

PART 1 GENERAL

1.1 SECTION INCLUDES

- .1 Reclaimed brick for cavity wall construction, veneer wythe, complete with required thru-wall flashings, cavity vents and installation of loose angle lintels over openings and shelf angle supports face.
- .2 Demolition and cleaning of existing brick.
- .3 Concrete masonry single wythe construction.
- .4 Glazed concrete block.
- .5 Mortar for masonry.
- .6 Reinforcement, anchorage, and accessories.
- .7 Build in items supplied by other sections.
- .8 Cut and fit for other sections of work.

1.2 RELATED SECTIONS

- .1 Section 05 50 00 - Metal Fabrications: Loose steel lintels.
- .2 Section 07 21 15 - Insulation.
- .3 Section 07 28 00 - Air and Vapour Barriers.
- .4 Section 09 31 00 - thin set tiling: stone tile.

1.3 REFERENCES

- .1 CAN3-S304M - Masonry Design and Construction for Buildings.
- .2 CSA A371M - Masonry Construction for Buildings.
- .3 CSA A370M - Connectors for Masonry.
- .4 CSA A179M - Mortar and Grout for Unit Masonry. ASTM C270 - Mortar for Unit Masonry.
- .5 CSA A82.56M - Aggregate for Masonry Mortar.
- .6 ASTM A580 - Stainless and Heat-Resisting Steel Wire.
- .7 ASTM C207 - Hydrated Lime for Masonry Purposes.
- .8 IMIAC - International Masonry Industry All-Weather Council: Recommended Practices and Guide Specification for Cold Weather Masonry Construction.

1.4 SUBMITTALS

- .1 Provide Samples as per Section 01 13 30 Submittal Procedures
- .2 Samples: Submit three samples of stone, sawn and rustic faced, units to illustrate colour, texture and extremes of colour range.
- .3 Samples mortar: Submit two samples of mortar, illustrating mortar colour and colour range.
- .4 Provide shop drawings for the sawn stone work. Indicate stone layout and sizes, anchor details and jointing.

1.5 QUALITY ASSURANCE

- .1 Perform Work in accordance with CSA A371 - Masonry Construction for Buildings and CAN3-S304M - Masonry Design and Construction for Buildings..
- .2 Installer: Company specializing in performing the work of this section with minimum 5 years documented experience.
- .3 Design anchors and supports under direct supervision of a registered Professional Structural Engineer, registered in the Province of Manitoba.

1.6 ENVIRONMENTAL REQUIREMENTS

- .1 Cold Weather Requirements: Conform to CSA A371M - Masonry Construction for Buildings; for cold weather construction requirements.
- .2 Maintain materials and surrounding air temperature to maximum 32 degrees C prior to, during, and 48 hours after completion of masonry work.

PART 2 PRODUCTS

2.1 CONCRETE MASONRY UNITS (CMU)

- .1 Hollow Block Units (CMU): CSA A16 Series Type H/7.5/C/M normal weight.
- .2 Size and Shape: Size and coursing as indicated on drawings. Provide special units for 90 degree corners, bond beams, lintels, and bullnosed corners.

2.2 CONCRETE VENEER GLAZED UNITS

- .1 Prefaced Concrete Block Masonry Units (Glazed CMU): CAN/CSA-A165 Series (CSA-A165.1 and CSA-A165.3), Classification H/7.5/C/M; lightweight, modular concrete block with a permanent glazed face on surface integrally bonded to the base block, custom colour to match sample proved by Contract Administrator. Spectra-Glaze II scored series 4 x 4.
- .2 Size and Shape: modular size of 8" x 8" x 16", Provide special units for 90 degree corners, lintels bullnosed corners.

2.3 BRICK UNITS

- .1 Face Brick: Existing face brick salvaged from existing walls demolished under this Contract.
- .2 Clean existing salvaged brick for reuse.

2.4 MATERIALS – MORTAR

- .1 Portland Cement: CAN3-A5/A8/A362-M88, ASTM C150 Normal Type 10.
- .2 Hydrated Lime: ASTM C207, Type S.
- .3 Water: Clean and potable.

2.5 MORTAR MIXING

- .1 Thoroughly mix mortar ingredients in accordance with CSA A179M. ASTM C270 in quantities needed for immediate use.
- .2 Add mortar colour and admixtures in accordance with manufacturer's instructions. Provide uniformity of mix and colouration.
- .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 32 degrees C, or two-and-one-half hours at temperatures under 5 degrees C.
- .6 Mortar colour: minimum of two colours to be selected.

