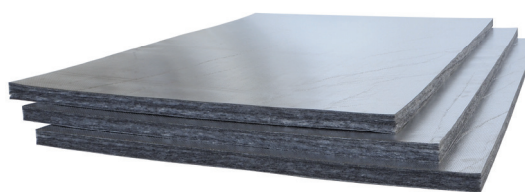


GreenStuf®

AUTEX RIGID DUCT LINER

GreenStuf® Autex Rigid Duct Liner (ARD) consists of 100% polyester insulation material bonded to a durable facing. GreenStuf HVAC range has been engineered to improve the acoustic performance and thermal efficiency of residential and commercial rigid ducting.



Declare.



PROUDLY MADE IN AUSTRALIA

APPLICATIONS

GreenStuf ARD has been designed as a thermal and acoustic lining for all types of air conditioning systems, including rectangular ducting, oval and round sheet-metal ducting and silencers.

Its high durability rating means it can be used for both low and high air-flow volumes, rated to velocities of up to 50m/second, with no additional protection. The tough black facing also helps protect the liner on-site prior to installation.

To ensure Building Code compliance, architects and building designers are advised to consult an engineer or the relevant Australian standards before specifying thermal and acoustic insulation products. For information and assistance please contact your local Autex account manager.

TECHNICAL

Building Regulations: GreenStuf ARD will support and assist in meeting the following provisions of the NCC:

NCC Volume One - BCA Class 2-9 Buildings

Section J - Energy Efficiency: Performance requirement

JP1 Section F - Health and Amenity: Sound Transmission and Insulation. Performance requirement FP 5.1 and FP 5.4

NCC Volume Two - BCA Class 1 and Class 10 Buildings

Part 2.6 - Energy Efficiency: Performance requirement P 2.6.1

Part 3.8.6 -Health and Amenity, Sound Insulation: Performance requirements P 2.4.6.

BCA Compliance: GreenStuf will contribute to achieving the energy efficiency requirements of the NCC. GreenStuf ARD complies with the requirements of AS4254 "Ductwork for Air Handling and the National Construction Code of Australia".

Thermal Performance: GreenStuf ARD declared thermal performance ratings have been laboratory tested to ASTM C518 using the procedures of ASTM C653 including modifications specified in AS/NZS 4859.1 standard for insulation.

Hazardous Building Materials: GreenStuf is non-hazardous.

Fire Regulations: GreenStuf insulation may not be suitable for all applications, as stipulated in the NCC. Please consult a fire engineer when specifying GreenStuf insulation or contact your local Autex account manager for further information.

Nominal Thickness: The products nominal thickness is the off-line manufactured thickness. Packaging, storage and handling may affect the "out of the pack" thickness. This is not considered a manufacturing fault. If thickness is critical to a particular installation please discuss your requirements with your Autex account manager.

Acoustic Performance: GreenStuf ARD will reduce noise transfer through ducting and help the attenuation of fan noise. Total noise and insertion loss in ducting depends on the absorption of the insulation material, coverage applied and the design of the individual duct and it's layout. For further information please contact your local Autex account manager.

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%.

Durability: GreenStuf has a 50 Year Durability Warranty. When installed in accordance with the manufacturer's instructions, GreenStuf insulation will satisfy the 50 year durability criteria for minimum design life as set out in the ABCB guidance document Durability in Buildings including Plumbing installations 2015 (section 3.4).

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

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

| PRODUCT | NOMINAL THICKNESS (mm) | R-VALUE | NRC | SLABS PER PACK | m ² /PACK |
|----------|------------------------|---------|-----|----------------|----------------------|
| R0.6 ARD | 25mm | R0.6 | 0.7 | 10 | 28.80m ² |
| R1.0 ARD | 45mm | R1.0 | 0.8 | 5 | 14.50m ² |
| R1.5 ARD | 50mm | R1.5 | 0.9 | 5 | 14.40m ² |
| R2.0 ARD | 75mm | R2.0 | 1.0 | 3 | 8.64m ² |

Sizes: GreenStuf ARD is made to order. Sheet size typically: 1200mm x 2400mm (+/- 10mm). Special sizes available on application, all subject to minimum order quantities. GreenStuf ARD can be supplied plain with black face or foil faced on request.

Fire ratings:AS ISO 9705:2003

Australian Group Number: Group 1

SMOGR_{RC}: less than 100m²/s²Assessed using methodology AS ISO 9705:2003 in accordance with AS5637.1:2015, as required by NCC specification C1.10-4. FAR4045-2 issued 8th October, 2013AS1530.3

Ignitability Index (0-20) 0

Heat Evolved Index (0-10) 0

Spread of Flame Index (0-10) 0

Smoke Developed Index (0-10) 3

APL Report 98148

GreenStuf ARD Facings: GreenStuf ARD can be factory faced with a durable 100% polyester black needled felt or perforated foil. Self-adhesive options are available on request (a minimum order quantity applies). Please discuss your requirements with your Autex account manager.

Installation advice: GreenStuf ARD can be cut with a sharp industrial Stanley knife or a serrated Swibo type blade. GreenStuf ARD can also be cut with specialist reciprocation or circular powered cutters. GreenStuf ARD can be fastened with weld pins or supplied with an optional pressure sensitive adhesive backing on request.

Vermin: GreenStuf is naturally resistant to insect and vermin attack and does not contain chemical deterrents. Birds and vermin will live and nest in all bulk-fibre insulation materials if allowed access in high-risk areas. Autex recommends ensuring the building perimeter is vermin proofed.

Specification & Substitution: Autex specification documents are available from our website www.greenstuf.com.au

Substitution of any products should not be accepted and we recommend this be made clear in all specification and tender documents.

MSDS: Material Safety Data Sheets (MSDS) are available on request from your Autex account manager or by visiting our website www.greenstuf.com.au

Take Back Programme: Autex will gladly recycle used, uncontaminated GreenStuf insulation to help keep it out of landfills. For more information on recycling GreenStuf contact Autex on freephone 1800 678 160.

Environmental: All GreenStuf products are manufactured using 100% polyester fibre and contain a minimum of 50% previously recycled fibre (from PET plastic). GreenStuf products are manufactured under Autex's Zero Waste Programme where all manufacturing waste is recycled back into the production process. 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 Autex account manager, or visit our website www.greenstuf.com.au

ISO Standards: Autex is committed to Quality and Environmental best practice through our ISO 9001 & ISO 14001 certified Quality and Environmental Management Systems.

Additional information and advice is available from your Autex account manager or by visiting our website www.greenstuf.com.au

Greenstuf® is manufactured in Australia by Autex Australia Pty Ltd. Autex retains the right to change products and specifications without prior notice. If a specification is critical to the end use application please discuss your requirements with your Autex account manager.

GreenStuf® is a registered trademark of Autex Industries.

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