



PRINCEPS
GLAZED PORCELAIN STONEWARE



TIBERIO NO



CESARE BI

A strong, solid, compact material: all the properties of resistance to the most widely varying forms of external stress, typical of glazed porcelain stoneware are found in this product and reinforce both its functional and aesthetic qualities.

Available in different color finishes, PRINCEPS gives concrete expression to every flight of interior design fancy and allows countless composition effects created by a blend of colours, sizes and textures.

Furthermore, decorative and special trims make a high degree of finishing in the installation of the product.



AURELIANO TO



20"x20"
13"x13"



3Y07 Cesare BI
20"x20"
3Y03 Cesare BI
13"x13"



3Y06 Augusto BG
20"x20"
3Y02 Augusto BG
13"x13"



3Y05 Tiberio NO
20"x20"
3Y01 Tiberio NO
13"x13"



3Y08 Aureliano TO
20"x20"
3Y04 Aureliano TO
13"x13"

TRIMS



3W33 Princeps FR. BI
1^{9/16}"x13"



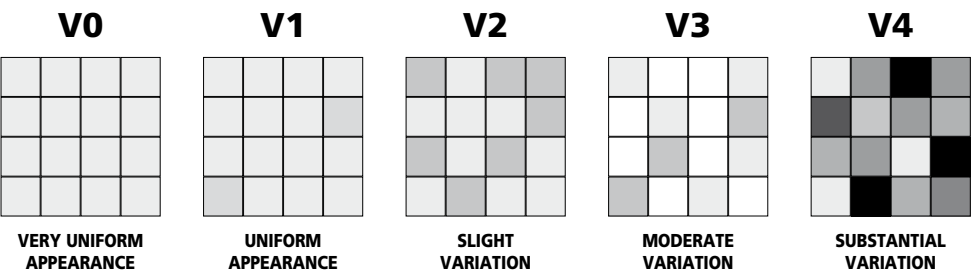
3X00 Cesare BI	Bullnose
3Y99 Augusto BG	Bullnose
3Y98 Tiberio NO	Bullnose
3X01 Aureliano TO	Bullnose
3 ^{1/8} "x13"	

Shade variations

The color and shade of all tiles vary to some degree. This variance can be from piece to piece and can also occur from production run to production run.

American National Standard Specifications for Ceramic Tile (ANSI) has implemented a guide that rates ceramic tile on a five-point scale and ranges from V0 through V4.

Instituting the ANSI's color shade variation guidelines you will reduce customer complaints and sell the unique and individual beauty of each ceramic tile.



V0 Very Uniform Appearance

Pieces of the same shade value are very uniform and smooth in texture.

V1 Uniform Appearance

Differences among pieces from the same production run are minimal.

V2 Slight Variation

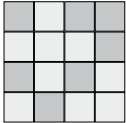
Clearly Distinguishable differences in texture and/ or pattern within similar colors.

V3 Moderate Variation

While the colors and or texture present on a single piece of tile will be indicative of the colors and/or texture to be expected on the other tiles, the amount of colors and/or texture on each piece may vary significantly. It is recommended that the range be viewed before selection.

V4 Substantial Variation

Random color and/or texture differences from tile to tile, so that one tile may have totally different colors and/or texture from that on other tiles. Thus, the final installation will be unique. It is recommended that the range be viewed before selection.

SHADE VARIATION AND APPLICATIONS				
<div><div>V2</div><div></div><div>SLIGHT VARIATION</div></div>		Residential	Commercial	Industrial
	Floor	•	•	
	Wall	•	•	•
	Countertop	•	•	•
	Pool	•	•	•

Water, oil, grease, or other fluids create slippery conditions. Floors with exposure to these conditions require extra caution in product selection and proper maintenance.

Care & Maintenance

Princeps is a stain-resistant porcelain tile. Routine maintenance will keep your tile looking new for years to come.

Ragno USA's products are typically easy to install and maintain using the following general guidelines:

- Choose tile from same dye lot and caliber whenever possible
- Select tile alternately from several boxes and rotate when installing
- Follow industry-accepted installation practices as detailed by Tile Council of America "Handbook for Ceramic Tile Installation" or those recommended by the Ceramic Tile Institute of America
- Remove all grout residue promptly after application; neither acid cleaning nor sealing is recommended
- Clean regularly with clear water and/or a neutral (soapless) cleaner, wipe dry to lessen slippery conditions

TECHNICAL SPECIFICATIONS

DESCRIPTION	ANSI STANDARD	RESULT	ASTM TEST METHOD
Water Absorption	$\leq 0.50\%$	$\leq 0.50\%$	C373
Frost Resistance	As Reported	Resistant	C1026
Scratch Resistance	MOHS 1-10	7	MOHS SCALE
Breaking Strength 13"x13"	≥ 250 lbf.	≥ 462 lbf.	C648
Facial Dimension	-3.0 % < Nominal < 3.0 %	Within Standard	C499
Thickness	≤ 0.04 in (1.02 mm max)	Within Standard	C499
Wedging (Squareness)	+/- 0.50 % or +/- 2.0 mm*	Within Standard	C502
Warpage (Flatness)	+/- 0.75 % or +/- 2.3 mm*	Within Standard	C485
Abrasion Resistance	Class 0 - Class V	Class IV	C1027
C.O.F. (Wet)	As Reported	$0.40 \leq \text{COF} < 0.50$	C1028
C.O.F. (Dry)	As Reported	$0.70 \leq \text{COF} < 0.80$	C1028
Chemical Resistance	Class A - Class E	Class A	C650
Stain Resistance	Class A - Class E	Class A	C1378

* Whichever is less



Floor Tile



Wall Tile



Decorative Tile



Trim Available



Suitable for Outdoors



Slight Variation



Frost Resistant



Abrasion Resistance



C.O.F. (Wet)



C.O.F. (Dry)



21% Minimum Pre-Consumer Recycled Content



Certified No VOC

PACKAGING

	SIZE	THICKNESS	BOX			PALLET		
			PCS	SQ FT	LBS	BOXES	SQ FT	LBS
Floor Tile	20"x20"	7/16"	06	16.15	80.00	24	387.60	1920.00
Floor Tile	13"x13"	5/16"	13	15.52	58.00	44	682.88	2552.00
Listelli	1 ⁹ / ₁₆ "x13"	Compatible	06		3.00			
Bullnose	3 ¹ / ₈ "x13"	Compatible	20		20.00			



Contributes to
LEED Credits



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