

**PART 1 GENERAL**

- 1.1 Related Sections
  - .1 Masonry Mortar Section 04 05 12
  - .2 Masonry Accessories Section 04 05 23
  - .3 Masonry Anchorage and Reinforcing Section 04 05 19
  - .4 Concrete Unit Masonry Section 04 22 00
- 1.2 Reference Standards
  - .1 CSA A370-04, "Connectors for Masonry".
  - .2 CSA A371-04, "Masonry Construction for Buildings".
  - .3 CSA A179-04, "Mortar and Grout for Unit Masonry".
- 1.3 Quality Assurance
  - .1 Masonry work to CSA A371-04 except where specified otherwise.
  - .2 Membrane applied by applicator certified by NABA. Applicator to provide certificate to the Contract Administrator to confirm NABA certification. Applicators to have minimum 5 years proven experience.
- 1.4 Testing and Review
  - .1 Testing of mortar cube specimens shall be performed by a firm acceptable to the Contract Administrator and paid for by this section.
  - .2 The Contractor shall take mortar cube specimens when directed by the Contract Administrator at the beginning, at 30% and 50% stages of masonry work.
  - .3 This Contractor shall be responsible for proper storage and delivery of the specimens as prescribed by the testing agency.
  - .4 Each set of specimens shall consist of 3 mortar cubes to be tested as follows: 1 - 7 day test, and 2 - 28 day tests.
  - .5 Provide inspection agency with an accurate description and location of area from which specimens were taken, to be recorded on the test reports.
  - .6 Testing of mortar shall be performed in accordance with CSA A179-04.
- 1.5 Membrane Air/Vapour Barrier Testing
  - .1 Inspection and testing of the air/vapour barrier will be carried out by an inspection agency selected by the Contract Administrator and paid by case allowance.
  - .2 Notify Contract Administrator minimum 48 hours prior to installation of membrane to arrange inspection. Permit agency full access to all portions of work.
  - .3 Contractor must repair all improper installations and air leaks to the acceptance of the testing agency.
  - .4 Costs of inspection paid by cash allowance.

- 1.6 Job Mock-up
  - .1 Construct mock-up panel of exterior masonry wall construction, 1200 x 1800 mm (4' x 6') minimum, showing masonry colours and textures, use of reinforcement, ties, through-wall flashing, weep holes, jointing, coursing, mortar and workmanship.
  - .2 Allow 5 days for review by Contract Administrator before proceeding with masonry work.
- 1.7 Protection
  - .1 Until complete and protected by flashings or other permanent construction, keep masonry dry using waterproof, non-staining coverings that extend over walls and down sides sufficient to protect walls from wind driven rain.
  - .2 Protect masonry and other work from marking and other damage. Protect completed work from mortar droppings. Use non-staining coverings.

## **PART 2 PRODUCTS**

- 2.1 Masonry Accessories
  - .1 Backer Rod: purpose-made expanded polyethylene, elastomer, closed cell, sheet, nominal density 2.7 p.c.f. Ethafoam by Dow or Permastik 2220, of size indicated.
  - .2 Expansion Joint Filler: Dur-O-Wall DA2015 Rapid Expansion Joint closed cell neoprene, conforming to ASTM D1056 class RE41, of sizes required.
  - .3 Base Flashing:
    - .1 Galvanized steel sheet: minimum 0.38mm (0.15") Nominal Base Steel Thickness (NBST) commercial quality to ASTM A526M-85 with Z275 designation zinc coating to ASTM A525 (latest edition).
    - .2 Perm-A-Barrier Membrane S.A. or T.G., as manufactured by Bakor, and Sopraseal Stick as manufactured by Soprema.
  - .4 Drip Flashing: Prefinished steel sheet, minimum 0.38mm (0.15") NBST Grade A steel to ASTM A446 (latest edition), with Z275 designation zinc coating with series 5000 baked enamel finish. Colour as selected.
  - .5 Brick Vents: Louvred, polyvinyl chloride with top flap. Goodco Brick Vent or acceptable, "as Equal".
  - .6 Cavity Closures: Ethafoam SB closed cell polyethylene foam, oversized as recommended by the manufacturer.
  - .7 Neoprene closure strips of thickness required, continuous lengths.
- 2.2 Masonry Ties
  - .1 Connectors for brick veneer shall be Rap-Tie System, as manufactured by Fero Holdings Ltd. consisting of the following:
    - .1 Anchor Plate Connectors: 1.6mm (16 ga.) sheet steel to ASTM 570-M90, hot dipped galvanized finish. Use 50 mm wide plates for wall heights less than 4.5 metres and use 75mm wide plate wall higher than 4.5 metres, for the full height of the wall. Length of plate to suit insulation thickness.
    - .2 Wire-Tie: 5 mm (3/16") diameter galvanized steel wire. Length to extend to mid-point of veneer, but not closer than 25mm (1") from exposed face.

