

GRANOR
RUBBER & ENGINEERING
BUILT ON MOVEMENT

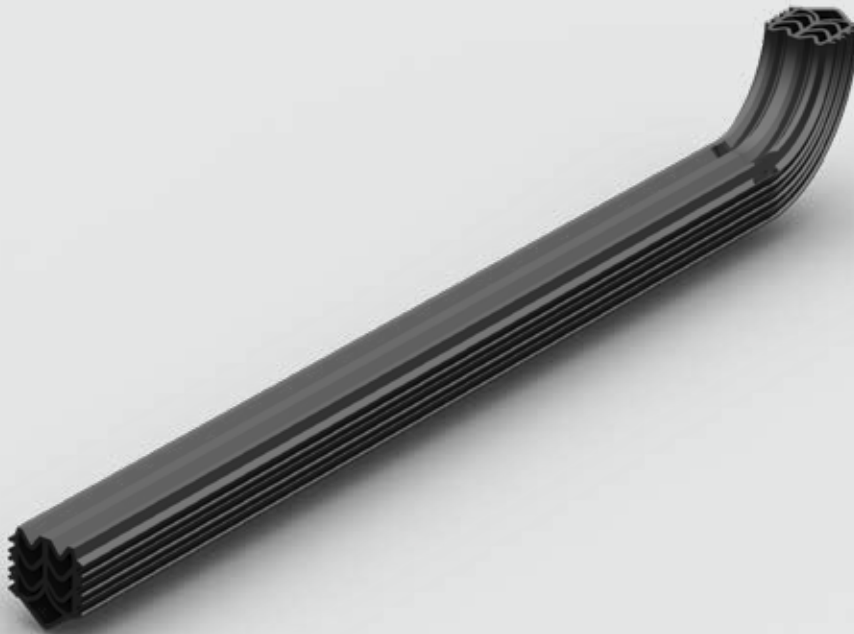
GRANOR® WIZFLEX SERIES

THE WIZFLEX® EXPANSION JOINT SYSTEM

The Wizflex® Expansion Joint System is based on a combination of compression seal technology and epoxy-bonded rubber seal technology, developed and patented by Granor after years of experience with waterproof expansion joint systems.

A specialist epoxy adhesive is applied to the joint gap walls and a high-quality extruded elastomeric profile, which is then easily pressed into the joint gap.

The profile design ensures that the side walls of the profile remain vertical and push against the sides of the gap while the epoxy adhesive sets. This mechanism is paramount in achieving maximum bond strength between the elastomeric profile and the sides of the gap. The compression seal concept also ensures maximum movement range by providing a fully collapsible profile and also allowing a substantial extension when the joint is fully opened.



APPLICATIONS

The Wizflex® Expansion Joint System is suitable for use in Bridge expansion joints, multilevel car parks and other elevated structures where high-quality waterproof joints are required.

FEATURES

- > Reliable long term sealing outcomes
- > Puncture proof heavy duty profiles
- > No metallic components – quiet when driven on
- > Durable UV resistant elastomer compounds
- > Suitable for both new work and replacement outcomes
- > No Coverplate required

COMPOUND CHARACTERISTICS

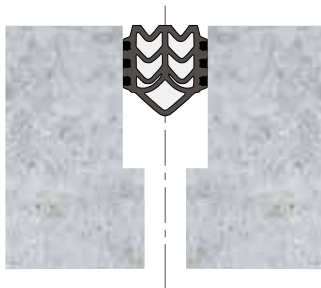
PHYSICAL PROPERTIES

ASTM Designation	M7CA810
Hardness	77 Shore A
Tensile Strength	11.9 MPa
Elongation at Break	288%
Tear Resistance	47kN/m
Heat Aging	
Change in Hardness	~5
Change in Tensile Strength	+16%
Change in Elongation at break	-42.7%
Compression Set @ 70hrs, 100oC	42.6%

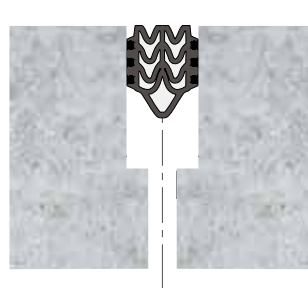
DESIGN FEATURES



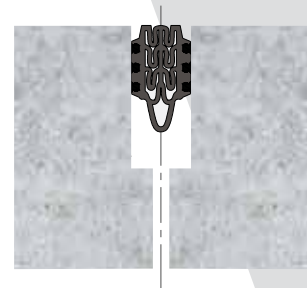
FULLY OPENED



INSTALLED



FULLY CLOSED



PERFORMANCE TABLE

Wizflex Seal Part No. WZ-50	Seal Movement Range (mm) – In Service			Typical Minimum Install Gap Width (mm)	Minimum Height Required for Seal (mm)
	Minimum Gap	Maximum Gap	Total Movement Capacity		
WZ-50	26	56	30	35	50
WZ-60	35	76	41	45	65
WZ-80*	40	95	55	55	80
WZ-100	50	110	60	65	90

*a lower profile Wizflex-80 is available upon request.



