

**ARBO**

# Façade & Membrane System

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ARBO® EPDM SYSTEM AND GLAZING



# Contents

History of ARBO®	3
Introduction to EPDM	4
EPDM ARBO® Systems	6
EPDM system type	8
EPDM membrane adhesives	9
EPDM façade accessories	10
EPDM membrane system sizes	11
Structural glazing	12
Xpanda 600 expanding joint sealing	14
Xpanda 600 Product Selector	16
ARBO® window / frame protection solution	17
Service	18



## History of ARBO®



**"We have been developing products and sealants for the professional user at our UK manufacturing base for nearly 160 years, and are proud of our traditional values. We continue to work with a variety of customers to produce solutions to individual requirements and projects, offering a unique flexibility of approach that delivers sealant solutions that work in the modern environment"**



### Over 150 Years of Excellence.

Adshead Ratcliffe & Co Ltd was founded in 1859 and is proud of its long-established British manufacturing base.

Our mission is to develop and offer to customers a quality range of products backed up by high levels of service – both via sales representatives in the field and the Production and Administrative Teams in our HQ and Distribution Centres.

Based in Belper, Derbyshire, we are recognised as one of the most successful and growing business in the region. We have a philosophy of innovation, and have our in-house Research and Development facilities with our laboratory, alongside extensive manufacturing and training facilities, that make the Company well positioned to respond to customer needs and market requirements. Our products are manufactured to quality standards recognised within the UK and globally.

We are regarded as the premier manufacturer of sealants, and our products are sold under the leading ARBO® Brand containing a range of sealants for the professional user, together with the extensive range of EPDM products marketed under the ARBO® Façade Solutions brand. We continue to invest in our people and products, and are committed to supplying quality products manufactured to exacting standards, to our many customers nationally and internationally.

In early 2017, Adshead Ratcliffe & Co became part of CARLISLE® CM Europe following the acquisition by the US group CARLISLE® Companies Incorporated. The CARLISLE® CM Europe group is Europe's leading waterproofing and sealing solutions provider for roofs, façades, and buildings. The umbrella brand CARLISLE® CM Europe unites the trusted brands ARBO® RESITRIX®, HERTALAN®, ALUTRIX®, HARDCAST® and ECOLAN®

# Introduction to EPDM

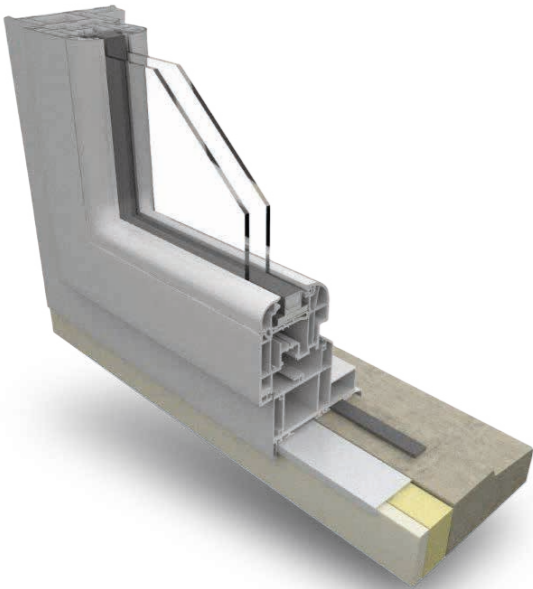
The ARBO® EPDM Façade Membrane system is a black synthetic rubber waterproofing membrane and designed to offer a fully compatible solution that not only prevents water and air leakage but incorporates sealants and adhesives which are safe and solvent free. Drawing on our wealth of experience and laboratory testing we can provide a system that will not affect sensitive substrates such as natural stone. The ARBO® EPDM Façade Membrane system does not affect solvent sensitive paint finishes and is compatible with other ARBO® sealants.

Following the introduction of Document L, it has become a requirement to provide a robust seal to the internal interfaces between different façade components of a construction. The purpose of this seal is to reduce heat and air leakage from a building and to help prevent interstitial condensation. To aid rapid construction techniques, contractors demand that a building is made substantially waterproof as early as possible

during construction. The ARBO® EPDM Façade Membrane system plays an important role in achieving this aim. Increasing standards demanded by building insurance companies on new constructions and impending legislation means that window seals must incorporate additional robust seals and use of an external sealant only will not be permitted as a defence against water ingress.

