

Florida Tile Industries, Inc.

Lakeland, FL 33802

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TECHNICAL DATA

GENERAL SPECIFICATIONS

Related Documents:

Drawings and general provisions of contract, including General Supplementary Conditions and Division I Specification sections apply to work of this section:

RELATED WORK SPECIFIED ELSEWHERE:

A. Lathing and Cement Scratch Coat: Section _____

B. Waterproof Wallboard: Section _____

C. Waterproof Membranes: Section _____

D. Sealants for Movement Joints: Section _____

DESCRIPTION OF WORK:

Definition: All surfacing units made of ceramic materials. Extent of tile as indicated on drawings and schedules. Types of tile work include the following:

- Glazed Wall Tile
- Porcelain
- Glazed Paver Tile
- Quarry Tile

QUALITY ASSURANCE:

A. Source of Materials: Provide materials obtained from one source for each type and color of tile, grout and setting materials.

B. Work shall be executed and tested in accordance with current editions of the following standards:

1. ANSI A108.1 - Installation of ceramic tile with Portland Cement 1.

ANSI A108.4 Installation of ceramic tile with water resistant organic adhesives.

ANSI A108.5 - Installation of ceramic tile installed with dry-set Portland Cement Mortar or Latex-Portland Cement Mortar.

ANSI A108.6 - Installation for ceramic tile installed with chemical-resistant epoxy.

2. American Society for Testing and Material (ASTM)

ASTM C150 - Specifications for Portland Cement

ASTM C206 - Specifications for Hydrated Lime

3. Federal Specifications (FS)

FSTT-S 001543 Class A or B (COM-NBS) One Part Silicone Rubber

SUBMITTALS:

- A. Certificates of Compliance: The manufacturer shall furnish Certificates of Compliance stating conformance with all requirements of American National Standards Institute Specification ANSI A137.1-1988.
- B. Master Grade Certificate: Furnish Master Grade Certificates for each shipment and type of tile signed by the manufacturer and the installer.
- C. Samples: Submit samples of each type of tile for each color and texture required, not less than 12" square. A full-size sample of each type of trim for each color is required.

PRODUCT HANDLING:

Deliver to job site and store packaged material in original containers with labels intact. Prevent damage to materials by water; freezing or other causes.

PROJECT CONDITIONS:

Maintain temperatures at not less than 50 degrees Fahrenheit in tiled areas during installation and for 7 days after completion unless higher temperatures are required by manufacturer's instructions.

PRODUCT SPECIFICATIONS

- A All tiles are Standard Grade complying with ANSI A137.1-1988 as manufactured by Florida Tile Industries, Inc., Lakeland, FL or approved equivalent.
- B. Sizes, colors, textures and patterns as selected by the architect, See drawings and schedules.
- C. Provide trim of the same color; size and finish of adjacent flat tile.
- D. Accessories - Furnish cast vitreous china accessories to match or harmonize with color and finish of adjacent wall tile. Accessories required where shown on drawings.

SETTING MATERIALS:

Portland Cement Mortar Installation Materials:

Provide materials to comply with ANSI A108.1 as required for installation method designated.

Cleavage Membranes: Polyethylene film. 4 mil. ASTM C171 Type 1.1.2.

Reinforcing Mesh: Welded wire fabric 2" x 2" 16/16 gauge.

Dry-Set Portland Cement: ANSI 118.1 water-retentive Portland Cement, sand and special latex additives. Lattices vary considerably Follow manufacturer's directions explicitly.

Organic Adhesive: ANSI A136.1 Type 1 for areas requiring prolonged water resistance. Provide primer-sealer as recommended by the manufacturer.

Epoxy Mortar: ANSI 118.3 Formula AAR-11 or high-temperature resistance formula where indicated.

GROUTING MATERIALS:

Commercial Portland Cement Grout:

Pre-blended compound composed of Portland Cement and additives formulated for the type tile installed.

Latex-Portland Grout: Use latex additive in grout compatible with Latex-Portland Cement Mortar

Dry Set Grout: Portland Cement and additives formulated for type of tile installed.

INSTALLATION SPECIFICATIONS

Before tile installation begins, the installer is responsible for checking the tile for obvious visual defects. Cartons of tile must be blended to achieve an aesthetic blend. No claims will be accepted after installations which have obvious visual defective tile. Substrate surfaces shall not show variations in excess of:

Dry-Set Mortar:

Wall: 1/8" in 10'

Floor: 1/8" in 8'

Organic Adhesive

Wall: 1/8" in 10'

Floor: 1/8" in 8'

Latex-Portland Cement Mortar

Wall: 1/8" in 10'

Floor: 1/8" in 8'

Epoxy

Wall: 1/8" in 10'

ANSI Installation Standard: Comply with applicable parts of ANSI A-108 Series for ceramic tile installation.

Extend tile work into recesses, and under and behind equipment and fixtures except where otherwise shown. Fit tile to electrical outlets, piping, fixtures and other penetrations so that plates, collars or covers overlap tile.

