

Partie 1 General

1.1 RELATED REQUIREMENTS

- .1 The list of Work in this division is indicative but non-limiting. It does not exclude Work described in other specification divisions shown on the drawings or required for full execution of the Work as intended on the drawings.
- .2 Section 04 21 13 Brick Masonry.
- .3 Section 06 10 00 Rough Carpentry.
- .4 Section 06 10 01 Structural Carpentry.
- .5 Section 06 20 00 Finish Carpentry.
- .6 Section 06 40 00 Architectural Woodwork.
- .7 Section 07 92 00 Joint Sealants.
- .8 Section 08 11 00 Metal Doors and Frames.
- .9 Section 08 14 16 Flush Wood Doors.
- .10 Section 09 65 16 Resilient Sheet Flooring.
- .11 Section 09 68 13 Tile Carpeting.
- .12 Section 09 91 23 Interior Painting.

1.2 REFERENCES

- .1 ASTM International
 - .1 ASTM D2369-10e1, Standard Test Methods for Volatile Content of Coatings.
 - .2 ASTM D2832-2011, Standard Guide for Determining Volatile and Nonvolatile Content of Paint and Related Coatings.
- .2 Canadian Lumbermen's Association (CLA)
 - .1 CLA Grading Rules for Canadian Hardwood Strip Flooring 1997.
- .3 CSA International
 - .1 CSA O151-F09, Canadian Softwood Plywood.
 - .2 CSA O325-F07, Construction Sheathing.
- .4 Forest Stewardship Council (FSC)
 - .1 FSC-STD-01-001-2004, FSC Principle and Criteria for Forest Stewardship.
- .5 Health Canada/Workplace Hazardous Materials Information System (WHMIS)
 - .1 Material Safety Data Sheets (MSDS).
- .6 South Coast Air Quality Management District (SCAQMD), California State, Regulation XI. Source Specific Standards

- .1 SCAQMD Rule 1113-A2011, Architectural Coatings.
- .2 SCAQMD Rule 1168-A2005, Adhesives and Sealants Applications.
- .7 Sustainable Forestry Initiative (SFI)
 - .1 Norme SFI-2010-2014.

1.3 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 strip plank flooring and include product characteristics, performance criteria, physical size, finish and limitations.
 - .2 Submit 2 copies of WHMIS MSDS in accordance with Section 01 35 29.06 - Health and Safety Requirements.
- .3 Shop Drawings:
 - .1 Submit shop drawings in accordance with Section 01 33 00 - Submittal Procedures, supplemented as follows.
 - .2 Indicate placement of pattern with respect to area of work. Show cuts at edges, entrances, alcoves, change of levels, and other obstructions.
 - .3 Indicate direction, details of edges with adjacent finishes and baseboards, cuts, nails and staples, and other relevant information.
- .4 Samples:
 - .1 Submit for review and acceptance of each unit.
 - .2 Samples will be returned to Contractor for inclusion into work.
 - .3 Submit duplicate 405 mm x 405 mm long samples of finish flooring strips.
- .5 Certifications: submit product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.
- .6 Test Reports: certified test reports showing compliance with specified performance characteristics and physical properties.
- .7 Manufacturers Reports:
 - .1 Manufacturer's Field Reports: submit manufacturer's written reports within 3 days of review, verifying compliance of Work, as described in PART 3 - FIELD QUALITY CONTROL.

1.4 CLOSEOUT SUBMITTALS

- .1 Submit in accordance with Section 01 78 00 - Closeout Submittals.
- .2 Operation and Maintenance Data: submit operation and maintenance data for wood strip plank flooring for incorporation into manual.

1.5 QUALITY ASSURANCE

- .1 Certifications: product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.
- .2 Sustainable Standards Certification:
 - .1 Certified Wood: submit listing of wood products and materials used in accordance with CAN/CSA-Z809 or FSC or SFI.

1.6 MOCK-UPS

- .1 Construct mock-up in accordance with Section 01 45 00 - Quality Control.
- .2 Construct mock-up 10 m² minimum, of wood strip flooring including one inside corner and one outside corner, base and threshold.
- .3 Mock-up will be used.
 - .1 To judge quality of work, substrate preparation, operation of equipment and material application.
- .4 Locate mock-up where indicated.
- .5 Allow 24 hours minimum for inspection of mock-up before proceeding with work.
 - .1 Proceed with work only after receipt of written acceptance by Departmental Representative.
- .6 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.

1.7 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 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
 - .1 Ensure concrete, masonry, sheet rock, paint and framing members are thoroughly dry before flooring is delivered.
 - .2 Do not truck or unload flooring in rain, snow or excessively humid conditions.
- .3 Storage and Handling Requirements:
 - .1 Store materials in fully enclosed ventilated, clean and dry storage space for 72 hours minimum before starting of work.
 - .1 Remove packaging and allow 72 hours for wood to acclimatize in accordance with manufacturer's written recommendations.
 - .2 Cover flooring with tarpaulin or vinyl if atmosphere is foggy or damp.
 - .3 Leave adequate room for good air circulation around stacks of flooring.
 - .4 Divide flooring into small lots and store in spaces where it will be installed.
 - .5 Store and protect wood strip flooring from nicks, scratches, and blemishes.