### STANDARD GRADE AVAILABLE IN:

<b>0.75 mm thickness;</b> 20 metre rolls. Width – 100 mm to 1400 mm in 50 mm increments. Other widths on request
<b>0.75 mm thickness;</b> 25 metre rolls. Width – 100 mm to 1400 mm in 50 mm increments. Other widths on request
<b>1.0 mm thickness;</b> 20 metre rolls. Width – 100 mm to 1400 mm in 50 mm increments. Other widths on request.
<b>2.0 mm thickness;</b> 10 metre rolls. Width – 100 mm to 1400 mm in 50 mm increments.



### KEY BENEFITS SUMMARY

- Sealing and waterproofing construction gaps in building facades
- High resistance to mechanical damage
- Provides a waterproof and airtight flexible seal
- Flexible, robust and easy to install
- Excellent weathering, ageing and UV resistance
- Quality assured with printed logo for identification.
- Compliance with Part L of the Building Regulations
- By reducing the size of heating and ventilation systems achieves significant reductions in heating running costs
- Works in conjunction with ARBO® MA and ARBO® SA Adhesives to achieve a watertight and airtight seal

TECHNICAL INFORMATION		
TENSILE STRENGTH	EN 12311-2B	≥ 9
ELONGATION	EN12311-2B	≥ 400
Modulus 300%	EN12311-2B	≥ 6
HARDNESS (SHORE A)	N/A	50-70
TEAR STRENGTH (KN/M)	N/A	≥ 35
LOW TEMPERATURE FLEXIBILITY	EN 495-5	
WATER VAPOUR PERMEABILITY	N/A	40,000 u
REACTION TO FIRE	EN 13501-1	Class E
WATER TIGHTNESS	EN 1928	Pass
DURABILITY (HEAT AGEING)	EN 1928	Pass
DURABILITY (ALKALI)	EN12113-2	Pass
OZONE	N/A	Resistant
UV	N/A	Resistant
LIFE EXPECTANCY	50 years – Based on SKZ 2001 Study	

### ORDERING

ARBO® EPDM Façade Membrane is cut to order. Please state quantity, width and total number of rolls required:

<b>0.75 mm thickness</b> in 20 metre lengths.
<b>0.75 mm thickness</b> in 25 metre lengths.
<b>1.0 mm thickness</b> in 20 metre lengths.
<b>2.0 mm thickness</b> in 10 metre lengths.

### APPLICATION METHOD – FOR ALL ARBO® EPDM FAÇADE MEMBRANES

All surfaces to be coated must be clean, dry and sound.

- Porous surfaces to be primed with ARBO® AFS Primer .
- Minimum recommended lap to window -25 mm
- Minimum recommended lap to substrate -100 mm
- Terminator strips are recommended when applying to head, jambs and cill detail.
- Recommended sequence is cill, jamb, head.
- Apply by sealant gun in approximately 8 mm beads approximately 25 mm apart.
- Press EPDM membrane onto the Arbo adhesive, then use an Arbo Roller to ensure full contact between substrates and membrane.
- We recommend that edges of membrane are encapsulated with ARBO® adhesive.
- Lap and patch corners where necessary
- Any holes or gaps in corners should be sealed with further application of adhesive
- Do not apply at temperatures below 5 °C and where relative humidity is below 40 %

### LIMITATIONS

This product is intended for vertical and horizontal facade use only. Flat areas jointed with an Arbo adhesive that will be subjected to ponding have not been tested and are therefore not recommended. Continuous membrane i.e. one piece - no joints, is allowed, providing it is not subject to traffic and is laid to a fall to shed water. For further information please contact our Technical Services.



#### Important:

The information in this booklet is given in good faith and based on results gained from experience and tests. However, all recommendations or suggestions are made without guarantee since the conditions of use are beyond our control. Goods are supplied subject to the Company's terms and conditions of sales, a copy of which is available on request.



# EPDM ARBO® Systems

ARBO® Façade Solutions have developed their own EPDM system to seal internally between window frames and a variety of substrates using high quality EPDM utilising solvent free adhesives. This green system helps the building achieve Document L.

This important detail can no longer be ignored. Responsible fabricators and installers are being asked by main contractors ‘to seal that gap’.

Legislation is going to get tougher in the future, and your clients will be expecting you to provide a robust solution at this detail for certification of the building. We can help by specifying and carrying out site visits to ensure successful completion of contract.

