

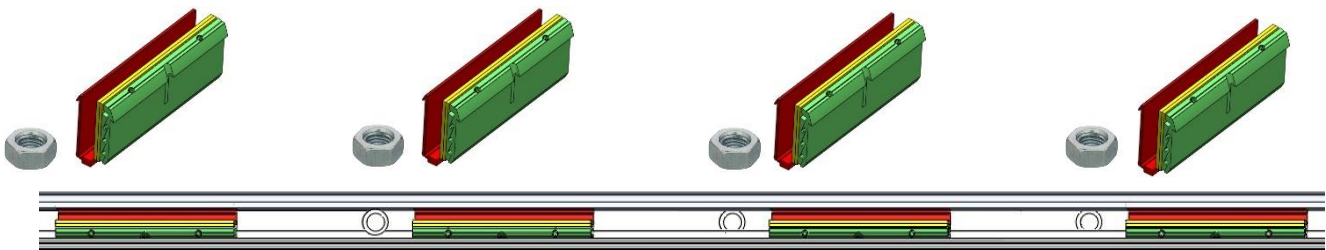
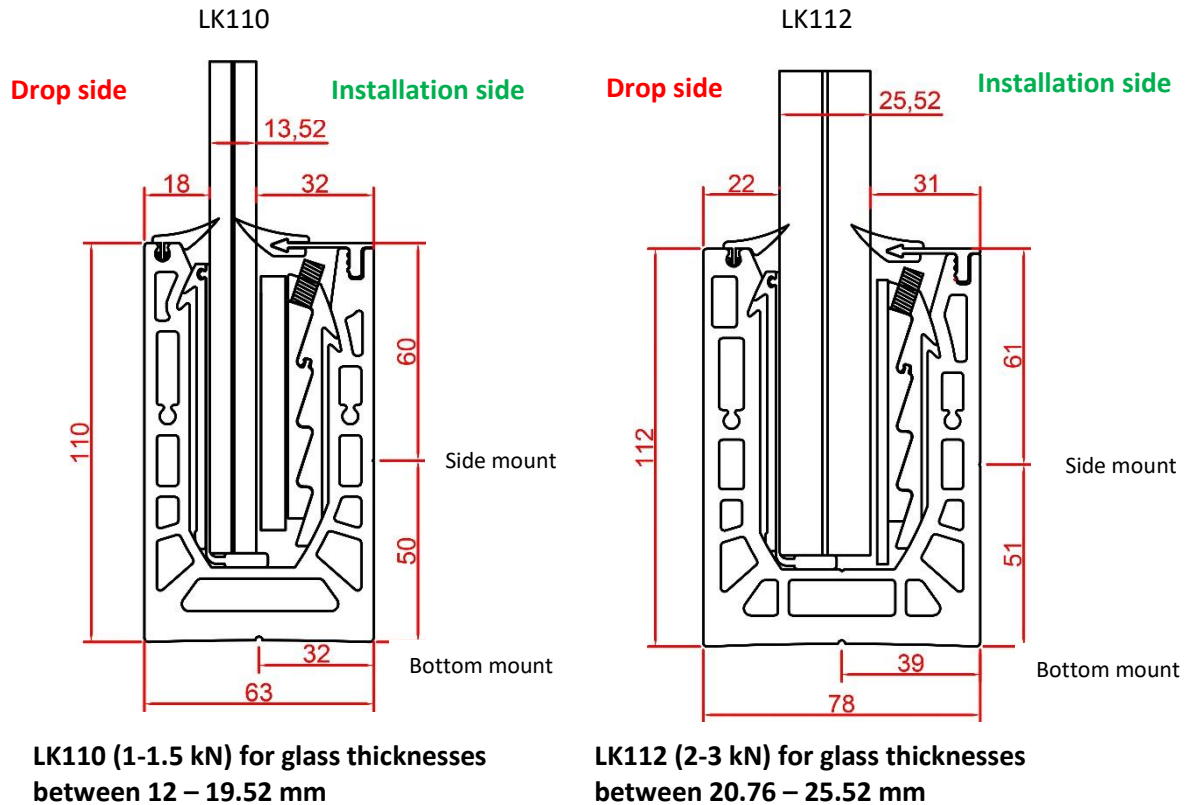


