

TLXTM
MULTI-FOIL INSULATION

Silver

NOW
APPROVED FOR
TIMBER FRAME
WALLS



The brighter way to insulate

Installation instructions
for walls



The multi-foil system
certified to achieve 0.2

when installed according to BBA certificate No 06/4379

TLX Silver in walls

The first BBA approved multi-foil for timber frame and masonry walls which allows for the construction of highly energy efficient walls.



Benefits

- improves U-value of given stud depth
- reduces stud depth required to achieve given U-value
- allows glass/mineral wall to be used instead of rigid board (between/in front of studs)
- powerful vapour barrier – eliminates need to install additional reflective vapour control layer
- can improve airtightness of building when installed in walls
- enables air space between TLX Silver and plasterboard to be used to create cavity for services

Quick and easy to install

- conventional insulation (glass wool/rigid board) fitted between timber wall studs
- TLX Silver installed across front of studs and stapled into place
- vertical battens and plasterboard

Wall structure

- outer cladding
- cavity
- reflective breather membrane
- plywood sheathing
- timber studs with insulation
- batten
- plasterboard

Bespoke solutions for factory fixing

We have developed bespoke sizes specifically for timber frame and modular wall construction to improve efficiency and reduce waste.

TLX Silver can be supplied in special widths up to maximum of 3m for factory fixing.

TLX Silver can also be supplied with top and bottom flanges along edge of roll for special widths. (Flanges are formed by outer reflective layers and detailed at junctions to improve air tightness and energy efficiency).

U-values of timber frame walls with TLX Silver

(U-value with reflective vapour control layer in place of TLX Silver in brackets)

Stud depth	Glass wool λ 0.035	Glass wool λ 0.032	Rigid PUR λ 0.023
89mm	0.24 (0.30)	0.23 (0.29)	0.20 (0.25)
140mm	0.19 (0.23)	0.18 (0.22)	0.16 (0.19)

Code for Sustainable Homes

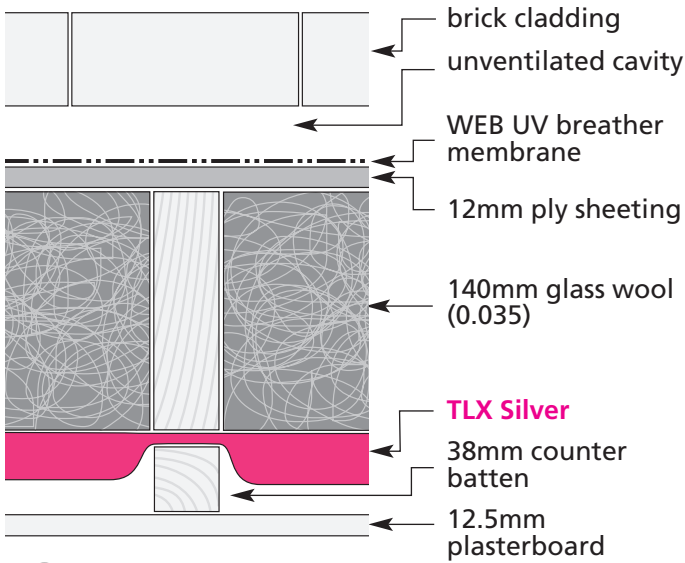
		Public housing	Private housing
Part L1A	0.25 – 0.30	-	2008
Code level 3	0.20 – 0.23	2008	2010
Code level 4	0.17 – 0.19	2010	2013
Code level 5	0.14 – 0.16	2013	

For further technical information on engineered timber frame wall solutions to comply with Building Regulations & The Code for Sustainable Homes, please contact our Thermal Hotline on 01204 674730.

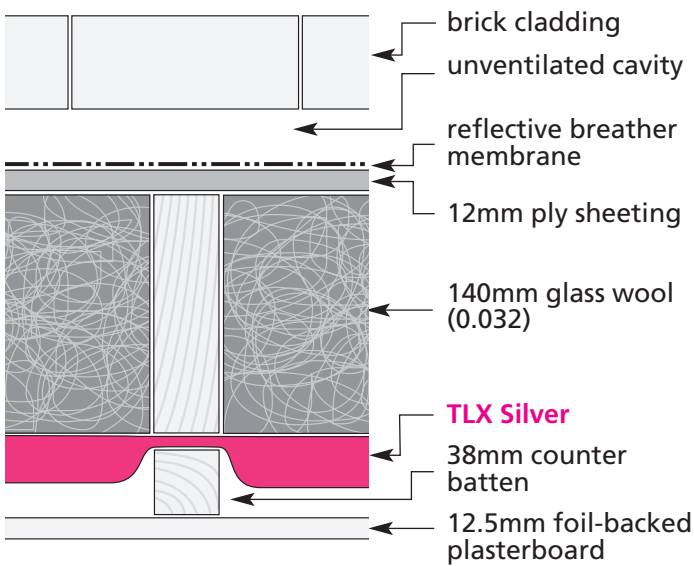
TLX Silver – timber frame wall solutions

