

SPECIFICATION / HYDROMENT - BOSTIK FINDLEY

Notes to Specifier:

1. Specify HYDROMENT - SINGLE-FLEX premium, latex modified, multi-purpose flexible thin set mortar system or HYDROMENT - SINGLE-FLEX F.S. ,a fast-setting, latex modified, flexible thin-set mortar system for installing Pewter Accents tiles over properly prepared concrete, structurally sound exterior grade plywood, cementitious backer units, and existing ceramic tile. Note: HYDROMENT - SINGLE-FLEX premium, latex-modified multi-purpose thin- set mortar may be applied over HYDROMENT - ULTRA-SET as well.
2. Specify HYDROMENT - SINGLE-FLEX F.S. fast-setting, latex modified, flexible thin set mortar system for retiling floors and walls that have to be ready for use within a very short period of time, such as hospitals, airports, shopping malls, commercial office complexes, etc. In all other cases, specify only the HYDROMENT - SINGLE-FLEX premium, latex modified, multi-purpose thin-set mortar system.
3. When specifying HYDROMENT - SINGLE-FLEX premium, latex modified, multi-purpose flexible thin-set mortar system, specify that the Pewter Accents tiles be grouted not less than 24 hours after installation.
4. When specifying HYDROMENT - SINGLE-FLEX F.S. fast-setting, latex modified, flexible thin-set mortar system for fast-setting installations, specify that the Pewter Accents tiles be grouted not less than 3 to 4 hours after installation.
5. DO NOT SPECIFY any of these mortar systems over press-wood, particle board, chipboard, masonite, Lauan, Asbestos board, metal, gypsum-based patching and leveling compounds, and similar dimensionally unstable materials which are not suitable substrates to receive Pewter Accents tiles.
6. Specify sanded HYDROMENT - CERAMIC TILE GROUT/JOINT FILLER fast-setting, high early strength grout, modified with HYDROMENT - MULTI-PURPOSE ACRYLIC MORTAR ADMIXTURE & GROUT ADDITIVE for floors and walls with joints 1/8" to 1-1/2" inches in width and for all EXTERIOR installations. For exterior installations, specify joints to be thoroughly compacted and tooled.
7. Specify HYDROMENT - COLOR-POXY chemical-resistant, 100% solids, colored epoxy setting and grouting system on interior floors expected to withstand heavy-duty traffic, where stain, impact and chemical resistance is desired. Specify joints to be 1/16" to 3/8" wide (vertical) and/or 1/16" to 1" wide (horizontal).
8. Structural requirements for Pewter Accents tiles require that all floor and wall surfaces to be covered be rigid and conform to secure and good engineering practices. Maximum allowable deflection is L360 when subjected to live and dead loads and should be uniform over the length of the span.
9. Pewter Accents tiles, their setting mortars and grouts do not constitute a waterproof barrier and should not be considered as a replacement for a waterproof membrane.
10. This is a total system. Specify latex-modified, flexible thin set mortars, fast-setting latex-modified, flexible thin-set mortars, epoxy mortar, epoxy grout, and additives, as herein described, by product name to ensure that specifications do not differ from the manufacturer's instructions.
11. INSERT THE FOLLOWING SPECIFICATION IN THE CONCRETE SECTION OF THE SPECIFICATION
 - 11.1 No sealer or curing compound shall be used on concrete to be covered with tiles. Concrete shall be completely cured prior to the installation of the tiles. Concrete surfaces which are to receive a tile surface, shall have a wood float finish and shall be left level and true to tolerance in plane of 1/8" in 8'-0" for walls, and 1/8" in 10'-0" for floors. Pitch floors to drains where required (1/4" per ft recommended). Areas requiring filling, patching or leveling shall be prepared using cementitious levelers and patching materials. No gypsum-based levelers shall be permitted.
 - 11.2 All surfaces to receive tiles shall be left clean, and be free of dust, oil, grease, paint, tar, wax, curing agent, primer, sealer, form-release agent, or any other deleterious substance and debris which may prevent or reduce adhesion.
 - 11.3 The general contractor shall be responsible for the removal of any such contaminant prior to the commencement of the tile work.

