

Part 1 General

1.1 SECTION INCLUDES

- .1 Materials and installation of new concrete walks, and new concrete slab-on-grade for existing (relocated) storage shed.

1.2 RELATED SECTIONS

- .1 Section 01 74 19 - Construction/Demolition Waste Management and Disposal
- .2 Section 03 05 10 - Cast-In-Place Concrete - Short Form
- .3 Section 07 92 10 - Joint Sealing
- .4 Section 31 14 11 - Earthwork and Related Work - Short Form

1.3 REFERENCES

- .1 American Society for Testing and Materials (ASTM):
 - .1 ASTM D698-07e1 - Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400ft-lbf/ft³) (600kN-m/m³)
- .2 Canadian Standards Association (CSA):
 - .1 CAN/CSA-A23.1/A23.2-09 - Concrete Materials and Methods of Concrete Construction/Methods of Test for Concrete

1.4 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 19.
- .2 Remove from site and dispose of packaging materials at appropriate recycling facilities.
- .3 Collect and separate for disposal paper, plastic, corrugated cardboard, and other packaging material in appropriate on-site bins for recycling in accordance with Waste Management Plan.
- .4 Do not dispose of unused materials into sewer systems, onto ground or in other locations where it will pose health or environmental hazard.

Part 2 Products

2.1 MATERIALS

- .1 Concrete mixes and materials: to Section 03 05 10.
- .2 Reinforcing bars: to to Section 03 05 10.

- .3 Joint filler and curing compound: to Section 03 05 10.
- .4 Granular base: 80 mm gravel to Section 31 14 11.
- .5 Non-staining mineral type form release agent: chemically active release agents containing compounds that react with free lime to provide water soluble soap.
- .6 Sealant for isolation joints: multi-component, self-levelling, control joint type designed to suit application; color selected by Departmental Representative from manufacturer's full color range.

Part 3 Execution

3.1 GRADE PREPARATION

- .1 Do grade preparation work in accordance with Section 31 14 11.

3.2 GRANULAR BASE

- .1 Place granular base material to lines and widths required for walks and slab-on-grade. Place granular base material to 100 mm compacted depth.
- .2 Compact granular base to at least 95% of maximum density to ASTM D698.

3.3 CONCRETE

- .1 Do concrete work in accordance with Section 03 05 10.
- .2 Immediately after floating, give concrete surfaces uniform broom finish to produce regular corrugations not exceeding 2 mm deep, by drawing broom in direction normal to centre line.
- .3 Provide edging with 10 mm radius edging tool.

3.4 TOLERANCES

- .1 Finish surfaces to within 3 mm in 3 m as measured with 3 m straightedge placed on surface.

3.5 JOINTS

- .1 For walks, install tooled transverse contraction joints at intervals of 1.5 m, and expansion joints at intervals of 6 m, to comply with layout shown.
- .2 Form joints after floating, when concrete is stiff but still plastic.

3.6 ISOLATION JOINTS

- .1 Install isolation joints in locations where walks butt the building.

- .2 Install joint filler in isolation joints in accordance with Section 03 05 10. Set joint filler 25 mm below top of concrete surface.
- .3 Seal top of isolation joints with self-levelling sealant, with top surface set approximately 3 mm below top of concrete surface. Install sealant to requirements specified in Section 07 92 10.

3.7 CURING

- .1 Cure concrete by adding moisture continuously in accordance with CAN/CSA-A23.1 to exposed finished surfaces for at least 1 day after placing, or sealing moisture in by curing compound.
- .2 Where burlap is used for moist curing, place two pre-wetted layers on concrete surface and keep continuously wet during curing period.
- .3 Apply curing compound evenly to form continuous film. In accordance with manufacturer's requirements.

END OF SECTION