

LaminaHeat ComfortScrim

Product Introduction

LaminaHeat ComfortScrim™ — Low Voltage Infrared Heating Film

The ComfortScrim is a revolutionary low-voltage carbon fibre heating film designed for wall, ceiling, and underfloor applications in residential and commercial buildings. At just 0.5mm thick, it installs seamlessly beneath flooring, behind plasterwork, or directly onto any wall or ceiling surface using standard adhesive — completely invisible once fitted.

Operating on 12–48V AC/DC, the system is exceptionally safe, making it particularly well suited for bathroom environments. It boasts a 99.7% electricity-to-heat conversion rate delivering outstanding energy efficiency while keeping running costs low — up to 30% lower than underfloor heating or air source heat pumps.

Heating is delivered primarily through far-infrared radiation, producing a natural, sun-like warmth that heats surfaces and objects rather than just the air. The system can raise a room from 10°C to 22°C in approximately 20–30 minutes and its close-to-surface installation means an exceptionally fast thermal response time.

ComfortScrim is also compatible with solar power systems — the 48V configuration can connect directly to a battery, bypassing the need for an inverter, making it a strong fit for sustainable building projects. Additional benefits include anti-mould functionality, no annual maintenance requirements, and a 10-year warranty.

Available in 600mm and 900mm widths with roll lengths up to 100 metres, ComfortScrim is a flexible, future-ready heating solution for new builds and retrofits alike.



Dielectric Strength	Dielectric Strength	>1.5 kv
	Dielectric Constant @ 1Hz	7.0
	Dielectric Constant @ 1 MHz	0.006
	Volume Resistivity @50%RH	$5.4 \times 10^5 \Omega\text{-cm}$
Physical Properties	Material	PET film 36gsm
		PETG film 100 μm
		Carbon Fiber Layer 300 μm
Thermal Properties	Maximum Operating Temperature	80°C
	Thermal Expansion	$11 \times 10^{-6} \text{cm/cm/}^\circ\text{C}$
	Thermal Conductivity	1.6 W/m $^\circ\text{K}$
Mechanical Properties	Heating Conductor Thickness	100 μm
	Maximum Tensile Strength	20 MPa
	Elongation at Break	2.8%
	Tensile Modulus	7 Gpa
	Copper Busbar Cross Section	20mm x 0,050mm
Complies with: Low Voltage Directive (2014/35/EU): EN 60335-2-17:2013 EMF (2014/30/EU): DIN EN 62233:2008 WEEE 2 (2012/19/EU) – Simple electrical equipment not requiring registration D2.2.310 – Heating and cooling for wall, ceiling and floor surfaces		

Product Parameters

Product Number		PG11-024-220-600R Micro-porous	PG11-024-220-900R Micro-porous	PG11-048-160-600R Micro-porous	PG11-048-160-900R Micro-porous	PG11-048-400-600R Micro-porous	PG11-048-400-900R Micro-porous
Installation Surface		Bathroom floor	Bathroom floor	Floor	Floor	Wall / Ceiling	Wall / Ceiling
Power	W/m ²	220	220	160	160	400	400
Power	W/lm	121	187	88	136	220	340
Total Width	mm	600	900	600	900	600	900
Heating Width	mm	550	850	550	850	550	850
Copper Strip Width	mm	20	20	20	20	20	20
AC Voltage	V	24	24	48	48	48	48
Current	A/lm	5	7.8	1.83	2.83	4.6	7.1
Max. Current	A	16	16	16	16	16	16
Max Heating Length	M	3.1	2	8.7	5.6	3.4	2.2
Resistance	Ω/m ²	8.7±10%	3.6±10%	47.6±10%	19.9±10%	19±10%	8.0±10%
Weight	g/m ²	350	350	350	350	350	350
The information in this data sheet does not constitute a warranty statement and shall not be construed as an inducement to infringe any patent or violate any laws, safety regulations or insurance regulations.							