

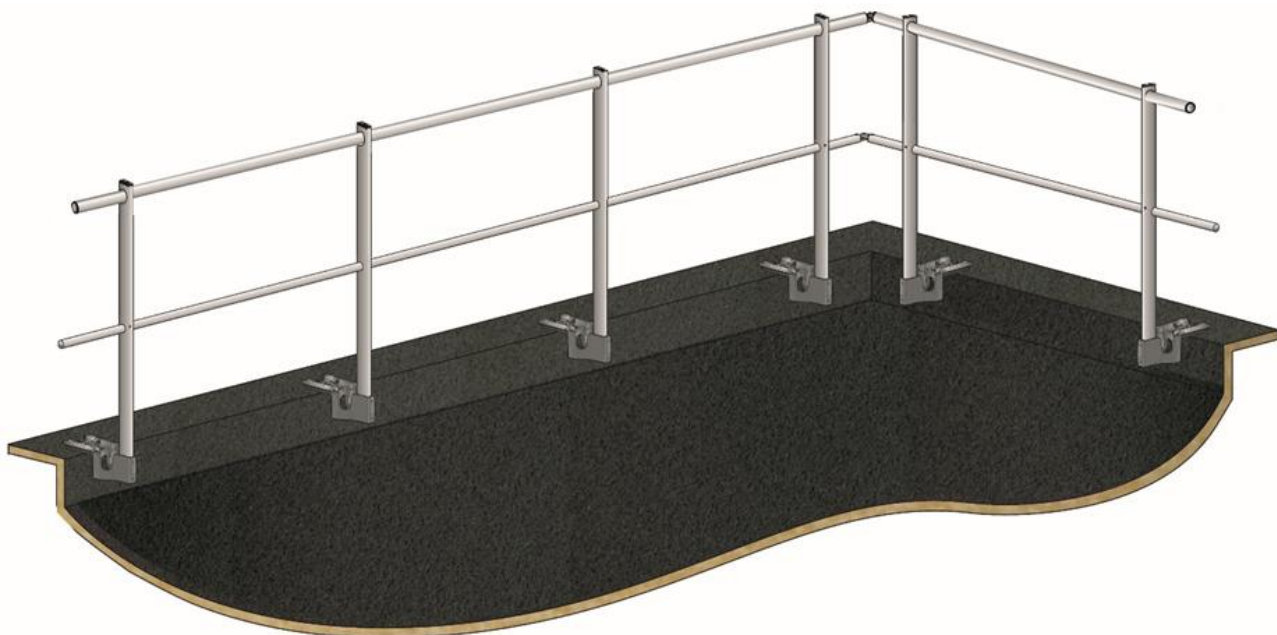
## System description

GARDCO ATT-Z railing systems to be fixed on the parapet for side protection on flat roofs not accessible to the public. The fastening is carried out under the parapet cover. With the different variants, the system can easily bridge different insulation thicknesses.

The system is tested according to the current standards DIN EN 13374 Class A and DIN EN ISO 14122-3.

## Maximum post spacing depending on standard

GARDCO ATT-Z14 according to DIN ISO 14122-3:	max. 1,50 m
GARDCO ATT-Z13 according to DIN EN 13374 Class A:	max. 2,50 m



## Installation

Please read the assembly instructions before installing the railing.

