



SNAP-LOCK BRACKET SYSTEM

Installation Instructions



Check substructure for level and plumb alignment.



Installation of RHEINZINK-mounting rail underneath the line of the eave flashing.

RHEINZINK-snap-lock bracket system

The RHEINZINK-snap-lock bracket system is quick and easy to install, substantially reducing installation cost and time. The product consists of a C-profile mounting rail, into which gutter brackets are installed.

Using screws, the mounting rail is fastened directly to the roof edge – fascia, rafter, curtain wall, etc. Conventional gutter spacing to adjoining materials is maintained. With a simple twist, gutter brackets can be installed at any point on the mounting rail. Then, the gutter is pressed against the rear stop of the gutter bracket and, with the bead, is snapped onto the front nose of the bracket. Straightening the bracket by means of a string and subsequent bending is no longer necessary.

Installation steps

1. Check the substructure (fascia, rafters, eaves, masonry, etc.) for straight, level and plumb alignment. If alignment tolerances are > 2.0 cm, the unevenness will be noticeable on the gutter alignment.
2. Install the RHEINZINK mounting rail approximately 2.0 cm underneath the eave flashing line (comply with regional requirements and local practice for snow loads and roof pitch). The bracket mounting rail is installed with the longer leg of the C-section on the bottom. It is fastened using screws or fasteners which are appropriate to transfer the structural loads into the substructure and sloped as required (see comments). Rail ends are joined with mounting rail couplers.



Snap-lock brackets are twist mounted onto the mounting rail.



The RHEINZINK gutter is snapped into place securely and permanently.

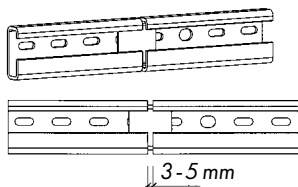
A space is provided between the rail ends to allow for expansion. A supplementary mounting rail attachment strap is available for unusual roof edge configurations, for example, when rafters are cut at right angles to the roof pitch. These straps are twisted into the oblong holes in the mounting rail and fastened onto the sides of the rafter.

Note: For longer gutters, allow 3-5 mm space per length of mounting rail to allow for expansion between rails at the coupler locations. Use metal cutting tools to cut the last mounting rail to length.

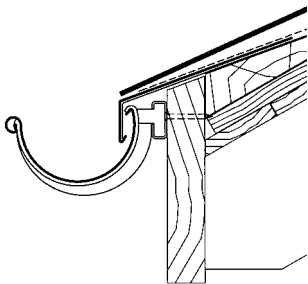
3. Insert the end of the gutter snap-lock bracket into the mounting rail slot. Turn clock-wise from horizontal to vertical axis (see sketch). The snap-lock brackets should be located within +/- 5 cm of a mounting rail fastener.
4. Snap the RHEINZINK-gutter onto the bracket.

Comments regarding gutter slope:

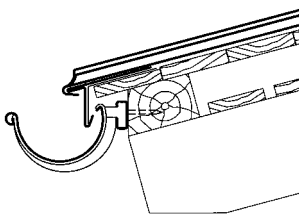
Trade regulations recommend slopes around 1-3 mm/m gutter. RHEINZINK industrial recommendations also permit horizontal installation.



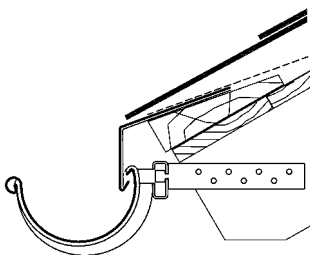
Allow spacing for expansion between mounting rails.



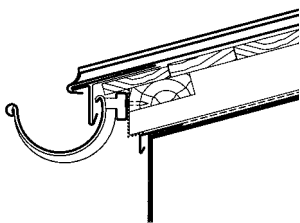
Eave detail incl. front board with tiles



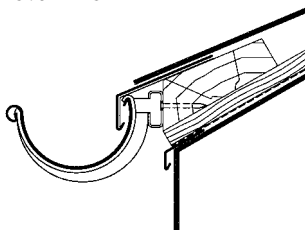
Eave detail with RHEINZINK standing seam covering



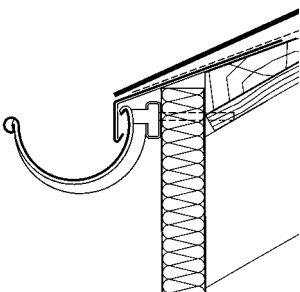
Eave detail incl. snap-lock fixing rail attachment strap with angled rafter end; fixed with 3 tapping screws 5.0 x 45 mm



