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Revision Date: 05-31-2019
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DIVISION: 05 00 00 - METALS

Section: 05 40 00 – Cold-Formed Metal Framing

Section: 05 41 00 – Structural Metal Stud Framing

DIVISION: 09 00 00 – FINISHES

Section: 09 22 00 – Supports for Plaster and Gypsum Board

Section: 09 22 16 – Non-Structural Metal Framing

REPORT HOLDER:

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REPORT SUBJECT:

MaxTrak™ Slotted Deflection Track (SLT)
MaxTrak™ 2D Slotted Deflection & Drift Track (SLT-H)

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2018 and 2015 International Building Code® (IBC)
- 2018 and 2015 *International Residential Code*® (IRC)
- 2017 Florida Building Code – Building (FBC-B)
(see Section 9.1)
- 2017 Florida Building Code – Residential (FBC-R)
(see Section 9.1)
- 2016 *California Building Code* (CBC)
(see Section 9.2)
- 2016 *California Residential Code* (CRC)
(see Section 9.2)

NOTE: This report references 2018 IBC and IRC Code sections with [FBC and CBC] Code sections shown in brackets where they differ.

1.2 *MaxTrak™* SLT and *MaxTrak™* SLT-H deflection tracks have been evaluated for the following properties:

- Structural Performance
- Fire Resistance

1.3 *MaxTrak™* SLT and *MaxTrak™* SLT-H 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.

1.3.1 *MaxTrak™* SLT is 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 1-1/2 inches.

1.3.2 *MaxTrak™* SLT-H is used for framing exterior curtain walls and non-load bearing (nonstructural) interior walls where vertical deflection and horizontal drift occurs. Slots in the legs are designed for a total allowable vertical movement of 1-1/2 inches. Slots in the web are design for a total allowable horizontal movement of 4 inches.

2.0 STATEMENT OF COMPLIANCE

MaxTrak™ SLT and *MaxTrak™* SLT-H 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.

3.0 DESCRIPTION

MaxTrak™ SLT and *MaxTrak™* SLT-H deflection tracks are fabricated from structural steel ST33H or ST50H in accordance with ASTM A1003. Steel has a coating complying with AISI S240, CP60 or CP90.

3.1 *MaxTrak™* SLT and *MaxTrak™* SLT-H deflection tracks are available in steel thicknesses of 33 mil, 43 mil, 54 mil, and 68 mil. Deflection tracks are available in widths of 2-1/2 inch, 3-5/8-inch, 4-inch, 6 inch and 8 inches. See Figure 1 and Figure 2 for track profiles.



4.0 PERFORMANCE CHARACTERISTICS

- 4.1 Allowable lateral loads are shown in Table 2 and Table 3.
- 4.2 *MaxTrak™* SLT and *MaxTrak™* SLT-H for use in joint systems are fire rated when installed in accordance with the UL Certification XHLI.R26034.

5.0 INSTALLATION

Installation shall be in accordance with the applicable code, manufacturer's installation instructions and this report. Where differences occur between this report and the manufacturer's installation instructions, this report shall govern.

- 5.1 Fasteners attaching the *MaxTrak™* slotted deflection tracks to the structure shall be designed by a licensed design engineer to withstand the allowable lateral loads recognized in Table 2 and Table 3.
- 5.2 Cold-formed steel studs are attached to the deflection tracks with fasteners as described in Table 2 and Table 3. The installation of the screws shall be in compliance with ASTM C1007 with a minimum of three threads past the connection. Installation shall be as depicted in Figure 3, or as determined by the licensed design engineer of record.

6.0 CONDITIONS OF USE

The *MaxTrak™* 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 *MaxTrak™* slotted deflection tracks identified in this report are manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

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, June 2012, editorially revised April 2015.
- 7.3 Documentation of an Intertek approved quality control system for the manufacturing of products recognized in this report.

