



SURECAV[®]



SUSTAINABLE - CHEAPER - FASTER

SureCav is a 100% recycled plastic cavity spacer system, replacing the need for concrete backing-blocks and helping to construct more sustainable homes. SureCav allows you to achieve a higher quality build, saving money, time and space, whilst helping to lower your carbon footprint by up to 6 times, compared to using a concrete backing-block!

BBA APPROVED

100% RECYCLED PLASTIC

CHEAPER & FASTER BUILD

25mm OR 50mm CAVITIES

CLEAN, MOISTURE-FREE CAVITIES

WIND-DRIVEN RAIN PROTECTION

REDUCES THE WALL WIDTH

SAVES DELIVERY EMISSIONS

HELPS TO LOWER U-VALUES

SUITS ALL MASONRY FINISHES

BRICK - STONE - FLINT- SLATE

NEW-BUILD OR RETRO-FIT



DESIGN SURECAV INTO YOUR CARBON REDUCTION STRATEGY!



PlanetMark
Certified Business



SureCav saves time, effort, space and money!



SureCav25 - a permitted 25mm cavity!

SureCav25 is the only product accepted by the BBA and LABC that allows a 25mm residual cavity. Now! Install SureCav25 to make extra room in the cavity for more insulation and help to drive down U-Values even further!

SureCav is OVER 50% cheaper!

By choosing SureCav will be saving over half the cost of building a block wall to support the stonework or external masonry. Also, don't forget that the time saved in using SureCav results in a faster build, estimated to be at least 10 working days on an average 4-bedroom house.

Our drive to help the environment!

We have, to date, used over 1,715 tonnes of 100% recycled plastic in our production to manufacture SureCav. On site, this has replaced the equivalent of nearly 130,000 tonnes of concrete or 7 million concrete blocks, which would take nearly 6,400 lorry loads to deliver. The same wall area, when installing SureCav, would take just 226 loads! SureCav saves site storage and loading/offloading emissions.

1 pallet of SureCav = 15 pallets of concrete blocks!



SureCav avoids having to build an additional concrete-block construction wall, which could require up to 40 tonnes of blocks.

The equivalent wall area of SureCav panels will easily fit into a pick-up and makes it so much more practical for site handling, distribution and installation.

SureCav25 and SureCav50 are designed specifically for all external masonry finishes, including brick, stone, flint, slate and also retro-fit applications.

SureCav is accepted for use with a block inner leaf, timber-frame construction, as well as SIP, ICF and SFS internal structures.



SureCav25 is the only accepted way to build a 25mm residual cavity!

Installing SureCav will result in:

- A faster, cleaner build, saving time, effort and money
- A perfectly protected moisture and mortar-free environment
- Protection for the fabric of the building against wind-driven rain
- Over 50% cheaper, compared to building with a backing-block wall
- A cleaner ECO2 footprint, compared to using concrete blocks

In manufacture, SureCav produces a sixth, or less, of the embodied carbon, compared to the concrete block backing-wall it replaces. SureCav is produced using 100% recycled polypropylene, which further reduces the CO2 production compared to polypropylene sourced from virgin materials.

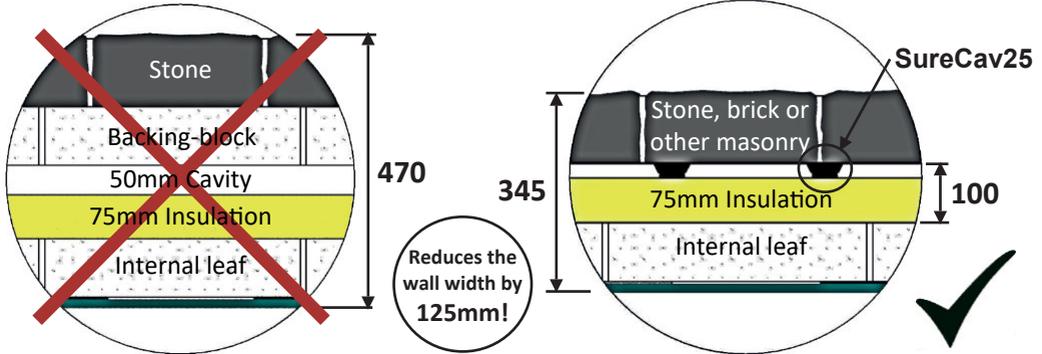


Maximise the advantage of a permitted 25mm air gap

Why build the old way
like this? |||||

When you can accomplish
THIS with SureCav25!

