

4100



mounting

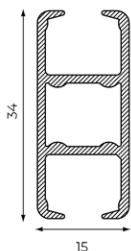
ceiling & wall

*) bending

Minimum radius 15 cm. Larger radius (20, 25, 30 cm) strongly recommended for smoother curtain movement in bends.

profile

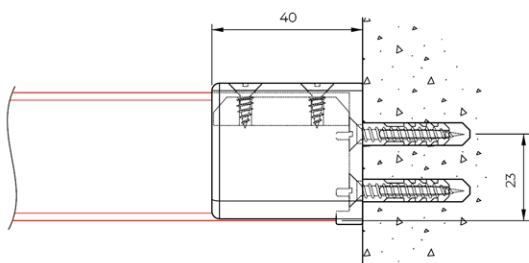
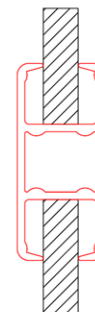
4100 Privacy rails
405 gr/m



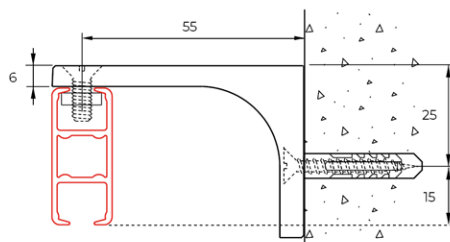
bending

radius cm
R 15* (1015)
R 20 (1015)
R 30 (1015)
R >80 (1018)

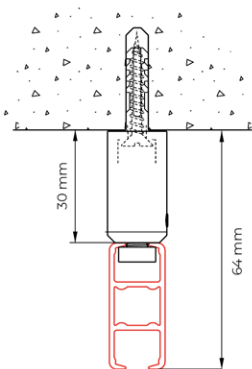
filler position



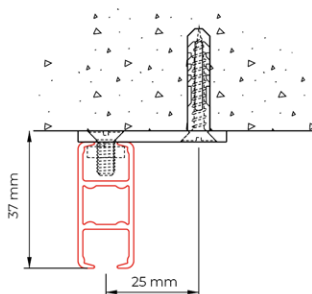
wall mounting with wall bracket 4149



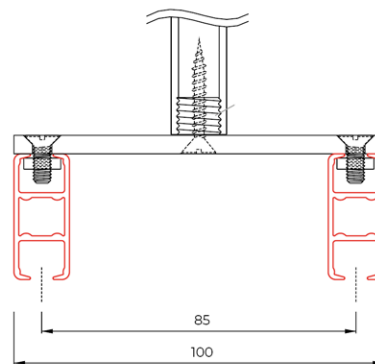
wall mounting with bracket 4140



ceiling mounting with suspension hanger 4254



ceiling mounting with ceiling bracket 4135



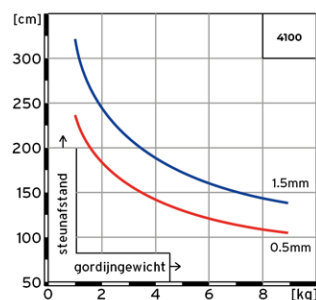
mounting with double bracket 4116-10 to suspension hanger 4055

IEC 60364

The international norm IEC 60364 stands for isolated rail placement. For more information, please contact Qurails in Ede.

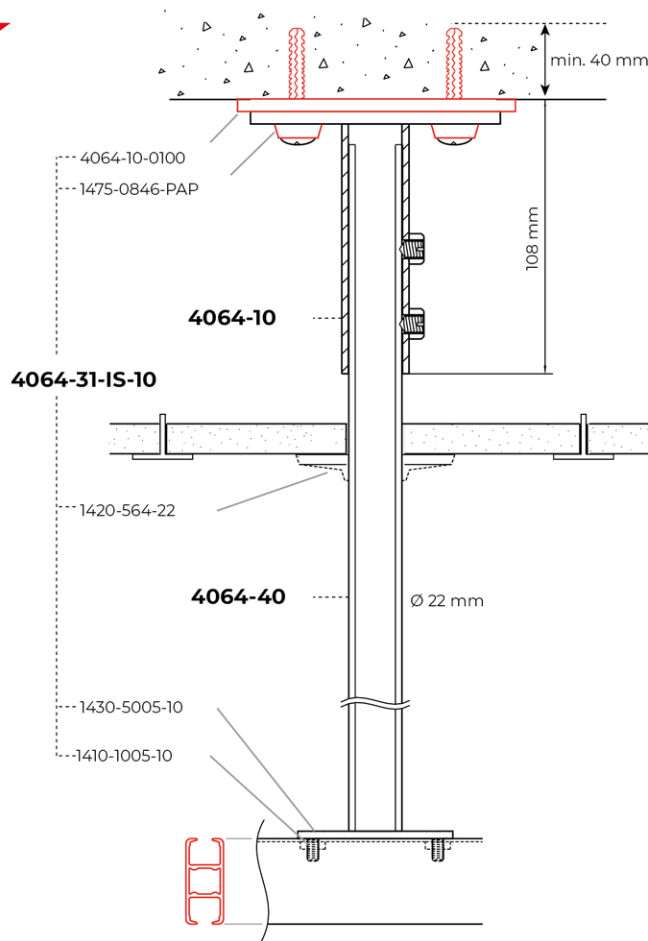
Ceiling mounting with suspension hanger 4055 (because of synthetic draadvoet 4156), hanger tube 4064 (because of stability), wall mounting with synthetic wall bracket 4140 and wall bracket 4149.

