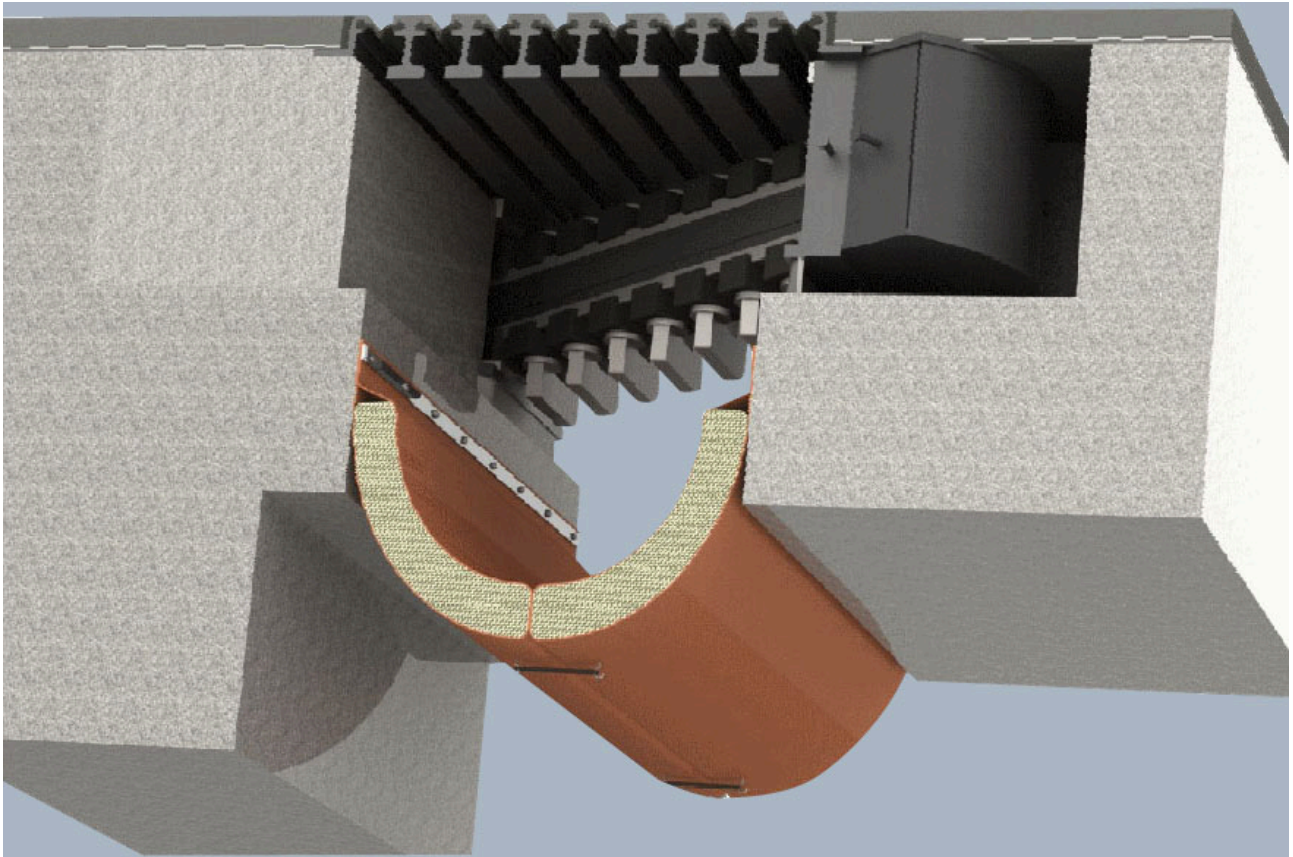


## MAURER GU-f

Flexible Noise Protection-System under expansion joints



*MAURER GU-f - Noise Protection-System under expansion joints*

The combination of low noise emission lamella-expansion joints (diamond shaped elements) with the herewith presented system GU-f underneath the joint „GU-f“ provides an optimum reduction of noise emissions at expansion joints.

The patented system GU-f is an improvement of the previously used noise-insulation of expansion joints and provides the following advantages:

- **Modular structure – can be handled by one person**
- **Combination of reflexion + absorption of noise ensures high efficiency**
- **Retrofitting underneath of existing expansion joints is possible**
- **Durable design – infinite number of opening and closing movements possible**
- **Optimum supplement to expansion joints that leads to noise protection at their surface**

- Next to the required guarantees longevity, the combination of the employed material an efficient reduction of the impulse like and low frequency noise emissions which have a far reach of disturbance. Fig. 3 displays the efficiency of the system also in the low frequency range (measured at the abutment underneath the insulation). Measurements demonstrated a noise reduction effect far above the required 15 dB(A).
- Due to its modular structure, this noise protection system is also suitable for retrofitting underneath existing joints.
- Opening and closing of this system is possible by just one person, without using any tools.



Fig. 1 - Modular structure of the GU-f system



Fig. 2 - Local, user-friendly opening of the GU-F system

- Moisture occurring will not be collected, but can be drained away by a drainage system which is located at the lowest point.
- This system can be adapted to any geometry in respect to structural gap and expansion joint structure, while maintaining the simple serviceability.

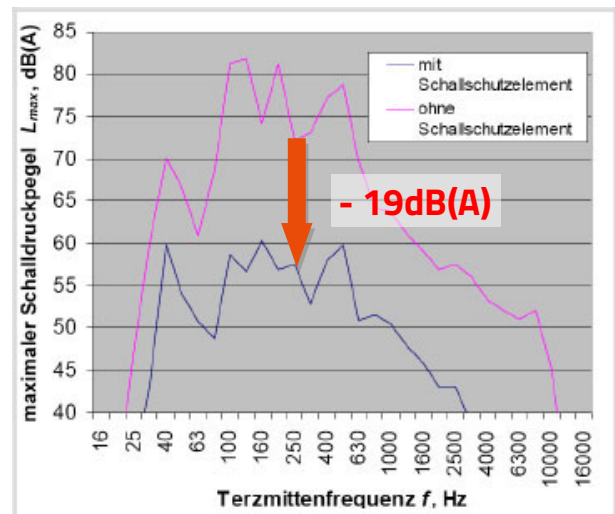


Fig. 3 - Reduction of noise emission by the GU-f

### Contract specifications

Noise protection for Roadway Expansion Joints, type MAURER GU-f or equivalent, delivered and installed according to static and structural requirements.

Simple and easily operated, modular design of sound proving elements with insulating mats in PVC rubber shell and sound-reflecting stainless steel sheet. The connection joints of elements must not affect the sound-reducing overall efficiency - regardless of the expansion joint position.

The noise protection must be provided over the entire length of the joint to the cornicing.

Possibly occurring moisture must be able to drain freely.

A direct sound transmission needs to be avoided. Openings shall be kept to an acoustically acceptable extent.

The sound absorbing features must be demonstrated through a standardized, reproducible reference measurement on the building. Immediately below the device has a requested sound-reducing effect of  $\geq 15\text{dB(A)}$  (truck crossing at 80km/h).

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