Part 1 GENERAL

1.1 GENERAL REQUIREMENTS

1. Division One - General Requirements, is a part of this Section, and shall apply as if repeated here.

1.2 REFERENCE STANDARDS

1. Standard of finished carpentry, metal work and cabinet work in accordance with the "Architectural Millwork Standards" of the Architectural Woodwork Manufacturers Association of Canada (AWMAC).

1.3 QUALIFICATIONS

1. The work of this trade shall be executed by a company having a minimum of 5 years proven first class experience in this type of work and having adequate equipment and skilled personnel.

1.4 SUBMITTALS

1. Submit Shop Drawings in electronic PDF format in accordance with GC.3.10 of CCDC Document 2 – 2020 and Section 01 33 00, Submittals.

2. Shop Drawings: Submit shop drawings of PVC Composite Decking in accordance with the General Conditions of the Contract. Clearly indicate material being supplied and show all connections, attachments, reinforcing, anchorage and location of exposed fastenings.

3. Samples: Before proceeding with work, submit 5 ½" x 1" decking for Square-Shoulder and Grooved samples in colours Boardwalk, French White Oak, American Walnut, and Castle Gate, for review as specified in Section 01 33 00, Submittals.

4. Mock-up: Before proceeding with work, submit 3-900 mm x 900 mm (36"x36") mock-ups of PVC Composite Decking for review on site demonstrating details of edging, forming and construction, concealed fastening system, and substrate wood framing of ramp/deck transition locations (top of ramps, bottom of ramps, fascia or side of ramps abutting different materials).

5. Shop Drawings: Submit shop drawings of Wall Cladding (WC-1) in accordance with the General Conditions of the Contract. Clearly indicate material being supplied and show all connections, attachments, reinforcing, anchorage and location of exposed fastenings. WC-1 is used in wall types EW4, EW5, EW6, EW7, W5, and FR10.

6. Samples: Before proceeding with work, submit 3" x 4" samples of Wall Cladding (WC-1) in manufacturers full greyscale range of colours and textures for review and final selection by Consultant, as specified in Section 01 33 00, Submittals.

7. Mock-up: Before proceeding with work, submit 3-900 mm x 900 mm (36"x36")

mock-ups of Wall Cladding (WC-1) for review on site demonstrating details of edging (miter), forming and construction, concealed fastening system, substrate framing and abutting different materials.

8. Before Shop Drawings and fabrication are started, take critical measurements at the site to facilitate installation and fitting of work.

9. Design Criteria - Applicable Standards:

    1. All standards in accordance with latest issue.

    2. Ontario Building Code

10. Clearly indicate construction details, sizes, and wood and steel sections, thickness or gauge of wood and sheet materials, connections, joints, method of anchorage, number or anchors, supports, reinforcement and accessories. Confirm all dimensions on site.

1.5 DELIVERY AND STORAGE

1. Give Painter sufficient notice so that untreated or unpainted carpentry items or materials can be primed immediately upon delivery to site.

2. No equipment shall be delivered to the site until a portion of the building in which it is to be installed is completely ready for equipment as approved by the Architect.

3. Store finished work properly and keep under cover both in transit and at site. Finish woodwork shall not be delivered to site until concrete and masonry work has dried out.

4. Cover all plastic laminate and melamine faces at shop with heavy Kraft Paper.

5. Check access clearance at site before assembling.

1.6 SAMPLES

1. Submit duplicate 12" x 12" (300 mm x 300 mm) samples of each type of panelling and each type of solid wood or plywood to receive stain or natural finish.

2. Submit duplicate 12" (300 mm) long samples of each type of moulding.

3. Submit samples of construction methods and all hardware.

1.7 WARRANTY

1. The warranty period stipulated in the General Conditions of the Contract shall be extended five (5) years in writing against defects.

1.8 MOISTURE CONTENT

1. Finish material to be dried to a uniform maximum moisture content of 12% for exterior work and 6% to 8% for interior work.

2. PRODUCTS

1. MATERIALS

1. Materials used for finish work shall be sound, free from defects that would mar finished appearance, well seasoned and air dried and of good quality for intended purposes. Wood laminates pressure bonded.

2. Plywoods: shall be rift cut or Birch / Walnut architectural grade "AA" No. 1 Face Grade and shall comply to C.S.A. 0115-M1982, with plywood core, laminated with waterproof adhesive. Plywood shall be good both sides.

3. Hardwoods - Shall be solid selected Birch / Walnut Architectural Grade 'AA'. Wood shall be selected for uniform colours and graining when at stained and varnished items. Finger jointed woods will not be accepted.

