MAPEI Products Assembly

1. Grout Options:
   A. Ultracolor® Plus ISO CG2WAF
   B. Keracolor™ S ISO CG2WA

2. Cementitious Bond Coat Options:
   A. Kerabond/Keralastic™ System ISO C2ES2P2
   B. Granirapid® System ISO C2FS2P2

3. Waterproofing Membrane Options:
   A. Mapelastic™ 315
   B. Mapelastic AquaDefense

4. Reinforced Mortar Bed Options:
   A. Mapecem® Premix with Planicrete® AC
   B. Topcem™ Premix with Planicrete AC

Minimum Performance Requirements from TCNA 2013 Guidelines

Grout: ISO CG1 or ANSI A118.6 or better
Latex-Cement Bond Coat: ISO C2S1 or ANSI A118.4 or better

Environmental Classifications
Residential (Res)  6
Commercial (Com)  6

Service Rating
Consult drainage mat manufacturer.

Drawings are developed from the Tile Council of North America’s (TCNA) 2013 TCA Handbook for Ceramic Tile Installation and the Terrazzo, Tile and Marble Association of Canada’s (TTMAC) Tile Installation Manual. MAPEI products are listed as options and are substituted for TCNA’s and TTMAC’s listed ANSI and ISO (ISO 13007) standards. Please refer to the referenced handbooks and current data sheets for complete instructions and application limitations. Some installation methods and component materials are not referenced. MAPEI encourages the user to consult all approved resources to ensure a complete assembly.

MAPEI Corporation  ♦  1144 E. Newport Center Drive ♦ Deerfield Beach, Florida 33442 ♦ Phone: 954-246-8888
Guide Specification: 09 30 00  
FLOORS, EXTERIOR  
Roof Deck (over occupied space) Membrane, Drainage Membrane Cement Mortar  
Ceramic Tile

MAPEI CAD DETAIL MF 103B, TCNA F103B, TTMAC 325ED-E

PART 1 GENERAL

1.1 SECTION INCLUDES
A. Tile setting mortars and adhesives.
B. Grout for tile.
C. Waterproofing membrane for tile.

1.2 RELATED SECTIONS
A. Section 09 30 00 - Tiling: Ceramic tile materials.
B. Section 09 30 33 - Stone Tiling: Stone tile materials.

1.3 REFERENCES
E. ISO 13007 - International Standards Organization; classification for Grout and Adhesives.
F. LEED® - Leadership in Energy and Environmental Design.

1.4 SUBMITTALS
A. Submit under provisions of Section 01 30 00.
B. [Product Data]: Manufacturer's technical information for each product specified.
C. Samples: Color charts for selection of grout.
D. Installation Instructions: Manufacturer's printed instructions for each product.

1.5 QUALITY ASSURANCE
A. To ensure warranty requirements and compatibility of products; please provide all tile grout, setting materials, additives, accessories, and factory-prepared dry-set mortars from the same manufacturer.
B. Installer Qualifications:

1. Installer is [a five-star member of the National Tile Contractors Association] [or] [a Trowel of Excellence member of the Tile Contractors’ Association of America]
2. Installer's supervisor for the Project holds the International Masonry Institute’s Foreman Certification.
3. Installer employs [Ceramic Tile Education Foundation Certified Installers] [or] [installers recognized by the U.S. Department of Labor as Journeyman Tile Layers].

1.6 PRE INSTALLATION CONFERENCE

A. Convene one week prior to commencing work of this section.

B. Require attendance of installation material manufacturer, tile supplier, tile installer and installers of related work. Review installation procedures and coordination required with related work.

C. Meeting agenda includes but is not limited to:
   1. Tile and installation material compatibility.
   2. Grouting procedure.
   3. Maintenance and cleaning products and methods.
   4. Surface Preparation.

1.7 DELIVERY, STORAGE AND HANDLING

A. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use. Prevent damage or contamination to materials by water, freezing, foreign matter or other causes.

B. Do not use frozen materials unless specifically allowed by manufacturer.

C. Deliver and store materials on site at least 24 hours before work begins.

D. Provide heated and dry storage facilities on site.

1.8 ENVIRONMENTAL REQUIREMENTS

Comply with requirements of referenced standards and recommendations of material manufacturers for environmental conditions before, during, and after installation.

A. For interior applications:
   1. Do not begin installation until building is completely enclosed and HVAC system is operating and maintaining temperature and humidity conditions consistent with “after occupancy” conditions for a minimum of 2 weeks.
   2. Maintain continuous and uniform building temperatures of not less than 10°C (50°F) during installation.
   3. Ventilate spaces receiving tile in accordance with material manufacturer’s instructions.

B. For exterior applications:
   1. Build a temporary shelter and when needed use indirect auxiliary heaters to maintain an adequate temperature level in the working environment and surfaces.
2. Exhaust temporary heaters to exterior to prevent damage to the work or injury to personnel from carbon monoxide emissions.
3. Maintain substrate and ambient temperatures in tiled areas between 10°C (50°F) and 35°C (95°F) during installation and for at least 7 days after completion, unless otherwise indicated in the product instructions and/or ANSI A108 installation standards.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: MAPEI Americas U.S.A., 1144 E. Newport Center Rd., Deerfield Beach, FL 33442; ASD. Toll Free Tel: 800-42-MAPEI; Tel: 954-246-8888; Fax: 954-246-8801; Email: mapeitechsvcs@mapei.com Web: www.mapei.com.