Specification

Section 09

PART 1: GENERAL

1.0.1 SUMMARY

- A. Work performed under the requirements of this section shall be subject to all conditions set forth under Part 1 "GENERAL CONDITIONS" as applicable to this portion of the work.

1.0.2 REFERENCES

- A. AMERICAN NATIONAL STANDARDS INSTITUTE (A.N.S.I.)
 1. A118.3 Chemical resistant, water cleanable tile-setting and grouting epoxy
 2. A118.4 Latex modified thin-set mortar & acrylic polymer-modified thin-set mortar
 3. A118.6 Ceramic tile grouts and acrylic grout additive
 4. A118.9 Cementitious backer units (C.B.U.)
 5. A108.5 Installation of ceramic tile with latex thin-set mortar
 6. A108.6 Installation of pewter tile with chemical resistant, water-cleanable tile setting and grouting epoxy
 7. A108.10 Installation of grout in tile work
 8. A108.11 Interior installation of cementitious backer units
- B. TILE COUNCIL OF AMERICA, INC.
 1. Handbook of Ceramic Tile Installation

1.0.3 SUBMITTALS

- A. Product Data: submit manufacturer's technical information and installation instructions for all specified materials.
- B. SAMPLES
Prior to commencing the work, submit for approval four (4) representative tile samples of each type, finish and color mounted on a 1/2" EXTERIOR grade plywood board using the specified mortar and grouted with the specified grout. These samples shall be of current production, properly identified, clean and representative of the appearance of the finished work.

1.0.4 QUALITY ASSURANCE

- A. Provide tile, grout and setting materials from one source. Additives, installation materials, and grouts shall be from the same manufacturer.

1.0.5 DELIVERY, STORAGE AND HANDLING (Refer to Updated MSDS Sheets)

- A. Deliver and store tile in a manner to prevent chipping, breakage, staining, or any other damage.
- B. Deliver and store packaged materials in original containers with seals unbroken and labels intact until time of use. Prevent damage or contamination to materials by water, moisture, freezing, excessive heat, foreign matter or other causes. Do not stir any frozen material until it has completely thawed.
- C. Provide heated and dry storage facilities on site.
- D. Deliver and store all materials on site at least 24 hours before work begins.

1.0.6 ENVIRONMENTAL REQUIREMENTS

- A. Maintain environmental conditions and protect work during and after installation. Comply with trade standards and manufacturer's printed recommendations.
- B. Turn off all forced ventilation and radiant heating systems and protect the work against drafts during installation and for at least 72 hours after completion.
- C. Use indirect auxiliary heaters where necessary to maintain an adequate temperature level in the working environment.
- D. Vent temporary heaters to exterior to prevent damage to the work from carbon dioxide build-up.
- E. Maintain temperature in tiled areas at not less than 50 degrees F. (10 degrees C.) or more than 95 degrees F. (35 degrees C.) during installation and for 72 hours after completion, unless higher temperatures are required by ANSI A108 installation standards or manufacturer's written instructions.

PART 2: PRODUCTS *(Select appropriate product or products - delete all others)*

2.0.1 MATERIALS

- A. IMPERVIOUS PEWTER ACCENTS TILES: IMPERVIOUS PEWTER ACCENTS TILES (specify series, finish, size, and color) ... as manufactured by Lunada Bay Pewter Tiles
(Example: †IMPERVIOUS PEWTER ACCENTS TILES to be Impervious Pewter Accents Tiles supplied by Stone & Pewter Accents Inc. URL: www.lunadabaytile.com - Telephone 310-257-1300 - Facsimile 310-530-0610)

