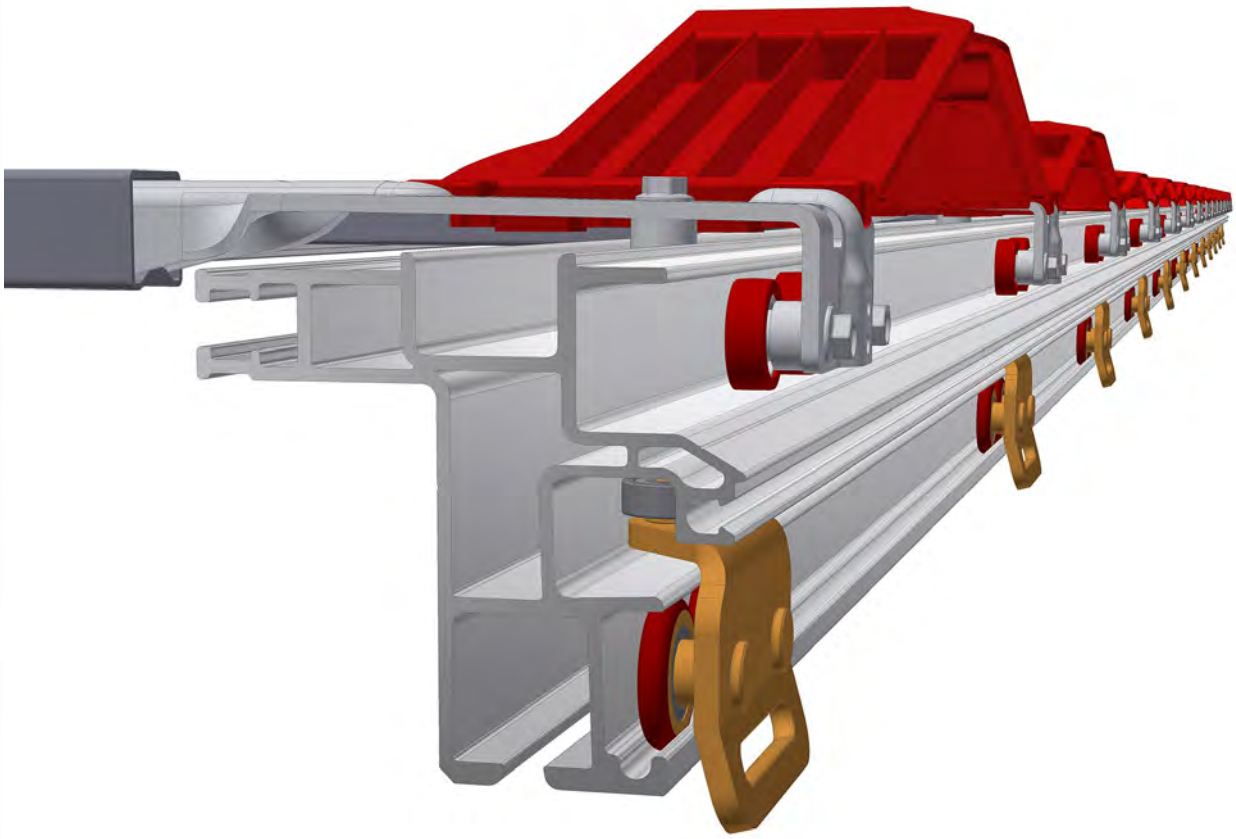
FOLDING CANVAS STRUCTURES

MYCRO TRIKE



versus omega

TRANS-TECHNIK

AKTUALIZACE 1.7. 2020

CONTENTS:

1 **Instructions for use and conditions for operation of a platform car superstructure with fixed roof** and side folding

1.1 Superstructure description

. The platform car superstructure is designed for road traffic vehicles. Its construction and use shall follow the applicable regulations, particularly Act no. 56/2001 Coll. on conditions of operation of vehicles on roads, and Decree no. 341/2014 Coll. of approving of technical capability and technical conditions of operation of vehicles on roads. It can only be operated by persons knowing these regulations and instructed properly about operation of a platform car superstructure.
Platform car superstructures are designed particularly for transport of piece loads, above all piece load, on the platform car loading area. The load shall be laid out on the loading area evenly to prevent overloading of any part of the loading area, and secured so that it cannot be displaced or overturned during its transport. Therefore the superstructure is equipped with anchoring lugs in the aluminium frame of the platform car for fixing of the load. The load is fixed to these anchoring lugs by clamping straps. Location and number of the anchoring lugs is determined by the superstructure manufacturer, based on the applicable regulations

. Weight of the load shall not exceed the permitted loading specified in the vehicle technical certificate. Driving with non-anchored load may cause damage to the superstructure.

The superstructure is equipped with tiltable sidewalls and tiltable rear face to facilitate loading and unloading. The sidewalls are fixed to the corner or central columns by closures. A check of proper closing of the sidewalls and rear face shall always be made before the journey, to prevent any spontaneous opening of the sidewalls during the journey.

JDrive with sidewalls or rear face tilted down is forbidden. In case it is necessary to drive with sidewalls or rear face tilted down, it is possible if these are open and slid out of their hinges.

In case of incorrect use of the structure the supplier of parts for platform car superstructures cannot be responsible for any possible damages caused by non-observance of the applicable regulations.

. Any warranty for this superstructure becomes void in case of incorrect use of the platform car superstructure

1.2 **Maintenance of the platform car superstructure**

The platform car superstructure does not require any special maintenance. It is important to keep the superstructure clean, wash it by pressure water, particularly during winter season, when chemicals are used on roads and that may impair functionality of the sidewall hinges and locks and cause corrosion of the galvanised components if these are left dirty for a long time

Attention!
Hinges of the sidewalls and their closures shall be treated regularly using preservative lubricants.
Closures of the central columns shall be treated regularly using preservative lubricants.

Due to the fact that all bolted joints of the aluminium platform (clamps PALCOM) are secured by an adhesive against any spontaneous release of the bolts, it is forbidden to retighten these joints during operation. This might cause release of these joints leading to damage of the supporting parts of the superstructure.

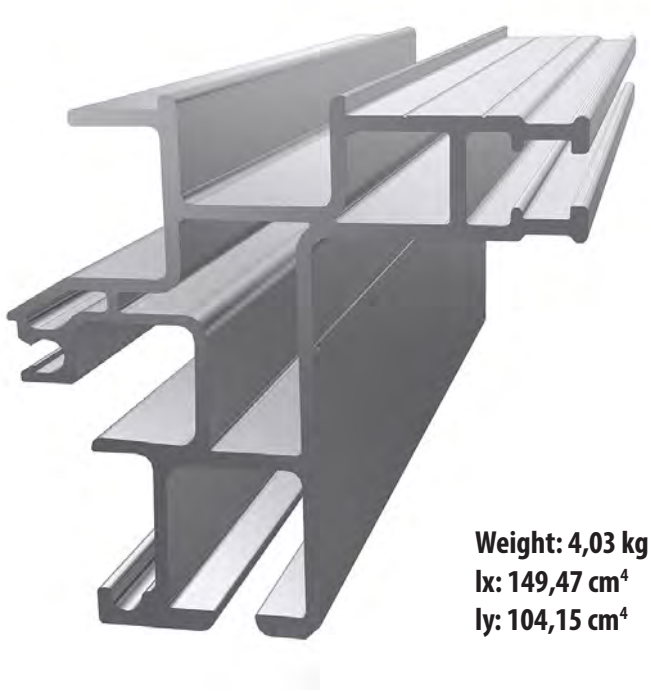
In case of a fault on the supporting parts contact please an authorised service centre or a company that assembled the platform car superstructure. The particular company can repair the superstructure professionally using properly specified spare parts.

Maintenance of the platform car superstructure

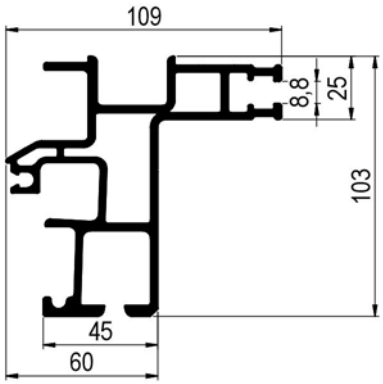
The platform car superstructure consists of a set of components prepared always for the given dimension and design, according to the customer‘s requirement. The aluminium platform consists of auxiliary profiles, crosspieces and frame profiles connected together by special clamps. The frame profiles are connected in corners and possibly also under central column using special corner and central elements. Such assembled platform forms the platform car structure. This structure consists of corner and central columns that are also supporting components of the roof structure. Sidewalls of aluminium profiles thick 25mm with closures are fixed to the frame using hinges that enable tilting of the sidewalls and face down and their detachment. The sidewalls and rear face are manufactured mostly of one-piece profiles 400mm high. Upon customer‘s requirements, we can also deliver sidewalls with different heights, e.g. 500 or 600mm. The front face can be delivered with different heights, according to the customer‘s requirement. Al profiles 100x25mm as supports of the canvas are used on sides of the superstructure, between the columns. The number of profiles can be chosen by the customer.

The roof structure consists of a frame assembled of aluminium profiles 60x30x2mm, fixed to aluminium corner columns using corner assembly sets. Steel brackets with rubber inserts are riveted to this frame; aluminium tubes Ø 35 mm for supporting of the roof canvas are located in these brackets. The canvas is not included in delivery of the company TRANS-TECHNIK

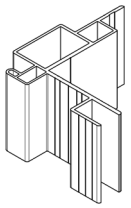
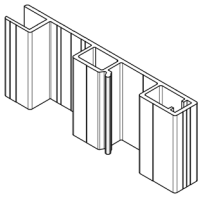
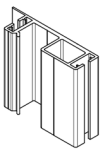
1. GUIDE PROFILE MYCRO Trike



Weight: 4,03 kg / m
Ix: 149,47 cm^4
Iy: 104,15 cm^4

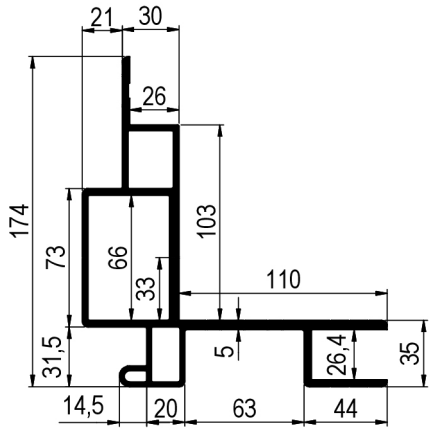
TT-number	Drawing	Produced lengths of the guide profile
0538 011.045 **0538 011.053** **0538 011.060** **0538 011.066** **0538 011.073** **0538 011.079** **0538 011.086**		L = 4,5 m L = 5,3 m L = 6,0 m L = 6,6 m L = 7,3 m L = 7,9 m L = 8,6 m

2. ALUMINIUM CORNER COLUMNS - OVERVIEW

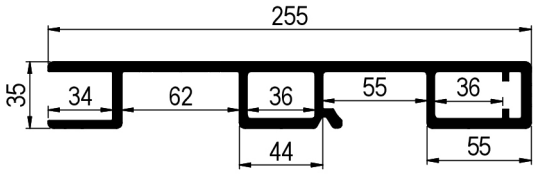
Name	TT-number Al přír./elox-	Drawing	Length mm	Weight
ALUMINIUM CORNER PILLARS BIG	**0354 121.000** **0354 121.100**		3300	21,1 kg / ks
	0354 100.000 **0354 100.100**		3300	22,7 kg / ks
ALUMINIUM CORNER PILLARS MIDI	**0354 420.000** **0354 420.100**		3200	13,86 kg / ks
	0354 400.000 **0354 400.100**		3200	15,07 kg / ks
ALUMINIUM CORNER PILLARS LIGHT	**0354 220.000** **0354 220.100**		5500	2,58 kg / m
	0354 200.000 **0354 200.100**		5500	3,16 kg / m

3. 1. ALUMINIUM CORNER PILLARS BIG

3. 1. 1. Drawings, layout of the columns, assembly sets for the frame

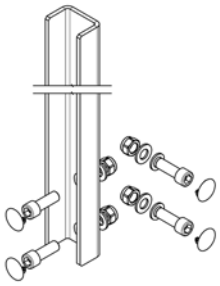


0354 121.000
0354 121.100



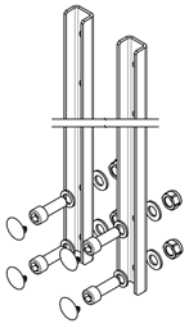
0354 100.000
0354 100.100

LAYOUT OF THE COLUMNS



0354 120.200

The set includes:
1 pc - stiffener U65 - 750
4 pcs - bolt M14x40, cyl. head
2 pcs - hex. nut M12
4 pcs - washer A15/28, DIN125
4 pcs - washer 15/24, DIN 433
4 pcs - blind caps 22.0-25

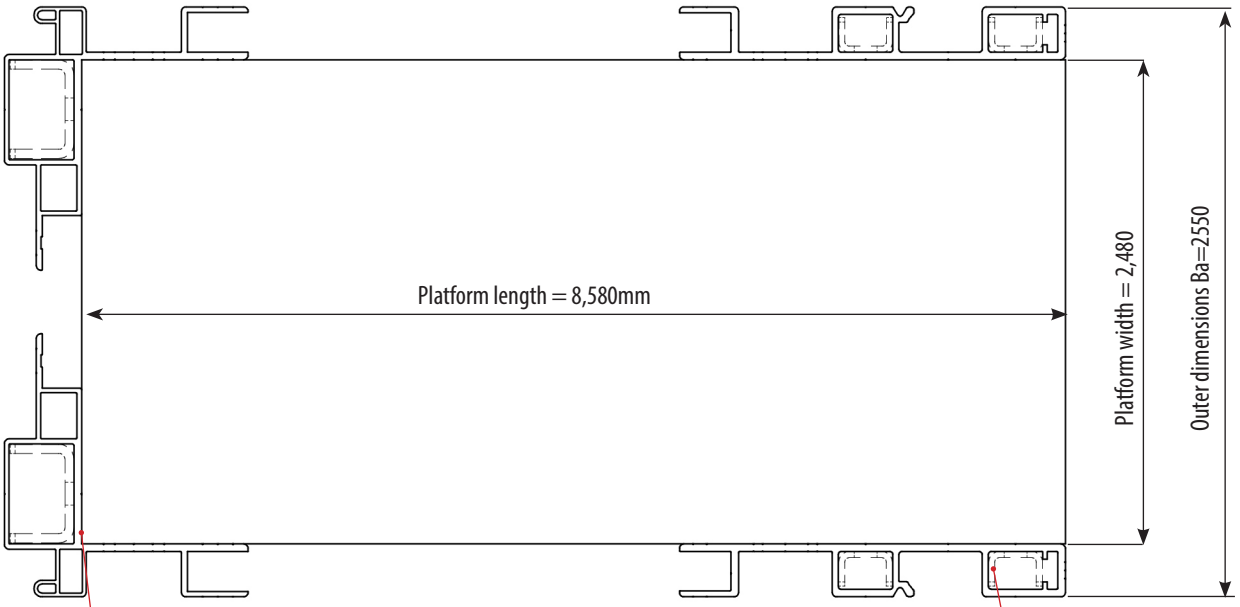


0354 100.200

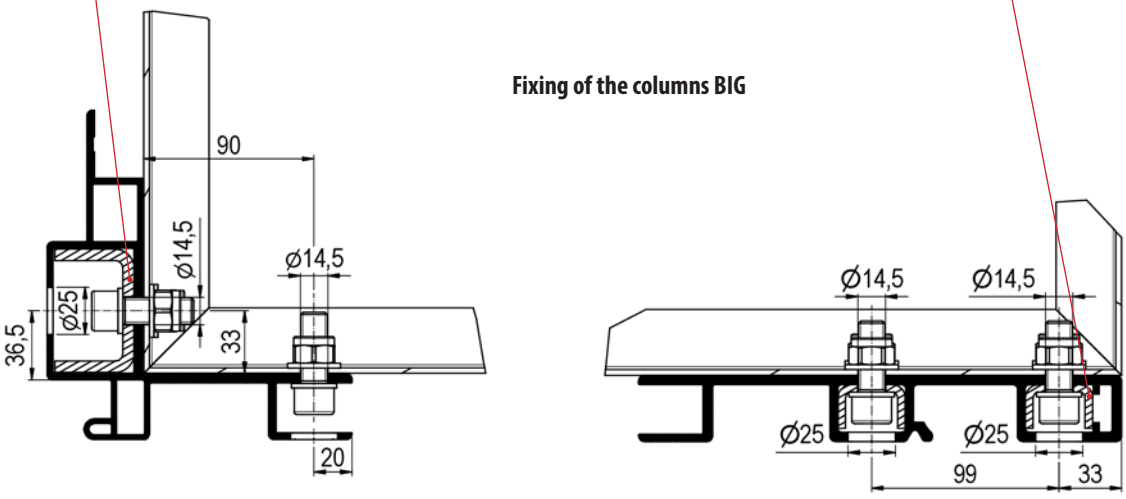
The set includes:
2 pc - stiffener U35 - 750
4 pcs - bolt M14x40, cyl. head
2 pcs - hex. nut M12
4 pcs - washer A15/28, DIN125
4 pcs - washer 15/24, DIN 433
4 pcs - blind caps 22.0-25

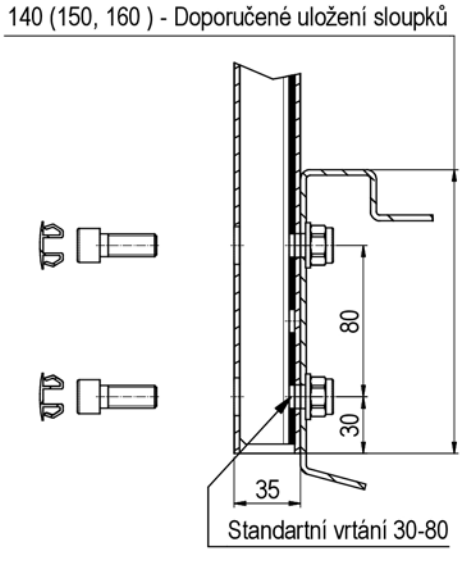
TT-number	Name	Materiál Material	Lenght	Weight kg / pcs
0354 100.000	Aluminium rear pillar 255 x 35 mm		3300	22,7
0354 100.100	Aluminium rear pillar255 x 35 mm		3300	22,7
0354 121.000	Aluminium front pillar161 / 174 x 35 mm		3300	21,1
0354 121.100	Aluminium front pillar161 / 174 x 35 mm		3300	21,1
0354 100.200	Assembly set for the frame - rear pillow	galvanized steel	Spoj. mat. je součástí dodávky	3,5
0354 120.200	Assembly set for the frame - rear pillow	galvanized steel		5,1

3.1.2.Aluminium corner columns BIG - columns assembly scheme



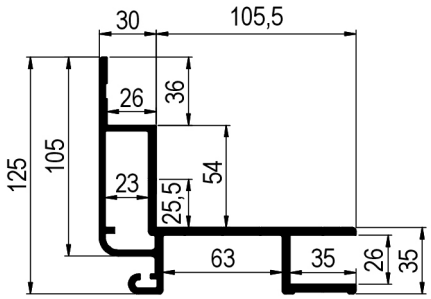
Fixing of the columns BIG



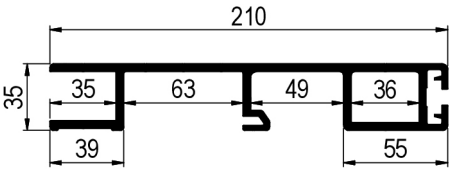


3. 2. ALUMINIUM CORNER PILLARS MIDI

3. 2. 1. Drawings, layout of the columns, assembly sets for the frame

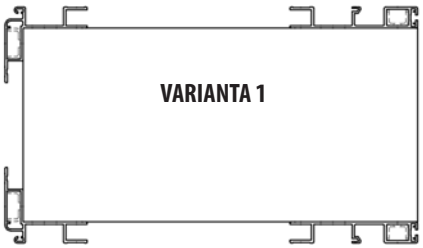


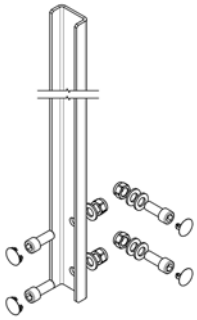
0354 420.000
0354 420.100



0354 400.000
0354 400.100

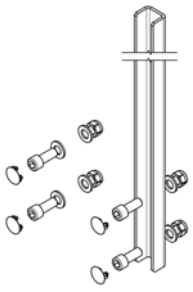
LAYOUT OF THE COLUMNS





0354 420.200

Set includes:
1 pc - stiffener
4 pcs - bolt M12x30, cyl. head
4 pcs - hex. nut M12
4 pcs - washer 13, galvanised, DIN 125
4 pcs - end caps 18-20

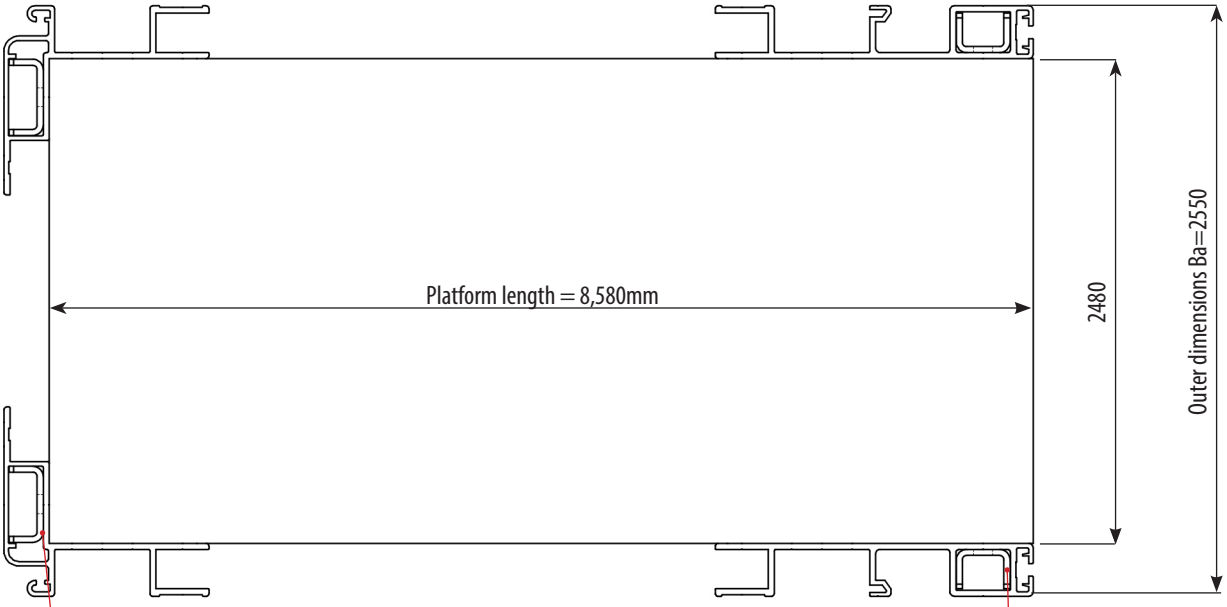


0354 400.200

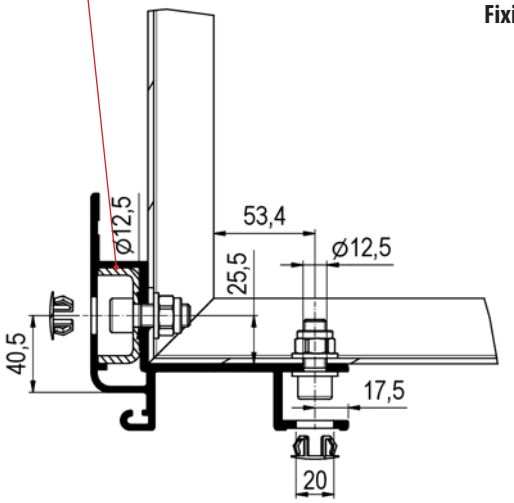
Set includes:
1 pc - stiffener
4 pcs - bolt M12x30, cyl. head
4 pcs - hex. nut M12
4 pcs - washer 13, galvanised, DIN 125
4 pcs - end caps 18-20

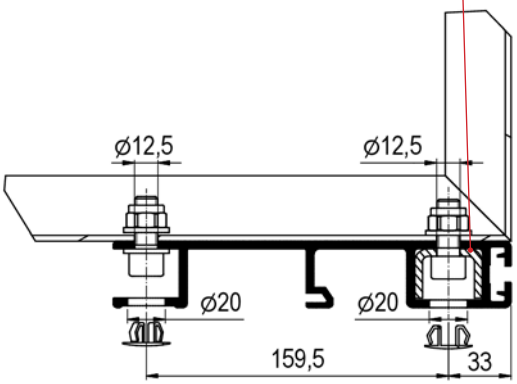
TT-number	Name	Materiál Material	Lenght	Weight kg / pcs
0354 400.000	Aluminium rear pillar		3200	15,07
0354 400.100	Aluminium rear pillar		3200	15,07
0354 420.000	Aluminium front pillar		3200	13,86
0354 420.100	Aluminium front pillar		3200	13,86
0354 400.200	Assembly set for the frame rearS	galvanized steel	Spoj. mat. je součástí dodávky	1,9
0354 420.200	Assembly set for the frame - front	galvanized steel		2,4

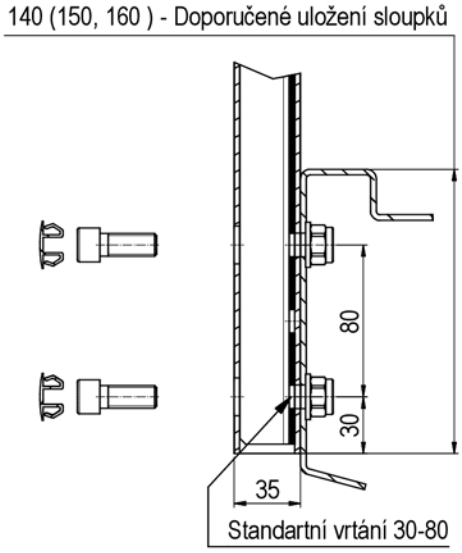
3.2.2.Aluminium corner columns MIDI- columns assembly scheme



Fixing of the columns MIDI

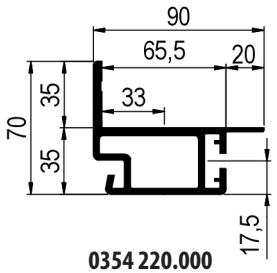




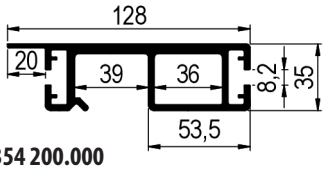


3. 3. ALUMINIUM CORNER PILLARS LIGHT

3. 3. 1. Drawings, layout of the columns, assembly sets for the frame



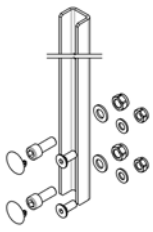
0354 220.000
0354 220.100



0354 200.000
0354 200.100

LAYOUT OF THE COLUMNS

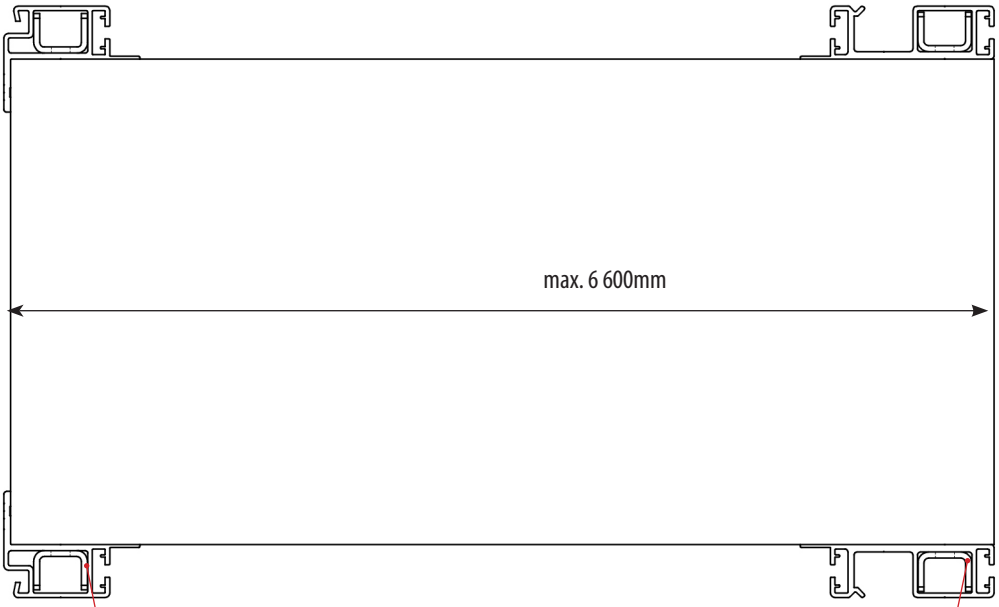
0354 200.200



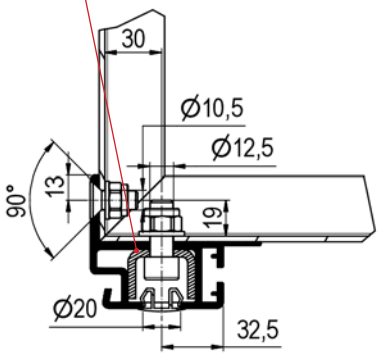
Set includes:
1 pc - stiffener U35 - 400
2 pc - bolt M12x30, cyl. head
2 pc - bolt M10x25, sunk head
2 pcs - hex. nut M12
2 pcs - hex. nut M10, self-lock.
2 pcs - washer 10.5, galvanised
2 pcs - washer 13, galvanised
2 pcs - blind caps 18.0-20

