

The Easy Way to Select the Right Mortar and Grout for Your Installation



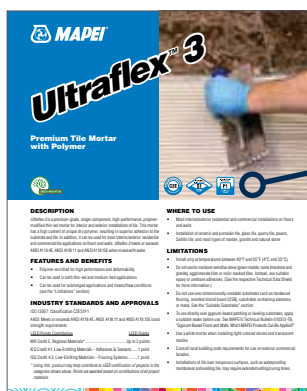
The ISO 13007 standards express product classifications alphanumerically, using simple letters and numbers. Letters describe the chemical nature of the adhesive (such as cement-based, mastic, epoxy or urethane) along with special characteristics (such as fast-setting, slip-resistant or deformable). Numbers indicate whether the product performance is “normal” (such as normal in bond strength, for light to medium traffic use) or “improved” (such as higher in bond strength, for high traffic use).

All MAPEI mortars and grouts are classified under ISO 13007.

Here are a few examples:

- *Ultraflex™ LFT - C2TES1P1*
- *Granirapid® - C2FS2P2*
- *Ultraflex 1 - C2E*
- *Ultracolor® Plus - CG2WAF*
- *Ultraflex 2 - C2EP1*
- *Kerapoxy® IEG CQ - RG*
- *Ultraflex 3 - C2ES1P1*

ISO 13007 classifications appear on MAPEI packaging and literature



ISO 13007 Classifications

Adhesives

Types	Classes	Special Characteristics
C = Cementitious (Thin-set mortars)	1 = Normal 2 = Improved	F = Fast-setting T = Slip-resistant E = Extended open time S1 = Deformable S2 = Highly deformable P1 = Plywood adhesion P2 = Improved plywood adhesion
D = Dispersion (Mastics)	1 = Normal 2 = Improved	A = Accelerated drying T = Slip-resistant E = Extended open time
R = Reaction resin (Epoxies & Urethanes)	1 = Normal 2 = Improved	T = Slip-resistant

Grouts

Types	Classes	Special Characteristics
CG = Cementitious grouts	1 = Normal 2 = Improved	F = Fast-setting A = High abrasion resistance W = Reduced water absorption
RG = Reaction resin grouts	—	Higher performance characteristics than improved cementitious grouts



Each application below demonstrates how easily the appropriate MAPEI adhesives and grouts can be specified when using the ISO 13007 classification code.

Large-format floor tile in a multi-level shopping mall concourse with heavy foot traffic

(*Mapeguard™ 2*, *Granirapid® System* and *Kerapoxy® CQ* grout)

When tile is being set on a new or renovated mall, cracks can be present in the underlying substrate. *Mapeguard 2* can be used for this crack isolation. For applications where substrates are subject to deflecting loads, as with a suspended slab in a three-story mall, it is critical to have a significant level of flexibility that allows for sufficient expansion and contraction. A mortar with the ISO 13007 designation “S2,” the performance classification for improved deformability, is the key to a successful installation – and *Granirapid System* meets these needs. Heavy traffic areas that may be subject to scuffs and stains require a high-strength reaction resin grout (ISO 13007 classification RG) that is nonsagging as well as resistant to stains/chemicals. *Kerapoxy CQ* offers these attributes for the best application.

- 1 MAPEI SM Primer
- 2 Mapeguard 2
- 3 Granirapid System
- 4 Kerapoxy CQ



Locker room showers

(*Mapelastic™ AquaDefense*, *Ultraflex™ LFT™* and *Kerapoxy CQ* grout)

When designing a tile installation system for community gang showers in a locker room, it is key that all installation layers are compatible and designed for a continuous wet environment (TCNA Environmental Classification COM 4) with some thermal growth and shrinkage, and ability to stand up to rigorous daily cleaning regimens during their life cycle. A liquid-applied waterproofing that meets ISO 13007-5 and ANSI A118.10, such as *Mapelastic AquaDefense*, ensures a continuous topical moisture barrier from constant shower use. When choosing the tile mortar that can handle this application's continuous traffic and use, it is important to use a mortar with an ISO 13007 improved tensile bond strength (“C2”) and normal deformability (“S1”), such as *Ultraflex LFT*. Strategically choosing a grout for this environment is crucial as the first line of defense against water intrusion, potential for bacterial growth, stain/chemical attack and abrasion. Using a reaction resin grout classified as ISO 13007 RG should be specified. *Kerapoxy CQ* provides this level of protection and peace of mind.

- 1 Mapelastic AquaDefense
- 2 Ultraflex LFT
- 3 Kerapoxy CQ



Exterior tile on a building exposed to extreme temperatures

(*Kerabond™ T / Keralastic™* and *Ultracolor® Plus* grout)

Thermal growth and shrinkage must be considered for mortars and grouts exposed to extreme cold/hot temperatures throughout the year. Such considerations require a mortar with an improved bond (“C2”) and improved deformability (“S2”). The *Kerabond T / Keralastic* mortar system fully meets these requirements. Likewise, ongoing exposure to movement, abrasion and moisture necessitates a grout with improved performance capabilities (“CG2”), while exposure to extensive abrasion and moisture requires the additional ISO 13007 classifications A (for high abrasion resistance) and W (for reduced water absorption). Such a grout would provide the required performance levels needed for a facade subject to driving rain and wind. *Ultracolor Plus* grout would qualify according to its ISO 13007 classifications.

- 1 Kerabond T / Keralastic
- 2 Ultracolor Plus

