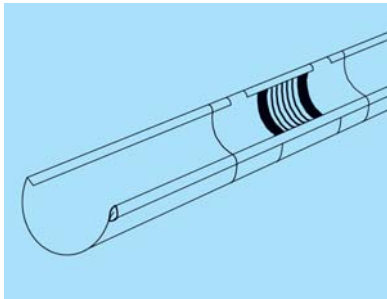
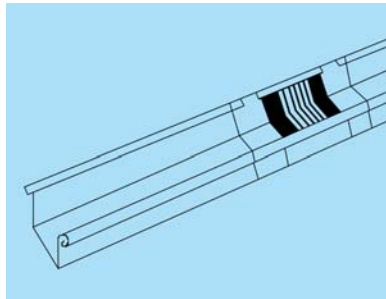


Installation guidelines for Semmler Expansion Elements



See flip side for example.

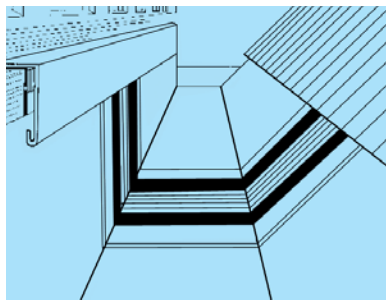
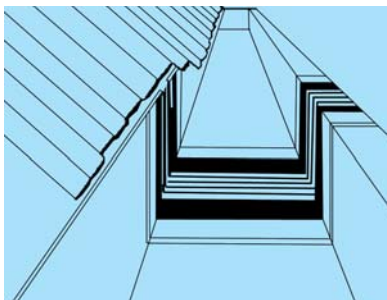


Guttering hung from eaves: semicircular or box-type gutters

How far apart Semmler Expansion Elements should be positioned:

	aluminium	copper, zinc, stainless steel
gutters up to 500 mm in size*	12 m	15 m
gutters over 500 mm in size*	8 m	10 m

At the outside corners or at the beginning of the guttering the given distance has to be divided by two; at the inside corners the given distance has to be divided by four.



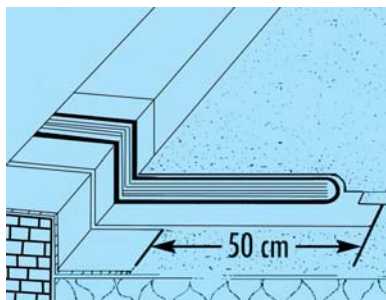
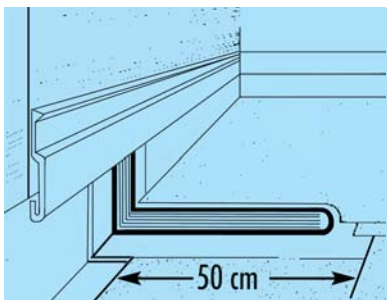
Inlet type gutters:

box-type gutters, water gutters, coping – not bonded

How far apart Semmler Expansion Elements should be positioned:

	aluminium	copper, zinc, stainless steel
gutters up to 500 mm in size*	8 m	10 m
gutters over 500 mm in size*	6 m	8 m

At the outside corners or at the beginning of the guttering the given distance has to be divided by two; at the inside corners the given distance has to be divided by four.



Single-Head Elements:

for roof-skirting or wall joints on flat roofs

How far apart Semmler Expansion Elements should be positioned:

	aluminium	copper, zinc, stainless steel
	5 m	6 m

At the outside corners or at adjoining/the beginning of roof sheeting the given distance has to be divided by two; at the inside corners the given distance has to be divided by four.

Please note:

Elements must be at least 50 cm longer than the width of the adjoining wall plate or roof sheeting!

