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| Version | Date | Description of Revisions |
| 1 | August 30, 2006 | Approved final document. |
| 2 | November 19, 2007 | Minor revisions by Legal Services. |
| 3 | November 13, 2009 | Modified ‘Related Section’ |
| 4 | March 15, 2011 | Minor changes from Legal |
| 5 | June 5, 2012 | Added References and Replacement Parts Section |
| 6 | July 3, 2012 | Reformatted to Remove White Space |
| 7 | April 22, 2015 | General formatting |
| 8 | August 25, 2015 | First draft Phase 1 review (AV) |
| **9** | **October 19, 2015** | **Updated, Finalized Specification – Legal Reference eDOCS #6263211 v3 (AV)** |
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# GEneral

## Related Sections

### Section 01060 – Regulatory Requirements

### Section 04051 – Masonry Procedures.

### Section 04060 – Mortar and Masonry Grout.

### Section 04080 – Masonry Reinforcement and Connectors.

### Section 04090 – Masonry Accessories.

## References

### Comply with the latest edition of the following statutes, codes, standards, and all amendments thereto:

#### CSA A165 Series-14, CSA Standards on Concrete Masonry Units

## Measurement and Payment

### All costs associated with the work of this Section shall be included in the price(s) for Item No(s). \_\_\_ in the Bid Form.

# PRODUCTS

## Materials

### Standard concrete block units in accordance with CSA A165 Series-14

#### Classification: CAN-A165.1, Type H/20/B/M

#### Size: metric modular.

#### Provide plain end blocks, jamb blocks, lintel blocks and other special shapes as required.

#### Linear shrinkage and moisture movement of blocks shall not exceed 0.03 %.

#### Concrete blocks shall be manufactured with lightweight aggregate where indicated conforming to CAN/CSA-A23.1.

#### Special shapes: Provide bull nosed units for exposed corners. Provide purpose made shapes for lintels and bond beams. Provide additional special shapes as indicated in the Contract Documents.

# EXECUTION

## Installation

### Concrete block units

#### Lay concrete block masonry units in running bond except where indicated otherwise. Coursing height: 200 mm for one block and one joint.

#### Tool joint of exposed concrete block to a neat concave finish free of all cracks and crevices.

#### Pass conduits and piping through hollow cells of blocks or build around with split blocks. Cut blocks accurately for electrical boxes and recessed equipment. Build chases and openings as required, accurately located and neatly finished, as the work progresses.

#### Use special shaped blocks where required. Use bullnose corner, flat end blocks at all external corners and openings of exposed block walls.

#### Use solid blocks for at least two courses under point bearing loads. Ensure solid blocks continue 200 mm either side of bearing or more where noted on the Structural Contract Drawings.

### Concrete block lintels

#### Install reinforced concrete block lintels over openings in masonry where steel or reinforced concrete lintels are not indicated in the Contract Documents.

#### End bearing: Minimum of 200 mm.

#### Unless noted on Contract Drawings, construct concrete block lintels and bond beams with 200 mm deep bond beam units. Fill voids of units with concrete and reinforce with 2-15M deformed steel bars.

#### Concrete for lintels and bond beams shall be 30 MPa structural concrete with 10 mm nominal size coarse aggregate conforming to Section 03300 – Cast-In-Place-Concrete.

#### Reinforcing for lintels and bond beams shall conform to Section 03200 – Concrete Reinforcement.

#### Support and brace block lintels level and secure to prevent movement or deflection during curing period. Allow blocks to cure at least 10 days before applying load. Block lintels shall have 200 mm minimum bearing at each end.

#### Install solid concrete masonry bearing blocks at the jambs of all concrete block lintels. Provide bearing blocks of same material and appearance as adjacent wall surface

### Masonry reinforcement and ties

#### Install horizontal masonry reinforcing in all masonry walls spaced at 400 mm o/c vertically.

### Reinforce walls where thickness is reduced by a chase by placing horizontal reinforcing in every horizontal course, extending not less than 600 mm on each side of the chase.

### Install horizontal masonry reinforcing in two consecutive courses above and below all openings in walls, extending not less than 900 mm on each side of opening.

### Install vertical masonry reinforcing beside the openings in wall and at end of walls or interconnection of walls as indicated on the Contract Drawings.

### Do not extend horizontal masonry reinforcement through control joints.

### Tie exterior wythe of cavity walls to new masonry backup with slotted block ties at 800 mm horizontal and 600 mm vertical spacing and 300 mm maximum spacing around openings and ends. Install masonry connectors in accordance with CSA-A370 and CSA-A371.

### Tie exterior masonry veneer to existing masonry backup with Helifix anchors at 800 mm horizontal and 600 mm vertical spacing and 300 mm maximum spacing around openings and ends.

### Install vertical reinforcing where indicated on the Drawings but not less than 1-20M at 600mm spacing.

### Fill voids in block where vertical reinforcing occurs with 20 MPa grout. Fill voids after laying each course of block ensuring grout is well rodded in to completely fill voids.

## Cleaning

#### Standard Block: Allow mortar droppings on masonry to partially dry then remove by means of trowel, followed by rubbing lightly with a small piece of block and finally by brushing.

### Upon completion of installation, remove surplus materials, rubbish, tolls, and equipment barriers off the Site.

**END OF SECTION**