soba inter

| Construction + Systems | Expansion joint strips

Swiss expansion joint systems

www.soba-inter.com

Our high-quality expansion joint systems in use around the world.

Soba Inter AG

Soba Inter AG provides solutions for high-quality construction products that ensure optimum solutions to physical challenges when it comes to sealing off buildings. Since 1976, it has been constantly developing new products and optimizing existing ones, and it has been awarded numerous patents. For decades, the established expansion joint strips have been the flagship product, especially RedLINE® and FlamLINE®.

Soba Inter AG produces various certified products at its own plants in Switzerland, thus guaranteeing consistently high quality.

Our products are used in a wide range of ambitious buildings all over the world and deliver real customer satisfaction.

Titanic Belfast

Swiss Embassy New Delhi

LANXESS Arena Cologne

Main Station Vienna

Convention Centre Vancouver

Alpina Gstaad

Microsoft Campus Redmond

Efficient system solutions for three-dimensional joint movements since 1976

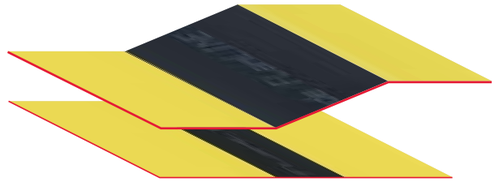
Building components are permanently exposed to strong strains such as temperature fluctuations, earthquakes, and other physical conditions. These affect the volume and the composition of the materials used and the substance of the buildings, and can cause symptoms of fatigue or breakages with catastrophic consequences. Soba Inter AG provides high-quality solutions to ensure sustainable building quality.

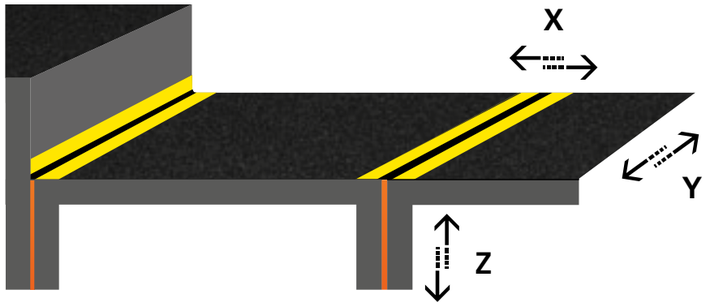
Benefits of RedLINE® and FlamLINE®

- Economic to fit thanks to prefabricated, precision-fit expansion joint strips
- Strips and preforms are supplied as fully fabricated systems
- No complex substructure thanks to sandwich construction
- No shielding necessary thanks to the quality of joint with seal
- Very high resistance to building vibrations (e.g., in the event of an earthquake)
- Smooth fitting without loops or bulges
- Easily follows the line of any joint
- Highly elastic expansion zone
- Force-fit connections on bitumen and with epoxy resin adhesives on concrete and metal, etc.
- Special metal connection pieces for connections to metal work
- Individual strips can be put together on site using the specially designed vulcanization device

Composite parts without weak points thanks to vulcanization method

The expansion zones in the center of the product (black or red area) are highly elastic to prevent sealing coatings on buildings from tearing. The established production method using vulcanization guarantees a consistent joint and a contiguous seal.





Product variety with Swiss quality

An expansion joint strip is only as good as the elastic material it contains. Special elastic rubber compounds have been developed for the Soba Inter products, which make the products unique and guarantee a long service life for the expansion joint strips. Soba Inter AG complies with quality standards in accordance with ISO 9001 and 14001. You can recognize every Soba Inter product by its trademark.

Certified Management System SQS ISO 9001 / 14001 / OHSAS 18001

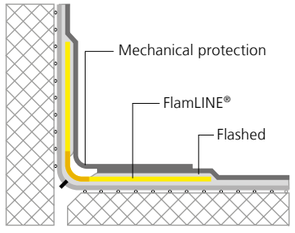
FlamLINE® – the Swiss expansion joint strip for torching

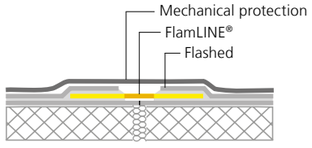
FlamLINE® is the latest-generation expansion joint strip for bridging expansion joints in bituminous seals between building components. The high-resistance quality strip made of quality rubber offers highly efficient and safe fitting.

