INSTALLATION ~ CERAMIC TILE

MATERIALS:

Treatment of 1/8" expansion control joints maintained between all panels will be specified by the manufacturer of the mortar. In absence of this information, apply the mortar in one step without fiber tape or working the mortar deep into the joint. The 1/4" gap left along the perimeter of the walls and vertical surfaces to allow for horizontal expansion may either be left open or filled with a colour coordinated Tub and Tile silicone in two to three weeks if you so desire.

MORTAR: Use EGP latex-portland cement mortars which are approved by the material manufacturer for the bonding to wood underlayments - ANSI A118.11 to prepare and set the mortar bed.

GROUT: It is recommended that you use grout material that meets the ANSI S118.6 standards.

SUB-FLOOR

The sub-floor underlayment must be a minimum 1-1/8" nominal thickness, structurally sound, cross braced between joists, and meet a deflection rating of L/480 under ceramic tile and L/720 under marble.

- 1/ Surface must be structurally sound, dry and free of any contaminants such as sealers, cleaning compounds, oil, dirt, dust etc.
- 2/ Deflection is best pre-checked with a live load and measured with a laser instrument.
- 3/ JONA-Ply 3/8" panels are recommended for ceramic tile applications for improved joist to joist stiffness.

STEP ONE:

SETTING THE FIRST PANEL

- 1/ Choose a corner along a straight long line and begin to install and fasten one panel at a time.
- 2/ Install all panels with the grain set at right angles to the floor joists.
- 3/ Offset panel edge from the sub-floor edges by a minimum of 12" on all panels.
- 4/ Leave an 1/8" wide space between panels and 1/4" wide space between panels and any restraining surface which they abut, such as columns for

SETTING THE FIRST PANEL cont...

perimeter walls, to allow for any expansion before sanding.

Note: Tile must not be installed on JONA-Ply underlayment panel with epoxy or modified epoxy emulsion mortar unless it is installed with 1/4" gaps between the panels.

- 5/ Start from a panel corner and fasten row by row to the opposite side. DO NOT four corner fasten first.
- 6/ Use full body weight over the area being fastened to assure firm contact with the sub-floor.
- 7/ Fasten panels every 2" along the edges and 4" across the field.
- 8/ Position fasteners 3/8" to 1/2" from panel edges.

STEP TWO:

SETTING THE OTHER PANELS

- 1/ Ring shank or annular-grooved, galvanized flooring nails with a 3/16" diameter head is the preferred fastener for ceramic tile. Stainless steel or polymer coated staples (min. 1/4" crown max. 1/2" crown) and non-staining screws are also acceptable choices.
- 2/ Recess fastener heads 1/16" and assure 75% to 90% penetration into the sub-floor assembly. DO NOT penetrate through the bottom of the sub-floor and avoid driving into floor joists to prevent pop-ups.
- 3/ Stagger panel joints in each row 12" minimum to ensure four panel corners never meet at an intersection.
- 4/ Lay all panels with the grain running in the same direction.
- 5/ Cut panels to size with a trim saw.
- 6/ Keep factory edges together and use hand cut edges against walls etc.
- 7/ Avoid using panel pieces less than 12" except for cutting in to allow for floor fixtures.

STEP THREE:

MORTAR

Mix EGP latex-portland cement mortar in accordance with the following directions, unless mortar manufacturer's are different:

1/ Add dry ingredients to proper amount of water or liquid latex recommended by the manufacturer.

MORTAR cont...

- 2/ Mix and shake according to the manufacturer's instructions. Mix slowly and thoroughly and let mortar stand for 15 minutes, then remix. DO NOT mix with high speed mechanical mixer. DO NOT add water, latex, additional mortar, or other ingredients after slaking period.
- 3/ Mortar consistency shall be such that when applied with the recommended notched trowel to JONA-Plypanels, the ridges formed in the mortar shall not flow or slump.
- 4/ During use, remix mortar occasionally. Additional liquid or fresh materials shall not be added after initial mixing. Mortar shall not be used after initial set.
- 5/ Key the setting material into JONA-Py panels by applying mortar with flat side of trowel over an area no greater than can be covered with tile before the mortar skins over, using a notched trowel of type recommend by the mortar manufacturer, comb mortar to obtain even setting bed. Cover the surface uniformly with no bare spots, and with sufficient mortar to ensure a minimum mortar thickness of 3/32" between tiles and JONA-Py panels after tile has been embedded. Tile shall not be applied to skinned -over mortar.

STEP FOUR:

SETTING THE TILES

- 1/ Press tile into freshly combed mortar, ensuring mortar contact with the tile while maintaining accurate joint alignment and spacing. Keep an adequate joint depth open for grouting.
- 2/ Thoroughly embed all tile or tile assemblies to obtain maximum contact and penetration of mortar into the back of each tile, or back of each tile and back mounting material. Average contact area shall not be less than 80% when no less than three tiles or tile assemblies are removed for inspection.
- 3/ Certain rib-backed or buttonbacked tile may require troweling a layer of mortar on the back of each tile prior to placing on the combed mortar bed.

Additional information can be found in the Tile Council of America's Handbook for Ceramic Tile Installation or you can visit their website at www.tileusa.com







