

05.40.00 (Cold-Formed Metal Framing)



Technical Services: 888-437-3244, Engineering Services: 877-832-3206, Sales 800-543-7140

# Deep Leg Deflection Track (Slip Track) - Structural

#### Structural deflection track for interior & exterior walls

A single deep leg track system allows the top of the wall stud to float within the track legs. This connection allows for vertical live load movement of the primary structure without transferring axial loads to the wall studs. The wall studs are not fastened to the deflection track and a row of lateral bracing is required within 12" of the deep leg track to prevent rotation and lateral movement of the studs. The deflection track system must be designed for the end reaction of the wall studs (point loads) and for the specific gap required for vertical deflection.

### **Product Data & Ordering Information:**

Yield Strength: Grade 33ksi or 50ksi Material:

Coating: CP60 per ASTM C955 (CP90 available)

33mils, 20ga Structural, 0.0346" Design Thickness, 0.0329" Min. Thickness 43mils: 18 Gauge, 0.0451" Design Thickness, 0.0428" Min. Thickness 54mils: 16 Gauge, 0.0566" Design Thickness, 0.0538" Min. Thickness 68mils: 14 Gauge, 0.0713" Design Thickness, 0.0677" Min. Thickness 97mils: 12 Gauge, 0.1017" Design Thickness, 0.0966" Min. Thickness 2", 2-1/2" or 3" legs with an inside depth equal to the depth of the stud.

Standard depths available: 2-1/2", 3-5/8", 4", 6" and 8".

Custom depths available by special orders.

## 2" Leg with 1/2" Gap

**Dimensions:** 

Allowable Deflection Track Point Loads							
Yield Strength	33mils (20ga)	43mils (18ga)	54mils (16ga)	68mils (14ga)	97mils (12ga)		
33ksi	113	163	213	N/A	N/A		
50ksi	N/A	247	323	435	729		

## 2-1/2" Leg with 3/4" Gap

Allowable Deflection Track Point Loads								
Yield Strength	33mils (20ga)	43mils (18ga)	54mils (16ga)	68mils (14ga)	97mils (12ga)			
33ksi	75	123	158	N/A	N/A			
50ksi	N/A	187	240	318	519			

## 3" Leg with 1" Gap

Allowable Deflection Track Point Loads							
Yield Strength	33mils (20ga)	43mils (18ga)	54mils (16ga)	68mils (14ga)	97mils (12ga)		
33ksi	56	96	129	N/A	N/A		
50ksi	N/A	145	195	256	411		

#### Table Notes:

- 1. Values above are designed for wall stud spacing at 16" o.c.
- 2. Lateral bracing is required within 12" of deflection track to prevent wall studs from rotating.
- 3. Values are based on equations from AISI North American Standard for Cold Formed Steel Structural Framing (S240).
- 4. Stud failure modes relating to the deflection track connection (shear, web crippling, etc.) must be checked separately.

#### **Code Approvals & Performance Standards**

- AISI S100-16 (2020) w/S2-20 North American Specification for the Design of Cold-Formed Steel Structural Members
- AISI S240-20 North American Standard for Cold-Formed Steel Structural Framing
  - o (Compliant to ASTM C955, but IBC replaced with AISI S200 in IBC 2015, AISI S240 in IBC 2018)
  - Section A3 Material Chemical & mechanical requirements (Referencing ASTM A1003/A1003M)
  - Section A4 Corrosion Protection (Referencing ASTM A653/A653M)
  - o Section A5 Products Thickness, shapes, tolerances, identification
  - Section C Installation (Referencing ASTM C1007)
- ICC-ES ESR-1166P Structural Studs and Track
  - ESR-1166P LABC and LARC Supplement
- Intertek CCRR-0206 Structural Studs and Track
- SFIA Stud Code Compliance Certification Program
- SDS For ASTM A1003 Steel Framing Products For Interior Framing, Exterior Framing and Clips/Accessories

# A GAP POINT LOAD DEEP LEG LEG LENGTH DEFLECTION TRACK

#### Calculating slip track point load:

Point Load (P) =

(wind pressure PSF) x (spacing FT) x (wall length

Example: (5 PSF) X (1.33 FT) x (9.5 FT) / 2 = 31.7lbs

Sustainability Credits For more details and LEED letters contact Technical Services at 888-437-3244 or visit clarkdietrich.com/LEED.

- LEED v4.1 MR Credit: Environmental Product Declarations: EPD (1 point) - Sourcing of Raw Materials (up to 2 points) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points)
- LEED v4 MR Credit: Building Product Disclosure and Optimization: EPD (1 point) -Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) -Innovation Credit (up to 2 points).

Deep Leg Deflection Track System The technical content of this literature is effective 10/14/24 and supersedes all previous information.