alea

Leed® Compliance Document

30.09.2021

IT04-21092901 IT06-21101202 IT06-21101203 IT06-21101204

Demountable wall

Our commitment to our planet

greenITop.com	contributes to MRC3,MRC5,MRC8(H) EQC2,EQC7,EQC9 credits (v4 NC) **IT04-21092901**	contributes to MRC3,MRC5 MRC8(H),EQC2 credits (v4 NC) **IT06-21101202**	contributes to MRC2,MRC4,MRC6 EQC2,EQC7,EQC9 credits (v4 CI) **IT06-21101203**	contributes to MRC2,MRC4 MRC6,EQC2 credits (v4 CI) **IT06-21101204**

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alea

Alea

Environment and sustainability

1. Alea

Founded in 1973, Alea s.r.l. has become one of the most active office furniture companies in the international market.

Our mission is to create beautiful, comfortable and stimulating working spaces. Places where people feel good. We offer a wide range of high-quality products, from furniture to partitions, always characterised by careful research into design and materials. Not only standard products, but also solutions specifically designed to meet the requirements of our customers.

We maintain a family-run structure, made up of various departments grouped together in a single headquarters located in Sarone di Caneva, in the province of Pordenone, in an area where one of Europe's most important industrial districts is developed.

Since 2001 we have a North American office in Miami, as well as showrooms in Italy, Paris and London, and numerous dealers all over the world. We are present in more than 90 countries..

We combine high quality materials with an efficient production organisation that operates according to the logic of "just in time", coordinating a group of suppliers that allow us to give our customers a rapid response to even the most complex requests. Alea is 100% made in Italy.

In our department dedicated to mobile partitions, designers and engineers develop every single project with the utmost care to guarantee design and functionality. Their in-depth knowledge of the production process makes them masters of engineering able to handle even the most ambitious projects.

Alea firmly believes in sustainable business and focuses on environmental impact and worker health. The pursuit of these principles leads our company to concentrate its efforts on the eco-friendly development of production processes and products. In fact, one of our priorities is the constant search for recyclable materials.

Alea has certified its quality process in accordance with the UNI EN ISO 9001 standard and has obtained the UNI EN ISO 14001 certificate for environmental management. We have also successfully obtained UNI ISO 45001 certification - on occupational health and safety assessment. Upon customer request, Alea can supply FSC® certified products (License Code FSC-C118323) according to the FSC-STD-40-004 standard.

Always committed to environmental initiatives, Alea guarantees the use of 100% recycled cardboard for its packaging which is marked with the Ecopack logo, emphasising this initiative.

Company certificates can be consulted at this link https://www.aleaoffice.com/us/sostenibilita

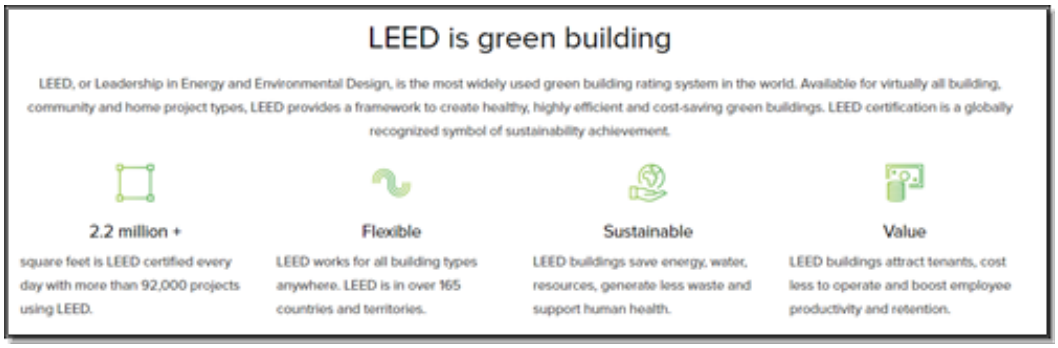
2. LEED® rating system

Sources: USGBC, GBC ITALIA

LEED® - Leadership in Energy and Environmental Design - is a building certification system born on a voluntary basis and which is applied in over 140 countries around the world. The LEED standard was born in America by the U.S. Green Building Council (USGBC), a non-profit association founded in 1993, which currently has more than 20,000 members and which aims to promote and develop a global approach to sustainability, giving recognition to virtuous performance in key areas of health human and environmental.

