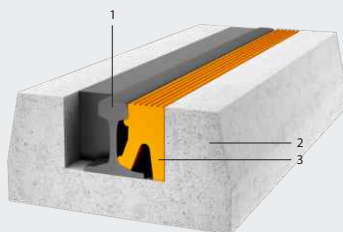


Sylomer® Rail Groove Filler

Greater Safety at Level Crossings



- 1 Rail
- 2 Covering (concrete, plaster, asphalt ...)
- 3 Sylomer® rail groove filler

Product advantages

- Increased safety in road traffic for pedestrians, wheelchair users as well as all single-track vehicles
- Quick and easy installation
- Keeps dirt and debris out of the grooves
- High resistance against ageing and weathering
- No danger of slipping on the rail groove filler - even during wet weather
- Grooves will not freeze up
- References in Austria, Switzerland, Germany and France

Diverse applications

- Level crossings
- Industrial tracks (connecting tracks leading to factory grounds)
- Depots and workshops at railway and local transport operators
- Logistics centres and port areas



Rail groove fillers at the SBB workshop

Whenever street users and railway tracks meet, safety is the top priority. The groove between the rail and the guard rail or between the rail and the trackslab surface for level crossings and track systems represent a danger for pedestrians and single-tracked vehicles.

Sylomer® rail groove fillers eliminate this accident risk, provide improved safety for road traffic and also protect the grooves from being filled in by stones, road grit and other deposits/objects. Sylomer® rail groove fillers are characterized by high stability and wear resistance.

The perfectly optimized elasticity guarantees that the system will function properly: As soon as a rail vehicle travels over the track, the groove is freed up for the rail wheel flange. The groove is closed again after the train has passed, once again eliminating any danger. Sylomer® rail groove fillers can be installed quickly and easily. The prefabricated parts are laid in the grooves either loose, with facing sides glued together or as pre-welded components.

General Information

The width of Sylomer® rail groove fillers is designed to ensure there is a good form and fit to the grooves, meaning that the width of the profile at the top is about 1.5-2 mm smaller than the groove width.

This ensures complete closure of the groove with Sylomer® after the wheels of the rail vehicle pass (no sticking to the railhead and no overlap). The height of the groove filler profile must be selected so that it is about 2 mm lower than the railhead.

Sylomer® rail groove fillers are made of a closed-cell polyurethane elastomer. The product is characterized by excellent stability and wear resistance. With polyurethane materials, contraction or expansion of approximately 1 - 2 cm is possible due to material and weather conditions. This, however, has no effect on the functionality of the groove filler-profile.



Installation in slab track

Permit and maximum allowed speed for traversing Sylomer® rail groove fillers

A railway construction permit No. 224.898/3-II/2/90 by the Austrian Federal Ministry of Public Works and Transport has been issued for the use of Sylomer® rail groove fillers in various forms and designs. Sylomer® rail groove fillers are intended for use on tracks with a maximum train speed of $V_{max} = 40 \text{ km/h}$, i.e. for:

- Level crossings
- Industrial tracks (connecting tracks leading to factory grounds)
- Depots and workshops at railway and local transport operators
- Logistics centres and port areas



External groove and rail groove filler



Level crossing with Sylomer® rail groove fillers

Installation

Prior to installation of the Sylomer® rail groove filler, the groove must be free of loose materials such as leaves, stones, dirt etc. The Sylomer® groove filler profiles which are delivered can easily be bonded or welded together into longer strands on-location. Generally speaking, end-to-end welding with a mirror welding set is the fastest and simplest approach and is not influenced by the weather nor temperature.

If the Sylomer® groove filler profiles are to be bonded together using adhesives, the instructions of the adhesive producer, such as mixing ratios, setting times, curing times, ambient temperature for use etc. must be complied with.



Welding the groove filler profiles together

Installation of Sylomer® rail groove fillers is quick and easy, and can be carried out at almost any level crossing.

Maintenance

Sylomer® rail groove fillers are durable products which handle exposure to the elements and wear-and-tear very well. Influences of mechanical effects, such as grit and salt in the winter or other debris which may collect over time between the railhead and the Sylomer® rail groove filler, the groove filler may sometimes

not return to its original position after the train passes and remain wedged in the groove below the level of the railhead. In such cases, the groove fillers should be removed and reinstalled properly after the groove and rail channel has been cleaned. If Sylomer® rail groove fillers are damaged in any way, they can be easily removed and replaced with new ones.

Lifecycle of Sylomer® rail groove fillers

This product is a part which is subject to wear. As a result, we cannot offer a guarantee for any specific lifecycle.

It is not possible for us to make a serious estimation of the expected lifecycle of the product because of the wide range of factors to which the product is exposed, such as the installation position, condition of the rail wheel flanges, debris, number of train passages, axle loads, rail wear etc. However, we can look back on 20 years of positive experience with this product.

Sylomer® Rail Groove Filler

Technical Details



Sylomer® rail groove fillers are easy to install

| Rail | Length | Sketch | Designation |
|----------|--------|--------|--|
| S 49 | 1,300 | | SRF 65 S 49/1 (1300x77x156/ZG 4090) |
| S 33 | 1,300 | | SRF 5 S 33 (1300x69x118/ZG 4084) |
| UIC 54/E | 1,300 | | SRF 65 UIC 54 E/1 (1300x77x164/ZG 4092) |
| S 49 | 1,300 | | SRF 4 S 49 (1300x70x130/ZG 4080) |
| div. | 1,500 | | SRF 56 (1500x65x42/ZG 4087) |
| div. | 1,300 | | SRF HAL (1300x80x90/ZG 4124) |

Excerpt from the Sylomer® rail groove filler delivery program

Product description

- Cellular polyurethane elastomer (PUR)
- Outstanding resistance to oils, grease, road salt etc.*
- Usable at temperatures between -30 °C and +70 °C

Standard colour: grey**

Delivered form: All common rail types

Delivered length: 1,300 mm and 1,500 mm

* See chemical resistance data sheet
** Other colours also possible