

Steel element verified General description of the verified steel elements and the code article that it refers to.	Status
Anchor bolts in poured concrete	
- Snug tightening of the anchor bolts We verify that the nuts are firmly tightened. [art.25.4 of standard CSA S16-09].	
- Modified holes of braced columns We verify that the base plate holes of braced columns have not been modified by torching and oversizing. Any modifications must be authorized by the engineer of record. [item 25.4 of structural standard CSA S16-09] We recommend that oversized holes be reinforced with welded plate washers. Their thickness is to be determined.	
Fabrication and erection of the steel elements	
- Plumbness of columns We verify the plumbness of the structure with a bazoooka in good condition. The following columns are not in tolerance: [Art. 29.3.3 of standard CSA S16-09].	
-Alignment and fabrication of steel elements We verify that the fabrication and erection are in tolerances. [Art 28 and 29 of standard CSA S16-09]	
Bolted connections	
- Bolting procedure We validate the bolting procedure and where bolt pretension has been done. [Art.22.2.2 of standard CSA S16-09].	
- Snug-tightened bolts We verify that the connection plates are in contact and that bolts are firmly tightened. [art.23.2 of standard CSA S16-09].	
- Pre-tensioned bolts We verify that minimal bolt pretension is obtained. [Art. 23.9, table 7 and table 8 of standard CSA S16-09]	
Welded connections	
- Welding requirements We verify that company certifications, welder qualifications and welding procedures are conforming. [CWB and chapter 5,8 and 11 of standard CSA W47.1-09].	
- Material preparation We verify the preparation of materials that includes the type of rod, the alignment of the joint, the preparation of the joint and the preheating. [WPS and Chapter 4 and 5 of standard CSA W59-13].	
- Visual inspection	
	We validate the visual quality of the welds [art. 11.5.4 of standard CSA W59-13].
	We validate the visual quality of the welds [art. 12.5.4 of standard CSA W59-13].

Steel deck

- Installation of the deck

We verify the type, the gauge thickness, the general layout and the condition of the steel deck. [Requirements given in the drawings and the fabricators installation specifications]

- Deck Fixations

We verify the compression in the head of the nail. [Hilti specification and installation guide]. We also verify the layout asked in the drawings.

We verify the quality of the deck spot welds. [Art.9.14.5 of standard CSA W47.1-09]. The core must be filled, the perimeter is intact and the minimal dimensions are obtained.

We verify that shear collectors are nailed or welded and they participate in the load transfer. Also we verify that the layout is respected. [Drawing specifications]

- Overlap fixations

We verify the joint separation and solidity. Also we verify the insertion of the screws [CANAM specification and installation guide]. We also verify the layout asked in the drawings.

We validate that the deck joints are firmly and solidly joined. We also verify the layout of the mechanical punching asked in the drawings.

Steel Coatings

- On site touch-up's

[Primer of type CISC/CPMA 1-73a] we verify the surface preparation if possible and we verify that the coating attains its minimal life period. This coating is used for a simple application system.

[Primer of type CISC/CPMA 2-75] we verify the surface preparation if possible and we verify that the coating attains its minimal life period. This coating is used in a multiple application system

We verify that touch-up's are done with a rich zinc coating.

Other Elements

- Installation and fixation of anchors

We verify the model and length of the anchor used. We verify anchor spacing, depth and spacing of the anchor grid. We validate the installation torque. [As per drawings and specifications of the fabricator]

Chemical Anchors : We verify the general installation like the drilling of the holes, the cleaning and the application of the chemical paste.

Mechanical anchors : We verify the general installation like the drilling of the holes, the cleaning and the mechanical embedment.

- Studs

When welded with a rod, we validate visually the quality of the contouring weld [Cl. 6.4.14 et 11.5.4 of the CSA W59-13].

When welded with the stud gun, we validate that 2 qualifying bending test are successful at 90 degrees. We validate the presence of the overlapping weld on the contour of the stud and that the bending test at 30 degrees is successful. [Chap. 6 of the CSA W59-13].

- Drawings

We validate that structural drawings are for construction and that they have been approved by a licenced Quebec engineer. [Cl.4 of standard CSA S16-09]

List of defects and comments

--