

PART 1 - GENERAL

1.1 Related Work

- .1 Concrete Formwork Section 03100
- .2 Cast-in-Place Concrete Section 03300
- .3 Pre-cast Architectural Concrete Section 03400

1.2 References

- .1 Do reinforcing work in accordance with CAN/CSA-A23.1-M90.
- .2 Do welding of reinforcement in accordance with CSA-W186-M, except where specified otherwise.

1.3 Source Quality

- .1 Upon request, provide *Contract Administrator* with certified copy of mill test reports of reinforcing steel, showing physical and chemical analysis, minimum 5 weeks prior to commencing reinforcing work.
- .2 Upon request, inform *Contract Administrator* of proposed source of material to be supplied.

1.4 Substitutes

- .1 Substitution of different size bars permitted only upon the written approval of the *Contract Administrator*.

PART 2 - MATERIALS

2.1 Materials

- .1 Reinforcing steel: billet steel, grade 400, deformed bars to CSA G30.18 unless indicated otherwise.
- .2 Welded steel wire fabric: to CSA G30.5. Provide in flat sheets only.
- .3 Chairs, bolsters, bar supports, spacers: to CAN/CSA-A23.1 (non-metallic).
- .4 Mechanical splices: subject to the approval of the *Contract Administrator*.

2.2 Fabrication

- .1 Fabricate reinforcing in accordance with CAN/CSA-A23.1 and ACI 315R, Manual of Engineering and Placing Drawings for Reinforced Concrete Structures.
- .2 Obtain *Contract Administrator's* approval for locations of reinforcement splices other than shown on drawings. Stagger splices in adjacent bars.

- .3 Horizontal reinforcement to be made continuous around corners by use of corner bars of same size and strength as horizontal bars and as indicated on the drawings.
- .4 Bars noted as continuous to be spliced with a minimum of 1.3 times Class "B" tension laps, staggered where possible.
- .5 Provide standard hook length for all bars noted "hooked", unless noted otherwise.
- .6 Ship bundles of bar reinforcement, clearly identified in accordance with bar bending details and list.

PART 3 - EXECUTION

3.1 Field Bending

- .1 Do not field bend reinforcement 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 bars which develop cracks or splits.

3.2 Placing

- .1 Place reinforcing steel as indicated on drawings and in accordance with CAN/CSA-A23.1.
- .2 Metal reinforcement shall be protected by thickness of concrete indicated on drawings or as specified in CAN/CSA-A23.1.
- .3 Clean reinforcing steel of excess rust and previously deposited concrete prior to placing concrete.
- .4 Use non-metallic chairs and bolsters to support all reinforcement. Reinforcement shall be accurately placed and secured against displacement.
- .5 Anchor bolts, dowels, and steel embedments shall be set before concrete placement and shall not be inserted into placed concrete.
- .6 The *Contract Administrator* shall be notified 72 hours prior to concrete placement to inspect installed reinforcing steel.