



1-800-367-1492 • www.cpcsigns.com

Sign Care Guidance & Sign Mounting Solutions



Substrate Reliability

- ◆ Users are urged to carefully evaluate substrates for adhesion and sign durability.
- ◆ Aluminum, when properly prepared, has been found to be most reliable and durable for traffic signs.

Sign Transport

- ◆ When transporting, signs must be secured to avoid damage due to scuffing, abrasion and load shifting.

Receiving/Inspection

- ◆ Upon delivery, check merchandise for quantity and carrier damage. Notify Custom Products immediately of any problems.
- ◆ *Any damages or shortages must be noted on carrier delivery receipt. We highly recommend taking pictures with a smart phone to support any freight or quality claims. It can shorten the claims process significantly.*

Storage and Packaging

- ◆ Signs should be stored indoors and kept dry.
- ◆ Signs should be stored vertically in racks and interleaved with 3M sheeting liner with the glossy side against all sign faces.
- ◆ Packaging that has become wet or damp must be removed immediately and the signs permitted to dry completely.
- ◆ If signs are stored outdoors, they must be unwrapped from their transport packaging and stored in a way that permits free air circulation and normal moisture evaporation.
- ◆ Signs stored outside should also be stored upright on edge using wooden battens on the floor or as vertical supports, or both.

Sign Installation

- ◆ When attaching signs to posts, all connecting bolts should be tightened with tools that minimize contact with the sign face to avoid scratching the surface.
- ◆ Only one end of the nut and bolt should be tightened, preferably tightened from the rear of the sign.
- ◆ Tightening from both sides can transfer stress onto the 3M™ Reflective Sheeting resulting in permanent pinwheel style wrinkles.

Sign Installation *continued*

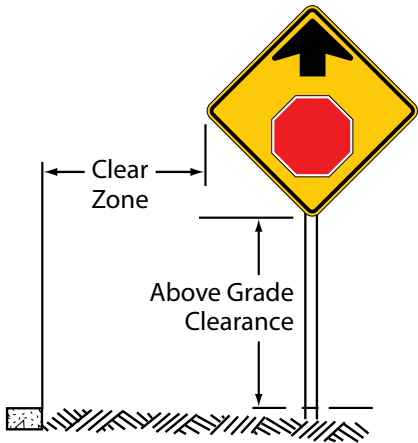
- ◆ Avoid over-tightening the connecting bolts as this can cause specular glare from dimples on the sign face.
- ◆ A washer should be used between connecting bolt heads and the sign face to protect the reflective sheeting from the twisting action of the bolt heads.
- ◆ After installation and before leaving the road site, inspect all signs to see that they have not been damaged during installation and are free of oil and dirt residue from fingers and tools.

Sign Cleaning

- ◆ For maximum performance, signs should be kept clean and free from dirt, road tar, oil, bituminous material and mulch.
- ◆ A wet, detergent type, non-abrasive cleaner suitable for high quality paint surfaces is recommended.
- ◆ The cleaner must also be free of strong aromatic solvents or alcohols and be chemically neutral.
- ◆ Following use of any cleaning agent, the sign surface must be thoroughly and immediately rinsed with clean water.

Sign Graffiti

- ◆ 3M offers protective overlay films that reduce the effects of graffiti and sticker damage.
- ◆ If graffiti is sprayed onto a screen printed sign that does not have POF 1150 or 1160 applied, then the sign will be irrevocably damaged when the graffiti is removed.
- ◆ It is critically important that graffiti be removed from a sign as soon as possible.
- ◆ Prolonged exposure to the sun will bond the graffiti to the sign and make its removal without sign damage very difficult.
- ◆ Signs cleaned with any other product than the wet, detergent type referred to above must be inspected. Inspection must take place at night from a vehicle using the vehicle headlights, or be measured with a retroreflectometer to ensure the sign is still acceptably reflective. It is not possible to evaluate the reflectivity of a sign during daylight using eyesight alone.



Breakaway Sign Supports

The Manual on Uniform Traffic Control Devices (MUTCD), which is the national standard used for all public and private roads open to public travel, states that roadside sign supports in the clear zone shall be breakaway, yielding, or shielded.

