



### Manufacturer Product Description

Styronit® STY 325 Acoustic 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 acoustic insulation. It's ready-mixed natural plaster with a special mix combination to minimize noise problems to neighbouring walls, elevators, generator rooms, offices, schools, hotels..ect, It is suitable for interior wall surfaces, bricks, aerated concrete, painted and/or other walls, ceiling, etc.

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](http://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)



<p><b>Construction Waste Management</b> MR Credit 2</p> <p><b>Solid Waste Management Construction/Renovation Waste</b> MR Credit 9</p>	<p>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.</p> <p>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.</p> <table border="1" data-bbox="475 1153 1436 1205"> <thead> <tr> <th>Applicable building types*</th> <th>NC</th> <th>C&amp;S</th> <th>CIR</th> <th>NCR</th> <th>SCH</th> <th>HC</th> <th>H</th> <th>EBOM</th> </tr> </thead> <tbody> <tr> <td>LEED® Credit points</td> <td>1-2</td> <td>1-2</td> <td>1-2</td> <td>1-2</td> <td>1-2</td> <td>1-2</td> <td>0.5-3</td> <td>1</td> </tr> </tbody> </table>	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																																				
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<p><b>Recycled Materials Content</b> MR Credit 4</p> <p><b>Sustainable Purchasing</b> MR Credit 3</p>	<p>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.</p> <p>Styronit® STY 325 Acoustic 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.</p> <table border="1" data-bbox="475 1473 1436 1532"> <thead> <tr> <th>Applicable building types*</th> <th>NC</th> <th>C&amp;S</th> <th>CI</th> <th>CIR</th> <th>NCR</th> <th>SCH</th> <th>HC</th> <th>H</th> <th>EBOM</th> </tr> </thead> <tbody> <tr> <td>LEED® Credit points</td> <td>1-2</td> <td>1-2</td> <td>1-2</td> <td>1-2</td> <td>1-2</td> <td>1-2</td> <td>1-4</td> <td>0,5-8</td> <td>1</td> </tr> </tbody> </table>	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																																		
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<p><b>Local Material</b> MR Credit 5</p>	<p>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)</p> <p>Styronit® manufacturing plant is located in Tuzla/Istanbul. Raw material composition and the transport distance and shipping methods are as follows;</p> <table border="1" data-bbox="507 1771 1332 1989"> <thead> <tr> <th>Raw Material</th> <th>% Average Weight</th> <th>From</th> <th>Transport</th> <th>Distance to Styronit Plant(km)</th> </tr> </thead> <tbody> <tr> <td>Perlite</td> <td>50-55%</td> <td>Istanbul</td> <td>Road freight</td> <td>57</td> </tr> <tr> <td>Pumice</td> <td>15-25%</td> <td>Nevşehir</td> <td>Road freight</td> <td>705</td> </tr> <tr> <td>Cement</td> <td>≤2%</td> <td>Kocaeli</td> <td>Road freight</td> <td>34</td> </tr> <tr> <td>Lime</td> <td>&lt;2%</td> <td>Istanbul</td> <td>Road freight</td> <td>10</td> </tr> <tr> <td>Organic, inorganic fibers</td> <td rowspan="2">≤21%</td> <td>Istanbul</td> <td>Road freight</td> <td>24</td> </tr> <tr> <td>Organic, inorganic fibers</td> <td>Kocaeli</td> <td>Road freight</td> <td>11</td> </tr> </tbody> </table> <table border="1" data-bbox="475 2056 1436 2092"> <thead> <tr> <th>Applicable building types*</th> <th>NC</th> <th>C&amp;S</th> <th>CI</th> <th>CIR</th> <th>NCR</th> <th>SCH</th> <th>HC</th> <th>H</th> <th>EBOM</th> </tr> </thead> <tbody> <tr> <td>LEED® Credit points</td> <td>1-2</td> <td>1-2</td> <td>1-2</td> <td>1-2</td> <td>1-2</td> <td>1-2</td> <td>1-4</td> <td>0,5-8</td> <td>1</td> </tr> </tbody> </table>	Raw Material	% Average Weight	From	Transport	Distance to Styronit Plant(km)	Perlite	50-55%	Istanbul	Road freight	57	Pumice	15-25%	Nevşehir	Road freight	705	Cement	≤2%	Kocaeli	Road freight	34	Lime	<2%	Istanbul	Road freight	10	Organic, inorganic fibers	≤21%	Istanbul	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
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## ENERGY & ATMOSPHERE (EA)



<b>Minimum Energy Performance</b> EA Precondition 2  <b>Optimum Energy Performance</b> 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® STY 325 is used, it improves thermal conductivity 15% in the brick walls, 16% 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*										
LEED® Credit points										

## INDOOR ENVIRONMENTAL QUALITY (IEQ)



<b>Acoustic Performance</b> IEQ Preconditions 3 (Schools) IEQ Credit 2 (Healthcare) IEQ Credit 9 (Schools)	According to LEED requirements at the schools the sound level should be less than 40 dB(A) and should provide at least 35 STC according to ANSI S12.60 -2002 Standard. In healthcare buildings the sound levels should remain within the limits specified in 2010 FGI Guidelines Table 1.2-2 Minimum-Maximum Design Criteria for Noise .									
	Styronit® STY 325 contributes to the rise of the acoustic performance of the building along with other acoustic applications. It plays a role in taking the relevant credit.									
Applicable building types*										
LEED® Credit points										

## INNOVATION & DESIGN PROCESS (ID)



<b>Innovation in Design</b> 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*									
LEED® Credit points										

## REGIONAL PRIORITY (RP)



<b>Regional Priority</b> 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*									
LEED® Credit points										

### \* LEED Building Type Abbreviations

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