# ACOUSTIC ABSORPTION BLANKET (AAB)

GreenStuf<sup>®</sup> Acoustic Absorption Blanket (AAB<sup>®</sup>) is a range of 100% polyester acoustic insulation products designed for reducing and controlling reverberated noise in building interiors. GreenStuf AAB is ideally suited for use as an absorber behind acoustic panels and ceiling systems.

GreenStuf AAB is available in a range of densities and performance options. GreenStuf AAB is supplied as lofted black, grey, and white insulation panels /sheets.

# APPLICATIONS

GreenStuf AAB has been engineered to maximize sound absorption for the control of reverberated noise in building interiors. GreenStuf AAB is ideal for managing noise in theatres, studios, auditoriums, halls, offices, retail and indoor swimming pool complexes. GreenStuf AAB can also be used in marine applications, as acoustic baffles, acoustic infill for silencers and louvres, and insulation for Original Equipment Manufacturers (OEM).

To ensure New Zealand Building Code (NZBC) compliance, architects and building designers are advised to consult an engineer or the relevant NZ standards before specifying acoustic insulation products. For information and assistance please contact your GreenStuf account manager.

# TECHNICAL

NZBC Compliance: When installed in accordance with the manufacturer's instructions will satisfy the 50 year durability clause NZBC B2.3.1 (a). GreenStuf meets the relevant clauses of NZBC E3 Internal Moisture, F2 Hazardous Building Materials, and may contribute to meeting H1 Energy Efficiency, and G6 Acoustic Design requirements.

**Vermin:** GreenStuf is naturally resistant to insect and vermin attack.

**Fire Regulations:** Greenstuf insulation may not be suitable for all applications, as stipulated in the NZBC.

Please consult a fire engineer when specifying GreenStuf insulation or contact your GreenStuf account manager for further information.

Durability: GreenStuf has a 50 Year Durability Warranty.

**Product Format:** GreenStuf AAB is available as standard 2400mm x 1200mm sheets, in black and white. Custom sizes, grey colour blends and self-adhesive backed options are available with minimum order quantities on request.

**Moisture:** GreenStuf is not affected by moisture. Exposure to an atmosphere of 50°C at 90% relative humidity for four days showed moisture absorption by weight of less than 0.03%.

Hazardous Building Materials: GreenStuf is non-hazardous.

#### VOC Emission Safe:

VOC concentration: GECA/GreenGuard Limit: Cetec Pty Ltd (Report: RCV080408) 0.01 mg/m<sup>3</sup> (7 days). 0.25 mg/m<sup>3</sup> (7 days).

**Non-Corrosive:** GreenStuf polyester is considered non-corrosive based on AS/NZS 4859.1 Standard for insulation.

**Non-Toxic, Non-Allergenic, Non-Irritant:** There are no known hazards with the use or handling of GreenStuf polyester.

**MSDS:** Material Safety Data Sheets (MSDS) are available on request from your GreenStuf account manager or can be downloaded from our website greenstuf.co.nz

**Installation:** GreenStuf AAB should ideally be installed with the textured/patterned surface exposed to the sound source. GreenStuf AAB can be fixed to wall and ceiling substrates using a contact type adhesive (ADOS F2) and/ or mechanical fixings such as insulation anchors. Additional information and advice are available from your GreenStuf account manager or by visiting our website greenstuf.co.nz

## Fire ratings:

ISO 9705: 1993 Classification: Group 1-S Smoke Production Rate: <5.0m<sup>2</sup>/s As required by NZBC C/VM2 F1 4973 and FAR 4045

### <u>AS/NZS 1530.3</u> Ignitability Index (0-20) 0 Heat Evolved Index (0-10) 0 Spread of Flame Index (0-10) 0

Smoke Developed Index (0-10) 0-1 FNE8363 IEC 60695-11-5 (Downlight Fire Test Standard)

IEC 60695-11-5 (Downlight Fire Test Standard) GreenStuf AAB range has been tested and assessed as complying with IEC 60695-11-5 Needle-flame Test.