The LEED® standards, developed by USGBC, indicate the requirements for building environmentally sustainable buildings, both from the energy point of view and from the point of view of the consumption of all the environmental resources involved in the construction process.

LEED® is a voluntary and consensus-based system for the design, construction and management of sustainable buildings and high-performance territorial areas and which is developing more and more internationally; it can be used on any type of building and promotes an integrated design system that concerns the entire building.



www.usgbc.org

The certification constitutes an independent third party verification of the performance of an entire building (or part of it) and/or urban areas. The internationally recognized LEED® certification states that a building is environmentally friendly and that it is a healthy place to live and work.

Working on the entire process, from design to actual construction, LEED® requires a holistic approach, otherwise the set objectives will not be achieved. Only with a large effort of integrated planning and coordination is it possible to create a harmonious building in all the areas mentioned above.

The competitive advantages for those who adopt the LEED® standards, be they professionals or companies, can be identified above all in the great final quality of the product (building), in the considerable savings in management costs that these buildings allow to obtain when compared with traditional buildings and in certification by a third party.

The LEED® certification, in fact, provides the market with a shared approach, on which to base the choices and a measurable standard for each aspect dealt with.

The LEED® rating system is structured in a set of (manual) protocols according to the type of building to be certified. We will therefore have a protocol that certifies new buildings and major renovations (LEED Nuove Costruzioni, LEED NC, LEED BUILDING DESIGN AND CONSTRUCTION LEED BD + C), a protocol for school buildings (LEED FOR SCHOOLS), a protocol that certifies retail and the interiors of a building (LEED COMMERCIAL INTERIOR and LEED RETAIL), a protocol that certifies existing buildings (LEED EXISTING BUILDING OPERATION AND MAINTENANCE, LEED EBOM), a protocol that certifies groups of buildings, eg. neighborhoods (LEED FOR NEIGHBORHOOD), and so on.

The setting of all these protocols is the same, in the sense that they are all organized in the same areas or chapters, which are:

• Sustainable Sites (SS)

• Water Efficiency (WE)

• Energy and Atmosphere (EA)

• Materials and Resourses (MR)

• Indoor Environmental Quality (EQ)

For the sake of completeness, there are two other areas/chapters, which however concern aspects more related to the certification process:

• Regionality: higher credit (points) is given to credits in certain geographical areas due to the strong relationship between the territorial context and credit requirements;

• Innovation in design: aspects are enhanced that either in the specific protocol are not considered but are present in the other protocols, or a higher score is given for exemplary performance in some credits of the protocol. Everything is regulated precisely by the text of the manuals.

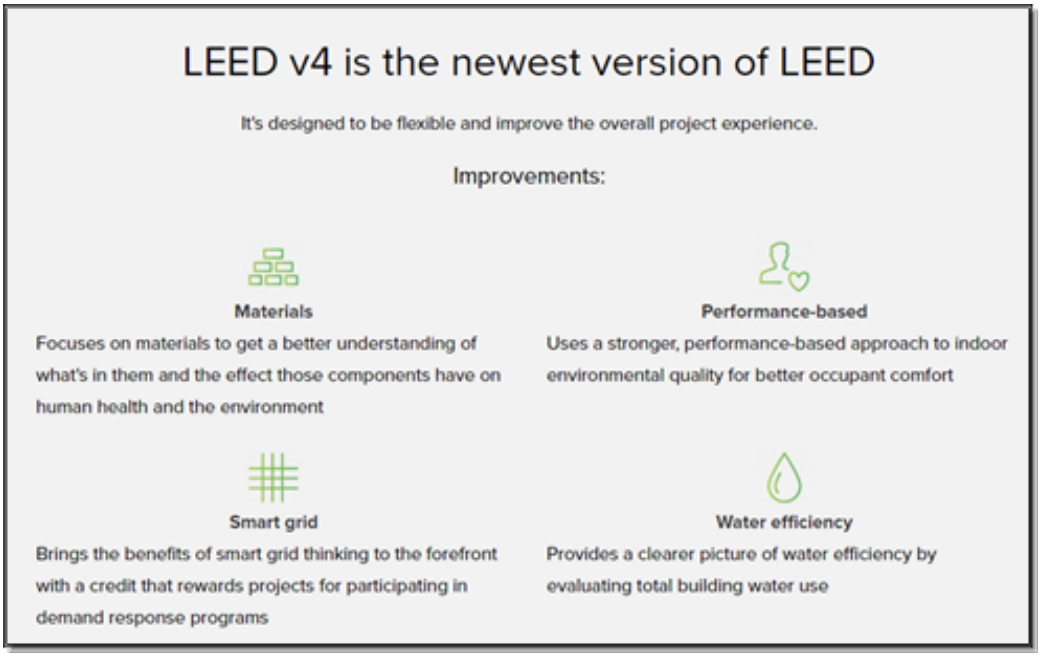
All these areas/chapters contain the prerequisites and credits. The prerequisites are mandatory and do not give a score, while the credits can be chosen or not by the design team but they are the ones that give the score, which must be achieved to obtain the certification level defined as a goal by the certification.