B. Acceptable Manufacturer: MAPEI, Inc. Canada, 2900 Francis-Hughes, Laval, PQ, Canada, H7L3J5. Toll Free Tel: 800-361-9309; Tel: 450-662-1212; Fax: 450-662-0444; Email: TServicesCA@mapei.com; Web: www.mapei.ca.

C. Substitutions: Not permitted.

D. Sustainability:
   1. Selected MAPEI products may help contribute to LEED® certification of projects up to two (2) points for MR Credit 5: Regional Materials (points are awarded based on contribution of all project materials).
   2. Selected MAPEI products may also contribute one (1) point for Credit 4.1: Low-Emitting Materials – Adhesives & Sealants;
   3. Credit 4.2: Low-Emitting Materials – Paints & Coatings;

2.2 TILE

A. Acceptable manufacturers: Subject to conformity with the enclosed requirements, provide products coming from one of the following manufacturers:

   1.

2.3 MEDIUM AND HIGH BUILD CEMENTITIOUS MORTAR

A. Medium build, fast-setting, pre-blended mortar requiring the addition of MAPEI, “Planicrete AC”, and “Mapecem Premix”.

B. High build, accelerated-cure mortar requiring the addition of MAPEI, “Planicrete AC”, and “Topcem Premix”.

2.4 ACCESSORIES

A. Professional Cement Based Waterproofing: trowel-applied, two-component, flexible, fiber-reinforced waterproofing and crack-isolation membrane complying with ANSI A118.10 and having IAPMO certification as a shower pan liner; MAPEI, “Mapelastic 315”.

09 30 00-4
B. Premium Latex Based Waterproofing and Crack Isolation Membrane; fast setting, flexible, thin, load-bearing, waterproofing membrane system consisting of a premixed, quick-drying liquid latex, for installation under ceramic tile complying with ANSI A118.10 and ANSI A118.12; and having IAPMO certification as a shower pan liner MAPEI, "Mapelastic AquaDefense".

2.5 MORTAR MATERIALS

A. Dry-set, thin-set mortar and polymer additive. Flexible polymer-modified Portland cement mortar, complying with ANSI A118.4 and ISO 13007 C2ES2P2; MAPEI "Kerabond/Keralastic System" consisting of factory-prepared dry-set mortar with MAPEI latex additive.

B. Quick-setting thin-set mortar and polymer additive; complying with ANSI A118.4 and ISO 13007 C2FS2P2; MAPEI "Granirapid" two-component system, of hydraulic mortar and flexible liquid polymer additive.

2.6 GROUT MATERIALS

A. Grout: Fast-setting sanded polymer-modified grout, complying with ANSI A118.6, ANSI A118.7 and ISO 13007 CG2WAF, for joints between 1/16 inch and 1 inch (1.5 mm and 25 mm) wide; MAPEI "Ultracolor Plus".

1. Color: __________.

B. Grout: Sanded polymer-modified Portland cement tile grout; complying with ANSI A118.6 and ISO 13007 CG2WA, for joints between 1/8 inch and 5/8 inch (3 mm and 19 mm) wide; MAPEI "Keracolor S".

1. Color: __________.

2.7 CERAMIC TILE, SEALERS, CLEANERS AND MAINTENANCE PRODUCTS

A. Complete line of sealers, cleaners and maintenance products for use with ceramic tile and grout


2.8 MIXES

A. Proportion and mix materials in accordance with manufacturer's most current written instructions and applicable ANSI standards.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine substrates for compliance with requirements for conditions affecting performance of the work. Refer to ANSI A108.01; General requirements for sub-surfaces and preparations by other trades materials or TTMAC’s TileSpecification Guide 09 30 00 Tile Installation Manual.

B. Do not proceed with tilework until surfaces and conditions comply with requirements indicated in reference tile installation standard and manufacturer's printed instructions.

C. Installation of flooring materials indicates the acceptance of substrate.
3.2 INSTALLATION

A. Install tile in accordance with manufacturer's printed instructions and the applicable requirements of ANSI A108 Series for the materials being used.

B. Install tile using TCNA or TTMAC methods specified on the drawings.

C. Install expansion and control joints in accordance with TCA method EJ171 (or TTMAC 301MJ method in Canada).

3.3 GROUTING

A. Grout joints in accordance with manufacturer's instructions and ANSI A108.10.

B. Clean standing water, dust, and foreign substances from joints to be grouted.

C. Clean and dry tile surfaces.

D. After grouting, remove all grout residues promptly.

3.4 PROTECTION

A. Protect installed tile work from damages by other trades and general abuse until substantial work completion and acceptance.

B. Refer to manufacturer's product data sheet for recommendations regarding protection.

END OF SECTION