

SCOPE OF WORK (SCHEDULE – A)
Plumbing

Supply all labour, material, equipment, permits, and pay taxes and fees necessary to complete this scope of work, as per Project plans, specifications, in the accordance with the requirements of the National & Ontario Building Codes, Tarion and all other authorities having jurisdiction. Work to be completed as and when required by the Site Manager and include, but not limited to the following:

It is the sole responsibility of the Subcontractor to check with the Contractor’s Site Manager prior to starting any house to verify the Contractor’s exterior colour designations and check instructions regarding structural changes, upgrades and colours. The Subcontractor accepts responsibility for any errors by not doing so.

NOTE: THIS SCOPE OF WORK SHALL NOT BE MARKED UP, MODIFIED, AND/OR CHANGED IN ANY WAY. CROSSING ITEMS OUT OR ADDING ITEMS IN SHALL AUTOMATICALLY DISQUALIFY YOUR PROPOSAL FROM CONSIDERATION.

SECTION A: MOBILIZATION

- 1) All costs associated with mobilization, transportation, machinery floats, etc..., are included in the contract price.
- 2) If long term storage is required onsite the sub-contractor shall work with the site supervisor to ensure materials / items being stored are done in such a manner that does not interfere with the Contractor's activities on site.
- 3) All rented items required to complete the work outlined herein is included in the contract price.
- 4) All ladders, planks, walkways, scaffolding, lifting equipment, as well as all tools, hardware, tackle and materials required to complete the scope of work contained herein is included in the contract price.
- 5) This Sub-Contractor must visit the site prior to commencing work. Any site conditions that could potentially effect, or hinder the progress or quality of this Sub-Contractor's work as per the Drawings, Directions, Site Instructions, or Governing Building Codes and Construction Standards must be reported to the Contractor in writing. If work commences and no such issues are raised by the Sub-Contractor, then it will be mutually agreed that the Subcontractor has accepted the site conditions “As-Is”.
- 6) All work to be completed as per Contractor’s schedules, and as instructed by the Contractor.

SECTION B - MATERIAL / EQUIPMENT & HANDLING

- 1) The Sub-Contractor will provide, care for, and manage all materials and equipment required to perform their scope of work in its entirety. This includes: Ensuring that equipment is in good working order, materials necessary to complete their work as per the Contractor’s schedule is delivered and available on time, safe guarding against theft, vandalism and damages, and that operators/drivers of equipment requiring specific licenses are properly trained and licensed to do so.
- 2) The Sub-Contractor shall be responsible for all material handling including but not limited to: Loading, Unloading, Delivery Coordination, Quality Control Measures, Hoisting, etc...
- 3) All materials are to be used as they are delivered. On-site storage and Stockpiling are not permitted. As such any Issues which may arise as a result of site logistics, weather, theft, or any damage to stored or stockpiled materials shall be the sole responsibility of the Sub-Contractor.
- 4) The Sub-Contractor shall ensure that all material deliveries are carried out without obstructing the flow of traffic through the job site. Roads must remain accessible, and clean to all parties working/visiting the job site at all times. In the event that this is not possible, and the Sub-Contractor is required to obstruct the road to receive any of their deliveries, the Site Superintendent must be notified prior to the delivery taking place. Failure to notify the Site Superintendent of any potential road obstructions could result in the denial of service where the Sub-Contractor may be instructed to cease delivery operations immediately.
- 5) All materials and equipment brought to the job site by this Sub-Contractor shall be insured by the Sub-Contractor.
- 6) All equipment brought to the job site by this Sub-Contractor must have all required documentation with it and available upon request. Including: Ownership, Insurance, maintenance logs, operator information and license, etc...
- 7) All waste, garbage, and debris generated buy this Sub-Contractor's work / activities shall be disposed off by the Subcontractor in the areas designated by the Site Supervisor. This shall be the sole responsibility of the Subcontractor. Any clean up, or debris removal work that must be completed by the Contractor on behalf of the Subcontractor shall be backcharged accordingly.

