



TENSA®BASE



A tried and tested watertight aluminium expansion joint for interior and exterior use.

Principle

The TENSA®BASE is a stable and incredibly elegant joint construction for interior and exterior use. Corrosion-resistant extruded anticorrosional aluminium alloy mounting brackets ensure stability. The robust sealing profile is manufactured from aging-resistant elastomer and is attached to the surface of the joint. The result is a reliable and watertight joint construction with excellent drive-over comfort. If necessary, the sealing profile can be replaced simply and easily. TENSA®BASE joints can be supplied in six different standard designs.



Adjusting the TENSA®BASE



Expansion joint with paving

Applications

TENSA®BASE joint constructions can be used for most movement joints in commercial buildings, warehouses, underground car parks, ramps, multi-storey car parks, airports, stations and shopping centres, etc.

Dimensionally accurate plans are required for custom-made joint constructions with changes of direction, angles, intersections and edgings.

The sealing profile is normally attached separately, after the prior installation of the edge profiles, and is inserted and locked into place in one piece along the whole joint length.

Guaranteed watertight seal

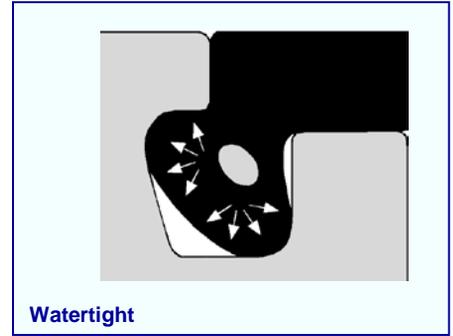
The unique, mechanical, watertight anchoring of the elastomeric profile is guaranteed by the tried and tested "TENZA" anchoring system with dual safety features. This system has already been used for TENZA®BASE for several years and in the toughest conditions, and provides a secure connection without bolts or moveable parts.

1st safety feature:

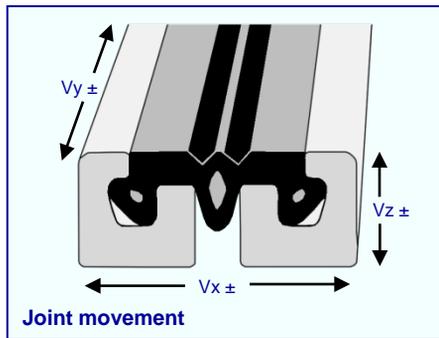
Pre-tensioning ensures a perfect watertight seal.

2nd safety feature:

The high durability characteristics of the elastomer mean that there is no loss of retaining force in the sealing zone, and permanent pressure is guaranteed.



Watertight



Joint movements

Joint movements around the different axes are possible without generating large restoring forces which could negatively impact neighbouring construction components.

Movement	Sealing profile type 25	Sealing profile type 50
Right-angle to joint (longitudinal direction)	$V_x \pm 12.5\text{mm}$	$V_x \pm 25\text{mm}$
Parallel to joint (transverse direction)	$V_y \pm 7\text{mm}$	$V_y \pm 12\text{mm}$
Vertical to joint (height difference)	$V_z \pm 10\text{mm}$	$V_z \pm 15\text{mm}$

Stainless steel protective profile

The aluminium surfaces still visible after installation can be fitted with an optional rust-free stainless steel cap.

Use of such stainless steel caps provides the edge lamellae with surface protection against aggressive agents, and also gives the joint a uniform and harmonious appearance along the whole length.



TENZA®BASE with stainless steel cap

Advantages of the sealing insert

The elastomeric profile level with the carriageway surface prevents soiling and ensures that the TENZA®BASE has high drive-over comfort. Despite large movements, it is still possible to drive over the expansion joint without impact and without noise.

The sealing profile can also be installed quickly and easily, without the need for special tools, once the main expansion joint elements have been concreted into position. This also ensures that the sealing profile can be replaced at any time, without damaging the concrete adjacent to the aluminium mounting.



Installation in entrance to underground car park

TENSA®BASE GZ 25

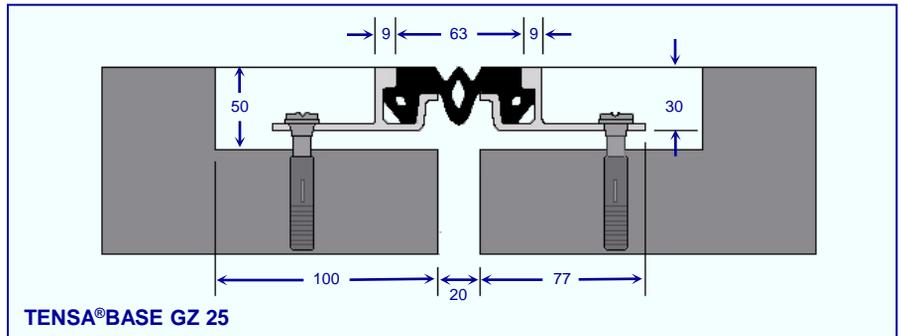
This profile is suitable for installation after the slab has been poured. An installation recess for the insertion of the expansion joint should be formed during slab construction.

