



# BOND-FLEX 100

## SILICONE SEALANT

### KEY FEATURES

- Conforms to BS EN 15651
- Durable waterproof seal
- Flexible at low (-50°C) and high (+180°C) temperatures
- High level of extensibility – over 600%
- Low shrinkage

### DESCRIPTION

**Bond-Flex 100** is a single part, acetoxo type silicone rubber sealant. It cures on exposure to atmospheric moisture to form a resilient highly elastic seal which maintains flexibility over a wide range of temperatures. The sealant is extremely resistant to weathering, ageing and water. **Bond-Flex 100** conforms to BS EN 15651. **Bond-Flex 100** contains fungicide.

### RECOMMENDED USE

**Bond-Flex 100** is suitable for general purpose applications where adhesion to non-porous surfaces is required, including sealing metal cladding and curtain walling.

**Bond-Flex 100** should not be used on substrates such as concrete, marble or similar materials e.g. granite as the product releases acetic acid during curing and may cause staining. It also is not suitable for use on polyethylene, polypropylene, Teflon and bituminous surfaces.

**Bond-Flex 100** should not be used in contact with metals such as lead, copper, galvanised steel, brass or zinc.

**Bond-Flex 100** may be discoloured in contact with organic elastomers such as EPDM and neoprene.

**Bond-Flex 100** is not recommended for sealing of aquaria or for continuous water immersion, or for structural glazing.

### IMPORTANT

Before embarking on any work involving **Bond-Flex 100** the safety data sheet should be carefully studied by those carrying out the work.

### BSI STANDARDS



FM 01696  
BS EN ISO 9001:2008

### METHOD OF USE

#### SURFACE PREPARATION

- Surfaces should be clean, dry, firm and free from dust, oil, grease and any loose materials.
- Loose and flaking paint should be thoroughly removed before sealing.
- As paint surfaces vary considerably, it is recommended that a preliminary adhesion test should be carried out before application.
- When using in remedial applications remove all old silicone first.
- If required place masking tape along joint edges and remove within 5 minutes of applying the sealant.

#### APPLICATION & BONDING

- Application Temperature +5 to +40°C
- Cut off the dome at the top of the cartridge, cut the nozzle to the required diameter and then screw it onto the cartridge.
- Insert the cartridge into a skeleton gun and squeeze the trigger until the sealant appears
- Apply ensuring no air is trapped behind the sealant.
- NOTE: For conventional construction joints subject to movement, it is important that the dimensional proportions of the joint are correct.

For **Bond-Flex 100**:

Width: Minimum	4mm
Maximum	25mm
Depth: Minimum	5mm
Maximum	10mm

Ideally the width of the joint should be twice the depth of the joint.

- When using **Bond-Flex 100** for sealing typical connection joints a suitable inert filling material such as closed cell polythene foam should be used to prevent sealant adhesion to the bottom of the joint, thus avoiding excess tension of the sealant.
- This sealant emits small quantities of acetic acid during curing. It must therefore only be applied in well ventilated conditions.
- The sealant surface can be tooled immediately to a smooth finish using a tooling stick or trowel dipped in diluted detergent. Do not use a wetted finger.
- Clean application equipment and remove excess uncured sealant with white spirit and cured sealant by abrasion.

## TYPICAL CHARACTERISTICS

<b>Physical form</b>	None slump paste
<b>Colour</b>	Black / Clear / White
<b>Chemical type</b>	Silicone rubber
<b>Relative Density</b>	Approx. 1.035
<b>Coverage</b>	10 linear metres of 6mm diameter bead per cartridge
<b>Cleaner</b>	White spirit

## TYPICAL PERFORMANCE DATA

<b>Drying time</b>	<b>touch through</b>	10 – 20 minutes 24 hours
(dependent on bead size and humidity – rate of cure is approx. 2mm a day at 23°C/55% RH)		
<b>Service temperature</b>	<b>°C</b>	-50 to +180
<b>Joint movement accommodation</b>	<b>%</b>	Approx. 25
<b>Flow</b>	<b>mm</b>	<2
<b>Tensile strength</b>	<b>MPa (N/mm<sup>2</sup>)</b>	Approx. 1.8 for a 2mm film (DIN 53504)
<b>Elongation at break</b>	<b>%</b>	650 (DIN 53504)
<b>Modulus at 100% elongation</b>	<b>MPa (N/mm<sup>2</sup>)</b>	Approx. 0.3 for a 2mm film (DIN 53504)
<b>Shore A Hardness</b>		Approx. 18 for a 2mm film (DIN 53505)

## PACKAGING

Please refer to Customer Service Department for current pack sizes.

## STORAGE

Store in original sealed containers in a cool dry place out of direct sunlight in the temperature range +5 to +25°C.

