

**Part 1 General**

**1.1 REFERENCES**

- .1 Canadian Standards Association (CSA International)
  - .1 CSA-A165 Series-04, Standards on Concrete Masonry Units.
  - .2 CSA A179-04, Mortar and Grout for Unit Masonry.
  - .3 CSA-A371-04, Masonry Construction for Buildings.
- .2 International Masonry Industry All-Weather Council (IMIAC)
  - .1 Recommended Practices and Guide Specification for Hot and Cold Weather Masonry Construction.

**1.2 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit submittals in accordance with Section 01 33 00.
- .2 Product Data: Submit manufacturer's printed product literature, specifications and data sheets
- .3 Samples.
  - .1 Two of each type of brick, concrete, masonry unit specified, including special shapes, supplemented with specific requirements in Sections.
  - .2 Two cured, and coloured samples of mortar and grout, illustrating mortar colour and colour range, supplemented with specific requirements in Section 04 05 12 - Masonry Mortar and Grout.
  - .3 Two of each type of masonry accessory and flashing specified, supplemented by specific requirements in Section 04 05 23 - Masonry Accessories.
  - .4 Two of each type of masonry anchorage, reinforcement and connector proposed for use, supplemented by specific requirements in Section 04 05 19 - Masonry Anchorage and Reinforcing.
  - .5 Samples: used for testing and when accepted become standard for material used.
- .4 Manufacturer's Instructions: Submit manufacturer's installation instructions, including storage, handling, safety and cleaning.
- .5 Shop Drawings:
  - .1 Provide drawings stamped and signed by professional engineer registered or licensed in Province of Manitoba, Canada.
  - .2 Provide shop drawings detailing temporary bracing required, designed to resist wind pressure and lateral forces during installation.
- .6 Provide manufacturer's instructions for care, cleaning and maintenance of prefaced masonry units for incorporation into manual specified in Section 01 78 00 - Closeout Submittals.

### **1.3 QUALITY ASSURANCE**

- .1 Pre-Installation Meetings: conduct pre-installation meeting to verify project requirements, manufacturer's installation instructions and manufacturer's warranty requirements.
- .2 Qualifications:
  - .1 Manufacturer: capable of providing field service representation during construction and approving application method.
  - .2 Installer: experienced in performing work of this section who has specialized in installation of work similar to that required for this project.
  - .3 Masons: company or person specializing in masonry installations with 5 years documented experience with masonry work similar to this project.

### **1.4 DELIVERY, STORAGE, AND HANDLING**

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

### **1.5 SITE CONDITIONS**

- .1 Site Environmental Requirements.
  - .1 Cold weather requirements.
    - .1 TO CSA-A371 with the following requirements.
    - .2 Maintain temperature of mortar between 5 degrees C and 50 degrees C until batch is used or becomes stable.
    - .3 Maintain ambient temperature of masonry work and it's constituent materials between 5 degrees C and 50 degrees C and protect site from windchill.
    - .4 Maintain temperature of masonry above 0 degrees C for minimum of 7 days, after mortar is installed.
    - .5 Preheat unheated wall sections in enclosure for minimum 72 hours above 10 degrees C, before applying mortar.
  - .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.
  - .3 Spray mortar surface at intervals and keep moist for maximum of three days after installation.

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**Part 2 Products**

**2.1 MATERIALS**

- .1 Masonry materials are specified in Related Sections.

**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 Examine openings to receive masonry units. Verify opening size, location, and that opening is square and plumb, and ready to receive work of this Section.
  - .1 Inform Contract Administrator of unacceptable conditions immediately upon discovery.
  - .2 Proceed with installation after unacceptable conditions have been remedied and after receipt of written approval from Contract Administrator.
- .2 Establish and protect lines, levels, and coursing.

