Code Compliance Research Report
CCRR-0342

Issue Date: 04-30-2020
Revision Date: 04-14-2025
Renewal Date: 04-30-2026

DIVISION: 05 00 00 – METALS
Section: 05 40 00 – Cold-Formed Metal Framing

REPORT HOLDER:
Mill Steel Framing
2905 Lucerne Drive
Grand Rapids, Michigan 49546
www.millsteel.com

REPORT SUBJECT:
Mill Steel Framing Slotted Deflection Track

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2024 and 2021 *International Building Code®* (IBC)
- 2024 and 2021 *International Residential Code®* (IRC)

NOTE: This report references the most recent Code editions noted. Section numbers in earlier editions may differ.

1.2 Mill Steel Framing slotted deflection tracks have been evaluated for the following properties:

- Structural Performance

1.3 Mill Steel Framing slotted deflection tracks are cold-formed steel framing members; which serve as a connecting member that isolates the cold-formed steel framing system from the movement of the primary building structure. Mill Steel Framing slotted deflection tracks are used for framing exterior curtain walls and non-load bearing (nonstructural) interior walls where vertical deflection occurs. Slots in the legs are designed for a total allowable vertical movement of 1.5 inches.

2.0 STATEMENT OF COMPLIANCE

Mill Steel Framing slotted deflection tracks comply with the Codes listed in Section 1.1, for the properties stated in Section 1.2 and uses stated in Section 1.3, when installed as described in this report, including the Conditions of Use stated in Section 6.

2.1 2024 IBC and IRC Evaluation Reports

The Intertek CCRR is an *Evaluation Report* for approval of an alternate material, design, or method of construction in accordance with Section 104.2.3.6.1 of the 2024 IBC and Section R104.2.2.6.1 of the 2024 IRC.

3.0 DESCRIPTION

Mill Steel Framing slotted deflection tracks are fabricated from structural steel ST33H in accordance with ASTM A1003. Steel has a coating complying with AISI S240, G60 or G90.

3.1 Mill Steel Framing slotted deflection tracks are available in steel thicknesses of 33 mil. Deflection tracks are available in web depths of 2.5 inch, 3.625 inch, 4 inch, 6 inch and 8 inches, and flange lengths of 2.5 inches and 3 inches. See Figure 1 for track profiles.

4.0 PERFORMANCE CHARACTERISTICS

4.1 Allowable lateral loads are shown in Table 1.

5.0 INSTALLATION

Installation shall be in accordance with the applicable code, manufacturer's installation instructions and this report, or as determined by the licensed design engineer of record. Where differences occur between this report and the manufacturer's installation instructions, this report shall govern.

5.1 Fasteners attaching the Mill Steel Framing slotted deflection tracks to the structure shall be designed by a licensed design engineer to withstand the allowable lateral loads recognized in Table 1.

5.2 Deflection tracks are attached to cold-formed steel studs with one #8-18 x 3/4 inch (0.118 inch shank diameter) truss head, carbon steel, self-drilling screw through each flange in the middle of the slot. Screws shall comply with ASTM C1513 and the installation of the screws shall be in compliance with ASTM C1007 with a minimum of three threads past the connection.

5.3 Stud to track connection must be installed with a maximum gap of 7/8" between the web of the deflection track and the end of the stud.

6.0 CONDITIONS OF USE

The Mill Steel Framing slotted deflection tracks identified in this report are deemed to comply with the referenced building codes for above grade use subject to the following conditions.

6.1 All designs and calculations shall be prepared by a licensed design professional according to the requirements in the jurisdiction where the project is located.

6.2 The minimum base steel thickness of the section delivered to the jobsite must be a minimum of 95% of the design thickness.

6.3 The Mill Steel Framing slotted deflection tracks are manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc. (AA-647).

7.0 SUPPORTING EVIDENCE

7.1 Manufacturer's drawings and installation instructions.

7.2 Reports of testing and engineering analysis in accordance with ICC-ES AC46, Acceptance Criteria for Cold-Formed Steel Framing Members, October 2019, editorially revised December 2020, and AISI S100-16(2020) w/S2-20, North American Specification for the Design of Cold-Formed Steel Structural Members.

7.3 Documentation of an Intertek approved quality control system for the manufacturing of products recognized in this report.

8.0 IDENTIFICATION

Mill Steel Framing slotted deflection tracks produced in accordance with this report shall be identified with the following information:

8.1 Individual members shall each be identified with labeling at a maximum spacing of 96 inches that includes: the manufacturers name, logo, or initials; The size and member designation; The minimum base steel thickness (uncoated) in decimal or mils; Yield strength; Galvanization coating designation: G60 or G90; The text “Intertek CCRR-0342”.

8.2 Bundles of like members shall be identified with the Intertek identification mark and Code Compliance Research Report number, CCRR-0342, as shown:

CODE COMPLIANCE
Intertek
CCRR-0342

9.0 OTHER CODES

This section is not applicable.

10.0 CODE COMPLIANCE RESEARCH REPORT USE

10.1 Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.

10.2 Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product by Intertek.

10.3 Reference to the https://bpdirectory.intertek.com is recommended to ascertain the current version and status of this report.

