

DP-100 Diamond Pier™ – Public Use/Green Technology

Post/Beam Brackets

The connection bracket needed to make the connection from the Diamond Pier™ to the superstructure can be purchased separately from a local lumberyard. The DP-100 pier has a 5/8” galvanized bolt embedded in the top of the pier (nut provided), and this bolt will connect to a Simpson Strong-Tie® bracket – model ABE or ABU. Each of these brackets comes with a standoff fitting that separates the wood from contact with the base of the bracket, and eliminates the need to drill into the bottom of the lumber to compensate for the raised anchor bolt.

The ABE bracket is light gauge steel, and it has fairly short sides that attach to posts or beams with galvanized nails. The ABU bracket is heavier gauge, taller, takes a heavier load, and can be attached with either nails or ½” through bolts.

Both brackets come in either a standard galvanized coating, extra zinc coating (Z-max®), or stainless steel finish. Most lumber yards carry the galvanized varieties, but the stainless steel is a special order. The proper coating or finish should be chosen based on the lumber and treating specifications of the project superstructure.

The brackets have a wide hole in the base that allows some horizontal adjustment of the final bracket location, and are tightened to the embedded anchor bolt with a large washer provided with the bracket. If a stainless bracket is chosen, the embedded galvanized bolt must be protected from contact with the bracket and washer with the addition of a small bushing, plumbing washer, or similar rubber or plastic separator. As an alternative, special orders for DP-100 piers with stainless steel anchor bolts may be processed, but the casting and delivery schedule will depend on the season and standard orders casting schedule.

There are three sizes of bracket : 4x4, 4x6 and 6x6. All may be used with the standard DP-100 Diamond Pier.

If a 4-bolt DP-100 is used, a custom bracket made to fit the 4-bolt pattern must be fashioned and coated locally.

Driving Bits

Automatic demo hammers used for installing the Diamond Pier Pins are listed under the documents section of the residential web page. The bits for larger hammers, using 1 1/8” hex shafts, can be rented through a local rental yard, or purchased from Pin Foundations, Inc. Most of the rental bits are produced by Bruner & Lay of Chicago (847) 678-3232, and distributed through various rental companies throughout the US - bit model # B 31-861, or B 31-863.

Custom bits made for Pin Foundations, Inc. also fit the 1 1/8” hex hammers, cost \$165.00 each, and can be delivered by UPS or shipped with a direct order for a pallet of piers.