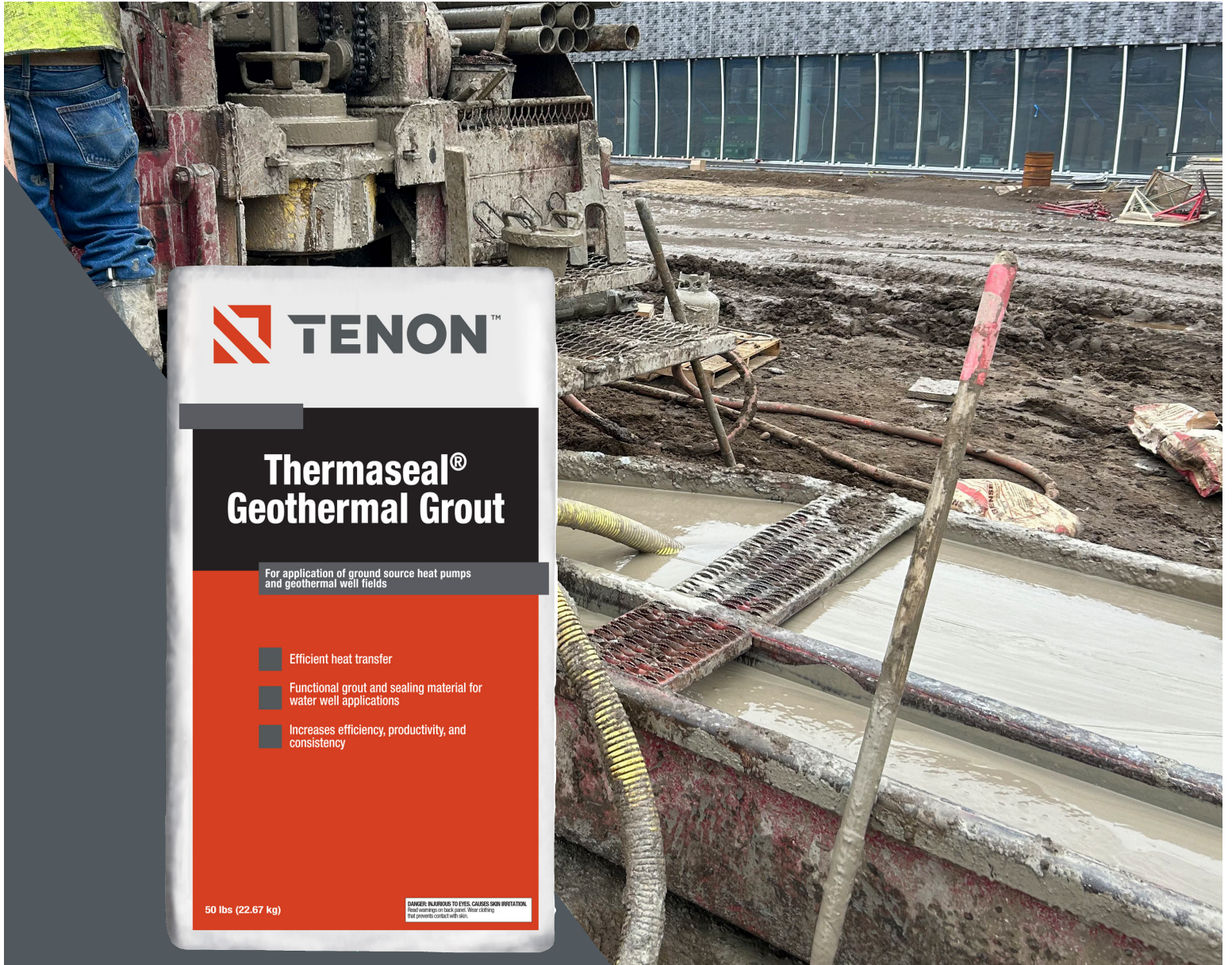





TENON®

Thermaseal® Geothermal Grout

Thermaseal® Geothermal Grout

For application of ground source heat pumps and geothermal well fields

- Efficient heat transfer
- Functional grout and sealing material for water well applications
- Increases efficiency, productivity, and consistency

50 lbs (22.67 kg)

WARNING: IRRITATING TO EYES. CAUSES SKIN IRRITATION. Read warnings on back panel. Wear clothing and gloves contact with skin.

