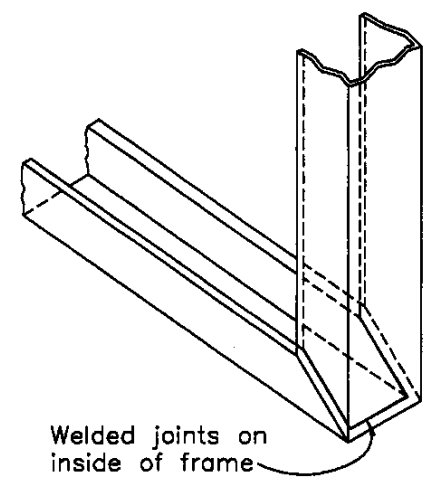
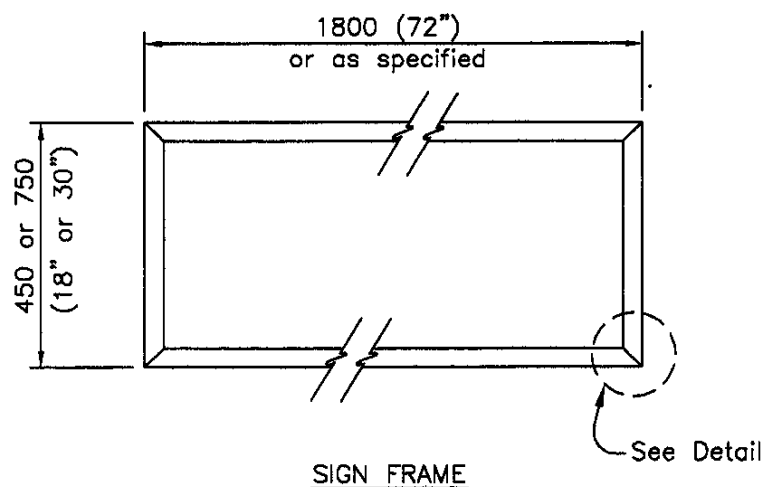