2.0.2 SETTING MATERIALS

- A. PREMIUM, LATEX MODIFIED, MULTI-PURPOSE FLEXIBLE THIN-SET MORTAR: (see Notes to Specifier 1,3,5,8 and 9) HYDROMENT - SINGLE-FLEX, a premium, latex modified, multi- purpose flexible thin set mortar system conforming to ANSI A118.4 standard as manufactured by BOSTIK FINDLEY. (www.bostikfindley-us.com)
- B. FAST-SETTING, LATEX MODIFIED, FLEXIBLE THIN SET MORTAR: (see Notes to Specifier 1,2,5,8, and 9) HYDROMENT - SINGLE-FLEX F.S. conforming to ANSI A118.4, as manufactured by BOSTIK FINDLEY. (www.bostikfindley-us.com)
- C. MEDIUM BED MORTAR: HYDROMENT - MEDIUM BED MORTAR conforming to ANSI A118.1 standard, as manufactured by BOSTIK FINDLEY. (www.bostikfindley-us.com)
- D. EPOXY MORTAR: (see Notes to Specifier 5,7,8, and 9) HYDROMENT - COLOR-POXY 100% solids epoxy setting material (mortar) conforming to ANSI A118.3 standard, as manufactured by BOSTIK FINDLEY. (www.bostikfindley-us.com)
- E. MULTI-PURPOSE ACRYLIC ADMIXTURE: HYDROMENT - 425 MULTI-PURPOSE ACRYLIC MORTAR ADMIXTURE & GROUT ADDITIVE, as manufactured by BOSTIK FINDLEY. (www.bostikfindley-us.com)

2.0.3 GROUTING MATERIALS

- A. SANDED TILE GROUT: (see Note to Specifier 6) HYDROMENT - CERAMIC TILE GROUT/JOINT FILLER fast-setting, high early strength grout conforming to ANSI A118.6 standard, as manufactured by BOSTIK FINDLEY. Color: (specify color or) as selected by architect.
- B. ACRYLIC GROUT ADDITIVE: HYDROMENT - 425 MULTI-PURPOSE ACRYLIC MORTAR ADMIXTURE & GROUT ADDITIVE conforming to ANSI A118.6 standard as manufactured by BOSTIK FINDLEY.
- C. CHEMICAL RESISTANT EPOXY GROUT: (see Note to Specifier 7) HYDROMENT - COLOR-POXY chemical-resistant, 100% solids, colored epoxy grout and setting material, conforming to ANSI A118.3 standard as manufactured by BOSTIK FINDLEY. Color: (specify color ... or) as selected by the architect.

2.0.4 MIXES

- A. Mix setting and grouting materials in accordance with manufacturer's printed instructions.

2.0.5 SPECIAL INSTRUCTIONS: (see Notes to Specifier 2, 4, 5, and 6)

In areas which cannot be closed to traffic for a prolonged period of time, install tiles with HYDROMENT - SINGLE-FLEX F.S. fast-setting, latex modified, flexible thin-set mortar system, and grout with HYDROMENT - CERAMIC TILE GROUT/JOINT FILLER fast-setting, high early strength grout modified with HYDROMENT - 425 MULTI-PURPOSE ACRYLIC MORTAR & GROUT ADDITIVE.

PART 3: EXECUTION

3.0.1 EXAMINATION

- A. Before work commences, examine the areas to be covered and report any flaw or adverse condition in writing to the general contractor and the architect. Do not proceed with the work until surfaces and conditions comply with the requirements indicated in the manufacturer's instructions and in ANSI A108.5 and A108.6 specifications. For more details, see "TCA HANDBOOK FOR CERAMIC TILE INSTALLATION."