4. Framing Lumber - No. 2 or better spruce, pine or fir best mercantile lumber.

5. Penetrating Sealer - "Penetrim" by Tremco Mfg. Co. (Canada) Ltd., or "1402" by MacNaughton Brooks Ltd.

6. Painted Hardwood: American Poplar ("White Wood") "C" select grade.

7. Plastic Laminate: 1/16" (1.5 mm) thick decorative high pressure laminated plastic sheeting conforming to CAN3-A172-M1979 and all applicable requirements of O.B.C. (not limited to flame spread rating and smoke development classification.) Manufacturer shall thoroughly sand back of sheet to form a homogenous bonding surface. Plastic laminate manufacturer shall be selected by Architect from Formica, Wilsonart, Arborite or Nevamar unless otherwise indicated. Backing Sheet .020" (.5 mm) thick, sanded one side. Final colour pattern and finish to be selected by Architect from manufacturer's full range of products.

8. Painted Hardwood BASEBOARD: to meet requirements of AWMAC's STANDARDS (NAAWS) Grade specified and their intended use. 19mm x 100mm with chamfered top edge, primed and finish painted including back.

9. PVC Composite Decking (CD):

   1. 5 ½" x 1" decking by TimberTech, Landmark Collection. Texture: Crosscut Hardwoods. Colour: Boardwalk. Installed with concealed fastening system. Profile: Square-Shoulder in 16' and 20' lengths or Grooved 12', 16' and 20' lengths

10. Wall Cladding (WC-1): Fiber-C glass fiber reinforced concrete skin, large format panels 13mm thick. A minimum of two colours and textures to be chosen. Greyscale colours and textures: Off White Fero Light, Silvergrey Fero. Final selection of greyscale colours and textures by consultant based on submitted samples, and mock-ups. At exterior walls, system includes concealed fastening system, Delta Fassade S – Commercial open-joint cladding and Delta accessories (FAS Corner, Fassade Flashing,, Fassade Tape, LFS Adhesive, Tilaxx Adhesive, TW-flashing).

11. Solid Cedar Lumber: Exterior grade, structural solid cedar lumber (coordinate with structural drawings); smooth finish with ¼" pencil round edges, moisture protected (natural colour and matte finish). NOTE: warped, twisted, split, bent, loose or missing knots will not be accepted. Size and connections as indicated on drawings.

12. Cedar: Western Red Cedar or better. Select & Clear Surface Textures Grade Smooth finish. Sizes as indicated and detailed/required by shop drawings and/or structural drawings. Note: warped, twisted, loose or missing lengths in wood will not be accepted.

13. Exterior Wood Siding: V-Joint , 1" x 6" and 1" x 4" nominal dimensioned clear white pine boards, installed vertically on horizontal wood strapping (see drawings), or at ceilings and soffits on wood strapping. Primed and finish painted including back.

14. Copper Metal Flashing: 20oz copper sheet.

15. Horizontal Nominal Wood Furring Strip: 1"x 3" (25mm x 76mm) minimum strapping size at 400mm o/c or as shown on drawings and as per manufacturer's guidelines.

16. 10 mil Tyvek breathable Air/Vapour barrier.

17. Membrane Reinforced Flashing: Install Blue Skin TWF by Bakor reinforced membrane flashing over top of all metal flashings.

18. Adhesive: As recommended by manufacturer for required application and to conform to C.S.A. 0121-M1978.

19. Nails, Spikes and Staples: To C.S.A. B111-1974, plain finish nails. Use spiral thread nails and barbed staples.

20. Pressure Treated Wood: Conforming to Section 06100, sizes as indicated and detailed. **NOTE:** Warped, twisted, loose or missing knots in wood will not accepted.

21. Exposed fasteners: All exposed fasteners to be stainless steel. At exposed screw locations use stainless steel screws and cup washers.

22. Refer to drawings and details for complete list of materials to be installed.

3. EXECUTION

1. WORKMANSHIP

1. Work shall be executed by mechanics skilled in their respective trade, according to best practice, or specified herein and indicated on drawings.

2. Check job dimensions and conditions and notify the Architect in writing of unacceptable conditions. Do not proceed until remedial instructions are received. Commencement of work will imply acceptance of site conditions and re-working or modification of the work as deemed necessary by the Architect will be done at no extra cost to the Owner.

3. As far as practical, assemble work at the shop and deliver to the job ready for installation. Leave ample allowance for fitting and scribing on the job.

4. Fabricate work square and to the required lines.

5. Lay out work carefully as indicated and to accommodate work of other trades. Accurately cut and fit; erect in proper position true to dimensions. Align, level, square, plumb, adequately brace, and secure permanently in place.

