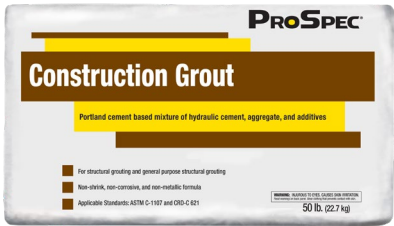
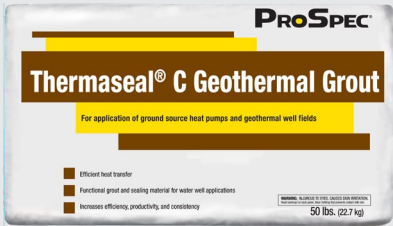
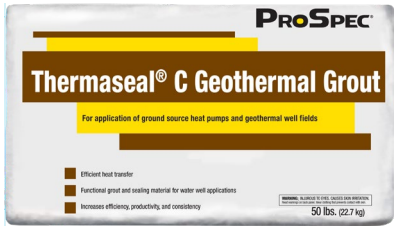
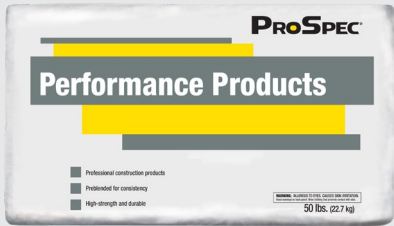


ADVANTAGES/USES	CONSTRUCTION GROUT	THERMASEAL GEOTHERMAL GROUT HF	THERMASEAL GEOTHERMAL GROUT (MN MIX)	SOIL STABILIZATION
	 <ul style="list-style-type: none"> <li>• Non-shrink, non-metallic, Portland cement-based mixture of hydraulic cement, aggregate, and additives for structural grouting and general purpose structural grouting</li> <li>• Can be mixed to plastic, flowable, or fluid consistency based on application requirements</li> <li>• Above and below grade</li> <li>• Interior and exterior</li> <li>• Commercial use</li> </ul>	 <ul style="list-style-type: none"> <li>• Thermally conductive cementitious grout engineered for application of vertical ground source heat pumps and geothermal well fields.</li> <li>• High-solids grout with low absorption</li> <li>• Non-toxic</li> <li>• Safe with potable water</li> <li>• Functional grout and sealing material for water well applications</li> <li>• Easy to pump with conventional geothermal grout pumps</li> </ul>	 <ul style="list-style-type: none"> <li>• Thermally conductive cementitious grout engineered for application of vertical ground source heat pumps and geothermal well fields.</li> <li>• High-solids grout with low absorption</li> <li>• Non-toxic</li> <li>• Safe with potable water</li> <li>• Functional grout and sealing material for water well applications</li> </ul>	 <ul style="list-style-type: none"> <li>• Portland cement-based product used to alter soil and enhance the load bearing capacity of the sub-grade to support pavements and foundations</li> <li>• Exterior use</li> <li>• Soil drying</li> <li>• Commercial use</li> </ul>
APPLICATION				
Thickness	Min ½" Max 4"	N.A.	N.A.	N.A.
Initial Set Time @ 70°F	0:15 (hr:min)	0:30 (hr:min)	0:30 (hr:min)	0:45 (hr:min)
Final Set Time @ 70°F	N.A.	N.A.	N.A.	N.A.
Pot Life @ 70°F	15 min	30 min	30 min	N.A.
Open to Use	3 days	30 min	30 min	N.A.
Temperature Use Range	50°F-90°F	50°F-90°F	50°F-90°F	50°F-90°F
Industry Standards	Meets or exceeds ASTM C-1107 Meets Corps of Engineers Specification CRD-C 621	HF (high-flow) mix is approved for use by the Illinois Department of Health	MN Mix conforms to Chapter 4725 of the Minnesota Department of Health Administrative Rules (Section 4725.01; Subp.226)	N.A.
Enhancements	Non-shrink Pumpable and flowable	Target thermal conductivity standard of 1.0 BTU/hr-ft-F°	Target thermal conductivity standard of 1.0 BTU/hr-ft-F°	Final strength varies with soil content, conditions of mixing, compaction, and curing
Compressive Strength	1,750-3,450 (24 hr.) 8,200-10,500 (28 day)	N.A.	N.A.	N.A.
Suitable Substrates (Refer to Data Sheet for restrictions and notes)	Fully cured, structurally sound concrete	Pressure grouting to fill bore holes in rock, soil, concrete, masonry, and similar materials Ground source heat loops	Pressure grouting to fill bore holes in rock, soil, concrete, masonry, and similar materials Ground source heat loops	Soil
Color	Gray	Gray	Gray	Gray
For Technical Product Data, Industry Standards, and Material Safety Data Sheets on all of the ProSpec® products, please visit our website at <a href="http://www.tccmaterials.com">www.tccmaterials.com</a>				