

**Administration and Inspection Activities for  
~~Metal Traffic Barriers and Metal Railings for Structures~~**

**(As ~~Specified~~specified in OPSS 908 ~~and SSP 109S19~~)**

**908.01 SCOPE**

This CAIS covers the construction administration and inspection requirements for the construction of metal ~~traffic barriers and metal railings~~ and inspector guard for structures including posts and ~~anchors anchorage assembly~~ as specified in OPSS 908, ~~November 2014, and SSP 109S19, March 2018/~~July 2025.

**908.02 REFERENCES**

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

~~Ontario Provincial Standard Specifications, Construction:~~

~~OPSS 906 — Structural Steel for Bridges~~

~~OPSS 908 — Metal Traffic Barriers and Metal Railings for Structures~~

~~MTO Standard Special Provisions:~~

~~SSP 109S19 — Amendment to OPSS 908, November 2014 — Additional Requirements~~

**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 <del>railings-</del> <u>metal railing and/or inspector guard.</u>	-
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 Metal-Traffic Barrier~~Inspector Guard~~**

Inspection Activities:

1	-	Check that the fabrication of the <u>metal railing and/or</u> <del>the metal traffic barrier or both-</del> <u>inspector guard</u> meets the requirements of the Working Drawings and Contract <u>Documents.</u>	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 <u>metal railing and metal traffic barrier/or inspector guard,</u> 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 <u>metal railing and-metal traffic barrier/or inspector guard</u> to the site.	-
3	M	Issue a Notice to Proceed, in a timely manner, and prior to the Contractor delivering the <u>metal railing and-metal traffic barrier/or inspector guard</u> from an individual shipment to the site.	-

**908.04.01.03 Mill Test Certificates**

Administrative Activities:

<u>1</u>	<u>M</u>	<u>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.</u>	<u>-</u>
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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**

~~908.05.01~~ ~~Metal Traffic Barrier~~

Administrative Activities:

1	-	Check that the materials used for <del>the barrier</del> <u>metal railings and inspector guards</u> are as specified in the Contract Documents.	-
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.	-

~~908.07~~ ~~CONSTRUCTION~~

~~908.0705.01~~ ~~General~~ ~~Anchorage Assembly~~

~~Inspection Activities:~~

<del>1</del>	<del>-</del>	<del>Check that the railing and metal traffic barrier are protected from damage and distortion during hot dip galvanizing, transportation, handling, and installation, and are stored properly on site.</del>	<del>25%</del>
<del>2</del>	<del>-</del>	<del>If applicable, Check that the thickness of epoxy grout placed underneath post bases does not exceed 3 mm. Verify that surface preparation, mixing, installation, and curing time for the epoxy grout adheres to the manufacturer's recommendations.</del>	<del>25%</del>

Administrative Activities:

<del>1</del>	<del>M</del>	<del>Receive and Check a Request to Proceed from the Contractor after installation of railing and metal traffic barrier. Check that any substitutions to ASTM A449 anchors are according to OPSS 908.05.01 Anchorage Assembly.</del>	<del>-</del>
<del>2</del>	<del>M</del>	<del>Issue a Notice to Proceed, in a timely manner, and prior to the next operation.</del>	<del>-</del>

**908.07 CONSTRUCTION**

**908.07.02 Alignment Fabrication of Metal Railings and Inspector Guard**

**908.07.02.01 General**

Administrative Activities:

<u>1</u>	=	<u>Check that field modifications are not made unless previously approved by the Contract Administrator.</u>	=
<u>2</u>	:	<u>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.</u>	:

**908.07.02.02 Steel Components**

Inspection Activities:

<u>1</u>	:	<u>Check that flame cut edges are smooth and free of slag.</u>	<u>25%</u>
<u>2</u>	:	<u>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.</u>	<u>100%</u>

Administrative Activities:

<u>1</u>	M	<u>Check fabrication and welding is according to the Contract Documents.</u>	=
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**908.07.02.03 Aluminum Components**

Inspection Activities:

<u>4</u>	M	<u>Check that installation is to the elevations and alignments specified in the Contract Documents.</u>	<u>100%</u>
<u>2</u>	-	<u>Check the condition of completed posts and rails. Check that damaged areas, including coating, are properly repaired according to the Contract Documents.</u>	<u>100%</u>

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

Administrative Activities:

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

**908.07.03 Anchorage**

Inspection Activities:

<u>1</u>	<u>-</u>	<u>Check that anchorage assemblies are installed as specified in the Contract Documents.</u>	<u>100%</u>
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**908.07.04 ~~Fabrication~~Installation of Metal Railings and ~~Metal Traffic Barriers~~Inspector Guard**

~~Administrative Activities:~~

<del><u>4</u></del>	<del><u>-</u></del>	<del><u>Check that field modifications are not made unless previously approved by the Contract Administrator.</u></del>	<del><u>-</u></del>
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~~**908.07.05 Contact Surfaces**~~

Inspection Activities:

<u>1</u>	<u>-</u>	<u>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.</u>	<u>25%</u>
<u>2</u>	<u>-</u>	<u>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.</u>	<u>25%</u>
<u>3</u>	<u>M</u>	<u>Check that installation is to the elevations and alignments specified in the Contract Documents.</u>	<u>100%</u>
<u>4</u>	<u>-M</u>	<u>Check the condition of completed posts and rails. Check that aluminum components <del>damaged areas, including coating,</del> are not installed in contact with dissimilar materials. Verify that contacting surfaces use separators in accordance with <u>properly repaired according to</u> the Contract Documents.</u>	<u>100%</u>

**908.07.05 Quality Control**

Inspection Activities:

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

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

**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 ~~OFFOR~~ PAYMENT**

Administrative Activities:

1	-	Measurement <del>offor</del> payment shall be as specified <u>in OPSS 908.</u>	-
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WARRANT: Always with OPSS 908, Construction Specification for Metal ~~Traffic Barriers and Metal~~ Railings for Structures.