

Administration and Inspection Activities for Metal Railings for Structures

(As specified in OPSS 908)

908.01 SCOPE

This CAIS covers the construction administration and inspection requirements for the construction of metal railings and inspector guard for structures including posts and anchorage assembly as specified in OPSS 908, July 2025.

908.02 REFERENCES

The references listed in OPSS 908 shall apply to this CAIS, in addition to the following standards, specifications, forms, or publications.

Construction Administration and Inspection Specifications (CAIS):

CAIS 906 Structural Steel for Bridges
CAIS 911 Coating Structural Steel Systems

MTO Forms:

PH-CC-701 Request to Proceed
PH-CC-702 Notice to Proceed
PH-CC-821 Manufacturer's Certificate of Conformance

908.03 DEFINITIONS

For the purpose of this CAIS, the definitions shall be as specified in OPSS 908.

908.04 DESIGN AND SUBMISSION REQUIREMENTS

908.04.01 Submission Requirements

908.04.01.01 General

Administrative Activities:

1	-	Receive and Check that the Working Drawings are as specified in the Contract Documents prior to the commencement of fabrication of the metal railing and/or inspector guard.	-
2	-	Check that a copy of the Working Drawings is available and being followed at the manufacturing facility during fabrication.	-

3	-	Check that a copy of the Working Drawings is available and being followed at the site during installation.	-
4	-	Submit a copy of the Working Drawings to MTO Structural.	-

908.04.01.02 Inspection after the Fabrication of Metal Railing and Inspector Guard

Inspection Activities:

1	-	Check that the fabrication of the metal railing and/or inspector guard meets the requirements of the Working Drawings and Contract Documents.	25%
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Administrative Activities:

1	M	Receive and Check the Contractor's Manufacturer's Certificate of Conformance, upon completion of the fabrication of the metal railing and/or inspector guard, and prior to shipping from the manufacturing facility.	-
2	M	Receive and Check a Request to Proceed from the Contractor prior to the delivery of each individual shipment of metal railing and/or inspector guard to the site.	-
3	M	Issue a Notice to Proceed, in a timely manner, and prior to the Contractor delivering the metal railing and/or inspector guard from an individual shipment to the site.	-

908.04.01.03 Mill Test Certificates

Administrative Activities:

1	M	Receive and Check mill test certificates are according to OPSS 906 for steel components; and according to ASTM B221M, B209M, and B108 as applicable for aluminum components.	-
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908.04.01.04 Test Reports for Fasteners and Anchorages

Administrative Activities:

1	M	Receive and Check documentation demonstrating that bolts, anchorages, nuts, and washers are as specified in the Contract Documents.	-
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908.05 MATERIALS

Administrative Activities:

1	-	Check that the materials used for metal railings and inspector guards are as specified in the Contract Documents.	-
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2	M	Receive and check mill test certificates, including for aluminum components according to OPSS 906 "Mill Test Certificates".	-
3	M	Check the type, size, length and condition of materials (including protective coatings) delivered to the site. Check that all the delivered material is being supplied from the approved list and stored properly.	-

908.05.01

Anchorage Assembly

Administrative Activities:

1	-	Check that any substitutions to ASTM A449 anchors are according to OPSS 908.05.01 Anchorage Assembly.	-
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908.07

CONSTRUCTION

908.07.02

Fabrication of Metal Railings and Inspector Guard

908.07.02.01

General

Administrative Activities:

1	-	Check that field modifications are not made unless previously approved by the Contract Administrator.	-
2	-	Check that the fabricator is certified according to CSA W47.1, Division 1 or Division 2 for steel railings or CSA W47.2, Division 1 or Division 2 for aluminum railings.	-

908.07.02.02

Steel Components

Inspection Activities:

1	-	Check that flame cut edges are smooth and free of slag.	25%
2	-	Check damaged/uncoated areas do not exceed the limits of 908.07.01.02.06. If limits are exceeded, check that repairs are according to the Contract Documents.	100%

Administrative Activities:

1	M	Check fabrication and welding is according to the Contract Documents.	-
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908.07.02.03

Aluminum Components

Inspection Activities:

1	-	Check bolts are in full bearing in connections.	100%
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2	-	Check that aluminum components are not installed in contact with dissimilar materials. Verify that contacting surfaces use separators in accordance with the Contract Documents.	100%
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Administrative Activities:

1	M	Check fabrication and welding is according to the Contract Documents.	-
2	CA	Consult with the MTO CSA prior to issuing written approval for use of special aluminum alloy fasteners for aluminum components.	-

908.07.03 Anchorages

Inspection Activities:

1	-	Check that anchorage assemblies are installed as specified in the Contract Documents.	100%
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908.07.04 Installation of Metal Railings and Inspector Guard

Inspection Activities:

1	-	Check that the metal railing system and inspector guard components are protected from damage and distortion during coating, transportation, handling, and installation, and are stored properly on site.	25%
2	-	If applicable, Check that the thickness of epoxy grout placed underneath post bases does not exceed 3 mm. Verify that surface preparation, mixing, , handling, and curing of the epoxy grout adheres to the manufacturer's recommendations.	25%
3	M	Check that installation is to the elevations and alignments specified in the Contract Documents.	100%
4	M	Check the condition of completed posts and rails. Check that damaged areas, including coating, are properly repaired according to the Contract Documents.	100%

908.07.05 Quality Control

Inspection Activities:

1	-	Check that installed metal railings and/or inspector guards meet the requirements of the Contract Documents.	100%
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Administrative Activities:

1	M	Receive and Check a Request to Proceed from the Contractor after preparation of anchorages and prior to installation of metal railing or inspector guard.	-
2	M	Issue a Notice to Proceed, in a timely manner, and prior to the next operation.	-

908.09 MEASUREMENT FOR PAYMENT

Administrative Activities:

1	-	Measurement for payment shall be as specified in OPSS 908.	-
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908.10 BASIS FOR PAYMENT

Administrative Activities:

1	-	Measurement for payment shall be as specified in OPSS 908.	-
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WARRANT: Always with OPSS 908, Construction Specification for Metal Railings for Structures.