MERIDIAN STANDARD FOR TERRACE TILE FLOOR SYSTEMS

REQUIREMENTS

(Non-mandatory)

1. SCOPE AND PURPOSE

- **1.1 Scope.** This standard sets forth requirements for all exterior tile floor systems on terraces. Excluded from this standard are terraces on the 1st floor with brick paver floor systems.
- **1.2 Purpose.** The purpose of this standard is to establish minimum material, installation and inspection requirements to provide for uniform appearance, quality and longevity of tile floor systems, and to safeguard building structural elements.

1.3 Exemption. Tile floor systems that have been replaced prior to March, 2022 shall be exempt from the material and installation requirements in Sections 4 and 5 for future repairs and partial replacements. Full replacements shall comply with all requirements of this standard.

2. **DEFINITIONS**

- **2.1 Expansion Joint.** A movement joint located at regular intervals between rows of tile to allow expansion and contraction without inducing damaging stresses due to changes in temperature and moisture content.
- **2.2 Shall.** Denotes a mandatory item.
- **2.3 Should.** Denotes an advisory item.
- **2.4 Thin-set.** An adhesive mortar consisting of cement, water, aggregate and additives that is used to adhere tile to substrates such as concrete.
- **2.5 Tile Floor System.** A floor system on terraces at the Meridian consisting of tile, grout, expansion joints, caulk and waterproofing membranes.
- 2.6 Waterproofing. A self-curing, liquid rubber

C1.2 The tile floors on Meridian terraces not only provide a finished extension of each unit's living space, but also serve to protect the concrete slabs that are critical elements of the building structural system. Consequently, in order to maintain the value of each unit and ensure the structural integrity of the building it is necessary to establish minimum requirements for repair and replacement of these floors.

The expected life of the original terrace tile floor systems at the Meridian is 20 to 25 years. As long as the material, installation and inspection requirements of this standard are followed for all repair and replacement work it is expected that new floors will last equally as long.

C1.3 Though this provision provides an exemption for unit owners that have replaced tile floor systems prior to the issuance of this standard, it is recommended that owners consider and comply with as many as the requirements as possible whenever a repair or partial replacement project is undertaken in order to ensure the best possible outcome.

polymer that forms a flexible, seamless waterproofing membrane on substrates such as concrete.

3. GENERAL

- **3.1 Work Rules.** All tile floor system repairs and replacements shall be performed in accordance with all applicable contractor work rules and regulations of the Association.
- **3.2** Prevention of Falling Objects. Prior to the commencement of repair or replacement work appropriate measures shall be taken to prevent debris from falling off terraces.
- **3.3 Inspections.** The Association Manager shall be contacted by the unit owner to schedule inspections required in Section 6. Work shall not proceed beyond each inspection hold point without the approval of the Association.

4. MATERIAL

- **4.1 Concrete Surfacing.** Mortar used to correct the slope of concrete slabs shall be LATICRETE 3701 Fortified Mortar.
- **4.2 Waterproofing.** Membrane material for concrete waterproofing shall be LATICRETE HYDRO BAN®.
- **4.3 Thin-set.** Adhesive mortar for tile placement shall be LATICRETE 254 Platinum thin-set.

4.4 Tile.

- **4.4.1 Material.** Tiles shall be a minimum of 12 inches square and shall be porcelain meeting or exceeding the requirements of ANSI standard A137.1:2021. Tiles shall be certified to limit water absorption to no greater than 0.5%. Tile color shall closely match the original tile installed by the builder, as represented by a master sample controlled by the Association, and shall have a matte finish.
- **4.4.2 Approval.** A tile sample shall be submitted to the Association Manager for approval. Installation of tiles shall not proceed without the approval of the Association.
- **4.5 Tile Edge Trim.** Trim for tiles along the free edge of terraces shall have an L-shaped profile and shall be made from PVC material.
- **4.6** Grout. Tile joints shall be grouted with

- **C3.1** Unit owners are responsible for their contractors and should ensure that all materials are carefully carried in and out of the building, and that common areas are adequately protected and cleaned up.
- **C3.2** Preventing tile floor system debris from falling is critical to protect people and property below the elevation of the work. Appropriate measures may include installing plywood against guardrails, tarping, netting, and combinations thereof.

C4.4.2 It is strongly recommended that unit owners gain approval from the Association before purchasing tile material. Any costs associated with returning and restocking of unapproved tile materials are solely the responsibility of the unit owner.

LATICRETE PERMACOLOR® Select or SPECTRALOCK® PRO grout. Grout color shall be Silver Shadow or equivalent.

- **4.7 Backer Rod.** Backers for caulking of expansion joints shall be extruded rods made from closed-cell polyethylene.
- **4.8 Caulk.** Caulk shall be a non-sag, paintable, polyurethane-based sealant, such as SIKAFLEX® Pro Select Construction sealant, and shall be closely color matched to the grout.
- **4.9 Alternative Materials.** Mortar, waterproofing and grout products other than the LATICRETE products specified in this section may be used provided that the materials deliver equivalent performance and the manufacturer's warranty equals or exceeds the LATICRETE warranty.