The prerequisites and credits cover all aspects of a building, from the systems, to the details of the design, to the permeability of the soil, to the consumption of drinking water, to the relationship of the site with the servants near the building or to the availability of public transport. Some of these also concern materials, in the sense that the materials have characteristics that help the building meet certain requirements defined in the prerequisites and protocols. What was done in this document was to first identify the possible credits that could relate to the ALEA products considered in the project, on the other hand to verify their characteristics and documentation in line with the requirements. The credits to which the products can contribute are explained in the following paragraphs.

The LEED® rating system certifies the building, it does not certify the individual products or components of the building, but the latter can help to meet the requirements of the protocol and consequently to obtain the relative scores for the building.

This also implies that the product CANNOT have a score, the score is always and only for the building, but it can help the building get the score.

As already mentioned, the following paragraphs will illustrate the excellence of ALEA in relation to LEED® credits. As described earlier in the text, all protocols are structured in the same areas, and for the most part the credits are the same or similar. In this work, for clarity and to avoid unnecessary repetitions (and which could create confusion), the LEED NC New Construction and LEED COMMERCIAL INTERIOR protocols have been used as a reference.

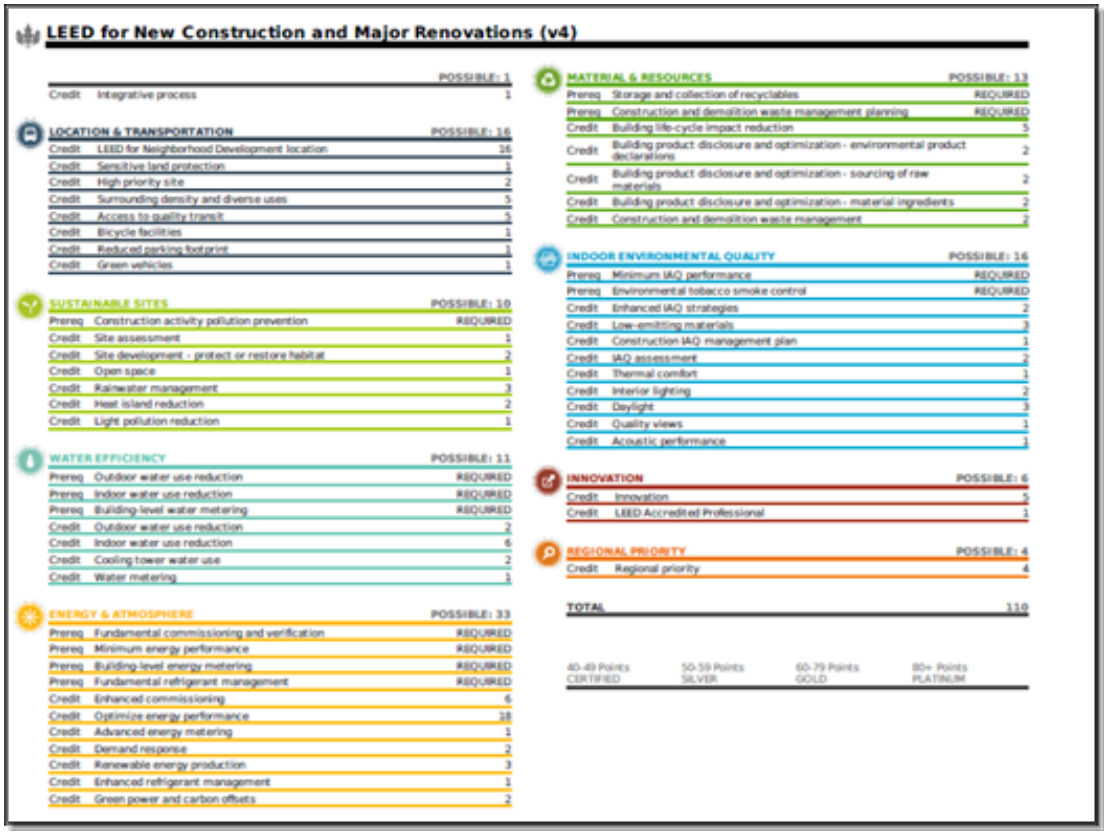


www.usgbc.org

3. Alea and LEED® V4 credits

Given the high customization that ALEA products can have, the credits to which the different solutions can contribute as a whole are explicit. For specific solutions, contact the technical department.

The credits to which ALEA products can contribute are highlighted in the following check lists:



LEED for New Construction and Major Renovations (v4)

	Integrative process	POSSIBLE: 1
Credit	Integrative process	1
	LOCATION & TRANSPORTATION	POSSIBLE: 16
Credit	LEED for Neighborhood Development location	16
Credit	Sensitive land protection	1