INSTALLATION MANUAL OF ADJUSTABLE BALUSTRADE PROFILES

LK110/112

STEELPRO LTD

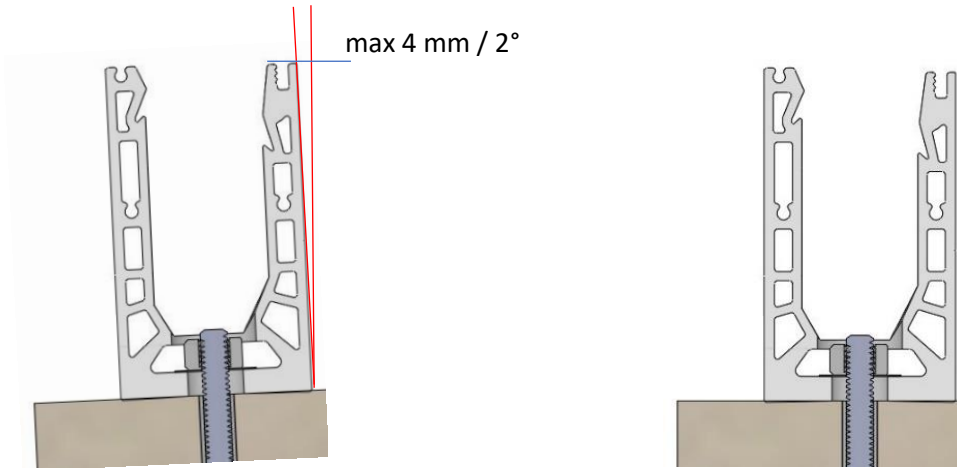
Steelpro LK110/112 “unimount” profiles can be mounted on an uneven surface because the adjustment is performed simultaneously when fixing a glass pane. There is no need of special tools for adjustment. All you need is a cordless drill with 3 mm hex key and a level. It is highly important, that the profile channel is professionally and firmly enough anchored to the attachment surface.



LK110 interval between fixing bolts ca 400mm

LK112 interval between fixing bolts 300mm

There is always one wedge between two fixing bolts in both mount types

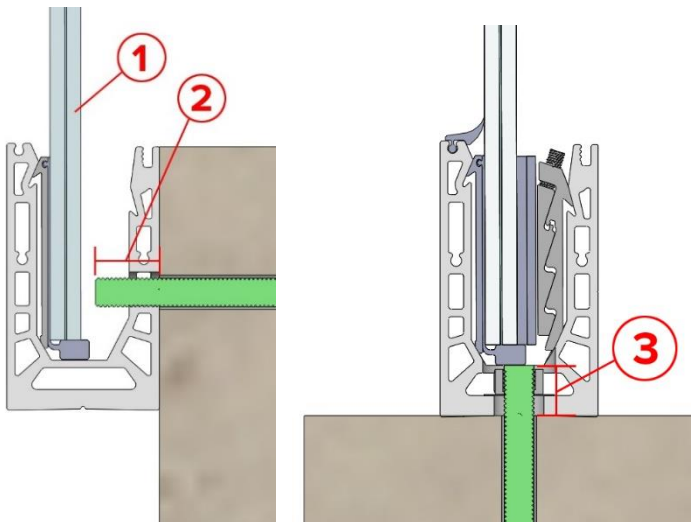


The maximum permitted inclination of a profile resulting from an uneven surface is 4 mm / 2° on top

Fixing distance from the anchor to the edge of the concrete depends on the load class and lies between 60-100 mm

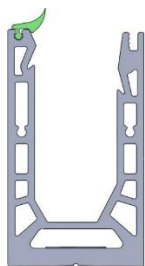


To ensure sturdiness of the anchor, its distance to edge must be in accordance with the load class. In each case responsible structural engineer specifies the distance between the anchor/threaded bar and concrete edge according to the load class.

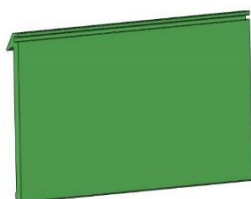
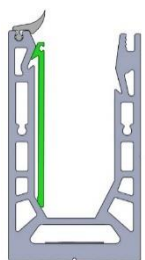


LK110		Side mount	
1) Glass thickness		2) Max threaded rod length	
13.52 mm		27 mm	
17.52 mm		23 mm	
19.52 mm		21 mm	
LK112		Side mount	
1) Glass thickness		2) Max threaded rod length	
21.52 mm		31 mm	
25.52 mm		27 mm	
LK110		Bottom mount	
Glass thickness		3) Max threaded rod length	
Any		20 mm	
LK112		Bottom mount	
Glass thickness		3) Max threaded rod length	
Any		20 mm	

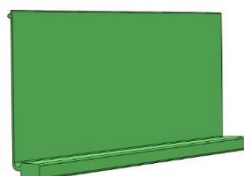
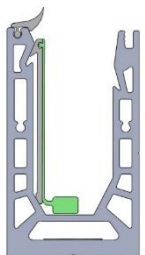
NOTE! We recommend using the ETA approved Steelpro ML 280 resin also for anchoring of LK-profiles. Steelpro ML 280 is suitable for both cracked and uncracked concrete. ETA approval mark VMK-SFZ ETA-15/0858+ETA-16/0808. Styrene free.