**3.3 INSTALLATION**

- .1 Do masonry work in accordance with CSA-A371 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 Exposed masonry: Remove chipped, cracked, and otherwise damaged units, in accordance with CSA A-165, Clause 82.1, in exposed masonry and replace with undamaged units.
- .2 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 Allow joints to set just enough to remove excess water, then rake joints uniformly to 6 mm depth and compress with square tool to provide smooth, compressed, raked joints of uniform depth where raked joints are indicated.
  - .3 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.
- .3 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.
- .4 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.
  - .3 Brace door jambs to maintain plumb. Fill spaces between jambs and masonry with mortar.
- .5 Support of loads
  - .1 Use 30 MPa concrete, where concrete fill is used in lieu of solid units.
  - .2 Use grout to CSA A179 where grout is used in lieu of solid units.
  - .3 Install building paper below voids to be filled with concrete grout; keep paper 25 mm back from faces of units.
- .6 Provision for movement
  - .1 Leave 3 mm space below shelf angles.
  - .2 Leave 6 mm space between top of non-load bearing walls and partitions and structural elements. Do not use wedges.
  - .3 Built masonry to tie in with stabilizers, with provision for vertical movement.
- .7 Control joints: Construct continuous control joints as indicated.
- .8 Expansion joints: Build-in continuous expansion joints as indicated.
- .9 Interface with other work.
  - .1 Cut openings in existing work as indicated.
  - .2 Make good existing work. Use materials to match existing.

### **3.5 SITE TOLERANCES**

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

### **3.6 CLEANING**

- .1 Progress Cleaning: in accordance with related masonry sections.
- .2 Final Cleaning:
  - .1 Perform cleaning after installation to remove construction and accumulated environmental dirt.
  - .2 Upon completion of installation and verification of performance of installation, remove surplus materials, rubbish, tools and equipment barriers.

### **3.7 PROTECTION**

- .1 Temporary Bracing:

- .1 Provide temporary bracing of masonry work during and after erection until permanent lateral support is in place.
  - .2 Bracing approved by Contract Administrator.
  - .3 Brace masonry walls as necessary to resist wind pressure and lateral forces during construction.
- .2 Moisture Protection:
- .1 Keep masonry dry using waterproof, non-staining coverings that extend over walls and down sides sufficient to protect walls from wind driven rain, until completed and protected by flashing or other permanent construction.
  - .2 Cover completed and partially completed work not enclosed or sheltered with waterproof covering at end of each work day. Anchor securely in position.
  - .3 Air Temperature Protection: protect completed masonry as recommended in 1.5 SITE CONDITIONS.

**END OF SECTION**

**Part 1 General**

**1.1 REFERENCES**

- .1 Canadian Standards Association (CSA International).
  - .1 CSA A179-04, Mortar and Grout for Unit Masonry.

**1.2 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit submittals in accordance with Section 01 33 00.
- .2 Product Data: Submit manufacturer's printed product literature, specifications and data sheets .
- .3 Samples: in accordance with Section 04 05 00 - Common Work Results for Masonry, supplemented as follows: Submit two samples of mortar.
- .4 Manufacturer's Instructions: Submit manufacturer's installation instructions.

**1.3 QUALITY ASSURANCE**

- .1 Pre-Installation Meetings: conduct pre-installation meeting to verify project requirements, manufacturer's installation instructions and manufacturer's warranty requirements.

**1.4 DELIVERY, STORAGE, AND HANDLING**

- .1 Deliver, store and handles masonry mortar and grout materials in accordance with Section 01 61 00 - Common Product Requirements, supplemented as follows:
  - .1 Deliver pre-packaged, dry-blended mortar mix to project site in labelled plastic-lined bags each bearing name and address of manufacturer, production codes or batch numbers, and colour or formula numbers.
  - .2 Maintain mortar, grout and packaged materials clean, dry, and protected against dampness, freezing, traffic and contamination by foreign materials.

**1.5 SITE CONDITIONS**

- .1 Ambient Conditions: maintain materials and surrounding air temperature to:
  - .1 Minimum 5 degrees C prior to, during, and 48 hours after completion of masonry work.
  - .2 Maximum 32 degrees C prior to, during, and 48 hours after completion of masonry work.
- .2 Weather Requirements: CAN/CSA A371, International Masonry Industry All-Weather Council (IMIAC) - Recommended Practices and Guide Specifications for Hot and Cold Weather Masonry Construction.

