

TILE BONDED TO CONCRETE SLAB - THIN-SET METHOD

DETAIL A INTERIOR/EXTERIOR

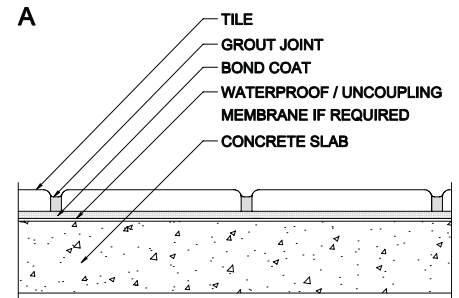
311F-2009/2010

SUITABLE SUBSTRATES

- Floor systems over which the tile will be installed shall be in conformance with the Canadian National Building Code 2005 and applicable local building codes taking into consideration anticipated live and dead loads.

MATERIALS

- TILE
- WATERPROOF MEMBRANE (as required)
Flextile WP900 or WP980 Waterproof & Crack Isolation Membrane (ANSI A118.10/A118.12)
- CRACK ISOLATION MEMBRANE/ SOUND CONTROL (as required)
Flextile 1000 or 2000SC Flexilastic Crack Isolation & Sound Reduction Membrane (ANSI A118.12) with Flextile 4000 (Interior) or 4001 (Exterior) Primer
- BOND COAT
Interior:
Flextile 60, 50, 52, 56SR, 58, 61 or 62 Polymer Modified Thin-Set Mortars (ANSI A118.4/A118.11)
Flextile 51 or 53 / 43 or 44 two-component Latex Mortar System (ANSI A118.4/A118.11)
Flextile 58XT Fast Set two-component Latex Mortar System (ANSI AS118.4/A118.11)
Flextile Flex-Epoxy 100 – 100% Solids Epoxy Mortar (ANSI A118.3)
Exterior:
Flextile 51 or 53 / 43 or 44 two-component Latex Mortar System (ANSI A118.4/A118.11)
Flextile 58XT Fast Set two-component Latex Mortar System (ANSI AS118.4/A118.11)
- GROUT
Interior:
Flextile Polymer Modified Grout (ANSI A1118.7)
Flextile Flex-Epoxy 100–100% Solids Epoxy Grout (ANSI A118.3)
ColourMax Plus Urethane Grout
Exterior:
Flextile 600 Polymer Modified Grout (ANSI A118.7)
ColourMax Plus Urethane Grout



APPLICATION

- Apply tile to bond coat before bond coat skins over. Use sufficient bond coat to ensure minimum 95% contact on exterior surfaces and wet areas and minimum of 80% contact on interior dry surfaces. Contact shall be evenly distributed to give full support of the tile. Slide tile firmly into position. Allow bond coat to cure. Force grout into full depth of joint, remove excess grout and clean.

LIMITATIONS

- Manufacturer's recommendations must be followed.
- Maximum variation of slab should not exceed 6 mm in 3049 mm or 2 mm in 305 mm.
- Provide positive drainage below exterior slabs; use latex-Portland cement mortars on exterior slabs. Use of epoxy mortars and grouts is recommended for interior surfaces only or where improved chemical resistance is required.
- Use method 309F-2009/2010 or crack isolation/uncoupling membrane if recommended by the manufacturer for precast floor systems, post tensioned concrete floor systems and other floors subject to movement or deflection.
- Not a roof assembly (For roof assembly see Detail 325F-2009/2010 Detail A)

OTHER CONSIDERATIONS

- For exterior installations, use a suitable latex-Portland cement mortar. Backbuttering of the tile is required to achieve 95% contact.
- Tile used in exterior applications must be frost resistant.
- Refer to Notes For The Professional and 301MJ- 2009/2010.
- Waterproof membrane if required must be specified. (ANSI A118.10-1999) Follow manufacturer's recommendations.
- For exterior use concrete slab must be sloped to provide positive surface drainage and adequate drainage below slab must be provided.
- Uncoupling membrane may require unmodified dryset mortar for tile bond coat. Follow manufacturer's recommendations.



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DETAIL B – EPOXY METHOD INTERIOR ONLY

311F-2009/2010

SUITABLE SUBSTRATES

- Interior only concrete slab where chemical resistance is desired. Suitable for food plants, dairies, breweries and commercial kitchens. Concrete floor systems, over which the tile will be installed shall be in conformance with the Canadian National Building Code 2005 and applicable local building codes taking into consideration anticipated live and dead loads.

MATERIALS

- TILE
- BOND COAT
Flextile Flex-Epoxy 100–100% Solids Epoxy Mortar (ANSI A118.3)
- GROUT
Flextile Flex-Epoxy 100 – 100% Solids Epoxy Grout (ANSI A118.3)
ColourMax Plus Urethane Grout

APPLICATION

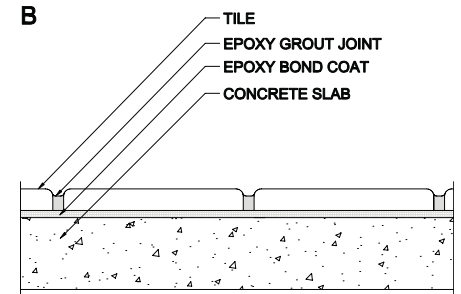
- Apply tile to bond coat before bond coat skins over. Use sufficient bond coat to ensure a minimum 80% contact. If 95% coverage is specified. Refer to 3.3.10. Contact shall be evenly distributed to give full support of the tile. Allow bond coat and grout to cure as recommended by the manufacturer for the type of environment and exposure anticipated. Force grout into full depth of joint flush with tile surface. Remove excess grout by using fl oat at 90° angle and clean with a sponge and plenty of water.

