

# Portofino

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PORCELAIN FLOOR TILE

*Calacatta*







ELEMSCA1224 *M*    ELEMSCA1224L *P*



| 12 x 24 |

ELEMSCAWEAVE *P*



*basketweave*

ELEMSCAMOS22 *M*



*mosaic* | 2 x 2 |

ELEMSCAHEX2 *M*



*hexagon* | 2 x 2 |

ELEMSCABN336 *M*    ELEMSCABN336L *P*



*bullnose*

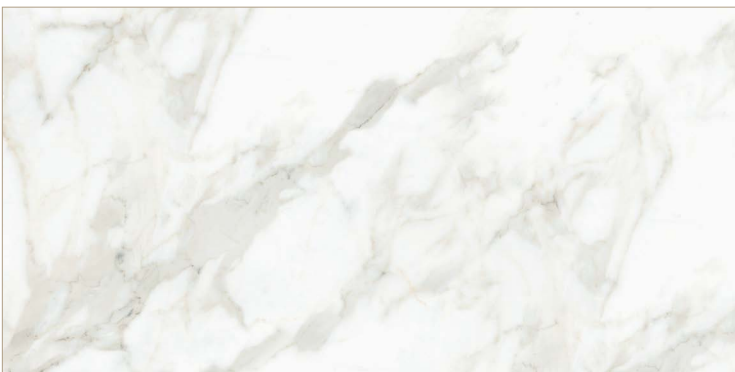
| 3 x 36 |

ELEMSCA24 *M*    ELEMSCA24L *P*



| 24 x 24 |

ELEMSCA1836 *M*    ELEMSCA1836L *P*



| 18 x 36 |

*P* • Polished Finish    *M* • Matte Finish



**18x18**

ELEPPCR18 *M*

**24x24**

ELEPPCR24 *M*  
ELEPPCR24L *P*

**36x36**

ELEPPCR36 *M SO*  
ELEPPCR36L *P SO*

**48x48**

ELEPPCR48 *M SO*  
ELEPPCR48L *P SO*



**12x24**

ELEPPCR1224 *M*  
ELEPPCR1224L *P*

**18x36**

ELEPPCR1836 *M*  
ELEPPCR1836L *P*

**24x48**

ELEPPCR2448 *M SO*  
ELEPPCR2448L *P SO*



**2x2 mosaic**

ELEPPCRMOS22 *M*



**3x12**

ELEPPCR312 *M*  
ELEPPCR312L *P*



**3x24 bullnose**

ELEPPCRBN324 *M*  
ELEPPCRBN324L *P*



**12x12 basketweave**

ELEPPCRWEAVEL *P*



**12x12 herringbone**

ELEPPCRMOSHER *M*



WHITE BODY WALL TILE

Crema Starfil



**18x18**  
ELEPWCR18 *M*



**10x30**  
ELEPWCR1030 *P*



**10x30 bevel**  
ELEPWCR1030BEV *P*



**1x1 mosaic**  
ELEPWCRMOS11 *P*



**10x30 shanghai warm**  
ELEPWCR1030SHA *P SO*



**10x30 trial warm**  
ELEPWCR1030TRI *P SO*



**2x10 torello**  
ELEPWCRTOR210 *P*



**2x10 bullnose**  
ELEPWCRBN210 *P*

*P* • Polished Finish    *M* • Matte Finish  
*SO* • Special Order (4-6 week delivery)



**18x18**  
ELEPPDO18 *M*

**24x24**  
ELEPPDO24 *M*  
ELEPPDO24L *P*

**36x36**  
ELEPPDO36 *M SO*  
ELEPPDO36L *P SO*

**48x48**  
ELEPPDO48 *M SO*  
ELEPPDO48L *P SO*



**12x24**  
ELEPPDO1224 *M*  
ELEPPDO1224L *P*

**18x36**  
ELEPPDO1836 *M*  
ELEPPDO1836L *P*

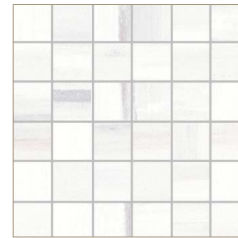
**24x48**  
ELEPPDO2448 *M SO*  
ELEPPDO2448L *P*