TT-number	Name	Material	Lenght	Weight kg / pcs
0354 200.000	Aluminium rear pillar 128 x 35 mm			3,16
0354 200.100	Aluminium rear pillar 128 x 35 mm			3,16
0354 220.000	Aluminium front pillar 90 / 70 x 35 mm			2,58
0354 220.100	Aluminium front pillar 90 / 70 x 35 mm			2,58
				kg/ks
0354 200.200	Assembly set for the frame	galvanized steel		0,9

3.3.2.Aluminium corner columns LIGHT- columns assembly scheme

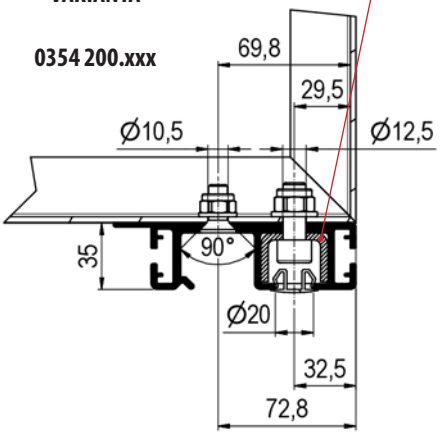


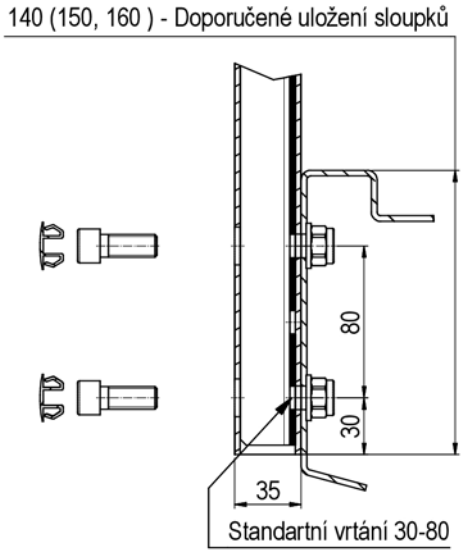
Fixing of the columns LIGHT



VARIANTA

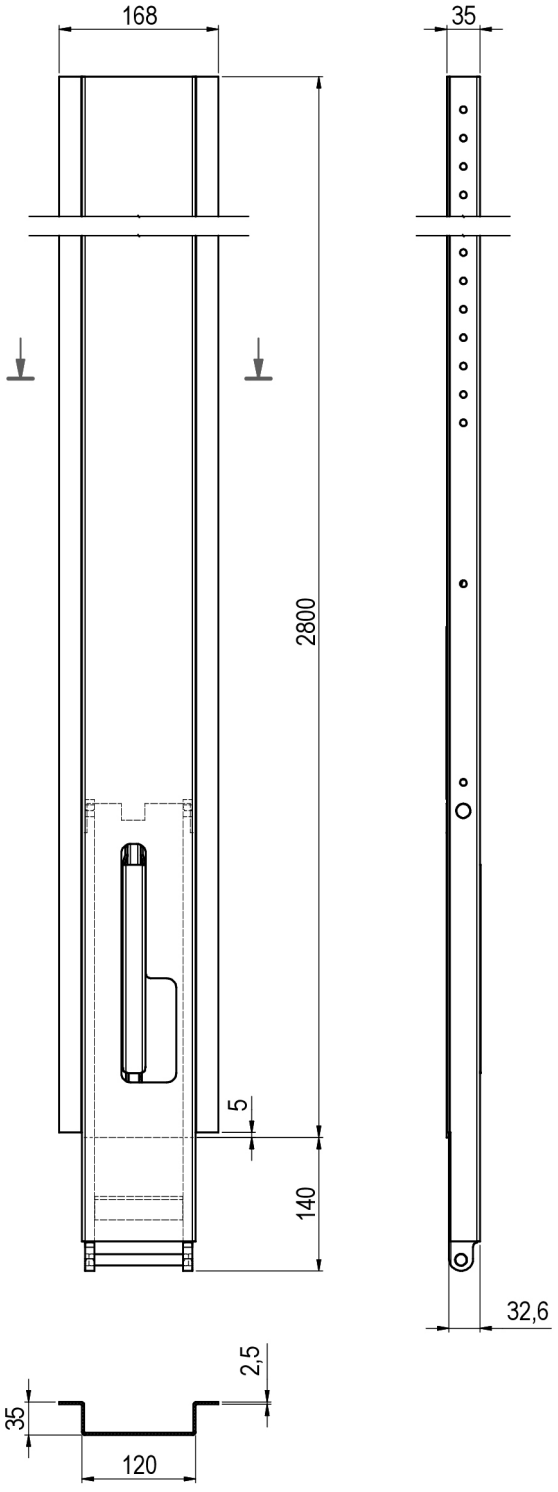
0354 200.xxx

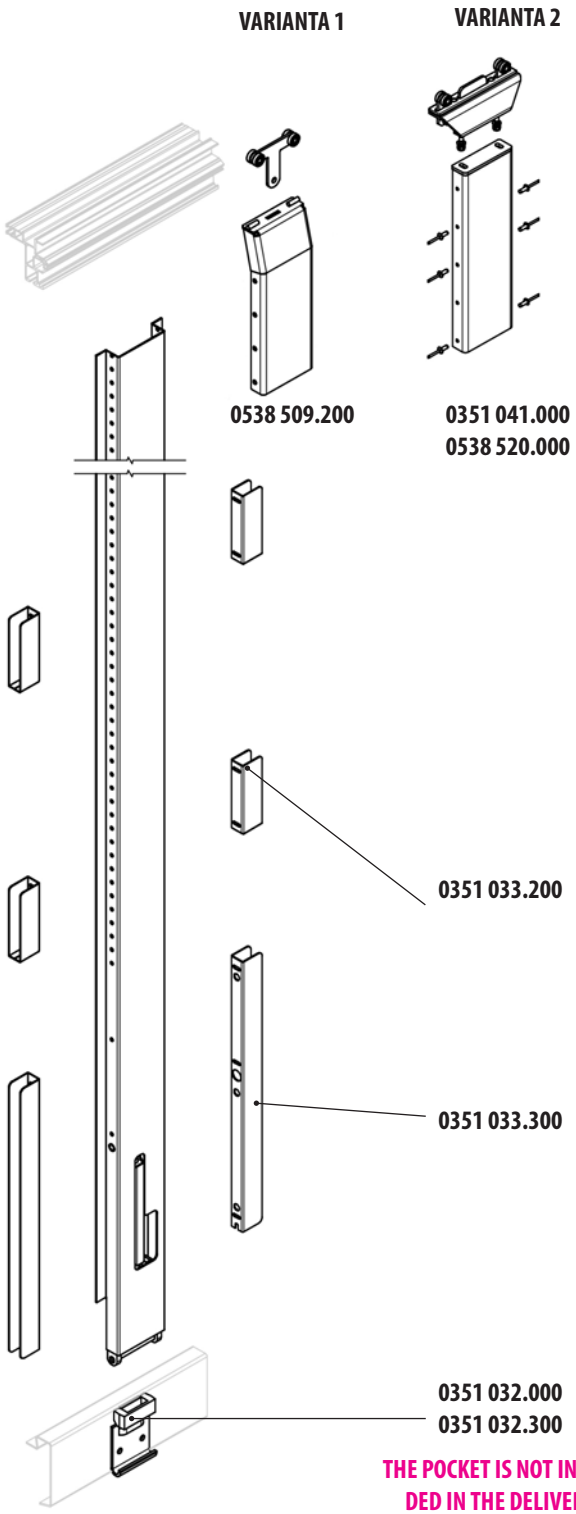




4. CENTRAL TILTABLE COLUMNS

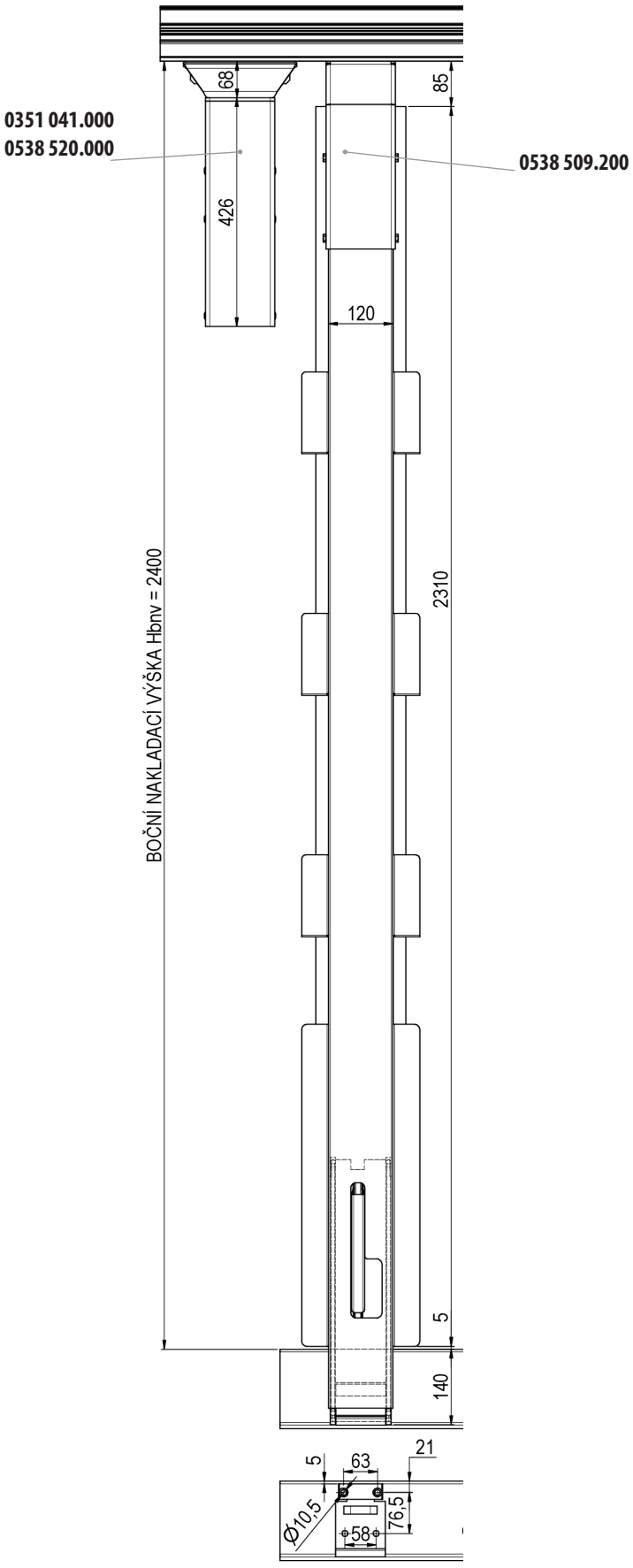
4.1. Steel heavy central column DG, H = 2,800mm



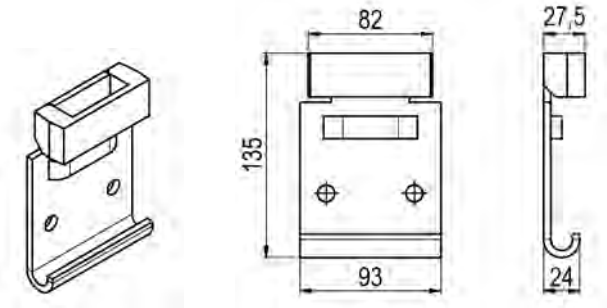
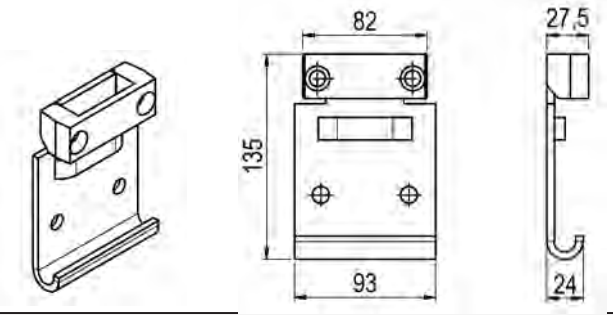
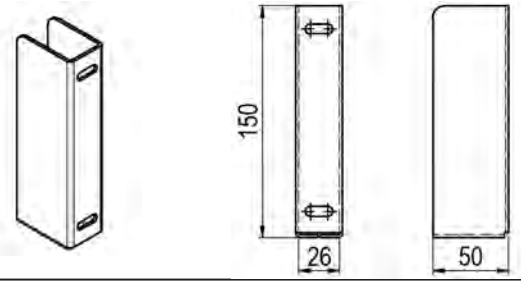
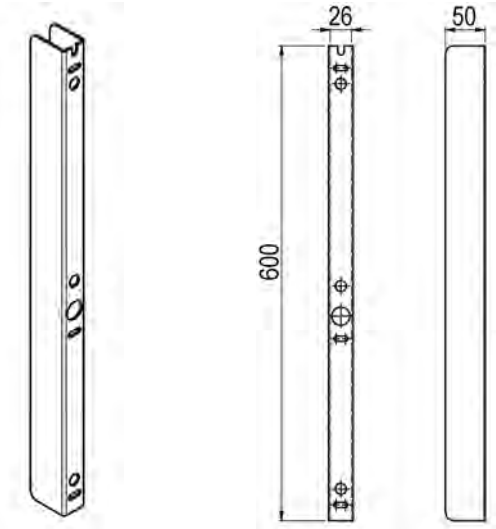
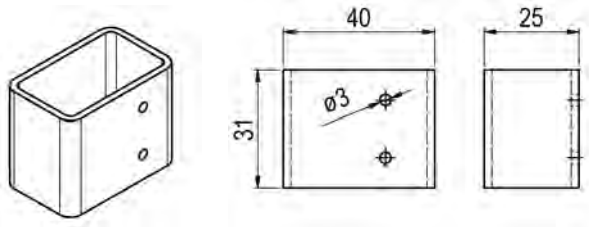


TT-number	Name	Height column	Materiál /	Weight kg/pcs
0351 032.001	Central column CS, DG, without pocket	2800	steel / black varnish	21,5
0351 032.200	DG column pocket - welding on		steel	0,82
0351 032.300	DG column pocket - screwing on		galvanised steel	0,80
0351 033.200	Pocked for the under-canvas profile		galvanised steel	0,40
0351 033.300	Pocket for the pyramidal profile		galvanised steel	1,1
0354 106.000	Lug for sidewall closures		galvanised steel	0,30

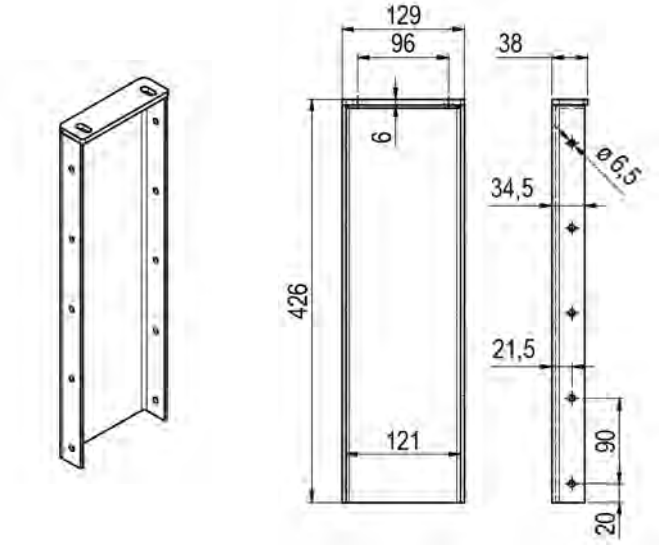
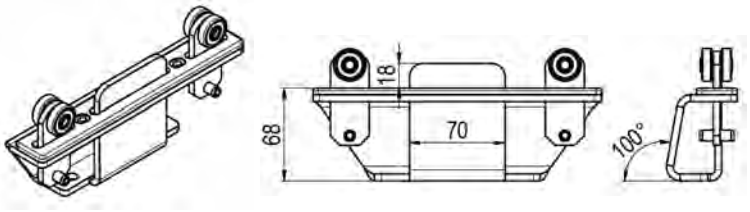
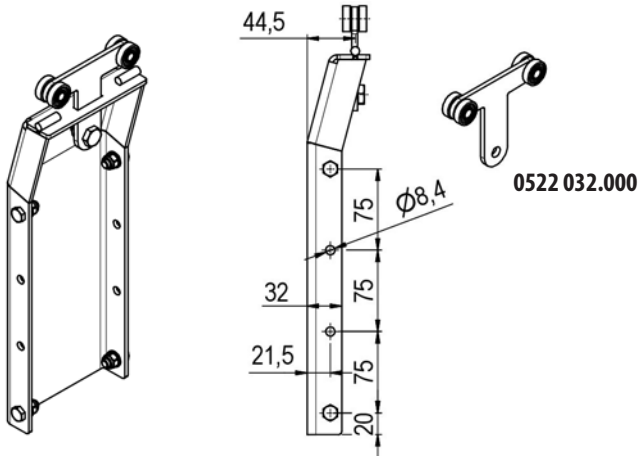
4.1.2. Steel heavy central DG column, installation



4.1. 3. Steel heavy central DG column - piece list

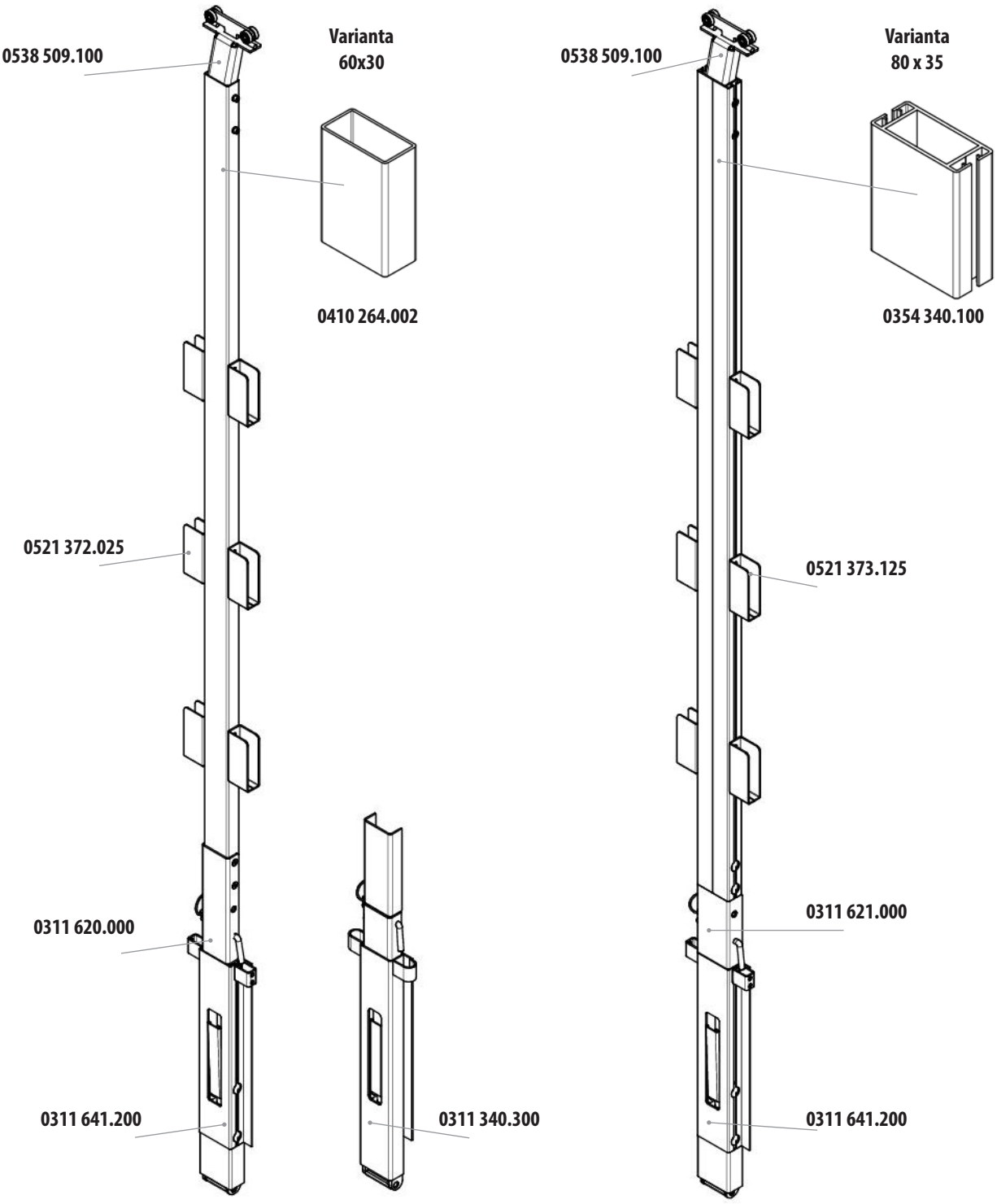
TT-number	Name	Drawing
0351 032.200	DG column pocket - welding on	
0351 032.300	DG column pocket - screwing on	
0351 033.200	Pocked for the under-canvas profile	
0351 033.300	Pocket for the pyramidal profile	
0354 106.000	Lug for sidewall closures	

4.1.3. Steel heavy central DG column

TT-number	Name	Drawing
0351 041.000	Fixed extension, universal	
0538 520.000	JCentral column slider MYCRO Trike	
0538 509.200	Slider of the central column VERSUS MYCRO Trike for 120x35 mm for non-lifting roof	

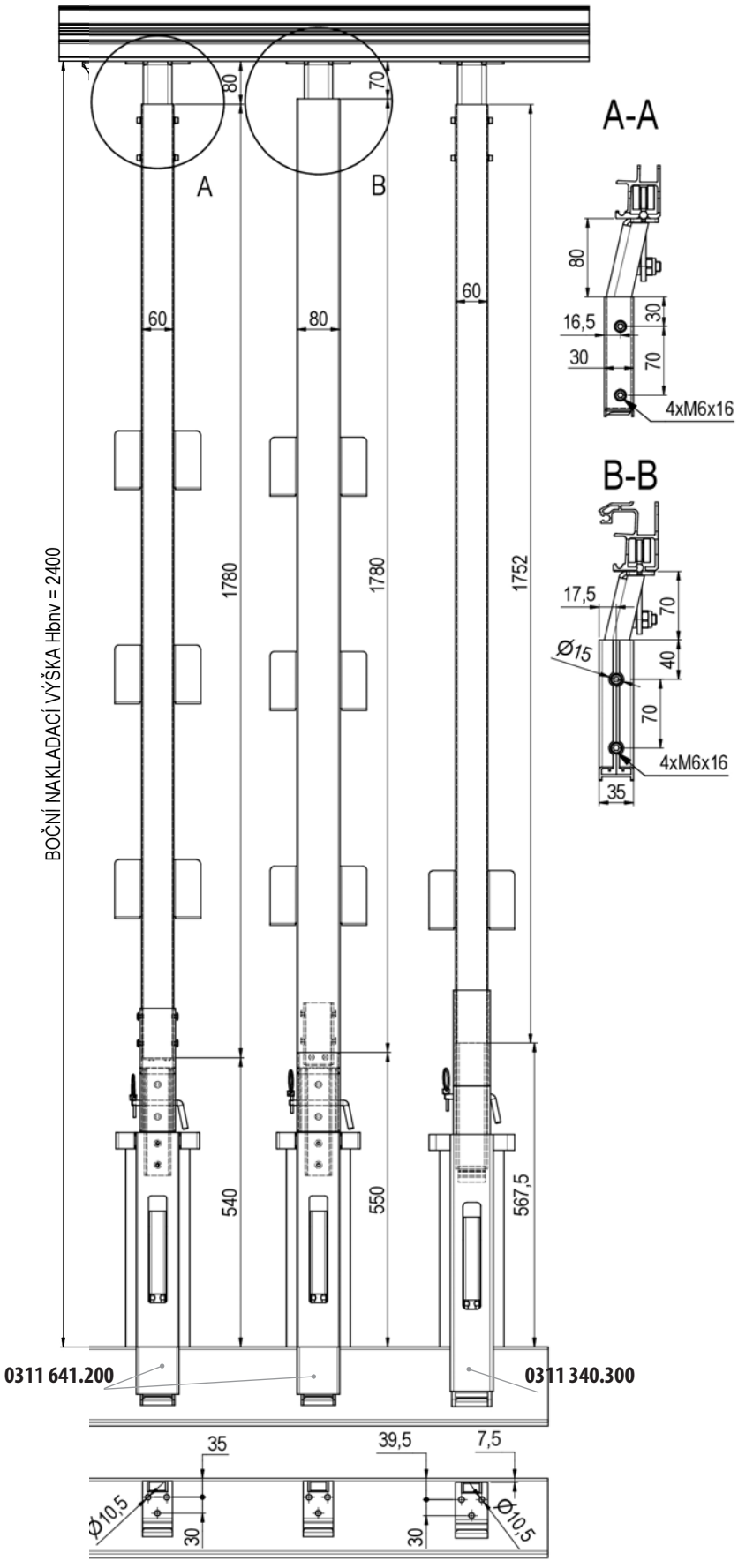
4.2. Al light central column

4.2.1.Al light central column – set

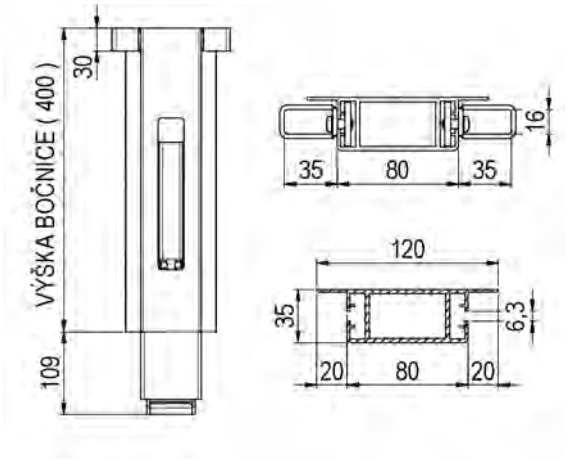
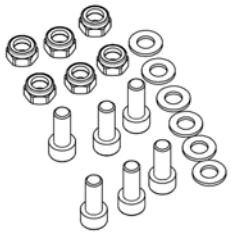
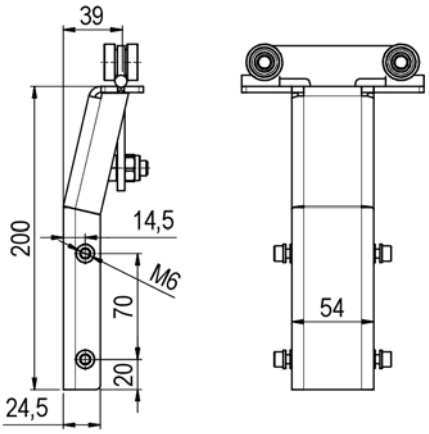
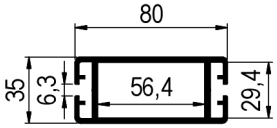
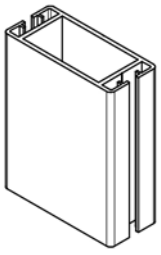
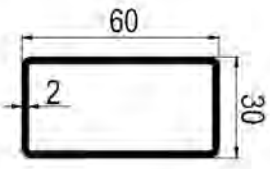
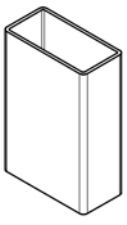


