

INSTALLATION INSTRUCTIONS TUFF CURB® XLP

**Multi-Surface Anchors
Concrete Anchors
#160/161 Epoxy Kit
#163 Super Bundy®**

GENERAL NOTES

1. Curb should always be used with delineator posts or hazard markers. Use only IRS spring systems and posts per manufacturer's recommendations.
2. It is recommended to use a minimum of four (4) curb sections to create a 90-degree turn. Use more as needed.
3. Three anchors are suggested when posted speeds are 55 mph or greater. Two anchors located on the outer mounting holes may be used otherwise and will provide ample anchoring.
4. Epoxy is acceptable for all speed levels given proper substrate.
5. Super Bundy® installation is only recommended for low speed applications (30mph or less.)
6. Proper substrate is critical for performance of the product. Ensure that concrete and asphalt meet current state specifications for composition and compaction and is in generally good, un-cracked condition. It is the responsibility of the owner to determine the suitability of the substrate and the installation method used.
7. Connection to the road surface is the responsibility of others. Road surfaces and installation conditions vary widely from location to location. Consult a local licensed engineer as necessary to ensure proper installation. IRS cannot provide site specific engineering recommendations with regard to road connections.
8. Periodic maintenance is required for all installations. Please see our maintenance instructions for details.

MULTI-SURFACE ANCHORS INSTALLATION INSTRUCTIONS

Anchor Kit consists of 2 or 3 of each: 3" Plastic Anchors, 4" Lag Screws, Metal Washer

Materials Needed for Installation

Hammer Drill with 16mm or 5/8" Bit
Small Hammer
1/4" Allen Wrench (fixed post only)
3/4" socket and ratchet wrench or impact wrench
Compressed air with air gun or wand



INSTALLATION INSTRUCTIONS:

1. Place Tuff Curb XLP on surface and align to desired position (per detailed traffic engineering plans.) Using the curb as a template, mark the anchor holes to establish pattern for drilling.
2. Drill two or three holes 3" deep using a 16mm or 5/8" bit. Clean holes out thoroughly using compressed air. Do not over-drill hole depth.



3. Using small hammer gently tap the anchor sleeves into the holes. Top of the sleeves should be flush with ground level.

4. Place curb over the anchors. Put washer onto lag screw. Start lag screw through curb hole into anchor. Use $\frac{3}{4}$ " wrench to tighten lag screw snug into base.



5. For Quick Release post assemblies, lift pull pin ring, place knuckle over shoulder bolts, turn clockwise into place and release pull pin ring until properly seated. For fixed post assemblies, place the sign or post into curb receptacle, check for proper alignment and hand tighten all four socket cap screws. Use $\frac{1}{4}$ " Allen wrench to snug screws. For Quarter Turn posts, align post pin hole 90-degrees from keeper pins and rotate clockwise 90-degree then insert both keeper pins.



CONCRETE ANCHORS INSTALLATION INSTRUCTIONS

Anchor Kit consists of two or three 4" concrete screw anchors

Materials Needed for Installation

Hammer Drill with 1/2" Bit
1/4" Allen Wrench (fixed post only)
3/4" socket and ratchet wrench or impact wrench
Compressed air with air gun or wand



INSTALLATION INSTRUCTIONS:

