



**EDEN**  
BLOC<sup>35</sup>

NATURAL RIGID INSULATION FROM SECOND NATURE UK LTD

# Content

---

## **EdenBloc<sup>35</sup>...**

A Step Change in Natural Insulation **03**

Why Choose EdenBloc<sup>35</sup>? **04**

Applications **06**

Technical Summary **10**

# EdenBloc<sup>35</sup>

## A Step Change in Natural Insulation

---

EdenBloc<sup>35</sup> is Second Nature's latest innovation in natural insulation. EdenBloc<sup>35</sup> is a natural, low density rigid insulation that can be used in many internal situations including wall lining, under rafters, between rafters and timber studs to provide first class thermal insulation.

EdenBloc<sup>35</sup> is manufactured in the UK, provides sizable energy efficiencies in service and locks up nearly twice its own weight in CO<sub>2</sub> which all contribute to its excellent carbon footprint.

Our unique patented technology combines excellent thermal performance with the breathability of natural fibres, bridging the gap between synthetic foams and other natural fibre insulation materials.

EdenBloc<sup>35</sup> has a thermal conductivity of 0.035 W/mK and the ability to eliminate thermal bridging factors which can improve insulation performance by as much as 30% compared to other natural insulation.

EdenBloc<sup>35</sup> has 60% recycled content and contains no synthetic binders, substantially reducing environmental impact and the need to rely on fossil derived materials. Our insulation is safe to reuse and allows efficient end of life energy recovery or composting.



# Why Choose EdenBloc<sup>35</sup>?

EdenBloc<sup>35</sup> has many benefits that make it the **first choice** when it comes to **performance and sustainability**.



## HIGH PERFORMANCE

- Thermal conductivity of 0.035 W/mK providing better insulation performance than any other natural insulation.
- Vapour permeable and breathable ensuring EdenBloc<sup>35</sup> acts in sympathy with the building envelope and making it an ideal choice for use in breathable building systems.
- Excellent acoustic absorption properties due to the density and structure of EdenBloc<sup>35</sup>.
- Eliminates thermal bridging factors by creating a continuous sheet of insulation.
- EdenBloc<sup>35</sup> boards can be fixed back to walls or timbers reducing the complexity of the structure.
- EdenBloc<sup>35</sup> is composed almost entirely of protein based fibres that are more resistant to combustion than cellulose fibres which eliminates the need for high loadings of fire retardants.
- EdenBloc<sup>35</sup> contains no organic insecticides and is completely safe to handle and easy to cut.
- Absorbs and fixes airborne pollutants including formaldehyde due to the chemical binding capacity of the protein fibres, helping contribute to a healthier indoor environment.

## LOW IMPACT

---

- Locally manufactured in the UK in a purpose built factory in Cumbria, minimising transport impacts to site.
- EdenBloc<sup>35</sup> contains more than 60% recycled content, mainly waste wool from the carpet industry.
- EdenBloc<sup>35</sup> contains no synthetic binders and it can be safely utilised at the end of its service life.
- Low carbon footprint, low embodied energy of manufacture and locks up nearly twice its weight in CO<sub>2</sub>.
- Generates sizable energy savings and CO<sub>2</sub> reductions in service.
- EdenBloc<sup>35</sup> is composed of renewable, naturally derived materials and contains no organic pesticides.
- Zero Ozone Depletion Potential (ODP) and Zero Global Warming Potential (GWP).
- Safe to re-use or recycle and suitable for energy recovery or composting at the end of life.
- Durability provides reliable long term energy efficiency for buildings.



60% RECYCLED CONTENT  
NO SYNTHETIC BINDERS  
IMPROVED PERFORMANCE

# Applications

EdenBloc<sup>35</sup> can be used in **internal roof and wall** insulation situations.

