

GAUGED PORCELAIN TILE PANELS DETAIL

Floor applications over Schluter®-DITRA, Schluter®-DITRA-XL or Schluter®-DITRA-HEAT on concrete subfloors or gypsum concrete underlayment over concrete subfloors

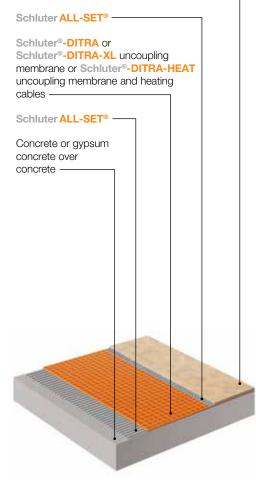
Gauged porcelain tile panels are a growing trend in the tile industry, providing modern aesthetics and new design opportunities. These panels are available in dimensions as large as 3'-3" x 9'-9" (1 m x 3 m), and thicknesses as low as 9/64" (3.5 mm). Gauged porcelain tile panels present unique installation challenges to address in addition to common porcelain tile installation practices. The ANSI A108 accredited standards committee developed the A137.3 "American National Specifications for Gauged Porcelain Tiles and Gauged Porcelain Tile Panels/Slabs" and ANSI A108.19 "American National Standard Specifications for Interior Installation of Gauged Porcelain Tile and Gauged Porcelain Tile Panels/Slabs" to address the unique challenges that these products present to tile setters at the national level. Prior to any installation, consult the gauged porcelain tile panel manufacturer to determine the product's suitability for the intended area of use.

In response to customer demand for an uncoupling membrane installation method, Schluter Systems conducted testing and created the enclosed detail D-C-GP.

Floors, Interior - Gauged Porcelain Tile Panels

D-C-GP-19

Gauged Porcelain Tile Panels (7/32" [5.5 mm] and thicker) –



Areas of Application

- Over any structurally sound and even concrete subfloor
- Over gypsum concrete underlayment placed over structurally sound concrete subfloors
- Young concrete (concrete cured less than 28 days)
- On or below grade concrete subject to moisture migration
- Post-tensioned or pre-stressed concrete
- Cracked concrete
- Interior dry or wet areas

Limitations

- Minimum thickness of gauged porcelain tile panels 7/32" (5.5 mm)
- DITRA, DITRA-XL and DITRA-HEAT membranes only (no DITRA-HEAT-DUO)
- Recommended installations in light commercial areas such as office spaces, stores in malls, reception areas, kitchens, etc.
- DITRA, DITRA-XL and DITRA-HEAT membranes and gauged porcelain tile panels must be installed with Schluter ALL-SET®
- Concrete subfloors and gypsum concrete underlayment over concrete subfloors only; no wood subfloors
- Concrete slabs subject to moisture migration must have all seams in DITRA, DITRA-XL and DITRA-HEAT sealed with Schluter®-KERDI-BAND
- Any cracks in concrete subfloor must exhibit in-plane movement only; thin-set tile assemblies, including those incorporating DITRA, DITRA-XL or DITRA-HEAT, cannot accommodate differential vertical displacement

Requirements

- Slab to be structurally sound
- Slab to be free of waxy or oily films and curing compounds (when present, mechanical scarifying is necessary)
- The installation of DITRA, DITRA-XL or DITRA-HEAT and tile can begin as soon as the slab can be walked upon
- Slab to be free of standing water
- Gypsum where radiant heat tubes are laid over the subfloor, gypsum poured to a height that is 3/4" (19 mm) above the tops of the tubes is required before DITRA, DITRA-XL and DITRA-HEAT

- Residual moisture in gypsum screed, 2.0% (percentage by volume) or less before installing DITRA, DITRA-XL or DITRA-HEAT
- Installation must conform to the Schluter®-DITRA and Schluter®-DITRA-HEAT Installation Handbooks and ANSI A108.19, including, but not limited to, requirements for mortar coverage, movement joints, grout joint size, and lippage

Substrate Preparation

- Any leveling or sloping of the slab or assembly must be done prior to installing DITRA, DITRA-XL or DITRA-HEAT
- Gypsum follow manufacturer's directions

Movement Joints

- DITRA, DITRA-XL and DITRA-HEAT do not eliminate the need for movement joints, including perimeter movement joints, within the tile surface. Movement joints must be installed in accordance with industry standards and norms; see the Schluter®-DITRA and Schluter®-DITRA-HEAT Installation Handbooks, TCNA EJ171, and TTMAC 301 MJ
- Concrete floors may incorporate various movement joints; see the Schluter®-DITRA and Schluter®-DITRA-HEAT Installation Handbook for guidelines on how to treat the different types of joints (control/ contraction joints, expansion joints, etc.)

Materials Specifications

- Gauged porcelain tile panels ANSI A137.3
- Grout ANSI A118.3, A118.7

Setting and Grouting Specifications

- ▲ Tile ANSI A108.19
- Grout ANSI A108.6, A108.10

Other Considerations

- Since DITRA, DITRA-XL and DITRA-HEAT must bond to the gypsum concrete, follow gypsum manufacturer's recommendations regarding primers and/or special surface preparation before installing DITRA, DITRA-XL and DITRA-HEAT
- Where a waterproof floor is required, all DITRA, DITRA-XL and DITRA-HEAT seams and floor/wall transitions must be sealed with KERDI-BAND; see waterproofing details (D-WP and DH-WP) in the Schluter®-DITRA and Schluter®-DITRA-HEAT Installation Handbooks for more information

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Schluter Systems products used in the installations with gauged porcelain tile panels are covered under applicable product and/or systems warranties. A lifetime warranty may also be available depending on Schluter Systems products used and applicable registration requirements. For the most current information and materials regarding Schluter Systems warranties and programs, please visit www.schluter.com/warranty.

Warranties