## PROTECT FROM FROST

## SHELF LIFE

At least 2 years from date of manufacture, under the above conditions of storage

## Disclaimer - please read carefully

This disclaimer is issued by Bostik Limited ("the Company") and applies to the use of any products supplied by the Company ("the Products") displayed on this Technical Data Sheet ("TDS"). Please read this disclaimer carefully before using any of the Products. Using this TDS and/or the Product constitutes your acceptance of this disclaimer. Its contents shall prevail over any directions of use and any disclaimer and/or exclusion or limitation of liability of the Company which may appear on the packaging of the Products..

This disclaimer sets out the entire financial liability of the Company (including any liability for the acts or omissions of its employees, agents and sub-contractors) to any user of the Products ("Product User") in respect of any use made or resale by the Product User, of any of the Products in this TDS.

This disclaimer does not affect the Company's liability for death or personal injury arising from the Company's negligence in respect of the Products, or its liability for fraud, or fraudulent misrepresentation, or any other liability which cannot be excluded or limited under applicable law.

The Company's total liability however arising and whether caused by tort (including negligence and breach of statutory duty), breach of contract or otherwise, arising in connection with the use made or resale by the Product User of any of the Products in this TDS shall be limited to the price paid for the Product by the Product User.

The Company shall not be liable to the Product User for any pure economic loss, loss of profit, loss of business, depletion of goodwill or otherwise, in each case whether direct, indirect or consequential, or any claims (including in respect of personal injury insofar as not caused by the Company's negligence) for consequential compensation whatsoever (howsoever caused) which arise out of or in connection with the use made or resale by the Product User of any of the Products in this TDS.

The Company shall not be liable to the Product User in relation to any loss for any use which is inappropriate or use which is otherwise than in accordance with the relevant instructions for use of the Products in this TDS or on the Product. Product Users are advised to confirm the suitability of the Products by their own tests.

This TDS covers just one of a large range of products supplied by the Company. Full information on these products and advice on application is freely available from our fully trained staff throughout the country. In addition, specialist technical advice is available from our Technical Services Department. This TDS supersedes all previous TDSs relating to the Products and users of it must ensure that it is the current issue. Destroy all previous TDS, and if in any doubt, contact the Company, quoting the code number on the bottom left hand side of this page.

## SMART HELP

Please contact your local representative



**CONSTRUCTION PRODUCT REGULATION  
DECLARATION OF PERFORMANCE**

No: TDS 01171-01

**Product Description :** Bostik Bond- Flex 100  
**Product Codes :** 30813548 30813549 30813550  
**Intended Use :** For use in accordance with applicable harmonised technical specification for façade elements, glazing & sanitary joints  
**Manufacturer :** Bostik Ltd  
**Contact Address :** Ulverscroft Road  
Leicester  
LE4 6BW  
**System of Assessment :** System 3 for reaction to fire  
**Harmonised Standards :** EN 15651-1:2012, EN 15651-2:2012, EN 15651-3:2012

SKZ – TEConA GmbH (1213) performed the initial type testing according to EN 15651-1 / EN 15651-2 / EN 15651-3 and reaction to fire under system 3 and issued a test report.

DECLARED PERFORMANCE		
Conditioning – Procedure B (according to ISO 8340)	Substrate – Anodised aluminium (without primer)	
ESSENTIAL CHARACTERISTICS	PERFORMANCE	HARMONISED TECHNICAL SPECIFICATION
Reaction to fire	Class E	EN 15651-1:2012
Release of chemical dangerous to the environment and health	NPD (*)	
Water tightness and air tightness		
Resistance to flow	≤ 3 mm	
Loss of volume	≤ 10 %	
Tensile properties at maintained extension after water immersion	NF	
Tensile properties (secant modulus) for use in cold climate areas (-30°C)	≤ 0,9 MPa	
Tensile properties at maintained extension for use in cold climate areas (-30°C)	NF	
Durability	Pass	
Reaction to fire	Class E	EN 15651-2:2012
Release of chemical dangerous to the environment and health	NPD (*)	
Water tightness and air tightness		
Vertical flow resistance	≤ 3 mm	
Loss of volume	≤ 10 %	
Adhesion / cohesion properties after exposure to heat, water and artificial light	NF	
Elastic recovery	≥ 60 %	
Tensile properties (secant modulus) for use in cold climate areas (-30°C)	≤ 0,9 MPa	
Tensile properties at maintained extension for use in cold climate areas (-30°C)	NF	
Durability	Pass	
Reaction to fire	Class E	EN 15651-3:2012
Release of chemical dangerous to the environment and health	NPD (*)	
Water tightness and air tightness		
Vertical flow resistance	≤ 3 mm	
Loss of volume	≤ 10 %	
Tensile properties at maintained extension after water immersion	NF	
Microbiological growth	1	
Durability	Pass	

(\*) See material safety data sheet  
NPD: No Performance Determined  
NF: No Failure

The performance of the product Bostik Bond-Flex (30813548, 30813549, 30813550) is in conformity with the declared performance shown in the table above.

This declaration of performance is issued under the sole responsibility of Bostik Ltd.

**Signed for and on behalf of Bostik Ltd by:**

**Name:** Alison Jamieson

**Signature:** 

**Function:** S.H.E.Q. Manager

**Date:** June 2016