CEDAR BREATHER BY BENJAMIN OBDYKE;
 - .3 MAPLATH BY MAPEI;
 - .4 Substitute materials or products: approved by addendum in accordance with the instructions to bidders.
- .5 Waterproof Sheathing paper: to CAN/CGSB-51.32, single ply type.
 - .1 Acceptable product:
 - .6 ROOFSHIELD by Proctor
 - .7 AIROUTSHIELD ROOF by rsp
 - .8 ATTIC WRAP by dupont
 - .1 Substitute materials or products: approved by addendum in accordance with the Instructions to Bidders.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable in accordance with manufacturer's written instructions.
 - .1 Visually inspect substrate in presence of Departmental Representative.
 - .2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from Departmental Representative.

3.2 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

3.3 APPLICATION

- .1 Do wood shingle work in accordance with NBC and CSA O118.2, Appendix B, except where specified otherwise.
- .2 Install shingles over open strapping or plywood.
- .3 Space shingles from 6 to 10 mm.
- .4 Stagger joints minimum of 40 mm in succeeding courses. Ensure that in any 3 courses no two joints are in alignment.
- .5 Use two nails per shingle. Space nails 20 mm from edge and 40 mm above butt line of following course.
- .6 Drive nails flush but do not crush shingles.

3.4 WALL SIDING SHINGLES

- .1 Underlayment:
 - .1 Install over sheathing.
 - .2 Install horizontally and fasten to sheathing with staples.
- .2 Install shingles using double course method to ensure triple thickness at any given point. For double coursing set outer course 12 mm lower than under course. At external corners alternate overlap.

3.5 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.
- .3 Waste Management: separate waste materials for reuse recycling 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 wood shingles installation.

END OF SECTION