Recommendation for installation

The joint elements are inserted and adjusted to the correct height using shim plates. They are then attached every 35cm with a non-positive connection (e.g. shear connector HAS M8x80). High-strength mortar is poured beneath the joint, ensuring that no mortar enters the expansion joint itself. The bolted transportation clamps fitted in the factory can now be removed. The recess should then be filled with a high-strength, non-shrinking mortar and a screed level prepared, flush with the carriageway surface. When the mortar has hardened, the sealing profile can be fitted.

Profile Type	Max. Joint Width	Range of Joint Movement	Exposed Width*	Profile Height	Delivered Length	Insert Colour
GZ 25	20mm	±12.5mm	81mm	30mm	5m	black

* In central position



TENSA®BASE GZ 50

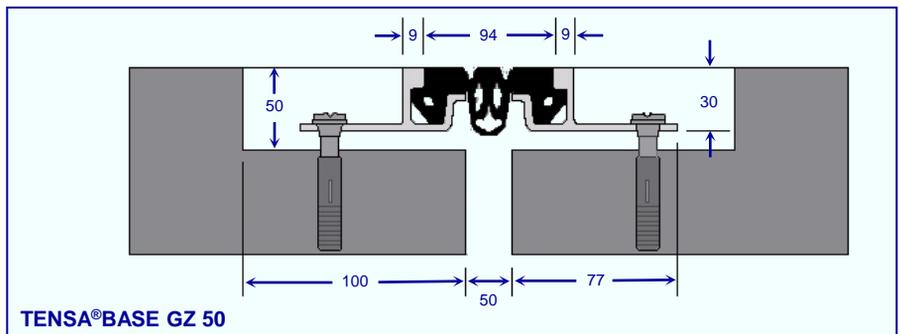
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Profile Type	Max. Joint Width	Range of Joint Movement	Exposed Width*	Profile Height	Delivered Length	Insert Colour
GZ 50	50mm	±25.0mm	112mm	30mm	5m	black

* In central position



TENSA®BASE GZ 4-25

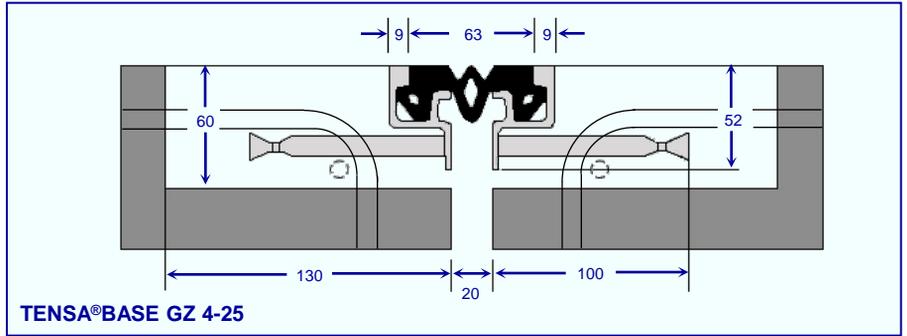
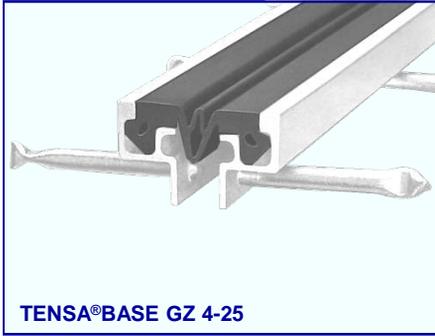
This profile is suitable for installation after the slab has been poured. An installation recess for the insertion of the expansion joint should be formed during slab construction.

Recommendation for installation

The joint elements are inserted into a pre-prepared recess. The joint profile can be precisely positioned and levelled using angled plates, supported on both sides by height-adjustable elevating screws. The recess should then be filled with a high-strength, non-shrinking mortar and a screed level prepared, flush with the carriageway surface. Care should be taken to ensure that no mortar enters the expansion joint itself. Once the high-strength mortar has hardened, the transportation clamps between the edge profiles can be cut and the sealing profile fitted.

Profile Type	Max. Joint Width	Range of Joint Movement	Exposed Width*	Profile Height	Delivered Length	Insert Colour
GZ 4-25	20mm	±12.5mm	81mm	52mm	5m	black

* In central position



TENSA®BASE GZ 4-50

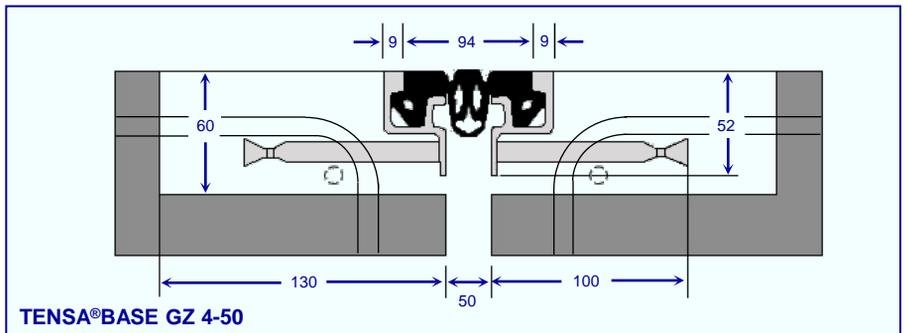
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Profile Type	Max. Joint Width	Range of Joint Movement	Exposed Width*	Profile Height	Delivered Length	Insert Colour
GZ 4-50	50mm	±25.0mm	112mm	52mm	5m	black