Helping to
achieve a
U-Value as
low as 0.18
W/m²K



A reduction in wall thickness of 25mm will increase the internal dimensions of the property by 50mm in each direction, resulting in an average of 1.25% increased floor space over two storeys. For stone or flint-work, an additional 5% floor space will have been gained by removing the concrete backing-blocks. This can rise to upwards of 6% or more additional floor-space in cases where random stone is used in very severe weather zones.

Consider this for building with brick: with just a 1.25% gain, this is equivalent to the floor space of 1 extra house on a 70 house site!

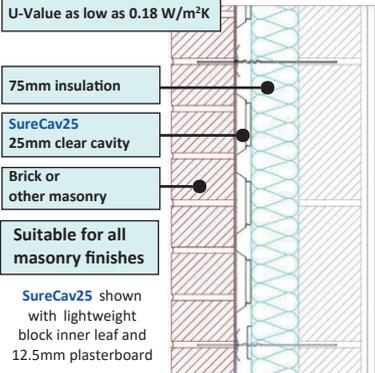
Brick builds: Lower the U-Value with the help of SureCav25!

SureCav25 provides a clean, consistent, mortar-free, BBA approved, 25mm clear cavity in all exposure zones, including very severe.

SureCav25 will significantly reduce labour and material costs, giving a faster, cleaner build and it is durable, remaining effective for the life of the building, ensuring no water penetration from wind driven rain.

Example:
25mm SureCav25 permitted (clear cavity) directly fitting against the breather membrane of the timber-frame

Example:
100mm overall cavity width
75mm insulation
25mm SureCav25 (clear cavity)
U-Value as low as 0.18 W/m²K



SureCav25
25mm clear cavity

Brick or other masonry

Suitable for all masonry finishes

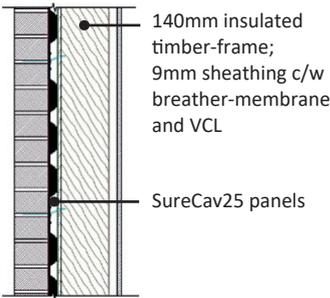
SureCav25 shown with a timber-frame construction, double-skinned plasterboard and brick outer leaf

SureCav25 is the smarter approach to modern construction, saving time, energy and money. Include it in your design brief!

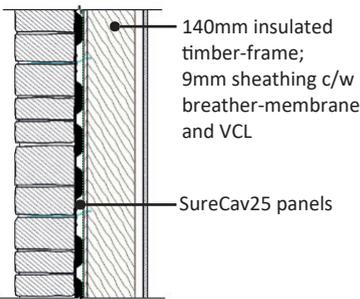
SureCav! For the perfectly protected, moisture and mortar-free cavity environment!

