Part 1 General

1.1 SECTION INCLUDES

1. Finishing of slabs-on-grade.

1.2 RELATED REQUIREMENTS

1. Section 03 30 00 - Cast-in-place Concrete.
2. Section 07 90 00 - Joint Sealants.

1.3 REFERENCE STANDARDS

1. CSA A23.1, 2, 3: Concrete materials and methods of concrete construction/test methods and standard practices for concrete
2. REP 302.1R-15 Guide for concrete floor and slab construction
3. ASTM E1155-20 Standard test method for determining FF floor flatness and FL floor levelness numbers

1.4 ADMINISTRATIVE REQUIREMENTS

1. Coordination: Coordinate with concrete floor placement and concrete floor curing, and other work having a direct bearing on work of this section.

1.5 QUALITY ASSURANCE

1. Perform Work in accordance with CSA-A23.1/A23.2.
2. Installer Qualifications: Company specializing in performing the work of this section with minimum five (5) years documented experience.
3. Prior to starting concrete Work submit quality control procedures for Consultant's approval for following items:
    1. Hot weather concrete.
    2. Cold weather concrete.
    3. Curing.
    4. Finishes.

1.6 DELIVERY, STORAGE, AND HANDLING

1. Transport, handle, store, and protect products.
2. Deliver materials in manufacturer's packaging including application instructions.

1.7 SITE CONDITIONS

1. Do not place concrete during, or for 24 hours after rain/snow fall.
2. Examine subgrade and ensure soil material is not frozen or saturated with water. Do not use frozen base materials. Do not install base on frozen subgrade.
3. Temporary Heat: Ambient temperature of 10 degrees C minimum.
4. Ventilation: Sufficient to prevent injurious gases from temporary heat or other sources affecting concrete.

Part 2 Products - Not Used

Part 3 Execution

3.1 EXAMINATION

1. Verify existing conditions before starting work.
2. Verify that floor surfaces are acceptable to receive the work of this section.
3. Do not begin installation until all unsatisfactory conditions are resolved. Beginning Work of this Section constitutes acceptance of site conditions and responsibility for defective installation caused by prior observable conditions.

3.2 FLOOR FINISHING

1. Finish concrete floor surfaces to CSA-A23.1/A23.2.
2. Wood float surfaces which will receive quarry, ceramic or porcelain tile with full bed setting system.
3. Steel trowel surfaces which will receive carpeting, resilient flooring, seamless flooring, or thin set quarry, porcelain or ceramic tile..
4. Steel trowel surfaces that are scheduled to be exposed.
5. In areas with floor drains, maintain design floor elevation at walls; slope surfaces uniformly to drains at nominal 10 mm per m to 20 mm per m, or as indicated on drawings.

3.3 TOLERANCES

1. Measure for floor flatness (FF) and floor levelness (FL) tolerances for floors to ASTM E1155M, within 48 hours after slab installation.
2. Concrete slab and floor finish tolerance in accordance with CSA-A23.1, Table 21 (Slab and floor finish classifications):
    1. Exterior: Class A: F (FF) 20 / F (FL) 15.
    2. Interior: Class B: F (FF) 25 / F (FL) 20.
3. Correct the slab surface if the actual F (FF) or F (FL) number for the floor installation measures less than required.
4. Correct defects in the defined traffic floor by grinding or removal and replacement of the defective work. Areas requiring corrective work will be identified. Re-measure corrected areas by the same process.

End of Section