140mm stud solutions

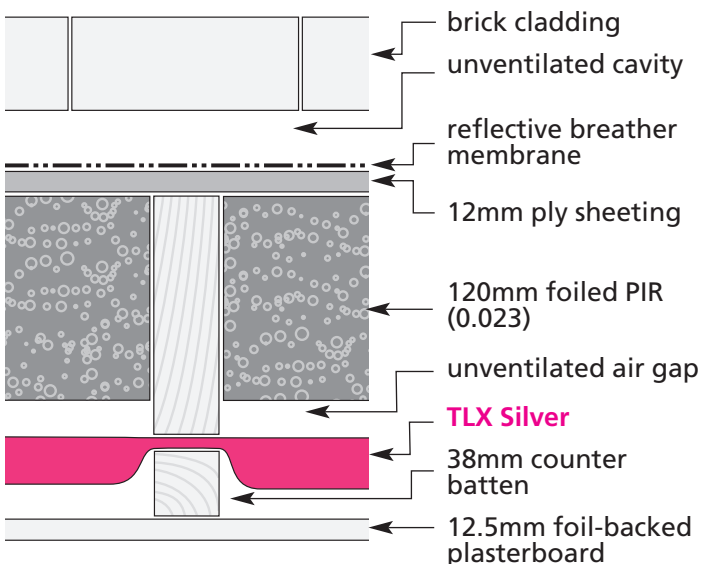
D U-value 0.20
TLX Silver + 140mm glasswool (0.035)



E U-value 0.18
TLX Silver + 140mm glasswool (0.032)

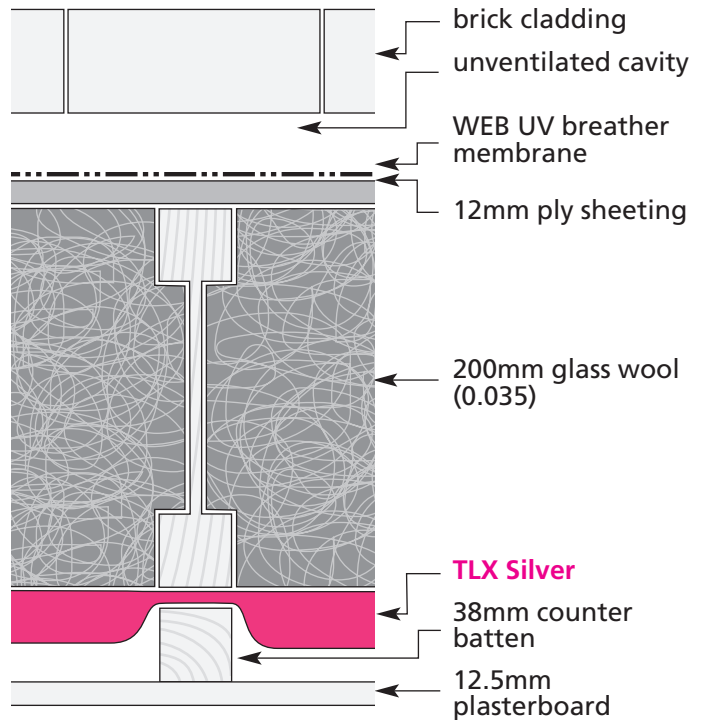


F U-value 0.15
TLX Silver + 120mm foiled PIR (0.023)

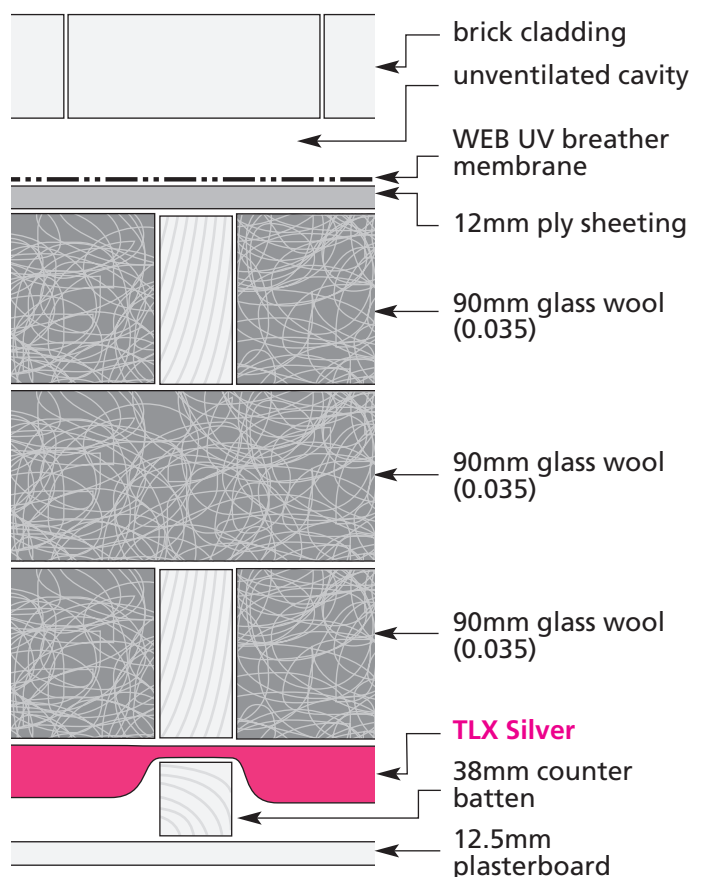


Engineered stud solutions

G U-value 0.15
TLX Silver + 200mm glasswool (0.035)



