

# TIVOLI

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*travertine-look porcelain*



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**CANCOS**  
TILE & STONE



BEIGE

*Tivoli*



LOUNGE  
BAR

> POOL  
> SPA  
> SUITES

*Tivoli*

BEIGE

DOMTIBE88



- 8x8 -

DOMTIBE816



- 8x16 -

DOMTIBEHX



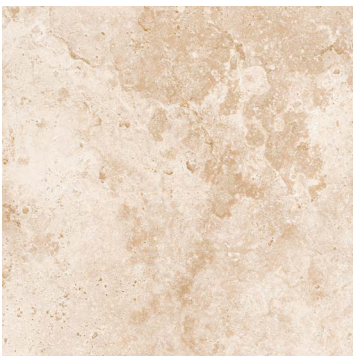
- hexagon mosaic -

DOMTIBEMOS11



- 1x1 mosaic -

DOMTIBE16



- 16x16 -

DOMTIBE1624



- 16x24 -

DOMTIBEHER



- herringbone mosaic -



BIANCO

*Tivoli*



*Tivoli*

BIANCO

DOMTIBI88



- 8x8 -

DOMTIBI816



- 8x16 -

DOMTIBIHEX



- hexagon mosaic -

DOMTIBIMOS11



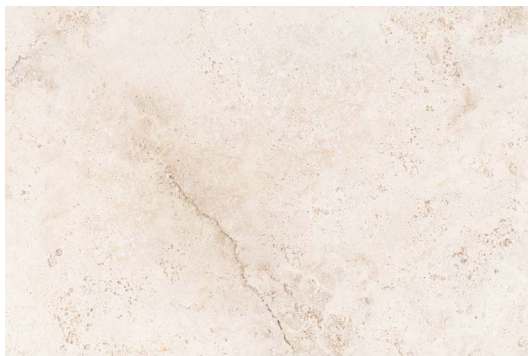
- 1x1 mosaic -

DOMTIBI16



- 16x16 -

DOMTIBI1624



- 16x24 -

DOMTIBIHER



- herringbone mosaic -



GRIGIO

*Tivoli*



*Tivoli*

GRIGIO

DOMTIGR88



- 8x8 -

DOMTIGR816



- 8x16 -

DOMTIGRHEX



- hexagon mosaic -

DOMTIGRMOS11



- 1x1 mosaic -

DOMTIGR16



- 16x16 -

DOMTIGR1624



- 16x24 -

DOMTIGRHER



- herringbone mosaic -



TUFO

*Tivoli*





*Tivoli*

TUFO

DOMTITU88



- 8x8 -

DOMTITU816



- 8x16 -

DOMTITUHEX



- hexagon mosaic -

DOMTITUMOS11



- 1x1 mosaic -

DOMTITU16



- 16x16 -

DOMTITU1624

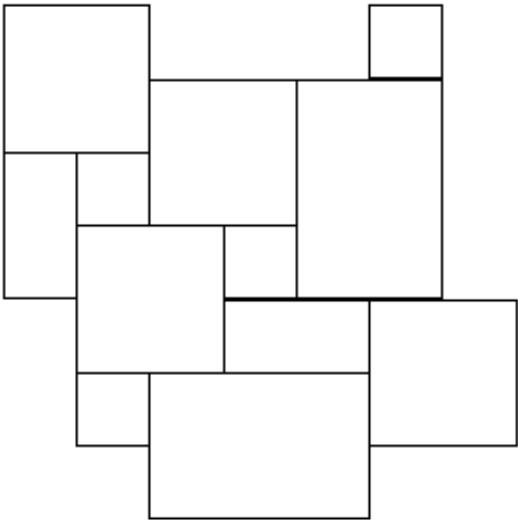


- 16x24 -

DOMTITUHER



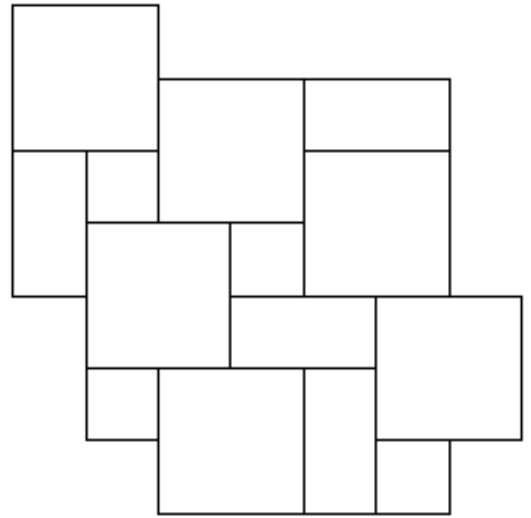
- herringbone mosaic -



LAYING PATTERN #1

16x24	33.33%
16x16	44.44%
8x16	11.11%
8x8	11.11%



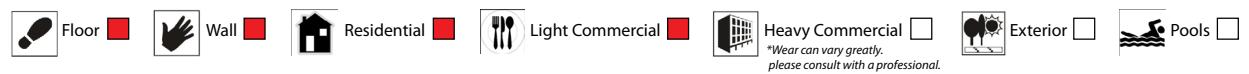


LAYING PATTERN #2

16x16	66.66%
8x16	22.22%
8x8	11.12%



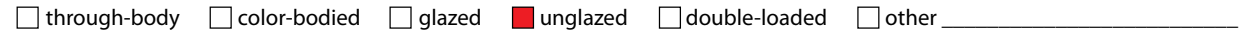
## Suggested Applications



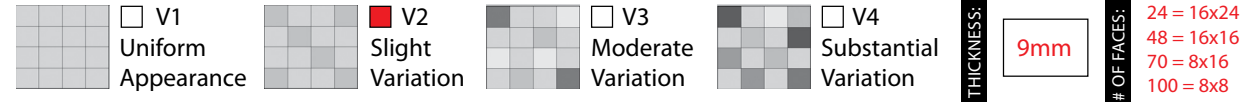
## Installation Suggestions



## Porcelain Type



## Shade Variation



## Slip Resistance

DCOF	Values	Applications
<b>&gt;0.43</b>	0.42	Recommended Standard DCOF value for wet/dry commercial flooring
	0.65	Recommended Standard DCOF value for ADA ramps