SIGN PANEL

FRAME SECTION

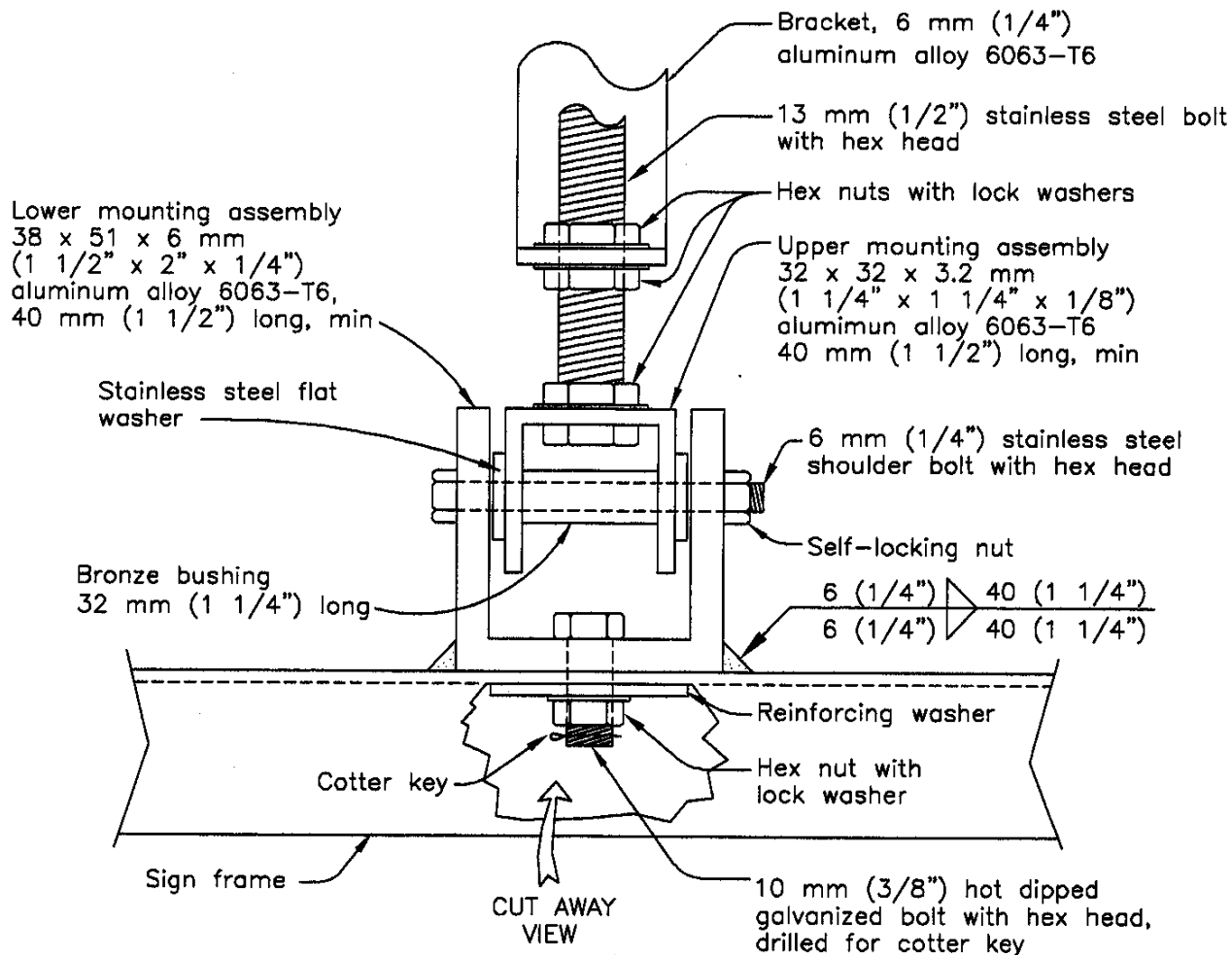


SIGN FRAME

FRAME CORNER

Dimensions are in millimeters, except as noted

REVISIONS NO. DATE		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
1 12/02/97 2 12/23/02 3 4	MAST ARM DOUBLE-FACE REFLECTIVE STREET NAME SIGN		METRIC 313
APPROVED BY: <i>[Signature]</i>		DATE: 4/16/03 EX. DATE: 03/31/07	SHEET 1 OF 3
CITY ENGINEER No. 40599			



**MOUNTING ASSEMBLY (Front View)**

(Alternate to Caltrans Standard for Internally Illuminated Street Name Sign)

Dimensions are in millimeters, except as noted

REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		METRIC 313
1	12/02/97	MAST ARM DOUBLE-FACE REFLECTIVE STREET NAME SIGN	SHEET
2	12/23/02		
3		APPROVED BY: <i>[Signature]</i>	DATE: 4/16/03
4		CITY ENGINEER R. No. 40599	EX. DATE 6/31/07
			2 OF 3

NOTES:

1. **FABRICATION - PANELS** Sign faces shall be panels of 1.3 mm (0.050") aluminum. Panel dimensions shall be 450 mm (18") in height by 1800 mm (72") in width unless otherwise specified. Affixed to one side of each panel shall be white (silver) high-intensity reflective sheeting meeting criteria for encapsulated lens sheeting specified in State of California "Specifications for Reflective Sheeting Aluminum Sign". Upon each panel shall be screened a green background. The resulting panel shall thus have a white legend and white border on a field of green. The green color shall be the standard color used for California highway guide signs. Legend shall be standard 200 mm (8") upper-case/150 mm (6") lower-case alphabet, 200 mm (8") numerals, arrows per detail and 20 mm (3/4") border. Legend shall be spaced on the panel in a balanced pattern.
2. **FABRICATION - SIGN FRAME** A closed rectangular frame shall be fabricated using 6063-T6 aluminum channels 32 x 32 x 3.2 mm (1 1/4" x 1 1/4" x 1/8"). Corners of the rectangular frame shall be mitered and welded along all three joined faces to assure structure soundness and maximize watertightness. Welds shall be on the inside of the frame. The lower mounting assembly shall be affixed to the top face of the frame prior to final fabrication of the sign.
3. **FINAL FABRICATION** Sign panels shall be riveted to the frame with anodized aluminum rivets. Rivet spacings shall not exceed 200 mm (8") on center. Rivet color shall be white or silver to approximate color of the sign panel border into which they are set. Sign panels with identical legends shall be affixed to both sides of a single frame, except where otherwise specified.
4. **MOUNTING ASSEMBLIES** Sign fixtures shall be suspended from mast arm by use of brackets which adjust vertically for leveling. Different rates of slope and degrees of curvature of the mast arm equipment requires this flexibility be incorporated into the assemblies. The adjustable bracket assembly shall provide for controlled movement by use of a bronze bushing so that the sign fixture will swing freely, thus minimizing transmission of wind loads to the mast arm and pole. Mounting assemblies shall be constructed and attached to the sign and mast arm in accordance with State Standard Plans, Plan ES-7A thru ES-7H, with the following exceptions:
  - (a) The lower mounting assembly may be attached to the sign frame by use of a single mounting bolt rather than two as indicated in the Standard Plan, provided that, in addition to the above-referenced single mounting bolt, a fillet weld shall be run along both edges of the lower mounting assembly for the length of the join between said assembly and the top face of the sign frame.
  - (b) The upper mounting assembly may be of a dimension that permits its nesting inside the lower mounting assembly, rather than the reverse as shown in the State Standard Plan.
  - (c) Both the upper and lower mounting assemblies shall be constructed of aluminum bar stock.

Location of the mounting assemblies on the sign shall be in accordance with State Standard Plans ES-7A thru ES-7H. 1500 mm (60") signs shall be mounted the same as 1800 mm (72") signs.
5. **MOUNTING LOCATION** Location of sign on mast shall be per State Standard Plans ES-7A thru ES-7H. 1500 mm (60") signs shall be mounted same as 1800 mm (72") signs.

Dimensions are in millimeters, except as noted

REVISIONS		CITY OF LONG BEACH, CALIFORNIA DEPARTMENT OF PUBLIC WORKS	STANDARD PLAN NO.
NO.	DATE		
1	12/02/97	MAST ARM DOUBLE-FACE REFLECTIVE STREET NAME SIGN	METRIC 313
2	12/23/02		
3	02/28/03		
4		APPROVED BY: <i>[Signature]</i> CITY ENGINEER R. No. 40599	DATE: 4/16/03 EX. DATE: 03/31/07
		SHEET 3 OF 3	