H U-value 0.12
TLX Silver + 270mm glasswool (0.035)



GENERAL INSTRUCTIONS

- Installation of TLX Silver and additional insulation products should be in accordance with the certificate holder's instructions and current good building practice.
- During construction, care must be taken to ensure the product is not damaged during installation. Should damage occur by tearing, the product should be repaired by covering the holes with tape.
- The product is attached to wall studs using staples or nails of at least 14mm length.
- The product must have overlap joints of at least 50mm and be taped along the entire length of the joint with TLX tape or Henkel silver 'Duck' tape.
- When the product is cut to fit around openings, care should be taken to minimise gaps.
- The product can be cut easily using sharp scissors or a knife.
- Any exposed cut edges of the product should be sealed with a suitable adhesive tape.

INSTALLATION PROCEDURE

Timber frame wall

- Installation may be either vertical or horizontal. If horizontal, installation should start at the floor and go up to the ceiling.
- The product is unrolled across the inside of the timber studs and fixed using staples or nails of at least 14mm length.
- The next layer must overlap the first layer by at least 50mm and be taped along the entire length of the joint with TLX tape or Henkel silver 'Duck' tape. If securely taped, the product will also function as a vapour barrier.
- The product should be permanently fixed in place using wooden battens of size at least 32 x 25mm, perpendicular to the wall studs held in place with nails.
- When the top layer has been battened, any excess material may be removed by running a sharp knife along the edge of the batten.
- Plasterboard is fixed to the battens. The batten size should be sufficient to ensure a 20mm gap between the product and the plasterboard.
- This gap may be used as a cavity for services. However, bare electrical wiring must not be allowed in contact with TLX Silver. PVC coated electrical wiring to normal domestic items such as light fittings may come into contact with TLX Silver.

Solid masonry wall

- Fit vertical timber studs of at least 32 x 25mm, down the wall, held in place with screws.
- The product is unrolled across the inside of the timber studs and fixed using staples or nails of at least 14mm length.
- The next layer must overlap the first layer by at least 50mm and be taped along the entire length of the joint with TLX tape or Henkel silver 'Duck' tape.

- The product should be permanently fixed in place using wooden battens of size at least 32 x 25mm, perpendicular to the wall studs held in place with nails.
- When the top layer has been battened, any excess material may be removed by running a sharp knife along the edge of the batten.
- Plasterboard is fixed to the battens. The batten size should be sufficient to ensure a 20mm gap between the product and the plasterboard.
- This gap may be used as a cavity for services. However, bare electrical wiring must not be allowed in contact with TLX Silver. PVC coated electrical wiring to normal domestic items such as light fittings may come into contact with TLX Silver.

CUTTING

- TLX Silver can be cut using a sharp knife with the TLX Silver resting on a board, or with scissors. When cutting, always retain as much of the welded seam as possible. Where TLX Silver has been cut and the layers are exposed, the cut edge should be taped together.
- Pieces which have been cut should be stapled and battened as soon as possible, and should not be left only partially secured overnight.
- Awkward shapes (such as triangular pieces for dormer cheeks) should be taped up, stapled and battened immediately.
- Any tears or holes should be repaired with the specified adhesive tape.

TAPING

- It is important that TLX Silver is securely taped at overlaps and junctions with walls or windows. TLX tape or Henkel All-Purpose Silver Duck tape are recommended as a suitable tape. Other tapes should not be used unless they have been shown to have equivalent bonding to Duck tape.
- TLX Silver must always be taped together when the surfaces are clean and dry.

ADDITIONAL INSULATION

- When used with additional insulation, care should be taken that all air gaps are maintained in accordance with their products and advice should be sought from the certificate holder.
- Mineral wool can be placed inside the cavity formed when the product is installed across studs.
- Rigid polyurethane (PIR) products can be placed inside the cavity. Suitable fixings such as wooden battens nailed to the sides of the studs can be used to generate an air layer between the PUR and the other components of the wall.

STORAGE

- TLX Silver rolls must be stored on a flat dry surface, protected from the weather and direct sunlight.
- Make sure when installing TLX Silver that it does not come into contact with heat sources above 80°C.

Contact the thermal hotline 01204 674 730 for technical advice

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Patent applications: 2005297091; 2,584,932; 200580043095.4; EP05796146.8; 3045/DELNP/2007; 11/666,051; 0705558.5; PCT/GB2007/001029; 0710632.1; 0710632.1; 0716402.3
Patents granted: GB2432812; EP1105290