**3x12**  
ELEPPDO312 *M*  
ELEPPDO312L *P*



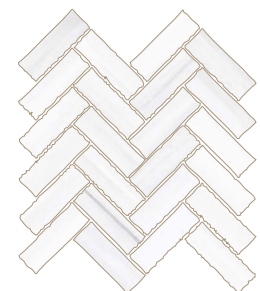
**3x24 bullnose**  
ELEPPDOBN324 *M*  
ELEPPDOBN324L *P*



**2x2 mosaic**  
ELEPPDOMOS22 *M*



**12x12 basketweave**  
ELEPPDOWEAVEL *P*



**12x12 herringbone**  
ELEPPDOMOSHER *M*

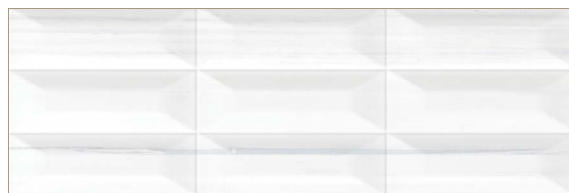




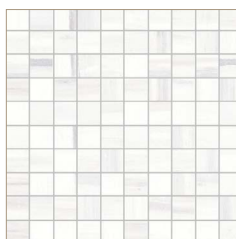
**18x18**  
ELEPWDO18 *M*



**10x30**  
ELEPWDO1030 *P*



**10x30 bevel**  
ELEPWDO1030BEV *P*



**1x1 mosaic**  
ELEPWDOMOS11 *P*



**10x30 shanghai cold**  
ELEPWDO1030SHA *P*



**10x30 trial cold**  
ELEPWDO1030TRI *P*



**2x10 torelo**  
ELEPWDOTOR210 *P*



**2x10 bullnose**  
ELEPWDOBN210 *P*

*P* • Polished Finish    *M* • Matte Finish  
*SO* • Special Order (4-6 week delivery)



**18x18**  
ELEPPGR18 *M*



**12x24**  
ELEPPGR1224 *M*  
ELEPPGR1224L *P*



**2x2 mosaic**  
ELEPPGRMOS22 *M*



**12x12 basketweave**  
ELEPPGRWEAVEL *P*

**24x24**  
ELEPPGR24 *M*  
ELEPPGR24L *P*

**18x36**  
ELEPPGR1836 *M*  
ELEPPGR1836L *P*



**3x12**  
ELEPPGR312 *M*  
ELEPPGR312L *P*

**36x36**  
ELEPPGR36 *M SO*  
ELEPPGR36L *P SO*

**24x48**  
ELEPPGR2448 *M SO*  
ELEPPGR2448L *P SO*



**3x24 bullnose**  
ELEPPGRBN324 *M*  
ELEPPGRBN324L *P*

**48x48**  
ELEPPGR48 *M SO*  
ELEPPGR48L *P SO*



**12x12 herringbone**  
ELEPPGRMOSHER *M*





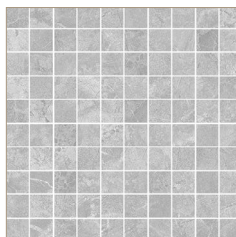
**18x18**  
ELEPWGR18 *M*



**10x30**  
ELEPWGR1030 *P*



**10x30 bevel**  
ELEPWGR1030BEV *P*



**1x1 mosaic**  
ELEPWGRMOS11 *P*



**10x30 shanghai cold**  
ELEPWGR1030SHA *P*



**10x30 trial cold**  
ELEPWGR1030TRI *P*

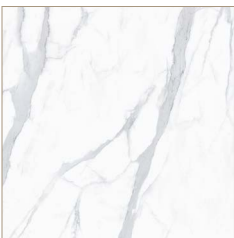


**2x10 torello**  
ELEPWGRTOR210 *P*



**2x10 bullnose**  
ELEPWGRBN210 *P*

*P* • Polished Finish    *M* • Matte Finish  
*SO* • Special Order (4-6 week delivery)



