



► Report on:

Member Selection and
Structural Design

Volume 7, Number 9

Metallic Coating Specifications for Cold-Formed Steel Framing in Canada

Model specifications for steel studs include the requirements for metallic coatings. This is an important characteristic for steel framing since it impacts the long-term service life. Some of the specifications and standards that cover these framing members in Canada include:

- ASTM C645 *Standard Specification for Nonstructural Steel Framing Members*
- AISI S200 *North American Standard for Cold-Formed Steel Framing – General Provisions*
- AISI S201 *North American Standard for Cold-Formed Steel Framing – Product Data*
- CSSBI S5 *Guide Specification for Lightweight Steel Framing*

The AISI S201 standard is referenced in Part 9 of the National Building Code of Canada 2010. AISI S200 is referenced in CSA-S136 *North American Specification for the Design of Cold-Formed Steel Structural Members*. ASTM C645 is commonly included in job-specific specifications.

In all industry standards and specifications related to cold-formed steel framing the minimum galvanized coating for non-structural members is Z120 (G40) and for structural framing is Z180 (G60). The AZM150 (AZ50) 55% aluminum-zinc alloy coating is also referenced as an alternative. Specifications that reference other coating weights should be reviewed and revised accordingly.

The long-term performance of galvanized steel framing has been studied to verify that these minimum coating weights are appropriate. The conclusions from a 10-year study undertaken by the NAHB Research Center clearly demonstrate that the life span of these standard metallic coatings was well beyond the life expectancies of modern buildings. A summary of this research, *Durability of Galvanized Steel Framing in Residential Buildings*, is available from the Steel Framing Alliance on their web site at www.steel framing.org

It should be noted that the industry standards for minimum metallic coating on steel framing may be different from other sheet steel building products. The cold-formed steel framing industry in Canada is harmonized with the United States so that products from all CSSBI manufacturer members are comparable. Heavier coating weights can be ordered if the project conditions required the added protection, but these products would not be readily available.

For More Information from CSSBI

For additional information on the application or specification of cold-formed steel framing members, contact the CSSBI.

Canadian Sheet Steel
Building Institute
652 Bishop St. N., Unit 2A
Cambridge, Ontario N3H 4V6
Tel.: (519) 650-1285
Fax: (519) 650-8081
Web Site: www.cssbi.ca