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**Part 2 Products**

**2.1 MATERIALS**

- .1 Use same brands of materials and source of aggregate for entire project.
- .2 Cement: Portland Cement: to CAN/CSA-A3000
- .3 Aggregate: supplied by one supplier: to CAN/CSA A179.
- .4 Mortar and grout: CSA A179.
- .5 Use aggregate passing 1.18 mm sieve where 6 mm thick joints are indicated.
- .6 Colour: ground natural aggregates.
- .7 Mortar for exterior masonry above grade to CAN/CSA-A3002 and CAN/CSA A179:
  - .1 Loadbearing: type S based on Proportion specifications.
  - .2 Non-Loadbearing: type S based on Proportion specifications.
- .8 Mortar for foundation walls, manholes, sewers, pavements, walks, patios and other exterior masonry at or below grade to CAN/CSA-A3002 and CAN/CSA A179: type M based on Proportion specifications.
- .9 Mortar for interior masonry to CAN/CSA-A3002 and CAN/CSA A179:
  - .1 Loadbearing: Type S based on Proportion specifications.
  - .2 Non-loadbearing: Type N based on Proportion specifications.
- .10 Non-Staining mortar: use non-staining masonry cement for cementitious portion of specified mortar type.
- .11 Grout: to CSA A179, Table 3.

**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 CONSTRUCTION**

- .1 Do masonry mortar work in accordance with CSA A179 except where specified otherwise.
- .2 Grout masonry in accordance with CSA-S304.1, CSA-A371 and CSA-A179 and as indicated.

**3.3 SCHEDULE**

- .1 Grout following masonry components:

- .1        All reinforced cores in block walls full height.
- .2        All lintel courses, bond beams, etc.

**3.4            CLEANING**

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

**END OF SECTION**



## **Part 1 General**

### **1.1 REFERENCES**

- .1 Canadian Standards Association (CSA International).
  - .1 CAN/CSA-A23.1/A23.2-04, Concrete Materials and Methods of Concrete Construction/Methods of Test and Standard Practices for Concrete.
  - .2 CAN/CSA A179-04, Mortar and Grout for Unit Masonry.
  - .3 CAN/CSA A370-04, Connectors for Masonry.
  - .4 CAN/CSA A371-04, Masonry Construction for Buildings.
  - .5 CAN/CSA G30.18-M92 (R2007), Billet-Steel Bars for Concrete Reinforcement.
  - .6 CSA-S304.1-04, Design of Masonry Structures.
  - .7 CSA W186-M1990 (R2007), Welding of Reinforcing Bars in Reinforced Concrete Construction.
  - .8 CAN/CSA-G164-M92 (R1998), Hot Dip Galvanizing of Irregularly Shaped Articles.

### **1.2 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data: Provide manufacturer's printed product literature, specifications and datasheets illustrating products to be incorporated into project for specified products.
- .3 Submit Shop Drawings:
  - .1 Shop drawings consist of bar bending details, lists and placing drawings.
  - .2 On placing drawings, indicate sizes, spacing, location and quantities of reinforcement and connectors.

## **Part 2 Products**

### **2.1 MATERIALS**

- .1 Bar reinforcement: to CSA-A371 and CSA G30.18.
- .2 Wire reinforcement: to CSA-A371 and CSA G30.14.
- .3 Connectors: to CSA-A370 and CSA-S304.
  - .1 Slotted block type: designed for application, submit shop drawings.
  - .2 Acceptable material: Ferro Ties.
- .4 Vertical supports: Dur-o-wall as indicated.
- .5 Corrosion protection: to CAN/CSA-G164-M92 (R1998), Hot Dip Galvanizing of Irregularly Shaped Articles.

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## **2.2 FABRICATION**

- .1 Fabricate reinforcing in accordance with CSA-A23.1 and ANSI/ACI 315-94, Details and Detailing of Concrete Reinforcement.
- .2 Fabricate connectors in accordance with CSA-A370.
- .3 Obtain Contract Administrator's approval for locations of reinforcement splices other than shown on placing drawings.
- .4 Upon approval of Contract Administrator, weld reinforcement in accordance with CSA W186.
- .5 Ship reinforcement and connectors, clearly identified in accordance with drawings.

## **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 GENERAL**

- .1 Supply and install masonry connectors and reinforcement in accordance with CSA-A370, CSA-A371, CAN/CSA-A23.1 and CSA-S304.1 unless indicated otherwise.
- .2 Prior to placing mortar, grout, obtain Contract Administrator's approval of placement of reinforcement and connectors.
- .3 Supply and install additional reinforcement to masonry as indicated.