ARBO® Facade Solutions EPDM System provides the following key advantages:

- It is clean, green and easy to apply
- Easy factory or site application
- No fumes
- No smell



## EPDM ARBO® Systems

### ARBO® EPDM FAÇADE MEMBRANE STANDARD



Available in	
THICKNESS	0,75 mm
LENGTH	20 and 25 metre roll
WIDTH	100 mm to 1000 mm in 50 mm increments Other widths up to 1400 mm – available on request.

### ARBO® EPDM FAÇADE MEMBRANE BS1

ARBO® EPDM Façade Membrane BS-1 is ARBO® EPDM Façade Membrane with the addition of a butyl strip for easy and clean application to timber and composite frames.



Available in	
THICKNESS	0,75 mm
LENGTH	25 metre roll
WIDTH	100 mm to 300 mm in 50 mm increments

### ARBO® EPDM FAÇADE MEMBRANE BS2

ARBO® EPDM Façade Membrane BS-2 is ARBO® EPDM Façade Membrane with the addition of two butyl strips for easy and clean application to timber and composite frames.



Available in	
THICKNESS	0,75 mm
LENGTH	25 metre roll
WIDTH	100 mm to 300 mm in 50 mm increments

# EPDM system type

## ARBO® EPDM FAÇADE MEMBRANE INSTANT

ARBO® EPDM Façade Membrane Instant is a lamination of standard ARBO® EPDM Façade Membrane and a pressure sensitive adhesive that contains a scrim to reduces stretching during application.

It bonds to a wide variety of smooth surfaces and is suitable for sealing gaps in the internal walls of light weight construction facades.

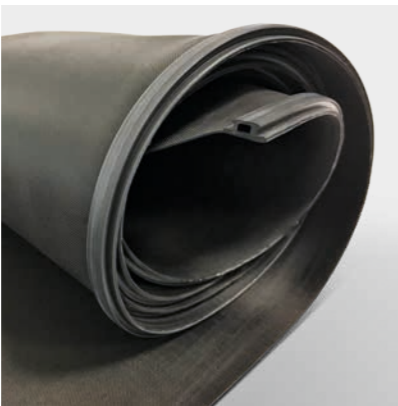


Available in

THICKNESS	0,8 mm
LENGTH	25 metre roll
WIDTH	100 mm to 1000 mm in 50 mm increments

## ARBO® EPDM FAÇADE MEMBRANE PROFILED

ARBO® EPDM Façade Membrane BS-1 is ARBO® EPDM Façade Membrane with the addition of a butyl strip for easy and clean application to timber and composite frames.



Available in a 6 mm & 10 mm profile detail.

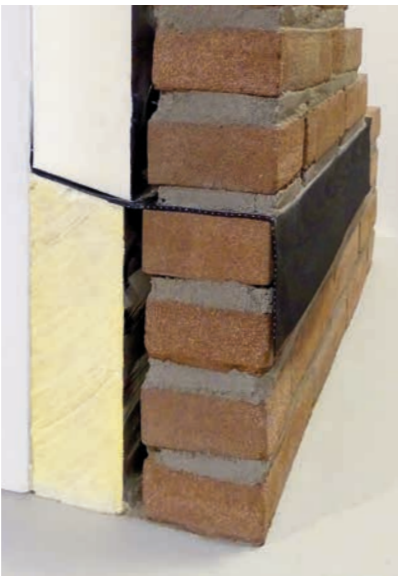
THICKNESS	0,75 mm
LENGTH	25 metre roll
WIDTH	150 mm & 250 mm only other widths available on request, 4-6 weeks lead time

## ARBO® FLEXIFORM MEMBRANE

ARBO® Flexiform consists of a flexible aluminum layer encapsulated in an EPDM membrane sheet. This allows the product to be folded or shaped.

Due to its highly flexible nature, ARBO® Flexiform can be used as a very cost effective Lead replacement.

ARBO® Flexiform is fully compatible with all Arbo adhesives.



Available in

LENGTH	12 metre roll
WIDTH	210 mm 450 mm 650 mm (210 mm x 440 mm blank EPDM)

# EPDM membrane adhesives

## ARBO® MA ADHESIVE

Is a one part moisture curing, solvent free adhesive based on modified polymer technology. ARBO® MA Adhesive combines good initial grab to a variety of common construction substrates with high bond strength and good flexibility.



Available in

FOIL	600 ml
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## ARBO® SA ADHESIVE

Is a solvent free, one part elastomeric sealant adhesive based on neutral curing silicone polymer technology. ARBO® SA Adhesive combines good initial grab to a variety of common construction substrates with long term performance.