6. Use treated lumber for studs, blocking nailers, furring and other wood permanently installed in building. Brush coat freshly cut ends with two coats of concentrated form of preservative.

7. Recess and conceal fasteners and anchor heads. Fill with matching wood plugs. Set nail heads and fasteners occurring within exposed interior carpentry work.

8. Provide wood members free from bruises, blemishes, mineral marks, knots, shake and other defects and select for uniform colour grain and texture. Machine and hand sand surfaces exposed in the finished work to an even, smooth surface free from defects detrimental to appearance.

9. Provide running members in the maximum lengths obtainable. Provide thickness of members in maximum dressed size of standard lumber. Where thickness of width indicated is not available in hardwoods, use glue laminations to obtain sizes required. Provide unexposed backs of veneers having the same physical characteristics as the face veneer.

10. Give painter sufficient notice so that untreated or unprimed carpentry items or materials can be primed immediately upon delivery to site. No exposed end grain of plywood shall be permitted; edging shall be solid 3/8" (10 mm) wide by thickness of plywood and of same species of wood. Finger jointed edging will not be accepted.

11. Co-operate with others engaged in work on the building to the end that proper unity of action will assure the orderly progress of the work. Do necessary boxing and protecting of sills, jambs, corners and the like. Construct scaffold, ramps, and other temporary staging necessary.

12. Chamfer edges of plastic laminate to avoid chipping.

2. WOOD DOOR INSTALLATION.

1. Fit wood doors to frame by dressing off hinge edge before applying butts. Provide 3/32" (2.5 mm) clearance at jambs and heads. Mount so as to swing easily and freely on their hinges and close accurately against the stops on the frames without binding. Latch bolts shall engage positively with the strikes or catches when the doors are slammed shut or closed with moderate force. Doors shall remain stationary in every position without independent motion.

3. WOOD DOOR HARDWARE INSTALLATION

1. Install finishing hardware supplied under Section 08700 on wood doors.

2. Installation is to be performed by a certified hardware installer.

3. Complete preparation of wood doors for all hardware including mortise type latch set.

4. At completion of the work, moving parts shall be gone over, made to work easily, smoothly and efficiently. Work carefully cleaned down and left in complete and finished condition satisfactory to Architect.

5. As per Section 08700, hardware supplier shall check all hardware for proper operation when it has been installed and shall notify the Architect of any cases where it has not been properly installed, is defective, or is not as specified.

4. TRIM

1. Work includes miscellaneous trim as required of Oak, Birch or Walnut unless indicated otherwise.

2. Trim members shall be of sizes and profiles indicated. Trim members shall be slow-fed work, free from chatter and other machine marks.

3. Install trim after it has been backprimed.

4. Members shall be full length and secured with wire nails, set and holes filled.

5. Mitre all joints.

5. WOOD DOOR FRAMES, SCREENS & TRIM

1. Work includes door frames & miscellaneous trim as required of Oak,

Birch or Walnut unless indicated otherwise.

2. Trim members shall be of sizes and profiles indicated. Trim members shall be slow-fed work, free from chatter and other machine marks.

3. Install trim after it has been back primed.

4. Members shall be full length and secured with wire nails, set and holes filled.

5. Mitre all joints.

6. PLASTIC LAMINATE SILLS

1. Construct window sills using 2 layers of plywood wood preservative treated plate and with plastic laminate on top exposed surface complete with stained and varnished hardwood Oak nosing as detailed on drawings. Install over air/vapour barrier. Supply and installation of first layer of plywood by Section 06 10 00, remaining sill by this section.

2. All wood to have wood preservative installed on all sides.

3. See drawings for details.

7. WASHROOM ACCESSORIES

1. Install all washroom accessories as supplied in Section 10 28 00.

8. HOLLOW METAL DOOR AND FINISH DOOR HARDWARE FOR HOLLOW METAL DOORS INSTALLATION

1. Install/hang all hollow metal doors. Install as specified in Section 08110.

2. Install all finish door hardware.

9. HARDWOOD BASE (VENTED)

1. Select Oak at stained and varnished areas unless indicated otherwise.

2. Secure base with stainless steel screws and cup washers with a minimum of two at minimum 16" (400mm) o.c. in anchors to Architect's approval.
3. Base to be 19mm x 100mm high with chamfered top edge except where detailed otherwise.

10. INSTALLATION

1. Deliver Finish Carpentry to the site. Provide units of such sizes as will not present difficulty of entry to the place of installation. Where units

are shipped in knock-down forms, provide clear instructions for assembly.

2. Install Finish Carpentry items plumb, square, true, rigid and secure with concealed fastening at exposed areas and with stainless steel screws and cup washers where secured inside of millwork units.

End of Section 06 20 00