G-Norm

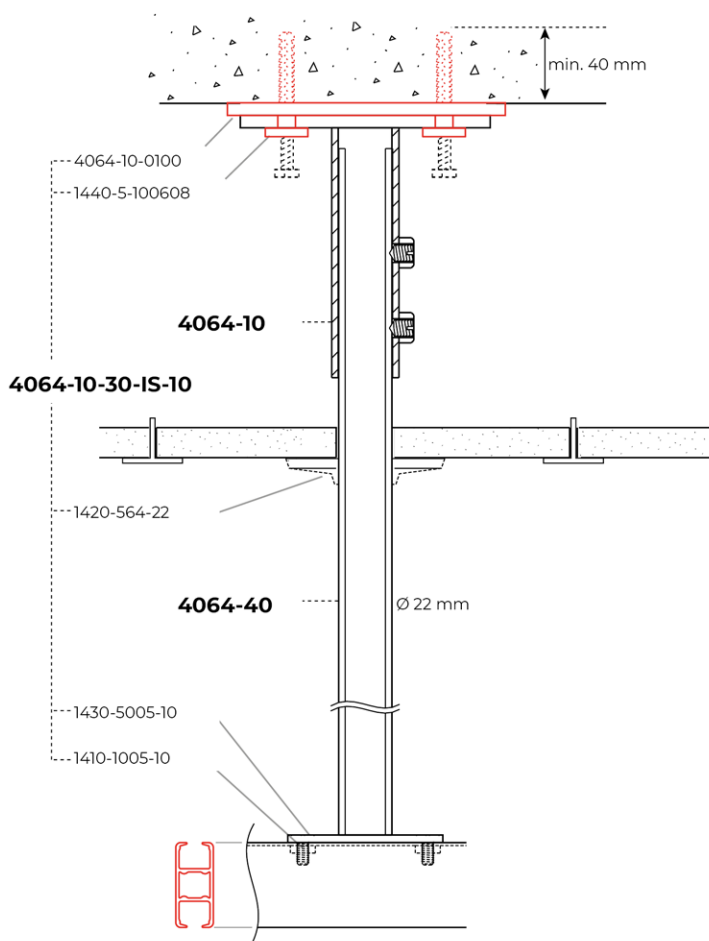


Strut hangers

- ceiling mounting of 4100 with base plate 4064-10, mounting set 4064-31-IS-10 (for isolated placement according to local legislation) and hanger tube 4064-40 (to length)
- incl. screw and isolation plug



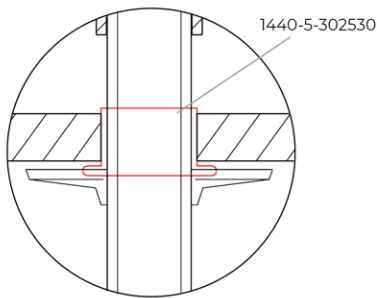
max. load capacity hanger tube: 60 kg, (perpendicular to ceiling and depending on quality of ceiling mounting).



- ceiling mounting of 4100 and 5100 with base plate 4064-10, mounting set 4064-30-IS-10 (for isolated placement according to local legislation) and hanger tube 4064-40 (to length)
- excl. screw and plug (ceiling side)

Strut hangers

application of the extender 4064-20 for extension of the hanger tube

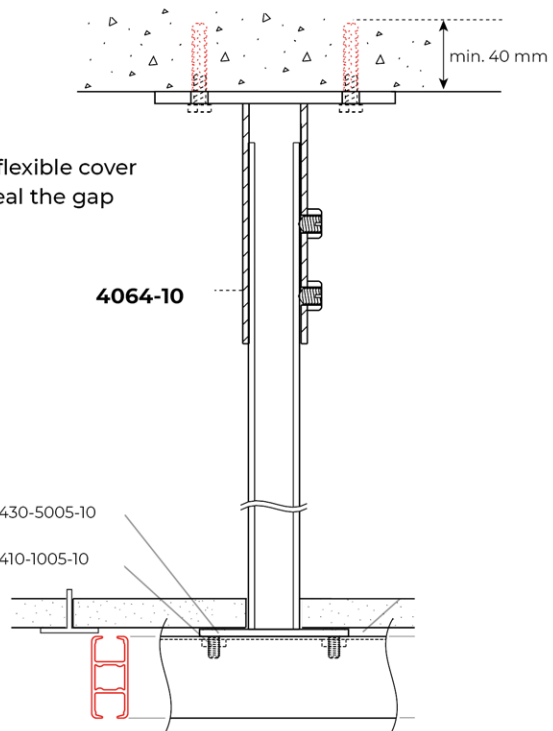
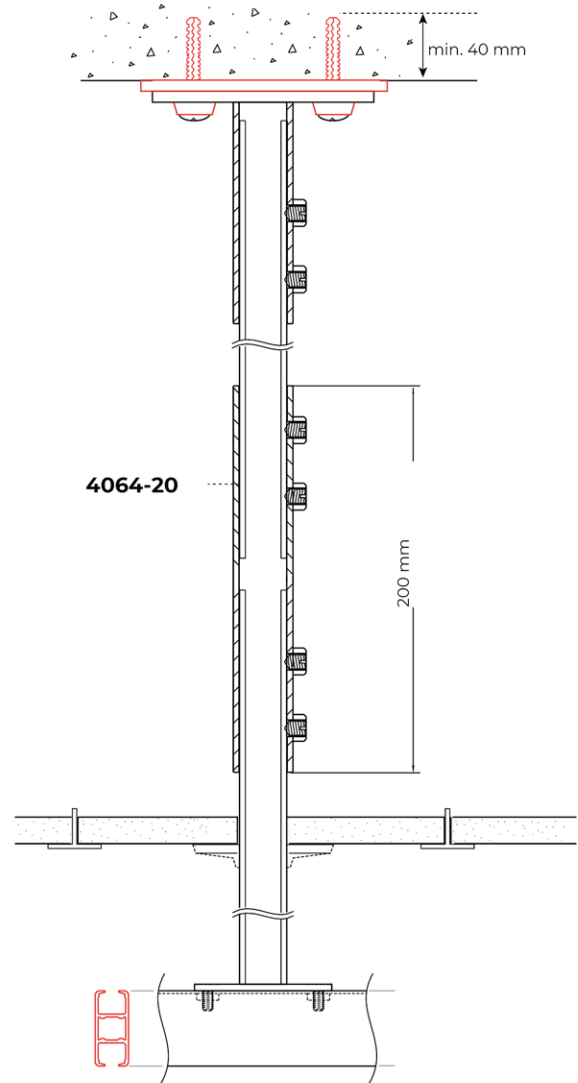


Application of an extra-isolating synthetic can for isolation on (metal) cooling climate ceilings.

Example of non-isolated mounting with set 4064-30-10 and placement of rail directly under a suspended ceiling.