- Upgrading existing wall structures as part of dry-lining
- Insulating stud partitions or timber frame infill.
- Under and between rafter insulation

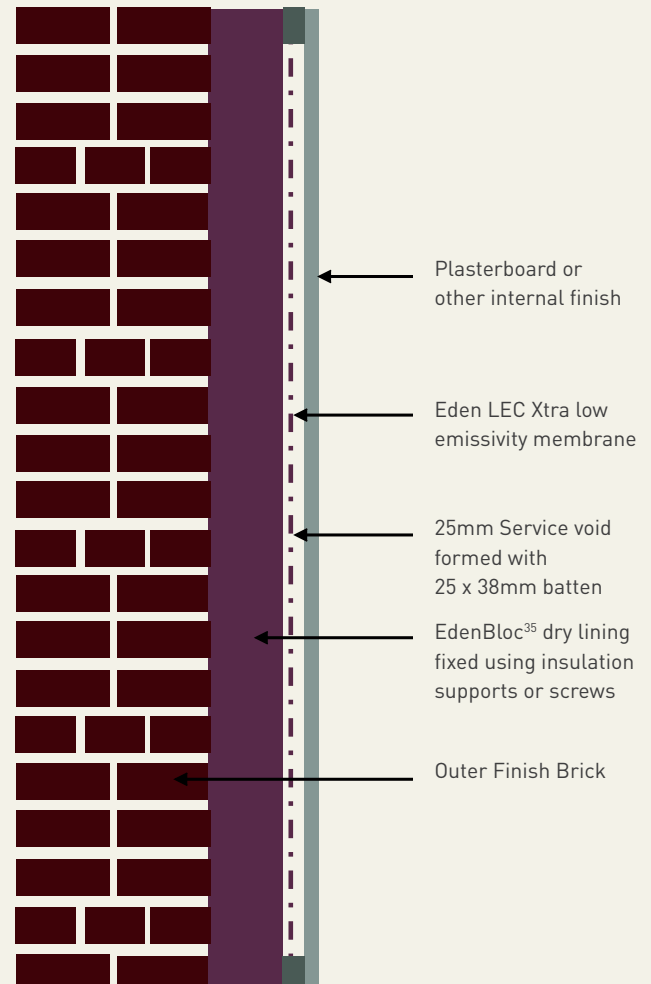
## 9" Brick – EdenBloc<sup>35</sup> Lining with Eden LEC Xtra Low Emissivity Membrane

