

TILE ON SHOWER RECEPTORS

319SR-2012-2014

DETAIL A - ON SOLID BACKING OR MORTAR BED OVER WOOD OR METAL STUDS

SUITABLE SUBSTRATES

- Shower pan or waterproof membrane over structural base.
- Wall constructed in accordance with Details 303W-2012-2014, 307W-2012-2014 and 308W-2012-2014.

MATERIALS

- TILE
- SHOWER PAN OR MEMBRANE – Installed over sloped base.
- MORTAR BED – Minimum of 32 mm to 51 mm sloped to drain. See Tile Guide Specification Mixes 2.5.3 and 2.5.5.
- BOND COAT – Portland cement paste on fresh mortar bed, and dry set mortar (minimum acceptable standard ANSI A 118.1 or ISO C1) or latex-Portland cement mortar (ANSI A 118.4 or ISO C2) or modified epoxy emulsion mortar (ANSI A 118.3 or ISO R1) over mortar bed cured for minimum of 24 hours.
- GROUT – Portland cement or latex-Portland cement (minimum acceptable standard ANSI A 118.6 or ISO CG1), epoxy grout (minimum acceptable standard ANSI A 118.3 or ISO RG).

APPLICATION

- Provide 6 mm in 300 mm slope to drain in floor. For heavy duty installations, wall constructed according to Detail 303W-2012-2014, 307W-2012-2014 or 308W-2012-2014 is recommended. Carry membrane or pan at least 75 mm above shower curb, or 150 mm above floor in showers without curbs. Latex additive use in place of water is recommended for Portland cement bond coat, and may be used in modification of mortar bed.

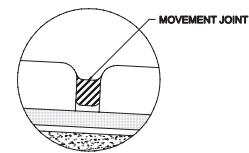
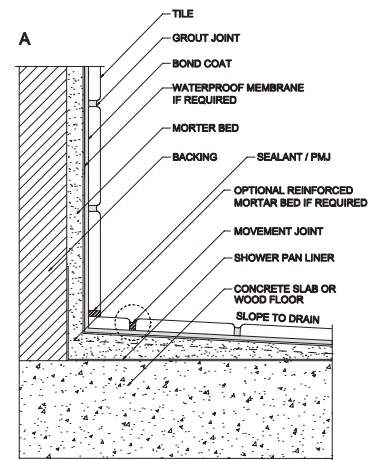
LIMITATIONS

- Do not use paper back or mesh back mounted tile in wet areas unless the manufacturer guarantees that the material is suitable for this type of installation.
- Ensure bond coat is compatible with waterproof membrane.
- Manufacturers' recommendations must be followed.

OTHER CONSIDERATIONS

- Drains should be designed to permit drainage of water at the tile surface and the surface of the waterproof membrane. For drainage see Detail 326DR-2012-2014. A drainage layer may be incorporated over the waterproof membrane as recommended by the manufacturer if a traditional double weep hole drain is used.
- When using a shower pan, a waterproof membrane is recommended below bond coat.
- Tile should be moisture resistant. Type MR1 or some MR2. Refer to page 7.
- For high use showers (hotels, gang showers, sports facilities, etc.) a waterproof membrane shall be used.*
- Waterproof membrane if required must be specified. (ANSI A 118.10) Follow manufacturer's recommendations.
- If waterproof membrane is not used a vapor retarder must be used behind the mortar bed or solid backing
- All openings and cuts must be treated to ensure waterproof integrity.
- Refer to Notes For The Professional.
- If waterproof membrane is not specified a slurry bond coat must be applied to concrete slab.
- Solid backing must be suitable for a wet environment.

- * If the shower is high use or is actually a steam shower, and the waterproof membrane is acting as both the waterproofing membrane and the vapor retarder the waterproof membrane must have a perm rating of .5 or less using ASTM E-96 Procedure E with 90 % humidity. If the waterproof membrane has a perm rating higher than .5 then a vapor retarder should be used behind the solid backing that has a perm rating 1.0 or less when tested with ASTM E-96 Procedure A.



Continued

TILE ON SHOWER RECEPTORS

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DETAIL B – THIN-SET ON BACKER UNIT/BOARD

SUITABLE SUBSTRATES

- Wood or metal studs, maximum 406 mm o.c.
- Shower pan or waterproof membrane over structural base
- Wall constructed in accordance with Details 305W-2012-2014 Detail A or B.

