Application

Pink® Batts® Silencer® insulation is a lightweight flexible glass wool insulation product designed to:

- Provide acoustic insulation in internal walls and midfloors
- Fit easily into standard constructions, or be easily cut to fit in non-standard constructions
- Meet the requirements of the New Zealand Building Code (NZBC) for different designs and environments

**NOTE:** Pink® Batts® Silencer® wall insulation is designed for use in internal walls, only where both acoustic and thermal properties are desired. In an external wall, we recommend the use of the Pink® Batts® Ultra® wall range.

Features and Benefits

- Absorbs sound – reduces noise transmission between rooms for a quieter more relaxing home
- Internationally certified for Indoor Air Quality – gives assurance that products meet strict chemical emissions limits
- Non-combustible – will not easily burn in the event of a fire
- Made from over 80% recycled glass - making sustainable use of waste
- Made in New Zealand - designed for New Zealand building conditions and reduces emissions associated with the importing of overseas manufactured product
Acoustic Properties

Pink® Batts® insulation will assist with noise control; however, penetrations in walls will transmit sound readily. Superior noise control can be achieved by using Pink® Batts® insulation products in conjunction with good acoustic design.

<table>
<thead>
<tr>
<th>Application</th>
<th>STC¹</th>
<th>IIC²</th>
<th>NRC³</th>
<th>Nominal Thickness</th>
<th>Estimated R-value⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pink® Batts® Silencer® 100mm</td>
<td>43</td>
<td>N/A</td>
<td>1.04</td>
<td>100mm</td>
<td>R2.4</td>
</tr>
<tr>
<td>Pink® Batts® Silencer® 75mm</td>
<td>39</td>
<td>N/A</td>
<td>0.91</td>
<td>75mm</td>
<td>R1.9</td>
</tr>
<tr>
<td>Pink® Batts® Silencer® Midfloor</td>
<td>N/A</td>
<td>32</td>
<td>1.10</td>
<td>150mm</td>
<td>R3.6</td>
</tr>
</tbody>
</table>

1. Testing with 10mm GIB® standard plasterboard on either side
2. Construction: 200 x 50mm Joist @ 450mm, 20mm particle board, 10mm GIB® standard plasterboard, battens @ 400mm
3. Once the product is enclosed in a wall cavity, NRC is irrelevant. NRC measures reverberation and absorption eg: Suitable measure for recording studio, theatre etc
4. This R-value is an estimated R-value only and is not tested to AS/NZS 4859.1 like our Pink® Batts® thermal insulation products. Estimated R-values are calculated at nominal thickness

Steps to a Quieter Home

Building or renovating - follow these simple steps to ensure your home has optimal noise control

1. Ensure your layout allows for different noise zones
   - Group similar rooms together
     - Quiet rooms: e.g. bedrooms and studies
     - Living Rooms: e.g. lounge, dining, home cinema, rumpus
     - Functional rooms: e.g. kitchens, laundries, bathrooms, toilets
   - If noise is likely to disturb sleeping occupants, position bedrooms as far away from living areas as possible
   - Ensure bedroom and living areas are positioned away from external noise sources such as busy roads
   - Use foyers, corridors or hallways to buffer noise

2. Specify and install Pink® Batts® Silencer® in internal walls between rooms. Use GIB® Soundseal® and GIB® Noiseline® for additional noise control

3. Design your home to ensure penetrations and gaps in walls are minimised i.e: power outlets are not back to back.
Acoustic Solutions

Between room solutions - Fill internal walls with Pink® Batts® Silencer® wall insulation

Used in conjunction with GIB® Noise Control Systems, Pink® Batts® Silencer® insulation can provide noise control for all the different zones in your home. Depending on your desired level of noise control, choose from the systems below.

