

# W+W Guard rail EN 81-20

**NEW!**



The construction and stability of the guard rails of the new series are according to EN 81-20.

With four screws in each case the solid bases will be fixed on the car roof.

In order to be able to withstand a force of 1000N acting anywhere on the upper part of the railing without an elastic deformation of more than 50mm depending on the structure of the ceiling, our optionally available mounting kit with mounting rails has to be used.

On these then the railing is fixed. Due to this kind of fixation the larger surface improves the force absorption.

It may be necessary to fix an additional tensioning rope.

It will be fixed in the upper area of the guard rail and at a strong position (e.g. support frame) of the lift cabin.

The rail system and the tensioning rope are included in the optional mounting kit.

The guard rail is 0.70m respectively 1.10m high and the maximum width is 1.30m.

The width is variably adjustable. The handrail and the cross bar will be customized locally to the necessary length with a power cutter or hack saw.

The rigid guard rail can be extended with the extension package (VP).

The guard rail acc. to EN 81-20 is available in a rigid, foldable and telescopic version.

The baseboard (optional to order) as well is necessary for the complete construction of the guard rail according to EN 81-20.



FOLDABLE Guard rail EN 81-20



TELESCOPIC Guard rail EN 81-20

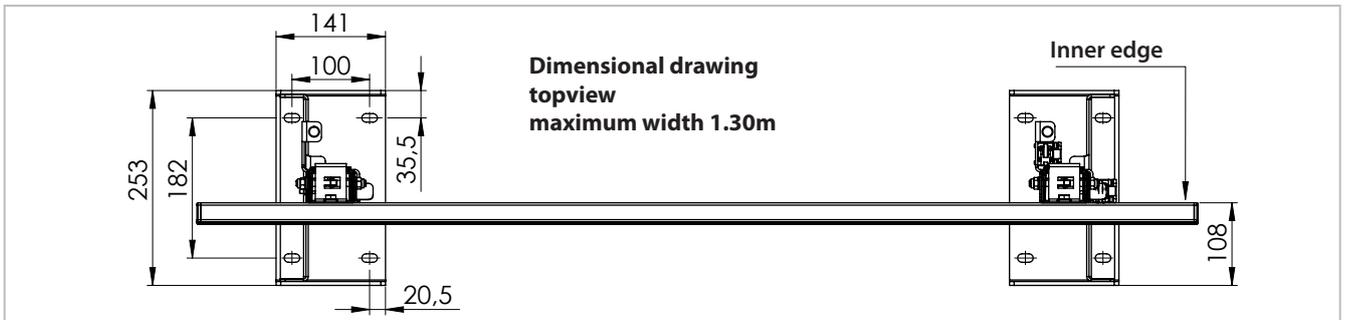


RIGID Guard rail EN 81-20

**Important advice!**

When choosing the railing, the free distances acc. to EN 81-20 5.4.7.4 are to be considered:

- 0.70m height at distances 0.30m up to 0.50m (interior edge hand rail - shaft wall)
- 1.10m height at distances beyond 0.50m (interior edge hand rail - shaft wall)
- 10cm distance between outer edge hand rail and any parts in the shaft.



**Advice:**

When the car is in its highest position, according to EN 81-20 5.2.5.7.2 the free distance between the lowest part of the shaft ceiling and the highest part of the guard rail shall be at least 0.30 m.



Mounting example: FOLDABLE and TELESCOPIC guard rail



Mounting example: post fixed on mounting rail and fixation tensioning rope

# W+W Guard rail EN 81-20



# 0.70m and 1.10m RIGID

## Scope of delivery basic package (GP) RIGID Guard rail

- 2 pcs. posts rigid
- 1 pc. handrail 1.30m
- 1 pc. cross bar 1.30m
- 1 set fastening screws consisting of:
  - locking tooth-screws and nuts M12
- 1 pc. sign „falling / crushing“

Depending on the structure of the ceiling, our mounting kit for handrails rails has to be used as well as maybe other individual measures for an appropriate fixation.