- 8) It is the Subcontractor's responsibility to ensure that all products supplied be installed precisely per the manufacturer's specifications and requirements and suggestions. Any variance from these requirements should be discussed with the Builder before any installation. Any costs which arise due to Subcontractor's negligence of the above aforementioned shall be solely his responsibility. **THE SUBCONTRACTOR MUST ENSURE TOTAL KNOWLEDGE OF THE PRODUCTS BEING USED**

SECTION C - WINTER PROTECTION (SEASONAL ITEMS)

- 1) All winter heat shall be supplied by this Sub-Contractor (if required). Should the Contractor at his own expense agree to Supply winter heat (propane/heaters) to the Sub-Contractor, the Sub-Contractor is required to maintain a log book of all propane bottles used by the Sub-Contractor for submission to the Contractor upon request.
- 2) Tarping, covers, etc.. shall be the responsibility of the Sub-Contractor and included in the contract price, where and when required unless otherwise agreed in writing by the Contractor. Should the Contractor agree to provide tarping, covers, etc to the Sub-Contractor the Sub-Contractor must coordinate all installs and dismantling/removal.
- 3) Weather conditions do not constitute a reason for delays in work. It is expected that in the event of "lost days" due to weather conditions, that the Sub-Contractor will make a valid and verifiable effort to ensure that the Contractor's schedules are not compromised by way of Weekend Work (when permitted), Overtime, and/or introducing additional labour/crews to "catch up" and make up for any lost days.

SECTION D - GENERAL CONDITIONS AND WARRANTY

- 1) **ABSOLUTELY** no additional work is to be performed for potential, homebuyers without express written approval from Contractor's main office. The Subcontractor clearly understands and agrees that none of the Subcontractor's forces, directly employed or contracted, including suppliers, shall deal with the Project's Purchaser's regarding any business activity. Any requests of additional work or modifications made by a purchaser directly to the subcontractor shall be reported immediately to the contractor's head office and dealt with through the Contractor. The Subcontractor further understands and agrees that should the Subcontractor's forces engage directly with a purchaser, the Subcontractor will be terminated and be responsible and reimburse the Contractor for all monies lost by the Contractor as a result of such direct activity, as calculated by the Contractor.
- 2) Work is to proceed in accordance with work schedules as provided by the Contractor.
- 3) It is agreed by both parties of this contract that the terms and conditions of the Tarion New Home Warranty Program shall be included and form part of this contract. As such, this Subcontractor agrees to make themselves familiar with the quality standards required of him under this program especially the Tarion Performance Guidelines.
- 4) All work must conform and be carried out in accordance with the Ontario Building Code, Local By-Laws, Tarion, CMHC, and as per all Plans, Drawings, Diagrams, Instructions, and Specifications provided.
- 5) All work is to be carried out in accordance with the Contractor's schedules. No exceptions.
- 6) All workmanship and Materials shall be warranted for a period no less than 2 (Two) years from the date that the home is occupied by the Contractor's client NOT date that the work was completed. The Tarion Warranty Corporation shall govern. Any items/deficiencies deemed Warrantable either the Contractor and/or the Tarion Warranty Corporation shall be the responsibility of this Sub-Contractor to correct.
- 7) All shop drawings associated with this Sub-Contractor's work must be submitted to head office prior to commencing work.
- 8) The Contractor reserves the right to inspect all vehicles (at his own discretion) entering or leaving the job site.
- 9) All Sub-Contractors must sign in and out at the Contractor's construction office prior to commencing any work or before vacating the job site.
- 10) Site parking will be controlled by the Site Superintendant. Parking of personal shall only be permitted in designated areas. Any damages caused to personal[y] owned vehicles or equipment shall not be the sole responsibility of the Sub-Contractor.
- 11) It is understood that all Completion Slip numbers will be issued by the site construction office once a week and picked up at the site office on the Contractor's designated day only. Subcontractor must submit to the site office a written request for completion slips one week prior to the Contractors issuance. Written request is to indicate the lots or items completed and declare that the work is 100% complete according to the contract. The request must be signed by the Subcontractor's foreman. Completion slips will not be faxed to the Subcontractor. (For "Supply Only"

contracts, site administrator will issue completion slip numbers to the supplier's office upon verification of the goods delivered.)

