

Grout 1,000

Technical Data Sheet

Rev: 04-2018

Product Description

Grout 1,000 provides a system for the filling of voids behind substrates to prevent leaks and subsidence and for the filling of abandoned lines. Grout 1,000 is a volume-stable, Type I/II portland cement based product blended with pozzolans and performance enhancing admixtures used to form a structural or flowable fill. Grout 1,000 is specifically formulated for applications in fine, sandy soils or soils with low porosity.

Performance Specifications

Compressive Strength: (ASTM C109)
>1,000 psi 28 Days

Drying Shrinkage: (ASTM C596)
0% 28 Days @ 90% RH

Wet Unit Weight: (ASTM C138)
105 ± 5 lb/ft³

Packaging:
65 lb bag / 40 bags per pallet

Yield per Bag:
0.91 ft³

Typical Structures

Grout 1,000 provides void and leak repair to a variety of concrete and masonry structures including:

Manholes	Tunnels & Pipelines
Tanks & Containment	Wastewater Facilities

Equipment

Approved application equipment includes the SprayMate® 35C, SprayMate® 35D, MiniMate II, grout packers, and nozzle with control valve and pressure gauge. If using other equipment, please contact The Strong Company, Inc.

Surface Preparation

For voids and leaks: Identify all areas of infiltration, paying close attention to entries into the substrate such as service lines, intersections, lifting holes, and joints. Soak the soil outside the substrate to verify leaks if necessary. Fill all large voids, cracks, and areas around incoming lines with a rapid-setting patching product to prevent grout from escaping. Use an instant-setting product to seal minor cracks as necessary. Drill holes through substrate using a recommended pattern per manufacturer. Drill pattern may vary from application to application.

For abandoned lines: Install concrete bulkhead with inlet and outlet riser at each manhole junction of abandoned line. Extend inlet riser through bulkhead into abandoned line to allow uninterrupted flow of cementitious grout. Turn risers 90 degrees from bulkhead to access them outside of manhole. Turn outlet riser 90 degrees outside of manhole and extend horizontally for such length that no spillage enters manhole.

Mixing

Use 4.0 gallons of water per bag of product. Add the required amount of water to the mixer first, followed by product. Mix until material is flowable. Follow all other manufacturer's recommendations.

Discharge mixed material into hopper and prepare another batch in such a manner as to allow continuous application without interruption until complete.

Application

For voids and leaks: Place a grout packer into a drilled hole and tighten until fit is snug. Create channels for material by attaching nozzle to packer and pumping water until water discharges from another hole. Plug hole currently discharging water. Continue pumping water and plugging holes until water has discharged from each hole. Stop pumping if pressure rise exceeds 10 psi and move to hole where water has not discharged. Use above procedure until water has discharged from each hole. After pumping water, remove plugs, attach nozzle to packers, and pump material using above procedure. Stop pumping if pressure rise exceeds 10 psi. Remove packers and plugs 3 hours after pumping material. Fill holes with rapid-setting patching product.

For abandoned lines: Place a flow-through packer into inlet riser and inflate until packer is seated in riser. Pump material through inlet riser until material discharges from outlet riser. Remove risers 3 hours after pumping material.

Curing

No actions for curing are required.

Weather

Do not apply if ambient temperature is below 40°F. Do not apply to frozen surfaces or if substrate is expected to freeze within 24 hours after application. Keep the material temperature at time of application below 90°F. Do not allow water temperature to exceed 80°F. Chill with ice if necessary.

Acceptance

Cast four 2 inch cube specimens each day or for every pallet of material used, whichever occurs first. Properly package, label, and return specimens to the manufacturer for testing in accordance with the owner's or manufacturer's directions for compressive strength per ASTM C109.