- .3 Insulation support: polyethylene, purpose made for insertion over connector plate to hold insulation boards tight to backup wall.
  - .4 Fasteners: 6mm (1/4") Tapcon hex-head fasteners, 2 per plate with minimum 32mm embedment into concrete block.
  - .5 Connectors shall have corrosion resistance in accordance with Section 4, CSA A37094.
- 2.3 Insulations
- .1 Extruded, expanded polystyrene to CAN/cgsb-51.20-m87 Type 3, RSI=0.87/25 mm, butt edges, 600 x 2400 mm (2'-0" x 8'-0") size.
  - .2 Acceptable products: Cavitymate by Dow Chemical Inc. and Celfort 200 by Owens Corning.
- 2.4 Membrane Air-Vapour Barrier
- .1 Acceptable products:
    - .1 Perm-A-Barrier Membrane, as manufactured by W.R. Grace & Co. of Canada Ltd.
    - .2 Blueskin A.S., as manufactured by Bakor.
    - .3 Sopraseal Stick, as manufactured by Soprema.
  - .2 Ensure compatibility with other building membrane components.
  - .3 Roll width to suit tie locations, where used in cavity wall locations.
  - .4 Provide suitable primer for substrate where self-adhesive membrane is used.
  - .5 Include suitable mastic membrane to seal end laps, terminations and around protrusions such as masonry ties.
- 2.5 Sealants & Caulking
- .1 Sealants and caulking shall comply with Section 07 92 00.

**PART 3 EXECUTION**

- 3.1 Product, Delivery, Storage and Handling
- .1 Cementitious materials and aggregates shall be stored in such a manner as to prevent deterioration or intrusion of foreign material.
  - .2 Supplement Clause 5.16.1.1 of CSA A371-04 as follows:
    - .1 Ensure that materials are delivered to job site in dry condition.
    - .2 Store under waterproof cover on pallets or plank platforms held off ground by means of plank or timber skids.
- 3.2 Climatic Conditions
- .1 Conform to Clause 5.16.2 and 5.16.3 of CSA A371-04 for Cold Weather Requirements and Protection Requirements, and as follows.
  - .2 When air temperature is below 5° C take following precautions in preparing and using mortar:

