

PART 1 – GENERAL

deflection bracket with punched fastener holes in depths indicated.

1.1 DESCRIPTION

A. Scope of Work

All interior and exterior and interior non load-bearing light gauge steel and deflection assemblies and connections.

1.2 SUMMARY

A. This Section includes the following:

1. Exterior and Interior non load-bearing wall deflection connections and assemblies.

1.3 PERFORMANCE REQUIREMENTS

- A. Engineering Responsibility: Engage a fabricator who assumes undivided responsibility for engineering deflection connections and assemblies by employing a qualified professional engineer to prepare design calculations, shop drawings, and other structural data.
- B. All Exterior and Interior load-bearing deflection bracket applications are to be engineered by a qualified professional Engineer.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Engage an experienced Installer who has completed cold formed metal framing similar in material, design, and extent to that indicated for this project and with a record of successful in-service performance.
- B. Standard
 1. Work shall meet the requirements of the following standards:
 - a. American Iron and Steel Institute (A.I.S.I.) "Design of Cold Formed Steel Structural Members," January 2002 edition.
 - b. American Welding Society (A.W.S.) D.1.3, 1981 "Structural Welding Code – Sheet Steel."
 - c. American Society for Testing Materials (A.S.T.M.)
 - d. American Institute of Steel Construction (A.I.S.C.) "Manual of Steel Construction," 9th edition.
 - e. All pertinent Federal, State, and Local codes.
 2. The most stringent requirements shall govern in conflicts between specified codes and standards.
 3. Certify that each welder has satisfactorily passed AWS qualification tests for welding processes involved and, if pertinent, has undergone recertification within the past twelve months.
- C. Inspection
 1. As directed by Architect, Owner's testing agency may inspect the maintenance of a quality control program including spot checking weldments and welding procedures in accordance with A.W.S. standards.
 2. Full responsibility for quality control shall remain with the Contractor.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Protect THREE LEGGED DOG DEFLECTION CLIP from corrosion, deformation, and other damage during delivery, storage, and handling.
- B. To store THREE LEGGED DOG DEFLECTION CLIP, protect with waterproof covering, and ventilate to avoid condensation.

1.6 SUBMITTALS

A. Structural Calculations

1. Submit structural calculations prepared by the Professional Engineer of record.

Calculations shall include, but are not limited to:

- a. Description of design criteria.
 - b. Engineering analysis depicting stress and deflection (stiffness) requirements for each framing application.
 - c. Selection of deflection connection components and accessories.
 - d. Verification of attachments to structure and/or adjacent framing components.
- B. Drawings
 1. Submit drawings prepared by the manufacturer for approval by the Project Architect and Engineer. These drawings should include:
 - a. Cross-sections, plans and/or elevations of component.
 - b. Component assembly details showing screw types and locations, weld lengths and locations or other related fastener requirements of component.

PART 2- PRODUCTS

2.1 AVAILABLE MANUFACTURERS:

- A. Manufacturers offering THREE LEGGED DOG DEFLECTION CLIP that may be incorporated in the work include, and are limited to, the following:

FLEX-ABILITY CONCEPTS

5500 W. Reno Ave., Ste. 300, Oklahoma City, OK 73127

TEL:(405) 996.5343 FAX:(405)996.5353

www.flexabilityconcepts.com

2.2 MATERIALS

A. Galvanized – Steel bracket:

1. Coating Designation: Equal or superior to ASTM A653 G-60.
2. Thickness: 16 Ga.

2.3 THREE LEGGED DOG DEFLECTION CLIP

- A. THREE LEGGED DOG DEFLECTION CLIP: Manufacturer's standard steel

2.4 THREE LEGGED DOG DEFLECTION CLIP

- A. Fabricate THREE LEGGED DOG DEFLECTION CLIP accessories of the same material and finish used for THREE LEGGED DOG DEFLECTION CLIP with a minimum yield strength of 33,000 psi.
- B. Provide accessories of manufacturer's standard thickness and configuration, unless otherwise indicated.

2.5 FASTENERS

- A. Mechanical Fasteners: Modified truss screws for slot. #8 Corrosion-resistant coated, self-drilling, self-threading steel drill screws elsewhere. (See customer instruction sheet)
- B. Welded Electrodes: Comply with AWS standards.

2.6 MISCELLANEOUS MATERIALS

- A. Galvanizing Repair Paint: SSPC-Paint 20 of DOD-P-21035, with dry film containing a minimum of 94 percent zinc dust by weight.

2.7 FABRICATION

- A. Fabricate THREE LEGGED DOG DEFLECTION CLIP connections and accessories plumb, square, true to line, true to radius, and with connections securely fastened, according to manufacturer's recommendations and the requirements of this Section.
 1. Install THREE LEGGED DOG DEFLECTION CLIP by sliding THREE LEGGED DOG DEFLECTION CLIP over stud and screw fasten, as standard with fabricator. Wire tying of THREE LEGGED DOG DEFLECTION CLIP members is not permitted.
 - a. Comply with AWS requirements and procedures for welding, appearance and quality of welds, and methods used in correcting welding work.
 2. Fasten other materials to THREE LEGGED DOG DEFLECTION CLIP by welding, bolting, or screw fastening, according to manufacturer's recommendations.
- B. Reinforce, stiffen, and brace framing assemblies to withstand handling, delivery, and erection stresses. Lift fabricated assemblies to prevent damage or distortion.
- C. Fabrication Tolerances: Fabricate assemblies as required.

PART 3- EXECUTION

3.1 INSTALLATION, GENERAL

- A. THREE LEGGED DOG DEFLECTION CLIP connections may be shop or field fabricated for installation, or it may be field assembled.
- B. Install THREE LEGGED DOG DEFLECTION CLIP and accessories plumb, square, true to line, true to radius, and with connections securely fastened, according to manufacturer's recommendations and the requirements of this Section.
 1. Do not cut THREE LEGGED DOG DEFLECTION CLIP.
 2. Fasten THREE LEGGED DOG DEFLECTION CLIP members by welding or screw fastening, as standard with fabricator. Welding of THREE LEGGED DOG should only occur if fastening to base of standard track or deep leg track wire tying of THREE LEGGED DOG DEFLECTION CLIP members is not permitted.
 - a. Comply with AWS requirements and procedures for welding, appearance and quality of welds, and methods used in correcting welding work.
 - b. Locate and install mechanical fasteners according to THREE LEGGED DOG DEFLECTION CLIP manufacturer's instructions.
- C. Install THREE LEGGED DOG DEFLECTION CLIP in intervals specified by project Architect of Engineer.
- D. Provide temporary bracing and leave in place until framing is permanently stabilized.

3.2 REPAIRS AND PROTECTION

- A. Galvanizing Repairs: Prepare and repair damaged galvanized coatings on fabricated and installed THREE LEGGED DOG DEFLECTION CLIP with galvanizing repair paint according to ASTM A 780 and the manufacturer's instructions.
- B. Touchup painting: Wire brush, clean, and paint scarred areas, welds, and rust spots on fabricated and installed prime-painted, THREE LEGGED DOG DEFLECTION CLIP.
 1. Touchup painted surfaces with same type of shop paint used on adjacent surfaces.

Provide final protection and maintain conditions in a manner acceptable to manufacturer and installer to ensure THREE LEGGED DOG DEFLECTION CLIPS are without damage or deterioration at the time of Substantial Completion