



TRP ROOF ACCESS HATCH WITH INSULATION

Technical Data Sheet

PRODUCT DESCRIPTION

Shams TRP roof access hatches provide a safe and rapid exit from the interior to the roof. They are designed for frequent access for maintenance, inspection and emergency escape.

Each TRP hatch consists of the following elements:

• A PVC 90° upstand with internal air chamber. The material is rigid and durable, and highly resistant to corrosion and adverse weather conditions.

• An insulation layer made of physically cross-linked, closed-cell polyethylene foam in anthracite grey, with acrylic adhesive backing.

• A white lacquered aluminium frame hinged to the upstand.

• Gas-spring shock absorbers that open the lid between approximately 70° and 90°, depending on the hatch size.

• An internal handle for opening and closing.

• A sheet-metal lid made of 1 mm galvanised steel to prevent oxidation and corrosion. The top surface is slightly inclined to avoid water ponding and provides a modern, streamlined external appearance.

The system offers additional protection against hail, falls and vandalism. TRP roof access hatches are available with square and rectangular bases. Standard upstand height: 180 mm.

TECHNICAL CHARACTERISTICS – METAL LID

FIRE CLASSIFICATION

Classification according to EN 13501-2:2009+A1:2010 – "Fire classification of construction products and building elements".

EUROCLASS	REACTION TO FIRE	SMOKE PRODUCTION	DROPLETS / PARTICLES
B s1 d0	Combustible – very limited contribution to fire	Low smoke production	No flaming droplets or particles

PHYSICAL AND MECHANICAL PROPERTIES – GALVANISED STEEL SHEET

TEST	VALUE	UNIT	STANDARD
Ultimate tensile strength Rm (max.)	360	N/mm²	EN 10346:2015
Yield strength Re (max.)	315	N/mm²	EN 10346:2015
Re/Rm × 100	88	(N/mm²)×100	EN 10346:2015
Elongation at break	35	%	EN 10346:2015

TECHNICAL CHARACTERISTICS – POLYETHYLENE FOAM INSULATION

Fire classification according to ISO 3795 – "Road vehicles, and tractors and machinery for agriculture and forestry – Determination of burning behaviour of interior materials".

FIRE PERFORMANCE	MEAN VALUE	STANDARD
Burning rate F	100 mm/min	ISO 3795

PHYSICAL AND MECHANICAL PROPERTIES – POLYETHYLENE FOAM

PROPERTY	STATE	MEAN VALUE	STANDARD
Density	-	30 kg/m³	ISO 845
Compressive strength at 25 %	F	52 kPa	ISO 3386-1
Compressive strength at 40 %	F	86 kPa	ISO 3386-1
Compressive strength at 50 %	F	120 kPa	ISO 3386-1
Hardness – Shore A	P	10	ISO 868
Hardness – Shore 0	P	16	ASTM D2240
Hardness – Shore 00	P	56	ASTM D2240
Water absorption	Vol. % of water absorbed	1%	ISO 2896
Thermal conductivity at 10 °C	A	0.036 W/m·K	ISO 8301
Thermal conductivity at 40 °C	A	0.040 W/m·K	ISO 8301

ADHESIVE – PHYSICAL PROPERTIES

MATERIAL	THICKNESS	LINER	ADHESIVE FORCE	TEMPERATURE RANGE
Modified acrylic	0.07 mm	Siliconised paper	2 mil, PET: 90°, 20 m/min	-40 °C / +155 °C

TECHNICAL CHARACTERISTICS – PVC UPSTAND

Fire classification according to EN 13501-2:2009+A1:2010 – "Fire classification of construction products and building elements".

EUROCLASS	REACTION TO FIRE	SMOKE PRODUCTION	DROPLETS / PARTICLES
B s3 d0	Combustible – very limited contribution to fire	High smoke production	No flaming droplets or particles

Shams PVC 90° upstands present very low flammability; they do not burn easily and do not sustain flame once the external heat source is removed. They are self-extinguishing. According to UL 94 tests to determine the degree of self-extinction, the Shams PVC 90° upstand is classified as V0 – the flame extinguishes within 10 seconds without dripping.

The use of these upstands provides additional safety as the material is electrically insulating. The product complies with Directive 2011/65/EU (RoHS) on the restriction of the use of certain hazardous substances in electrical and electronic equipment, Annex II as amended by Delegated Directive (EU) 2015/863.

PHYSICAL AND MECHANICAL PROPERTIES – PVC

PROPERTY	VALUE	UNIT	STANDARD
Density (23 °C)	1.48–1.54	g/cm³	UNE EN ISO 1183
Tensile strength	min. 37	MPa	UNE EN ISO 527
Flexural strength	55.67	MPa	ASTM D790
Charpy impact strength	8.2	kJ/m²	ASTM D256
Rockwell hardness	84.5	HD	ASTM D785
Vicat softening temperature	min. 81	°C	UNE EN ISO 306
Elongation at break	min. 115	%	UNE EN ISO 527

THERMAL PROPERTIES – PVC

PROPERTY	VALUE	UNIT	STANDARD
Thermal transmittance coefficient	0.16	W/m²·K	-
Thermal transmission coefficient	1.4	W/m²·K	ISO 10077

CHEMICAL RESISTANCE – PVC

Excellent resistance to most common chemical agents, according to UNE 53-029-82.

The values shown are based on the technical data supplied by the raw material manufacturers and correspond to tests carried out under standard conditions. Shams reserves the right to introduce any modifications derived from product development and improvement.