**DESCRIPTION**

TB-BOOTS are specially designed tieback covers used to maintain waterproofing integrity at soil retention tieback heads. TB-BOOT is a single piece, durable pre-formed thermoplastic cover that provides a simple and quick waterproofing installation detail. TB-BOOTS are used with various CETCO waterproofing membrane systems including Voltex, Ultrasel and COREFLEX.

The specially designed tieback cover incorporates a 3-dimensional pre-formed shape to accommodate most tie-back heads installed at various angles and its angled shape is designed to displace a minimal amount of concrete. The thick thermoplastic construction provides the strength and durability to withstand the concrete placement. TB-BOOT is available in three sizes to accommodate various tie-back head sizes. Each size is also available with a gray thermoplastic membrane flange to weld COREFLEX membrane.

**APPLICATIONS**

The TB-BOOT can be installed over both cable and rod type tie-back heads. The pre-formed 3-dimensional shape is installed over the tie-back head with the perimeter flat base mechanically fastened to the soil retention system. The TB-BOOT is integrated with the field membrane installation providing a continuous waterproofing system for these difficult to detail areas.

**INSTALLATION**

Select appropriate size TB-BOOT to fit over tie-back plate and allow proper cast-in-place concrete coverage per project requirements. TB-BOOT should fit over entire tie-back head without the tie-back plate or cables in direct contact with the TB-BOOT. Prior to TB-BOOT installation, fill voids in retention wall substrate and tie-back head assembly with spray foam (min 20 psi) or non-shrink grout. For non-hydrostatic conditions, install and secure AQUADRRAIN drainage composite course per manufacturer’s guidelines to soil retention wall prior to installing TB-BOOT. For hydrostatic conditions, install TB-BOOT prior to waterproofing membrane. With soldier piles, strip piles with waterproofing membrane prior to TB-BOOT placement.

Fill pre-formed shape of TB-BOOT with 2-part urethane spray foam (min 20 PSI) and place over tie-back head before foam sets up. Secure TB-BOOT to soil retention system using washer head fasteners along the outside edge of the flat base. Apply 6 mm (1/4") thick by minimum 75 mm (3") wide continuous ring of BENTOSEAL onto the flat base just outside of the 12 mm (1/2") raised collar. Install 4-ft by 4-ft piece of CETCO waterproofing membrane (with precut hole in center to fit tight around the 12 mm (1/2") raised collar) over the entire flat base with outside edges fastened to the retaining wall. Secure membrane edge around raised collar with washer-head fasteners that pass through the BENTOSEAL ring; typical fastener spacing 150 mm (6"). Do not install fasteners or puncture TB-BOOT inside of the 12 mm (1/2") raised collar. Apply counter flashing of BENTOSEAL along waterproofing membrane sheet edge around raised collar. Then install waterproofing membrane field sheet overlapping outer membrane edge minimum 100 mm (4").

For COREFLEX, use CoreCaps, black non reinforced PVC weldable covers (CoreCap 6, CoreCap 8, Corecap 10). Install COREFLEX Field Sheet overlapping CoreCap a minimum of 100 mm (4") and fuse COREFLEX membrane to CoreCap flange with a continuous hot air weld. Secure any loose APC geotextile with CETSEAL.

For soil nail rods and rock anchor heads cut to within 150 mm (6") of soil retention wall surface, install TB-6SN per TB-BOOT installation guidelines herein.

**AVAILABLE SIZES**

Three TB-BOOT Sizes: TB-6SN is 150 mm (6") deep, TB-8 is 200 mm (8") deep, and TB-10 is 250 mm (10") deep. Each size is also available with CoreCap weldable flange for COREFLEX: CoreCap 6, CoreCap 8 and CoreCap 10.
**TB-BOOT**

**TIE-BACK COVERS**

**ULTRALEASEL & VOLTEX INSTALLATION**

**HYDROSTATIC CONDITION**

The above detail illustration is applicable for any one of the following CETCO waterproofing membranes per project specifications: VOLTEX, VOLTEX DS, VOLTEX CR, VOLTEX DSCR and ULTRALEASEL BT.

**COREFLEX INSTALLATION**

**HYDROSTATIC CONDITION**

For COREFLEX, use the TB-BOOT with gray weldable flanges installed with COREFLEX field sheet welded to gray flange per CETCO’s guidelines.

**NON-HYDROSTATIC CONDITIONS**

For non-hydrostatic conditions, install and secure AQUADRIN drainage composite course per CETCO’s guidelines to soil retention wall prior to installing TB-BOOT.

**NON-STANDARD INSTALLATIONS**

For irregular shoring wall and tie back head conditions not suitable for standard TB-BOOT installation stated herein, please contact CETCO for installation guidelines.

**SHOTCRETE INSTALLATIONS**

For structural shotcrete foundation walls, refer to the applicable CETCO waterproofing product’s published shotcrete application literature for installation guidelines.