TT-number	Name	Materiál /	Weight kg/pcs
0311 641.200	Central column 80x35, tiltable + pocket + lugs	Al elox	2,8
0311 340.300	Central column with rim, tiltable, with TOP		
0311 302.000	Assembly set - connecting material for tiltable		0,2
0538 509.100	Slider of the central column VERSUS MYCRO		2,04
0311 620.000	Extension for column 80x35/60x30 and locking		1,6
0311 621.000	Extension for column 80x35/80x35 and locking		1,6
0354 340.100	Al column 80x35mm without rim, central		2,10 kg/m
0410 264.002	Al profile 60x30x2mm, R3	Al natural	0,91 kg/m
0521 372.025	Pocket for the canvas structure 25mm, riveting		0,28

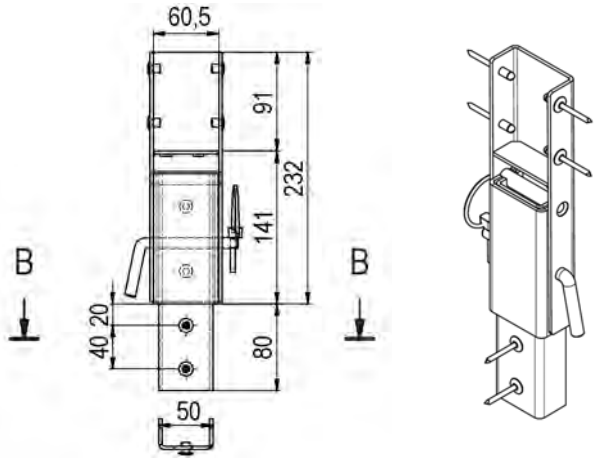
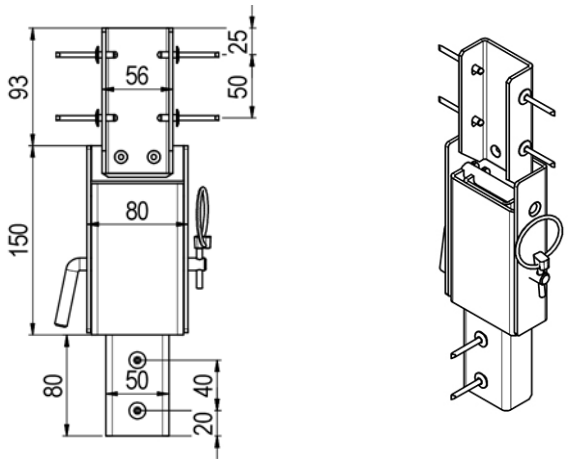
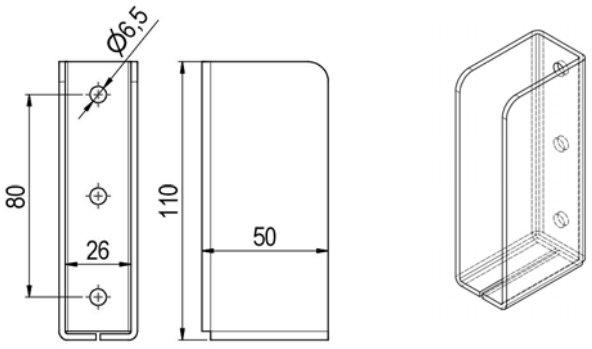
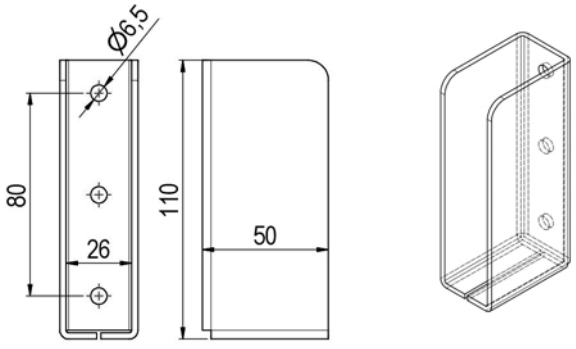
4.2.2.Al light central column – installation



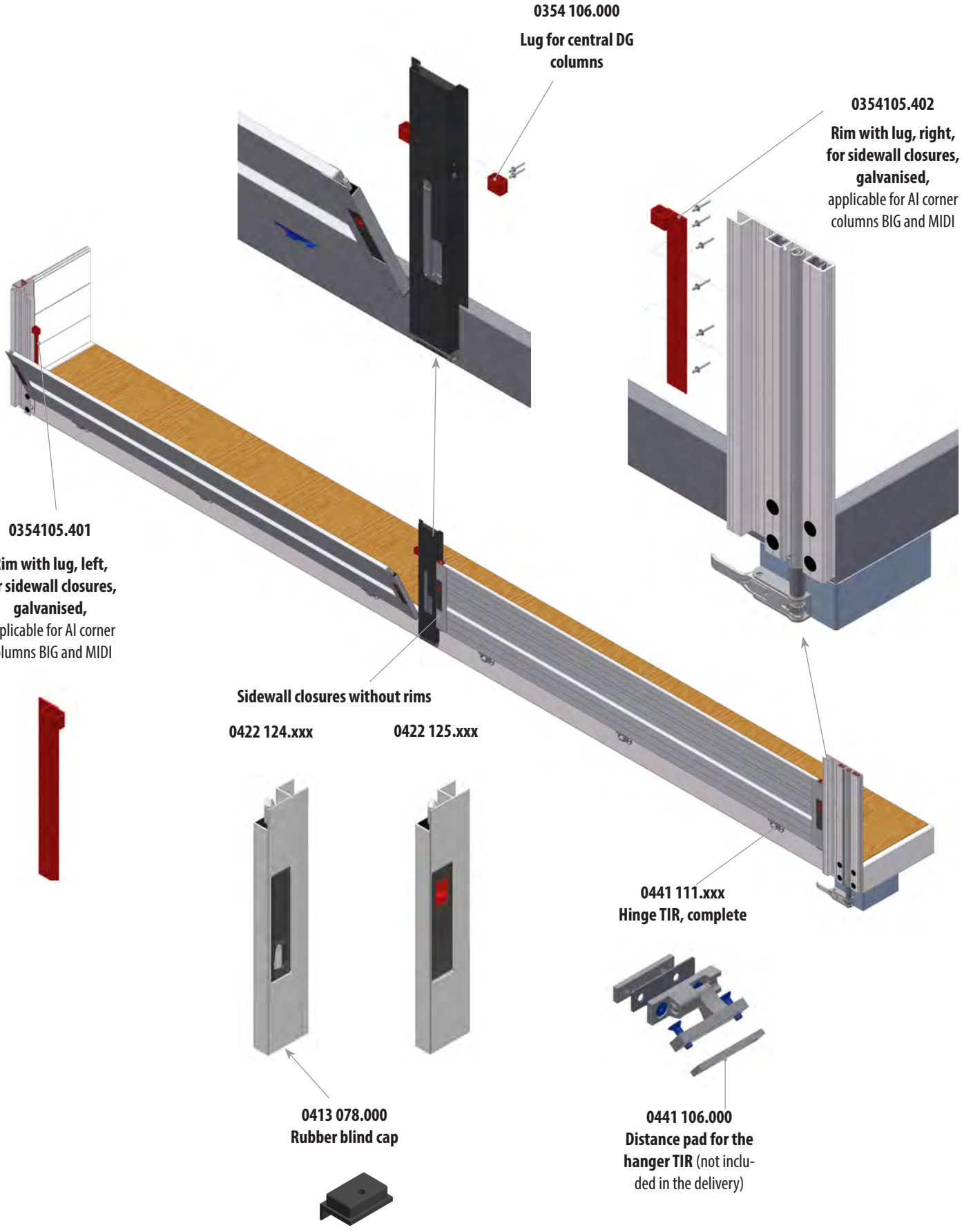
4.2.3. Al light central column - piece list

TT-number	Name	Drawing
0311 641.200	Central column 80x35, tiltable, + pocket + lugs + connecting material	
0311 302.000	Assembly set - connecting material for tiltable columns 80x33 (for 2 columns)	
0538 509.100	Slider of the central column VERSUS MYCRO Trike for 120x35 mm for non-lifting roof	 **0522 032.000** **Rolna pro sloupek - ND**
0354 340.000	Al column 80x35mm without rim, central Al natural ,	 
0410 264.002	Al profile 60x30x2mm, R3	 

4.2.3. Al light central column - piece list

TT-number	Name	Drawing
0311 620.000	Extension for column 80x35/60x30 and locking pin + connecting material Material Al anodized	
0311 621.000	Extension for column 80x35/80x35 and locking pin + connecting material Material Al anodized	
0521 372.025	Pocket for the canvas structure 25mm, riveting, 50x100mm Material: galvanised steel Pocket components: 2x peel mandrel rivet 6.4x12 St/St	
0521 373.125	Pocket for the canvas structure 25mm, screwing, 50x100mm Material: galvanised steel Pocket components: 2x bolt M6 with round head	

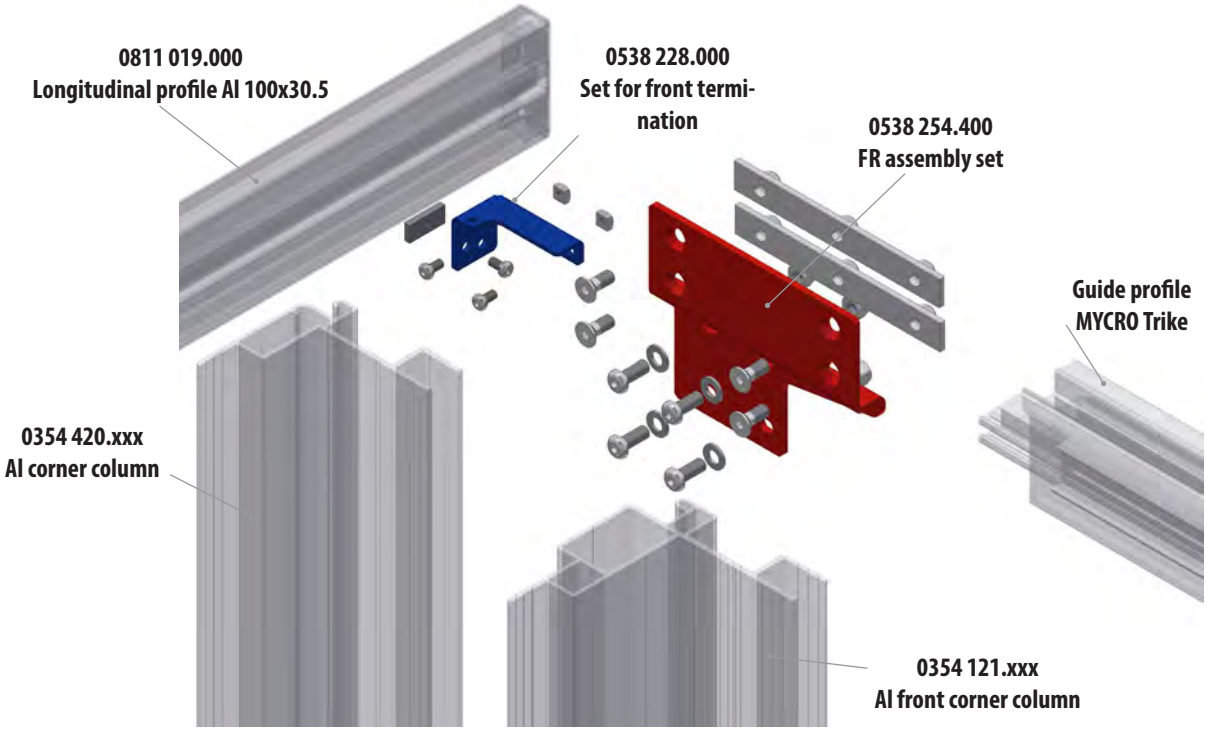
5. FOLDING STRUCTURE WITH SIDEWALLS

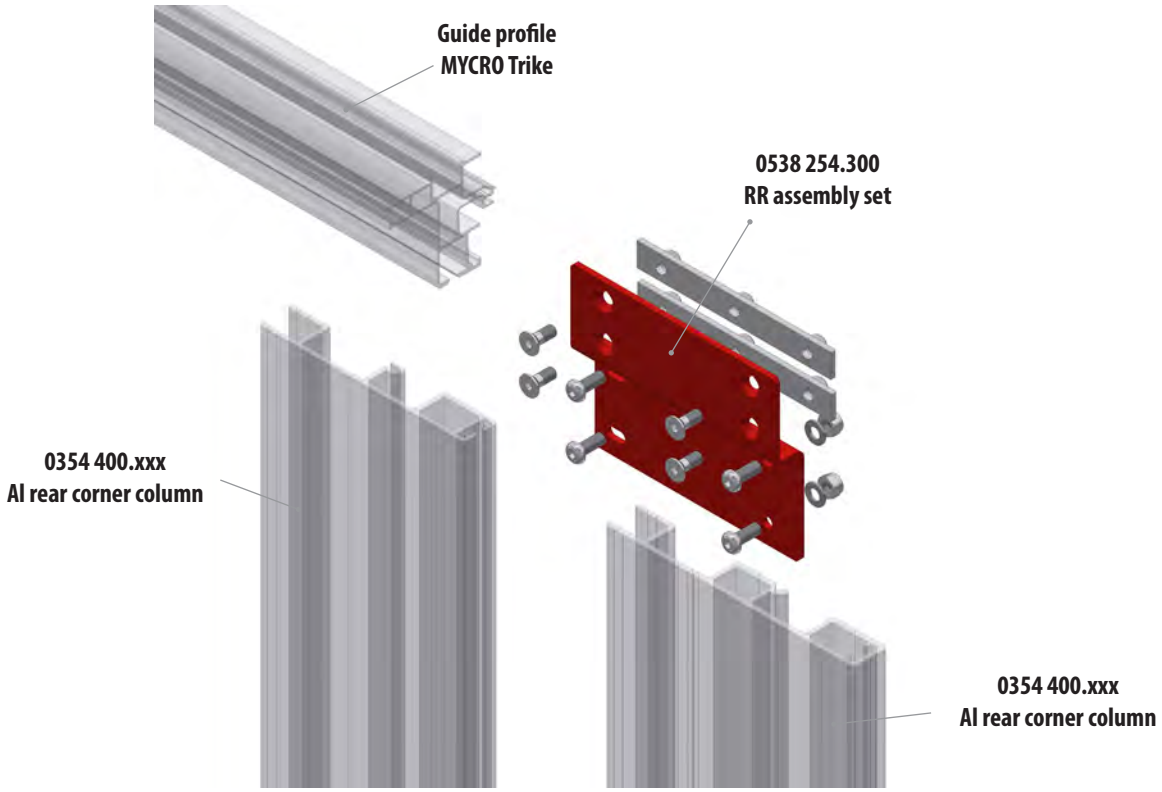


6. MYCRO Trike NON-LIFTING SETS

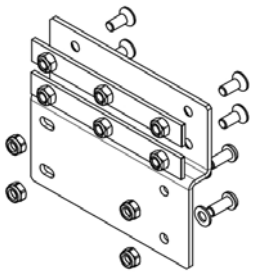
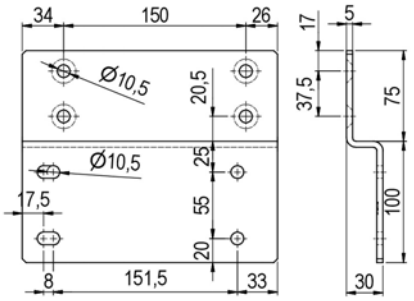
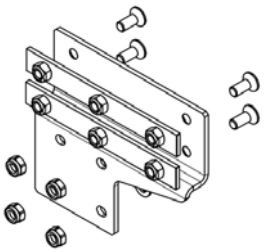
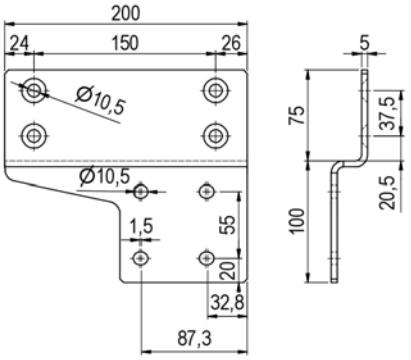
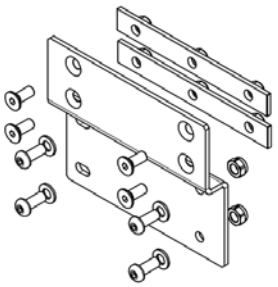
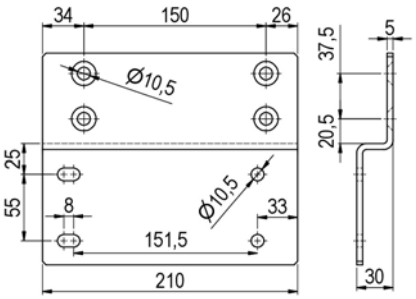
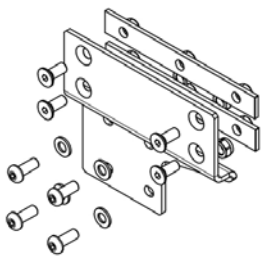
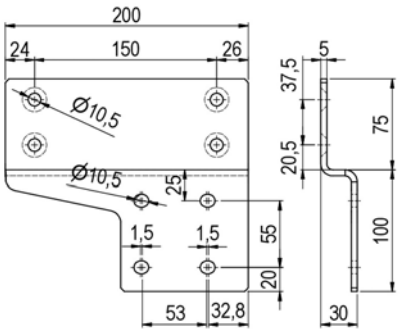
6.1. Assembly sets for the guide profile MYCRO Trike, for Al corner columns BIG and MIDI

Assembly nodes

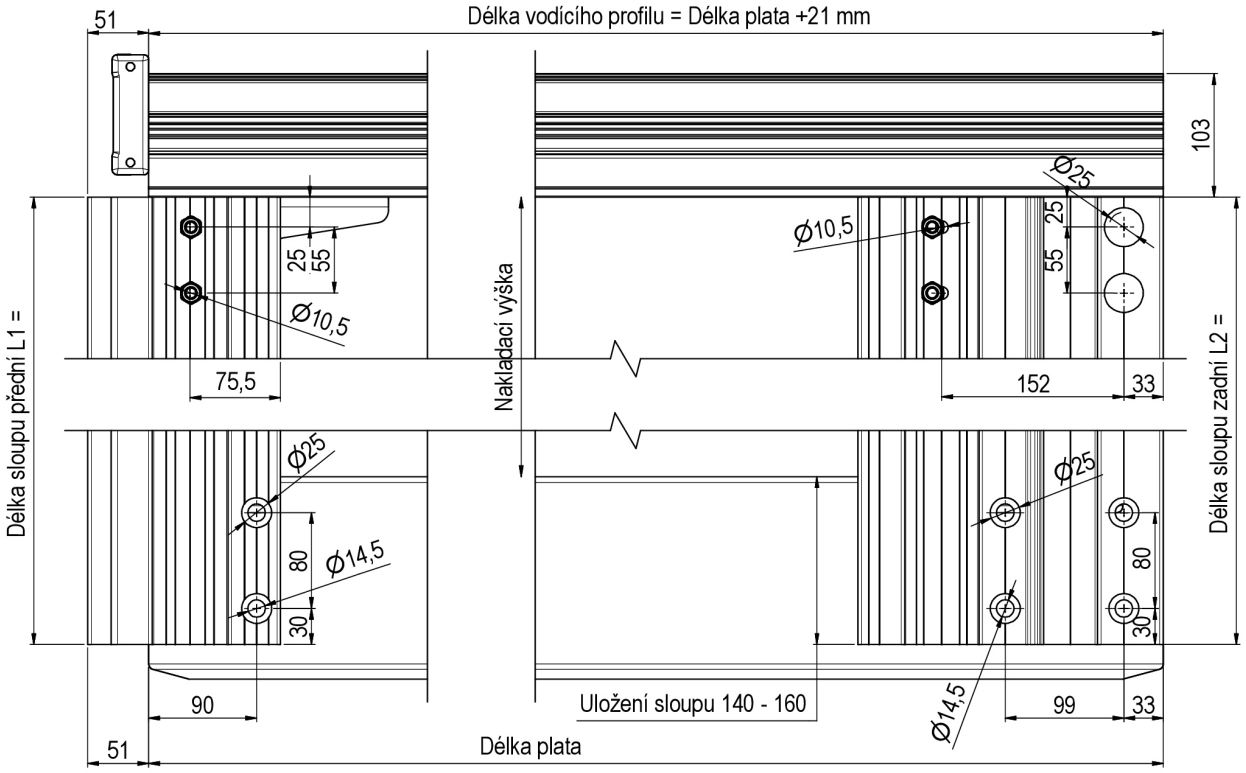


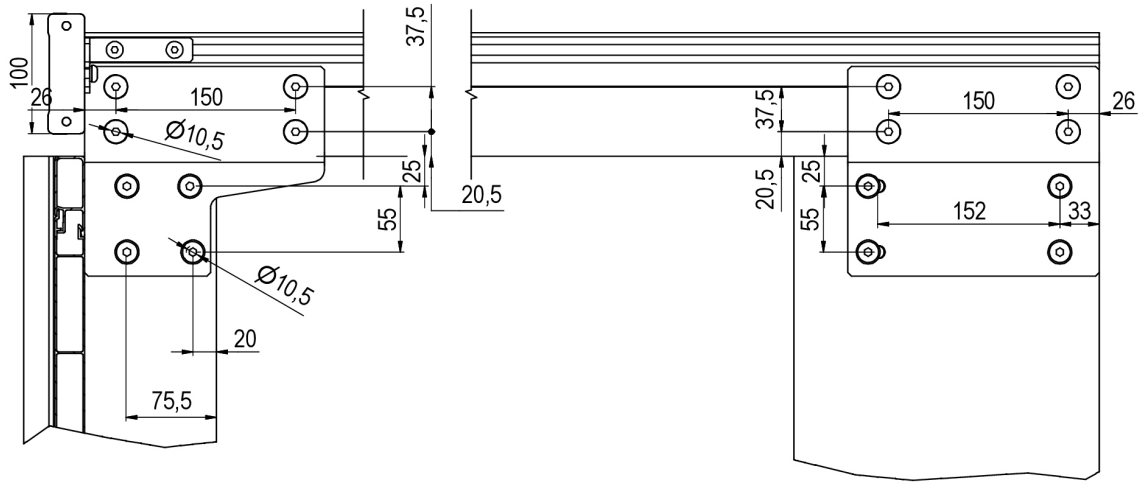


6.1.2. Assembly sets for the guide profile MYCRO Trike, for Al corner columns BIG and MIDI - piece list

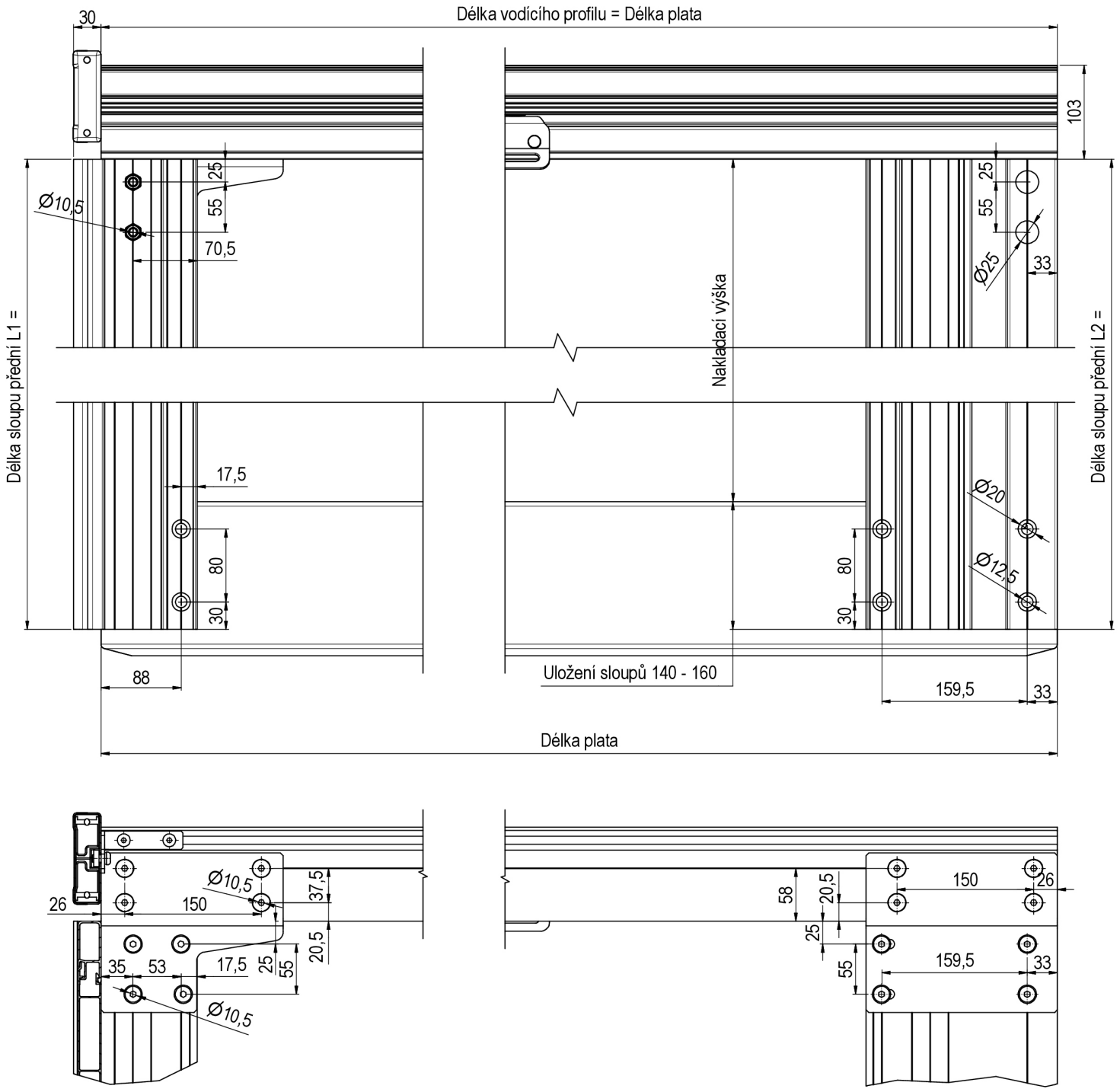
TT-number	Name	Drawing
0538 254.100	RL assembly set DUO 120 Trike + MYCRO Trike, non-lifting The set includes:	 
0538 254.101	1 pc - RL MYCRO assembly part, galvanised	
0538 202.210	2 pcs - threaded plate 25x5-200/75	
1904 110.025	4 pcs - bolt M10x25, sunk head	
1905 110.025	4 pcs - bolt M10x25, round head	
1942 110.000	4 pcs - hex. nut M10, self-locking	
1961 110.000	4 pcs- washer 10	
2730 232.503	2 pcs - end caps 22-25	
0538 254.200	FL assembly set DUO 120 Trike + MYCRO Trike, non-lifting	 
0538 254.201	The set includes:	
0538 202.210	1 pc - RL MYCRO assembly part, galvanised	
1904 110.025	2 pcs - threaded plate 25x5-200/75	
1905 110.025	4 pcs - bolt M10x25, sunk head	
1942 110.000	4 pcs - bolt M10x25, round head	
1961 110.000	4 pcs - hex. nut M10, self-locking	
2730 232.503	4 pcs- washer 10	
0538 254.300	RR assembly set DUO 120 Trike + MYCRO Trike, non-lifting	 
	The set includes:	
0538 254.301	1 pc - RL MYCRO assembly part, galvanised	
0538 202.210	2 pcs - threaded plate 25x5-200/75	
1904 110.025	4 pcs - bolt M10x25, sunk head	
1905 110.025	4 pcs - bolt M10x25, round head	
1942 110.000	4 pcs - hex. nut M10, self-locking	
1961 110.000	4 pcs- washer 10	
2730 232.503	2 pcs - end caps 22-25	
0538 254.400	FR assembly set DUO 120 Trike + MYCRO Trike, non-lifting	 
0538 254.301	The set includes:	
0538 202.210	1 pc - RL MYCRO assembly part, galvanised	
1904 110.025	2 pcs - threaded plate 25x5-200/75	
1905 110.025	4 pcs - bolt M10x25, sunk head	
1942 110.000	4 pcs - bolt M10x25, round head	
1961 110.000	4 pcs - hex. nut M10, self-locking	
2730 232.503	4 pcs- washer 10	

