



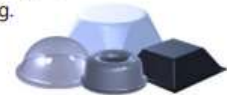
BumperStop® Protectors 2000 & 3000 series

Technical Data Sheet

March 2021

Manufactured in the UK, a highly reliable brand of self-adhesive protective bumpers. Using a strong flexible and highly resilient polyurethane material BumperStop® Protectors are considered a premium range of its type. Among their many features is their ability to withstand shock and vibration whilst being both non-slip and non-marking.

BumperStop® Protectors are supplied die-cut on a sheet to allow ease of removal and aid the speed of use in application. This product range consists of a large selection of different shapes, profiles, colours and styles so that users will always find something to suit their particular application demands



Product Features

- Durable & Highly Resilient
- Shock & Vibration Resistant
- Non-Slip & Non-Marking
- Large Range of Shapes, Colours & Profiles
- Transparent Option for Extreme Clarity

Product Benefits

- Protects Surfaces & your unit, box or appliance
- Various Heights of Parts Allows For Heat Dissipation
- Discrete on Clear Materials
- Quick & Simple to Apply

Polyurethane Physical Properties

Properties	Test Method	Clear	Coloured
Hardness (Shore A)	ASTN D-2240	66-70	66-70
Tensile Strength (MPA)	BS903	4.5MN/m2	4.5MN/m2
Elongation (%)	BS903	193	193
Tear Strength (KN/m)	BS903	14.4	14.4
Abrasion Resistance (MG loss)	BS EN 5470-1:1999	150	150
Load Tolerance 21°C to 60°C		Min 3 Mpa	Min 3 Mpa
Flame Retardancy	UL94HB (in house test)	Pass	Pass
Kinetic Coefficient of Friction	ASTM D - 1894 - 78		
	A Stainless Steel	2.52	2.52
	B Glass	2.7	2.7
	D High impact polystyrene	2.37	2.37

Shelf-Life - 12 months when stored in original packaging at room temperature

Exposure to the Environment Bumperstops are intended for interior applications where physical properties will remain unchanged. When used externally for extended periods, some discolouration as well as loss of adhesion may occur.

Load Tolerance Information

In the event Bumperstop® Protectors are used for applications involving the support of heavy plate glass or similar, laboratory tests have shown that cylindrical shapes perform better than hemispherical. A heavy load supported by the wrong style of BumperStop® protector could result in fracturing or "crumbling" of the polyurethane material. Please refer to the chart for weight loading guidance.

Compression tests were carried out at ambient temperature (24°C)

Product	Colour	Profile	Kg per part	Product	Colour	Profile	Kg per part
2010	Clear	Hemispherical	2	2191	Clear	Cylindrical	12
2115	Clear	Hemispherical	3	2019	Clear	Cylindrical	12
2150	Clear	Hemispherical	6	2100	Clear	Square	6
2120	Clear	Cylindrical	4	2127	Clear	Square	8
2125	Clear	Cylindrical	8	2205	Clear	Square	12

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Pressure Sensitive adhesive data

4001 - Standard on all BumperStop® Protectors

A solvent based acrylic adhesive with high instant tack. Strong stable pressure sensitive adhesive system which displays good adhesion to more demanding surfaces that would need higher levels of tack as well as good peel and shear properties. This adhesive system also displays good ageing properties when used for long term applications

Peel & Shear Data

Surface Material	Test Method	4001 Pressure Sensitive Adhesive	
		20min - 23°C 50% RH	24h - 23°C 50% RH
Stainless Steel	Peel FINAT 1 Unit N/25mm	13.4	15.7
Aluminium		12.1	14.8
Glass		12.5	17.7
HPDE		4.1	4.4
Polystyrene		9.9	13.1
ABS		10.4	15.1
Stainless Steel	Shear FINAT 8		> 300h
Stainless Steel	Loop Tack N/25mm	13.8	

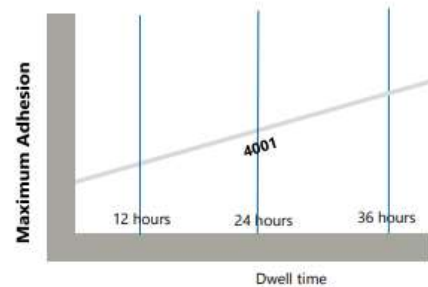
Temperature Range

Adhesive No	Adhesive Type	Application Temperature	Service Temperature
4001	Solvent Acrylic	20°C to 40°C	- 40°C to + 120°C

Adhesive Considerations

Please refer to the chart which illustrates the relative adhesion properties of the adhesive system used in the production of BumperStop® Protectors. In general terms it is helpful to allow time (dwell) to increase the surface contact and therefore the overall adhesion.

We always recommend customers carry out their own tests to ensure suitability because application conditions will vary.



APPLYING BumperStop® Protectors

It is important to remember, that as with any self adhesive product, the surface to which they are being applied must be clean, dry and free from dust and dirt. Therefore, to gain maximum adhesion, clean the surface with low strength solvent and allow to dry thoroughly before use. Please follow solvent manufacturers' instructions for safety.

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