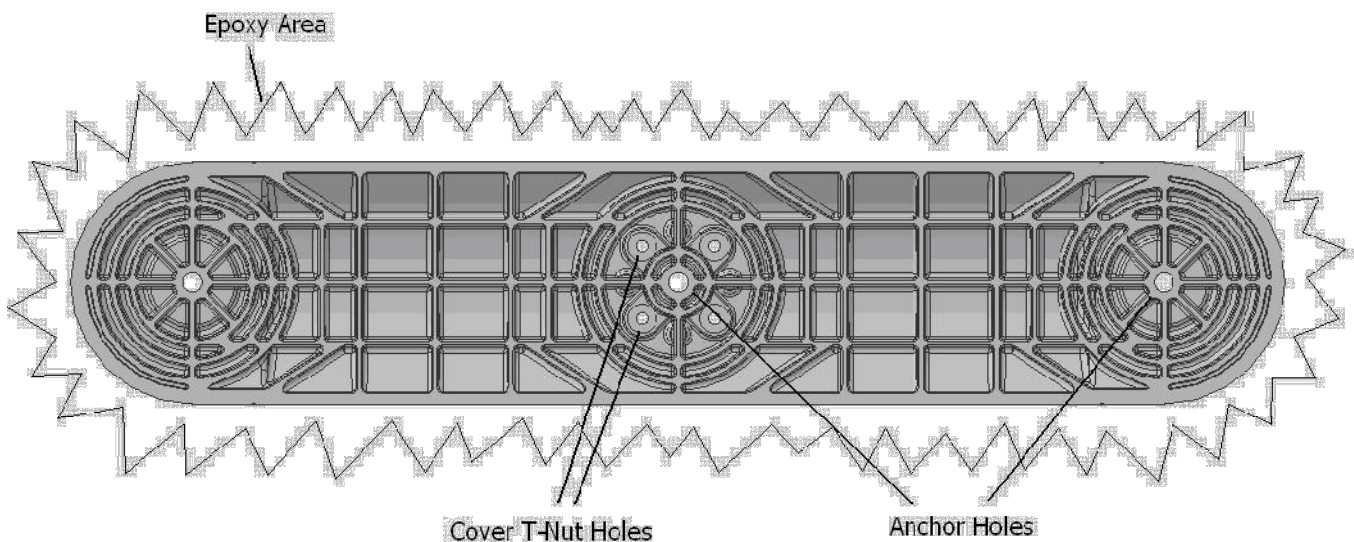
1. Place Tuff Curb XLP on surface and align to desired position (per detailed traffic engineering plans). Using the curb as a template, mark the anchor holes to establish pattern for drill.
2. Drill two or three holes 4" deep using ANSI 1/2" bit. Clean holes out thoroughly using compressed air.
3. Place curb over the anchors. Start lag bolt through curb hole into anchor. Use 3/4" wrench to tighten lag screw snug into base.
4. For Quick Release post assemblies, lift pull pin ring, place knuckle over shoulder bolts, turn clockwise into place and release pull pin ring until properly seated. For fixed post assemblies, place the sign or post into curb receptacle, check for proper alignment, hand tighten all four socket cap screws. Use 1/4" Allen wrench to snug screws.



EPOXY ADHESIVE INSTALLATION INSTRUCTIONS

***FOR BEST RESULTS CLOSELY FOLLOW THE EPOXY
MANUFACTURER'S INSTALLATION INSTRUCTIONS.***

1. Place four (4) small pieces of tape on the bottom of the curb to cover t-nuts. Tape prevents epoxy from entering screw threads upon installation.
2. Pavement surface should be flat, clean, and dry. Clean as necessary.
3. For proper adhesion, flame-treat the underside of the curb prior to installation. Quickly pass a cool flame over the bottom surface several times to increase surface preparation. Take care not to overheat and warp the curbing.
4. Mix epoxy as directed and closely follow instructions on epoxy container.
5. Approximately 40 to 50 oz. of epoxy are required per curb section. A two gallon epoxy kit should install 5-6 curb sections.
6. Align curb per detailed traffic engineering plans and roughly mark outline of curb. Pour epoxy on ground in an area slightly larger than curb outline. Push curb into epoxy and slowly wiggle back and forth in epoxy, filling underside channels with epoxy. Allowing epoxy to fill anchor holes will increase adhesion through mechanical bonding. Ensure the round sections of the bottom of the curb, near the anchor holes, receive the greatest amount of epoxy. Stack the epoxy tall enough to ensure grip on the vertical parts of the ribbing. Additional epoxy may be needed to accommodate slightly uneven surfaces.



Allow epoxy to dry 24 hours for optimum performance. Most epoxies are temperature sensitive. Take care to follow manufacturer's recommendations.

6. For fixed post assemblies, place the sign or post into curb receptacle, check for proper alignment, hand tighten all four socket cap screws. Use 1/4" Allen wrench to snug screws. For Quick Release post assemblies, lift pull pin ring, place knuckle over shoulder bolts, turn clockwise into place and release pull pin ring until properly seated. For Quarter Turn posts, align post pin hole 90-degrees from keeper pin and rotate clockwise 90-degree then insert keeper pin.



SUPER BUNDY®

INSTALLATION INSTRUCTIONS

Materials Needed for Installation

Chalk Line
Propane Torch
Compressed air with air gun or wand

INSTALLATION INSTRUCTIONS:

1. Pavement surface should be clean and dry. Clean as necessary.
2. Snap a chalk line in the desired position of the curb (per detailed traffic engineering plans.) Place curb to the side of desired position to use as a guide for placement of Super Bundy® pads.
3. Heat the surface prior to placement of pads.



4. Place three pads on the surface, one at each anchor location covering the circular pattern on the underside of the curb, and heat the pad to its melting point.



5. Place a second set of pads on top of the first set and heat each to its melting point as in the previous step. Super Bundy® always requires two pads on top of each other.



6. Push the curb gently into Super Bundy® pads and slowly wiggle back and forth, taking care not to push all the way through the melted pads. Allow one hour to cure.