- ◆ “Breakaway” requirements apply to all roads, whether publicly or privately owned.
- ◆ “Breakaway” is often used as an umbrella term to describe crash tested sign supports that break or bend upon impact.
- ◆ Rigid objects close to a roadway can become deadly hazards when struck by a vehicle that strays off the pavement.
- ◆ All non-breakaway sign supports and mailbox supports within the clear zone of roads posted at 50 MPH or greater should immediately be replaced with approved breakaway systems.
- ◆ On roads posted at speeds 45 mph or lower, the breakaway criterion may be met when upgrading sign retroreflectivity or by 2019, whichever comes first.

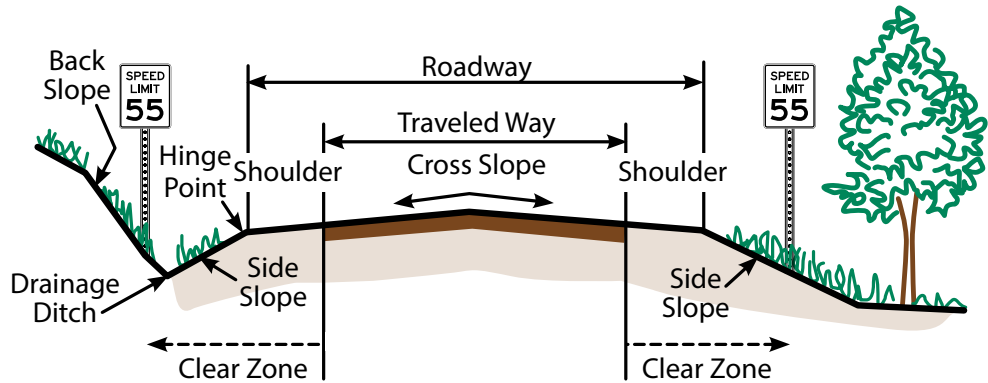
Did You Know?

Sign mounting heights from the ground to the bottom of a sign (Above Grade Clearance) are:

- ◆ 7 feet: urban areas
- ◆ 5 feet: rural areas
- ◆ 4 feet: object markers and chevron signs

Clear Zone

A clear zone is defined as the total roadside border area, starting at the edge of the traveled way, that is available for an errant driver to stop or regain control of a vehicle. This area may consist of a shoulder, a recoverable slope, a nonrecoverable slope, and/or a clear run-out area.



- ◆ Recommended clear zone distances are based on speed, average daily traffic, and roadside terrain such as slope and curvature.
- ◆ Lower clear zone distances consist of flat, level terrain, local roads/streets with lower speeds and lower average daily traffic.
- ◆ Higher clear zone distances consist of steeper roadside slopes, higher speeds and higher average daily traffic.
- ◆ Visit the Federal Highway Administration website, and utilize the AASHTO Roadside Design Guide and Manual for Traffic Control Devices (MUTCD) for more detailed guidance in developing your agency’s individual standards and policies.

Speed	Clear Zone Distance Range
40 mph or less	10 - 16 feet
45 - 50 mph	10 - 28 feet
55 mph	10 - 32 feet
60 mph	12 - 44 feet
65 - 70 mph	12 - 46 feet



Did You Know?

Optional powder paint colors are available for posts and hardware.

U-Channel Posts

- ◆ Most popular and widely used post system.
- ◆ Manufactured using recycled railroad tracks.
- ◆ Green posts are typically used in rural areas.
- ◆ Galvanized posts are more popular for use in urban areas.

Safety Splice Breakaway System

- ◆ A quick and simple design.
- ◆ NCHRP-350 Crash-worthy.



Round Posts

- ◆ Commonly used for a decorative look.
- ◆ Good for small sign installation when used with an Anchor Plate and/or Breakaway System.

POZ-LOC® Socket Breakaway System

- ◆ A simple, cost effective way to install post without digging, concrete, threading, or nuts and bolts.
- ◆ NCHRP-350 Crash-worthy.



Square Posts

- ◆ Easy, safe installation by hand or with power equipment.
- ◆ Versatile, 4-sided sign mounting, at any height.

POZ-LOC® Post Anchor Breakaway System

- ◆ Can be driven into the ground first, allowing crews to work at ground level for quicker installations or replacement of damaged sign posts.
- ◆ NCHRP-350 Crash-worthy.



Did You Know?

- ◆ There are solutions that solve common industry concerns and issues.
- ◆ We recommend items on this page to help protect the investment of your posts, signs and installation cost!

