
PART 1 - GENERAL

- 1.1 RELATED REQUIREMENTS .1 Section: 07 13 00 - Membrane Waterproofing.
- 1.2 REFERENCES .1 American Society for Testing and Materials International, (ASTM).
.1 ASTM C 578-11b, Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation.
.2 ASTM C 518-11, Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.
.3 ASTM D 1621-10, Standard Test Method for Compressive Properties Of Rigid Cellular Plastics.
.4 ASTM D 2842-06, Standard Test Method for Water Absorption of Rigid Cellular Plastics.
.5 ASTM C 666/C666M-0308, Standard Test Method for Resistance of Concrete to Rapid Freezing and Thawing.
- 1.3 SHOP DRAWINGS .1 Submit shop drawings in accordance with Section 01 33 00 - Submittal Procedures.
.2 Indicate layout, pattern and relationship of paving joints to all projections and new Cooling Tower unit curb / footing details.
- 1.4 ACTION AND INFORMATIONAL SUBMITTALS .1 Product Data:
.1 Submit product data in accordance with Section 01 33 00 - Submittal Procedures.
.2 Submit two copies of WHMIS MSDS - Material Safety Data Sheets in accordance with Section 01 33 00 - Submittal Procedures. Indicate VOC's:
.1 For cleaning and sealing compounds.
.2 Samples:
.1 Submit samples in accordance with Section 01 33 00 - Submittal Procedures.
.2 Submit full size sample of each type, size pavers.
.3 Manufacturer's Instructions:
.1 Submit manufacturer's installation instructions.
- 1.5 QUALITY ASSURANCE .1 Qualifications:
.1 Installer: company or person specializing in precast concrete paver installations documented experience approved by manufacturer.
.2 Test Reports: certified test reports showing compliance with specified performance characteristics and physical properties.

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- .3 Certificates: product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.
 - .4 Pre-Installation Meetings: conduct pre-installation meeting to verify project requirements, manufacturer's installation instructions and manufacturer's warranty requirements.
- 1.6 WASTE MANAGEMENT AND DISPOSAL
- .1 Separate and recycle waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
 - .2 Fold up metal banding, flatten and place in designated area for recycling.

PART 2 - PRODUCTS

2.1 PRECAST CONCRETE INSULATED UNIT PAVERS

- .1 Insulated Concrete Pavers Panel Units:
 - 1 Composite unit size: 610mm x 1220mm x 100mm height.
 - .2 Material Composition:
 - .1 Extruded polystyrene insulation, to ASTM C 587 and ASTM C 518:
 - .1 Dimensions: 75 mm thick.
 - .2 c/w tongue and groove system at all unit edges.
 - .2 Latex modified concrete surface:
 - .1 Dimensions: 25 mm thick.
 - .2 Colour: To match existing.
 - .1 Variations to homogenous pattern only as approved by Departmental Representative.
 - .3 Accessories:
 - .1 Proprietary fabricated perimeter metal interlock securement system:
 - .1 Compression/retainment bars and clips.
 - .2 Fasteners as per Manufacturer's instructions.

2.2 PERIMETER SECUREMENT

- .1 Metal counter flashing perimeter securement detail:
 - .1 150mm minimum length continuous counter flashing roof coverage.
 - .2 Install as per Manufacturer's Instructions and Specifications.

2.3 CLEANING
COMPOUND

- .1 Clear, organic solvent, designed and recommended by manufacturer for cleaning Insulated concrete paver units of contamination encountered.

PART 3 - EXECUTION3.1 MANUFACTURER'S
INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.

3.2 ROOF SURFACE
VERIFICATON

- .1 Verify that structural surface conforms to Manufacturer's requirements for installation of insulation of concrete unit pavers. If discrepancies occur, notify Departmental Representative. Do not commence work until instructed by Departmental Representative
- .2 Install overlapped separation slip sheet as required to meet Manufacturer recommendations and instructions.

3.3 INSTALLATION OF
EDGE RESTRAINTS

- .1 Refer to 2.2: Perimeter Securement.

3.4 INSTALLATION OF
CONCRETE PAVERS

- .1 Lay pavers to pattern indicated. Joints between pavers as recommended by Manufacturer.
- .2 Use end, edge and corner details as recommended by Manufacturer. Saw cut pavers to fit around obstructions and at abutting structures.
- .3 Installation by mechanical equipment:
.1 Prepare installation sequence and obtain approval of sequence by Departmental Representative.
.2 Place paver pallets and other materials without exceeding load bearing capacity, or otherwise detrimentally affecting installations.
.3 Inspect insulated unit pavers and remove chipped, broken or otherwise damaged pavers if structural performance or aesthetics is adversely compromised.
.4 Replace pavers removed without altering layout and structural quality.
- .4 Ensure no damage to roof waterproofing membrane during installation of pavers.
- .5 Final surface elevations not to exceed plus or minus 10 mm under 3 m long straightedge.

3.5 CLEANING

- .1 Carry out cleaning at times and conditions recommended by manufacturer of cleaning compound.
- .2 Remove and dispose of loose, extraneous materials from surfaces to be cleaned.
- .3 Apply cleaning compounds appropriate for removal of various contaminants encountered in accordance with manufacturer's recommendations.
- .4 Final surface to be free of contamination.

3.6 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.

3.7 CLEANING

- .1 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

END OF SECTION