8.0 IDENTIFICATION

MaxTrak™ slotted deflection tracks produced in accordance with this report shall be identified with labeling at a maximum spacing of 96 inches that includes the following information:

- 8.1 The manufacturers name, logo, or initials;
- 8.2 The size and member designation
- 8.3 The minimum base steel thickness (uncoated) in decimal or mils;
- 8.4 Yield strength;
- 8.5 Galvanization coating designation: CP60 or CP90;
- 8.6 Bundles of like members shall be identified with the Intertek identification mark and Code Compliance Research Report number, CCRR-0205, as shown:





9.0 ADDITIONAL CODES

9.1 FLORIDA BUILDING CODE

9.1.1 Scope of Evaluation: The MaxTrak™ SLT and MaxTrak™ SLT-H deflection tracks were evaluated for compliance with the 2017 Florida Building Code – Building and Florida Building Code – Residential.

9.1.2 Conclusion: The MaxTrak™ SLT and MaxTrak™ SLT-H deflection tracks, described in Sections 2.0 through 7.0 of this Research Report, comply with the 2017 Florida Building Code – Building and Florida Building Code – Residential, including the High-Velocity Hurricane Zone provisions.

9.1.3 Intertek is a Florida State Product Evaluation Entity.

9.2 CALIFORNIA BUILDING CODE

9.2.1 Scope of Evaluation: The MaxTrak™ SLT and MaxTrak™ SLT-H deflection tracks were evaluated for compliance with the 2016 California Building Code and California Residential Code.

9.2.2 Conclusion: The MaxTrak™ SLT and MaxTrak™ SLT-H deflection tracks, described in Sections 2.0 through 7.0 of this Research Report, comply with the 2016 California Building Code and California Residential Code.

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 – CODE REFERENCED STANDARDS

2018 IBC and IRC	2015 IBC and IRC	2017 FBC	2016 CBC
AISI S100-16	AISI S100-12	AISI S100-12	AISI S100-07
AISI S240-15	AISI S200-12	AISI S200-12	AISI S200-12
	ASTM C955-11c	ASTM C955-11c	ASTM C955-11c

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TABLE 2 - MAXTRAK™ ALLOWABLE LATERAL LOADS (INTERIOR LOCATION) ^{1, 2, 3, 4}

MaxTrak™ Slotted Deflection Track Material Properties			Fastener Description	Stud At Interior Location				
Design Thickness (inch)	Designation Thickness			Min. Yield Strength (ksi)	Allowable Lateral Load (lbs) ⁽¹⁾	Safety Factor, Ω ⁽⁶⁾	Resistance Factor, ϕ ⁽⁶⁾	Nominal Lateral Strength (lbf)
	Mil	Gauge						
0.0346	33	20	33	#8 wafer-head self-drilling screws, minimum 0.43" head diameter ⁽⁵⁾	156 lbs	2.92	0.548	456
0.0451	43	18	33	#10 wafer-head self-drilling screws, minimum, 0.43" head diameter ⁽⁵⁾	205 lbs	2.92	0.548	599
0.0566	54	16	50	#10 wafer-head self-drilling screws, minimum, 0.43" head diameter ⁽⁵⁾	360 lbs	2.92	0.548	1051
0.0713	68	14	50	#10 wafer-head self-drilling screws, minimum 0.43" head diameter ⁽⁵⁾	537 lbs	2.92	0.548	1568

Notes:

1. The allowable lateral loads limit the transverse deflection to a 1/8" service limit.
2. The minimum wall stud thickness must be equal to the MaxTrak™ thickness.
3. Stud to track connection must be installed as depicted in Figure 3 with a maximum gap of 7/8" between the web of the deflection track and the end of the stud.
4. Studs located greater than 12" from the end of the MaxTrak™.
5. Fasteners shall comply with SAE J78 and ASTM C954.
6. Safety and resistance factors have been determined in accordance with AISI S100-16, Section K2.1 [AISI S100-12, Section F1.1]



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TABLE 3 - MAXTRAK™ ALLOWABLE LATERAL LOADS (JAMB LOCATION) ^{1, 2, 3, 4}