Eave detail with RHEINZINK standing seam covering



Eave detail incl. fascia board and counterbattens with tiles



Eave detail with prefabricated elements

Note:

when fastening the mounting rail to the fascia or rafter tail

Rafter spacing	Thickness of fascia board	Thickness of fascia board when fastening through to end of rafter
≤ 80 cm	> 45 mm	> 20 mm to ≤ 30 mm
> 80-120 cm	> 60 mm	

Fasteners for mounting rails depending on the eave condition

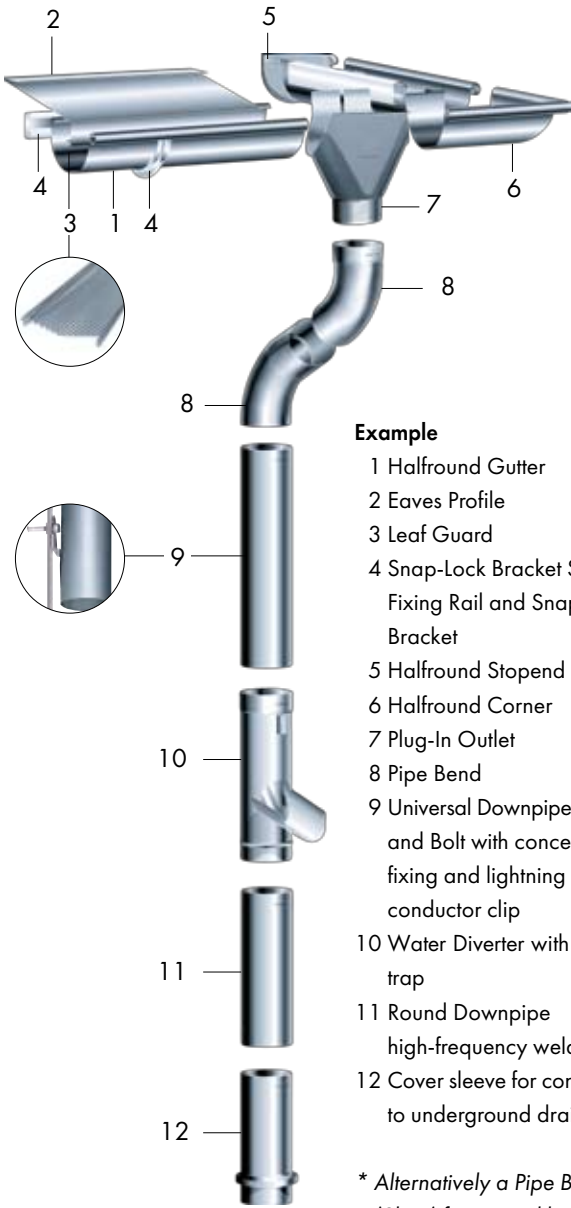
Eave situation	Galvanized quick fasteners 6,0 x 60 mm	Galvanized quick fasteners 5,0 x 45 mm	Galvanized quick fasteners 5,0 x 90 mm	Dowels / Screws**	Galvanized self-tapping screws Ø 6,0 mm
Fascia board 80 mm thick	e ≤ 90 cm	e ≤ 60 cm			
Rail strap for angular end of rafter		e ≤ 90 cm 3 screws			
Fascia board* ≥ 45 mm thick		e ≤ 60 cm			
Fascia board* ≥ 60 mm thick	e ≤ 90 cm	e ≤ 60 cm			
Fascia / rafters ≥ 20 mm to ≤ 30 mm			e ≤ 90 cm at end of rafter		
Masonry				e ≤ 90 cm	
Finished building components					e ≤ 40 cm

* The fascia board must be adequately fastened to the substructure to transfer the structural loading using Ø 5 mm galvanized screws.

** The choice of fastener depends on the type of masonry. Consult dealers specializing in fasteners.

For information pertaining to other applications, please consult the RHEINZINK Department of Application Technology.

e = spacing of screws



Example

- 1 Halfround Gutter
- 2 Eaves Profile
- 3 Leaf Guard
- 4 Snap-Lock Bracket System
Fixing Rail and Snap-Lock
Bracket
- 5 Halfround Stopped
- 6 Halfround Corner
- 7 Plug-In Outlet
- 8 Pipe Bend
- 9 Universal Downpipe Bracket
and Bolt with concealed
fixing and lightning
conductor clip
- 10 Water Diverter with leaf
trap
- 11 Round Downpipe
high-frequency welded
- 12 Cover sleeve for connection
to underground drainage*

* Alternatively a Pipe Bend
(Shoe) for ground level
drainage