

This certificate is valid for Building Regulations & associated technical guidance in force on the date of registration and for the regulations in the countries indicated

Timloc Building Products – Thermo-loc FR30 cavity closer

Description of Product

This is an assessment of Thermo-loc FR30, an insulated cavity closer suitable for first and second fix applications, around window and door openings in masonry and timber frame cavity construction. The function of the product is to provide an insulated DPC at jambs and sills at window and door openings, thereby reducing condensation, and alleviating cold bridging and mould growth in these areas. The product is also fire rated.

The white rigid extruded uPVC profile, housing 25mm thick Earthwool mineral fibre (encapsulated in a polythene sleeve), is supplied in two standard profiles to accommodate cavity widths 50-100mm (single profile and flush reveal profile) and 105-300mm (double profile).

Please consult the 'Conditions of Certificate' and 'Non-Regulatory Information' sections to see if the product is acceptable for use on sites covered by LABC Warranty.



Key Factors Assessed

- Safety in case of Fire
- Health, Hygiene and Environmental
- Safety in Use
- Energy Economy and heat retention
- Durability serviceability and identification

Validity

This certificate was first issued on 25th November 2021 and is valid until 25th November 2022

Issue Dated 25th November 2021

Scope of Registration

This registration applies to Thermo-loc FR30 cavity closer only.

The single profile product is supplied in numerous standard cavity widths, ranging from 50mm to 100mm, (see manufacturers details) comprises of a rigid, extruded uPVC C-section profile with a 25mm Earthwool RS140 Mineral wool insulation infill. The insulation is encapsulated in a polythene sleeve. The double profile version of this cavity closer has two C-section extruded uPVC profiles, around the same insulation type and thickness. This double profile is available to fit a range of standard cavity widths from 105mm to 300mm, however the product can also be ordered in non-standard cavity sizes. The cavity side of both profile types have an additional slot in the uPVC C-section to allow proprietary fixing ties (at 450mm centres) to be installed for use in first fix applications (see manufacturers details).

For first fix applications, the product can be nailed to the jamb/sill of the door or window frame and the whole assembly built in as work proceeds using fixing ties as work proceeds. Alternatively the barrier can be built in sections using proprietary fixing ties as work proceeds.

For second fix situations, the correct sized cavity closer should be friction fitted between the inner and outer leaves of the cavity wall and fixed with nails through the flange for additional security. A minimum overlap of 30mm with the window or door frame is required to meet the requirements of the Accredited Construction Details and BRE document 'Thermal Insulation: avoiding risks,' in all applications. The product can be friction fitting into the open cavity after the building work to the door or window opening is completed. The product should be ordered in the required cavity width. The manufacturer advises fixing nails to the flanges to ensure a secure fit to all profiles on second fix applications.

The FR30 is also available to use in a fully rebated or checked reveal location, as the C-section profile has one flanged omitted to allow fitting up to the inside of the outer leaf of the opening. The FR30 cavity closer is therefore suitable for use in severe and very severe location zones.

The product should be installed in full lengths (cut to size) to each jamb and sill (supplied in 2.4m lengths), with jamb section overlapping with the sill section, by cutting away part of the fixing flange, thus maintain any water runoff in the cavity. The jamb sections should be butted up to the underside of the lintel to alleviate cold bridging and must abut the cavity wall insulation to maintain continuity of the thermal envelope.

A minimum overlap of 30mm between window frame and FR30 cavity closer (all profile types) is required, as per the MHCLG Accredited Construction Details for Masonry and Timber frame construction. The product has a declared Thermal Conductivity of 0.036W/mK and a thermal resistance path of 0.85m²K/W, which will also comply with the requirements of these details.

The manufacturer's claim FR30 cavity closer will achieve a fire rating of, 30 minutes for integrity and 15 minutes for insulation. However, according to Regulation 7(2), cavity closers require no minimum performance for their fire rating if their propose is only to provide a thermal break as per Approved Document L1A & 1B, and L2A & 2B, but they should not span two compartments and should be limited in size to the minimum required to restrict the thermal bridging. This should be a consideration when specifying the product for a particular building height, purpose group, boundary condition or space separation etc.

LABC consider that, Thermo-loc FR30 will meet the functional requirements of the Building Regulations (listed below) if the criteria detailed in this certificate are met;



The Building Regulations 2010 (as amended) at the date of current issue

In England and Wales: Regulation 7(2)	Materials and workmanship
In England:	2013 edition including 2018 amendments
In Wales:	2013 edition including 2020 amendments
Note:	The product is acceptable.
In England: AD B3 (4)	Fire Safety, Volumes 1 & 2, 2019 edition including 2020 amendments
In Wales: AD B3 (4)	Fire Safety, Volumes 1 & 2 including 2020 amendments
Note:	Subject to limitations detailed under Conditions of Certificate.
In England: AD C	Site preparation and resistance to contaminants and moisture 2004 including 2010 and 2013 amendments
In Wales: AD C	Site preparation and resistance to contaminants and moisture 2004 including 2010 amendments
Note:	Subject to limitations detailed under Conditions of Certificate.
AD L	Conservation of fuel and power
In England: AD L1A (2016)	Conservation of fuel and power in new dwellings
In Wales: AD L1A (2016)	Conservation of fuel and power in new dwellings
In England: AD L1B (2018)	Conservation of fuel and power in existing dwellings
In Wales: AD L1B (2016)	Conservation of fuel and power in existing dwellings
In England: AD L2A (2016)	Conservation of fuel and power in new buildings other than dwellings
In Wales: AD L2A (2016)	Conservation of fuel and power in new buildings other than dwellings
In England: AD L2B (2016)	Conservation of fuel and power in existing buildings other than dwellings
In Wales: AD L2B (2016)	Conservation of fuel and power in existing buildings other than dwellings
Note:	Subject to limitations detailed under Conditions of Certificate.



The Building (Scotland) Regulations 2004 (as amended)

If you would like to discuss a specific use of the product in Scotland it will require an additional assessment under the Scottish Building Regulations and accordingly you should contact the LABSS STAS Administrator at www.labss.org

Non-Regulatory Information



LABC Warranty

The Thermo-loc FR30 has not been assessed by LABC Warranty.

Supporting Documentation

PAL Extrusions uPVC profiles- PAL Group

Knauf Fabrication Slab Data Sheet

Knauf RS140 Data sheet

Knauf Earthwool Building Slab Absorption co-efficient

Emails 1 & 2 from Timloc technical manager clarifying technical queries

Thermo Loc minimum thermal resistance path for FR30 Cavity closer

Timloc Data sheet for FR30 cavity closer

Cavity closer FR30 fire test certificate

Items that should be provided in conjunction with the LABC Assured certificate as part of an Application to determine compliance:

- The building use, height and boundary condition etc. should be considered
- Ensure correct size of cavity closer is specified and also for the correct exposure zone
- Manufacturers' Installation guide

Items that should be provided in conjunction with the LABC Assured certificate as part of the Inspection regime to determine compliance:

- Manufacturer's Installation guide

Items that should be provided in conjunction with the LABC Assured certificate as part of a Completion to determine compliance:

- Manufacturer's Installation guide

Contact Information

Timloc Building Products

Timloc House

Ozone Park

Howden

DN14 7SD

Tel: 01405 765 567

Email: technical@timloc.co.uk

Web: www.timloc.co.uk