Manufacturer Product Description

Styronit® is structured with fibrous and inorganic natural porous mineral, aggregate and organic fibers which can be considered as high performance industrial adobe material that provides natural thermal insulation. It's ready-mixed natural mortar with a special mix combination to minimize the energy consumption and to achieve the desired insulation at the optimum application thickness, to provide comfort and livable environment without threat to human health and to protect the exterior and/or interior surfaces of the buildings. Biomantolama, Kaba, Horasan, Bioklima provide benefits in terms of LEED .

For further details visit http://www.styronit.com.tr

About LEED

LEED (Leadership in Energy and Environmental Design) is a certification system that rewards the best green building strategies and practices . It is a leading program on design, construction, maintenance and operations for the high-performance green buildings. Projects are prerequisites for providing the requirements , may be eligible for various levels of certification LEED® about winning points. For further details visit **www.usgbc.org**

This product evaluation report is created on 16.06.2016 in accordance with the LEED v3 certification system. It is valid for one year.

MATERIAL AND RESOURCES (MR)

Construction Waste Management
MR Credit 2

Solid Waste Management Construction/Renovation Waste
MR Credit 9

Because of 100% recyclable structure of Styronit® it helps the recycling of the construction waste whether or not they have been damaged during construction, renovation or the destruction of part of the reconstruction project. Thus contributes to the construction waste management and recycling efforts.

In addition, in the assessment process of evaluation of existing buildings it can contribute to prevent waste sent at least 70% of the field of construction and renovation waste to waste area.

Applicable building types*	NC	C&S	CIR	NCR	SCH	HC	H	EBOM
LEED® Credit points	1-2	1-2	1-2	1-2	1-2	1-2	0.5-3	1

Recycled Materials Content
MR Credit 4

Sustainable Purchasing
MR Credit 3

In order to reduce the raw material and the consumption of resources used in construction, it is desired that at least 10% of the over budget of all building materials used in the project should content pre-consumer and/or post-consumer recycled substance as defined in ISO 14021 standard.

Styronit® products contents 21% post-consumer recycled materials in their structure. With this feature it contributes to get recycled content credits to the projects in accordance with LEED criteria.

Applicable building types*	NC	C&S	CI	CIR	NCR	SCH	HC	H	EBOM
LEED® Credit points	1-2	1-2	1-2	1-2	1-2	1-2	1-4	0,5-8	1

Local Material
MR Credit 5

Providing the materials used within the scope of the project and the raw materials from close areas avoid the environmental impact originating from transport. Under Loan it is aimed that the maximum transport distance to the project area is 800 km (500 miles)

Styronit® manufacturing plant is located in Tuzla/Istanbul. Raw material composition and the transport distance and shipping methods are as follows;

Raw Material	% Average Weight	From	Transport	Distance to Styronit Plant(km)
Perlite	50-55%	İstanbul	Road freight	57
Pumice	15-25%	Nevşehir	Road freight	705
Cement	≤2%	Kocaeli	Road freight	34
Lime	<2%	İstanbul	Road freight	10
Organic, inorganic fibers	≤21%	İstanbul	Road freight	24
Organic, inorganic fibers		Kocaeli	Road freight	11

Applicable building types*	NC	C&S	CI	CIR	NCR	SCH	HC	H	EBOM
LEED® Credit points	1-2	1-2	1-2	1-2	1-2	1-2	1-4	0,5-8	1

ENERGY & ATMOSPHERE (EA)

Minimum Energy Performance EA Precondition 2 **Optimum Energy Performance** EA Credit 1 EA Credit 1.3 (CI)	Minimum 10% energy cost reduction in the new buildings is a precondition for LEED according to base building mentioned in ASHRAE 90.1-2007 standard. In existing buildings it is required minimum 5% energy efficiency. When Styronit® products are used, they improve thermal conductivity 15.43% in the brick walls, 16.91% in the concrete walls comparing to the other layers of the wall section with the same properties. This allows to increase the energy performance and thus contributes to the achievement of the relevant credits.

Applicable building types*	NC	C&S	CI	CIR	NCR	SCH	HC	EBOM	H
LEED® Credit points	1-19	3-21	5-10	5-10	1-19	1-19	1-24	1-18	1-34

INNOVATION & DESIGN PROCESS (ID)

Innovation in Design ID Credits 1.1 – 1.5 ID Credits 1.1 – 1.4 (EBOM) ID Credits 3.1 – 3.4 (H)	Because of one or more criteria of Styronit® products mentioned above contribute to get innovation credits as reaching the project as " reference performance ".

Applicable building types*	NC	C&S	NCR	SCH	EBOM
LEED® Credit points	1-5	1-5	1-5	1-4	1-4

REGIONAL PRIORITY (RP)

Regional Priority RP Credits 1.1 – 1.4	Styronit® products can help projects to get Regional Priority credits depending on the region and the regional priorities identified by USGBC

Applicable building types*	NC	C&S	NCR	SCH	EBOM
LEED® Credit points	1-4	1-4	1-4	1-4	1-4

*** LEED Building Type Abbreviations**

New Construction & Major Renovations **(NC)**
Commercial Interiors **(CI)**
New Construction-Retail **(NCR)**
Existing Buildings: Operations & Maintenance **(EBOM)**
Schools **(SCH)**
Commercial Interiors-Retail **(CIR)**
Core & Shell **(C&S)**
HealthCare **(HC)**
Homes **(H)**