

PART 1 - GENERAL

1.1 RELATED REQUIREMENTS

- .1 Replacing Brick - Section 04 03 31.
- .2 Masonry Mortar - Section 04 05 12.

1.2 REFERENCES

- .1 ASTM International Inc.
 - .1 ASTM A666-10, Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar.
- .2 Canadian Standards Association (CSA International)
 - .1 CAN/CSA-A370-14 Connectors for Masonry.
 - .2 CAN/CSA-A371-14 Masonry Construction for Buildings.
 - .3 CSA S304.1, Design of Masonry Structures.

1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00.
- .2 Product Data:
 - .1 Provide manufacturer's printed product literature, specifications and datasheets illustrating products to be incorporated into project for specified products.
 - .2 Provide two copies of Workplace Hazardous Materials Information System (WHMIS) - Material Safety Data Sheets (MSDS).
- .3 Samples:
 - .1 Provide samples in accordance with Section 01 33 00, supplemented as follows:
 - .1 Samples: submit two samples of each masonry reinforcing type used for this project.
- .4 Manufacturer's Instructions:
 - .1 Provide manufacturer's installation instructions.

1.4 QUALITY ASSURANCE

- .1 Test Reports: certified test reports showing compliance with specified performance characteristics and physical properties.
- .2 Certificates: product certificates signed by manufacturer certifying materials comply with

specified performance characteristics and criteria and physical requirements.

- .3 Pre-Installation Meetings: conduct pre-installation meeting to verify project requirements, manufacturer's installation instructions and manufacturer's warranty requirements. Comply with Section 01 33 00.

- .4 Mock-ups:

- .1 Construct mock-ups in accordance with Section 01 33 00 and requirements of Section 04 03 31 supplemented as follows:

- .1 Construct mock-ups panel of anchorage installation.

- .2 Sample panel: using proposed procedures, anchorage material, connectors, reinforcement material, and workmanship.

1.5 FIELD MEASUREMENTS

- .1 Make field measurements necessary to ensure proper fit of members.

1.6 DELIVERY, STORAGE, AND HANDLING

- .1 Deliver, store and handle masonry anchorage and reinforcing materials in accordance with Section 01 33 00, supplemented as follows:
 - .1 Deliver reinforcement and connectors, identified in shop and placement drawings.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 Connectors: to CAN/CSA-A370 and CSA S304.1.
 - .1 Spiral Anchors: 9.5 mm outside diameter stainless steel spiral anchors to Grade 304. Size length of anchor for 50mm minimum embedment into precast cladding panel.
- .2 Reinforcing Coatings: to CAN/CSA-A370.
 - .1 Anti-Corrosion and Bonding Agent: Three-part, epoxy resin, anti-corrosion and bonding agent. Bond Strength Concrete: 2-3MPa. Bond Strength Steel: 1-2MPa.

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| <u>2.2 FABRICATION</u> | .1 | Fabricate connectors in accordance with CAN/CSA-A370. |
| | .2 | Ship reinforcement and connectors, clearly identified in accordance with drawings. |

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| <u>2.3 SOURCE QUALITY CONTROL</u> | .1 | Upon request, provide Departmental Representative with certified copy of mill test report of connectors, showing physical and chemical analysis, minimum 5 weeks prior to commencing work. |
| | .2 | Upon request inform Departmental Representative of proposed source of material to be supplied. |

PART 3 - EXECUTION

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| <u>3.1 MANUFACTURER'S INSTRUCTIONS</u> | .1 | Comply with manufacturer's written recommendations, including product technical bulletins, handling, storage and installation instructions, and datasheets. |
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| <u>3.2 PREPARATION</u> | .1 | Anchors: Direct and coordinate placement of metal anchors for masonry supplied to other Sections, and as per the project drawings. |
| | .2 | Existing Reinforcing: Clean existing reinforcing of all corrosion products to expose clean, dry steel. |

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| <u>3.3 INSTALLATION</u> | .1 | Anchors: Supply and install lateral support and anchorage into masonry in accordance with CAN/CSA-A370, CAN/CSA-A371, CSA-A23.1/A23.2 and CSA S304.1 unless indicated otherwise. |
| | .2 | Coating of Existing Reinforcing: Coat existing exposed and cleaned reinforcing as per manufacturer's instructions. |

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| <u>3.4 FIELD QUALITY CONTROL</u> | .1 | Site inspections in accordance with Section 01 33 00. |
| | .2 | Obtain Departmental Representative approval of placement of connectors and coating application, prior to placing mortar. |

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| <u>3.5 CLEANING</u> | .1 | Clean in accordance with Section 01 33 00 |
| | .1 | Remove surplus materials, excess materials, rubbish, tools and equipment. |