6.1.3. Determination of the guide profile length for columns BIG



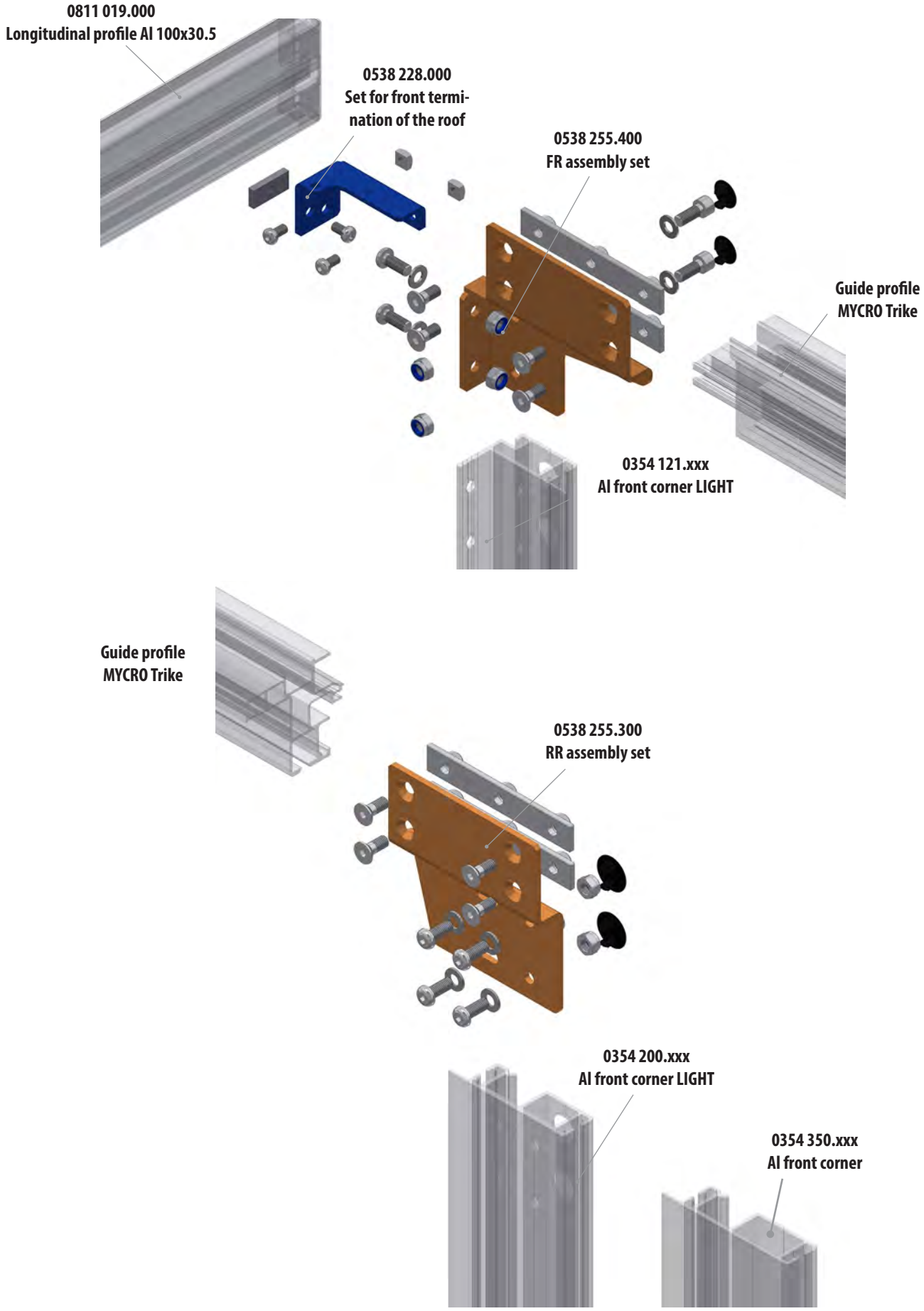


6.1.4. Determination of the guide profile length for columns MIDI

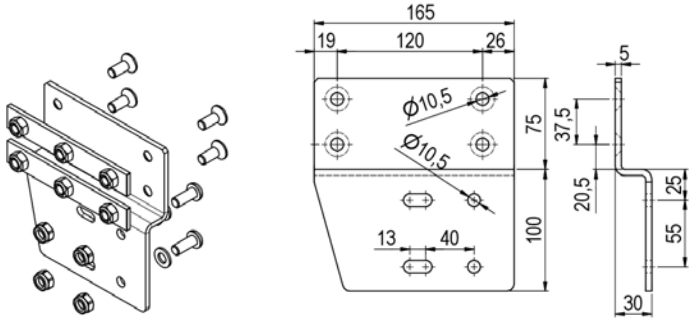
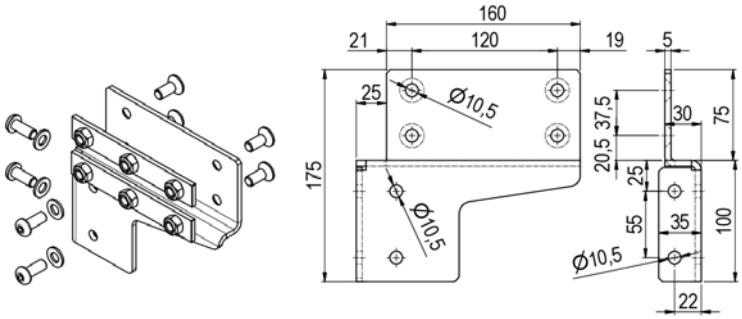
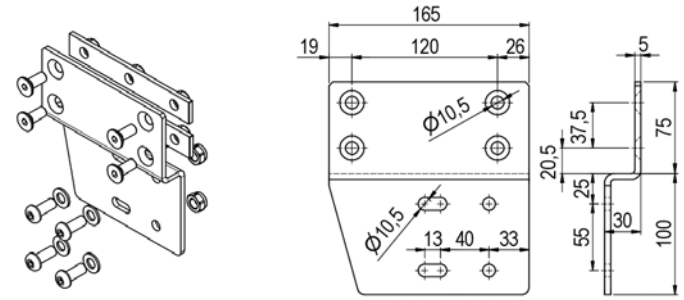
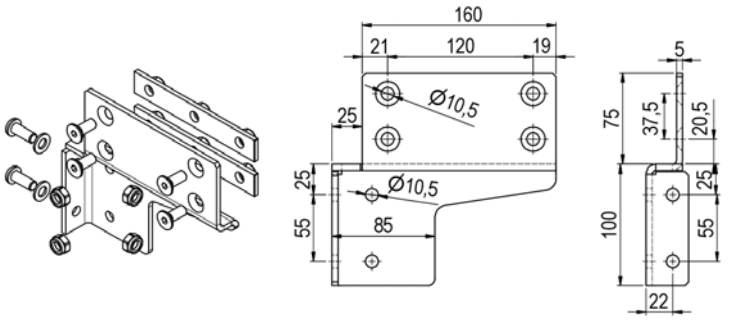


6.2. Assembly sets for the guide profile MYCRO Trike, for Al corner columns LIGHT

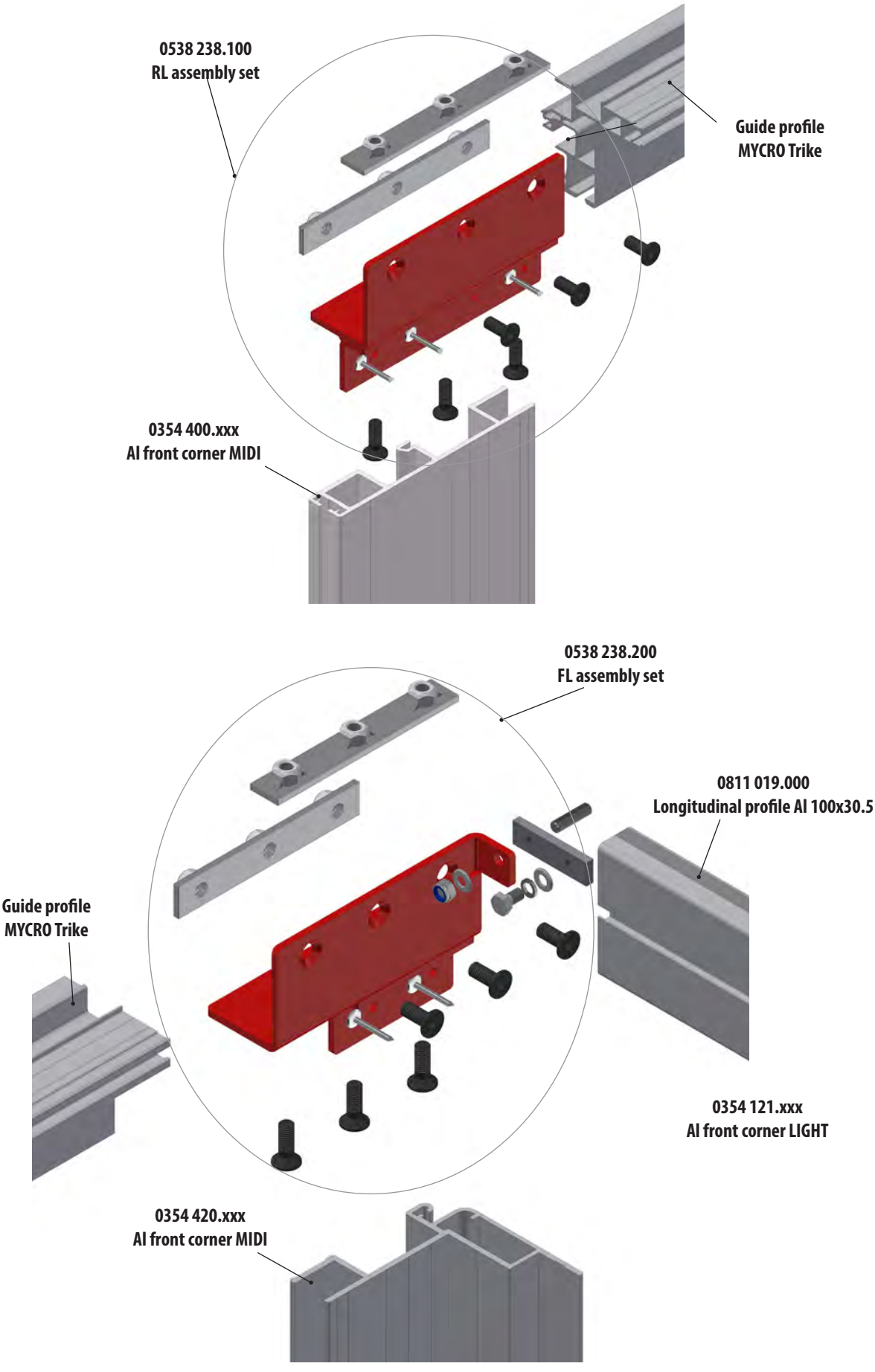
6.2.1. Assembly sets for the guide profile MYCRO Trike, for Al corner columns LIGHT



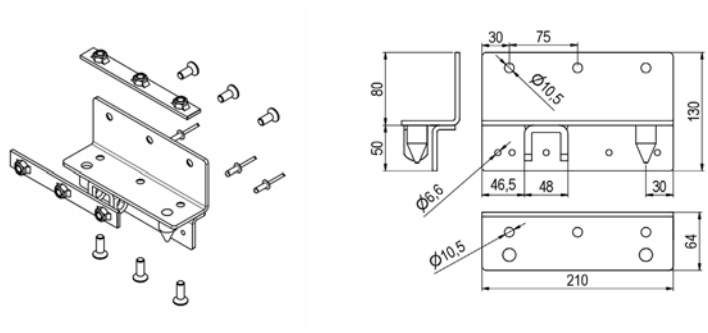
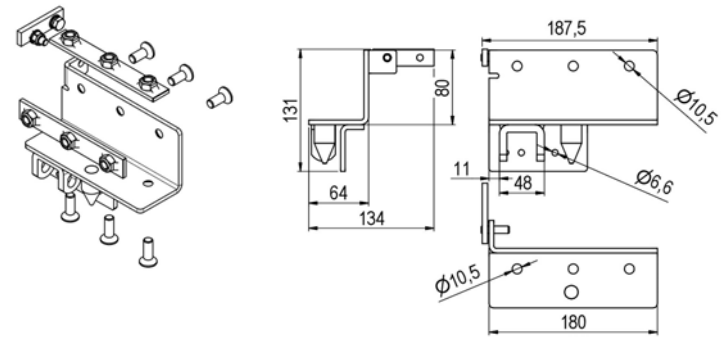
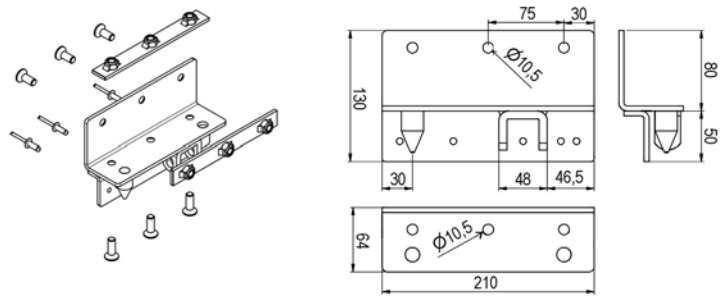
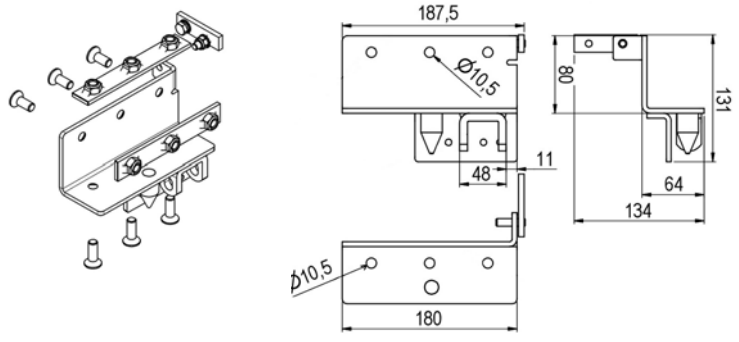
6.2.2. Assembly sets for the guide profile MYCRO Trike, for Al corner columns LIGHT - piece list

TT-number	Name	Drawing
0538 255.100	RL assembly set MYCRO Trike, non-lifting, Al columns LIGHT The set includes:	
0538 255.101	1 pc - RL MYCRO assembly part, galvanised	
0538 240.015	2 pcs - threaded plate 25x5-160/60	
1904 110.025	4 pcs - bolt M10x25, sunk head	
1903 110.025	4 pcs - bolt M10x25, round head	
1942 110.000	4 pcs - hex. nut M10, self-locking	
1961 110.000	4 pcs- washer 10	
2730 225.003	2 pcs - end caps 22-25	
0538 255.200	FL assembly set MYCRO Trike, non-lifting, Al columns LIGHT The set includes:	
0538 255.201	1 pc - RL MYCRO assembly part, galvanised	
0538 240.015	2 pcs - threaded plate 25x6-160/60	
1904 110.025	4 pcs - bolt M10x25, sunk head	
1905 110.025	4 pcs - bolt M10x25, round head	
1942 110.000	4 pcs - hex. nut M10, self-locking	
1961 110.000	4 pcs- washer 10	
2730 225.003	2 pcs - end caps 22-25	
1903 110.025		
0538 255.300	RR assembly set MYCRO Trike, non-lifting, Al columns LIGHT The set includes:	
0538 255.301	1 pc - RL MYCRO assembly part, galvanised	
0538 240.015	2 pcs - threaded plate 25x6-160/60	
1904 110.025	4 pcs - bolt M10x25, sunk head	
1903 110.025	4 pcs - bolt M10x25, round head	
1942 110.000	4 pcs - hex. nut M10, self-locking	
1961 110.000	4 pcs- washer 10	
2730 225.003	2 pcs - end caps 22-25	
0538 255.400	FR assembly set MYCRO Trike, non-lifting, Al columns LIGHT The set includes:	
0538 255.401	1 pc - RL MYCRO assembly part, galvanised	
0538 240.015	2 pcs - threaded plate 25x6-160/60	
1904 110.025	4 pcs - bolt M10x25, sunk head	
1905 110.025	4 pcs - bolt M10x25, round head	
1942 110.000	4 pcs - hex. nut M10, self-locking	
1961 110.000	4 pcs- washer 10	
2730 225.003	2 pcs - end caps 22-25	
1903 110.025		

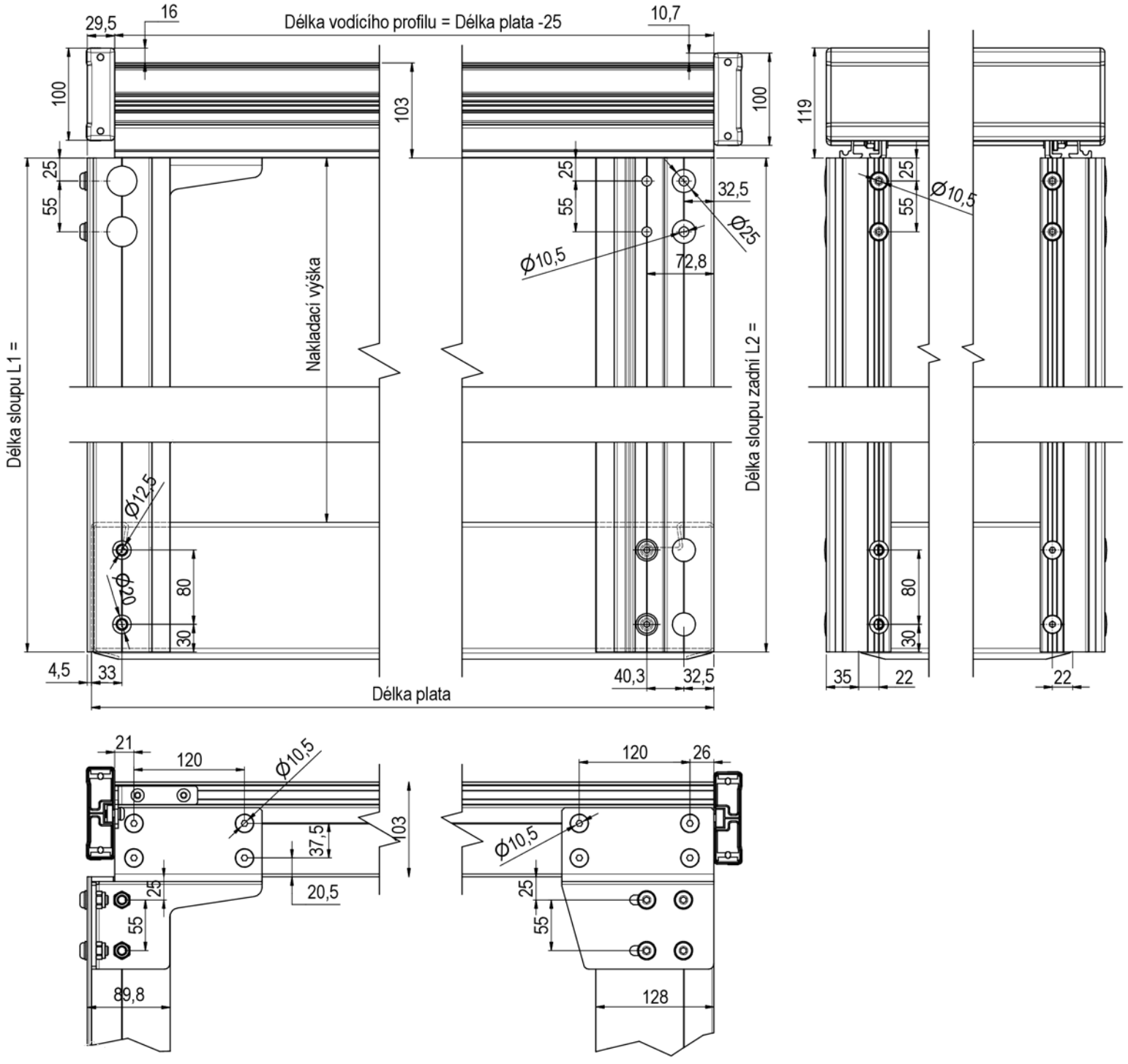
6.3. Assembly sets lifting for the guide profile MYCRO Trike, for Al corner columns MIDI



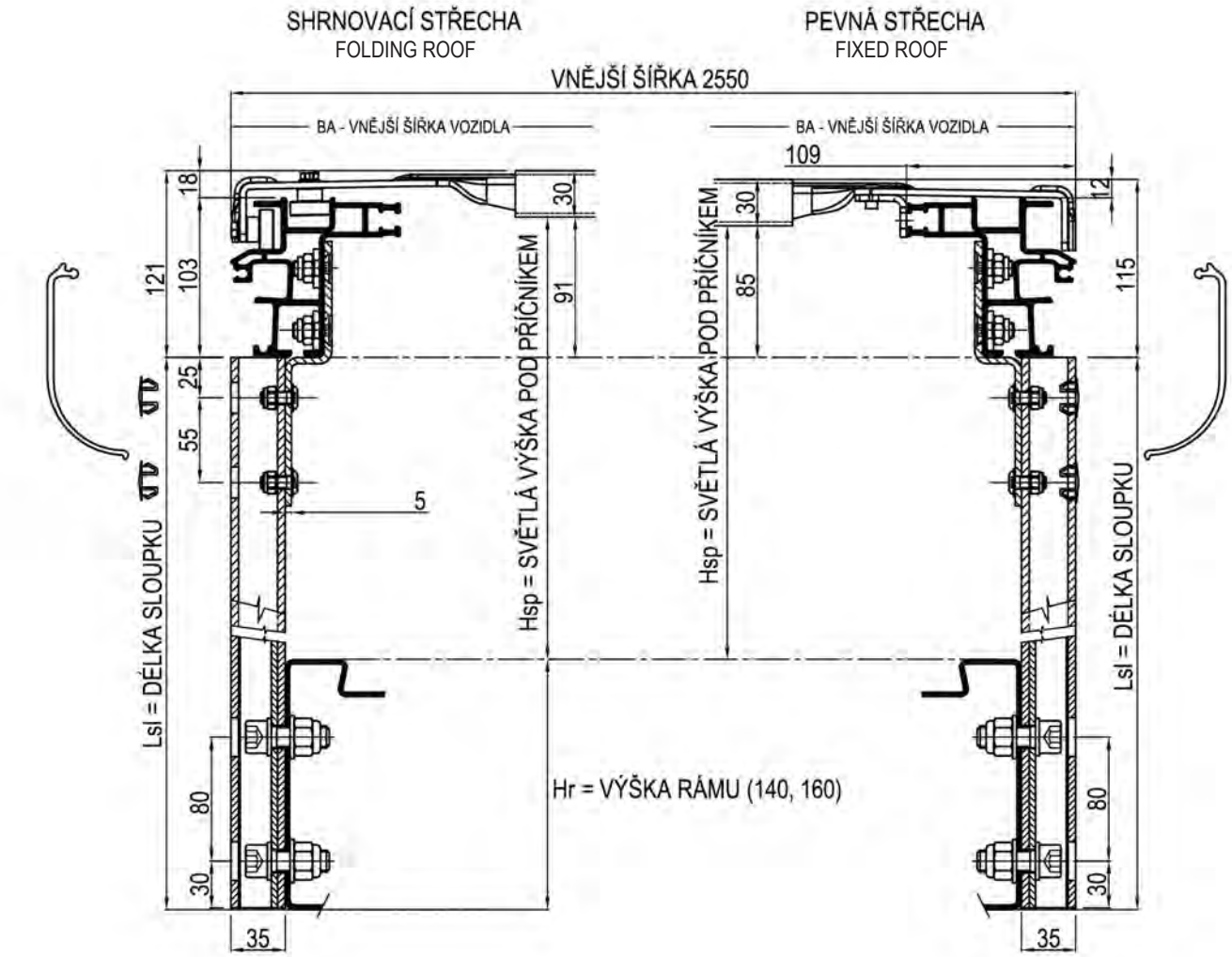
6.3. Assembly sets lifting for the guide profile MYCRO Trike, for Al corner columns MIDI - piece list

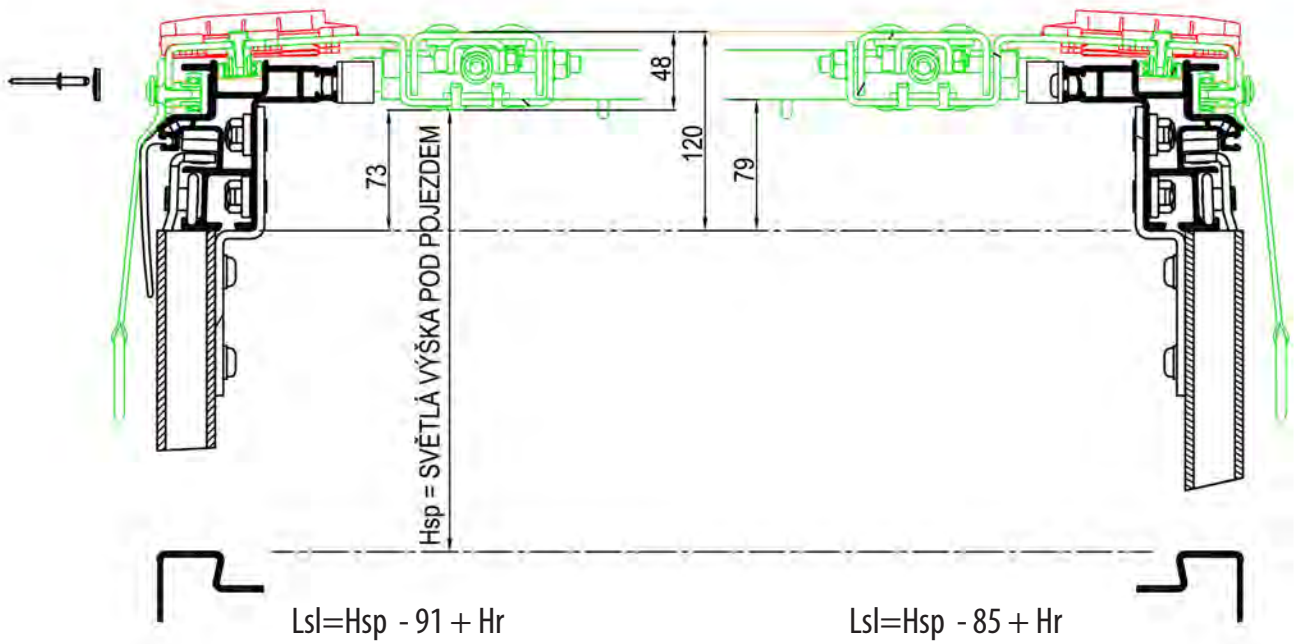
TT-number	Name	Drawing
0538 238.100 0538 238.101 0538 202.210 1904 110.030 1904 110.025 0538 238.121 2111 464.181	RL assembly MYCRO Trike, lifting, Al columns MIDI The set includes: 1ks - montážní díl ZL, zvedací, pozink 2ks - deska závitová 25x5-200/75 3ks - šroub M10x30, zapušť. hlava 3ks - šroub M10x25, zapušť.hlava 1ks - podpěra montážní sady 3ks - nýt trhací 6,4 x18	
0538 238.200 0538 238.201 0538 240.015 1904 110.030 1904 110.025 0441 122.200 0538 238.221 1901 108.014 1942 108.000 1961 108.000 1962 108.000 2111 464.181	FL assembly MYCRO Trike, lifting, Al columns MIDI The set includes: 1ks - montážní díl PL, zvedací, pozink 2ks - deska závitová 25x5-160/60 3ks - šroub M10x30, zapušť. hlava 3ks - šroub M10x25, zapušť. hlava 1ks - deska závitová 65x18x6 1ks- podpěra montážní sady 1ks- šroub M8x14, šestihr 1ks- maticeM8, samojist. 2ks- podložka 8,4 1ks- podložka 8, pružná 2ks- nýt trhací	
0538 238.300 0538 238.301 0538 202.210 1904 110.030 1904 110.025 0538 238.121 2111 464.181	RR assembly MYCRO Trike, lifting, Al columns MIDI The set includes: 1ks - montážní díl ZL, zvedací, pozink 2ks - deska závitová 25x5-200/75 3ks - šroub M10x30, zapušť. hlava 3ks - šroub M10x25, zapušť.hlava 1ks - podpěra montážní sady 3ks - nýt trhací 6,4 x18	
0538 238.400 0538 238.401 0538 240.015 1904 110.030 1904 110.025 0441 122.200 0538 238.221 1901 108.014 1942 108.000 1961 108.000 1962 108.000 2111 464.181	FR assembly MYCRO Trike, lifting, Al columns MIDI The set includes: 1ks - montážní díl PL, zvedací, pozink 2ks - deska závitová 25x5-160/60 3ks - šroub M10x30, zapušť. hlava 3ks - šroub M10x25, zapušť. hlava 1ks - deska závitová 65x18x6 1ks- podpěra montážní sady 1ks- šroub M8x14, šestihr 1ks- maticeM8, samojist. 2ks- podložka 8,4 1ks- podložka 8, pružná 2ks- nýt trhací	

