



## NEW ROBENS 3D SELF-INFLATING MAT LIGHT IN WEIGHT AND HEAVY ON FEATURES



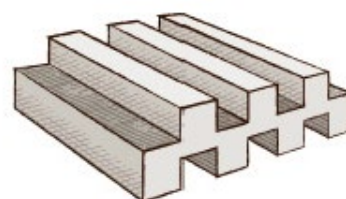
Heavy investment in research and tooling to create new self-inflating mats featuring innovative foam core profiles has allowed technical outdoor equipment manufacturer, Robens, to create the lightest 3D self-inflating mattress (SIMs) for 2022.

The PFC-free Polarshield 80 (pictured above) and 120 (8cm and 12cm thick respectively) use a 20D 390T nylon fabric with a double square ripstop weave to reduce weight and packed size while ensuring comfort and ease of use are maintained. They also feature delamination-proof TPU for extreme durability required in outdoor pursuits.

The latest award-winning Scandinavian brand's SIMs also build on the advances in 3D manufacturing techniques it introduced last year. This includes the ability to bond together materials with different characteristics to increase side wall stability.

Normally, bonding dictates all sides of a 3D SIM must use the same stretch fabric required by the upper surface for comfort. This means that the mat must be over inflated to obtain the right firmness to compensate for the sides bowing out like a balloon as pressure rises. The new bonding technique allows a 'static' material to be used for walls. As this does not deform under pressure it improves inflation/deflation speeds as less air is required to achieve the right comfort levels. It also enhances stability at the edge of the mat.

Another technological advancement introduced by Robens is its offset construction technique (pictured right). Here, offset horizontal channels cut across the top and bottom surfaces of the foam to ensure an even thickness of insulation across the whole mat. This increases comfort and eliminate cold spots (especially those associated with vertical coring). The construction ensures mat performance is maintained while removing more foam from the profile to offer a reduction in weight and packed size.



The new profile brings a major environmental benefit. Each mat is cut from a slab of insulation and 'nests' with the uncut one below thanks to its offset profile – think egg box. This substantially reduces manufacturing waste to near zero.

Polarshield SIMs also feature the Robens Peak valve (pictured left) that provides high air flow rates for easy inflation and deflation – especially when an optional Robens Pump Sack is used.

For further information and prices, plus details of your nearest retailer, visit [robens.co.uk](http://robens.co.uk)

ENDS (374 words)

#### Editor's notes

***High resolution and web images for use with this press release can be downloaded from Dropbox using the following link <https://bit.ly/3C72jYx> The usual Oase Outdoors ApS copyright applies.***

#### RRPs:

Polarshield 80 £169.99

Polarshield 120 £190.00

#### Open sizes:

Polarshield 80 200cm x 70cm x 8cm

Polarshield 120 200cm x 77cm x 12cm

#### Packed size and weight:

Polarshield 80 34cm x 20cm 1.59kg

Polarshield 120 39cm x 28cm 2.43kg

Robens is a registered trademark

**Brand website:** [robens.co.uk](http://robens.co.uk)

**Self-Inflating Mats:** [robens.de/en-gb/shop/outdoor-sleeping-gear/mats/self-inflating-mats](http://robens.de/en-gb/shop/outdoor-sleeping-gear/mats/self-inflating-mats)

**Polarshield 80:** [robens.de/en-gb/shop/outdoor-sleeping-gear/polarshield-80](http://robens.de/en-gb/shop/outdoor-sleeping-gear/polarshield-80)

**Polarshield 120:** [robens.de/en-gb/shop/outdoor-sleeping-gear/polarshield-120](http://robens.de/en-gb/shop/outdoor-sleeping-gear/polarshield-120)

#### R-Values

The R-Value is the measure of a material's thermal resistance under uniform conditions and the higher a material's R-Value then the better insulation it provides. While it is a standard measurement there is currently no single international test procedure to determine this in self-inflating mattresses, so we have worked with specialists to create values that aid the purchasing process.

To obtain the most accurate figures we use an independent test company that has developed its own method to obtain R-Values. Our mattresses are inflated to a uniform pressure and placed horizontally between two plates in a stable environment. A current is passed through one plate to create a constant heat and the power required to maintain this temperature is used to calculate the R-Value – the less energy required to keep that plate warm then the higher the insulation properties of the material and its R-Value.

#### R-values:

Polarshield 80 4.1 (-12)

Polarshield 120 5.0 (-19°C)

#### Peak Valve

The Robens Peak Valve has been developed to address slow inflation/deflation speeds and to make it easier to adjust firmness. It provides great air flow with the choice of one-way inflation through easy and simple operation. Its slim internal and external profile enhances its durable, leak proof performance.

To use, open the valve cover to reveal the valve assembly that includes a diaphragm disc with a central shaft. Push the shaft down to fully open the valve for the two-way free flow of air. This provides superfast and carefree inflation and deflation. Pull the central shaft up to re-seat the diaphragm disc. In this one-way position air can only be blown into the airbed or SIM, making it perfect for effortless inflation and fine-tuning firmness

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