- .1 Heat sand slowly and evenly but do not scorch. Do not use scorched sand, having a reddish cast, in mortar.
  - .2 Heat water to 70° C maximum.
  - .3 After combining heated ingredients maintain temperature of mortar between 5° C and 50° C until used.
  - .4 Protect mortar from rain and snow.
- .3 When air temperature is below -4° C protect and heat masonry to maintain air temperature above 0° C on both sides of walls during operations and for a period of 24h after.
  - .4 When air temperature is below -4° C, erect wind-breaks to prevent differential freezing of walls.
  - .5 Maintain dry beds for masonry and use dry masonry units only. Do not wet masonry units in winter.
  - .6 During hot weather protect freshly laid masonry from drying too rapidly, by means of waterproof, non-staining coverings.
- 3.3 Measurement and Mixing of Mortar
- .1 Supplemental clause 6 of CSA A179-04 as follows:
    - .1 Mix grout to semi-fluid consistency.
    - .2 Incorporate colour into mixes in accordance with manufacturer's instructions.
    - .3 Use clean mixer for coloured mortar.
    - .4 Prehydrate pointing mortar by mixing ingredients dry, then mix again adding just enough water to produce damp, workable mix that will retain its form when pressed into a ball. Allow to stand for not less than 1 hour or more than 2 hours, then re-mix with sufficient water to produce mortar of proper consistency for pointing.
- 3.4 Membrane Air/Vapour Barrier
- .1 Install air/vapour barrier in strict accordance with manufacturer's specification, including priming of surfaces to be adhered.
  - .2 All surfaces to receive air vapour barrier, including tops to bond beams, to be flush and smooth, without voids.
  - .3 Install in 600 mm (24") widths to suit tie spacing. Cut bottom edge of membrane at ties and lap with lower sheet 50mm (2").
  - .4 Ensure surfaces are flush, without voids, clean, dry, and free of contaminants that would impair adhesion. Fill all voids and provide backing at control joints.
  - .5 Apply mastic membrane at end laps, terminations, and around protrusions, where required to complete seal.
- 3.5 Insulations
- .1 Secure rigid insulation to masonry cavity walls where and as indicated on drawings.
    - .1 Place insulation horizontally with staggered joints. Ensure insulation is placed tight to wall and to all anchors protruding through the system, to maintain continuity of thermal barrier.

- .2 Mechanically secure insulation to back-up using purpose made insulation supports.

### 3.6 Masonry Flashings

- .1 Masonry flashings shall comply with clause 5.13.5 of CSA A371-04, and as follows:
  - .1 Install flashing as shown under exterior masonry bearing on foundation walls, slabs, shelf angles, and steel angles over openings. Install flashing under weep hole courses. Install flashing elsewhere as indicated.
  - .2 In double wythe walls and veneered walls, carry flashing from front edge of masonry, under outer wythe, then up backing not less than 200 mm (8").

### 3.7 Masonry Erection

- .1 Verify lines, levels and dimensions prior to laying masonry. Notify Contract Administrator of discrepancies.
- .2 Connect masonry veneer to backing in accordance with clause 5.6.2 CSA A371-04 with wire ties laid horizontally and set in mortar filled masonry, at 600 mm (24") vertical and 600 mm (24") horizontal spacing maximum, beginning within 300 mm (12") of openings and outside edges. First course of ties to be 400 mm (16") from base foundation.
- .3 Layout coursing and bond to achieve correct coursing heights, and continuity of bond above and below openings, with minimum of cutting.
- .4 Mix units within each pallet and with other pallets to ensure uniform blend.
- .5 Build masonry plumb, level and true to line, with vertical joints in proper alignment, within construction tolerances, see clause 5.3, CSA A371-04.
- .6 Remove chipped, cracked and otherwise damaged units in exposed masonry and replace with undamaged units.
- .7 Allow for movement as follows:
  - .1 Leave 3 mm (1/8") space below shelf angles.
  - .2 Fill and seal gaps in exterior walls to maintain air/vapour barrier and weatherproofing. Use Ethafoam rod and backing and sealant.
- .8 Provide 55 mm (2 1/4") high weeper openings, in exterior wythes of cavity walls, immediately over flashing and at base of facing, at horizontal spacing not exceeding 800 mm (32") o.c.

### 3.8 Jointing

- .1 Mortar joints shall be concave 10 mm (3/8") + 1.5 mm (1/16") unless otherwise noted.
- .2 Joints shall be tooled, where indicated, with a jointer, when the mortar becomes "thumb-print" hard.
- .3 Mortar joints shall be to CSA A371-04. Allow joints to set just enough to remove excess water, then tool with round jointer to provide smooth, compressed, uniformly concave joints.

### 3.9 Control Joints

- .1 Provide continuous vertical control joints in the new brick veneer as located on elevation drawings, but locations not to exceed brick manufacturers recommendations.
- .2 Install continuous control joint fillers and sealant as required.