MaxTrak™ Slotted Deflection Track Material Properties			Fastener Description	Stud At Jamb Location				
Design Thickness (inch)	Designation Thickness			Min. Yield Strength (ksi)	Allowable Lateral Load (lbs) ⁽¹⁾	Safety Factor, Ω ⁽⁶⁾	Resistance Factor, ϕ ⁽⁶⁾	Nominal Lateral Strength (lbf)
	Mil	Gauge						
0.0346	33	20	33	#8 wafer-head self-drilling screws, minimum 0.43" head diameter ⁽⁵⁾	100	2.97	0.539	297
0.0451	43	18	33	#10 wafer-head self-drilling screws, minimum 0.43" head diameter ⁽⁵⁾	133	2.97	0.539	395
0.0566	54	16	50	#10 wafer-head self-drilling screws, minimum 0.43" head diameter ⁽⁵⁾	237	2.97	0.539	704
0.0713	68	14	50	#10 wafer-head self-drilling screws, minimum 0.43" head diameter ⁽⁵⁾	355	2.97	0.539	1054

Notes:

1. The allowable lateral loads limit the transverse deflection to a 1/8" service limit.
2. The minimum wall stud thickness must be equal to the MaxTrak™ thickness.
3. Stud to track connection must be installed as depicted in Figure 3 with a maximum gap of 7/8" between the web of the deflection track and the end of the stud.
4. Studs located within 12" of the end of the MaxTrak™.
5. Fasteners shall comply with SAE J78 and ASTM C954.
6. Safety and resistance factors have been determined in accordance with AISI S100-16, Section K2.1 [AISI S100-12, Section F1.1]



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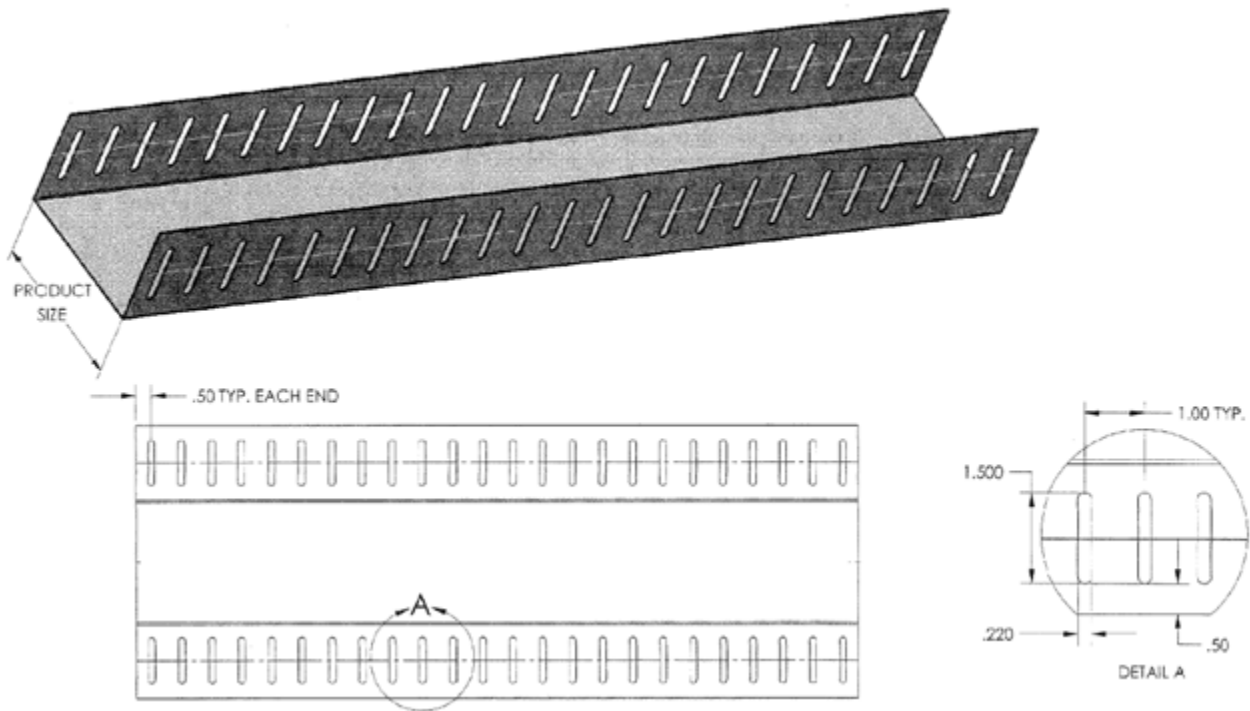