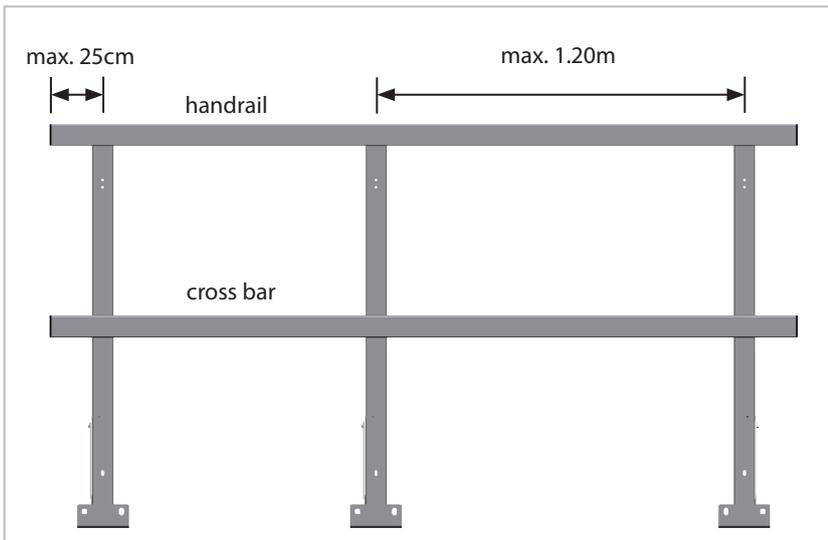
Art.no.	Description
078960	Guard rail EN 81-20 0.70m rigid / GP
078961	Guard rail EN 81-20 1.10m rigid / GP
078962	Guard rail EN 81-20 0.70m rigid / VP
078963	Guard rail EN 81-20 1.10m rigid / VP

GP = basic package / VP = extension package

## Position of the posts and length of the guard rail

Generally, the posts must be positioned as far as possible at the outer ends of the handrail or the cross bar. The handrail and the cross bar may protrude at most 25cm over the post. The distance between two posts must not exceed 1.20m.

The rigid guard rails can be extended as needed with the extension packages. Handrail and cross bar may be shortened (with an angle grinder or iron saw) to obtain the correct length for the guard rail.



## Example

Guard rail basic package 1.10m RIGID (GP, [art.no. 078961](#)) with an extension package (VP, [art.no. 078963](#))



Front view RIGID Guard rail EN 81-20 with extension package



Back view RIGID Guard rail EN 81-20 with extension package

# W+W Guard rail EN 81-20



## 1.10m FOLDABLE

Two different sizes of the foldable guard rail are available. When two guard rails are mounted on two sides of the lift cabin it is possible to fold them onto one another. The opened as well as the turned down position is monitored by contacts. The locking clicks into place automatically during opening. The unlocking to turn down is done by pulling up the cross bar.

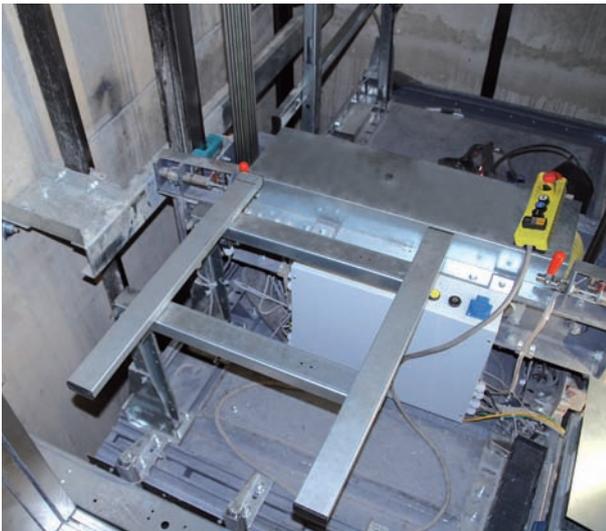
### Scope of delivery FOLDABLE Guard rail

- 2 pcs. foldable posts, pre-mounted
- 1 pc. handrail 1.30m
- 1 pc. cross bar 1.30m
- 1 set monitoring switches (1NC 1NO) incl. 5m supply line
- 1 set fastening screws consisting of: locking tooth-screws and nuts M12
- 1 pc. sign „falling / crushing“

Depending on the structure of the ceiling, our mounting kit for handrails rails has to be used as well as maybe other individual measures for an appropriate fixation.

