# BAUX MATERIAL DATA SHEET

## BAUX ACOUSTIC WOOD WOOL PRODUCTS

BAUX Acoustic Wood Wool is a functional, natural material made from two of the world's oldest building materials, wood and cement. The combination is simple and ingenious. Wood fiber offers excellent insulation, heat retention and sound absorption. BAUX is made from certified wood – FSC® and PEFC™ – guaranteeing that it can be traced back to responsible forestry operations. Cement, a proven and popular building material, is the binder that provides strength, moisture resistance and fire protection. Therefore, BAUX Acoustic products are versatile and durable in all climates.

### COMPOSITION OF INGREDIENTS

| Ingredient: | (1) PORTLAND CEMENT | (2) WOOD SWEDISH FIR (FSC) | (3) LIMESTONE POWDER | (4) PAINT, WATER BASED |
|---|---|---|---|---|
| Share (%) | 48% | 35% | 17% | <1% |
| CAS: | 65997-15-1 | - | 471-34-1 | - |
| Function: | Binder | Sounds absorber, visual look | Binder | Visual look |
| Supplier: | Cementa | | Nordkalk | Teknos |
| Origin: | Sweden & Denmark (20%/80%) | Sweden | Sweden | |
| Certificates: | | FSC & PEFC | | Group M1, The Swan |

### PHYSICAL APPEARANCE & PERFORMANCE

| | | | |
|---|---|---|---|
| Appearance: | Interior/Exterior wall or ceiling panels | Thermal resistance | RD $m^2 \cdot K/W$ = 0,294 (25mm) 0,588 (50 mm) and 0,823 (70 mm) |
| Colors: | Unpainted or painted – see next page | Thermal conductivity | $\lambda_{average}$ 0,085 W/m°C (25 mm thickness) |
| Odor: | None | Steam coefficient permeability. | 4 - 5 x 10-6 $m^2/s$. |
| Solubility in water: | None | Air permeability | ~20 $m^3/m^2hPa$ |
| Density: | ~300 $kg/m^3$ (11 $kg/m^2$ = 2.25 lbs/ft2 t25mm) | Tensile Strength | 0,007 MPa |
| Dust: (1) | No measurable particle attraction | Compression strength | 0,4 MPa |
| Emissions: (2) | < 11µg/m2 x h | Flexural Strength | 0,7 MPa |
| Asbestos release: | No content | Deformation | 4 mm (0.05 MPa pressure), 5 mm (0.10 MPa pressure) |
| Recycled content: | None | TVOC emission rate (µg/m2h): | 14/33 (unpainted/painted)* |
| Harmful additives: | None | VVOC emission rate (µg/m2h): | 97* |
| Red list chemicals: | None | SVOC emission rate (µg/m2h): | < 2* |
| Product life time: | 50 years | Formaldehyde (µg/m2h) | < 1* |

(1) RNK & Sitac blasted 10 year old tiles with air jet (2) Swedish Institute of Technical Research - Protocol 90K10102 * measured after 28 days, report RISE Research Institutes of Sweden AB

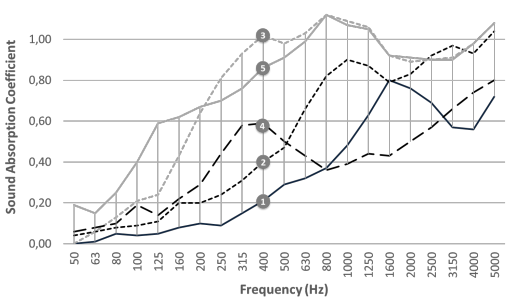
### REACTION TO FIRE & STANDARDS

| | |
|---|---|
| Classification | A-Classed according to ASTM E84 standard (Flame spread Index = 0 Smoke developed index = 0)<br>B-s1, d0 according to EN 13823 EN ISO 11925-2 |
| Extinguishing media | Water, Carbon Dioxide, Foam or Dry Chemical |
| Harmonized standard | SS-EN 13168:2012+A1:2015 - Thermal insulation products for buildings, factory made wood wool products<br>SS-EN 13964:2014 - Suspended Ceilings |
| Stability and reactivity | Stability: Stable<br>Conditions to avoid: None known |