Joints shall align vertically and horizontally between trim and field tile. Grout tile to comply with reference installation standards using grout materials indicated.

Protection: Leave finished installation free of cracked, chipped, broken, unbonded or otherwise defective tile work. Protect all floor tile installations with kraft paper or other heavy covering during construction period to prevent staining or damage. No foot or wheel traffic permitted on floor for at least 7 days after grouting.

TEST METHODS DEFINED

COEFFICIENT OF FRICTION

ASTM C-1028-89 is the standard test method for determining the static coefficient of friction of ceramic tile and other like surfaces by the dynamometer pull meter method. Static coefficient of friction is a term used in physics to describe the amount of force required to cause an object (shoe sole material) to start moving across a surface (flooring material). A higher coefficient indicates increased resistance of shoe sole material to start moving across a flooring material. The ASTM procedure states that "the measurement made by this apparatus is believed to be one important factor relative to slip resistance. Other factors can affect slip resistance, such as the degree of wear on the shoe and flooring material; presence of foreign material, such as water, oil and dirt;

the length of the human stride at the time of slip; type of floor finish, and the physical and mental condition of humans. Therefore, this test method should be used for the purpose of developing a property of the flooring surface under laboratory conditions, and should not be used to determine slip resistance under field conditions unless these conditions are fully described.”

Please consult ASTM Standard Test Method C-1028-89 for a more detailed explanation of coefficient of friction and test methods.

Note that the precision of this test as described in the ASTM procedure indicates that the coefficient values can be expected to vary as much as 0.3. Since coefficient of friction is normally less than 1.0, test results will vary by more than 30%.

Also, the static coefficient of friction may vary within and between production runs because of the inherent characteristics of ceramic tile.

Although ANSI has not established a standard value for coefficient of friction, OSHA (Occupational Safety and Health Administration) has established a recognized industry of 0.5 (wet and dry) for slip-resistant surfaces. The Americans with Disabilities Act (ADA) recommends but does not require “a Static Coefficient of Friction of 0.60 for accessible routes and 0.80 for ramps” ADA does not specifically state that 0.60 is both a dry and a wet requirement.

It is important to note that any tile or other hard surface flooring can become slippery when wet or improperly maintained.

The coefficient of friction of all hard surface flooring materials, including ceramic tile, can be adversely effected by inadequate or improper maintenance, such as the use of unsuitable cleaning materials or procedures. The Florida Tile Care and Maintenance Brochure explains how to maintain your ceramic tile floor. For a copy of this brochure, see your Florida Tile Distributor or call Florida Tile at 1-800-FLA-TILE.

MOH'S HARDNESS:

Scratch resistance of glazes is measured by scratching the glaze with a mineral of known hardness. Hardness of minerals is classified by Moh's Scale, which lists 10 minerals according to their hardness. Each mineral in this scale will scratch those with lower numbers in the scale, but will not scratch minerals with higher numbers. Talc is classified as number one on the Moh's Scales and diamond ten.

Resilient flooring materials, such as vinyl and asphalt tile, are relatively soft and can be scratched by talc, number one on the scale. White polished marble can be scratched by calcite, which is number three. Black marble rates a four and can be scratched by fluorite. Most glazes used on ceramic tile fall in the five to six range, which is also slightly harder than most steels. Case-hardened steel, such as what is used in drill bits used for drilling holes in steel, is approximately six and will scratch most glazes. Some glazes used on ceramic tiles, designed for floor use, cannot be scratched by a case-hardened drill bit. Quartz, number 7 on Moh's Scale, will scratch most glazes and all but the hardest unglazed ceramic tiles. Sand is a common example of natural quartz.

BREAKING STRENGTH:

ASTM C-648 describes the standard test method for determining structural strength of ceramic tile, This test provides a means for establishing whether or not a lot of ceramic tile meets the strength requirements which may be required for a specific installation procedure and its ability

to withstand load and impact. The ANSI standard requires an average breaking strength of 90 lbs. for wall tiles and 250 lbs. for floor tiles. Tiles installed on floors with adhesives may require higher breaking strengths.

ACID RESISTANCE:

ASTM C650 is the standard test method for determining resistance of ceramic tile to chemical substances, The glazed surface of Florida tile products is resistant to virtually all caustic and corrosive liquids. Typical exceptions are: fluorides and concentrated hydrochloric acid,

FROST RESISTANCE:

ASTM C-1026 describes the standard test method for determining ceramic tile's ability to withstand repeated cycles of freezing and thawing.

Ability of tile to resist damage or deterioration when tested in freezing and thawing situations such as those found in central and northern sections of the United States.

