

PART 1 GENERAL**1.1 Summary**

- .1 Unless otherwise indicated, follow the standards below when specifying prefabricated unit paving. These standards are not intended to restrict or replace professional judgment.

1.2 References

- .1 Products and execution shall meet or exceed the most recent version of the following standards.
- .2 Canadian Standards Association (CSA)
 - .1 CAN/CSA A23.1 Concrete materials and methods of concrete construction.
 - .2 CAN/CSA A23.2 Test methods and standard practices for concrete.
 - .3 CAN/CSA A231.2 Precast Concrete Pavers.
 - .4 CAN/CSA A283 Qualification Code for Concrete Testing Laboratories
- .3 American Society for Testing and Materials (ASTM)
 - .1 ASTM C136 Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
 - .2 ASTM C979/C979M Standard Specification for Pigments for Integrally Colored Concrete.
- .4 Government of Quebec
 - .1 Bureau de normalisation du Québec (BNQ)
 - .1 NQ 2624-120 Pavé de béton préfabriqué.
- .5 Interlocking Concrete Pavement Institute (ICPI)

PART 2 PRODUCTS**2.1 General**

- .1 Cleaning Products and Sealant.
 - .1 Cleaning products and sealants for prefabricated units paving are not desirable.
- .2 Dimension tolerances
 - .1 ± 3 mm in thickness, max.
 - .2 ± 2 mm in length or width, max.

2.2 Prefabricated Concrete Units

- .1 Concrete Properties
 - .1 Precast concrete units shall comply with the requirements of the CSA-A231.1 and the CSA-A231.2 standards, including:

- .1 Compression resistance: 50 MPa min.
- .2 Absorption: 5% max.
- .3 Freeze/Thaw :
 - .1 225g/m² after 28 cycles, max.
 - .2 500g/m² after 49 cycles, max.
- .2 Pigments used to colour concrete pavers: conforming to the ASTM C 979/C979M standard.
- .2 Vehicular areas
 - .1 In areas where vehicular traffic (regular or occasional) will occur:
 - .1 Pavers shall respect a 3:1 ratio (length vs. width).
 - .2 Pavers shall never have dimensions greater than 300 mm x 300 mm
 - .3 Pavers shall have a minimum thickness of 100 mm.
 - .3 McGill Standard Collection
 - .1 Type 1
 - .1 Thickness : 100mm.
 - .2 Nominal dimensions :
 - .1 300mm x 300mm.
 - .2 150mm x 300mm.
 - .3 Shall be the following, or approved equivalent:
 - .1 « Boulevard TLI 100mm » as manufactured by Permacon.
 - .1 Colours :
 - .1 Cinder Grey.
 - .1 This colour contributes to a reduction of heat island effect.
 - .2 Finish: Standard.
 - .2 Charcoal.
 - .1 Finish: Standard. (or Grenart for accents)
 - .4 Do not request to the general contractor the surplus for replacement.

2.3 Prefabricated Lattice Concrete Units

- .1 Prefabricated lattice concrete units are not desirable as a prefabricated paving unit material.

2.4 Granite Units

- .1 Granite Properties
 - .1 Refer to section **31 35 00** Natural Stone.
- .2 McGill Standard Collection
 - .1 Nominal dimensions

- .1 300mm x 300mm.
 - .2 150mm x 300mm.
 - .3 A number of oversized pieces (such as 600mm x 300mm) should be planned, to avoid small pieces in awkward locations during installation.
- .2 Thickness : 100mm.
 - .3 A 5mm chamfer is required on the edges of the top surface.

2.5 Limestone Units

- .1 Limestone is not desirable as a prefabricated paving unit material in high traffic areas.

2.6 Bedding material

- .1 Refer to section **31 05 16** Aggregate Materials.

2.7 Joint sand

- .1 Refer to section **31 05 16** Aggregate Materials.

2.8 Borders

- .1 For unit paving installed on concrete slab, shall be either:
 - .1 Granite borders. Refer to section **31 35 00** Natural Stone.
 - .2 Angle bar: when a visible border is not desired, use a galvanized steel angle bar, 89mm x76mm x 6.4mm
- .2 For unit paving installed on granular sub-base, shall be aluminium border such StructureEdge, as manufactured by Permaloc or approved equivalent.

PART 3 EXECUTION

- .1 General
 - .1 Prefabricated unit pavings should be installed according to industry standards, on ± 20 mm of bedding material.
 - .1 Foundation shall include a concrete slab.
 - .1 Installation on a granular sub-base is only acceptable for low-traffic, pedestrian-only areas.
 - .2 Nominal dimensions shall be respected during installation. Contractor shall not abut paving units one against each other.
 - .3 Top edge of cut pavers shall have a new 5mm chamfer created. Contractor shall provide execution sample to ensure chamfer appearance is acceptable.
 - .4 Joint sand shall be installed without delay following paver installation, to avoid debris within the joints.

END OF SECTION