

Sonneborn®

Concrete Repair Systems



SONOCRETE® SONOPOST™

- Compliant rapid-setting grout
- Anchoring cement for concrete and masonry

Features

- Quick setting...
- Shrinkage compensated...
- Tenacious bond to concrete...
- Just add water...

Benefits

- Minimizes downtime
- Resistant to cracking
- Locks fixtures permanently
- Easy to mix

Where to Use Sonopost™

- Machinery and equipment bases
- Anchor bolts
- Posts
- Railings
- Structural columns
- Seating bolts
- Reinforcing rods
- Horizontal concrete and masonry
- Interior or exterior
- Power line stanchions

How to Apply Sonopost™

Anchoring Applications

Surface Preparation

1 In sound concrete, drill holes wide enough to accept the anchor bolts, (clearance not less than 1/4" (6 mm)). Make certain the hole diameter will allow the material to readily flow between the anchor bolt and the wall of the cavity. Typically, the diameter of the hole should be a minimum of 3 times the diameter of the post.

2 For added strength, "mushroom" the base of the hole by tilting the drill and working it back and forth.

3 Blow or vacuum out all loose particles to ensure a dust-free surface, then dampen the cavity, but do not allow water to pond in the bottom of the hole.

Application

1 Place the anchor bolts.

2 Mix enough material to fill the hole. Mix only enough that can be placed in 10 minutes. Use the minimum amount of water that will yield a pourable mix (approximately 2.3 ounces per lb. (146 mL per kg)).

3 Pour a small amount of Sonopost™ into the hole and work the bolt up and down to eliminate air pockets.

4 Fill the rest of the hole level with the surrounding concrete or slightly overfill to prevent ponding of water. Pour from one side only to ensure a good, even flow.

5 Sonopost™ will set hard in 15 minutes, but extreme temperatures will lengthen or shorten set times. Do not attach nuts for 90 minutes. Sonopost™ strengthens as it cures, so allow more time when installing heavy equipment.

Grouting Applications

Surface preparation

1 Areas to be grouted must be clean and free of oil, grease, dirt and contaminants. Remove all loose materials.

2 When required, provide air relief openings to prevent air entrapment.

3 All concrete in contact with Sonopost™ must be thoroughly saturated with clean water before grout placement. Remove excess water to achieve SSD (saturated surface dry) condition before placement.

Forming

1 For column base plates and machinery bases, follow forming procedures that allow for rapid and continuous placement of the material.

2 Anchor support elements so that no movement is possible. Remove supports only after Sonopost™ has sufficiently hardened.

Mixing

1 Sonopost™ requires only the addition of potable water to achieve the desired placement consistency. Use the minimum amount of mixing water to achieve the necessary placement consistency.

2 For small installations, best results are achieved using a 3/4" drill and paddle mixer. For larger batches, a mortar mixer with moving blades is recommended. Mix no longer than 3 minutes and do not mix more material than can be placed in 10 - 12 minutes.

Application

1 Place in accordance with ACI grouting procedures and recommendations.

2 Place grout quickly and continuously, striking off exposed areas.

3 Consolidate grout during placement with mechanical vibrator or rodding. Material must be compacted and condensed for air and void removal to obtain optimum E.B.A. (Effective Bearing Area). If needed, lightly trowel exposed areas.

4 For grouting beyond 2" (51 mm) in depth, Sonopost™ must be extended with up to 50 lbs. (22.5 kg) of washed, graded, saturated surface dry aggregate. Size of aggregate is dependent upon size and depth of pour. The minimum depth of placement is 1/2" (13 mm).

Curing

Curing is mandatory for all exposed grout surfaces. Maximum performance of the product is achieved by moist curing for up to 7 days followed with a curing compound.

Clean Up

Clean all tools and equipment immediately with water. Cured material can be removed by mechanical means only.