FlamLINE®

Optimized for all applications

The FlamLINE® expansion joint strip seals all joint areas occurring along building transitions. The expansion joint strip is either delivered prefabricated with all pre-forms based on local building component dimensions or made to measure on the building site.





Adhesive flanges

The two adhesive flanges on the sides are reinforced with a holder. A flame is used to seal this adhesive flange to the bituminous seal or it is glued directly to the substrate (e.g., concrete or steel) with epoxy resin adhesive to form a force-fit connection.

Elastic expansion zone

The support-free expansion zone to absorb the movement of building parts forms the center of the expansion joint strip. This is positioned along the joint. Depending on the strip type, movements of up to 240 mm are possible.

Material properties

The elastic material for FlamLINE® consists of a butyl elastomer with a range of properties:

- Outstanding resistance to ozone corrosion
- Very good long-term heat resistance (up to +90 °C)
- Very good flexibility at low temperatures (down to –40 °C)

General resistance to chemicals:

- Very good against alkali, diluted acids, and saline solutions
- Excellent against water vapor
- Very good resistance to polar solvents such as alcohol and ketone

Resistance to nonpolar plasticizers and solvents (e.g., mineral oils, petrol, fuels, and aromatic compounds such as toluene) is low. Continuous contact with these substances is to be avoided.

Short-term contact with naked flames or mastic asphalt during the installation phase is possible without compromising the material's properties.

We offer specialist products for further areas and applications (see page 15).

Technical details FlamLINE®

Features	Unit	Test standard	Test values
Elastomer base		ISO 1629	IIR
Colour			yellow/black
Density	g/cm³	DIN EN ISO 1183-1	1.47 - 1.51
Hardness	Shore A	DIN 53 505	55
Tensile strength	N/mm²	DIN 53 504	> 5
Elongation at break	%	DIN 53 504	> 600
Tear resistance	N/mm	DIN 53 507	> 8
Water vapour permeability at a thickness of 2.2 mm	g/m² x day	Based on DIN 53 122	0.16 approx. 270,000
Fire behaviour		DIN EN 13 501-1	Building material class E

Simple flame fitting

FlamLINE® expansion joint strips are efficient and safe to fit. The adhesive flanges on the side are flashed to the bituminous surface seal in a sandwich construction by means of a direct flame or epoxy resin adhesive directly onto a concrete or wall substrate to form a force-fit connection.

FlamLINE® expansion joint strips are generally delivered prefabricated with all preforms on a project-specific basis. For installations in several stages or for very long building joints that make handling more difficult, the specially developed vulcanization device can be used to produce the strip on site. Ask our technical services department directly about the options available (info@soba-inter.com).

Simple and practical corner formats for efficient fitting to the building.

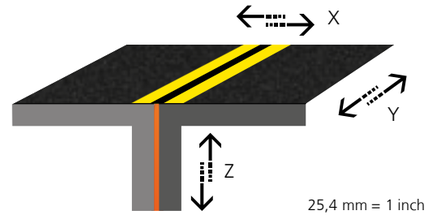
Optimum adjustment of FlamLINE® to building structures to secure the seal of the building.

Consistent FlamLINE® joint seal over a number of corners and levels.

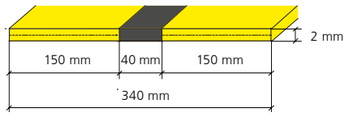
Wide range for varied applications for bridging joints

Building parts vibrate in all directions, depending on the substrate composition, external influences from adjacent infrastructures, or earth movement.

The FlamLINE® product range provides an optimum flexible joint connection for a very wide range of lateral (X), longitudinal (Y), and vertical (Z) movements.



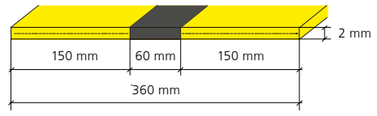
FlamLINE® 20



X Lateral movement max. ± 20 mm
Y Longitudinal movement max. ± 20 mm
Z Vertical movement max. ± 20 mm

V_r max. resulting displacement = 34 mm

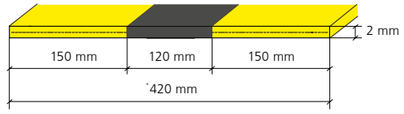
FlamLINE® 40



X Lateral movement max. ± 40 mm
Y Longitudinal movement max. ± 40 mm
Z Vertical movement max. ± 40 mm

