

# LARGE FORMAT TILE ON INTERIOR WALLS

## 330LFTW -2019-2021

### SUITABLE SUBSTRATES

- For installation on the following suitable substrates: Gypsum Board, CBU, Fiber Cement Underlayment, Coated Glass Mat Water Resistant Gypsum Boards or Cured Mortar Bed.
- Gypsum Board for dry interiors only.
- Over dry, well-braced wood studs or furring.
- Over well-braced metal studs (For drawings refer to 304W,305W-A,B,307W) NOTE: The maximum loading recommended for Gypsum Board is 5lbs/ sf including setting and grouting materials.

### MATERIALS

- TILE\*
- Gypsum Board – ASTM C36 or C630.
- CBU – ANSI A118.9, installed in accordance with ANSI A108.9.
- Fibre Cement Underlayment – ASTM C1288.
- Cured mortar bed, lath and membrane – ANSI A108.1B.
- Crack Isolation Membrane – ANSI A118.12 (follow manufacturer's instructions for use on vertical surfaces).
- Waterproofing membrane – ANSI A118.10. Follow manufacturer's recommendations.
- Vapor/moisture barrier membrane (when required) to be 15 lb. roofing felt or minimum 4-mil polyethylene film.
- LEVELLING COMPOUND – Cementitious patching compound as per manufacturer's recommendations.
- BOND COAT – Latex-Portland cement mortar (minimum acceptable standard ANSI A118.4 or ISO 13007 C2S1), modified epoxy emulsion mortars or 100% solids epoxy mortar (minimum acceptable standard ANSI A118.3 or ISO 13007 R1).
- GROUT – Polymer-modified sanded tile grout (minimum acceptable standard ANSI A118.7 or ISO 13007 CG2).

### ★ APPLICATION

- Measure deflections on the floor or wall using a 3 m straight-edge prior to commencing any installation.
- Crack Isolation Membrane – ANSI A108.17 or follow the CIM manufacturer's recommendations – to provide complete coverage of the substrate in the area on which the large format tile is to be installed.
- Waterproofing membrane – ANSI A108.3 or follow the CIM manufacturer's recommendations. Use recommended notch trowel for setting larger format tiles. Apply mortar into substrate with flat side of trowel. This ensures complete contact to the pores of the substrate. It is very important that complete coverage be achieved by back buttering each piece of tile with thin-set mortar immediately prior to setting the tile to ensure that no voids are present against the back of the tile.
- Follow ANSI 108.19 for important information pertaining to the installation of gauged porcelain tiles and gauged porcelain tile panels/slabs (note that this installation standard is restricted for indoor installation, a standard for an outdoor installation is underdevelopment).
- 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). Special attention should be paid to ensure complete coverage of the bond coat to the edges of the tiles. Remove excess mortar from the joint areas so that at least 2/3 of the tile depth is available for grouting. Allow bondcoat 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

- Do not use regular gypsum board in wet areas such as tub & shower enclosures.
- Do not use in areas where gypsum board is exposed to temperatures above 52°C.
- Maximum variation of slab should not exceed 6 mm in 3000 mm or 2 mm in 300 mm.
- Surface variation should not exceed 3 mm in 3000 mm and 1.5 mm in 600 mm.

### OTHER CONSIDERATIONS

- Maximum stud spacing – 406 mm o.c.
- ★ Minimum recommended metal stud depth 92 mm.
- Metal studs – 20 gauge or heavier.
- Movement Joint (architect must specify type of joint and show location and details on drawings).
- Movement joints – mandatory, according to Detail 301MJ-2019-2021.
- 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-2019-2021.
- Waterproofing membrane if required must be specified. (ANSI A118.10) Follow manufacturer's recommendations.
- There is a new standard for gauged porcelain tiles and gauged porcelain tile panels/slabs as per ANSI A137.3 which should be consulted for types, size and performance.
- ★ Use of a Lippage Control device may be required.

- ★ \* Notes on Large format tiles, Gauged Porcelain and Porcelain Panels/Slabs can be found on pages 12 -13.