



## Installation Instructions for P-Series/Flexy DMT14x14 Deck Mount Plate



The FIM DMT14x14 for P-Series and Flexy is a 1/2" aluminum plate designed for sturdy low-profile mounting of your shade to any solid, level surface.

The plate comes with 13 holes. 8 outer plate mounting holes, 4 inner (tapped) support tube mounting holes, and 1 hole for the rotation locking pin (relevant to P-Series only).

### Placement and Orientation

Each different surface requires different installation steps:

- **Poured concrete:** The plate can be located anywhere you are allowed to and able to drill to insert concrete anchors.
- **2x6 / 2x4 solid wood decks:** The plate can be bolted directly to the wood . If two opposing corners of the plate can solidly be lag screwed 8" into a deck joist, in most cases no additional blocking underneath will be necessary.
- **5/4 / Trex / plywood decks:** On these types of decks, additional blocking and cross bracing from underneath is usually necessary in order for the plate not to flex the surface when load is applied.

If you are uncertain about any of the above requirements please contact a licensed local contractor for an evaluation.

After considering the above requirements, determine the best location for the umbrella pole(s) relative to the point of where you would most often position the canopy (i.e., over your patio table).

### For use with P-Series cantilevered umbrella

Mark the desired center point of the canopy with some masking tape, then assemble the umbrella pole (upright and cantilever), raise it, and move it to the best mounting location considering above

requirements so that the end of the cantilever is directly above the marked center point. When you have located the optimum location, mark the center of the pole.

Note the orientation of the plate - the locking pin hole **MUST** point exactly towards the desired center position of the umbrella. Mark center of the plate, then place the plate on the center mark for the pole, the side with the locking pin hole pointing towards the umbrella center. All 5 holes on that axis should be aligned pointing towards the center of the umbrella.

Mark the 8 outer plate mounting holes **and** the locking pin hole through to the surface and remove the plate.

## **For use with FLEXY dual post canopy**

Use the layout dimensions (center to center of posts) on page 8 of your Flexy instruction booklet to determine the proper location of the plates.

## **Installation**

Installations on concrete are best done with GRK Caliburn XL #27774 concrete screws (fastest and easiest), or 3/8"x2" drop in anchors such as Hilti 3512349 (drill hole size 1/2", bolt size 3/8"). Minimum slab thickness is 3". Make sure all 8 fasteners are firmly set.

On solid 2x4 / 2x6 plank decks, fasten 2 opposing sides sitting centered on a joist using 3/8" x 8" lag screws, and the other 4 holes with 3/8" x 2 1/2" lag screws, or (preferred) 3/8" x 3" hex bolts with nuts and large washers, if deck is accessible from underneath. Note - if there is noticeable flex after installation, additional blocking will need to be added.

If the plate **can not** be centered over a joist, or if you have 5/4" radius edge, TREX or similar composite decking, reinforcement bracing and blocking must be placed underneath the deck surface to create a non-flexing area to mount the plate to. 3/8" hex bolts with nuts and large washers must be used in this case.

**For P-Series ONLY:** Where the locking pin hole was marked, drill a 3/8" diameter hole at least 1" deep to allow the locking pin to **fully pass through** the plate and into the surface below, to safely lock the umbrella's rotation.

## **For P-Series only: Mounting the umbrella pole**

Bolt the umbrella support tube to the plate using the 4 - M10x16 stainless hex bolts supplied with the plate. Tighten firmly.

Slide cross shaped bolt cover plate over the tube and bolts, followed by the rotation disk. The square recess in the disk must face **upwards**.

Slide umbrella pole over the support tube, align it with the recess in the rotation disk, and push down firmly to seat the pole in the recess.

Rotate umbrella pole to desired position, align hole in rotation disk with holes in support tube and deck mount plate, and push in the locking pin all the way.