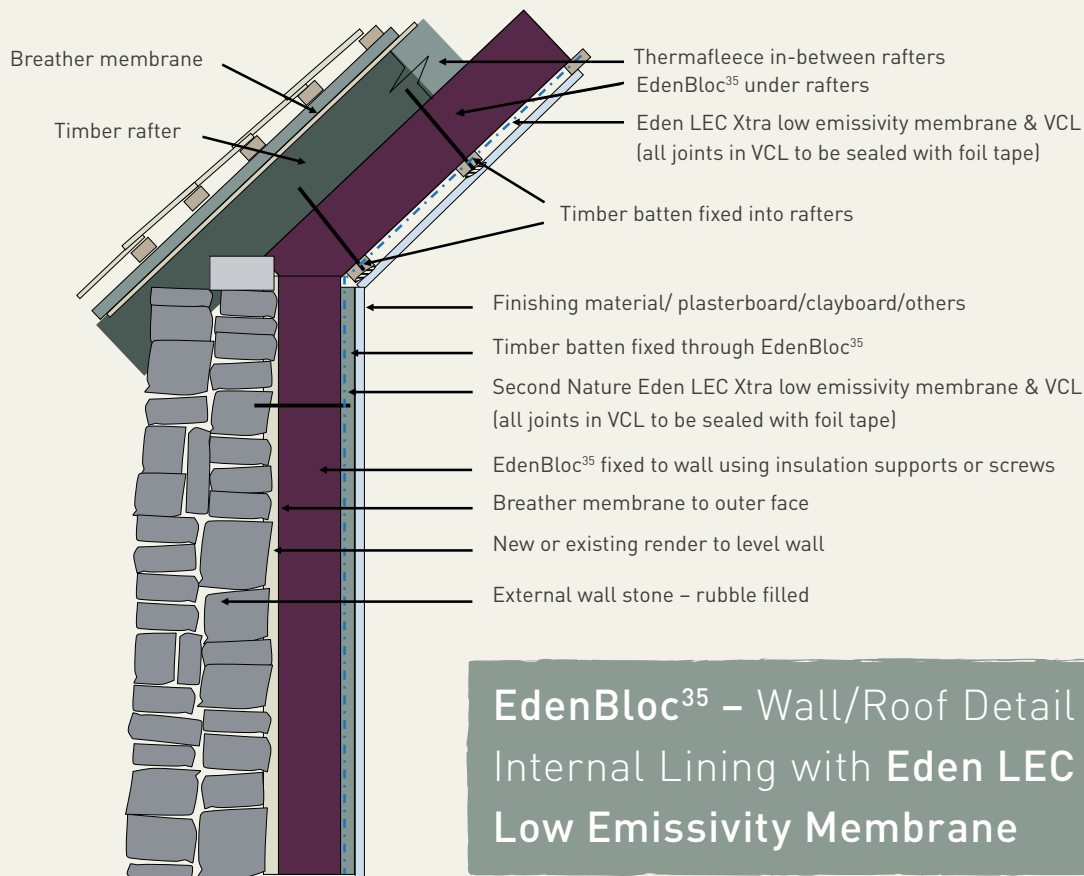


EdenBloc <sup>35</sup>	Service Void	U Value W/m <sup>2</sup> K**
60mm	25mm	0.34 W/m <sup>2</sup> K
75mm	25mm	0.30 W/m <sup>2</sup> K
100mm	25mm	0.25 W/m <sup>2</sup> K
125mm	25mm	0.22 W/m <sup>2</sup> K

\*\* Based on a generic wall construction. For specific U Value calculations please contact Second Nature UK Ltd.

EdenBloc<sup>35</sup> can be used in conjunction with Eden Premium VCL vapour control layer. For additional thermal performance, the vapour control layer can be replaced with Eden LEC Xtra low emissivity membrane.





**EdenBloc<sup>35</sup> – Wall/Roof Detail for Internal Lining with Eden LEC Xtra Low Emissivity Membrane**

**U Value Achieved for Walls\*\***

EdenBloc <sup>35</sup> Thickness	60mm	75mm	100mm	125mm
U Value	0.36 W/m <sup>2</sup> K	0.32 W/m <sup>2</sup> K	0.27 W/m <sup>2</sup> K	0.23 W/m <sup>2</sup> K

**U Value Achieved for Roofs\*\***

Thermafleece or PB20 with EdenBloc <sup>35</sup> Lining	100mm 60mm	100mm 75mm	100mm 100mm	100mm 125mm
U Value	0.22 W/m <sup>2</sup> K	0.20 W/m <sup>2</sup> K	0.17 W/m <sup>2</sup> K	0.15 W/m <sup>2</sup> K
Thermafleece or PB20 with EdenBloc <sup>35</sup> Lining	125mm 60mm	125mm 75mm	125mm 100mm	125mm 125mm
U Value	0.20 W/m <sup>2</sup> K	0.18 W/m <sup>2</sup> K	0.16 W/m <sup>2</sup> K	0.14 W/m <sup>2</sup> K

