

ISO-FLEX PD COVER PLATE INSTALLATION PROCEDURES

1. General Requirements

Ensure that the expansion joint stem openings are of a consistent width along the entire length and suitable for the selected size of PD Cover Plate.

Edge spalling, sharp projections and any uneven concrete surfaces shall be repaired prior to proceeding with the cover plate installation. All repair materials used should have reached full cure conditions as specified by the manufacturer.

Ensure that slab surface is smooth along its length. High spots should be ground down, or otherwise leveled by filling low spots.

2. Preparation

PD Cover Plates are shipped in standard 10 Ft. lengths. Anchor locations are predrilled and countersunk for standard anchorage hardware that is provided with the order.

Unpack and lay out PD Cover plates. Measure and make any cuts on the jobsite to meet overall length conditions. The cover plates can be miter cut in the field to accommodate and change of direction conditions.

The base extrusion (female connection) and the extension plate (Male connection) should be matched and slid together into an assembly. If necessary WD40 lubricant can be utilized to aid in this process. Each set of extrusions should be match aligned and not staggered for best performance.

Drilling of the typical floor anchorage holes is accomplished by using a 3/8" concrete drill bit. Drill to a minimum of 4" deep. Blow out all anchor holes to remove all dust. For any wall attachment anchors the drill bit would be 1/4" with a 3" depth.

The anchorage system provided involves 3/8" x 4" Stainless steel combo flathead Lok/Bolt by Dewalt/Powers Anchors (Cat. Number 6174S). **Any wall connection** the anchors are 1/4" x 3" (Cat Number 6172S).

Insert the anchor through the PD cover plate component. Drive the anchor into the anchor hole until firmly seated. Tighten the anchor 3-5 turns past finger tight. Follow initial tightening by torquing the anchor to 15 ft.-lbs. for the 3/8" diameter and to 4 ft.-lbs. for the 1/4" diameter.

3. Installation

It is recommended that the cover plates be located over the joint gap per project conditions and that a chalk line should be snapped to ensure a straight installation. The base extrusion (female) extrusion should be located so that the radial bottom of the part is tight to the wall of the joint gap opening.

Using the cover plate as a template locate and pre-drill the pilot holes for the anchor at each end of the 10 Ft. plate. Blow out any dust and partially insert an anchor in each of the end locations. This will hold the plate in place. Now using the plate as your template drill a pilot hole in the remaining anchor locations. It is recommended that the adjoining plate section ends be held apart from each other by 1/8" in order to allow for thermal expansion of the aluminum plate.

Step A for Installations with noise dampening bedding:

Prior to removing the plate for drilling of anchor holes, snap a chalk line along the free side edge of the plate.

Now remove the end anchors, set the plate aside, and drill all of the anchor locations. Blow out and remove any dust in the holes and around the work area.

Step B for Installations with noise dampening bedding:

Locate the Part A & B of the Iso-Flex 980 Sealant. Using a power drill and mixing paddle mix the components for 2-3 minutes and until the components are combined into a consistent gray color.

Using a bulk caulking gun run out a bead of sealant approx. 1" in from the chalk line. The objective is to keep the sealant below the plate once the plate is reinstalled and the sealant is compressed and dispersed under the plate. In any locations where the concrete surface may be lower than the surrounding surface, it will be necessary to run a second or third sealant bead to account for this low area.

Once the sealant is fully applied, place a bond breaker sheet of poly sheet over the sealant. The tacky sealant will hold the sheet in place.

It is important to move quickly to get the plate repositioned and held in place with the 2 end anchors.

Reposition the cover plate assembly back into place over the drilled anchor holes. Insert and tighten down the 2 end anchors.

Step C for Installations with noise dampening bedding:

With the plate back in place and secured at each end, gently press the free end of the cover plate into the soft sealant. The intent is to allow the sealant to remain between the cover plate and the concrete surface to act as a noise deadening material. Therefore, do not press too hard by causing all of the sealant to be dispersed.

With the end anchors secured in place you can now insert the remaining anchors and tighten all into place. This should be accomplished by following the anchoring guideline covered in the "Preparation" section above. As the anchors are set, be sure to NOT flex or bend the PD cover plate extrusions as it can bind the hinge operation.

All of the steps in this process will be repeated for each section of the PD cover plate system.

4. Completion

The installation can be opened to traffic once the anchorage is fully secured into place. On installations having the noise dampening bedding it is necessary to allow 24 hours for the bedding sealant to fully cure.

Rev 04/19