NamakaranFakher.co

کاتالوگ تخصصی مقاطع کرتین‌وال

CURTAIN WALL PROFILES – TECHNICAL CATALOGUE

شرکت مهندسین نماکاران فاخر

NAMAKARAN FAKHER ENGINEERING COMPANY

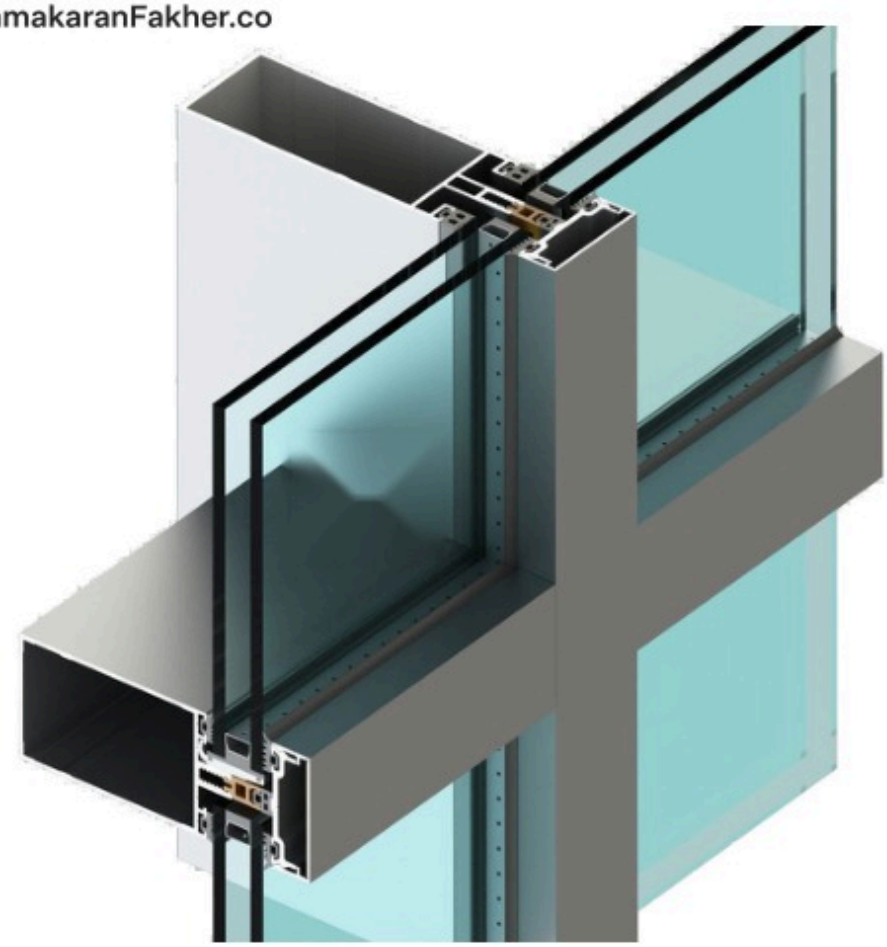
NAMAKARAN FAKHER ENGINEERING COMPANY

www.NamakaranFakher.co

TECHNICAL CATALOG

STEEL SUPPORTED FACADE SYSTEM- FACE CAP

NamakaranFakher.co



CW50

system specification

Mullion and Tranzem width size: 50 mm.

Vertical profile height size: 62.5-300 mm.

Horizontal profile height size: 50-206 mm.

Profile wall thickness: 1.4-3.5 mm.

The smallest opening size: 700-1200 mm.

Maximum opening size: 1500-2000 mm.

Polyamide size: 12 mm.

Size of glass thickness: 4-45 mm.

Standard tires for **sealing and air sealing** the facade.

It is possible to implement curtain wall with **cap-cap U-channel** and **full frameless**.

Size of glass thickness: 4-45 mm.

Thermal insulation size (UF): 1.47-3.85 W/m²k.

TECHNICAL CATALOG

STEEL SUPPORTED FACADE SYSTEM- FACE CAP

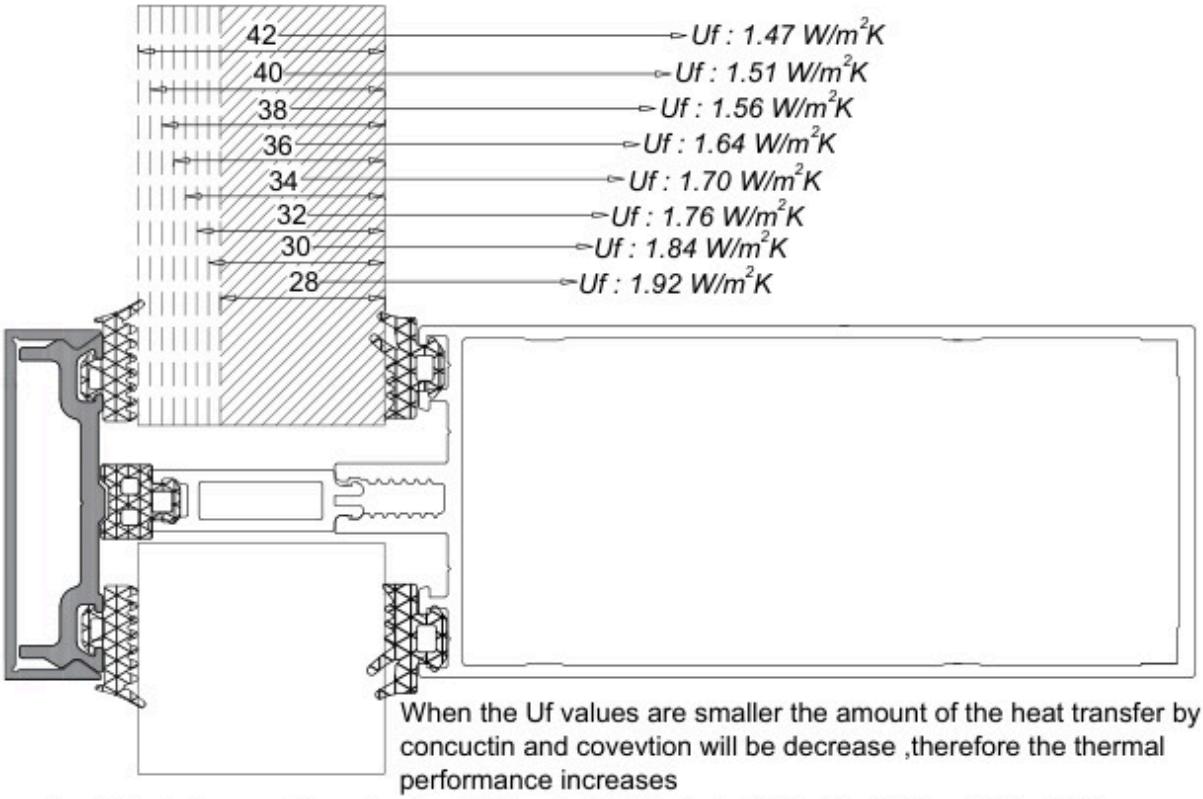
NamakaranFakher.co





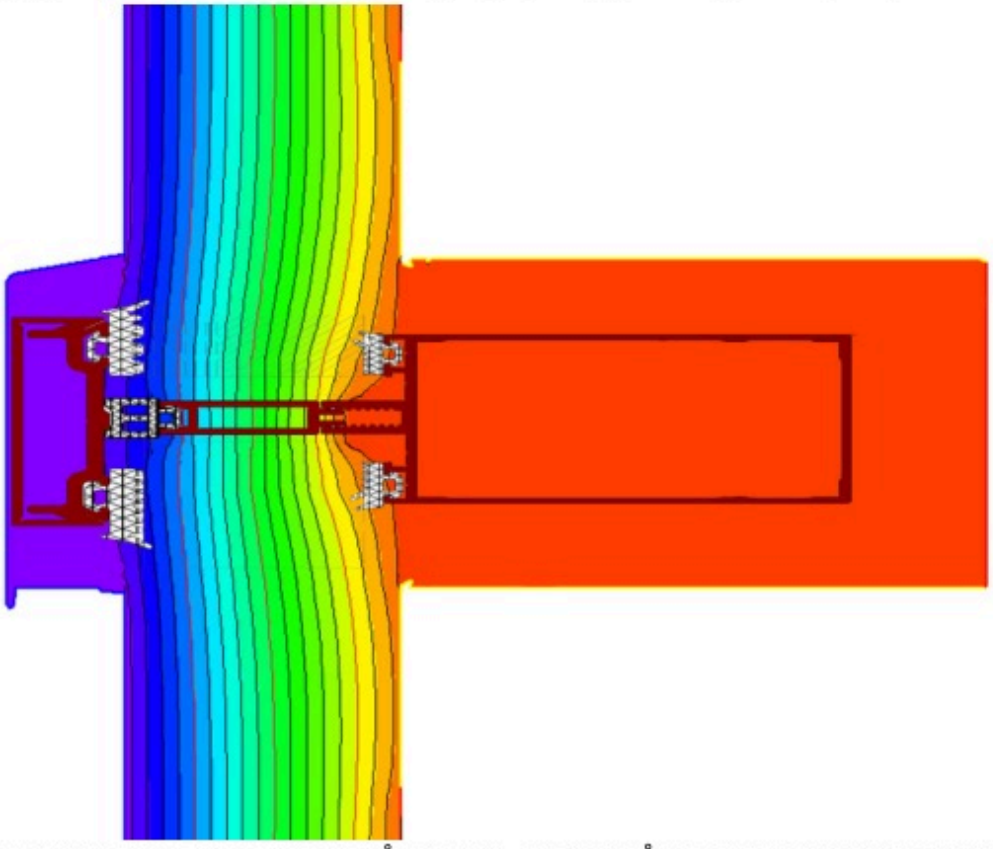
THERMAL PERFORMANCE VALUES

Uf VALUES ACCORDING TO THE GLASS THICKNESS IN CAPPED CURTAIN WALL



When the Uf values are smaller the amount of the heat transfer by concuctin and covevtion will be decrease ,therefore the thermal performance increases

با کاهش اندازه ی Uf ،انتقال و اتلاف انرژی کاهش میابد و عملکرد ترمال بریک سیستم افزایش میابد

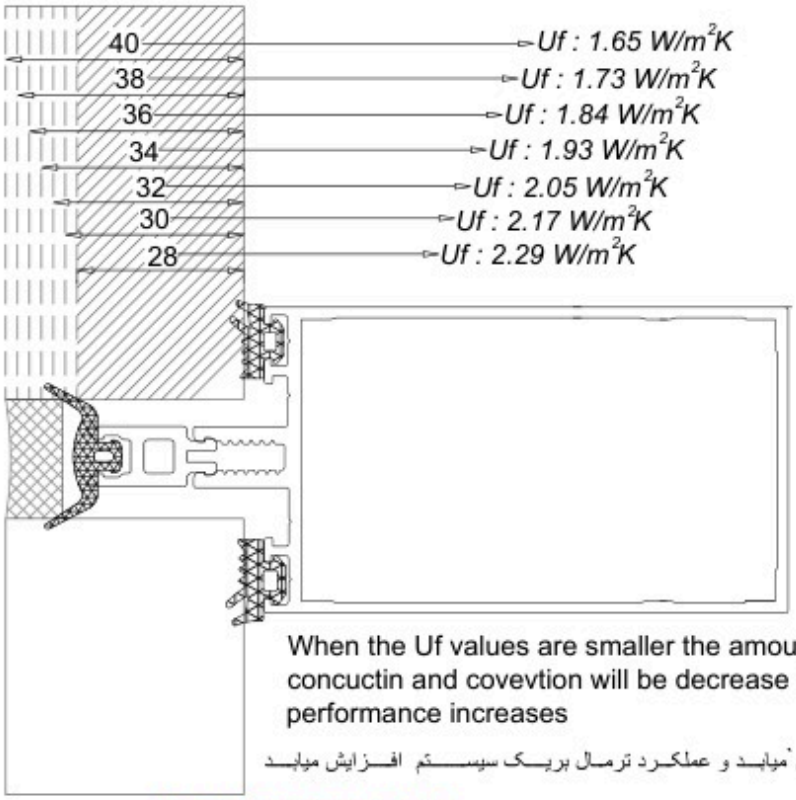


AS EN 10077-2 standard , room temperature is 20 C ,outer temprature is 0 C and relative humidity is 50%.

مطابق با استاندارد AS EN 10077-2 دمای متوسط داخلی 20°C دمای متوسط بیرونی 0°C و رطوبت محیط 50 %

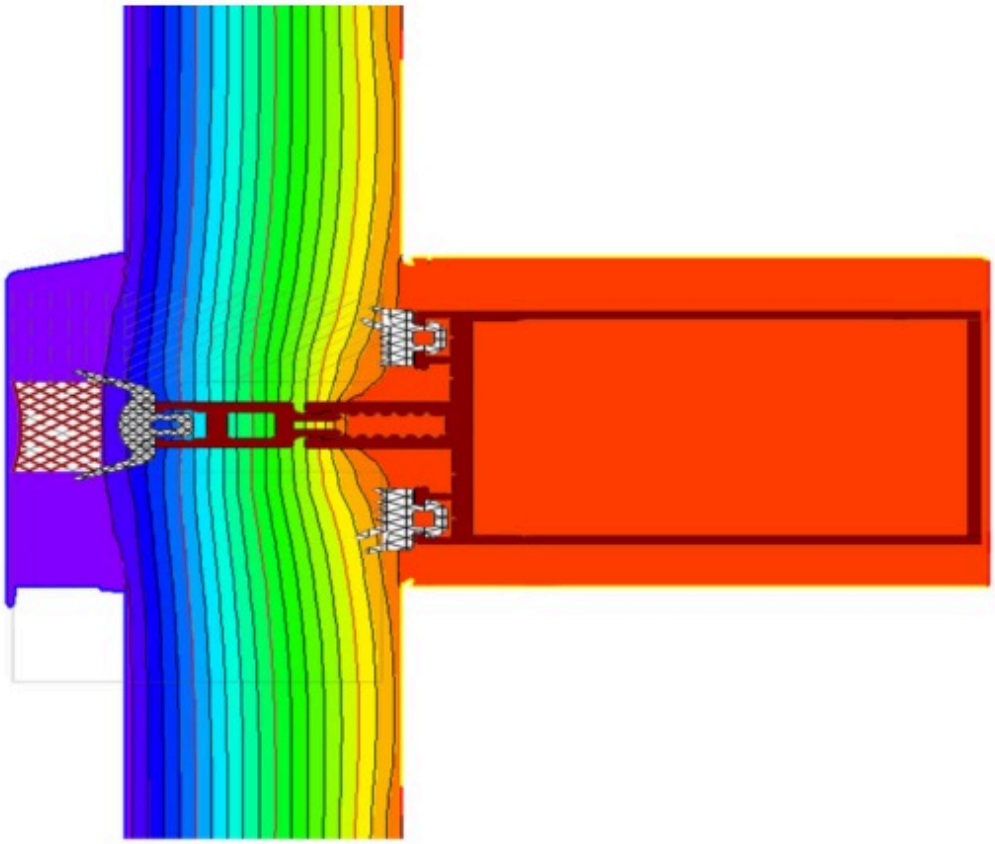
THERMAL PERFORMANCE VALUES

Uf VALUES ACCORDING TO THE GLASS THICKNESS IN CAPPED CURTAIN WALL



When the Uf values are smaller the amount of the heat transfer by concuctin and covevtion will be decrease ,therefore the thermal performance increases

با کاهش اندازه ی Uf اینتق...ال و اتلاف انرژی کاهش میابد و عملکرد ترمال بریک سیستم افزایش میابد



AS EN 10077-2 standard , room temperature is 20 C ,outer temprature is 0 C and relative humidity is 50%.

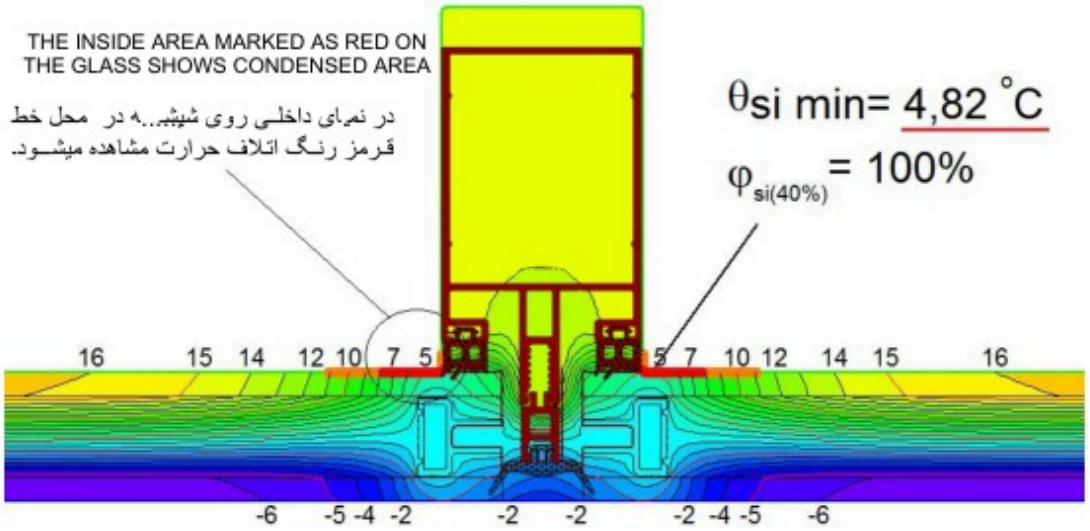
مطابق با استاندارد AS EN 10077-2 دمای متوسط داخلی 20°C دمای متوسط بیرونی 0°C و رطوبت محیط 50 %

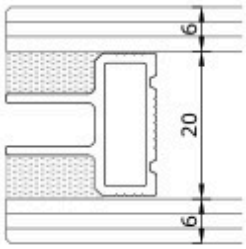
THERMAL CALCULATION CONDITIONS	
شرایط محیطی محاسبه ی حرارتی	
(OUTER TEMPERATURE) دمای متوسط بیرونی	: - 10°C
(ROOM TEMPERATURE) دمای متوسط داخلی	: 22°C
(RELATICE HUMIDITY) رطوبت نسبی	: %40
	EN 10077-2

PERFORMANCE DIFFERENCES OF CONDENSATION AT FOURSIDE

تفاوت عملکرد حرارتی سیستم در کرتین وال یو چنبل

1.STANDARD ALUMINIUM SPACER (6+20+6>Ug : 1.4 W/m²K)

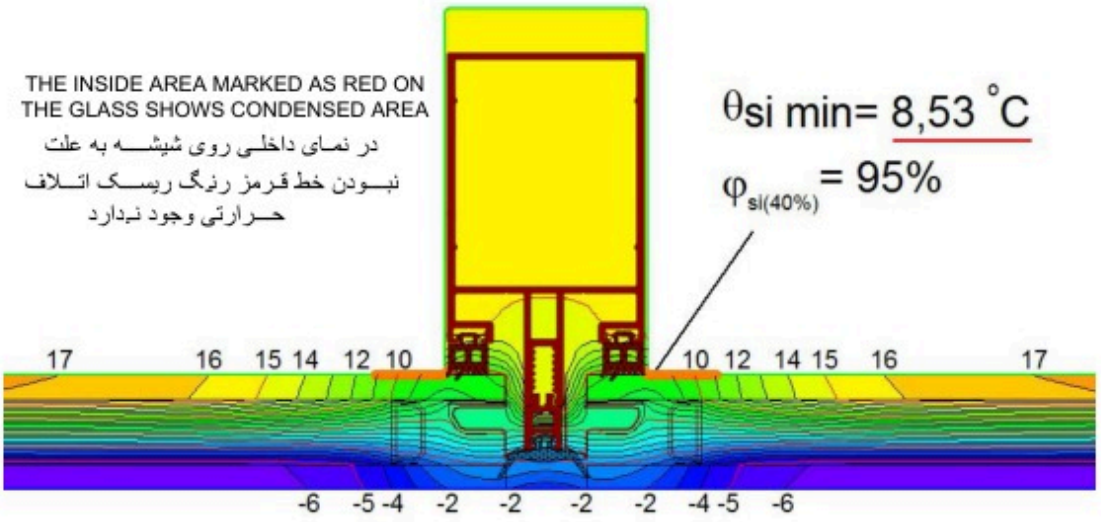


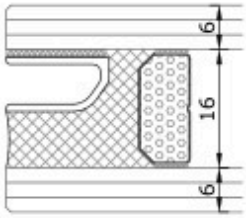


MINIMUM INSIDE TEMPERATURE VALUE (Qsi min.) WITH STANDARD ALUMINIUM SPACER BAR (20mm)

کمترین دمای حرارت در سطح نمای داخل با اسپیسر یو چنبل استاندارد 20 میلی متر

1.WARM EDGE SPACE R(6+16+6>Ug : 1.4 W/m²K)





MINIMUM INSIDE TEMPERATURE VALUE (Qsi min.) WITH STANDARD ALUMINIUM SPACER BAR (16mm)

کمترین دمای حرارت در سطح نمای داخل با اسپیسر لبه عایق شده 16 میلی متر (Qsi min.)

CONDENSATION PERFORMANCE INCREASES DIRECTLY PROPORTIONAL WITH RAISING OF THE MINIMUM INSIDE TEMPERATURE VALUE (Qsi min.)

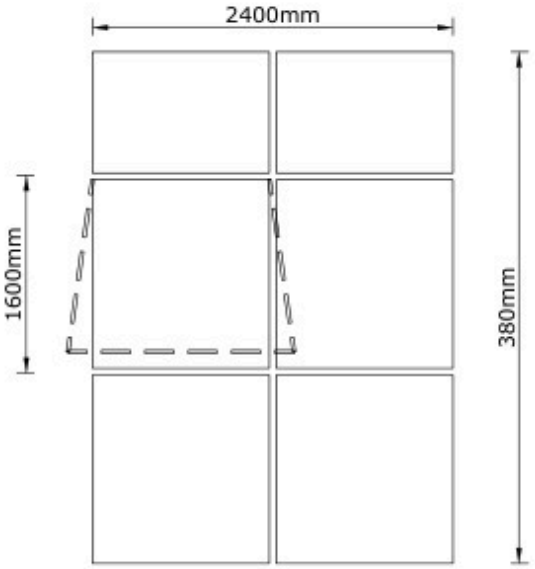
کمترین دمای حرارت در سطح نمای داخل (Qsi min.) هر قدر بیشتر باشد عملکرد سیستم به صورت مستقیم افزایش میابد.

TEST REPORT PERFORMANCE VALUES



نتـــایج تســـت ریپـــورت

Test Sample Dimensions



Capped Curtain Wall

Width : 2400 mm

Height :3800 mm

Resistance to wind load calue of 900 Pa is according to the usage of the mullion depth as 80mm . The reason of this mullion selestion is too see the watertighness of the system clearly even under the most difficult conditions.

TEST REPORT RESULTS

هوابنـدی سیســـتم (AIR PERMEABILITY) -EN 12152	**A0** (0 Pa)	**A1** (150 Pa)	**A2** (300 Pa)	**A3** (450 Pa)	**A4** **(600 Pa)**	
نفـوذ پـذیری در آبینـدی (WATHERTIGHTNESS) -EN 12154	**R4** (150 Pa)	**R5** (300 Pa)	**R6** (450 Pa)	**R7** (600 Pa)	**RE....** (750+ Pa)	**RE1500** (1500 Pa)
بـر بـاد مقاومـت در RESISTANCE TO WIND LOAD) -EN 13116)	**900 Pa ***					
عملکـرد آکوســـتیک (ACOUSTIC PERFORMANCE) -EN 10140-2 EN 717-1	Rw (C ; Ctr) = **32.6** (-1.6; -3.8) dB					
پیچـــش اســـتاتیک (STATIC TORDION) -EN 13115	**Class 4 (350 N)**					

For further information , please ask for the test reports.

THE ACCEPTANCES OF STATIC CALCULATIONS

(*STANDARDS USING WITH STATIC CALCULATIONS*):

TS EN 13830

LOADS USING WITH STATIC CALCULATIONS:

1- *Horizontal Wind Load*

2- *Vertical Glass Load*

3- *Snow Load*

Wind Load

(*Before the static calculation , first determine the shape coefficent of wind and then according to the height of the building select the wind load value from the table below*)

shape coefficent of wind:

(height of building) / (minimum width of building) ⩽ 5 : c = 1.2

(height of building) / (minimum width of building) ⩾ 5 : c = 1.6

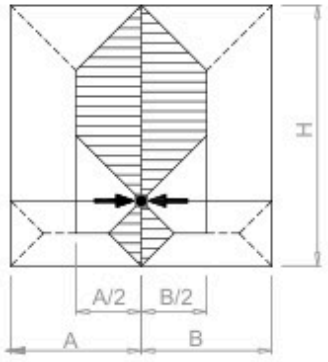
ضـــریب بـــار بـــاد *shape coefficent of wind*	ارتفـــاع از زمین (m) *GROUND ELEVATION*	سرعت بـاد (m/s) *WIND SPEED*	مکش بـاد (kg/m^2) *ABSORPTION*	بـار بـاد (kg/m^2) *WIND LOAD*
1.2	0 - 8	28	50	60
	9 - 20	36	80	96
	21 - 100	42	110	132
	⩾ 100	46	130	156
1.6	0 - 8	28	50	80
	9 - 20	36	80	128
	21 - 100	42	110	176
	⩾ 100	46	130	208

III.1 STATICAL CALCULATIONS

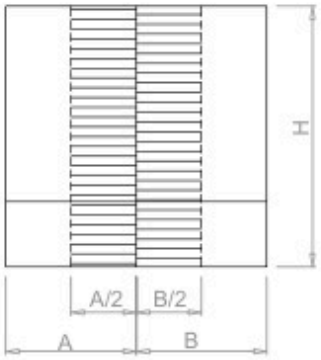
III.1.1 MAXIMUM DIMENSIONS FOR STANDARD CW 50

III.1.1.1 Specifications

Vertical profiles (suspension profiles) should be calculated with maximum frontal deflection of L/200 or 15mm for windload according to EN 13830,taking into account maximum deflection for IGU of 12mm according to EN 1279-5.(or depending on national guidelines)



NORMAL LOAD



CALCULATED LOAD

Figure 1 shows the formulas used for the calculations where 2 support points have been used.

FIGURE 1

q = LOAD = N/m = p . b

p = PRESSURE = N/m² = Pa

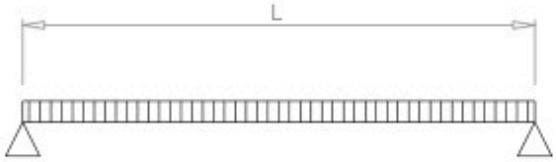
b = WIDTH = m = (A + B)/2

L = LENGTH = m

E = YOUNG'S MODULUS = N/mm² = 70000N/mm²

Ix = MOMENT OF INERTIA = cm4

f = DEFLECTION = mm



$$f = \frac{5 \times q \times L^4}{384 \times E \times Ix} \times 10^5$$

Figure 2 shows the formulas used for the calculations where 3 support points have been used.

FIGURE 2

q = LOAD = N/m = p . b

p = PRESSURE = N/m² = Pa

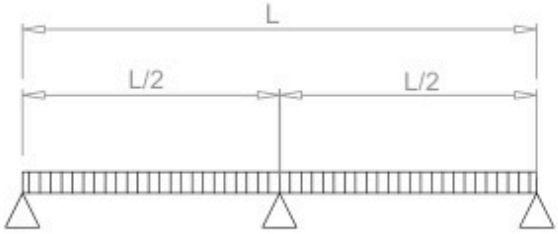
b = WIDTH = m = (A + B)/2

L = LENGTH = m

E = YOUNG'S MODULUS = N/mm² = 70000N/mm²

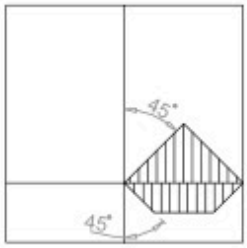
Ix = MOMENT OF INERTIA = cm4

f = DEFLECTION = mm



$$f = \frac{q \times L^4}{2960 \times E \times Ix} \times 10^5$$

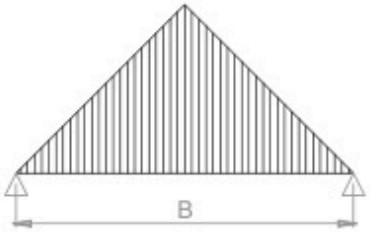
Horizontal profiles (transom profiles) should be calculated with maximum frontal deflection of L/200 or 15mm for wind load according to EN 13830, taking into account maximum deflection for IGU of 12mm according to EN 1279-5.(or depending on national guidelines)



$$Ix = \frac{q \times B^4}{120 \times E \times f} \times 10^5$$

FIGURE 3

Triangular distribution :



q= LOAD = N/m = p . B/2

p = PRESSURE = N/m² = Pa

B = WIDTH = m

E = YOUNG'S MODULUS = 70000 N/mm²

f = DEFLECTION = mm

Ix = MOMENT OF INERTIA = cm4

FIGURE 4

Trapezoid distribution :



q= LOAD = N/m = p . a

B = LENGTH = m

E = YOUNG'S MODULUS = N/mm² = 70000 N/mm²

f = DEFLECTION = mm

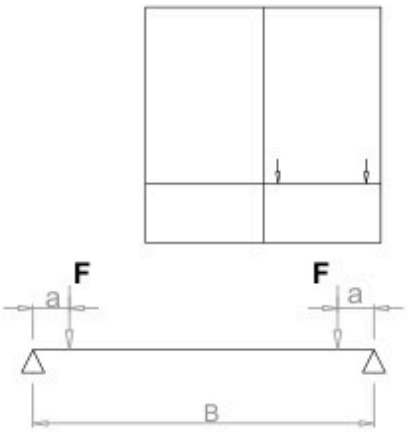
Ix = MOMENT OF INERTIA = cm4

a = PANEL HEIGHT / 2 = m

$$Ix = \frac{q \times B^4}{1920 \times E \times f} \times \left(25 - 40 \times \frac{a^2}{B^2} + 16 \quad \frac{a^4}{B^4}\right) \times 10^5$$

Horizontal profiles (transom profiles) should be calculated with maximum frontal deflection of L/500 or 3mm for dead load(self weight) according to EN 13830,(or depending on national guidelines E.g. maximum deflection of 2mm in the netherlands)

FIGURE 4



F = FORCE = N = 10 x G/2

B = LENGTH = m

E = YOUNG'S MODULUS = N/mm² = 70000 N/mm²

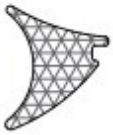
Iy = MOMENT OF INERTIA = cm4

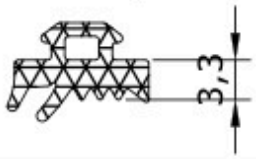
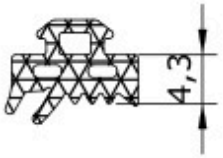
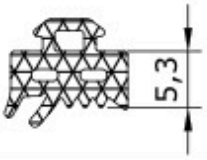
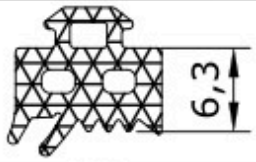
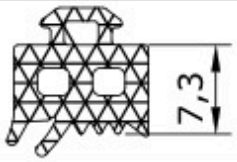
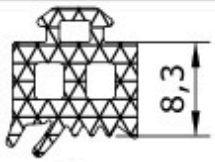
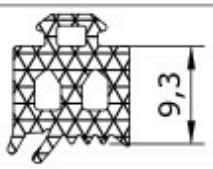
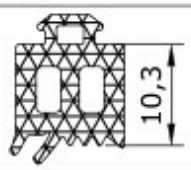
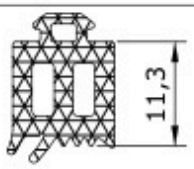
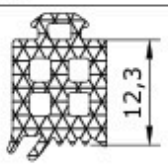
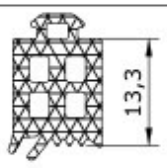
f = DEFLECTION = mm

a = DISTANCE TO GLASS SUPPORT = m

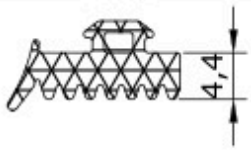
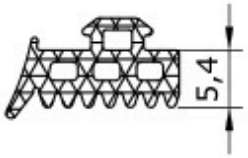
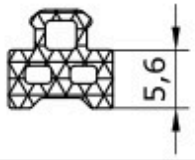
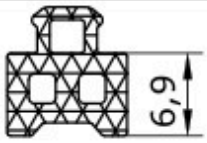
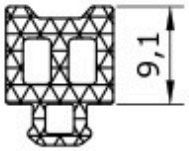
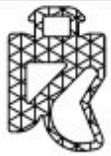
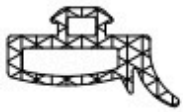
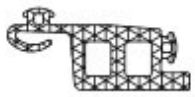
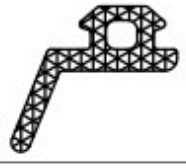
G = GLASS WEIGHT = kg

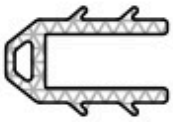
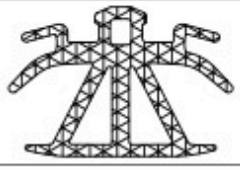
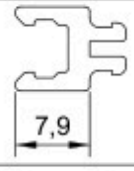
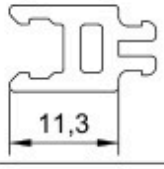
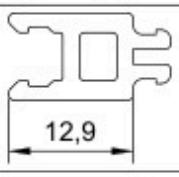
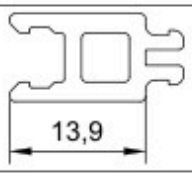
$$Iy = \frac{F \times a}{24 \times E \times f} \times \left(3 \times B^2 - 4 \times a^2\right) \times 10^5$$

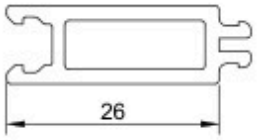
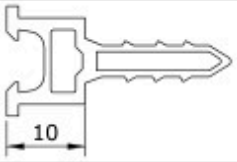
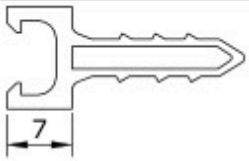
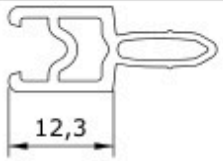
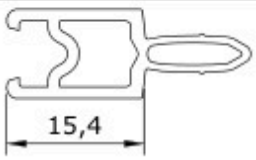
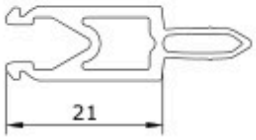
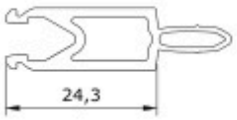
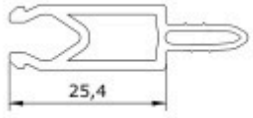
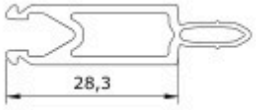
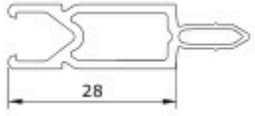
Shape	Code	Description
	G1002	inner glazing gasket 2mm 320mt/15kg
	G1003	inner glazing gasket 3mm 420mt/15kg
	G1004	inner glazing gasket 4mm 280mt/15kg
	G1005	inner glazing gasket 5mm 230mt/15kg
	G1006	inner glazing gasket 6mm 100mt/8kg
	G1007	inner glazing gasket 7mm 100mt/8.3kg
	mo68-007	outer glazing gasket 300mt/15kg
	mo60-006	sash gasket
	mo61	opening frame gasket
	300-501	glass suport gasket 72 g/m
	560-1001	corner alignment [Polyamid]

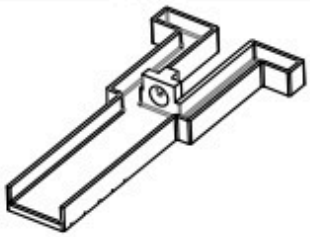
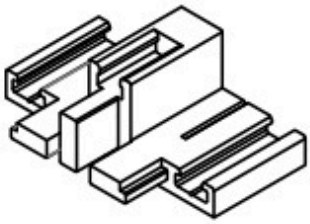
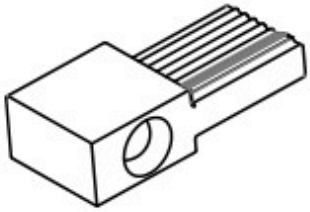
Shape	Code	Description
	CW03 300-03	inner glazing gasket 3mm 65 g/m
	CW04 300-04	inner glazing gasket 4mm 62 g/m
	CW05 300-05	inner glazing gasket 5mm 82 g/m
	CW06 300-06	inner glazing gasket 6mm 100 g/m
	CW07 300-07	inner glazing gasket 7mm 102 g/m
	CW08 300-08	inner glazing gasket 8mm 106 g/m
	CW09 300-09	inner glazing gasket 9mm 125 g/m
	CW10 300-10	inner glazing gasket 10mm 128 g/m
	CW11 300-11	inner glazing gasket 11mm 136 g/m
	CW12 300-12	inner glazing gasket 12mm 144 g/m
	CW13 300-13	inner glazing gasket 13mm 149 g/m

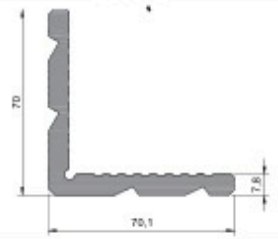
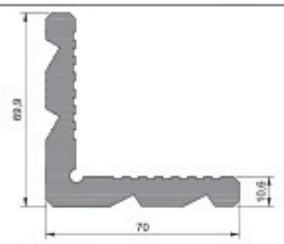
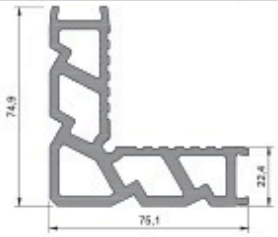
NamakaranFakher.co

Shape	Code	Description
	CW40 300-40	presureplate gasket 4mm 90 g/m
	CW41 300-41	presureplate gasket 5mm 90 g/m
	PW40 300-40	central epdm gasket 5.5mm 72 g/m
	PW41 300-53	central epdm gasket 7mm 95 g/m
	PW51 300-51	central epdm gasket 9mm 95g/m
	CW617 300-617	mullion gasket 114 g/m
	CW627 300-627	presureplate gasket 75 g/m
	CW624 300-624	frame gasket 30g/m
	CW623 300-623	glazing gasket inside 25 g/m
	CW628 300-628	frame gasket 170g/m
	CW55 300-55	sash gasket 53 g/m

Shape	Code	Description
	CW59 300-59	sash gasket
	CW57 300-57	sash gasket 60g/m
	CW189	gaskets for clamping profile21932 38 g/m
	CW616 300-616	silicone filling gasket 130 g/m
	CW618 300-618	silicone filling gasket 200 g/m
	CW629 300-629	frame gasket 100g/m
	300-500	glass suport gasket 66 g/m
	NP028	mullion or transom front izalator
	NP094	mullion or transom front izalator
	NP021	mullion or transom front izalator
	NP121	mullion or transom front izalator

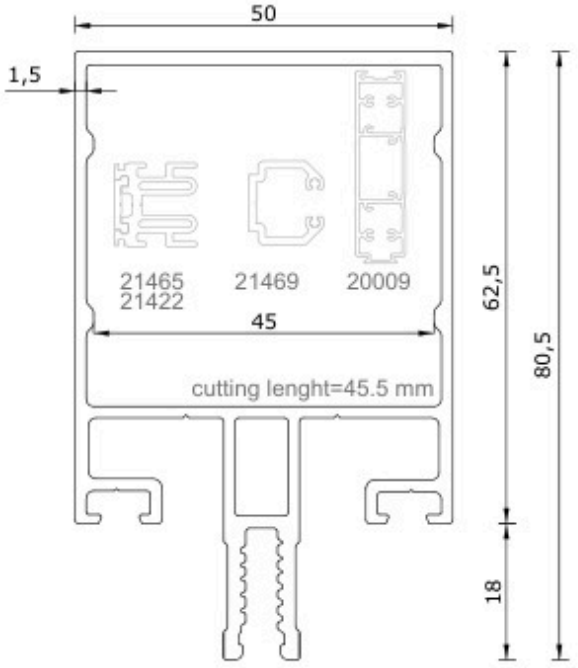
Shape	Code	Description
	NP095	mullion or transom front izalator
	NP902	mullion or transom front izalator
	NP086	mullion or transom front izalator
	NP207	mullion or transom front izalator
	NP278	mullion or transom front izalator
	NP139	mullion or transom front izalator
	NP140	mullion or transom front izalator
	NP143	mullion or transom front izalator
	NP283	mullion or transom front izalator
	NP144	mullion or transom front izalator
	NP141	mullion or transom front izalator

Shape	Code	Description
	2000-209	Water drain part
	2000-210	Horizontal to horizontal profile installation adapter [PVC]
	2000-211	Vertical to vertical profile installation adapter [PVC]
	MO20	corner alignment [PVC]

Shape	Code	Description
	C7.8	corner cleat 2.645 kg/m
	C10.6	corner cleat 3.43 kg/m
	C12.6	corner cleat 4.02 kg/m
	C22.4	corner cleat 3.67 kg/m

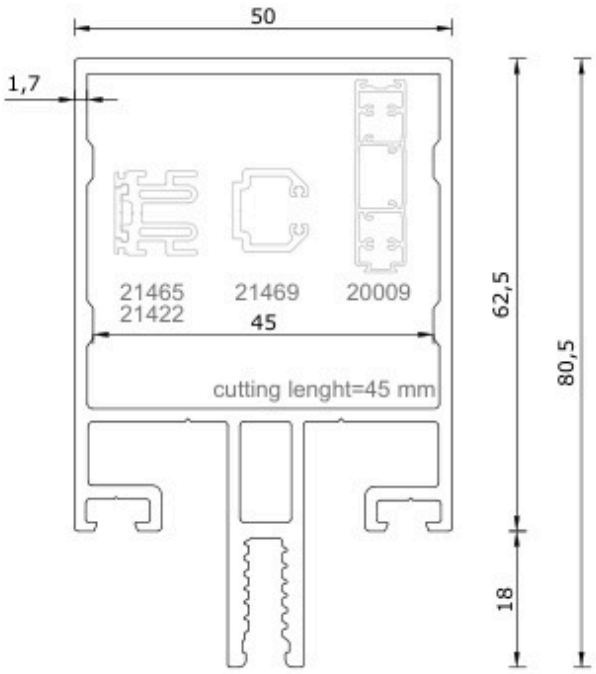
CODE	WEIGHT(kg/m)	Ix cm4	Iy cm4
21917	1.510	30.8	16.41
341501	1.700	34.59	18.12
21407	0.765	0.9	3.3
21182	0.530	-	-

21917



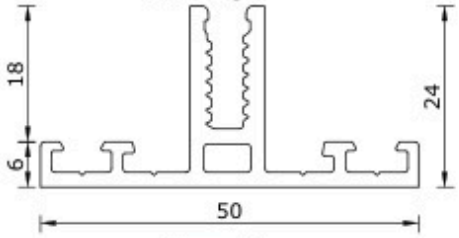
پروفیل عمودی
mullion profile

341501



پروفیل عمودی
mullion profile

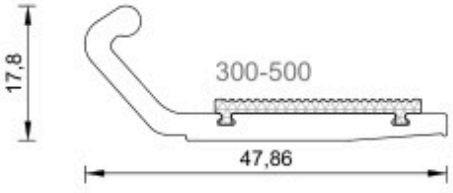
21407



پروفیل add on
add on profile

profile	horizontal profile	shape
21917	342522	
341501	342522	

21182

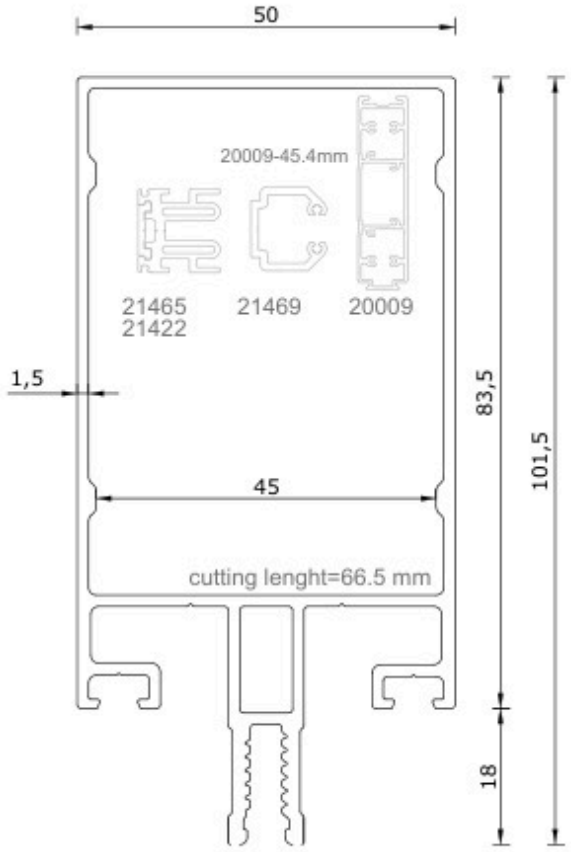


تاکوز آلومینیومی پروفیل های عمودی
glass support for mullion profiles

scale1:1

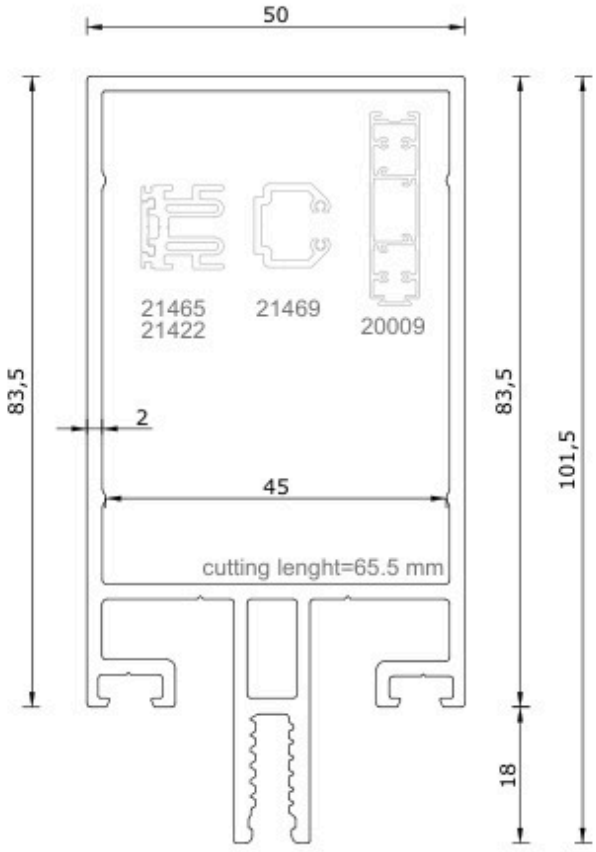
CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21916	1.700	59.77	20.34
21476	2.030	73.08	24.56

