

TECHNICAL DATA SHEET

PENTASEAL FUNCTIONS

- **Excess of 750pa Wind Driven Rain Protection**
- > 100% Airtight Internal Seal
- Optimal Outwards Vapour Diffusion
- Thermal Insulation & Thermal Break
- Sound Insulation up to 56 dB



Pentaseal is a BBA approved multi-functional, permanently elastic perimeter sealing tape that removes the need for traditional, labour intensive, sealing methods and materials. Replacing grouts, silicones, mastics & spray foams, Pentaseal offers a complete, all in one UV light and weather resistant sealing solution that is simple to install. Pentaseal remains permanently elastic and will continually expand and contract as dictated by structural movement without any detrimental effect on performance.

10 Year Function Warranty | 20 Year BBA Approved Life Cycle

WIND DRIVEN RAIN PROTECTION

Guaranteed to provide a minimum of 750 Pa protection from wind driven rain.

100 % AIRTIGHT INTERNAL SEAL

Contributing to minimalising heat loss by convection.

VAPOUR DIFFUSION

Pentaseal offers an optimal vapour diffusion gradient from the inside outwards with an sd-value of 40 : 1 (internal \geq 22; external \leq 0.5) DIN EN ISO 12572.

THERMAL INSULATION

U-Value Range of 0.6 W / $(m^2 \cdot K)$ to 0.8 W / $(m^2 \cdot K)$ dependant on tape width / construction joint depth.

THERMAL BREAK

With a Thermal Conductivity of $\lambda 10$,tr ≤ 0.048 W / m · K Pentaseal® also provides an excellent thermal break solution.

SOUND INSULATION

Up to 56 dB sound reduction when tested in a 10mm joint. This figure further improves when the tape width and thickness increases.

Multi-Solution Construction Joint / Connection Seal which can Contribute to Increasing PSI Calculation Values.

The details and information given in this literature are based on best current knowledge. They are intended to serve as general information only and it is advised that the user conducts their own tests for their specific set of conditions to determine the suitability of the product for its proposed use. No warranty or liability is given or implied regarding any part of these instructions or details, or the completeness of the information. We reserve the right to modify, or change, the specifications and information without advance notification. All goods are supplied subject to our standard conditions of sales, copies of which are available upon request.

PENTASEAL COMBINES THE FOLLOWING REQUIREMENTS IN ONE SOLUTION;

- Building Energy Act (GEG, EnEV valid 31.10.20)
- RAL "installation guide"
- UK Building Regulations

Full Technical Support On and Off Site

SERVICE, PACKAGING & DELIVERY

Pentaseal is supplied pre-compressed on rolls with a self adhesive backing to aid installation.

PART NUMBERS:

- PENT542128 54mm (width) x 8 Meters Sealing Joints 2 to 12mm
- PENT543188 54mm (width) x 8 Meters Sealing Joints 3 to 18mm
- PENT545308 54mm (width) x 8 Meters Sealing Joints 5mm to 30mm

TECHNICAL DATA	STANDARD	CLASSIFICATION
Material description		impregnated PUR flexible foam with special film
Colour		black
Impermeable to driving rain	DIN EN 1027	≥750 Pa
Impermeable to driving rain, joint intersection	DIN EN 1027	MF 1
Temperature stability range	DIN 18542	-30°C to +80°C
Classification according to	DIN 18542-2020	MF 1 (BG 1 / BG R)
Airtightness	DIN EN 12114	$a = 0.00 \text{ m}^3 / [\text{h} \cdot \text{m} \cdot (\text{daPa})^{2/3}]^{**}$
UV light and weather stability	DIN EN ISO 4892-2	MF1
Compatible with adjacent building materials	DIN 52453	requirements fulfiled
Dimension tolerance	DIN 7715 TS P3	requirements fulfiled
Building material class	DIN 4102	B 1 (fire resistant)
Thermal conductivity	DIN EN 12667	$\lambda_{10,tr} \ge 0.048 \text{ W/m} \cdot \text{K}$
U-value: window construction depth 60mm 70mm 80mm	DIN 4108-3	$U = 0.8 \text{W} / (\text{m}^2 \bullet \text{K}) / 0.7 \text{W} / (\text{m}^2 \bullet \text{K}) / 0.6 \text{W} / (\text{m}^2 \bullet \text{K})$
Sound reduction		up to 56 dB in 10 mm joint
sd-value gradient (from internal to external)	DIN EN ISO 12572	\approx 40: 1 (internal \geq 22; external \leq 0.5)
ETA - 15/0407		CE mark since 2015
Shelf life		1 year, dry and in original packing
Storage temperature		+ 1 °C to +20°C

^{**} no measurable air penetration according to DIN EN 12114.