

ADVANTAGES/USES	CONSTRUCTION GROUT	THERMASEAL GEOTHERMAL GROUT HF	THERMASEAL GEOTHERMAL GROUT (MN MIX)	REFRACTORY MORTAR
	<ul style="list-style-type: none"> • Non-shrink, non-metallic, Portland cement-based mixture of hydraulic cement, aggregate, and additives for structural grouting and general purpose grouting, anchoring, and hole filling • Can be mixed to plastic, flowable, or fluid consistency based on application requirements • Above and below grade • Interior and exterior • Commercial use 	<ul style="list-style-type: none"> • Thermally conductive cementitious grout engineered for application of vertical ground source heat pumps and geothermal well fields. • High-solids grout with low absorption • Non-toxic • Safe with potable water • Functional grout and sealing material for water well applications • Easy to pump with conventional geothermal grout pumps 	<ul style="list-style-type: none"> • Thermally conductive cementitious grout engineered for application of vertical ground source heat pumps and geothermal well fields. • High-solids grout with low absorption • Non-toxic • Safe with potable water • Functional grout and sealing material for water well applications 	<ul style="list-style-type: none"> • For fireplaces, fire pits, flues, etc. • Good for applications up to 2550°F • Air entrained for freeze-thaw resistance • One hour working time • Interior/exterior use • ASTM C199
APPLICATION				
Thickness	Min ½" Max 4"	N.A.	N.A.	Fire/Clay Brick: ½" - ¾" Flue Tile: ½"
Initial Set Time @ 70°F	0:15 (hr:min)	0:30 (hr:min)	0:30 (hr:min)	0:60 (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	60 min
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	40°F-100°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°	Air-entrained for freeze-thaw resistance
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	Fire brick, clay flues
Color	Gray	Gray	Gray	Gray

ADVANTAGES/USES

	HIGH STRENGTH PRECISION GROUT	PRECAST MORTAR GROUT	SLAB BEDDING GROUT	SLAB DOWEL GROUT
	<ul style="list-style-type: none"> • Non-shrink, non-metallic, Portland cement-based mixture of hydraulic cement, aggregate, and additives for structural grouting and general purpose grouting, anchoring, and hole filling • Can be mixed to plastic, flowable, or fluid consistency based on application requirements • Above and below grade • Interior and exterior • Commercial use 	<ul style="list-style-type: none"> • A fast setting, non-shrink, single component, cementitious mortar grout for precast repairs and erections • Excellent hang capability • Non-staining • non-metallic • Non-corrosive • Shavable • No chlorides or salts • High-strength • Freeze/thaw resistant • Commercial use 	<ul style="list-style-type: none"> • A non-shrink, high compressive strength, non-metallic grout used for placing prefabricated concrete pavements • High fluid • Excellent bond • Cement based • Non-corrosive • Resists freeze/thaw damage • Commercial use 	<ul style="list-style-type: none"> • A non-shrink, high compressive strength, non-metallic grout used for placing fabricated concrete pavements • High fluid • Excellent bond • Non-shrink • Cement based, non-corrosive • Resists freeze/thaw damage • Commercial use

APPLICATION

Thickness	1-4" (neat) 4-8" (extended)	>½-5"	N/A	½-2" (neat) 2-8" (extended)
Initial Set Time @ 70°F	Varies. See data sheet.	Varies. See data sheet.	0:35 (hr:min)	Varies. See data.
Final Set Time @ 70°F	Varies. See data sheet.	Varies. See data sheet.	1:00 (hr:min)	N/A
Pot Life @ 70°F	Varies. See data.	Varies.	Varies	60 min
Open to Use	1-3 days (depending on project requirements)	Varies	Varies. See data sheet.	Varies. See data sheet.
Temperature Use Range	40°F-80°F	40°F-80°F	65°F-70°F	65°F-70°F
Industry Standards	ASTM C1107, CRD-C621	ASTM C1107, CRD-C621	ASTM C1107, CRD-C621	ASTM C928, ASTM C827
Enhancements	Non-shrink, pumpable	Non-shrink, moldable	Non-shrink, highly fluid	Non-shrink, pumpable
Compressive Strength	Varies. See data sheet.	Varies. See data sheet.	Varies. See data sheet.	Varies. See data sheet.
Suitable Substrates (Refer to Data Sheet for restrictions and notes)	Fully cured, structurally sound concrete.	Used for patching on vertical and overhead concrete masonry. Can be used as bedding mortar joining vertical and horizontal. Restorating for bridges, parking structures, tunnels, etc.	Ideal for precast concrete roadway panels	Specifically designed to compliment precast concrete slab placement and fill inverted dovetail slots
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 www.tccmaterials.com