



FUNCTION. DESIGN. QUALITY.



**EXTRA HEAVY:**  
Extra heavy and high-impact use in food plants, dairies, breweries, and kitchens. Requires quarry tile, packing house tile, or tile designated by tile manufacturer. (Passes ASTM C627 cycles 1 through 14.)

**HEAVY:**  
Shopping malls, stores, commercial kitchens, work areas, laboratories, auto showrooms and service areas, shipping/receiving, and exterior decks. (Passes ASTM C627 cycles 1 through 12.)

**Blanke-PERMAT ASTM C627 ¾ inch plywood, 24" O.C. Tile Installation: Extra Heavy**

1	APA rated "Exposure 1" plywood subfloor; 23/32" thick T&G	TCNA
2	Permat Underlayment	Blanke
3	ANSI A118.4/A118.11 thin-set mortar	TCNA
4	12" x 12" Porcelain Tile	Blanke
5	sanded grout	TCNA

"The 23/32" T&G plywood subfloor was nailed to four 2" x 2" joists spaced 24" O.C. to simulate the support provided in an actual installation. The tongue and groove seam was positioned 15" off the centerline of the system and perpendicular to the joist. The subfloor was nailed to the joists with 2" ring shank nails set at six inch centers on the perimeter joists and twelve-inch centers on the intermediate joists. A 1/4" bead of construction adhesive was applied to each joist prior to nailing. "

In accordance with the Performance-Level Requirement Guide and Selection Table of the 2013 *TCNA Handbook for Ceramic, Glass, and Stone Tile Installation* (page 40), the installation is classified "**EXTRA HEAVY**".

**Blanke-PERMAT ASTM C627 ¾ inch plywood, 24" O.C. Stone Installation: Heavy**



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1	APA rated "Exposure 1" plywood subfloor; 23/32" thick T&G	TCNA
2	Permat Underlayment	Blanke
3	High performance ANSI A118.4/A118.11 thin-set mortar	TCNA
4	24" x 24" White Carrara Marble tile	Blanke
5	sanded grout	TCNA

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In accordance with the Performance-Level Requirement Guide and Selection Table of the 2013 *TCNA Handbook for Ceramic, Glass, and Stone Tile Installation* (page 40), the installation is classified **"HEAVY"**.

Blanke-PERMAT ANSI A118.12 Specification for Crack Isolation Membranes for Thin-Set Ceramic Tile and Dimension Stone Installation



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5.1.3	7-Day shear strength	176 PSI	> 50 PSI
5.1.4	7-Day water immersion shear strength	83 PSI	> 50 PSI
5.1.5	4-Week shear strength	173 PSI	> 50 PSI

**Point Load Test**

Sample 1	4219 lbf	>1000 lbf
Sample 2	4034 lbf	>1000 lbf
Sample 3	3554 lbf	>1000 lbf

Test Designation	Test Description	Evaluation	ANSI Specification
5.4	<b>System Crack Resistance Test</b>		
	Specimen 1	(3/32")	Standard performance: Tile failure occurs after 1/16" specimen gap opening, but before 1/8" gap opening. High performance: Tile failure does not occur by 1/8" specimen gap opening.
	Specimen 2	(3/32")	Standard performance: Tile failure occurs after 1/16" specimen gap opening, but before 1/8" gap opening. High performance: Tile failure does not occur by 1/8" specimen gap opening.
	Specimen 3	(7/64")	Standard performance: Tile failure occurs after 1/16" specimen gap opening, but before 1/8" gap opening. High performance: Tile failure does not occur by 1/8" specimen gap opening.