MATERIALS

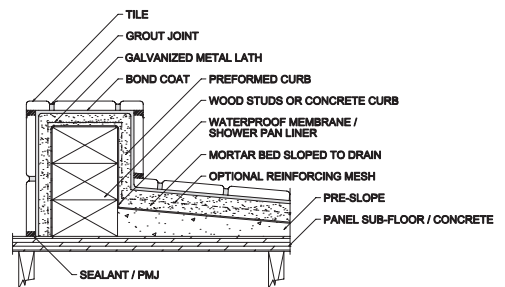
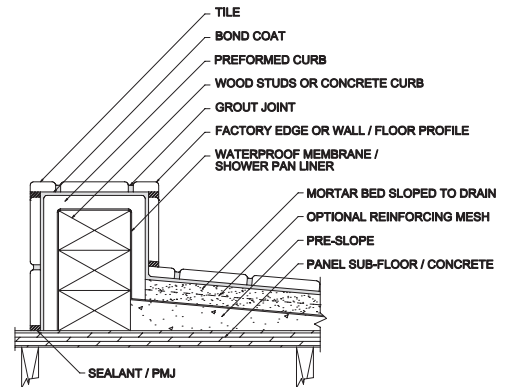
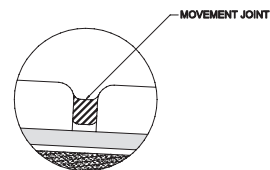
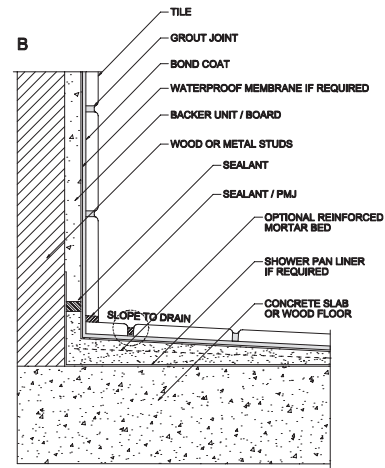
- Cementitious backer unit (ANSI A 118.9) or nominal 11 mm thick fibre-cement backer board meeting ASTM C1288 or coated glass mat backer board (ASTM C1178) – minimum 13 mm thick.
- TILE
- SHOWER PAN – a membrane installed over sloped base.
- MORTAR BED – minimum of 32 mm to 51 mm sloped drain. See Tile Guide Specification Section Mixes 2.5.5.
- TAPE – 51 mm wide fibre-mesh tape
- BOND COAT – Single or two component liquid latex-Portland cement mortar (minimum acceptable standard ANSI A 118.4 or ISO C2S1)
- GROUT – Portland cement or latex-Portland cement (minimum acceptable standard ANSI A 118.6 or ISO CG1), epoxy grout (minimum acceptable standard ANSI A 118.3 or ISO RG).

APPLICATION

- Attach backer unit or coated glass mat backer board to studs with rust resistant screws or nails. Fasteners shall be spaced 150 mm o.c. Backer unit must be stable, plumb and square with coated grey side of coated glass mat backer board away from the studs. Drive fasteners flush with coated surface. Do not countersink. Surface variation in the backing not to exceed 6 mm in 3000 mm or 2 mm in 300 mm and can be applied either parallel or perpendicular to framing. For large format tile where one edge is 380 mm or larger, surface variation should not exceed 3 mm in 3000 m. Apply levelling coat, if required. All joints and angles must be taped with alkali-resistant 51 mm wide fibre-mesh tape, filled with a latex-Portland cement mortar and sanded. Do not sand coated glass mat backer board. For all joints and angles embed an alkali-resistant 51 mm wide fibre-mesh tape in the same bond coat material used to set the tiles and let dry. Apply thin-set bond coat material used to set the tiles and let dry. Apply thin-set bond coat to cementitious backer unit (CBU) or coated glass mat backer board using proper notched trowel to ensure adequate bond. Use sufficient bond coat to ensure 95% contact in wet areas. Slide tile firmly into position while bond coat is wet and tacky. Force grout into full depth of tile joint. Remove excess grout and clean.

LIMITATIONS

- Manufacturer's recommendations must be followed. Coated glass mat backer board should not be used where prolonged exposure to heat exceeds 52° C and not to be used for exterior use. It is not recommended for use with passive solar heat systems. Maximum tile size is 356 mm x 356 mm x 10 mm. Do not apply directly over concrete or masonry block.
- Coated glass mat backer board should not be used in shower floors.



OTHER CONSIDERATIONS

- Movement joints, spacing and minimum gauge of steel studs as per instructions of manufacturer of cementitious backer board (CBU) or coated glass mat backer board.
- Provide 6 mm in 300 mm slope to drain in floor. Carry membrane or pan at least 75 mm above shower curb, or 150 mm above floor in showers without curbs. Latex additive use in place of water is recommended for Portland cement bond coat and may be used in modification of mortar bed.
- Drains should be designed to permit drainage of water at the tile surface and the surface of the waterproof membrane. For drainage see Detail 326DR-2012-2014. A drainage layer may be incorporated over the waterproof membrane as recommended by the manufacturer if a traditional double weep hole drain is used.
- When using a shower pan, a waterproof membrane is recommended below bond coat.
- Tile should be moisture resistant. Type MR1 or some MR2. Refer to page 7.
- For high use showers (hotels, gang showers, sports facilities, etc.) a waterproof membrane shall be used over cementitious backer unit (CBU).*
- Waterproof membrane if required must be specified. (ANSI A 118.10) Follow manufacturer's recommendations.
- All openings and cuts must be treated to ensure waterproof integrity.
- Refer to Notes For The Professional and 301MJ-2012-2014.
- A waterproof membrane or vapour retarder not to be used behind coated glass mat backer board.
- If waterproof membrane is not specified a slurry bond coat must be applied to concrete slab.
- Vapour retarder must be used when recommended by manufacturer.

* If the shower is high use or is actually a steam shower, and the waterproof membrane is acting as both the waterproofing membrane and the vapor retarder the waterproof membrane must have a perm rating of .5 or less using ASTM E-96 Procedure E with 90 % humidity. If the waterproof membrane has a perm rating higher than .5 then a vapor retarder should be used behind the solid backing that has a perm rating 1.0 or less when tested with ASTM E-96 Procedure A.

