



## LEED v.5 sustainability data sheet

### BASWA acoustic plaster systems

Sustainability and human-centric design are our core principles. BASWA is driven by proactive rethinking, improving, and innovation, challenging the status quo of meeting industry criteria and delivering products and processes that standardize wellbeing and Healthy Architecture in all spaces. As a leader in the seamless acoustic industry, we believe creating innovative products should enhance the aural experience and contribute to a greener future. We are motivated to make a positive impact on the environment with quality materials. Recognizing that sustainability is a continuous process rather than a destination, we are committed to decreasing our carbon footprint.

BASWA aims to lead product development using plant fibers, recycled glass, post-industrial recycled marble sand, organic binders, and minimal synthetic materials. BASWA acoustic systems are composed of up to 93% recycled, up to 89% recycled, and natural raw materials, and even waste materials from other production processes.

Sand produced during marble production is otherwise wasted, yet it has a subtle beauty and sophistication, harnessed in BASWA finishes. This sand creates micro-porous surfaces through which sound passes into the BASWA system panels. BASWA Phon and BASWA DTG panels are made of a minimum of 80% recycled glass, reducing landfill waste and the demand for new raw materials. 100% renewable and locally generated electricity from hydropower in the panel production process utilizes less energy and emits less greenhouse gas. Furthermore, using only water instead of solvents in our products helps keep harmful VOCs out of the atmosphere.

BASWA Natural panels are made exclusively from hemp and flax fibers sustainably cultivated by regional farmers who adhere to strict environmental standards. Not only does hemp store massive amounts of CO<sub>2</sub>, but it is also quickly renewable and incredibly efficient. In addition to its carbon sequestration capabilities, it is naturally resistant to pests and can be grown without the use of pesticides. Hemp is durable, long-lasting, and mold and fire-resistant.

Wet-applied products are available packaged in cardboard boxes instead of plastic buckets, reducing plastic waste while reducing delivery weight by more than 50%. Our sample boxes, cardboard packaging, and paper-based marketing materials are made of approximately 86% recycled wastepaper.

BASWA considers the environmental impact of construction and offers durable, long-lasting acoustic systems and a comprehensive cleaning and maintenance program.

We believe we are responsible to produce thoughtfully, further examining the connection between improved acoustics and human wellbeing. We strive to expand access to and knowledge of the importance for acoustical wellbeing in everyday life.

General data

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|               |                                                                          |
|---------------|--------------------------------------------------------------------------|
| Additional    | The following is available upon request:                                 |
| Documentation | LEED submittal, per system (with detailed recycled content and VOC data) |
|               | Environmental product declaration, per system                            |
|               | Health product declaration, per system component                         |
|               | System data sheet, per system                                            |
|               | Product data sheet, per system component                                 |
|               | Test data summary, per system                                            |
|               | Third-party test reports                                                 |

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| Disclaimer | Due to widely varying application conditions, a guarantee for installed materials cannot be reliant on this information. Product specifications are subject to change without notice. All rights reserved. Changes, reprints, and copies, as well as electronic reproduction, even in excerpts, require the explicit permission from BASWA acoustic North America. |
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## ENERGY & ATMOSPHERE (EA)

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### EA Prerequisite 5 Fundamental Refrigerant Management

#### Required

LEED BD+C: New Construction  
LEED BD+C: Core and Shell  
LEED ID+C: Commercial Interiors  
LEED O+M: Existing Buildings

INTENT: To reduce ozone depletion and global warming potential and support early compliance with the Kigali Amendment to the Montreal Protocol, while minimizing direct contributions to climate change.

#### APPLICATION:

#### **BASWA Cool**

Acoustic system with embedded, large-scale water-transporting capillary system providing consistent thermal control at a fraction of the energy typically used in a forced air system, and without the negative effects on the ozone typical with air conditioning systems.

A draft-free, noise-free heating and cooling system with excellent sound absorption that performs through its thinly applied monolithic finish and the thermal conductivity of the marble aggregate.

