

Fellert Product LEED v4 Report

Even Better – All Finishes

For Projects Worldwide

Fellert currently offers 8 types of finish in a variety of colors (Stone, Marble, Concrete, New England, Silk, Sahara, and Secern) in the complete product line. The following statements are based on the tested performance minimums of these finish types, with the exception of acoustical performance. Please contact us if your project needs additional finish data.

ENERGY AND ATMOSPHERE (EA)

PREREQUISITE 2 / CREDIT 2 - Optimize Energy Performance

[1-18 points]

Fellert Acoustical Board can benefit the energy performance of a building by enhancing the insulation of the building envelope, as a contributing element of the exterior walls and/or the roof/ceiling assembly.

Thermal Conductivity ASTM C-177 @ 75 F on 6.0 PCF 0.22

1" Acoustical Board: 4.55 R Value
1.5" Acoustical Board: 6.82 R Value

MATERIALS AND RESOURCES (MR)

CREDIT 1 – Building Life-Cycle Impact Reduction

[5 points]

Acoustical Plaster: In a skim-coating application, plaster can benefit the salvage of interior walls and ceilings in need of repair.

Fellert products have been tested for durability in terms of mold resistance (ASTM D3273/D3273), flame spread resistance (ASTM E84), flexibility (ASTM D6991), compressive strength (ASTM E761), and density (ASTM E605). Further, Fellert systems can be non-destructively re-coated, making it a durable and lasting solution.

CREDIT 3 – Building Product Disclosure and Optimization – Raw Materials

[2 points]

OPTION 1: Raw material source and extraction reporting (1 point)

Fellert and their partners have committed to environmental excellence. Company self-reported letters stating commitment to sustainable practices are provided as a supplement to this guide (worth ½ point).

AND/OR

Fellert Acoustical Ceilings AE Kyrkängsgatan 6 503 38 Borås, Sweden Tel: 46 33 4302202



OPTION 2: Leadership extraction practices (1 point)

Fellert products include a high level of recycled content (all post-consumer) and rapidly renewable materials), which count towards this credit option. Project sites within 100 miles of manufacturing and extraction points listed are heavily weighted within LEEDv4.

RECYCLED CONTENT:

Acoustical Board: 60% post-consumer recycled content

Acoustical Plaster: 27.8% post-consumer recycled content (min.)

Acoustical Board Adhesive: none Sand Additive: none

Fiber Mesh Tape*: 5% pre-consumer, 35% post-consumer recycled content

Plastic C-Channel*:nonePrimer*:noneAcoustical Coating*:none

REGIONAL MATERIALS:

Manufacture of Acoustical Board: Shelbyville, IN, USA

Acoustical Board raw material extraction points

(expressed as % of total weight):

Camden, TN, USA
Lewisport, KY, USA
Green River, WY, USA
Nephton, Ontario, Canada
Boron, CA, USA
7%
6%
3%
10%

Chicago Ridge, IL, USA
 Brossard, Quebec, Canada
 6% (Post-Consumer Recycled Glass)
 54% (Post-Consumer Recycled Glass)

Acoustical Adhesive manufacture: Västra Frölunda, Sweden

Acoustical Plaster manufacturing assembly point:

• Gdansk, Poland

Acoustical Plaster raw material extraction point:

Schenkenzell, Germany 38.25%Gdansk, Poland 61.75%

Sand Additive*:

Fiber Mesh Tape*:

High Impact Polystyrene C-Channel*:

Primer*:

Acoustical Coating*:

Sourced from Borås, Sweden
Sourced from Borås, Sweden
Sourced from Borås, Sweden
Sourced from Borås, Sweden

RAPIDLY RENEWABLE MATERIALS:

Acoustical Board: none

Acoustical Plaster: 27.8% cotton (min.)

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Acoustical Board Adhesive: none
Sand Additive: none
Fiber Mesh Tape*: none
Plastic C-Channel*: none
Primer*: none
Acoustical Coating*: none

ASSEMBLY WEIGHTS:

All weights are based on laboratory testing of a sample installation, and are expressed as % of total weight for the purposes of LEED certification. Assembly percentages have been applied each MR credit, and are summarized below:

1" Acoustical Board System (net weight 9.9 oz./sf):

•	Board	8.2 oz./sf	70.69%
•	Plaster	1.7 oz./sf	14.66%
•	Adhesive	1.7oz./sf	14.66%

Assembly recycled content: 46.5% Post-Consumer (min.)

Assembly rapidly renewable content: 3.1% RR (min.)