Traditional block inner leaf and timber-frame construction

Timber-frame

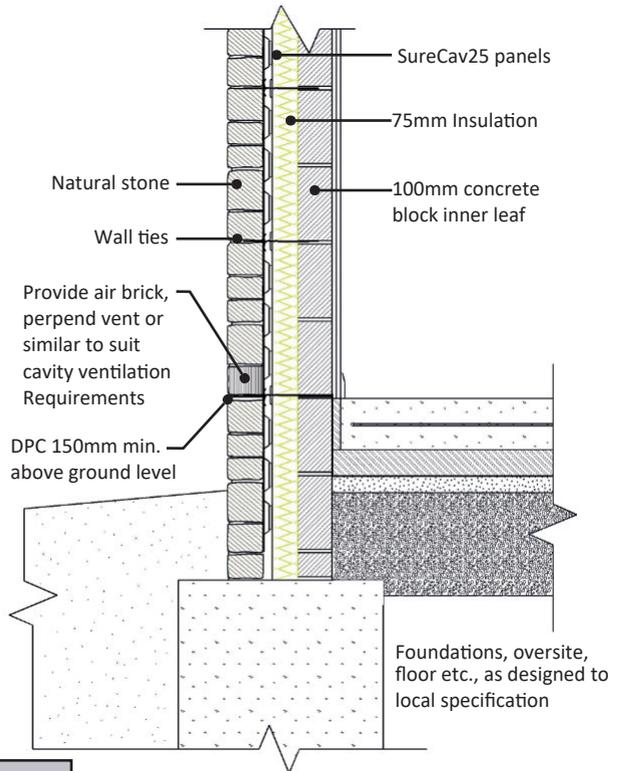


SureCav25 with brick outer leaf installed against breather-membrane



SureCav25 installed against breather-membrane and natural stone outer leaf

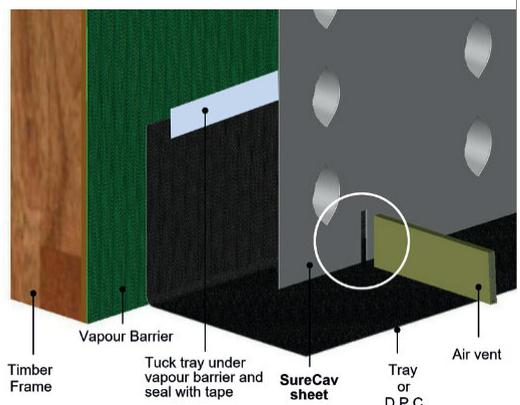
Traditional construction with stone and block inner-leaf



Ventilation requirements

Ventilating the residual cavity is an important requirement to prevent the possibility of any interstitial condensation. This equates to ventilation being provided at a min. rate of 1500mm² per metre run and can be achieved by air bricks or perpend/weep vents at low level, high level and at lintels.

SureCav is suitable for brick, block, timber-frame, SIPs, ICF, SFS inner leaf and all types of masonry external finishes, ensuring a consistent, clear residual cavity. The cavity air space has been an essential feature of buildings for decades and has proved its worth in helping to protect the fabric of the building. SureCav25 upholds this proven 'clear-cavity' approach.



Cut a slot in the SureCav panel that corresponds with the vent aperture. Above is an example of how the slot is cut for the air vent with timber-frame.



Meeting the needs of modern construction

SureCav25! Order online NOW or through all builders merchants!

All the properties of SureCav50 you've come to rely on, but now just 25mm deep, with a guaranteed 25mm mortar and moisture-free clear cavity space!

Example:
100mm overall cavity width
75mm insulation
25mm SureCav25 (clear cavity)
U-Value as low as 0.18 W/m²K

SureCav25
25mm panel forming a 25mm clear cavity

75mm insulation

Brick or other Masonry

Suitable for all masonry finishes

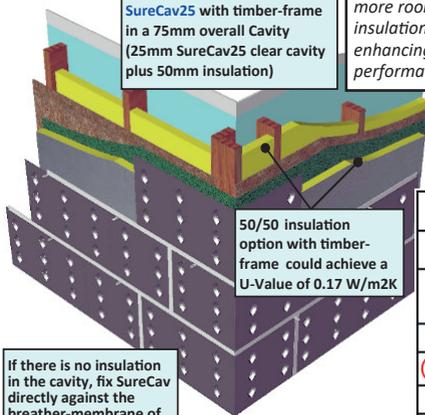
SureCav25 shown with block inner leaf

SureCav25 will help to drive down U-Values by creating more room in the cavity for insulation, thereby enhancing the thermal performance of the wall.

Excellent for brick construction!
SureCav25! The only approved method for building a 25mm residual cavity!



