



## SECTION 908

### DOWELS

#### INDEX

- 908.01 SCOPE**
- 908.02 MATERIALS**
- 908.03 FABRICATION, TRANSPORTATION AND STORAGE**
- 908.04 PLACEMENT**
- 908.05 UNASSIGNED**
- 908.06 MEASUREMENT FOR PAYMENT**
- 908.07 BASIS OF PAYMENT**

#### **908.01 SCOPE**

The scope of this section is to cover the supply, material, fabrication and placement of dowels in substructure and superstructure where drilling and grouting of rock or existing structure is required.

#### **908.02 MATERIAL**

The Contractor shall supply all the reinforcing steel used as dowels and dowel pins to be incorporated in the work. All reinforcing steel for dowels shall be in accordance with Section 905, "Concrete Reinforcement".

#### **908.03 FABRICATION, TRANSPORTATION AND STORAGE**

All steel shall be fabricated to sizes and shapes as shown on the drawings.

The Contractor shall transport the reinforcing steel and dowel pins to the site and shall store in an accessible place where identification checking can take place prior to placement.

All dirt, grease or other foreign materials shall be removed from the steel prior to placement.

#### **908.04 PLACEMENT**

Diaphragm dowels shall be placed in locations as shown on the contract drawings.

Where dowels are to be placed in rock, holes shall be drilled to the required depth and size. Hole diameter shall be two times the nominal diameter of the dowel. Each hole shall be cleaned out, grouted and the dowel set in place. The grout shall be a low slump, expansive type neat grout with a minimum compressive strength of 25 MPa in 28 days.

If the hole contains water, the contractor shall remove the water otherwise a tremie procedure approved by the Engineer shall be used to completely fill the hole with grout. The dowel shall be forced into the hole after the grout has been placed and while it is still fresh.

Where dowels are to be grouted into structures or structural components, all the holes may be drilled before any grouting is done if approved by the Engineer. Hole diameter shall be two times the nominal diameter of the dowel. The holes shall be flushed out, saturated with water and blown out with oil free compressed air

## **FORM 908**

immediately before the grout is injected. The grout shall be a low slump, expansive type neat grout with a minimum compressive strength of 30 MPa in 28 days.

### **908.06 MEASUREMENT FOR PAYMENT**

The quantity of dowels for which payment shall be made shall be the total number of dowels in the (a) substructure and the (b) superstructure which require drilling and grouting as shown on the drawings.

### **908.07 BASIS OF PAYMENT**

Payment at the contract unit price for dowels in the (a) substructure and the (b) superstructure shall be full compensation for furnishing all labour, tools, equipment, materials and incidental items required to supply, install, drill holes, and grouting the dowels as shown on the drawings or as indicated herein.

Where dowel pins are projecting through elastomeric bearing pads, the cost associated with these dowels shall be considered incidental to the supply and installation of bearing pads and separate payment will not be made for the same.