

Technical Data Sheet

April 2025

BumperStop® Protectors are Self-Adhesive Protective Bumpers used in a variety of different applications as feet, stops & spacers due to their protective qualities.

They are resilient, sound dampening, non-slip, non-marking and protects against scratches. Made using a plasticiser free, polyurethane composition with a long aging high-tack pressure sensitive adhesive. BumperStop® Protectors can be applied to a huge range of items. Also very useful as spacers to prevent squeaks and rattles.

Often used as feet and spacers for the protection of small appliances, desktop or handheld electronic devices, telephones, keyboards, foot pedals, scales, clocks, speakers, dispensers, computers, audio, video, medical equipment, cabinetry and domestic appliances.

Polyurethane Physical Properties

Property	Method	Average Result Carried out on 4112	
Shore Hardness A	ASTN D2240	68-76	
Tensile Strength	ASTM D412 Die C 500mm/min @ 23±2°C and 50±10%RH	5.59 MPa / 811psi	
Elongation at Break	ASTM D412 Die C 500mm/min @ 23±2°C and 50±10%RH	68%	
Tear Strength (Angle Tear)	ASTM D412 Die C 500mm/min @ 23±2°C and 50±10%RH	13.8 N/mm	
Taber Abrasion	ISO 5470-1—CS17 Wheel 1000g	0.005 mg/1000cycles	
Load Tolerance	Min 3 Mpa	Min 3 Mpa	
Flame Retardancy	UL94HB (in house test)	Pass (Clear & Coloured)	
Kinetic Coefficient of friction	ASTM D-1894-78	Clear	Coloured
	A Stainless Steel	5.69	5.69
	B Glass	2.9	2.9
	D High Impact Polystyrene	2.53	2.53

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	Profile	Kg per part	Product	Profile	Kg per part
2120	Cylindrical	3	2010	Hemispherical	2
2125	Cylindrical	6	2150	Hemispherical	6
2191	Cylindrical	10	2127	Square	6
2020	Cylindrical	10	2205	Square	10

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BumperStop® Protectors are RoHS, REACH and Wee compliant.

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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	16.0	15.7
Aluminium		12.1	14.8
Glass		12.5	17.7
HDPE		4.1	4.4
Polystyrene		9.9	13.1
ABS		14.4	15.1
Stainless Steel	Shear FINAT 8		>300h
Stainless Steel	Loop Tack N/25mm	22.0	

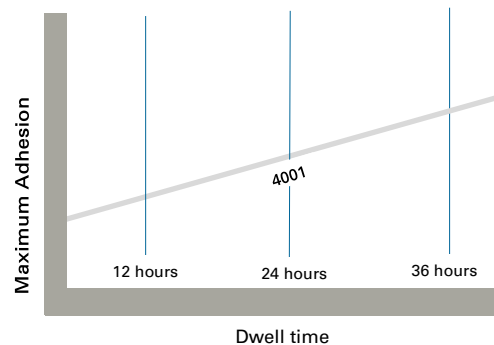
Temperature Range

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 the tape is being applied must be clean, dry and free from dust and dirt. Therefore, to gain maximum adhesion, it might be necessary to clean the surface with low strength solvent and allow to dry thoroughly before use. Please follow solvent manufacturers' instructions for safety. In some cases we also recommend the use of an application roller to ensure maximum adhesion force is applied to the tape or die-cut once in its final position.

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