

**TECHNICAL DATA SHEET** 

# **TROVEX RESILIENCE**

#### **OVERVIEW AND STRUCTURE**

Trovex Resilience wall protection is an extruded semi-rigid PVC sheet. The system provides a high impact and hygienic, easy to clean surface, for enhanced wall/door protection.

#### Description

Colour:	20 standard colours available
Surface Thickness:	Semi-Matt
Thickness:	2mm
Size:	2440 x 1220
	3000 x 1220
Maximum Service Temp:	60°c

#### Preparation

Surface preparation of walls prior to installation is normally minimal, depending on substrate type/condition. Surfaces must be dry, free of dust, grease or other contaminants to ensure thorough bonding of the adhesive. For specific advice, please contact technical services on 01707 254170 or contact a member of the team as found on our website: <u>https://trovex.com/support-resources/technical-support/</u>

#### Installation

Trovex Resilience can be fixed directly to most substrates using one of the following methods.

- 1. Trovex Bond 2
  - A 2 part polyurethane full coverage adhesive for most substrates.
- 2. Trovex Bond W A single part, water based full coverage adhesive for porous substrates only.

### Cutting

The sheet can be cut with a jigsaw, circular saw, electric nibblers or fine toothed handsaw.

#### Jointing

- 1. A high impact 2 part PVC H joint, co-extruded with an integral watertight seal at the mouth of the joint
- 2. Sealant joint 3-4mm wide
- 3. Hot Welded Joint

#### Internal / External Corners

Trovex Resilience can be thermoformed on site to ensure internal and external corners, including window and door reveals are neatly clad without an edge joint.



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#### Maintenance

Regular cleaning with a mild liquid detergent and warm water using a soft, non-abrasive cloth will ensure quality of performance. The sheet is resistant to certain solvent cleaning if necessary. (Trovex IPA Cleaner T309). A non-abrasive domestic type cream cleaner can be used for stubborn marks. Do not use abrasive cleaners or pads

#### **Chemical resistance**

Trovex Resilience has a lightly embossed surface with dimensional stability and excellent chemical resistance. A full chemical resistance chart is available on request.

### Storage and conditioning

Sheets should be stored flat and fully supported. Leave for 24 hours to attain the ambient room temperature (min 14°c)

### Limitations of use

Trovex Resilience has a maximum service temperature of 60°c. For temperatures above this and in all open flame areas, use stainless steel. For advice on the best combinations of materials to use, please contact technical services on 01707 254170 or contact a member of the team as found on our website: https://trovex.com/support-resources/technical-support/

#### **Materials Conformity Declaration**

Trovex Resilience conforms to material safety data specified within European Union Directive EC 91/155/EEC.

#### **Fire Resistance and Classification**

Trovex Resilience Wall Protection achieves the following standards.

BS476 Part 7 (Surface Spread of Flame)	Classification 1
BS476 Part 6 (Fire Propagation)	Classification 0
EN1SO 13501	Classification Bs3d0

#### Volatile Organic Compound (VOC) Content

Samples of Trovex and adhesive have been tested by Building Research Establishment in accordance with ISO16000-10:2006, report number w12/09/02a. The samples tested were intended to imitate real-life installation and, as such, were wiped with a cleaning agent prior to ponding the panels to plasterboard using Trovex Bond TB300/25 2 component polyurethane adhesive and Trovex Bond TB301/12 single component acrylic adhesive. The results confirm that the VOC content, formaldehyde and vinyl chloride monomer release are all low or non-existent. Heavy metals are not present and therefore migration of these elements cannot occur.



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## **Typical Physical Properties**

Property	Value	Unit	Standard	Test Method
GENERAL PROPERTIES:				
Density*	1.4	1.4	-	-
MECHANICAL PROPERTIES:				
Tensile Modulus	-	MPa	ISO 527	23°C 1mm/min
Yield stress	35	MPa	ISO 527	23°C 50mm/min
Elongation at Yield	-	%	ISO 527	23°C 50mm/min
Elongation at Break	-	-	ISO 527	23°C 50mm/min
Drop Weight Impact	70	J	ISO 6603-1	A 23oC
THERMAL PROPERTIES:				
VICAT softening Point	75	°C	ISO 306	A/50
HDT	60	-	ISO 75	A, 1.8 MPa
BURNING BEHAVIOUR:				
Burning Rate	-	-	-	-
Flammability Rating	Class 1	-	BS 476 part 7	1.0 mm and above
Flammability Rating UL	V0	-	-	1.0 mm and above
Flammability Rating	M1	-	Epiradiateur CSTB	1.0 mm and above
Flammability Rating	Bs3d0	-	EN 13823	2.0 mm and above
SURFACE VOLUME:				
MISCELLANEOUS:				
Mould Shrinkage	-	%	-	-
Thermoforming Temperature	80	°C	-	-

\* The density quoted should only be used as a guide. This value can change depending upon the type and quantity of pigments or additives used.



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#### SUPPLEMENTAL INFORMATION

#### **Chemical Contact and cleaning**

Reagent	Chemical resistance	Re
Acetone	Not recommended	Bra
Acid – (Weak)	Good	Bu
Acid – (Strong)	Good	Сс
Alcohol	Good	De
Anti-freeze	Excellent	Die
Base (Weak)	Excellent	Fo
Base (Strong)	Good	Lu
Battery Acid	Good	Pe

Reagent	Chemical resistance
Brake Fluid	Not recommended
Butter	Good
Coffee	Excellent
Detergent	Excellent
Diesel	Good
Foodstuffs	Good
Lubricating Oil	Very Good
Petrol	Good

Chemical resistance is influenced by many factors, including concentration, temperature, exposure time and material stress. Therefore, the data should only be used as a guide.

Most common mild soaps or detergents dissolved in warm water can be used to effectively clean general dirt and surface contaminants, but in all cases should be objectively tested. Abrasive products will damage the surface.

#### **Storage and Drying**

If sheet is stored in humid conditions for long periods then it should be dried before thermoforming, ideally at 80°C for approximately 2 hours, plus an additional hour for every 1 mm thickness. It is essential that enough space be left between the sheets (20-30mm) to allow correct drying. The time lapse between drying and forming should be minimised in order to save energy and reduce heating times. If sheets are left to stand at room temperature for a long period of time, they may need to be re-dried.

#### **Dimensional Tolerances**

Standard tolerances are subject to the local standard tolerance set. Extra tolerance requirements may be possible on request and by special agreement.

### **Product Modification**

Product code nomenclature takes in to account selected primary features of a product. The suffix may indicate a primary additional functionality, however, further multiple modifications are almost always possible and may be agreed upon and specified prior to our technical and commercial offer. Such enhancements are a normal part of our service capability and they do not affect the general characteristics listed in technical data sheets.



# **TROVEX RESILIENCE**

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**Suitability for use** - Trovex sells PVCU sheet and laminated products. The above information describes the basic features of our products. However, these are largely influenced by their specific application, the application environment, final processing and the customer's intended usage. We recommend that in each case the suitability of our products for the intended usage is thoroughly listed and evaluated. We do not give any warranty or guarantee for any particular quality required by a customer or for the usability of our products in any particular customer environment. Trovex will under no circumstance be liable for wear and tear, for damages resulting from disregard of product instructions – including those contained in this technical data sheet – operating instructions, disregard of other instructions, misuse, alteration or unauthorised repairs or processing. All deliveries shall be subject to the Terms and Conditions of Trovex.

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#### DETAILS OF THE SUPPLIER OF THE TECHNICAL DATA SHEET

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### EMERGENCY TELEPHONE NUMBER

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