- .3 Stop reinforcing at every 4<sup>th</sup> course each side of control joints unless otherwise shown.
- 3.10 Lintels
  - .1 Loose and fastened angle lintels shall have minimum 200mm (8") bearing each end.
- 3.11 Building-In
  - .1 Build in items required to be built into masonry.
  - .2 Prevent displacement of built-in items during construction. Check for plumbness, alignment, and correctness of positions, as work progresses.
  - .3 Cut out neatly for electrical outlet boxes, and other recessed or built-in objects.
  - .4 Make cuts straight, clean and free from uneven edges. Use masonry saw where necessary.
  - .5 Embed bolts and anchors solidly in mortar or grout to develop maximum resistance to design forces.
- 3.12 Existing Work
  - .1 Provide for making good and patching of existing work including cutting and patching. Use materials to match existing.
  - .2 Tooth-in new work when filling in existing openings and making new openings in existing walls.
- 3.13 Sealants
  - .1 Apply sealants in accordance with Section 07 92 00.
  - .2 Apply sealants in control joints to match adjacent mortar joints (i.e. scored in scored block).
- 3.14 Cleaning
  - .1 Clean face brick to brick manufacturer's recommendations.

**PART 1 GENERAL**

- 1.1 Related Sections
  - .1 Masonry Procedures Section 04 05 10
  - .2 Masonry Accessories Section 04 05 23
  - .3 Masonry Anchorage and Reinforcing Section 04 05 19
  - .4 Concrete Unit Masonry Section 04 22 00
- 1.2 References
  - .1 ASTM C5 - Quicklime for Structural Purposes.
  - .2 ASTM C94 - Ready-Mixed Concrete.
  - .3 ASTM C207 - Hydrated Lime for Masonry Purposes.
  - .4 CAN3-A5M - Portland Cement.
  - .5 CAN3-A8M - Masonry Cement.
  - .6 CSA A82.56M - Aggregate for Masonry Mortar.
  - .7 CSA A179M - Mortar and Grout for Unit Masonry.
  - .8 IMIAC - International Masonry Industry All-Weather Council: Recommended Practices and Guide Specifications for Cold Weather Masonry Construction.
- 1.3 Submittals
  - .1 Submit product data to requirements of Section 01 30 00.
  - .2 Provide product data on design mix, indicate Proportion or Property method used, required environmental conditions, and admixture limitations.
  - .3 Submit test reports under provisions of Section 01 41 00.
  - .4 Submit test reports on mortar indicating conformance to ASTM C270.
  - .5 Submit test reports on grout indicating conformance to ASTM C476.
  - .6 Submit manufacturer's installation instructions to requirements of Section 01 61 00.
  - .7 Submit premix mortar installation instructions.
- 1.4 Deliver, Store And Protect Products
  - .1 Accept products of this section on site in new condition and verify no damage.
  - .2 Maintain packaged materials clean, dry and protected against dampers, freezing and foreign matter.
- 1.5 Environmental Requirements
  - .1 Maintain materials and surrounding air temperature to minimum 10 deg. C prior to, during, and 48 hours after completion of masonry work.

**PART 2 PRODUCTS**

- 2.1 Materials
  - .1 Portland Cement: CAN3-A5M, Normal type, gray colour.
  - .2 Masonry Cement: CAN3-A8M, for general use.
  - .3 Mortar Aggregate: CSA A82.56M, standard masonry type; clean, dry, protected against