Credit	High priority site	2
Credit	Surrounding density and diverse uses	5
Credit	Access to quality transit	5
Credit	Bicycle facilities	1
Credit	Reduced parking footprint	1
Credit	Green vehicles	1
	SUSTAINABLE SITES	POSSIBLE: 10
Prereq	Construction activity pollution prevention	REQUIRED
Credit	Site assessment	1
Credit	Site development - protect or restore habitat	2
Credit	Open space	1
Credit	Rainwater management	3
Credit	Heat island reduction	2
Credit	Light pollution reduction	1
	WATER EFFICIENCY	POSSIBLE: 11
Prereq	Outdoor water use reduction	REQUIRED
Prereq	Indoor water use reduction	REQUIRED
Prereq	Building-level water metering	REQUIRED
Credit	Outdoor water use reduction	2
Credit	Indoor water use reduction	6
Credit	Cooling tower water use	2
Credit	Water metering	1
	ENERGY & ATMOSPHERE	POSSIBLE: 33
Prereq	Fundamental commissioning and verification	REQUIRED
Prereq	Minimum energy performance	REQUIRED
Prereq	Building-level energy metering	REQUIRED
Prereq	Fundamental refrigerant management	REQUIRED
Credit	Enhanced commissioning	6
Credit	Optimize energy performance	18
Credit	Advanced energy metering	1
Credit	Demand response	2
Credit	Renewable energy production	3
Credit	Enhanced refrigerant management	1
Credit	Green power and carbon offsets	2
	MATERIAL & RESOURCES	POSSIBLE: 13
Prereq	Storage and collection of recyclables	REQUIRED
Prereq	Construction and demolition waste management planning	REQUIRED
Credit	Building life-cycle impact reduction	5
Credit	Building product disclosure and optimization - environmental product declarations	2
Credit	Building product disclosure and optimization - sourcing of raw materials	2
Credit	Building product disclosure and optimization - material ingredients	2
Credit	Construction and demolition waste management	2
	INDOOR ENVIRONMENTAL QUALITY	POSSIBLE: 16
Prereq	Minimum IAQ performance	REQUIRED
Prereq	Environmental tobacco smoke control	REQUIRED
Credit	Enhanced IAQ strategies	2
Credit	Low-emitting materials	3
Credit	Construction IAQ management plan	1
Credit	IAQ assessment	2
Credit	Thermal comfort	1
Credit	Interior lighting	2
Credit	Daylight	3
Credit	Quality views	1
Credit	Acoustic performance	1
	INNOVATION	POSSIBLE: 6
Credit	Innovation	5
Credit	LEED Accredited Professional	1
	REGIONAL PRIORITY	POSSIBLE: 4
Credit	Regional priority	4
	TOTAL	110