21916



پروفیل عمودی
mullion profile

21476



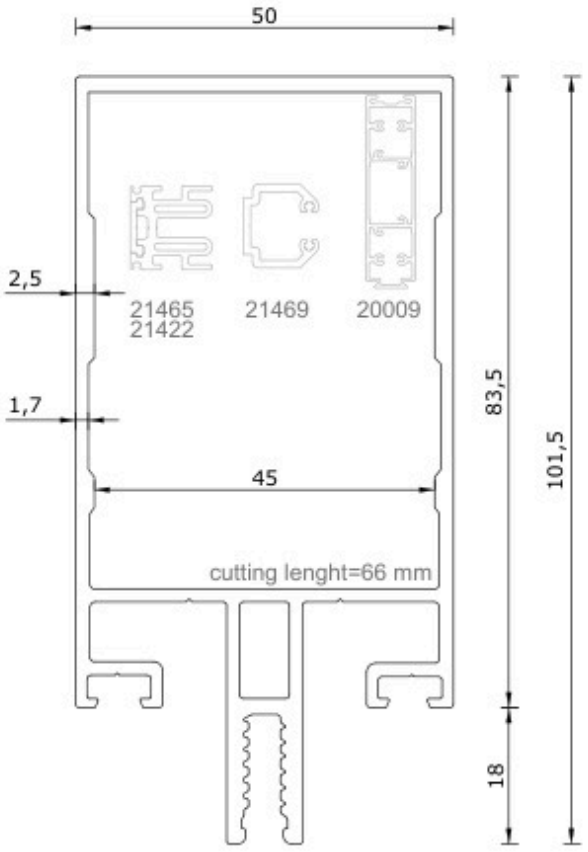
پروفیل عمودی
mullion profile

profile	horizontal profile	shape
21916	342523	
21476	342523	

scale1:1

CODE	WEIGHT(kg/m)	Ix cm4	Iy cm4
341502	1.980	67.66	23.68

341502



پروفیل عمودی

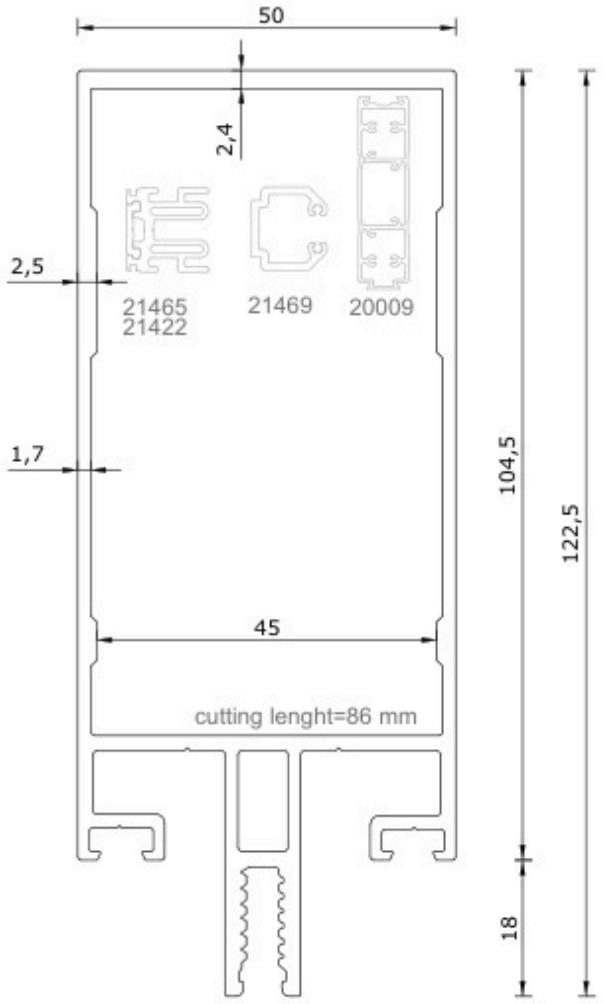
mullion profile

profile	horizontal profile	shape
341502	342523	

scale1:1

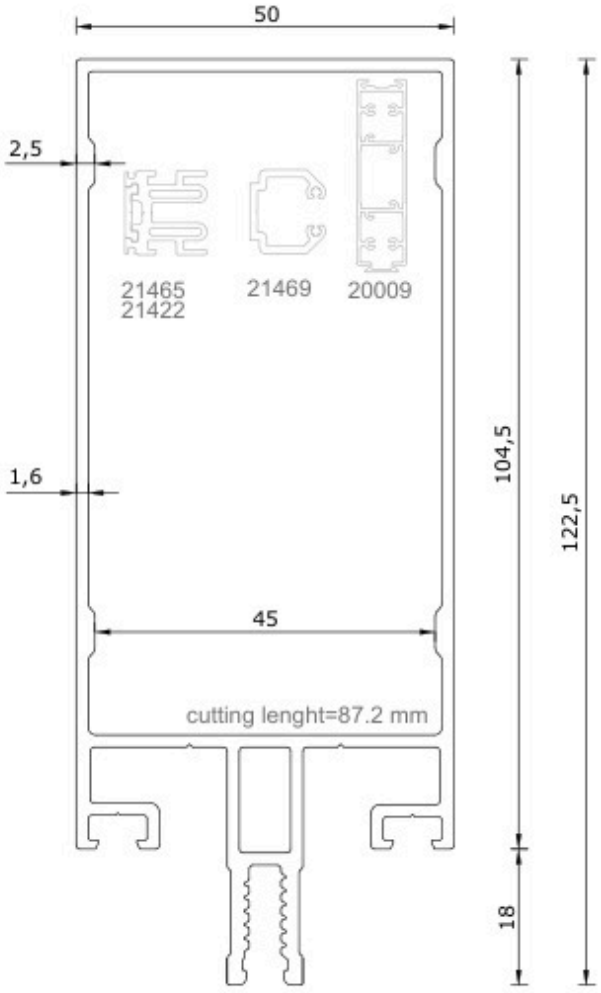
CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
341503	2.316	128.69	28.63
21592	1.980	106.03	25.64

341503

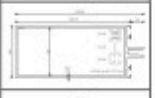


پروفیل عمودی
mullion profile

21592



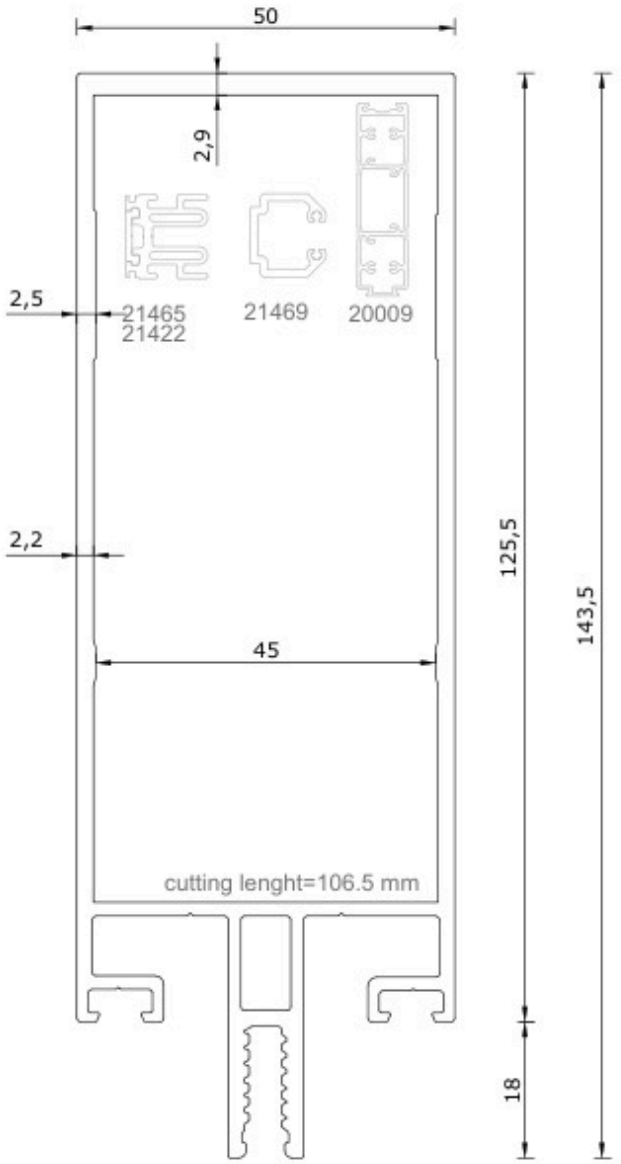
پروفیل عمودی
mullion profile

profile	horizontal profile	shape
341503	342524 21478	
21592	342524 21478	

scale1:1

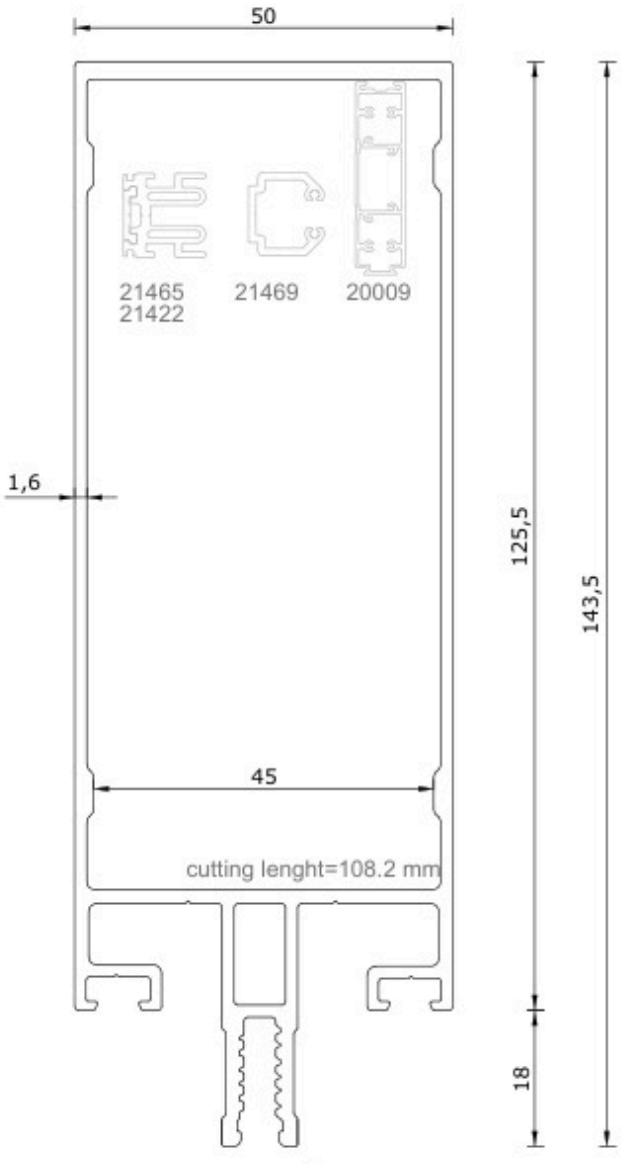
CODE	WEIGHT(kg/m)	Ix cm4	Iy cm4
341505	2.815	218.71	37.53
21593	2.172	164.39	29.4

341505



پروفیل عمودی
mullion profile

21593



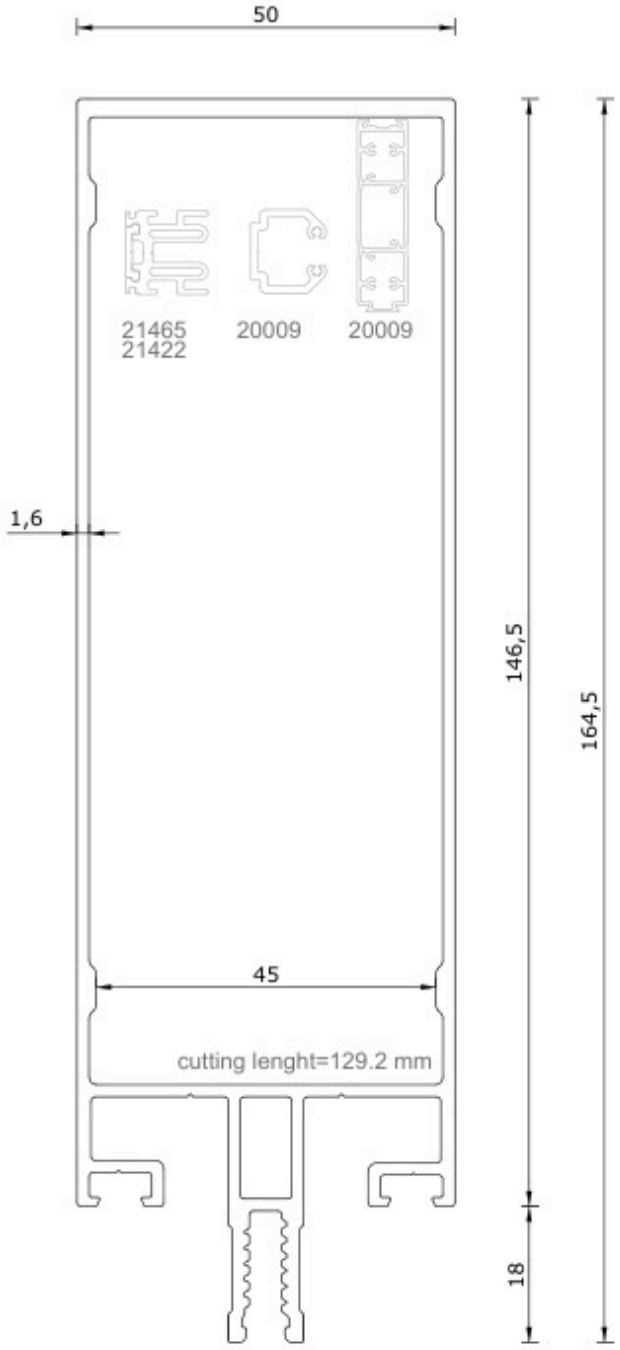
پروفیل عمودی
mullion profile

profile	horizontal profile	shape
341505	342525 21479	
21593	342525 21479	

scale1:1

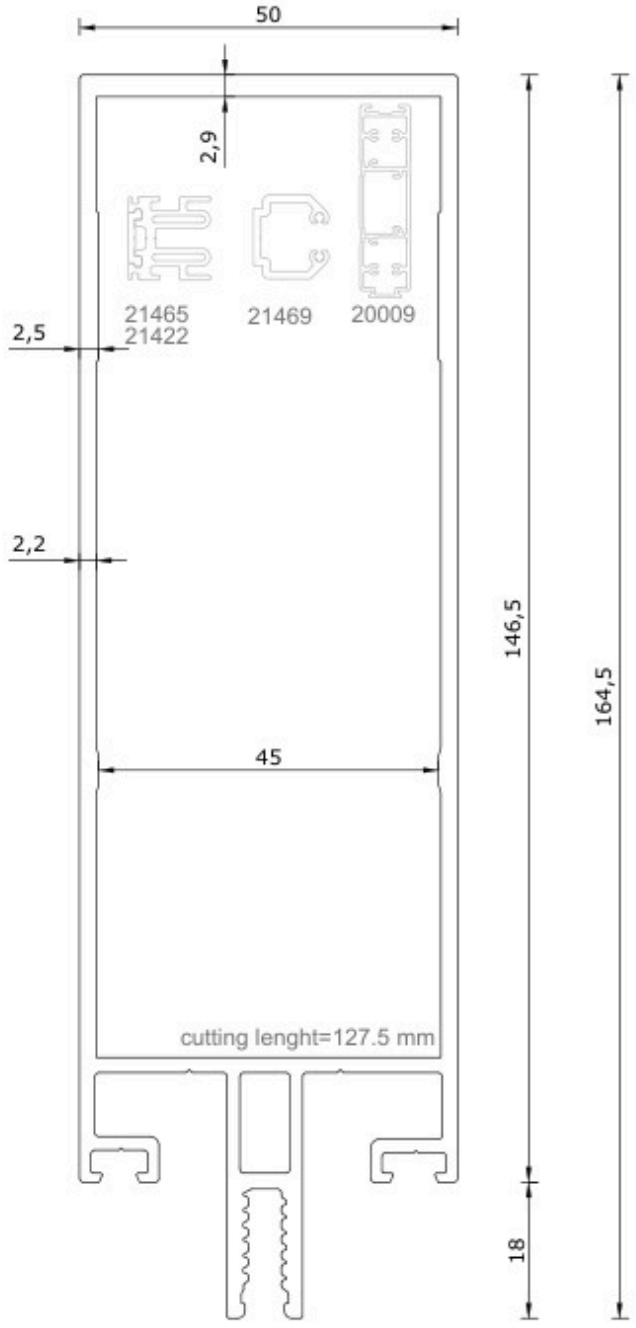
CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21594	2.362	234	33.32
341506	3.085	317.38	42.82

21594



پروفیل عمودی
mullion profile

341506



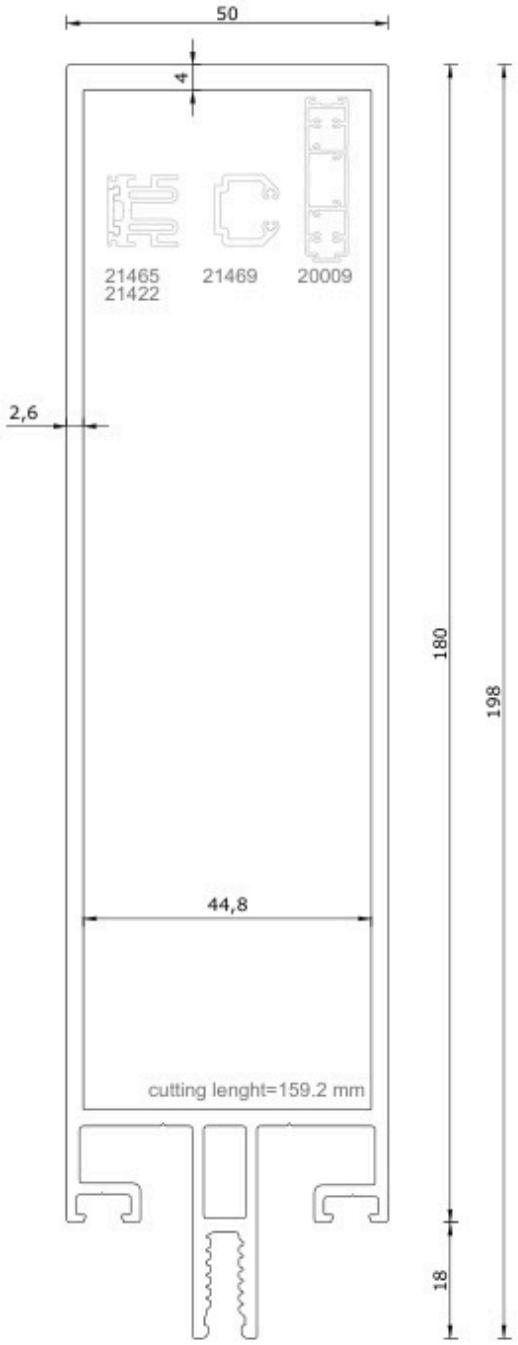
پروفیل عمودی
mullion profile

profile	horizontal profile	shape
21594	342526	
341506	342526	

scale1:1

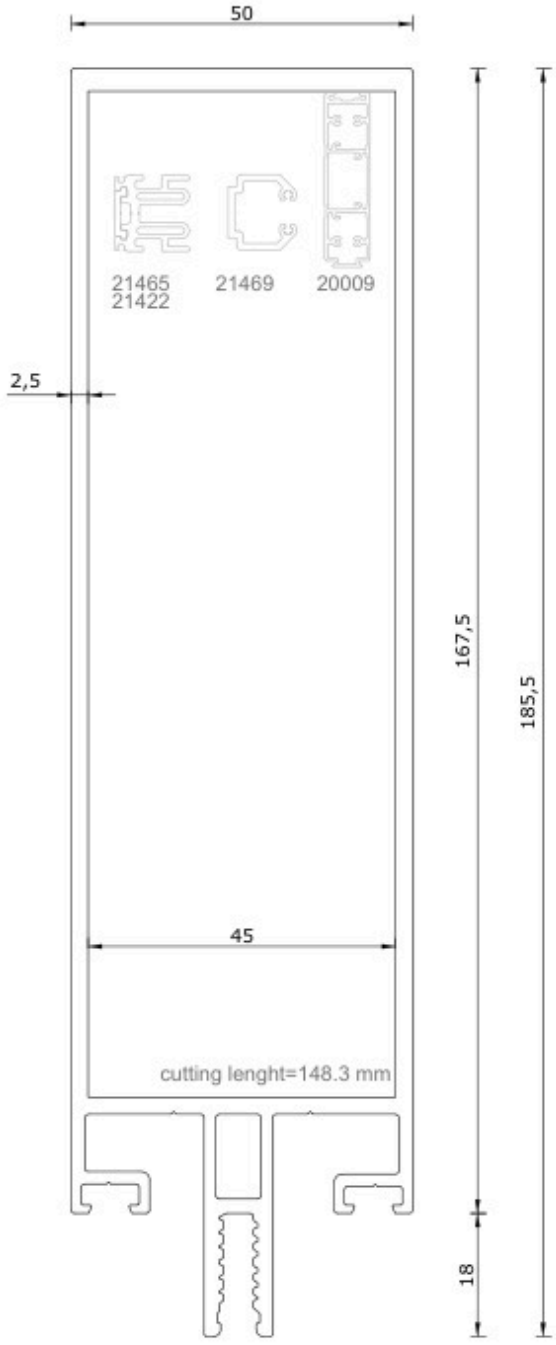
CODE	WEIGHT(kg/m)	Ix cm4	Iy cm4
341508	4.05	604.83	58.36
341507	3.568	445.46	52

341508



پروفیل عمودی
mullion profile

341507

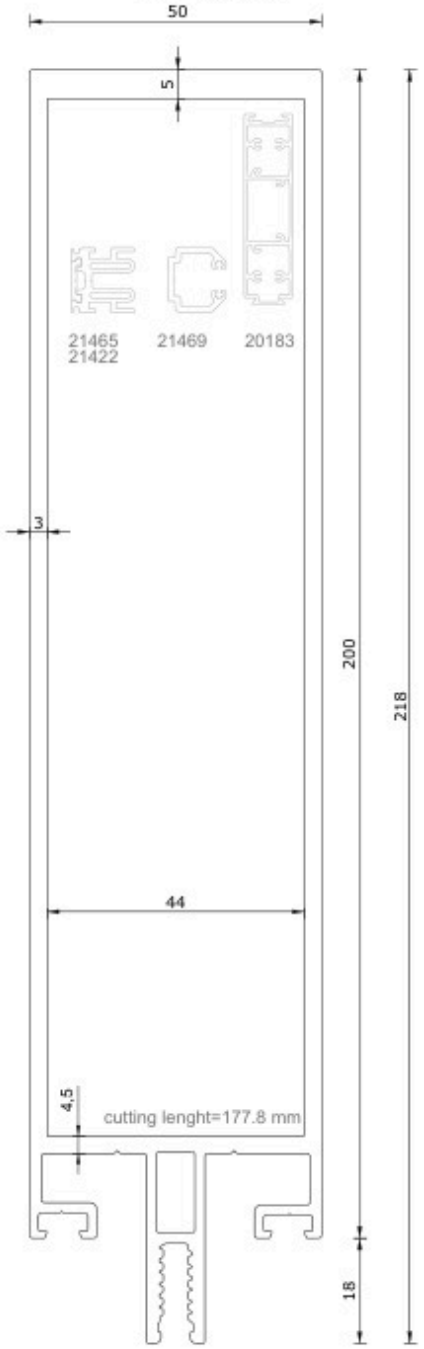


پروفیل عمودی
mullion profile

profile	horizontal profile	shape
341508	21473	
341507	342527	

CODE	WEIGHT(kg/m)	Ix cm4	Iy cm4
341509	4.931	881.25	72.30
21680	1.81	81.74	20.15

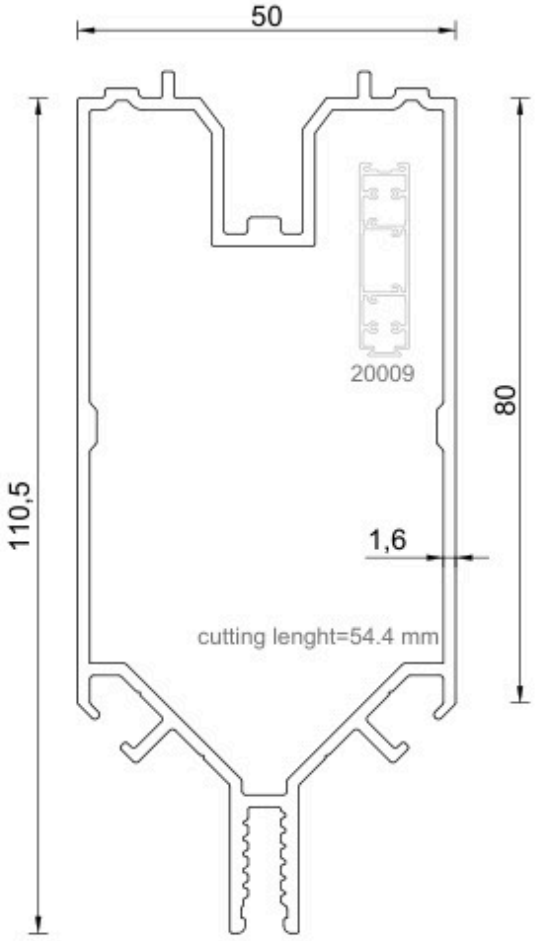
341509



پروفیل عمودی

mullion profile

21680



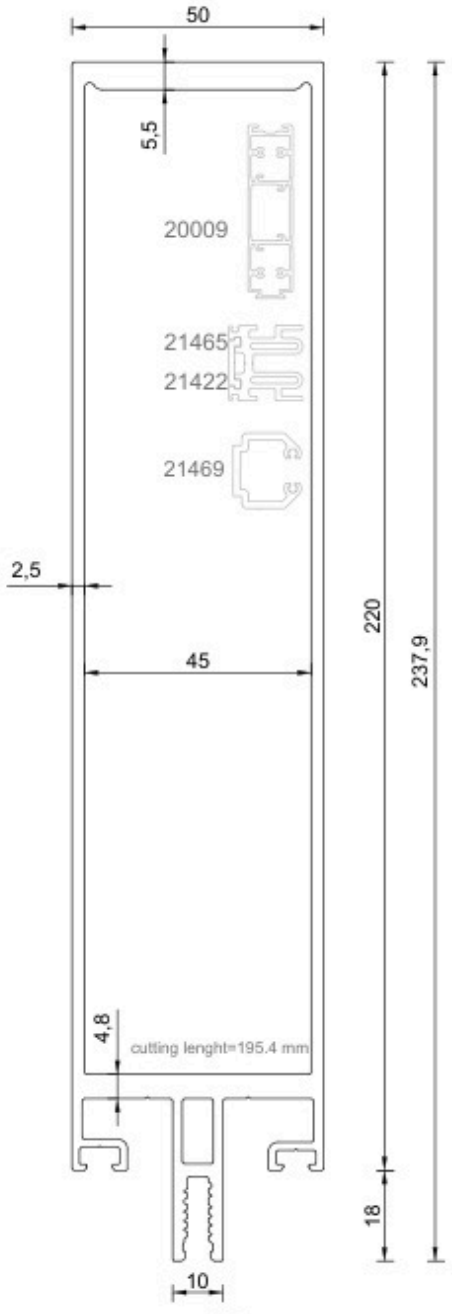
آداپتور زاویه بیرونی 90 درجه

corner adapter profile

profile	horizontal profile	shape
341509	21474	

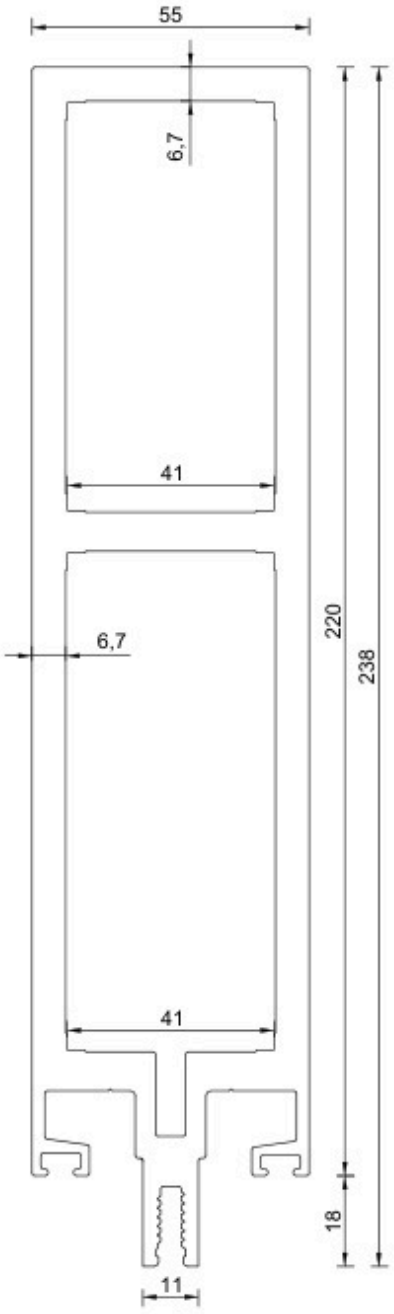
CODE	WEIGHT(kg/m)	Ix cm4	Iy cm4
21470	4.800	1135.08	70.43
21471	10.750	2051.35 - 2452.35	180.77 - 334.53

21470



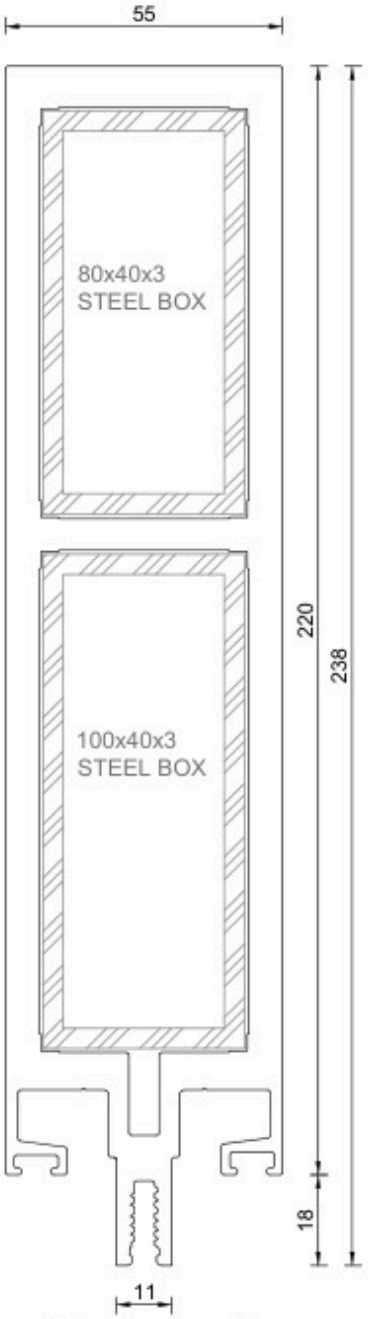
پروفیل عمودی
mullion profile

21471



پروفیل عمودی
mullion profile

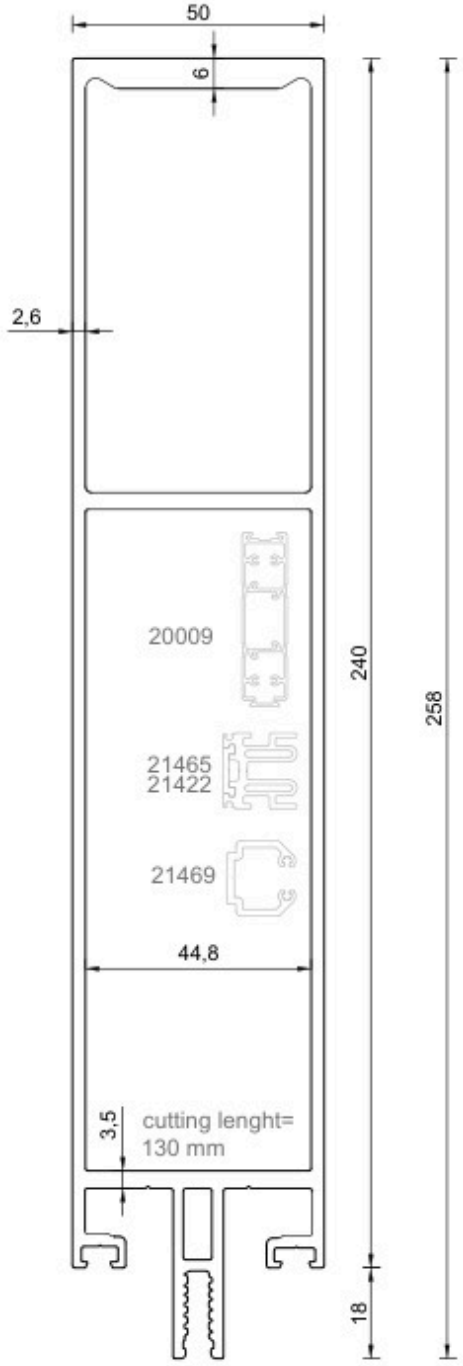
21471



پروفیل عمودی تقویت شده
Supported mullion profile

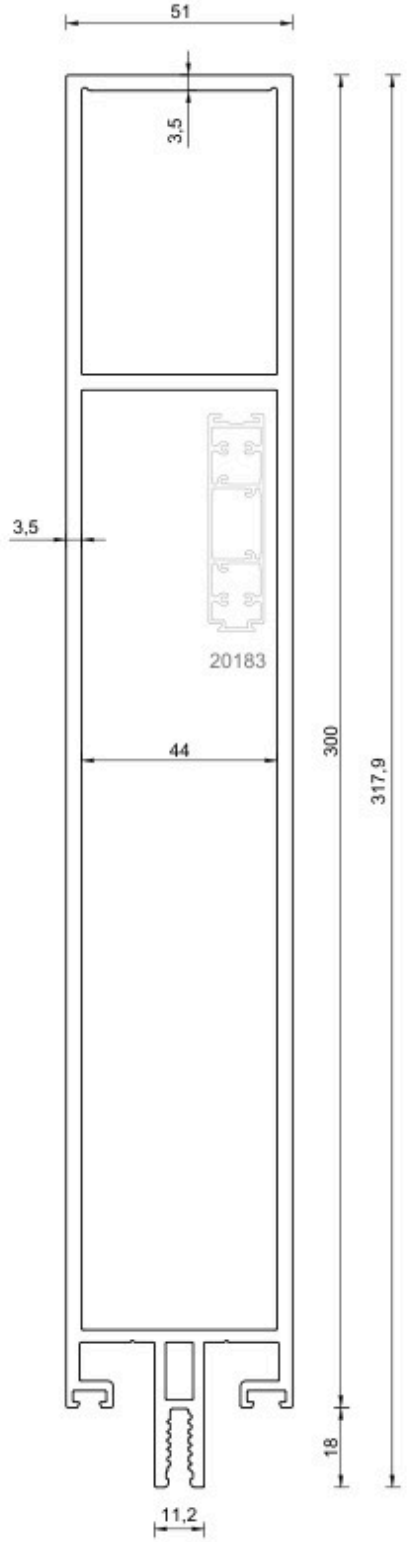
CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21472	5.580	1483.69	79.15
341513	7.500	2690.01	126.49

21472



پروفیل عمودی
mullion profile

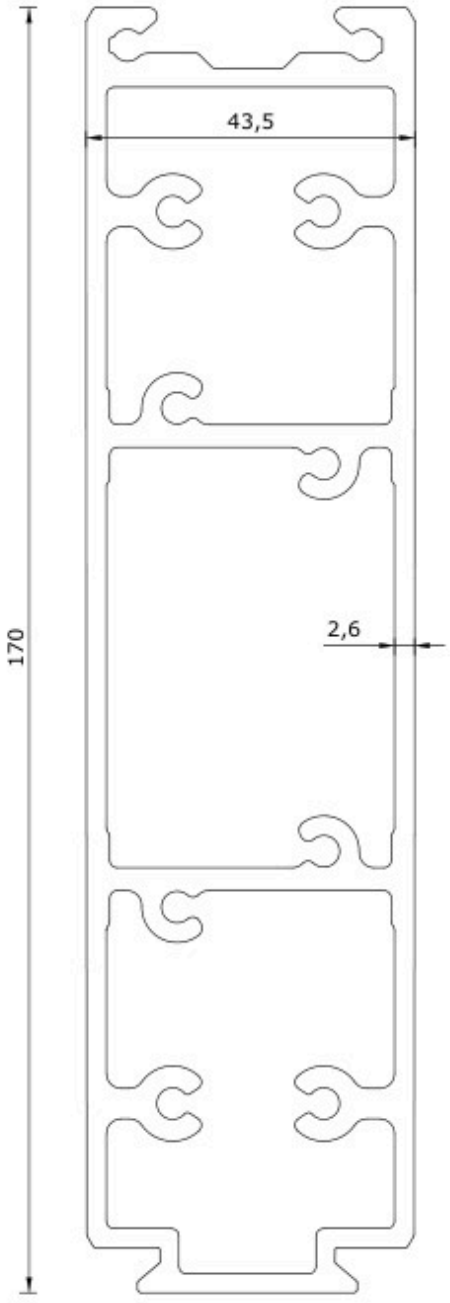
341513



پروفیل عمودی
mullion profile

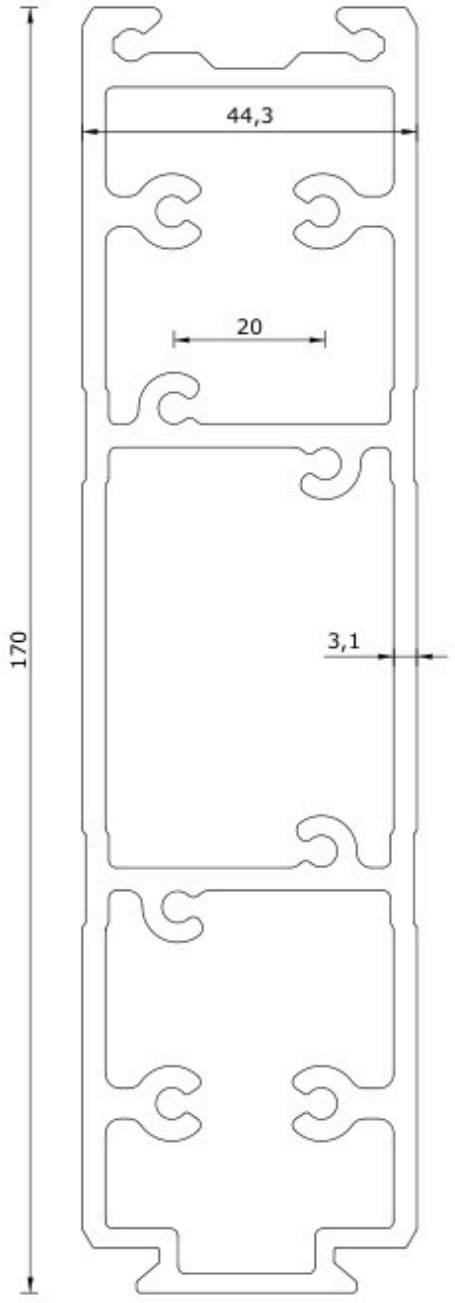
CODE	WEIGHT(kg/m)	Ix cm4	Iy cm4
21183	5.326	556.34	56.05
20009	5.665	561.66	56.45

21183

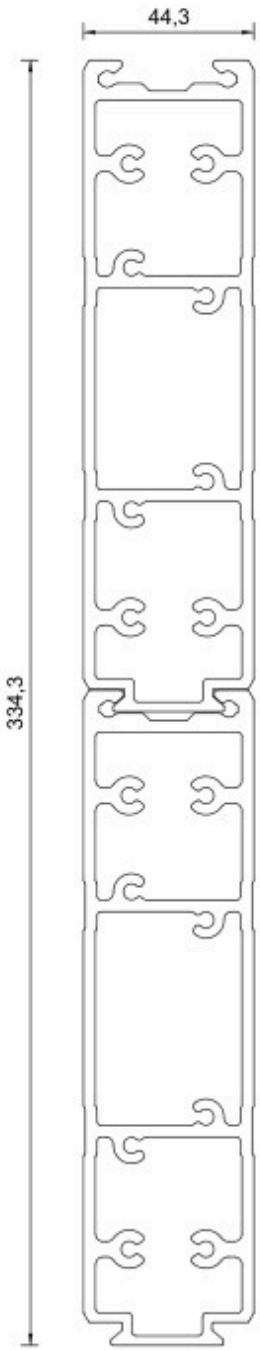


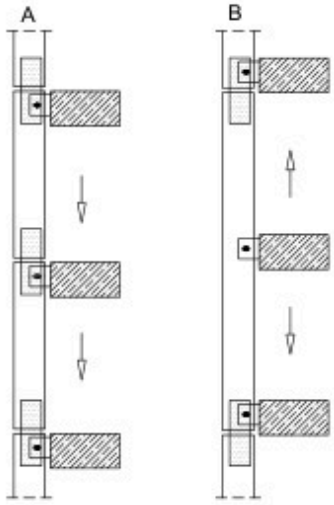
پروفیل اتصال عمودی
connection and expansion profile

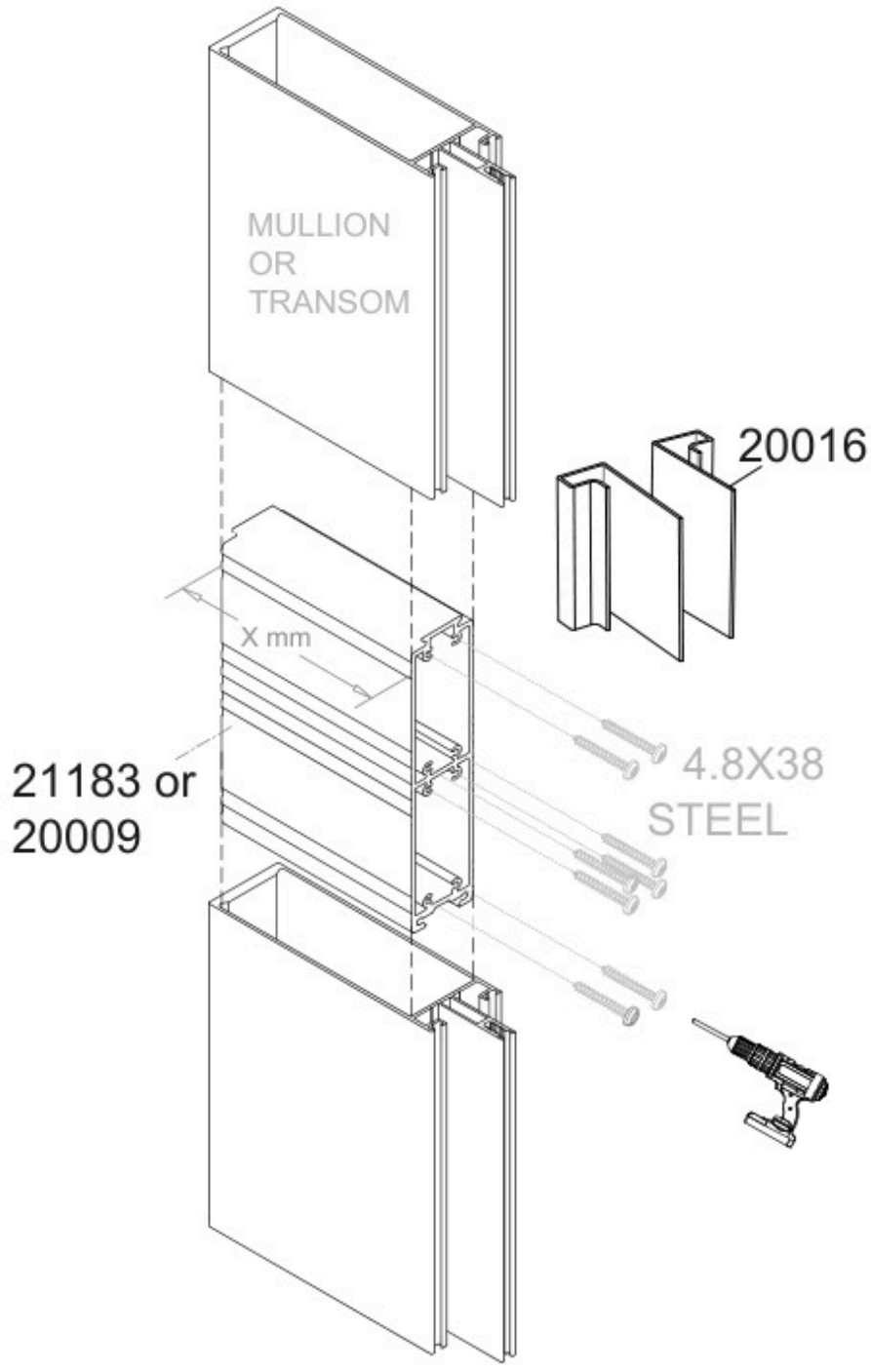
20009



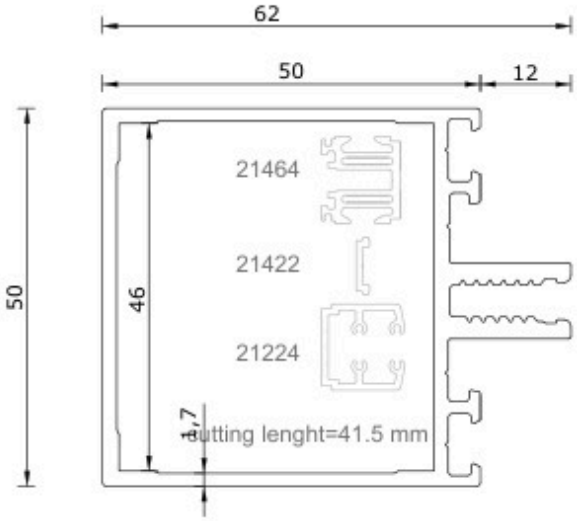
پروفیل اتصال عمودی
connection and expansion profile


44,3
334,3


A
B


MULLION
OR
TRANSOM
20016
X mm
21183 or
20009
4.8X38
STEEL

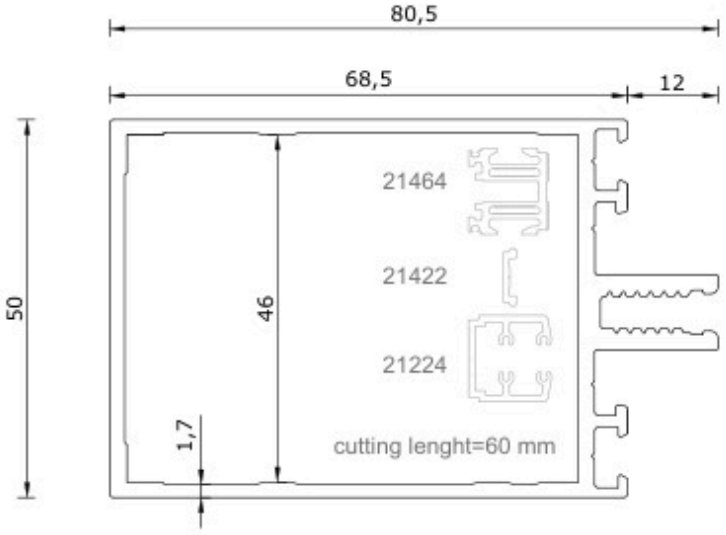
CODE	WEIGHT(kg/m)	Ix cm4	Iy cm4
21486	1.31	14.03	18.77
342522	1.51	17.94	38.39
342523	1.7	22.02	71.3



21486

پروفیل افقی

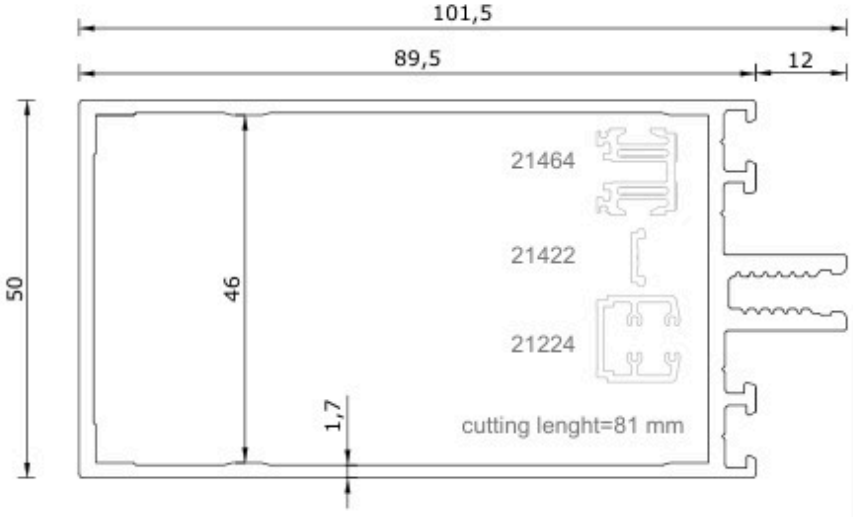
transom profile



342522

پروفیل افقی

transom profile



342523

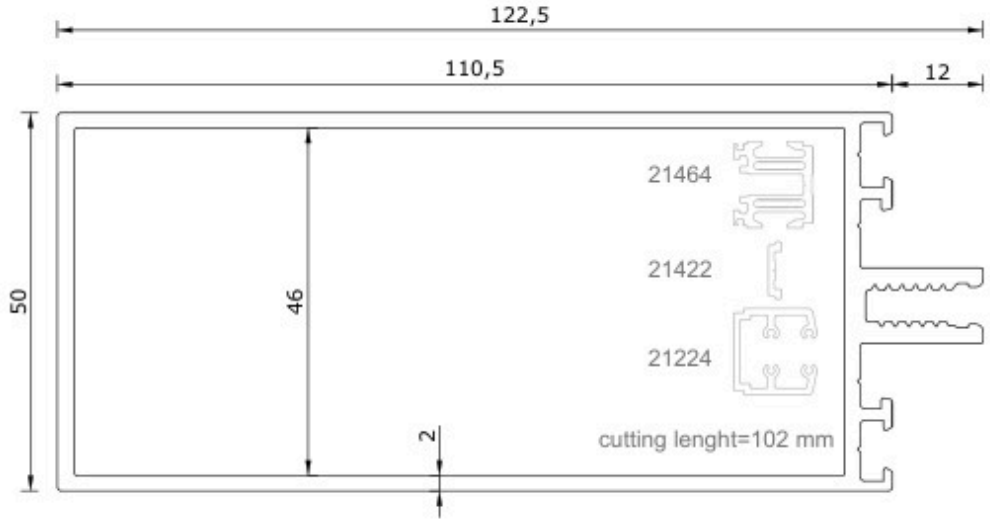
پروفیل افقی

transom profile

profile	Vertical profile	shape
342522	341501 21917	
342523	341502 21916	

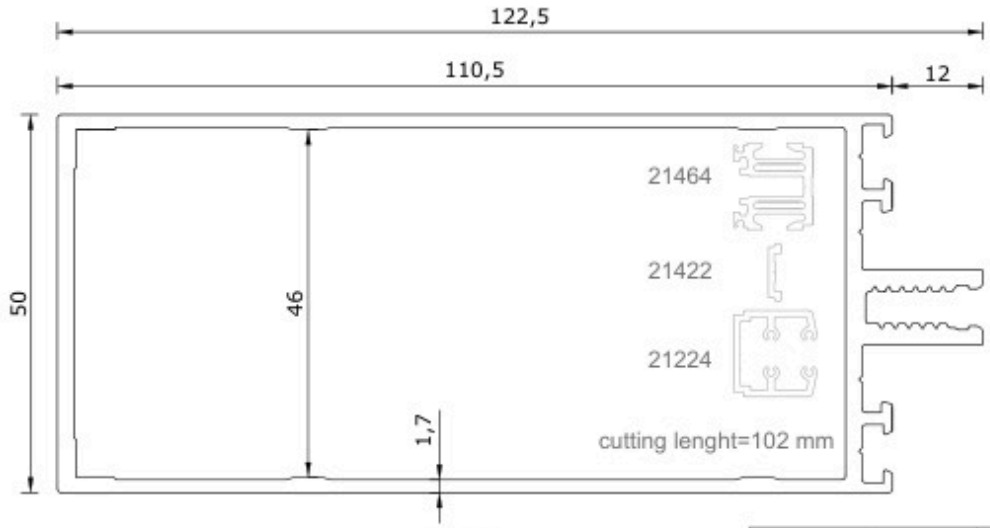
CODE	WEIGHT(kg/m)	Ix cm4	Iy cm4
21478	2.046	29.09	125.22
342524	1.908	28.18	116.77

