SANDED VS. UNSANDED GROUT

What is the difference between sealed and unsealed grout?

There are many different types of grout. All have different functions and places of use; the oldest and most basic types of grout, being SANDED AND UNSANDED. Both of these types of grout consist of only Portland cement, pigments and additives. ANSI defines the qualities of these grouts in A118.6

Sanded Grout

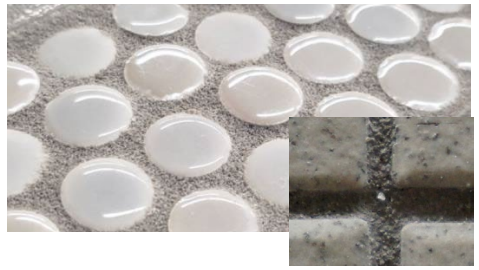
- For grout joints 1/8" - 1/2"
- May scratch soft stones, glass and mirror
- Resistant to shrinkage and cracking
- Needs to be sealed and maintained
- Rough texture
- Color consistency can be affected by water quantity

Unsanded Grout

- Commonly called NONSANDED
- For joints 1/16" or 1/8"
- May be used with soft stones, glass and mirror
- Needs to be sealed and maintained
- Smooth texture
- Color consistency can be affected by water quantity
- Can crack easily

CLOSE-UP VISUALS

Sanded Grout: Note that you can see the aggregate



Unsanded Grout: No visible aggregate and a smooth joint

TECHNICAL DEFINITIONS

Standard Sanded Cement Grout– A factory prepared mixture of cement, graded sand, and other ingredients to produce a water resistant, dense, uniformly colored material, meant for joints of 1 8 width or greater

Standard Unsanded Cement Grout– A factory prepared mixture of cement and other additives that provide water retentivity, meant for joints of 1 16 to 1 8 or less

Nerdy Stuff

Property	Standard Sanded Cement Grout	Standard Unsanded Cement Grout
Linear Shrinkage	Less than 0.20%	Less than 0.30%
Water Absorption	Less than 5% (Half of Standard Grout)	Less than 5% (Half of Standard Grout)
Compressive Strength	3,000 psi. min.	3,000 psi. min.
Tensile Strength	500 psi. min. (70% Greater than Standard Grout)	500 psi. min. (Double Standard Grout)
Flexural Strength	1,000 psi. min. (Double Standard Grout)	1,000 psi. min. (Double Standard Grout)

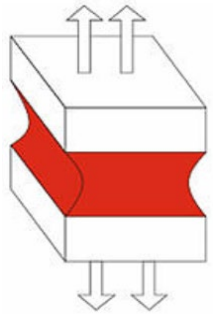
Final Thoughts

Portland cement and sand have been used for thousands of years in tile systems. Portland cement was only available in gray and white, so those were your only grout color choices, THOSE WERE THE DAYS. Through the innovations in the last 100 years, we now have any color you wish.

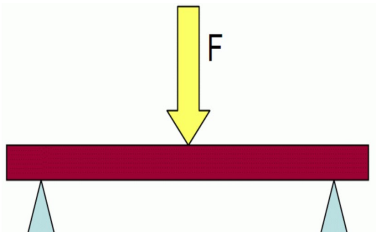
Sanded and unsanded grouts have served their purpose, but the newer high performance grouts (ANSI A118.7) will soon take their place in the market. Some manufacturers are already limiting their color offerings in the basic sanded and unsanded (A118.6) format. These newer formulations are stronger and more stain resistant.

Tilebar does not currently stock basic sanded and unsanded grouts. We only stock high performance grouts Laticrete Permacolor, Permacolor Select and epoxy grout Laticrete SpectraLock 1.

(1) Tensile Strength



(2) Flexural Strength



TERMS TO KNOW

1. Tensile Strength: the resistance of a material before breaking under tension.

2. Flexural Strength: the maximum bending stress that can be applied to a material before it yields. The most common way of obtaining the flexural strength of a material is by employing a transverse bending test using a three-point flexural test technique.