

Structural Steel Grade 50



U. S. Steel Canada
A Subsidiary of United States Steel

Reliable Formability and Proven Strength

U. S. Steel Canada provides a range of hot-dip galvanized sheet steel construction products for residential, commercial, institutional, industrial and agricultural construction applications. Structural steel is strong and lightweight making it an economical and versatile building material. The hot dip galvanized Stelcoat™ provides enhanced corrosion resistance resulting in a durable product with a long service life. With reliable formability and proven strength, this steel product performs well in a wide range of structural applications.

Metallurgical Principle

Strength and design flexibility are just some of many valuable qualities required when utilizing sheet steel as a construction material. Through continuous technological innovation, U. S. Steel Canada has developed a high-quality structural grade 50 galvanized product for the residential, commercial and agricultural construction sectors. These products include decking, roof and floor joists that can be used as part of a wide array of building components.

Product Specifications

Sheet steel utilized for residential and commercial building components must meet the requirements from the following Standard: "ASTM A653/A653M Sheet Steel, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process".

Mechanical Properties

GRADE DESIGNATIONS	SS GRADE 50 CLASS 1	SS GRADE 50 CLASS 2
YIELD STRENGTH (ksi)	50	50
TENSILE STRENGTH (ksi)	65	-
ELONGATION (%)	12	12

U. S. Steel Canada Structural Steel Grade 50 galvanized product provides added strength and quality to construction products resulting in stronger, economical, and environmentally friendly building systems. All structural steel component member specifications are in accordance with the standard CSA S136: "North American Specification for the Design of Cold-Formed Steel Structural Members".

Product Attributes

The following chart displays U. S. Steel Canada's product manufacturing capability.

Available Thickness and Width**

THICKNESS RANGE		MAXIMUM WIDTH*	
(in.)	(mm)	(in.)	(mm)
0.040 TO 0.165	1.0 TO 4.2	50	1270

*MAXIMUM WIDTH IS A FUNCTION OF SPECIFIED THICKNESS

Various metallic coating thicknesses are available such as:

Metallic Coating Thickness Availability**

DESIGNATION	oz./ft ² *	DESIGNATION	g/m ² *
G40	0.40	Z120	120
G60	0.60	Z180	180
G90	0.90	Z275	275

*TOTAL COATING BOTH SIDES

**PLEASE INQUIRE ABOUT AVAILABILITY OF SIZES AND COATINGS

The strength of a Structural Steel Grade 50 product permits for increased design flexibility with the known quality associated with Stelco. Please inquire about availability of sizes and coatings



Hamilton Works
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