SECTION E - MATERIALS, INSTALLATION AND PERFORMANCE STANDARDS

- 1) Subcontractor shall assign a Master Plumber foreman to be on site at all times during the subcontractor's work.
- 2) Subcontractor agrees and acknowledges that all work undertaken on this project shall conform to the specifications, brochures and displays at the Sales Office and/or Model Homes.
- 3) All sanitary drainage and vent systems will be done in A.B.S. plastic.
- 4) All 90 degree footing elbows for stack connections shall be supplied by Subcontractor to Site Manager.
- 5) Water service from property valve to inside water meter including corporation coupling for connection as per applicable codes and municipal standards (minimum 3/4"). ***Piping this project to be Min. 200 psi exterior IPEX complete with complete with all check valves, floor supports and other accessories as required.*** Extended service included in price. Site may be pre-serviced prior to basement excavation. Water meter installation included. Installation of the meter, including the piping that is part of the meter installation and the valving arrangement shall be in accordance with the "Water Purveyors" requirements. Water meter to be installed per Region of Peel Standard DWG. # 1-4-7 current update. Install water meter in an accessible and suitable location as directed by Site Manager. (water meter supplied by the Region).
- 6) Domestic hot and cold potable water lines, service connections and connections to all fixtures, faucets and equipment to be "Vanguard Pex" system. Provide any air knock chambers as required. All homes to receive 3/4" water risers from water meter to hot water tank. All supply water lines to be 3/4" diameter in basement and all risers. All PEX branches off the risers to use 1/2" PEX pipe or as required by Code as stipulated in Table A-7.6.3.1. All connections, fittings and tools used to be as per Vanguard specifications.
- 7) Each Kitchen and all bathroom sink to receive Hot and cold water shut-off valves.
- 8) Temporary shut off valve to be supplied and installed near meter for temporary use of water by other trades. Removal of temporary shut off valve at finishing stage as per instructions from Site Manager.
- 9) Should the Contract decide to build Semi-Detached Dwellings, the Water supply, drainage and vent systems shall NOT penetrate Semi Detached Party walls.
- 10) Supply and Install anti-scald mixing valve at the outlet of the water heater to lower temperature.
- 11) Supply and install MUSTEE 10 Utilatub, with CNC #22-200 Chrome faucet installed into laundry base cabinet. Supply and install hot and cold washer tap and separate stand pipe for automatic washing machine connections.
- 12) Two hose bibs for lawn service; one to be located in garage of each unit and one at rear, equipped with back-flow preventers. Where garage is detached from house, bibs to be installed at the side, close to the front and at the back of house. For "Walk out deck", Look-out basement" and "Walk-out basement" conditions, the location of the rear hose bib is to be confirmed by Site Manager prior to installation. Masonry weep holes shall not be used as pass through for exterior hose bibs. Drill brick as required above the flashing brick course.
- 13) All exterior hose bibs to have shut off valves inside house. Shut off and drain valves to be installed for easy access by hand. Installed on a slight angle to ensure all excess water drains out of the hose bib unit through the drain valve.
- 14) Locate and connect hot water tank (power vent 60 gallon, supplied by others) as per plans. Ensure tank is accessible for service from all sides. Hot water tanks and other work supplied by other trades to be protected before soldering any copper fittings.
- 15) Arrange for all inspections, testing, and approvals as part of this contract. Cap system. All homes to be pressure tested after drywall installed, but prior to taping. Ensure home is heated prior to leaving water on during winter months. Minimum 150 lb air test on all water lines.
- 16) All roof vent flashings are to be included and installed before roof shingles. All roof vents shall be installed at rear and side portions of roof only. No vents to be at front elevation of house. Flashings for air vents included.
- 17) Should the dwelling require sump pumps, the Sub-Contractor shall supply and install all sump pumps as per the required specs. and/or instructions of the Contractor. (Sump Pits Provided By Others).