21478



پروفیل افقی
transom profile

342524

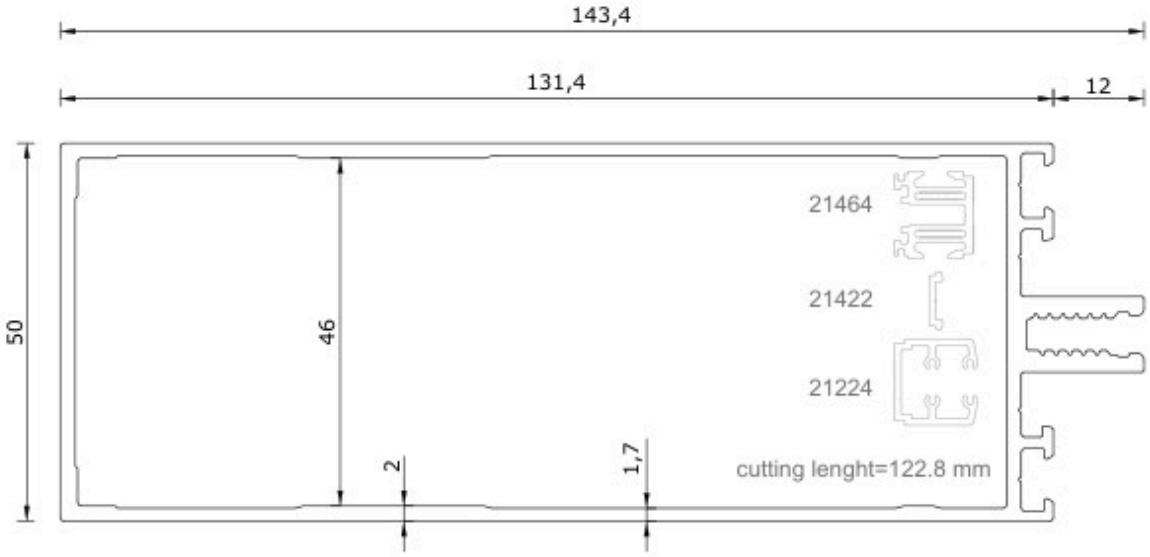


پروفیل افقی
transom profile

profile	Vertical profile	shape
21478	341503 21592	
342524	341503 21592	

CODE	WEIGHT(kg/m)	Ix cm4	Iy cm4
342525	2.150	30.96	177.82
21479	2.280	33.91	1190.24

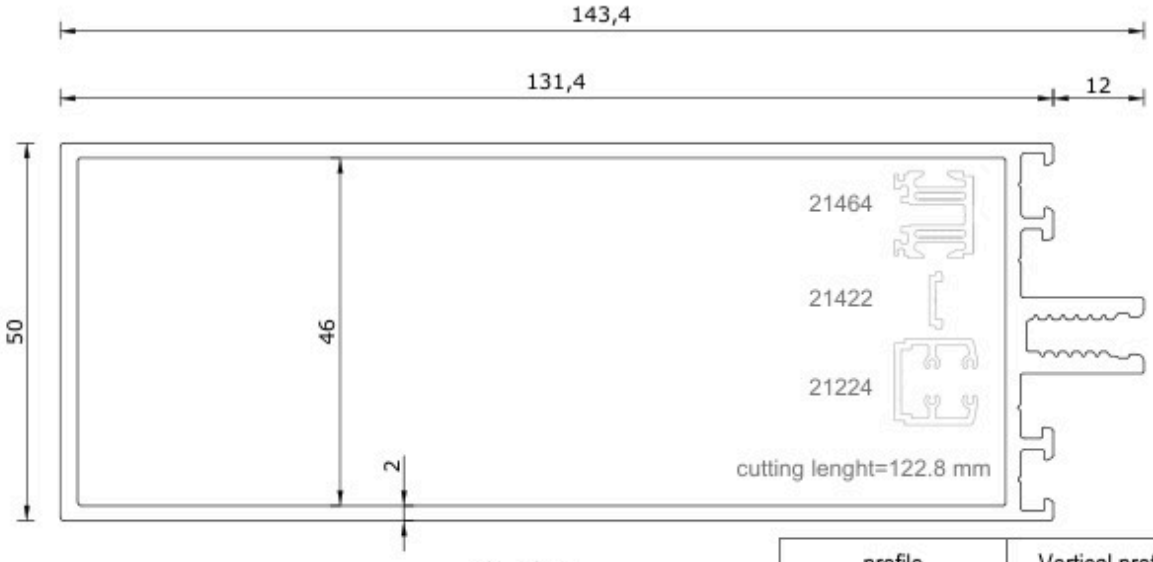
342525



پروفیل افقی

transom profile

21479



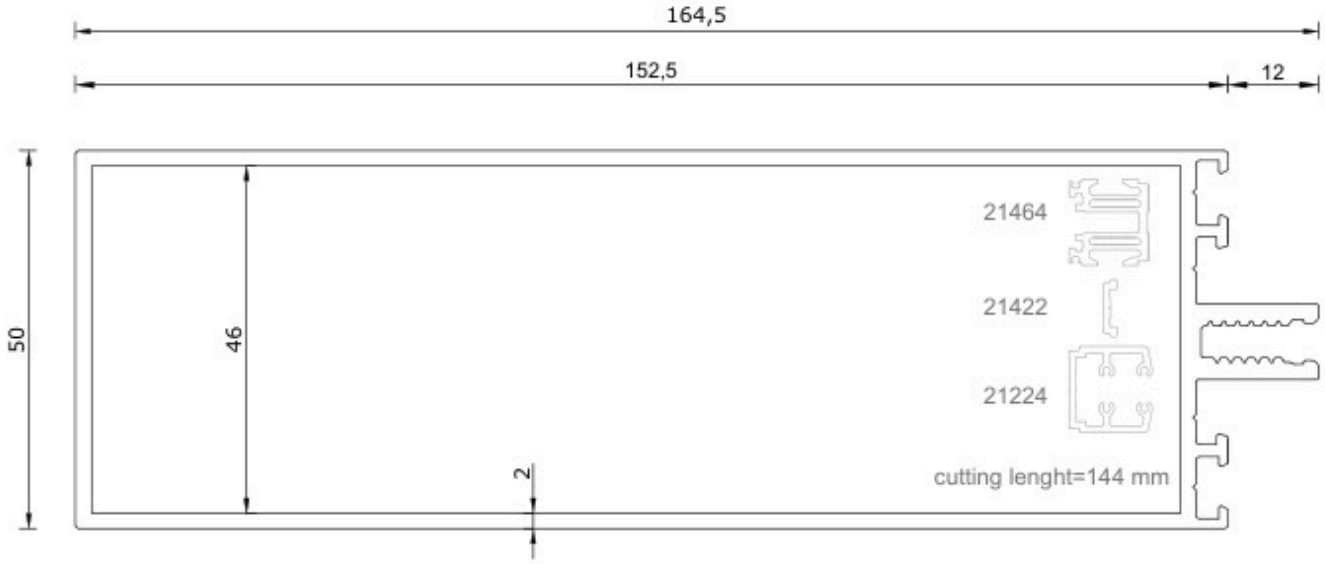
پروفیل افقی

transom profile

profile	Vertical profile	shape
342525	341505 21593	
21479	341505 21593	

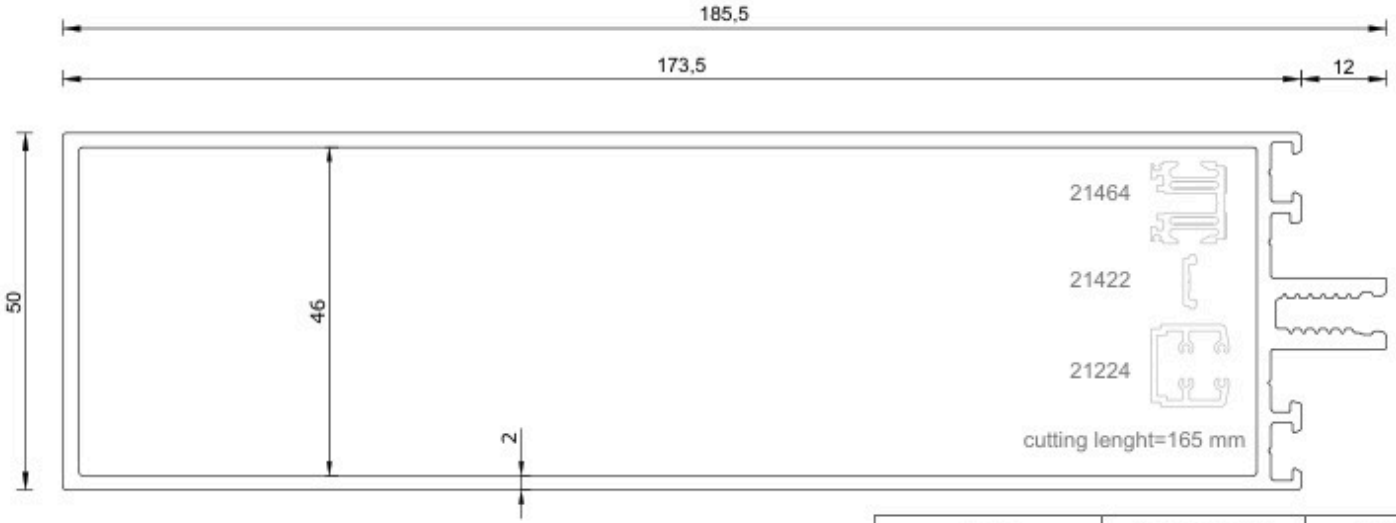
CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
342526	2.57	38.76	273.48
342527	2.8	44.49	381.63

342526



پروفیل افقی
transom profile

342527

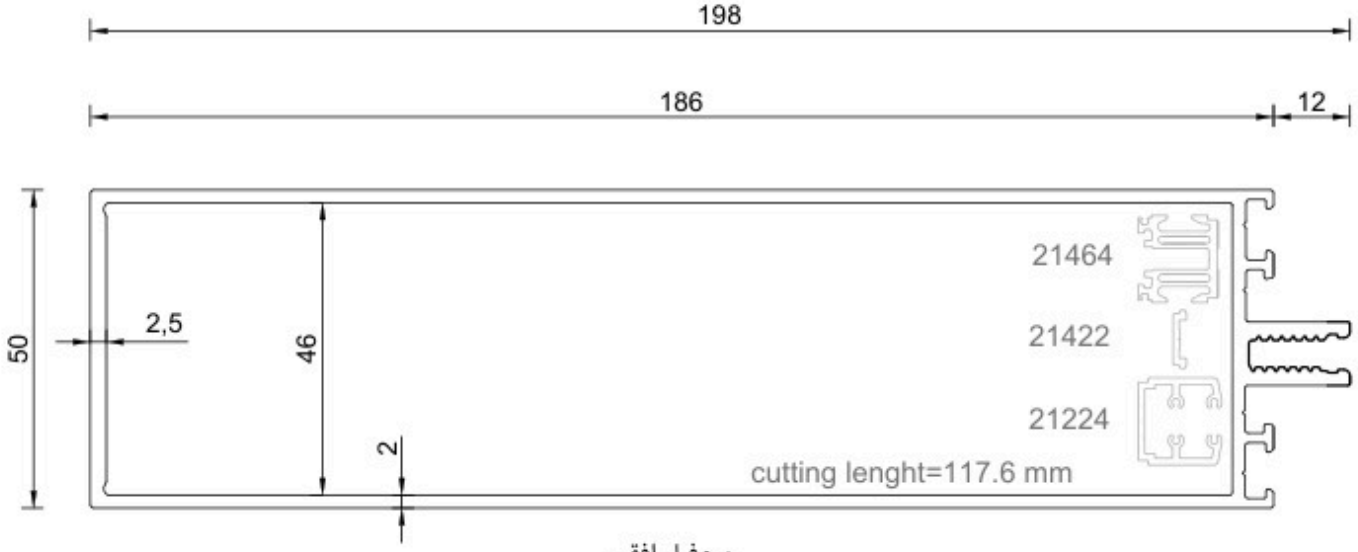


پروفیل افقی
transom profile

profile	Vertical profile	shape
342526	341506 21594	
342527	341507	

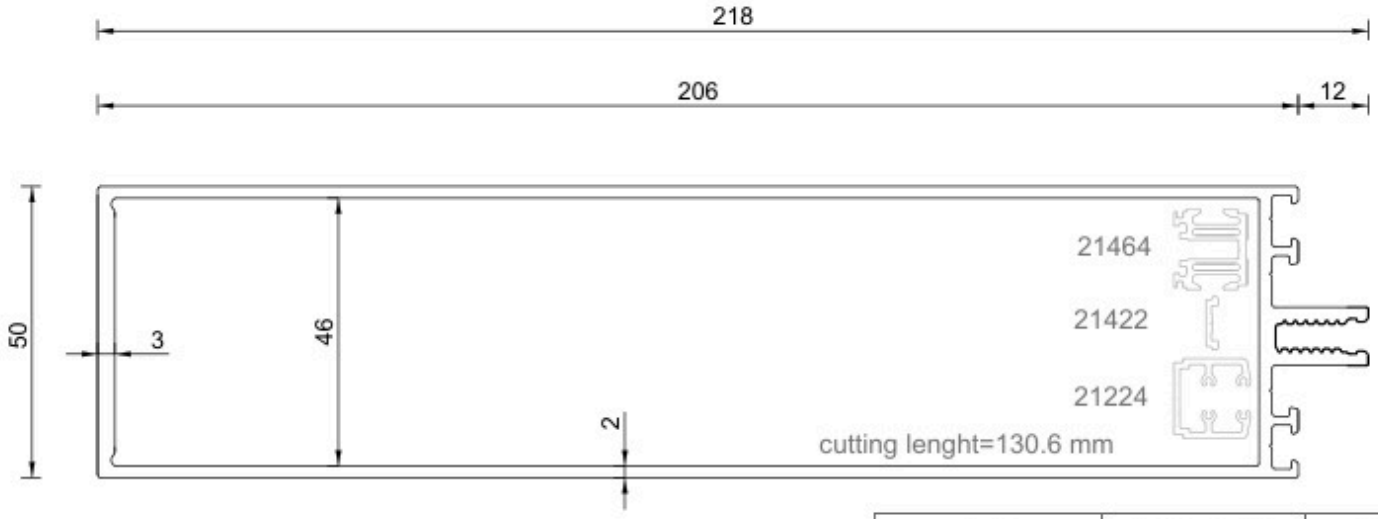
CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21473	2.930	46.78	458.46
21474	3.210	51.80	617.58

21473

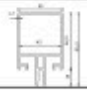


پروفیل افقی
transom profile

21474

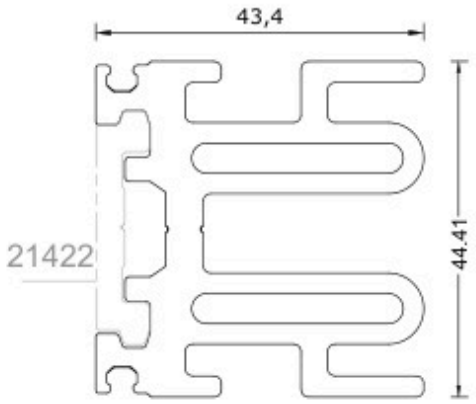


پروفیل افقی
transom profile

profile	Vertical profile	shape
21473	341508	
21474	341509	

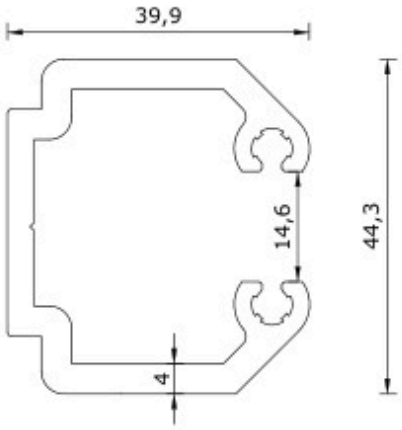
CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21465	2.300	-	-
21469	1.480	-	-
21422	0.369	-	-
20016	0.240	-	-

21465



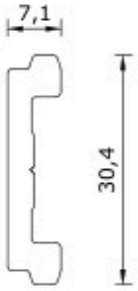
لقمه اتصال عمودی به عمودی
mullion connector profile

21469



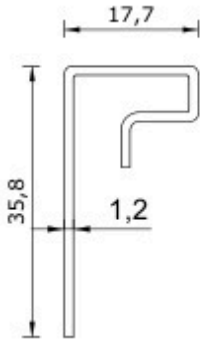
لقمه اتصال عمودی به عمودی
mullion connector profile

21422



ریل لقمه کشویی
mullion connector profile

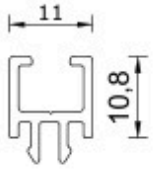
20016



پروفیل درز گیر
water isolation profile

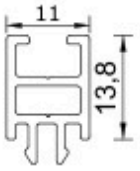
CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21193	0.170	-	-
21194	0.217	-	-
21195	0.228	-	-
21196	0.240	-	-
21209	0.260	-	-
21197	0.285	-	-

21193



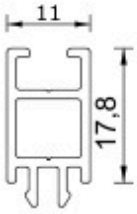
آداپتور شیشه
adapter profile

21194



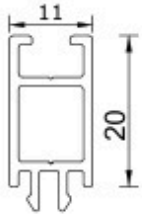
آداپتور شیشه
adapter profile

21195



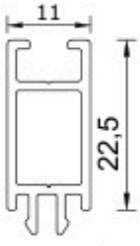
آداپتور شیشه
adapter profile

21196



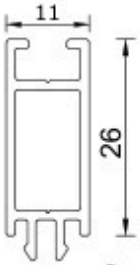
آداپتور شیشه
adapter profile

21209



آداپتور شیشه
adapter profile

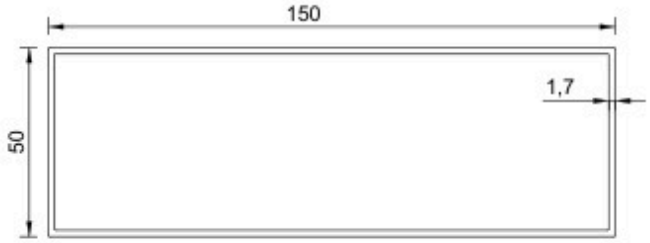
21197



آداپتور شیشه
adapter profile

CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21899	1.930	-	-
21412	1.160	-	-
21918	1.230	-	-
21285	0.985	-	-

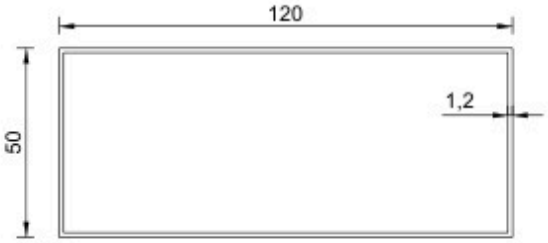
21899



قوطی 150x50

150x 50box profile

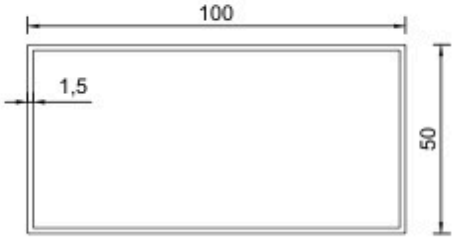
21412



قوطی 120x50

120x 50box profile

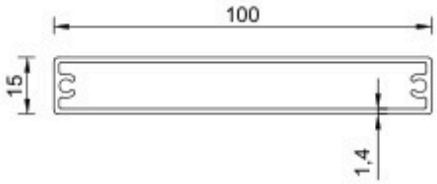
21918



قوطی 100x50

100x 50box profile

21285

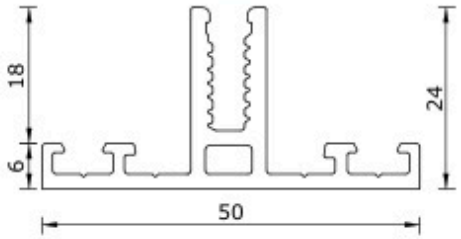


قوطی 100x15

100x 15box profile

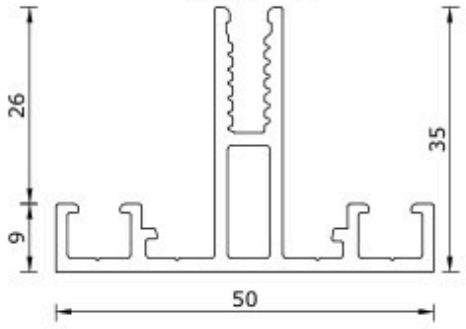
CODE	WEIGHT(kg/m)	Ix cm4	Iy cm4
21407	0.765	-	-
21510	0.820	-	-
21408	0.830	-	-
21919	0.815	-	-

21407



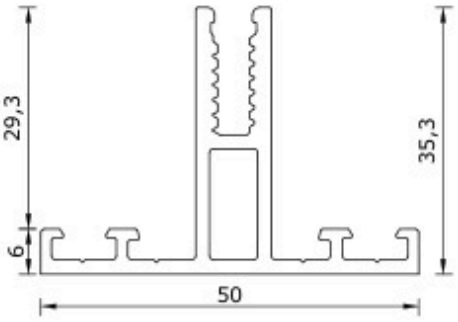
پروفیل add on
add on profile

21510



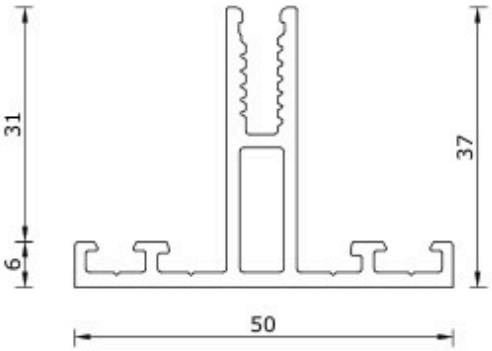
پروفیل add on
add on profile

21408



پروفیل add on
add on profile

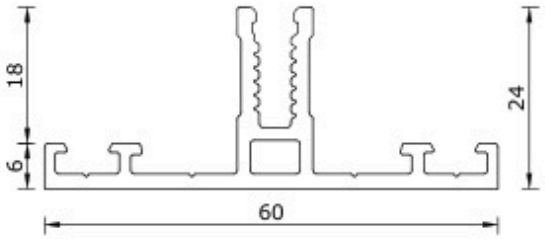
21919



پروفیل add on
add on profile

CODE	WEIGHT(kg/m)	Ix cm4	Iy cm4
21201	0.750	-	-
20015	0.300	-	-
20026	0.420	-	-
21202	0.320	-	-
21185	0.655	-	-

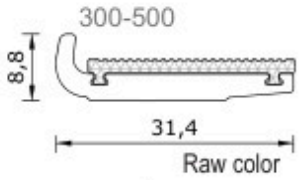
21201



پروفیل add on

add on profile

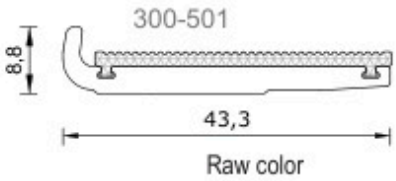
20015



vq, Ä qêM¡ Në -5

glass support profile

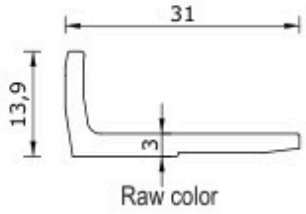
20026



vq, Ä qêM¡ Në -5

glass support profile

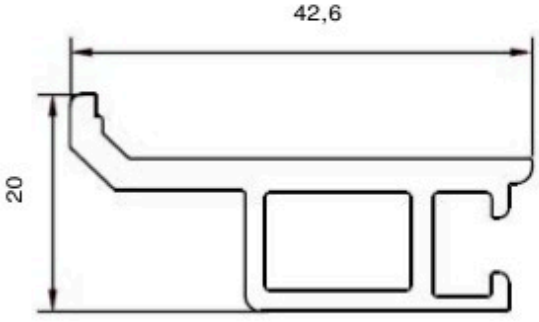
21202



Ä qêM¡ Në -5

glass support for 21201add on

21185

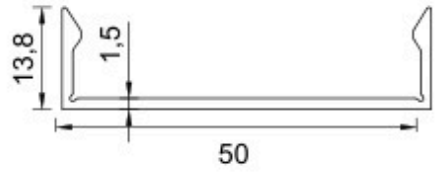


vq, Ä qêM¡ Në -5

glass support profile

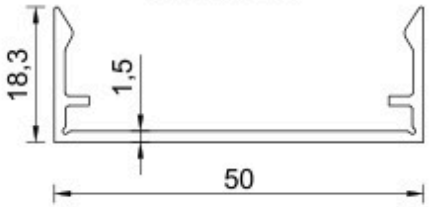
CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
340558	0.325	-	-
340537	0.388	-	-
340538	0.432	-	-
21928	0.286	-	-
21927	0.359	-	-
340556	0.500	-	-

340558



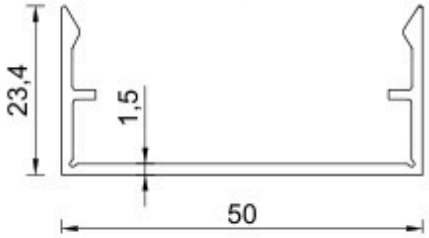
پروفیل درپوش
cover profile

340537



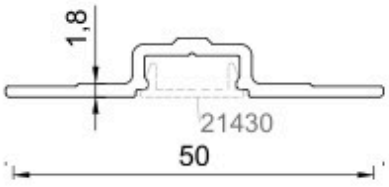
پروفیل درپوش
cover profile

340538



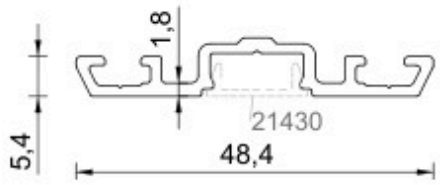
پروفیل درپوش
cover profile

21928



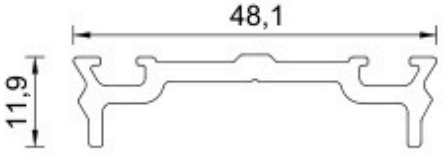
درپوش پیچ خور
cover profile

21927



درپوش پیچ خور
cover profile

340556

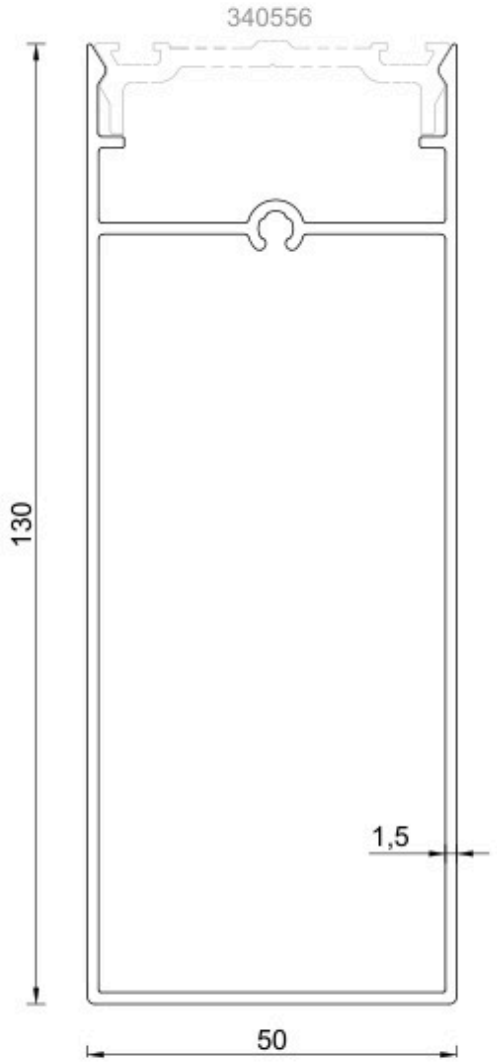


نگهدارنده شیشه
presure plate profile

scale1:1

CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21420	1.600	-	-

21420



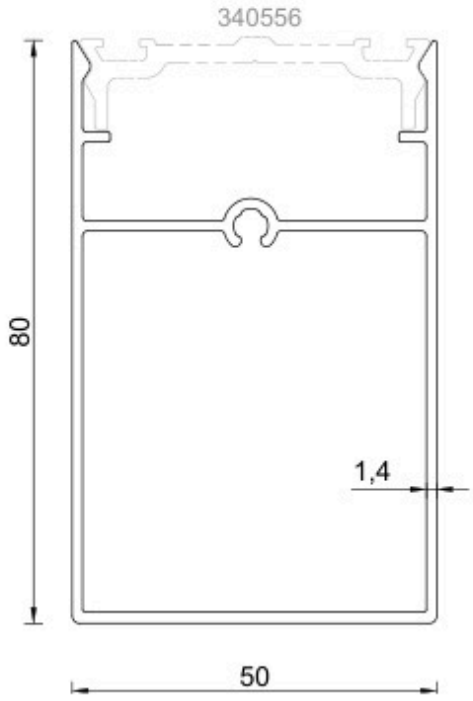
درپوش مستطیلی

cover profile

scale1:1

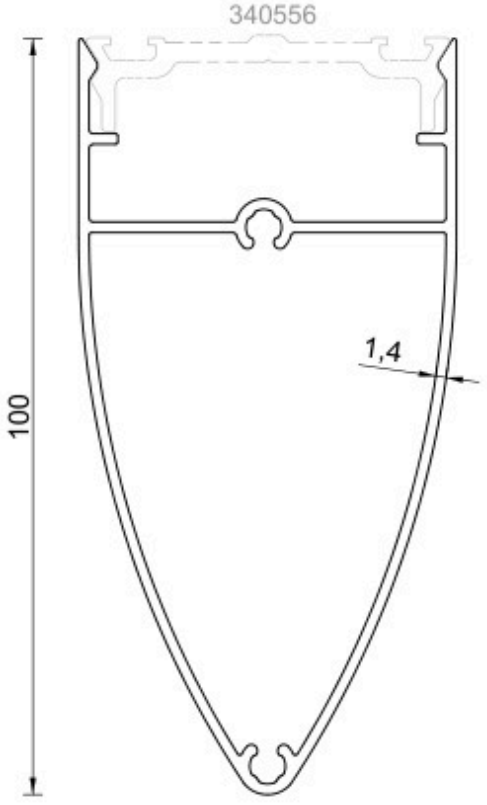
CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21419	1.1	-	-
21466	1.120	-	-

21419



درپوش مستطیلی
cover profile

21466

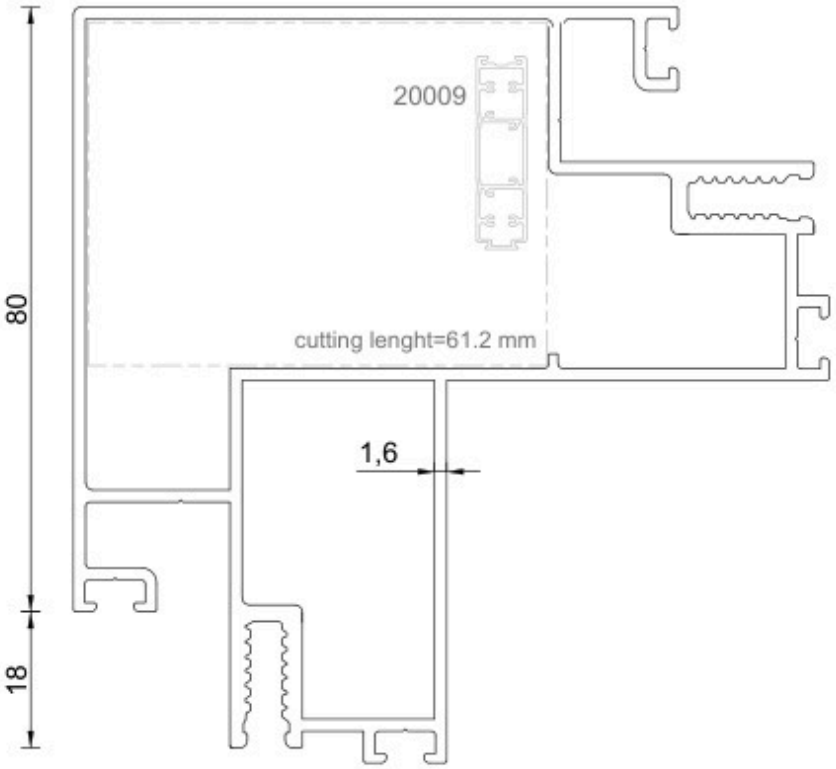


درپوش دوکی
cover profile

scale1:1

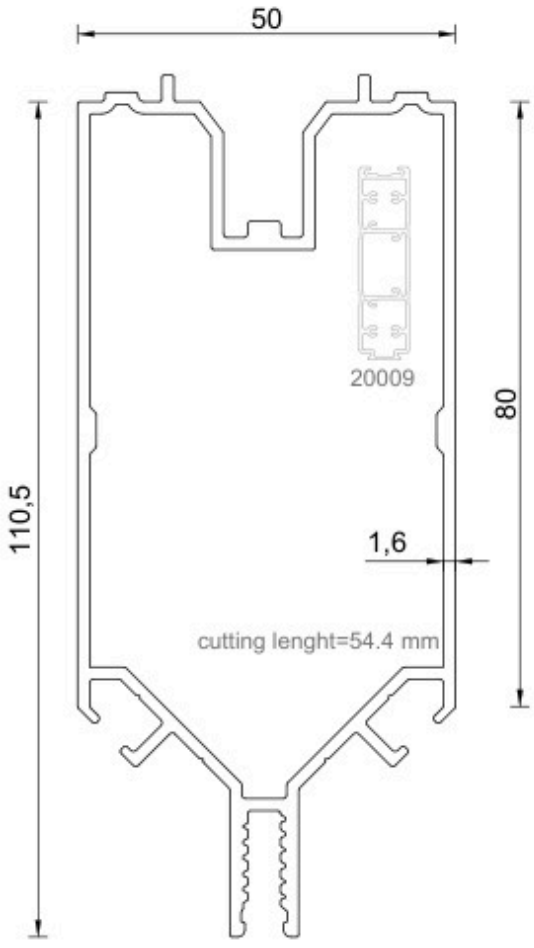
CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21680	1.81	81.74	20.15
21467	2.700	101.16	98.93

21467



پروفیل کنج بیرونی 90 درجه
corner profile 90

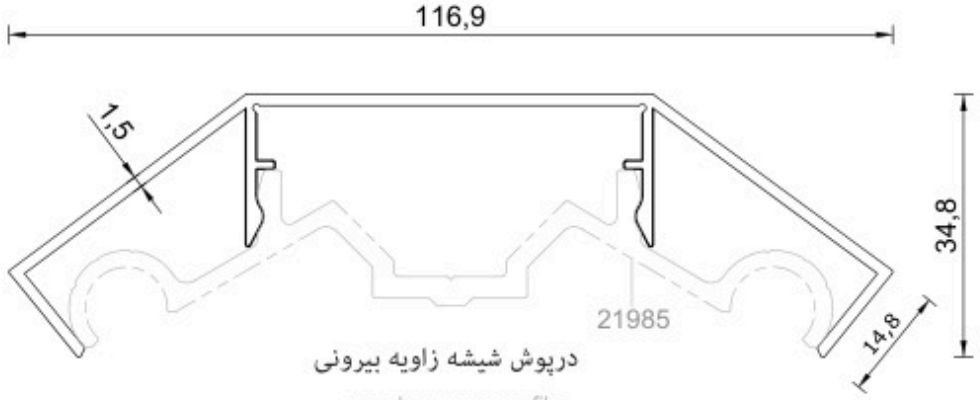
21680



آداپتور زاویه بیرونی90 درجه
corner adapter profile

CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21986	0.860	-	-
21985	1.140	-	-
21984	0.740	-	-
21980	0.165	-	-

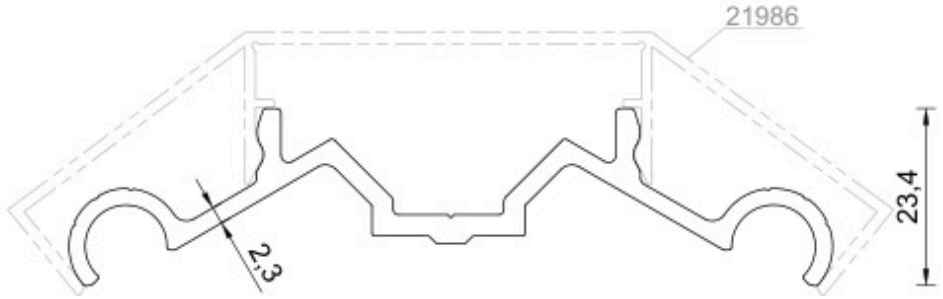
21986



درپوش شیشه زاویه بیرونی

angular cover profile

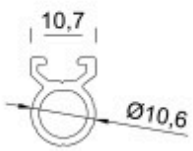
21985



نگهدارنده شیشه زاویه بیرونی

angular pressure plate profile

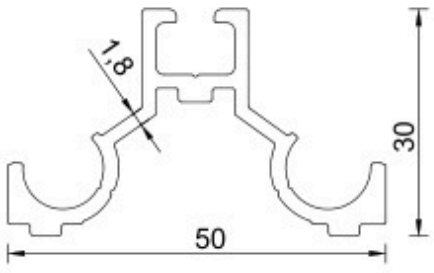
21980



آداپتور تنظیم زاویه شیشه

angular adapter profile

21984



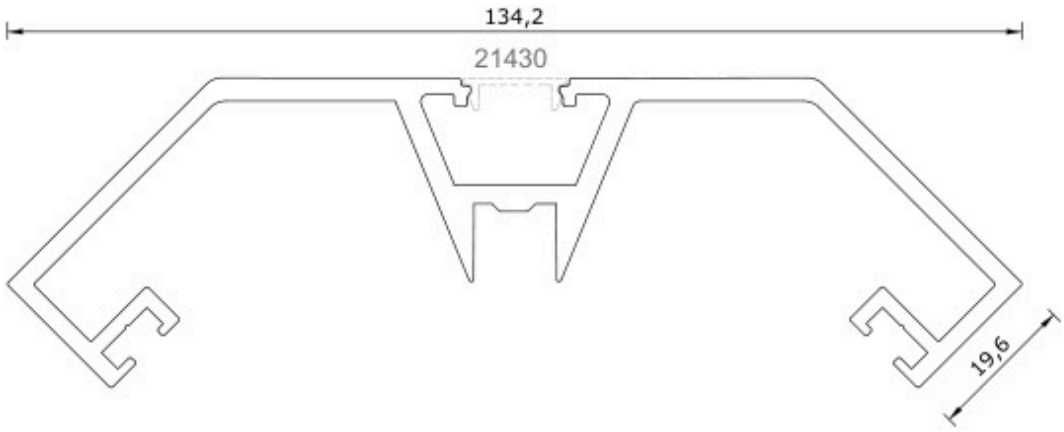
آداپتور زاویه بیرونی

angular adapter profile

scale1:1

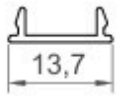
CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21304	1.910	-	-
21184	0.156	-	-
21186	0.176	-	-
21430	0.060	-	-

21304



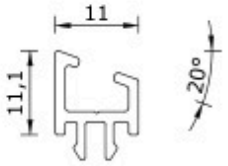
درپوش کنج بیرونی 90 درجه
90corner profile

21430



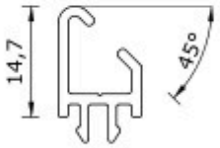
پیچ درپوش شیار
cover profile

21184



آداپتور شیشه زاویه دار
corner adapter profile

21186

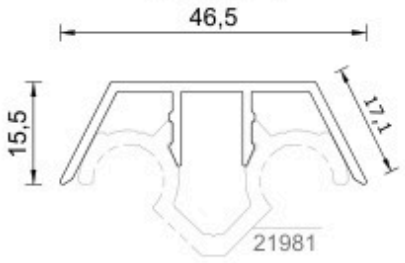


آداپتور شیشه زاویه دار
corner adapter profile

scale1:1

CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21982	0.370	-	-
21981	0.525	-	-
21983	0.310	-	-
21468	0.560	-	-
21401	0.165	-	-

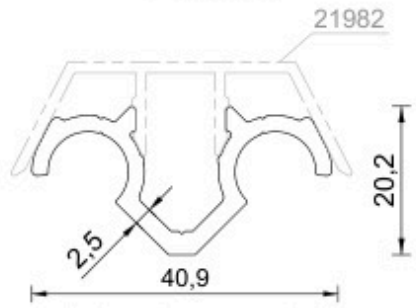
21982



درپوش شیشه زاویه داخلی

angular cover profile

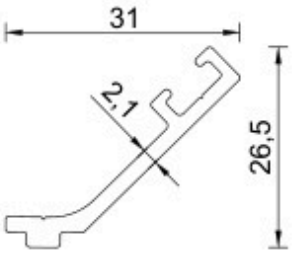
21981



نگهدارنده شیشه زاویه داخلی

angular pressure plate profile

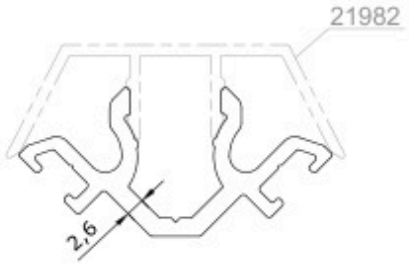
21983



آداپتور کنج داخلی90 درجه

corner adapter profile

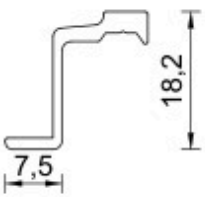
21468



نگهدارنده شیشه زاویه داخلی90 درجه

90deg pressure plate profile

21401



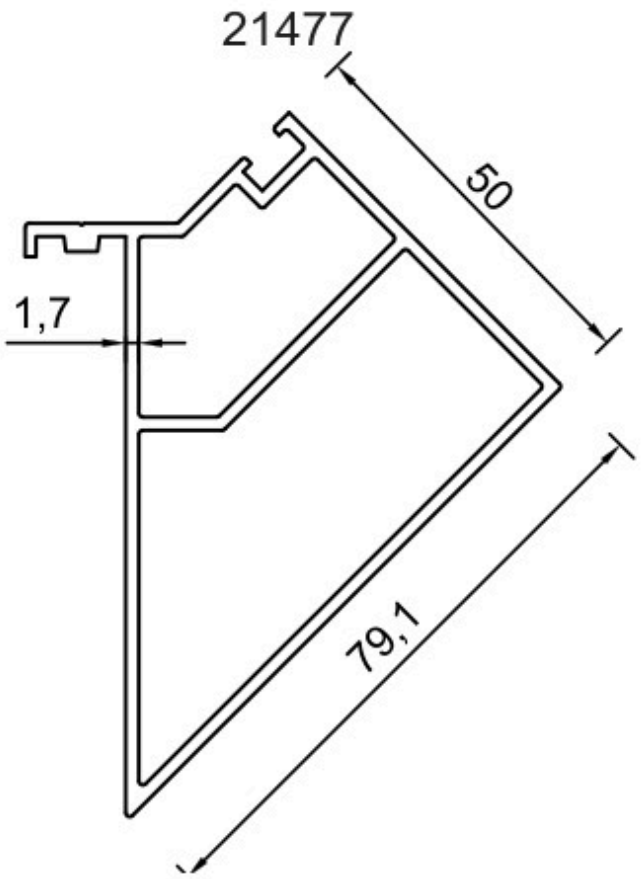
تاکوز پایین لنگه ترمال بریک

glass support profile

scale1:1

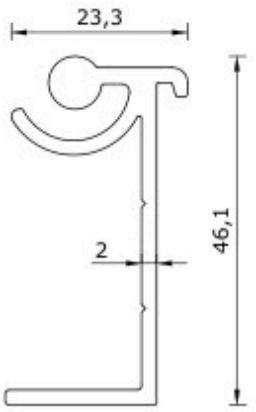
CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21477	1.500	-	-
21187	0.670	-	-
21188	0.574	-	-

21477



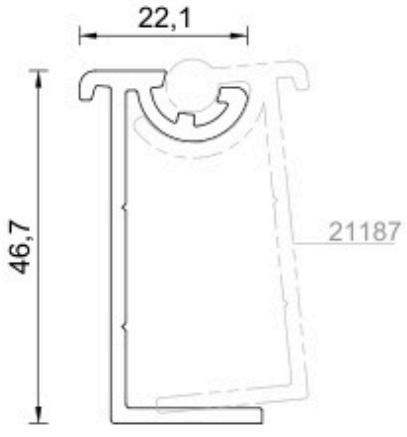
آداپتور کنج داخلی90 درجه
corner adapter profile

21187



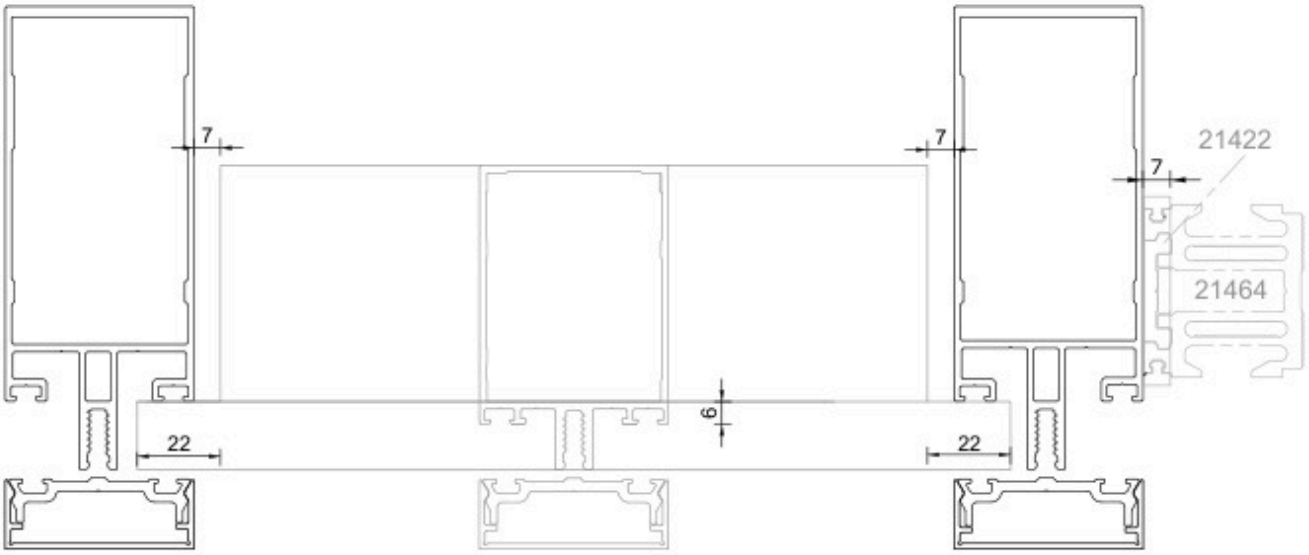
آداپتور زاویه کرتین وال
adjustable corner profile

21188



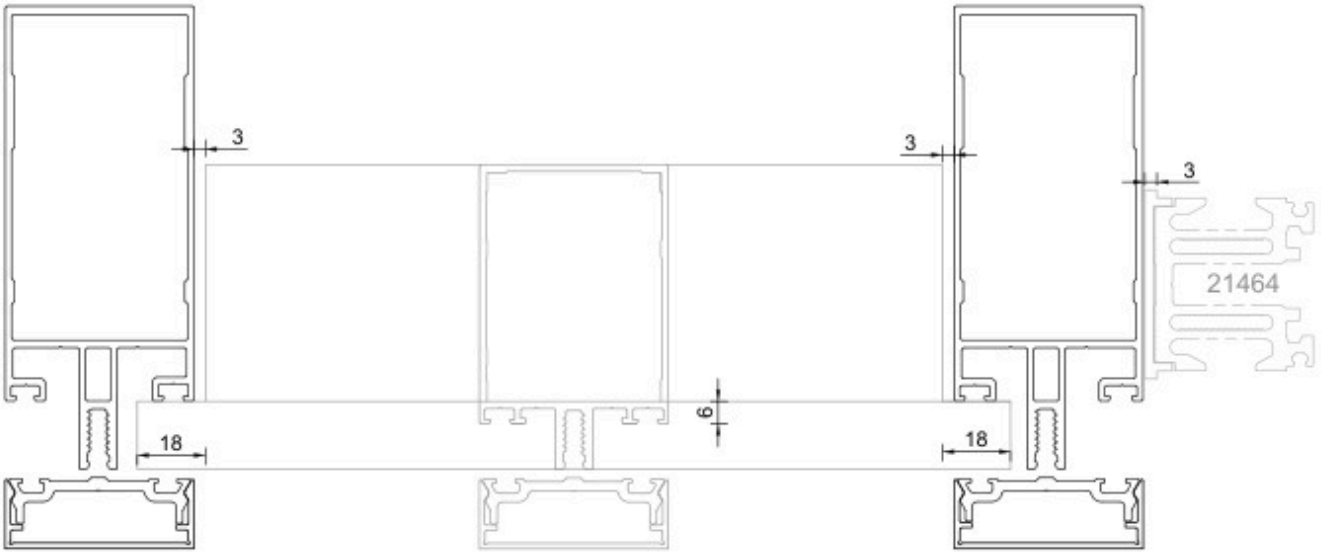
آداپتور زاویه کرتین وال
adjustable corner profile

scale1:1



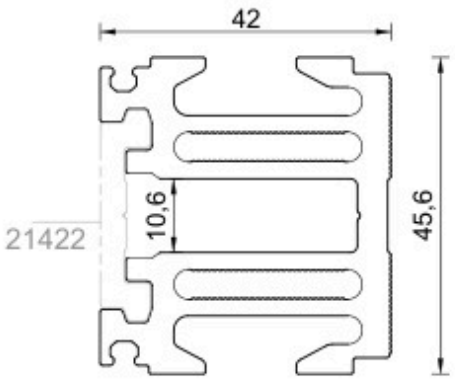
اندازه برش در نصب لقمه های ریلی

The size of the cut in the installation of rail connector

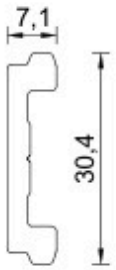


اندازه برش در نصب لقمه های فیکس

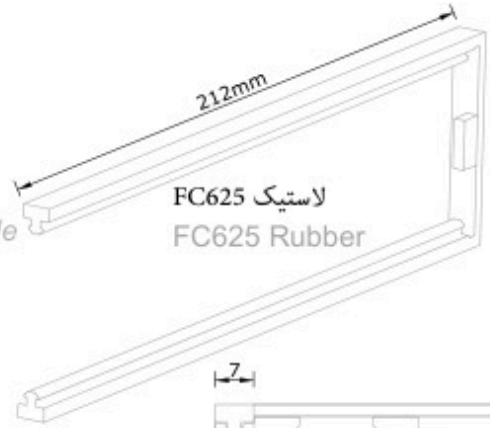
The size of the cut in the installation of fix connector



