

SECTION 09 01 30.91 TILE RESTORATION**NEW TILE JOINT TREATMENT****PART 1 - GENERAL****1.01 RELATED DOCUMENTS:**

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this section.

1.02 SUMMARY:

- A. This Section includes the following:
 - 1. Joint grouting and sealing for new, thinset, interior ceramic and quarry tiled floor, wall and ceiling areas installed by others, with a fill coat and finish coat.
 - 2. Installation shall result in a floor, wall and ceiling treatment that will produce a moisture barrier and condition so that the appearance can be maintained using conventional cleaning processes in combination with recommended periodic prescribed support service activities.

1.03 QUALITY ASSURANCE:

- A. Definition - Joint Treatment: Grouting and sealing of newly installed interior ceramic and quarry tile floor, wall and ceiling tile. This technology is environmentally friendly and permanent in nature, and should not be confused with or compared to grout painting, staining, or otherwise recoloring.
 - 1. Products and systems are also commonly used for “restorative bonding” and sealing of existing interior ceramic tile, and may be referred to as such herein, simply as a generic reference.
- B. Source of Materials: Provide materials obtained from one source for each type and color of new tile and restorative bonding materials.
- C. Installer Qualifications: Engage a licensed, certified, trained and experienced installer who has successfully completed new tile joint treatments and restorative bonding installations similar in material, design, and extent to that indicated for this Project.
- D. New Joint Treatment and Restorative Bonding Products: Products and installation surfaces’ shall be as designed by the manufacturer so as not to reduce the co-efficient of friction (slip-resistance) of flooring products to less than required to comply with published U.S. Justice Department Regulations for the “Americans with Disabilities Act of 1990” (ADA, ADA-AG), ANSI A 117.1, and the “Uniform Federal Accessibility Standards” (UFAS); And revisions and amendments thereto.
- E. Mock-ups: Provide mock-up of new joint treatment and restorative bonding system at locations indicated, or if not indicated, as directed by Architect or Owner. Mock-up shall be approximately 2-feet by 2-feet or include no less than four (4) contiguous floor, wall and ceiling tiles, whichever is larger, at locations indicated. Accepted mock-ups shall demonstrate and establish the quality of work by which the remainder of the work shall be judged.

- F. Sanitation Support Service: Contractor shall offer an optional periodic “sanitation support service” to the Owner in writing upon completion of the work.

1.04 SUBMITTALS:

- A. Experience and qualification data for manufacturer and applicator.
- B. Product Data: Submit manufacturer’s complete and current product information, technical information, and installation and maintenance instructions.
- C. Submit sample warranty for review.
- D. Shop Drawings: Where locations of the work of this contract are not indicated or completely indicated, prepare and submit shop drawings indicating tile patterns and locations and widths of control, isolation, contraction and expansion joints in tile surfaces.
- E. Samples for Initial Selection Purposes: Submit manufacturer’s color charts consisting of full range of colors, textures and patterns available for each type of new joint treatment and restorative joint treatment indicated. Include samples of all materials involving color selection.
- F. Samples for Verification Purposes, submit the following upon request by Architect or Owner:
 - 1. Samples for each type of joint treatment for each color and texture required, not less than 12-inches square, on plywood or hardboard backing, grouted and sealed.
- G. Contractor’s proposal for “Sanitation Support Services,” including all provisions and services to be provided, frequency of inspections, additional cleaning and restorative procedures and annual cost for at least the first year following expiration of manufacturer’s warranty.

1.05 DELIVERY, STORAGE, AND HANDLING:

- A. Deliver and store packaged materials in accordance with manufacturer’s written instructions and recommendations, in original containers with seals unbroken and labels intact until time of use. Prevent damage or contamination to materials by water, freezing, foreign matter or other causes.
- B. Store items to be incorporated in the Work in stable and secure manner, off of floor, within an area which has ambient temperature controlled within acceptable range required for each product.
- C. Do not unreasonably encumber the site with materials or equipment. Confine stockpiling of materials and location of storage to the areas indicated, or if not indicated, as designated by the Contractor or Owner.
 - 1. If additional storage is necessary, obtain and pay for such storage off site in a fully bonded and insured facility acceptable to the Owner and accessible to the Owner during normal business hours, with all items stored clearly identified as being assigned to this project. Address for any off-site stored materials shall be provided to the Owner, by the Contractor.

1.06 PROJECT CONDITIONS:

- A. Maintain environmental conditions and protect work during and after installation to comply with manufacturer's current printed instructions and recommendations.
- B. Vent any temporary heaters to exterior to prevent injury to building occupants and workers, to the facilities, and to prevent damage to new joint treatment and restorative bonding work from carbon dioxide buildup.
- C. Maintain temperatures at not less than 50 degrees F (10 degrees C) in work areas during installation and for 7-days after completion, unless higher temperatures are required by manufacturers' current printed instructions and recommendations.