6.2.3. Determination of the guide profile length for columns LIGHT



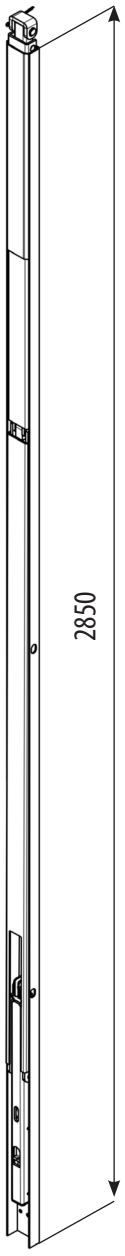
6.2.4.Calculation of column lengths



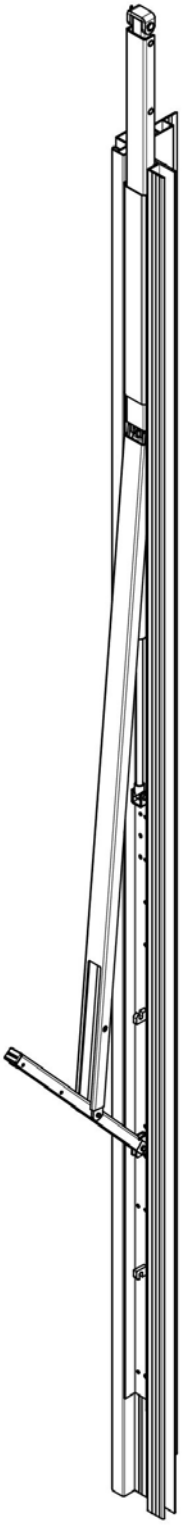


7.1. Lifting DG columns

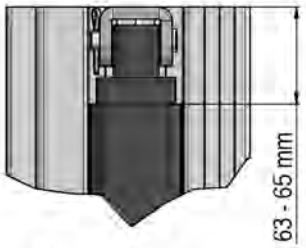
DG is mechanical lifting system, using its articulated mechanism you can lift smoothly the vehicle roof by up to 400mm.
Standard length of the column is 2,850mm. The DG column is riveted to the supporting corner column of the superstructure.
Material / surface - steel / cataphoresis
Weight: 16.65 kg/pc

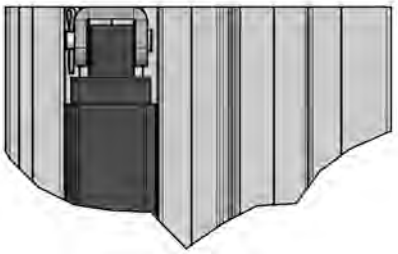


TT-číslo
0351 061.000 k

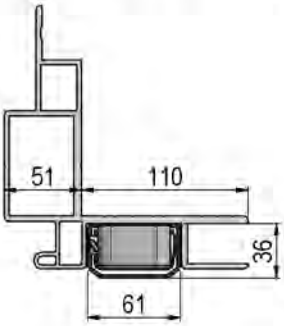


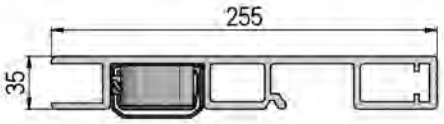
Installation of the lifting DG column into the Al corner

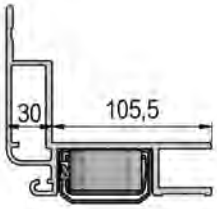




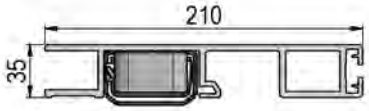
AL corner columns BIGl







AL corner columns MIDI



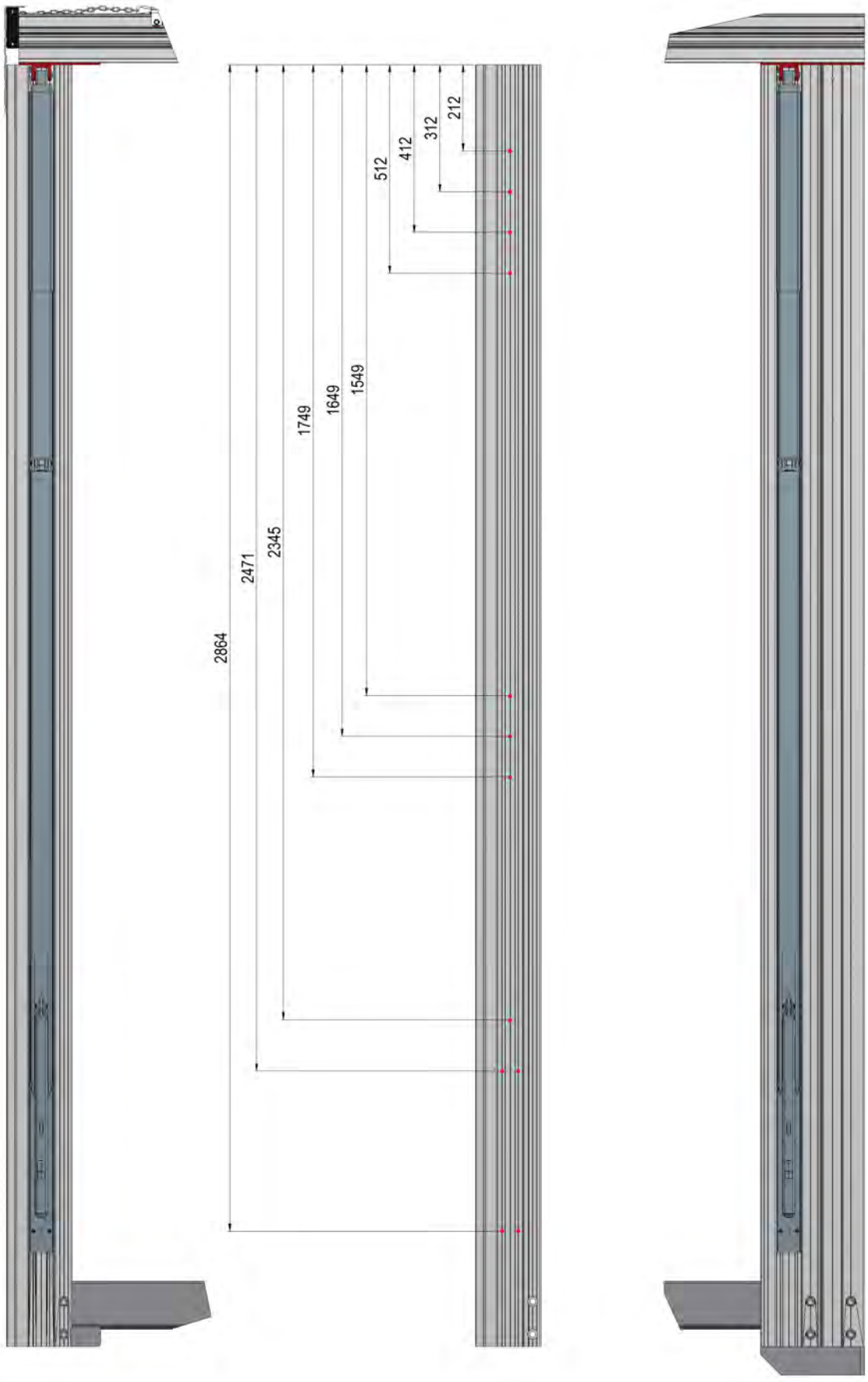
Installation for the front column, tilting design - 1 pin only

Installation for the rear column, fixed design - 2 pins

0351 061.100 Gas strut 400 / 900N,ND for the column

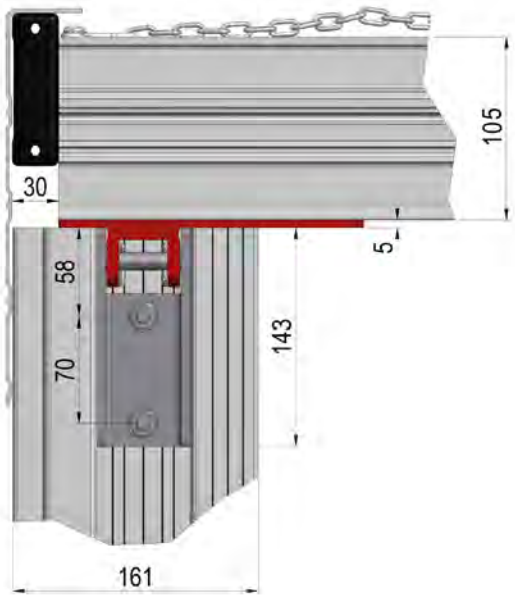
7.2 ASSEMBLY DESIGN - DG LIFTING COLUMN

Drill holes 12 x ø6,5mm for lifting columns

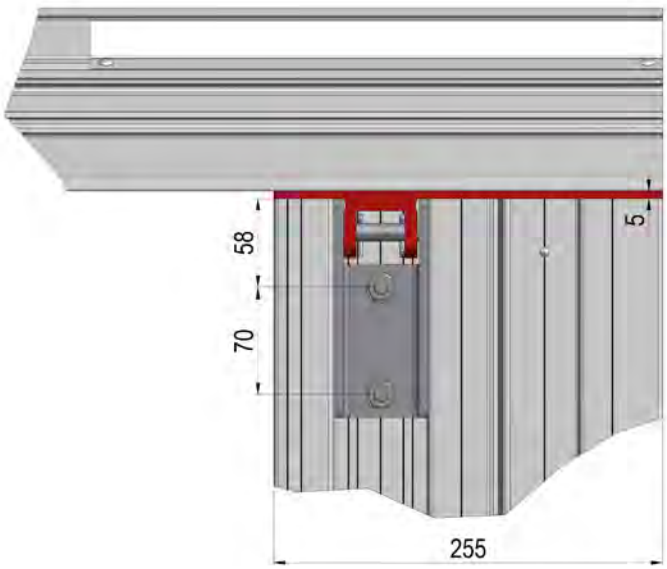


7.3 ASSEMBLY DESIGN - DG LIFTING COLUMN

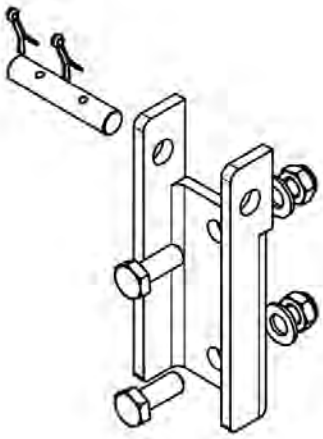
FRONT CORNER COLUMN



REAR CORNER COLUMN

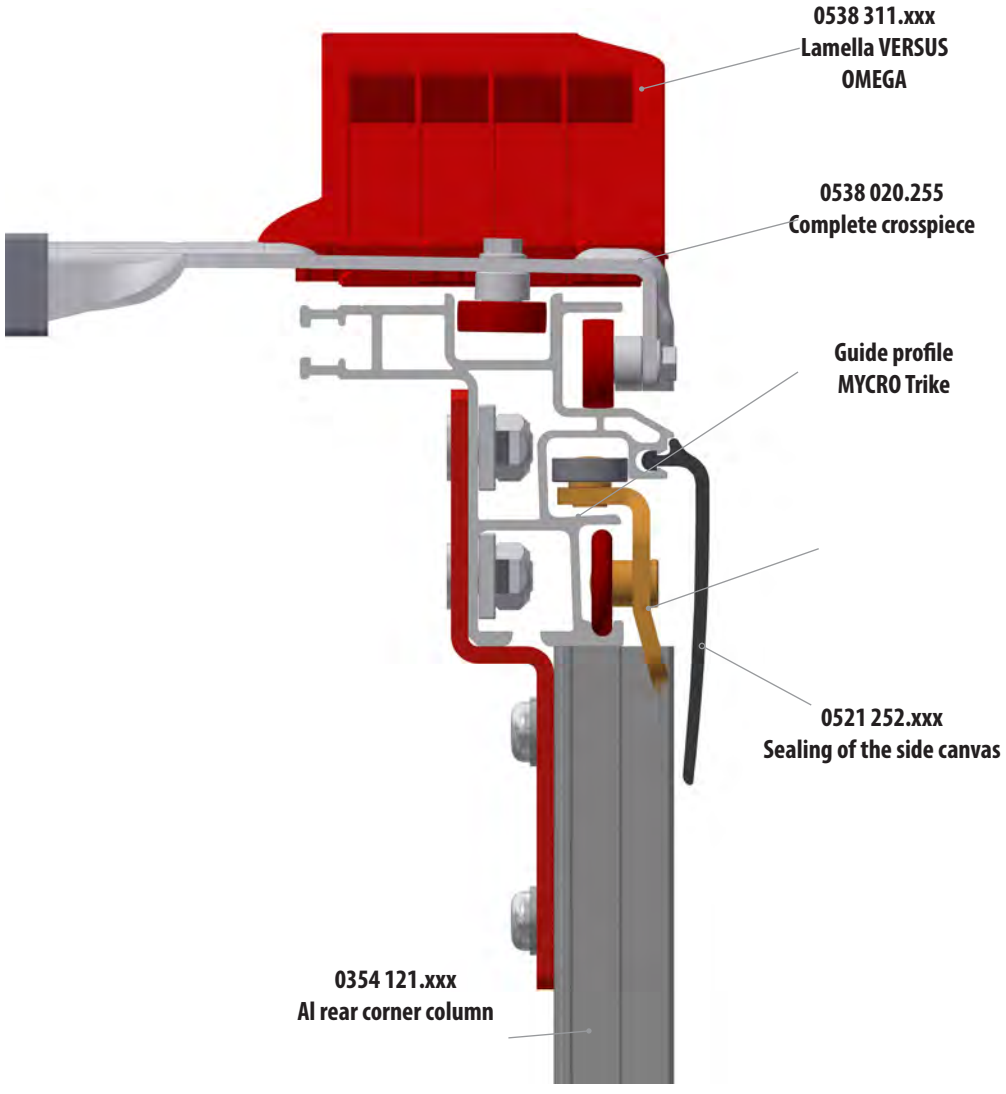


0538 215.000
Counterpiece to the installation lifting set
for DG column
for one-sided lifting

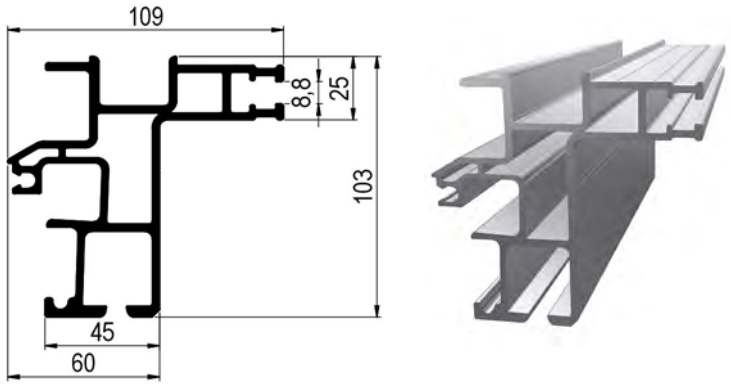
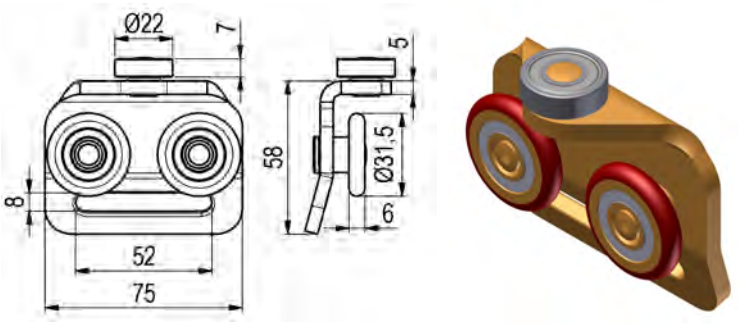
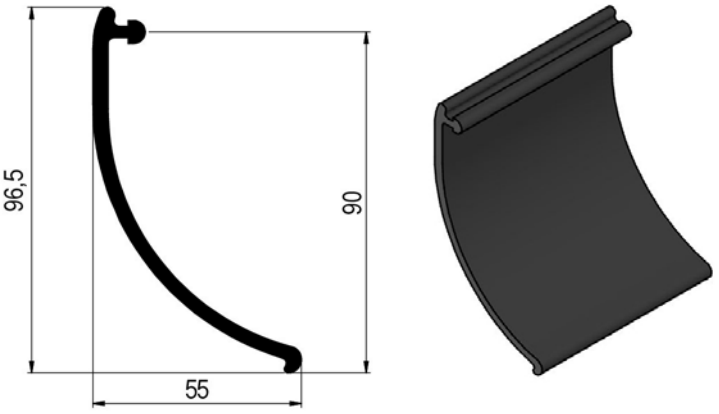


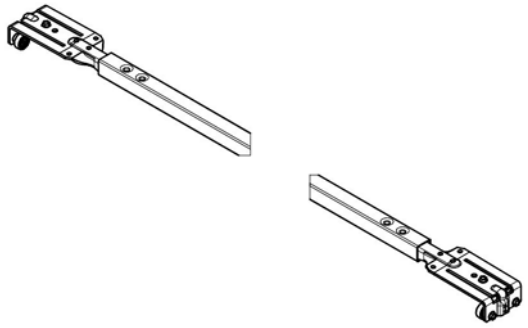
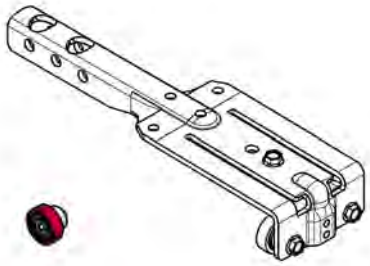
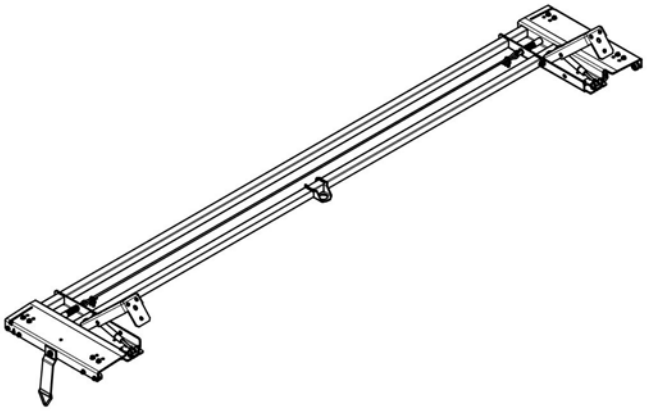
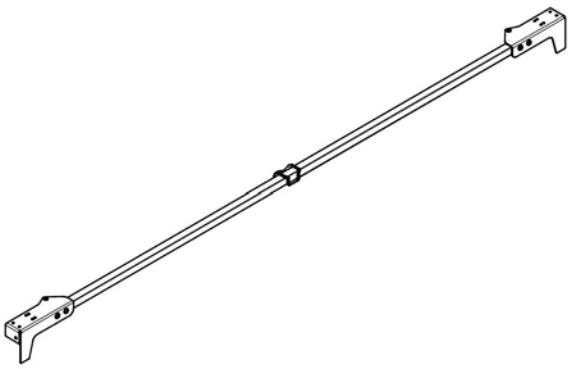
8. ROOF VERSUS OMEGA

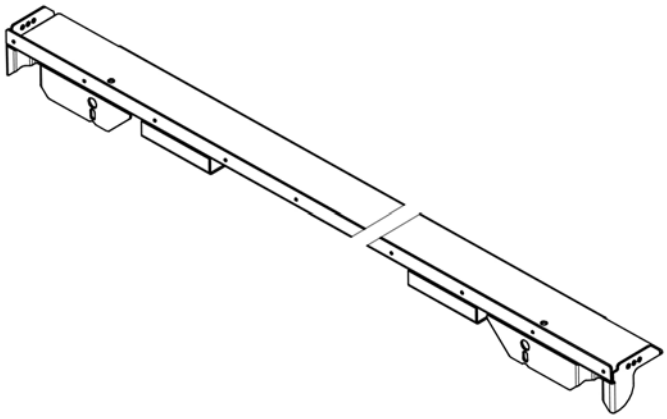
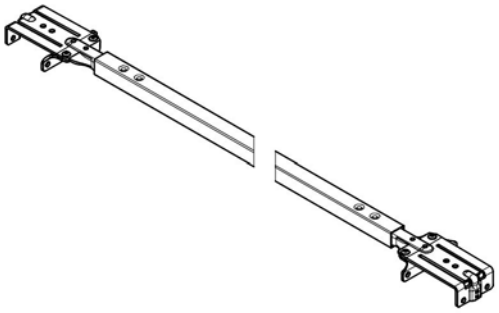
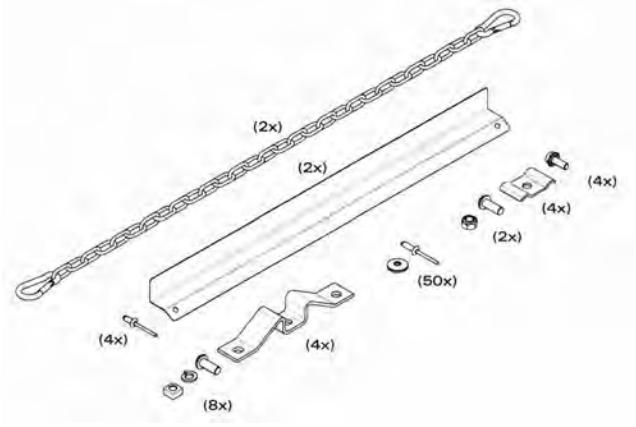
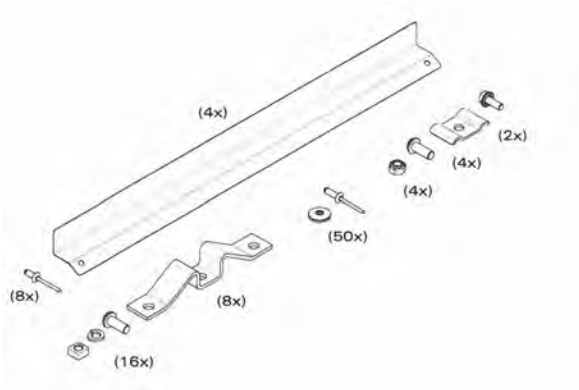
Assembly design for the profile MYCRO Trike

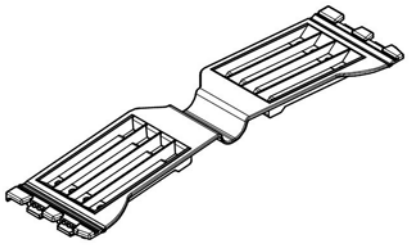
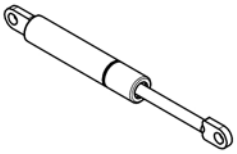


8.1. Roof parts

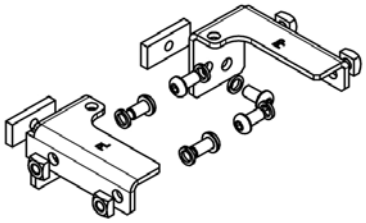
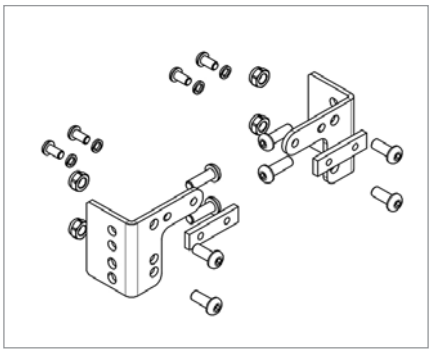
TT-number	Name	Drawing
0538 011.045 **0538 011.053** **0538 011.060** **0538 011.066** **0538 011.073** **0538 011.079** **0538 011.086**	Guide profile MYCRO Trike L = 4,5 m L = 5,3 m L = 6,0 m L = 6,6 m L = 7,3 m L = 7,9 m L = 8,6 m	
0522 048.000	Canvas guide wheel	
0521 252.004 **0521 252.007** **0521 252.009** **0521 252.014**	Sealing of the side canvas L=4,5m L=7m L=9m L=14m	

TT-number	Name	Drawing
0538 020.255	Complete universal crosspiece L=2550mm	
0522 021.901 **0538 020.911**	Crosspiece slider Crosspiece bearing, red plastic	
0538 030.555	End tiltable part, L=2550	
0538 031.655	Tiltable beam 30x30 with side termination	

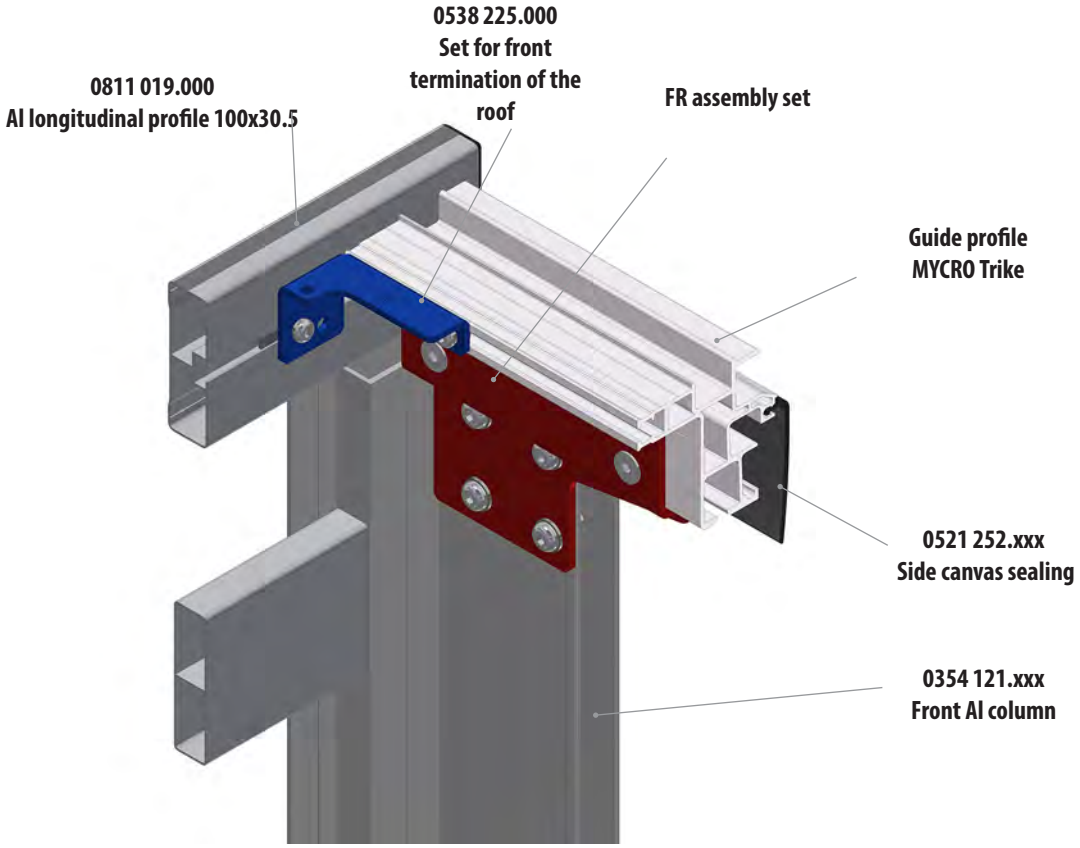
TT-number	Name	Drawing
0538 031.355 **0538 031.455**	Tiltable squared beam H=125mm H=175mm	
0538 109.255	Fixed roof crosspiece L=2550mm	
0538 300.000	Roof accessories	
0538 300.300	Accessories of the roof TWIN	

TT-number	Name	Drawing
0538 311.400 **0538 311.500** **0538 311.600** **0538 311.700**	Lamella VERSUS OMEGA 400 Lamella VERSUS OMEGA 500 Lamella VERSUS OMEGA 600 Lamella VERSUS OMEGA 700	
0538 800.000	Control rod	
0538 040.000	Gas strut	

