



# SURECAV®

## SURECAV LTD

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## TECHNICAL DATA SHEET

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### 1. General description

SureCav is a moulded, 100% recycled polypropylene panel with spacer protrusions that forms the cavity and allows a stone, slate, brick and flint outer skin to be built without the need of an additional block leaf. This cavity protection system ensures clean and moisture-free cavities.

#### PRODUCTS:

- **SureCav25:** Forms a consistent and protected 25mm residual cavity
- **SureCav50:** Forms a consistent and protected 50mm residual cavity

#### The main advantages of SureCav instead of a concrete block backing wall:

- It results in an **extra 5%** internal floor area on a two-storey house where the original external dimensions are used
- SureCav is **very light** and takes up less than a quarter of the space of the concrete blocks it replaces
- It is much more **environmentally friendly**, weight for weight, than concrete blocks that produce large amounts of CO2 in manufacture
- SureCav is **easy to transport** and to move around a building site compared with concrete blocks.
- Footings are up to **100mm narrower** meaning there is less excavated material to dispose of and less concrete in the foundations.
- When fixed, SureCav holds the insulation against the wall, guaranteeing it works to its **full efficiency**.
- Using SureCav ensures **no water penetration** from wind driven rain with a 25mm or 50mm residual cavity not the usual 50 or 75mm in very severe exposure zones.

### 2. Typical application

The products are suitable to use with a conventional inner block leaf or with a timber-frame/SIP structure. The SureCav panels are 1200mm x 450mm and either 25mm or 50mm deep. The panels are placed against the timber-frame or cavity insulation and held in place with the wall-tie clips. The whole SureCav system can be installed on timber-frame ahead of the masons, using special seal-washers screwed through the pods. Helical ties can be fixed in any position through the flat face of the sheet only.

Additional frame-ties can be fixed through any of the pods using the special seal washers.

### 3. Ordering information

SureCav25, SureCav50 and seal-washers can be ordered from any Builder's Merchant or online at [www.surecav.co.uk](http://www.surecav.co.uk)

#### 4. Physical properties

##### RECYCLED POLYPROPYLENE TECHNICAL DATA 3019/3

Grade: PPUFBK

Description: Black general purpose polypropylene

Process Recommendations:

BARREL TEMPERATURES: 195 - 230°C - *typically*

MOULD TEMPERATURE: ~20 - 50°C

DRYING TEMPERATURE: 70 - 80°C

**Additional information:** PPUFK is a general purpose polypropylene-compound with good impact performance and manufactured from recycled polymer.

PROPERTIES	TEST METHOD	UNITS	TYPICAL VALUE
<b>Mechanical Properties</b>			
Tensile Strength	ISO 527	MPa	22-30
Elongation at Break	ISO 527	%	10
Flexural Modulus	ISO 178	Gpa	1.1
Flexural Strength	ISO 178	MPa	~
Izod Notched Impact	ISO 180	kJ/m2	>3.5
Charpy Notched Impact Strength	ISO 179B	kJ/m2	~
Ball Indentation Hardness (H1961/30)	180 2039-1	MPa	~
Rockwell Hardness (scale A)	ISO 2039-2	MPa	~
Shore D Hardness	ISO 868	~	~
<b>Thermal Properties</b>			
Melting Point DSC @10°C/min	ISO 3146	°C	~
Heat of Deflection Temperature 1.8Mpa	ISO R75	°C	~
0.46Mpa		°C	~
Vicat Softening Point (50N, 50°C/h)	ISO 306	°C	>100
Glow Wire Test (1.6mm)	PN1EC 695-2-1	°C	~
FMV SS 302	ISO 3795	mm/min	<100
Flammability to UL94	IN HOUSE	Rating	HB
<b>Electrical Properties</b>			
Surface Resistivity	ISO IEC 93	Ohms	~
Dielectric Strength (2mm thickness)	ISO IEC 243	kV/mm	~
Comparative Tracking Index	ISO IEC 112	Volts	~
<b>Melt Flow &amp; Viscosity Properties</b>			
MeltFlow Index (230°C / 2.16kgs)	ISO 1133	cm3/g	10-15
Viscosity Number - 1g In 96% H2SO4 23°C	ISO 307	cm3/g	~
Relative Viscosity - 1g In 96% H2SO4 23°C	ISO 307	cm3/g	~
<b>General Properties</b>			
Specific Gravity	ISO R 1183	cm3/g	0.905
24 Hour Moisture Absorption @ 23°C	ISO R 62	%	~
Water Absorption to Saturation		%	~
Water Absorption from Air to Equilibrium @ 23°C/50% RH	ISO R 62	%	~
Mould Shrinkage	-	%	1.3-1.4

All technical information is given in good faith but without warranty. While we aim to supply good quality consistent products there can be minor variations due the recycled nature of the material.

**See the latest installation manual, technical drawings and design information:**

Visit [www.surecav.co.uk](http://www.surecav.co.uk)  
or email us at [info@surecav.co.uk](mailto:info@surecav.co.uk)

**FAQs, testimonials, site installation photos, online ordering and much more!**