

**TELESPAR®**

*S I G N   S U P P O R T   S Y S T E M S*



*From the smallest village and back road to the largest city and interstate highway, the Telespar system offers sign support solutions that work.*



**THE TELESPAR SIGN SUPPORT SYSTEM OFFERS ALL THESE FEATURES:**

- Easy, safe installation by hand or power
- Convenient sign mounting before installation
- Superior torsional strength
- Versatile, four-sided sign mounting, at any height
- Fast, economical replacement of damaged sign posts
- Reusable materials
- FHWA-approved yielding capability

**A COMPLETE SYSTEM**

The Telespar system consists of square, perforated, welded steel tubing, in eight sizes and three gauges. Perforations or knockouts on all four sides allow you to mount signs back-to-back and on adjacent sides.

The unique manufacturing method used to produce Telespar tubing permits tubular sections of different sizes to telescope into the next larger size making adjustment, reinforcement and splicing fast and easy. The square shape also provides superior windload capabilities and torsional stability.

Telespar tubing is complemented by a variety of compatible fittings, accessories, nuts and bolts, and simple installation tools, creating an engineered system of integrated parts.

**THE TELESPAR SYSTEM IS BACKED BY NATIONWIDE DISTRIBUTION**

With Telespar tubing, you get the benefit of our distribution system, which extends throughout the U.S. and Canada.

Large inventories ensure that multiple sizes of Telespar tubing are in stock. Local distribution points can provide for immediate orders and prompt delivery. Large orders are sent directly from the factory, thereby avoiding warehouse costs.



## VERSATILITY PLUS

The Telespar Sign-Support System can benefit any size town, county, or state highway department by saving time, money and lives. The versatility of the Telespar concept creates a system adaptable, not only to signpost usage, but also to identification signage, parking-meter posts, barricades, and countless other applications.

## SALVAGEABILITY

An average 60% salvage rate makes Telespar one of the most economical systems available. A major portion of a damaged signpost can usually be saved and spliced with another Telespar section to produce additional posts, to form a cross member or for other general framing. This multitude of second uses adds up to savings instead of accumulating piles of useless damaged posts.



## EASY INSTALLATION

Telespar signposts require only one worker for installation. All work can be done at ground level, eliminating the need for bucket trucks and similar heavy equipment. Most important, independent tests show that Telespar signposts go up in about half the time compared to other materials.

## TORSIONAL STABILITY

Primarily because of its square shape, Telespar tubing has excellent torsional stability. The utilization of Telespar tubing means substantial reduction of sign flutter in high wind, and less loosening and damaging of sign blanks on the post. And in many applications, a single highly-stable Telespar post will do the job of *two* U-channel posts!



## SAFETY

The Telespar System was the first to be used effectively in a yielding breakaway concept for small sign-support systems. It is FHWA-approved, and in compliance with AASHTO specifications.



## RAPID REPLACEMENT

Telespar sign supports can be replaced more quickly and easily by a one-man crew than any other signpost on the market. Within minutes, one man, working at ground level, can replace vital traffic signs, thus ensuring that dangerous intersections will not be left without proper signs for extended periods of time.

Simply unbolt or remove the rivets from the damaged post, lift it from the anchor assembly, and replace with a new post and sign.



## POSTS WITH PREPUNCHED HOLES

### DESCRIPTION

Telespar square posts with 7/16" prepunched holes on 1" centers are the standard against which all other signposts are measured. Precision manufactured from the highest-quality steel, Telespar posts are corner-welded to allow smooth telescoping action — a key to the system's versatility and ease of installation.

### SIZES AND GAUGES

Telespar 12 and 14 gauge signposts are available in sizes ranging from 1" - 2 1/2" square. Two 10 gauge posts — 2 3/16" and 2 1/2" square — meet extra heavy-duty requirements.

### FINISHES

Telespar posts are cold-formed from carbon steel on state-of-the-art high-speed rolling mills. Steel is pregalvanized, then coated with a conversion coating and sealed with a polymer topcoat during manufacturing. The result is Pre-galv Plus™, a finish providing exceptional levels of long-term appearance and corrosion protection.



