D•Mansion













SOFT

□•Mansion

18"x18"

MOSAIC 12"x12"



SOFT

18"x18" ÷ 9 mm

12"x12" ÷ 9 mm



9"x18" ÷ 9 mm



Mosaic 12"x12" ÷ 9 mm



6"x6" ÷ 9 mm



Battiscopa 3^{1/8}"x12" ÷ 9 mm





FINE

•Mansion

18"x18" 9"x18" 6"x6" MOSAIC 12"x12"





9"x18" ÷ 9 mm

Mosaic 12"x12" ÷ 9 mm





Battiscopa 3^{1/8}"x12" ÷ 9 mm



□•Mansion

RICH

18"x18"





RICH

18"x18" ÷ 9 mm

12"x12" ÷ 9 mm



9"x18" ÷ 9 mm



Mosaic 12"x12" ÷ 9 mm



6"x6" ÷ 9 mm





Battiscopa 3^{1/8}"x12" ÷ 9 mm







100% REUSE OF UNFIRED TILES

Crude waste generated by the process is reintegrated in the production cycle with no costs for the environment. This contributes to the safeguard of natural resources.



100% RECYCLING OF THE INDUSTRIAL WASTE (FIRED TILES)

All the waste-fired tiles generated by the process are recycled from the building industry as inert supports for road subsoils and foundations, reducing the use of new natural resources.

RECYCLE OF 100% OF NON CERAMIC WASTE

100% of non ceramic waste is differentiated and recycled in other production cycles.



100% WATER RECYCLING

The water used in the production process is 100% recycled. The water demand is reduced by about 60% by this mean. No industrial water is discharged in the ecosystem.



LOW EMISSIONS IN THE ATMOSPHERE

Panaria complies strictly to US Standards with a very small amount of gas emissions in the atmosphere (cfr Post-Kyoto Protocol negotiations on greenhouse gas emissions).



HIGH REDUCTION OF METHANE CONSUMPTION (-25%)

Methane consumption is highly reduced (-25%) by the use of up to date technologies and customized installations.



SAFETY REQUIREMENTS: "ANTISLIP" PROPERTIES

D•MANSION has got "Antislip" properties (ASTM C1028: SCOF ≥ 0.60), in order to provide the highest safety and quality of life to those who both live and design the buildings.



SAFETY REQUIREMENTS: NO FIRE REACTION

Panaria tiles are totally flameproof, it withstands the destructive action of fire, it does not promote flame spread and, on contact with flames, does not produce either smoke or toxic fumes: therefore they are classified in Class A1fl and A1 (no reaction to fire) from the EU Decision 96/60/CE.



100% RECYCLABLE PANARIA PACKING MATERIAL

Panaria packing material is 100% recyclable (carton boxes, plastic packaging materials, wooden pallets, straps, etc..).



A DEDICATED SCORING CARD IS AVAILABLE, AS AN EFFECTIVE TOOL TO CALCULATE THE LEED POINTS INVOLVED, DEPENDING ON THE PRODUCT USED AND COMBINED WITH THE WHOLE PROJECT FEATURES, GRANTING EXTRA POINTS WHEN ITS DISTANCE FROM THE PRODUCTION SITE OF THE TILE LAYS WITHIN 500 MILES.

anaria CERAMICA

PANARIA Ceramica is a member of the **U.S. GREEN BUILDING COUNCIL**: this is an organisation that promotes buildings that are environmentally friendly, profitable and healthy places to live and work in.

LEED CREDITS

SS CREDIT 7.1 - HEAT ISLAND EFFECT / NON ROOF (NC, CI, CS, SCHOOLS LEED Rating Systems):

<u>1 LEED POINT</u> is granted for the use of hardscape materials with SRI \geq 29.

D•MANSION DOES NOT CONTRIBUTE TO CHANGE THE ENERGY BALANCE OF THE ENVIRONMENTS WHERE THEY ARE INSTALLED.

It does not produce any Urban Heat Island Effect, thanks to its very good physical properties, i.e. Solar Reflectance Index SRI ≥ 29.