### ACOUSTICAL CHARACTERISTICS

| Installation method | | | $\alpha_w$ | NRC | SAA | Class |
|---|---|---|---|---|---|---|
| Direct Mounted on Concrete Wall | 1 | BAUX 25mm<br>Any shape | 0.30 | 0.40 | 0.41 | D |
| | 2 | BAUX 3D PIXEL<br>Equal amount of t25/t50/t70 mm | 0.50 (MH) | 0.60 | 0.62 | D |
| | 3 | BAUX 25mm<br>40 mm Stone Wool | 1.0 (H) | 0.95 | 0.95 | A |
| Air Slot between Concrete Wall and BAUX material | 4 | BAUX 25 mm<br>200 mm slot | 0.50 (H) | 0.45 | 0.46 | D |
| | 5 | BAUX 25mm + 40 mm Stone Wool<br>200 mm slot | 0.90 (H) | 0.90 | 0.90 | A |

Absorption coefficient




$\alpha_w$ = Weighted sound absorption coefficient NRC = Noise Reduction Coefficient SAA = Sound Absorption Average (ASTM C423)
Stone Wool in use: 40mm stone wool panel 140 $kg/m^3$ Using Stone Wool as backing may require screws to fix the tiles appropriately, or a frame around the tiles

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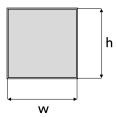
## PRODUCTION & CERTIFICATES

| | | | | |
|---|---|---|---|---|
| Production locations | Raw material: Ydre, Sweden Finishing: Ydre, Sweden & Virginia, USA | | | |
| Waste in production | 80% of waste (wood wool) from production is used for heating of the factory and the drying plant. No waste for the timber log. | | | |
| Regulation/protocol (VOC Test Report Indoor Air Comfort GOLD) | French VOC Regulation | A+ | Indoor Air Comfort GOLD® | Pass |
| | French CMR components | Pass | EN 717-1§ | E1 |
| | AgBB/ABG | Pass | BREEAM International | Compliant |
| | Belgian Regulation | Pass | LEED v4 (outside U.S.) | Compliant |
| | Indoor Air Comfort® | Pass | BREEAM® NOR | Pass |
| Collaborations & supplier certificate | SundaHus, PEFC FSC, PORTICO, BYGGVARUBEDÖMNINGEN, EPD | | | |

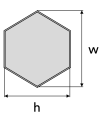
## BAUX PRODUCT DIMENSIONS

### 3D PIXEL



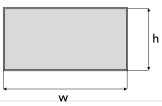

| | w [mm] | h [mm] | t [mm] | pieces/m² | w [~inch] | h [~inch] | t [~inch] | pieces/sq.ft. |
|---|---|---|---|---|---|---|---|---|
| t25 | 290 | 290 | 25 | 11.89 | 11.42 | 11.42 | 1.0 | 1.10 |
| t50 | 290 | 290 | 50 | 11.89 | 11.42 | 11.42 | 2.0 | 1.10 |
| t70 | 290 | 290 | 70 | 11.89 | 11.42 | 11.42 | 2.75 | 1.10 |

### HEXAGON



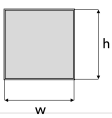

| | w [mm] | h [mm] | t [mm] | Pieces/m² | w [~inch] | h [~inch] | t [~inch] | pieces/sq.ft. |
|---|---|---|---|---|---|---|---|---|
| Mini | 220 | 190 | 25 | 31,29 | 8.66 | 7.48 | 1.0 | 2.91 |
| Small | 290 | 250 | 25 | 17.82 | 11.42 | 9.84 | 1.0 | 1.66 |
| Large | 580 | 500 | 25 | 4.45 | 22.84 | 19.68 | 1.0 | 0.41 |

### RECTANGLE



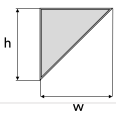

| | w [mm] | h [mm] | t [mm] | pieces/m² | w [~inch] | h [~inch] | t [~inch] | pieces/sq.ft. |
|---|---|---|---|---|---|---|---|---|
| Small | 580 | 290 | 25 | 5.95 | 22.84 | 11.42 | 1.0 | 0.55 |
| Large | 580 | 1160 | 25 | 1.49 | 22.84 | 45.7 | 1.0 | 0.14 |