For Best Performance

- If placement depth exceeds 2" (51 mm), Sonopost™ must be extended with up to 50 lbs. of 3/8" (10 mm) washed pea gravel.
- Exposed grout must be cured; use water, sheets, or an appropriate Sonneborn® curing compound.
- Do not exceed limitations set by American Concrete Institute on concrete placement.
- Do not overwater—follow water requirements carefully.
- Do not use in pours with less than 1/4" (6 mm) clearance.
- Failure to follow good trade practices may result in decreased material performance.
- Depth of the anchoring system must be determined in relation to the height and loading of its member.
- If area of installation contains numerous, re-entrant corners, consult ACI 504R.
- Do not use below 40°F (4°C) or over 90°F (32°C).
- Make certain the most current version of this data guide is being used; call Customer Service (1-800-433-9517) to verify the most current version.
- Proper application is the responsibility of the user. Field visits by ChemRex® personnel are for the purpose of making technical recommendations only and are not for supervising or providing quality control on the jobsite.

Technical Data

Compliances*

- ASTM C 1107, Class B
- CRD-C-621

*As modified for rapid-setting grout

Technical Data

Compressive Strength, (ASTM C 109) psi (MPa)

1 hour	1,500 (10.3)
7 days	6,500 (44.8)
28 day	8,000 (55.2)

Pullout Strength

Greater than 5,000 lbs. at 1 hour

Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.

Order Information

Packaging

Sonopost™

- 10 lb. (4.5 kg) cans, 4 cans per carton
- 50 lb. (22.7 kg) pails

Store Sonopost™ in a cool, dry area. Discard if product absorbs moisture or becomes wet.

Shelf life is typically 1 year when stored in unopened containers under normal conditions.

Coverage

- One lb. of Sonopost™ fills 14 cubic inches (229 cubic cm) when mixed according to directions. A 10 lb. (4.5 kg) pail requires approximately 24 fl. ounces (708 mL) of clean water. Do not overwater.

A 50 lb. (22.7 kg) bag of Sonopost™, when extended with 50 lbs. of aggregate, yields 0.60 cubic ft. (0.017 m³).

Caution

Sonopost™ contains Portland cement, silicon dioxide (quartz)

Risks

May cause eye, skin or respiratory irritation. Product is alkaline on contact with water and may cause injury to skin or eyes. Ingestion or inhalation of dust may cause irritation. Contains small amount of free respirable quartz which has been listed as a suspected human carcinogen by NTP and IARC. Repeated or prolonged overexposure to free respirable quartz may cause silicosis or other serious and delayed lung injury.

Precautions

KEEP OUT OF THE REACH OF CHILDREN. Prevent contact with skin and eyes. Prevent inhalation of dust. DO NOT take internally. Use only with adequate ventilation. Use impervious gloves, eye protection and if the TLV is exceeded or if used in a poorly ventilated area, use NIOSH/ MSHA approved respiratory protection in accordance with applicable federal, state and local regulations.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. SEEK MEDICAL ATTENTION. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs, SEEK IMMEDIATE MEDICAL ATTENTION. If swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

Refer to material Safety Data Sheet (MSDS) for further information.

Proposition 65

This product contains material listed by the state of California as known to cause cancer, birth defects or other reproductive harm.

For medical emergencies only, call ChemTrec (1/800/424/9300).

Limited Warranty Notice

Every reasonable effort is made to apply ChemRex® exacting standards both in the manufacture of our products and in the information which we issue concerning these products and their use. We warrant our products to be of good quality and will replace or, at our election, refund the purchase price of any products proved defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement or refund, CHEMREX® MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, RESPECTING ITS PRODUCTS, and CHEMREX® shall have no other liability with respect thereto. Any claim regarding product defect must be received in writing within one (1) year from the date of shipment. No claim will be considered without such written notice or after the specified time interval. User shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith. Any authorized change in the printed recommendations concerning the use of our products must bear the signature of the ChemRex® Technical Manager.



Sonneborn®

ChemRex®

Corporate Office:

889 Valley Park Drive, Shakopee, MN 55379

Customer Service: 1/800/433-9517

Technical Services: 1/800/ChemRex (1/800/243-6739)

Web Site: www.chemrex.com