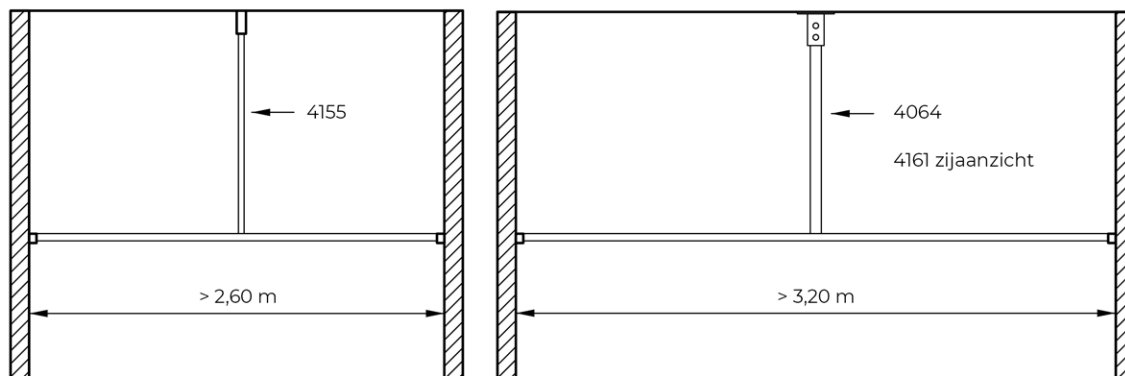
4064-30 1430-5005-10
 1410-1005-10

optional flexible cover strip to seal the gap

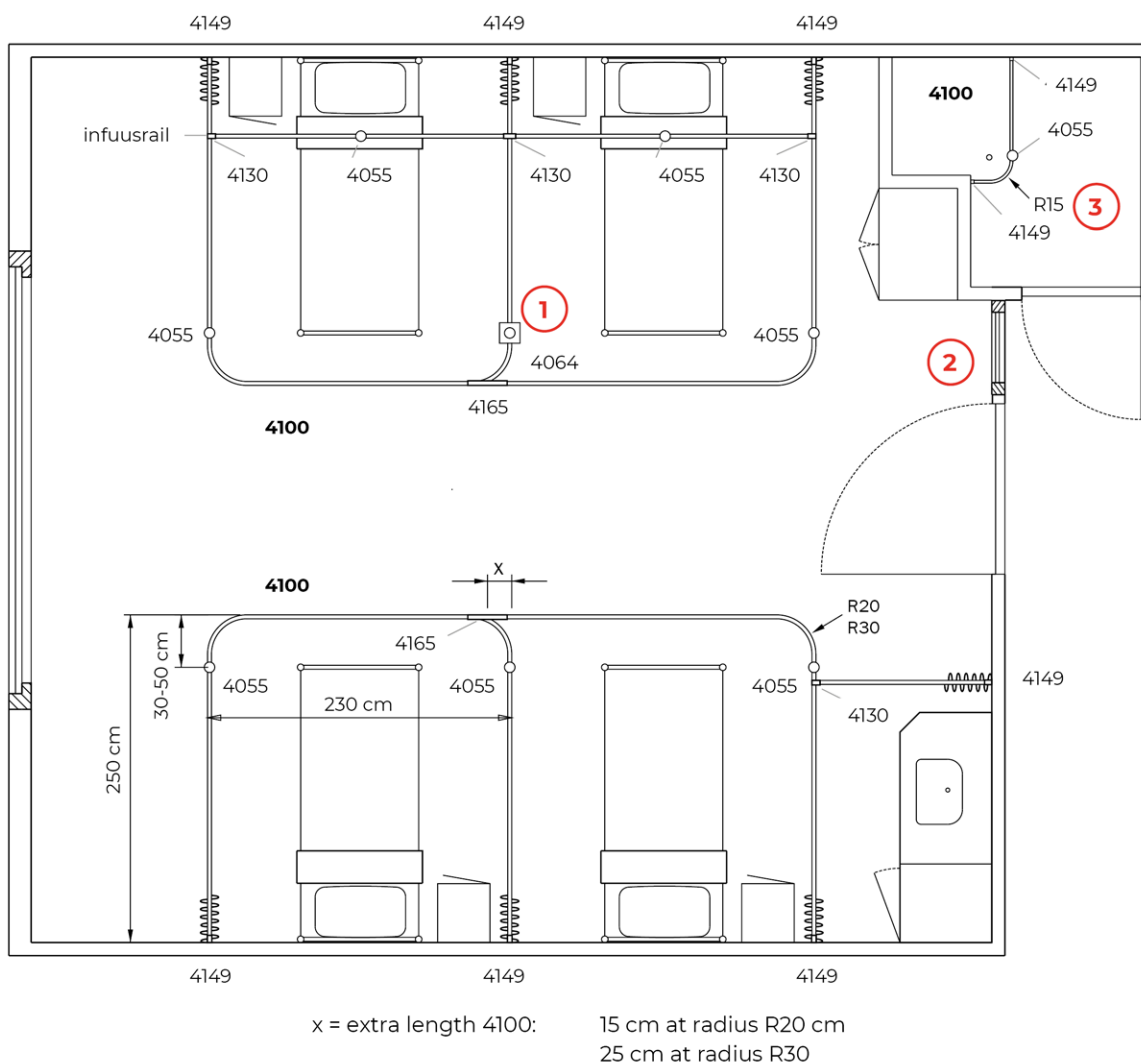


Application examples

This drawing illustrates under what conditions a hanger tube 4064 or V-hanger 4161 are applied, and under what conditions a suspension hanger suffices. Applicable to the 4100 and the 5100, important for sideward stability.



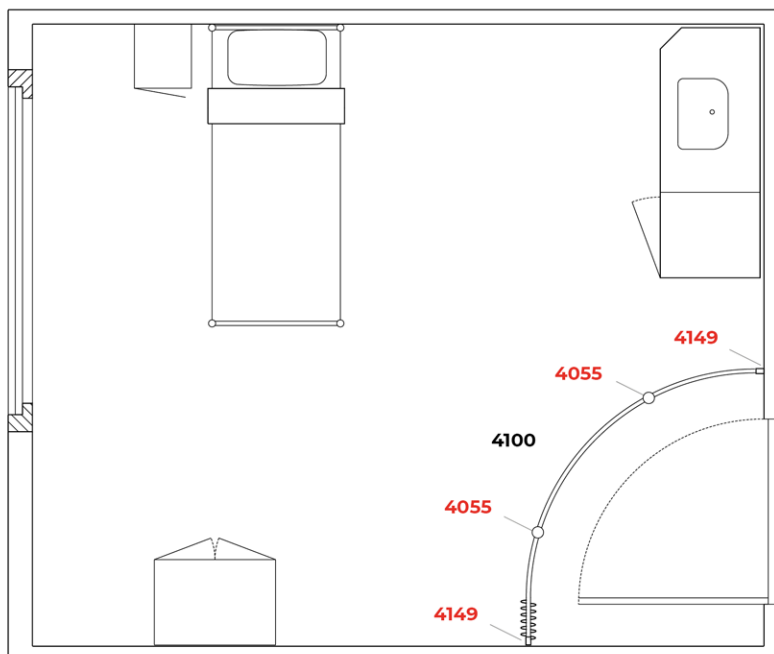
Example of a room with 4 beds and the 4100 system.



