

**Part 1 General****1.1 RELATED SECTIONS**

- .1 Division 01 – General Requirements
- .2 Section 04 05 12 - Mortar and Masonry Grout.
- .3 Section 04 05 19 - Masonry Anchorage and Reinforcing.
- .4 Section 04 22 00 - Concrete Unit Masonry.
- .5 Section 07 92 00 - Joint Sealants.

**1.2 REFERENCES**

- .1 Canadian Standards Association (CSA International).
  - .1 CAN/CSA-A165 Series-04(R2009), Standards on Concrete Masonry Units.
  - .2 CAN/CSA-A179-04(R2009), Mortar and Grout for Unit Masonry.
  - .3 CAN/CSA-A371-04-(R2009), Masonry Construction for Buildings.

**1.3 SUBMITTALS**

- .1 Product Data. Submit manufacturer's printed product literature, specifications and data sheet in accordance with Section 01 00 10 – General Instructions and include product characteristics, performance criteria, physical size, finish and limitations.
- .2 Submit the following documentation:
  - .1 Product Data– MSDS, Spec Sheet, Product Label, consumer and post industrial recycled content, weight, VOC compliance, Environmental Certification if available. (materials)

**1.4 DELIVERY, STORAGE, AND HANDLING**

- .1 Deliver, store, handle and protect materials in accordance with Section 01 61 00 – Common Product Requirements.
- .2 Deliver materials to job site in dry condition.
- .3 Storage and Protection.
  - .1 Keep materials dry until use except where wetting of bricks is specified.
  - .2 Store under waterproof cover on pallets or plank platforms held off ground by means of plank or timber skids.

**1.5 WASTE MANAGEMENT AND DISPOSAL**

- .1 Separate and recycle waste materials in accordance with Section 01 00 10 – General Instructions.
- .2 Remove from site and dispose of packaging materials at appropriate recycling facilities.

- .3 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard and pallets packaging material for recycling in accordance with Waste Management Plan.
- .4 Unused metal materials are to be diverted from landfill to a metal recycling facility as approved by Departmental Representative.
- .5 Unused or damaged masonry materials must be diverted from landfill to a local facility as approved by Departmental Representative.

## **1.6 SITE CONDITIONS**

- .1 Site Environmental Requirements.
  - .1 Cold weather requirements. Supplement Clause 5.15.2 of CSA-A371-04 (R2009), with following requirements.
    - .1 Maintain temperature of mortar between 5 degrees C and 50 degrees C until batch is used or becomes stable.
    - .2 Maintain ambient temperature between 5 degrees C and 50 degrees C and protect site from windchill.
  - .2 Hot weather requirements.
    - .1 Protect freshly laid masonry from drying too rapidly, by means of waterproof, non-staining coverings.
    - .2 Keep masonry dry using waterproof, non-staining coverings that extend over walls and down sides sufficient to protect walls from wind driven rain, until masonry work is completed and protected by flashings or other permanent construction.

## **Part 2 Products**

### **2.1 MATERIALS**

- .1 Masonry materials are specified in Related Sections.
- .2 Concrete Masonry Units to meet CSA-A165 Series-04(R2009) Standards.
- .3 Mortar and Grout for Unit Masonry to meet CSA A179-04(R2009) Standards.
- .4 General Masonry Construction for Buildings to meet CSA-A371-04 (R2009) Standards.

## **Part 3 Execution**

### **3.1 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 PREPARATION**

- .1 Provide temporary bracing of masonry work during and after erection until permanent lateral support is in place.
- .2 Bracing approved by Departmental Representative.

**3.3 INSTALLATION**

- .1 Do masonry work in accordance with CSA-A371-04(R2009), except where specified otherwise.
- .2 Build masonry plumb, level, and true to line, with vertical joints in alignment.
- .3 Layout coursing and bond to achieve correct coursing heights, and continuity of bond above and below openings, with minimum of cutting.

**3.4 CONSTRUCTION**

- .1 Jointing.
  - .1 Allow joints to set just enough to remove excess water, then tool with round jointer to provide smooth, joints true to line, compressed, uniformly concave joints where concave joints are indicated.
  - .2 Strike flush joints concealed in walls and joints in walls to receive plaster, tile, insulation, or other applied material except paint or similar thin finish coating.
- .2 Cutting.
  - .1 Cut out for electrical switches, outlet boxes, and other recessed or built-in objects.
  - .2 Make cuts straight, clean, and free from uneven edges.
- .3 Building-In.
  - .1 Build in items required to be built into masonry.
  - .2 Prevent displacement of built-in items during construction. Check plumb, location and alignment frequently, as work progresses.
- .4 Wetting of bricks.
  - .1 Except in cold weather, wet bricks having an initial rate of absorption exceeding 1 g/minute/1000mm<sup>2</sup>: wet to uniform degree of saturation, 3 to 24 hours before laying, and do not lay until surface dry.
  - .2 Wet tops of walls built of bricks qualifying for wetting, when recommencing work on such walls.
- .5 Support of loads.
  - .1 Use grout to CSA A179 where grout is used in lieu of solid units.
  - .2 Install building paper below voids to be filled with grout; keep paper 25mm back from faces of units.
- .6 Provision for movement.
  - .1 Leave 6mm space between top of non-load bearing walls and partitions and structural elements. Do not use wedges.
  - .2 Built masonry to tie in with stabilizers, with provision for vertical movement.

- .7 Interface with other work.
  - .1 Cut openings in existing work as indicated.
  - .2 Openings in walls: approved by Departmental Representative.
  - .3 Make good existing work. Use materials to match existing.
  - .4 When working with existing wall, remove cut blocks if possible and replace with uncut masonry units to tie infill portion into existing wall construction.

### **3.5 SITE TOLERANCES**

- .1 Tolerances in notes to Clause 5.3 of CSA-A371 apply.

### **3.6 CLEANING**

- .1 Perform cleaning after installation to remove construction and accumulated environmental dirt.
- .2 Upon completion of installation, remove surplus materials, rubbish, tools and equipment barriers.

### **3.7 PROTECTION**

- .1 Protect masonry and other work from marking and other damage. Protect completed work from mortar droppings. Use non-staining coverings.

**END OF SECTION**