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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 Sections |
| 6 | July 3, 2012 | Reformatted to Remove White Space |
| 7 | April 22, 2015 | General Formatting |
| 8 | August 24, 2015 | First draft Phase 1 review (AV) |
| **9** | **October 19, 2015** | **Updated, Finalized Specification – Legal Reference eDOCS #6263208 v3 (AV)** |
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# GEneral

## Related Sections

### Section 01060 – Regulatory Requirements

### Section 01300 – Submittals

## References

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

#### CAN/CSA‑A23.1-14/A23.2-14, Concrete Materials and Methods of Concrete Construction/ Test Methods and Standard Practices for Concrete.

#### CAN‑A370-14, Connectors for Masonry.

#### CAN‑A371-14, Masonry Construction for Buildings.

#### CSA G30.18-09 (R2014), Carbon Steel Bars for Concrete Reinforcement.

#### CAN‑S304-14, Design of Masonry Structures.

#### CSA W186-M1990 (R2012), Welding of Reinforcing Bars in Reinforced Concrete Construction.

#### CSA A179-14, Mortar and Grout for Unit Masonry.

#### ASTM A1064/A1064M-15, Standard Specification for Carbon-Steel Wire and Welded Wire Reinforcement, Plain and Deformed, For Concrete

#### Reinforcing Steel Institute of Canada (RSIC), Reinforcing Steel Manual of Standard Practice

## 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.

## Quality Assurance

### Test Reports: certified test reports showing compliance with the specified performance characteristics and physical properties.

### Certificates: Product certificates signed by the manufacturer certifying that the materials comply with the specified performance characteristics and criteria and the physical requirements.

### Pre-Installation Meetings: conduct pre-installation meetings to verify Contract Work requirements, manufacturer’s installation instructions and manufacturer’s warranty requirements.

## Submittals

### Product Data:

#### Submit the manufacturer’s printed Product literature, specifications and data sheets in accordance with Section 01300 – Submittals.

### Shop Drawings:

#### Submit shop drawings in accordance with Section 01300 - Submittals.

#### Shop drawings consist of bar bending details, lists and placing drawings.

#### On placing drawings, indicate the sizes, spacing, location and quantities of reinforcement and connectors.

### Manufacturer’s Instructions:

#### Submit the manufacturer’s installation instructions.

# products

## Materials

### Bar reinforcement: in accordance with CSA A371-14 and CSA G30.18-09 (R2012), Grade 400W.

### Wire reinforcement: in accordance with CSA A371-14 and CSA G30.14, ladder type.

### Connectors: in accordance with CSA A370-14 and CSA S304-14.

### Corrosion protection: in accordance with CSA S304-14, galvanized or stainless steel.

## Fabrication

### Fabricate reinforcing in accordance with CSA‑A23.1-14 and the Reinforcing Steel Manual of Standard Practice by the Reinforcing Steel Institute of Canada (RSIC).

### Fabricate connectors in accordance with CAN‑A370-14.

### Obtain the Consultant’s approval for the locations of reinforcement splices other than as shown on the placing drawings.

### Upon the approval of the Consultant, weld reinforcement in accordance with CSA W186-M1990 (R2012).

### Ship reinforcement and connectors, clearly identified in accordance with the Contract Drawings.

# execution

## General

### Supply and install masonry connectors and reinforcement in accordance with CAN‑A370-14, CAN‑A371-14, CAN/CSA‑A23.1-14 and CAN‑S304-14 unless indicated otherwise in the Contract Documents.

### Prior to placing concrete, mortar, grout, obtain the Consultant’s approval of the placement of the reinforcement and connectors.

### Supply and install any additional reinforcement of masonry as indicated in the Contract Documents.

### Horizontal Masonry Reinforcement: heavy duty ladder type fabricated with 4.76 mm thick wires, galvanized after fabrication according to ASTM A153 Class B2, manufactured by Blok-Lok Ltd., Dur-O-Wal Ltd. or equal. Use standard type for single wythe walls (Blok-Lok, BL-10). For corners and intersecting walls use special corner sections and tee-sections such as Corner Lok and Blok-Lok Partition-Lok to match ladder-type reinforcing.

### Vertical Reinforcement: billet steel, grade 400W, deformed bars conforming to CSA G30.12 and Section 03200 – Concrete Reinforcement.

### Masonry Anchors:

#### Strap anchors: 38 mm x 6 mm thick x length as required for proper projection into masonry with bent end.

#### All masonry anchors shall be hot dipped galvanized after fabrication in accordance with ASTM A153 Class B2

## Bonding and Tying

### Bond walls of two or more wythes using metal connectors in accordance with the NBC, CAN‑S304-14, CAN‑A371-14 and as indicated in the Contract Documents.

### Tie masonry veneer to backing in accordance with the NBC, CAN‑S304-14, CAN‑A371-14 and as indicated in the Contract Documents.

## Reinforced Lintels and Bond Beams

### Reinforce masonry lintels and bond beams as indicated in the Contract Documents.

### Place and grout reinforcement in accordance with CAN‑S304-14.

## Grouting

### Grout masonry in accordance with CAN‑S304-14, CSA-A371-14 and CSA-A179-14 and as indicated in the Contract Documents.

## Metal Anchors

### Supply and install metal anchors as indicated in the Contract Documents.

## Lateral Support and Anchorage

### Supply and install lateral support and anchorage in accordance with CAN‑S304-14, CSA-A371-14 and CSA-A179-14and as indicated in the Contract Documents.

## Control Joints

### Terminate reinforcement 25 mm short of each side of control joints unless otherwise indicated in the Contract Documents.

## Field Bending

### Do not field bend reinforcement and connectors except where indicated in the Contract Documents or where authorized by the Consultant.

### When field bending is authorized, bend without heat, applying a slow and steady pressure.

### Replace bars and connectors which develop cracks or splits.

## Field Touch-up

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

## Cleaning

### Upon completion of installation, remove any surplus materials, rubbish, tools and equipment barriers.

**END OF SECTION**