## ARBO® BUTE-AL BAND

Draught and water-proof sealing tape made of an adhesive butyl covered with tear proof polyester aluminium laminate.

Easy application self wound reel dispenses with necessity to remove paper.



Available in

LENGTH	10 metre roll
WIDTH	50 mm 75 mm 100 mm Other sizes on request.

## ARBO® CONTACT ADHESIVE

ARBO® CA Adhesive is a solvent based contact adhesive, which can be brush or roller applied.

Designed to work in conjunction with all ARBO® EPDM Membrane systems.



Available in

TIN	4,2 kg
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# EPDM façade accessories

## ARBO® TERMINATOR STRIP

Terminator Strip is used to mechanically fix ARBO® EPDM Façade Membrane to a window or door; principally in factory application.

It is also recommended for use when large areas of EPDM are being installed and the wet strength of the adhesive is not sufficient to prevent the material from moving whilst the adhesive cures.



## ARBO® INTERNAL & EXTERNAL EPDM CORNERS

ARBO® EPDM corners are designed for internal and external corner details for difficult applications.

Larger size can be specially designed for any project where required.



## ARBO® FAÇADE TOOLS



Hand Barrel Gun incl. nozzle	for 600 ml foils
ARBO® AFS Primer	1 litre
EPDM Roller	100 mm wide
EPDM Roller	150 mm wide
Latex Gloves	100 per box
Two Ply Small Blue Wipes	2 pack
12 mm/ 1/2" Priming Brush	Each size
ARBO® EPDM Heavy Duty Scissors	Each size

# EPDM membrane system sizes

	ARBO® STANDARD EPDM MEMBRANE	ARBO® STANDARD EPDM MEMBRANE	ARBO® PRINTED EPDM MEMBRANE	ARBO® STANDARD EPDM MEMBRANE	ARBO® INSTANT MEMBRANE	ARBO® BS1 & BS2 EPDM MEMBRANE	ARBO® PROFILED EPDM MEMBRANE
THICKNESS	2 mm	1 mm	0,75 mm	0,75 mm	0,8 mm	0,75 mm	0,75 mm
LENGTH	20 mtr reel	20 mtr reel	25 mtr reel	20 mtr reel	25 mtr reel	25 mtr reel	25 mtr reel
WIDTH	100 mm	✓	✓	✓	✓	✓	X
150 mm	✓	✓	✓	✓	✓	✓	✓
200 mm	✓	✓	✓	✓	✓	✓	X
250 mm	✓	✓	✓	✓	✓	✓	X
300 mm	✓	✓	✓	✓	✓	✓	✓
350 mm	✓	✓	✓	✓	✓	X	X
400 mm	✓	✓	✓	✓	✓	X	X
450 mm	✓	✓	✓	✓	✓	X	X
500 mm	✓	✓	✓	✓	✓	X	X
550 mm	✓	✓	✓	✓	✓	X	X
600 mm	✓	✓	✓	✓	✓	X	X
650 mm	✓	✓	✓	✓	✓	X	X
700 mm	✓	✓	✓	✓	✓	X	X
750 mm	✓	✓	✓	✓	✓	X	X
800 mm	✓	✓	✓	✓	✓	X	X
850 mm	✓	✓	✓	✓	✓	X	X
900 mm	✓	✓	✓	✓	✓	X	X
950 mm	✓	✓	✓	✓	✓	X	X
1000 mm	✓	✓	✓	✓	✓	X	X
1400 mm	X	✓	✓	✓	X	X	X

## COVERAGE:

ARBO® MA / SA ADHESIVE	8 mm diameter bead	12 linear metres	per 600 ml foil
ARBO® CA ADHESIVE*	100 mm wide	5 linear metres	per 4.2 kg tin
ARBO® AFS PRIMER	100 mm wide	50 linear metres	per 1.0 litre tin

\*allows for adhesive applied to both surfaces to be bonded.

# Structural glazing

ARBO® Façade Solutions partner with the global manufacturer of silicone polymers GE – Momentive to distribute their structural silicones in the U.K. and Ireland.

GE-Momentive has recently increased their manufacturing and technical facilities in Europe and their products will conform to the latest European standards. They are working with major aluminum system companies to obtain acceptance for specific structural systems.

ARBO® Façade Solutions can help you in the UK and Ireland with all aspects of your project to ensure the correct procedure is followed. We will supply products direct from our factory in Derbyshire and depots in London and Manchester.

