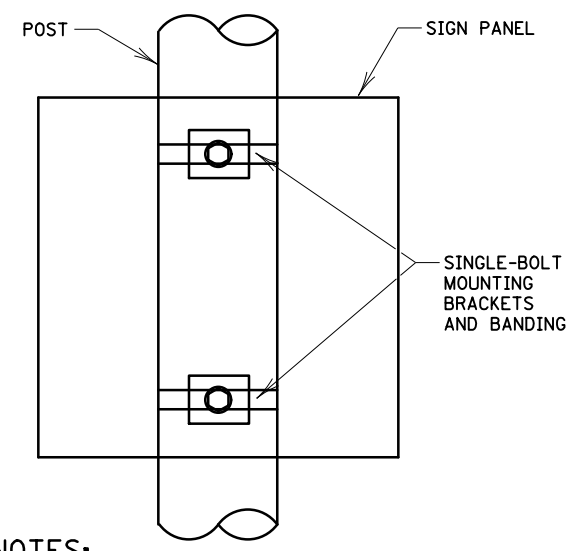
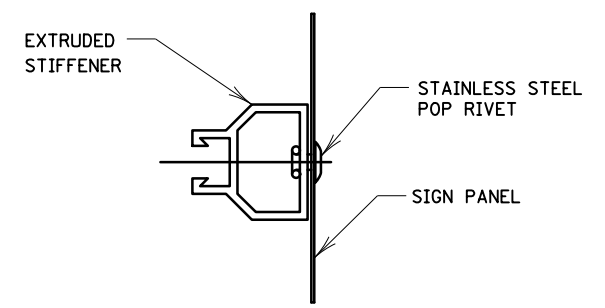


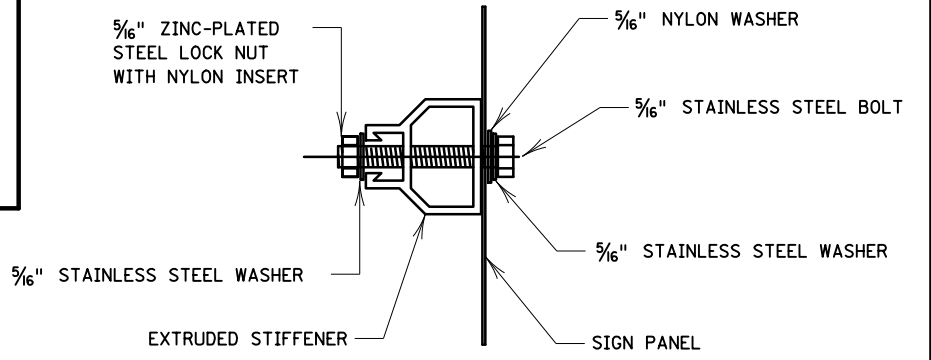
**NON-STIFFENER MOUNTING DETAILS**  
FOR SIGN PANELS UP TO 24" WIDE AND  
OVERHEAD SIGN IDENTIFICATION PLATES