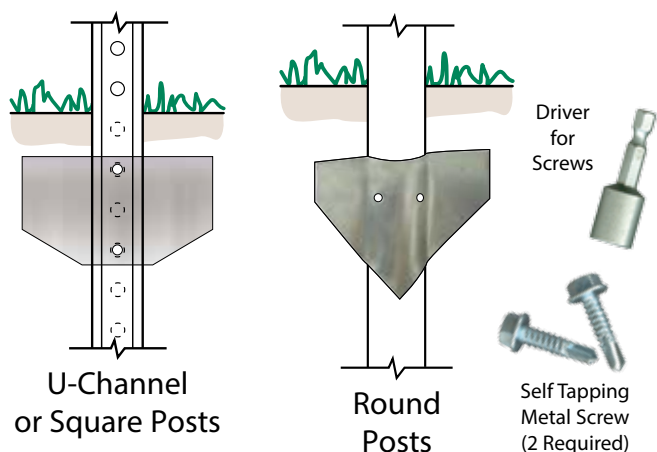
Jumbo Brackets

- ◆ Jumbo Brackets support the larger street name sign blades necessary due to the MUTCD implementation of minimum 6" letter height on street name signs.
- ◆ We recommend Jumbo Brackets for signs larger than 9" high x 30" long.



Anchor Plates

- ◆ Designed to keep post firmly in place.
- ◆ Keeps post from turning and reduces the need for concrete.



Anti-Theft Hardware

- ◆ Theft of traffic signs for scrap is common.
- ◆ Avoid this problem by adding anti-theft Vandal Proof Hardware.
- ◆ Use hardware below with U-Channel Posts.



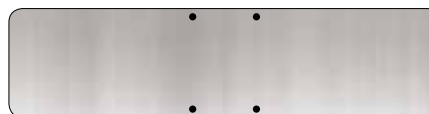
Warranty

Nylon Washers are *required* to maintain warranty when twist style fasteners are used to mount signs sheeted with Matched Component System Materials.



See page 8 for MCSM details.

Hole Punch



NOTE: Sign blades need to have holes punched in a specific configuration if the 12 point or button head bolt are to be used with brackets.

Vandal Resistant

The **Hardware and Tools** below are vandal resistant and are for use with street name sign brackets in the U-Channel, Round and Square Post segments.



Sign Saver

Place sign savers between sign and u-channel post so that sign will not bend from over tightening of hardware.



Signal or Utility Pole Sign Mounting

Did You Know?

Utilizing existing infrastructure, such as signal and utility poles in urban areas is a practical solution where space is limited, typically at intersections and in busy urban locations.

The Manual for Uniform Traffic Control Devices (MUTCD) Section 2A.19 states:

- ◆ Where permitted, signs may be placed on existing supports used for other purposes, such as highway traffic signal supports, highway lighting supports, and utility poles.
- ◆ If signs are placed on existing supports, they shall meet all other placement criteria stated in the MUTCD.

Wing Brackets

Wing Brackets can be strapped or bolted to posts or a wall.



4.5" x 2.5"
Flat Blades
Bell Wing
Bracket



Cantilever Wing Brackets
14.5", 24", 30" and 36" Long Sizes
available for Flat or Extruded Blades

All wing brackets, overhead brackets and strapping are available in standard silver finish or ornate black powder paint finishes.



12", 18" or 24" Bell Wing Brackets
Sign attaches with 5/16" bolts.
Hardware NOT Included.

Mounting Options

To attach signs to signal or utility poles, you can choose from Snap-Lock Assembly Kits, Buckle Bracket Kits or build your own kit to accommodate your sign mounting needs.

Snap Lock Assembly Kit

- ◆ The screw type hose clamp needs only a screwdriver to tighten for installation.
- ◆ Choose stainless steel brackets and add nuts and bolts to attach signs.



Snap Lock Hose Clamp
1/2" X 38" strap fits post from
1 3/4" to 12 1/4" in diameter.



Cantilever Sign Bracket

*2 brackets needed to mount 1 sign to a post.

Plus 4
Sign Bracket
For Posts Over
4" in Diameter



Minus 4
Sign Bracket
For Posts 4" in
Diameter or Less

5/16" x 18 x 3/4"
Stainless Steel Bolt (Just the right
length to fit the threaded PLUS 4
or MINUS 4 Bracket)



Stainless Steel Nut
(Only required for cantilever)

Buckle Bracket Kit

Each buckle bracket kit contains everything needed, including hardware, to mount (1) one sign to a post that is 4" - 12" in diameter.