Assembly regional extraction/manufacturing content: varies by

location 1.5" Acoustical Board System (net weight 13.7 oz./sf):

•	Board	12.0 oz./sf	77.92%
•	Plaster	1.7 oz./sf	11.04%
•	Adhesive	1.7 oz./sf	11.04%

Assembly recycled content: 49.8% Post-Consumer (min.)

Assembly rapidly renewable content: 3.1% RR (min.)
Assembly regional extraction/manufacturing content: varies by location

Acoustical Plaster finish only – applied directly to GWB with no substrate (net wt. 2.2 oz./sf):

•	Sand	0.1 oz./sf	4.54%
•	Primer	0.4 oz/sf	18.18%
•	Plaster	1.7 oz./sf	77.27%

Assembly recycled content: 21.5% Post-Consumer (min.)

Assembly rapidly renewable content: 21.5% RR (min.) **Assembly regional extraction/manufacturing content:** varies by location

<u>CREDIT 4</u> – Building Product Disclosure and Optimization – Material Ingredients [2 points]

Fellert has disclosed all chemicals of each constituent product via MSDS sheets and LEED compliant product VOC testing. The entire product assembly information is available via the Fellert Health Product Declaration (HPD).



INDOOR ENVIRONMENTAL QUALITY (IEQ)

CREDIT 2 – Low Emitting Materials

[3 points]

(Note: Earning this credit can also help teams pass air quality tests needed to earn EQc4)

Total System VOC Compliance:

Contributes towards "interior paints and coatings applied on site" category compliance Emissions Content:

 Meets the classroom and office requirements of the Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources using Environmental Chambers – Version 1.1 – Emission Testing Method for California Section 01350.

(COMPONENT) Acoustical Plaster:

Contributes towards "interior paints and coatings applied on site" category compliance Emissions Content:

- ALL FINISHES: VOC Content: ≤ 4 grams per liter as per ASTM D3960 "Determination of Volatile Organic Compound (VOC) Content in Paints and Related Coatings"
- VOC and emissions testing completed by ISO Guide 65 accredited organization, carrying ISO/IEC17025 accreditation for the test methods used.

(COMPONENT) Primer:

Contributes towards "interior paints and coatings applied on site" category compliance Emissions Content:

- VOC Content: ≤ 9 grams per liter as per EPA Method 24 "Determination of Volatile Organic Compound (VOC) Content in Paints and Related Coatings"
- VOC and emissions testing completed by ISO Guide 65 accredited organization, carrying ISO/IEC17025 accreditation for the test methods used.

(COMPONENT) Acoustical Coating:

Contributes towards "interior paints and coatings applied on site" category compliance Emissions Content:

- VOC Content: ≤ 2 grams per liter as per ASTM D3960 "Determination of Volatile Organic Compound (VOC) Content in Paints and Related Coatings"
- VOC and emissions testing completed by ISO Guide 65 accredited organization, carrying ISO/IEC17025 accreditation for the test methods used.

(COMPONENT) Acoustical Board Adhesive:

Contributes towards "interior paints and coatings applied on site" category compliance Emissions Content:

- VOC Content: ≤ 1 grams per liter as per EPA method 24.
- VOC and emissions testing completed by ISO Guide 65 accredited organization, carrying ISO/IEC17025 accreditation for the test methods used.



CREDIT 4 – Indoor Air Quality Assessment

[2 points]

Fellert products indirectly contribute to this credit for projects using the Air Testing method (option 2), as the installed product is extremely low VOC and will not negatively contribute to the air quality of the spaces being tested.

CREDIT 7 – Daylight and Views – Daylight

[3 points]

High light reflectance benefits projects maximizing access to daylight using Option 1 (Full Daylight Simulation) or option 3 (Light Measurement Plan)

Fiberglass Board and Acoustic Plaster:

• 0.90 minimum Light Reflectance per ASTM E1477 – all finishes

<u>CREDIT 9</u> – Acoustics [1 point]

ASTM C423 - 7a

FINISH	3mm TYPE A	1" TYPE A	1.5" TYPE A	1" TYPE E	1.5" TYPE E
Secern	0.30	0.80	0.90	0.75	0.85
Sahara	0.30	0.80	0.95	0.70	0.90
Silk	0.30	0.85	0.90	0.80	0.90
Concrete	N/A	0.80	0.90	0.75	0.80
Marble	N/A	0.60	0.60	0.45	0.50
Stone	N/A	0.60	0.60	0.45	0.50
New England	N/A	N/A	N/A	N/A	N/A

REGIONAL PRIORITY CREDITS (RP)

LEEDv4 provides credit weighting worth up to 4 points based on the location of your project. Check which credits your project can earn at http://www.usgbc.org/rpc