<table>
<thead>
<tr>
<th>Sound Control</th>
<th>Construction</th>
<th>STC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>Standard internal wall framing, no Pink® Batts® Silencer® insulation, 10mm GIB® Standard plasterboard both sides.</td>
<td>Provides an STC 36 - speech can be heard.</td>
</tr>
<tr>
<td>Improved Option</td>
<td>Standard internal wall framing, Pink® Batts® Silencer® insulation, 100mm,10mm GIB® Standard plasterboard both sides.</td>
<td>Provides an STC 43 - loud speech is just audible.</td>
</tr>
<tr>
<td>Superior Option</td>
<td>Standard internal wall framing, Pink® Batts® Silencer® insulation, 100mm, 2 layers 10mm GIB® Noiseline® both sides, GIB® SoundSeal® around the perimeter.</td>
<td>Provides an STC 48* - loud speech is heard as a light murmur only.</td>
</tr>
</tbody>
</table>

* The correct use of Pink® Batts® Silencer® insulation and GIB® Noise control systems will reduce noise significantly but will not eliminate it.

For more detailed information about construction options refer to GIB® Noise Control Systems Manual 2006.

Between Floor Solution - Pink® Batts® Silencer® Midfloor

Pink® Batts® Silencer® Midfloor is specifically designed to reduce noise transmission between floors. If you plan on having a hard surface such as tiles or laminate flooring on your upper level, use Pink® Batts® Silencer® Midfloor in conjunction with a GIB® Noise Control System. A well designed system will reduce the level of impact sound that travels through the floor joists and into the room below. Carpets and soft floor coverings will also help reduce the sound.

External noise solution - Pink® Batts® Ultra® insulation - the ultimate in thermal and acoustic insulation for your external walls

The Pink® Batts® Ultra® range will not only provide you with great thermal insulation, it can also help reduce the noise from the outside. However, penetrations in walls will transmit sound readily. Superior noise control can be achieved by using Pink® Batts® Ultra® insulation products in conjunction with good acoustic design.

Tips to reduce noise entering your home
- Use Pink® Batts® Ultra® wall and ceiling products
- Minimise penetrations in walls ie: Doors, windows, plumbing etc.
- Use double glazing
Environment

Pink® Batt® insulation is a sustainable and energy efficient product.
- Manufactured using over 80% recycled glass, making sustainable use of waste
- Manufactured in Auckland, minimising shipping distances compared to imported products

Green Star NZ Credits

Green Star is a comprehensive environmental rating system for buildings; materials with certain attributes can receive points that contribute to the overall score of a rated home.

New Zealand Green Building Council (NZGBC) does not test or certify products; they rely on the work done by third party certification bodies and eco labels like Environmental Choice. Further information is available at nzgbc.org.nz.

All BRANZ appraised products are eligible for Environmental Choice, all Pink® Batt® insulation products are manufactured in the same environmentally considerate way.

Health and Safety

Product Safety

Pink® Batt® insulation is a non-hazardous, safe product.
- IARC (International Agency for Research on Cancer) classifies glass wool formulation used to manufacture Pink® Batt® products as Group 3: ‘Not classifiable as to its carcinogenicity to humans’. This is the same classification as caffeine, tea, hair colouring, chlorinated drinking water, saccharin
- Pink® Batt® insulation is bio-soluble. In the unlikely event any fibres are inhaled into the lungs they will dissolve in the body fluids and be cleared from the body

Indoor Air Quality

Pink® Batt® insulation is certified under the GREENGUARD Certification Program. Being certified for indoor air quality gives an assurance that products meet strict chemical emissions limits (including minimal levels of VOCs and formaldehyde), to help create healthier indoor environments

General Health

- Pink® Batt® insulation will assist in meeting the World Health Organisation recommendation for houses to be maintained at a minimum temperature of 18ºC to provide a healthy and comfortable home
- A Wellington School of Medicine study found insulated houses resulted in families with fewer sick days and the economic benefit was double the initial cost of the insulation

* Stated thicknesses are values at which stated R-values are achieved and are likely to be minimum values. See table on Page 5

