# Specifications and Scope of Work

CAVANAGH

## **Concrete Form Work**

The Contractor shall provide all materials, tools and labour to do a complete concrete job including, but not limited to, the following:

1. The Contractor shall form and pour footings as per the Owner’s drawings (20 MPA concrete, max.100 mm. slump). Standard strip footing size shall be **20” x 6” or 24” x 6” or 24 x 8”** per plans and working drawings. Underside of step footings shall be poured at a 45-degree angle.
2. The Contractor shall form and pour foundation walls as per the Owner’s drawings (20 MPA concrete, max.100 m.m. slump). The Contractor shall pour the top of the foundation walls straight and level throughout. A tolerance of **1/4”** level shall be acceptable. The Contractor shall be responsible for any leveling of the top of the foundation beyond the allowable **1/4”**. The Contractor shall be responsible for any additional framing costs incurred by the Owner due to top of foundations being off-level by more than **1/2**”. Contractor to ensure any cuts to concrete are straight and level to a tolerance of  **1/4”. Contractor to ensure that all beam pockets require no more than 1” of steel shims. Contractor to grout all beam pockets and clean off all concrete spatter on service pipes, electrical conduits.**
3. Contractor to pour all walls and flatwork in one continuous pour and ensure there is no ‘honeycomb’ in the pour. Any honeycomb shall be repaired and patched at Contractors expense. Owner can decide if engineer stamp required at the Contractors expense.
4. Supply and install a code approved waterproof drainage membrane where required and as per manufacturers’ instructions. All form ties shall be removed at least flush with the concrete surface and sealed to prevent moisture penetration and corrosion. The Contractor shall be responsible for all cost associated with repairs resulting from any leakage through the form tie rod holes.
5. The Contractor Shall supply and install **2-15M** continuous steel reinforcement rods with 10% overlap on the top of the foundation wall, on the bottom of all linear foundation walls and 2 bars over services running under the footing. Contractor to ask about possible rebar inspection prior to pour per Site Superintendent instructions.
6. The Contractor shall supply and install a Foundation footing Drainage Tile along the perimeter of the footings and shall be covered on the top and sides by not less than 6” of clear crushed stone. The drainage tile shall be installed to allow connection to the storm sewer system. Supply and install vertical weeping tile at basement windows. This tile shall be properly braced and connected to the weeping tile placed around the footing. Ensure tile will stay in place during backfill operations to ensure proper drainage of the window wells.
7. Supply and install anchor bolts, as per the Ontario Building Code, in location required to properly anchor plates.
8. Install windows supplied by builder and installed by Contractor level and square per working drawings.
9. Form and pour **32 MPa** concrete (max. 75 m.m. slump), c/w 5-8% air entrainment, minimum **5"** thick porch slab and 6” at the face of the porch. Contractor to supply and install 10 mm rebar tied at 16” O/C.
10. Contractor to follow house plot plans to determine the number of risers to build into the front porch. Some inset/checked in steps may be required per plan and grading issues.
11. Supply and install approximately **6-8”** clear crushed stone under basement floor slab as per Ontario Building Code and the Owner’s drawings.
12. Supply all material and labour to pour and trowel finish basement floor slab **minimum** **3"** thick with **25 MPa** concrete floor over an approved vapor barrier and to be properly sloped to meet floor drains and toweled smooth free of defects. Contractor to install bond break flush and straight complete with vapor barrier and acoustically sealed to foundation wall ready for city inspection. Contractor to cover rough ins by other trades to avoid spatter on ABS city services and PVC pipes.
13. Supply and install minimum **8"** crushed stone under the garage floor slab and install a bond break flush and straight with top of slab. Debris behind bond break creating bumps and lumps will not be accepted. Contractor to supply all material and labor to pour **32 MPA** concrete (max. 75 m.m. slump), c/w 5-8% air entrainment 4" thick garage floor slab, with slope to the overhead door. Provide with a broom finish. Contractor is not to pour garage slab if grade/top of slab pin at overhead garage door check is missing. Contractor to ensure top of slab to man door threshold at mudroom or hallway is no more than 22 ½”
14. Contractor to ensure that the maximum height between top of garage slab and sub floor of no more than 22 ½”.
15. Supply all equipment required to place concrete and ensure all poured concrete has proper protection from weather. All issues to be reported to Site Superintendent immediately.
16. Provide foundation parging with hardening agent between finished grade and top of foundation. Contractor to ensure foundations are properly prepped including cleaning, filling voids, removing excess concrete, wood and nails. Contractor to fill between door jambs and concrete as required by Site Superintendent. Parging to be from top of foundation to 2” below finished grade, as well as risers to front steps.
17. Provide door checks and sleeves per the Owner’s drawings.
18. Contractor to ensure all concrete pours are protected from freezing. Phoenix Homes to supply heaters and propane. Contractors’ worker performing the pour shall have a representative that is ROT certified to manage the temporary heaters, hoses and fuel.
19. The Contractor shall provide to the Owner, prior to starting his work, proof of a Two Million Dollar Liability Insurance naming the Contractor and the Owner jointly for the duration of the contract.
20. Check all drawing dimensions prior to pouring and report any errors or omissions to the Owner.
21. Ensure that all work performed under this Agreement is equal to or better than the requirements of the Ontario Building Code and is accepted by the City of Ottawa Inspection Department.
22. Ensure that all equipment, materials and manpower employed by the Contractor on the job site satisfies at all times, the requirements of the Workers’ Compensation Board and the Owner’s Safety Policy Statement.
23. All materials and workmanship to be guaranteed free of major structural defects for a period of Seven **(7)** years from date of occupancy as per Tarion warrantee. Contractor to provide any extended Manufacturers warranty on materials to purchaser. All defects to be corrected within the warranty period, by the Contractor, at no expense to the Owner. Contractor to provide copy of the Manufacturers extended warranty to the Owner prior to start of contract works.