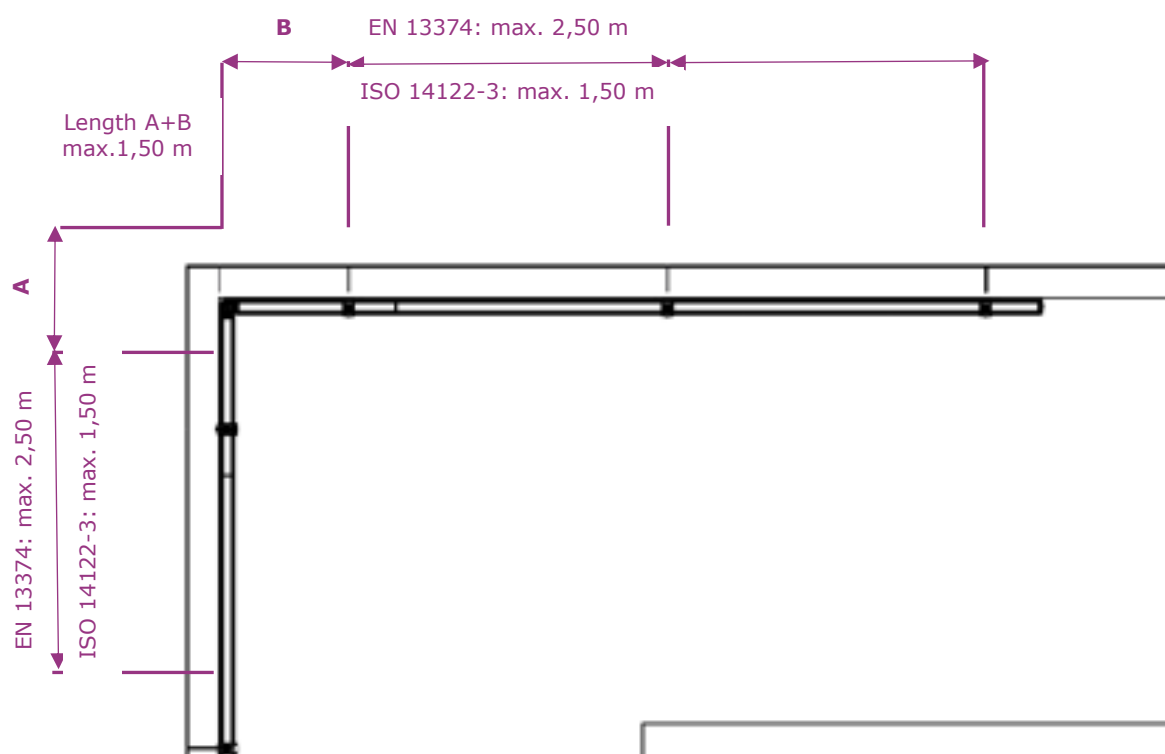
Before installation, check the load-bearing capacity of the parapet construction and thus the suitability for mounting the brackets for the GARDCO ATT-Z railing system.

The roof pitch must not exceed 10°. If the parapet upstand is less than 150 mm, a baseboard must be fitted.

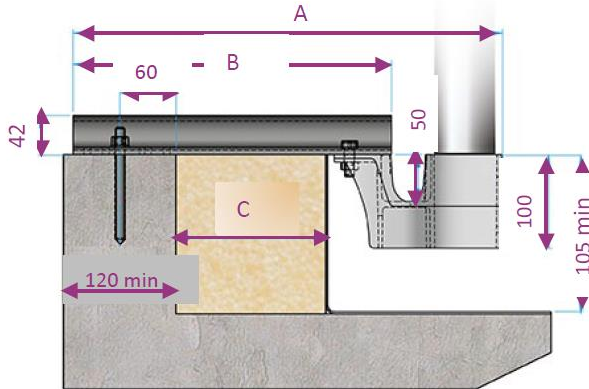
The railing must not be supplemented with attachments or claddings that increase the wind contact area or represent an additional load input. In areas with aggressive environmental conditions, e.g. in the vicinity of chemical plants or near the coast, additional coating or anodising of the railing parts may be necessary.

## Layout

The maximum distance between two posts is 2.50 m according to DIN EN 13374 and 1.50 m according to DIN EN ISO 14122-3.



**Structure for attica with insulation**



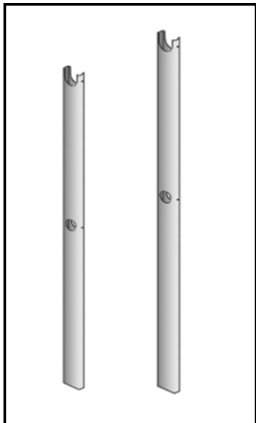
**Dimensions with insulated attica in mm**

Insulation thickness C	Foot section	Total length A	Length B
to 70 mm	Z 70	369	250
>70 to 100 mm	Z 100	399	280
>100 to 130 mm	Z 130	429	310
>130 to 160 mm	Z 160	459	340

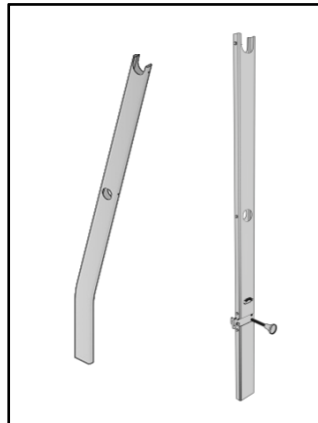
**Please note:**

The fixing material for the foot section is not part of the scope of delivery. This must be determined on site depending on the subsoil and procured by the customer!