- dampness, freezing, and foreign matter.
- .4 Grout Coarse Aggregate: CSA A179M, maximum 10mm size.
- .5 Grout Fine Aggregate: CSA A179M, sand.
- .6 Hydrated Lime: ASTM C207, Type S.
- .7 Quicklime: ASTM C5, non-hydraulic type.
- .8 Premix Mortar: CSA A179M, using gray cement, normal strength.
- .9 Water: Clean and potable.
- 2.2 Mortar Colour
  - .1 Mortar Colour: shall be natural colour.
- 2.3 Admixtures
  - .1 Plasticizer: Water reducing type which reduces porosity and absorption to increase bond strength.
  - .2 Water Repellent: Liquid type.
- 2.4 Mortar Mixes
  - .1 Mortar for Load Bearing Walls and Partitions: CSA A179M, Type S using the Property Method.
  - .2 Mortar for Non-load Bearing Walls and Partitions: CSA A179M, Type N using the Property Method.
  - .3 Mortar for Reinforced Masonry: CSA A179M, Type M using the Property Method.
  - .4 Pointing Mortar: CSA A179M, Type O using the Property Method; with maximum 2 percent ammonium stearate or calcium stearate.
  - .5 Stain Resistant Pointing Mortar: One part Portland cement, 1/8 part hydrated lime, and two parts graded (80 mesh) aggregate, proportioned by volume. Add aluminum tristearate, calcium stearate, or ammonium stearate equal to 2 percent of Portland cement by weight.
  - .6 Use dirt-resistant mortar for all masonry work.
- 2.5 Mortar Mixing
  - .1 Thoroughly mix mortar ingredients in quantities needed for immediate use in accordance with ASTM CSA A179M.
  - .2 Add in accordance with manufacturer's instructions. Provide uniformity of mix and coloration.
  - .3 Do not use anti-freeze compounds to lower the freezing point of mortar.
  - .4 If water is lost by evaporation, re-temper only within two hours of mixing.
  - .5 Use mortar within two hours after mixing at temperatures of 26 deg. C, or two-and-one-half hours at temperatures under 10 deg. C.
- 2.6 Mix Tests
  - .1 Provide analysis and testing of mortar to requirements of Section 01 41 00.
  - .2 Test mortar mix for compressive strength and slump.



**PART 3            EXECUTION**

3.1                Examination

- .1                Request inspection of spaces to be grouted.

3.2                Preparation

- .1                Apply bonding agent to existing concrete surfaces.
- .2                Plug cleanout holes to prevent leakage of grout materials. Brace masonry for wet grout pressure.

3.3                Installation

- .1                Install mortar in accordance with manufacturer's instructions.
- .2                Work grout into masonry cores and cavities to eliminate voids.
- .3                Do not displace reinforcement while placing grout.
- .4                Remove grout spaces of excess mortar.

**PART 1 GENERAL**

- 1.1 Related Sections
  - .1 Masonry Procedures Section 04 05 10
  - .2 Masonry Mortar Section 04 05 12
  - .3 Masonry Accessories Section 04 05 23
  - .4 Concrete Unit Masonry Section 04 22 00
- 1.2 Reference Standards
  - .1 Do masonry reinforcing and tying to CAN3-S304-M84 unless specified otherwise.

**PART 2 PRODUCTS**

- 2.1 Materials
  - .1 Wire reinforcement: to CAN3-A371-04, G30.18.
  - .2 Metal ties: to CAN3-S304-04.
  - .3 Bar type reinforcement: to CAN3-A371-M04, G30.18.
  - .4 Metal anchors: to CAN3-S304-M04.
  - .5 Corrosion protection: to CAN3-S304-M04, for metal ties and horizontal reinforcing in exterior walls.
- 2.2 Acceptable Products
  - .1 Metal ties:
    - .1 B.V.T.S. (Brick Veneer Tie Support) as manufactured by FERRO and supplied by TALLCRETE, hot-dipped galvanized.

**PART 3 EXECUTION**

- 3.1 Horizontal Reinforcing
  - .1 Install in each wythe of following masonry elements at vertical intervals 400 mm maximum, horizontal reinforcement comprising two 3.8 mm rods, each rod 25 mm from each face, and lapped 150 mm at each splice:
    - .1 Wythes in stack pattern.
    - .2 Wythes of masonry except brick veneer in running bond.
- 3.2 Bonding And Tying
  - .1 Tie masonry veneer to backing in accordance with CAN3-S304-M04. Install ties at 600 mm vertical intervals. Ensure B.V.T.S. ties are installed into stud back-up system.
- 3.3 Engineered Masonry
  - .1 Grout and reinforce engineered masonry in accordance with CAN3-S304-M04 and as indicated.