## ADVANTAGES OF STRUCTURAL GLAZING

- Allows for broader architectural design flexibility
- Increases the thermal efficiency of buildings, because the exterior exposure of metal framing is either reduced or eliminated
- Reduces or eliminates water and air infiltration
- Reduces the potential for thermal breakage of glass
- Assists in the design of bomb proof windows
- Gives solutions to building designs in earth quake zones and other severe movement applications.



## Structural glazing

### ULTRAGLAZE SSG 4000E SILICONE

UltraGlaze SSG 4000E Silicone Structural Glazing Sealant is a one-component, high-strength neutral cure sealant specially designed and tested for structurally glazed curtain wall applications.



### ARBOSIL 1096—STRUCTURAL WEATHERSEAL SILICONE

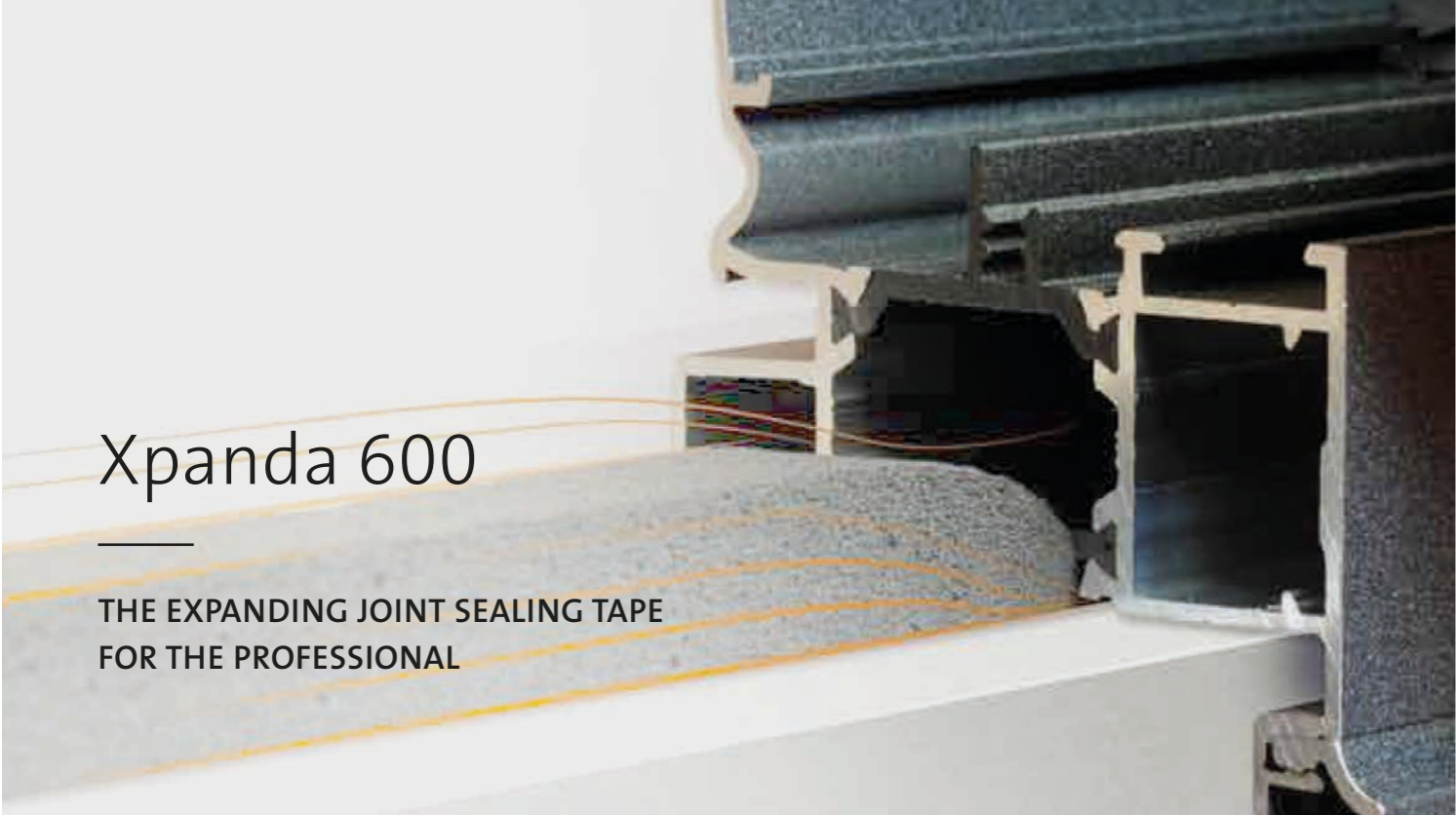
Arbosil 1096 Structural Weatherseal Silicone is a one part low modulus neutral cure silicone sealant which cures on exposure to moisture vapour to form an elastic silicone rubber.



