**A-3 ROUGH CARPENTRY Revised: April 1, 2021**

**Contractor is to supply all labour and material to do all “rough carpentry” work, to include but not necessarily be limited to the following items. All work to be carried out in accordance with the General Conditions (Schedule “A”) of the contract, the site specifications (Schedule B of the Agreement of Purchase and Sale), drawings, and product schedule, to the satisfaction of the Builder and/or his representative, and to all codes and authorities having jurisdiction.**

**ROUGH CARPENTRY (FRAMING)**:

1. This Contractor shall install all wood framing and structural beams and posts indicated on the architectural drawings or required for a complete and operable facility. Where pre-manufactured steel posts are required, this Contractor will provide the exact site measurement to the Site Superintendent.
2. This Contractor shall either

(a): mount sill plates on a full bed of mortar Sika Grout 212 or equivalent mortar shall be given time to set before any other framing members are installed.

1. This Contractor shall install all open web joists and sub-floor level and true and make adjustments to warp age in floor and ceiling joists. All bridging, strapping, joist blocking and spacers to be installed as per the engineered drawings and as per Builder’s Specifications.
2. This Contractor is responsible for the installation, shimming and levelling of all steel structural beams and the proper securing/fastening of all structural teleposts.
3. This Contractor is to ensure the minimum end bearing of all steel beams is no less than 90mm (3-1/2"). This Contractor shall install the required packing of all beam pockets.
4. This Contractor shall ramset a full 2” X 6” plate over top of all basement steel beams and shall ensure that all joist bottoms are toe-nailed securely to this plate and are restrained from movement and twisting.
5. This Contractor shall install one row of 19mm x 89mm (1" x 4") strapping to underside of joist with bridging between joists for every distance no greater than 2100mm (6’-10”) from end bearing of joists as a minimum requirement. The engineered joist plans must be strictly adhered to.
6. This Contractor shall install all joist anchors, hangers, and stirrups as required. This Contractor shall install all washers and nuts supplied by others to fasten all sill plates to top of foundation wall.
7. This Contractor to install R5.6 Insulated OSB Panel on house wall of garage.
8. This Contractor shall inform the Site Superintendent if the material received on site is not the proper grade (SPF #1 and #2).
9. This Contractor shall supply and install a fully taped and sealed Tyvek air barrier behind all trusses backing a habitable area from underside of floor to top of double plate (including fireplace chase roof) to ensure a continuous air barrier is maintained as per Ontario Building Code.
10. This contractor shall install HEADER WRAP for each floor as per Valecraft Homes Specification details SP-2b.
11. This Contractor is responsible for following the correct joist layout and installation procedures for end bearings, use of hangers, cantilevering blocking, etc. of pre-engineering open web joists as provided by the manufacturer of the product. All joist hangers are to be installed as per the manufacturer’s specifications (i.e. glued and screwed.)
12. This Contractor shall apply all exterior sheathing to all exterior partitions including floor joist plates and headers and all corners and garage walls adjacent to habitable areas. All areas not accessible by the insulation contractor are to be insulated by this Contractor. The contractor shall install exterior sheathing to ends of all raised heal trusses.
13. This Contractor shall install double joists, headers and trimmers at all floor openings as shown on drawings.
14. This Contractor shall be responsible for following all criteria with respect to party wall framing and material requirements to ensure proper fire separation at party walls as required by the O.B.C. and approved by local authorities. These materials are to be provided by the Builder and installed by this Contractor.
15. This Contractor shall install one continuous layer of 5/8” Type ‘X’ drywall to the inside of the studs on a party wall.
16. This Contractor must ensure nailing patterns are strictly adhered to for all built-up beams. A vertical row of 3 – 3” nails installed every 12” o/c on both sides of a triple shall be considered an absolute minimum.
17. This Contractor is responsible for any reasonable amount of shimming required between truss bottom chord and strapping to ensure a straight flat ceiling. All trusses to be nailed to partitions.
18. This Contractor shall ensure that all trusses are properly braced for lateral stability and shall ensure that all truss webs in compression greater than 1825mm (6’-0”) in length are braced so as to prevent any potential kick-out of the web member.
19. Install all rafters and/or pre-engineered trusses and ceiling joists at proper spacing and secure with ridge ties and bracing between members as required. Apply all roof sheathing employing H-clips where necessary. Additional bracing around vent stacks and roof vents may be required if requested by Site Superintendent. Second floor ceilings are to be strapped with 19mm X 89mm at 400mm (16”) on centre. This includes porch preparation for soffit and brick.
20. **This Contractor shall ensure all roof returns or “Canards” are properly sheathed to allow the proper installation of flashing and shingles overtop.**
21. This Contractor shall install all interior and exterior wood partitions plumb and square and shall provide any stud straightening or additional blocking etc. as part of a framing “back up” or final check-up after all mechanical systems are passed. This includes all final preparations to be made to ensure framing inspection is passed.
22. This Contractor shall not notch, bore or cut any wood members for pipes, ducts, conduits or other reasons except as shown on the architectural drawings or as specifically approved in advance by the Site Superintendent.
23. This Contractor is responsible for the installation of all exterior doors, door frames and windows (supplied by the Builder). Installation must be level and true and must follow the manufacturer's guidelines for window and door installations including full width shimming under all window mullions. Equal spacing must be provided for the placement of loose fill insulation around the frame.

**Note:** All windows and doors are to be screwed with No.8 x 3" wood screws. **This Contractor to supply his own screws.**

 All window and doors are to be inspected for damage and reported to the Site Superintendent prior to installation.