5. INSTALLATION

- **5.1 Demolition.** Existing tile floor systems, including tiles, grout, thin-set, caulk, expansion joints and stucco shall be removed as required and discarded in accordance with Section 3.1. Demolition debris shall not be thrown or lowered from terraces.
- 5.2 Substrate Preparation.
- **5.2.1 Removal of Waterproofing.** Existing waterproofing membrane material shall be removed by grinding with a diamond cup wheel to bare concrete.
- **5.2.2 Removal of Stucco.** Stucco on the walls immediately above the slab shall be removed to allow new waterproofing material to be applied 3-4 inches up the walls in accordance with Section 5.4. Any waterproofing membrane material under the stucco shall be removed in accordance with Section 5.2.1.
- **5.2.3 Cleaning.** The concrete slab and wall surfaces shall be cleaned by brooming and vacuuming, and shall be free of all dirt, dust and debris. Grease stains shall be removed using a suitable degreasing compound that will not damage concrete and does not leave a residue that can inhibit adhesion of the waterproofing material.
- **5.2.4 Inspection.** The fully cleaned concrete substrate shall be inspected by the Association in accordance with Section 6 prior to application of new concrete surfacing and waterproofing materials.

C4.9 The LATICRETE products specified in Section 4, when used together as a system and applied in accordance with LATICRETE specifications and industry standard guidelines, carry a 25-year warranty against material defects and deterioration under normal usage.

C5.2 Proper preparation of the concrete substrate is critical to the long-term performance of the tile system and the protection of the building structural slab.

C5.2.4 Inspection at this point in the installation process is critical to ensuring the preparation work satisfies the requirements of this standard and provides the best opportunity for a successful installation. Additionally, having the terrace stripped down to bare concrete affords the Association an opportunity to inspect the structural slab for evidence of degradation.

- **5.3 Concrete Slope.** The surface of the concrete slab shall have adequate slope for water drainage. Existing slopes less than 1% shall be corrected using concrete surfacing mortar in accordance with the material manufacturer's installation instructions.
- **5.4 Waterproofing.** After the concrete substrate has been prepared and the slope has been corrected, concrete waterproofing material shall be applied to the bare concrete slab and 3-4 inches up the adjacent wall surfaces. A minimum of 3 coats of waterproofing shall be applied in accordance with the material manufacturer's installation instructions.
- **5.6 Stucco.** Stucco material matching the existing wall stucco shall be applied at the base of the walls to cover the new waterproofing membrane.
- **5.7 Tile.** Tiles shall be installed in a stacked pattern with ¼" grout joints. Tile edge trim material shall be installed along the free edge of terraces to secure edge tiles and provide a finished appearance. Tiles and tile edge trim shall be adhered to the substrate using thinset in accordance with the material manufacturer's installation instructions.
- **5.8 Expansion Joints.** Expansion joints shall be located no greater than 8 feet apart and shall be sealed with backer rods and caulk in accordance with the material manufacturer's installation instructions.
- **5.9 Grouting.** The spaces between tiles and between edge tiles and PVC edge trim shall be filled with grout in accordance with the material manufacturer's installation instructions.
- **5.10 Caulking.** Gaps at the edges of tiles adjacent to walls and around guardrail posts shall be sealed with caulk in accordance with the material manufacturer's installation instructions. The caulk along walls shall be applied in a bead large enough to form a seal that extends a minimum of $\frac{1}{2}$ " up walls and over tiles. The bead shall be formed to a smooth radius to facilitate water shedding and provide a finished appearance.
- **5.11 Painting.** Caulk adjacent to walls, new wall stucco and PVC tile edge trim shall be painted to match the building wall color with exterior paint. The Association Manager shall be contacted for paint material.
- **5.12 Anchoring.** When drilling and installing fasteners into a terrace concrete slab through a completed tile floor system, a sealant approved by the waterproofing membrane manufacturer shall be applied to maintain the integrity of the membrane. **Holes**

C5.3 Though the original design drawings for the building call for terrace concrete slabs to be sloped for drainage, design intent is not always fully realized during building construction. Having a stripped down terrace provides an opportunity to check the actual slope and correct it if necessary.

C5.10 Proper sealing at tile edges is important to prevent water from leaking under the tiles, degrading the substrate, and shortening the life of the tile floor system.

drilled into concrete slabs shall not exceed 3/4" deep in order to prevent damage to slab post-tensioning cables.

6. INSPECTION

- **6.1 Hold Points.** Inspections shall be performed by the Association at each of the following critical hold points.
- **6.1.1 First.** After substrate preparation and before installation of concrete surfacing and waterproofing materials.
- **6.1.2 Second.** After tile placement and before grout and caulk installation.
- **6.2 Approval.** Work shall not proceed beyond each inspection hold point without the approval of the Association.
- **6.3 Final Inspection.** A final inspection shall be performed by the Association after completion of work.
- **6.4 Documentation.** Inspection and approval documentation shall be kept by the Association Manager and copies shall be provided to the unit owner.
- **C6.3** Unit owners should not release contractors prior to final inspection by the Association to avoid additional rework and mobilization costs.
- **C6.4** It is recommended that unit owners keep records of all inspection and approval results.