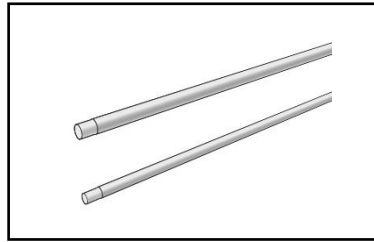
**Components**



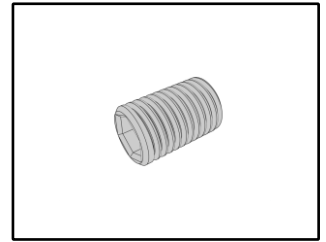
Post  
 H 110 and 118 cm



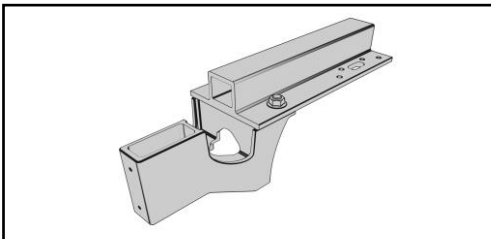
Post 15° inclined  
 Post foldable



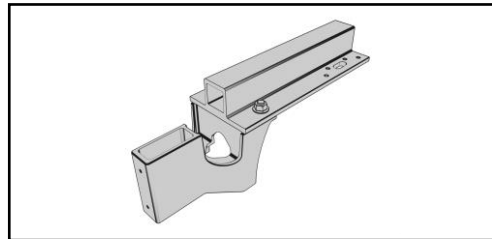
Handrail Ø 45 mm  
 Kneerail Ø 35 mm



Grub screws M8x10  
 mounted in the foot part



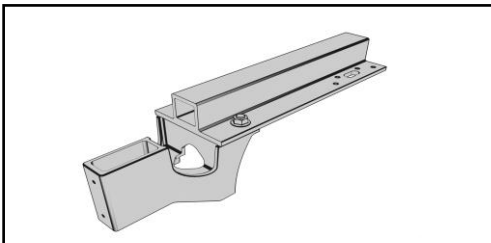
Foot part Z70 for attica with  
 up to 70 mm insulation



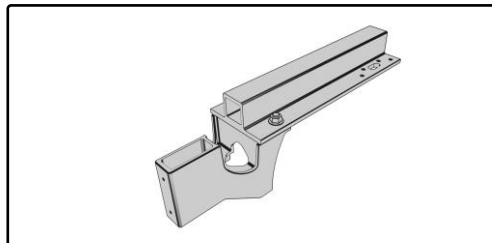
Foot part Z100 for attica with  
 up to 100 mm insulation



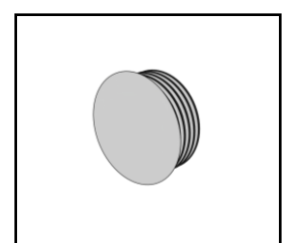
Cap for post



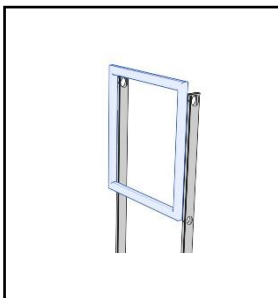
Foot part Z130 for attica with  
 up to 130 mm insulation



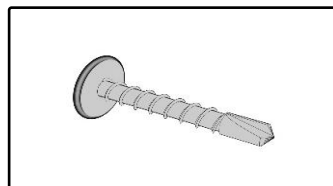
Foot part Z160 for attica with  
 up to 160 mm insulation