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### EA Credit 3 Enhanced Energy Efficiency

LEED BD+C: New Construction  
(1 - 10 Points)

LEED BD+C: Core and Shell  
(1 - 7 Points)

LEED ID+C: Commercial Interiors  
(1 - 12 Points)

INTENT: To design buildings that minimize energy use to reduce the environmental damage caused by resource extraction, air pollution, and greenhouse gas emissions and to facilitate the transition to a clean energy future.

#### APPLICATION:

#### **All systems**

BASWA system panels offer a range of high R-values relating to the total panel thickness. *See the chart that follows for system-specific data.*

BASWA finishes are made with recycled marble sand and are cool to the touch. Marble has a natural ability to maintain a cool temperature due to its thermal properties, and quickly absorbs heat and then releases it slowly, creating a cooling effect.

#### **BASWA Cool**

Acoustic system with embedded, large-scale water-transporting capillary system providing consistent thermal control at a fraction of the energy typically used in a forced air system, and without the negative effects on the ozone typical with air conditioning systems.

A draft-free, noise-free heating and cooling system with excellent sound absorption that performs through its thinly applied monolithic finish and the thermal conductivity of the marble aggregate.

Cooling capacity at  $\Delta 8K$ ; 79,1 W / m<sup>2</sup>  
Heating capacity at  $\Delta 15K$ ; 117,7 W / m<sup>2</sup>

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**EA Credit 7**  
**Enhanced Refrigerant Management**

LEED BD+C: New Construction  
(1 - 2 Points)

LEED BD+C: Core and Shell  
(1 - 2 Points)

LEED ID+C: Commercial Interiors  
(1 - 2 Points)

INTENT: To eliminate ozone depletion and global warming potential, and support early compliance with the Montreal Protocol, including the Kigali Amendment, while minimizing direct contributions to climate change.

APPLICATION:

**BASWA Cool**

Acoustic system with embedded, large-scale water-transporting capillary system providing consistent thermal control at a fraction of the energy typically used in a forced air system, and without the negative effects on the ozone typical with air conditioning systems.

A draft-free, noise-free heating and cooling system with excellent sound absorption that performs through its thinly applied monolithic finish and the thermal conductivity of the marble aggregate.

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**MATERIALS & RESOURCES (MR)**

**MR Credit 3**  
**Low-Emitting Materials**

LEED BD+C: New Construction  
(1 - 2 Points)

LEED BD+C: Core and Shell  
(1 Point)

LEED ID+C: Commercial Interiors  
(1 - 4 Points)

INTENT: To reduce concentrations of chemical contaminants that can damage air quality and the environment. To protect human health and the comfort of installers and building occupants.

APPLICATION:

**All systems**

BASWA systems and system components have been tested for compliance with CA Dept. of Public Health CDPH Standard Method Vers 1.2, 2017. Detailed test data available with results of VOC and TVOC ranges.

*See chart that follows for system-specific data.*

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**MR Credit 4**  
**Building Product Selection and Procurement**

LEED BD+C: New Construction  
(1 - 5 Points)

LEED BD+C: Core and Shell  
(1 - 5 Points)

LEED ID+C: Commercial Interiors  
(1 - 10 Points)

INTENT: To encourage the use of products and materials that have sustainability information available and that have environmentally, economically, and socially preferable impacts in alignment with industry momentum. To reward project teams for selecting products from manufacturers who have disclosed sustainability information about their products and optimized their products across multiple criteria areas.

**APPLICATION:**

**All systems**

BASWA utilizes natural plant fibers, recycled glass, post-industrial recycled marble sand, organic binders, and minimal synthetic materials to produce the most sustainable systems available.

Each BASWA system offers unique sustainable solutions. BASWA Phon, BASWA DTG, and BASWA Basic panels are made with recycled glass, reducing landfill waste and the demand for new raw materials. BASWA Natural panels are made exclusively from hemp and flax fibers sustainably cultivated by regional farmers who adhere to strict environmental standards. BASWA finishes are made of post-industrial recycled marble sand that helps form a micro-porous surface that sound can pass through to be absorbed within the system panel.