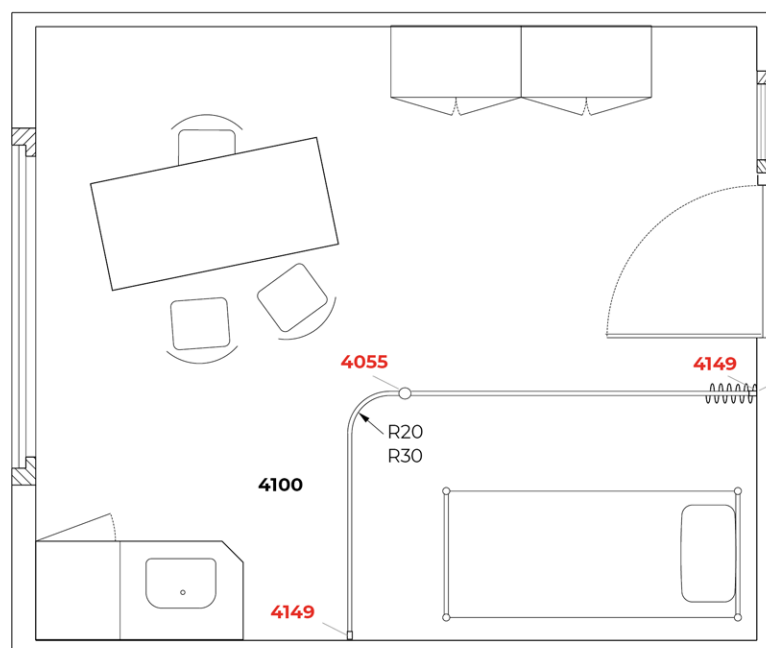
At (1), a hanger tube has been placed for stability, because at (2) no supporting rail can be connected to the wall. When applied as a shower rail (3), a smaller radius can be used for curves (compared to bed curves).



Application examples

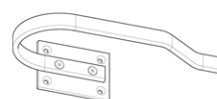


In these types of rooms, privacy can be guaranteed beautifully by placing a single rail with large radius at the door.

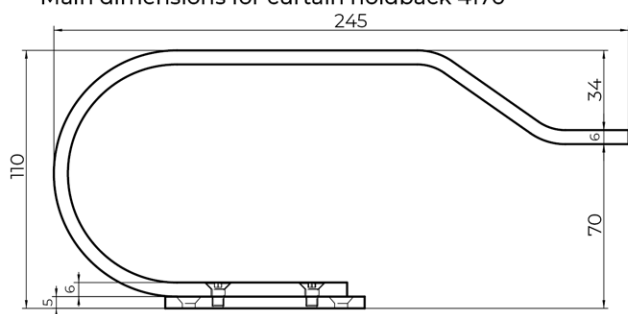


Example of an examination room with a 4100 system.
Placement of L-shaped cubicle rail around the bed, with extra space for medical personnel and placement of medical equipment.

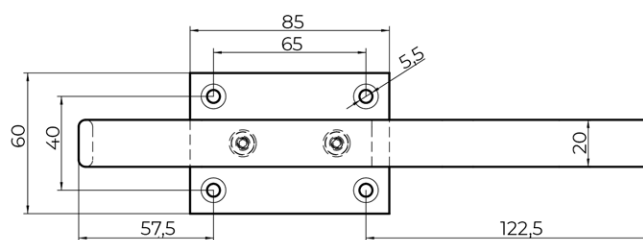
Example of possible placement of curtain holdback 4170



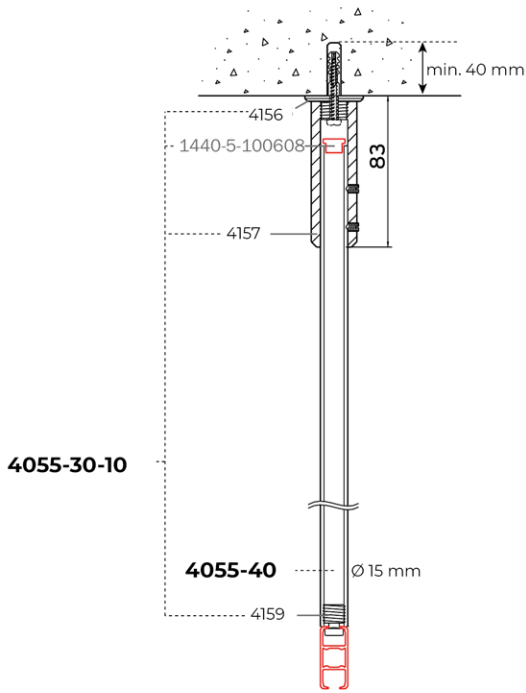
Main dimensions for curtain holdback 4170



side view

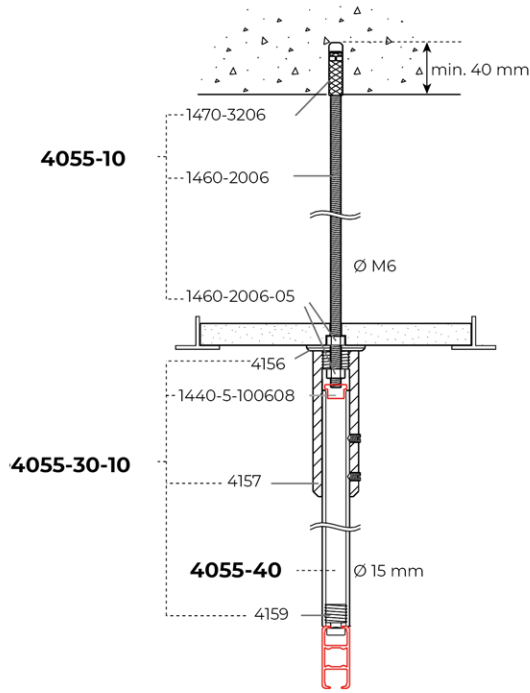


top view



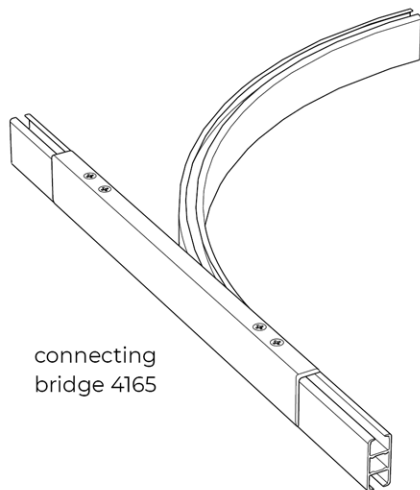
- ceiling mounting of 4100 to suspension hanger with mounting set 4055-30-10, isolated according to local legislation.
- excl. screw and plug

max. load capacity of suspension hanger: 30 kg (perpendicular to ceiling and depending on quality of ceiling mounting).