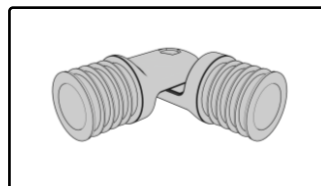
Cap for tube



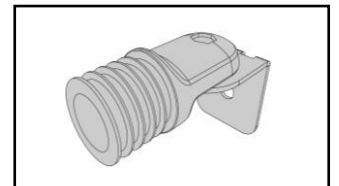
Door element



Drilling screw 4,8x25

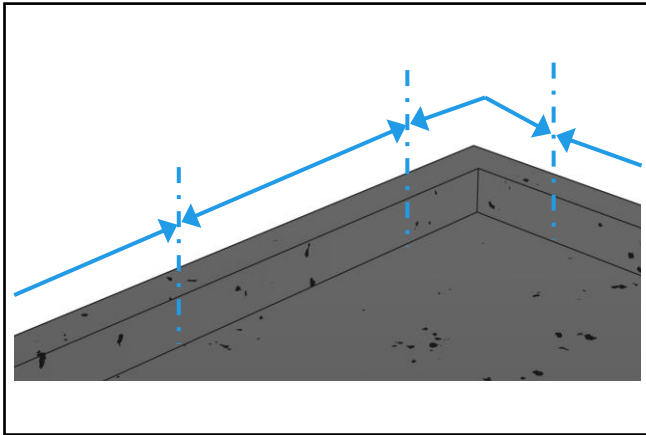


Corner connector

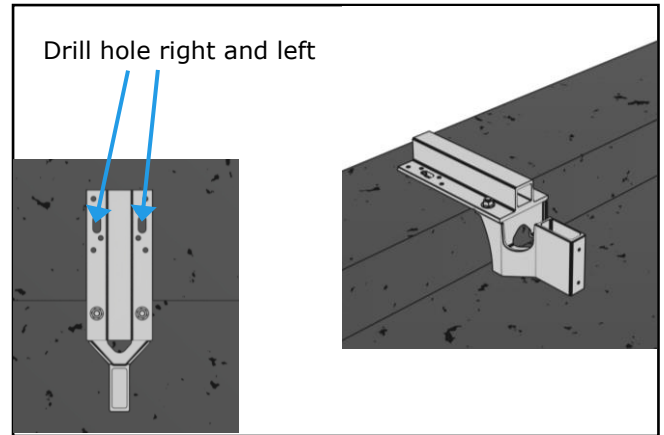


Wall connector

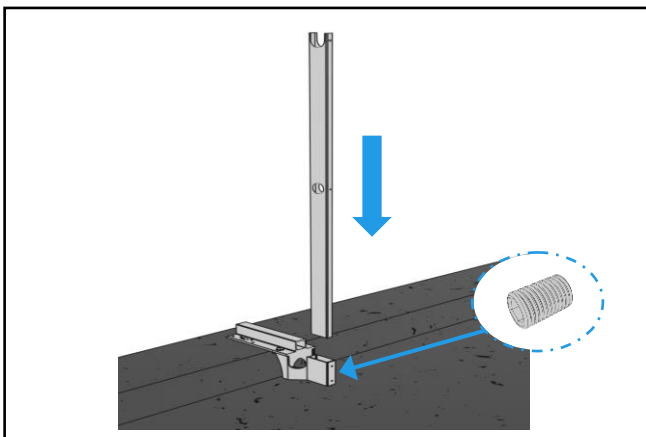
**Montage**



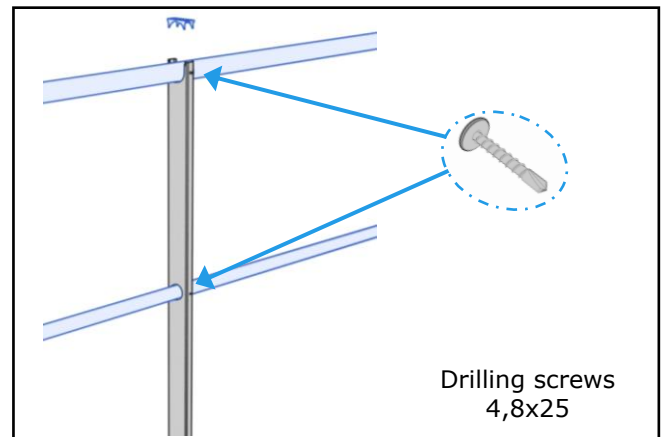
Mark the distances on the parapet crown, making sure to observe the maximum distances! See the assembly diagram on page 2!