40-49 Points CERTIFIED | 50-59 Points SILVER | 60-79 Points GOLD | 80+ Points PLATINUM

LEED V4 NC New Construction

contributes to **MRC3,MRC5,MRC8(H) EQC2,EQC7,EQC9** credits (v4 NC) **IT04-21092901**	Glass wall/Glass door
contributes to **MRC3,MRC5 MRC8(H),EQC2** credits (v4 NC) **IT06-21101202**	Solid wall/Solid door

LEED V4 CI Commercial Interior

contributes to **MRC2,MRC4,MRC6 EQC2,EQC7,EQC9** credits (v4 CI) **IT06-21101203**	Glass wall/Glass door
contributes to **MRC2,MRC4 MRC6,EQC2** credits (v4 CI) **IT06-21101204**	Solid wall/Solid door

This logo, called Product Badge, graphically represents a summary of the credits to which ALEA products can contribute consistently with what is described in the following paragraphs[1].

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[1] **The Product Badge bears the same identification codes as in this document ("IT04-21092901; IT06-21101202; IT06-21101203; IT06-21101204") in order to create a unique identification. It should also be noted that the Product Badge is reported for the LEED® System, as it is designed and created to be in line with the references, policies and rules of said System.**

Materials and resources area

The Materials and Resources area is an area that considers the sustainability of the building on the basis of the materials that were used to build it. Pursuing the achievement of LEED® credits in the field of Materials and Resources (MR) can reduce the amount of waste and improve the building environment through responsible waste management and the selection of materials.

The credits in this section focus on two important issues: the environmental impact of the materials that enter the building project and the minimization of disposal. With respect to the first area, ALEA has chosen to use wood that comes from an FSC-certified sustainable supply chain, and to use materials with recycled content. With respect to the second area, it can support companies in the management of their waste (recyclable packaging).

In version 4 of the rating system, the Materials and Resources area is the area that undergoes the most changes, enhancing good business practices and their environmental and social responsibility.

The credits of LEED NC V4 to which the products of, ALEA can contribute are:

- MRC3 - Building product Disclosure and Optimization - Sourcing of Raw Material
- MRC5 - Construction and Demolition Waste Management
- MRC - Design for Flexibility

MR C3 - Building Product Disclosure And Optimization - Sourcing Of Raw Materials

> **Intent: To encourage the use of products and materials for which life cycle information is available and that have environmentally, economically, and socially preferable life cycle impacts. To reward project teams for selecting products verified to have been extracted or sourced in a responsible manner.**

The objective of this credit is the enhancement of the use of materials of sustainable origin, that is, they come from a sustainable supply chain or have recycled content.

Upon customer request, Alea can supply FSC® certified products (License Code FSC-C118323) according to the FSC-STD-40-004 standard.

In addition, ALEA with its suppliers promotes the use of materials with recycled content, and on specific request, thanks to the certifications and documentation of the suppliers, it is able to calculate and declare the recycled content of the creations.

Below is an example of the percentages of recycled content of some products considered in the mapping:

Product	% pre consumer recycled content	% post consumer recycled content	Reference unit
A65 double glazed glass wall	1%	0%	Ref. To linear foot with a height of 3m
A65 single glass wall	1%	0%	Ref. To linear foot with a height of 3m
A65 double glass door	1%	0%	By piece
A65 single glass door	1%	0%	By piece
A65 sliding door	1%	0%	By piece
Lacquered doors (blind doors)	16%	0%	By piece

For specific products and solutions, contact the technical department.

MR C5 - Construction and demolition waste management

Intent: To reduce construction and demolition waste disposed of in landfills and incineration facilities by recovering, reusing, and recycling materials.

