
CONCRETE WALKS AND CURBS

PART 1 GENERAL**1.1 Related Sections**

- .1 Section [02315](#) Excavating, Trenching and Backfilling.
- .2 Section [02743](#) Asphalt Concrete Paving.
- .3 Section [03100](#) Concrete Formwork.
- .4 Section [03200](#) Concrete Reinforcement.
- .5 Section [03300](#) Cast-in-Place Concrete.

1.2 References

- .1 Canadian Standards Association (CSA).
 - .1 CAN/CSA-A23.1-[94], Concrete Materials and Methods of Concrete Construction.
- .2 Canadian General Standards Board (CGSB).
 - .1 CAN/CGSB-1.2-[M89], Boiled Linseed Oil.
 - .2 CAN/CGSB-3.3-[M89], Kerosene.
- .3 American Society for Testing and Materials (ASTM).
 - .1 ASTM D698-[91], Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400ft-lbf/ft³) (600kN-m/m³).

PART 2 PRODUCTS**2.1 Materials**

- .1 Concrete mixes and materials: to Section 03300- Cast-in-Place Concrete.
- .2 Reinforcing steel: to Section 03200- Concrete Reinforcement.
- .3 Joint filler: to Section 03300- Cast-in-Place Concrete.
- .4 Granular base: to Section 02315- Excavating, Trenching and Backfilling, type: crusher run.
- .5 Non-staining mineral type form release agent: chemically active release agents containing compounds that react with free lime to provide water soluble soap.

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- .6 Fill material: to Section [02315](#) - **Excavating, Trenching and Backfilling**
- .7 Kerosene: to CAN/CGSB-3.3.

PART 3 EXECUTION**3.1 Grade Preparation**

- .1 Do grade preparation work in accordance with Section [02315](#)-**Excavating, Trenching and Backfilling**.
- .2 Place fill in maximum 150mm layers and compact to at least 98% of maximum density to ASTM D698.

3.2 Granular Base

- .1 Obtain Consultant's approval of subgrade before placing granular base.
- .2 Place granular base material to lines, widths, and depths as indicated.
- .3 Compact granular base to at least 98% of maximum density to ASTM D698.

3.3 Concrete

- .1 Obtain Consultant's approval of granular base and reinforcing steel prior to placing concrete.
- .2 Do concrete work in accordance with Section [03300](#)- **Cast-in-Place Concrete**.
- .3 Immediately after floating, give sidewalk surface uniform broom finish to produce regular corrugations not exceeding 2 mm deep, by drawing broom in direction normal to centre line.
- .4 Provide edging as indicated with 10 mm radius edging tool.
- .5 Slip-form pavers equipped with string line system for line and grade control may be used if quality of work acceptable to Consultant can be demonstrated. Hand finish surfaces when directed by Consultant.

3.4 Tolerances

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

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3.5 Expansion and Contraction Joints

- .1 Install tooled transverse contraction joints after floating, when concrete is stiff, but still plastic, at intervals of 1.5 m.
- .2 Install expansion joints to meet OPSD 552.0.
- .3 Install expansion joints around manholes and catch basins and along length adjacent to concrete curbs, catch basins, buildings, or permanent structure.
- .4 When sidewalk is adjacent to curb, make joints of curb, gutters and sidewalk coincide.
- .5 Install joint filler in expansion joints in accordance with Section [03300-Cast-in-Place Concrete](#).
- .6 Seal expansion joints with sealant approved by Consultant.

3.6 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 approved by Consultant.
- .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 fil in accordance with manufacturer's requirements.

3.7 Backfill

- .1 Allow concrete to cure for 7 days prior to backfilling.
- .2 Backfill to designated elevations with material approved by Consultant. Compact and shape to required contours as indicated or as directed by Consultant.

END OF SECTION - 02770