### ARBO® SST

ARBO® SST is a structural spacer tape compatible with structural silicone and is used as the spacer between glass and frame during structural glazing fabrication.





# Xpanda 600

THE EXPANDING JOINT SEALING TAPE  
FOR THE PROFESSIONAL

Xpanda 600 is a unique combination of resilient foam and a water resisting binder. The combination produces a “dry” pre-formed strip seal used to resist weather ingress in fenestration, roofing and construction applications. The viscoelastic properties also offer noise and vibration damping.

Xpanda 600 is manufactured using an open cell polyurethane foam heavily impregnated with acrylics creating flame retardant properties. Under high compression the product will create a weather-proof seal; under low compression, the product is suitable for draught sealing.

Xpanda 600 is recommended for use in more extreme weather applications (tested to DIN 52453 Watertight Against Driving Rain) and is fully resistant to UV. The product is supplied in rolls, pre-compressed to approximately 85 %.



## IMPROVING STANDARDS

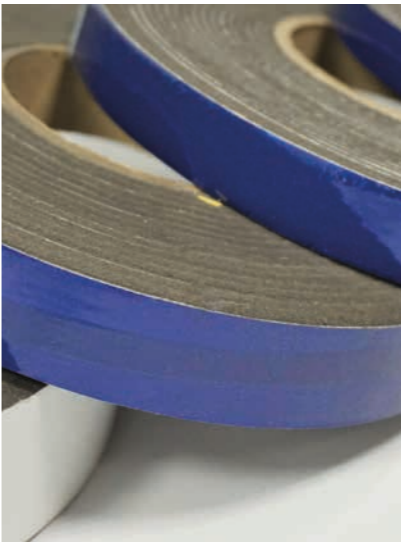
In the article ‘Perimeter sealing of doors and windows’ published in the NHBC Standards Extra June 2010, it is observed that three key factors come into play to maintain performance and durability. These are weather tightness, air tightness and insulation. It is recognized that foam tapes with a minimum 600 Pascal rating provide the necessary performance criteria together with the flexibility required for movement to meet today’s exacting standards.

## LONG-LIFE FLEXIBILITY IN MULTIPLE USE

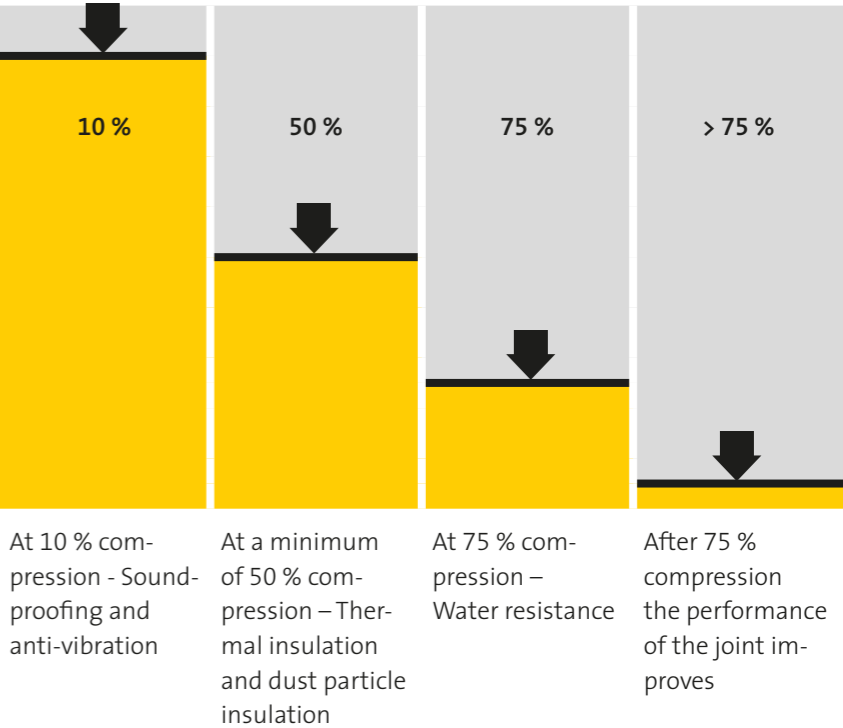
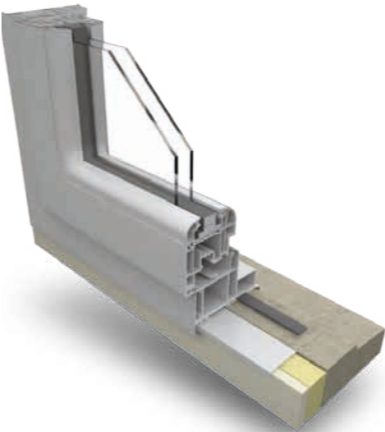
Xpanda 600 is supplied as a pre-compressed roll, with one side being self-adhesive to assist with initial positioning. Available in a number of different widths and thicknesses. Used in the correct way, Xpanda 600 is suitable for many different applications when used at the specific compression shown below.

