

FG 300 Model UR Channelizer Post
Material Specifications

1) **Design**

The channelizer post shall consist of a modified T-shaped tubular post a minimum of 3.00 inches wide by 2.00 inches deep, with 0.125 inch (min.) walls, comprised of flat front and curved rear surfaces and sides to create areas of opposing compression stresses on the inner and outer walls when impacted resulting in superior rebound. All channelizer posts shall be capable of sustaining a minimum of fifty (50) bumper and direct wheel-over impacts at 60 MPH (100 km/h) without damage to the post or the reflective sheeting applied to the post. All posts shall be easily replaceable. All posts shall be constructed of UV-stabilized thermo-plastic polyurethane (TPU) for superior durability, conforming to the following material specifications:

Property	ASTM Test	Results
Specific Gravity (min.)	D 792	1.10
Hardness (min.)	D 2240	80 A
Tear Strength (min PSI)	D 624, Die C	600
Tensile Strength @ yield, (min PSI)	D 412	4,000
Tensile Elongation @ break (min. %)	D 412	600
Cold Temp. Impact Test (-7° F)	FL/DOT	Pass

2) **Bases**

Channelizer posts shall mount to a base unit with two (2) plastic locking pins. For highest visibility and durability, posts shall be mounted to bases of the same color as the post and/or curb and the corresponding lane line (yellow & yellow, white & white, etc.) and shall be 1.5 # in weight. All bases shall be constructed of a high-impact thermo-plastic styrenic alloy conforming to the following material specifications:

Property	ASTM Test	Results
Specific Gravity (min.)	D 792	1.02
Gardner Impact (min.)	N/A	160
Flexural Strength (min.)	D 790	5,500

3) **Florescent and Standard Colors**

Channelizer posts and bases shall be constructed of UV-stabilized polymers and colors. The color shall be solid throughout and stabilized to resist UV degradation. In construction work zone areas where orange devices are used, all materials shall be Florescent Orange to improve visibility in low light conditions.

4) Locking Pins

The channelizer posts shall be secured to the base units with rust-proof black plastic locking pins conforming to the same material specifications as the base units to prevent dislocation when posts are impacted and to ease replacement of old posts.

5) Reflective Sheeting

All posts shall have retro-reflective sheeting applied. The minimum reflective sheeting shall be two (2) 6-inch wide wraps of sheeting the same color as the post applied one (1) inch down from the top of the post with a six (6) inch gap between wraps. The sheeting shall meet State specifications for retroreflectivity.

6) Lengths

Channelizer posts shall be available in lengths from 16 to 48 inches, as specified in the construction plans or procurement details.

7) Installation

Channelizer posts shall be secured to the roadway with removable and reusable one-piece anchor bolts with a finished hex head, integral washer, dual lead threads and chamfered tip. One-piece bolts shall be used to eliminate improper assembly; dual-thread bolts shall be used to prevent bolts spinning in holes when tightened. All channelizer posts shall be completely removable with standard power tools. Alternatively, posts shall be adhered to the roadway with approved 2-part road marker epoxy, flexible bituminous adhesive or pressure-sensitive synthetic butyl rubber pads, min. 0.125" thick.

8) Packaging

Channelizer posts and bases shall be packaged in boxes of 25 pieces. A sufficient quantity of pins shall be supplied to secure all posts to the bases.

9) NCHRP 350 Acceptance

The channelizer posts shall be fully crash-tested by an A2LA-certified testing facility and meet requirements for **Category 1** devices as specified in **NCHRP Report # 350**. All channelizer posts shall have the acceptance of the U.S. Department of Transportation, Federal Highway Administration. Test reports and certifications of acceptance to these standards must be supplied by the manufacturer upon request.

10) Quality

The channelizer posts shall be manufactured by an ISO 9001 certified firm in good standing; evidence of ISO compliance shall be presented as a pre-condition for acceptance for use.

11) Manufacturer

The device above is manufactured by Pexco LLC, Davidson Traffic Control Products, Tacoma, WA, USA, phone (253) 284-8000, email hwysales@pexco.com.