

Installation Instructions

Tools Required:

- Screw gun drill/driver with clutch for steel and wood deck with 3/8- or 1/2-inch drive (10 or 13 mm). To avoid stripping screws into wood or elongating holes into steel, do not use an impact driver. Screws driven with impact drivers may have substantially less pull resistance than screws installed with a clutch driver.
- Hammer drill for concrete deck with 3/8- or 1/2-inch drive (10 or 13 mm).
- Pre-Drill concrete decks using 3/16-in. (5 mm) masonry bit of sufficient length to penetrate all layers of roofing and up to 2-inches (50.8 mm) into the concrete deck.
- No. 3 Phillips driver tip to drive roof screws.
- 1/2-inch (13 mm) nut runner or wrench to drive cap screws.
- Torque wrench (reads in inch-pounds) and 1/2-in. (13 mm) socket to torque cap screws 60 to 70 inch-pounds.
- Cartridge type caulk gun.
- Blower (gas or electric). Can of keyboard cleaner may suffice for small jobs.
- Wire brush for cleaning mineral surfaced roofing.

Materials Required:

- OMG Roofing fasteners for the specific deck type (see "Approved fasteners" section on this page or consult OMG).
- Water block sealant recommended by the roofing system manufacturer.
 Use approximately one tube of sealant per nine PowerGrip™ units.
- Membrane cleaner for single-ply applications as recommended by roof system manufacturer.
- Recommended applicators and clean-up products for membrane cleaners.

Additional tools and materials required for installation on modified and gravel surfaced built-up roofs:

- Flat spade or roofers spud bar (to scrape off gravel).
- Small propane torch (in the event gravel does not spud easily, it can be heated and scraped).
- Can of asphalt roof adhesive or coating (black) and stirring device.
- Ladle or applicator for asphalt adhesive.

NOTE: Only technicians trained in commercial roof installation should install this product.

VERY IMPORTANT: Before installation begins, clean membrane roofs using approved cleaners and procedures. Clean mineral surface roofs by lightly wire brushing area to remove loose granules and blow loose material from the area. Wipe coated roofs with recommended cleaners.

Remove PowerGrip Universal 7 (PGU-7) from shipping box and separate top and bottom plates. Remove and discard clear separator sheet between top and bottom discs.

STEP 1: Mark a spot on the roof to indicate where the center of the PGU-7 should be located.



STEP 2: Place base ring/plate at desired location using guide hole to center over mark. Set ring/plate with foam side down. Do not install anchors directly on seams or laps in the roof cover. If installation on a seam or lap is unavoidable refer to the Technical Bulletin for specific installation procedures.



STEP 3: Mechanically attach the base plate through the membrane and into the structural roof deck using appropriate OMG Roofing Fasteners (sold separately). Fasteners should be installed in a criss-cross pattern. Add 1/2-in. (12.7 mm) to the length of the fastener to compensate for the base plate thickness. Special care should be given to drive the fasteners perpendicular to the deck. Do not tighten.

Once all screws have been started and base foam is partially compressed, tighten the ring/base down until the base foam is fully compressed. Make sure the roof is not deformed. If the roof becomes deformed, back the overtightened screw(s) out slightly and gently re-tighten. Take care to confirm that each fastener is tight but not overdriven. When installed correctly, the foam under the base plate should be visibly compressed.



Approved Fasteners:

For **steel and plywood/OSB** roof decks, screws should be long enough to penetrate through the bottom of the deck approximately 3/4-inch (12.7 mm). For **timber plank** decks, screws should embed into wood a minimum of 1-inch (25.4 mm).

For optimal performance in **timber plank** decks, use an OMG Heavy Duty Roofing Fastener (#14).

For optimal performance in **steel** decks, use an OMG Extra Heavy Duty (XHD) Roofing Fastener (#15).

The quality of **plywood and OSB** can vary widely. Use either an OMG Heavy Duty #14 or XHD #15, whichever provides the greatest pull resistance.

For **concrete** roof decks, screws should be long enough to embed into the deck a minimum of 1-in. and up to 1.5-inches (25.4 to 38.1 mm). Holes should be pre-drilled approximately 1/2-in. (12.7 mm) deeper than the embedment to allow for screws to completely draw down and for the compacting concrete residue. Blow or clean roof after drilling.

For optimal performance in **concrete** decks, use OMG Heavy Duty Roofing Fastener (#14).

STEP 4: Loose lay the cover plate over the base plate by aligning the bolt holes. Once the bolt holes are properly aligned, mark the cover plate and membrane as shown to help re-align the cover plate for final installation in Step 6.



STEP 5: Apply a continuous, unbroken bead of recommended water block sealant to the underside of the top plate's sealant flange. The bead should be about 3/8-in. (9.5 mm) wide and 3/8-in. (9.5 mm) tall (see image below).



STEP 6: Lay cover plate onto base plate, taking care to align it using the indicator marks made in Step 4, and align the cap screw holes with the threaded holes in the base ring/plate.



STEP 7: Hand tighten all four bolts supplied to secure the cover plate to the base plate, until the neoprene gasket on the bolt begins to bulge under the washer. Complete the assembly by torqueing the cap screws following a criss-cross pattern to 60-70 inch pounds. The sealant should be extruded evenly out from the top plate edge 1/4- to 3/8-in. (6.35 to 9.5 mm). Do not tool sealant. Optional: Apply indelible torque marks to each cap screw if specified.



STEP 8: Once the cover plate is secured to the base plate, inspect to ensure that water block sealant has squeezed out around the edge of the disc approximately 1/4 to 3/8-in. (6.35 to 9.5 mm).



The PowerGrip Universal 7 is now ready for use. Attach mounting hardware (furnished by others) to the 3/8-in. (9.5 mm) top stud and secure with the 3/8-in. (9.5 mm) flange nut.

Always check with roof system manufacturer for installation criteria and written acceptance of the intended application prior to installation. Failure to do so could void the roof warranty.