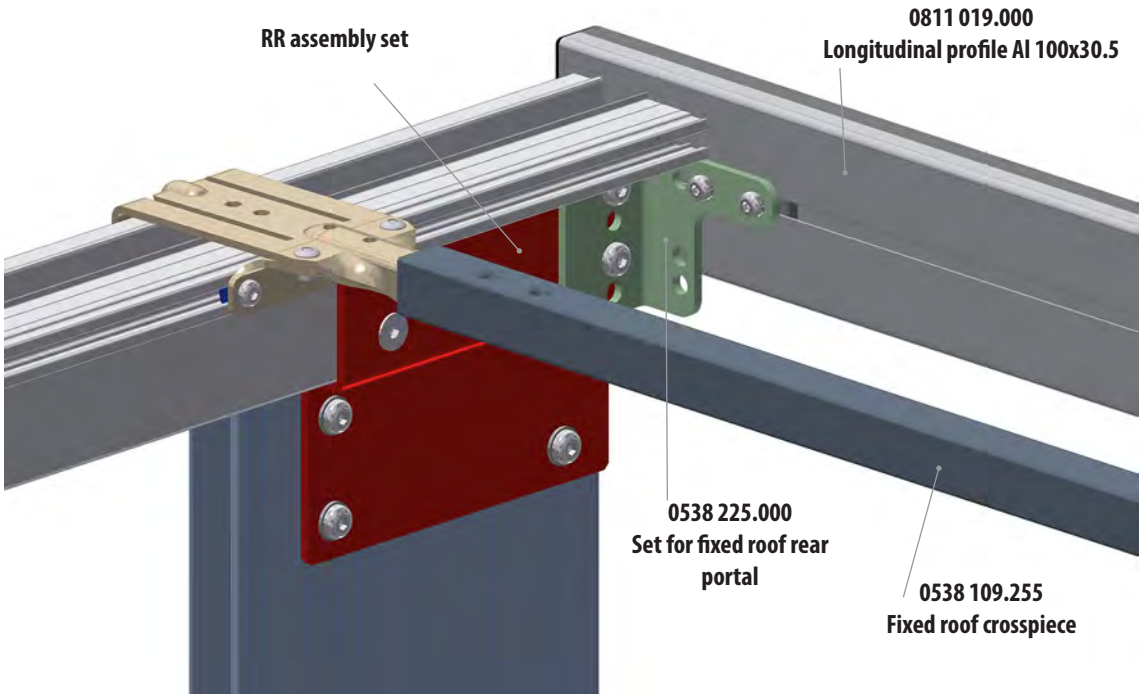
8.2. Bracing of the front and rear faces - non-folding roof

TT-number	Name	Drawing
0538 228.000	Set for non-lifting front termination of the roof The set includes: 1 pc - FL bracket (0538 228.101), 1 pc - FR bracket (0538 228.201), 2 pcs - threaded plate 40/18/6, 6 pcs - M8x16 round head, 4 pcs - nut M8 square, galvanised, 6 pcs - spring washer 8, galvanised	
0538 227.000	Set for fixed roof rear portal The set includes: 1 pc - RL bracket (0538 227.101), 1 pc - RR bracket (0538 227.201), 2 pcs - threaded plate 65/18/6, 4 pcs - M8x16 round head, 4 pcs - nut M8 square,, self-locking, galvanised, 4 pcs - spring washer 8, galvanised, 4 pcs bolt M10x25, round head, 4 pcs bolt M10x30, hex. head	

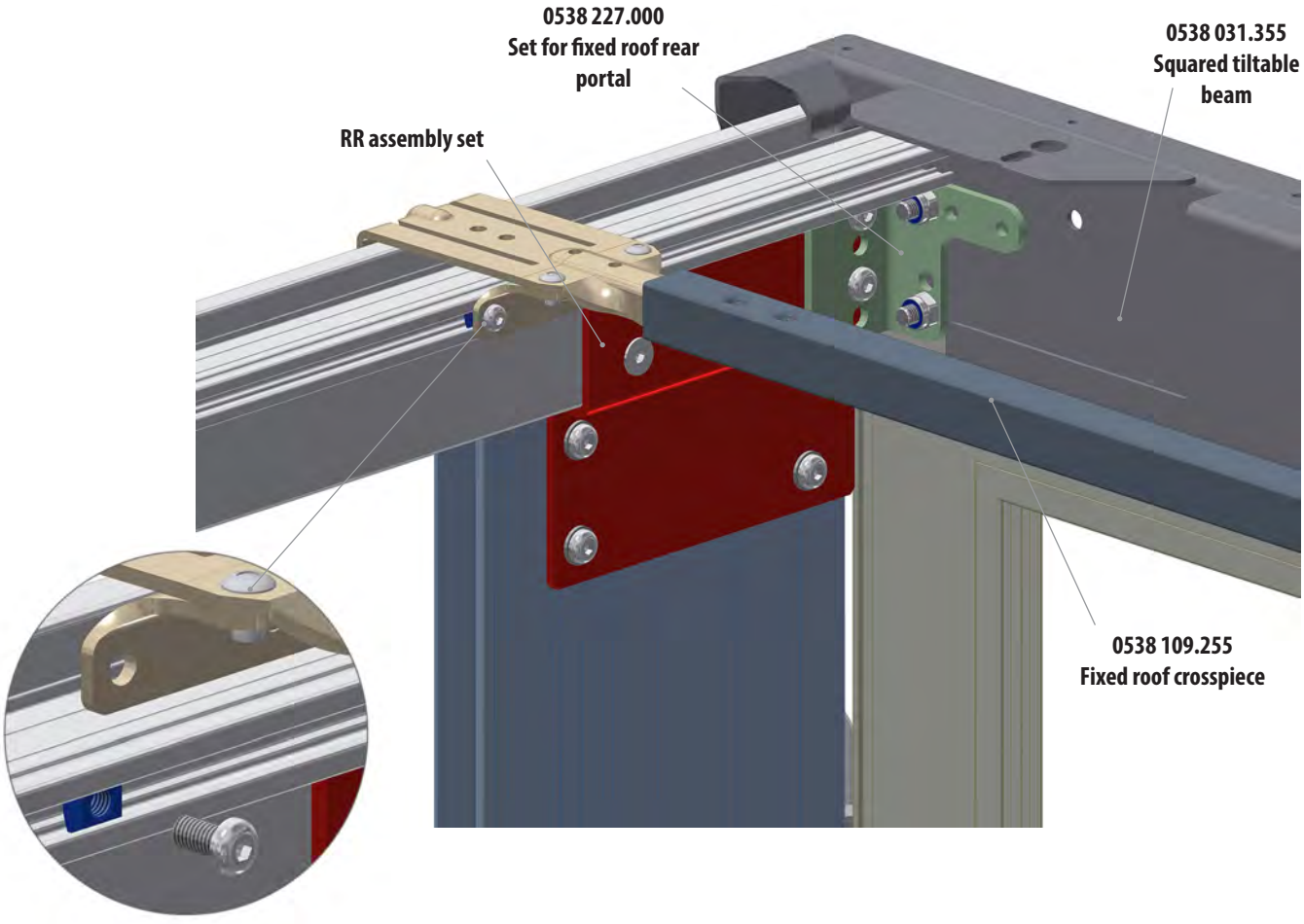
8.2.1. Bracing of the front face



8.2.2. Bracing of the rear face, non-folding roof - barrier Al profile, without gate



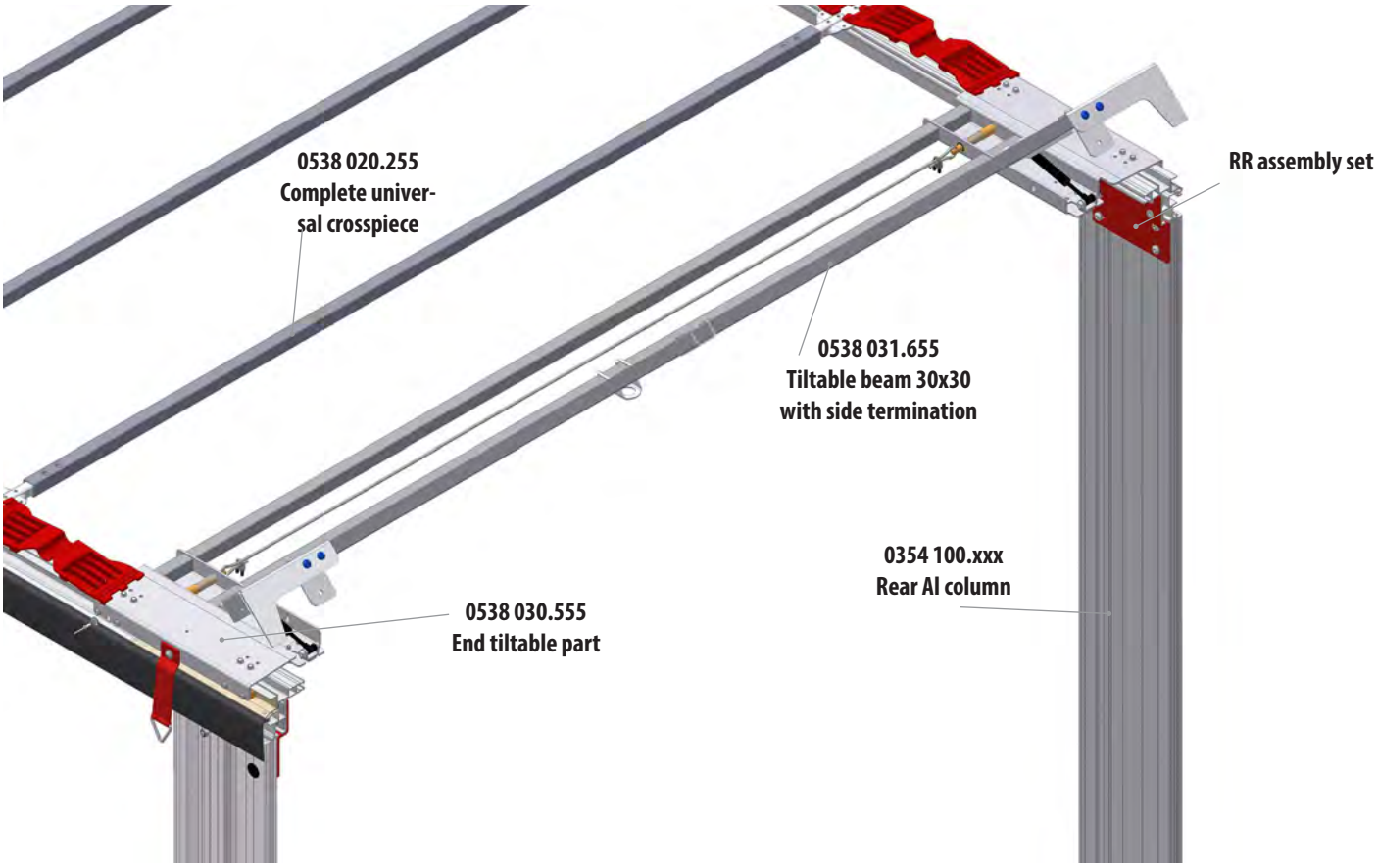
8.2.3. Bracing of the rear face, fixed roof - steel squared beam, with gate



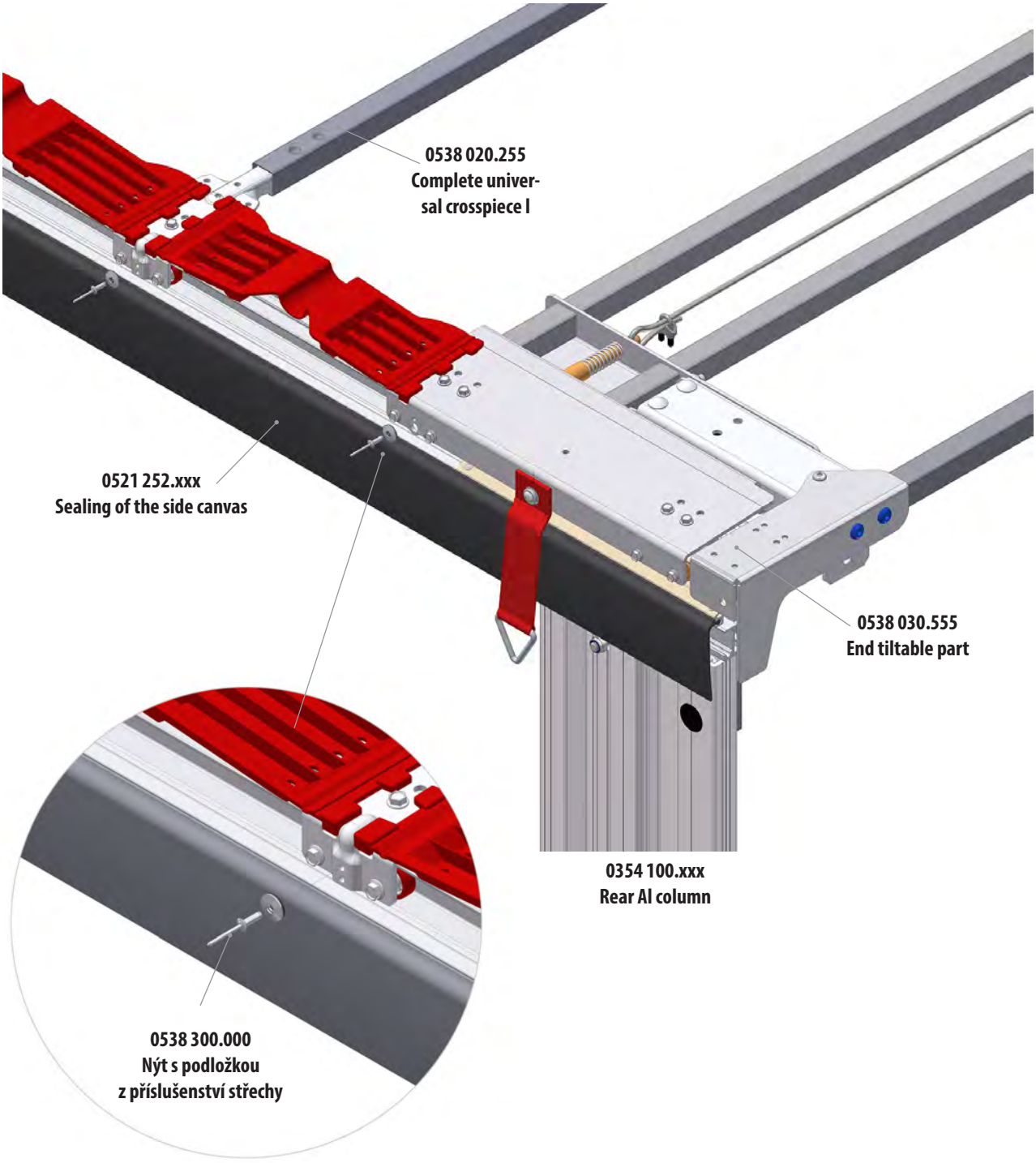
8.3. Termination of the rear face for folding roof

8.3.1. 6.3.1. Termination of the rear face with squared beam with gate, for folding roof

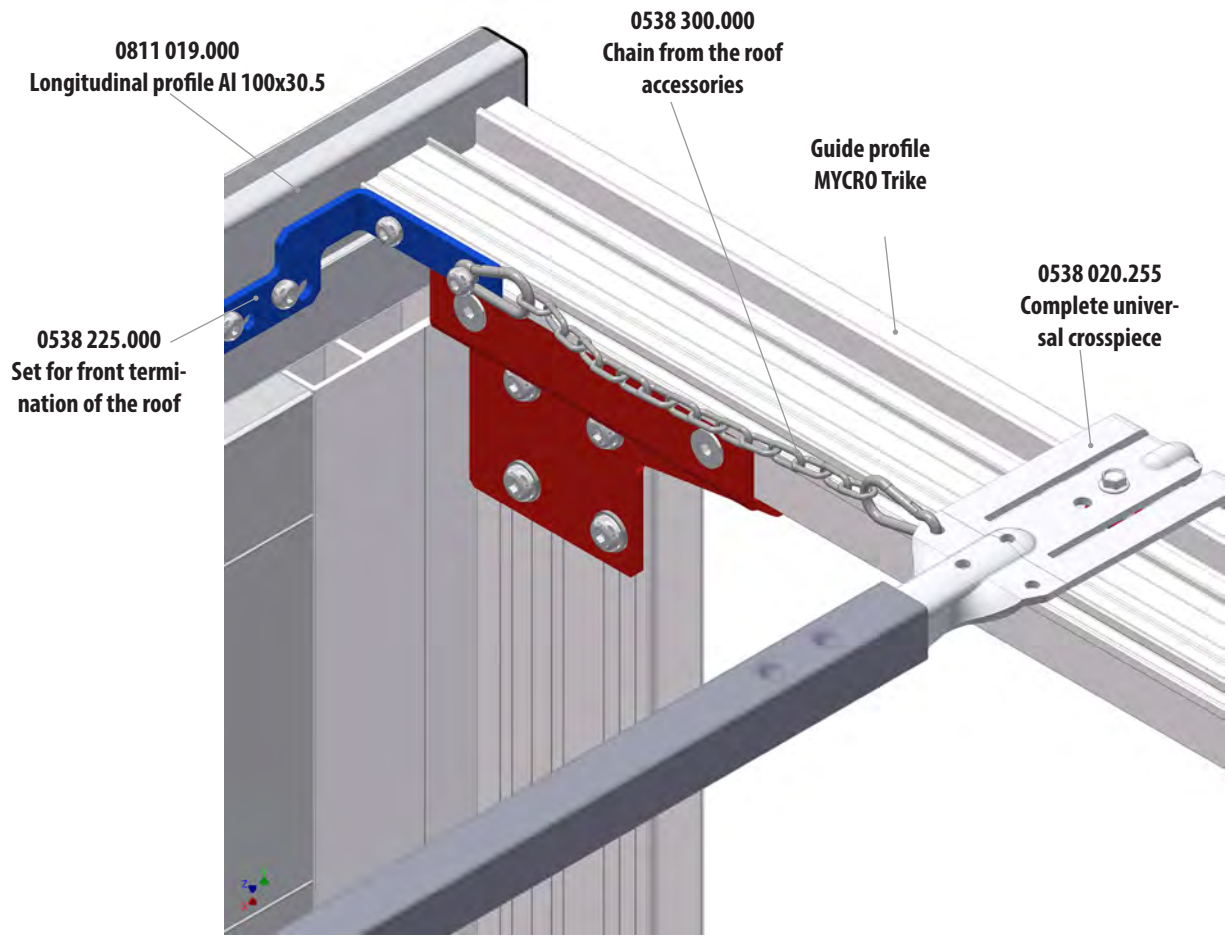
8.3.2. Termination of the rear face by a beam 30x30 without gate, for folding roof



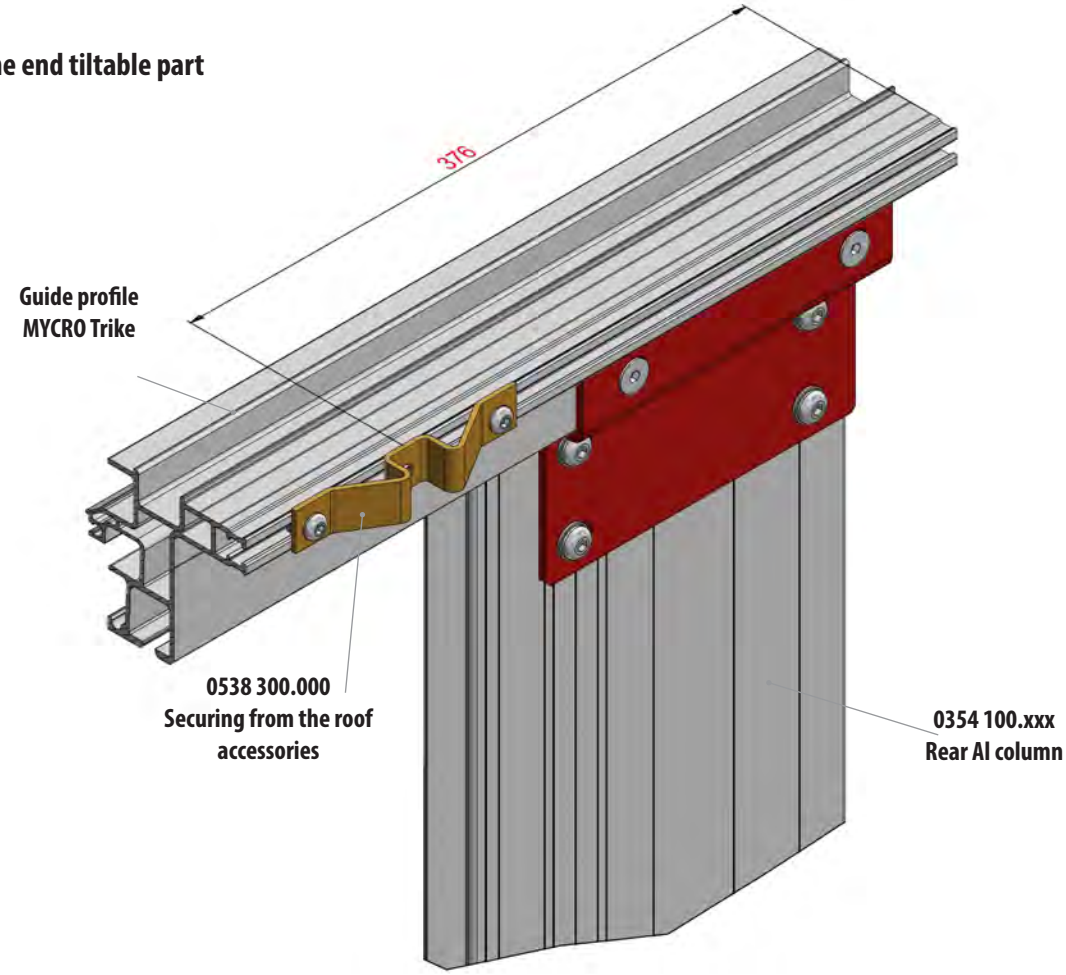
8.4. Riveting for the canvas



8.5. Fixing of the first crosspiece

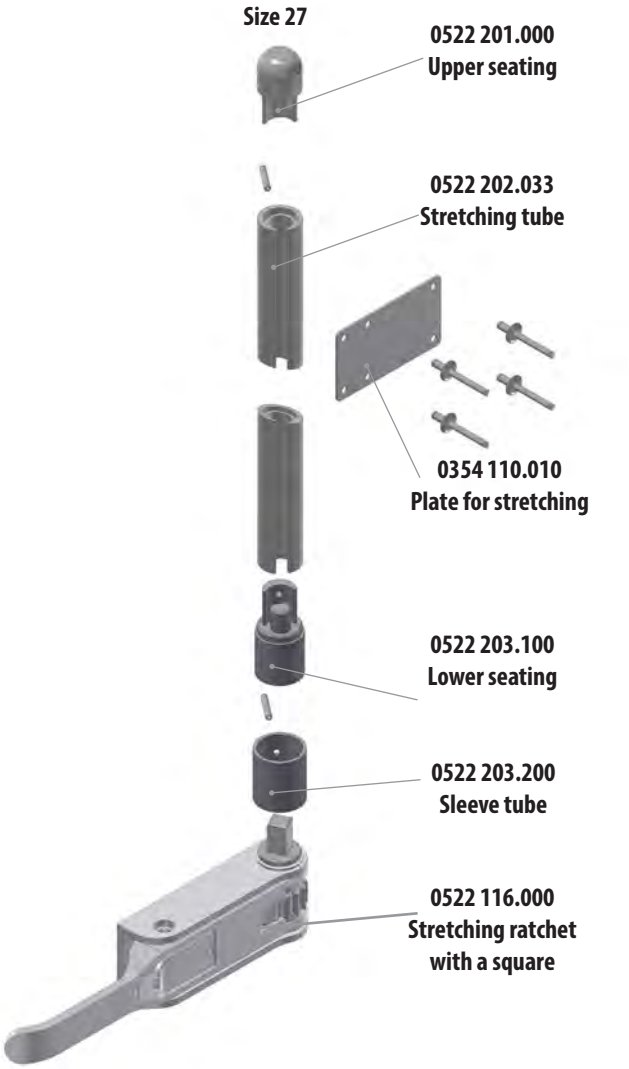


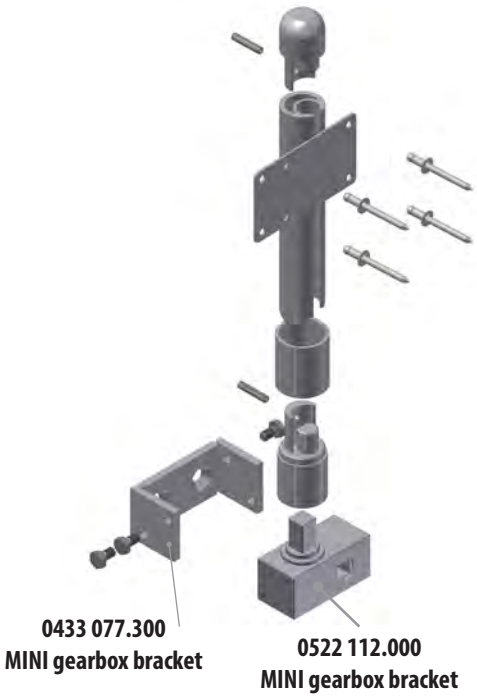
8.6. Securing of the end tiltable part



9. Stretching of the canvas

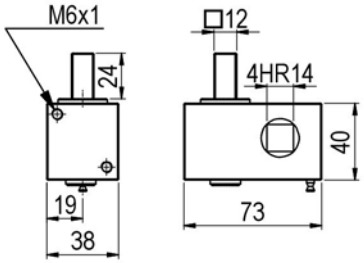
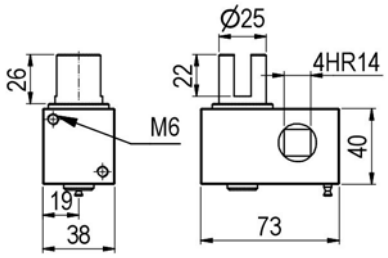
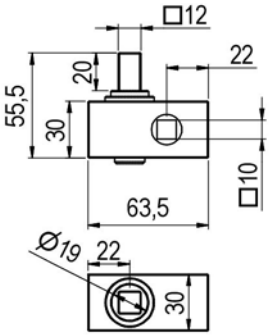
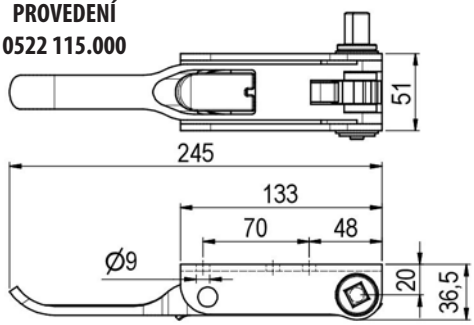
9.1. Stretching of the canvas, parts assembly

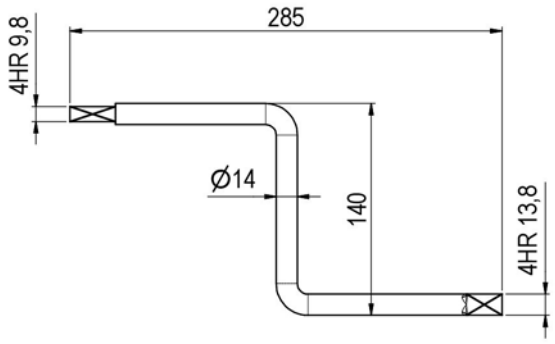
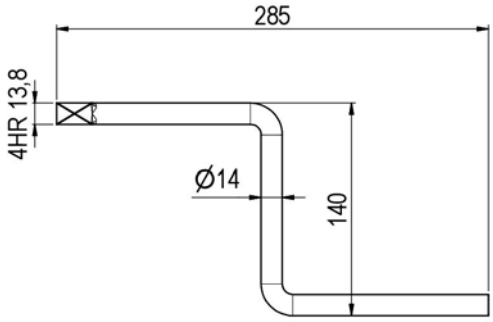