### **3.3 BONDING AND TYING**

- .1 Tie masonry veneer to backing in accordance with NBC, CSA-S304.1, CSA-A371 and as indicated.

### **3.4 REINFORCED LINTELS AND BOND BEAMS**

- .1 Reinforce masonry lintels and bond beams as indicated.
- .2 Place and grout reinforcement in accordance with CSA-S304.1, CSA-A371, and CSA-A179.

### **3.5 ANCHORS**

- .1 Supply and install metal anchors as indicated.

### **3.6 LATERAL SUPPORT AND ANCHORAGE**

- .1 Supply and install lateral support and anchorage in accordance with CSA-S304.1 and as indicated.

**3.7 MOVEMENT JOINTS**

- .1 Reinforcement will not be continuous across movement joints unless otherwise indicated.

**3.8 FIELD BENDING**

- .1 Do not field bend reinforcement and connectors except where indicated or authorized by Contract Administrator.
- .2 When field bending is authorized, bend without heat, applying a slow and steady pressure.
- .3 Replace connectors which develop cracks or splits.

**3.9 FIELD TOUCH-UP**

- .1 Touch up damaged and cut ends of epoxy coated or galvanized reinforcement steel and connectors with compatible finish to provide continuous coating.

**3.10 CLEANING**

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

**END OF SECTION**

**Part 1 General**

**1.1 REFERENCES**

- .1 American Society for Testing and Materials (ASTM)
  - .1 ASTM D 2240-05, Standard Test Method for Rubber Property - Durometer Hardness.
- .2 Canadian Standards Association (CSA International).
  - .1 CSA-A371-04, Masonry Construction for Buildings.

**1.2 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures
- .2 Product Data: Submit manufacturer's printed product literature, specifications and data sheets
- .3 Manufacturer's Instructions: Submit manufacturer's installation instructions.
- .4 Shop Drawings:
  - .1 Provide drawings stamped and signed by professional engineer registered or licensed in Province of Manitoba, Canada.
  - .2 Shop drawings consist of flashing and installation details. Indicate sizes, spacing, location and quantities of fasteners.
- .5 Samples:
  - .1 Provide masonry accessory supplemented as follows:
    - .1 Materials: two, cured, and coloured samples, illustrating colour and colour range. Include:
      - .1 Movement joint filler.
      - .2 Lap adhesive.
      - .3 Mechanical fasteners.
      - .4 Reglets.
      - .5 Brick vents.
    - .2 Two moisture control material samples, illustrating colour and colour range, size, and shape. Include:
      - .1 Weep hole vents.
      - .2 Mortar diverters.
      - .3 Grout screens.
    - .3 Two flashing material samples, illustrating colour and colour range, size, shape, and profile. Include as specified:
      - .1 Sheet metal flashings.
      - .2 Composite flashings.
      - .3 Plastic and rubber flashings.

- .6 Manufacturer's Instructions: Submit installation instructions for fillers, adhesives, reglets, brick vents, weeps, vents, diverters, screens, and flashings.

## **Part 2 Products**

### **2.1 MATERIALS**

- .1 Movement joint filler: purpose-made elastomer durometer hardness to ASTM D2240 of size and shape indicated.
- .2 Lap adhesive: recommended by masonry flashing manufacturer.
- .3 Weep hole vents: purpose-made PVC, polypropylene, or fibre filter.
- .4 Mortar diverters: shaped and sized to suit cavity spaces.
- .5 Grout Screens: 6 mm square monofilament screen is fabricated from high-strength, non-corrosive polypropylene polymers to isolate flow of grout in designated areas.
- .6 Polyethylene flashings: Reinforced: two 0.75 mm thick polyethylene films bonded each side of asphalt treated creped kraft paper, reinforced with 12.7 x 12.7 mm fibreglass scrim.
- .7 Aluminum flashings: in accordance with Section 07 62 00.

## **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 INSTALLATION MATERIALS**

- .1 Install continuous movement joint fillers in movement joints at locations indicated on drawings.
- .2 Lap adhesive: apply adhesive to flashing lap joints.
- .3 Mechanical fasteners: install fasteners to suit application and in accordance with manufacturer's written installation instructions.
- .4 Reglets: install reglets at locations indicated on drawings.
- .5 Brick vents: install brick vents at locations indicated on drawings.