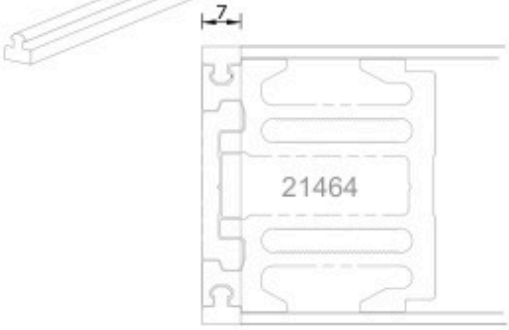
21464
پروفیل افقی لقمه فیکس و ریلی
transom connector profile
kg/m 2.150

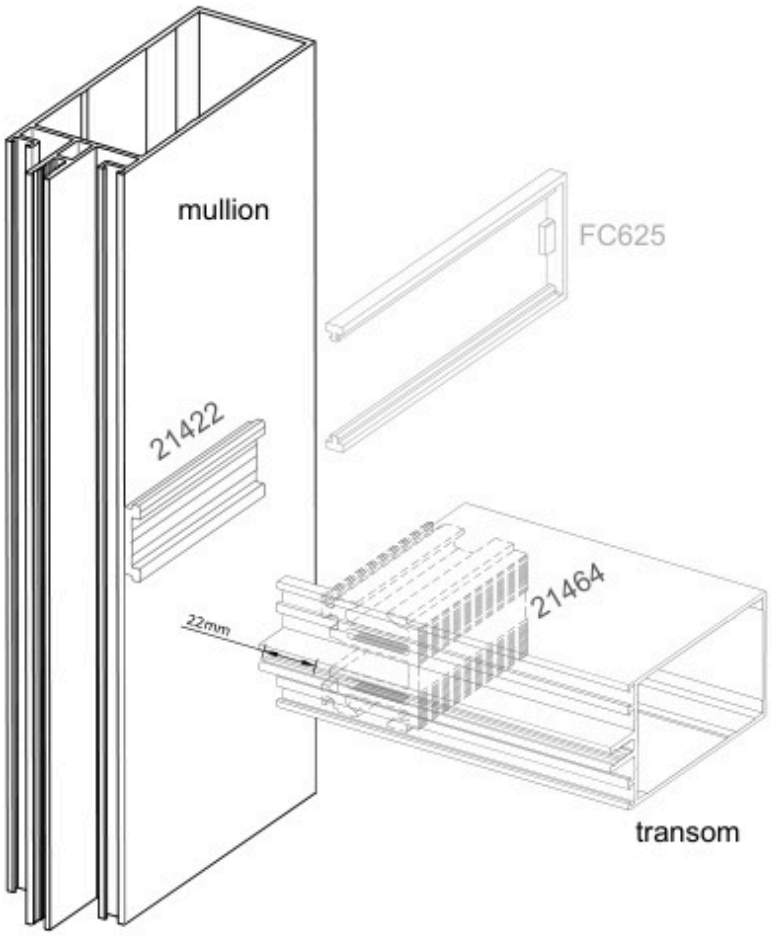


21422
پروفیل افقی ریل لقمه
transom connector profile
kg/m 0.369



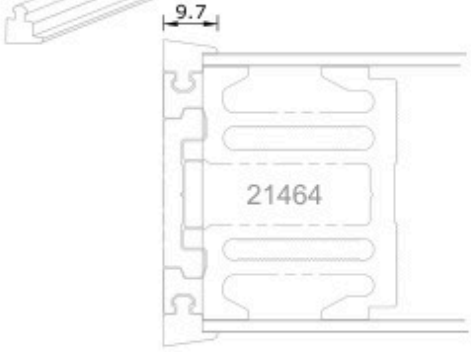
لاستیک FC625
FC625 Rubber

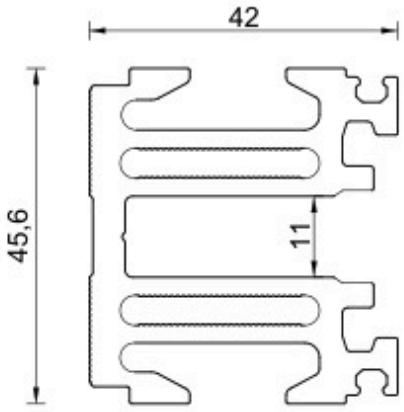






لاستیک لبه دار FC630
FC630 Edged rubber



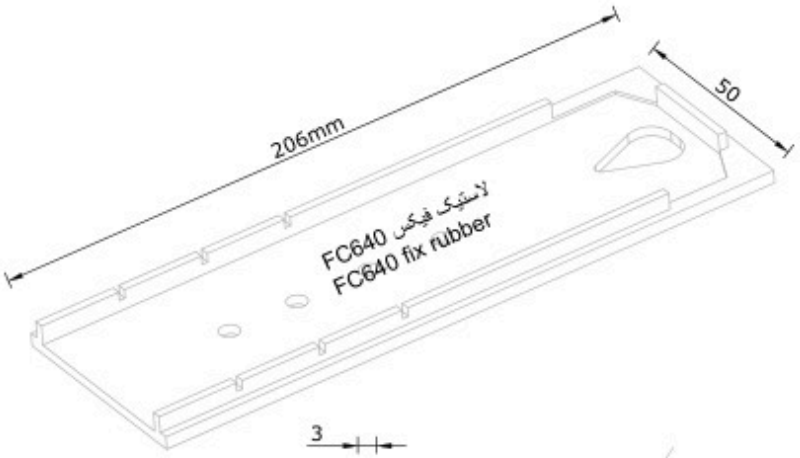


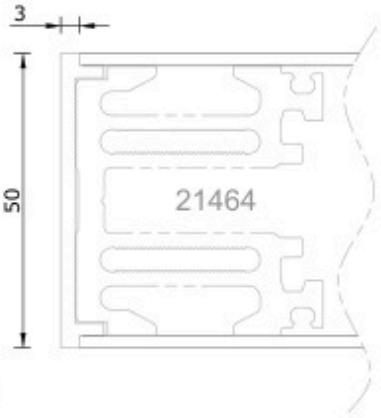
21464

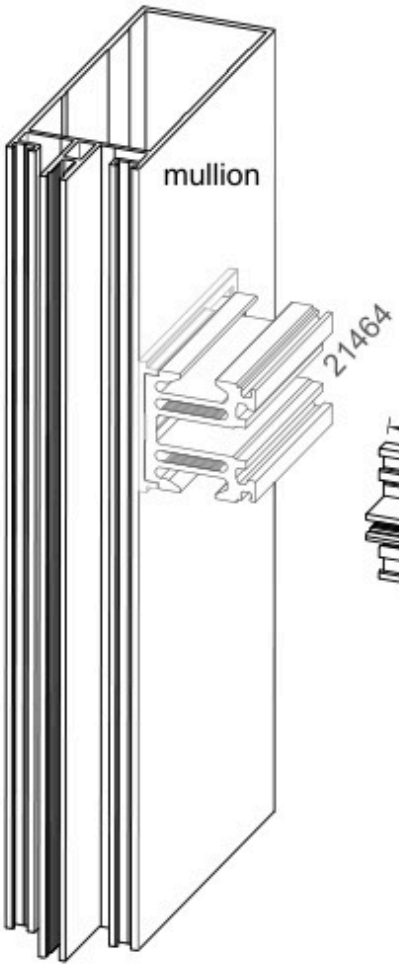
لقمه فیکس و ریلی پروفیل افقی

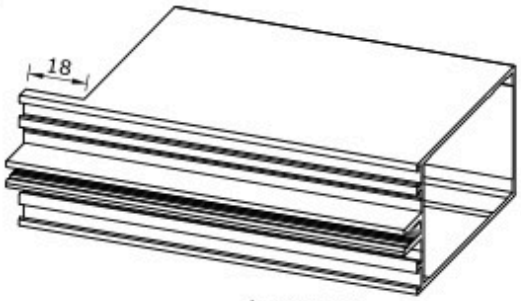
transom connector pr

2.150 kg/m

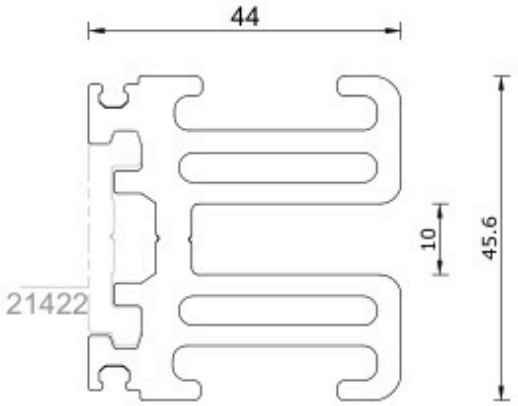




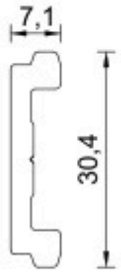




transom



21421
لقمه ریلی پروفیل افقی
transom connector pr
kg/m 2.432



21422
ریل لقمه پروفیل افقی
transom connector pr
kg/m 0.369

FC625, FC630 It is used in both fixed and sliding connector profiles

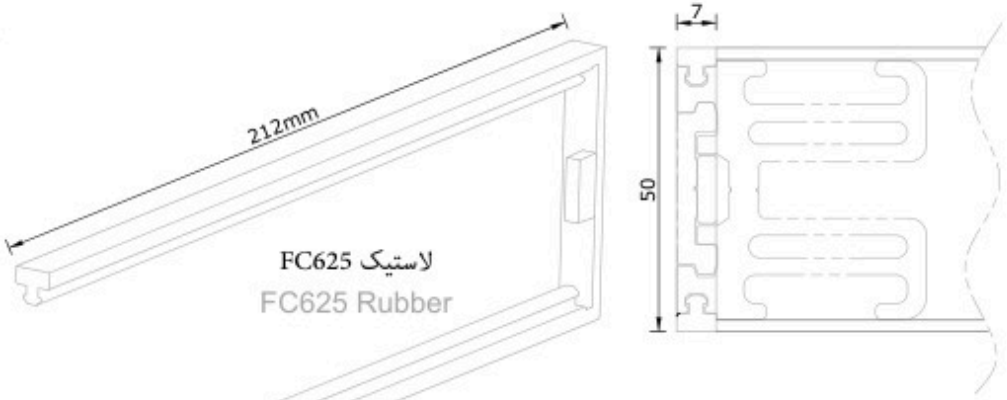
لاستیک های FC625 و FC630 هردو برای پروفیل لقمه فیکس و کشویی کاربرد دارند.

اندازه برش لاستیک ها

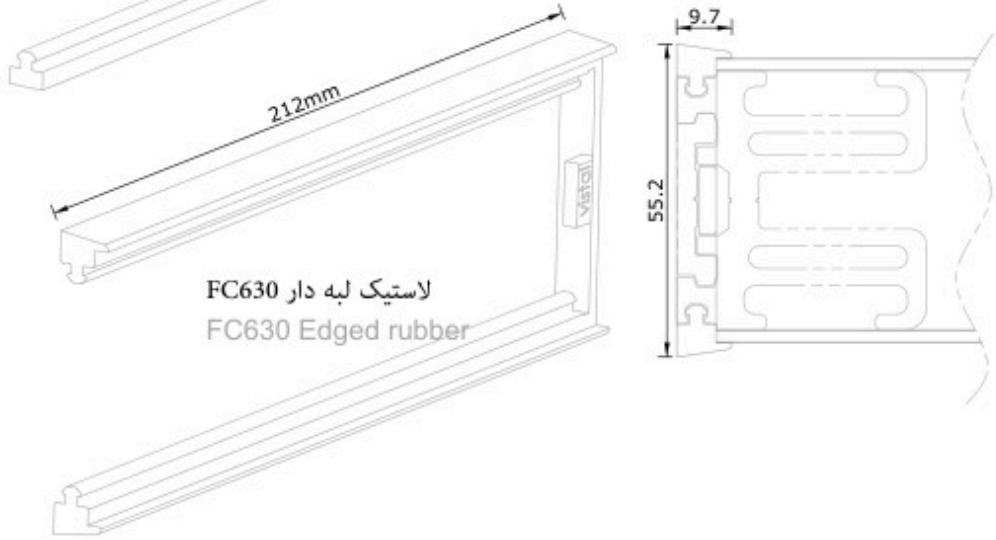
FC625 Rubber Cutting Size

FC630

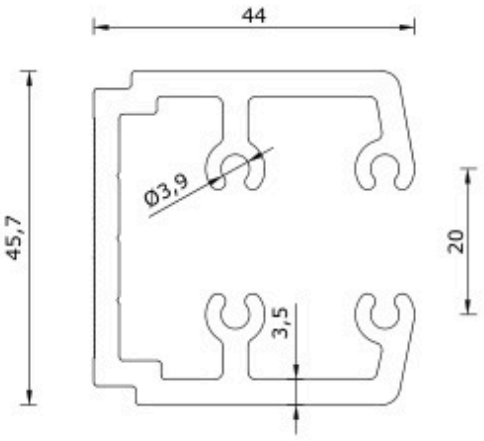
Profile	Gasket Cutting Size
21486	44 mm
342522	62.5 mm
342523	83.5 mm
342524	104.5 mm
21478	104.5 mm
342525	125.4 mm
21479	125.4 mm
342526	146.5 mm
342527	167.5 mm
21473	180 mm
21474	199.7 mm



لاستیک FC625
FC625 Rubber



لاستیک لبه دار FC630
FC630 Edged rubber

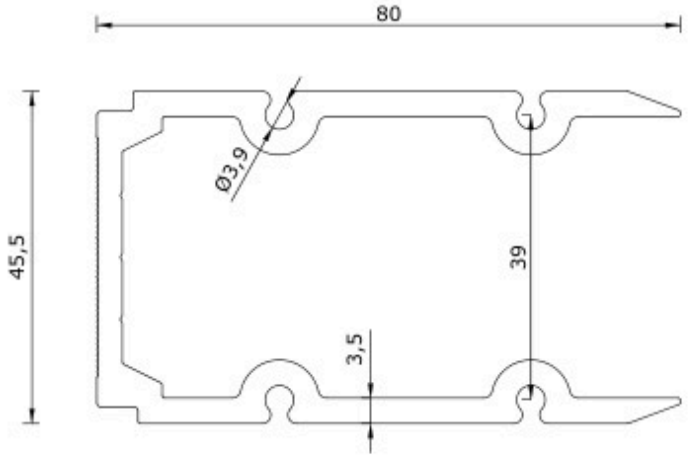


21224

لقمه فیکس پروفیل افقی

transom connector pr

1.9 kg/m

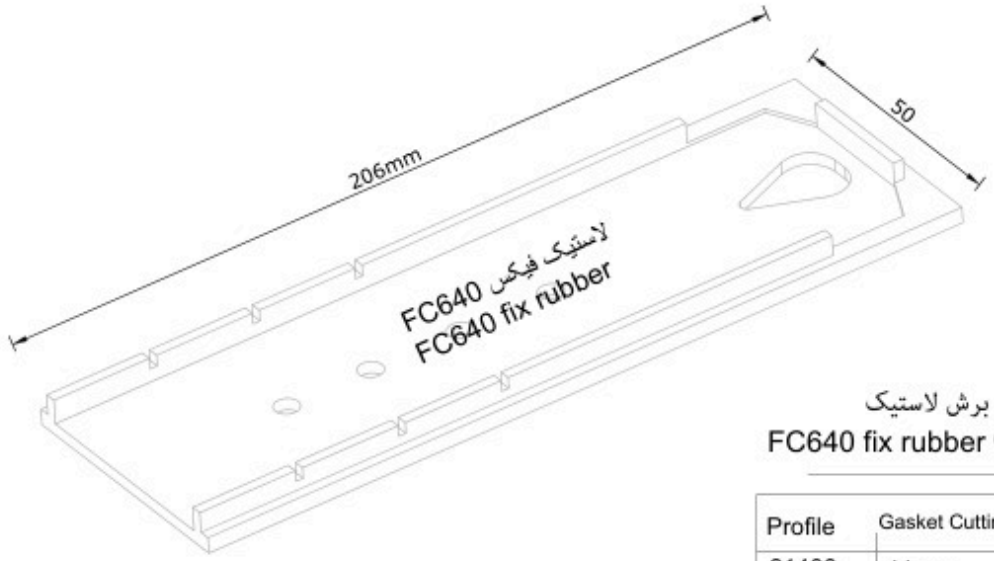


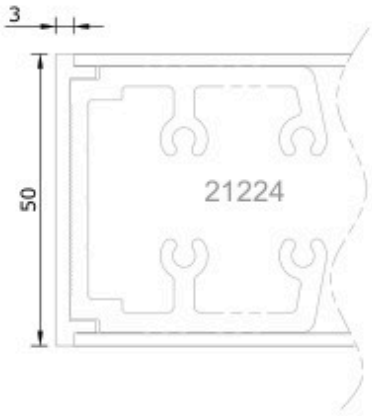
21481

لقمه فیکس تقویت پروفیل افقی

transom connector pr

kg/m 2.170

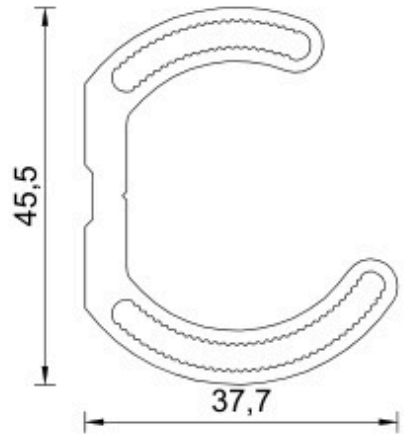




اندازه برش لاستیک

FC640 fix rubber Cutting Size

Profile	Gasket Cutting Size
21486	44 mm
342522	62.5 mm
342523	83.5 mm
342524	104.5 mm
21478	104.5 mm
342525	125.4 mm
21479	125.4 mm
342526	146.5 mm
342527	167.5 mm
21473	180 mm
21474	199.7 mm

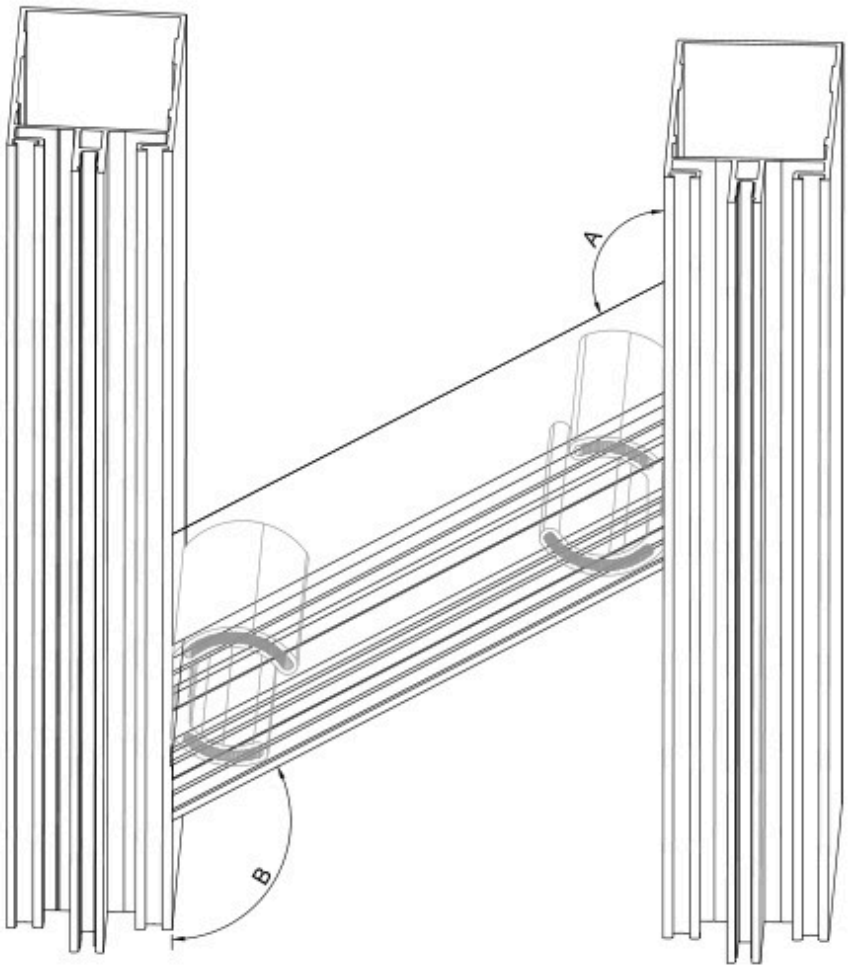


21423

لقمه پروفیل افقی زاویه دار

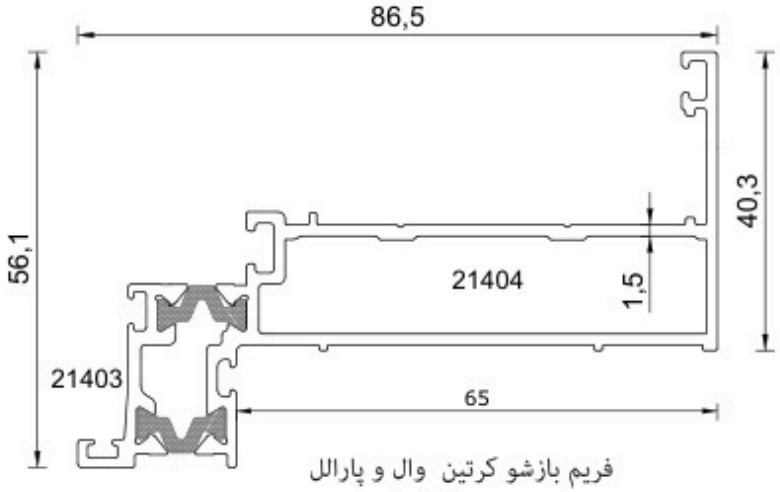
angular transom connector pr

1.02 kg/m



CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21403-21404	1.300	40.1	3.8
21290-21291	1.480	-	-

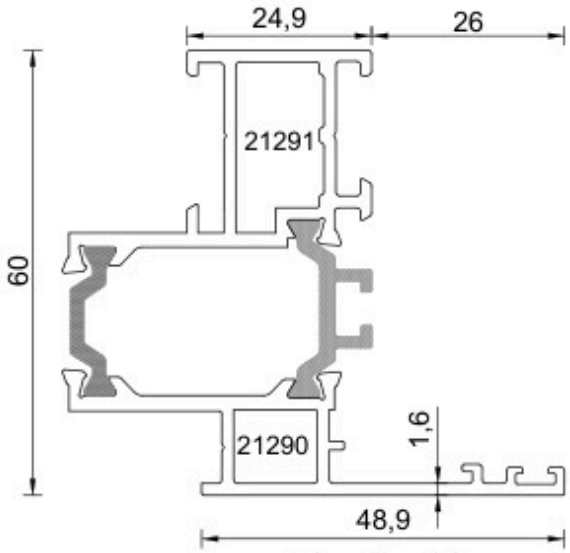
21403-21404



فریم بازشو کرتین وال و پارالل

insulated frame profile

21290-21291



لولایی فریم بازشو

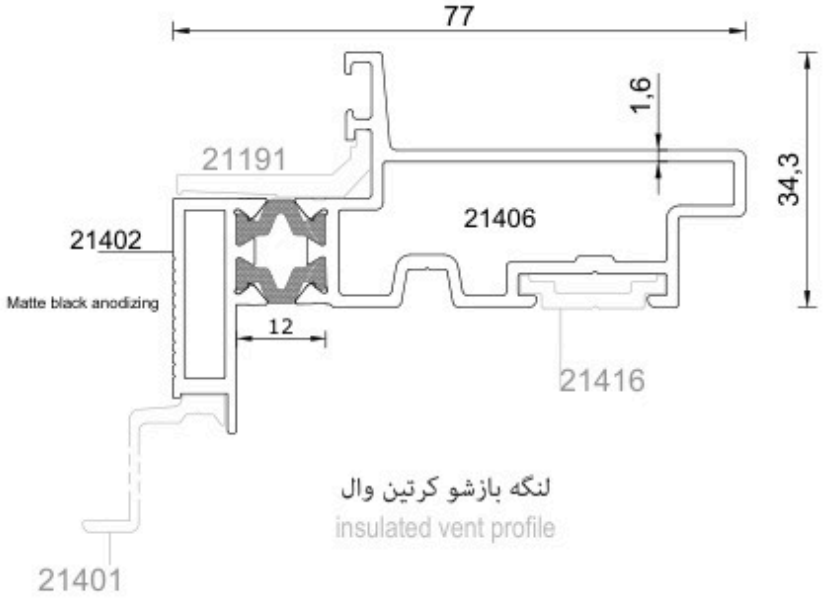
hinge opening frame profile

scale1:1

profile	corner cleat	shape	cutting size	corner cleat	shape	cutting size
21403-21404	C12.6		56.5 mm			
21290-21291	C10.6		19.5mm	C10.6		9.2mm

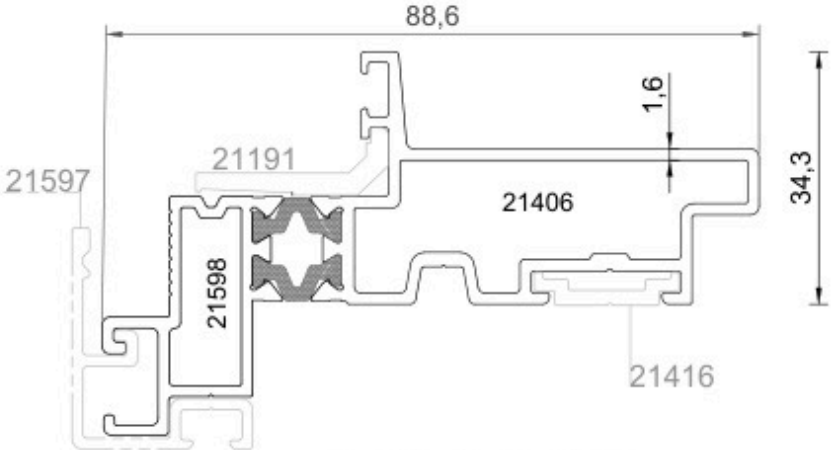
CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21402-21406	1.400	24.2	3.9
21406-21598	1.57	24.6	4.15

21402-21406



لنگه بازشو کرتین وال
insulated vent profile

21406-21598



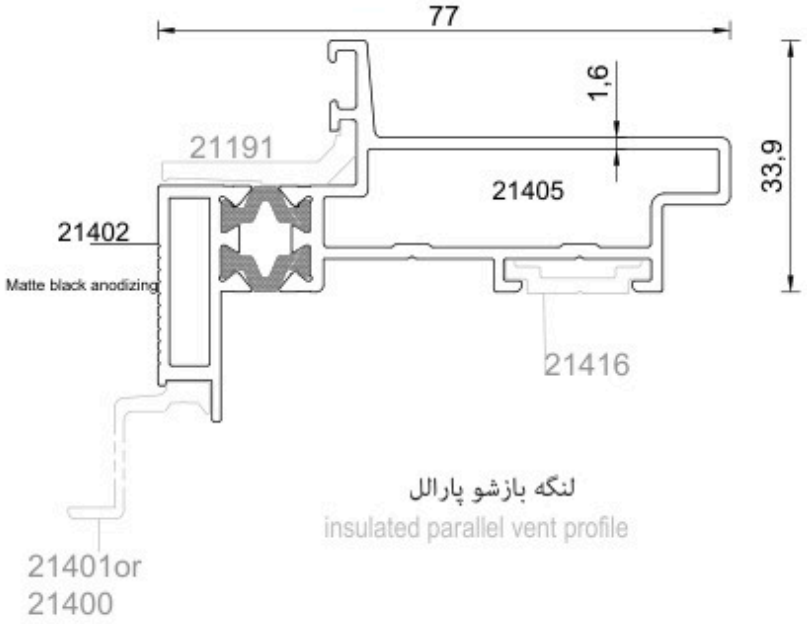
لنگه زهوار دار بازشو کرتین وال
insulated vent profile

scale1:1

profile	corner cleat	shape	cutting size	corner cleat	shape	cutting size
21402-21406	C12.6		38 mm ●	C22.4		4.8 mm ●
21406-21598	C12.6		38 mm ●	C22.4		7.9 mm ●

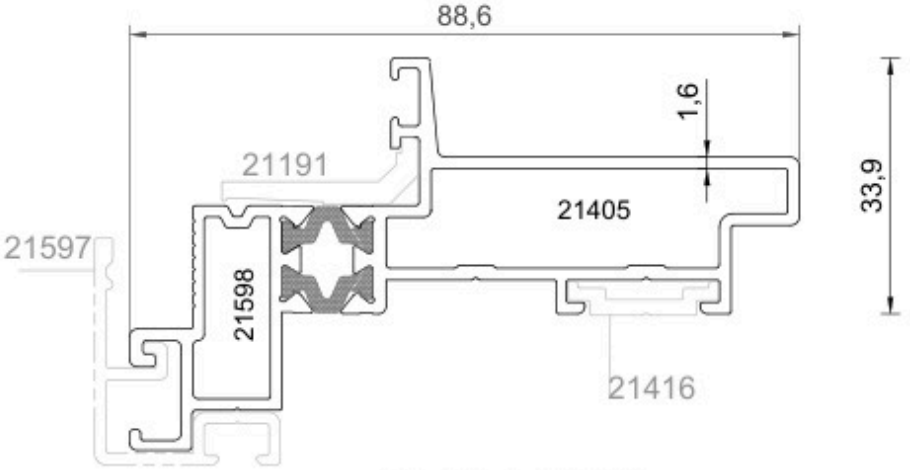
CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21402-21405	1.360	24.2	3.7
21405-21598	1.500	24.5	3.9

21402-21405



لنگه بازشو پارالل
insulated parallel vent profile

21405-21598



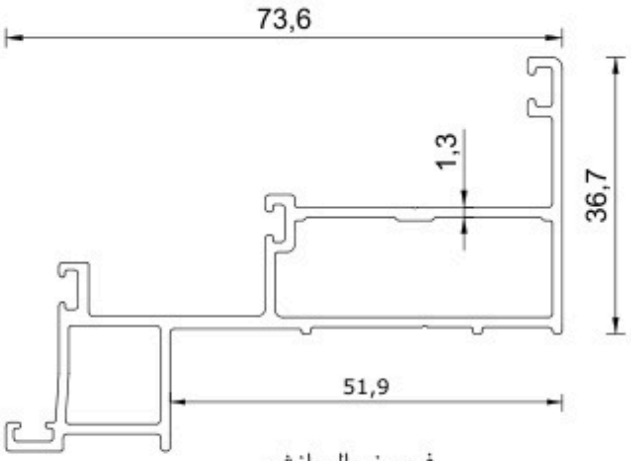
لنگه زهوار دار بازشو پارالل
insulated parallel vent profile

scale1:1

profile	corner cleat	shape	cutting size	corner cleat	shape	cutting size
21402-21405	C12.6		38 mm	C22.4		4.8 mm
21405-21598	C12.6		38 mm	C22.4		7.9 mm

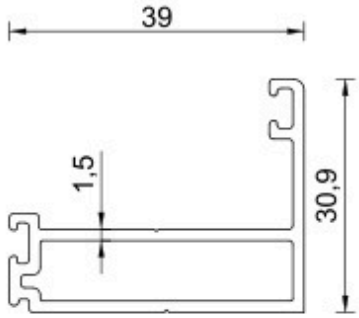
CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21207	0.930	-	-
21595	0.550	1.29	3.6
21390	0.280	-	-
21199	0.136	-	-

21207



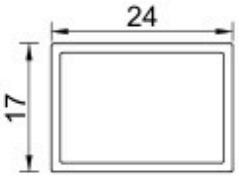
فریم نرمال بازشو
uninsulated frame profile

21595



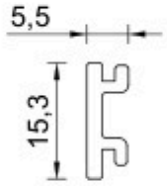
فریم بازشو کرتین وال
frame profile

21390



21595 قوطی داخل بازشو
frame adapter profile

21199



Matte black anodizing

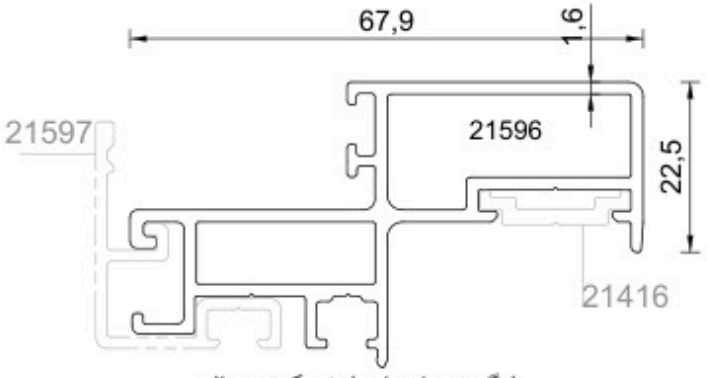
پروفیل آداپتور چسب شیشه
bonding frame profile

scale1:1

profile	corner cleat	shape	cutting size	corner cleat	shape	cutting size
21207	C12.6		33.4 mm	C12.6		11.6mm
21595	C7.8		33 mm	-	-	-

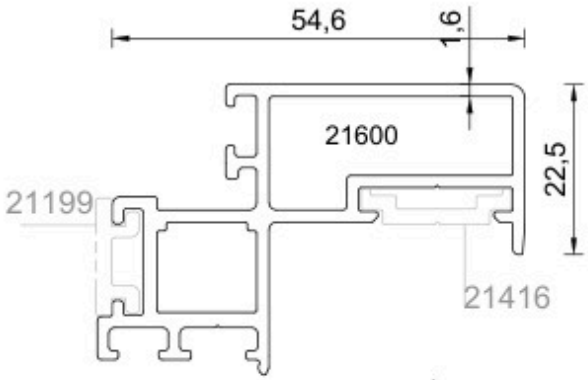
CODE	WEIGHT(kg/m)	Ix cm4	Iy cm4
21600	1.000	4.2	9.78
21596	1.09	3.78	14.36
21416	0.135	-	-
21191	0.240	-	-
21597	0.350	0.89	0.74

21596



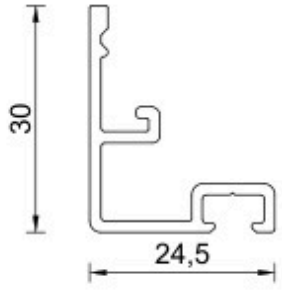
لنگه زهوار دار بازشو کرتین وال
sash profile

21600



لنگه بازشو کرتین وال
hidden vent profile

21597



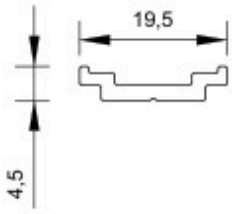
زهوار لنگه کرتین وال بدون چسب شیشه
sash profile

21191



تاکوز داخل لنگه ترمال بریک
glass support for opening sash

21416



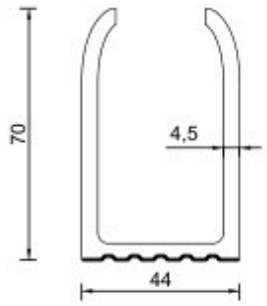
پروفیل تسمه بازشو
rod profile

scale1:1

profile	corner cleat	shape	cutting size	corner cleat	shape	cutting size
21600	C10.6		31.9 mm	C10.6		13.2 mm
21596	C10.6		31.9 mm	C7.8		23.3 mm

CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21485	4.680	-	-
21484	2.170	-	-

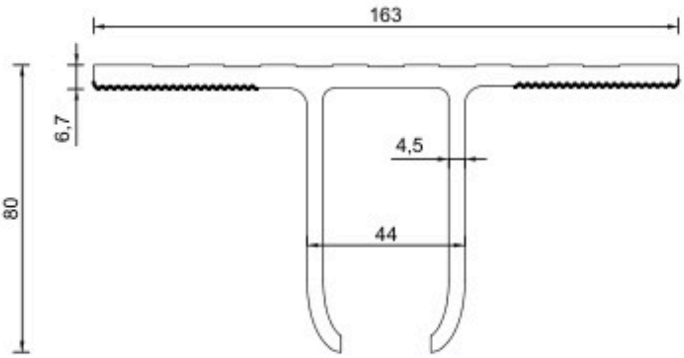
21484



براکت آلومینیومی نصب کف

Mullion bottom bracket

21485

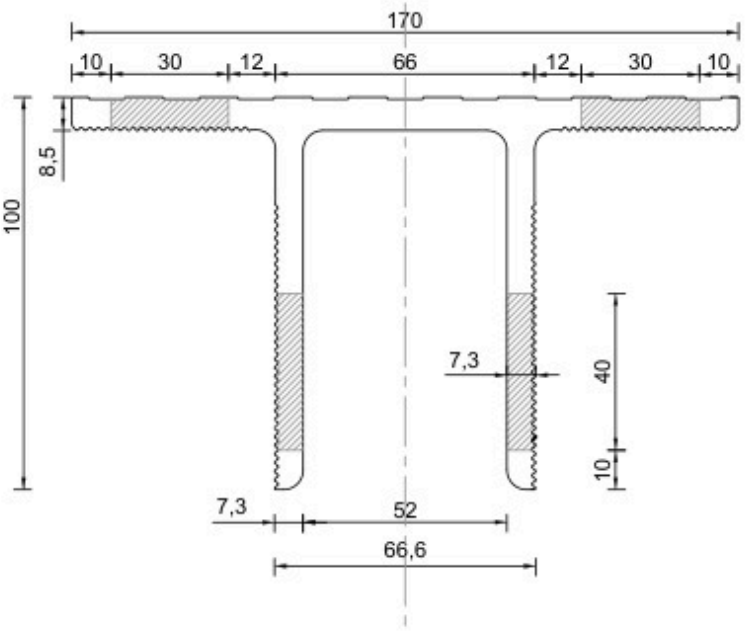


براکت آلومینیومی نصب سقف

Mullion up bracket

CODE	WEIGHT(kg/m)	Ix cm4	Iy cm4
21482	7.262	-	-
21483	8.650	-	-
21488	0.315	-	-
21487	2.080	-	-