EA CREDIT 1 - OPTIMIZE ENERGY PERFORMANCE (NC, CI, CS, SCHOOLS LEED Rating Systems)

The Thermal conductivity λ of D•MANSION porcelain tiles is 0.75 Btu/ft h °F (1,3 Watt/m°K or 1,1 Kcal/m h °C). For this reason it is ideal for heating floor systems and external cladding.

MR CREDIT 2 - CONSTRUCTION WASTE MANAGEMENT (NC, CI, CS, SCHOOLS LEED Rating Systems):

2 LEED POINTS are granted if at least 75% of the weight of raw materials – tiles and packing - will be recycled.

D•MANSION TILES and their PACKING MATERIAL (carton boxes, plastic packaging materials, wooden pallets, straps, etc..) ARE 100% RECYCLABLE. The management of the waste on the building site is also easier because the quantity of waste is very small (weight of packaging is around 2-3% of weight of total material).

MR CREDIT 4 - RECYCLED CONTENT (NC, CI, CS, SCHOOLS LEED Rating Systems): <u>2 LEED POINTS</u> are granted if the % post-consumer waste + ½% pre-consumer waste ≥ 20% of the total raw materials, based on cost. D•MANSION porcelain tiles are produced with 40% OF PRE-CONSUMER RECYCLED MATERIALS as certified by a qualified external company. The certificate is available on the website <u>www.panaria.it</u>

MR CREDIT 5 - REGIONAL MATERIALS (NC, CS, SCHOOLS LEED Rating Systems): <u>2 LEED POINTS</u> are granted if the use of local raw materials is equal to 20% of the total materials value, based on cost.

- These Credits are applicable for buildings constructed within 500 miles (804,5 km) from the production site of Lawrenceburg, Kentucky USA.
- The % contribution based on cost of D•MANSION tiles to a single LEED project is calculated based on the geographical position of the construction site.

MR CREDIT 5 - REGIONAL MATERIALS (CI LEED Rating System only):

- 1 LEED POINT: use a minimum of 20% of the combined value of construction and Division 12 (Furniture) materials and products that are manufactured regionally within a radius of 500 miles from the production site of Lawrenceburg, Kentucky USA.
- 2 LEED POINTS: meet the previous criterion requirement and use a minimum of 10% of the combined value of
 construction and Division 12 (Furniture) materials and products extracted, harvested or recovered, as well as
 manufactured, within 500 miles of the LEED project.

IEQ CREDIT 4.1 - LOW EMITTING MATERIALS, ADHESIVES AND SEALANTS (NC, CI, CS, SCHOOLS LEED Rating Systems): **1 LEED POINT** is granted if all adhesives and sealants used on the interior of the building comply with SCAQMD Rule #1168 (VOC limit of ceramic adhesives not more than 65 g/l less water).

IEQ CREDIT 4.3 - LOW EMITTING MATERIALS, FLOORING SYSTEMS

(NC, CI, CS, SCHOOLS LEED Rating Systems): 1 LEED POINT is granted if all flooring complies with the requirements indicated in IEQ Credit 4.3 Section.

D•MANSION tiles obtain 1 LEED point because they do not contain any Volatile Organic Compounds VOC (see LEED 2009 NC, CI, CS, SCHOOLS Rating Systems).

IEQ CREDIT 4.6 - LOW EMITTING MATERIALS, CEILING AND WALL SYSTEMS

(SCHOOLS LEED Rating System only): 1 LEED POINT.

D•MANSION tiles obtain 1 LEED point because they do not contain any Volatile Organic Compounds VOC (see Addenda of LEED Reference Guide for Green Building Design and Construction, 2009 Edition).

ID CREDIT 1 - INNOVATION IN DESIGN: 1-5 LEED POINTS for NC, Cl and CS, 1-4 LEED POINTS for SCHOOLS:

- "EXEMPLARY PERFORMANCES" MR CREDIT 2 CONSTRUCTION WASTE MANAGEMENT: 1 LEED POINT may be earned if at least 95% by weight of the Raw Materials material and packing will be recycled.