Useful tips on machining and installing Expansion Elements:

When bending or canting Semmler Expansion Elements special attention should be paid to the following points:

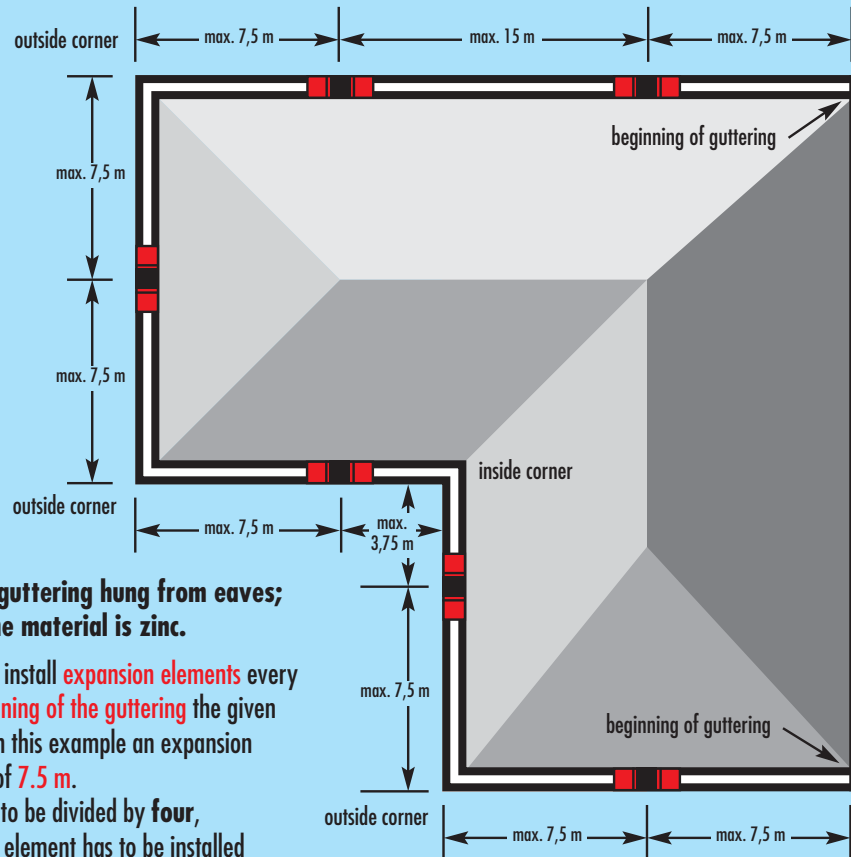
- The bending rail should have a radius of at least 2 mm.
- When bending material of over 1 mm in thickness, a bending radius of 5 mm is needed.
- In order to avoid a shearing effect, the bending cheek must be lowered by approximately 3-4 mm (dependent upon the thickness of the rubber at its centre point).
- Be careful not to squash or damage the rubber part. It is advisable to make a metal shoe to cover the bending rail; this can be done by bending a 2-5 mm thick strip of aluminium sheeting so that it fits over the rail, thus providing a larger bending radius and preventing damage to the rubber part of the element.
- Semmler Expansion Elements can be fitted into any existing profile simply by soldering or welding.
- Be careful to cover the metal strips adjacent to the rubber/metal joint as well as the actual rubber part with a wet cloth before beginning any soldering or welding work. This prevents heat being conveyed to the rubber part. A minimum of 6 cm between the rubber part and the soldering or welding joint should be allowed. At no time should the rubber be exposed to a naked flame.



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EXPANSION ELEMENTS

*The size of the guttering refers to the measurement along the bend from edge to edge.

Installation Example:



The figure represents an example of guttering hung from eaves; the gutter is up to 500 mm in size; the material is zinc.

With guttering of this kind it is necessary to install **expansion elements** every **15 m**. At the **outside corners** or at the **beginning of the guttering** the given distance has to be divided by **two** so that in this example an expansion element has to be installed at a maximum of **7.5 m**.

At the **inside corners** the given distance has to be divided by **four**, meaning that in this example an expansion element has to be installed at a maximum of **3.75 m**.

For other materials and dimensions of guttering, please refer to the table overleaf.

Tips on bending expansion elements.

The rubber part of the expansion element should not be squashed or damaged in any way during the process of bending. A 2-5 mm thick strip of aluminium sheeting can be bent to form a metal shoe which will fit over the bending rail, thus providing a larger bending radius and preventing damage to the rubber part of the element.

The ideal type of bending machine is one fitted with a row of rail parts. Part of the row can be removed from the bending rail, thus preventing the rubber part from being squashed or damaged.



A bending machine with a metal shoe. © Semmler GmbH 2011



A bending machine with removable rail parts. © Semmler GmbH 2011



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