- 18) All plumbing and drainage pipes to be securely fastened and supported using approved clips and clamps, including pipe wrap at clip or hanger strap locations. Subcontractor to prevent the water pipes from rattling.
- 19) All pipes to be protected as required (i.e. metal plates from possible damage caused by nails or screws.)
- 20) Use of 90 degree elbows on water lines to be minimized wherever possible.
- 21) All exposed water piping (water supply lines and drains) in finished areas, including pedestal sink drains and toilet water supply, to be chromed including flanges.
- 22) Kitchen sink to have dishwasher rough-in including capped “y” connection for waste and hot and cold-water line connections for future dishwasher hook up.
- 23) Water lines and drains are not to be installed in exterior wall cavities (except exterior hose bibs). Plumbing pipes where less than 300 mm away from exterior faces, (floors, walls and foundation walls) shall be fully insulated with approved insulated pipe wrapping. In the event that frozen pipes result as a violation to the clause, subcontractor is solely responsible for repair and rectification of error.
- 24) Insulate stacks if required to meet local authority’s requirement.
- 25) Install temporary nipple at shower butterfly. Nipple to extend past the drywall and ceramic. Replace with permanent fixture at finishing stage.
- 26) All lavatory faucets to be “RIZON” Single Lever Builder package, tub & shower faucet and shower head included. Contractor to arrange supply of MOEN “ALIGN” Chrome Single lever pull down kitchen faucet and MOEN chrome single lever lavatory faucet with MOEN for this project. Install Pressure Balance Tub & Shower multi-Choice Rough in all showers and tub.
- 27) Supply and install double BLANCO HORIZON 2.0 model #401022 (undermount) stainless steel sink in kitchen.
- 28) Supply and install master ensuite bathrooms acrylic oversized drop in soaker tubs, oval or corner as per plan. Colour of tubs to exactly match china fixtures. All oversized tubs to be additionally supported at the bottom with mortar or expandable foam as approved by the Site Manager.
- 29) In Master Ensuite where freestanding tubs are illustrated on architectural plans, supply and install 5’ MIROLIN CARI CF2006 freestanding Soaker tubs with MOEN ‘RIZON’ #4798/T935 3 piece Roman tub faucet with Presto pop-up drain.
- 30) All main, second bedroom ensuite and twin bathroom bathtubs to be 5’ Mirolin Phoenix Acrylic Tub.
- 31) Supply and install floor drain and rubber membrane liner for ensuite shower enclosures (various sizes as per plans). Liner to be one piece continuous and terminate minimum 8” up tiled wall. Liner to wrap around and return over tiled threshold base for glass shower enclosures.
- 32) All wastes to be mechanical pop-up type (washerless). “Tip toe” drain on all tubs standard.
- 33) Toilets to have water saving device. Low flush water closet toilets standard.
- 34) Supply and install bath tub curtain rods approved by Contractor.
- 35) All acrylic fixtures shall be protected with a layer of plastic sheet and also cardboard covering all finished parts of acrylic.
- 36) No tubs to be installed unless properly insulated behind.
- 37) For any second floor Laundry rooms, supply and install floor drain standard to contract.
- 38) Roof drain system standard for applicable house models with 2nd floor exterior balconies. Zurun Industries Limited Product Number ZB-185 Dura coated cast iron roof drain complete with bronze dome, clamp collar and threaded connection installed at lowest point of deck, flush with deck and incorporating roof membrane per approved manufacturer’s specifications to achieve complete waterproofing. Drain pipes to be connected to storm system as per plans and specifications.
- 39) Provide 3 piece rough-in washroom in basement complete - tub, toilet and sink floor drains, capped hot and cold water lines, and venting, location as per plan.