1.07 WARRANTIES AND GUARANTEES:

- A. Warranty: The manufacturer shall approve the installation and provide their standard written warranty for labor and materials, that the new joint treatment and restorative bonding system shall remain adhered, intact (without perceptible deformation) and completely leak free as long as prescribed Support Services are continued from the date of project Substantial Completion, subject to Owner's compliance with written maintenance instructions delivered to the Owner by the Contractor.
 - 1. Warranty provisions shall not apply in the event of occurrence of exclusions in the written warranty, including in part, Owner's noncompliance with written maintenance instructions delivered to the Owner by the Contractor, work performed on the completed system by others that affects its integrity or causes damage; or damage due to neglect, abuse, natural phenomena, acts of God, or other cause not under the control of the Contractor or due to defective workmanship.
 - 2. The Contractor shall warrant the appearance and integrity of the tile and grout surface indefinitely for as long as warranty provisions are adhered to and the Owner engages the Contractor for optional "Sanitation Support Services."
- B. Repairs that become necessary while new joint treatment and restorative bonding system is under warranty and/or guarantee, shall be performed within 14-days of notification to the installer and/or manufacturer, including in part, any required removals, repairs of the new joint treatment and restorative bonding system, and restoration of any additional materials removed to perform the work to at least their previously existing condition. Should for any reason, the installer is not able to perform the repairs, it shall be incumbent upon the manufacturer to do so. If repairs are not begun on time, Owner shall have work done by others and costs will be charged to the Contractor, with no detrimental effect on the remaining warranty and no termination of warranty.
- C. The above warranty shall be in addition to, shall be in effect simultaneously with, and shall not alter or limit other project or product warranties or guarantees, nor shall it serve as a limitation to other remedies available to the Owner.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS:

- A. Manufacturers: Subject to compliance with requirements, provide preapproved products, and new joint treatment and restorative bonding systems equivalent to "SaniGLAZE EnduraGLAZE and GroutGLAZE Process" systems, as manufactured by SaniGLAZE

International, LLC; Jacksonville, Florida; Phone: 1-800-874-5554; Website: www.saniglaze.com.

2.02 PRODUCTS - GENERAL:

- A. New joint treatment and restorative joint treatment, sealing and bonding system specified is proprietary in nature, and all materials utilized in completion of the work shall be either manufactured or approved in writing for use by the system manufacturer. It is anticipated that these requirements will also apply to any alternate new joint treatment and restorative bonding system accepted.
- B. All products and installation shall comply with joint treatment and restorative bonding system manufacturer's current written instructions, recommendations and restrictions.
- C. Completed new joint treatment and restorative bonding systems shall be capable of sustaining foot traffic within four hours after completion of the work, without damage to the system.

2.03 MATERIALS:

- A. Cleaners: SaniGLAZE EverGLAZE PRO
- B. Grouting Compound (herein referred as "Glazing Compound": SaniGLAZE High Build Glazing Compound, a waterborne moisture impermeable grout glazing compound, in combination with SaniGLAZE Dry Solids to prevent shrinkage and pitting during the curing process; for application to the existing grout lines between the tiles and leveled to the surface depth of just below tops of tile surfaces. Grout glazing compound shall be fully compatible with other components of the new joint treatment and restorative bonding system, and must bond to the thin set grout bed installed by others during tile installation.
 - 1. Color(s): This compound shall be available in varying colors.
 - 2. Restrictions: Grout glazing compound shall not be allowed to remain on any tile surface.
 - 3. Bonding and Curing: Grout glazing compound must bond with the thin set substance and be cured to form an impermeable barrier to moisture.
 - 4. Mixing: Utilizing clean, new or undamaged containers and equipment, comply with manufacturer's current written instructions, as follows, unless otherwise indicated or required for warranty:
 - a. Glazing Compound mixture shall contain 1 quart of SaniGLAZE High Build Glazing Compound, 24 oz. Dry Solids, 10 ml Part B Hardener, and shall be mixed thoroughly using a power drill with mixing blade or other mixing device acceptable to system manufacturer.
- F. Shielding Sealer:
 - 1. Porous and Nonporous Tile: SaniGLAZE Super Shield, SaniSEAL, SaniTECH (all waterborne), or SaniMAX / SaniMAX-C (solvent borne) with Xolite, a waterborne tile surface moisture, grease, oil and chemical barrier, providing an impermeable moisture seal over the entire treated area, with a semi-gloss, gloss or flat finish, as selected. This sealer shall be resistant to urine, disinfectants, bleach, acid bowl cleaner, high pH cleaners, and other chemicals typically used in cleaning rest rooms and other tile and grout areas.