**18x18**  
ELEPPVE18 *M*

**24x24**  
ELEPPVE24 *M*  
ELEPPVE24L *P*

**36x36**  
ELEPPVE36 *M SO*  
ELEPPVE36L *P SO*

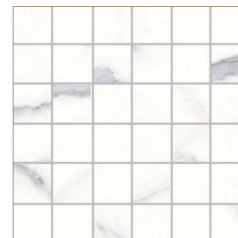
**48x48**  
ELEPPVE48 *M SO*  
ELEPPVE48L *P SO*



**12x24**  
ELEPPVE1224 *M*  
ELEPPVE1224L *P*

**18x36**  
ELEPPVE1836 *M*  
ELEPPVE1836L *P*

**24x48**  
ELEPPVE2448 *M*  
ELEPPVE2448L *P*



**2x2 mosaic**  
ELEPPVEMOS22 *M*



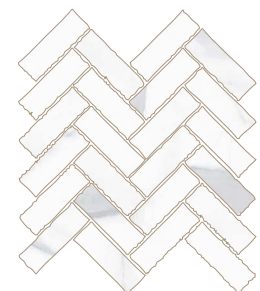
**3x12**  
ELEPPVE312 *M*  
ELEPPVE312L *P*



**3x24 bullnose**  
ELEPPVEBN324 *M*  
ELEPPVEBN324L *P*



**12x12 basketweave**  
ELEPPVEWEAVEL *P*

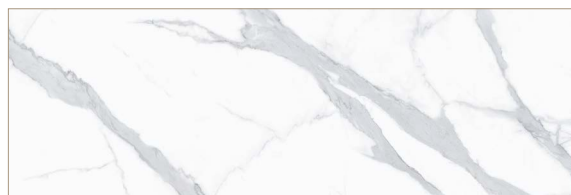


**12x12 herringbone**  
ELEPPVEMOSHER *M*





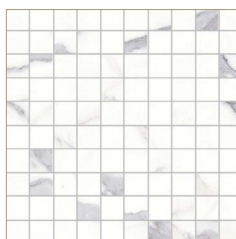
**18x18**  
ELEPWVE18 *M*



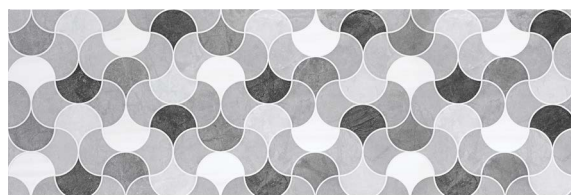
**10x30**  
ELEPWVE1030 *P*



**10x30 bevel**  
ELEPWVE1030BEV *P*



**1x1 mosaic**  
ELEPWVEMOS11 *P*



**10x30 shanghai cold**  
ELEPWVE1030SHA *P*



**10x30 trial cold**  
ELEPWVE1030TRI *P*



**2x10 torello**  
ELEPWVETOR210 *P*



**2x10 bullnose**  
ELEPWVEBN210 *P*

*P* • Polished Finish    *M* • Matte Finish  
*SO* • Special Order (4-6 week delivery)



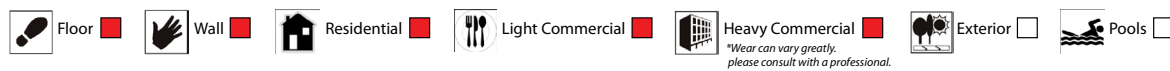
installation of  
**DOLOMITE**





installation of  
**VENATO**

## Suggested Applications



## Installation Suggestions



## Porcelain Type

through-body  color-bodied  glazed  unglazed  double-loaded

48x48: 30  
36x36: 40  
24x48: 30  
24x48: 20  
18x36: 80  
24x24: 55  
18x18: 110  
12x24: 110  
3x12: 200