V_r max. resulting displacement = 69 mm

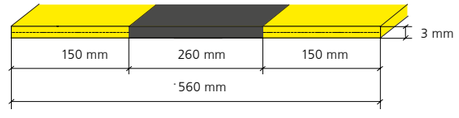
FlamLINE® 100



X Lateral movement max. ± 100 mm
Y Longitudinal movement max. ± 100 mm
Z Vertical movement max. ± 100 mm

V_r max. resulting displacement = 173 mm

FlamLINE® 240 G



X Lateral movement max. ± 240 mm
Y Longitudinal movement max. ± 240 mm
Z Vertical movement max. ± 240 mm

V_r max. resulting displacement = 415 mm

Special plate transition and interim pieces for connection to metal work.

Enclosures can easily be vulcanized into the FlamLINE® expansion joint strip.

Optimum seals, even underground for tunnels and other projects.

RedLINE® – the Swiss expansion joint strip for pouring

RedLINE® is the classic expansion joint strip made of quality rubber for bridging expansion joints in bituminous seals between building components. The conventional laying method using liquid hot bitumen means this expansion joint system can provide quick and safe installation of outstanding quality.

RedLINE®

Optimized for all applications

The RedLINE® expansion joint strip seals all joint areas occurring along building transitions. The expansion joint strip is either delivered prefabricated with all preforms based on local building component dimensions or made to measure on the building site.

Adhesive flanges

The two adhesive flanges on the sides are clad with a special fleece. These adhesive flanges are cast directly onto the bituminous seal with hot bitumen. Depending on the installation position, they can also be joined directly to the substrate with epoxy resin adhesive or liquid plastic to form a force-fit connection.

Elastic expansion zone

The expansion zone without the fleece cladding, to absorb the movement of building parts, forms the center of the expansion joint strip. This is positioned along the joint. Depending on the strip type, movements of up to 240 mm are possible.

Material properties

The elastic material for RedLINE® consists of an EPDM elastomer with a range of properties:

- Outstanding resistance to ozone corrosion
- Very good long-term heat resistance (up to +90 °C)
- Very good flexibility at low temperatures (down to –40 °C)

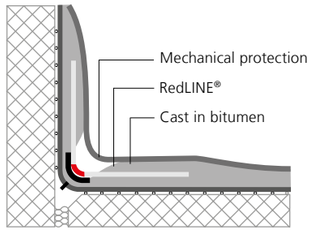
General resistance to chemicals:

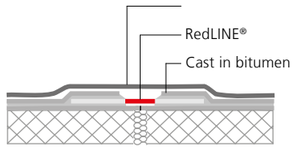
- Very good against alkali, diluted acids, and saline solutions
- Good against water vapor
- Good resistance to polar solvents such as alcohol and ketone

Resistance to nonpolar plasticizers and solvents (e.g., mineral oils, petrol, fuels, and aromatic compounds such as toluene) is low. Continuous contact with these substances is to be avoided.

Short-term contact with hot bitumen or mastic asphalt during the installation phase is possible without compromising the material's properties.

We offer specialist products for further areas and applications (see page 15).



