

Onyx

porcelain stoneware



COBSA USA

NEW YORK | NEW JERSEY | MIAMI



Ivory



ELEONIV1224
ELEONIV1224L



M+P | 12x24 |

ELEONIV2448
ELEONIV2448L



M+P | 24x48 |

ELEONIV312
ELEONIV312L



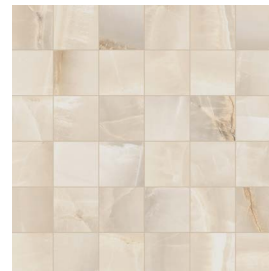
M+P | 3x12 |

ELEONIVHEXL



P | 4x4 hex |

ELEONIVMOS22



M | 2x2 mosaic |

ELEONIVWEAVEL



P | basketweave |

ELEONIVBN324
ELEONIVBN324L



M+P | 3x24 bullnose |



Ocean



OCEAN

ELEONOC1224
ELEONOC1224L



M+P | 12x24 |

ELEONOC2448
ELEONOC2448L



M+P | 24x48 |

ELEONOC312
ELEONOC312L



M+P | 3x12 |

ELEONOCBN324
ELEONOCBN324L



M+P | 3x24 bullnose |

ELEONOCHEXL



P | 4x4 hex |

ELEONOCMOS22



M | 2x2 mosaic |

ELEONOCWEAVEL



P | basketweave |



Silver



ELEONSI1224
ELEONSI1224L



M+P | 12x24 |

ELEONSI2448
ELEONSI2448L



M+P | 24x48 |

ELEONSI312
ELEONSI312L



M+P | 3x12 |

ELEONSIBN324
ELEONSIBN324L



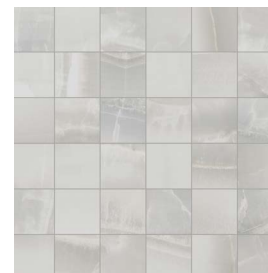
M+P | 3x24 bullnose |

ELEONSIHEXL



P | 4x4 hex |

ELEONSIMOS22



M | 2x2 mosaic |

ELEONSIWEAVEL



P | basketweave |



White



ELEONWH1224
ELEONWH1224L



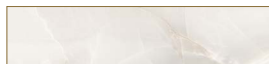
M+P | 12x24 |

ELEONWH2448
ELEONWH2448L



M+P | 24x48 |

ELEONWH312
ELEONWH312L



M+P | 3x12 |

ELEONWHBN324
ELEONWHBN324L



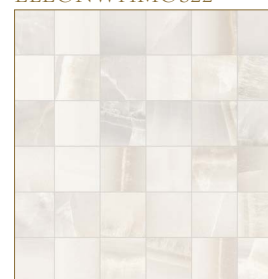
M+P | 3x24 bullnose |

ELEONWHHEXL



P | 4x4 hex |

ELEONWHMOS22



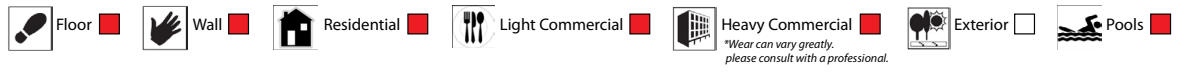
M | 2x2 mosaic |

ELEONWHWEAVEL

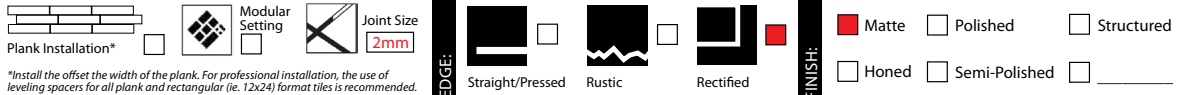


P | basketweave |

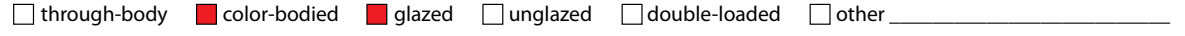
Suggested Applications



Installation Suggestions



Porcelain Type



Shade Variation



Slip Resistance

DCOF	Values	Applications
<input checked="" type="checkbox"/> ≥0.42	0.42	Recommended Standard DCOF value for wet/dry commercial flooring
<input type="checkbox"/> ≥0.65	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