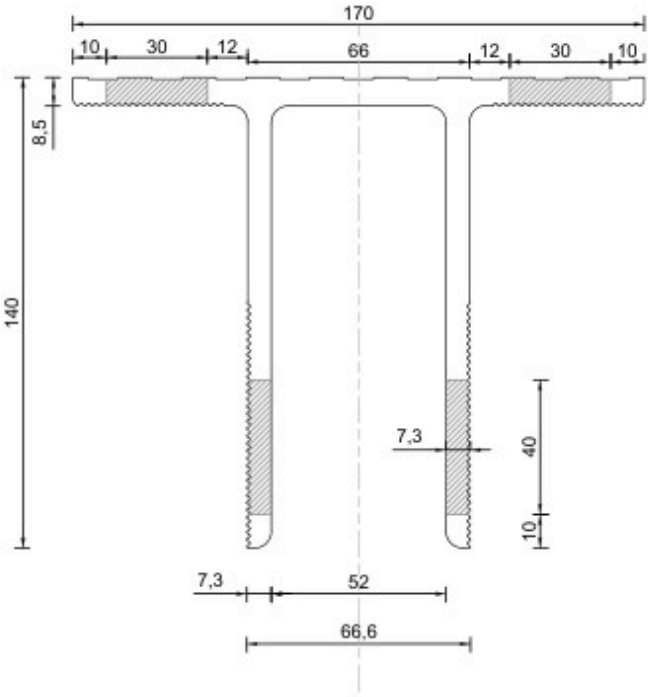
21482



پروفیل براکت 10 سانتی متر

10cm bracket

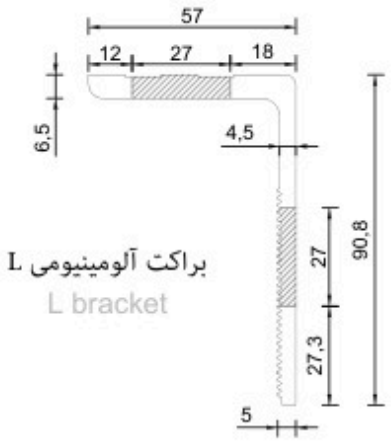
21483



پروفیل براکت 14 سانتی متر

14cm bracket

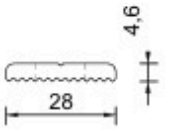
21487



براکت آلومینیومی L

L bracket

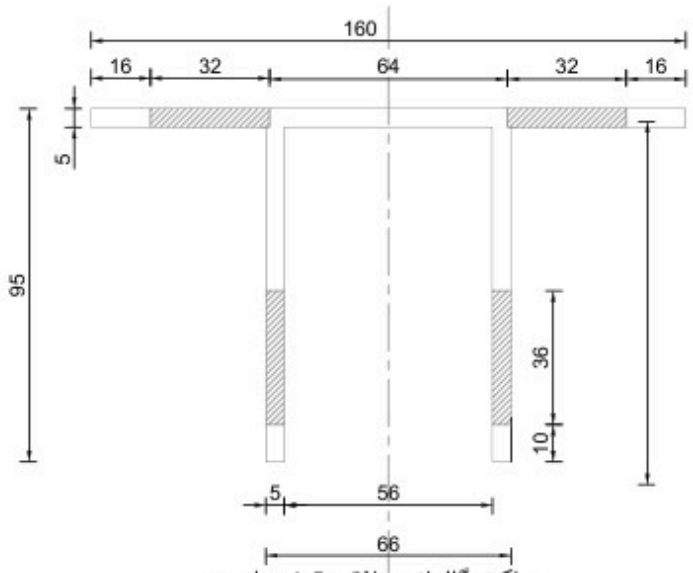
21488



پروفیل واشر براکت

Washer profile

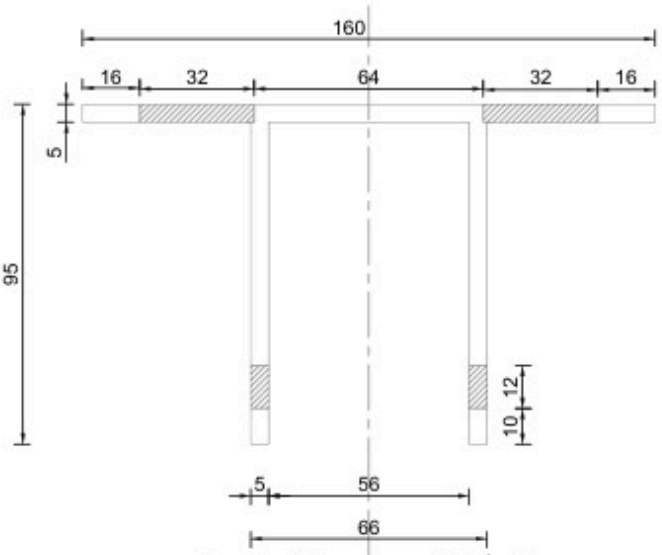
21711



براکت گالوانیزه افقی 5-4 میلی متر

Horizontal Galvanized bracket 4-5 mm

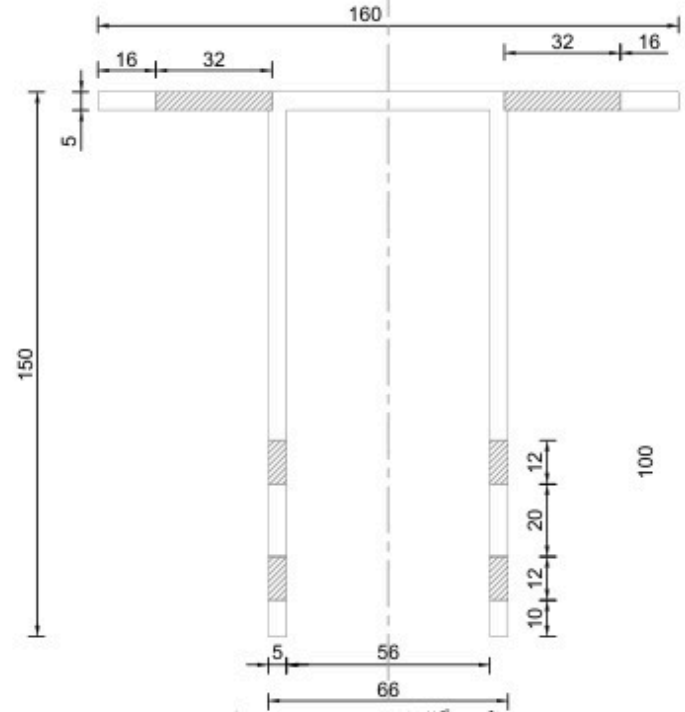
21710



براکت گالوانیزه عمودی 5-4 میلی متر

Vertical Galvanized bracket 4-5 mm

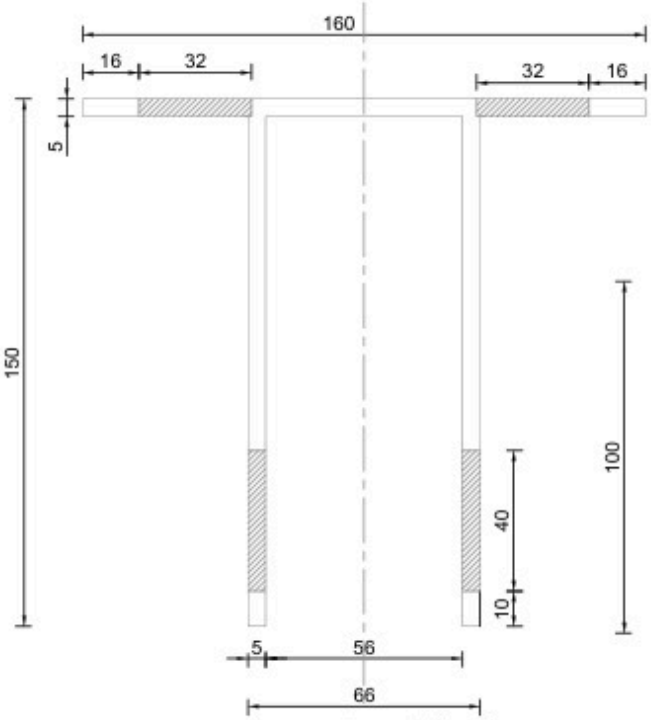
21709



براکت گالوانیزه عمودی 5 میلی متر

Vertical Galvanized bracket 5 mm

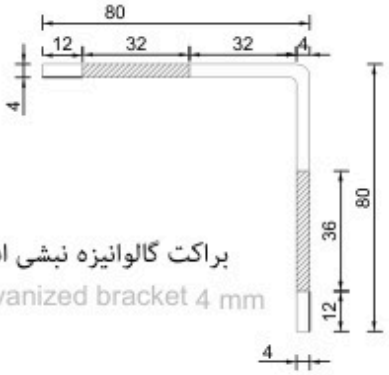
21708



براکت گالوانیزه افقی 5 میلی متر

Horizontal Galvanized bracket 5 mm

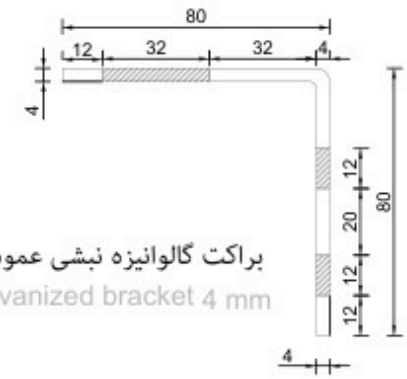
21712



براکت گالوانیزه نبشی افقی 4 میلی متر

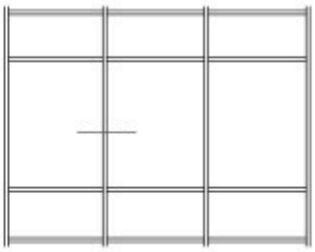
Horizontal Galvanized bracket 4 mm

21718

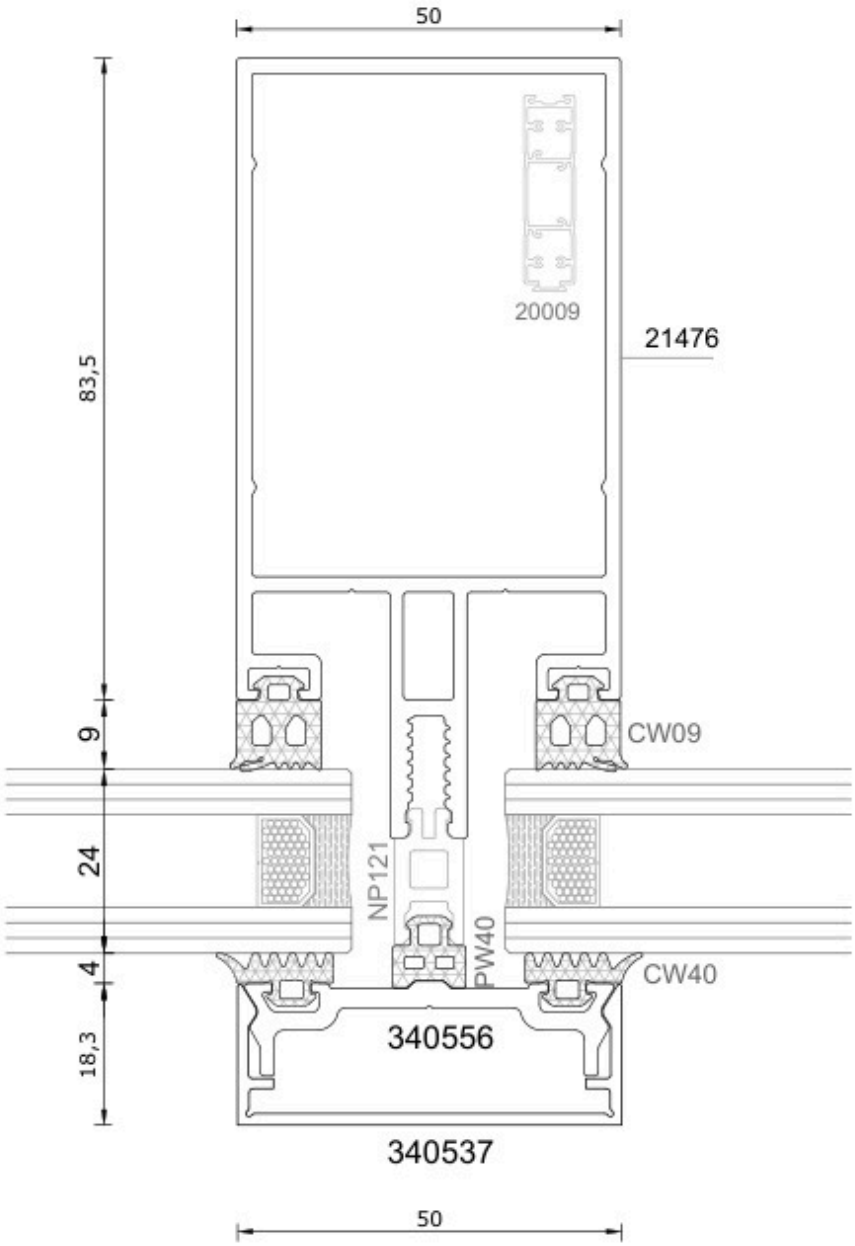


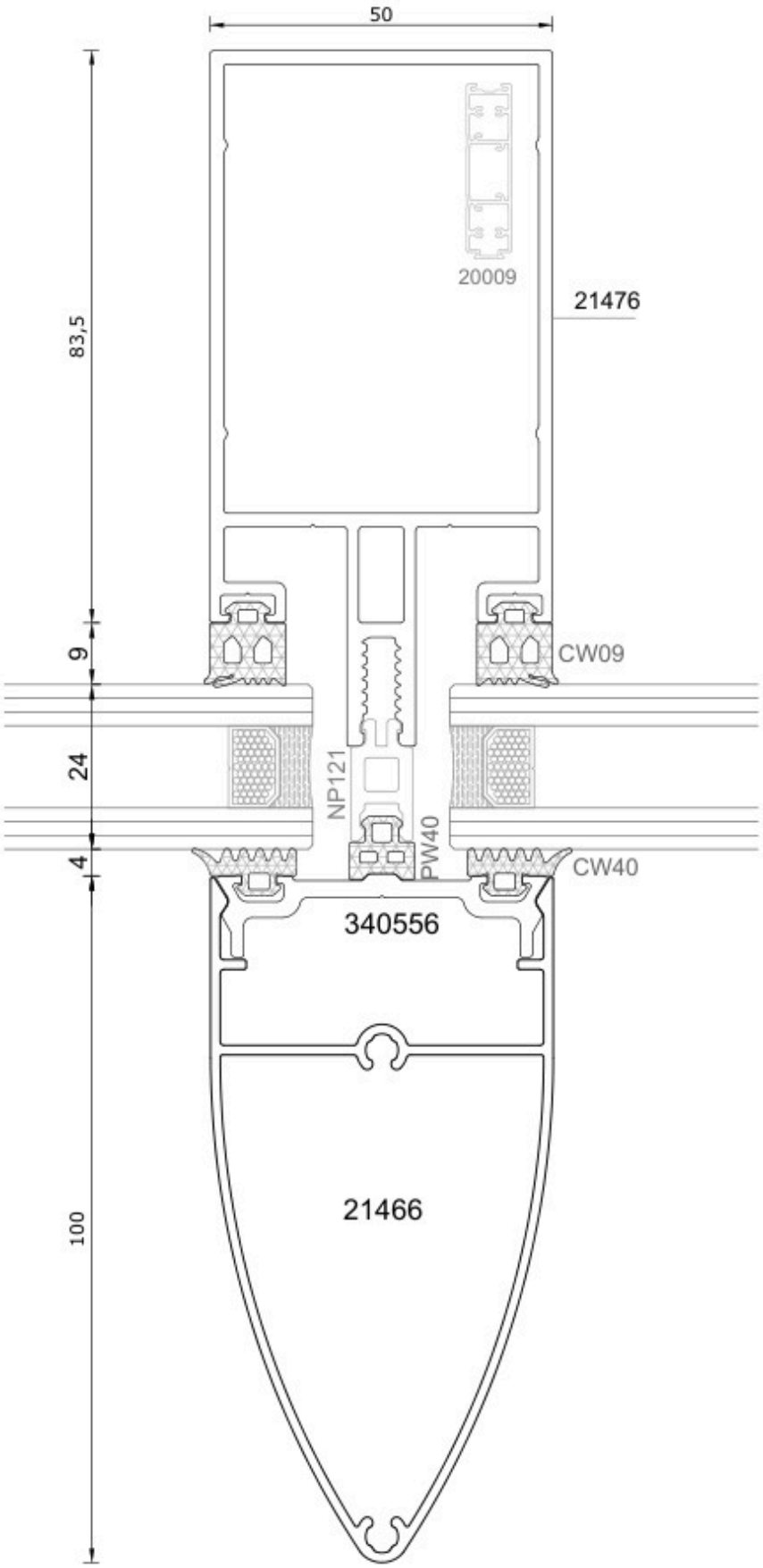
براکت گالوانیزه نبشی عمودی 4 میلی متر

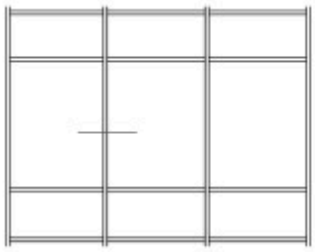
Vertical Galvanized bracket 4 mm



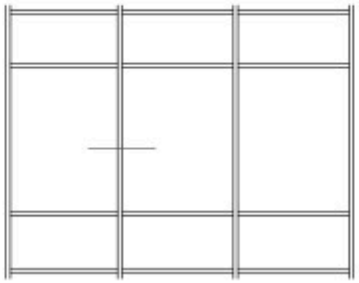
عمودی فیکس
vertical fix



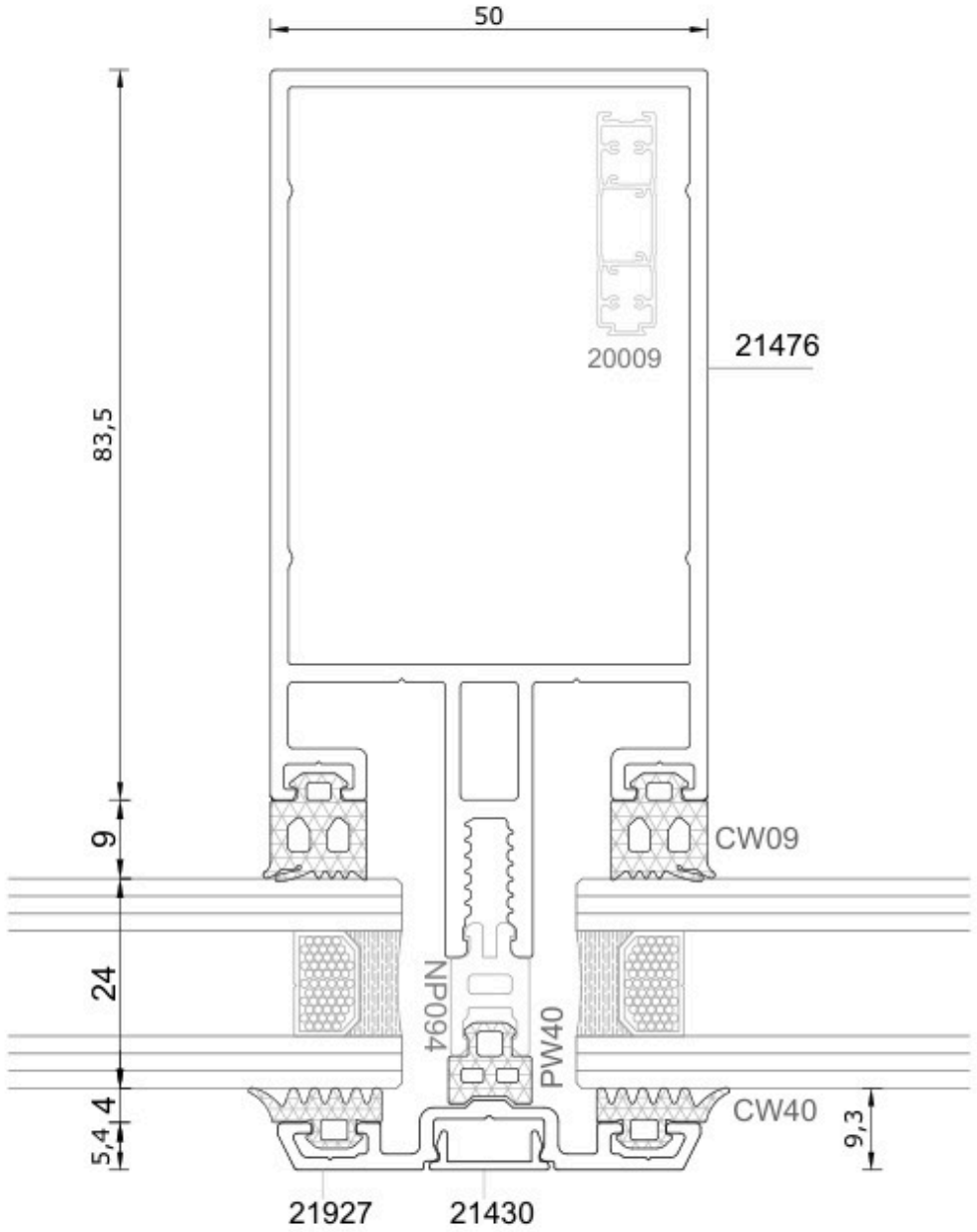


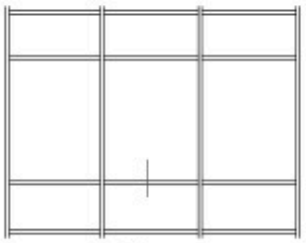


عمودی فیکس
vertical fix

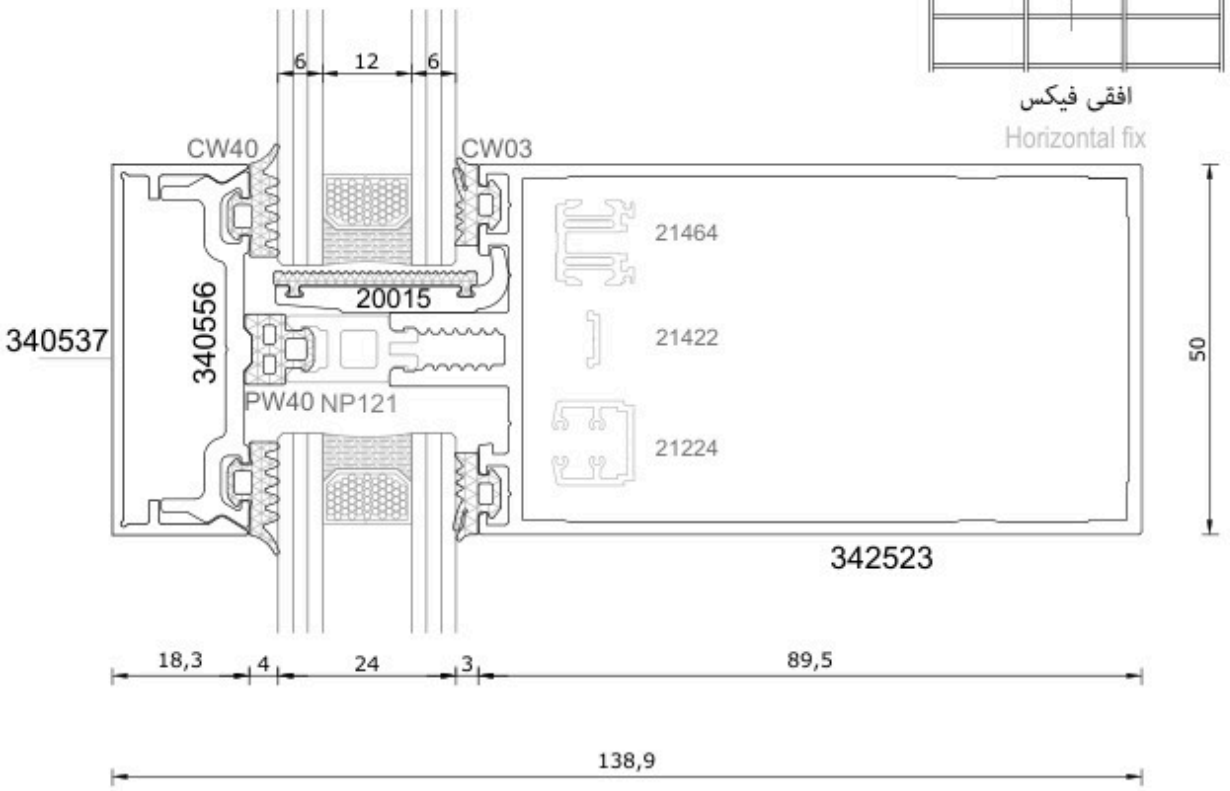


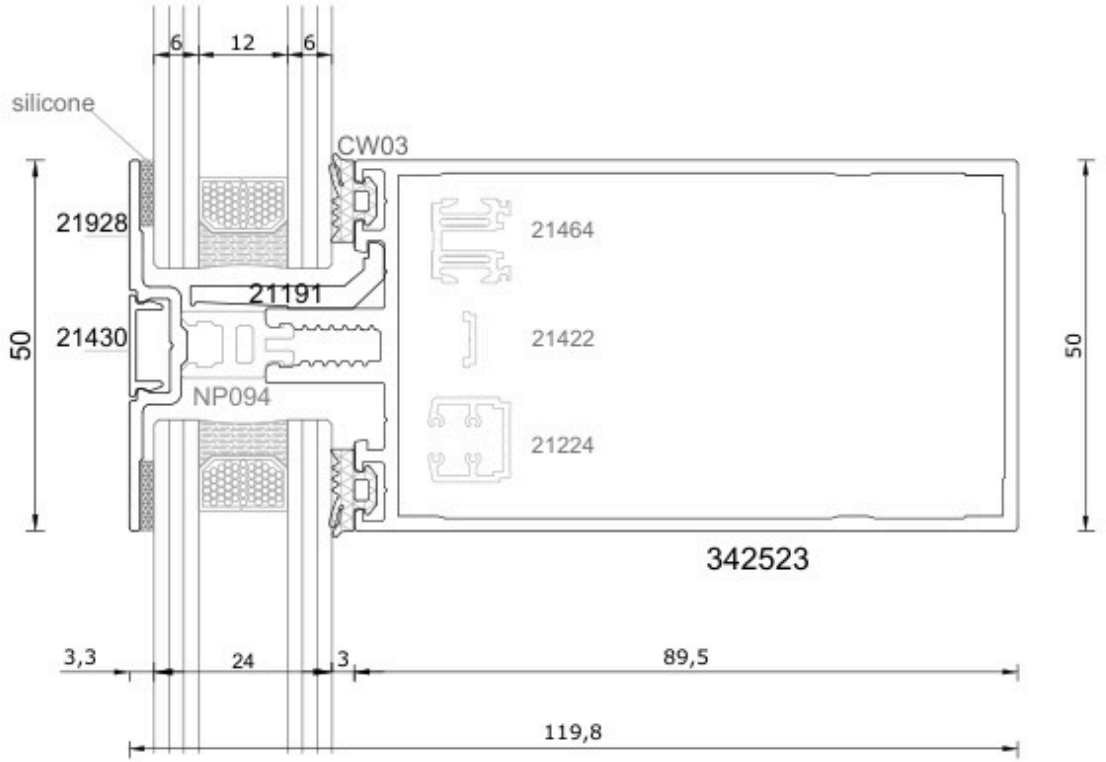
عمودی فیکس
vertical fix



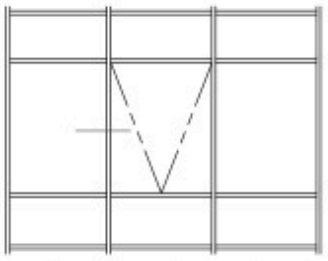


افقی فیکس
Horizontal fix

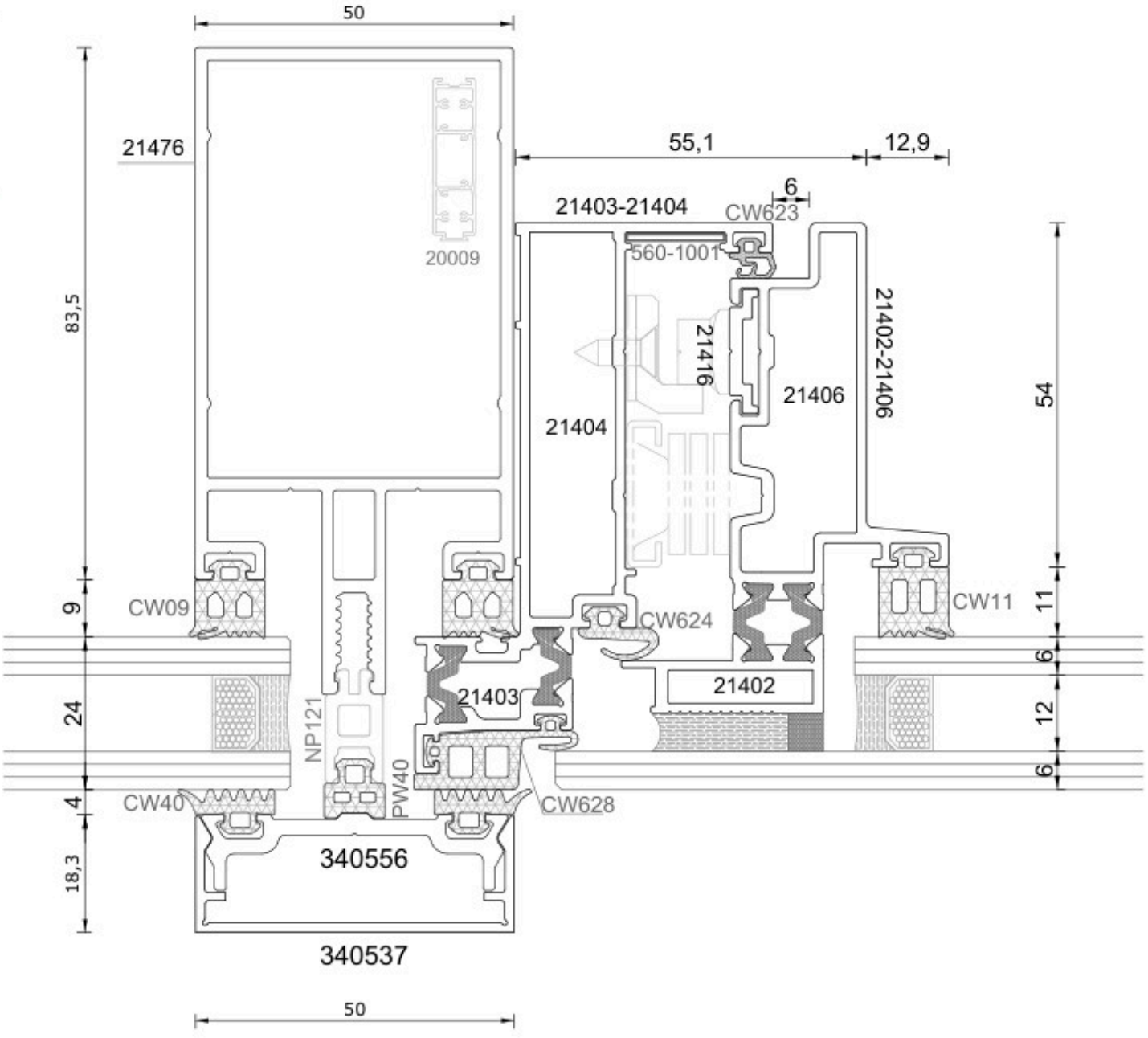


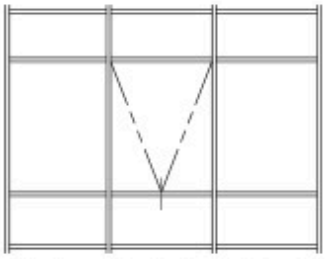


NamakaranFakher.co

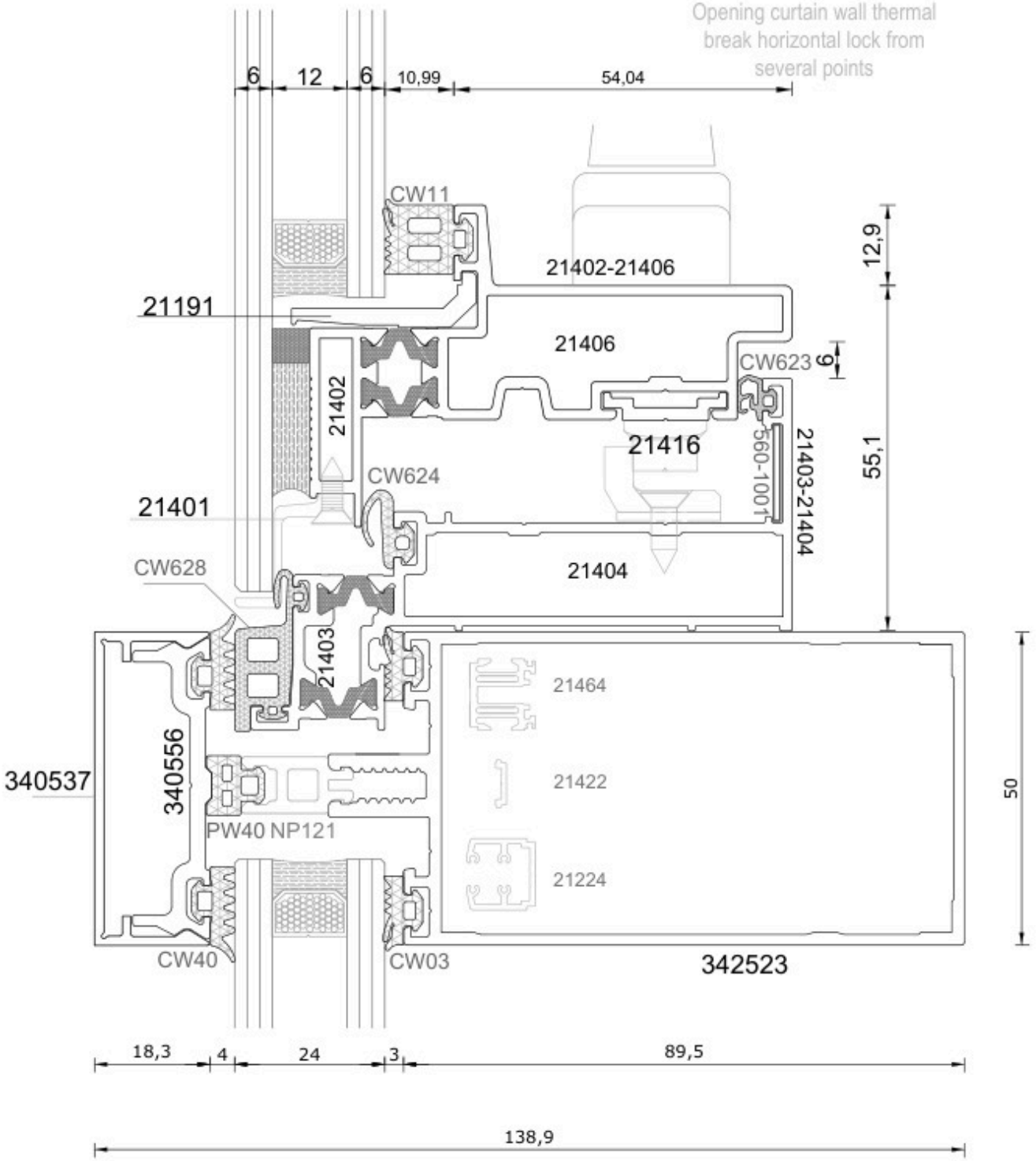


بازشو کرتین والی ترمال بریک عمودی
قفل از چند نقطه
Opening glazing bead curtain wall thermal break vertical lock from several points

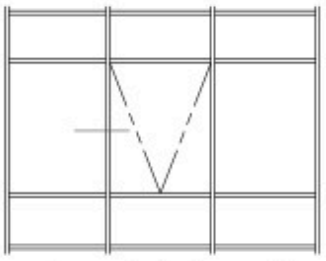




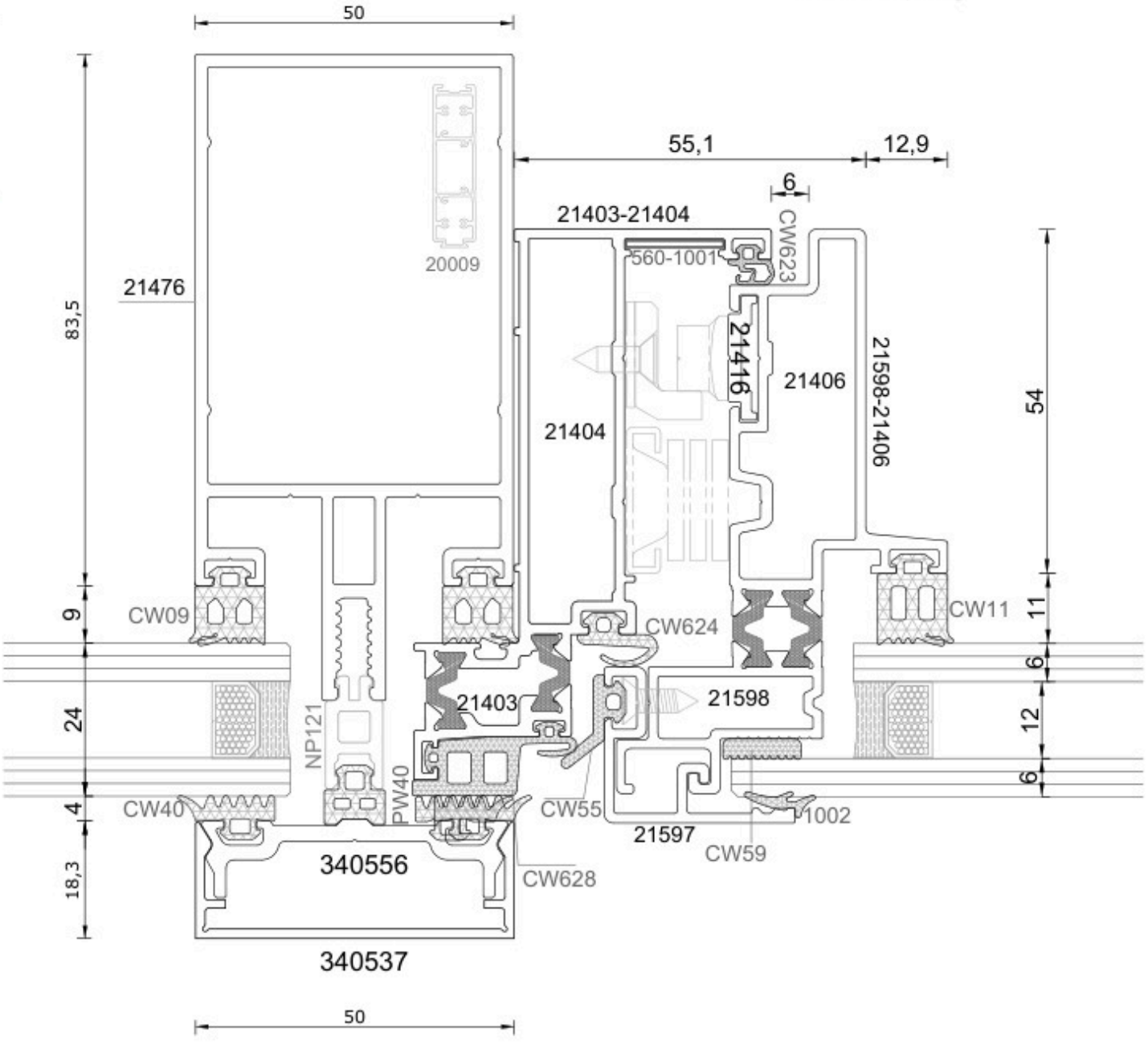
بازشو کرتین والی ترمال بریک افقی
قفل از چند نقطه
Opening curtain wall thermal break horizontal lock from several points

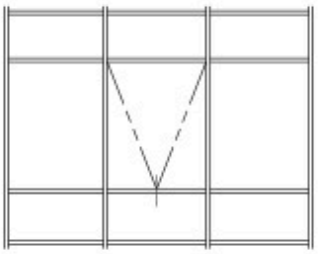


NamakaranFakher.co



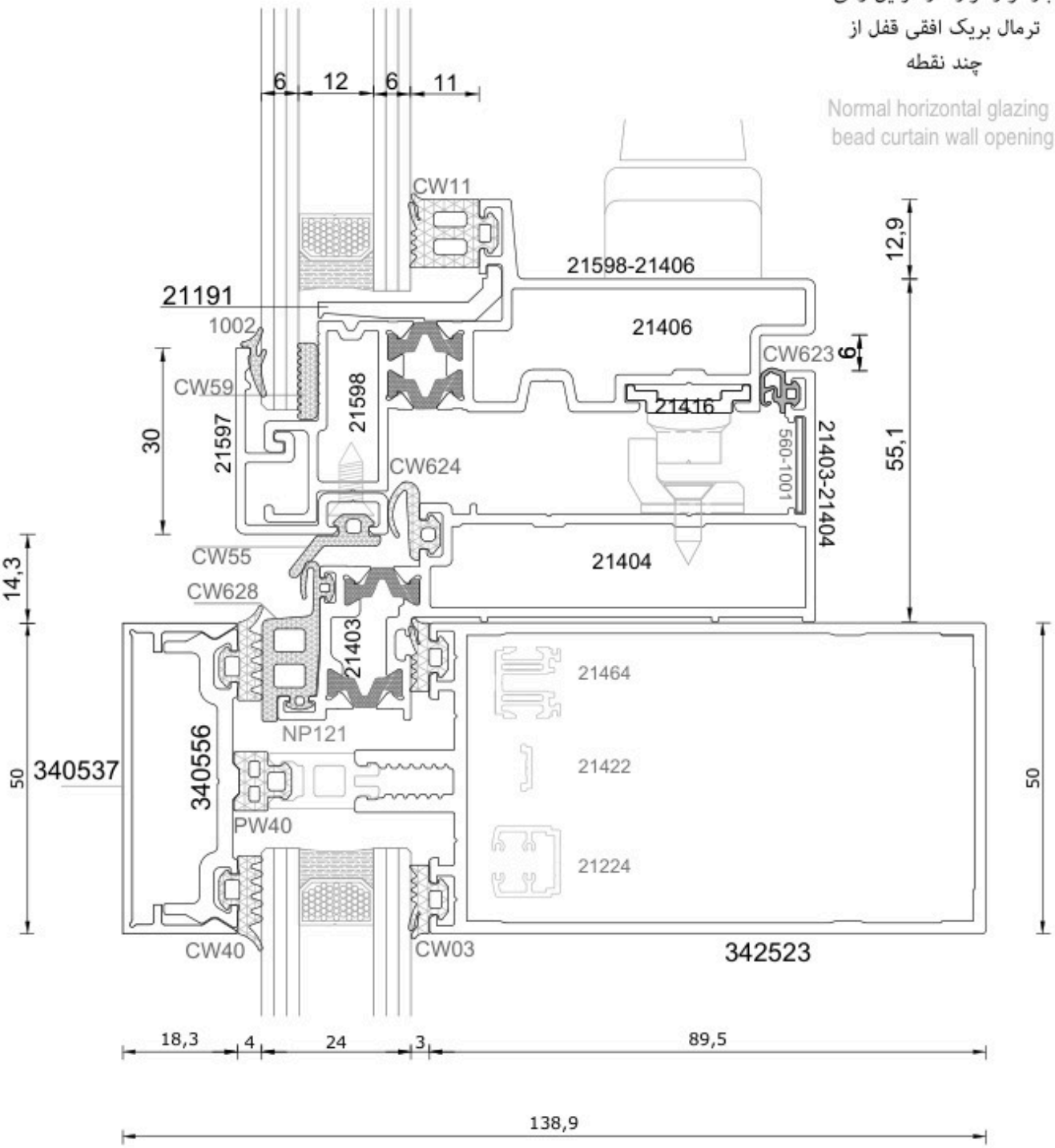
بازشو زهوار دار کرتین والی
ترمال بریک عمو دی
قفل از چند نقطه
Normal vertical glazing bead
curtain wall opening

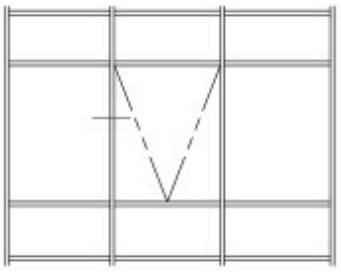




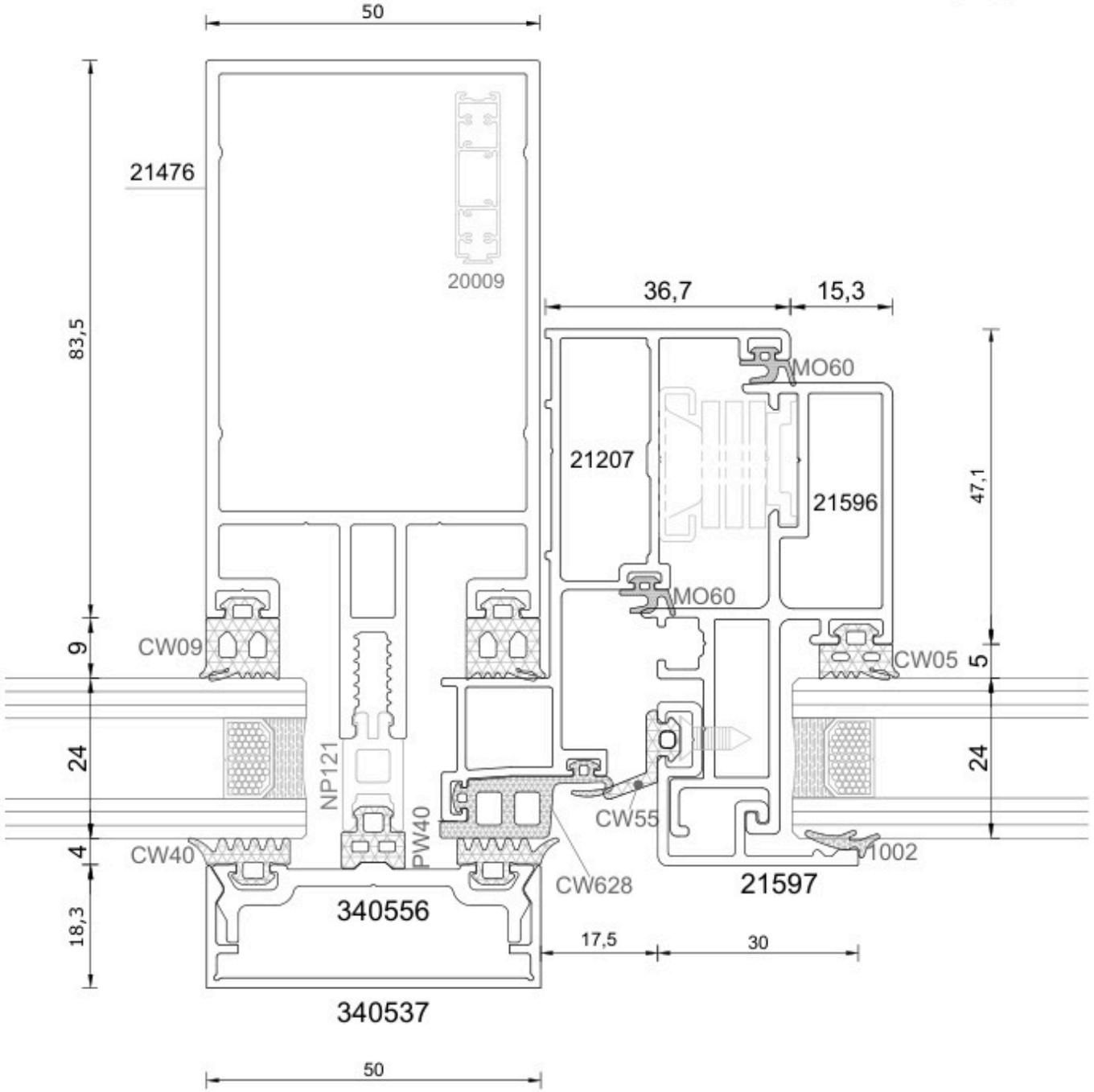
بازشو زهوار دار کرتین والی
ترمال بریک افقی قفل از
چند نقطه

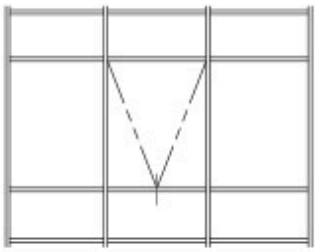
Normal horizontal glazing
bead curtain wall opening