- 3.4 Reinforced Lintels And Bond Beams
  - .1 Reinforce masonry lintels and bond beams as indicated. Make joints in lintels and bond beams to match adjacent walls.
  - .2 Place and grout reinforcing in accordance with CAN3-S034-04. Use concrete of 25 Mpa or indicated strength conforming to requirements of Section 03 30 00.
- 3.5 Bolts And Anchors
  - .1 Embed bolts and anchors solidly in mortar or grout to develop maximum resistance to design forces.
- 3.6 Control Joints
  - .1 Stop reinforcing 1 inch short of each side of control joints unless otherwise indicated.
- 3.7 Lateral Support And Anchorage
  - .1 Provide lateral support and anchorage in accordance with CAN3-S304-04 and as indicated.

**PART 1 GENERAL**

- 1.1 Related Sections
  - .1 Masonry Procedures Section 04 05 10
  - .2 Masonry Mortar Section 04 05 12
  - .3 Masonry Anchorage and Reinforcing Section 04 05 19
  - .4 Concrete Unit Masonry Section 04 22 00

**PART 2 PRODUCTS**

- 2.1 Materials
  - .1 Control joint filler: purpose-made to ASTM D2240-75 of size and shape indicated:
    - .1 Dur-O-Wall Limited model Rapid\* Regular.
  - .2 Weep hole vents: purpose-made plastic designed to drain cavities to exterior.
    - .1 Dur-O-Wall Limited model Cell-Vent\*.
  - .3 Nailing inserts: 0.6 mm thick purpose-made galvanized steel inserts for setting in mortar joints.
  - .4 Flexible flashing: modified bituminous reinforced pre-fabricated sheet membrane:
    - .1 W.R. Grace "Bituthene 3000".
    - .2 Royston "104A".
    - .3 Bakelite "Vedathane-Duo".

**PART 3 EXECUTION**

- 3.1 Control Joints
  - .1 Install continuous control joint fillers in control joints at locations indicated.
- 3.2 Weep Hole Vents
  - .1 Install weep hole vents in vertical joints immediately over flashings, in exterior wythes of cavity wall and masonry veneer wall construction, at horizontal spacing not exceeding 600 mm oc.
- 3.3 Nailing Inserts
  - .1 Install nailing inserts in mortar joints at 400 mm oc each way, for attachment of wall strapping.

3.4 Wall Sheathing Paper

.1 Wall sheathing paper (Building Paper): 100% high density polyethylene CCMC # 10098

.1 Technical Specification

.1	Tensile Strength:	5.0 N/MM CAN 2-51, 32-M77, ASTM D-1682-GRAB, ASTM D-4632-GRAB
.2	Water Vapour Permeance:	4883 Ng/Pa.s.m <sup>2</sup>
.3	Water Resistance:	> 130 cm of water
.4	Air Permeance:	0.175 L/sec. m <sup>2</sup>
.5	Resistance to UV Exposure	120 days under Florida sun
.6	Flame Spread:	0 - ASTM-E84-89A
.7	Smoke Developed Value:	25 - ASTM-E84-89a

.2 Acceptable Products:

- .1 Dupont Canada Inc. Tyvek
- .2 Reemay Inc. Typar
- .3 Fabrene Inc., Air-gard
- .4 Simplex Products Division, R-wrap

3.5 Masonry Flashing

.1 Install flashing in masonry in accordance with CAN3-CSA-S304-04 and as follows:

- .1 Install flashings under exterior masonry bearing on foundation walls, slabs, shelf angles, and steel angles over openings. Install flashings under weep hole courses. Install flashings elsewhere as indicated.
- .2 In double wythe walls and veneered walls, carry flashings from front edge of masonry, under outer wythe, then up backing not less than 6 inches, and as follows:
  - .1 For masonry backing embed flashing 1 inch in joint.
  - .2 For concrete backing, bond flashing to backing using manufacturer's recommended adhesive or embed flashing in preformed reglet.
  - .3 For wood or steel stud frame backing, attach flashing to walls behind sheathing paper.
  - .4 For gypsum board backing, bond to wall using manufacturer recommended adhesive.
- .3 Lap joints 6 inches and seal with adhesive.