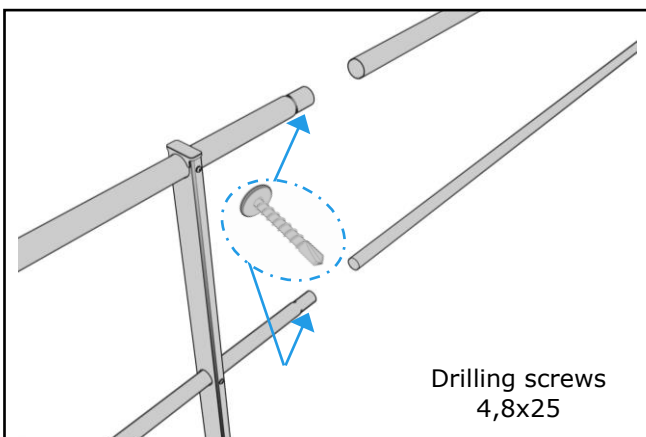
Drill the drill holes using a post base. Fasten the base with 2 screws (provided by customer).



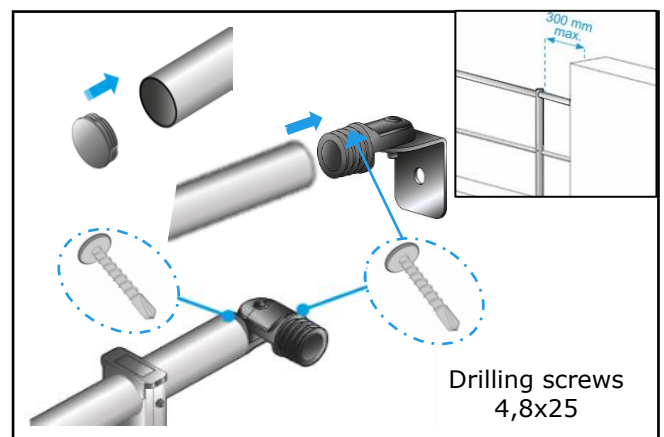
Insert the post into the post base. Secure the post with 2 grub screws already fitted.



Thread the knee rail and insert the handrail. Put on the cover cap. Fix the knee rail and the handrail with 2 drilling screws.



Insert the handrail and the knee rail into each other and fix each with a drilling screw placed diagonally from below.



Put on the cover caps at the ends. Insert the handrails and knee rails into wall connections or into flexible corner connectors and fix them with drilling screws. The wall connection must be to the wall at a maximum distance of 30 cm from the last post (provided by customer).

## Storage

The grates are made of aluminium or galvanised steel, the support structure as well as the railing are made of aluminium. When exposed to moisture, the surfaces can oxidise and lose their shine or develop stains. This oxidation does not attack the metal itself, but forms a natural protective layer. The optical changes have no effect on the quality of the components and the maintenance path. We recommend storing the components protected from moisture, dry and ventilated until assembly.

## Maintenance

GARDCO ATT-Z should be inspected at intervals of max. 2 years. Particular attention should be paid to loose or deformed parts and correct positioning. If there is any concern about the functionality of the railing, it should be inspected and, if necessary, serviced before the next time the roof is entered. If individual parts need to be replaced, only undamaged original components should be used.

## General safety instructions

For the duration of the assembly, protection against falling must be provided, e.g. by means of an appropriate scaffold or anchoring devices. It must be ensured that the assembly is only carried out by instructed specialists in compliance with the specifications for carrying out work at appropriate heights.

Only undamaged original parts are to be used for assembly, and no changes may be made to them that impair their function or safety. Should it be necessary to dismantle the railing, this must be carried out in reverse order to the assembly instructions.

After a person has fallen or an object has fallen into the GARDCO railing, as well as after incorrect installation, the railing may only continue to be used if it has been inspected by a competent person and approved in writing for the intended use.

Openings between side guardrail systems and other constructions must be as small as possible, must not exceed 120 mm for guardrail rails and 20 mm for the toe board. The guardrail system must not be used as an anchor device.

## Marking



- 1 Product and typ identification
- 2 Standard and classification
- 3 Year of manufacture nad serial number
- 4 Note that instuctions for use must be observed
- 5 Manufacturer

## Disclaimer

The load-bearing capacity of the substrate must be checked by the customer. Solid-C cannot make any statements about this. In addition to these installation instructions, the installing company has to observe the valid regulations and rules of technology. Solid-C GmbH is not liable for the dimensioning instructions contained in commercial offers, since it is generally not possible to agree on all technical framework conditions within the scope of tender submissions. The installation company is responsible for the mechanical durability of the mounted products to the building envelope, especially for their tightness. The components of Solid-C GmbH are designed for this purpose according to the expected loads and the valid state of the art. Solid-C GmbH does not assume any liability for damages caused by improper installation.