BUILDING TRUST

PRODUCT DATA SHEET

Wabo®Flex 5121

Seismic Expansion Joint Floor Profile

DESCRIPTION

Wabo®Flex 5121 is seismic expansion floor joint profile.

USES

- Designed for shopping malls, hospitals etc.
- Suitable for applications involving granite, ceramic tiles, and PVC flooring.

FEATURES

- Mill finish aluminum
- Easy onsite installation
- Replaceable TPE insert
- Multi-hole mounting bracket for secure fixing

PRODUCT INFORMATION

Packaging	Profile supplied in 3-meter length TPE inserts supplied in 25-meter length
Colour	Black, gray and cream.
Appearance and colour	
Shelf life	**Thermoplastic elastomer (TPE):** 5 years if stored in a cool, dry environment, protected from direct sunlight, UV radiation, ozone, and excessive humidity. **Aluminum Alloy (6063-T5):** Indefinite provided the material remains free from excessive corrosion, mechanical damage, or other deterioration that could affect its intended performance.

Storage conditions

The product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +15 °C and +25 °C.

Density

Aluminum Alloy (6063-T5)	~2.70 kg/m³
Thermoplastic elastomer (TPE)	~1.21 gr/cm³

Dimensions

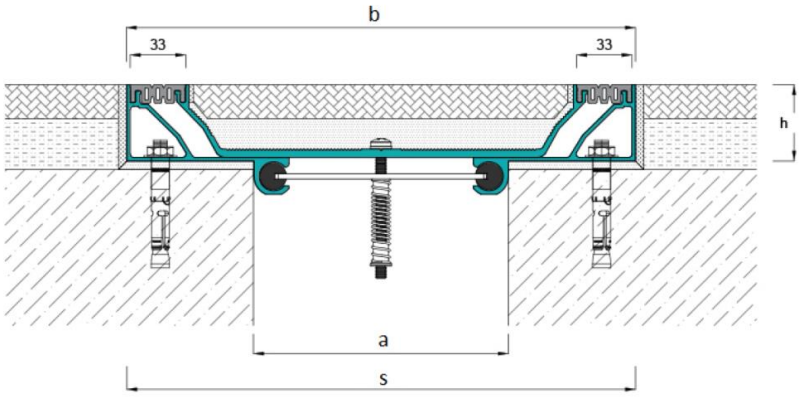
Profile Code	Top Surface Width (b)	Installation Depth (h)	Total profile width (s)
5121-100	250 mm	45 mm	250 mm
5121-100C	175 mm	45 mm	175 mm
5121-150	300 mm	45 mm	300 mm
5121-150C	225 mm	45 mm	225 mm
5121-200	400 mm	45 mm	400 mm
5121-200C	300 mm	45 mm	300 mm
5121-250	480 mm	60 mm	480 mm
5121-250C	365 mm	60 mm	365 mm
5121-300	600 mm	60 mm	600 mm
5121-300C	450 mm	60 mm	450 mm
5121-350	650 mm	60 mm	650 mm
5121-350C	500 mm	60 mm	500 mm
5121-400	700 mm	60 mm	700 mm
5121-400C	550 mm	60 mm	550 mm
5121-450	750 mm	60 mm	750 mm
5121-450C	600 mm	60 mm	600 mm
5121-500	800 mm	60 mm	800 mm
5121-500C	650 mm	60 mm	650 mm

Melting point

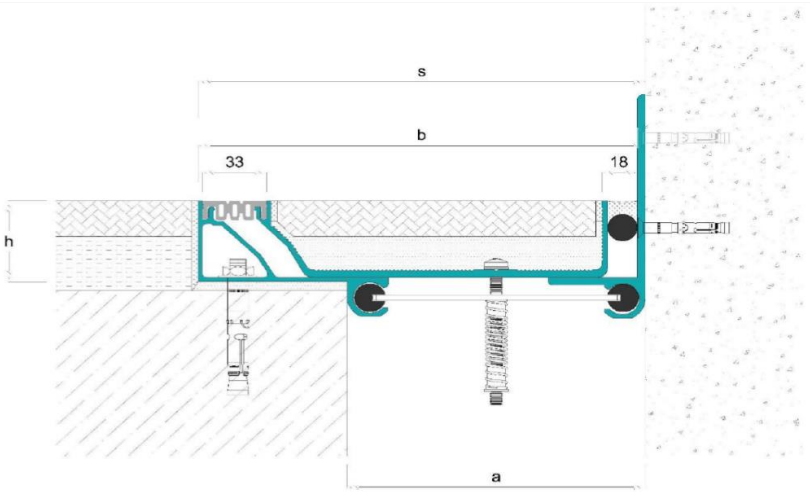
Aluminum (6063-T5)	~600 °C

Cross section

Wabo®Flex 5121:



Wabo®Flex 5121C:



TECHNICAL INFORMATION

Modulus of elasticity in compression	Aluminum (6063-T5)	~69.5 GPa
Tensile strength	Thermoplastic elastomer (TPE)	~4.2 MPa (ISO 37, DIN 53504)