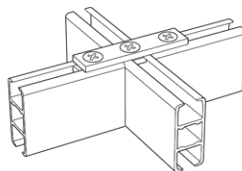


- ceiling mounting of 4100 to suspension hanger with mounting set 4055-30-10, isolated according to local legislation.
- suspension hanger fixed to threaded rod set 4055-10

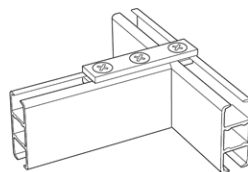
Application examples



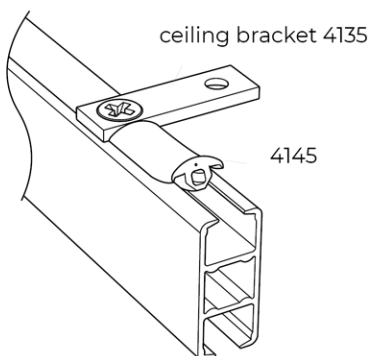
connecting bridge 4165



connection bracket white 4130



connection bracket white 4130 as perpendicular connector



ceiling bracket 4135

4145

The cover strip prevents accumulation of dust in the opening on top of the rail and thus simplifies maintenance. The self-locking strip is flexible and can also be placed in curves.

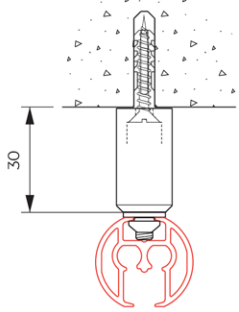
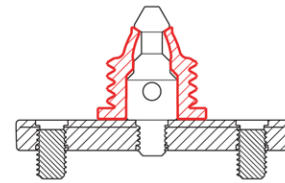
Left: ceiling mounting of rail 4100 with ceiling bracket 4135 and flexible cover strip 4145 to seal the gap on top.

mounting

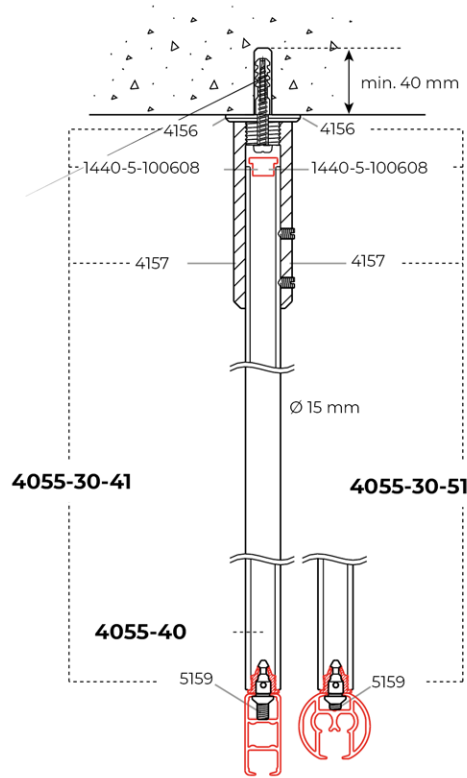
for use with profiles 4100 and 5100

profile

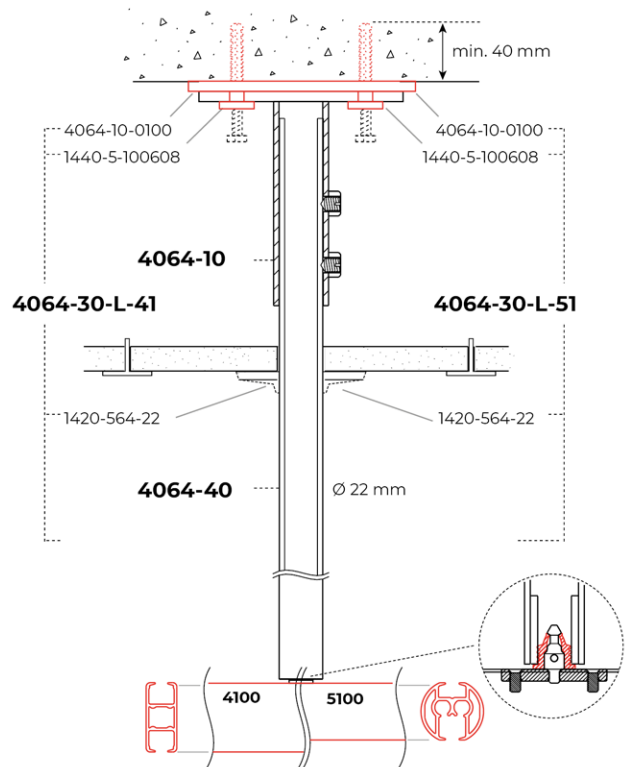
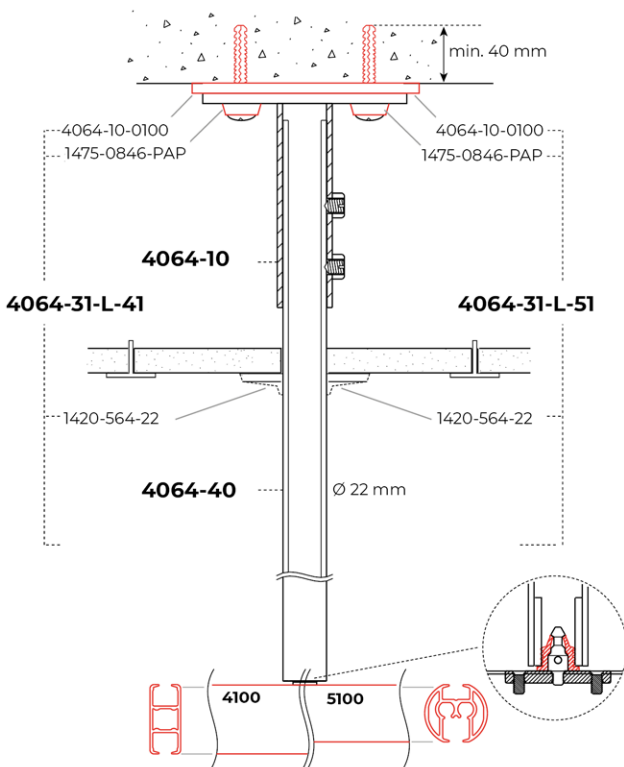
LRS



ceiling mounting of the 5100 with 5154-LRS

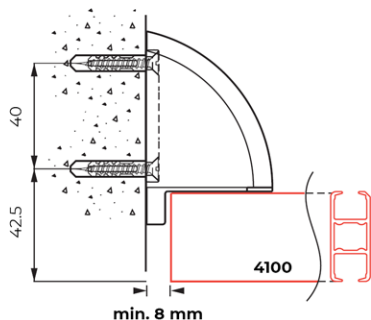


ceiling mounting of the 4100 with suspension hanger 4055, with mounting set 4055-30W-LRS