<table>
<thead>
<tr>
<th>Properties</th>
<th>Result</th>
<th>Test/Method/Standard</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combustibility</td>
<td>Non-Combustible</td>
<td>AS/NZS 1530.1:1994</td>
<td>Group Number 1S</td>
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<tr>
<td>Early Fire Hazards</td>
<td></td>
<td>AS/NZS 1530.3:1993</td>
<td>= 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Ignitability [Range 0-20]</td>
<td>= 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Spread of Flame Index [Range 0-10]</td>
<td>= 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Heat Evolved Index [Range 0-10]</td>
<td>= 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Smoke Developed Index [Range 0-10]</td>
<td>= 0-1</td>
</tr>
<tr>
<td>Corrosion</td>
<td>Non-Corrosive</td>
<td>AS/NZS 4859.1:2002-Glass wool exempt</td>
<td></td>
</tr>
<tr>
<td>Moisture Absorption</td>
<td>Non-Hygroscopic</td>
<td>AS/NZS 4859.1:2002-Glass wool exempt</td>
<td></td>
</tr>
<tr>
<td>Vermin Resistance</td>
<td>No Food Source</td>
<td>AS/NZS 4859.1:2002-Glass wool exempt</td>
<td></td>
</tr>
</tbody>
</table>
New Zealand Building Code (NZBC) and Limitations

Pink® Batts® insulation when used, installed and maintained in accordance with the requirements outlined in this datasheet, will meet or contribute to meeting the following provisions of the NZBC:

NZBC Clause B2: Durability
Meets the requirement NZBC B2.3.1 a) 50 years and NZBC B2.3.1 b) 15 years

NZBC Clause E3: Internal Moisture
Contributes to meeting these requirements

NZBC Clause F2: Hazardous Building Materials
Meets this requirement and will not present a health hazard to people

NZBC Clause H1: Energy Efficiency
Contributes to meeting this requirement

Limitations

To meet the provisions of the NZBC as outlined in this datasheet, Pink® Batts® wall insulation MUST be:
- Installed and maintained in a dry protected environment
- Installed in a building where the provisions of NZBC E2 and E3 are met
- Installed to the requirements of NZS 4246:2016: Energy Efficiency-Installing bulk thermal Insulation in Residential Buildings
- Pink® Batts® wall insulation should NOT be crushed or folded

Product Specifications

<table>
<thead>
<tr>
<th>WALL - Acoustic Insulation</th>
<th>PRODUCT CODE</th>
<th>SIZE (mm)</th>
<th>NOMINAL STABILISED THICKNESS (mm)</th>
<th>NOMINAL TOTAL AREA PER BALE (m²)</th>
<th>APPROX. COVERAGE PER BALE* (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pink® Batts® Silencer® 100mm</td>
<td>7317001</td>
<td>1140 x 560</td>
<td>100</td>
<td>12.8</td>
<td>14.9</td>
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<tr>
<td>Pink® Batts® Silencer® 75mm</td>
<td>7317003</td>
<td>1140 x 560</td>
<td>75</td>
<td>16.6</td>
<td>19.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FLOOR - Acoustic Insulation</th>
<th>PRODUCT CODE</th>
<th>SIZE (mm)</th>
<th>NOMINAL STABILISED THICKNESS (mm)</th>
<th>NOMINAL TOTAL AREA PER BALE (m²)</th>
<th>APPROX. COVERAGE PER BALE* (m²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pink® Batts® Silencer® Midfloor</td>
<td>7310051</td>
<td>1140 x 432</td>
<td>150</td>
<td>4.9</td>
<td>5.2</td>
</tr>
</tbody>
</table>

* Coverage relates to standard structures (ie with framing allowance) therefore actual coverage may vary.

Products do not have Lifetime Warranty or BRANZ appraised accreditation.

Accreditations/Appraisals/Certifications

This document supersedes all previous versions and may have been superseded; is a guide only and the purchaser should ascertain the suitability of this product for the end-use situation intended and when used in conjunction with other products; and is provided without prejudice to Tasman Insulation New Zealand Ltd (Tasman) standard terms of sale. Tasman retains the right to change specifications without prior notice. Refer to www.pinkbatts.co.nz or consult Tasman for further information. Do not use this product for any application not detailed in this document. All claims about this product are subject to any variation caused by normal manufacturing process and tolerances. The liability of Tasman and its employees and agents for any errors or omissions in this document or otherwise in relation to the product is limited to the fullest extent permitted by law. Except where the consumer acquires the goods for the purposes of a business, any rights a consumer may have under the Consumer Guarantees Act are not affected. The colour PINK and Pink® are registered trademarks of Owens Corning used under license by Tasman Insulation. Batts® is the registered trade mark of Tasman Insulation.