## Shade Variation



THICKNESS: 10mm

# OF FACES:

## Slip Resistance

DCOF	Values	Applications
0.42	0.42	Recommended Standard DCOF value for wet/dry commercial flooring
	0.65	Recommended Standard DCOF value for ADA ramps

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

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		Critical Angle
Class	Typical Applications	
<input 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, included pool surrounds, jacuzzis (plus all Class A&B areas)	≥24°

## Scratch Resistance

MOH'S SCALE  
UNI EN ISO  
10545.6

7

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

ASTM C1378-04  
UNI EN ISO  
10545.14

4, 5

- 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

## Water Absorption

ASTM C-373  
UNI EN ISO  
10545.3

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

## Breaking Strength

ASTM C648  
UNI EN ISO  
10545.4

Industry standard should be greater than 250 lbs or 50 N/MM<sup>2</sup>

## Facial Dimension

ASTM c499-09  
UNI EN ISO  
10545.02

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

## Chemical Resistance

ASTM C650  
UNI EN ISO  
10545.13

Allowances for:  
result  
Acid   
Bases   
Chemicals

## Leed Information



### REQUIREMENTS FOR COMMERCIAL INTERIORS/NEW CONSTRUCTION

Sustainable Sites	1 Point
Site selection	
SS CREDIT 1 Heat Island Effect-non roof Material with a solar reflectant index of at least 29.	<input checked="" type="checkbox"/>
Energy & Atmosphere	1 Point
EA CREDIT 4 Green Power: Products that optimize energy performance for floors and walls using thermal conductivity. BTU-FT	<input checked="" type="checkbox"/>
Indoor Environmental Quality	1 Point
IEQ CREDIT 3.1-7 Green Cleaning: Reducing occupants exposure to hazardous cleaning chemicals.	<input checked="" 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 checked="" type="checkbox"/>

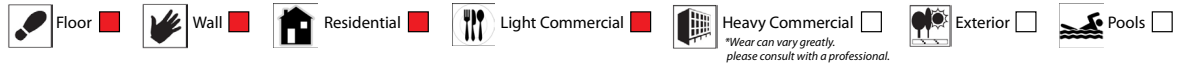
Materials & Resources	1 Point	2 Points
M&R CREDIT 2 Construction Waste Management: Recycling salvaged construction waste in to new reusable materials.	50% <input type="checkbox"/>	70% <input type="checkbox"/>
M&R CREDIT 4.1-4.2 Recycled Content: The sum of post consumer plus 1/2 of the pre consumer reps at least 10-20% of total value of materials.	10% <input type="checkbox"/>	20% <input checked="" 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 checked="" type="checkbox"/>	

Type: **Porcelain Stoneware**  
Product Line: **Portofino (matte)**

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



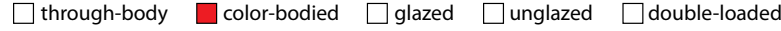
## Suggested Applications



## Installation Suggestions

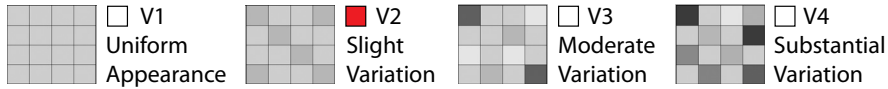


## Porcelain Type



48x48: 30  
36x36: 40  
24x48: 30  
24x48: 20  
18x36: 80  
24x24: 55  
18x18: 110  
12x24: 110  
3x12: 200