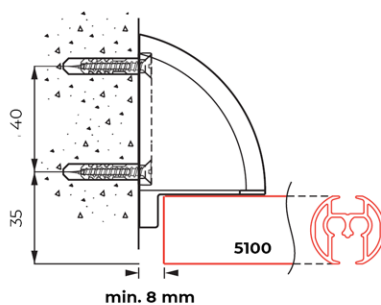


- ceiling mounting of 4100 or 5100 with base plate 4064-10, mounting set 4064-31-L-41 or 4064-31-L-51 for isolated placement according to IEC 60364 norm and hanger tube 4064-40 to length
- incl. screws and isolating plugs

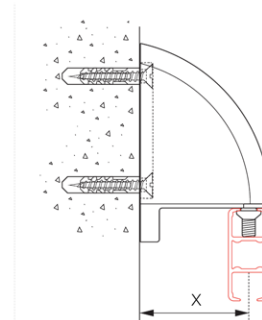
- ceiling mounting of 4100 or 5100 with base plate 4064-10, mounting set 4064-31-L-41 or 4064-31-L-51 for isolated placement according to IEC 60364 norm and hanger tube 4064-40 to length
- excl. screws and plugs for ceiling side, but incl. plastic bushes.



mounting the 4100 with 4149-LRS as wall bracket



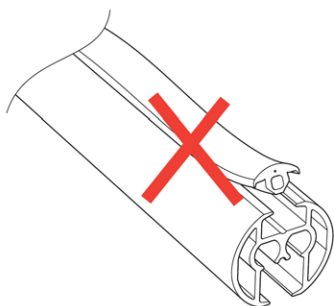
mounting the 5100 with 4149-LRS as wall bracket



	x [mm]
4100	40
5100	40

distance from wall in case of wall mounting 4100 or 5100 with 4149-LRS or 5149-LRS as wall bracket

Application example



In order to further diminish risks, the cover strip is omitted, or applied in fragments of max. 50 cm.

Scope statement

Fittings

Basic set 4159-LRS (for 4100) or 5159-LRS (for 5100).
Connection bridge 4165 (for 4100) or 5165 (for 5100).

Mounting:

4100: ceiling mounting with suspension hanger 4154-LRS, suspension hanger 4055 with LRS mounting set of hanger tube 4064 with LRS mounting set. Wall mounting (also as wall bracket) with 4149-LRS.

5100: ceiling mounting with suspension hanger 5154-LRS, suspension hanger 4055 with LRS mounting set or hanger tube 4064 with LRS mounting set. Wall mounting (also as wall bracket) with 5149-LRS.

System details:

This system allows the rail to release in a controlled manner when incorporated with privacy rail, shower rail or garment hanging rail.

The Load Release System allows for normal rail use, but will separate at the Load Release Suspension Points when the calibrated control load is reached.

- continuous statical load up to 5 kg possible
- controlled release at peak load of 35 - 45kg

Maintenance and inspection

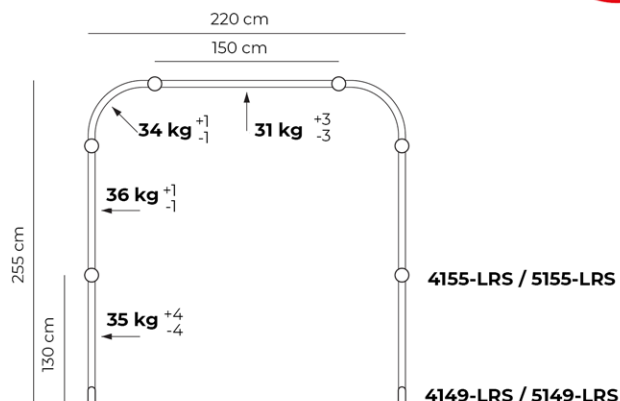
- Due to the ageing process of polymers, the effects of peak loading and or possible mis-use, we advise to check each Load Release Suspension Point for defects every 12 months from date of installation. We further recommend that all 4149-LR-R receiver units are replaced within 4 years of installation.

- It is advised that the LRS receiver unit is replaced immediately after the system has been activated.

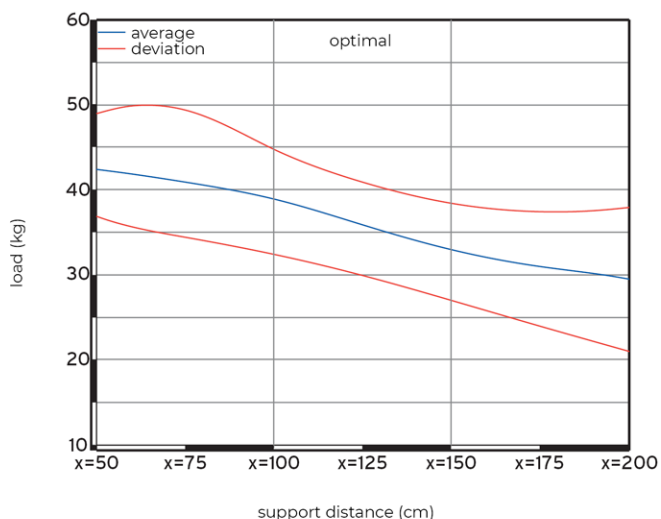
Mounting points:

Recommendation for mounting the 4100 with suspension hangers and wall brackets of the LRS-system. In the diagram below, you will find the uncoupling loads in red, fixed to suspension hangers and wall brackets (in black you will find the recorded deviations).

For further mounting possibilities, we would like to refer you to the technical document that can be requested at Qurails in Ede.