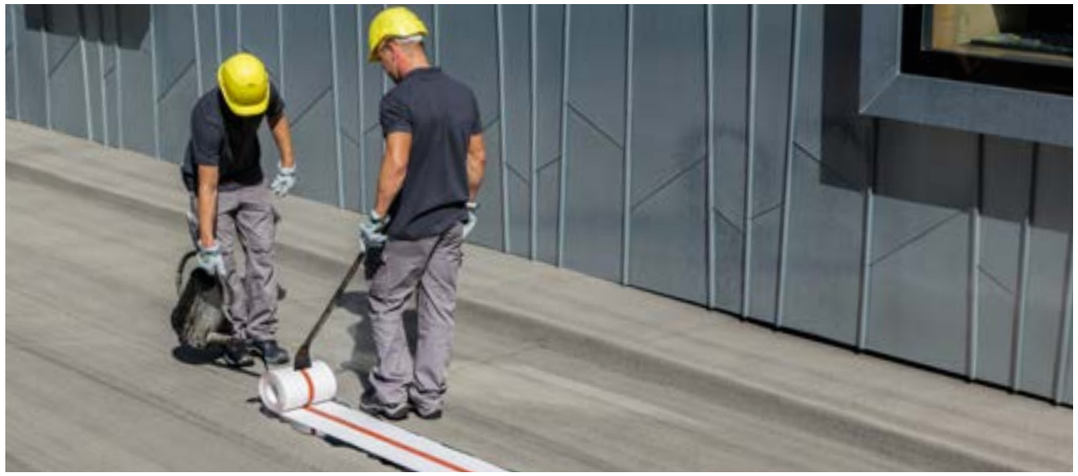


Technical details RedLINE®

Features	Unit	Test standard	Test values
Elastomer base		ISO 1629	EPDM
Colour			red/white
Density	g/cm³	DIN EN ISO 1183-1	1.0 - 1.1
Hardness	Shore A	DIN 53 505	45
Tensile strength	N/mm²	DIN 53 504	> 10
Elongation at break	%	DIN 53 504	> 500
Tear resistance	N/mm	DIN 53 507	> 5
Water vapour permeability at a thickness of 2.2 mm	g/m² x day	DIN 53 122	< 3
Fire behaviour		DIN EN 13 501-1	Building material class E

Simple cast fitting

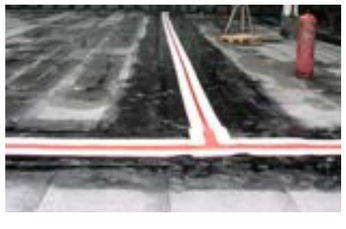
RedLINE® expansion joint strips are simple and safe to fit. They are cast with liquid hot bitumen between the bituminous surface seal or joined directly to the concrete or wall substrate with epoxy resin adhesive or liquid plastic to form a permanent force-fit connection.



RedLINE® expansion joint strips are generally delivered prefabricated with all preforms on a project-specific basis. For installations in several stages or for very long building joints that make handling more difficult, the specially developed vulcanization device can be used to produce the strip on site. Ask our technical services department directly about the options available (info@soba-inter.com).

Prefabricated strips with all preforms for user-friendly fitting.

Combination of various strip types (e.g., transitions RL 100–40).

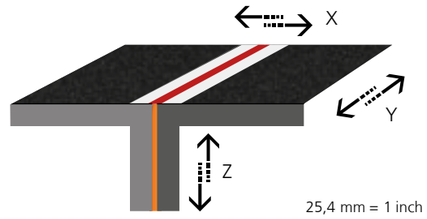


Enclosures can be vulcanized into the strip.

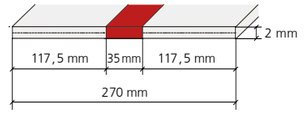
Wide range for varied applications for bridging joints

Building parts vibrate in all directions, depending on the substrate composition, external influences from adjacent infrastructures, or earth movement.

The RedLINE® product range provides an optimum flexible joint connection for a very wide range of lateral (X), longitudinal (Y), and vertical (Z) movements.



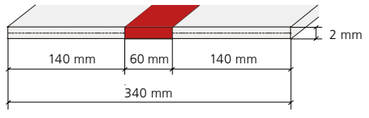
RedLINE® 20



X Lateral movement max. ± 20 mm
Y Longitudinal movement max. ± 10 mm
Z Vertical movement max. ± 15 mm

V_r max. resulting displacement = 26 mm

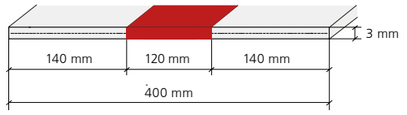
RedLINE® 40



X Lateral movement max. ± 40 mm
Y Longitudinal movement max. ± 20 mm
Z Vertical movement max. ± 30 mm

V_r max. resulting displacement = 53 mm

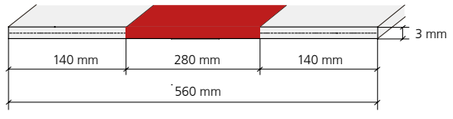
RedLINE® 100 G



X Lateral movement max. ± 100 mm
Y Longitudinal movement max. ± 50 mm
Z Vertical movement max. ± 75 mm

V_r max. resulting displacement = 134 mm

RedLINE® 240 G



X Lateral movement max. ± 240 mm
Y Longitudinal movement max. ± 120 mm
Z Vertical movement max. ± 180 mm

V_r max. resulting displacement = 323 mm

With vulcanized miter joints, the strips can be easily adapted to any changes of direction.