<input checked="" type="checkbox"/> R9* (3-10°)	<input type="checkbox"/> R10 (10-19°)	<input type="checkbox"/> R11** (19-27°)
<input type="checkbox"/> R12 (27-35°)	<input type="checkbox"/> R13 (>35°)	

DIN 51097

Class	Typical Applications	Critical Angle
<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

MINERAL

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

Industry standard ≤175mm²

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

- 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

3-5

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

>45 n/mm²

Industry standard should be greater than
250 lbs
or
50 N/MM2

Facial Dimension

ASTM c499-09
UNI EN ISO
10545.02

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

Chemical Resistance

ASTM C650
UNI EN ISO
10545.13

Allowances for:

result	
Acid	PASS
Bases	PASS
Chemicals	PASS

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 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 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 checked="" type="checkbox"/>

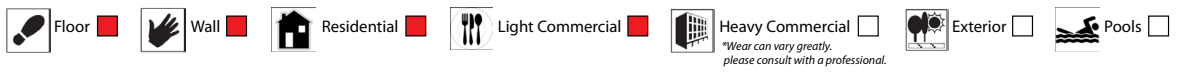
Materials & Resources	1 Point	2 Points
M&R CREDIT 2 Construction Waste Management: Recycling salvaged construction waste in to new reusable materials.	50% <input type="checkbox"/>	70% <input checked="" type="checkbox"/>
M&R CREDIT 4.1-4.2 Recycled Content: The sum of post consumer plus 1/2 of the pre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

Product Line:
ONYX

The marketing name for this product is property of CobsA-USA. This same product may be marketed under different names.

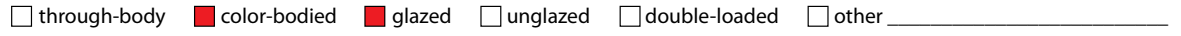
Suggested Applications



Installation Suggestions



Porcelain Type



Shade Variation



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

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

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

<input type="checkbox"/> R9* (3-10°)	<input type="checkbox"/> R10 (10-19°)	<input type="checkbox"/> R11** (19-27°)
<input type="checkbox"/> R12 (27-35°)	<input type="checkbox"/> R13 (>35°)	

DIN 51097

Class	Typical Applications	Critical Angle
<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

MINERAL

- Talc (Talc)
 - Gypsum (Fingernail)
 - Calcite (Penny)
 - Flourite (Some Marbles)
 - Apatite (Knife Blade)
 - Microline (Glass, Glazed Tile)
 - Quartz (Unglazed Porcelain)
 - Topaz (Granite)
 - Corundum (Ruby)
 - Diamond (Diamond)
- Industry standard ≤175mm²

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

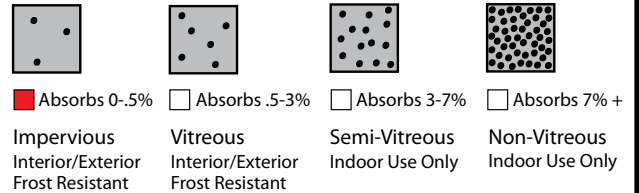
ASTM C1378-04
UNI EN ISO
10545.14

3,4

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

Water Absorption

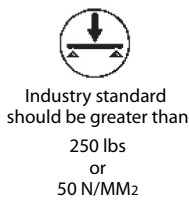
ASTM C-373
UNI EN ISO
10545.3



Breaking Strength

ASTM C648
UNI EN ISO
10545.4

>45 n/mm²



Facial Dimension

ASTM c499-09
UNI EN ISO
10545.02

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

Chemical Resistance

ASTM C650
UNI EN ISO
10545.13

Allowances for:

	result
Acid	PASS
Bases	PASS
Chemicals	PASS

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 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 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 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 checked="" 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 (Polished Finish)**
Product Line: **ONYX**

The marketing name for this product is property of CobsA-USA. This same product may be marketed under different names.



COBSA USA

NEW YORK | NEW JERSEY | MIAMI