

MasterFlex J Seal

High performance expansion joint system

MATERIAL DESCRIPTION

The **Masterflex J Seal** expansion joint system comprises a neoprene profile which is fixed in position with a two-part epoxy adhesive type **MasterBrace ADH 2200** (Concresive 2200). The profile is occasionally bonded to **Wabocrete II** nosings but may also be fixed directly to suitable concrete or steel substrates. A profile glue is used for all neoprene-to-neoprene bonding.

USES

Masterflex J Seal expansion joint systems are versatile and simple, enabling effective sealing in a wide range of applications including road bridges, car park structures, commercial buildings, stadia and water management structures. **Masterflex J Seal** expansion joint systems will accommodate movements up to 100%.

BENEFITS

- Reliable and durable
 - Wabocrete II polyurethane mortars nosings with proven reliability
- Versatile performance
 - Can accommodate 100% movement
 - Differential, rotational and shear movement accommodated
 - Wide range of profiles to meet different gap and movement requirements
 - Fabricated on site to suit site conditions
- Environmentally friendly
 - Cold applied system

CHEMICAL RESISTANCE

Water	Excellent
Acid	Very Good
Alkali	Very Good
Ketones	Very Good
Alcohols	Very Good
Synthetic Oils	Good
Oxidation	Very Good
Fuels	Excellent
Weather	Very Good

TYPICAL PROPERTIES*

Substrate preparation:

Colour:	Cement grey
Mixed density:	1758 kg/m ³ at 25°C
Flashpoint:	N/A
Compressive strength to ASTM D695:	60 N/mm ² at 7 days
Bond strength:	Greater than that of the concrete
Pot life:	
At 25°C:	1 hour 45 minutes
At 40°C:	45 minutes
Tack free time:	
At 25°C:	7 hours
At 40°C:	2 hours 15 minutes
Full cure:	
At 25°C:	5 days
At 40°C:	3 days

Rubber:

Shore A Hardness ASTM D2240 / BS 903 Part A26:	65
Specific Gravity ASTM D297 / BS 903 Part A1:	1.45
Tensile strength ASTM D412 / BS 903 Part A2:	16 N/mm ²
Elongation at break ASTM D412 / BS 903 Part A2:	300%
Compression set (22 hours @ 100°C) ASTM D395B / BS 903 Part A6:	40%
After ageing properties ASTM D573 / BS 903 A19:	24 hours @ 100°C
Change in hardness ASTM D2240 / BS 903 Part A26:	6
Change in tensile strength ASTM D412 / BS 903 Part A2:	-25%
Change in elongation ASTM D412 / BS 903 Part A2:	-35%

*Properties listed are based on laboratory-controlled tests, are only for guidance and are not a guarantee of performance.

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PACKAGING

Masterflex J Seal neoprene profiles are supplied in lengths to suit project requirements and can be supplied in continuous lengths. **MasterBrace ADH 2200** is available in 2 litre kits.

PRODUCT DATA

Masterflex J Seal neoprene profile is available in a range of sizes to meet particular project requirements. The profile is illustrated in Figure 1.



Figure 1: **Masterflex J Seal** neoprene profile J Seals with 100% movement capability are used for dynamic movement, for example for bridges, viaducts, tunnels, car park structures and water management applications.

A section through the J Seal profile bonded to Wabocrete II nosings is shown in Figure 2 (not to the scale).

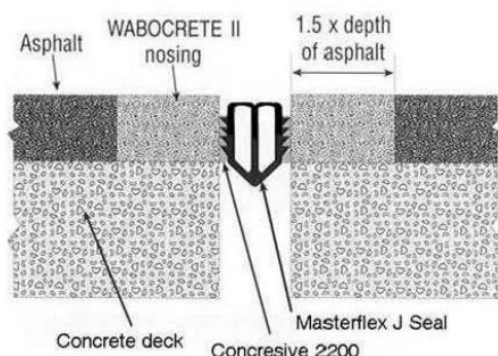


Figure 2: Section through Masterflex J Seal

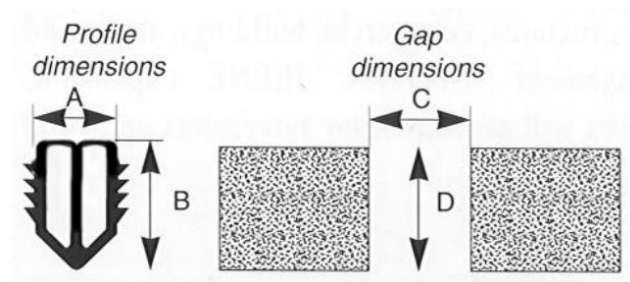
INSTALLATION

Masterflex J Seal is a specialist expansion joint product which is only to be installed by contractors that are trained and approved by Master Builders Solutions.

The primary operations typically involved in the installation are: creation and preparation of a recess application of Wabocrete II nosings if needed, preparation of the **Masterflex J Seal** profile (including forming kerb upstands etc.), deflation of the **Masterflex J Seal** profile, application of adhesive to the prepared nosing and positioning of the **Masterflex J Seal** profile.

When considering fixing the **Masterflex J Seal** profile directly to concrete or steel substrates, the conditions of such substrates is essential to the proper performance of the installed **Masterflex J Seal** expansion joint system. It is strongly recommended to contact your local Master Builders Solutions representative for advice when considering fixing Masterflex J Seal profiles to substrates. Installation procedure is available upon request.

DIMENSIONS



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STORAGE

Masterflex J Seal neoprene profiles should be stored by coiling without kinking or laid in lengths without deformation. They should be kept free from contamination prior to installation as contamination may impair the performance of contact products such as adhesive and profile glue.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage and disposal advice consult your local Master Builders Solutions Technical Services Department.

SAFETY PRECAUTIONS

Users are advised to wear gloves and eye protection when installing **Masterflex J Seal**. Appropriate health and safety advice can be found in the Material Safety Data Sheets.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs (which can also be tainted with vapour until product is fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers and dispose of as per local regulations.

For further information refer to the material safety datasheet.

NOTE

Technical support, where provided, does not constitute supervisory responsibility. For additional information contact your local MB Construction Chemicals Solutions South Africa (Pty) Ltd representative. MB Construction Chemicals Solutions South Africa (Pty) Ltd shall not be liable for technical advice provided.

MB Construction Chemicals Solutions South Africa (Pty) Ltd reserves the right to have the true cause of any difficulty determined by accepted test methods. Undertaking such tests is not, and shall not be deemed to be, an admission of liability or an assumption of any risk, loss, damage or liability.

QUALITY AND RESPONSIBLE CARE

All products originating from MB Construction Chemicals Solutions South Africa (Pty) Ltd are manufactured under a management system independently certified to conform to the requirements of the quality standards ISO 9001, environmental and occupational health and safety standards.

* Properties listed are based on laboratory controlled tests.

KEY DIMENSIONS ^(b)

Type	Profile Dimensions		Gap Dimensions		Joint Opening: Movement Range		
	Width A	Height B	Width C ^(c)	Height D ^(d)	Min.	Max.	Total
J25	25	31	25	50	17	34	17
J50	50	63	50	90	34	67	33

DISCLAIMER

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