Art.no.	Description	meas. A	meas. B
078964	Guard rail EN 81-20 1.10m, foldable 528	528mm	760mm
078965	Guard rail EN 81-20 1.10m, foldable 578	578mm	710mm

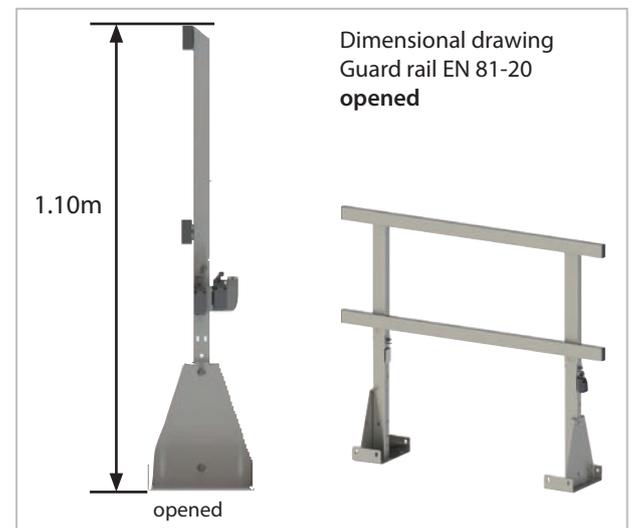
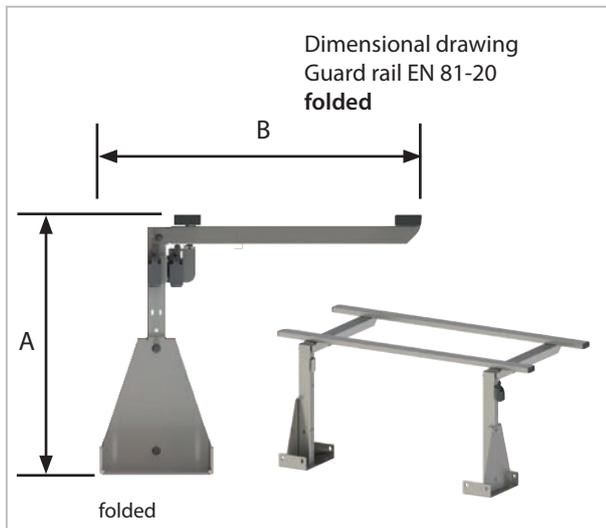
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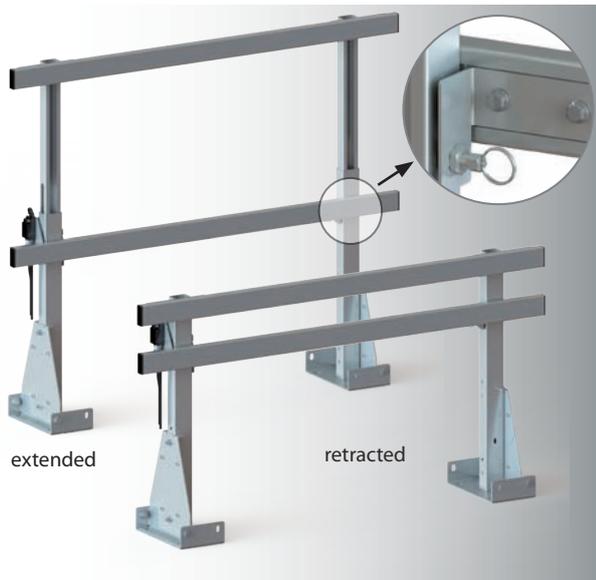
Mounting example: guard rail folded



Mounting example: guard rail opened



# W+W Guard rail EN 81-20



To unlock the guard rail actuate the snap-action mechanism. Please see the detail above.