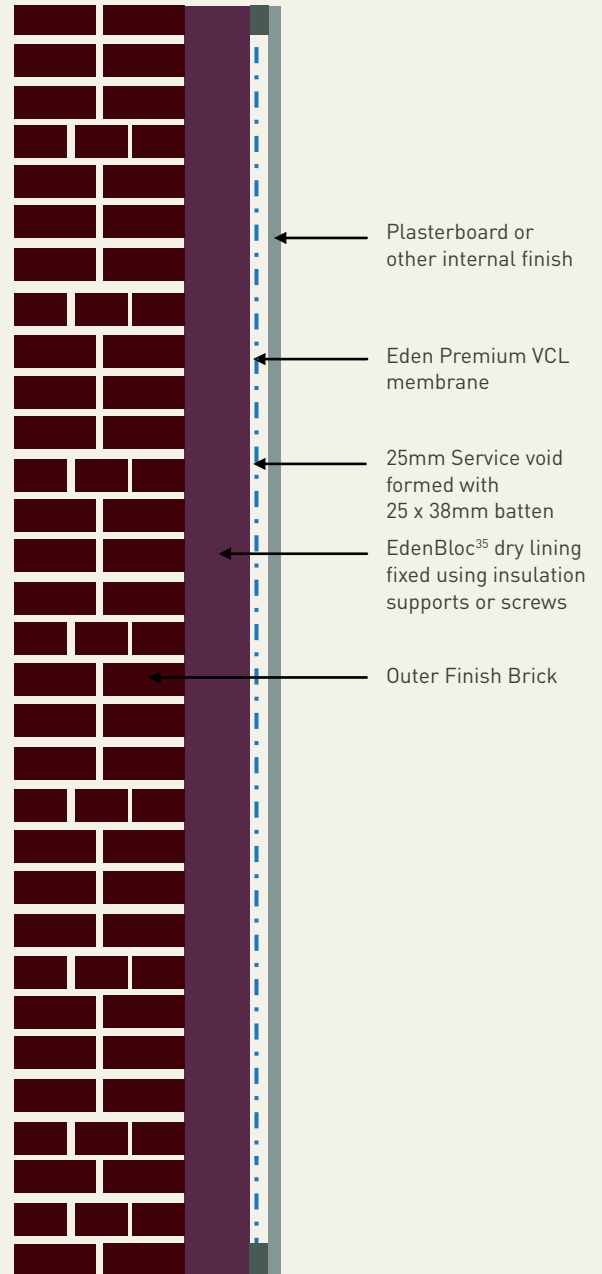
• Thickness supplied to nearest commercial size

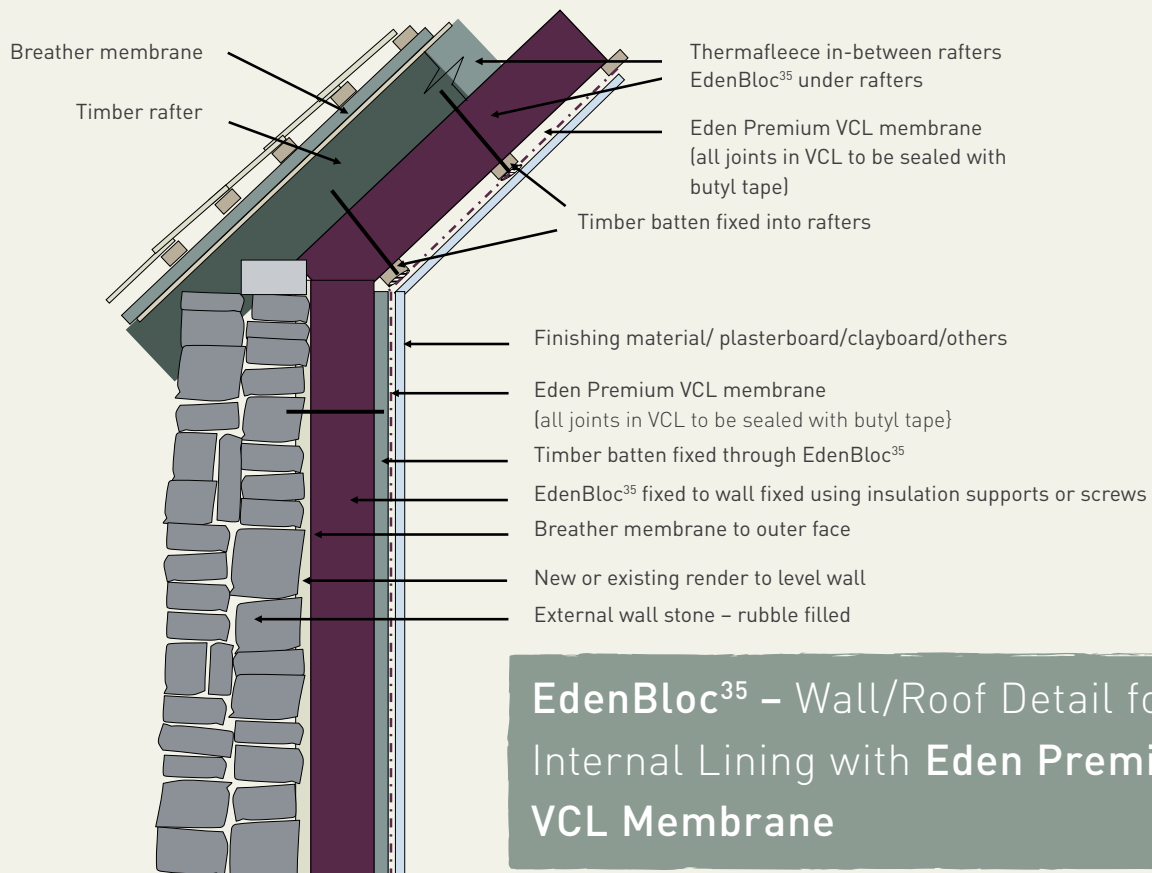
\*\* Based on a generic wall construction. For specific U Value calculations please contact Second Nature UK Ltd.