| PRODUCT                                  | THICKNESS | SIZE            | FORM      | WEIGHT  | DENSITY             |  |
|------------------------------------------|-----------|-----------------|-----------|---------|---------------------|--|
| Acoustic Absorption Blanket (AAB) 14-25  | 25mm      | 1200mm x 30m    | Roll Form | 350gsm  | 14kg/m <sup>3</sup> |  |
| Acoustic Absorption Blanket (AAB) 25-25  | 25mm      | 1200mm x 2400mm | Slab      | 625gsm  | 25kg/m³             |  |
| Acoustic Absorption Blanket (AAB) 35-25  | 25mm      | 1200mm x 2400mm | Slab      | 875gsm  | 35kg/m³             |  |
| Acoustic Absorption Blanket (AAB) 48-25  | 25mm      | 1200mm x 2400mm | Slab      | 1200gsm | 48kg/m <sup>3</sup> |  |
| Acoustic Absorption Blanket (AAB) 14-50  | 50mm      | 1200mm x 2400mm | Slab      | 700gsm  | 14kg/m <sup>3</sup> |  |
| Acoustic Absorption Blanket (AAB) 35-50  | 50mm      | 1200mm x 2400mm | Slab      | 1750gsm | 35kg/m <sup>3</sup> |  |
| Acoustic Absorption Blanket (AAB) 48-50  | 50mm      | 1200mm x 2400mm | Slab      | 2400gsm | 48kg/m <sup>3</sup> |  |
| Acoustic Absorption Blanket (AAB) 20-75  | 75mm      | 1200mm x 2400mm | Slab      | 1500gsm | 20kg/m <sup>3</sup> |  |
| Acoustic Absorption Blanket (AAB) 35-75  | 75mm      | 1200mm x 2400mm | Slab      | 2625gsm | 35kg/m³             |  |
| Acoustic Absorption Blanket (AAB) 48-75  | 75mm      | 1200mm x 2400mm | Slab      | 3600gsm | 48kg/m <sup>3</sup> |  |
| Acoustic Absorption Blanket (AAB) 20-100 | 100mm     | 1200mm x 2400mm | Slab      | 2000gsm | 20kg/m³             |  |
| Acoustic Absorption Blanket (AAB) 40-100 | 100mm     | 1200mm x 2400mm | Slab      | 4000gsm | 40kg/m <sup>3</sup> |  |
| Acoustic Absorption Blanket (AAB) 48-100 | 100mm     | 1200mm x 2400mm | Slab      | 4800gsm | 48kg/m <sup>3</sup> |  |

**Specification & Substitution:** GreenStuf specification documents are available through Masterspec or can be downloaded from our website greenstuf.co.nz

The performance and design of GreenStuf AAB has been engineered to supply a tested and proven sound control system. Substitution of any specified components in a sound control system can significantly compromise the system performance. Accept NO substitutions.

**Manufacture:** GreenStuf AAB is manufactured to a strict set of tolerances and best practice. GreenStuf AAB is an acoustic insulation designed to be installed in commercial buildings at height, therefore may contain some fibre colour contamination and/or belt marks. These elements are a result of the manufacturing process, if you require a perfect finished surface please consider our Quietspace\* Panel range or consult with your GreenStuf account manager.

Acoustic and Thermal Performance: All GreenStuf AAB acoustic and thermal performance testing has been carried out in a laboratory environment. On-site results could vary depending on the system design, product handling and quality of the installation. For service and advice, please contact your GreenStuf account manager or visit our website greenstuf.co.nz

**ISO Standards:** GreenStuf is committed to Occupational Health and Safety, Quality and Environmental best practice through our ISO 45001, ISO 9001 and ISO 14001 certified management systems. Takeback Programme: GreenStuf is recyclable. We will gladly recycle used polyester insulation site waste, including offcuts and packaging, to help keep it out of landfills. Please ensure used polyester insulation and offcuts are in a general state of cleanliness in line with standard site conditions. Excessive contamination, such as metal and cement, will not be accepted. Please contact your account manager to request a Material Diversion Certificate prior to dropping insulation off. For more information on recycling GreenStuf, contact us on 0800 428 839.