# TELESCOPIC

The telescopic guard rail is available in two sizes. The guard rail EN 81-20 up to a width of 1.30m is available with telescopic posts with a height of 50-70cm or 70-110cm.

In the extended position the locking device engages automatically. For retraction unlock the guard rail manually. Both end positions are monitored by a contact.

### Scope of delivery TELESCOPIC Guard rail

- 2 pcs. telescopic posts, pre-mounted
- 1 pc. handrail 1.30m
- 1 pc. cross bar 1.30m
- 1 set monitoring switches (1NC 1NO) incl. 5m supply line
- 1 set fastening screws consisting of:
  - locking tooth-screws and nuts M12
- 1 pc. sign „falling / crushing“

Depending on the structure of the ceiling, our mounting kit for handrails rails has to be used as well as maybe other individual measures for an appropriate fixation.

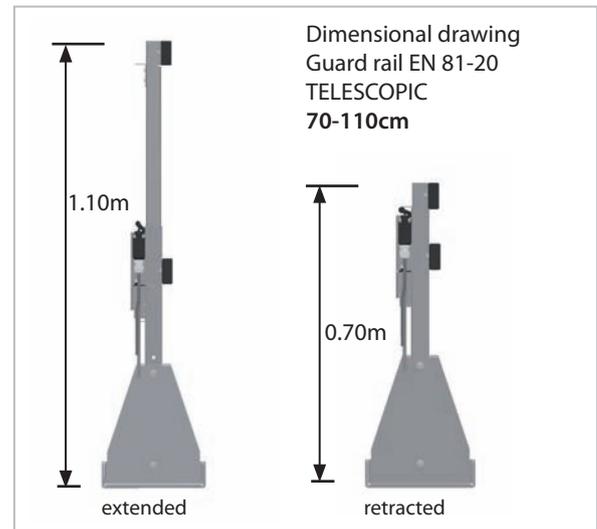
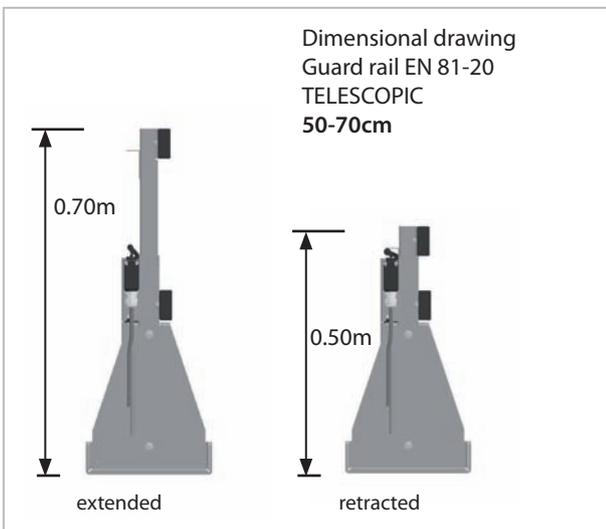
Art.no.	Description
078970	Guard rail EN 81-20, telescopic 50-70cm
078971	Guard rail EN 81-20, telescopic 70-110cm