* In central position



TENSA®BASE GZ 4/7-25

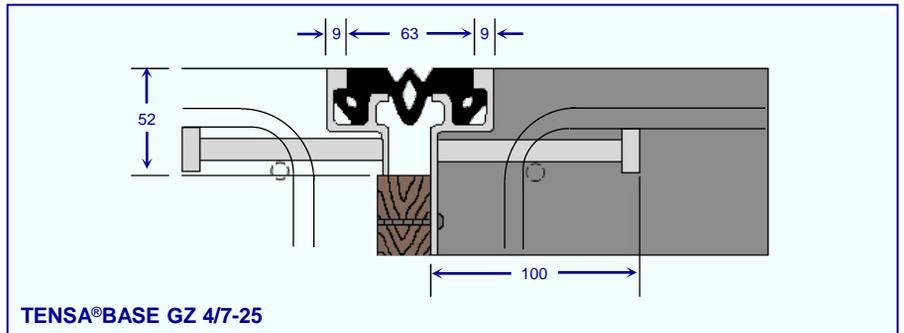
This joint profile has been developed for direct installation onto the formwork. The exact installation height is required before installation.

Recommendation for installation

The joint elements are delivered complete for direct installation onto the formwork. In the first step, the edge profile is positioned at the precise height and is fastened to the side of the formwork using nails. It is important to ensure that the longer section of the edge profile is positioned on the side to be concreted. In the second step, the shutter board is removed, and the joint gap is filled with Styropor or a similar material. It is now possible to concrete up to the Styropor formwork and the edge profile directly. Once the concrete has hardened, the transportation clamps between the edge profiles are cut, and the sealing profile can be fitted.

Profile Type	Max. Joint Width	Range of Joint Movement	Exposed Width*	Profile Height	Delivered Length	Insert Colour
GZ 4/7-25	20 mm	±12.5mm	81mm	52/82mm	5m	black

* In central position



TENSA®BASE GZ 4/7-50

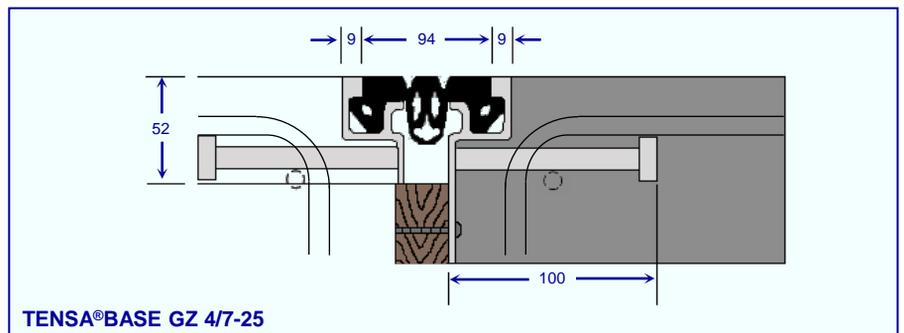
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Profile Type	Max. Joint Width	Range of Joint Movement	Exposed Width*	Profile Height	Delivered Length	Insert Colour
GZ 4/7-50	50mm	±25.0mm	112mm	52/82mm	5m	black

* In central position



Example tender

Delivery and expert installation of watertight expansion joints according to the installation instructions of the supplier.

Type: TENSA-BASE GZ 25
 Range of joint movement: $\pm 12.5\text{mm}$
 Profile height: 30mm
 Supplier: mageba sa
 CH-8180 Bülach
 Tel.: +41-44-872 40 50
 Fax: +41-44-872 41 29
 Email: hochbau@mageba.ch
 www.mageba.ch



Reference projects



Coop Supercenter, Biberist



Hôtel de Ville, Tavannes



Nestlé-SI en Bergère, Vevey



Balance, Bülach

Product Range



Bearings

- Slab bearings
- Wall bearings
- Separation bearings
- Sliding bearings and foils
- Deformation bearings
- Elastomeric bearings



Expansion joints

- Floor profiles for indoor and outdoor
- Facade profiles
- Wall and ceiling profiles
- Profiles for slabs and tiles



Special products

- Sealing membranes
- Hydrophilic rubber seals
- Adhesive and sealing compounds
- Shear connectors
- Insulated cantilever connectors



Vibration isolation

- Vibration isolation bearings
- Impact sound insulation
- Staircase bearings
- Pedestal bearings
- Vibration isolation connectors