TABLE 1 – MILL STEEL FRAMING SLOTTED DEFLECTION TRACK ALLOWABLE LATERAL LOADS [1, 2]

Mill Steel Framing Slotted Deflection Track						Stud at Interior Location				Stud at Jamb Location[3]			
Design Thickness (inch)	Designation Thickness		Min. Yield Strength (ksi)	Flange Length (inch)	Web Depth (inch)	Allowable Lateral Load (lbs)	Safety Factor, Ω[4]	Resistance Factor, ϕ[4]	Nominal Lateral Strength (lbf)	Allowable Lateral Load (lbs)	Safety Factor, Ω[4]	Resistance Factor, ϕ[4]	Nominal Lateral Strength (lbf)
	Mil	Gauge											
0.0346	33	20	33	2.5	2.5 3.625	84.6	2.9	0.55	245	95.2	2.9	0.55	276
					4	86.4	3.3	0.48	285	97.9	3.8	0.42	372
					6 8	56.9	4.0	0.40	227	61.2	2.9	0.55	177
				3	2.5 3.625	83.1	2.9	0.55	241	83.4	3.9	0.41	325
					4	98.7	2.9	0.55	286	98.7	3.8	0.42	375
					6 8	63.5	2.9	0.55	184	44.8	3.6	0.44	161

Notes:

1. The allowable lateral loads are limited to a transverse deflection of 1/8" service limit.
2. The minimum wall stud thickness must be equal to the deflection track thickness.
3. Studs located within 12" of the end of the deflection track.
4. Safety and resistance factors have been determined in accordance with AISI S100-16, Section K2.1.

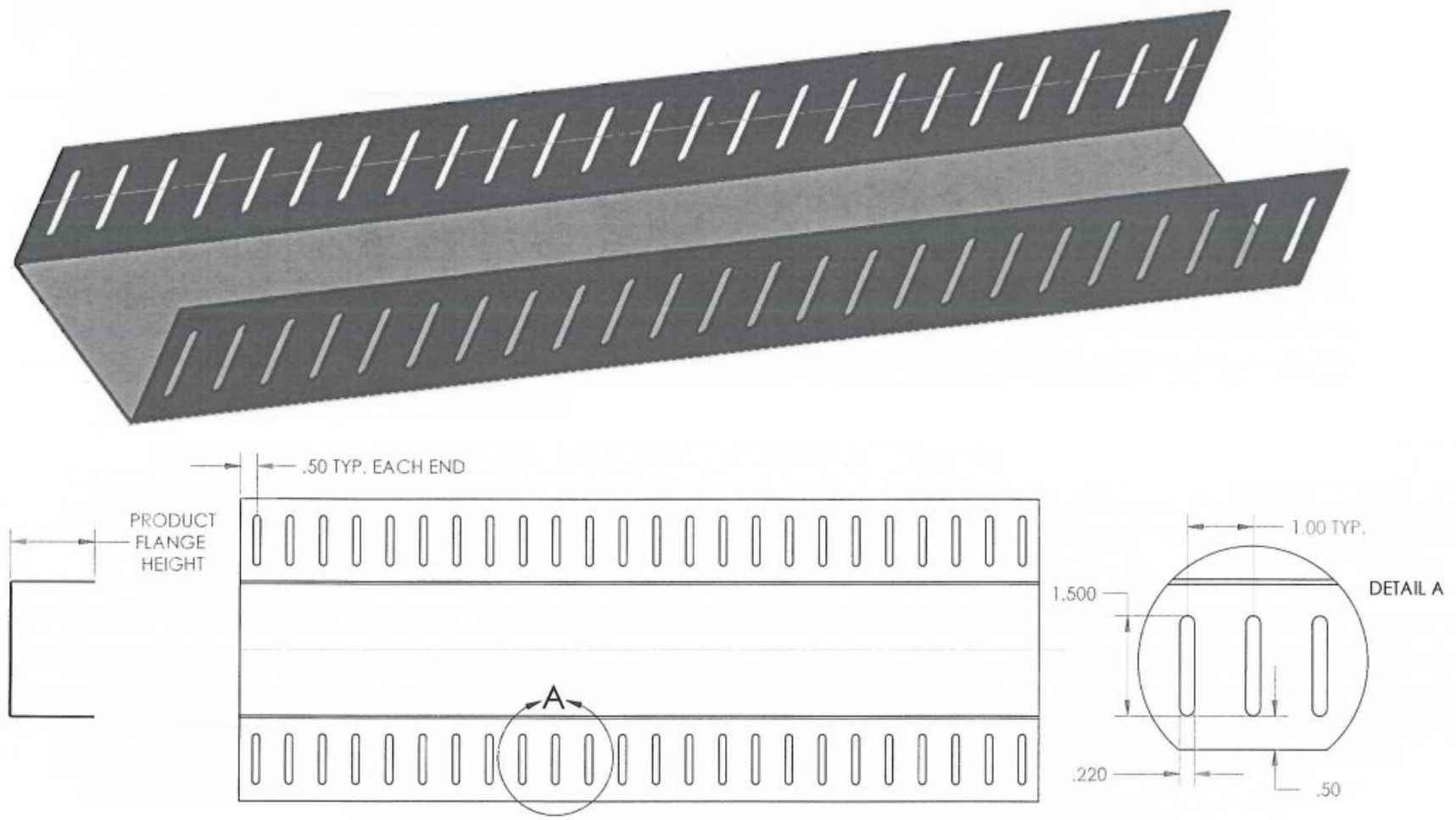

FIGURE 1 – MILL STEEL FRAMING SLOTTED DEFLECTION TRACK