## 9" Brick – EdenBloc<sup>35</sup> Lining with Eden Premium VCL Membrane

EdenBloc <sup>35</sup>	Service Void	U Value W/m <sup>2</sup> K**
60mm	25mm	0.40 W/m <sup>2</sup> K
75mm	25mm	0.35 W/m <sup>2</sup> K
100mm	25mm	0.29 W/m <sup>2</sup> K
125mm	25mm	0.24 W/m <sup>2</sup> K

\*\* Based on a generic wall construction. For specific U Value calculations please contact Second Nature UK Ltd.





## EdenBloc<sup>35</sup> – Wall/Roof Detail for Internal Lining with Eden Premium VCL Membrane

### U Value Achieved for Walls\*\*

EdenBloc <sup>35</sup> Thickness	60mm	75mm	100mm	125mm
U Value	0.43 W/m <sup>2</sup> K	0.37 W/m <sup>2</sup> K	0.30 W/m <sup>2</sup> K	0.25 W/m <sup>2</sup> K

### U Value Achieved for Roofs\*\*

Thermafleecce or PB20 with EdenBloc <sup>35</sup> Lining	100mm 60mm	100mm 75mm	100mm 100mm	100mm 125mm
U Value	0.22 W/m <sup>2</sup> K	0.20 W/m <sup>2</sup> K	0.17 W/m <sup>2</sup> K	0.15 W/m <sup>2</sup> K
Thermafleecce or PB20 with EdenBloc <sup>35</sup> Lining	125mm 60mm	125mm 75mm	125mm 100mm	125mm 125mm
U Value	0.20 W/W/m <sup>2</sup> K	0.18 W/m <sup>2</sup> K	0.16 W/m <sup>2</sup> K	0.14 W/m <sup>2</sup> K

• Thickness supplied to nearest commercial size

\*\* Based on a generic wall construction. For specific U Value calculations please contact Second Nature UK Ltd.

# Technical Summary

## Technical Details

Board dimensions:	1200mm x 600mm
Standard Thickness:	50mm, 60mm, 75mm, 100mm,
Custom Thickness:	Up to 350mm
Nominal Density:	45 kg/m <sup>3</sup>
Thermal Conductivity:	0.035 W/mK
Reaction to Fire:	Varies depending on facing
Facing:	Paper or low emissivity membrane

Due to the recycled nature of the components, the colour of EdenBloc<sup>25</sup> may vary.

For further technical information and to download our EdenBloc<sup>25</sup> Data Sheet please visit: [www.edenbloc.co.uk](http://www.edenbloc.co.uk)



# Additional Information



# EDENBLOC<sup>35</sup>

NATURAL RIGID INSULATION



EdenBloc<sup>35</sup> is Second Nature's latest innovation in natural insulation. EdenBloc<sup>35</sup> is a natural, low density rigid insulation that can be used in many internal situations including wall lining, under rafters, between rafters and timber studs to provide first class thermal insulation.

## Second Nature UK Ltd

Soulands Gate

Dacre, Penrith

Cumbria, CA11 0JF

**Sales & General Enquiries:** 017684 86285

**Technical Advice:** 0844 8009953

**Sales Office Fax:** 017684 86825

**E-Mail:** [info@secondnatureuk.com](mailto:info@secondnatureuk.com)

**Web:** [www.secondnatureuk.com](http://www.secondnatureuk.com)