**Packaging Recycling:** GreenStuf packaging is recyclable LDPE 4. Please refer to your local recycling centres for drop off and collection services.

**Environmental:** GreenStuf\* Acoustic Absorption Blanket (AAB") is manufactured using 100% polyester fibre and contains a minimum of 70% previously recycled fibre content (from PET plastic). Greenstuf views waste as a resource with potential, not something to be disposed of. With this in mind, all product trimmings and offcuts are reused, and waste material goes back through production to make more GreenStuf.

GreenStuf products are Global GreenTag GreenRate Level A certified and can be used to contribute to Green Star and Homestar accreditation.

GreenStuf is also Declare certified to be Red List chemical free and can be used in Living Building Challenge projects. For more information, please contact your GreenStuf account manager, or visit our website greenstuf.co.nz

| PRODUCT    | THICKNESS | WEIGHT  | DENSITY             | 125Hz | SOUND<br>250Hz | ABSORPT | ION — FRE<br>1000Hz | QUENCY<br>2000Hz | 4000Hz | NRC  |
|------------|-----------|---------|---------------------|-------|----------------|---------|---------------------|------------------|--------|------|
| AAB 14-25  | 25mm      | 350gsm  | 14kg/m <sup>3</sup> | 0.13  | 0.29           | 0.48    | 0.62                | 0.69             | 0.65   | 0.50 |
| AAB 25-25  | 25mm      | 625gsm  | 25kg/m <sup>3</sup> | 0.15  | 0.30           | 0.50    | 0.65                | 0.75             | 0.75   | 0.55 |
| AAB 35-25  | 25mm      | 875gsm  | 35kg/m³             | 0.10  | 0.38           | 0.64    | 0.83                | 0.88             | 0.84   | 0.70 |
| AAB 48-25  | 25mm      | 1200gsm | 48kg/m <sup>3</sup> | 0.15  | 0.42           | 0.73    | 0.92                | 0.96             | 0.90   | 0.75 |
| AAB 14-50  | 50mm      | 700gsm  | 14kg/m <sup>3</sup> | 0.29  | 0.54           | 0.78    | 0.82                | 0.80             | 0.76   | 0.75 |
| AAB 35-50  | 50mm      | 1750gsm | 35kg/m³             | 0.29  | 0.68           | 1.01    | 1.01                | 0.97             | 0.95   | 0.90 |
| AAB 48-50  | 50mm      | 2400gsm | 48kg/m <sup>3</sup> | 0.21  | 0.54           | 0.96    | 1.08                | 1.02             | 1.03   | 0.90 |
| AAB 20-75  | 75mm      | 1500gsm | 20kg/m <sup>3</sup> | 0.35  | 0.60           | 0.85    | 0.95                | 0.90             | 0.95   | 0.85 |
| AAB 35-75  | 75mm      | 2625gsm | 35kg/m <sup>3</sup> | 0.38  | 0.95           | 1.16    | 1.07                | 0.98             | 0.96   | 1.05 |
| AAB 48-75  | 75mm      | 3600gsm | 48kg/m <sup>3</sup> | 0.40  | 0.80           | 1.15    | 1.10                | 1.05             | 1.05   | 1.05 |
| AAB 20-100 | 100mm     | 2000gsm | 20kg/m <sup>3</sup> | 0.50  | 0.85           | 1.00    | 0.95                | 0.95             | 1.00   | 0.95 |
| AAB 40-100 | 100mm     | 4000gsm | 40kg/m <sup>3</sup> | 0.45  | 1.05           | 1.15    | 1.05                | 1.05             | 1.05   | 1.05 |
| AAB 48-100 | 100mm     | 4800gsm | 28kg/m³             | 0.88  | 1.14           | 1.10    | 1.03                | 1.03             | 0.98   | 1.10 |



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