

COMPLIANCE WITH CREDITS FOR LEED CERTIFICATION SYSTEM GREEN BUILDING RATING SYSTEMS

LEED COMMERCIAL INTERIORS

SS Cr.1 Site Selection. Path 5. Heat Island Effect - Roof	1 Point
MR Cr.4 Recycled Content	1-2 Points
MR Cr.5 Regional Materials	1-2 Points
IEQ Cr.4.3. Low emitting materials. Flooring systems	1 Point

LEED RETAIL NEW CONSTRUCTION

LEED NEW CONSTRUCTION

LEED CORE & SHELL

SS Cr.7.1. Heat island effect -nonroof-	1 Points
SS Cr.7.2. Heat island effect -roof-	1 Point
MR Cr.4 Recycled Content	1-2 Points
MR Cr.5 Regional Materials	1-2 Points
IEQ Cr.4.3. Low emitting materials. Flooring systems	1 Point

LEED FOR SCHOOLS

SS Cr.7.1. Heat island effect -nonroof-	1 Point
SS Cr.7.2. Heat island effect -roof-	1 Point
MR Cr.4 Recycled Content	1-2 Points
MR Cr.5 Regional Materials	1-2 Points
IEQ Cr.4.3. Low emitting materials. Flooring systems	1 Point
IEQ Cr.4.6. Low emitting materials. Ceiling and wall systems	1 Points

LEED EXISTING BUILDINGS

SS Cr.7.1. Heat island effect -nonroof-	1 Point
SS Cr.7.2. Heat island effect -roof-	1 Point
MR Cr.3. Sustainable Purchasing - facility alterations and additions	1 Point

LEED HEALTHCARE

SS Cr.7.1. Heat island effect -nonroof-	1 Point
SS Cr.7.2. Heat island effect -roof-	1 Point
MR Cr.3. Sustainably Sourced Materials and products	1-4 Points
IEQ Cr.4. Low emitting Materials	1 Point

LEED FOR HOMES

SS CR.3 Local Heat Island Effects (roof & nonroof)	1-2 Points
MR Cr.2. Environmentally Preferable Products	0,5-8 Points

LEED NEIGHBORHOOD DEVELOPMENT

GIB Cr.9. Heat Island Reduction	1 Point
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LEED RETAIL NEW CONSTRUCTION

EA-Prerequisite 2. Minimum Energy Performance	Mandatory
EA- Cr. 1 Optimize Energy Performance	1-19 Points
MR Cr 1.2. Building Reuse – Maintain interior non structural elements	1 Point
MR Cr 3. Materials Reuse	1-2 Points
IEQ Cr. 3.1. Construction Indoor Air Quality Management Plan—During Construction	1 Point
IEQ Cr. 3.2. Construction Indoor Air Quality Management Plan—Before Occupancy	1 Point

LEED FOR SCHOOLS

EA-Prerequisite 2. Minimum Energy Performance	Mandatory
EA- Cr. 1 Optimize Energy Performance	1-19 Points
MR Cr 3. Materials Reuse	1-2 Points
IEQ Cr. 3.1. Construction Indoor Air Quality Management Plan—During Construction	1 Point
IEQ Cr. 3.2. Construction Indoor Air Quality Management Plan—Before Occupancy	1 Point

LEED FOR SCHOOLS

EA-Prerequisite 2. Minimum Energy Performance	Mandatory
EA- Cr. 1 Optimize Energy Performance	3-21 Points
MR Cr 1.2. Building Reuse – Maintain interior non structural elements	1 Point
MR Cr 3. Materials Reuse	1 Point
IEQ Cr. 3.1. Construction Indoor Air Quality Management Plan—During Construction	1 Point

DIRECT CREDITS

	Sustainable Sites		Materials and Resources		Indoor Environmental Quality	
LEED Commercial Interiors		SS Credit 1: Site Selection. Path 5. Heat Island Effect—Roof 1 Point				
LEED Retail New Construction	SS Cr 7.1 Heat island effect—nonroof (SRI) 1 Point	SS Cr 7.2 Heat island effect—Roof (SRI) 1 Point	MR Cr4 Recycled Content 1-2 Points	MR Cr5 Regional Materials 1-2 Points	IEQ 4.3 Low-emitting materials-Flooring systems 1 Point	IEQ 4.6 Low-emitting materials. Ceiling and wall systems 1 Point
LEED New Construction						
LEED Core & Shell						
LEED for Schools						
LEED Existing Buildings			MR Cr3 Sustainable purchasing – facility alterations and additions 1 Point			
LEED Healthcare	MR Credit 3: Sustainably Sourced Materials and Products 1-4 Points	IE Q Credit 4: Low-Emitting Materials 1-4 Points				
LEED for homes	SS 3. Local Heat Island Effects 2 Points: 1 point (roof);1 point (non-roof)	Environmentally Preferable Products 0,5-8 Points				
LEED Neighborhood Development	Green Infrastructure and Buildings					
	Credit 9: Heat Island Reduction 1 Point					

