SIGN MOUNTING CLIPS AND ATTACHING HARDWARE MGS 08-01D

1.0 Description. This specification describes the requirements for extruded aluminum panel sign mounting hardware to include post clips (sign clips), bolts, washers and locknuts as outlined in Section 1042 of Missouri Department of Transportation Standard Specifications for Highway Construction.

2.0 Materials. Post clips shall be in compliance with ASTM B 108, ANSI 356-T6 Aluminum Alloy. Post clip bolts, washers and locknut shall be composed of Aluminum Alloy, see paragraph 2.3.

2.1 Post Clip Dimensions. Post clips shall have dimensions as illustrated in Figure 1 with a tolerance of ±1/8 inch.

2.2 Post Clip Casting. Post clips shall be cast using a permanent mold cast method.

2.3 Post Clip Bolt, Washer and Locknut Composition, see Figure 1 for Dimensions.

2.3.1 Post clip bolts shall comply with ASTM B 211, 2024-T4 or 6061-T6.

2.3.2 Post clip washers shall comply with ASTM B 209, ALCLAD 2024-T3 or 2024-T3.

2.3.3 Post clip locknuts (with nylon insert) shall comply with ASTM B 211, 2017-T4.

3.0 Certification and Acceptance. Acceptance of Aluminum post clips will be based on compliance of material requirements stated in paragraph 2.0 and certification from manufacturer of compliance with ASTM B 108. Acceptance is also dependent on successful completion of any tests deemed necessary by the engineer.

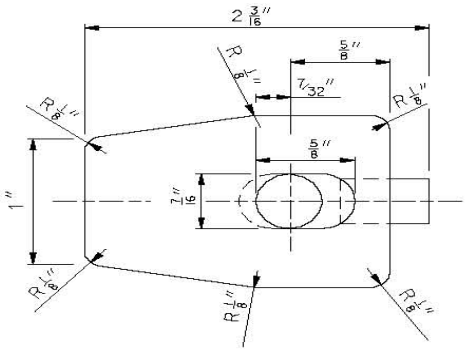
4.0 Ordering. Aluminum Post clips will be ordered in quantities of 500 fully assembled units. Each fully assembled unit shall consist of a post clip, post clip bolt, washer and locknut.

Figure 1

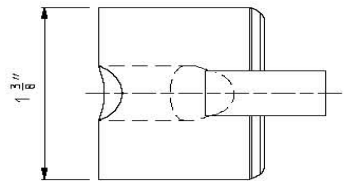
POST CLIPS

used to mount extruded panel signs

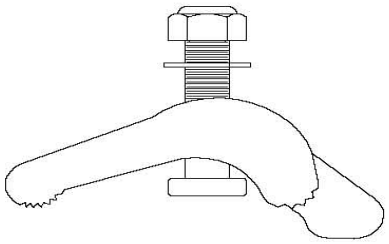
NOTES:
- POST CLIPS SHALL BE ASTM B 108, 356-T6 ALUMINUM ALLOY
- POST CLIP SHALL BE PRE- ASSEMBLED, SEE VIEW BELOW
- ALUMINUM BOLTS SHALL BE ASTM B 211, 2024-T4 OR 6061-T6
- ALUMINUM FLAT WASHERS SHALL BE ASTM B 209, ALCLAD 2024-T4 OR 2024-T4
- ALUMINUM LOCK NUTS (NYLONG INSERT) SHALL BE ASTM B 211, 2017-T4



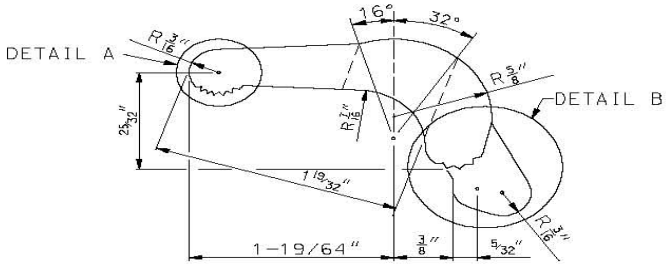
PLAN VIEW



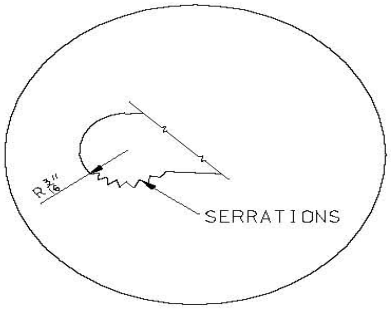
END VIEW



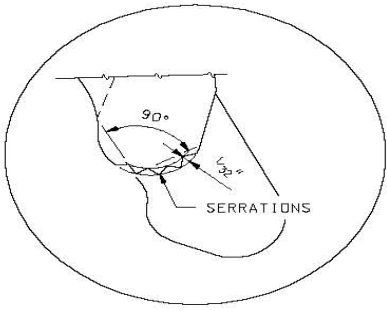
ASSEMBLED VIEW



ELEVATION VIEW



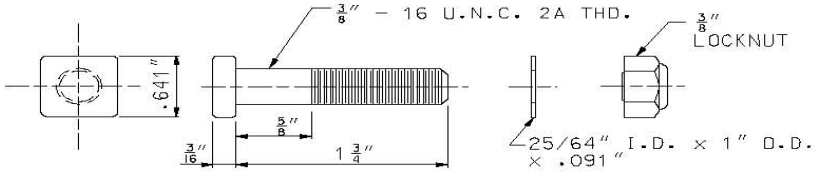
DETAIL A



DETAIL B

ENLARGED DETAIL OF SERRATIONS

POST CLIP BOLT WITH FLAT WASHER AND LOCKNUT



NOTE:
SQUARE BOLT HEAD SHOWN, RECTANGULAR BOLT HEAD WITH LEAST DIMENSION OF .641" MAY BE USED.

BOLT - 1 3/4 x 3/8 ALUMINUM
HEX LOCKNUT - 3/8" ALUMINUM
WASHER - ALUMINUM