The objective of this credit is to enhance actions that reduce waste that ends up in landfills and increase those destined for recycling, to promote the circular economy.

With respect to the products supplied, this credit evaluates the waste material and packaging on site during the laying and installation phases, to the extent that these are “diverted” from the landfill and reintroduced into a production cycle. Given that this information must be collected and calculated by the construction company or general contractor, the role played “upstream” by ALEA, which uses recyclable packaging, is important.

The packagings used are as follows:

- wooden crates;
- cardboard;
- recyclable stretch film.

ALEA has chosen to use packaging that can be easily separated and therefore sent for separate collection. On request it is possible to indicate the weights of the individual packages in the transport documents.

Upon request and after verification of feasibility, the packaging and any site waste can be collected by ALEA.

MR C6 – Interiors life-cycle impact reduction (LEED ID+C)

Intent: To encourage adaptive reuse and optimize the environmental performance of products and materials.

The objective of this credit is to stimulate the use of materials and products that have environmental performance related to reuse and optimization. In particular, option 2 “Design for Flexibility and Disassembly (1-2 points)” is considered, which enhances the use of easily movable or remodeled walls and furniture systems.

ALEA partition walls are born with this feature and are removable and interchangeable.

The walls are designed so that there is coplanarity between wall and door, with perfect alignment between glass and door, thus making the solutions more easily modular and interchangeable. The sliding doors are developed with micro frame.

Dry laying facilitates disassembly.

The technical department of ALEA has the skills to develop solutions targeted to the specific design needs of customers and, subsequently, to develop proposals for the needs of modification and integration of existing solutions.

Indoor Environmental Quality Area

To ensure the quality of the indoor environment, a joint effort by the client, the design team, contractors, subcontractors and suppliers is required. To provide an optimal indoor environment quality, automatic sensors and individual controls to regulate temperature, humidity and ventilation can be integrated into the building system. Other issues concerning indoor air quality addressed by the LEED® system include verifying thermal comfort, availability and quality of natural light with access to views of the outside. All these issues can enhance the quality of the internal environment and optimize confined spaces for the occupants of the building.

The credits of LEED NC V4 to which ALEA products can contribute are:

• EQC2 – Low Emitting Material

• EQC6 – Interior Lighting

• EQc9 – Acoustic Performance

EQ C2 - Low-emitting materials

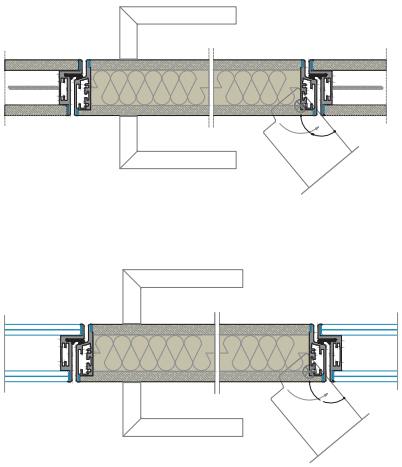
Intent: To reduce concentrations of chemical contaminants that can damage air quality, human health, productivity, and the environment.

The products used for the transparent walls are glass and metal, inert products. There are gaskets and glass layering with pvb film. Walls and wall components are removable and interchangeable.

The opaque walls use MDF and chipboard panels exclusively CARB PHASE 2.

For opaque and lacquered doors, a laboratory test was carried out which certifies the low emissivity, in line with the requirements of this credit (Test report 392-2021-00397401).

For more information on specific solutions, contact the technical department.



EQ C7 – Daylight

Intent: To connect building occupants with the outdoors, reinforce circadian rhythms, and reduce the use of electrical lighting by introducing daylight into the space.

The goal of this criterion is to enhance interior design in which the management of brightness is optimized from the point of view of visual comfort and daylight.

The glass walls are able to guarantee the transparency of the glass, as reported in the technical data sheets of the same. The glasses used have the following light transmission values:

Type of glass	Light transmission value Tv
6 + 6 Transparent Laminated Glass	0.87
Laminated glass 6 + 6 Transparent acoustic PVB	0.87
6 + 6 Transparent Extra-clear Laminated Glass	0.91
Laminated glass 6 + 6 Transparent extra clear acoustic PVB	0.91

EQ C9 - Acoustic performance

Intent: To provide workspaces and classrooms that promote occupants' well-being, productivity, and communications through effective acoustic design.

