

CONTRIBUTION TO OBTAINING THE CREDITS REQUIRED FOR LEED ENVIRONMENTAL SUSTAINABILITY CERTIFICATION FOR BUILDINGS SUPPLIED WITH APPIANI PRODUCTS

PRODUCTS:

- A) SINGLE-PRESS FIRING
- B) DOUBLE FIRING
- C) GLAZED PORCELAIN STONEWARE

As specified in the following table, the product ranges manufactured by Appiani can contribute to obtaining the points required for each Credit, in the various Credit Categories, required to obtain LEED certification for buildings according to the provisions of the Evaluation Protocols described below.

If the Specific Requirements laid down in the LEED assessment systems are satisfied, one or more points can be allocated to each Credit in order to achieve the various thresholds laid down for LEED certification of the whole building.

The requirements to be satisfied are laid down in each Credit described for the various Credit Categories which are evaluated both in the LEED Protocol NC 2009 NC – USGBC and LEED Protocol NC 2009 Italy – GBC Italy.

LEED certification thresholds for buildings:

- Basic Certification: 40 ÷ 49 points (Certified)
- Silver Certification: 50 ÷ 59 points (Silver)
- Gold Certification: 60 ÷ 79 points (Gold)
- Platinum Certification: 80 ÷ 110 points (Platinum)

CONTRIBUTION TO OBTAINING CREDITS FOR LEED CERTIFICATION OF BUILDINGS

A) Product: **Single-press Firing**

LEED			
CREDIT CATEGORY	CREDIT	DESCRIPTION OF CONTRIBUTION PROVIDED TO OBTAIN POINTS	POINTS ALLOCATED
SS Site Sustainability	SS 7.1: Heat Island Effect (exterior surfaces)	The products can contribute to obtaining the points laid down in the credit if made from material with a Solar Reflectance Index (SRI) above the threshold of 29	1 POINT
	SS 7.2: Heat Island Effect (roofing)	The products can contribute to obtaining the points laid down in the credit if made from material with a Solar Reflectance Index (SRI) above the threshold of 29	1 POINT
EA Energy and Atmosphere	EA 1: Optimisation of energy performance	The products can contribute to obtaining additional points if the whole design ensures the reduction of energy need of between: 8% min - 48% max	1-19 POINTS
MR Materials and Resources	MR 1.2: Reuse of buildings: maintenance of 50% of non-structural internal elements	The products can contribute to obtaining the points laid down in the credit as their intrinsic features of DURABILITY ensure the maintenance of non-structural elements of floor and wall tiling in existing buildings.	1 POINT
	MR 2: Management of building waste: reduce the amounts delivered to landfills by 50% (or 75%)	The products can contribute to obtaining the points laid down in the credit as their intrinsic features of CHEMICAL INERTIA allow the waste deriving from demolition of existing buildings to be used to replace the inert materials used in the work.	1-2 POINTS
	MR 4: Recycled content: 10% (or 20%) post-consumer + 1/2 pre-consumer	The products can contribute to obtaining the points laid down in the credit as their pre-consumer recycled material content amounts to: 15%	1-2 POINTS
	MR 5: Regional materials: 10% (or 20%) extracted, processed and produced regionally	The products can contribute to obtaining the points laid down in the credit as the raw materials used to produce them are 100% Regional Materials (coming from a distance of 350 km /1050 km)	1-2 POINTS
IEQ/QI Indoor Environmental Quality	IEQ/QI 4.3: Low-emitting materials VOC: flooring	The products can contribute to obtaining the points laid down in the credit as they are made in a manufacturing cycle in which the material emits no Volatile Organic Compounds (VOC) during installation or use	1 POINT
ID/IP Innovation and Design Process	ID/IP 1: Design innovation	The products can contribute to obtaining additional points in the event of exemplary or innovative performance being demonstrated, such as for Credits: - MR Credit 4: Recycled material content (> 30 %, > 40 %) - MR Credit 5: Regional material content (> 30 %, > 40 %)	1-5 POINTS