- 40) Kitchen layouts prepared by Contractor's kitchen cabinet supplier to be used for locating all kitchen and bathroom plumbing work.
- 41) Holes in subfloor for drains shall be minimal in size and cut clean with a drill or saw. Subcontractor will be backcharged for any repair to floor due to excessive or rough openings.
- 42) Install wood blocking for pedestal sinks if applicable.
- 43) Subcontractor to prepare a schematic of water pipe, drain and venting pipe locations for approval by Site Manager for each model type prior to commencement.
- 44) Subcontractor to co-ordinate with Site Manager to properly mark and ensure the exact location of stacks in the lower level of each home.
- 45) Every plumbing crew must be equipped with a fire extinguisher.
- 46) Subcontractor shall respect other trades work. Replace others work to proper order if temporarily moved. (Vapour barrier, insulation, bridging, kitchen waste receptacles etc...)
- 47) All required shop drawings for fixtures, materials and assemblies used on site shall be submitted to the Builder in book format prior to commencement (two copies).
- 48) All operating manuals, service instructions and warranties for fixtures to be packaged, labelled by lot number and submitted to Site office.
- 49) The Subcontractor is responsible for all inspection arrangements, approvals, plumbing permits, inspection fees, and required layouts.
- 50) It is the Subcontractor's responsibility to ensure that all products supplied including acrylic products be installed precisely per the manufacturer's specifications and requirements and suggestions. Any variance from these requirements should be discussed with the Builder before any installation. Any costs which arise due to Subcontractor's negligence of the above aforementioned shall be solely his responsibility. **THE SUBCONTRACTOR MUST ENSURE TOTAL KNOWLEDGE OF THE PRODUCTS BEING USED.**
- 51) A list of all proposed standard plumbing fixtures must be attached to bid/proposal.
- 52) Standard and upgrade fixtures shall not be substituted without written approval of the Builder. Approved substitutions shall be of higher quality at no extra cost.
- 53) Full two year warranty (parts and labour) commencing from date of closing on all workmanship and fixtures.
- 54) Any infraction noted on the Pre Delivery Inspection Report (PDI. Report) shall be completed to our satisfaction within five (5) days of the PDI. Report.
- 55) This Contractor agrees to make available a 24 Home Emergency Service.
- 56) The Subcontractor is to supply enough labour, equipment, and material as required for the Contractor's closing schedule.
- 57) The Contractor will apply additional 10% discount to Model homes

SECTION F – SITE RULES AND REGULATIONS:

This Subcontractor agrees with, and shall comply with the following "Project Rules". Non-compliance shall result in remedies allowed by the Contractor under this contract. "Rules" included but not limited to, are as follows:

- 1) Cross concrete at designated ramps only.
- 2) Access Roads to the Project site shall not be obstructed in any way, and, at all times roads shall be clear to allow fire trucks to enter the site and access all fire hydrants.
- 3) No storage of building materials on the access roads.
- 4) No parking on driveways or graded yards.
- 5) No pets are allowed on the project at any time.
- 6) The consumption of illegal substances or alcohol will not be tolerated and is cause for immediate termination.
- 7) All trash must be placed in bins provided.
- 8) Do not set tools, materials, trash etc. on countertops, vinyl or ceramic areas.
- 9) Portable toilet facilities are provided for your convenience, use of facilities in house is prohibited.
- 10) Absolutely No Smoking permitted in houses.

- 11) No eating or drinking in homes after drywall.
- 12) Once floor surfaces have been finished with carpet, linoleum, vinyl or hardwood, outdoor footwear shall not be worn in the home.
- 13) Overnight camping out at the Home and adjacent lands is prohibited.
- 14) Loud or excessive noise from a radio or any other electronic device and profanity are prohibited.