Example:
SureCav25 with timber-frame in a 75mm overall Cavity (25mm SureCav25 clear cavity plus 50mm insulation)



50/50 insulation option with timber-frame could achieve a U-Value of 0.17 W/m²K

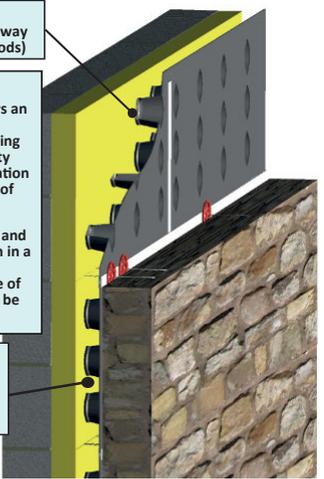
If there is no insulation in the cavity, fix SureCav directly against the breather-membrane of the timber-frame. Use the seal washers supplied by Surecav Ltd.

Example:
SureCav50 (Cut-away to show 50mm pods)

SureCav50
Illustration shows an overall cavity of 100mm, comprising 50mm clear cavity and 50mm insulation giving a U-Value of 0.24 W/m²K.

With SureCav25 and 75mm insulation in a 100mm overall cavity, a U-Value of 0.18 W/m²K can be achieved

50mm clear-cavity and no need for any backing-blocks



Example:
Use SureCav25 with your chosen Render System

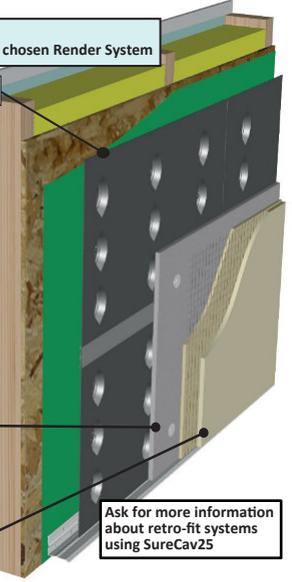
SureCav25 Cavity Spacer

With SureCav25 behind the render-board, a 25mm cavity is created that provides a moisture barrier to protect the timber-frame. Fix the SureCav25 panels in place by screwing through the pods using special seal washers to ensure moisture protection

Use insulation render boards or cement fibre boards, following the manufacturers standard fixing instructions

Choose your preferred render system

Ask for more information about retro-fit systems using SureCav25



Insulation Options using SureCav25			
Brick or stone outer leaf - lightweight block inner leaf (0.15) plus 3mm skim on 12mm plasterboard			
Overall cavity (mm)	Insulation (mm)	Clear cavity with SureCav25 (mm)	U-Value (W/m ² K)
75	50	25	0.24
100	75	25	0.18
125	100	25	0.15
145	120	25	0.14

Designed for brick, stone, slate, flint, timber-frame, SIPs, ICF and SFS.

Flint with Block inner-leaf construction

For the inner leaf block-work, install the ties as usual each 450mm vertically, doubling up the ties at reveals and openings, within 225mm of the opening. This avoids having to cut slots in the SureCav sheets each 225mm vertically.

Install the insulation and place the SureCav panels against the insulation, using the wall-tie clips to hold the SureCav in place. The flint is constructed directly against the SureCav panels, using additional ties as required.

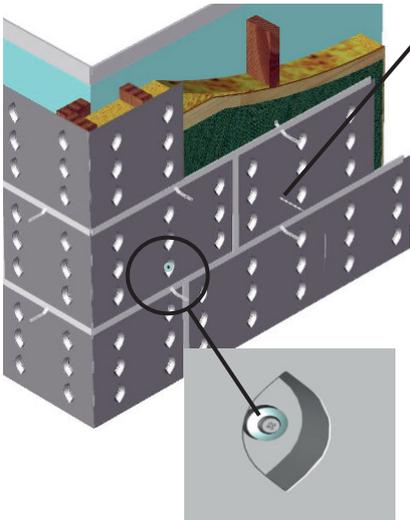


Additional tie, fixed through the pod using a seal -washer

Helical ties

Helical ties can be used with either timber-frame or a block inner-leaf. For solid timber-frame and SIP systems, helical ties are often used entirely throughout the project. For block inner-leaf, drill a pilot hole through the flat face of the sheet only (never through the pods) and into the block. Fix the helical tie with a suitable applicator.