# Xpanda 600 expanding joint sealing

## Technical Specification



MATERIAL	Polyurethane cellular foam, impregnated with a flame retardant acrylic resin
BUILDING CLASSIFICATION	Class 1 according to NF P85-570, BG1 according to DIN 18 542 (P -NDS04-479)
FIRE RESISTANCE	B1, Self—Extinguishing
WATERTIGHT AGAINST	600 pa minimum, according to the range of use Xpanda 600 600 as described below.
VAPOUR RESISTIVITY DIN	μ <10
TENSILE STRENGTH ISO	>170 kPa
ELONGATION AT BREAKING	>250 %
COMPATIBILITY	Will cause no corrosion with iron, steel, zinc coated sheet, aluminium or copper. Will not corrode PVC, glazing, wood, concrete or tiles



Xpanda 600 Product Selector

ARBO® window / frame protection solution

GAP TO BE FILLED (mm)	TAPE WIDTH INTO JOINT DEPTH (mm)	EXPANSION THICKNESS (mm)	PRODUCT REFERENCE TO ORDER
1.5-3	10	9	FCVITA1009
2-4	10	13	FCVITA1014
2-4	15	13	FCVITA1514
3-7	10	17	FCVITA1017
3-7	15	17	FCVITA1517
3-7	20	17	FCVITA2017
3-7	25	17	FCVITA2517
5-10	15	26	FCVIT01526
5-10	20	26	FCVITA2026
5-10	25	26	FCVITA2526
7-12	15	33	FCVITA1533
7-12	20	33	FCVITA2033
8-15	20	44	FCVITA2044
8-15	30	44	FCVITA3044
10-18	20	53	FCVITA2053
10-18	25	53	FCVITA2553
10-18	30	53	FCVITA3053
13-24	20	72	FCVITA2072
13-24	25	72	FCVITA2572
13-24	30	72	FCVITA3072
13-24	40	72	FCVITA4072
24-40	40	123	FCVITA40123

APPLICATIONS:

- Perimeter seals for windows and doors
- Expansion joints
- Side/end laps on roofing sheets
- Joints for portable or sectional buildings
- Abutment seals for conservatories
- Acoustic seals
- Timber buildings
- Ductwork
- Sealing roof lights
- Installation of solar panels
- Caravan and mobile home manufacture

BENEFITS:

- Quick installation
- Easy to apply
- Improves energy efficiency in buildings
- Expands to find its own level
- Seals against uneven surfaces
- Clean product
- Accommodates joint movement
- Allows ventilation of joint
- Easy to quantify usage
- Minimal wastage
- It can be painted after installation
- Only need one product to make watertight