Drawing on 100% renewable and locally generated electricity from hydropower in the panel production process requires less energy and emits less greenhouse gas. Using only water instead of solvents in our products helps keep harmful VOCs out of the atmosphere.

*See chart that follows for system-specific data.*

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**MR Credit 5**  
**Construction & Demolition Waste Management**

LEED BD+C: New Construction  
(1 - 2 Points)

LEED BD+C: Core and Shell  
(1 - 2 Points)

LEED ID+C: Commercial Interiors  
(1 - 4 Points)

INTENT: To reduce construction and demolition waste disposed of in landfills and incineration facilities and pollution to the environment. To reduce the environmental impacts and embodied carbon of manufacturing new materials and products. To delay the need for new landfill facilities that are often located in frontline communities. To create green jobs and materials markets for building construction services.

APPLICATION:

**All systems**

Typical installation results in less than 3% of panels discarded. Panel scraps may be acceptable in mixed-glass recycling facilities. Plastic buckets containing wet materials are recyclable or reusable. Unused panels and bucket materials can be saved for future projects.

Some products are available in cardboard packaging of our products in cardboard boxes in lieu of plastic buckets, which reduces plastic waste and increases materials per pallet by 50%, and reduces the delivery weight by more than 50%.

We understand that reducing waste is crucial to protecting the environment, and we make sure to use materials that can be easily recycled.

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**INDOOR ENVIRONMENTAL QUALITY (EQ)**

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**EQ Credit 1**  
**Enhanced Air Quality**

LEED BD+C: New Construction  
(1 Point)

LEED BD+C: Core and Shell  
(1 Point)

LEED ID+C: Commercial Interiors  
(1 - 2 Points)

INTENT: To design for increased indoor air quality (IAQ) to better protect the health of building occupants.

APPLICATION:

**All systems**

BASWA systems and system components have been tested for compliance with CA Dept. of Public Health CDPH Standard Method Vers 1.2, 2017. Detailed test data available with results of VOC and TVOC ranges.

*See chart that follows for system-specific data.*

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## **EQ Credit 2 Occupant Experience**

LEED BD+C: New Construction  
(1 - 7 Points)

LEED BD+C: Core and Shell  
(1 - 7 Points)

LEED ID+C: Commercial Interiors  
(1 - 7 Points)

LEED O+M: Existing Buildings  
(1 - 3 Points)

**INTENT:** To move beyond neutral or sufficient spaces toward human-centered design that supports customization, enjoyment, and emotional connections between people and the building, thus increasing the likelihood of consistent satisfaction and ongoing stewardship.

### **APPLICATION:**

#### **All systems**

BASWA systems interact with many senses. Sound and reverberation allow us to construct our perception of space and to develop an aural connection to others and place.

BASWA systems can be coupled to provide flexible sound absorption between zones while maintaining seamless aesthetics. BASWA systems offer high-performance, with performance values specific to each system and finish, and have been tested by standard installation conditions, A-mount and E-mount per ASTM C423 as well as CAC and STC testing.

BASWA systems can be installed in covered, outdoor areas to mitigate sound transference to indoor spaces.

BASWA finishes are made with recycled marble sand, which offers many benefits in addition to durability and natural aesthetic. Marble has a natural ability to maintain a cool temperature due to its thermal properties, and quickly absorbs heat and then releases it slowly, creating a cooling effect. Additionally, BASWA system panels offer a range of high R-values relating to the total panel thickness.

BASWA finishes also boast a high light reflectance L value of 91.03 per ASTM E 1477-98.

*See chart that follows for system-specific data.*

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**EQ Credit 3**  
**Accessibility and Inclusion**

LEED BD+C: New Construction  
(1 Point)

LEED BD+C: Core and Shell  
(1 Point)

LEED ID+C: Commercial Interiors  
(1 - 2 Points)

**INTENT:** To support the diverse needs of occupants and increase widespread usability of the building to foster an individual and collective sense of belonging.