Movement capability

Profile Code	Joint Width (a)	Total Movement
5121-100	100 mm	±50 mm
5121-100C	100 mm	±50 mm
5121-150	150 mm	±70 mm
5121-150C	150 mm	+50 / -70 mm
5121-200	200 mm	+100 / -80 mm
5121-200C	200 mm	±80 mm
5121-250	250 mm	±125 mm
5121-250C	250 mm	+100 / -125 mm
5121-300	300 mm	±150 mm
5121-300C	300 mm	+100 / -150 mm
5121-350	350 mm	±175 mm
5121-350C	350 mm	+100 / -175 mm
5121-400	400 mm	+175 / -200 mm
5121-400C	400 mm	+100 / -200 mm
5121-450	450 mm	+175 / -250 mm
5121-450C	450 mm	+100 / -225 mm
5121-500	500 mm	+175 / -250 mm
5121-500C	500 mm	+100 / -250 mm

Coefficient of thermal expansion	Aluminum Alloy (6063-T5)	~23.5 x 10-6 /K

Chemical resistance

Alcohol	Excellent
Sulphuric Acid	Good
Detergent	Good
Olive Oil	Fair

Thermoplastic elastomer (TPE)

Temperature resistance	Max. Dynamic Service Temperature 90 °C Max. Static Service Temperature 135 °C Thermoplastic elastomer (TPE)
Retention of properties after heat ageing	Thermoplastic elastomer (TPE) at 100 % ~1.85 MPa (ISO 37, DIN 53504) Thermoplastic elastomer (TPE) at 300 % ~2.5 MPa (ISO 37, DIN 53504)
Thermal conductivity	Aluminum Alloy (6063-T5) ~200 W/(m·K)
Electrical resistivity	Aluminum Alloy (6063-T5) ~0.035 x 10-6 Ω·m
Resistance to traffic load	Pedestrian and Cleaning Machine
Tensile stress at specified elongation	Thermoplastic elastomer (TPE) at 100 % ~1.85 MPa (ISO 37, DIN 53504) Thermoplastic elastomer (TPE) at 300 % ~2.5 MPa (ISO 37, DIN 53504)
Water resistance	Thermoplastic elastomer (TPE) Excellent
Elongation at break	Thermoplastic elastomer (TPE) ~600 % (ISO 37, DIN 53504)
Resistance to ozone	Thermoplastic elastomer (TPE) Excellent

BASIS OF PRODUCT DATA

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

FURTHER DOCUMENTATION

- General Method Statement (GMS)
- Substrate preparation for Wabo® floor joints

IMPORTANT CONSIDERATIONS

- This seismic expansion joint system is designed for applications where a discreet, aesthetically pleasing finish is required, minimizing the visibility of the expansion joint profile at floor level.
- The system features a central aluminum cover plate that separates the two sides of the expansion joint, with only narrow inserts remaining visible at the surface. Granite or other suitable flooring materials can be installed over the central plate using an appropriate epoxy mortar from Sika® range, allowing seamless integration with the surrounding floor finish.
- The system is designed for pedestrian traffic only. Strict adherence to the installation instructions is essential to ensure proper performance and minimize the risk of cracking or damage to the central floor covering.
- The profile is secured on both sides using M8 × 75 mm steel anchor bolts, installed at 350 mm center-to-center spacing.
- Suitable epoxy mortar or cementitious grout may be used for substrate leveling and preparation to provide a stable, uniform supporting base for the expansion joint profile.
- For applications requiring a sealant finish instead of TPE inserts, please consult local Sika representative for suitable alternatives and technical recommendations.
- For guidance on the installation of fire and water barriers, please consult local Sika representative.

ECOLOGY, HEALTH AND SAFETY

This product is an article as defined in article 3 of regulation (EC) No 1907/2006 (REACH). It contains no substances which are intended to be released from the article under normal or reasonably foreseeable conditions of use. A safety data sheet following article 31 of the same regulation is not needed to bring the product to the market, to transport or to use it. For safe use follow the instructions given in the product data sheet. Based on our current knowledge, this product does not contain SVHC (substances of very high concern) as listed in Annex XIV of the REACH regulation or on the candidate list published by the European Chemicals Agency in concentrations above 0,1 % (w/w).

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product’s suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

Sika Gulf B.S.C. (c)
Tel: +973 177 38188
Email: info@bh.sika.com
Sika Kuwait Cons. Mat. & Paints Co WLL
Tel: +965 22 282 296
Email: sika.kuwait@kw.sika.com
Web: gcc.sika.com

Sika UAE LLC
Sika UAE LLC (Branch)
Sika International Chemicals LLC
Tel: +971 4 439 8200
Email: info@ae.sika.com
Web: gcc.sika.com

Sika Saudi Arabia Limited
Riyadh / Jeddah / Dammam / Rabigh
Tel: +966 9200 22167
Email: info@sa.sika.com
Web: gcc.sika.com

Sika MB LLC
Oman
Tel. +968 22 826 500
Email: info@om.sika.com
Web: gcc.sika.com

ISO 9001, 14001, 45001 – SGS:
- Sika UAE LLC
- Sika International Chemicals LLC
- Sika Gulf B.S.C. ©
ISO 9001, 14001 – SGS:
- Sika Saudi Arabia Limited
ISO 9001, 14001 – TÜV:
- Sika UAE LLC (Branch)
ISO 9001 – URS:
- Sika MB LLC

All products are supplied under a management system certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and ISO 45001.