- .6 Replace defective or damaged materials with new.
- .4 Packaging Waste Management: remove for reuse and return by manufacturer as specified in Construction Waste Management Plan and in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

1.8 SITE CONDITIONS

- .1 Site Requirements:
 - .1 Safety: comply with requirements of Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of materials.
- .2 Ambient Conditions:
 - .1 Ventilation:
 - .1 Provide continuously during and after installation. Run system 24 hours per day during installation; provide continuous ventilation for 7 days after completion of installation.
 - .2 Ventilate enclosed spaces in accordance with Section 01 51 00 - Temporary Utilities.
 - .2 Temperature
 - .1 Maintain ambient temperature minimum of 18 degrees C and minimum of 21 degrees C from 7 days before installation to at least 48 hours after completion of work and maintain relative humidity not higher than 40% during same period.
 - .2 Maintain minimum temperature 10 degrees C within area of installation until final acceptance of building.
 - .3 Ensure substrate is within moisture limits prescribed by flooring manufacturer.
 - .4 Maintain heat and humidity levels near occupancy levels for 5 days prior to delivery and until sanding and finishing are complete during winter months.

1.9 ACCEPTABLE PRODUCTS AND MATERIALS

- .1 Where a particular brand name is stipulated, see Instructions to Bidders for procedure for requesting approval of substitute materials and products

Partie 2 Products

2.1 MATERIALS

- .1 Sustainability Characteristics:
 - .1 Adhesives and Sealants:
 - .1 Adhesives in accordance with Section 07 92 00 - Joint Sealants.
 - .2 VOC limit 100 g/L maximum to SCAQMD Rule 1168.
 - .3 VOC limit: 5% by weight maximum.

- .2 Coating:
 - .1 Coating in accordance with manufacturer's recommendations for surface conditions.
 - .2 VOC limit 275 g/L maximum to SCAQMD Rule 1113.
 - .3 VOC limit: 150 g/L.
- .3 Wood:
 - .1 CAN/CSA-Z809 or FSC or SFI certified.
 - .2 Urea-formaldehyde free.
- .2 Hard maple parquet: finished 19 mm (3/4") thick x 83 mm (3 1/4") wide, random length, tongue and groove edges and matched ends, Pacific grade to CLA Grading Rules for Canadian Hardwood Strip Flooring. Grade stamp each bundle of flooring.
- .3 Nails: purpose designed barbed nails for power nailing, 44 mm long.
- .4 Subfloor:
 - .1 Refer to sections 06 10 00 – Rough Carpentry and 06 10 01 – Rough Carpentry – Short Form.
- .5 Mastic: type recommended by flooring material manufacturer.
- .6 Waterproofing Membrane:
 - .1 Asphalt saturated felt: to CSA A123.3, No.15 organic felt.
- .7 Baseboard: maple, model, dimensions and profile matched to historic base on site. Finger grooved assembly.
- .8 Thresholds: hard maple: finished, 19 mm (3/4") thick, same type and finish as parquet in main part.
- .9 Floor finish
 - .1 Factory applied varnish (semi-gloss 30 to 40%).
 - .2 Test for acceptable VOC emissions to ASTM D2369 and ASTM D2832.
 - .3 Wax: paste to CAN/CGSB-25.2.

Partie 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify conditions of substrates previously installed under other Sections or Contracts are acceptable for wood strip and plank flooring installation 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 PREPARATION

- .1 Check and record moisture content of both flooring and subflooring before beginning installation.
 - .1 Ensure moisture content is within acceptable limits in accordance with manufacturer's written recommendations.
- .2 Manufacturer's Instructions: comply with manufacturer's written recommendations, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.
- .3 Install No.15 felt directly below finish flooring.
- .4 Install finish flooring, as indicated, parallel to long dimension of room and at right angle to floor joists.
- .5 Machine nail fastening. Maintain tight joints and board ends. Install to manufacturer's written instructions.
- .6 Maintain 20 mm expansion space at perimeter of floor surface.
- .7 Power sand floor surface smooth and true. Vacuum clean and remove dust.
- .8 Install base continuously at floor perimeter. Secure to wall surface with screws and plugs. Ensure base does not contact floor surface and is not secured to it.
- .9 Install thresholds at openings. Attach threshold to adjacent rigid floor surface. Threshold to act as ramp between floor surfaces over expansion space.

3.3 FIELD QUALITY CONTROL

- .1 Have manufacturer of products supplied under this Section review Work involved in handling, installation, protection and cleaning of its products, and submit written reports in acceptable format to verify compliance of Work with Contract within 3 days of review.
- .2 Manufacturer's Field Services:
 - .1 Schedule site visits.
 - .1 After delivery and storage of products, and when preparatory Work, or other Work, on which the Work of this Section depends, is complete but before installation begins.
 - .1 Twice during progress of Work at 25% and 60% complete.
 - .2 Upon completion of the Work, after cleaning is carried out.

3.4 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.
 - .1 Clean flooring base surfaces to flooring manufacturer's printed instructions.

- .2 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

- .1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.

3.5 PROTECTION

- .1 Protect new floors from time of final set of adhesive until final inspection.
- .2 Prohibit traffic on floor for 48 hours after installation.
- .3 Repair damage to adjacent materials caused by wood strip plank flooring installation.

END OF SECTION