**APPLICATION:**

**All systems**

The connection between improved acoustics and humans underlines the need for access to wellbeing in all spaces and knowledge on the impact of acoustics on everyday health.

BASWA systems interact with many senses. Sound and reverberation allow us to construct perception of space and determine aural connection to others and places. Aural impression is key to delivering acoustic comfort and calm, and can influence one's comprehension of spatial experience.

BASWA systems can be coupled to provide flexible sound absorption between zones while maintaining seamless aesthetics. BASWA systems offer high-performance, specific to each selected system and finish and have been tested by varying installation conditions, A-mount and E-mount per ASTM C423.

*See chart that follows for system-specific data.*

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| System     | Finish       | Thickness | NRC<br>E Mount<br>A Mount | Weight<br>lbs / sf | Recycled<br>materials<br>by weight | Pre / Post<br>consumer<br>content by<br>weight | Thermal<br>Conductivity<br>W/(m*K) | Light<br>reflectance<br>L-value | VOC per<br>CDPH<br>mg/m3 | LBC<br>Red List<br>Free | HPD | EPD |
|------------|--------------|-----------|---------------------------|--------------------|------------------------------------|------------------------------------------------|------------------------------------|---------------------------------|--------------------------|-------------------------|-----|-----|
|            | Classic Fine | 30 mm     | 0.80<br>0.80              | 2.06               | 81.2%                              | 64.6% pre<br>16.5% post                        | 0.044                              |                                 |                          |                         |     |     |
|            |              | 40 mm     | 0.85<br>0.85              | 2.24               | 81.8%                              | 59.6% pre<br>22.3% post                        | 0.041                              | 91.3                            | ≤ 0.5 Pass               | •                       | •   | •   |
|            |              | 70 mm     | 0.95<br>0.90              | 2.64               | 83.1%                              | 50.6% pre<br>32.5% post                        | 0.038                              |                                 |                          |                         |     |     |
|            |              | 30 mm     | 0.80<br>0.80              | 2.24               | 81.6%                              | 66.4% pre<br>15.2% post                        | 0.044                              |                                 |                          |                         |     |     |
|            |              | 40 mm     | 0.85<br>0.85              | 2.41               | 82.2%                              | 61.6% pre<br>20.6% post                        | 0.041                              | 89.6                            | ≤ 0.5 Pass               | •                       | •   | •   |
|            |              | 70 mm     | 1.00<br>0.90              | 2.81               | 83.3%                              | 52.8% pre<br>30.5% post                        | 0.038                              |                                 |                          |                         |     |     |
|            | Classic Base | 30 mm     | 0.80<br>0.80              | 1.53               | 77.3%                              | 55.0% pre<br>22.3% post                        | 0.044                              |                                 |                          |                         |     |     |
|            |              | 40 mm     | 0.85<br>0.85              | 1.70               | 78.6%                              | 49.4% pre<br>29.2% post                        | 0.041                              | 91.3                            | ≤ 0.5 Pass               | •                       | •   | •   |
|            |              | 70 mm     | 0.95<br>1.00              | 2.10               | 80.7%                              | 40.0% pre<br>40.8% post                        | 0.038                              |                                 |                          |                         |     |     |
|            |              | 30 mm     | 0.80<br>0.80              | 1.62               | 77.3%                              | 56.2% pre<br>21.1% post                        | 0.044                              |                                 |                          |                         |     |     |
|            |              | 40 mm     | 0.85<br>0.85              | 1.79               | 78.5%                              | 50.7% pre<br>27.8% post                        | 0.041                              | 89.6                            | ≤ 0.5 Pass               | •                       | •   | •   |
|            |              | 70 mm     | 1.00<br>0.95              | 2.19               | 80.6%                              | 41.5% pre<br>39.1% post                        | 0.038                              |                                 |                          |                         |     |     |
| BASWA Phon | Base         | 30 mm     | 0.80<br>0.80              | 2.24               | 81.6%                              | 66.4% pre<br>15.2% post                        | 0.044                              |                                 |                          |                         |     |     |
|            |              | 40 mm     | 0.85<br>0.85              | 2.41               | 82.2%                              | 61.6% pre<br>20.6% post                        | 0.041                              | —                               | ≤ 0.5 Pass               | •                       | •   | •   |
|            |              | 70 mm     | 1.00<br>1.00              | 2.81               | 83.3%                              | 52.8% pre<br>30.5% post                        | 0.038                              |                                 |                          |                         |     |     |
|            |              |           |                           |                    |                                    |                                                |                                    |                                 |                          |                         |     |     |
|            |              |           |                           |                    |                                    |                                                |                                    |                                 |                          |                         |     |     |
|            |              |           |                           |                    |                                    |                                                |                                    |                                 |                          |                         |     |     |