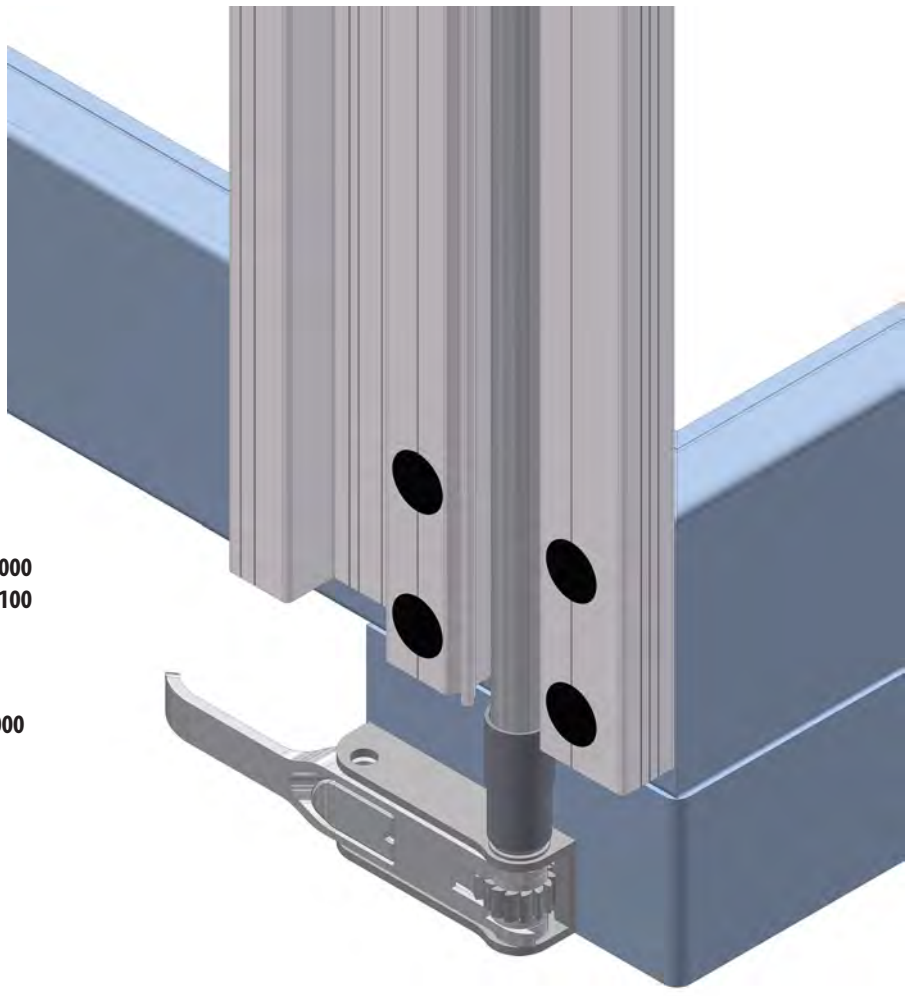
TT-number	Stretching tube size	Title	Materiál	Weight
0522 201.000	27	CS - Upper seating 27	stainless steel	0,10 kg / ks
0522 202.033		CS - Stretching tube 27mm, L=3,300mm	Al přírodní	0,70 kg / m
0522 203.000		CS - Lower seating 27	mosaz	0,10 kg / ks
0522 203.100		CS - Lower seating 27 + pin	stainless steel	0,14 kg / ks
0522 203.200		Sleeve tube for lower seating	galvanised steel	0,10 kg / ks

9.2. Stretching of the canvas

TT-number	Name	Drawing
0522 109.100 **0522 109.200**	Canvas stretching gearbox, LEFT, square Canvas stretching gearbox, RIGHT, square	 **PROVEDENÍ** **0522 109.100**
0522 110.100 **0522 110.200**	Canvas stretching gearbox, LEFT, with groove Canvas stretching gearbox, RIGHT, with groove	 **PROVEDENÍ** **0522 110.100**
0522 112.000	Stretching gearbox MINI 63x20x30 mm	
0522 115.000 **0522 116.000**	Stretching ratchet with 12mm square piece, front left/rear right Stretching ratchet with 12mm square piece, front right/rear left	**PROVEDENÍ** **0522 115.000** 

TT-number	Name	Drawing
0522 105.000	Gearbox crank / for gearbox 0522 109.xxx a 0522 110.xxx	
0522 111.000	**Gearbox crank / for gearbox 0522 112.xxx**	

9.3. Stretching ratchet installation

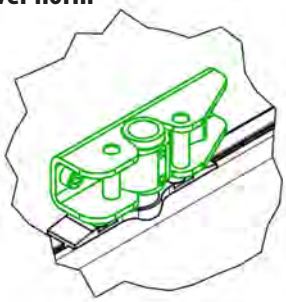


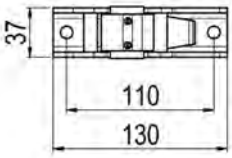
0354 100.000
0354 100.100

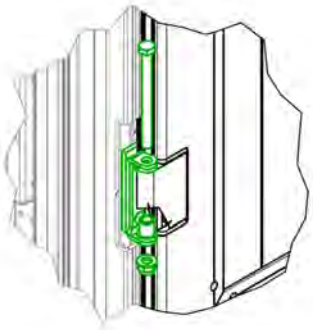
0522 115.000

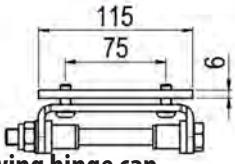
10.1. Double-leaf gate

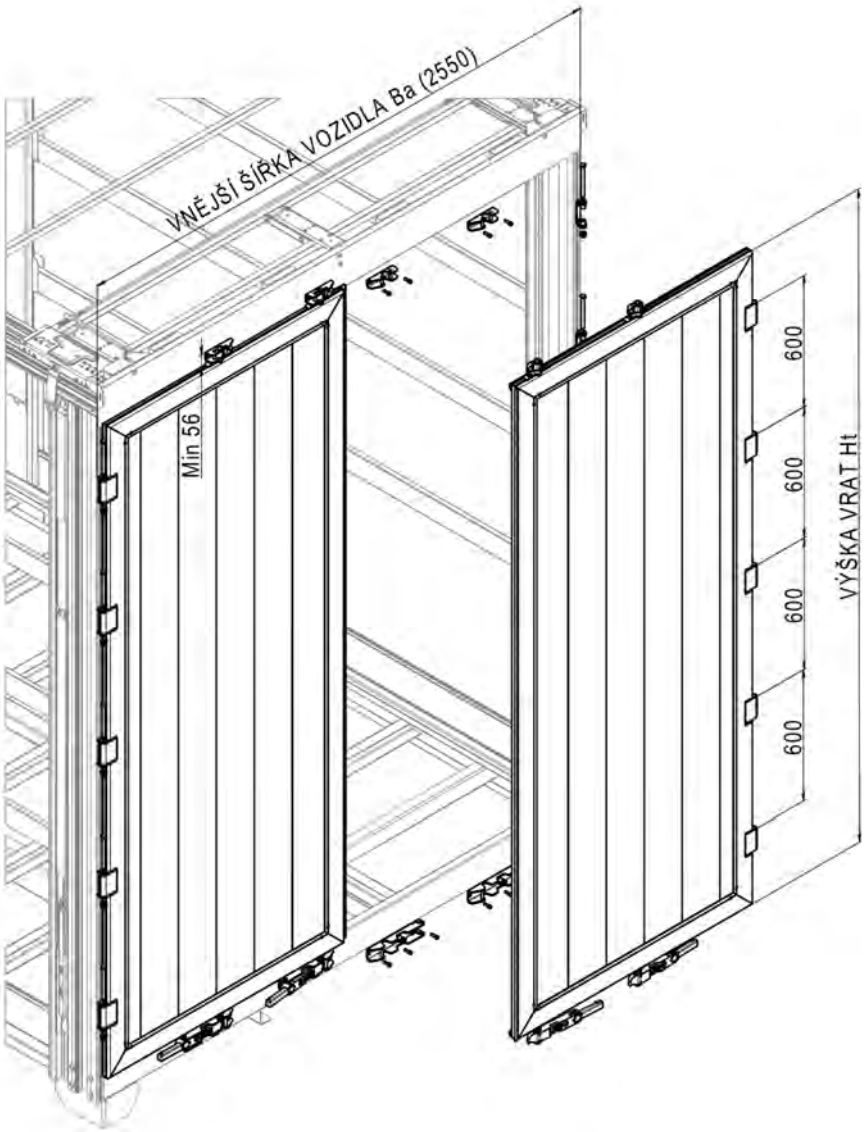
Uzávěr horní



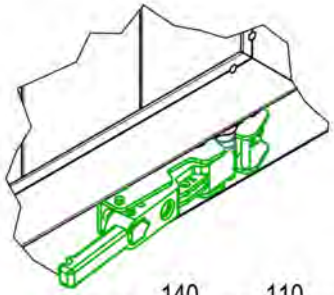


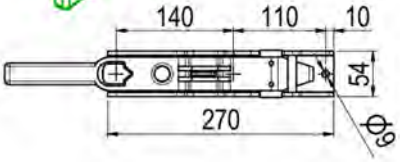


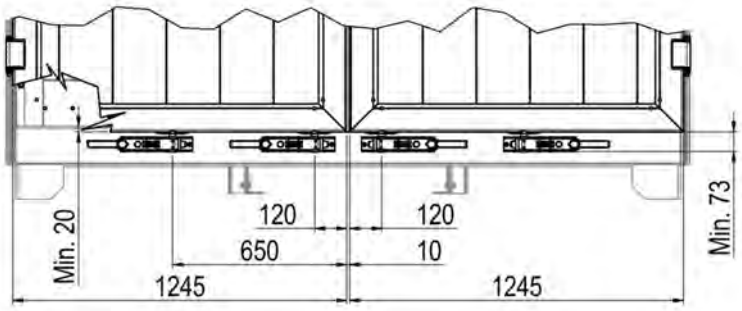




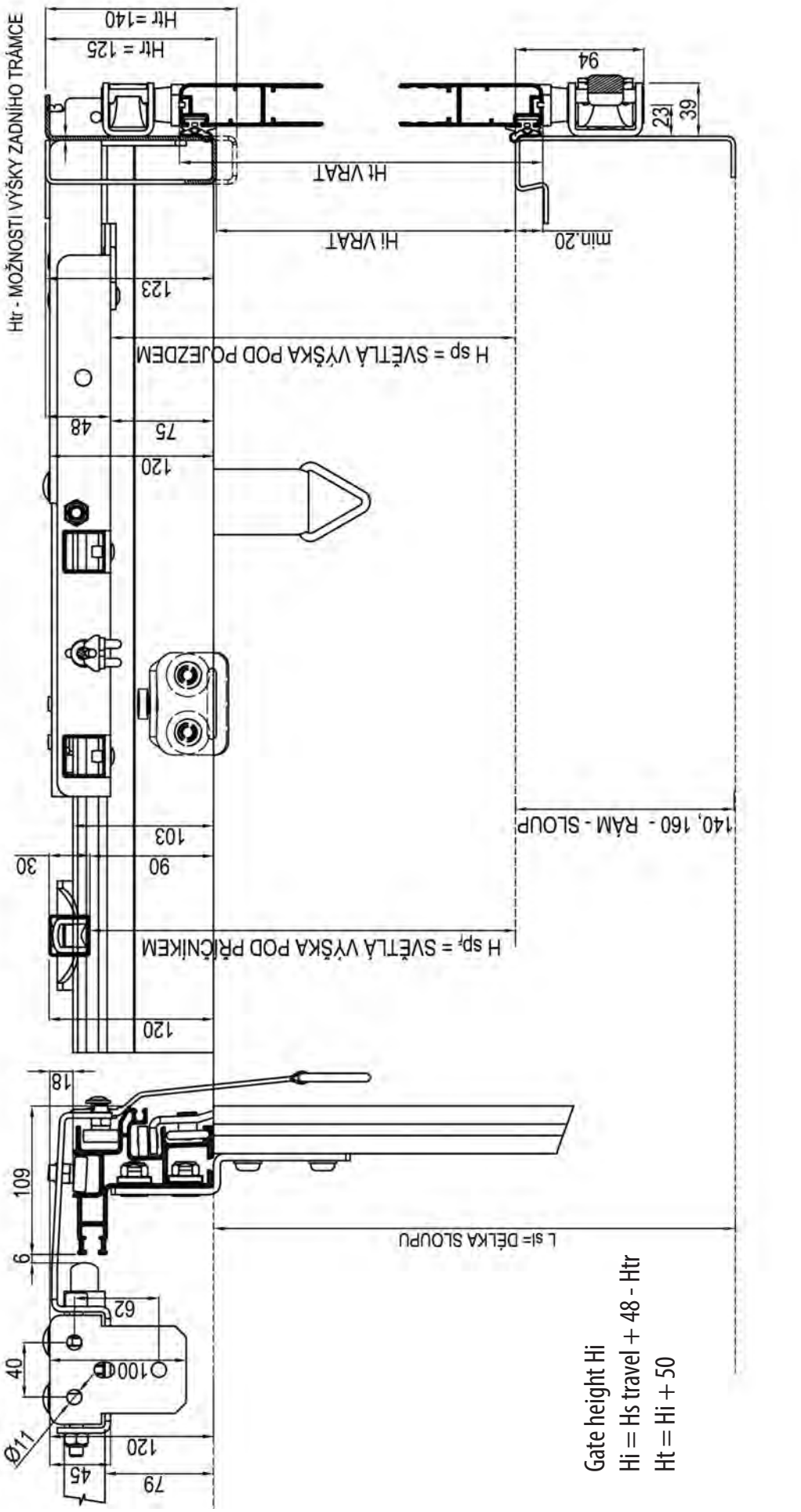
Screwing hinge cap



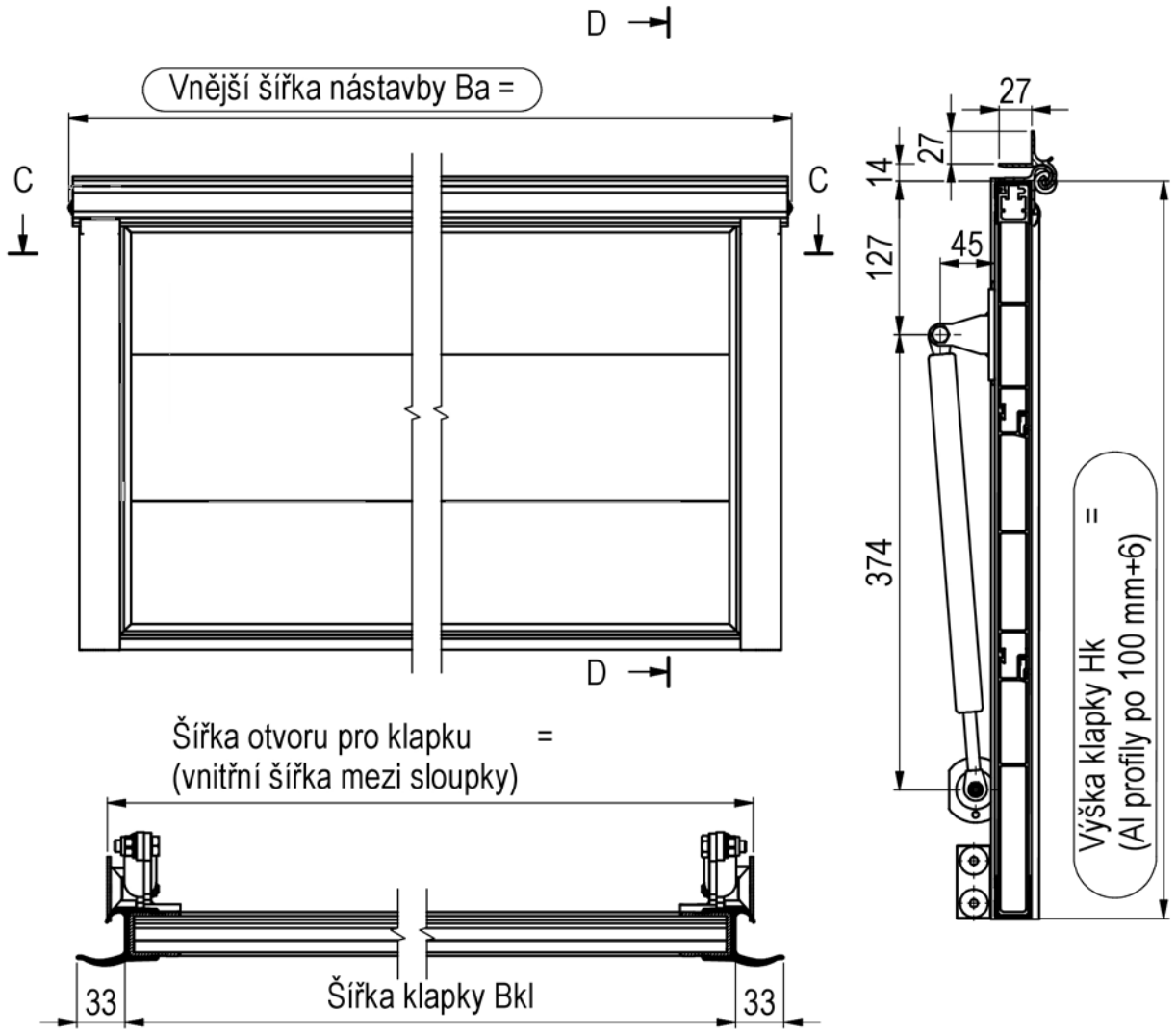




10.2. Calculation of gate height

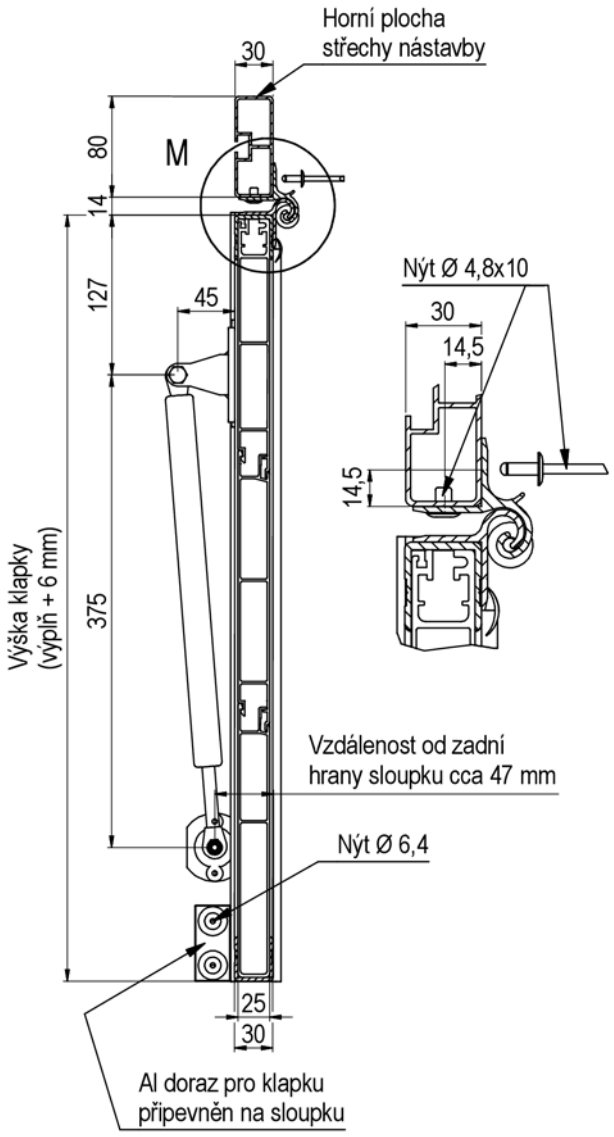


10.3. Rear portal with flap

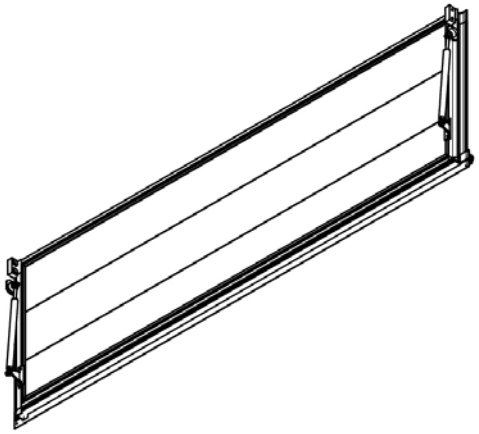


10.4. Rear portal with flap

Assembly with profile **80 x 30mm /60 x 30mm**
recommended for **PENTA CITY, FIXO, FIXO-S, LIGHT PLATFORME**

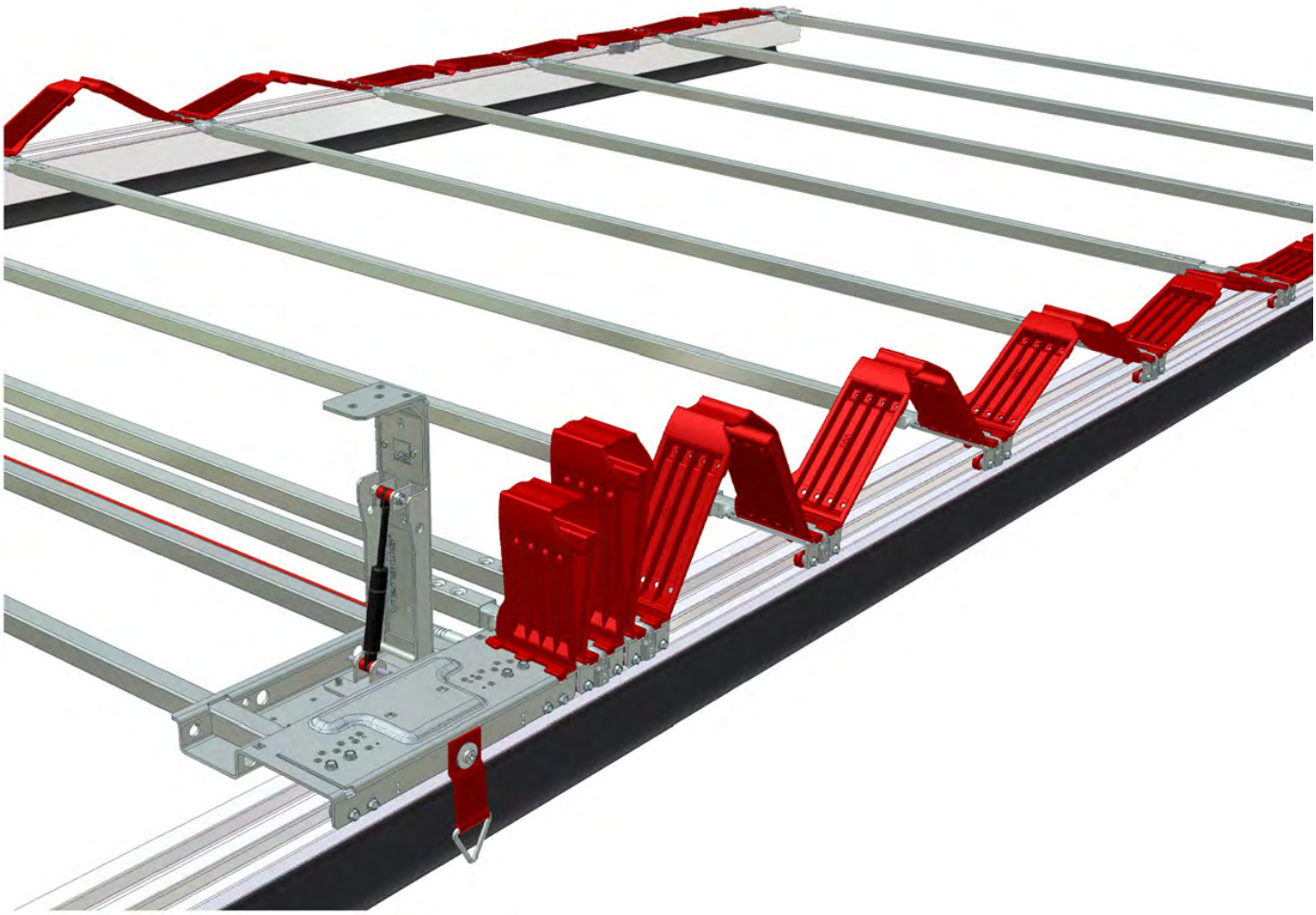


10.6. Rear portal with flap



Height flap	Outer width	Width flap (max.šířka)	TT number/ materiál klapky			Streingth gas springs	Weight
H mm	**Ba max mm**	**Bkl max mm**	TT-number	TT-number **elox**	TT-number **rám elox výplň panel**	**F (N)**	**kg /** pcs
500	2100	2010	**0561 050.021**	**0561 050.121**	**0561 050.221**	2 x 260	
	2200	2110	**0561 050.022**	**0561 050.122**	**0561 050.222**	2 x 260	
	2300	2210	**0561 050.023**	**0561 050.123**	**0561 050.223**	2 x 260	
	2400	2310	**0561 050.024**	**0561 050.124**	**0561 050.224**	2 x 260	
	2550	2460	**0561 050.025**	**0561 050.125**	**0561 050.225**	2 x 260	
600	2100	2010	**0561 060.021**	**0561 060.121**	**0561 060.221**	2 x 260	
	2200	2110	**0561 060.022**	**0561 060.122**	**0561 060.222**	2 x 260	
	2300	2210	**0561 060.023**	**0561 060.123**	**0561 060.223**	2 x 260	
	2400	2310	**0561 060.024**	**0561 060.124**	**0561 060.224**	2 x 260	
	2550	2460	**0561 060.025**	**0561 060.125**	**0561 060.225**	2 x 260	

Instructions for use and conditions of operation of the folding canvas structure Versus OMEGA

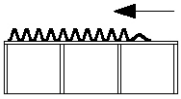


1.1 Description of the structure

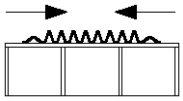
Folding canvas structure type Versus Omega enables easy and fast uncovering of the vehicle. The folding superstructure is usually in the design with folding of sides, with folding roof or fixed non-folding roof.

The roof structure is delivered in the following designs:

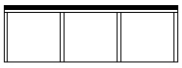
Folding from rear side



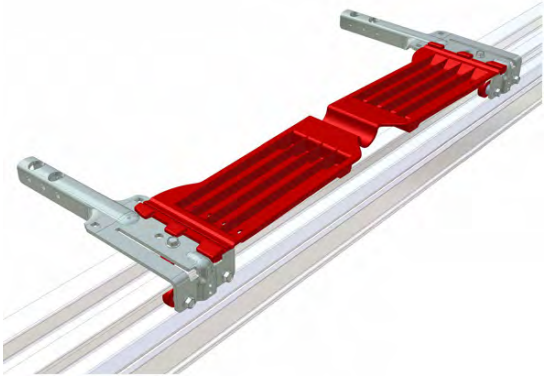
Folding on both sides

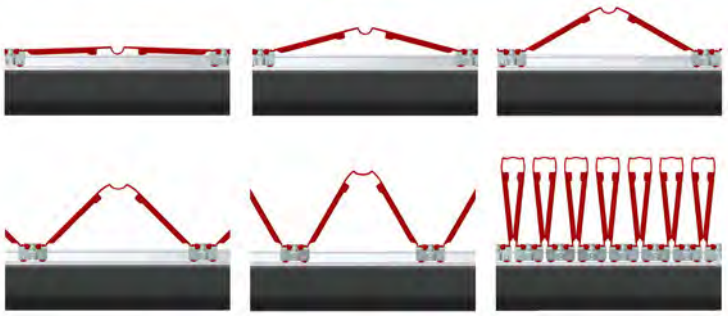


Fixed roof



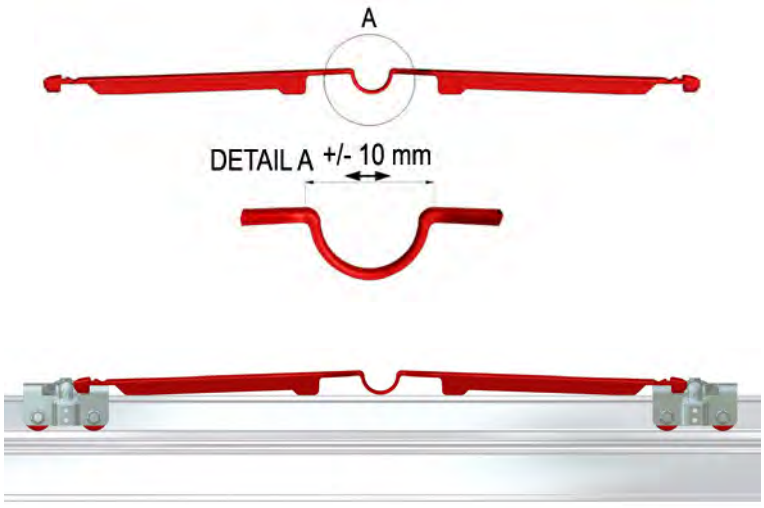
Screwed bearings of the crosspieces and rear travel, together with installed plastic lamellas (between crosspieces) enable easy folding and stretching of the roof structure. This also absorbs the shocks arising from manipulation with the structure.