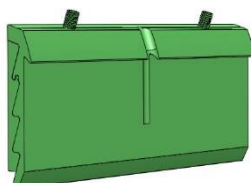
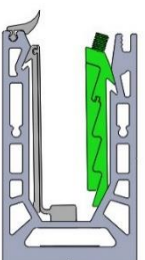
1. Attach the drop side rubber seal into the round-shaped groove on the top of the profile



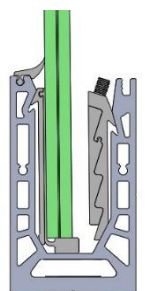
2. Install the swing plate into designed groove inside the profile (at intervals ca 400 mm for LK110 and ca 300 mm for LK112)



3. Attach the swing plate rubber into the groove in the plate. NOTE! This stage can be performed before installing of the swing plate.



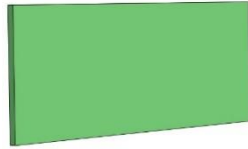
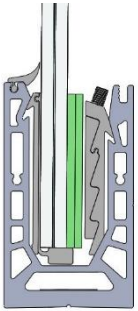
4. Place the adjustable wedge into the groove inside the profile



5. Insert the glass pane onto the rubber of the swing plate



We recommend using
toughened laminated glass only



6. Insert wedge plastics between the glass and the wedge by moving the glass from the top

Thicknesses of wedge plastics

LK110

12.76 mm glass 8 mm (4+4)

13.52 mm glass 7 mm (4+3)

16.76 mm glass 4 mm (2+2)

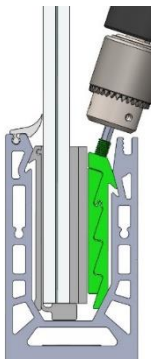
17.52 mm glass 3 mm

19.52 mm glass 1 mm

LK112

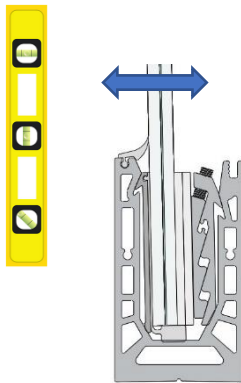
21.52 mm glass 7 mm (4+3)

25.52 mm glass 3 mm



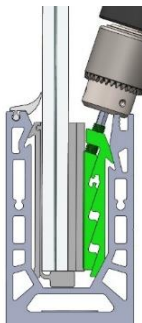
7. Pre-tighten one wedge (in the middle) for glass pane adjustment. The glass pane must be able to be moved by hand and stay fixed in desired position)

Hex key size 3 mm



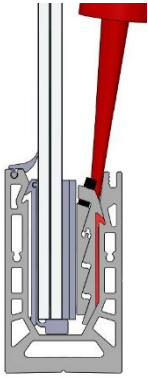
8. Adjust the pane into the right angle by hand. Use the level on the glass top or align with the already adjusted glass.

At this stage also adjust the glass panes lengthwise.

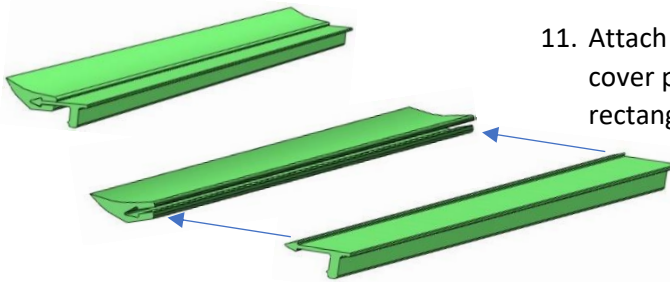
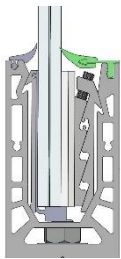
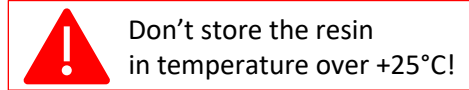


Maximum torque
5 N/m

9. Do the final tightening starting with the pre-tightened wedge and then tighten remaining wedges



10. Inject the Steelpro ML 280 resin into the wedge top hole



11. Attach cover plate rubber seal into the cover plate and insert them into the rectangular groove of the balcony side

Removal of the glass and the adjustment wedge. Glass pane replacement.

1. Remove carefully the cover plate with the rubber seal from the groove
2. Loosen all wedges by opening the hex screws and moving the glass
3. Remove the plastics
4. Remove the glass remains (if broken)
5. Remove the wedges
6. Remove remains of the resin from the wedges and the channel
7. Insert the new glass pane and follow installation steps 6 – 11

If you have any doubts on any stage of installation and/or on any product feature, please, don't hesitate to ask for advice from your professional distributor appointed by Steelpro. More info on our website

www.steelpro.fi