### **3.3 INSTALLATION MOISTURE CONTROL**

- .1 Install weep hole vents in vertical joints immediately over flashings, in exterior wythes of cavity wall and masonry veneer wall construction, at maximum horizontal spacing of 600 mm on centre.
- .2 Mortar diverters: install purpose made diverters in cavities where indicated and as directed, size and shape to suit purpose and function.
- .3 Grout screens: install purpose made diverters in cavities where indicated and as directed, size and shape to suit purpose and function.

### **3.4 INSTALLATION: FLASHINGS**

- .1 Build in flashings in masonry in accordance with CAN/CSA A371.
  - .1 Install flashings under exterior masonry bearing on foundation walls, slabs, shelf angles, and steel angles over openings, and at base of cavity wall and where cavity is interrupted by horizontal members or supports and as shown on drawings. Install flashings under weep hole courses and as indicated.
  - .2 In cavity walls and veneered walls, carry flashings from front edge of exterior masonry, under outer wythe, then up backing not less than 150 mm, and as follows:
    - .1 For masonry backing embed or bond flashing 25 mm in joint.
    - .2 For concrete backing, insert or bond flashing into reglets.
    - .3 For wood frame backing, staple flashing to walls behind water resistive paper, and lap joints.
    - .4 For gypsum board and glass fibre faced sheathing backing, bond to wall using manufacturer's recommended adhesive.
  - .3 Lap joints 150 mm and seal with adhesive.
- .2 Form flashing (end dams) at lintels, sills and wall ends to prevent water from travelling horizontally past flashing ends.
- .3 Install vertical flashing where outer veneer returns at window or door jambs, to prevent contact of veneer with inner wall.

### **3.5 CLEANING**

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

**END OF SECTION**

**Part 1 General**

**1.1 REFERENCES**

- .1 Canadian Standards Association (CSA International)
  - .1 CAN3 A165 SERIES-04, CSA Standards on Concrete Masonry Units covers: A165.1, A165.2, A165.3.

**1.2 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Provide submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Product Data: submit product data, including manufacturer's printed data sheets and catalogue pages illustrating products to be incorporated into project for specified products.
- .3 Samples: Provide unit samples in accordance with Section 04 05 00 - Common Work Results for Masonry.
- .4 Manufacturer's Written Instructions: provide in accordance with Section 04 05 00 - Common Work Results for Masonry.

**1.3 DELIVERY, STORAGE, AND HANDLING**

- .1 Deliver, store and handle concrete unit masonry in accordance with Section 04 05 00 - Common Work Results for Masonry.

**Part 2 Products**

**2.1 MATERIALS**

- .1 Standard concrete block units: to CAN3-A165 Series (CAN3-A165.1)
  - .1 Classification: H / 15 / M.
  - .2 Size: as indicated.
  - .3 Special shapes: provide bull-nosed units for exposed corners. Provide purpose-made shapes for lintels and bond beams. Provide additional special shapes as indicated.
  - .4 Colour: standard natural grey (to be painted by 09 90 00).
- .2 Single score concrete block units: to CAN3-A165 Series (CAN3-A165.1)
  - .1 Classification: H / 15 / M.
  - .2 Size: as indicated.
  - .3 Special shapes: radius, provide bull-nosed units for exposed corners. Provide purpose-made shapes for lintels and bond beams. Provide additional special shapes as indicated.
  - .4 Colour: standard natural grey (to be painted by 09 90 00).
- .3 Prefaced: split faced as indicated: Full height split faced ledge and as indicated.

- .1 Special shapes: Provide purpose-made shapes for corners, lintels and bond beams. Provide additional special shapes as indicated.
- .2 Colour: allow for two colours, selected from manufacturer's standard range by Contract Administrator.
- .4 Fire rated concrete block units: to CAN/CSA-A165 Series (CAN/CSA-A165.1) as modified below.
  - .1 Classification: H/15/B/M except as modified by fire resistance requirements specified below.
  - .2 Fire resistant characteristics: aggregate used in units and equivalent thickness of units to the Supplement to the National Building Code of Canada 2005, and in accordance with CAN/ULC-S101, for fire-resistance ratings indicated.
  - .3 Size: modular.
  - .4 Special shapes: Standard and Single Score, provide bull-nosed units for exposed corners. Provide purpose-made shapes for lintels and bond beams and provide additional shapes as indicated.
  - .5 Colour: standard natural grey (to be painted by 09 90 00).