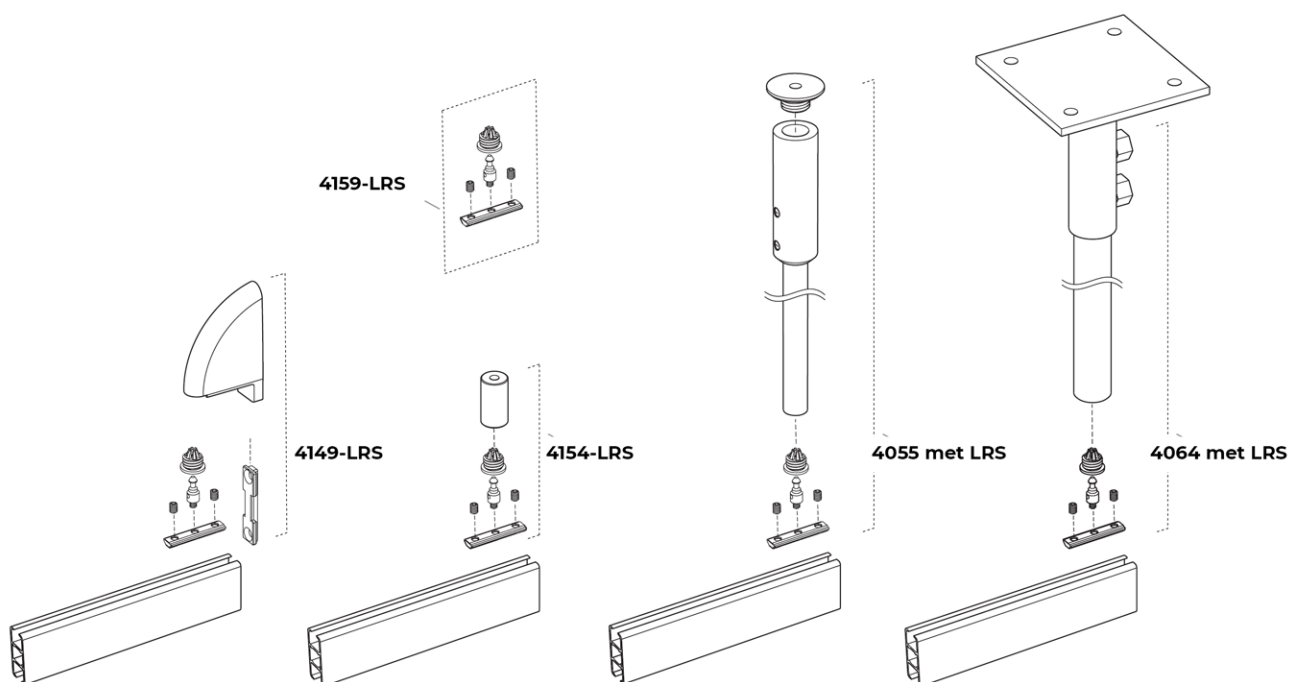
Course of the breakaway load



This graph represents the course of the breakaway load with increasing bracket distance (x).

In the optimal zone, the uncoupling load is close to the correct value. A small deviation from that value may be expected. When bracket distance starts exceeding 150 cm, the uncoupling load becomes less predictable.

Exploded view



Application example

Application example of room layout with 4100:

Below you will find a sample room displaying the various applications of the LRS.

1. window rail

For an uncoupling load of 30-40 kg given a straight window rail: the bracket distance (y) between the last 2 brackets will preferably be between 75-125 cm. The value of the intermediate bracket distances (x) then becomes double that distance.

2. cubicle rail & 3. shower rail

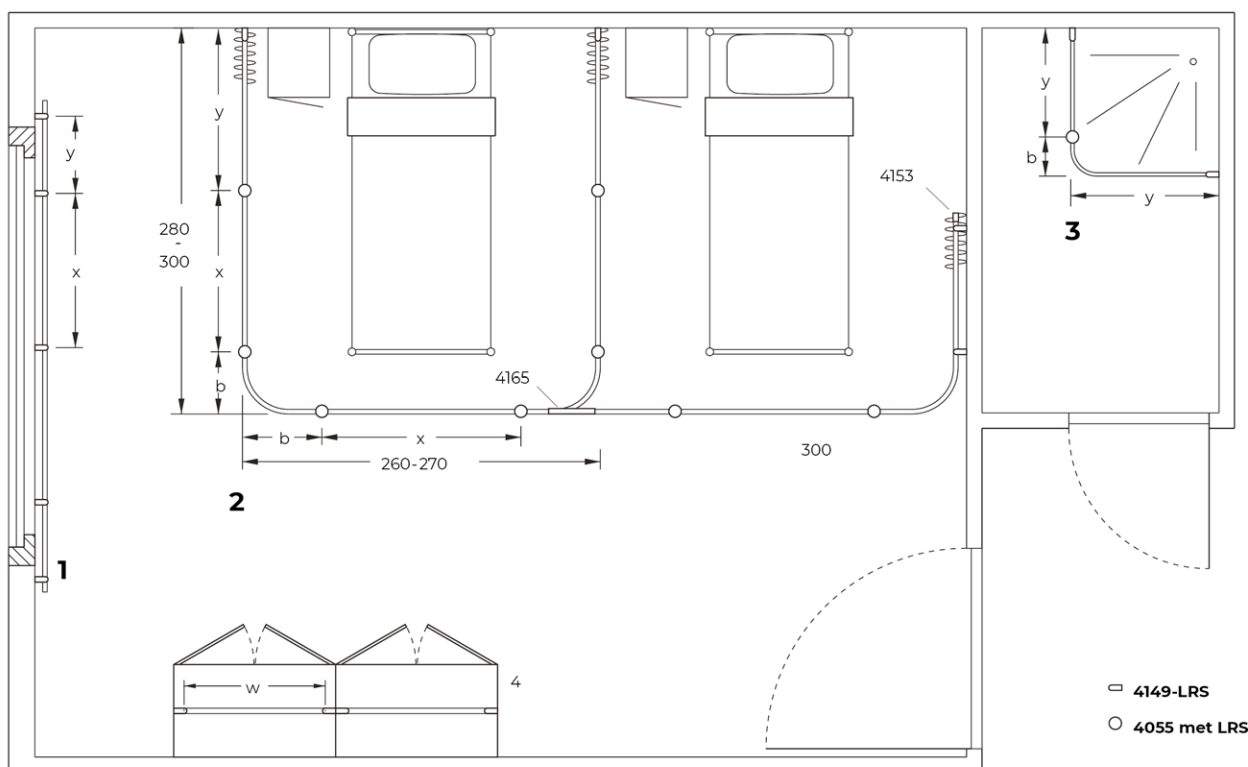
For an uncoupling load of 30 and 40 kg: the bracket distance (x) will have to be between 100 cm and 150 cm and the value (b) between 25 and 75 cm.

The values mentioned are excluding rail weight and curtain weight.

4. closet rail

To placement between two walls, for example in a closet, the following applies:

- The bracket distance (w) is max. 100 cm with rail 5100 and 125 cm with rail 4100.
- For larger spans, using an extra suspension hanger (4055 with LRS or 4154-LRS) is recommended.