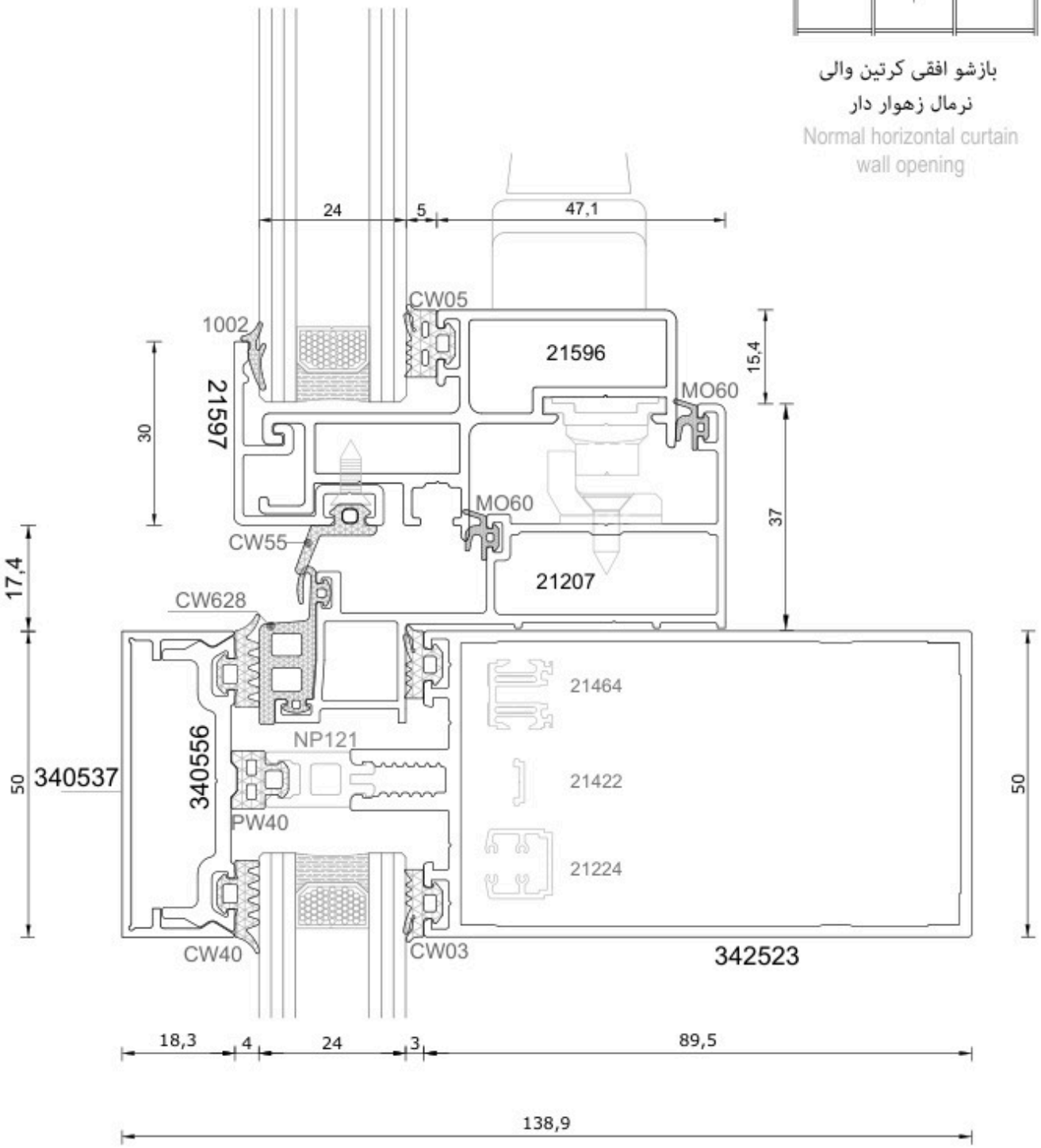


بازشو عمودی کرتین والی
نرمال زهوار دار
Normal vertical curtain wall opening

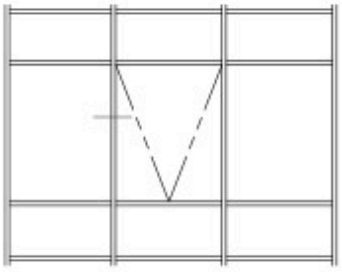




بازشو افقی کرتین والی
نرمال زهوار دار
Normal horizontal curtain wall opening

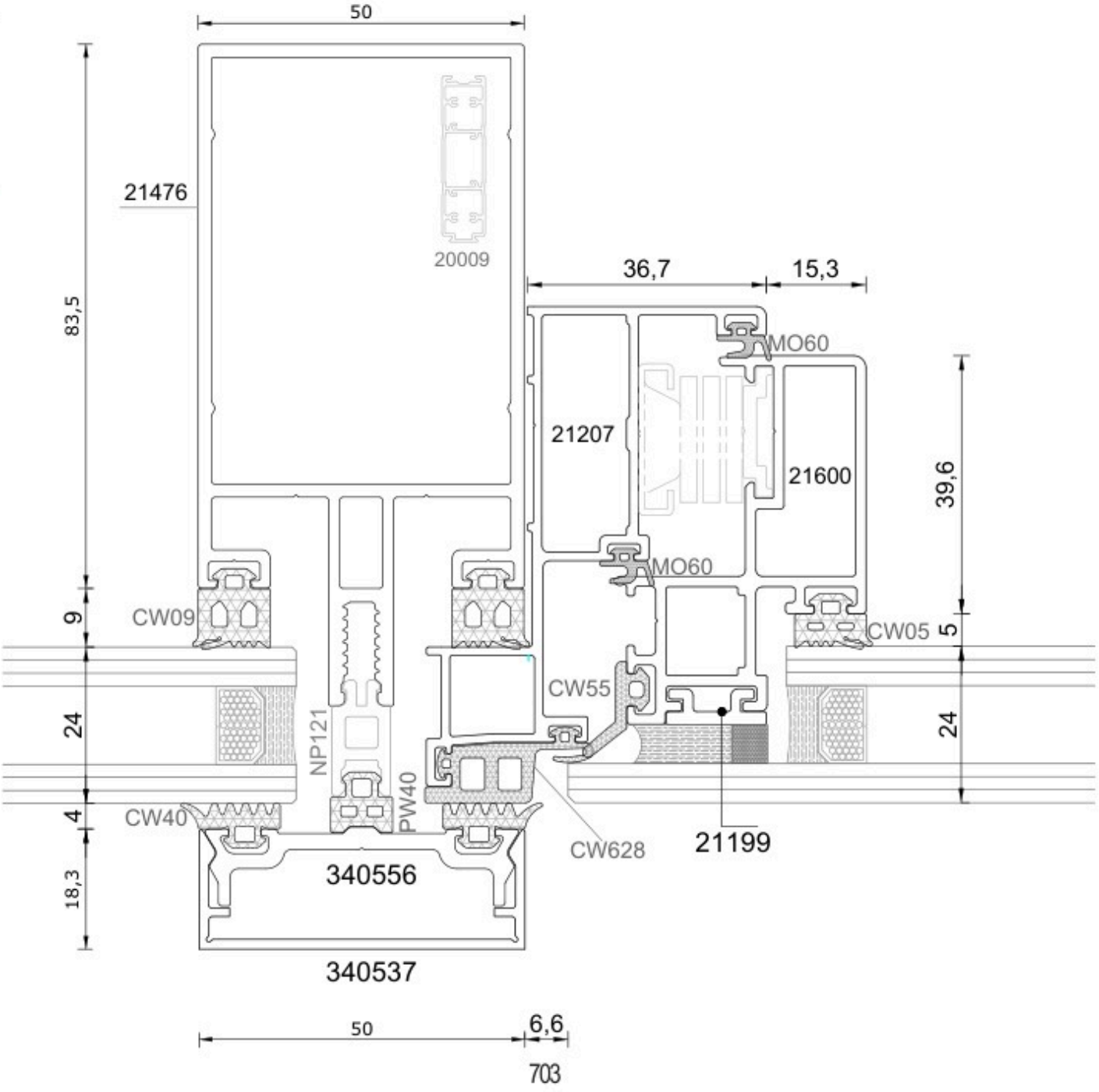


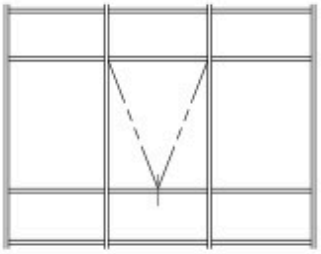
NamakaranFakher.co



بازشو عمودی کرتین والی نرمال

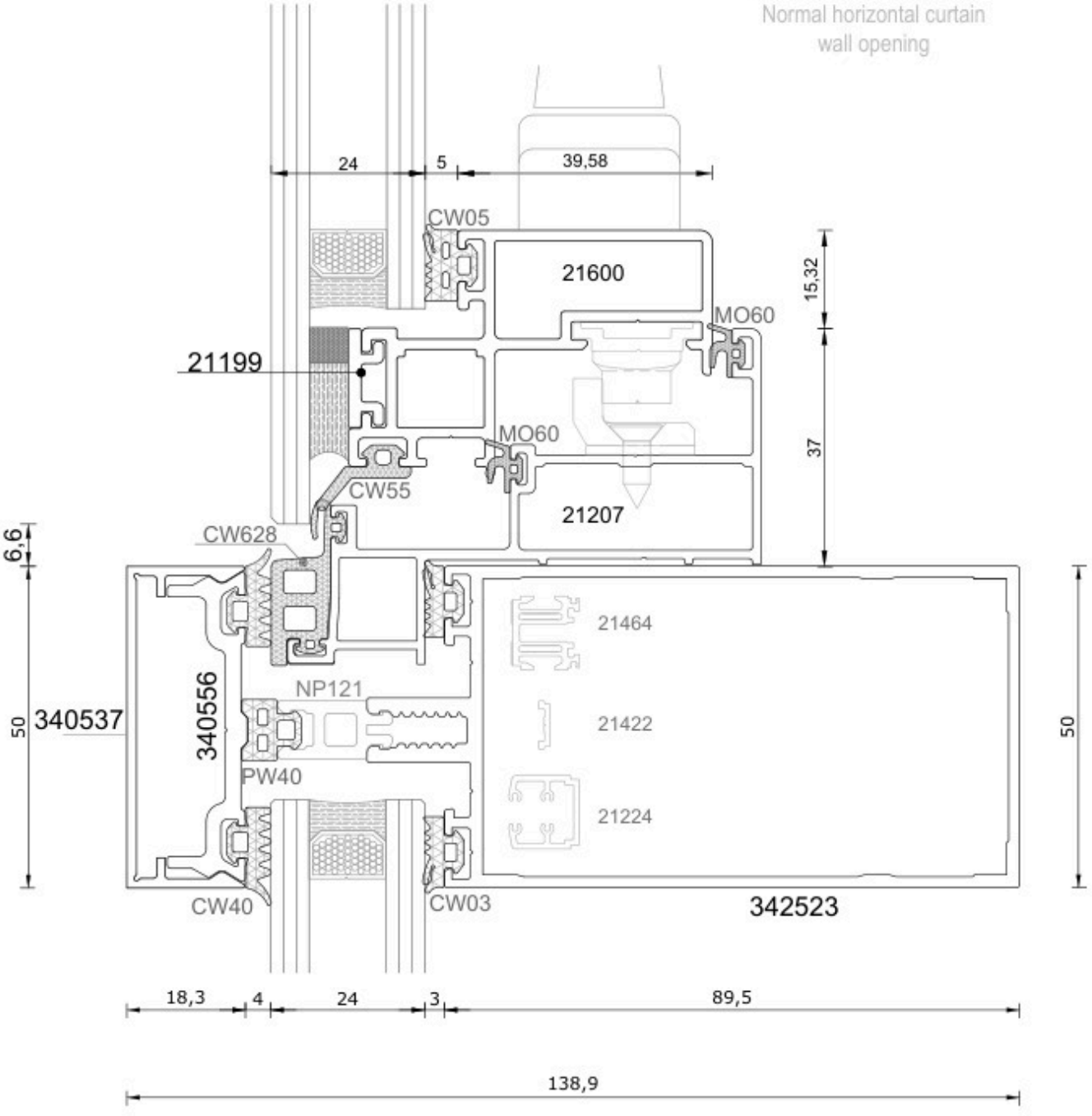
Normal vertical curtain wall opening

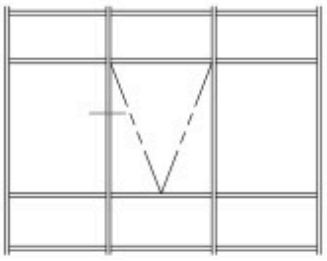




بازشو افقی کرتین والی نرمال

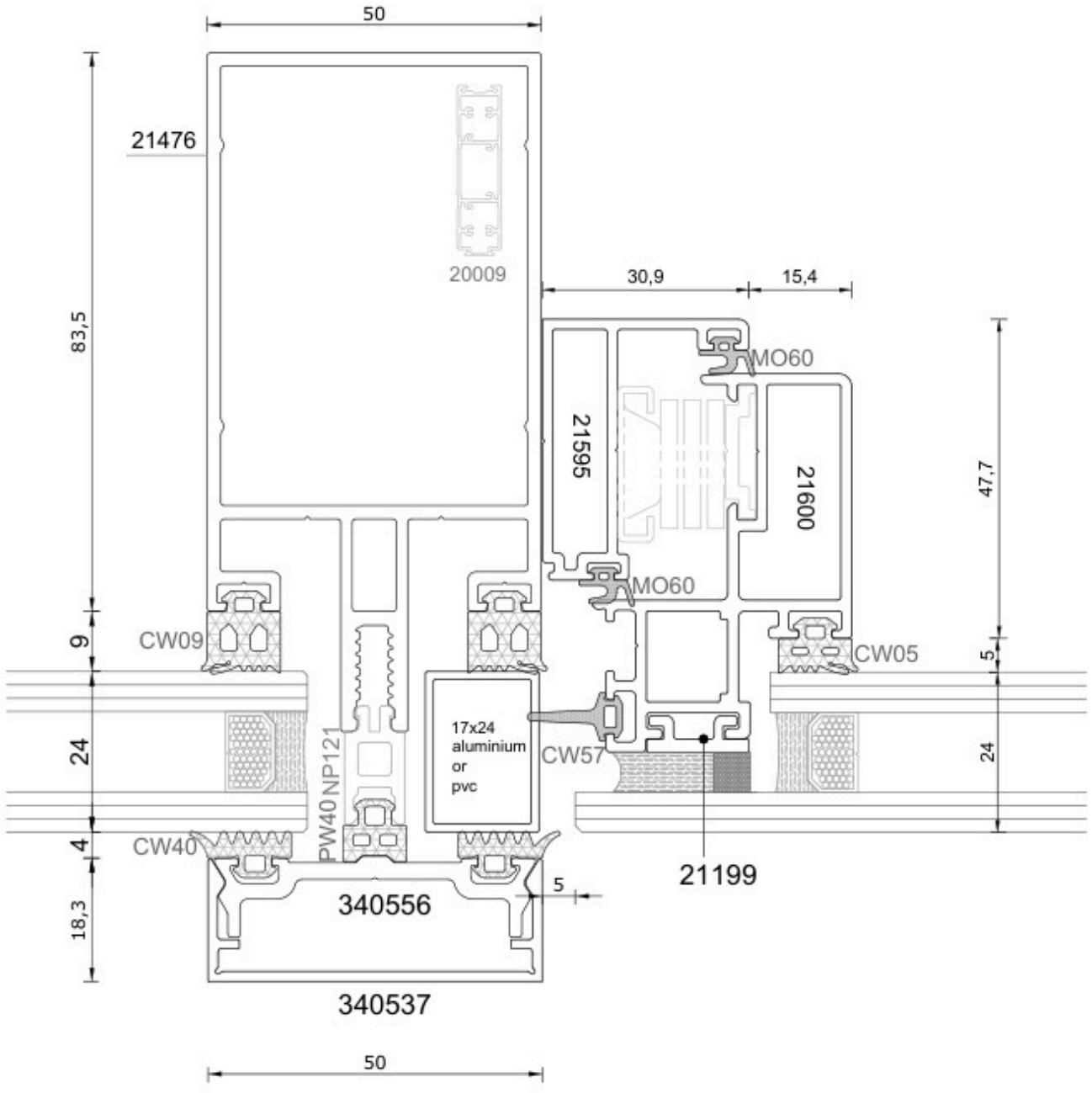
Normal horizontal curtain wall opening

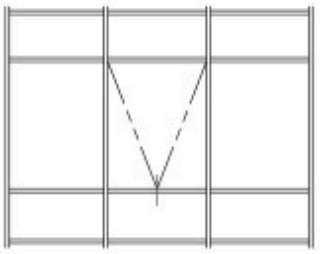




بازشو عمودی کرتین والی نرمال

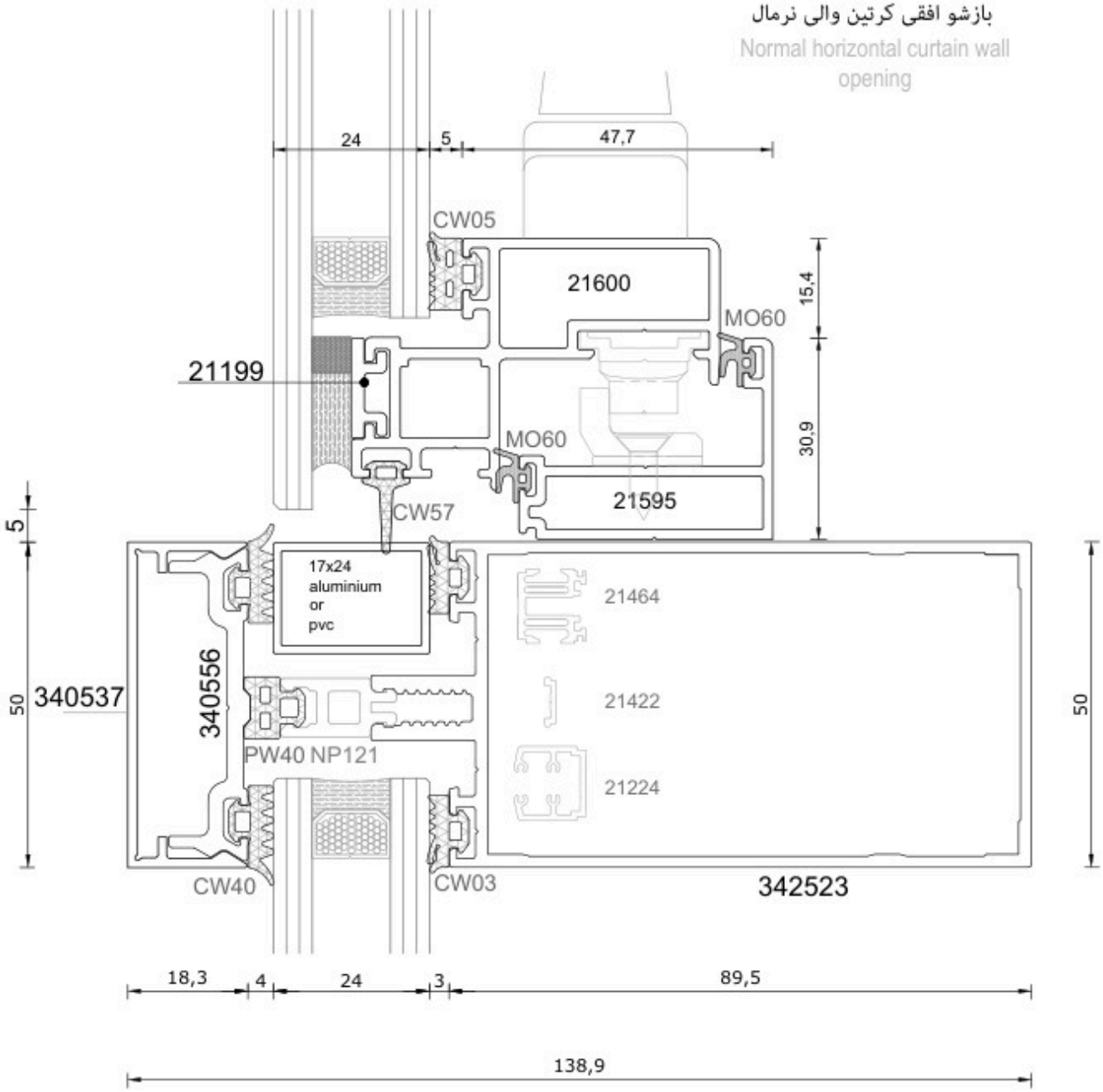
Normal vertical curtain wall opening



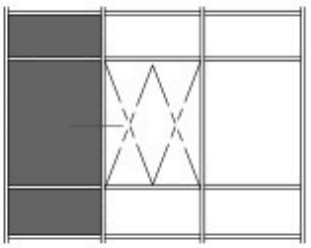


بازشو افقی کرتین والی نرمال

Normal horizontal curtain wall opening

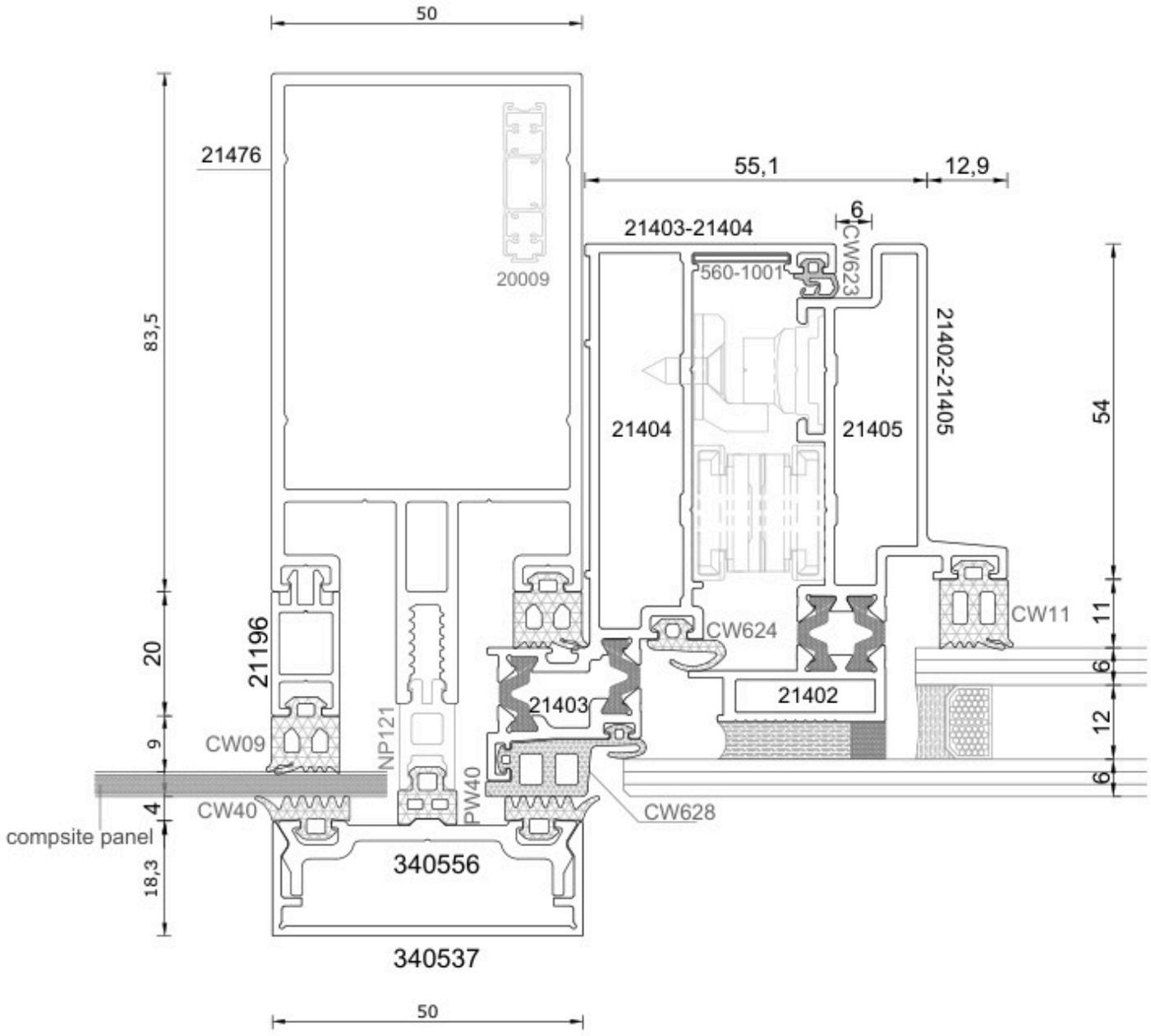


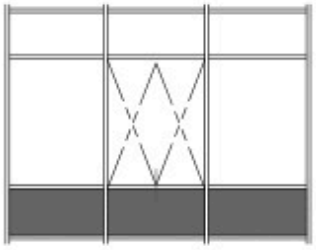
NamakaranFakher.co



Ä],L-¡ HëÑi ëUN-/

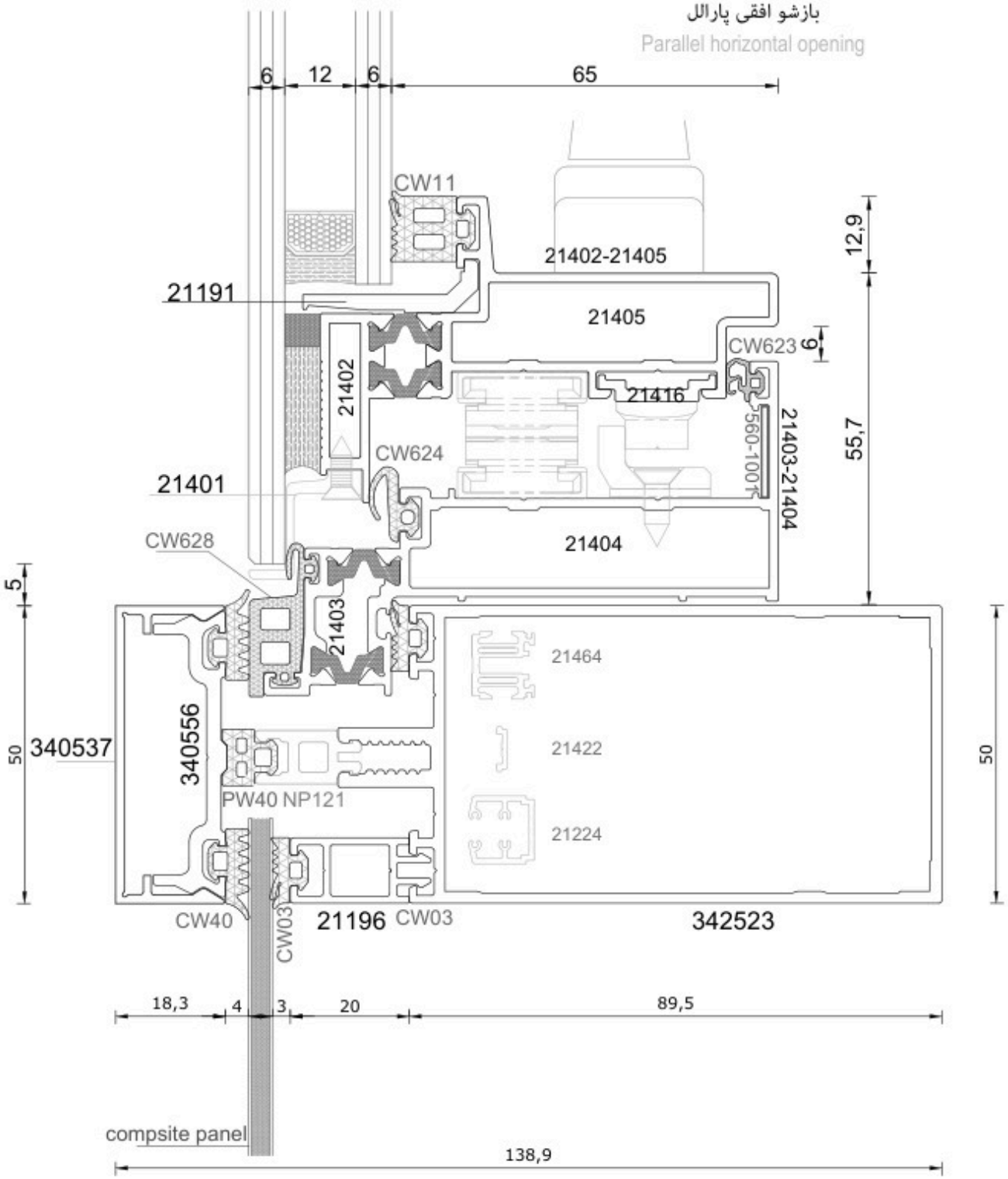
Parallel vertical opening



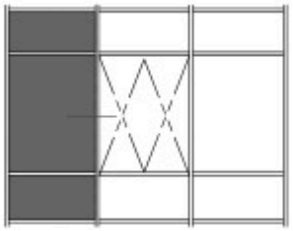


بازشو افقی پارالل

Parallel horizontal opening

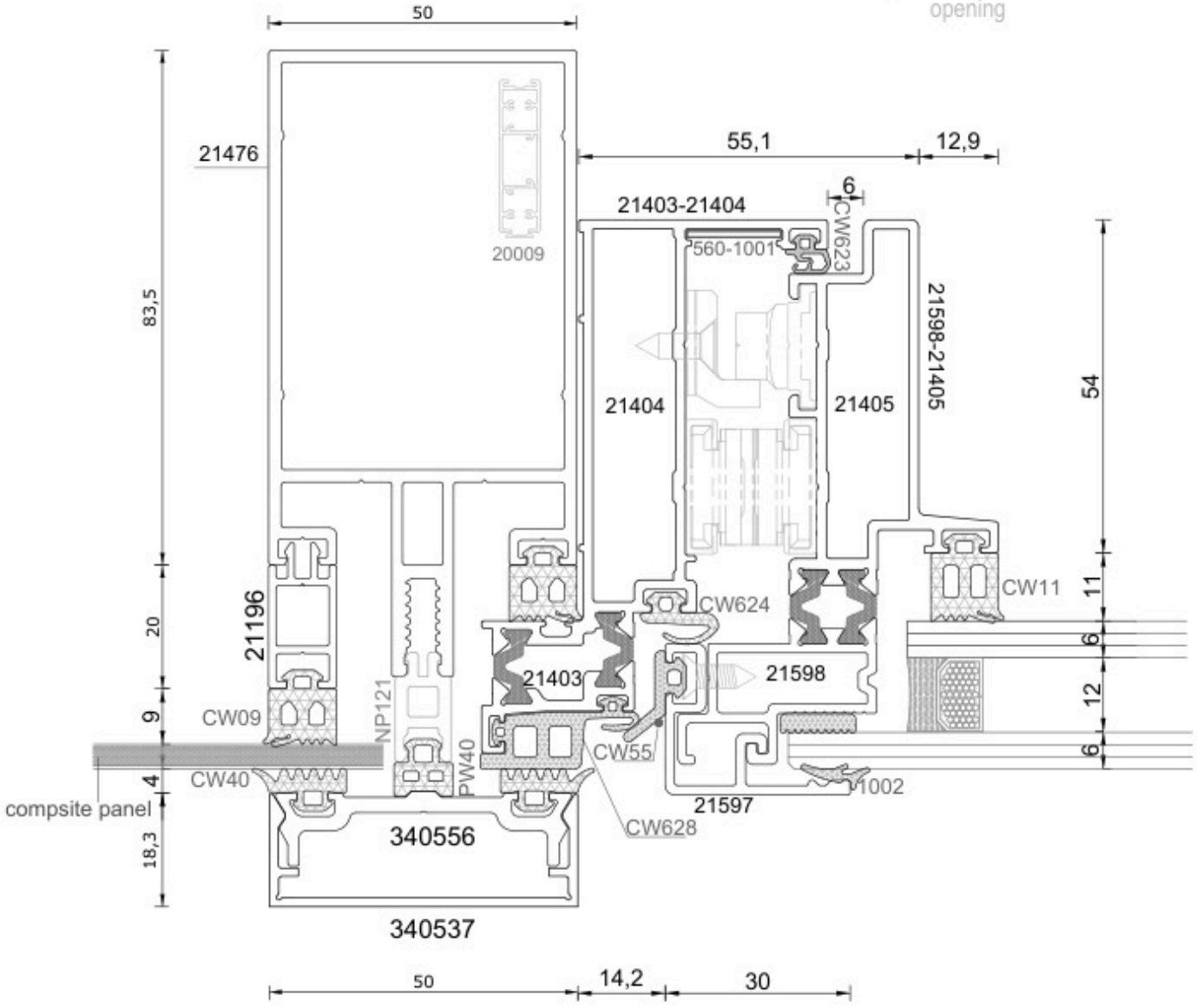


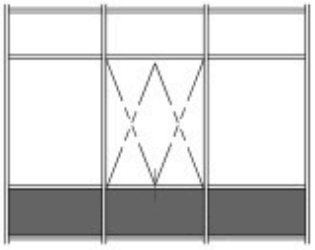
NamakaranFakher.co



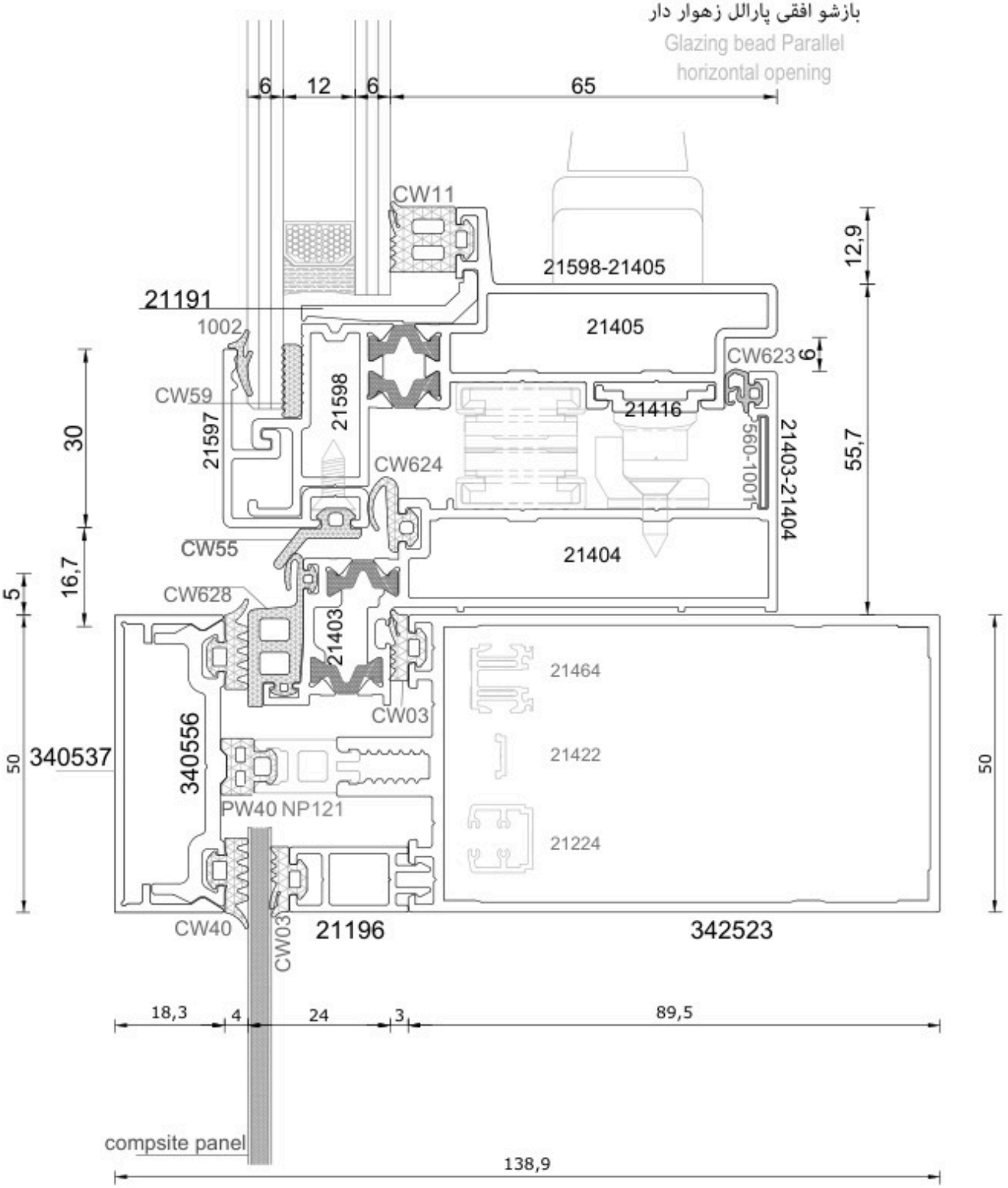
بازشو عمودی پارالل زهوار دار

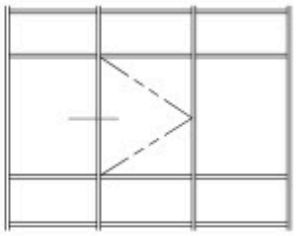
Glazing bead Parallel vertical opening





بازشو افقی پارالل زهوار دار
Glazing bead Parallel horizontal opening



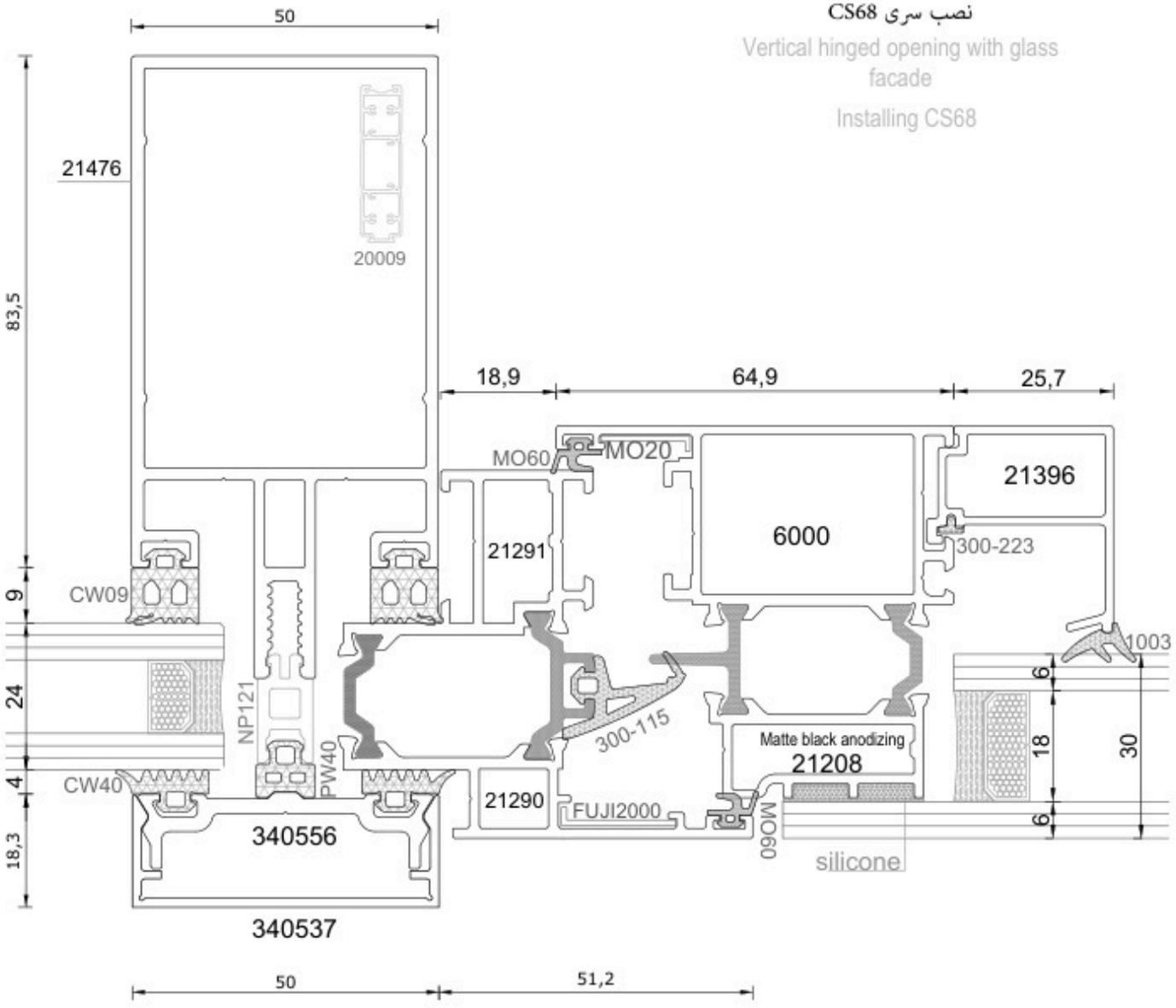


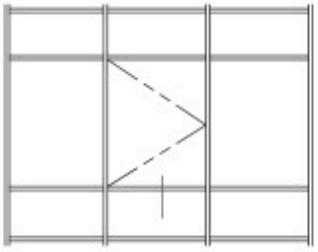
بازشو عمودی لولایی نما شیشه ای

نصب سری CS68

Vertical hinged opening with glass facade

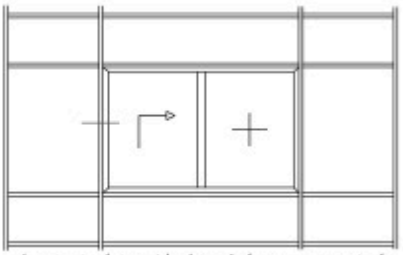
Installing CS68





بازشو افقی لولایی نما شیشه ای
نصب سری CS68
Horizontal hinged opening
with glass facade
Installing CS68