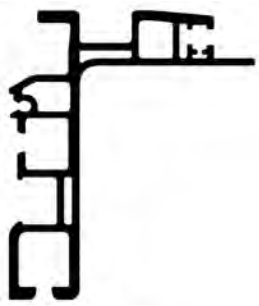
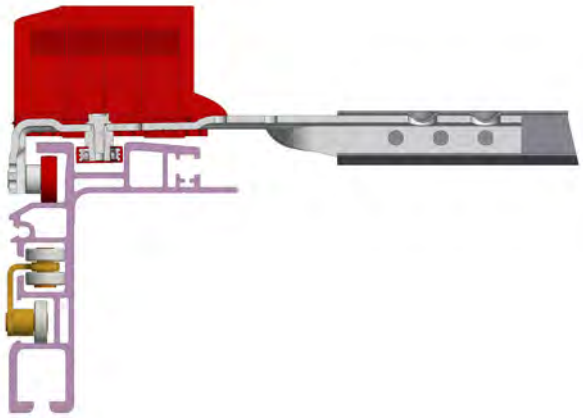
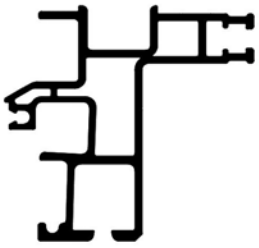
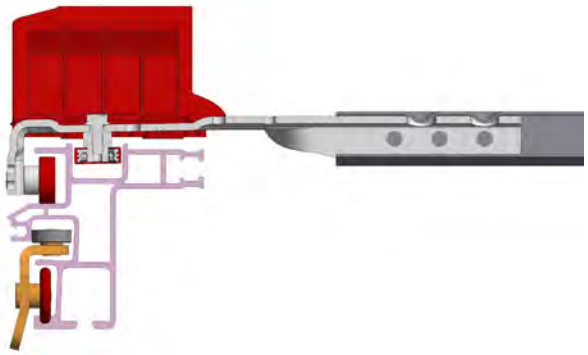
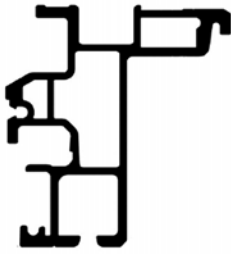
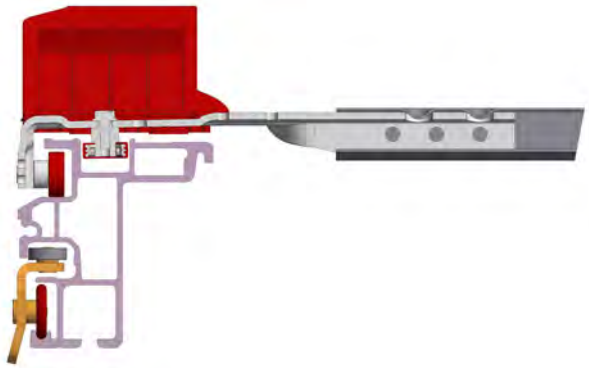




The plastic lamellas Ω are without central joints and can be bent thanks to their specific shape. The system of lamellas shaped as Ω can be compressed or stretched as necessary. This absorbs all forces with opening or closing of the roof. When the roof is closed, the lamellas are seated on the guide profile. This prevent bending of the lamellas downward or one over the other when opening the roof.

The roof canvas shall be fixed to each roof crosspiece using shackles, usually by five shackles on the first and last three crosspieces. Between these crosspieces, at least three shackles per one crosspiece are recommended.



Types of guide profiles for folding structure Versus Omega	Types of canvas guide wheels	Location of guide wheels, crosspieces and plastic lamellas in the guide profile
ALTO 150 VS2 **0538 007.xxx** 		
MYCRO TRIKE **0538 011.xxx** 		
DUO 120 TRIKE **0538 014.xxx** 		

Profile Mycro Trike - use particularly with smaller vehicles
Profile Duo Trike -use particularly with larger vehicles, e.g. with a XL superstructure
Profile Alto VS2 - use particularly for maximal filling of the loading area; suitable also for XL superstructures

1.2 Use and procedure with folding of the roof Versus Omega

All mechanisms for folding of the canvas and their parts Versus Omega are designed for vehicles designed for traffic on roads. The vehicle superstructure shall comply with the applicable regulations (particularly Act no. 56/2001 Coll.) on technical conditions of traffic of road vehicles on roads, decree no. 315/2012 Coll. on approval of technical capability and technical conditions of traffic of vehicles on roads).

The manufacturer neither supplier of the folding structure do not provide any warranty for losses and risks arising from non-observance of the applicable regulations. Folding roof mechanism can only be used if in compliance with the law and safety of traffic on roads. The equipment may only be operated by a person that is familiarised with the folding system Versus Omega.

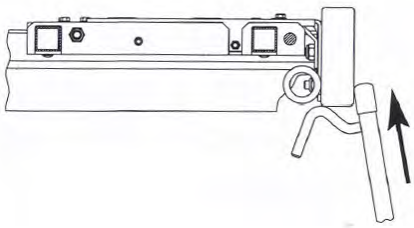
Procedure with folding of the roof Versus Omega

- The roof and side canvas may only be folded if the vehicle is in standstill

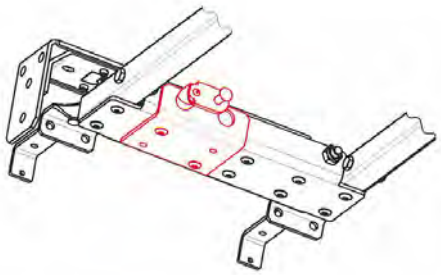
- The side canvas can be folded from the ground after unlocking of the canvas clips and release of the stretching ratchet.

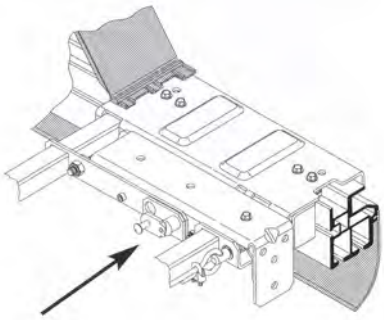
The folding roof structure can be unlocked after opening of the rear gate.

• Folding of the roof structure can be carried out by tilting the rear portal upward using the rod, see the picture.

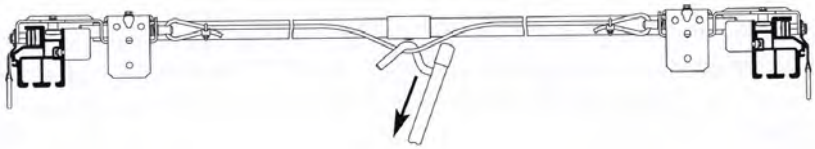


In case the read tiltable portal is equipped with a rotary locking mechanism, it is necessary to unlock it before tilting, see the picture.



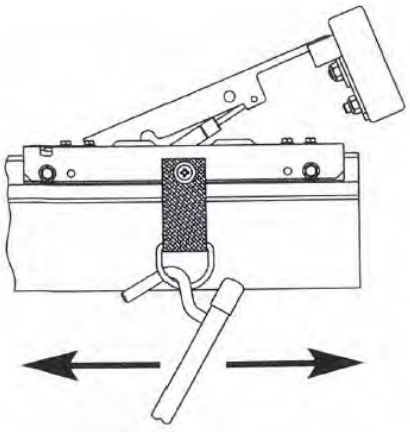


• Using the manipulation rod pull the steel stranded wire under the travel downward. This unlocks the rear travel and enables its linear shift, see the picture



• Folding of the roof without load on the vehicle is possible using the manipulation rod, by pulling the last crosspiece up to the place where the folded position can be secured.

• In case the vehicle is fully loaded, the roof can be folded using the side lug, see the picture.
When stretching the folded roof, proceed in reverse order.



• The roof structure can be raised using the lifting mechanism located in the font and rear corner columns. When lifting the roof, unlock the rear gate, release the side canvas, remove side bars and unlock side columns.

• We recommend use always bracing straps between the rear columns to increase safety and lifespan of the super-structure.

Attention!

Remember please that the folding roof in open position shall be secured for safe loading. Otherwise it could stretch spontaneously and this could lead to damage to the structure or load.

Attention!

e drive, folded roof shall be secured in stretched position; the rear portal shall be tilted down and locked. Further it is necessary to have the rear gate closed and side canvas stretched

1.3 Maintenance and repairs

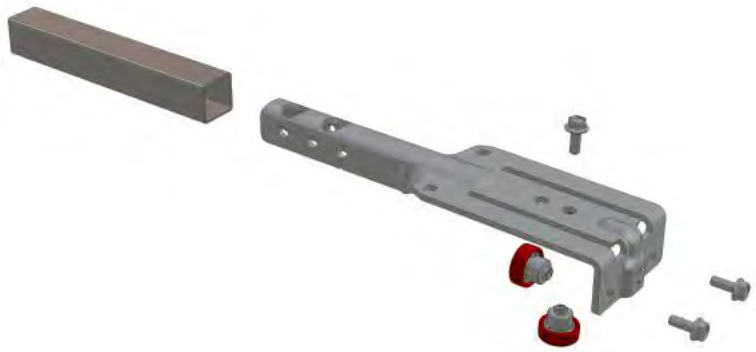
Regular servicing extends lifespan of folding roofs Versus Omega and enhances comfort with their use. Necessary service depends particularly on high concentrations of dust.
Repairs of folding roofs versus Omega can be carried out without their dismantling.

Aluminium guide profiles

Check the guide profiles for damage. Damaged profiles shall be replaced. When checking the structure, pay attention to cleanness of the guide profile. The surfaces that come into contact with bearings of the crosspieces and canvas guide wheels, shall be without any dirt. Dust and other mechanical dirt shall be thoroughly removed

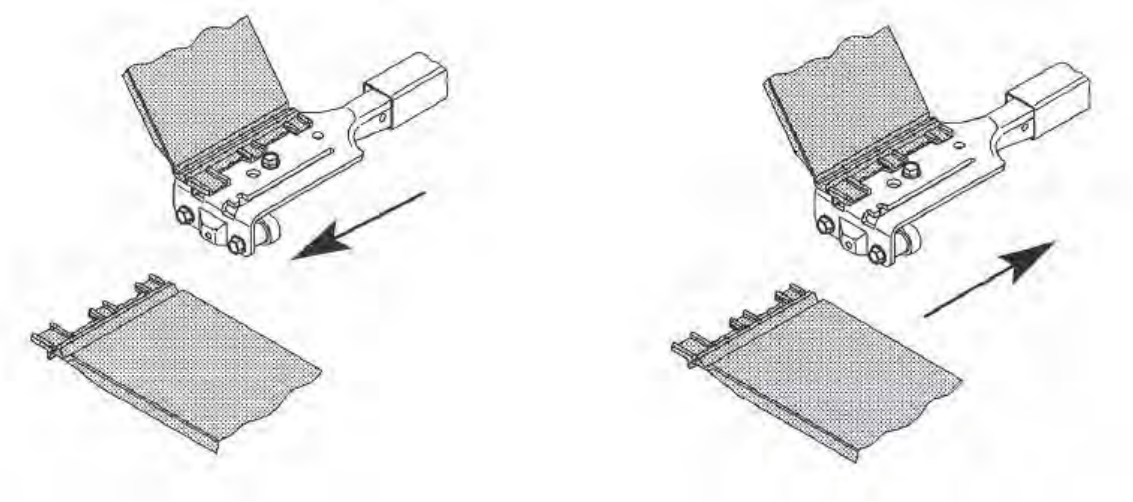
Bearings and their replacement

Bearings of the folding roof Versus Omega need no lubrication due to their covering.
In case of their non-functionality and damage, it is necessary to replace them using an open wrench no. 10 for releasing of the bolts. Apply the same procedure for installation of new bearings, see the picture.



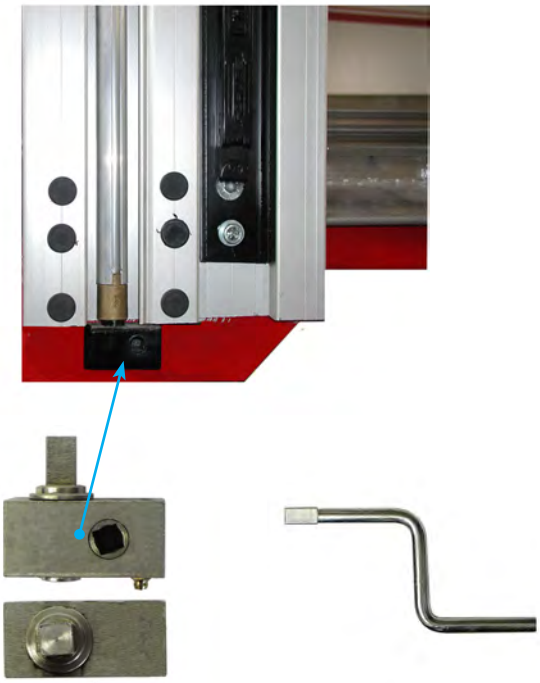
Plastic lamellas

Plastic lamellas are sliding-on types; it is necessary to check them to prevent their mechanical damage during manipulation with them. In case the lamella is damaged, it shall be replaced immediately to prevent any damage to other lamellas when folding the roof.
For replacement of a lamella open the roof, slide the damaged lamella out and slide on a new lamella, see the picture. Before sliding on a new lamella, bend it slightly to one and then to other side in the place of its sliding on. This eliminates its stiffness and causes its softening with first folding of the roof.

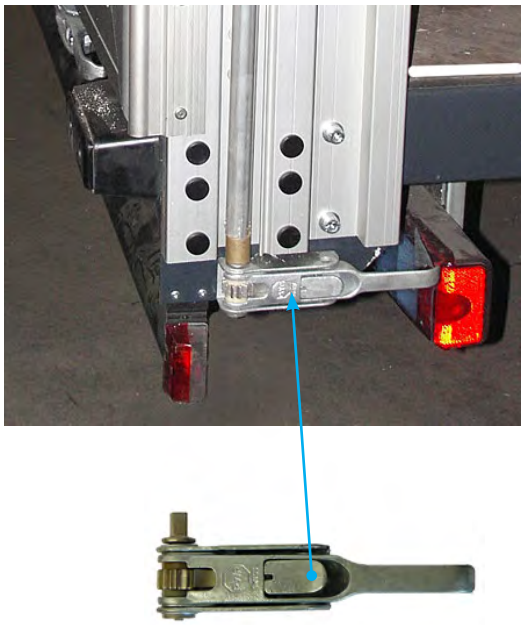


Stretching mechanisms

1)) gearbox with crank
it shall be lubricated as necessary (lubricator



2) stretching ratchet
it is recommended to lubricate it around the pinion



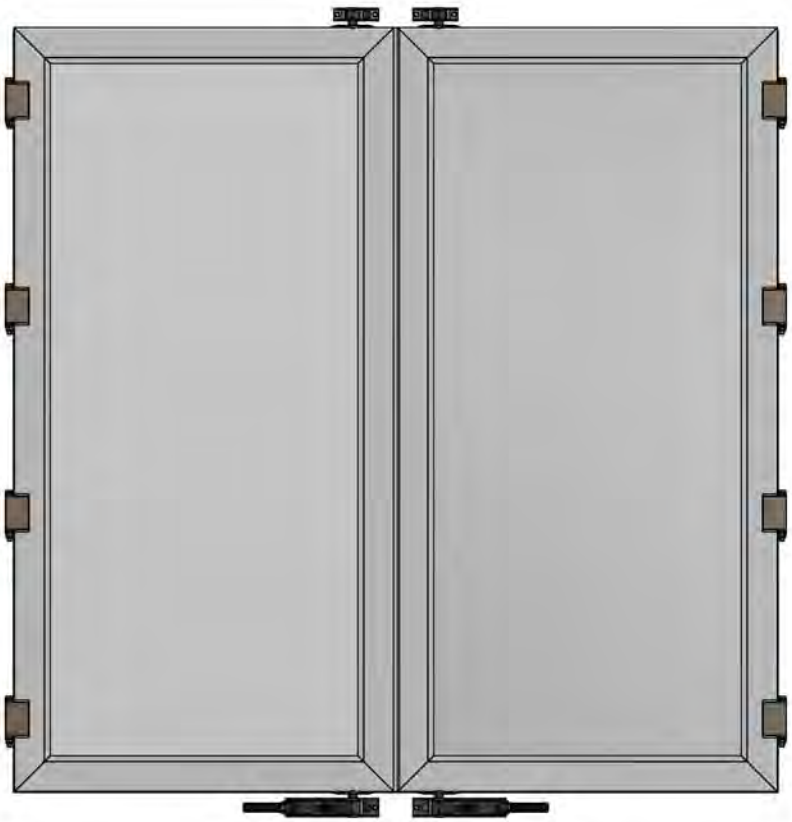
1.4 Warranty and spare parts

Our parts are covered with a 24-month warranty according to the law, i.e. from the delivery date. The warranty covers any faults and failures of our parts and structures. The warranty relates to replacement of parts considered as faulty. The warranty is rejected in case when the purchaser or any third party modifies or repairs the delivered goods without prior consent of our company or in case of improper use or bad maintenance

We recommend to use canvas with specific weight at least 900 g/m2 for our superstructures.
Note

The manufacturer reserves the right to make changes in the technical documentation and in the structure or accessories of Versus Omega. These parts were tested in view of their safety and functionality. Versus Omega is not responsible for any damage or injury caused by use of non-original spare parts and accessories.
Delivery and handover of spare parts and accessories provides:
TRANS-TECHNIK spol. s r.o., Tyršova 1146, 664 42 Modřice

Manual for ordering, installation and use of TT gate



Division of gates, designs and basic dimensions for ordering of gates.

Rear gate can be in the following designs: - double-leaf - double-closure - four-closure
- four-leaf
- the closures are outer or with flushed closures upon request.
- gate material: Al natural - Al anodized - Al varnished - Al frame + panel.

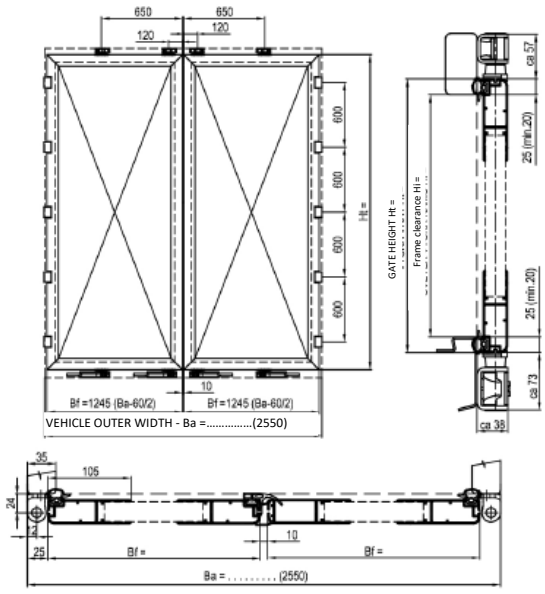
Rear gate made of Al profiles with sealing along perimeter and rubber sealing across the centre.
Surface natural and varnished - gate profiles and panels are welded in corners on both sides + Al panels welded from inside (at the top, in the centre and at the bottom).
Designs with anodized surfaces and panels - gate welded in corners from inside. The design with anodized surfaces - the filling panels are welded from inside (at the top, in the centre and at the bottom). The gate panels are glued in the frame profile from outside.

The hinges are made of steel, standardly screwed; also available with welding on or Al riveting (natural or anodized) hinges.
This gate design guarantees high strength, stiffness and therefore long lifespan.

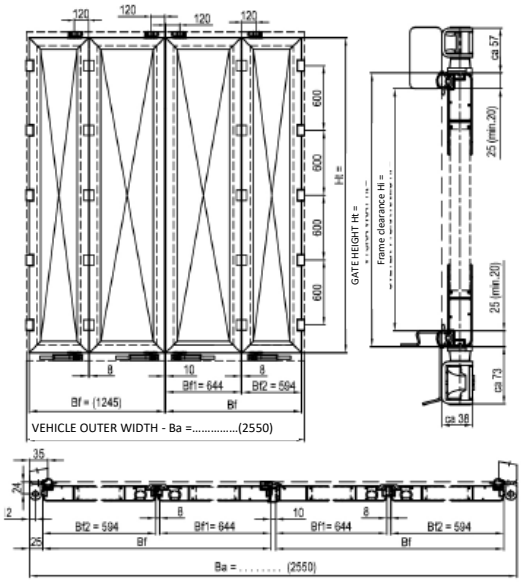
Dimensions for ordering of gates:

When ordering gates, specify dimensions: **Ba x Ht (mm) = (Vehicle outer width x gate height)**.
Recommended overlap of the frame and upper portal = 25mm (min. 20mm), see the picture below.
Warning: The gate is provided with a label in its lower corner for easy identification.

Double-leaf gate
basic dimensions



Four-leaf gate
basic dimensions



VEHICLE OUTER WIDTH - Ba =	VNĚJŠÍ ŠÍŘKA VOZIDLA – Ba =
GATE HEIGHT Ht =	VÝŠKA VRAT Ht =
Frame clearance Hi =	SVĚTLÁ VÝŠKA RÁMU Hi =

Gate installation - main principles:

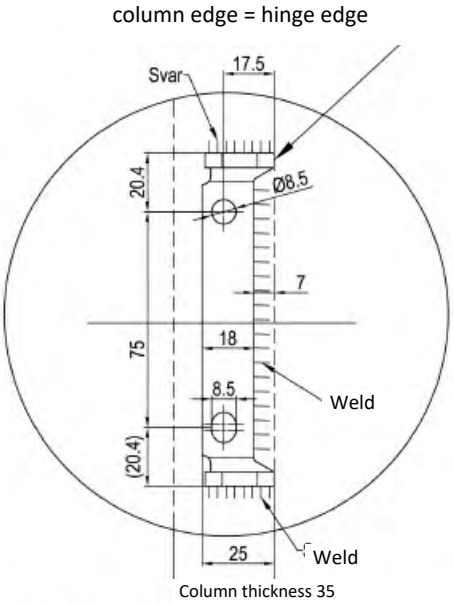
Thickness of the column for installation of a gate min. 35mm (due to function of the sealing).

1. Spacing of the hinges is 600mm. Gate shall be located so that the upper and lower overlap of the frame (portal) is min. 20mm, recommended 25mm.
The hinges (welded on, screwed) shall be located so the hinge outer edge is aligned with the outer edge of the column. The hinge "recess" should face to the superstructure outer dimension. See the picture.
Screwed closure: each hinge is fixed using two M8 bolts, strength 8.8.
Welded on hinges: the weld shall be located in the !recessed" part of the hinge, on its outer side (at the bend).
Riveted hinge should be fixed over the column corner by rivets dia. 6,4 x length (acc. to the column wall thickness).
The way of riveting: 1 rivet in the hinge centre, 1 rivet above and under the hinge; applies for each hinge.

ATTENTION!! In case of steel (screwed and welding on) hinges do not tighten the screw M12x140. Tightening - lamping - of the gate joint causes bad causes bad function of the hinge and may lead to sweeping and damage to the sealing.

2. Check the so-called pusher for its damage or knocking off after installation or due to improper use; this component has to protect sealing against sweeping, so sealing of the gate against water in the loading area. The pusher can be installed or replaced easily in case of its loss or damage.

3. We recommend to install a drip mould over each gate to prevent flowing of water from the roof onto the gate.



Use of gates

1. ! ! ! The gate shall be braced diagonally during operation - the journey. ! ! ! !

2. The gate shall be secured i open position using the gate bracket.

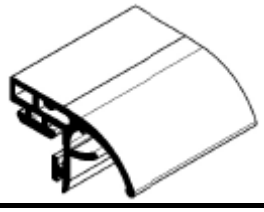
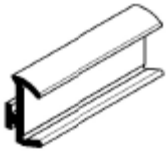
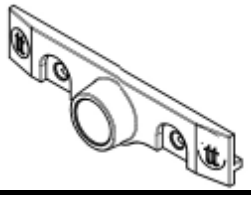
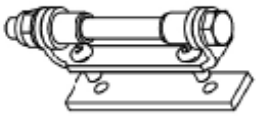
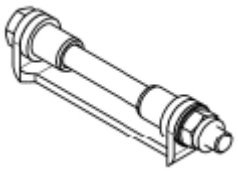
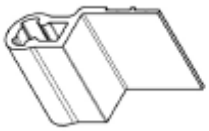
- do not drive with open gate.

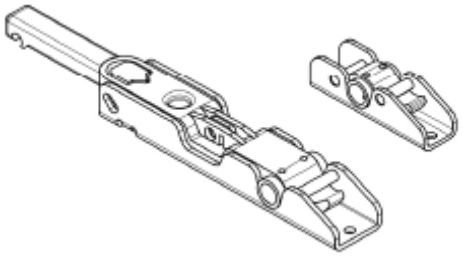
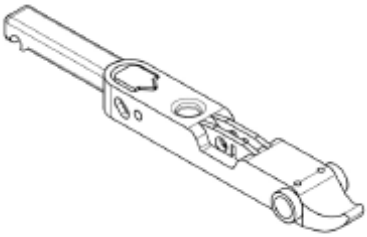
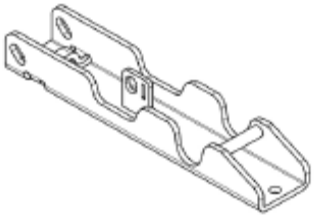
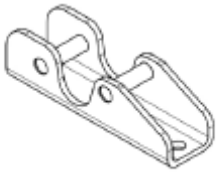
. before the journey check whether the upper and lower closures are in closed positions.

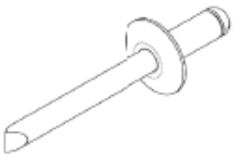
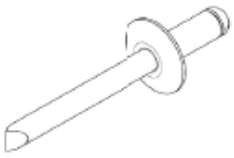
- secure the load against any displacement. The load shall not be in contact with the gate.

. Check presence of the gate pusher (located at the gate bottom corner).

Basic spare parts for gates

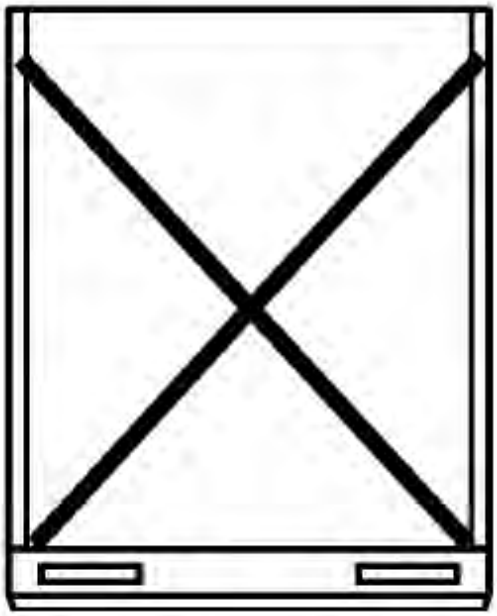
TT-no.	Description	Sketch
0512 026.000	Peripheral sealing	
0512 027.000	Central sealing 2K	
0512 028.000	Central sealing 4K	
0512 032.100	Pusher	
0512 030.000	Hinge 2K sleeve	
0512 034.000	Guide	
0512 050.000	Bolted gate hinge	
0512 053.000	Welding on gate hinge	
0512 019.xxx **0512 020.xxx**	Welding on gate hinge Al natural Al anodized	

TT-no.	Description	Sketch
0512 035.000	Gate closure 18mm, complete	
0512 035.110	Lower closure lever	
0512 035.120	Closure lever counterpiece	
0512 035.210	Upper closure finger	
0512 035.220	Upper closure counterpiece	
0512 039.000.	Closure rod 18mm - 3,300mm	

TT-no.	Description	Sketch
0991 041.204	Clamping set, strip, width 35mm	
0911 001.100	Anchoring lug with shackle 750kg, galvanised	
2111 464.165	Rivet 6.4x16 S = 5.5-8.5mm; used in the upper part of the column	
2111 464.181	Rivet 6.4x18 S = 9-12mm Used in the lower part of the column in the chamber with the stiffener	

The gate shall be provided with a label showing information about necessity of bracing

THE GATE SHALL BE BRACED!



REAR DOORS MUST BE FIXED WITH TENSION STRAPS