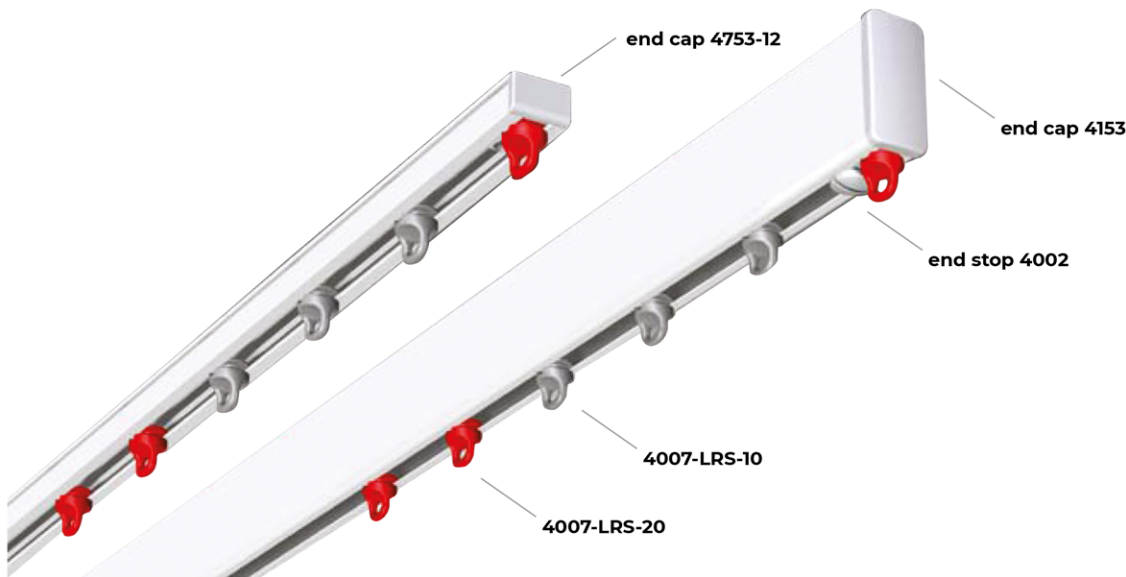


Technical report

The full technical LRS report can be requested via Qurails in Ede.

Liability

This system should be installed and used as specified in the technical documentation (that is available on request). Although the correct functioning of the various components of the LRS-system is always our top priority, the system can't rule out (self-)harm by persons, in whatever form. Neither can we be held responsible for damage caused by aggression, misconduct, negligence etc. or damage caused by failing to observe the instructions in the technical documentation.



LRS-gliders: for Anti-ligature purposes

Qurails LRS-gliders have been developed to allow the controlled release of curtains from specific Goelst curtain tracks (ref: 4100; 4301 & 4701). The gliders are provided with a flexible, yet firm gliding foot and rotate freely in the gliding channel.

In every day use the LRS gliders behave as ordinary gliders. However, when exposed to sudden and/or high loads, the glider design allows it to be pulled out of the track. Use of the LRS gliders also helps prevent the track being pulled from its mountings - (important when considering personal safety).

Loads

The LRS anti-ligature system incorporates both red and grey gliders.

When loading is applied gradually, individual red gliders can resist up to 12 kg* and individual grey gliders up to 8 kg* of weight. With sudden loading other values apply to both red and grey LRS gliders.

The red glider is released from the track with 1 kg falling from 5 cm. A weight of 0,5 kg falling from a height of 5 cm causes the grey glider to release.

This difference in response to gradual and sudden loading explains why the glider can function both as a normal glider as well as a quick release LRS glider.

The release of one LRS glider induces a 'zip' effect. If the curtain weight is taken as a whole, separate glider loads cannot simply be added up. There is always one glider that releases first, inducing an accelerated release of the other remaining gliders.

Use

Place two red LRS gliders 4007-LRS-20 at the lead glider positions of each curtain stack. Also place a red LRS glider 4007-LRS-20 in the last glider position and capture it within the end stop-cover (ref: 4753) or between two end stops (ref: 4002). Remaining glider positions are to be filled using grey glider 4007-LRS-10.

Recommendation: It is recommended that a maximum of 10 LRS gliders are used per metre of track.



Example of profile 4301 with end cap 4353 with red LR glider 4007-20 acting as end stop and grey LR gliders LR 4007-10.

**) Loads mentioned may vary due to ageing of the material, humidity or varying temperatures and are specific to Qurails products.*

Application

1 - Prevent damage to the curtains:

If the curtain is blocked or being pulled firmly
only wide channel profiles, and

- do not apply standard pilot (overlap) carrier
- neither metal end stop with eye 4001-M or standard end stop 4001.

handdrawn : yes
cord drawn : yes, but only with adapted carrier
electric. operated : yes, bu only with adapted carrier

2 - In emergency situations, the curtains can be pulled from the rail

when blocking an exit

only wide channel profiles, and

- do not apply standard pilot (overlap) carrier
- neither metal end stop with eye 4001-M or standard end stop 4001.

handdrawn : yes
cord drawn : yes, but only with adapted carrier
electric. operated : yes, bu only with adapted carrier

3 - Prevent the curtain-rail from being pulled from its mounting points,

considering the aluminium curtain rail can be abused to cause harm

only wide channel profiles, and

- do not apply standard pilot (overlap) carrier
- neither metal end stop with eye 4001-M or standard end stop 4001.

handdrawn : yes
cord drawn : yes, but only with adapted carrier
electric. operated : yes, bu only with adapted carrier

4 - Reduce risk on suicide by hanging from the curtains,

appliclicable to next profiles considering:

- place extra ceiling supports
- tight fit profile against mounting surface
- do not apply carrier
- neither metal end stop with eye 4001-M or standard end stop 4001.
- 4100 : ceiling mount with 4145 to fill the gap
- 4200 : ceiling mount with 4145 to fill the gap
- 4700-series : using punched rail and screw mounting
- 5100 (hand drawn) : ceiling mount with 4145 to fill the gap

not appliclicable for small channel profiles nor

- 4550 and 4560 because of suspended ceiling-use
- 4800 because of wall mounting
- 5100 when cord drawn
- 5300 because of wall mounting and being cord drawn
- 5600 when cord drawn
- 6200-based electrically operated systems

Components Load Release Gliders

Gliders

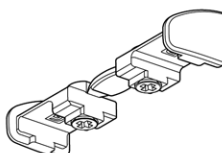


4007-LRS-10
LRS glider grey



4007-LRS-20
LRS glider red

Accessories 4301



4353
end cap set 4301 L + R
for 4301 profile