NamakaranFakher.co

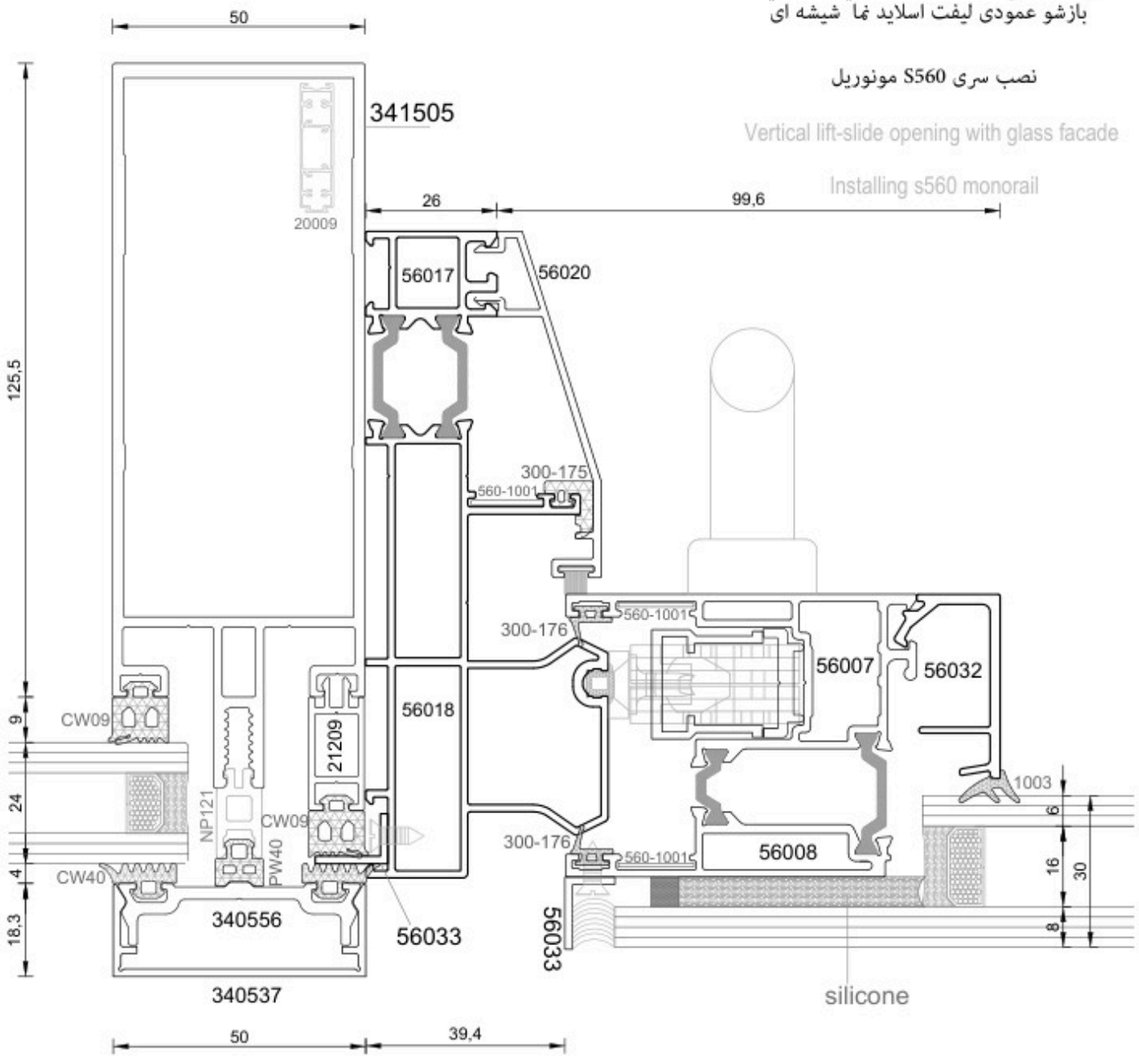


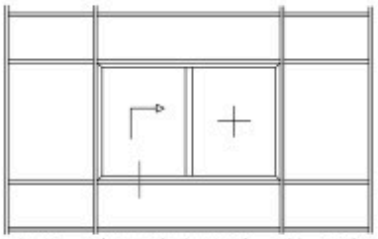
بازشو عمودی لیفت اسلاید نما شیشه ای

نصب سری S560 مونوریل

Vertical lift-slide opening with glass facade

Installing s560 monorail



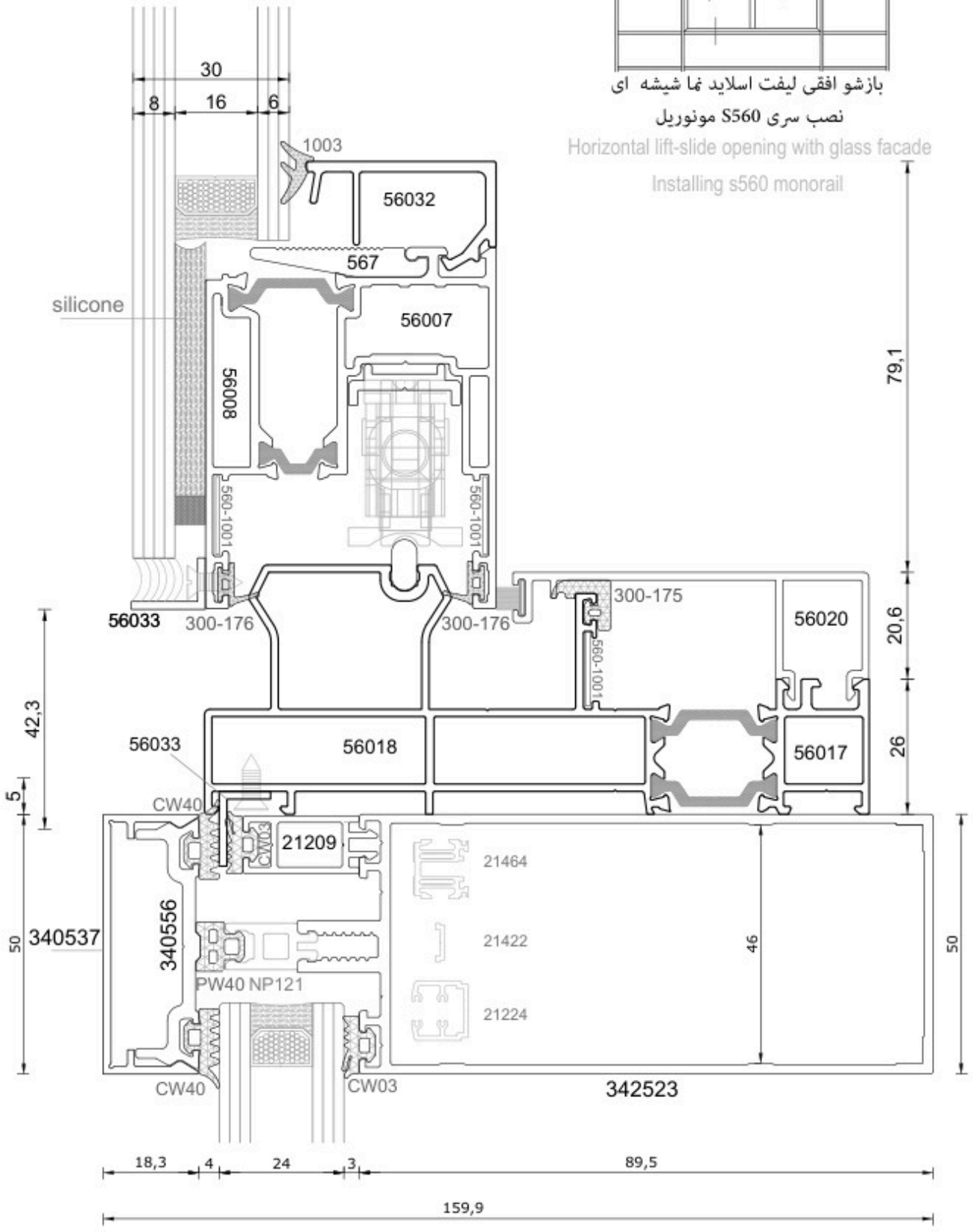


بازشو افقی لیفت اسلاید نما شیشه ای

نصب سری S560 مونوریل

Horizontal lift-slide opening with glass facade

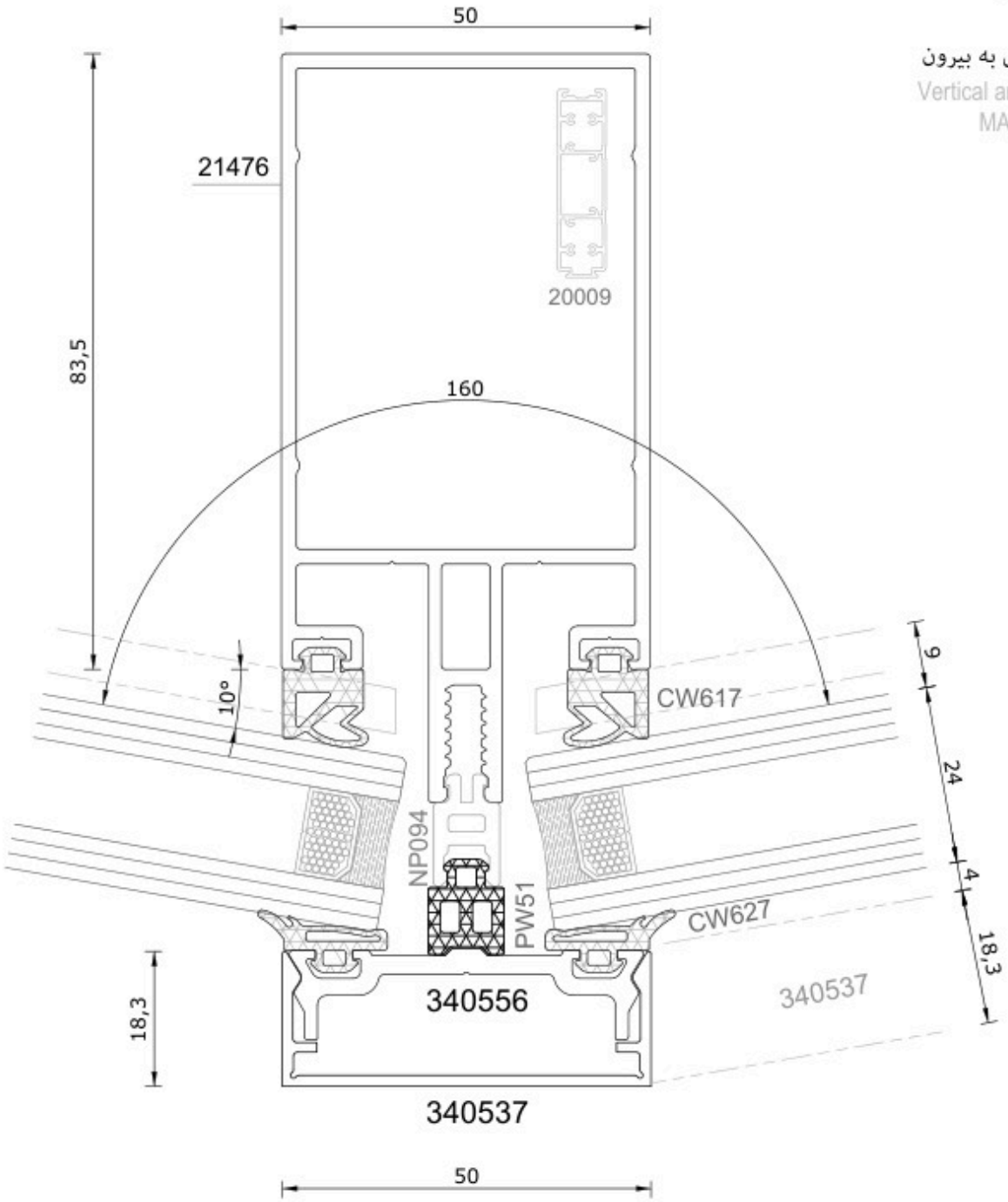
Installing s560 monorail

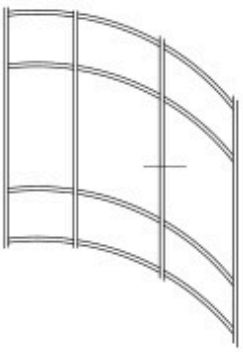


NamakaranFakher.co

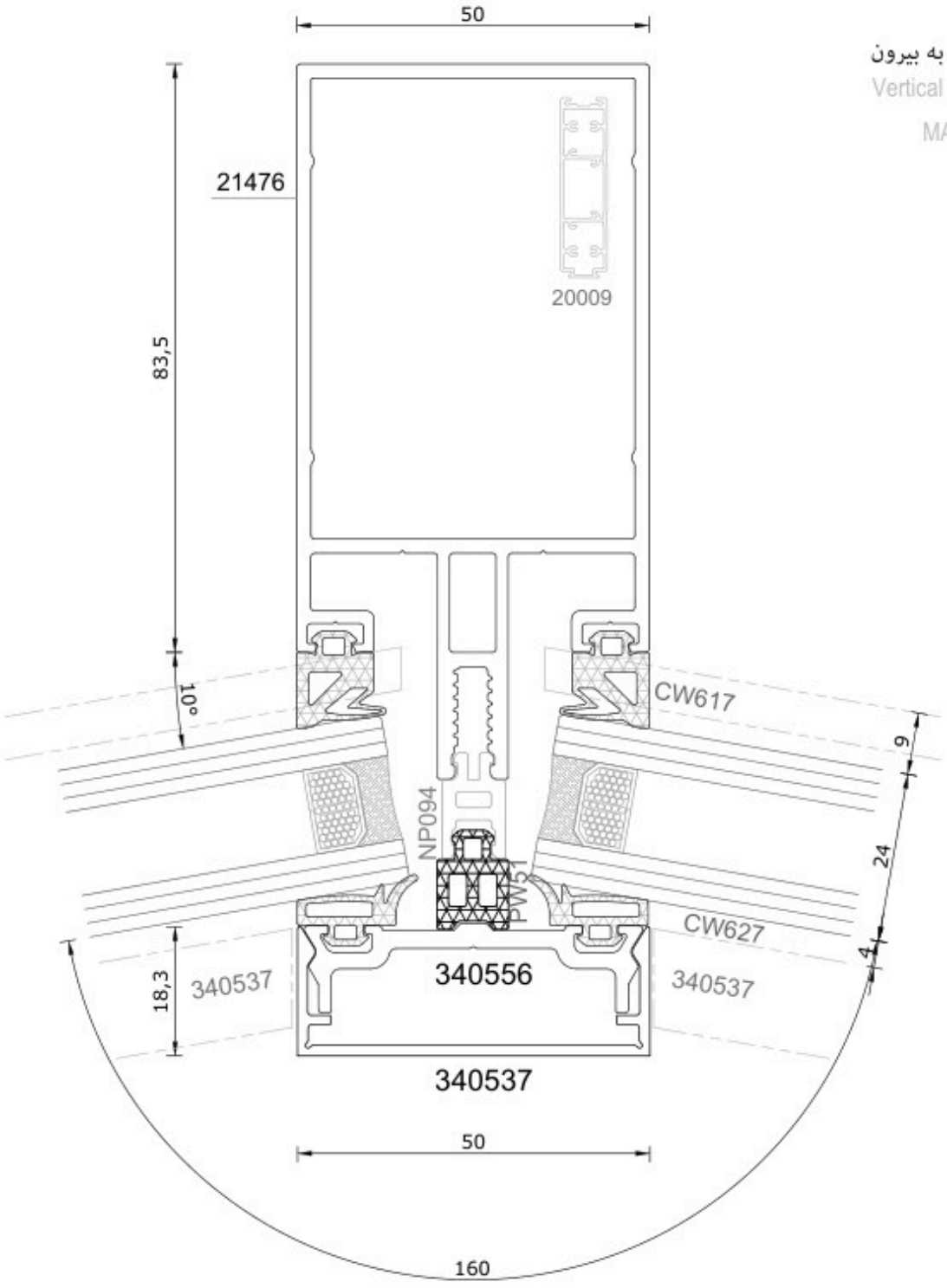


عمودی قوس به بیرون
Vertical arc outwards
MAX 10

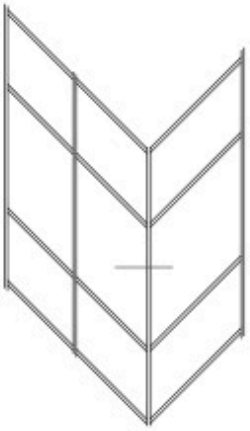




عمودی قوس به بیرون
Vertical arc inwards
MAX 10

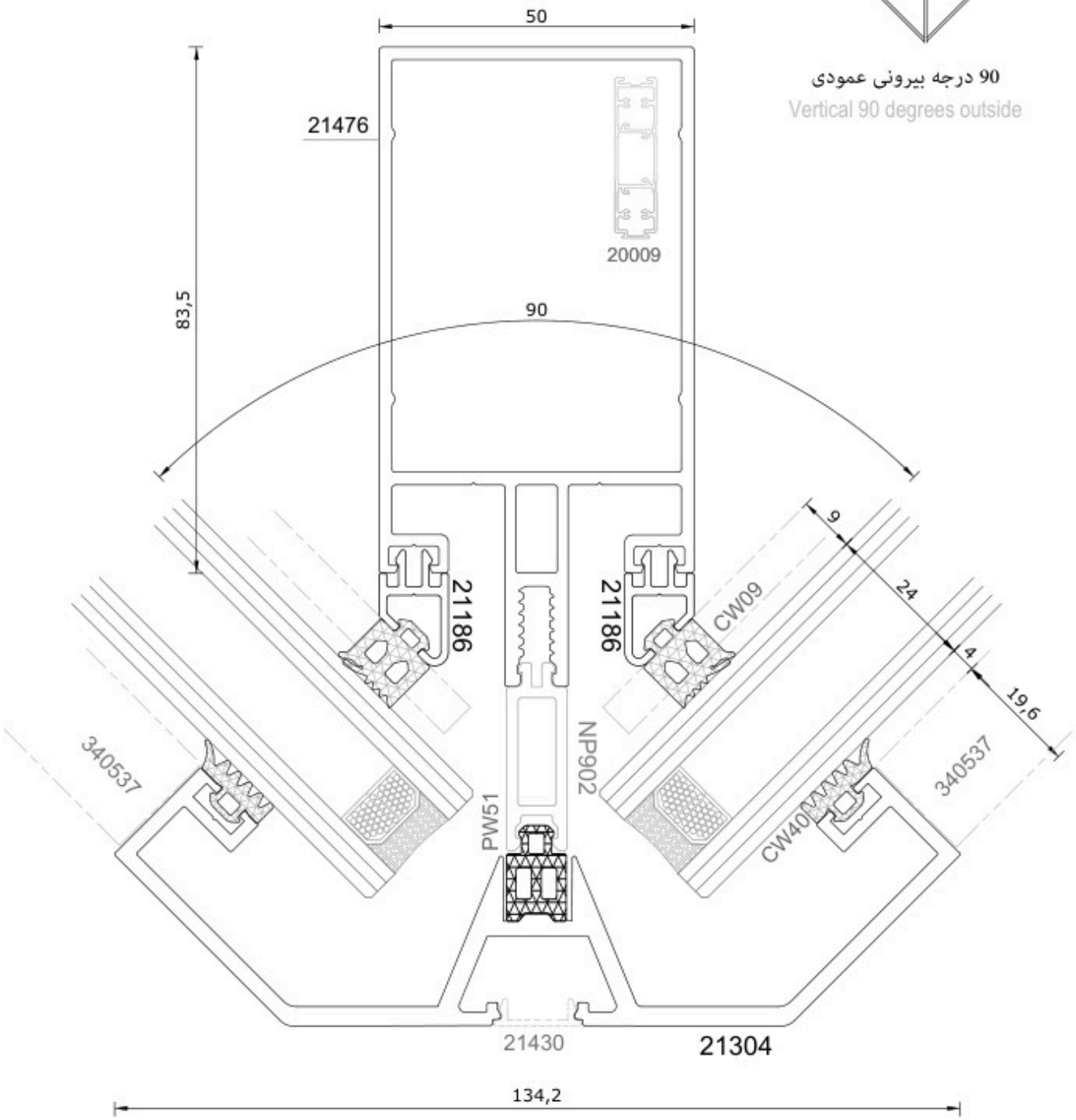


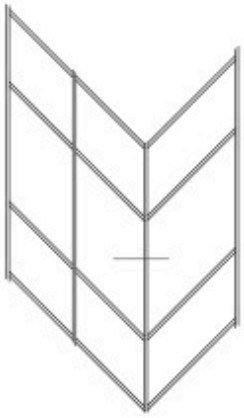
NamakaranFakher.co



90 درجه بیرونی عمودی

Vertical 90 degrees outside



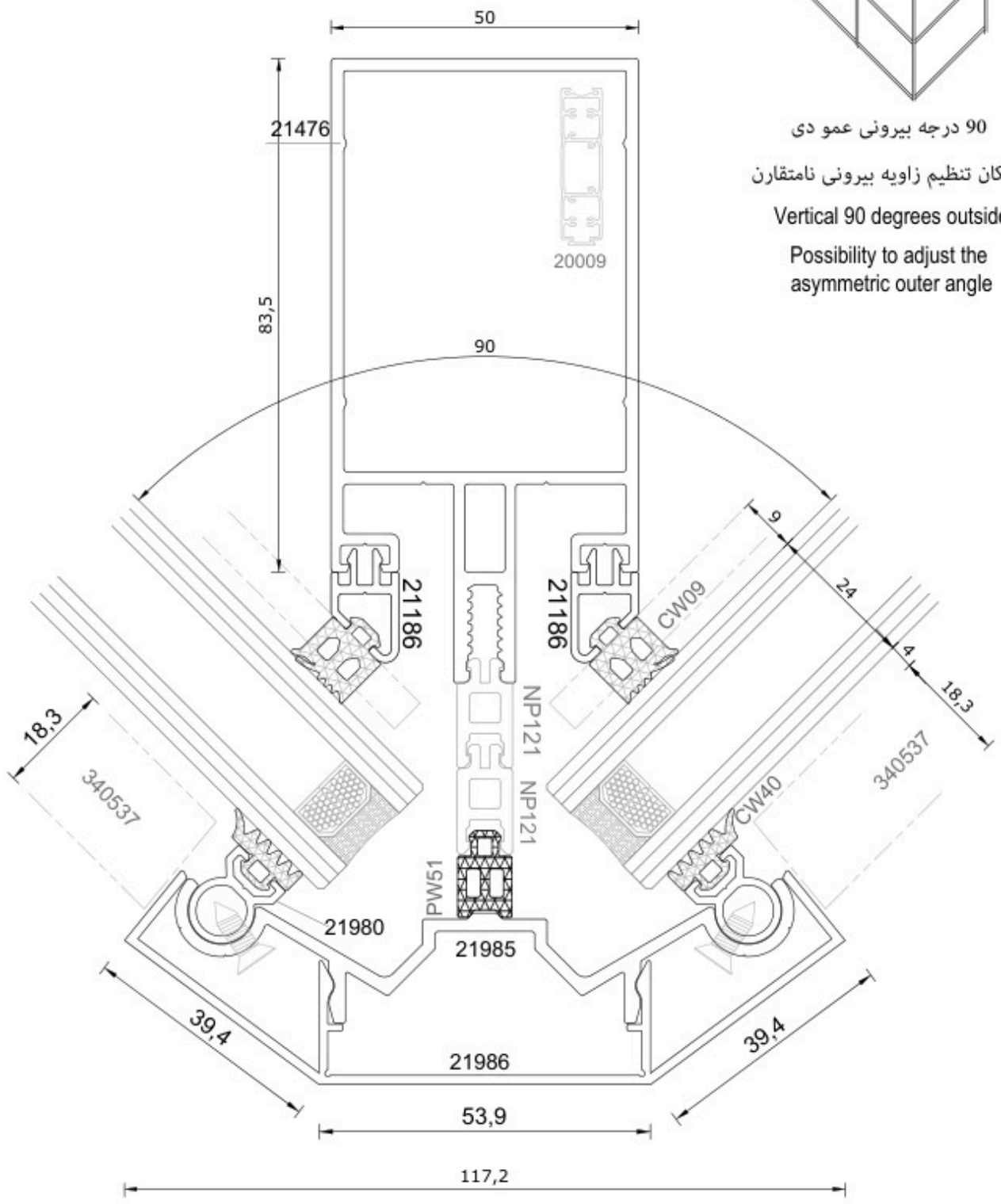


90 درجه بیرونی عمو دی

امکان تنظیم زاویه بیرونی نامتقارن

Vertical 90 degrees outside

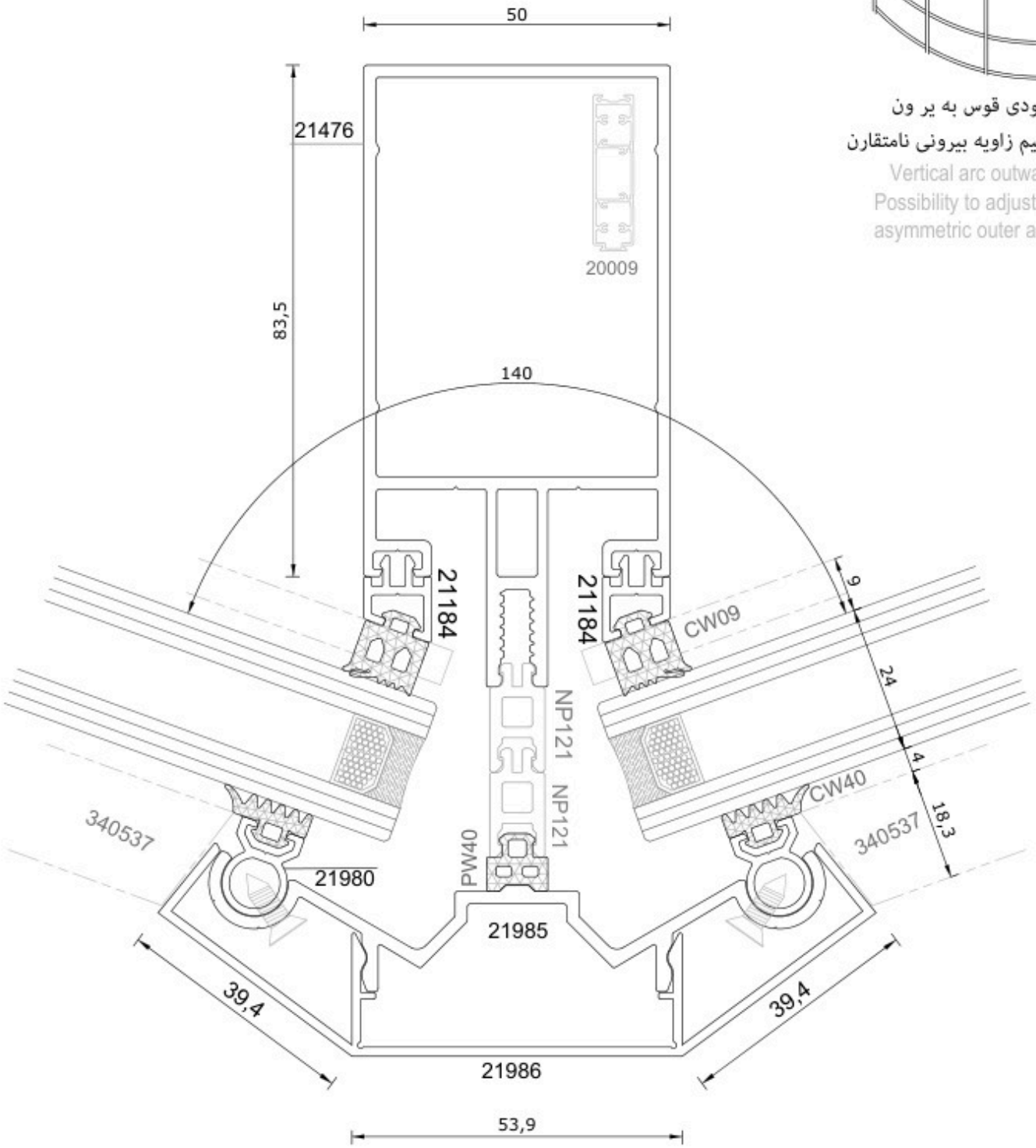
Possibility to adjust the asymmetric outer angle



NamakaranFakher.co

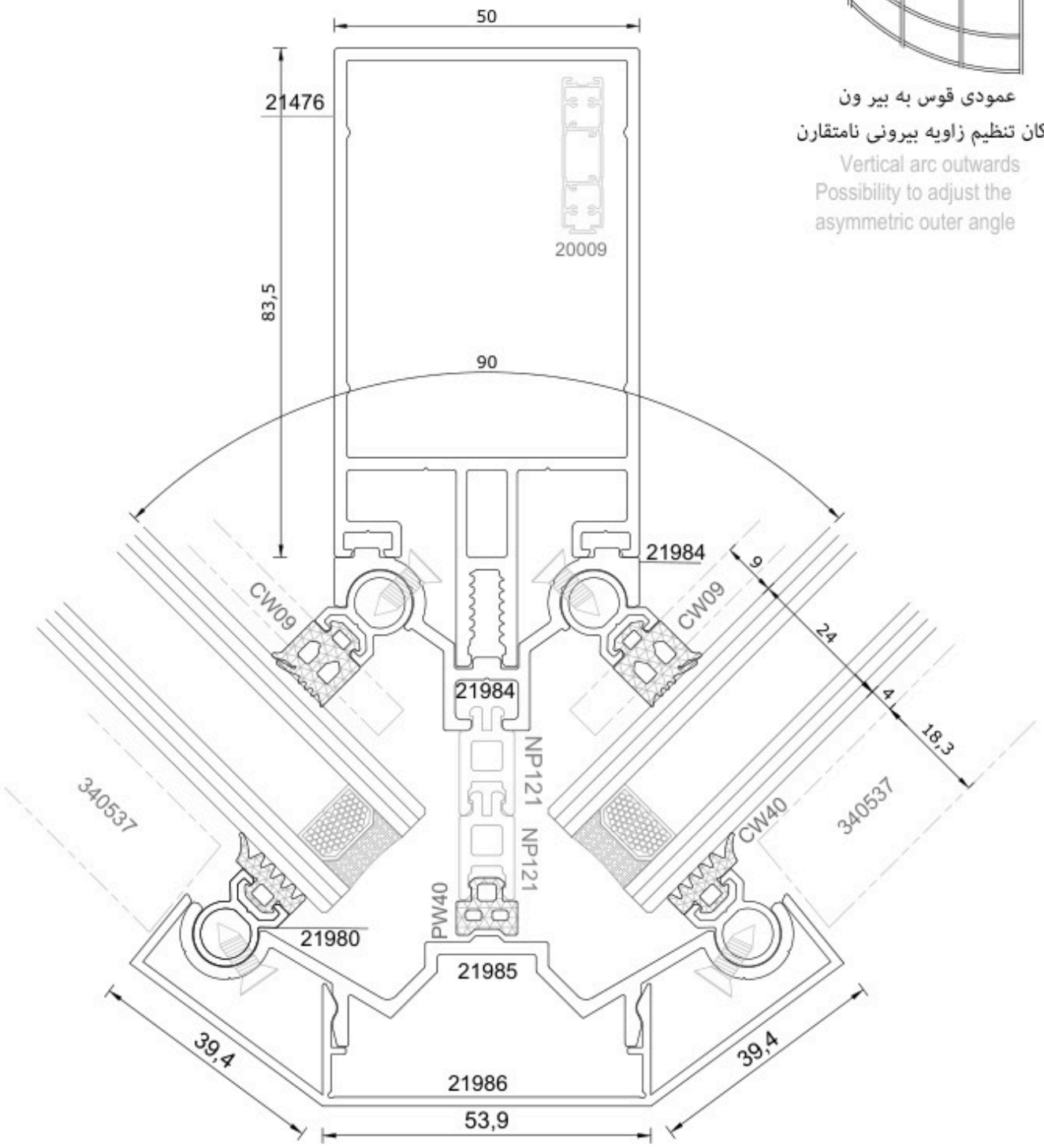


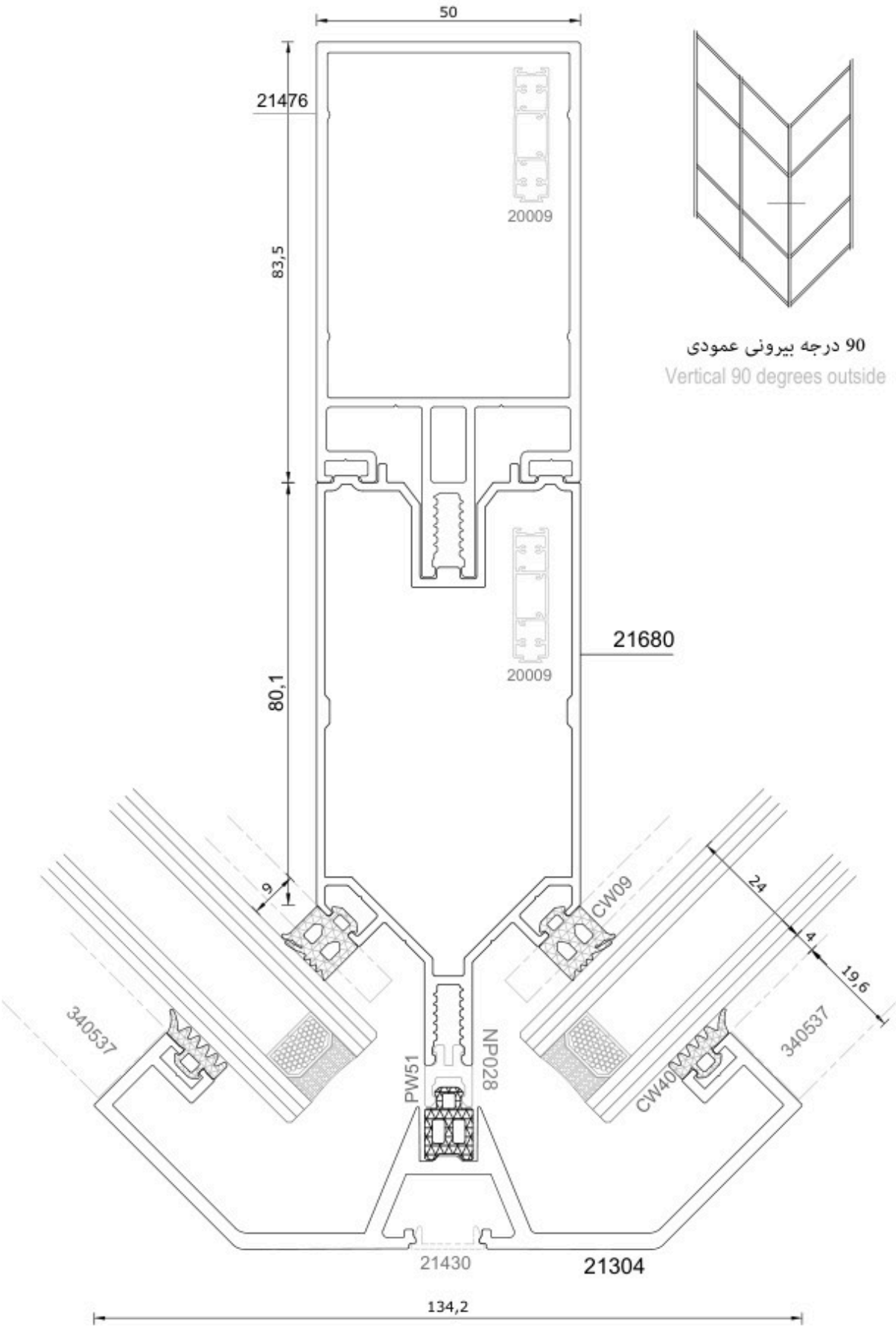
عمودی قوس به یر ون
امکان تنظیم زاویه بیرونی نامتقارن
Vertical arc outwards
Possibility to adjust the
asymmetric outer angle





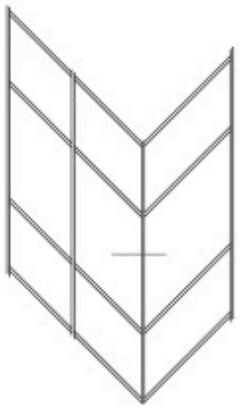
عمودی قوس به بیر ون
امکان تنظیم زاویه بیرونی نامتقارن
Vertical arc outwards
Possibility to adjust the asymmetric outer angle





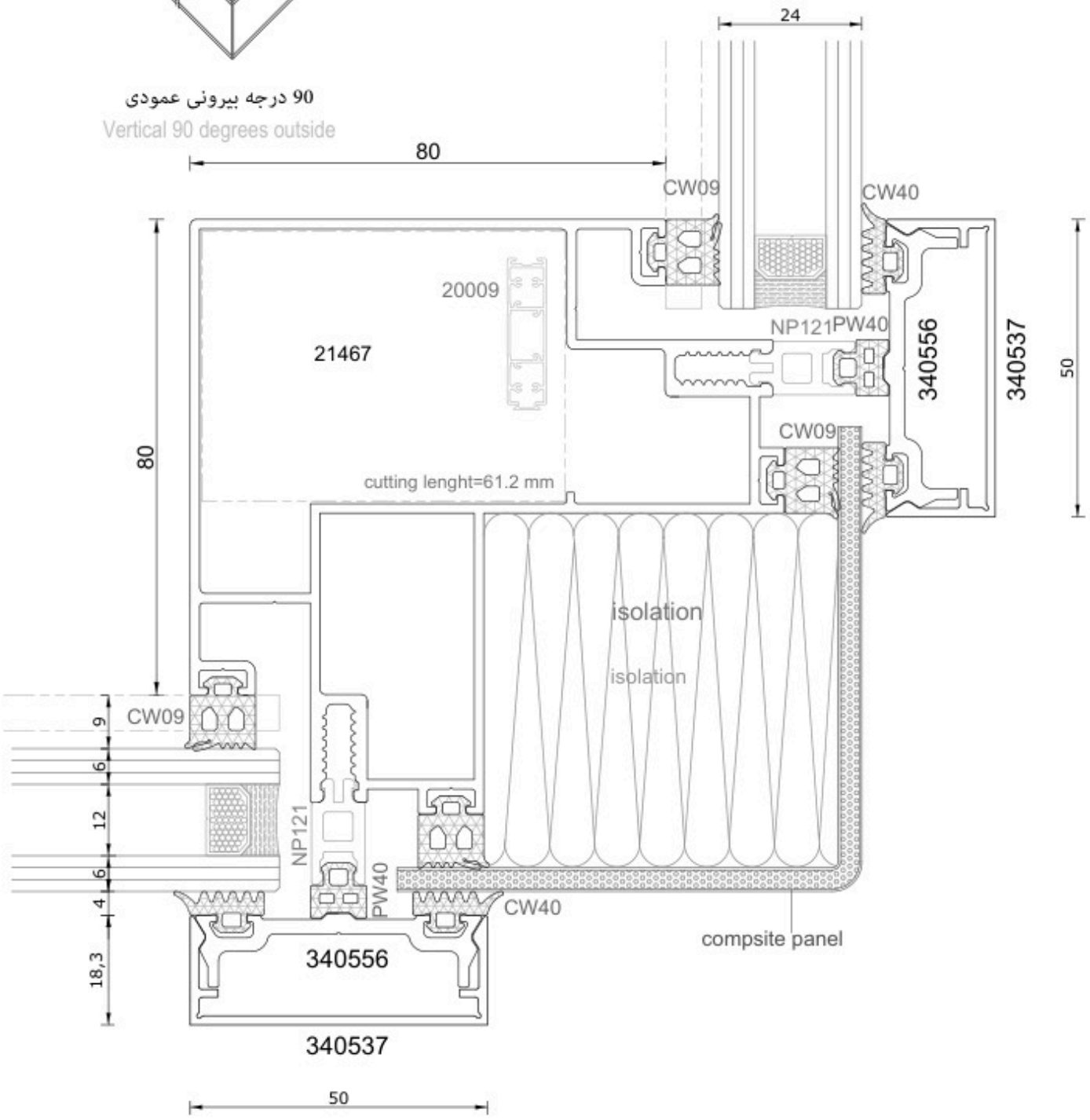
90 درجه بیرونی عمودی

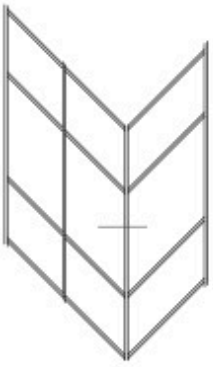
Vertical 90 degrees outside



90 درجه بیرونی عمودی

Vertical 90 degrees outside

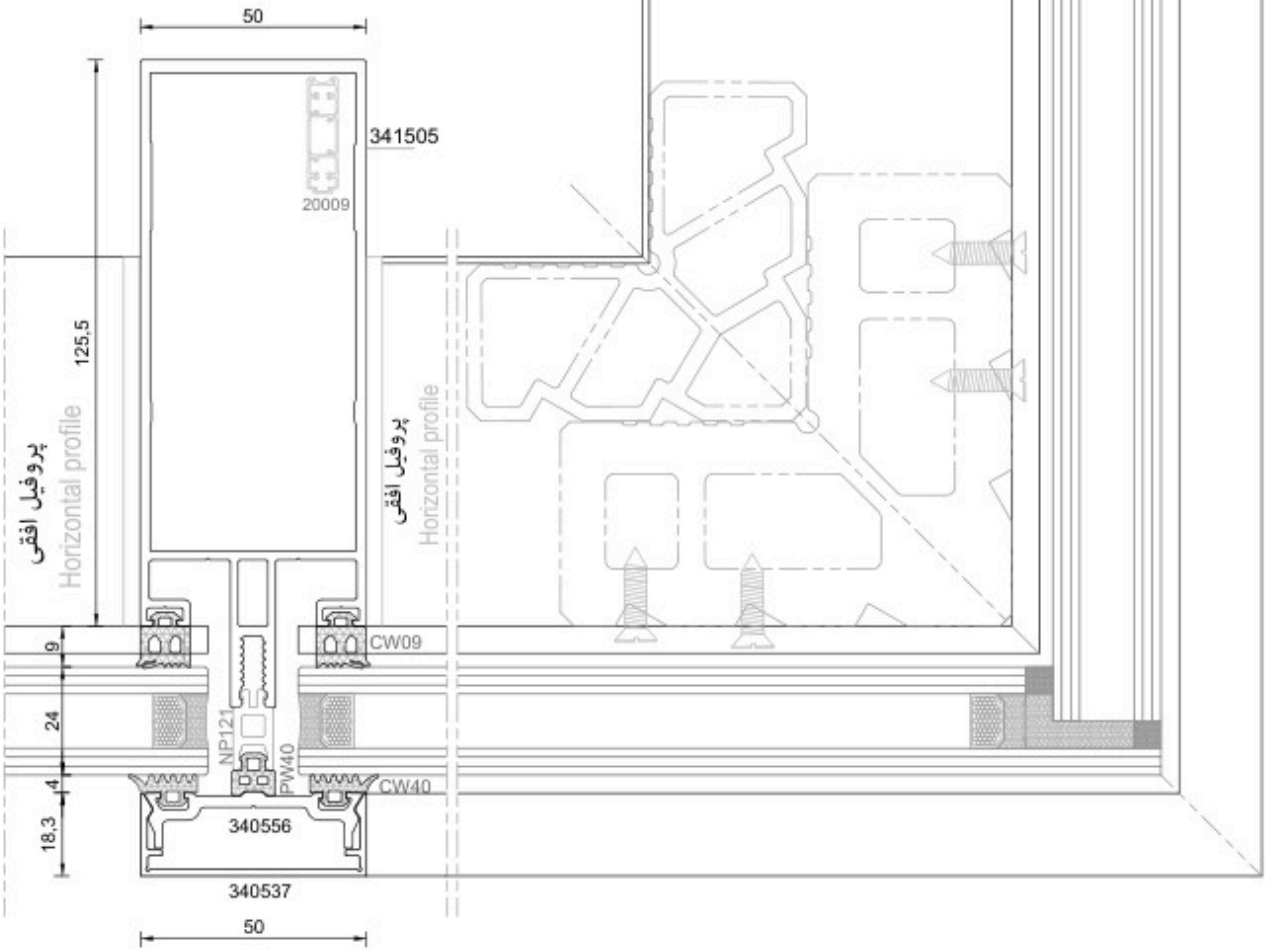


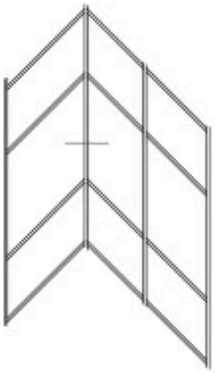


90 درجه بیرونی عمودی
Vertical 90 degrees outside



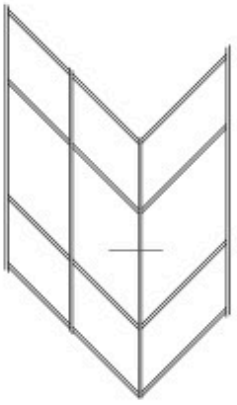
پروفیل افقی
Horizontal profile



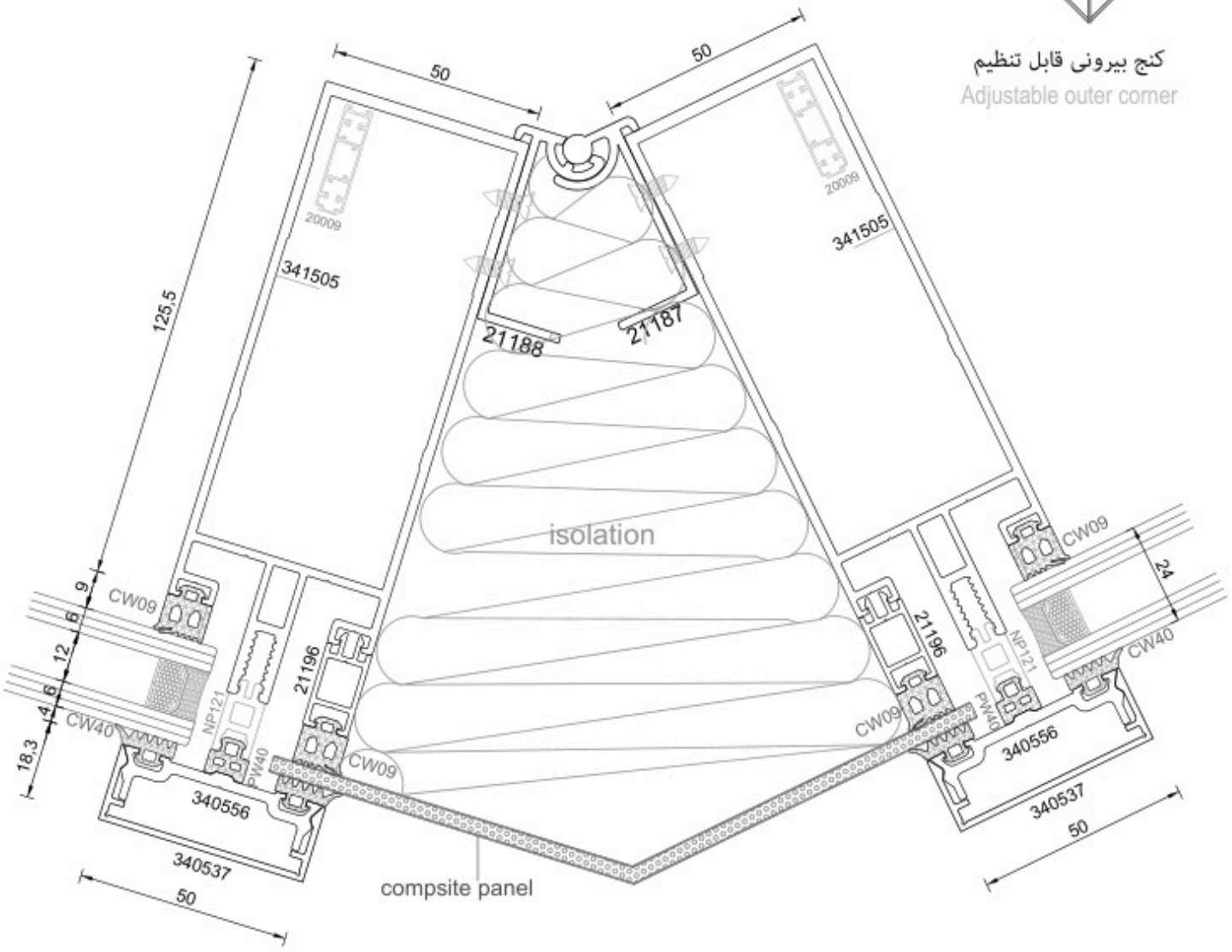


90 درجه داخلی عمودی
degrees internal vertical 90

NamakaranFakher.co

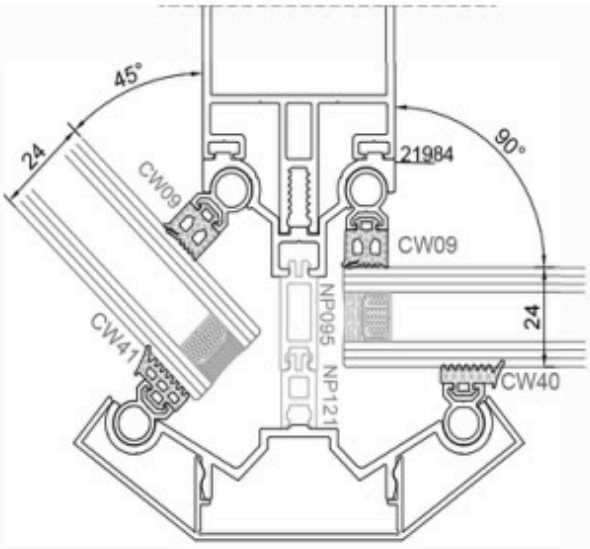


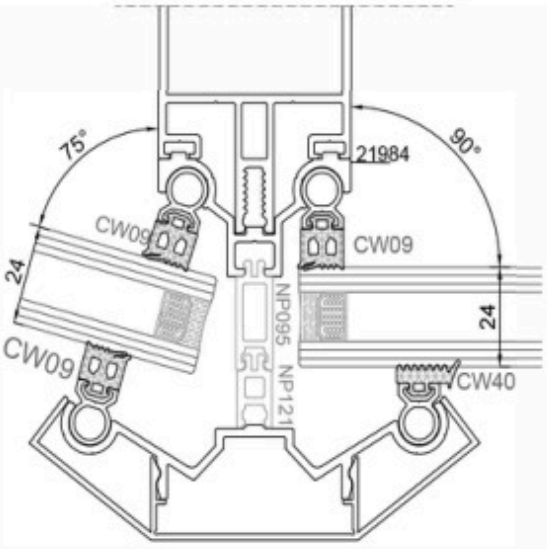
کنج بیرونی قابل تنظیم
Adjustable outer corner

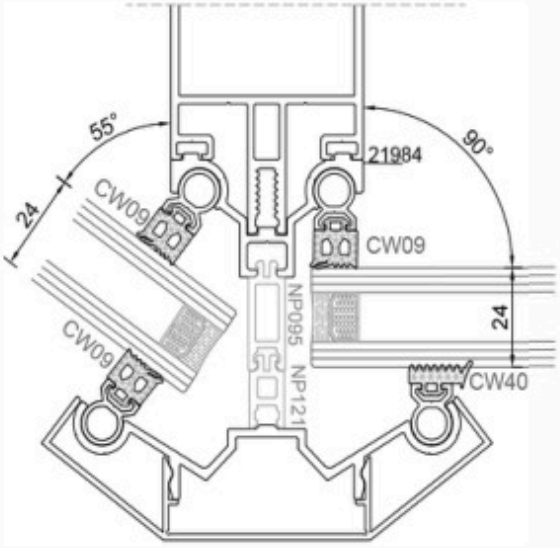


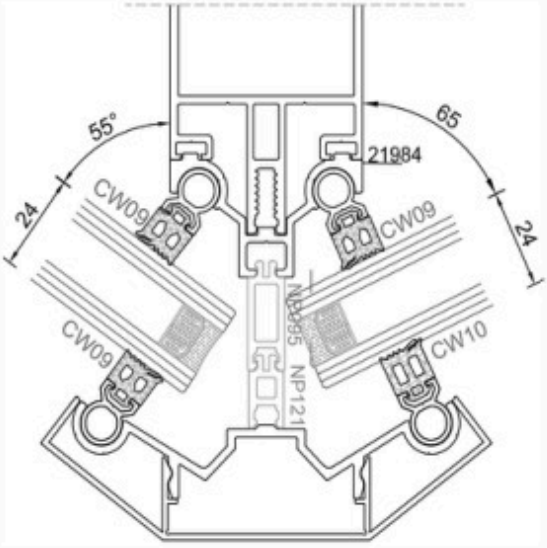
زاویه بیرونی نما شیشه ای

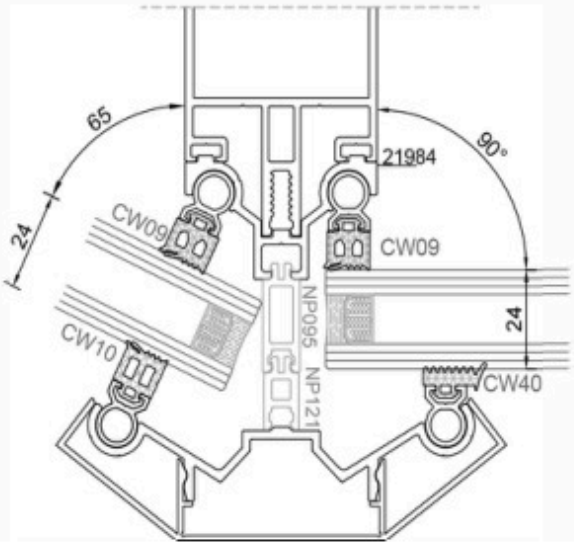
The outer angle of the glass facade

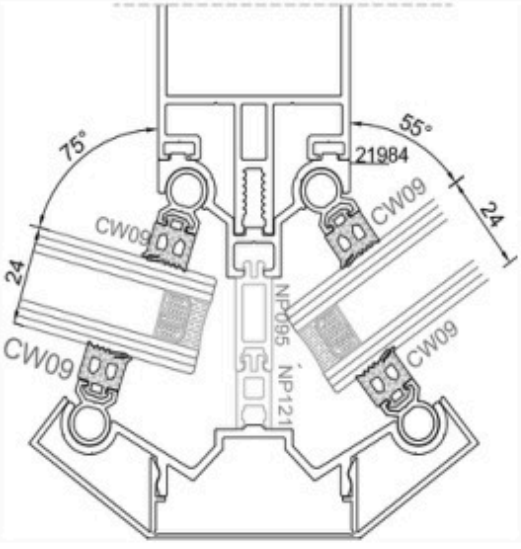




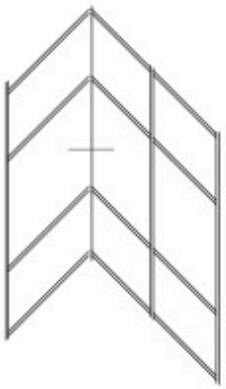






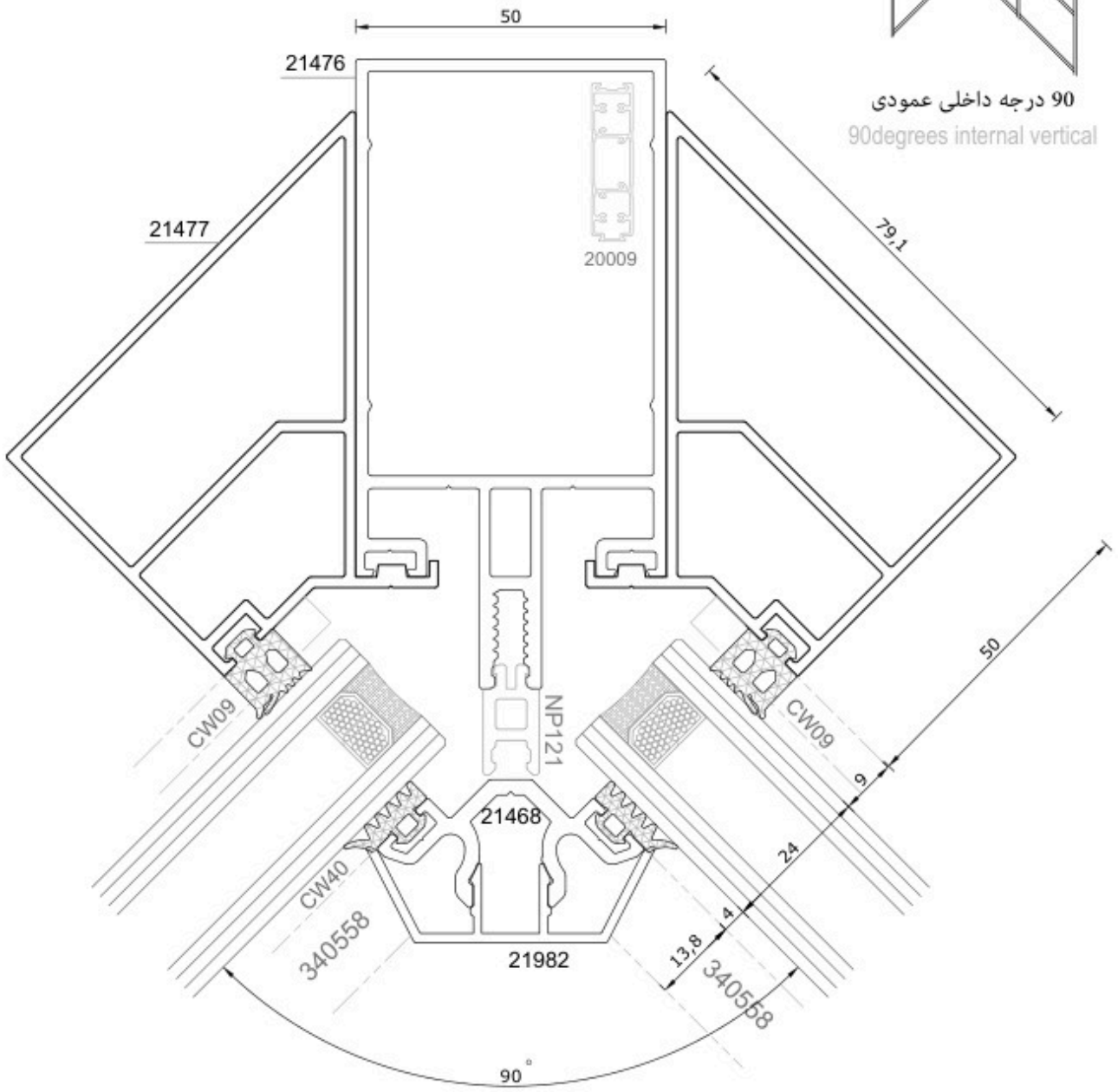


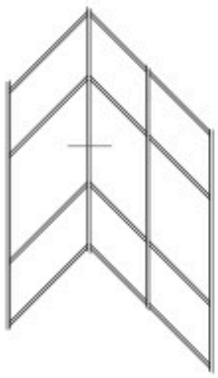
NamakaranFakher.co



90 درجه داخلی عمودی

90degrees internal vertical

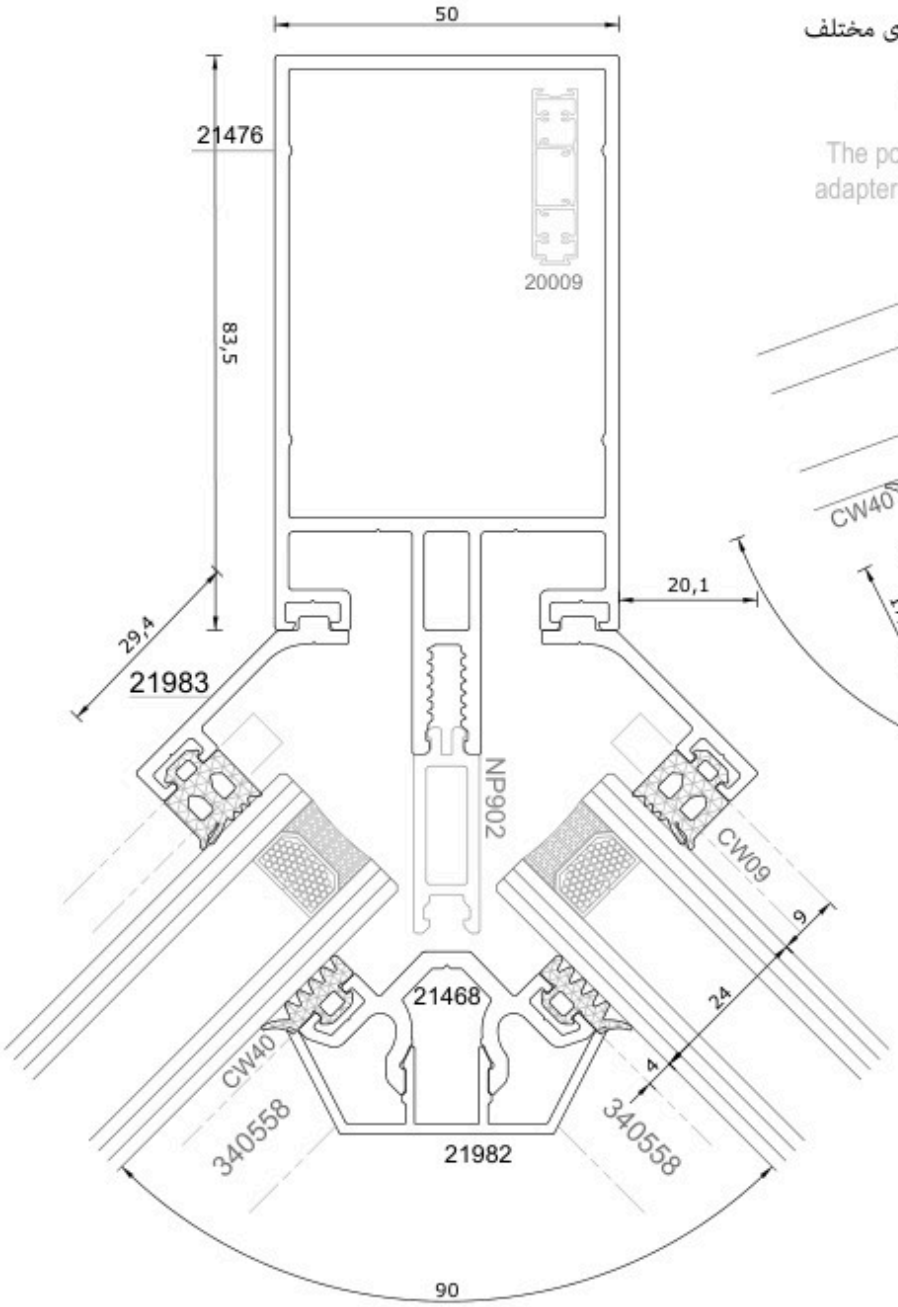


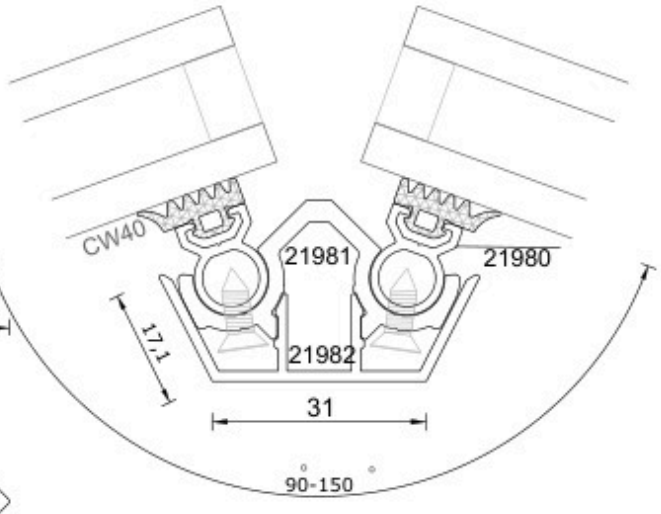


90 درجه داخلی عمو دی
امکان خم کار آداپتور شیشه برای زوایای مختلف

90degrees internal vertical

The possibility of bending the work of the adapter under the glass for different angles