NAME	DESCRIPTION	THICKNESS	WIDTH	LENGTH	COLOUR	BOX QUANTITY
Window Protection						
FCAV243100	Entry level window protection	35 mu	600 mm	100 m	Clear / Blue	4
FCAV24350	Entry level window protection	35 mu	600 mm	50 m	Clear / Blue	4
FCAV24325	Entry level window protection	35 mu	600 mm	25 m	Clear / Blue	4
FCAV253100	Standard level window protection	45 mu	600 mm	100 m	Clear / Blue	4
FCAV25350	Standard window protection	45 mu	600 mm	50 m	Clear / Blue	4
FCAV25325	Standard window protection	45 mu	600 mm	25 m	Clear / Blue	4
Hard Surface Protection						4
FCAV254100	Hard Surface Protection	45 mu	600 mm	100 m	Red	4
FCAV25450	Hard Surface Protection	45 mu	600 mm	50 m	Red	4
FCAV25425	Hard Surface Protection	45 mu	600 mm	25 m	Red	4
Profile Protection – Painted metal or Bare metal or PVC						
FCAV38525	High tack profile protection	80 mu	25 mm	100 mm	White / Black	72
FCAV38550	High tack profile protection	80 mu	50 mm	100 mm	White / Black	36
FCAV38575	High tack profile protection	80 mu	75 mm	100 mm	White / Black	24
Profile Protection – Painted metal or Bare metal or PVC						
FCAV38325	Medium tack profile protection	70 mu	25 mm	100 mm	White / Black	72
FCAV38350	Medium tack profile protection	70 mu	50 mm	100 mm	White / Black	36
FCAV38375	Medium tack profile protection	70 mu	75 mm	100 mm	White / Black	24
Carpet Protection Tape						
FCAV246600	General purpose carpet protection	35 mu	600 mm	100 mm	Clear	4
FCAV256600	Medium duty carpet protection	45 mu	600 mm	100 mm	Clear	4
FCAV20660o	Heavy duty carpet protection	100 mu	600 mm	100 mm	Clear	4
Georgian Bar Structural Tape						
FCUH-B1695C6	Clear structural bonding georgian bar tape	1.0 mm	6 mm	33 mm	Clear	50
FCUH-B1695C10	Clear structural bonding georgian bar tape	1.0 mm	10 mm	33 mm	Clear	30
FCUH-B1695C12	Clear structural bonding georgian bar tape	1.0 mm	12 mm	33 mm	Clear	25

## Service

## CUSTOMER SERVICE

**DIRECT TELEPHONE LINE:**

01773 826661

Our friendly staff are committed to giving you the highest levels of service and most products are available ex-stock.

Next day deliveries can be arranged in conjunction with our logistics partners, with normal delivery within 48 hours.

## TECHNICAL SUPPORT

**DIRECT TELEPHONE LINE:**

01773 596301

Technical queries and written specifications are available through our technical support line, with our highly trained and experienced staff able to answer any questions.

Our testing facilities are also available to assess the suitability of sealants against specific substrates to ensure compatibility and performance.

Striving to better meet industry needs, our website [www.arbo.co.uk](http://www.arbo.co.uk) provides desktop advice for architects and specifiers, assisting sealant selection. Detailed technical data sheets are also available on our website at: **[www.arbo.co.uk](http://www.arbo.co.uk)**

## SALES SUPPORT

Our field sales team covers the entire UK and is pleased to visit and advise costumers on the selection and availability of our products – this includes sites visits and tool box talks when necessary.

## CONTINUOUS IMPROVEMENT

The culture of our company is one of continuous improvement and the specification of our products will evolve in response to technological advances, research and development and environmental factors.

### DISTRIBUTION CENTRES

## BELPER

Derby Road, Belper,  
Derbyshire, England,  
DE 56 1WJ

```
T 01773 826661
F 017773 821215
```

### Opening Hours

Mon to Fri  
07.00 to 16.30

MANCHESTER

Unit 54,  
Oakhill Trading Estate,  
Worsley Road North,  
Worsley, Manchester,  
M28 3PT.

T 01204 795335  
F 01204 862795  
E manc@arbo.co.uk

### Opening Hours

Mon to Thu  
07.00 to 16.30  
Fri  
07.00 to 16.00

ESSEX

Unit P1, Pegasus Works,  
Hainault Business Park,  
Roebuck Road, Hainault  
IG6 3UF

T 020 8501 5005  
F 020 8500 9830  
E [woodford@arbo.co.uk](mailto:woodford@arbo.co.uk)

### Opening Hours

Mon to Thu  
06.00 to 15.30  
Fri  
06.00 to 14.30

## LONDON

Unit 22, Old Jamaica  
Business Estate,  
24 Old Jamaica Road,  
London, England,  
SE164AW.

T 0207 3945065  
F 0207 3945067  
E SE16@arbo.co.uk

### Opening Hours

Mon to Thu  
06.30 to 16.00  
Fri  
06.30 to 14.00

## Notes

This image shows a single page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, leaving small margins at the top and bottom. There is no handwriting or printed text on the page.

**CARLISLE®**  
**Adshead Ratcliffe & Co Ltd.**

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