

TILE INSTALLED ON CEMENTITIOUS BACKER UNIT (CBU) – THIN-SET METHOD/WALLS 305W-2019-2021

DETAIL A - INTERIOR WET/DRY AREAS AND EXTERIOR USE

SUITABLE SUBSTRATES

- Wood studs for interior use only or metal studs maximum 406 mm o.c.

MATERIALS

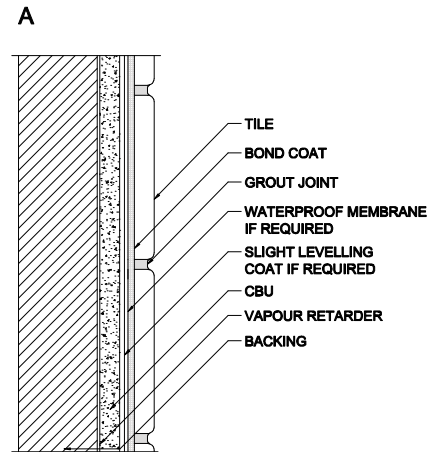
- VAPOUR RETARDER – 6 mils polyethylene film – Required in exterior and wet areas
- CEMENTITIOUS BACKER UNIT (CBU) – minimum 13 mm thick meeting ANSI A 118.9 or nominal 11 mm thick fibre-cement backer board meeting ASTM C1288.
- TILE – **Interior:** Usually non-vitreous glazed wall tile, but suitable for other types of ceramic tile and mosaic. Consult with manufacturer. **Exterior:** Use frost resistant materials only.
- TAPE – 51 mm fibre-mesh
- SLIGHT LEVELLING COAT – if required.
- BOND COAT – **Interior:** Latex-Portland cement mortar (minimum acceptable standard ANSI A118.4 or ISO 13007 C2) or dry-set mortar (minimum acceptable standard ANSI A118.1 or ISO 13007 C1). **Exterior:** Single or two component liquid latex-Portland cement mortar (minimum acceptable standard ANSI A118.4 or ISO 13007 C2S1).
- GROUT – Single or two component – **Interior:** Commercial Portland cement, Latex-Portland (minimum specification required ANSI A118.6 or ISO 13007 CG1), epoxy. **Exterior:** Latex-Portland cement grout (minimum acceptable standard ANSI A118.6 or ISO 13007 CG1).

APPLICATION

- Cementitious backer unit (CBU) must be stable, plumb, square and screwed to studs with corrosion resistant fasteners. Surface variation in the backing not to exceed 6 mm in 3000 mm or 2 mm in 300 mm. For large format tile where any side is greater than 380 mm, surface variation should not exceed 3 mm in 3000 mm and 1.5 mm in 600 mm.. Apply levelling coat if required. All joints must be taped with 51 mm fibre-mesh tape, fill with a dry-set or latex mortar and sand, and sanded if required to be smooth. Apply bond coat to mortar bed surface. Use proper notched trowel to ensure adequate bond. 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 on exterior installations and wet areas (it may be necessary to back-butter the tile in order to meet this requirement) and minimum 80% on interior dry areas. 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.

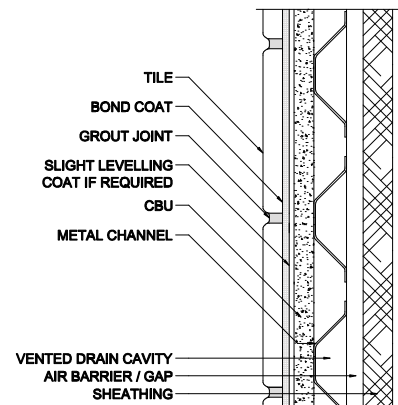
LIMITATIONS

- Manufacturer's recommendations must be followed.
- Exterior tile installations should not be attempted when temperature is less than 12°C unless otherwise stated by manufacturer. Do not use paperback or mesh-back mounted tile for exterior use or in locations of extreme moisture unless the manufacturer guarantees that the material is suitable for this type of installation.
- All requirements for exterior applications must be met.



Please refer to page 7.

EXTERIOR



OTHER CONSIDERATIONS

- Spacing and minimum gauge of steel studs as per instructions of manufacturer of cementitious backer unit (CBU). On exterior installation, drill approximately 6 mm weep holes in grout joints at the bottom of the wall to prevent spalling of cementitious backer unit (CBU) due to freeze-thaw action or follow manufacturer's recommendations.
- It is recommended to back butter stone or agglomerated stone in wet indoor or exterior installations.
- Waterproofing membrane if required must be specified. (ANSI A118.10) Follow manufacturer's recommendations.
- Special care must be taken when installing tile thicker than 13 mm to prevent slippage or debonding.
- Tile used on exterior applications must be frost resistant.
- Refer to Notes For The Professional and 301MJ-2019-2021.
- For high use showers (hotels, gang showers, sports facilities, etc.) a waterproofing membrane must be used. Refer to detail 319SR-2019-2021.
- Insulation and vapour retarder location to be specified by consultant.
- Refer to local codes and bylaws with respect to vented drain cavity for exterior applications.
- All openings and cuts must be treated to ensure waterproof integrity.
- It is suggested to leave last 13 mm of vertical grout joints ungrouted at every 600 mm to allow moisture to escape at the bottom of the wall.
- Latex Portland cement mortars may require 14 – 60 days cure before exposure to water. Verify with the manufacturer the correct cure time required. Alternatively, to reduce the curing time required, a rapid set mortar may be more suitable.
- Sheathing and backing to be designed and detailed by the consultant.