LIMITATIONS

- Epoxy grout should not be used where subjected to heat surpassing 100°C or as per manufacturer's recommendations. Use furan resin grout for areas subjected to excessive heat.
- Maximum variation of slab should not exceed 6 mm in 3049 mm or 2 mm in 305mm.

OTHER CONSIDERATIONS

- Refer to Notes For The Professional and 301MJ-2009/2010.
- Movement joints must be chemical resistant sealant or prefabricated movement joints.
- For industrial and chemical resistant floors, use the appropriate chemical resistant membrane, setting material and grouts in place of materials mentioned above. If specified, system must meet extra heavy duty rating. Follow manufacturer's instructions carefully.



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DETAIL C – CRACK CONCRETE 311F-2009/2010

INTERIOR/EXTERIOR – FULL COVERAGE

SUITABLE SUBSTRATES

- Floor systems over which the tile will be installed shall be in conformance with the Canadian National Building Code 2005 and applicable local building codes taking into consideration anticipated live and dead loads.

MATERIALS

- TILE
- BOND COAT

Interior:

Flextile 60, 50, 52, 56SR, 58, 61 or 62 Polymer Modified Thin-Set Mortars (ANSI A118.4/A118.11)
Flextile 51 or 53 / 43 or 44 two-component Latex Mortar System (ANSI A118.4/A118.11)
Flextile 58XT Fast Set two-component Latex Mortar System (ANSI AS118.4/A118.11)
Flextile Flex-Epoxy 100 – 100% Solids Epoxy Mortar (ANSI A118.3)

Exterior:

Flextile 51 or 53 / 43 or 44 two-component Latex Mortar System (ANSI A118.4/A118.11)
Flextile 58XT Fast Set two-component Latex Mortar System (ANSI AS118.4/A118.11)

- Crack isolation membrane conforming to ANSI A118.12
Flextile WP900 or WP980 Waterproof & Crack Isolation Membrane (ANSI A118.10/A118.12)
Flextile 1000 or 2000SC Flexilastic Crack Isolation & Sound Reduction Membrane (ANSI A118.12) with Flextile 4000 (Interior) or 4001 (Exterior) Primer
- Consult manufacturers for product compatibility.
- Membrane Bond Coat: as required by manufacturer's recommendations.
- GROUT

Interior: Flextile Polymer Modified Grout (ANSI A118.7)
Flextile Flex-Epoxy 100–100% Solids Epoxy Grout (ANSI A118.3)
ColourMax Plus Urethane Grout

Exterior: Flextile 600 Polymer Modified Grout (ANSI A118.7)
ColourMax Plus Urethane Grout

APPLICATION

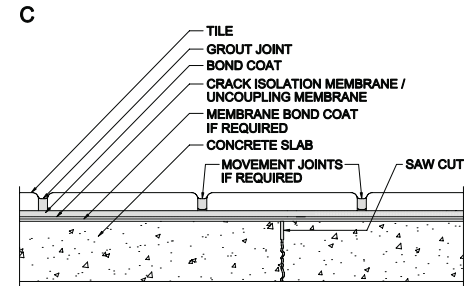
- Apply crack isolation membrane or uncoupling membrane as per manufacture's recommendations. Apply movement joints if required on one or on both sides of the tile bridging the existing crack. Apply tile to bond coat before bond coat skins over. Use sufficient bond coat to ensure minimum 95% contact on exterior surfaces and wet areas and minimum of 80% contact on interior dry surfaces. Contact shall be evenly distributed to give full support of the tile. Slide tile firmly into position. Allow bond coat to cure. Force grout into full depth of joint, remove excess grout and clean.

LIMITATIONS

- Manufacturers' recommendations must be followed.
- Maximum variation of slab should not exceed 6 mm in 3049 mm or 2 mm in 305 mm.
- Verify with manufacturer if product is sensitive to high PH levels in concrete.
- Verify with manufacturer if product is suitable for exterior installations and follow manufacturer's recommendations for suitable bond coat materials.

OTHER CONSIDERATIONS

- Tile used in exterior installations must be frost resistant.
- Refer to Notes For The Professional and 301MJ-2009/2010.
- For exterior use, concrete slab must be sloped to provide positive surface drainage and adequate drainage below slab must be provided.
- Some manufacturers recognize the use of their products for partial coverage, over existing cracks. Follow manufacturer's recommendations/guidelines.
- Uncoupling membrane may require unmodified dry-set mortar for tile bond coat. Follow manufacturer's recommendations.



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