1. **This Contractor shall apply two generous beads of exterior latex caulking (supplied by the Builder) 75mm apart across each patio door and entrance door threshold where the door sill sits directly on floor sheathing surface.**
2. Fur out all duct(s) and pipe(s) walls as required by the Site Superintendent. Install 2 X 2 wood cant strip at all angled walls to allow for adequate securing of drywall.
3. This Contractor shall install only all metal insulated doors where required. It is the responsibility of this Contractor to ensure that the swing of the door is in accordance with the working drawing. All doors must be set true and plumb with necessary screws and shims as per manufacturer's instructions and the O.B.C. regulations.

**Note**: Door Manufacturer's specifications re: application of special screws must be strictly adhered. Shims are to be placed at every door hinge and 3" brass plated screws are to be used to affix door jamb to jack and stud.

1. This Contractor shall install any required dropped ceilings, bulkheads or vertical boxes in living areas or garages to permit access of distribution services or other as specified on Plans or requested by the Superintendent.
2. All walls framed shall be adequately blocked to receive vertical siding where indicated on the architectural drawings.
3. This Contractor shall supply and install 6 mil poly damp proofing at the junction of stair stringers, underneath bottom plate on basement concrete floor, between top plates with insulated ceiling above, at junctions between interior walls and exterior walls and where any non-treated wood may come in contact with concrete.
4. In the event of any discrepancy with the plans, immediately notify the Site Superintendent and do not proceed with installation until such discrepancy is resolved.
5. This Contractor is expected to do all cutting over top of scrap wood. Allchainsaw cuts in aspenite sub-flooring and roof sheeting shall be repaired by this Contractor at his own expense before the signing of the Final Completion Slip.
6. This Contractor is responsible for the cutting and repair of the access hole cut in subfloor for the pouring of the concrete basement floor before the time of pouring.

1. This Contractor shall install and maintain all required safety barricades, ladders, ramps and railings and temporary construction stairs, during framing stage 38 X 89 mm guard rails around all stair openings, and that all deck openings are covered up and secured prior to leaving the job every evening. All barricades/guardrails and ramps where applicable must be installed immediately following deck installation.
2. This Contractor shall supply all required nails to be coated and not common. Nail sizing and applications shall be to Ontario Building Code standards.
3. This Contractor shall install the “Valecraft” pre-manufactured attic hatch in the location designated on the drawings. If site conditions do not permit the installation of the attic hatch as per the drawing, then the location shall be determined with the Site Supervisor. The attic hatch must be fully weather-stripped around the perimeter and caulked at any gaps evident between the pine frame and the hatch framing material to ensure a proper seal as per the Ontario Building Code.

**Note**: Do not remove attic door during installation to ensure that same does not go missing from the unit.

1. All extras are to be authorized by the Site Superintendent and must be accompanied with a change order within eight (8) hours of completion of the day.
2. All gable ends are to be completely sheathed with air barrier to receive exterior cladding.
3. This Contractor shall ensure that all nails penetrate directly into framing members to avoid future squeaks.
4. This Contractor shall supply and install nails, screws, roof H-clips, and install building paper supplied by the Builder where required.
5. This Contractor shall remove all framing braces from the home to an area designated by the Site Superintendent.
6. This Contractor shall ensure that all men working are following Valecraft Homes Safety Program and Procedures and current Occupational Health and Safety Act & Regulation for construction projects.
7. This Contractor shall be responsible for the removal of all construction debris as generated by his operations daily to ensure a safe and orderly working environment for himself and others. A rough sweep shall be required to remove all cuttings and debris from the home into a disposal container supplied by the Builder. This Contractor shall ensure that a thorough cleaning is completed every Friday afternoon.
8. It is the responsibility of this Contractor to complete an inspection of all sub-floors after the backing is completed to ensure they are properly secured. Any holes in the sub-floors are to be repaired at this time in accordance with Valecraft Homes Specification Detail SP-16.
9. This Contractor is responsible to complete a thorough frame check after backing and before wiring to ensure compliance with the architectural drawing and any changes provided.
10. This Contractor is responsible for ensuring that all installations and materials comply with the Ontario Building Code and shall further warrant all workmanship for a period of one year following occupancy. This Contractor shall make good on all repairs which do not comply with Tarion’s Minimum Requirements for Construction. This includes repairs to floor squeaks due to the improper installation of joist hangers.
11. This Contractor is responsible to install one second floor window ‘reversed’ temporarily at the direction of the Site Supervisor. After the drywall board has been loaded, this Contractor shall install this window ‘permanently’ when instructed to do so by the Site Supervisor.
12. This Contractor shall construct Tub Decks with ½” plywood and all saw cuts of the plywood are to be made with a skill saw.
13. This Contractor shall install strapping for the first-floor ceiling and second floor ceiling.
14. This Contractor is responsible to ensure that party wall 2” x 4” sill plates have full bearing onto foundation walls.
15. This Contractor shall install lumber lock glue adhesive (or equivalent) between the top of all floors joists and the underside of the aspenite subfloor throughout each floor framing platform.
16. This Contractor shall install OSB or plywood over all 2” x 6” load bearing end studs at archway openings to prevent drywall splitting as a result of stud shrinkage.
17. This Contractor shall install cant strip (45 degree) at end angled fireplace walls in order to provide solid backing this preventing drywall tap separation.
18. This contractor shall coordinate with the site super and understands that some works from other trades regarding fire coding may be required during the rough framing works and may require some scheduling flexibility.
19. This contractor shall coordinate with the site super the dropped ceilings that are required for mechanical and Fire Blocking (as per plan.)
20. This contractor shall install a double rim joist for the exterior decks for connection.
21. This contractor shall install R5 Insulated panel sheathing supplied by others on exterior walls **where required for** Energy Star homes.
22. This contractor shall replace at their own expense lumber engineered floor joists and/or beams that have been cut incorrectly on site.