| System        | Finish       | Thickness | NRC<br>E Mount<br>A Mount | Weight<br>lbs / sf | Recycled<br>materials<br>by weight | Pre / Post<br>consumer<br>content by<br>weight | Thermal<br>Conductivity W/<br>(m*K) | Light<br>reflectance<br>L-value | VOC per<br>CDPH<br>mg/m3 | LBC<br>Red List<br>Free | HPD | EPD |
|---------------|--------------|-----------|---------------------------|--------------------|------------------------------------|------------------------------------------------|-------------------------------------|---------------------------------|--------------------------|-------------------------|-----|-----|
| BASWA DTG     | Prime Base   | 30 mm     | 0.80<br>(E Mount)         | 1.61               | 83.4%                              | 52.2% pre<br>31.2% post                        | 0.045                               | 89.6                            | ≤ 0.5 Pass               | —                       | •   | —   |
|               | Prime Frost  | 30 mm     | 0.75<br>(E Mount)         | 1.61               | 83.4%                              | 52.2% pre<br>31.2% post                        | 0.045                               | —                               | —                        | —                       | —   | —   |
|               | One          | 30 mm     | 0.75<br>0.70              | 1.93               | 82.0%                              | 16.6% pre<br>65.4% post                        | 0.073                               | 90.2                            | —                        | —                       | —   | —   |
|               | Prime Fine   | 30 mm     | 0.70<br>0.70              | 2.35               | 82.0%                              | 28.4% pre<br>53.6% post                        | 0.073                               | 91.3                            | ≤ 0.5 Pass               | •                       | •   | —   |
| BASWA Basic   | Prime Base   | 30 mm     | 0.75<br>0.75              | 2.53               | 82.8%                              | 32.9% pre<br>49.9% post                        | 0.073                               | 89.6                            | —                        | —                       | —   | —   |
|               | Classic Fine | 30 mm     | 0.75<br>0.70              | 2.24               | 59.6%                              | 58.4% pre<br>1.2% post                         | 0.043                               | 91.3                            | ≤ 0.5 Pass               | •                       | —   | •   |
|               | Classic Base | 30 mm     | 0.75<br>0.75              | 2.41               | 61.6%                              | 60.5% pre<br>1.2% post                         | 0.043                               | 89.6                            | ≤ 0.5 Pass               | •                       | —   | •   |
|               |              | 40 mm     | 0.80<br>0.75              | 2.50               | 53.3%                              | 52.2% pre<br>1.1% post                         | 0.041                               | —                               | —                        | —                       | —   | —   |
| BASWA Natural | Fine         | 30 mm     | 0.75<br>0.75              | 1.70               | 49.4%                              | 47.8% pre<br>1.6% post                         | 0.043                               | 91.3                            | ≤ 0.5 Pass               | •                       | —   | •   |
|               |              | 40 mm     | 0.70<br>0.65              | 1.97               | 42.8%                              | 41.3% pre<br>1.4% post                         | 0.041                               | —                               | —                        | —                       | —   | —   |
|               | Base         | 30 mm     | 0.70<br>0.70              | 1.79               | 50.8%                              | 49.2% pre<br>1.6% post                         | 0.043                               | 89.6                            | ≤ 0.5 Pass               | •                       | —   | •   |
|               |              | 40 mm     | 0.80<br>0.85              | 2.06               | 44.2%                              | 42.9% pre<br>1.4% post                         | 0.041                               | —                               | —                        | —                       | —   | —   |
|               | Frost        | 30 mm     | 0.75<br>0.75              | 2.41               | 61.6%                              | 60.5% pre<br>1.2% post                         | 0.043                               | —                               | ≤ 0.5 Pass               | •                       | —   | •   |
|               |              | 40 mm     | 0.80<br>0.80              | 2.68               | 55.5%                              | 54.5% pre<br>1.0% post                         | 0.041                               | —                               | —                        | —                       | —   | —   |

