

TILE INSTALLED ON COUNTERTOPS

322C-2019-2021

SUITABLE SUBSTRATES

- 19 mm exterior grade plywood

MATERIALS

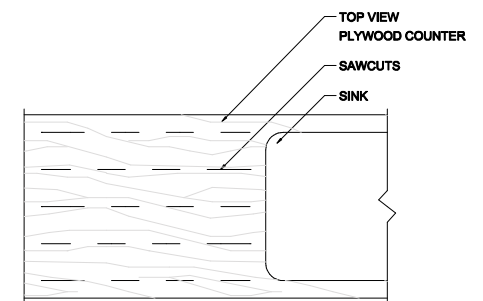
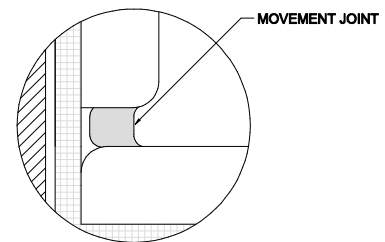
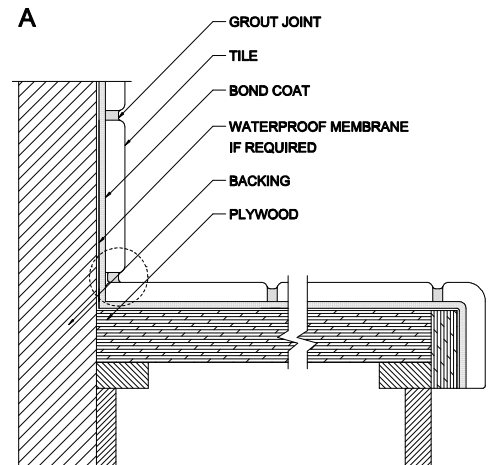
- Extra heavy duty glazed tile, unglazed porcelain tile, natural stone tile.
- Cleavage membrane – minimum 6 mils polyethylene film (Detail C).
- METAL LATH – 1.4 kg/m² (Detail C) (ASTM C847).
- Scratch coat (see Tile Guide Specification Section Mixes 2.9.2.1) and 25+ mm mortar bed (see Tile Guide Specification Section Mixes 2.9.2.3 and 2.9.2.5) (Detail C).
- Cementitious backer unit (CBU) minimum 13 mm thick (ANSI A118.9) or coated glass mat backer board (Detail B) minimum 13 mm (ASTM C1178).
- BOND COAT – Epoxy (minimum acceptable standard ANSI 118.3 or ISO 13007 R1), latex-Portland cement mortar (minimum acceptable standard ANSI A118.4 or ISO 13007 C2S1P1) (Detail A & B). Latex-Portland cement mortar on cured mortar bed (Detail C).
- GROUT – Latex-Portland cement (minimum acceptable standard ANSI A118.6 or ISO 13007 CG1) with a water base sealer or epoxy grout (minimum acceptable standard ANSI A118.3 or ISO 13007 RG).

APPLICATION

- Detail A - Gap plywood 6 mm and support joint with cross bridging. Fill gap between plywood with setting materials. Random cuts spaced approximately at 150 mm and 150 mm in length should be cut into the plywood to relieve the strains and to permit the plywood to remain relatively equal in moisture content on both sides.
- Detail B - Attach cementitious backer unit (CBU) or nominal 11 mm thick fibre-cement backer meeting ASTM C1288. For coated glass mat backer board do not use membrane and install with 30 mm galvanized or non-pull out nails. Gap cementitious backer unit (CBU) 3 mm. Tape joint with fiberglass tape set in latex-Portland cement mortar. Set tiles to achieve minimum 95% contact with bonding materials (it may be necessary to back-butter the tile in order to meet this requirement) and let cure before grouting. Provide 100% contact with bonding material under bullnose tile at the apron.
- Detail C - Apply polyethylene film over lapped at least 100 mm. Nail galvanized diamond metal lath butted, not overlapped, to the plywood. Apply mortar bed to required thickness of 32 mm min. Allow mortar bed to cure. Apply bond coat to cured mortar bed. Use proper notched trowel to ensure adequate bond. With pressure, apply a coat of mortar by using the trowel's flat side to key the mortar into the substrate. Apply additional mortar, combing it in a single direction parallel to the tile's shortest dimension, with the trowel's notched side. Place the tiles firmly into the wet bond coat. Push the tiles back and forth in a direction perpendicular to trowel lines, to collapse the mortar ridges and to help achieve maximum coverage. Ensure proper contact between mortar, tile and substrate by periodically lifting a few tiles to check for acceptable coverage. Use sufficient bond coat to ensure minimum 95% contact with back of tile (it may be necessary to back-butter the tile in order to meet this requirement). Beat mosaic tile into position. Remove excess mortar from the joint areas so that at least 2/3 of the tile depth is available for grouting. Allow bond coat to cure. Force grout into the joints with a rubber grout float. Make sure all joints are well-compacted and free of voids and gaps. Remove excess grout from the tile surface and clean.

LIMITATIONS

- Latex-Portland cement grouts are absorbent and can stain. A water based grout sealer may be recommended. Follow manufacturers recommendations.



OTHER CONSIDERATIONS

- Details A and B are most commonly used, particularly in residential construction. Epoxy grout is recommended for optimum stain resistance and hygienic purposes. An alternate method for finishing counter top edges is the use of prefabricated trim at the apron. Where ceramic tile is used to cover apron, full support must be provided behind tile using one of the methods shown. Where cut outs in counter tops are provided for appliances, provide cross bridging under counter tops within 51 mm of opening.
- A movement joint may be provided between the backsplash and the counter. A caulking sealant or a prefabricated movement joint may be used.
- Waterproofing membrane if required must be specified. (ANSI A118.10) Follow manufacturer's recommendations.
- Refer to Notes For The Professional and 301MJ-2019-2021.

