

T110 Superior Lift System

The Dayton Superior T110 Superior Lift Insert consists of a forged foot anchor, 4-leg wire base and plastic void former. The insert is positioned with the void direction toward the top of the panel and then is tied in place to the rebar cage. The T120 Superior Lifting Hardware allows quick attachment to the insert and remote ground release after panel has been erected and braced. The T110 Superior Lift Inserts are shipped assembled, ready to go and are sized 1/8" less than the panel thickness.



T110 Superior Lift System



To Order:

Specify: (1) Quantity, (2) Name, (3) Panel Thickness, (4) bottom face aggregate or formliner thickness

Example:

150, T110 Superior Lift Inserts, 9" Panel with 1/2" formliner panel

| Structural Panel Thickness | Anchor Size | Edge Distance | | |
|----------------------------|-------------|-------------------|-----------------|-----------------|
| | | 15" | | 30" |
| | | SWL (lbs) Tension | SWL (lbs) Shear | SWL (lbs) Shear |
| 5 | 4.125 | 9,500 | 9,600 | 11,340 |
| 5.5 | 4.125 | 11,500 | 9,900 | 13,760 |
| 6 | 4.625 | 13,600 | 10,350 | 16,340 |
| 6.5 | 5.125 | 15,000 | 10,980 | 19,060 |
| 7 | 5.625 | 16,500 | 11,200 | 21,920 |
| 7.25 | 5.875 | 17,200 | 12,000 | 22,750 |
| 7.5 | 6.125 | 17,800 | 12,400 | 23,140 |
| 8 | 6.625 | 21,800 | 13,900 | 23,900 |
| 8.5 | 7.125 | 22,800 | 15,500 | 24,000 |
| 9 | 7.625 | 23,800 | 16,740 | 24,000 |
| 9.25 | 7.875 | 24,000 | 17,400 | 24,000 |
| 9.5 | 7.875 | 24,000 | 17,400 | 24,000 |
| 10 | 7.875 | 24,000 | 17,400 | 24,000 |
| 10.5 | 7.875 | 24,000 | 17,400 | 24,000 |
| 11 | 7.875 | 24,000 | 17,400 | 24,000 |
| 11.25 | 7.875 | 24,000 | 17,400 | 24,000 |
| 11.5 | 7.875 | 24,000 | 17,400 | 24,000 |
| 12 | 7.875 | 24,000 | 17,400 | 24,000 |

T110 Safe Working Loads with T46 HD at 18" Spacing

| Structural Panel Thickness | Tension (lbs) | | Shear (lbs) |
|----------------------------|------------------------|------------------------|------------------------|
| | f'c=3,000 psi 2:1 S.F. | f'c=3,000 psi 2:1 S.F. | f'c=3,000 psi 2:1 S.F. |
| 5" | 19,000 | 13,440 | 13,440 |
| 5.5" | 23,000 | 13,860 | 13,860 |
| 6" | 27,200 | 14,493 | 14,493 |
| 6.5" | 30,000 | 15,378 | 15,378 |
| 7" | 32,000 | 15,680 | 15,680 |
| 7.25" | 32,000 | 16,800 | 16,800 |
| 7.5" | 32,000 | 17,360 | 17,360 |
| 8" | 32,000 | 19,460 | 19,460 |
| 8.5" | 32,000 | 21,700 | 21,700 |
| 9" | 32,000 | 23,436 | 23,436 |
| 9.25" or greater | 32,000 | 24,360 | 24,360 |

- Safe Working Load (SWL) provides a factor of safety of approximately 2 to 1 in 3,000 psi normal weight concrete.
- Maximum tension values limited to 12-Tons in conjunction with compatible lifting hardware.
- The information presented in this table was compiled in conjunction with concrete testing and the design calculation criteria outlined in ACI 318-19 Chapter 17.
- Contact Dayton Superior Technical Assistance for shear loads for inserts located near an edge smaller than in the table.

When using pairs of T110 anchors in up to 6.5" concrete panel thickness, the two shear cones will not intersect when they're spaced 18" apart (shear cone radius is typically 1.5x the depth of the anchor foot). For use with the T46 HD Special Spreader Bar. For deeper/thicker installations, the interaction between the two anchors would begin reducing the combined capacity to less than 2 times a single anchor. However, the 32,000 lb. capacity of the T46 will cap the system beyond 6.5" panel thickness (2 x 15,700 lbs.) to a maximum of 16,000 lbs. per anchor.

Note: The two anchors should be secured to each other and the rebar reinforcing grid at the required 18" on center spacing by wire tying with 2-40" length of #4 rebar either side of the anchors shafts or order double T110 inserts that come assembled at 18" o.c.

Note: The short length of rebar recommended is an aid to prevent the insert from moving during concrete placement. When this rebar is added for insert stability, it should be placed against the vertical portion of the insert and at least 1" away from the insert's foot.

T110 Base Plate

- Prevents the T110 insert from piercing the insulation
- Minimizes/eliminates the need for emergency lift plates when the insert is lost due to sinking
- Provides clean finish once concrete is set since the proper insert height is maintained
- Eliminates the need for shims
- Maintains T110's insert height
- Simply installs onto the T110 by pushing the feet/legs of the T110 into the slots of the T110BP base plate
- Two T110 Base Plates are needed per T110 insert



To Order:

Specify: (1) quantity, name

Example:

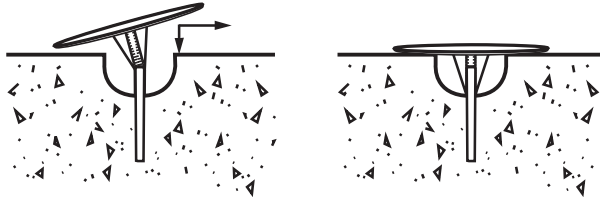
1 carton, T110 Base Plate

P99P Fleet Patch

The P99P Fleet Patch is a durable plastic patch designed to quickly cover T110 Superior Lift setting plug recesses. It is fabricated from an additive stabilized polypropylene to maintain the patch's slightly convex shape. The convex shape helps to keep a constant gripping pressure after installation. The patch is supplied in a concrete gray color with a matte finish that allows subsequent painting, if desired.

Fleet Patch Advantages:

- Special shape-holding composition
- Fast, one-piece "push-on" installation
- Paintable concrete gray matte finish
- Full eight (8) inch diameter
- Weather and chemical resistant
- Self adjusting grippers



P99P Fleet Patch

The P99P Fleet Patch is a high quality, one piece plastic patch that is easy to install and maintain. It provides a quick and economical solution to covering Fleet-Lift anchor recesses.

Fleet Patch

| Sales Category | Product Code | Wt. for 100 |
|----------------|--------------|-------------|
| P99P | FL612 | 24 lbs. |

To Order:

Specify: (1) quantity, (2) name, (3) product code.

Example:

200, P99P Fleet Patch, FL612.

Typical P99P Fleet Patch Installation:

1. Start the patch grippers on the top edge of the anchor
2. Push the patch onto the anchor, flush with the concrete

Note: The P99P Fleet Patch will not prevent corrosion or rusting of an embedded anchor that is subjected to wet conditions. Spraying the anchor with a corrosion resistant compound and applying a bead of silicone around the underside of the patch will help prevent moisture penetration.