 D•MANSION tiles and their packing material (carton boxes, plastic packaging materials, wooden pallets, straps, etc..) ARE 100% RECYCLABLE.
- "EXEMPLARY PERFORMANCES" IEQ CREDIT 4.6 LOW EMITTING MATERIALS, CEILING AND WALL
 SYSTEMS: 1 LEED POINT may be earned for NC, CI, CS LEED Buildings. No traces of VOC (Volatile Organic
 Compounds) are present in D•MANSION tiles (see Addenda of LEED Reference Guide for Green Building Design
 and Construction. 2009 Edition).

RP CREDIT 1- REGIONAL PRIORITY (NC, CI, CS, SCHOOLS LEED Rating Systems): 1-4 LEED POINTS

Between 1 and 4 credits can be obtained, of the 6 Regional Priority credits identified by the USGBC regional councils and chapters, if the project has an environmental importance for the region, where it is being constructed. A database of Regional Priority credits and their geographic applicability is available on the USGBC website www.usgbc.org.

EBOM LEED RATING SYSTEM - EXISTING BUILDINGS OPERATIONS AND MAINTENANCE

The cleaning and maintenance procedures on PANARIA Ceramica's general catalogue can help obtain the following LEED credits.

SS CREDIT 7.1 - HEAT ISLAND REDUCTION (NON ROOF): 1 LEED POINT is granted if a maintenance program is organized, that ensures the surfaces are cleaned at least every 2 years to maintain a good reflectance.

IEQ 3.1 - GREEN CLEANING, HIGH PERFORMANCE CLEANING PROGRAM: 1 LEED POINT.

IEQ 3.3 - GREEN CLEANING, PURCHASE OF SUSTAINABLE CLEANING PRODUCTS AND MATERIALS:
1 LEED POINT

MR 3 - SUSTAINABLE PURCHASING, FACILITY ALTERATIONS AND ADDITIONS: 1 LEED POINT is granted if the purchases contain at least 10% post-consumer waste and/or 20% pre-consumer waste material. D•MANSION porcelain tiles are produced with 40% of pre-consumer recycled materials, as certified by a qualified external company. The certificate is available on the website www.panaria.it

NC = LEED 2009 for New Construction. CI = LEED 2009 for Commercial Interior. CS = LEED 2009 for Core and Shell Development. SCHOOLS = LEED 2009 for Schools. EBOM = LEED 2009 for Existing Buildings Operations and Maintenance.

16

TECHNICAL FEATURES

EN 14411-G (Bla - GL) • ANSI A137.1-GL (Glazed Porcelain Tiles - P1 class) • ISO 13006-G (Bla-GL)

	SLIP RESISTANCE	BOT 3000 ANSI A137.1	DCOF ≥ 0.42	
PE	SURFACE ABRASION	ASTM C1027	PEI 5	
*	STAIN RESISTANCE	ASTM C1378	A RESISTANT	
0	CHEMICAL RESISTANCE (*)	ASTM C650	A RESISTANT	
	SHADE VARIATION	V2 SLIGHT VARIATION		





Product designed in Italy



GREENGUARD CERTIFICATION Panaria DMANSION series is made in a production plan "GOLD" certified by GREENGUARD.







PACKINGS AND WEIGHTS

DESCRIPTION	SIZES	PIECES BOX	WEIGHT BOX (KG.)	SQM BOX	LM BOX	BOXES PALLET	WEIGHT PALLET (KG.)	SQM PALLET
FONDO	18"X18"	7	31	1,45	-	32	992	46,40
FONDO	12"X12"	11	22	1,01	-	64	1408	64,64
FONDO	9"X18"	14	30	1,46	-	48	1440	70,08
FONDO	6"X6"	42	20	0,98	-	56	1120	54,88
BATTISCOPA	3 ^{1/8} "X12"	20	9	0,48	6	80	720	38,40
MOSAIC 16 PCS	12"X12"	4	7,5	0,36	-	81	607,5	29,16





GRAPHIC DESIGN: MARKETING PANARIA APRIL 2014

^{*} No Hydrofluoric acid and derivatives

Mansion



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