### SQUARE



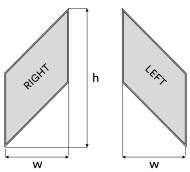

| | w [mm] | h [mm] | t [mm] | pieces/m² | w [~inch] | h [~inch] | t [~inch] | pieces/sq.ft. |
|---|---|---|---|---|---|---|---|---|
| Small | 290 | 290 | 25 | 11.89 | 11.42 | 11.42 | 1.0 | 1.10 |
| Large | 580 | 580 | 25 | 2.97 | 22.84 | 22.84 | 1.0 | 0.28 |

### TRIANGLE



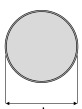

| | w [mm] | h [mm] | t [mm] | pieces/m² | w [~inch] | h [~inch] | t [~inch] | pieces/sq.ft. |
|---|---|---|---|---|---|---|---|---|
| Small | 290 | 290 | 25 | 23.78 | 11.42 | 11.42 | 1.0 | 2.21 |
| Large | 580 | 580 | 25 | 5.95 | 22.84 | 22.84 | 1.0 | 0.55 |

### PARALLELOGRAM



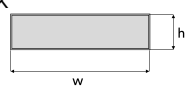

| | w [mm] | h [mm] | t [mm] | pieces/m² | w [~inch] | h [~inch] | t [~inch] | pieces/sq.ft. |
|---|---|---|---|---|---|---|---|---|
| Small | 290 | 580 | 25 | 11.89 | 11.42 | 22.84 | 1.0 | 1.10 |
| Large | 580 | 1160 | 25 | 2.97 | 22.84 | 45.7 | 1.0 | 0.28 |

### CIRCLE



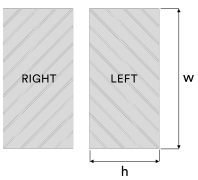

| | diameter [mm] | t [mm] | pieces/m² | diameter [~inch] | t [~inch] | pieces/sq.ft. |
|---|---|---|---|---|---|---|
| Small | 290 | 25 | 15.14 | 11.42 | 1.0 | 1.41 |
| Large | 580 | 25 | 3.78 | 22.84 | 1.0 | 0.35 |

### PLANK




| | w [mm] | h [mm] | t [mm] | pieces/m² | w [~inch] | h [~inch] | t [~inch] | pieces/sq.ft. |
|---|---|---|---|---|---|---|---|---|
| Small | 580 | 145 | 25 | 11.89 | 22.84 | 5.71 | 1.0 | 1.10 |
| Large | 1160 | 290 | 25 | 2.97 | 45.7 | 11.42 | 1.0 | 0.28 |

### PANEL




| | w [mm] | h [mm] | t [mm] | pieces/m² | w [~inch] | h [~inch] | t [~inch] | pieces/sq.ft. |
|---|---|---|---|---|---|---|---|---|
| All shapes (1) | 1160 | 580 | 25 | 1.49 | 45.7 | 22.84 | 1.0 | 0.14 |

(1) BAUX PANELS are available in 5 different surface structures. DIAGONAL (left and right), QUILTED, CHECK, LINES and STRIPES. Visit www.baux.se for more info

# BAUX MATERIAL DATA SHEET

## BAUX STANDARD AND INITAIL COLOR COLLECTION

| CLOUDS | WOODS | SKY IN THE SEA | HEAT OF THE SUN | EARTH & MOUNTAIN |
|---|---|---|---|---|
| NCS 9000-N | NCS S 6020- B | NCS S3050-R90B | NCS S 4040-R10B | NCS S 5020-Y90R |
| NCS S 7502 - B | NCS S 4020- G10Y | NCS S 3020-B10G | NCS 3040-R10B | NCS 3050-Y40R |
| NCS S 2502- B | NCS S 1020-G | NCS S 0530-B10G | NCS S 1030-R10B | NCS S 2030-Y40R |
| NCS S 0300-N | NCS S 1010-G30Y | NCS S 2020-B70G | NCS S 0520-Y80R | NCS S 1510-R40B |

## INITIAL COLORS

| | | |
|---|---|---|
| SKY<br>NCS 1060-B | HONEY<br>NCS 1060-Y10R | FALL<br>NCS 1080-Y30R |
| ULTRA<br>NCS 7020-R80B | LEAF<br>NCS 4050-G20Y | MOSS<br>NCS 7020-G10Y |