Efficient heat transfer

Tenon® Thermaseal Geothermal Grout is a thermally conductive cementitious grout engineered for application of vertical ground-source heat pumps and geothermal well fields. It is non-toxic with a high solids content and a low permeability factor, making it ideal for ground-source heat loops and safe for contact with potable ground water. It is a blend of thermally conductive sand with Portland cement.

Features:

- Low absorption with a rigid seal to prevent integration of aquifers and is made in three types, a MN Mix and two in the HF (high-flow) Mix
- Furthers development of a low-permeability, rigid seal to prevent integration of aquifers
- Preblended material
- Increases efficiency, productivity, and consistency
- MN Mix conforms to Chapter 4725 of the Minnesota Department of Health Administrative Rules (Section 4725.01; Subp. 226)



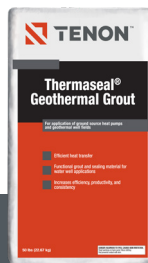
Application

Thermaseal Geothermal grout is typically pumped into the bore holes or the area to be grouted through a pressurized pipe system in a continuous operation through a tremie pipe at a rate of 5 - 15 gallons (19 - 57 liters) per minute. Thermaseal Geothermal Grout is flowable, making it ideal for pumping into tight, hard-to-reach areas. The use of a positive displacement piston pump may be helpful when pumping.

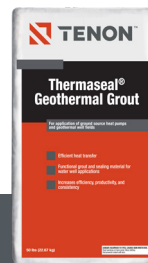
Mix Table				
Quantities based on 50 lbs. (22.7 kg) of blended material				
Target Thermal Conductivity (BTU/hr.-ft.-F°)	Fresh Water	Yield	Acceptable Range	Permeability
MN Mix				
1.0	1.55 gal. (5.86 L)	3.77 gal. (14.27 L)	16.2 - 17.2 lb./gal. (1.94 - 2.06 kg/L)	N/A
HF 1.1 Mix				
1.1	2.40 gal. (9.10 L)	4.69 gal. (17.8 L)	14.4 - 15.4 lb./gal. (1.73 - 1.85 kg/L)	6.74 x 10 ⁻¹⁰ cm./sec.
HF 0.75 Low Perm Mix				
0.75	2.40 gal. (9.10 L)	4.9 gal. (18.50 L)	13.8 - 14.8 lb./gal. (1.65 - 1.77 kg/L)	7.1 x 10 ⁻⁹ cm./sec.
HF 0.75 Mix				
0.75	2.40 gal. (9.10 L)	4.53 gal. (17.2 L)	15 - 16 lb./gal. (1.80 - 1.92 kg/L)	N/A

Available In:

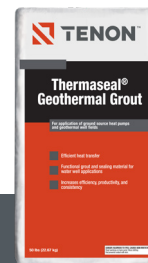
Tenon Thermaseal Geothermal Grout is available in 50 lb. MN Mix, 1.1 HF Mix, 0.75 HF Low Perm Mix, 0.75 HF Mix bags, and a 3000 lb 1.1 HF Mix bag (BOM# 1142777).



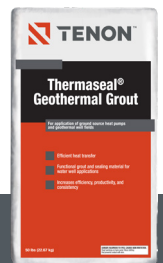
50 lb.
MN Mix
BOM #121014



50 lb.
1.1 HF Mix
BOM #113254



50 lb.
0.75 HF Low Perm Mix
BOM #129711



50 lb.
0.75 HF Mix
BOM #129569

For professional use only.

It is the responsibility of the installer/applicator to ensure the suitability of the product for its intended use. For technical assistance, please contact TCC Materials. To acquire technical and safety literature, please visit our website.