INDIRECT CREDITS

Energy and Atmosphere	Materials and Resources	Indoor Environmental Quality
EA-Prerequisite 2. Minimum Energy Performance Mandatory	MR Cr 1.2. Building Reuse – Maintain interior non structural elements 1 Point	IEQ Cr. 3.1. Construction Indoor Air Quality Management Plan—During Construction 1 Point
EA- Cr. 1 Optimize Energy Performance 1-19 Points	MR Cr 3. Materials Reuse 1-2 Points	IEQ Cr. 3.2. Construction Indoor Air Quality Management Plan—Before Occupancy 1 Point
EA-Prerequisite 2. Minimum Energy Performance Mandatory	MR Cr 3. Materials Reuse 1-2 Points	IEQ Cr. 3.1. Construction Indoor Air Quality Management Plan—During Construction 1 Point
EA- Cr. 1 Optimize Energy Performance 1-19 Points		IEQ Cr. 3.2. Construction Indoor Air Quality Management Plan—Before Occupancy 1 Point
EA-Prerequisite 2. Minimum Energy Performance Mandatory	MR Cr 1.2. Building Reuse – Maintain interior non structural elements 1 Point	IEQ Cr. 3. Construction Indoor Air Quality Management Plan—During Construction 1 Point
EA- Cr. 1 Optimize Energy Performance 3-21 Points	MR Cr 3. Materials Reuse 1 Point	

ENVIRONMENTALLY RESPONSIBLE CHOICE

CREDITS FOR LEED

Product: MODERN HEX NATURAL HEXAGON 29X25 cm

Classification: Bla

HEAT ISLAND EFFECT

- SS.Cr.7.1. Head Island Effect - nonroof **SRI** -
- SS.Cr.7.2. Head Island Effect - Roof

REGIONAL MATERIAL

The water used in the preparation of raw materials and ceramic tiles manufacturing is extracted from wells located in our facilities.

Construction materials or products transported by road, rail, or water have been extracted, harvested, or recovered, as well as manufactured, within a 500 mile (800 km) total travelling distance from the project site. The distance travelled is calculated using a weighted average considering means of transport.

96,5 %

591 km

Addenda LEED, 07/06/2012

RECYCLED CONTENT

Pre-consumer Recycled Content, including water and minerals

24,4 %

LOW-EMITTING MATERIAL

Products that are inherently non-emitting sources of VOC- specifically ceramic and others, are considered fully compliant without any VOC emission testing if they do not include integral organic based surface coatings, binders, or sealants

Addenda LEED, 14/4/2010

INDIRECT CREDITS

- EA.PR2. Minimum Energy Performance
- EA.Cr1. Optimize Energy Performance
- MR.Cr1.2. Building Reuse - Maintain non structural elements
- MR.Cr3. Materials Reuse
- IEQ.Cr.3.1. Construction Indoor Air Quality Management Plan During Construction
- IEQ.Cr.3.2. Construction Indoor Air Quality Management Plan Before Occupancy

These data have been obtained with **CoverLEED by ITC**, a tool developed and adapted by Instituto de Tecnología Cerámica. The data have been verified by Instituto de Tecnología Cerámica on xx/xx/xxxx

RECYCLED CONTENT
SELF-DECLARED ENVIRONMENTAL CLAIM, according to ISO 14021

Product: MODERN HEX NATURAL HEXAGON 29X25 cm
Classification: Bla



Pre-consumer Recycled Content, including water and minerals

49 %

PRODUCT	
Total water content (kg)	10,2
Total mineral content (kg)	21,6
Fresh water content (kg)	0,4
Virgin mineral content (kg)	15,8
Pre-consumer recycled water content (kg)	9,7
Pre-consumer recycled mineral content (kg)	5,7
Pre-consumer recycled content (%)	48,7
RECYCLED CONTENT (%)	24,4

Recycled content = post-consumer + 0,5 pre-consumer

Data for 1sqm

LEED Ranking Systems:	
Commercial	MR Cr.4 Recycled Content
Retail New	
New Construction	
Core&Shell	
Schools	
Existing Buildings	MR Cr.3 Sustainable purchasing
Healthcare	MR Cr.3: Sustainably Sourced Materials and Products
Homes	MR Cr.2. Environmentally Preferable Products