## Shade Variation



THICKNESS: 10mm

# OF FACES:

## Slip Resistance

DCOF	Values	Applications
	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		Critical Angle
Class	Typical Applications	
<input 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, included 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

ASTM C1378-04  
UNI EN ISO  
10545.14

3, 4

- 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

## Water Absorption

ASTM C-373  
UNI EN ISO  
10545.3

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

## Breaking Strength

ASTM C648  
UNI EN ISO  
10545.4

Industry standard should be greater than 250 lbs or 50 N/MM<sup>2</sup>

## Facial Dimension

ASTM c499-09  
UNI EN ISO  
10545.02

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

## Chemical Resistance

ASTM C650  
UNI EN ISO  
10545.13

Allowances for:  
result  
Acid   
Bases   
Chemicals

## Leed Information



### REQUIREMENTS FOR COMMERCIAL INTERIORS/NEW CONSTRUCTION

Sustainable Sites	1 Point
Site selection SS CREDIT 1 Heat Island Effect-non roof Material with a solar reflectant index of at least 29.	<input checked="" type="checkbox"/>
Energy & Atmosphere	1 Point
EA CREDIT 4 Green Power: Products that optimize energy performance for floors and walls using thermal conductivity. BTU-FT	<input checked="" type="checkbox"/>
Indoor Environmental Quality	1 Point
Low-Emitting Materials-Flooring Systems IEQ CREDIT 3.1-7 Green Cleaning: Reducing occupants exposure to hazardous cleaning chemicals.	<input checked="" 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 checked="" 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 checked="" 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 checked="" type="checkbox"/>	

Type: Porcelain Stoneware

Product Line: Portofino (polished)

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

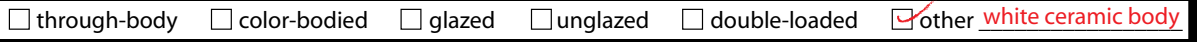
## Suggested Applications



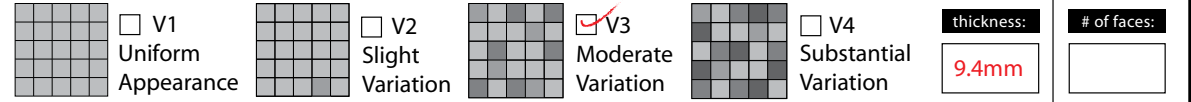
## Installation Suggestions



## Porcelain Type



## Shade Variation



## Slip Resistance



COF	WET		DRY		DCOF
	standard*	result	standard*	result	
accessible routes	.6		.6		
ramps	.8		.8		

\*Industry Standard/ADA Requirements

Values	Tile Classification
0 - 0.50	Questionable
0.50 - 0.60	Conditionally Slip Resistant
> 0.60	Slip Resistant

ASTM C-1028  
DIN 51097/51130

DIN 51130	DIN 51097 Class	Typical Applications	Critical Angle
<input type="checkbox"/> R9* 3-10°	<input type="checkbox"/> A	Barefoot, but mainly dry aisles and walkways, dry changing areas	≥12°
<input type="checkbox"/> R10 10-19°	<input type="checkbox"/> B	Shower rooms, pool surrounds, wet changing areas, disinfectant spray areas (plus all Class A areas)	≥18°
<input type="checkbox"/> R11 19-27°	<input type="checkbox"/> C	Areas constantly under water, e.g. steps into pools, foot baths, included pool surrounds, jacuzzis (plus all Class A&B areas)	≥24°
<input type="checkbox"/> R12 27-35°			
<input type="checkbox"/> R13 >35°			

## Wear Resistance

PEI RATING  
UNI EN ISO  
10545.7

- Class 1: Walls only
- Class 2: Resid. floors w/minimal abrasive traffic.
- Class 3: Resid. interiors normal use and foot traffic.
- Class 4: Light-medium commercial applications.
- Class 5: Commercial applications.

Product Line:  
**Portofino**

Type:  
**Ceramic Wall Tile**



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