CONTRIBUTION TO OBTAINING CREDITS FOR LEED CERTIFICATION OF BUILDINGS

B) Product: Double Firing

LEED			
CREDIT CATEGORY	CREDIT	DESCRIPTION OF CONTRIBUTION PROVIDED TO OBTAIN POINTS	POINTS ALLOCATED
SS Site Sustainability	SS 7.1: Heat Island Effect (exterior surfaces)	The products can contribute to obtaining the points laid down in the credit if made from material with a Solar Reflectance Index (SRI) above the threshold of 29	1 POINT
	SS 7.2: Heat Island Effect (roofing)	The products can contribute to obtaining the points laid down in the credit if made from material with a Solar Reflectance Index (SRI) above the threshold of 29	1 POINT
EA Energy and Atmosphere	EA 1: Optimisation of energy performance	The products can contribute to obtaining additional points if the whole design ensures the reduction of energy need of between: 8% min - 48% max	1-19 POINTS
MR Materials and Resources	MR 1.2: Reuse of buildings: maintenance of 50% of non-structural internal elements	The products can contribute to obtaining the points laid down in the credit as their intrinsic features of DURABILITY ensure the maintenance of non-structural elements of floor and wall tiling in existing buildings.	1 POINT
	MR 2: Management of building waste: reduce the amounts delivered to landfills by 50% (or 75%)	The products can contribute to obtaining the points laid down in the credit as their intrinsic features of CHEMICAL INERTIA allow the waste deriving from demolition of existing buildings to be used to replace the inert materials used in the work.	1-2 POINTS
	MR 4: Recycled content: 10% (or 20%) post-consumer + ½ pre-consumer	The products can contribute to obtaining the points laid down in the credit as their pre-consumer recycled material content amounts to: 15%	1-2 POINTS
	MR 5: Regional materials: 10% (or 20%) extracted, processed and produced regionally	The products can contribute to obtaining the points laid down in the credit as the raw materials used to produce them are 100% Regional Materials (coming from a distance of 350 km /1050 km)	1-2 POINTS
IEQ/QI Indoor Environmental Quality	IEQ/QI 4.3: Low-emitting materials VOC: flooring	The products can contribute to obtaining the points laid down in the credit as they are made in a manufacturing cycle in which the material emits no Volatile Organic Compounds (VOC) during installation or use	1 POINT
ID/IP Innovation and Design Process	ID/IP 1: Design innovation	The products can contribute to obtaining additional points in the event of exemplary or innovative performance being demonstrated, such as for Credits: - MR Credit 4: Recycled material content (> 30 %, > 40 %) - MR Credit 5: Regional material content (> 30 %, > 40 %)	1-5 POINTS

CONTRIBUTION TO OBTAINING CREDITS FOR LEED CERTIFICATION OF BUILDINGS

C) Product: **Glazed Porcelain Stoneware**

LEED			
CREDIT CATEGORY	CREDIT	DESCRIPTION OF CONTRIBUTION PROVIDED TO OBTAIN POINTS	POINTS ALLOCATED
SS Site Sustainability	SS 7.1: Heat Island Effect (exterior surfaces)	The products can contribute to obtaining the points laid down in the credit if made from material with a Solar Reflectance Index (SRI) above the threshold of 29	1 POINT
	SS 7.2: Heat Island Effect (roofing)	The products can contribute to obtaining the points laid down in the credit if made from material with a Solar Reflectance Index (SRI) above the threshold of 29	1 POINT
EA Energy and Atmosphere	EA 1: Optimisation of energy performance	The products can contribute to obtaining additional points if the whole design ensures the reduction of energy need of between: 8% min - 48% max	1-19 POINTS
MR Materials and Resources	MR 1.2: Reuse of buildings: maintenance of 50% of non-structural internal elements	The products can contribute to obtaining the points laid down in the credit as their intrinsic features of DURABILITY ensure the maintenance of non-structural elements of floor and wall tiling in existing buildings.	1 POINT
	MR 2: Management of building waste: reduce the amounts delivered to landfills by 50% (or 75%)	The products can contribute to obtaining the points laid down in the credit as their intrinsic features of CHEMICAL INERTIA allow the waste deriving from demolition of existing buildings to be used to replace the inert materials used in the work.	1-2 POINTS
	MR 4: Recycled content: 10% (or 20%) post-consumer + ½ pre-consumer	The products can contribute to obtaining the points laid down in the credit as their pre-consumer recycled material content amounts to: 16.8%	1-2 POINTS
	MR 5: Regional materials: 10% (or 20%) extracted, processed and produced regionally	The products can contribute to obtaining the points laid down in the credit as the raw materials used to produce them are 100% Regional Materials (coming from a distance of 350 km /1050 km)	1-2 POINTS
IEQ/QI Indoor Environmental Quality	IEQ/QI 4.3: Low-emitting materials: flooring	The products can contribute to obtaining the points laid down in the credit as they are made in a manufacturing cycle in which the material emits no Volatile Organic Compounds (VOC) during installation or use	1 POINT
ID/IP Innovation and Design Process	ID/IP 1: Design innovation	The products can contribute to obtaining additional points in the event of exemplary or innovative performance being demonstrated, such as for Credits: - MR Credit 4: Recycled material content (> 30 %, > 40 %) - MR Credit 5: Regional material content (> 30 %, > 40 %)	1-5 POINTS