

HARMONY

porcelain stoneware



COBSA USA

NEW YORK | NEW JERSEY | MIAMI

CARAMEL

Harmony



MAIHACA2448



- 24x48 -

MAIHACATUBE



- 24x48 tube -

Harmony

CLAY



MAIHACL2448



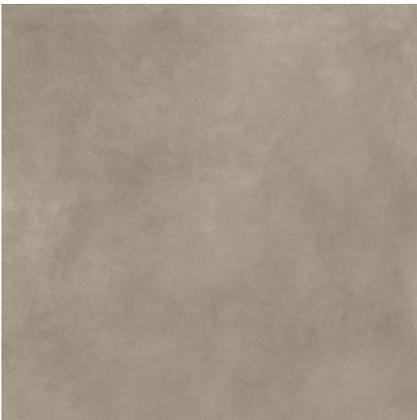
- 24x48 -

MAIHACLTUBE



- 24x48 tube -

MAIHACL48



- 48x48 -

HRFHACL1/4



- 48x110 -

COAL

Harmony



MAIHACO2448



- 24x48 -

MAIHACOTUBE



- 24x48 tube -

MAIHACO48



- 48x48 -

HRFHACO1/4



- 48x110 -

Harmony

SUGAR



MAIHASU2448



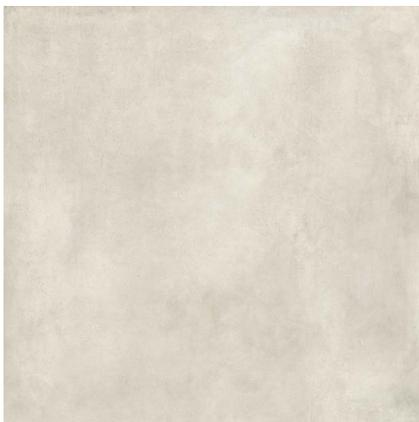
- 24x48 -

MAIHASUTUBE



- 24x48 tube -

MAIHASU48



- 48x48 -

HRFHASU1/4



- 48x110 -

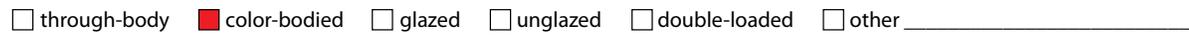
Suggested Applications



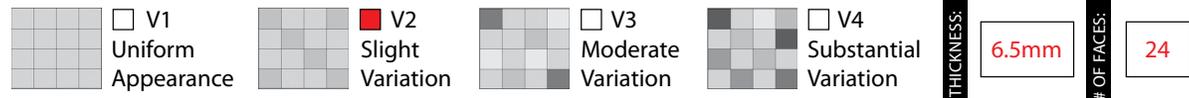
Installation Suggestions



Porcelain Type



Shade Variation



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

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°)

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

DIN 51097		
Class	Typical Applications	Critical Angle
<input checked="" type="checkbox"/> A	Barefoot, but mainly dry aisles and walkways, dry changing areas	≥12°
<input checked="" 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 **<13mm**

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 **3**

- 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%	Interior/Exterior Frost Resistant	Interior/Exterior Frost Resistant	Indoor Use Only	Indoor Use Only
<input type="checkbox"/> Absorbs .5-3%				
<input type="checkbox"/> Absorbs 3-7%				
<input type="checkbox"/> Absorbs 7% +				

Breaking Strength

ASTM C648
UNI EN ISO 10545.4 **>700N**



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

Lead 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 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 checked="" 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 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: **Harmony**

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