## POSTS WITH KNOCKOUTS

### DESCRIPTION

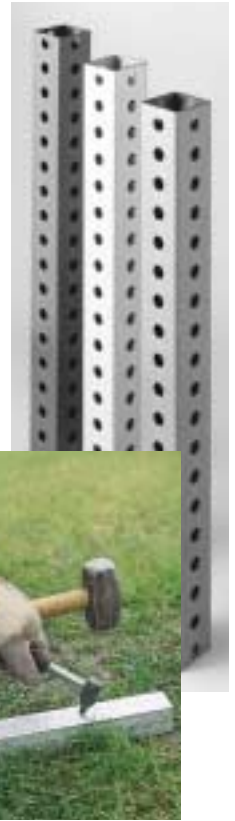
Telespar Qwik-Punch® posts are made with 7/16" knockouts, 1" on center, on all four sides. This feature allows workers in the field to quickly punch holes exactly where they're needed for anchor connections or sign mounting, leaving the balance of the post with a smooth, unbroken appearance. Qwik-Punch posts offer the same telescoping action and easy installation as regular Telespar posts.

### SIZES AND GAUGES

Qwik-Punch square posts are available in 1 3/4" and 2" square, 14 gauge.

## FINISHES

Qwik-Punch posts are cold formed from high-quality strip steel, then finished in-line with our exclusive Flo-Coat® process. This unique triple-coat finish begins with hot-dipped galvanizing followed by a conversion coating. A tough, clear polymer coating completes the process. This triple-layer protection produces a smooth, shiny appearance while providing superior durability and corrosion protection.



Fittings	Tube Size	Cutting Dimensions*
 TL015	1 1/2" sq.	1 3/16"
	1 3/4" sq.	1 1/16"
	2" sq.	1 5/16"
	2 1/4" sq.	1 3/16"
	2 1/2" sq.	1 1/16"
 TL016	1 1/2" sq.	1 3/16"
	1 3/4" sq.	1 1/16"
	2" sq.	1 5/16"
	2 1/4" sq.	1 3/16"
	2 1/2" sq.	1 1/16"
 TL017	1 1/2" sq.	
	1 3/4" sq.	
	2" sq.	
	2 1/4" sq.	
	2 1/2" sq.	

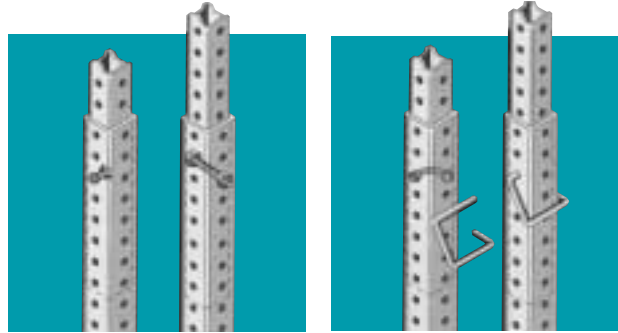
Fittings	Tube Size	Cutting Dimensions*
 TL018	1 1/2" sq.	1 3/16"
	1 3/4" sq.	Both tubes must be same size 1 1/16"
	2" sq.	1 5/16"
	2 1/4" sq.	1 3/16"
	2 1/2" sq.	1 1/16"
 TL019	1 1/2" sq.	Both tubes must be same size
	1 3/4" sq.	
	2" sq.	
	2 1/4" sq.	
	2 1/2" sq.	
 TL020	1 1/2" sq.	1"
	1 3/4" sq.	1"
	2" sq.	1"
	2 1/4" sq.	1"
	2 1/2" sq.	1"

\* Distance from end of tube to center of first hole.

## FASTENERS

### DRIVE RIVET

Drive rivets provide the convenience of a one-piece fastener with effective tamper-resistant design and fast installation using only a hammer.



### HEX HEAD NUTS & BOLTS

Standard hex nuts and bolts can also be used to connect components. A special jam nut is available to help form permanent, tamper-resistant connections.



### CORNER BOLTS

Corner bolts can be tightened with a single wrench. By taking up fit tolerance in telescoping assemblies, they provide a tighter, more stable installation.

### LOCK PINS

The lock pin allows for quick, temporary connections between telescoping tube sections. Simply align holes between sections, insert lock pin and allow pin to drop into locking position.

# TELESPAR® OPTIONS

## CHOICES THAT PUT YOU IN CONTROL

### GROUND SUPPORT OPTIONS

#### SINGLE BREAKAWAY ANCHOR

Using either manual or power equipment, a minimum 30" section of 12 gauge Telespar tubing is driven into the soil to serve as an anchor base. 1" to 2" is left exposed above the surface. One man working at ground level can safely and easily insert a signpost into the anchor base and bolt it in place. Installation time is thus kept to a minimum. Signs can be bolted onto the post before installation.