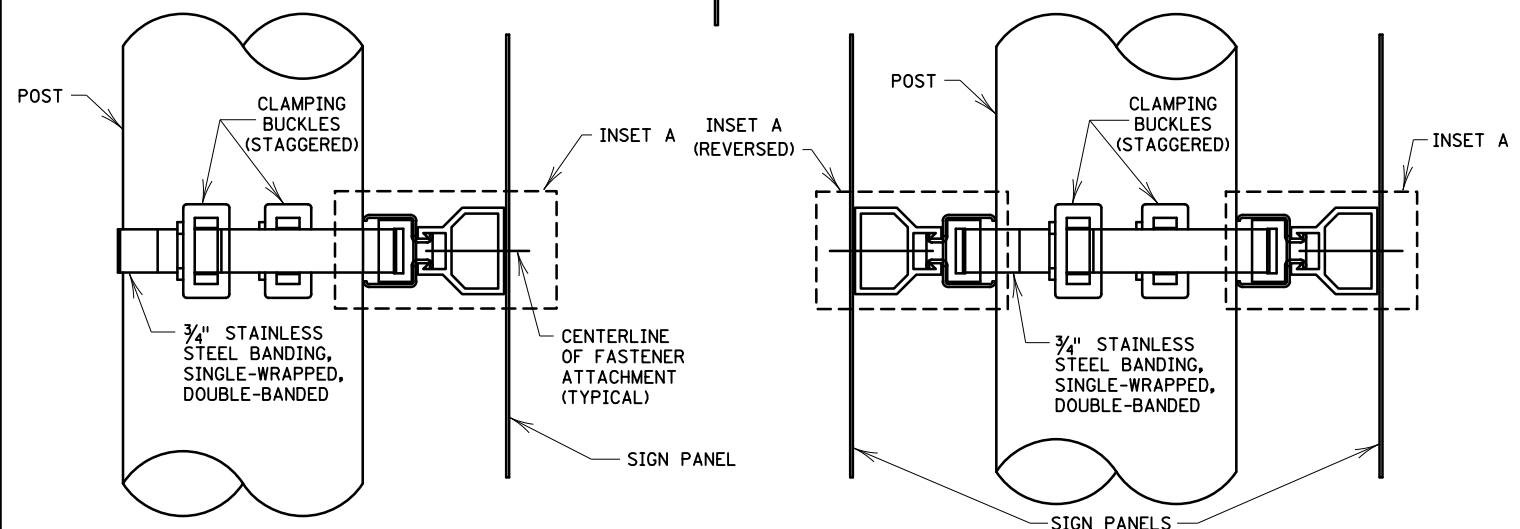
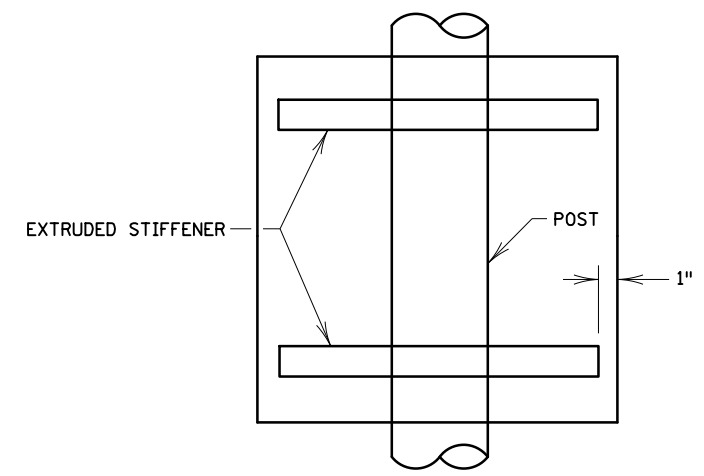
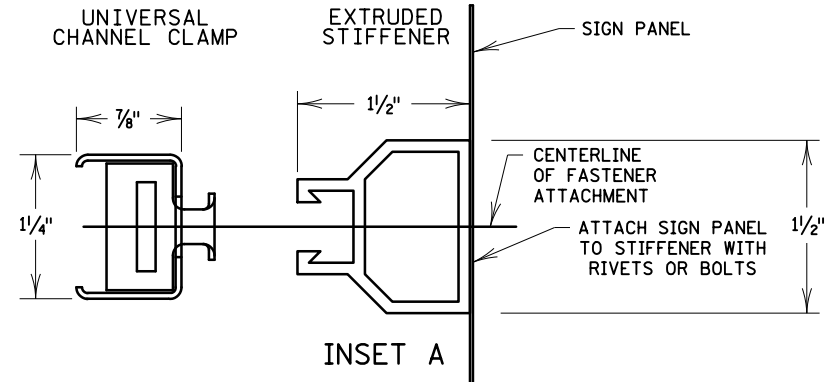
**NOTES:**  
TENSION THE BANDING IN ACCORDANCE WITH THE MANUFACTURER'S  
INSTALLATION REQUIREMENTS.  
DO NOT MOUNT SIGNS ON BREAKAWAY TRAFFIC SIGNALS AND  
LUMINAIRE SUPPORTS.



ATTACH 3/16" RIVETS AT 6" INTERVALS.  
ATTACH END RIVETS 3" FROM SIGN EDGE.  
USE 1/4" RIVETS FOR THE END RIVETS.  
**RIVET ATTACHMENT**



ATTACH AT STANDARD PUNCH CODE LOCATIONS  
**BOLT ATTACHMENT**



**STIFFENER MOUNTING DETAILS**  
FOR SIGN PANELS 30" WIDE AND LARGER

NUMBER OF EXTRUDED STIFFENERS REQUIRED		PANEL WIDTH				
		2'	3'	4'	5'	6'
PANEL HEIGHT	2'	2	2	2	2	3
	3'	2	2	2	2	3
	4'	2	2	2	2	3
	5'	3	3	3	3	3
	6'	3	3	3	4	4
7'	3	3	3	4	4	

PROVIDE VERTICAL SPACING OF NO MORE THAN 36"  
BETWEEN STIFFENERS.  
PROVIDE A VERTICAL DISTANCE OF NO MORE THAN 12"  
FROM PANEL EDGE TO STIFFENER.

**NOTES:**  
SPACE STIFFENERS IN ACCORDANCE WITH THE PUNCH CODES SHOWN IN THE MnDOT  
STANDARD SIGNS AND MARKINGS MANUAL.  
ATTACH STIFFENERS TO SIGN PANELS USING FASTENERS. PLACE STIFFENERS AT THE  
VERTICAL LOCATIONS OF THE MOUNTING HOLES FOR EACH SIGN.  
FURNISH AND INSTALL HARDWARE COMPATIBLE WITH STIFFENER MOUNTING SYSTEMS.  
FURNISH TWO TYPE 201 STAINLESS STEEL 3/4" WIDE BY 1/32" THICK STRAPS, EACH  
WITH CLAMPING BUCKLES AND INSTALL SEPARATELY WITH A SINGLE WRAP AROUND  
THE MAST ARM CHORD. PLACE THE SECOND BANDING STRAP OVER THE FIRST STRAP  
AND STAGGER THE CLAMPING BUCKLES SO THE BUCKLES ARE NOT DIRECTLY OVER  
ONE ANOTHER.

REVISION:  
APPROVED: OCTOBER 16, 2019  
*Brian Johnson*  
BRIAN JOHNSON  
STATE TRAFFIC ENGINEER

**m** MINNESOTA  
DEPARTMENT OF TRANSPORTATION  
STANDARD PLAN 5-297.730  
*Peter A Harff*  
PETER A. HARFF  
STATE DESIGN ENGINEER  
1 OF 1  
APPROVED: 10-16-2019  
REVISED:  
STATE PROJ. NO. (T.H. ) SHEET NO. OF SHEETS

**SIGN MOUNTING SYSTEMS FOR ROUND SUPPORTS**