These data have been obtained with **CoverLEED by ITC**, a tool developed and adapted by Instituto de Tecnología Cerámica. The data comply the standard ISO 14021 and have been verified by Instituto de Tecnología Cerámica on xx/xx/xxxx

REGIONAL MATERIAL
SELF-DECLARED ENVIRONMENTAL CLAIM, according to ISO 14021

Product: MODERN HEX NATURAL HEXAGON 29X25 cm

Classification: Bla

Manufacturing Site:

Carretera Castellón – San Juan de Moró, km 0.75, 12130 San Juan de Moró (Castellón)

Project Site: DELAWARE (USA)

Construction materials or products transported by road, rail, or water have been extracted, harvested, or recovered, as well as manufactured, within a 500 mile (800 km) total travelling distance from the project site. The distance travelled is calculated using a weighted average determined from the following formula:

$$(\text{Distance by rail}/3) + (\text{Distance by inland waterway}/2) + (\text{Distance by sea}/15) + (\text{Distance by all other means}) \leq 500 \text{ miles [800 km]}$$

Addenda LEED, 07/06/2012



Distance of raw materials (km)	150
Distance from factory to building (km)	442
DISTANCE OF THE PROJECT SITE (km)	591
REGIONAL MATERIALS (%)	96,5

Data for 1sqm

LEED Ranking Systems:	
Commercial Interiors	MR Cr5 Regional Materials
Retail New Construction	
New Construction	
Core&Shell	
Schools	
Existing Buildings	MR Cr.3 Sustainable purchasing
Healthcare	MR Cr.3: Sustainably Sourced Materials and Products
Homes	MR Cr.2. Environmentally Preferable Products

These data have been obtained with **CoverLEED by ITC**, a tool developed and adapted by Instituto de Tecnología Cerámica. The data have been verified by Instituto de Tecnología Cerámica on xx/xx/xxxx

LOW -EMITTING MATERIALS
SELF-DECLARED ENVIRONMENTAL CLAIM, according to ISO 14021

Product: MODERN HEX NATURAL HEXAGON 29X25 cm

Classification: Bla

Tile is fired at very high temperatures, usually in excess of 1,800°F. At such high temperatures, any organics that might be present in clays or binders are completely burned away. As a result, the final product is inert and has no VOCs that can be emitted.

Due to its VOC-free nature, ceramic and porcelain tile products are exempt from all testing criteria specified by LEED®. These exemptions were first introduced in the document addenda issued by USGBC in April, 2010

Addenda LEED, 14/04/2010

LEED Ranking Systems:	
Commercial Interiors	IEQ 4.3 Low-emitting materials-Flooring systems
Retail New Construction	
New Construction	
Core&Shell	
Schools	
Healthcare	IE Q Credit 4: Low-Emitting Materials
Schools	IEQ 4.6 Low-emitting materials. Ceiling and wall systems
Healthcare	IE Q Credit 4: Low-Emitting Materials

MR. Credit 1.2. Building Reuse-Maintain interior nonstructural elements
MR. Credit 1.3. Materials Reuse
IEQ Credit 3.1. Construction Indoor Air Quality Management Plan - During Construction
IEQ Credit 3.1. Construction Indoor Air Quality Management Plan - Before occupancy

Product: MODERN HEX NATURAL HEXAGON 29X25 cm
Classification: Bla

Chemical and physical properties*

Water absorption (UNE-EN ISO 10545-3)	≤ 0,2%
Breaking strength (UNE-EN ISO 10545-4)	≥ 2200 N
Flesural tensile strength (UNE-EN ISO 10545-4)	≥ 42 N/mm ²
Resistance to surface abrasion (UNE-EN ISO 10545-7)	CLASS 4
Thermal expansion coefficient (UNE-EN ISO 10545-8)	6,1-6,9x10 ⁻⁶ (°C ⁻¹)
Thermal shock resistance (UNE-EN ISO 10545-9)	Resists
Frost resistance (UNE-EN ISO 10545-12)	Resists
Chemical resistance (UNE-EN ISO 10545-13) Resistance to household chemicals and swimming pool slats	GA
Resistance to staining(UNE-EN ISO 10545-14)	5
Lifetime	More than 50 years

Due to physical and chemical properties of the tiles, not requirements for storage are needed

Pollutant	Ceramic tiles advantages
Formaldehyd	No formaldehyd emissions
Particulate matter (PM ₁₀)	Wet saws and cutters snap avoid particle emissions
Total Organic Compounds	No COV emissions
4- Phenocyclohexene	Not applicable
Carbon monoxide (CO)	No CO emissions are generated in the instalation