MONO-SIZED:

Near perfect size control on all of our domestically manufactured 8" x 8" and larger floor tiles through our revolutionary MONO-SIZED process. Mono-sized tiles are:

- Virtually uniform in size (variation of linear size from piece to piece is always less than 0.5%)
- Consistently square
- Caliber-free (ordering tile lots by size range is not required) means improved service and delivery
- Easier to handle, cut and install

FLORIDA TILE PRODUCT INFORMATION:

Florida Tile products are glazed, high-strength, flat-backed tiles. All Florida Tile floor tile products are made by the "single-fired" process, which generally imparts superior impact resistance and superior breaking strength. All products are formulated using high quality clays, specifically designed for density and strength then pressed, glazed and fired.

Note that the data represented in this literature represents typical test results of randomly selected "standard" products.

FLORIDA TILE® RUSTIC PRODUCTS AND SHADE BLENDING:

Florida Tile's rustic products: Aspen; Azteca; Cortina; Excavare; and Granite are designed to simulate natural surfaces by using a combination of ceramic processes. Shade and texture variations are inherent in these rustic products. These types of tiles are packed by shade blends and not specific shades, Products of a common shade blend type may be used together Specific product lots are identified by the last letter of the shade code.

WARRANTY

LIMITED WARRANTIES - PRODUCT DEFECT WARRANTY:

Florida Tile Industries, Inc. ("Manufacturer") warrants to the original purchaser that it will replace with comparable products any standard grade products sold by it which fail to meet the requirements in American National Specifications Institute, Specification A137.1-1988 or of the ASTM tests noted above for durability, coefficient of friction, acid resistance, or frost resistance.

Florida Tile Industries, Inc. will not be responsible for any costs of labor, installation or

removal of tile.

TEN-YEAR GLAZE WEAR WARRANTY:

Manufacturer warrants that Natura Granite Series, and Natura Tough-One Series only, will be free of undue visible glaze wear caused by normal wear and tear from pedestrian foot traffic for a period of the (10) years from the date of original installation, Undue glaze wear is defined as wear in which the glaze is worn through to the body itself. Visibility of wear is measured from a standing height of not less than five feet looking down on the tile surface. This limited warranty is not intended to be a guarantee that glazed tiles will never show signs of wear. This warranty is for purchases made on or after May 1, 1992. It covers standard grade material manufactured by Florida Tile Industries, Inc.

GLAZE WEAR WARRANTY LIMITATIONS:

The Manufacturer specifically excludes from this glaze wear warranty glaze failures due to the following incidents:

- improper installation of the tile,
- acts of God,
- falling objects, abuse, misuse, negligence, vandalism, fire, exposure to extreme temperature, or accidents,
- failure to follow the Manufacturer's recommended installation, maintenance and care guidelines, including use of improper chemicals or compounds,
- non-foot traffic wear, or any act or omission which might be reasonably expected to damage a ceramic floor.

In the event of a valid claim, the Manufacturer will remove and replace the tile(s) in the affected area(s) at its own expense, FOB manufacturing plant. Color matching of the replacement material is restricted to the currently available production items or materials that is in the Manufacturer's existing inventory.

MAKING A CLAIM:

The original purchaser must notify the Manufacturer in writing within sixty (60) days after delivery and prior to installation, of any defective tile: or for Natura Granite and Natura Tough-One within (60) days of the occurrence of any undue visible glaze wear After notification of any defective tile or glaze wear, the Manufacturer, or authorized agent, will, as soon as reasonably practicable, inspect the tile. At Manufacturer's option, such inspection shall take place either on site, or by having samples of the allegedly defective tile sent to the Manufacturer's laboratories. No claim will be honored without the tile having been inspected by the manufacturer. Claims made beyond the above periods are void. "Nonstandard" and "substandard" tile are sold "as is" and "with all faults."

The original purchaser must provide Manufacturer with the following information in order to have a claim honored under these warranties - a copy of the sales invoice showing:

- A. Date of Sale
- B. Specific material and quantity purchased
- C. Name and address of distributor
- D. Name and address of buyer

Claims, or any questions about these warranties should be addressed in writing to: Vice President
- Sales, Florida Tile Industries, Inc., P.O, Box 447, Lakeland, FL 33809

Your Florida Tile distributor has brochures for the care and maintenance of ceramic tile. If you do not have this maintenance brochure, contact your Florida Tile distributor or write to the manufacturer at the address listed above.

MANUFACTURER MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. PURCHASER'S REMEDY IS LIMITED TO REPLACEMENT AS DESCRIBED ABOVE, AND UNDER NO CIRCUMSTANCES SHALL THE MANUFACTURER BE LIABLE FOR ANY LOSS OR DAMAGE ARISING FROM THE PURCHASE, USE; OR INABILITY TO USE THIS PRODUCT, OR FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES. NO INSTALLER, DEALER, AGENT OR EMPLOYEE OF MANUFACTURER HAS THE AUTHORITY TO MODIFY THE OBLIGATIONS OR LIMITATION OF THIS WARRANTY

These warranties give specific legal rights. Since some states have laws governing consumer rights and damages, some of the above limitations may not apply to you, and you may have other rights which vary from state to state, Except for these other rights, the remedy provided under these warranties state the limit of the Manufacturer's responsibilities.