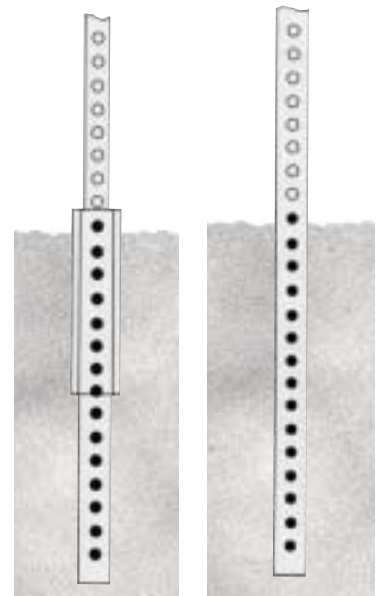


ANCHOR BASE

#### TWO-PIECE BREAKAWAY ANCHOR

A two-piece breakaway system is easily created by adding a 12 gauge outer sleeve of the next larger size tube to the original anchor base. This additional sleeve, approximately 18" long, provides a double wall thickness to accomplish the breakaway function.

When installing in soil, it is advisable to drive the anchor base and outer sleeve together, leaving 1" to 2" of the assembly exposed above the surface. The signpost is then inserted and bolted into the anchor assembly.



YIELDING BREAKAWAY

DIRECT EMBEDDED

# TELESPAR® OPTIONS

CHOICES THAT PUT YOU IN CONTROL

## INSTALLATION OPTIONS

### DIRECT EMBEDDED

Signposts can be driven directly into the ground without anchoring sections, using a drive cap with sledge or power equipment.



### PNEUMATIC HAMMER

Installation can also be accomplished using a conventional pneumatic driving tool.

### SELF-CONTAINED POWER EQUIPMENT

Anchor assemblies can be installed in any surface using self-contained power equipment.

### MANUAL INSTALLATION

For manual installation, use a drive cap and sledge hammer to drive anchor assembly into soil, gravel or blacktop.

## SURFACE OPTIONS

### BLACKTOP

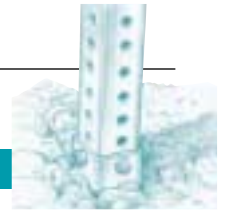
When installing Telespar tubing in blacktop, the anchor assembly is driven through the blacktop into the subsoil from ground level. All other aspects of the blacktop installation are the same as installing the Telespar system in soil.

### CONCRETE

Telespar posts can be installed in concrete, using a pneumatic hammer or concrete drill to break through the surface. The anchor assembly is driven to within 1" of the surface to allow attachment of the signpost. If a flush installation is desired, clearance should be recessed on two sides to clear the bolt for the signpost connection.

### GRAVEL OR SOIL

Installation of Telespar posts in gravel or soil is accomplished by driving the anchor post assembly into the ground, leaving 1" to 2" above the surface. The signpost is then inserted into the anchor assembly approximately 6" to 8" and bolted in place.



# TELESPAR® INSTALLATION

SIMPLE, FAST, SAFE

**1** Drive a minimum 30" piece of 12 gauge Telespar (anchor) into the soil until only 1-2 inches are left exposed. For a 2-piece anchor, use a 18" piece of tubing for a sleeve, one size larger than the anchor. Make sure the anchor and sleeve holes are aligned.

**3** Insert the signpost, which is one size smaller than the anchor, about 6-8 inches into the anchor base.

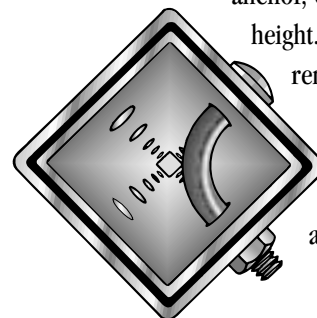
**4** Bolt the signpost to the anchor assembly with a corner bolt.



**2** Attach the sign to the post at the desired height using drive rivets or bolts.



The corner bolt takes up fit tolerance, concentrates fastening tension on only one corner of the tubing and prevents distortion of opposite tube walls which can occur when conventional through-bolts are over-tightened. If these simple steps are followed, an impacted post will break just above the anchor, or possibly at bumper height. To repair, simply remove the corner bolt, pull the post stub out of the anchor and replace it with a new post.



### HEAVY DUTY ANCHOR

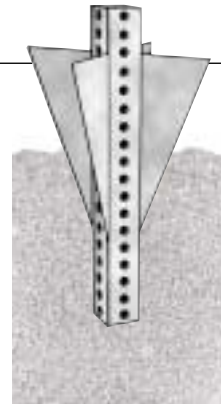
This heavy-duty breakaway anchor easily accommodates larger size Telespar signposts (2" and 2 1/2", 10 or 12 gauge material). A square, heavy-wall (.188) one-piece anchor eliminates the need for a stiffer sleeve and allows the signpost to break away on impact without damaging the anchor wall.