FRONT



BACK



Strapping, Buckles, Seals & Tools

Stainless Steel
Strapping
3/4"x.020"x200'
3/4"x.025"x100'
3/4"x.030"x100'



Wing Seal for .025" or
thinner strapping



Buckle for .030" or
thicker strapping



Strap
Cutter



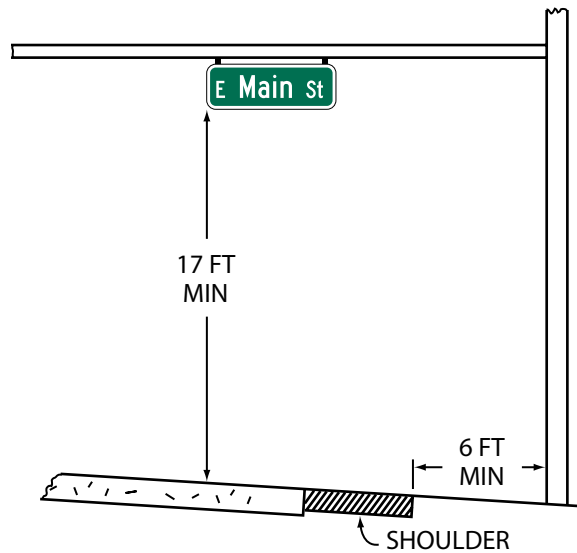
Ratchet Type
Strapping Tool

Special Stainless Steel Alloys Available for Saltwater Environments.

Did You Know?

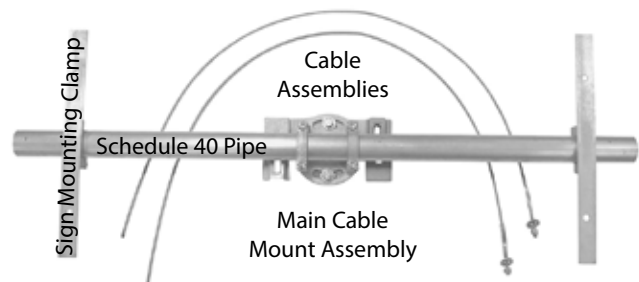
The Manual for Uniform Traffic Control Devices (MUTCD) Section 2A.17 states:

- ◆ Overhead signs should be used on freeways and expressways, at locations where some degree of lane-use control is desirable, and at locations where space is not available at the roadside.
- ◆ The operational requirements of the present highway system are such that overhead signs have value at many locations.
- ◆ Over-crossing structures may be used to support overhead signs.
- ◆ Under some circumstances, the use of over-crossing structures as sign supports might be the only practical solution that will provide adequate viewing distance.
- ◆ The use of such structures as sign supports might eliminate the need for the foundations and sign supports along the roadside.



- ◆ Overhead signs shall provide a vertical clearance of not less than 17 feet to the sign, light fixture, or sign bridge over the entire width of the pavement and shoulders except where the structure on which the overhead signs are to be mounted or other structures along the roadway near the sign structure have a lesser vertical clearance.

We recommend the bracket kits below for ease of use, versatility and reliability.



Span Wire Mounting Brackets

- ◆ Allows sign to swing freely in the wind
- ◆ 3-way adjustable bracket
- ◆ Mounts on cables up to 3/8" thick
- ◆ Pre-assembled for quick and hassle free installation

Mast Arm "Mast-o-Brackets"

- ◆ Available for sign sizes up to 120"
- ◆ The Main Cable Mount Assembly is the bracket at the center of the system and is used in conjunction with Cable Assemblies, Schedule 40 Pipe and Mounting Clamps.

Custom Products Corporation

P.O. Box 54091
Jackson, MS 39288-4091
www.cpcsigns.com

PRST STD
U.S. Postage
PAID
Custom Products
Corporation

 Find us on
Facebook
www.facebook.com/cpcsigns

 **Subscribe to our
Email List**
sign-up on our facebook page

SIGN CARE & SIGN MOUNTING SOLUTIONS

Mail:

P.O. Box 54091
Jackson, MS 39288-4091

Shipping:

1120 Flowood Dr.
Jackson, MS 39232

EMAIL

sales@cpcsigns.com



Sales:

1-800-367-1492 (Voice)
1-601-932-5854 (Voice)
1-800-206-3444 (Fax)
1-601-932-7178 (Fax)

WEBSITE

www.cpcsigns.com