SECTION G – SAFETY:

- 1) The Subcontractor shall at all times ensure that the health and safety of their staff and crews are paramount. As such the Subcontractor must ensure that any necessary safety training (i.e. Fall Protection, Propane Safety, etc...) required by their staff is up to date and any documentation associated with any such training is on site while their workers are present.
- 2) Prior to commencing work the Subcontractor must provide to the Contractor a copy of their Health and Safety Book which must be kept on site at all times in the Contractors construction office. If the Subcontractor does not provide a copy of their Health and Safety Book to the Contractor as required under this contract, the Contractor may chose to terminate or suspend the Subcontractor and/or withhold payment until such time as the Subcontractor furnishes the Contractor with their Health and Safety Book.
- 3) The Subcontractor shall be required regular safety meetings (at the Contractors discretion) on site, as requested by the Contractor.
- 4) All Subcontractors working with **“Hot Work Operations”** shall ensure that;
 - i) **Combustible Material:** All portable combustible material must be removed a minimum of 20 feet away from the working area and adjoining areas.
 - ii) **Flammable Liquids or Vapours:** Drums, tanks or other containers or explosive liquids or vapours must be cleaned and cleared of flammable or explosive liquids or vapours before work is done on them.
 - iii) **Pre-Operation Precautions:** When feasible, work area should be wetted down.
 - iv) **Spark Control:** Sheet metal guards, asbestos blankets and similar protection must be provided to prevent hot metal and sparks from falling on combustible material which cannot be moved.
 - v) **Fire Protection:** If the areas in which hot work operations are being performed are presently under operative sprinkler protection, the sprinklers in that area must be operative during welding or cutting operations. Suitable fire extinguishers or hand hose must be maintained near the operations, an extra person must be provided in the welding or cutting team whose sole responsibility is to watch for sparks and promptly use the extinguishing equipment.
 - vi) **Post-Operation Precautions:** After work, a thorough check must be made for smoldering fire in out-of-the-way places, and guard patrol protection must be maintained for a minimum of four hours.
 - vii) **Other:** During the course of construction, where a propane gas heater or other open flame heating device is used; the device will be positioned on fire resistive dry wall board, tied off to a wall or floor with not less than three (3) feet of clear space surrounding it.
- 5) **“Hot Work Operations”** shall be defined as follows:
 - i) The process whereby one or more of the parts to be joined is heated near or above its melting point and the heated surfaces are caused to flow together.
 - ii) The process of applying heat to red heat the spot to be severed, gouged or pieced, and the metal is burned in a jet of oxygen.
 - iii) Grinding operations that generates sparks.
 - iv) Torch-on roofing operations.
 - v) Roof tarring operations.

SECTION H – SERVICE REQUIREMENTS:

The Subcontractor agrees to comply fully with the Contractor’s pre-delivery inspection notification process as follows:

- 1) The pre-delivery inspection by the homeowner will be conducted approximately two (2) weeks prior to occupancy of the unit.
- 2) The Contractor will provide written notification to the Subcontractor of any deficiencies noted in the pre-delivery inspection, which are the Subcontractor’s responsibility to repair. Such notification shall be provided by the Contractor in accordance with Article Seven of the Agreement; and.

- 3) The Subcontractor agrees to respond to the Contractor within 24 hours of receipt of such notice and agrees to rectify any and all deficiencies forthwith and in any event prior to occupancy of the unit, failing which the Contractor may, at the Subcontractor's expense, attend to such rectification (either itself or through another Subcontractor). All expenses of such rectification together with an administrative charge of \$150.00 shall be deducted from any monies owing to the Subcontractor.
- 4) Should approval be granted by the Contractor allowing the Subcontractor to rectify such deficiencies after occupancy by the Contractor's Purchaser, it is the Subcontractors' sole responsibility to contact the purchaser and schedule appointments to rectify such deficiencies. Further, the Subcontractor shall be responsible to have the Contractor's service completion forms signed by the purchaser indicating the purchaser's acceptance of the work. Should the Subcontractor fail to honour or attend appointments made with the purchaser, the Contractor shall immediately remedy the matter and proceed as described in paragraph (c).