DIN 51130 \*R9: Industry Standard/ADA Requirements \*\*R11: Recommended For Exteriors

R9\* (3-10°)  R10 (10-19°)  R11\*\* (19-27°)  
 R12 (27-35°)  R13 (>35°)

DIN 51097

Class	Typical Applications	Critical Angle
<input checked="" type="checkbox"/> A	Barefoot, but mainly dry aisles and walkways, dry changing areas	≥12°
<input type="checkbox"/> B	Shower rooms, pool surrounds, wet changing areas, disinfectant spray areas (plus all Class A areas)	≥18°
<input type="checkbox"/> C	Areas constantly under water, e.g. steps into pools, foot baths, inclined pool surrounds, jacuzzis (plus all Class A&B areas)	≥24°

ASTM C-1028  
ANSI A137.1  
DIN 51097/51130

## Scratch Resistance

MINERAL

1. Talc (Talc)	6. Microline (Glass, Glazed Tile)
2. Gypsum (Fingernail)	7. Quartz (Unglazed Porcelain)
3. Calcite (Penny)	8. Topaz (Granite)
4. Flourite (Some Marbles)	9. Corundum (Ruby)
5. Apatite (Knife Blade)	10. Diamond (Diamond)

Industry standard ≤175mm<sup>2</sup>

## Wear Resistance

PEI RATING  
UNI EN ISO  
10545.7

- Class 1: Walls only
  - Class 2: Residential floors w/minimal abrasive traffic
  - Class 3: Residential interiors/light commercial traffic
  - Class 4: Medium commercial applications
  - Class 5: All commercial applications/heavy traffic
- \*Wear can vary greatly. please consult with a professional.*

## Stain Resistance

- 5: Removed after 5 minutes (hot water running)  
 4: Removed by manual cleaning (weak detergent)  
 3: Removed by mechanical cleaning (strong detergent)  
 2: Removed by immersion (24 hrs in suitable solvent)  
 1: Stain not removed

ASTM C1378-04  
UNI EN ISO  
10545.14 **5**

## Water Absorption

ASTM C-373  
UNI EN ISO  
10545.3

<input checked="" type="checkbox"/> Absorbs 0-0.5%	<input type="checkbox"/> Absorbs .5-3%	<input type="checkbox"/> Absorbs 3-7%	<input type="checkbox"/> Absorbs 7% +
<b>Impervious</b> Interior/Exterior Frost Resistant	<b>Vitreous</b> Interior/Exterior Frost Resistant	<b>Semi-Vitreous</b> Indoor Use Only	<b>Non-Vitreous</b> Indoor Use Only

## Breaking Strength



ASTM C648  
UNI EN ISO  
10545.4 **PASS**

## Facial Dimension

ASTM c499-09  
UNI EN ISO  
10545.02

	Standard	Tolerance	Result
flatness	±5mm	±.5%	<b>PASS</b>
thickness	±6mm	±.5%	<b>PASS</b>
straightness	±4.5mm	±.5%	<b>PASS</b>
squareness	±5.4mm	±.6%	<b>PASS</b>
sides L/W	±1.1mm ±4.5mm	±.5%	<b>PASS</b>

## Chemical Resistance

ASTM C650  
UNI EN ISO  
10545.13

Allowances for:

	result
Acid	<b>PASS</b>
Bases	<b>PASS</b>
Chemicals	<b>PASS</b>

## Leed Information



REQUIREMENTS FOR COMMERCIAL INTERIORS/NEW CONSTRUCTION

Sustainable Sites	1 Point	2 Points
Site selection SS CREDIT 1 Heat Island Effect-non roof Material with a solar reflectant index of at least 29.	<input type="checkbox"/>	
Energy & Atmosphere EA CREDIT 4 Green Power: Products that optimize energy performance for floors and walls using thermal conductivity. BTU-FT	<input type="checkbox"/>	
Indoor Environmental Quality Low-Emitting Materials-Flooring Systems IEQ CREDIT 3.1-7 Green Cleaning: Reducing occupants exposure to hazardous cleaning chemicals.	<input type="checkbox"/>	
IEQ CREDIT 4.1 Low Emitting Adhesives: Products less than 65 G/L VOC	<input type="checkbox"/>	
IEQ CREDIT 4.3 Low Emitting Materials: Flooring systems.	<input type="checkbox"/>	
Materials & Resources	1 Point	2 Points
M&R CREDIT 2 Construction Waste Management: Recycling salvaged construction waste in to new reusable materials.	50% <input type="checkbox"/>	70% <input type="checkbox"/>
M&R CREDIT 4.1-4.2 Recycled Content: The sum of post consumer plus 1/2 of the pre consumer reps at least 10-20% of total value of materials.	10% <input type="checkbox"/>	20% <input type="checkbox"/>
M&R CREDIT 5 Regional Materials: Materials manufactured within 500 miles of the project site.	10% <input type="checkbox"/>	20% <input type="checkbox"/>
Innovation in Design	1-5 Points	
ID CREDIT 1 Innovation in Design Measurable exemplary environmental performance.	<input type="checkbox"/>	

Type: **Porcelain Stoneware**

Product Line: **TIVOLI**

\*The marketing name for this product is property of Cancos Tile & Stone. This same product may be marketed under different names.\*