WZ-100

SEAL SELECTION PROCESS

- 01 Calculate required movement capacity based on thermal effects plus long term creep and shrinkage (etc).

The profile size should be chosen to match the joint gap opening at the median temperature for the range of expected movement. Installation in temperatures well below the median operating temperature may require an oversize seal. Consult with Granor engineers if in doubt.
- 02 Select a seal size with equal or greater movement capacity than is required.
- 03 Design the gap width to suit the selected seal. A stepped gap detail with a wider gap for the seal can be used if required.

INSTALLATION

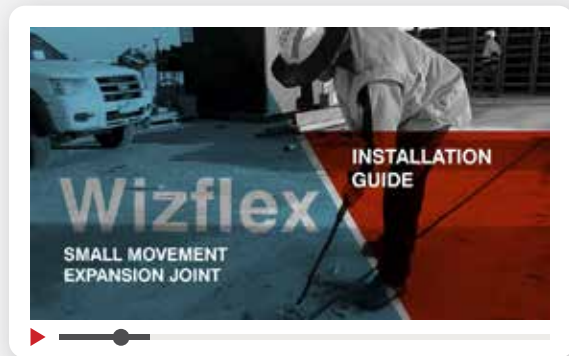
INSTALLATION TOOLS

To assist with installation Granor® has proprietary installation tools available (“pogo-stick” and / or “clamping tool”).

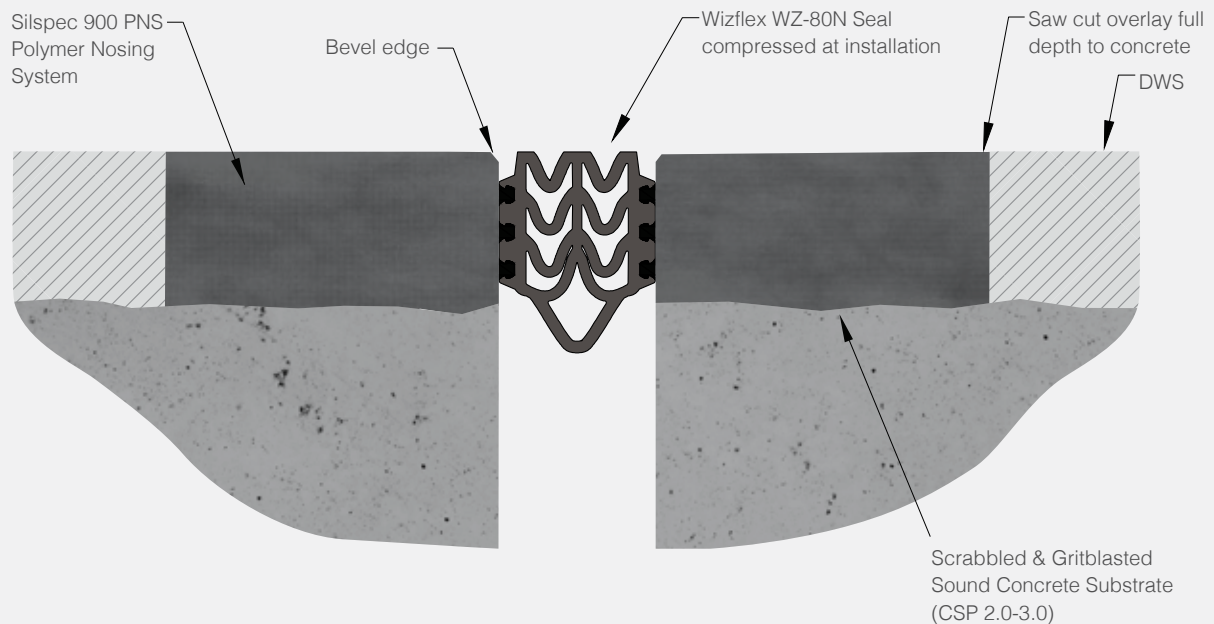
For smaller size seals and fairly open joint gaps a pogo-stick is typically used to help speed up the install process.

For very narrow gaps and larger size seals, the use of the clamping tool is recommended in conjunction with the pogo-stick.

Both can be purchased or hired from Granor.



For a full demonstration of the installation process watch the video on our website.



HEADER MATERIALS

Wizflex® can be installed between a variety of different header materials on either side of the gap including:

- › Continuous concrete deck slab
- › Galvanised steelwork or angle edging
- › Granor SILSPEC 900 PNS rapid set – Refer to Granor 'XJS' product datasheet for nosing details.
- › Granor Flexpatch (creamy grey-beige colour) polymer patching mortar
- › Stainless steel angle
- › Aluminium members



Wizflex on Railway Station Platform



Wizflex between Silspec 900 PNS

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