FIGURE 1 – MAXTRAK™ SLOTTED DEFLECTION TRACK (SLT) DETAIL

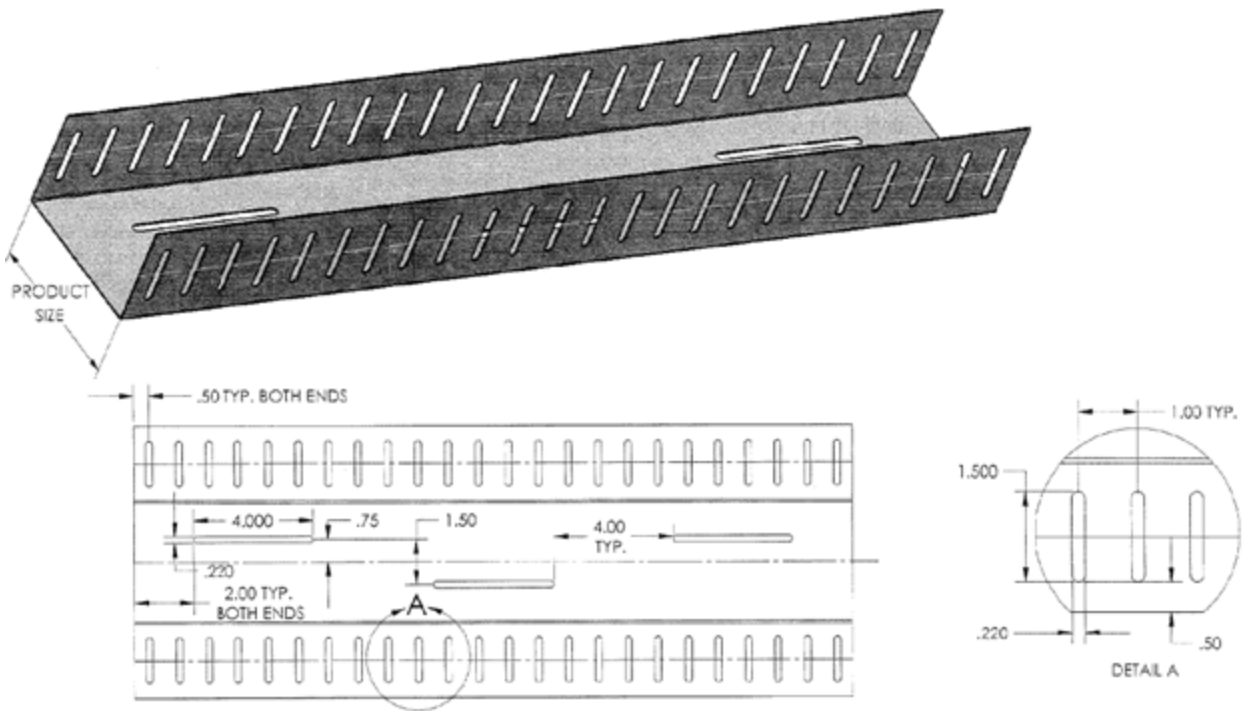


FIGURE 2 – MAXTRAK™ SLOTTED DEFLECTION & DRIFT TRACK (SLT-H) DETAIL

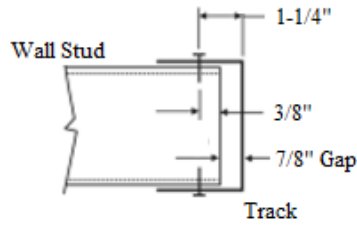


FIGURE 3 – STUD TO TRACK CONNECTION DETAIL



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