3.0.2 SURFACE PREPARATION

- A. GENERAL
 1. All supporting surfaces shall be structurally sound, solid, stable, level, plumb and true to a tolerance in plane of 1/8" in 8'-0" for walls, and 1/8" in 10'-0" for floors. They shall be dry, clean and free of dust, oil, grease, paint, tar, wax, curing agent, primer, sealer, form release agent, or any deleterious substance and debris which may prevent or reduce adhesion.
 2. Mechanically sand or scarify the substrate to completely remove all paint, loosely bonded topping, loose particles and construction debris.
 3. Neutralize any trace of strong acid or alkali from the substrate prior to the application of the mortar.
 4. All substrates shall be dry. The moisture content shall not exceed 5%.
 5. In all cases, the structural design of all floors shall not allow a deflection of more than 1/360 of the span under live and dead loads.
 6. Presswood, particle board, chipboard, masonite, gypsum floor patching compounds, Asbestos board, Lauan and similar dimensionally unstable materials are not acceptable substrates.
- B. CONCRETE
 1. Concrete surfaces shall be dry, completely cured, and free of hydrostatic conditions, and/or moisture problems (see Note 3.0.2 A.4 above).
 2. On grade or below grade concrete slabs must be installed over an effective vapor barrier and be exempt from hydrostatic pressures.
 3. New concrete surfaces shall be wood-floated finished.
 4. Over excessively dry porous concrete, keep the concrete substrate continuously moist for at least 24 hours before work begins. Remove all excess water or standing water allowing the surface to become almost dry before installing the leveling coat or setting mortar.

- C. PLYWOOD (Specify only for interior residential floors and countertops in dry areas) (see Notes to Specifier 1,5, & 8)
 - 1. Plywood substrate and underlayment shall be GROUP 1, EXTERIOR GRADE Douglas Fir plywood - C.C. type or better, conforming to A.P.A. classification and U.S. Product Standard PS 1-83 or a "SELECT" or (SEL-TF) COFI classified EXTERIOR grade plywood conforming to CSA-0121 standard for Douglas Fir.
 - 2. Plywood surfaces shall be installed smooth face-up. Offset joints of sub-floor and underlayment. Use exclusively new plywood.
 - 3. When on joists 16" O.C., plywood sub-floors shall consist of 2 layers each 5/8" thick, and gapped 1/8" between sheets and between all materials which they abut such as walls, drains and posts. The plywood shall be screwed 6" O.C. around the perimeter, and 8" O.C. throughout the body of the panel in each direction.
 - 4. Plank or board floors shall be covered over with one layer of 3/4" thick EXTERIOR grade plywood, each sheet to be fastened with screws 8" O.C. in all directions and around the perimeter. Leave 1/4" spacing between each plywood sheet and between all materials which they abut, such as: walls, drains and posts.
 - 5. The adjacent edges of the plywood sheets shall not be more than 1/32" above or below each other.
 - 6. All wood sub-floors shall be well-vented and vented from under.
- D. CEMENTITIOUS BACKER UNITS (C.B.U.)
When installed by others, the C.B.U. shall be from a reputable manufacturer and shall conform to the quality standard requirements of ANSI A118.9. It must be installed according to the C.B.U. manufacturer's instructions and in strict accordance with ANSI A108.11 standard for INTERIOR INSTALLATION OF CEMENTITIOUS BACKER UNITS.
- E. RESURFACING OLD SURFACES (Interior installations only)
Old cement terrazzo, ceramic tile, paver and quarry tile, shall be solid, well-bonded, flawless, stripped clean, and free of dust, wax, grease, sealer, soap residue, and all other deleterious substances which may prevent or reduce adhesion.