Installing the SureCav panel with a timber-frame building



Additional helical ties can be used by drilling a pilot hole through any flat area of the sheet into the timber-frame to provide extra support for masonry as necessary, **but NOT through the pods.**

Special seal-washers can be screwed through the pods to fix the whole system to the timber-frame sheathing, enabling the whole building to be clad prior to the start of building the external leaf. Additional masonry support ties can also be fixed through the pods using the seal-washers*.

*Seal-washers can be purchased from SureCav Limited

SureCav with all types of stone-work

SureCav was designed to be the perfect cavity spacer and backing support for rubble, random, Ashlar or even semi-dry stone-work. A few examples are shown in the photos below.



BBA approval for SureCav in all exposure zones

The Problem: Preventing damage from moisture affecting buildings

One of the greatest threats to the integrity of the building structure come from water ingress, one of the most common sources of moisture affecting buildings in the United Kingdom. Damage from the build-up of moisture results in mould, mildew and condensation on windows and in the loft space. Additionally, where there is a moisture problem in the wall cavity, damage readily occurs to the insulation and wall ties, also affecting wall plates, the timber frame itself and installed joinery. Preventing this from occurring is obviously a priority in the minds of all designers and builders interested in quality construction.

SureCav - the solution!

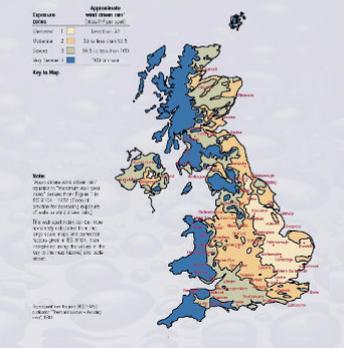
SureCav25 and SureCav50 will prevent any water ingress from wind driven rain when building external walls with all masonry finishes, enabling:

- A moisture and mortar-free 25mm or 50mm residual cavity will be maintained that will be easily ventilated
- Insulation will be held in place at all times, enabling it to work to its full efficiency

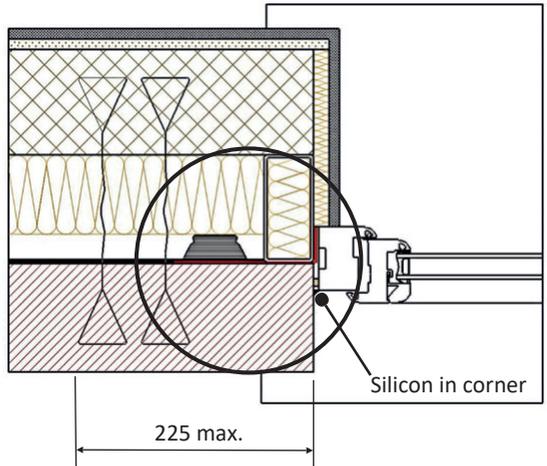
SureCav25 ensures no water penetration from wind-driven rain with a 25mm cavity instead of the usual 50mm or even 75mm that is sometimes required in high exposure zones. The barrier formed by the panels, locked together by the joining strips will protect the structure in even the most exposed weather conditions.



Blue shading indicates areas in the very severe exposure zone.



Protect from water ingress using a vertical DPC membrane



Additional wall ties (BBA Approved)
This procedure will prevent slots having to be made in the SureCav sheet on each course of block-work when building away from a doorway or window reveal. It is recommended that an additional wall-tie is included within 225mm of the opening on each board coarse level to satisfy the structural requirements. The ties should then be fitted every 450mm vertically coinciding with the joint in the SureCav sheet.

Fitting the vertical Damp Proof Membrane

It is important that the vertical DPM is fitted in front of the SureCav panel by at least 100mm and also allowed to wrap around the closer or batten. When the door or window frame is in place then the interface between the wall and the frame should be sealed with silicon sealant.



Contact Us

For all your SureCav requirements!



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