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**PART 1 GENERAL**

- 1.1 Related Sections
  - .1 Masonry Procedures Section 04 05 10
  - .2 Masonry Mortar Section 04 05 12
  - .3 Masonry Accessories Section 04 05 23
  - .4 Masonry Anchorage and Reinforcing Section 04 05 19
  - .5 Miscellaneous Metals Section 05 50 00

**PART 2 PRODUCTS**

- 2.1 Materials
  - .1 Standard concrete masonry units: refer to Section 04 05 10. Type, size (metric) and location as indicated on architectural and structural drawings.

**PART 3 EXECUTION**

- 3.1 Laying Concrete Masonry Units
  - .1 Bond: running stretcher.
  - .2 Coursing height: 200 mm for one block and one joint except as indicated.
  - .3 Jointing:
    - .1 Concave where exposed or where paint or other finish coating is specified.
- 3.2 Concrete Masonry 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.
- 3.3 Cleaning
  - .1 Allow mortar droppings on unglazed concrete masonry to partially dry then remove by means of trowel, followed by rubbing lightly with small piece of block and finally by brushing.

**PART 1 GENERAL**

- 1.1 General Requirements
  - .1 Division One – General Requirements, is part of this Section and shall apply as if repeated here.
- 1.2 Work Included
  - .1 The Work included under this section shall conform to the industry standard and be accepted by the local construction and trade associations.
- 1.3 Related Work
  - .1 Masonry Procedures Section 04 05 10
  - .2 Masonry Mortar Section 04 05 12
  - .3 Masonry Accessories Section 04 05 23
  - .4 Structural Steel Section 05 12 23
- 1.4 Quality Assurance
  - .1 Installation of Masonry Work: CAN3-A371M, CAN3-S304M.
- 1.5 Samples
  - .1 Submit samples to requirements of Section 01 33 00 – Submittal Procedures.
  - .2 Submit four samples of coloured masonry units to illustrate colour, texture and extremities of colour range.

**PART 2 PRODUCTS**

- 2.1 Concrete Masonry Units
  - .1 Hollow Load Bearing Units: CSA A165M, Type H/15/A/M.
  - .2 Non-Load Bearing Units: CSA A165M, Type H/15/A/M.
  - .3 Solid Load Bearing Units: CSA A165M, Type S/15/A/M.
- 2.2 Solid Clay Brick Units
  - .1 TO CAN/CSA A82.1M, as supplied by I-XL Masonry Supplies Ltd. as follows:
    - .1 Type: extruded brick, King size, (width 75 x height 70 x length 240 mm) from stock colours, texture “granite”. Brick Colour #1 – 290 Cinnabar – Brick Colour #2 – 287 Buckskin.
    - .2 Manufactured from one continuous batch to ensure minimum colour and texture variations.
    - .3 Solid Brick: use where necessary to avoid exposing brick cores.
  - .2 Accessories
    - .1 As specified in Section 04 05 23.

.3 Lintels

- .1 Refer to structural drawings.

**PART 3 EXECUTION**

3.1 Inspection

- .1 Verify that site conditions are ready to receive Work and dimensions are as indicated on drawings.
- .2 Beginning of installation means acceptance of site conditions.

3.2 Preparation

- .1 Verify items provided by other sections of Work are properly sized and located.
- .2 Established lines, levels, and coursing, protect from disturbance.
- .3 Provide temporary bracing during erection of masonry Work. Maintain in place until building structure provides permanent bracing.

3.3 Laying

- .1 Face brick – exterior masonry veneer:
- .1 Bond: running bond.
- .2 Jointing: concave joints.
- .2 Mixing and blending: mix units within each pallet and with three or more other pallets to ensure uniform blend of colour and texture.

3.4 Installation

- .1 Install masonry units in accordance with Section 04 05 10.

3.5 Cleaning

- .1 Test specified cleaning agent and procedures by cleaning a small, designated sample area before start of cleaning.
- .2 Do not proceed with cleaning until sample area is approved.
- .3 Soak wall with clean water and flush off loose dirt and mortar.
- .4 Apply specified cleaning agent in accordance with the manufacturer's direction, working from top to bottom.
- .5 Rinse areas thoroughly with clean water to remove cleaning solutions, dirt and mortar residue.