2.6 REINFORCEMENT AND ANCHORAGE

- .1 Veneer ties: Blocklok Model No BLT-345-BT; hot dipped galvanized.

2.7 FLASHINGS

- .1 Sheet Membrane Flashing: 60 mills thick, polyethylene and rubberized asphalt, width to suit application. Bituthane 3000 manufactured by Grace Construction Materials.
- .2 Primer: rubber based solvent type as recommended by flashing manufacturer.

2.8 ACCESSORIES

- .1 Weeps: Formed opening in mortar.

PART 3 EXECUTION

3.1 EXAMINATION

- .1 Verify that field conditions are acceptable and are ready to receive work.
- .2 Verify items provided by other sections of work are properly sized and located.

- .3 Verify that built-in items are in proper location, and ready for roughing into masonry work.

3.2 MASONRY DECONSTRUCTION

- .1 Demolish existing brick walls in areas as indicated on drawings.
- .2 Carefully remove bricks, clean and store on pallets for reinstallation.

3.3 PREPARATION

- .1 Direct and coordinate placement of metal anchors supplied to other sections.
- .2 Provide temporary bracing during installation of masonry work. Maintain in place until building structure provides permanent bracing.

3.4 COURSING

- .1 Establish lines, levels, and coursing indicated. Protect from displacement.
- .2 Maintain masonry courses to uniform dimension. Form vertical and horizontal joints of uniform thickness.

3.5 PLACING AND BONDING VENEER

- .1 Lay solid masonry units in full bed of mortar, with full head joints, uniformly jointed with other work.
- .2 Buttering corners of joints or excessive furrowing of mortar joints are not permitted.
- .3 Remove excess mortar as Work progresses.
- .4 Do not permit mortar to drop or accumulate into cavity air space or to plug weeps.
- .5 Do not shift or tap masonry units after mortar has achieved initial set. Where adjustment must be made, remove mortar and replace.
- .6 Perform job site cutting of masonry units with proper tools to provide straight, clean, unchipped edges. Prevent broken masonry unit corners or edges.
- .7 Isolate masonry partitions from vertical structural framing members with a control joint.
- .8 Isolate top joint of masonry partitions from horizontal structural framing members and slabs or decks with compressible joint filler.

3.6 WEEPS

- .1 Install weeps in veneer at 600 mm oc horizontally above through-wall flashing, above shelf angles and lintels, and at bottom of walls.
- .2 Provide air vents in veneer at same spacing as weeps at top of walls and below shelf angles and window / opening sills.

3.7 REINFORCEMENT AND ANCHORAGE

- .1 Spacing for tie anchors: 24" Vertical x 24" horizontal.

3.8 MASONRY FLASHINGS

- .1 Extend flashings horizontally at foundation walls, above ledge or shelf angles and lintels, under parapet caps, and at bottom of walls.
- .2 Lap end joints minimum 6" and seal watertight.
- .3 Turn flashing, fold, and seal at corners, bends, and interruptions.

3.9 BUILT-IN WORK

- .1 As work progresses, install plates, and other items to be built-in the work and furnished by other sections.
- .2 Install built-in items plumb and level.
- .3 Do not build in organic materials subject to deterioration.

3.10 TOLERANCES

- .1 Maximum Variation From Unit to Adjacent Unit: 1/16".
- .2 Maximum Variation From Plane of Wall: 1/4"/10 feet and 1/2"/20 feet or more.
- .3 Maximum Variation From Plumb: 1/4" per story non-cumulative.
- .4 Maximum Variation From Level Coursing: 1/8"/3' and 1/4"/10'm.
- .5 Maximum Variation of Joint Thickness: 1/16" / 3'.

3.11 CUTTING AND FITTING

- .1 Cut and fit for other sections as required. Cooperate with other sections of work to provide correct size, shape, and location.
- .2 Obtain approval prior to cutting or fitting masonry work not indicated or where appearance or strength of masonry work may be impaired.

3.12 CLEANING

- .1 Remove excess mortar and mortar smears.
- .2 Replace defective mortar. Match adjacent work.
- .3 Clean soiled surfaces with cleaning solution.
- .4 Use non-metallic tools in cleaning operations.

3.13 PROTECTION OF FINISHED WORK

- .1 Without damaging completed work, provide protective boards at exposed external corners which may be damaged by construction activities.

END OF SECTION