## **2.2 CLEANING COMPOUNDS**

- .1 Compatible with substrate and acceptable to masonry manufacturer for use on products.
- .2 Cleaning compounds compatible with concrete unit masonry and in accordance with manufacturer's written recommendations and instructions.

## **2.3 TOLERANCES**

- .1 Tolerances for standard concrete unit masonry tolerances in accordance with CAN/CSA A165.1, supplemented as follows:
  - .1 Maximum variation between units within specific job lot not to exceed 2 mm.
  - .2 No parallel edge length, width or height dimension for individual unit to differ by more than 2 mm.
  - .3 Out of square tolerance not to exceed 2 mm.

## **Part 3 Execution**

### **3.1 INSTALLATION**

- .1 Concrete block units.
  - .1 Bond: as indicated.
  - .2 Coursing height: as indicated.
  - .3 Jointing: concave where exposed or where paint or other finish coating is specified.
- .2 Prefaced Block:
  - .1 Bond: as indicated.
  - .2 Coursing height: as indicated.
- .3 Concrete block lintels.



- .1 Install reinforced concrete block lintels over openings in masonry where steel or reinforced concrete lintels are not indicated.
- .2 End bearing: not less than 200 mm as indicated on drawings.
- .4 Special Shapes:
  - .1 Install special units to form corners, returns, offsets, reveals and indents without cut ends being exposed and without losing bond or module.
  - .2 Install reinforced concrete block lintels over openings in masonry where steel or reinforced concrete lintels are not indicated.
  - .3 End bearing: not less than 200 mm as indicated on drawings.

### **3.2 CONSTRUCTION**

- .1 Cull out masonry units, in accordance with CAN/CSA A165 with chips, cracks, broken corners, excessive colour and texture variation.
- .2 Build in miscellaneous items such as bearing plates, steel angles, bolts, anchors, inserts, sleeves and conduits.
- .3 Construct masonry walls using bond as noted.
- .4 Build around frames previously set and braced. Fill behind hollow frames within masonry walls with mortar or grout and embed anchors.
- .5 Fit masonry closely against electrical and plumbing outlets so collars, plates and covers overlap and conceal cuts.
- .6 Install movement joints and keep free of mortar where indicated.
- .7 Hollow Units: spread mortar setting bed from outside edge of face shells. Gauge amount of mortar on top and end of unit to create full joints, equivalent to shell thickness. Avoid excess mortar.
- .8 Solid Units: apply mortar over entire vertical and horizontal surfaces. Avoid bridging of airspace between brick veneer and backup wall with mortar.
- .9 Ensure compacted head joints. Use full or face-shell joint as indicated.
- .10 Tamp units firmly into place.
- .11 Do not adjust masonry units after mortar has set. Where resetting of masonry is required, remove, clean and reset units in new mortar.
- .12 Tool exposed joints concave, weathered/raked for interior work; strike concealed joints flush.
- .13 After mortar has achieved initial set up, tool joints.
- .14 Do not interrupt bond below or above openings.

**3.3 REPAIR/RESTORATION**

- .1 Upon completion of masonry, fill holes and cracks, remove loose mortar and repair defective work.

**3.4 CLEANING**

- .1 Progress Cleaning:
  - .1 Standard Concrete Unit Masonry:
    - .1 Allow mortar droppings on masonry to partially dry then remove by means of trowel, followed by rubbing lightly with small piece of block. Clean wall surface with suitable brush or burlap.
    - .2 Prefaced Concrete Unit Masonry:
      - .1 Clean masonry as work progresses using soft, clean cloths, within few minutes after laying. Upon completion, when mortar has set so that it will not be damaged by cleaning, clean with soft sponge or clean cloths, brush, and clean water. Polish with soft, clean cloths.

**3.5 PROTECTION**

- .1 Brace and protect concrete unit masonry in accordance with Section .04 05 00 - Common Work Results for Masonry.

**END OF SECTION**