

Kings Plaza Shopping Center
Brooklyn, New York
Second Floor Tile Installation Protocol

INTRODUCTION:

The existing floor system consisted of a depressed structural slab at Common Areas and an “at grade” structural slab within tenant premises. The Common Areas structural slab was depressed approximately 3 to 4 inches to accommodate a two-layer mortar bed consisting of a lower layer of lightweight concrete and finish layer of colored concrete. Each layer varied in depth considerably in making up the total mortar bed and had deteriorated to the point of delaminating from the structural slab and between the mortar bed layers. The surface colored layer also exhibited considerable cracking and spalling.

Additionally, the second floor structure is subject to considerable vibration due to the suspension of the primary Concourse from the roof structure above that also serves as the service drives for all delivery vehicles to the roof top Service Docks.

To remedy this with the new tile installation, removal and replacement protocols were developed as described herein. The primary “mud set” mortar bed in the Concourse consists of a single source warranty of products manufactured by Laticrete set upon a “cleavage membrane” to isolate the system from the structural slab.

Note that in the Best Buy Court, a bonded system was installed with direct application to the structural slab but shall not be permitted in any other areas of the Common Area. For more information on remedial repairs, if necessary in this Court contact James Mahrer in Real Estate Services.

Included in the protocols are the treatment of the transition between mortar bed in the depressed Common Areas and the “at grade” structural slab at the tenant premises which accommodate thin-set tile.

PRODUCTS:

Crack Suppression Membrane—LATICRETE Blue 92 Anti-Fracture Membrane cold applied single component liquid with reinforcing mesh.

Latex Portland Cement Thick Set Mortar Bed—LATICRETE 3701 Fortified Mortar Bed.

Latex Portland Cement Thin Set Mortar Bed—LATICRETE 254 Platinum.

Wire Reinforcing—2 x 2 inch x 16 ASW gauge steel welded wire mesh.

Cleavage Membrane—4.0 mils polyethylene plastic film, taped joints.

Vertical Bond Breaker between substrates—Corex Board.

Structural Slab Leveling Compound—LATICRETE NXT Primer and NXT Level Plus

Control Joint—3/8" Blanke Heavy Duty Joint in colors to match field and border tiles. #2894 "Granite Gray" at field tile and #285 "Black" at border tile.

Control Joint Sealant—LATICRETE Latasil 9118 primer and Latasil silicone sealant in colors to match field and border tiles.

Tenant Lease Line Bond Break (Tile)—Schluter edge, black.

Field Tile—Ergon Elegance porcelain tile in Lappato finish, color "Ivory", 12 x 24 and 24 x 24 pattern.

Border Tile—Ergon Elegance porcelain tile in Lappato finish, color "Anthracite", 12 x 24.

Polymer Fortified Cement Grout—LATICRETE Permacolor Grout, Color #24 "Natural Grey" at field tile and Color #45 "Raven" at border tile.

Grout Joints—Tile is rectified for maintaining 2 millimeter joints.

INSTALLATION OVERVIEW:

Refer to Kings Plaza project Specifications Section 093013 for further technical requirements and LATICRETE installation guidelines. Herein is only a step by step general overview of the total assembly.

Common Areas requiring thick set mortar bed, unbonded:

1. Demolition of existing mortar bed approximately 3 to 4 inches to sound structural slab.
2. Following thorough vacuuming of loose substrate, application of LATICRETE NXT primer and NXT Level Plus.
3. Install cleavage membrane.
4. Install Laticrete 3701 Fortified Mortar Bed with reinforcing mesh set centered in the mortar bed but no less than 1" above structural slab. Basis of mixture is 0.8 gallons of water per bag adjusted in the field to achieve LATICRETE's recommended consistency.
5. Maintain 3/8" control joints per plan layout using Corex Board as bond breaker.
6. Apply Blanke H-D control joints at the mortar bed 3/8" joints.
7. Apply Blue 92 anti-fracture membrane system with reinforcing mesh no less than 1 ½ tile modules outboard of each control joint.
8. Perimeter edge bond breaks to be accomplished using Corex Board to depth of mortar bed.
9. At cold joints in mortar bed, provide a slurry coat of LATICRETE 254 Platinum prior to application of next mortar bed placement. Cold joints between mortar bed daily productions should be placed on a 45 degree angle to prevent shear and separation of the mortar bed.
10. Install approved tile system as specified.

Lease Line transitions between Common Area thick set mortar bed and Tenant thin set tile:

1. Provide 3/8" Corex Board bond break on vertical surface at the transition from thickset mortar bed and "at grade" tenant premises.
2. Provide the Blanke H-D control joint over the transition joint.

3. At the Lease Line, install (if not already present) the Schluter black edging in the joint aligning with the Lease Line. This provides for easy demolition in the future at the Lease Line to address back set storefronts and tenant entry alcoves.

Thin set bed preparation for Tenant tile "at grade":

1. Following proper substrate preparation of the structural slab "at grade", provide a full coat of the Blue 92 anti-fracture membrane system with reinforcing mesh at all thin set tile area.
2. Install approved tile system as specified.