### OMNI-DIRECTIONAL ANCHOR

Loose soil conditions can be problematic for signpost installation. The Omni anchor/sleeve system, made from Telespar tubing, is

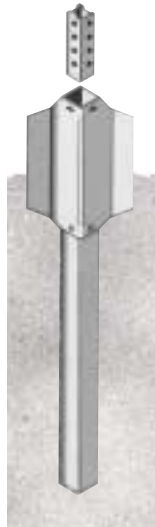
designed specifically for ease of installation in these conditions. The Omni system is available as an anchor or a sleeve. The system retrofits to existing problem installations easily.



### STABILIZATION ANCHOR SLEEVE

Soft or drop-off shoulders require special anchor systems. Wind buffeting and other environmental conditions can cause the signposts to layover or twist. The **Soil Stabilizer**

attaches to a single anchor with a corner bolt, securing the anchor in loose or sandy soil. It is then bolted through the post and top of the anchor. It should always be attached to the corner farthest from traffic flow (back opposite).



### SLIP BASE BREAKAWAY SYSTEM

AASHTO standards for structural supports of highway signs require that you meet "change of velocity standards for 1800 pound vehicles." The **Slip Base** meets those requirements as put forth in the NCHRP-350 report.

This anchor's flexibility provides:

- retrofitting of existing anchor footings.
- adapting to various post sizes.
- one of the most economical replacement costs in the industry.

The slip base, like all Telespar anchor systems, is economical to use and easy to install.



## SPECIFICATIONS

### MATERIAL

Steel posts conform to the standard specification for Hot-Rolled Carbon Sheet Steel, structural quality ASTM designation A570, Grade 50.

### SHAPE

The cross section of the post shall be a square tube formed of 10 gauge (.135" U.S.S. Gauge) or 12 gauge (.105" U.S.S. Gauge) or 14 gauge (.083" U.S.S. Gauge) steel, carefully rolled to size and welded in the corner.

### LENGTH

The length of the post shall be as specified on the purchase order with a length tolerance of  $\pm 1/4"$ .

### FABRICATION

The furnished members shall be straight and shall have a smooth uniform finish. It shall be possible to telescope consecutive sizes of tubes freely with a minimum amount of play.

### ELEMENTS OF SECTION

P/N	Tube Size Inches	Wall Thickness U.S. Std. Gauge & Inch	Area Sq. In.	Wt./Ft. Lbs.	I In. <sup>4</sup>	s In. <sup>3</sup>	r In.
16D12	1 3/4 x 1 3/4	14 (.083)	.392	1.71	.230	.201	.716
20D12	2 x 2	14 (.083)	.474	1.99	.296	.296	.790
14F12	1 1/2 x 1 1/2	12 (.105)	.380	1.70	.129	.172	.582
16F12	1 3/4 x 1 3/4	12 (.105)	.485	2.06	.231	.264	.690
20F12	2 x 2	12 (.105)	.590	2.42	.372	.372	.794
22F12	2 1/4 x 2 1/4	12 (.105)	.695	2.77	.561	.499	.898
24F12	2 1/2 x 2 1/2	12 (.105)	.803	3.14	.804	.643	1.001
21H12	2 3/16 x 2 3/16	10 (.135)	.841	3.43	.605	.590	.848
24H12	2 1/2 x 2 1/2	10 (.135)	1.010	4.01	.979	.783	.985
16D12QP	1 3/4 x 1 3/4 QP	14 (.083)	.392	1.88	.201	.230	.716
20D12QP	2 x 2 QP	14 (.083)	.474	2.16	.296	.296	.7906

I = Moment of Inertia

s = Section Modulus

r = Radius of Gyration

### GALVANIZED POSTS (PRE-GALV PLUS AND QWIK-PUNCH®)

Signposts are galvanized conforming to ASTM specification A-653 des. G-90. Corner weld is zinc coated

after scarfing operation. Qwik-Punch die-cut posts are in-line galvanized per AASHTO M-120, and all galvanized products receive a conversion coating and a clear organic polymer topcoat.

# TELESPAR® ADVANTAGE

*BETTER PERFORMANCE, LOWER COST*

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The Telespar sign-support system does more — and does it better — than anything else in its class. You simply won't find better performance at *any* price. Yet, no other product makes available dollars work so hard or go so far.

The reason is simple. The Telespar system was engineered specifically for sign-support use, then perfected with the help of traffic-control professionals like you. In short, we listen. That's the reason Telespar has become the most complete, cost-effective and easiest-to-use sign-support system in North America.

***tyco***

*Flow Control*

***Unistrut***

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