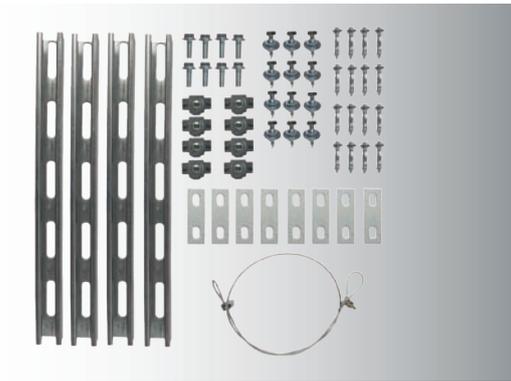
Mounting example: guard rail retracted



Mounting example: guard rail extended



# W+W Guard rail EN 81-20

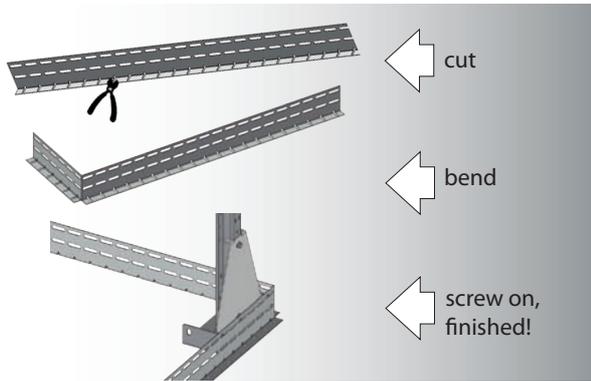


Example: Scope of delivery guard rail GP



### Advice

According to EN 81-20 5.4.7.2 the car roof has to be equipped with a baseboard at least 0.10m high at the outer edge of the roof, or between the outer edge of the roof and the guard rail, if there is one.



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# Mounting kit

### Scope of delivery of mounting kit (GP)

- 4 pcs. mounting rails 50cm
- 1 pcs. tensioning rope 1m
- 1 set mounting material: guard rail / mounting rails
- 1 set mounting material: mounting rails / ceiling

Art.no.	Description
078966	Guard rail EN 81-20 mounting kit GP
078968	Guard rail EN 81-20 mounting kit VP

Mounting kit VP is only suitable for [art.no. 078962](#) and [078963](#)

Depending on the structure of the ceiling, it could be that other individual measures need to be taken to attach the mounting rails safely on the roof for an appropriate fixation. The professional attachment is incumbent on the user in all cases.

## Basebord and floor safety device for car roofs acc. to EN 81-20 5.4.7.2

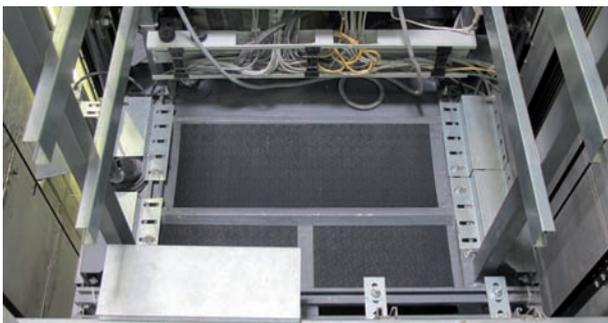
The basebord/ floor safety device can be universally screwed to the guard rail or to the car roof with the enclosed tapping screws. Consisting of:  
 Angle sheet 100mm x 30mm, 1300mm long, with slots for the universal mounting on car roofs or on guard rail stakes, including a screw fastening set.

Art.no.	Description
078967	Baseboard 130

## Anti-slip mats for car roofs according to EN 81-20 5.4.7.1



Car roof without anti-slip mats



Car roof with anti-slip mats

According to EN 81-20 5.4.7.1, the surface on the car roof on which a person works or moves between working areas must be slip-resistant. The anti-slip mats have a thickness of 1.8mm. They can easily be cut to size on site by means of scissors or a cutter knife. The back is self-adhesive. This way, within a few minutes a cabin roof can be made slip-resistant. Three different mat sizes are available. According to EN 81-20 5.2.5.7.3 there must be a single continuous surface on the car roof on which one person can stand. This surface must have a free area of at least 0.12m<sup>2</sup> and a minimum of 0.25m on the narrowest side. This safe standing area can be marked with the green anti-slip mat.  
 Material:  
 NBR-based solid rubber (acrylonitrile butadiene rubber)  
 Double-sided adhesive tape: Tesa 4970

No.art.	Description
077050	Anti-slip mat 172 x 265mm, black
077051	Anti-slip mat 265 x 345mm, black
077052	Anti-slip mat 345 x 530mm, black
077053	Anti-slip mat 480 x 250mm, green