Safe sealing of building transitions between old and new buildings.

RedLINE® is applied directly to concrete with epoxy resin adhesive to form a force-fit connection.

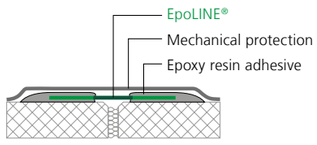
Other Swiss expansion joint strips for various applications

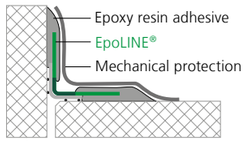
EpoLINE®

EpoLINE® is a rubber expansion joint strip. It is used for bridging three-dimensional joint movements between dilating building parts. Prefabricated based on the local component dimensions, the strip system allows quick and safe fitting of joint seals.

Technology

EpoLINE® consists of an elastic section and two adhesive flanges on the sides. These are applied with epoxy resin adhesive to form a permanent seal. This concept separates the functions of "movement absorption or expansion" and "incorporation into the epoxy resin adhesive."





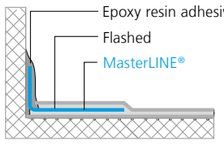
Direct gluing of the expansion joint strip to the concrete surfaces.

MasterLINE®

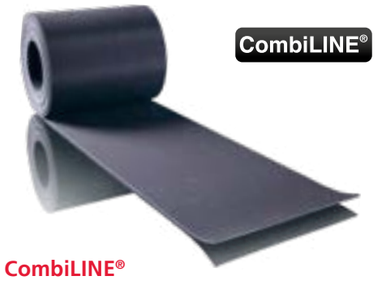
MasterLINE® is made of synthetic rubber, which enables metal-free connection and conclusion of bituminous surface seals. The strip system can be used anywhere where a strong, run-free sealed connection is required, for example on balustrades, walls, windows, etc. (ideally with short connection heights).

Technology

MasterLINE® is applied to the final component (e.g., concrete, metal, or wood) with epoxy resin adhesive to form a force-fit connection. It is connected to the bituminous surface seal by torching. No shielding is required thanks to the good connection between the bitumen strip and the connecting strip. The standard range incorporates strips in various widths as well as preforms, such as internal and external corner pieces and enclosures of various shapes.



Horizontally flashed into the bituminous seal and vertically glued to the substrate with epoxy resin adhesive to form a force-fit, run-free connection.

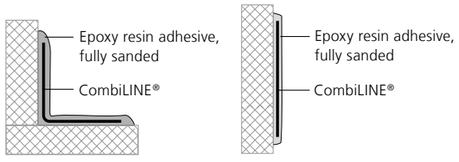


CombiLINE®

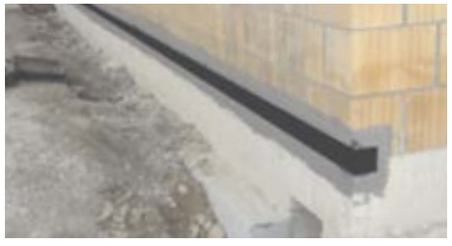
CombiLINE® is made of synthetic rubber to allow the sealing of nondilating working joints. It can easily be joined to a wide range of materials (e.g., concrete, wood, or metal). Prefabrication is not required as all connections can be made on site.

Technology

CombiLINE® is always fitted with epoxy resin adhesive because of its 1 mm thickness. The adhesive surface must be at least 4 cm to guarantee optimum adhesion to the substrate. The strip must not be exposed to the weather and must therefore be covered with a building protection mat or similar, or covered completely with epoxy resin adhesive and sprinkled with quartz sand. The standard range incorporates strips in various widths as well as preforms, such as internal and external corner pieces.



Simple and direct gluing of the expansion joint strip to walls and concrete foundations.



Bespoke expansion joint strips

Soba Inter AG is a world-leading company when it comes to waterproofing in building construction and specifically the bridging of joint movements. The comprehensive product range provides the whole world with high-quality solutions for various applications.

Ongoing research and development into new materials and processing methods to meet global customer requirements is one of the core principles of Soba Inter AG. We put intensive research into the long-term durability of our products, their compatibility with drinking water and food, and their behavior in contact with oils.

Please feel free to contact us if you have an individual requirement or a special request that is not covered by our existing expansion joint strips, or if you wish to have a product made in your corporate colors.

We can produce a bespoke solution based on our many years of experience.

soba inter

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