The objective of this criterion is to enhance the interior design in which the acoustic management is optimized according to the intended use of the spaces.

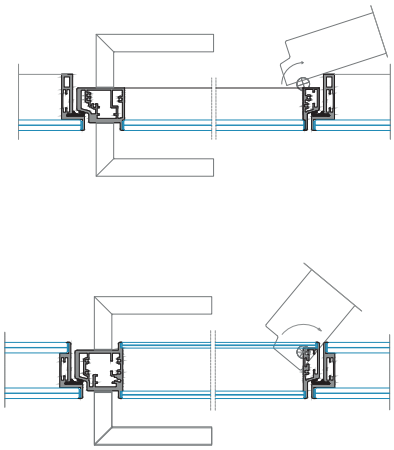
Below are the acoustic insulation values of the walls according to the type of glass used as well as from test reports carried out in an accredited laboratory:

- Stratified glass 6 + 6 Rw 34 dB
- Stratified glass 6 + 6 acoustic PVB Rw 36 dB

- Double wall laminated glass 6 + 6 Rw 39 dB
- Double wall laminated glass 6 + 6 acoustic PVB Rw 43 dB

Test reports are available upon request.

Type of glass	Direct airborne sound reduction Rw (C;Ctr) [dB]
6 + 6 Transparent Laminated Glass	36 (-1;-3)
6 + 6 Transparent Extra-clear Laminated Glass	36 (-1;-3)
Laminated glass 6 + 6 Transparent acoustic PVB	40 (-1;-3)
Laminated glass 6 + 6 Transparent extra clear acoustic PVB	40 (-1;-3)



Conclusion

QualityNet believes that the ALEA product can contribute to the achievement of the LEED certification score in the credits indicated in the following tables:

LEED V4 NC New Construction

LEED NC V4 CREDIT	Point	Title	Feature	Glass Wall	Solid Wall	Glass Door	Solid Door
MRC3	1-2	Building Product Disclosure And Optimization: Sourcing of Raw Material	FSC® Certification and Recycled Content	✓	✓	✓	✓
MRC5	1-2	Construction And Demolition Waste Management	Packaging in recyclable materials and collection of packaging on request and after evaluation	✓	✓	✓	✓
MRC8 (*LEED Healthcare*)	1	Design for Flexibility	Modularity and the possibility of reformulating interior spaces (modification in space)	✓	✓	✓	✓
EQC2	1-3	Low Emitting Materials	Selection of low-emissivity materials	✓	✓	✓	✓
EQC7	1-3	Daylight	Transparency of glazed solutions	✓		✓	
EQC9	1	Acoustic Performance	Sound insulation values	✓		✓	

LEED V4 CI Commercial Interior

LEED IC V4 CREDIT	Point	Title	Feature	Glass Wall	Solid Wall	Glass Door	Solid Door
MRC4	1-2	Building Product Disclosure And Optimization: Sourcing of Raw Material	FSC® Certification and Recycled Content	✓	✓	✓	✓
MRC6	1-2	Construction And Demolition Waste Management	Packaging in recyclable materials and re-delivery of packaging upon request and after evaluation	✓	✓	✓	✓
MRC2	1-4	Interior Life-Cycle Impact Reduction - Design for Flexibility	Modularity and the possibility of reformulating interior spaces (modification in space)	✓	✓	✓	✓
EQC2	1-3	Low Emitting Materials	Selection of low-emissivity materials	✓	✓	✓	✓
EQC7	1-3	Daylight	Transparency of glazed solutions	✓		✓	
EQC9	2	Acoustic Performance	Sound insulation values	✓		✓	

For more and more detailed information, contact the technical offices.

Although Qualitynet believes that the product examined can contribute to a LEED certification, please note that, globally, only GBCI (Green Business Certification Inc) can award scores and issue a LEED certificate. Recalling that LEED certifies the building and not the materials, Qualitynet does not express any guarantee on the achievement of the score.

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