



TERRAZZO, TILE AND MARBLE ASSOCIATION OF CANADA
L'ASSOCIATION CANADIENNE DE TERRAZZO, TUILE ET MARBRE

TTMAC Test Report Number: UFT2008-009

Test Requested By: Duradek Canada Ltd.
8288 – 129th Street
Surrey, B.C.
V3W 0A6

Test Subject Material: 60 mil Duradek Ultra “Tiledek” membrane complete with woven polyester backing & non-woven “fuzzy” polyester mat on top (tile) side. Membrane adhesive, D763 roller or trowel grade acrylic latex adhesive. CGC “Durock” cement board ½” x 4ft x 8ft underlayment; Mapei “Grani/rapid” latex hydraulic mortar, fastened with 32 mm Durock wood screws.

Test Date: 07/05/2008 – 07/09/2008

Test Procedure: ASTM C627: “A Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson – Type Floor Tester”

Installation Procedure:

Supplied by Duradek: 60 mm Duradek “Tiledek” membrane fully adhered to Durock panel with P763 adhesive. Laminate ½: Durock panel to ¾” plywood subfloor using Mapei “Grani/rapid” mortar. Apply with 6 mm square-notched trowel. Laminate and secure one panel at a time. Cover mortar with panel immediately. Place panels with joints staggered ½ panel in both directions from plywood subfloor joints. Fit ends & edges closely but not forced together, leaving a maximum 3 mm gap at panel edges and ends. Fasten panels to subfloor while mortar is wet with 32 mm Durock wood screws spaced 6” o.c. in both directions and placed at 12.5 mm from ends and edges. Do not overdrive fasteners. Subfloor to be exterior grade T&G, ¾” Douglas Fir plywood. Installed as per Duradek technical bulleting #126 – Plywood Deck Construction Recommendations. Test Deck Framing: kiln dried Pine, grade 2 or better 2” x 12” joists at 16” o.c. Attach header joist to each joist with (6) # 10x3 wood screws.

Installed by TTMAC: 12” x 12” slate tile (smooth face). Freeze thaw rated. Mapei “Grani/rapid” Latex hydraulic mortar. Tile to “Tiledek”: Mapei Granirapid. Mix latex-Portland cement mortars in accordance with manufacturer’s instructions or as modified here-in. Use the brand of prepacked dry mortar mix specified by the latex manufacturer. Add dry mortar mix to amount of latex or water specified by manufacturer and mix thoroughly to obtain completed and visually uniform wetting of the dry mortar mix. Slake for 15 minutes and remix before using. Average contact area shall be not less than 95% when not less than three tiles or tile assemblies are removed for inspection. The 95% coverage shall be sufficiently distributed to give full support of the tile. If 95% coverage is specified in the project specifications, backbutter each tile with bond coat; or select a notched trowel sized to facilitate the proper coverage, key the mortar into the substrate with the

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flat side of the trowel, and comb with the notched side of the trowel in one direction. Embed the tile in the mortar by beating in, pushing in a direction perpendicular to the combed ridges, or other means to achieve specified coverage. The method used should produce maximum coverage with the corners and edges fully supported. Grout with Mapei "Opticolor" grout.

Test Results:

The installation completed five (5) complete cycles for a total of 5400 revolutions at 900 pounds on the fifth cycle. At the completion of the sixth cycle at 900 pounds, using hard rubber wheels it was noted that three (3) tiles were chipped. No grout joints at this time had been compromised. On completion of the seventh cycle at a total of 6300 revolutions and 900 pounds it was noted that one (1) grout joint had popped up.

Conclusion:

In accordance with the Floor Assembly Installation Guide of the 2006/2007 Specification Guide 09 30 00 Tile Installation Manual, this installation received a rating of "Residential" as outlined by the guide.

APPLICATIONS	ASSEMBLY COMPONENTS & METHODS
EXTRA HEAVY (Passes ASTM C627-93 (1999) e1 cycles 1 through 14) Extra Heavy and high impact use in shipping and receiving, Food plants, dairies, breweries and commercial kitchens.	Concrete substrate only. Tile – 12+ mm quarry tile, 7 mm+ porcelain tile or packing house tile. Installation 309F-2006, 310F-2006, Wood – non
HEAVY (Passes ASTM C627-93 cycles 1 through 12) Latex modification recommended Shopping malls, stores, airport terminals, work areas, Laboratories, auto showrooms and service areas.	Concrete Substrate. Tile – 10 mm+ quarry tile, 7 mm+ porcelain tile, 13 mm+ terrazzo tile, 10 mm+ natural stone, 10 mm+ agglomerated, marble or granite. Installation – 312F-2006, 325ED2006 (A,E) Wood Substrate – 313F2006(A) (100% solids epoxy mortar
MODERATE (Passes ASTM C627-93 cycles 1 through 10) Normal commercial and light institutional use in public Space of restaurants and hospitals (etc).	Concrete Substrate Tile – ceramic mosaic or heavier Installation – See above
LIGHT (Passes ASTM C627-93 cycle 1 through 6) Light commercial use in office space, reception areas, Kitchens, bathrooms	Concrete Substrate Tile – ceramic, mosaic or heavier Installation – 314F-2006, 325ED-2006 (A,E) and latex Portland cement mortar bond coat over waterproof Membrane. Wood – 325ED-2006 (B,C,D)
RESIDENTIAL (Passes ASTM C627-93 (1999) e1 cycles 1 through 3) Kitchens, bathrooms, foyers	Concrete Substrate Tile – ceramic, mosaic or heavier Installation – See Above Wood – See Above

Testing conducted on this assembly was completed in parallel with ASTM C627 procedures. ASTM C627 is the standard method for evaluating ceramic floor tiles installation systems. The results of this test are to be used as a general guide to comparative performance and are not a true acknowledgement of the assemblies ability or inability to perform to a determined level. It must be noted that these results are not to be used for correlation between real life expectancy and the designated rating of any subject and that the ASTM C627 test conditions do not aim to replicate real life conditions by any means.


Signed


Date