- a. Finished Appearance: Clear, transparent and invisible when it has dried and cured, with sufficient particle size of the emulsion and surfactant package to allow deep penetration of porous tile substrates, and a chemical adhesion component. Gloss level as selected.
 - b. Maintenance: This compound must be able to recoat itself when maintenance needs arise.
 - c. Slip Resistance: Static Coefficient of Friction or at least 0.70 dry and 0.50 wet when tested with the ASTM Test Method F-2508.
- G. Optional Support Services - Materials: SaniGLAZE EverGLAZE Daily, capable of removing any surface soil and contaminants, renewing the original SaniGLAZE finish or SaniGLAZE Super Shield, SaniSEAL, SaniTECH, or SaniMAX which was applied during the original restoration, and bringing the floors, walls and ceilings back to the same "like new" appearance affected by the original restoration, using SaniGLAZE EverGLAZE Daily to clean and renew the original SaniGLAZE topical shield.
- 1. Maintenance by Owner shall include in part cleaning with EverGLAZE Daily and/or buffing and recoating SaniGLAZE Super Shield periodically as required to maintain the original restorative bonded surface integrity.

PART 3 - EXECUTION

3.01 EXAMINATION:

- A. Examine surfaces to receive new joint treatment and restorative bonding work and conditions under which the system will be installed.
- B. Do not proceed with new joint grouting work until surfaces and conditions comply with requirements indicated in manufacturer's current written instructions and recommendations.

3.02 INSTALLATION - GENERAL:

- A. Prepare and install new joint grouting in accordance with manufacturer's current written instructions and recommendations, and as otherwise required to obtain manufacturer's warranty.
- B. Application requires a fill coat and finish coat. Both the fill coat and the finish coat shall be applied using a Yorker type applicator cap with squeeze bottle, or caulking gun for large tile applications, and a squeegee or float for small tile applications.
- C. Curing: The fill coat shall be allowed to cure for a minimum of 24 hours, or until the fill coat has hardened. The finish coat shall also cure a minimum of 24 hours, and until thoroughly dry.

Note To Specifier:

The following table contains nomenclature on the SaniGLAZE Processes and cross references the steps required for each and the section where the respective specification can be located:

Restorative Bonding Process Name and Installation Steps Cross Reference Guide		
SaniGLAZE® Process Name	Installation Steps	Applicable Specification Section(s)
EnduraGLAZESM	Preparation Grout Glazing Sealing	3.03 Grouting and Sealing 3.03 A 3.03 C
GroutGLAZESM	Preparation Grout Glazing	N/A 3.03 A
SurfaceGLAZESM	Preparation Sealing	Not Applicable To This Specification
ChromaGLAZESM	Preparation Sealing w/Color	Not Applicable To This Specification
ChromaGLAZE+SM	Preparation Sealing w/Color Sealing w/Clear	Not Applicable To This Specification
VariGLAZESM	Preparation Sealing w/Color Sealing w/Chips Sealing w/Clear	Not Applicable To This Specification
XcelKLEENSM	Preparation	Not Applicable To This Specification

3.03 GROUTING AND SEALING:

(Note: Instruct tile contractor to grout newly installed tile with Custom Building Products non-modified sanded grout no. SLG0959, Color #09 Gray, or equivalent. Bring grout material up two thirds of the depth of the tile edges)

- A. Grouting: Apply SaniGLAZE High Build Glazing Compound or preapproved equivalent system, in combination with SaniGLAZE Dry Solids to prevent shrinkage and pitting during the curing process. This waterborne moisture impermeable grout glazing compound shall be applied to the new grout line filler application between the tiles and leveled to just below the top surface of adjacent tile. The compound shall not remain on any tile or other surfaces. The compound must bond with the grout and be cured to form an impermeable moisture barrier.

- B. Drying and Curing: The fill coat shall be allowed to cure for a minimum of 24 hours or until the fill coat has hardened. The finish coat shall also cure a minimum of 24 hours and until thoroughly dry and hard.
- C. Sealing: Apply SaniGLAZE Super Shield to the entire tile surface to provide an impermeable moisture seal over the entire treated area(s), with the specified gloss level.

3.04 CLEANING AND PROTECTION:

- A. Cleaning: Upon completion of joint treatment and restorative bonding applications, clean all new and adjacent existing tile surfaces so they are free of foreign matter. Remove any residue, splatter and similar materials from adjacent and other surfaces, wherever occurs.
- B. Remove all trash, containers, cartons, debris, excess materials, etc., which results from work under this Section, and legally dispose of off Owner's property.
- C. Protection: Advise Contractor and Owner in writing of protections necessary from completion of joint treatment and restorative bonding work and project Substantial Completion.

3.05 CLOSEOUT:

- A. Deliver the following to the Contractor or Owner, as applicable, in duplicate 3-ring binders clearly identifying the project, Contractor, Installer, and Owner on the cover and spine:
 - 1. Fully executed warranty, subject to acceptance of prescribed Support Services.
 - 2. Complete contact information for the system manufacturer and installer
 - 3. Complete printed cleaning and maintenance instructions. Include at least two sources with complete contact information for any special cleaning and maintenance solutions, materials and supplies.
 - 4. Proposal for "Sanitation Support Services."

END OF SECTION