

Part 1 General

1.1 RELATED SECTIONS

- .1 Section 01 74 19 - Construction/Demolition Waste Management and Disposal.

1.2 REFERENCES

- .1 American Society for Testing and Materials (ASTM)
 - .1 ASTM D1751-99, Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
- .2 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-19.24-M90, Multicomponent, Chemical-Curing Sealing Compound.
- .3 Canadian Standards Association (CSA)
 - .1 CAN/CSA-A23.1-09, Concrete Materials and Methods of Concrete Construction.
 - .2 CAN/CSA-A23.2-09, Methods of Test for Concrete.
 - .3 CAN/CSA-A3000-08, Cementitious Materials Compendium.
 - .4 CAN/CSA-G30.18-09, Carbon-Steel Bars for Concrete Reinforcement.

1.3 SUBMITTALS

- .1 Shop Drawings
 - .1 Submit placing drawings prepared in accordance with plans to clearly show size, shape, location and all necessary details of reinforcing.

1.4 WASTE MANAGEMENT AND DISPOSAL

- .1 Separate and recycle waste materials in accordance with Section 01 74 19 - Construction/Demolition Waste Management and Disposal.
- .2 Collect and separate plastic, paper packaging and corrugated cardboard in accordance with Waste Management Plan.
- .3 Place materials defined as hazardous or toxic in designated containers.
- .4 Ensure emptied containers are sealed and stored safely.
- .5 Use trigger operated spray nozzles for water hoses.
- .6 Designate cleaning area for tools to limit water use and runoff.

Part 2 Products

2.1 MATERIALS

- .1 Portland cement with 20% fly ash replacement: to CAN/CSA-A3000, type on drawings.

- .2 Reinforcing bars: to CAN/CSA-G30.18, Grade 400.
- .3 Premoulded joint filler:
 - .1 Bituminous impregnated fibreboard: to ASTM D1751.
- .4 Joint sealer/filler: grey to CAN/CGSB-19.24, Type 1, Class B.
- .5 Sealer: Clear, non-yellowing compound.
- .6 Other concrete materials: to CAN/CSA-A23.1.

2.2 MIXES

- .1 Proportion concrete in accordance with CAN/CSA-A23.1.
- .2 Minimum compressive strength as specified on drawings.
- .3 Class of exposure: on drawings.
- .4 Nominal maximum size of coarse aggregate: to CAN/CSA-A23.1.
- .5 Slump: on drawings.
- .6 Air content: on drawings.
- .7 Admixtures: to CAN/CSA-A23.1. Departmental Representative to approve accelerating or set retarding admixtures during cold and hot weather placing.

Part 3 Execution

3.1 CONSTRUCTION

- .1 Do cast-in-place concrete work in accordance with CAN/CSA-A23.1.

3.2 INSERTS

- .1 Cast in sleeves, ties, slots, anchors, reinforcement, frames, conduit, bolts, waterstops, joint fillers and other inserts required to be built-in. Sleeves and openings greater than 100 mm x 100 mm not indicated, must be approved by Departmental Representative.

3.3 FINISHES

- .1 Formed surfaces exposed to view: in accordance with CAN/CSA-A23.1.
- .2 Interior floor slabs to receive sheet vinyl requiring a smooth surface: initial finishing operations followed by final finishing comprising mechanical floating and steel trowelling as specified in CAN/CSA-A23.1 to produce hard, smooth, dense trowelled surface free from blemishes.

3.4 EXPANSION AND ISOLATION JOINTS

- .1 Install premoulded joint filler in expansion and isolation joints full depth of slab flush with finished surface.

3.5 CURING

- .1 Cure and protect concrete in accordance with CAN/CSA-A23.1.
 - .1 Do not use curing compounds where bond is required by subsequent topping or coating.

3.6 SEALING

- .1 Apply clear, non-yellowing sealer according to manufacturer's instructions.

3.7 SITE TOLERANCES

- .1 Concrete floor slab finishing tolerance in accordance with CAN/CSA-A23.1, straight edge method, to 8 mm in 3 meters.

3.8 FIELD QUALITY CONTROL

- .1 Concrete testing: to CAN/CSA-A23.2 by testing laboratory designated and paid for by Departmental Representative.

END OF SECTION