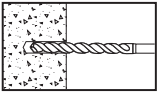


INSTALLATION INSTRUCTIONS (SOLID BASE MATERIALS)

ADHESIVES

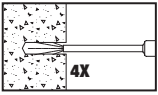
AC100+ GOLD®
Vinylester Injection Adhesive Anchoring System

DRILLING

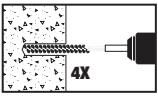


- 1- Drill a hole into the base material with a rotary hammer drill tool to the size and embedment required by the selected steel anchor element (see installation specifications for threaded rod and reinforcing bar). The tolerances of the carbide drill bit must meet ANSI Standard B212.15.
 - Precaution: Use suitable eye and skin protection. Avoid inhalation of dust during drilling and/or removal.
 - **Note!** In case of standing water in the drilled hole (flooded hole condition), all the water has to be removed from the hole (e.g. vacuum, compressed air, etc.) prior to cleaning.

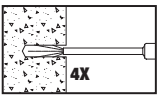
HOLE CLEANING DRY (BLOW 4X, BRUSH 4X, BLOW 4X)



- 2a- Starting from the bottom or back of the anchor hole, blow the hole clean using a compressed air nozzle (min. 90 psi) or a hand pump (supplied by Powers Fasteners) a minimum of four times (4x).
 - Use a compressed air nozzle (min. 90 psi) or a hand pump (min. volume 25 fl. oz.) for anchor rod 3/8" to 3/4" diameter or reinforcing bar (rebar) sizes #3 to #6.
 - Use a compressed air nozzle (min. 90 psi) for anchor rod 7/8" to 1-1/4" diameter and rebar sizes #7 to #10. A hand pump shall not be used with these anchor sizes.



- 2b- Determine wire brush diameter (see installation specifications) and attach the brush with adaptor to a rotary drill tool or battery screwgun. Brush the hole with the selected wire brush a minimum of four times (4x). A brush extension (supplied by Powers Fasteners, Cat. #08282) should be used for holes drilled deeper than the listed brush length.
 - The wire brush diameter should be checked periodically during use. The brush must be replaced if it becomes worn and does not come into contact with the sides of the drilled hole.

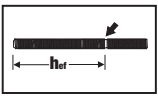


- 2c- Finally, blow the hole clean again a minimum of four times (4x).
 - Use a compressed air nozzle (min. 90 psi) or a hand pump (min. volume 25 fl. oz.) for anchor rod 3/8" to 3/4" diameter or reinforcing bar (rebar) sizes #3 to #6.
 - Use a compressed air nozzle (min. 90 psi) for anchor rod 7/8" to 1-1/4" diameter and rebar sizes #7 to #10. A hand pump shall not be used with these anchor sizes.
 - When finished the hole should be clean and free of dust, debris, ice, grease, oil or other foreign material.

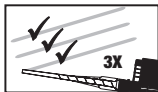
PREPARING



- 3- Check adhesive expiration date on cartridge label. Do not use expired product. Review Safety Data Sheet (SDS) before use. Cartridge temperature must be between 23°F - 95°F (-5°C - 35°C) when in use unless otherwise noted. Review gel (working) and cure time table. Consideration should be given to the reduced gel time of the adhesive in warm temperatures.
 - Attach a supplied mixing nozzle to the cartridge. Do not modify the mixer in any way and make sure the mixing element is inside the nozzle. Load the cartridge into the correct dispensing tool.
 - Note: Always use a new mixing nozzle with new cartridges of adhesive and also for all work interruptions exceeding the published working time of the adhesive.

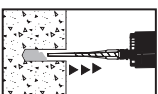


- 4- Prior to inserting the anchor rod or rebar into the filled bore hole, the position of the embedment depth has to be marked on the anchor.
 - Verify anchor element is straight and free of surface damage.



- 5- Adhesive must be properly mixed to achieve published properties. Prior to dispensing adhesive into the drilled hole, separately dispense at least three full strokes of adhesive through the mixing nozzle until the adhesive is a consistent GRAY color. Do not attach a used nozzle when changing to a new cartridge.
 - Review and note the published working and cure times (see gel time and curing time table) prior to injection of the mixed adhesive into the cleaned anchor hole.

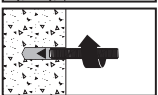
INSTALLATION



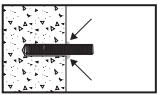
- 6- Fill the cleaned hole half to two-thirds full with mixed adhesive starting from the bottom or back of the anchor hole. Slowly withdraw the mixing nozzle as the hole fills to avoid creating air pockets or voids. For embedment depth greater than 7-1/2" an extension nozzle must be used with the mixing nozzle.
 - Piston plugs (see installation specifications) must be used with and attached to the mixing nozzle and extension tube for horizontal and overhead installations in concrete except with anchor rod 3/8" and rebar size #3. Insert piston plug to the back of the drilled hole and inject as described in the method above. During installation the piston plug will be naturally extruded from the drilled hole by the adhesive pressure.
 - **Attention!** Do not install anchors overhead without proper training and installation hardware provided by Powers Fasteners. Contact Powers for details prior to use.



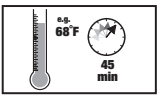
- 7- The anchor should be free of dirt, grease, oil or other foreign material. Push clean threaded rod or reinforcing bar into the anchor hole while turning slightly to ensure positive distribution of the adhesive until the embedment depth is reached. Observe the gel (working) time.



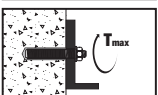
- 8- Be sure that the anchor is fully seated at the bottom of the hole and that some adhesive has flowed from the hole and all around the top of the anchor. If there is not enough adhesive in the hole, the installation must be repeated. The anchor shall not be moved after placement and during cure.



CURING AND LOADING



- 9- Allow the adhesive anchor to cure to the specified full curing time prior to applying any load (reference gel time and curing time table).
 - Do not disturb, torque or load the anchor until it is fully cured.



- 10- After full curing of the adhesive anchor, a fixture can be installed to the anchor and tightened up to the maximum torque (reference gel time and curing table) by using a calibrated torque wrench.
 - Take care not to exceed the maximum torque for the selected anchor.