3.0.3 INSTALLATION

- A. On interior wall installations, use a notched trowel with deep enough grooves to achieve an 80% minimum mortar contact with the back side of the tiles. (Edges and corners fully backed with mortar when set.)
- B. In all wet areas, exterior work, commercial and industrial floors, skim coat surface using the flat edge of the trowel. Simultaneously, apply the mortar to the substrate surface with a notched trowel with deep enough grooves to achieve a continuous bed without voids or unsupported areas. Lay tiles while both mortar surfaces are wet. Do not allow mortar to dry or skin over on either surface before laying the tiles.
- C. Install tiles according to the manufacturer's strict instructions as to the particulars of the mortar system, and following the general outline procedure set forth in ANSI A108.5 SPECIFICATION FOR THE INSTALLATION OF CERAMIC TILES (or ANSI A108.6 for epoxy mortar installation).
- D. On interior floors and walls, install tiles leaving a regular, even spacing of at least 1/16" between tiles.
- E. On all the exterior portions of the work, install tiles with a regular, even spacing of at least 1/16" between tiles.
- F. In areas where the tiles are specified to be grouted with a chemical resistant epoxy grout, install tiles with a regular, even spacing between tiles of at least 1/16".

3.0.4 EXPANSION AND CONTROL JOINTS

- A. Carry existing joints in the concrete sub-floors and walls through the tile work.
- B. Install control joints where the tile abuts restraining surfaces, around the perimeter of the tile work and at the base of columns and curbs.
- C. Install and space expansion and control joints in all directions according to the strict instructions of the Tile Council of America Detail #EJ-171 as described in the latest edition of their HANDBOOK FOR CERAMIC TILE INSTALLATION.
- D. Install (specify HYDROMENT - Chem Calk 900 expansion joint sealant, as manufactured by BOSTIK FINDLEY - specify color.) to caulk expansion and control joints following BOSTIK FINDLEY's strict instructions.

3.0.5 GROUTING

- A. Except where tiles are installed with the fast-setting, latex-modified flexible thin-set mortar, grout no sooner than 24 hours after installation.
- B. Where tiles are installed with the fast-setting, latex-modified, flexible thin set mortar, grout no sooner than 3 hours after installation.
- C. Mix HYDROMENT - CERAMIC TILE GROUT/JOINT FILLER fast-setting, high early strength grout with HYDROMENT - 425 MULTI-PURPOSE ACRYLIC MORTAR & GROUT ADDITIVE, following BOSTIK FINDLEY's written instructions.
- D. Install all sanded commercial tile grouts in strict accordance with the grout manufacturer's instructions, and following the general outline procedure of ANSI A108.10 for the installation of grout.
- E. Chemical Resistant Epoxy Grout: Where specified (specify area where HYDROMENT - COLOR-POXY grout is desired), install a chemical-resistant, 100% solids epoxy grout as specified. Mix epoxy grout in complete unit batches. Do not mix part units. Follow the grout manufacturer's instructions and the general outline procedure of ANSI A108.6 for handling, mixing, grouting, and cleaning tiles with epoxy.
- F. Clean tiles completely leaving no apparent cement laitance or epoxy film on the surface of the tile. DO NOT ACID WASH, especially where colored grouts are specified.

3.0.6 PROTECTION

- A. Flexible, latex-modified, multi-purpose thin-set mortar installation:
 - 1. Protect finished work against weather, freezing and complete water immersion for at least 21 days after completion of the work.
 - 2. Floors: protect floors from foot traffic for at least 24 hours and general traffic for at least 72 hours after installation. Prohibit heavy traffic on floors for at least 7 days after installation.
 - 3. Walls: protect walls from impact, vibration and hammering on adjacent and opposite walls for at least 14 days after installation.
- B. Fast-setting, flexible, latex-modified, multi-purpose thin-set mortar installation:
 - 1. Protect finished work against weather, freezing and complete water immersion for at least 72 hours after completion of the work.
 - 2. Floors: protect floors from general traffic for at least 3 to 4 hours after installation. Prohibit heavy traffic on floors for at least 72 hours after installation.
 - 3. Walls: protect walls from impact, vibration and hammering on adjacent and opposite walls for at least 24 hours after installation.
- C. Since temperature and humidity during and after installation affect the final curing time of all cement-based and epoxy materials, allow for extended periods of cure and protection when temperatures drop below 60 degrees F. (15 degrees C.) and/or when the relative humidity is higher than 70%.

END OF SECTION