

Part 1 General

1.1 REFERENCES

- .1 CSA Group
 - .1 CSA A23.1/A23.2-09, Concrete Materials and Methods of Concrete Construction/Test Methods and Standard Practices for Concrete.
 - .2 CSA A231.1/A231.2-06(R2010), Precast Concrete Paving Slabs/Precast Concrete Pavers.
 - .3 CSA A283-06(R2011), Qualification Code for Concrete Testing Laboratories.

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for precast concrete unit paving and include product characteristics, performance criteria, physical size, finish and limitations.
- .3 Shop Drawings:
 - .1 Indicate on drawings layout, pattern and relationship of paving joints to fixtures and project formed details.

1.3 QUALITY ASSURANCE

- .1 Qualifications:
 - .1 Installer: company or person specializing in precast concrete paver installations approved by manufacturer.
- .2 Mock-ups:
 - .1 Construct mock-up in accordance with Section 01 45 00 - Quality Control.
 - .2 Construct 3 x 3 m area mock-up.
 - .3 Mock-up will be used:
 - .1 To judge quality of work, substrate preparation, operation of equipment and material application.
 - .2 To determine joint sizes, lines, laying patterns, colour and texture.
 - .3 Locate where directed.
 - .4 Allow 24 hours for inspection of mock-up before proceeding with work.
 - .5 When accepted, mock-up will demonstrate minimum standard of quality required for this work. Approved mock-up may not remain as part of finished work.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 01 61 00 - Common Product Requirements.

- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Store materials off ground and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect precast concrete units from nicks, scratches, and blemishes.
 - .3 Replace defective or damaged materials with new.

Part 2 Products

2.1 CONCRETE PAVERS

- .1 Concrete pavers: to CSA A23.1/A23.2 and as follows:
 - .1 Size: 610 mm x 610 mm x 50 mm height – confirm height with existing concrete pavers to ensure new surface is flat.
 - .2 Colour: standard grey.
 - .3 Cut end, corner, border units as required.
- .2 Pigment in concrete pavers: to ASTM C979/C979M.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for precast concrete unit paving installation in accordance with manufacturer's written instructions.
 - .1 Visually inspect substrate in presence of Departmental Representative.
 - .2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from Departmental Representative.

3.2 BASE SURFACE

- .1 Verify that base surfaces conform to levels required for installation of unit pavers. If discrepancies occur, notify Departmental Representative and do not commence work until instructed by Departmental Representative.
- .2 Verify that top of base surface (top of base) does not exceed plus or minus 10 mm of grade over 3 m straightedge.
- .3 Ensure that base surface is not frozen or standing water is present during installation.

3.3 INSTALLATION OF CONCRETE PAVERS

- .1 Lay pavers to minimize joints. Lay pavers with edges butt tightly – no joints between pavers.
- .2 Saw cut pavers to fit around obstructions and at abutting structures.
- .3 Saw cut pavers to fit to ensure continuous path of travel for palette jack.
- .4 Inspect, remove, and replace chipped, broken and damaged pavers.
- .5 Final surface elevations not to exceed plus or minus 10 mm under 3 m long straightedge.
- .6 Ensure conformance of final elevations.

3.4 PRECAST CONCRETE UNIT CLEANING

- .1 Final surface to be free of contamination.

3.5 SEALING

- .1 Ensure paver surfaces to be sealed are clean, free of extraneous materials and efflorescence, dry and appropriately cured.
- .2 Apply 1 coat sealer in accordance with manufacturer's recommendations.
- .3 Protect sealed surfaces from trespass until sealer has dried and hardened.

3.6 FIELD QUALITY CONTROL

- .1 Retain concrete testing laboratory accredited in accordance with CSA A283.
- .2 Sample and test in accordance CSA A23.1/A23.2.
- .3 Do sampling and testing once.
- .4 Departmental Representative will select 10 pavers for testing from material on site for each sampling.
- .5 Submit test results to Departmental Representative for approval of precast concrete pavers.

3.7 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.

END OF SECTION