| Material      | Thickness | NRC<br>E Mount<br>A Mount | Weight<br>lbs / sf | Recycled<br>materials<br>by weight | Pre / Post<br>consumer<br>content by<br>weight | Thermal<br>Conductivity W/<br>(m*K) | Light<br>reflectance<br>L-value | VOC per<br>CDPH<br>mg/m3 | LBC<br>Red List<br>Free | HPD | EPD |
|---------------|-----------|---------------------------|--------------------|------------------------------------|------------------------------------------------|-------------------------------------|---------------------------------|--------------------------|-------------------------|-----|-----|
| Phon Panel    | 26 mm     | 0.75<br>0.70              | 0.58               | 82.9%                              | 28.4% pre<br>54.4% post                        | 0.039                               |                                 |                          |                         |     |     |
|               | 36 mm     | 0.90<br>0.90              | 0.75               | 84.5%                              | 21.8% pre<br>62.7% post                        | 0.038                               | —                               | ≤ 0.5 Pass               | •                       | •   | •   |
|               | 66 mm     | 1.00<br>1.00              | 1.15               | 86.4%                              | 14.2% pre<br>72.2% post                        | 0.036                               |                                 |                          |                         |     |     |
| DTG Panel     | 26 mm     | —                         | 0.56               | 90.0%                              | 90.0% post                                     | 0.040                               | —                               | ≤ 0.5 Pass               | —                       | •   | —   |
| Basic Panel   | 24.5 mm   | —                         | 1.36               | 93.0%                              | 93.0% post                                     | 0.073                               | —                               | ≤ 0.5 Pass               | •                       | •   | —   |
| Natural Panel | 26 mm     | —                         | 0.75               | 18.3%                              | 18.3% pre                                      | 0.043                               |                                 |                          |                         |     |     |
|               | 36 mm     | —                         | 1.02               | 13.5%                              | 13.5% pre                                      | 0.041                               | —                               | ≤ 0.5 Pass               | •                       | —   | —   |
| Hybrid Panel  | 10 mm     | —                         | 0.31               | 72.0%                              | 72.0% post                                     | 0.071                               | —                               | ≤ 0.5 Pass               | •                       | —   | —   |
| Fine          | —         | —                         | —                  | 95%                                | 95% pre                                        | —                                   | 91.3                            | ≤ 0.5 Pass               | •                       | •   | •   |
| Base          | —         | —                         | —                  | 93%                                | 93% pre                                        | —                                   | 89.6                            | ≤ 0.5 Pass               | •                       | •   | •   |
| One           | —         | —                         | —                  | 86%                                | 86% pre                                        | —                                   | 90.2                            | ≤ 0.5 Pass               | •                       | •   | —   |
| Fill          | —         | —                         | —                  | 68%                                | 68% post                                       | —                                   | —                               | ≤ 0.5 Pass               | •                       | •   | •   |
| Prime         | —         | —                         | —                  | 65%                                | 65% pre                                        | —                                   | —                               | ≤ 0.5 Pass               | •                       | •   | —   |

Individual  
components