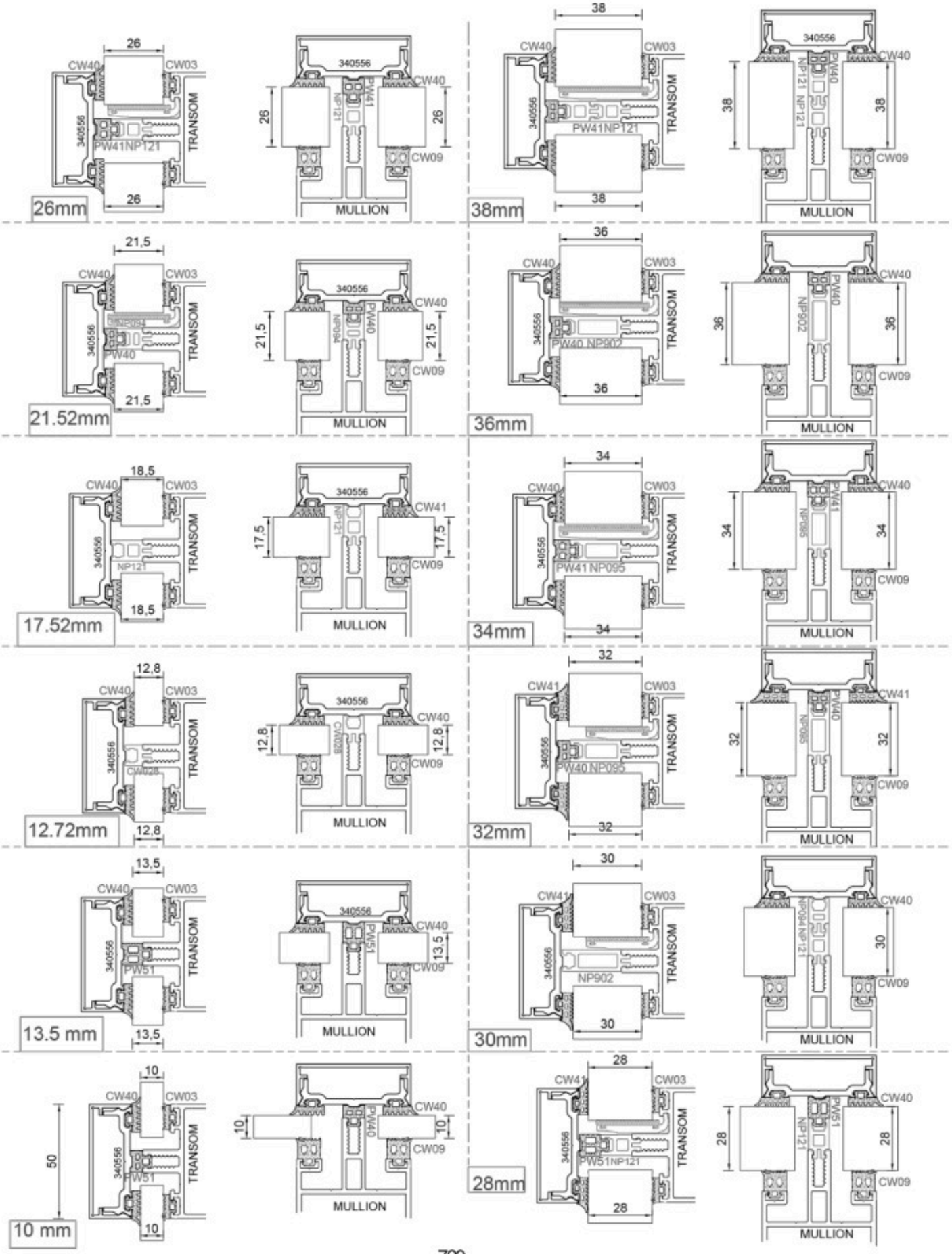


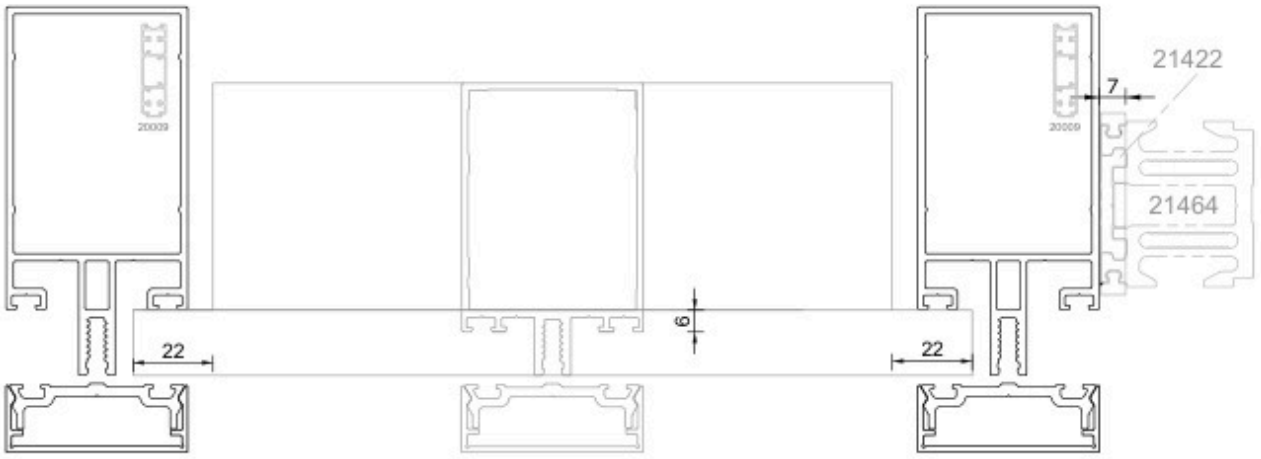


optional

ضخامت شیشه

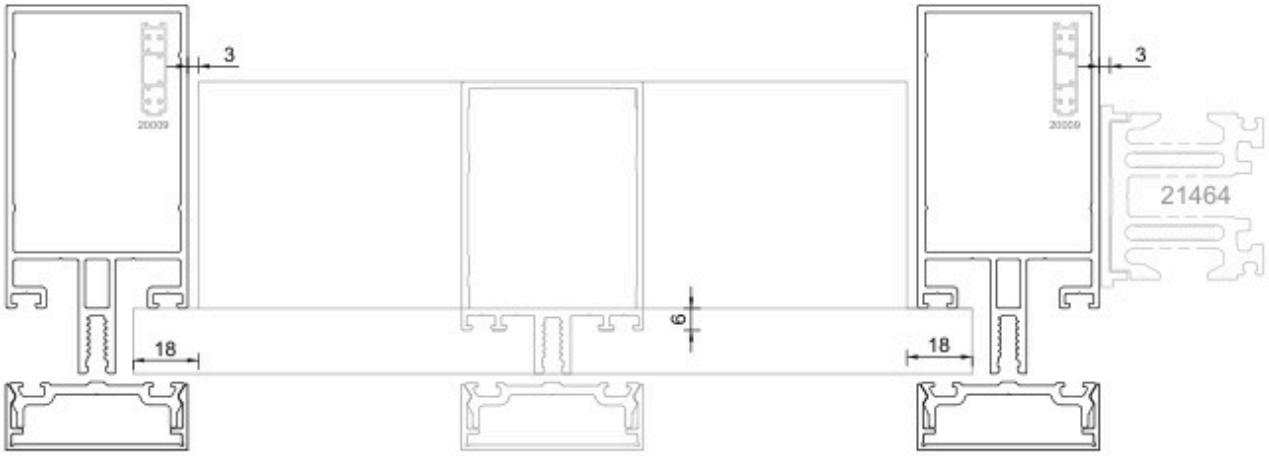
Glass thickness size





اندازه برش در نصب لقمه های ریلی

The size of the cut in the installation of rail connector

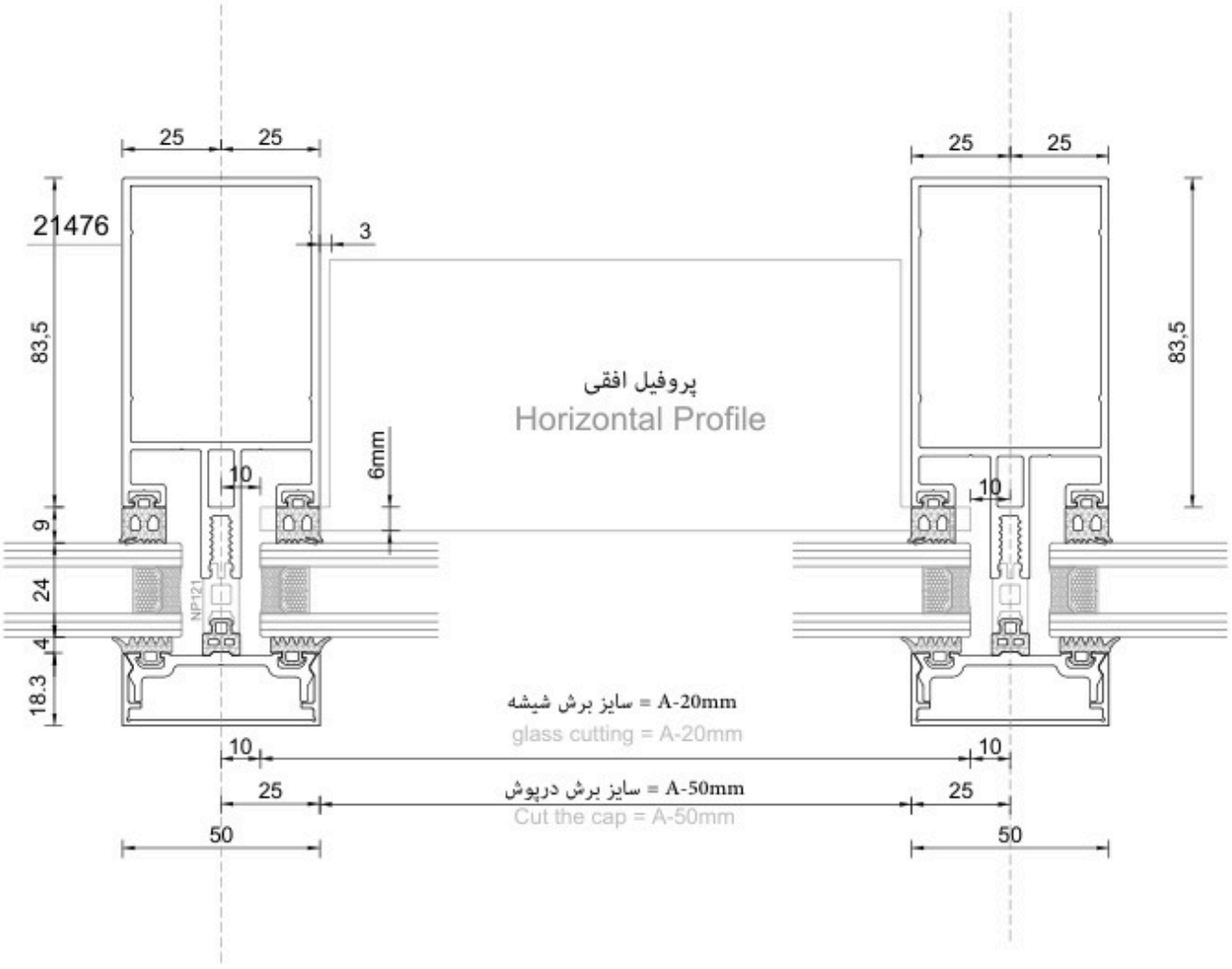


اندازه برش در نصب لقمه های فیکس

The size of the cut in the installation of fix connector

A= مرکز به مرکز دو پروفیل عمودی

A = Center to center of two vertical profiles



Opening cut curtain wall face cap

Curtain wall sash opening 21402-21406

Opening sash parrallel 21402-21405

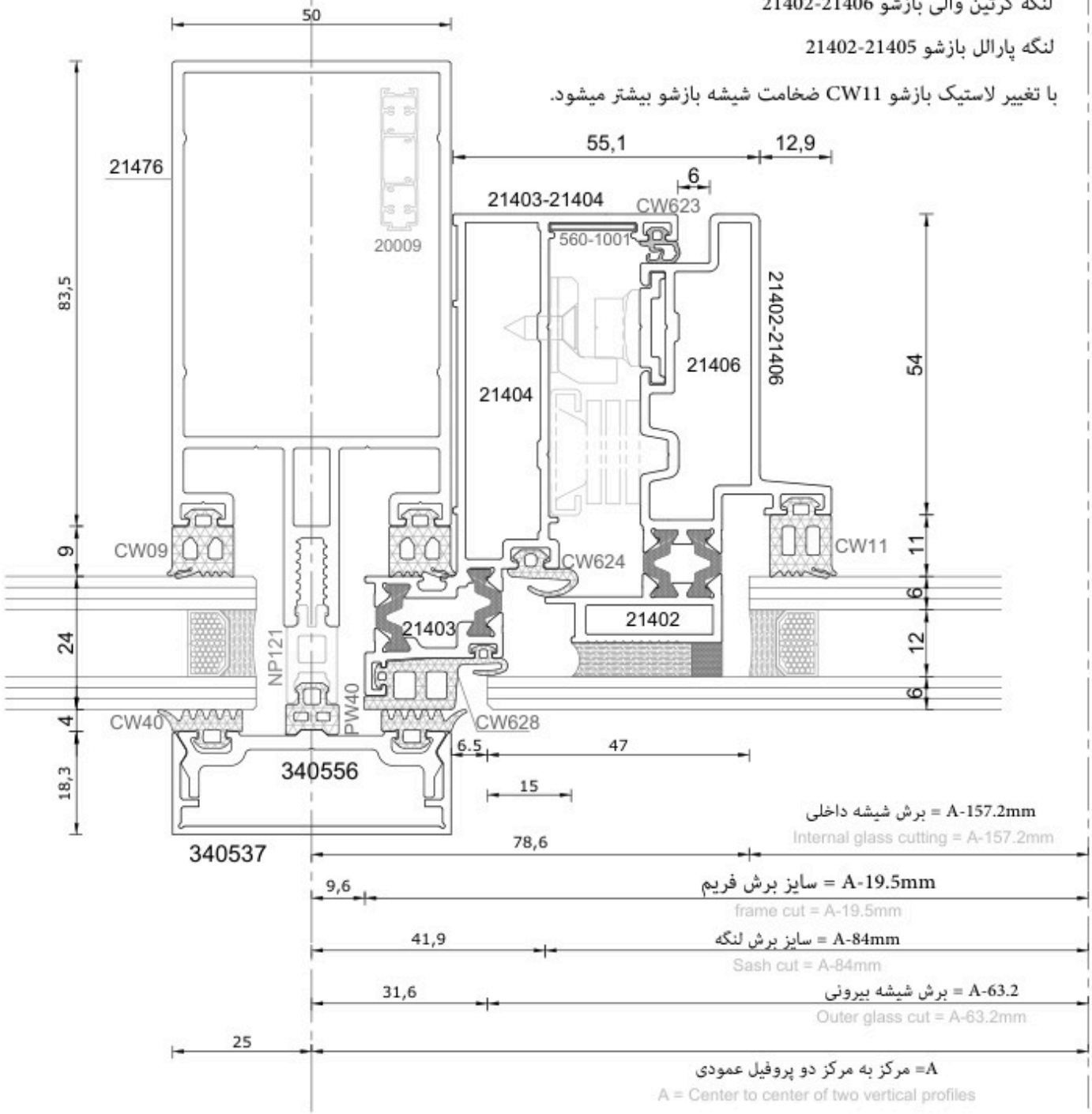
By changing the CW 11 opening rubber, the thickness of the opening glass increases

برش بازشو کرتین وال Face cap

لنگه کرتین والی بازشو 21402-21406

لنگه پارالل بازشو 21402-21405

با تغییر لاستیک بازشو CW11 ضخامت شیشه بازشو بیشتر میشود.



A-157.2mm = برش شیشه داخلی

Internal glass cutting = A-157.2mm

A-19.5mm = سایز برش فریم

frame cut = A-19.5mm

A-84mm = سایز برش لنگه

Sash cut = A-84mm

A-63.2 = برش شیشه بیرونی

Outer glass cut = A-63.2mm

A= مرکز به مرکز دو پروفیل عمودی

A = Center to center of two vertical profiles

NamakaranFakher.co

Opening cut curtain wall face cap

Curtain wall sash opening 21598-21406

Opening sash parrallel 21598-21405

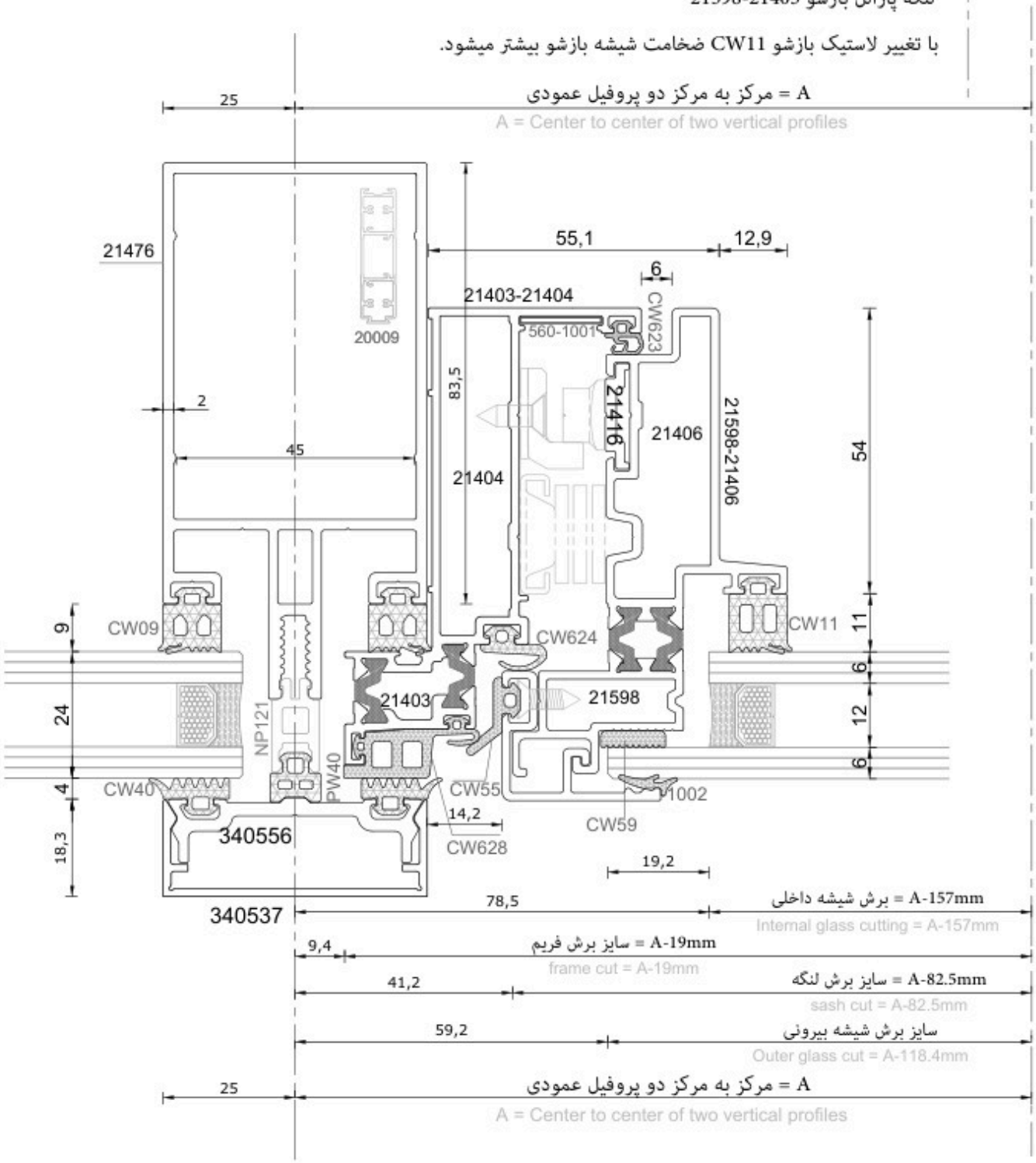
By changing the CW 11 opening rubber, the thickness of the opening glass increases

Face cap برش بازشو کرتین وال

لنگه کرتین والی بازشو 21598-21406

لنگه پارالل بازشو 21598-21405

با تغییر لاستیک بازشو CW11 ضخامت شیشه بازشو بیشتر میشود.

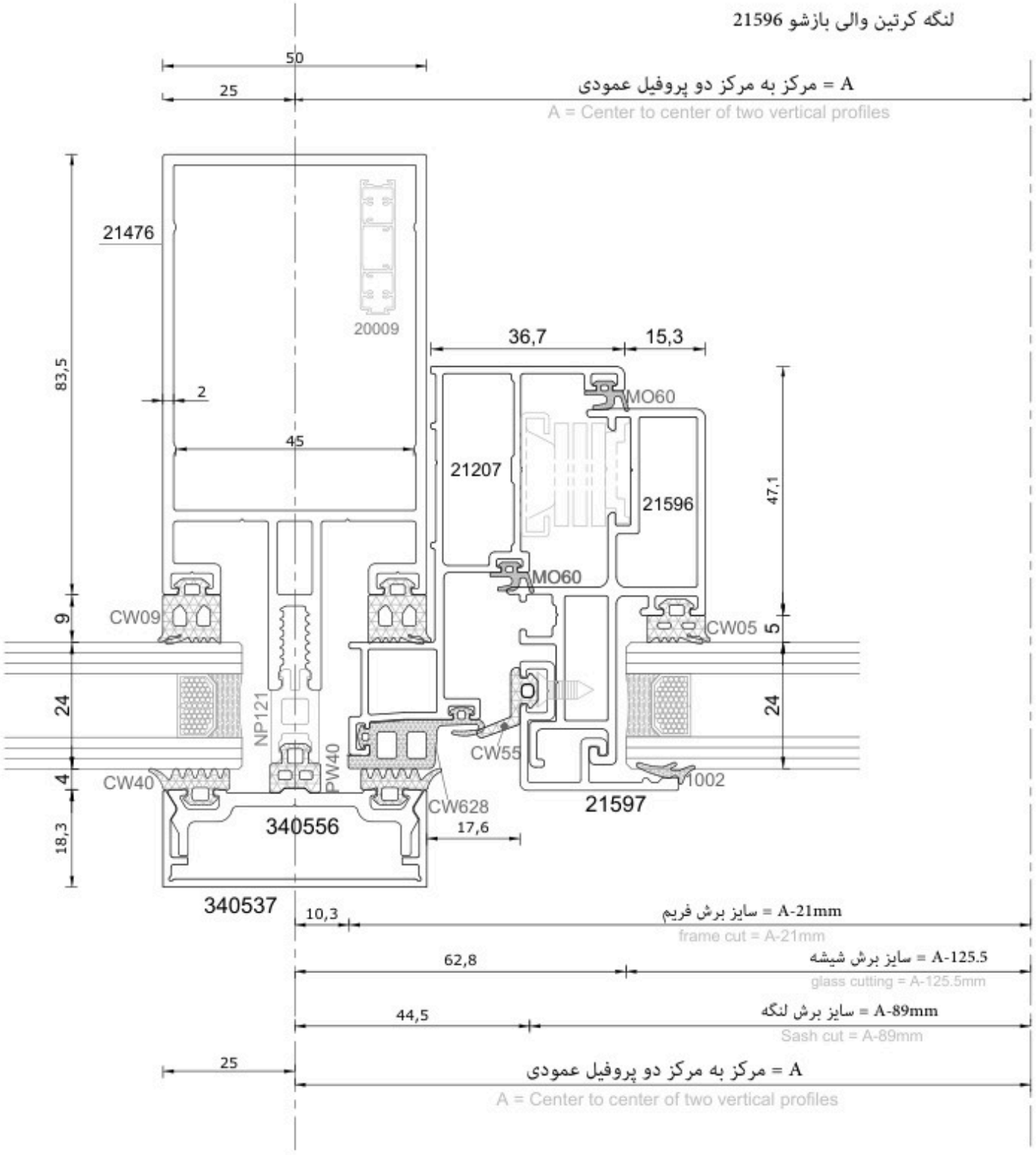


Opening cut curtain wall face cap

Curtain wall sash opening 21596

برش بازشو کرتین وال

لنگه کرتین والی بازشو 21596

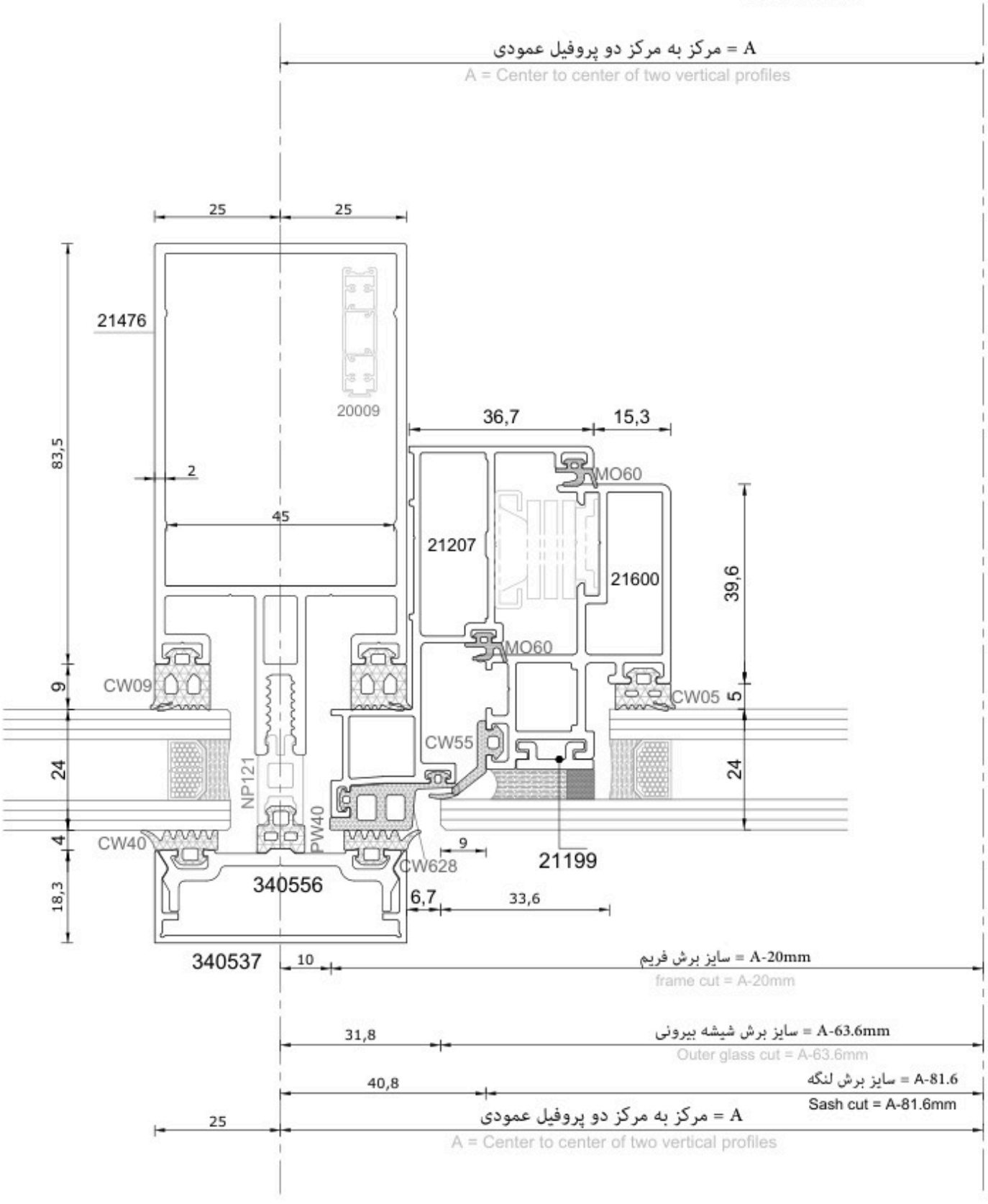


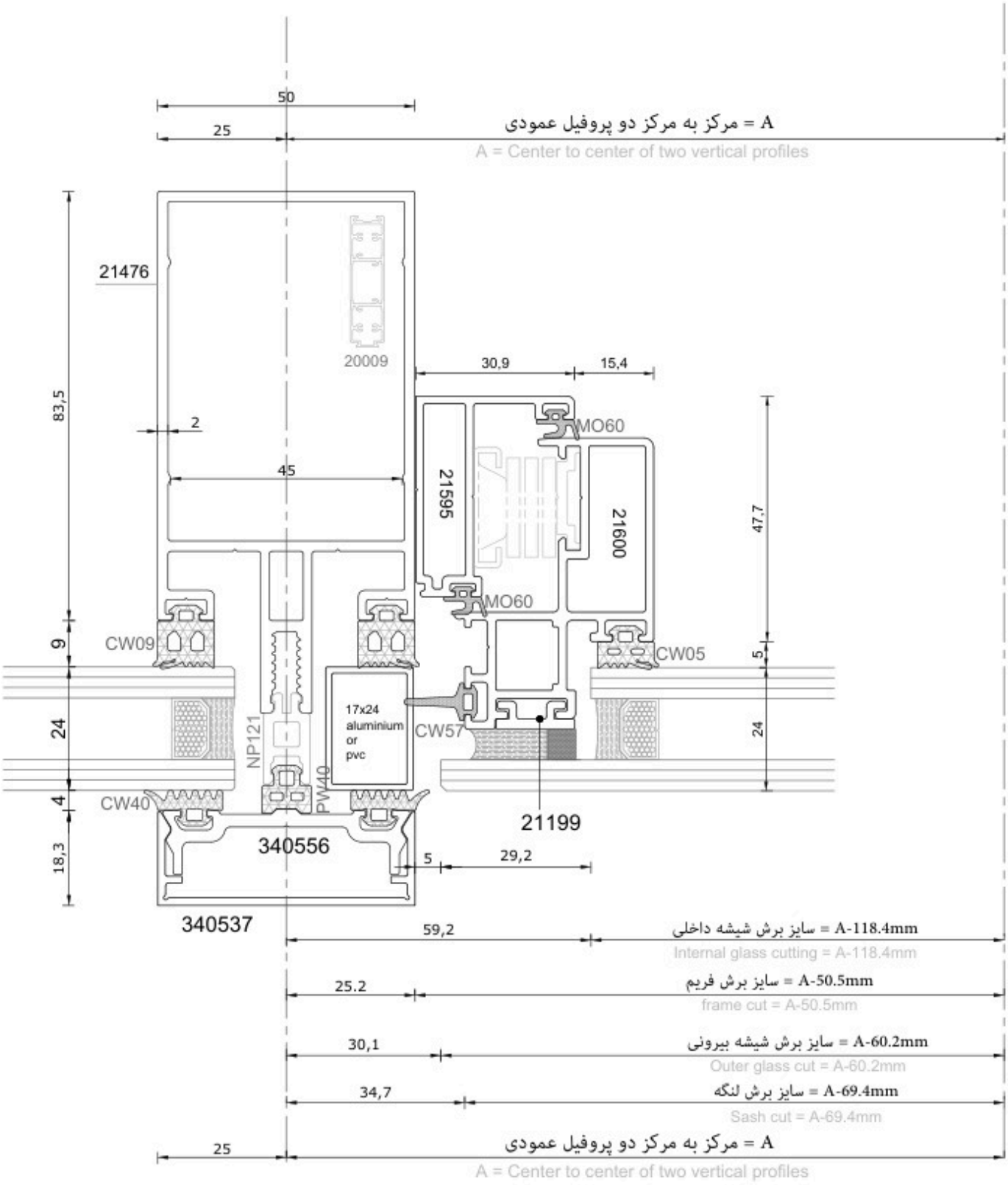
Opening cut curtain wall face cap

Curtain wall sash opening 21600

برش بازشو کرتین وال

لنگه کرتین والی بازشو 21600

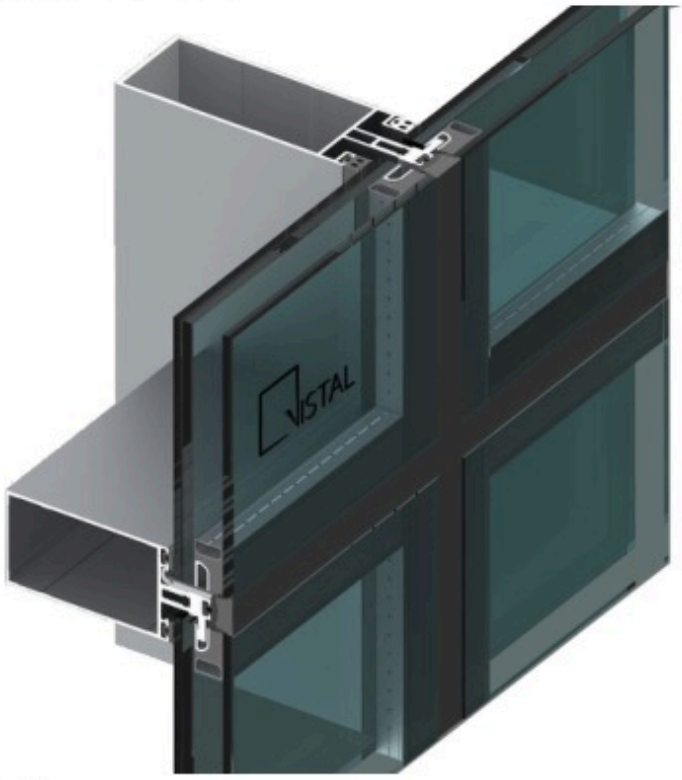



50
25
A = مرکز به مرکز دو پروفیل عمودی
A = Center to center of two vertical profiles
21476
20009
30,9
15,4
83,5
2
45
21595
21600
MO60
MO60
47,7
9
CW09
CW05
5
24
17x24
aluminium
or
pvc
NP121
CW57
PW40
24
4
CW40
21199
18,3
340556
5
29,2
340537
59,2
A-118.4mm = سایز برش شیشه داخلی
Internal glass cutting = A-118.4mm
25.2
A-50.5mm = سایز برش فریم
frame cut = A-50.5mm
30,1
A-60.2mm = سایز برش شیشه بیرونی
Outer glass cut = A-60.2mm
34,7
A-69.4mm = سایز برش لنگه
Sash cut = A-69.4mm
25
A = مرکز به مرکز دو پروفیل عمودی
A = Center to center of two vertical profiles

TECHNICAL CATALOG

STEEL SUPPORTED FACADE SYSTEM - STRUCTURAL GLAZING

CW50



system specification

Mullion and Tranzem width size: 50 mm.

Vertical profile height size: 50-240 mm.

Horizontal profile height size: 50-206 mm.

Profile wall thickness: 1.4-3.5 mm.

The smallest opening size: 700-1200 mm.

Maximum opening size: 1500-2000 mm.

Polyamide size: 12 mm.

Thermal insulation size (UF): 1.47-3.85 W/m²k.

standard tires for **sealing and air sealing** the facade.

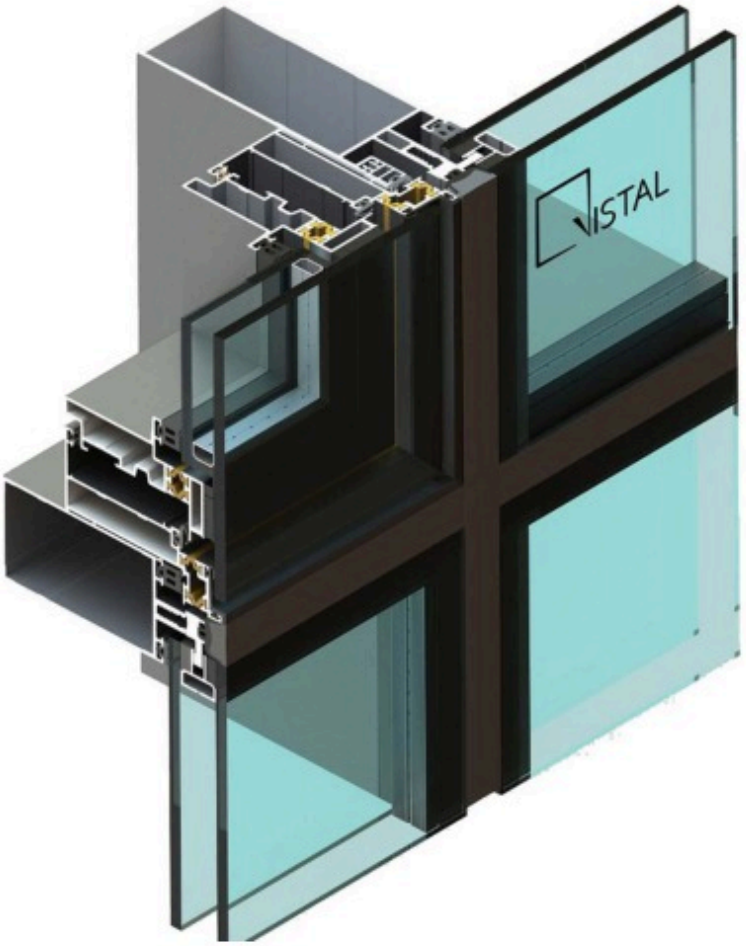
It is possible to implement curtain wall with **cap-cap U-channel** and **full frameless**

Size of glass thickness: 4-45 mm.

TECHNICAL CATALOG

STEEL SUPPORTED FACADE SYSTEM - STRUCTURAL GLAZING

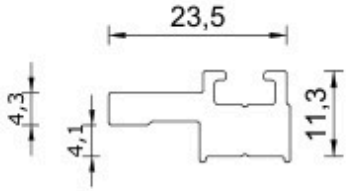
VISTAL





CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21414	0.450	-	-
21415	0.470	-	-
21932	0.400	-	-
21480	0.310	-	-
21509	0.238	-	-
21425	0.275	-	-

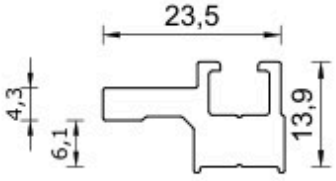
21414



تاگل نصب شیشه یوچنل

clamping profile

21415



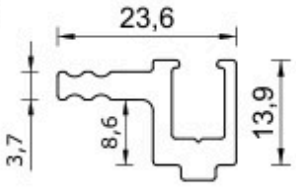
تاگل نصب شیشه یوچنل

clamping profile

21932

Rubber for 21932

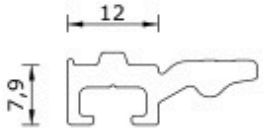




تاگل لاستیک خور شیشه یوچنل

clamping profile

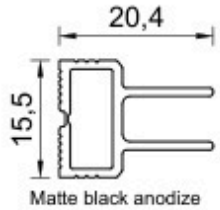
21480



تاگل نصب شیشه یوچنل

clamping profile

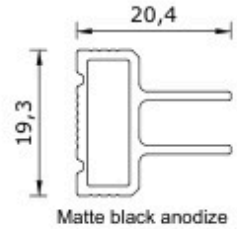
21509



اسپیسر 16 میلی متر

double glass bonding profile

21425



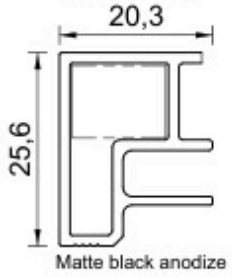
اسپیسر 20 میلی متر

double glass bonding profile

scale1:1

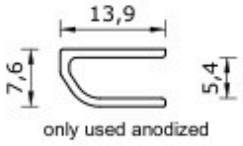
CODE	WEIGHT(kg/m)	Ix cm4	Iy cm4
21394	0.375	-	-
21210	0.425	-	-
21200	0.100	-	-
21424	0.635	-	-

21394



اسپیسر شیشه یوچنل تک جداره
single glass bonding profile

21200



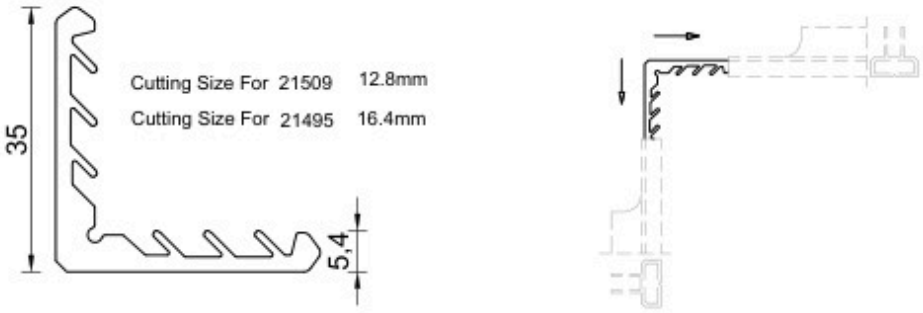
پروفیل کانال یوچنل
double glass bonding profile

21210



آداپتور نصب ورق کامپوزیت
composite panel adapter

21424



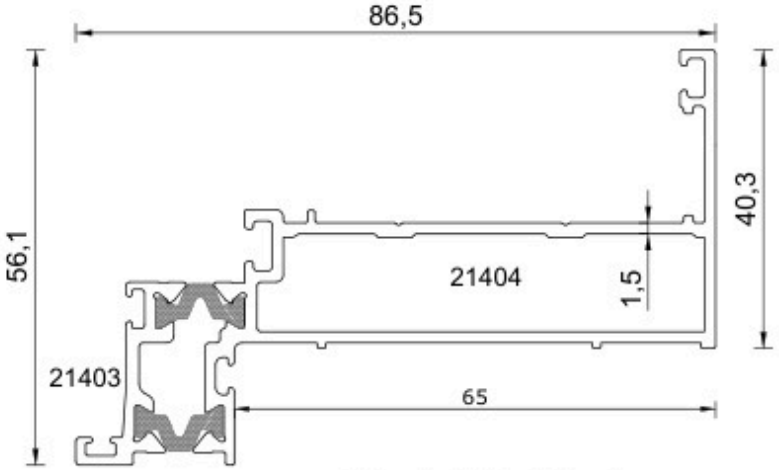
پروفیل فیکسر اسپیسر یوچنل
fixed frame assembling plug

scale1:1

profile	corner cleat	shape	cutting size
21394	C12.6		9.7 mm
21210	C12.6		9.7 mm

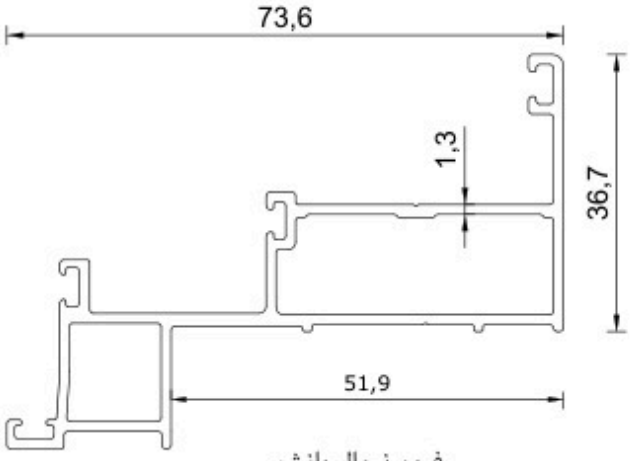
CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21403-21404	1.300	40.1	3.8
21207	0.930	-	-
21199	0.136	-	-
21400	0.165	-	-
21416	0.135	-	-

21403-21404



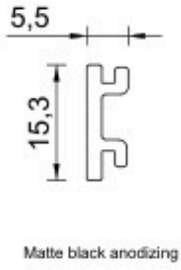
فریم بازشو کرتین وال و پاراللل
insulated frame profile

21207



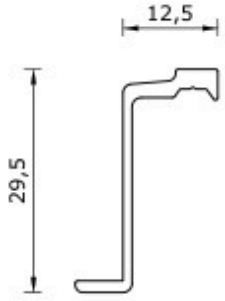
فریم نرمال بازشو
uninsulated frame profile

21199



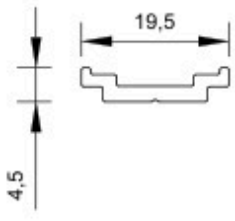
پروفیل آداپتور چسب شیشه
bonding frame profile

21400



تاکوز پایین لنگه ترمال بریک
Glass support profile

21416

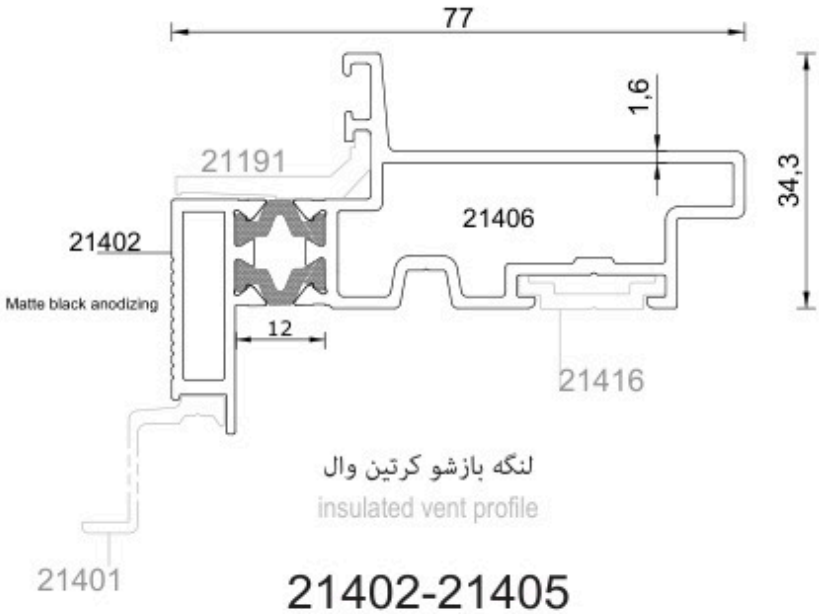


پروفیل تسمه بازشو
rod profile

profile	corner cleat	shape	cutting size	corner cleat	shape	cutting size
21403-21404	C12.6		56.5 mm			
21207	C12.6		33.4 mm	C12.6		11.6mm

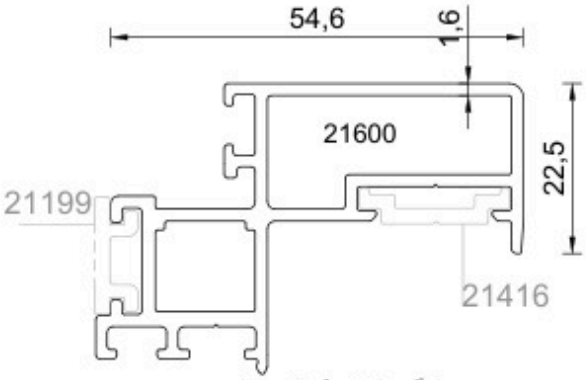
CODE	WEIGHT(kg/m)	Ix cm^4	Iy cm^4
21402-21406	1.400	24.2	3.9
21402-21405	1.360	24.2	3.7
21600	1.000	4.2	9.78

21402-21406



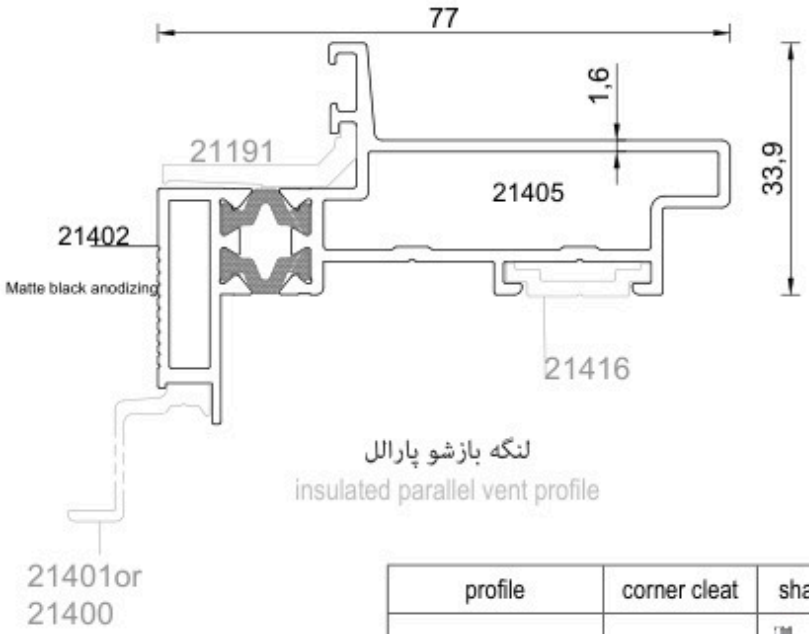
لنگه بازشو کرتین وال
insulated vent profile

21600



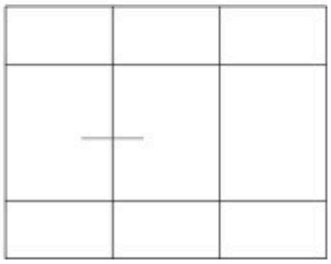
لنگه بازشو کرتین وال
hidden vent profile

21402-21405

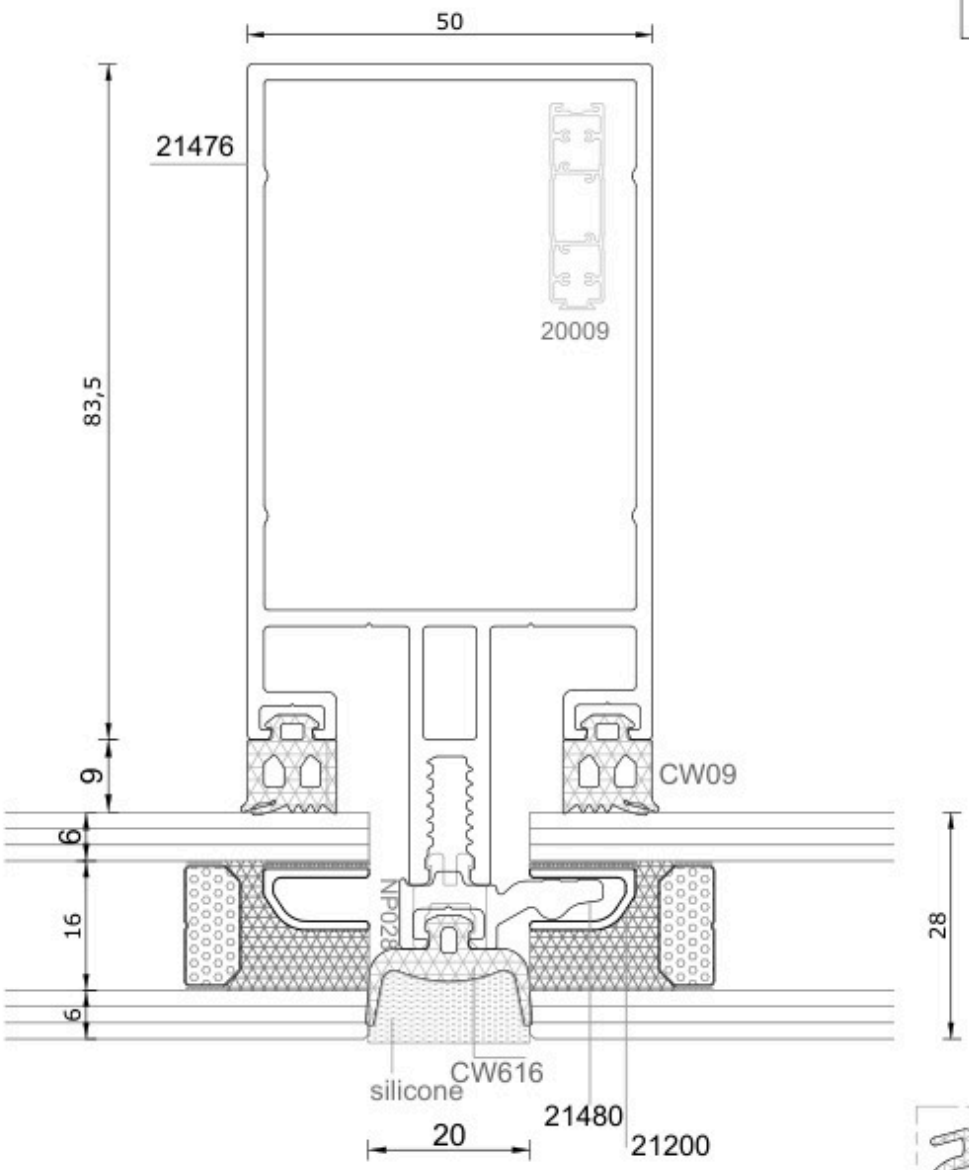


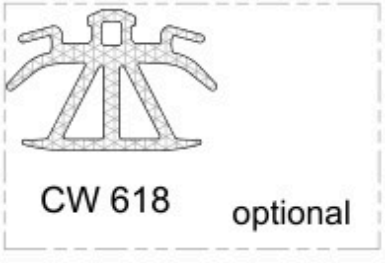
لنگه بازشو پارالل
insulated parallel vent profile

profile	corner cleat	shape	cutting size	corner cleat	shape	cutting size
21402-21406	C12.6		38 mm	C22.4		4.8 mm
21402-21405	C12.6		38 mm	C22.4		4.8 mm
21600	C10.6		31.9 mm	C10.6		13.2 mm



عمودی فیکس
vertical fix

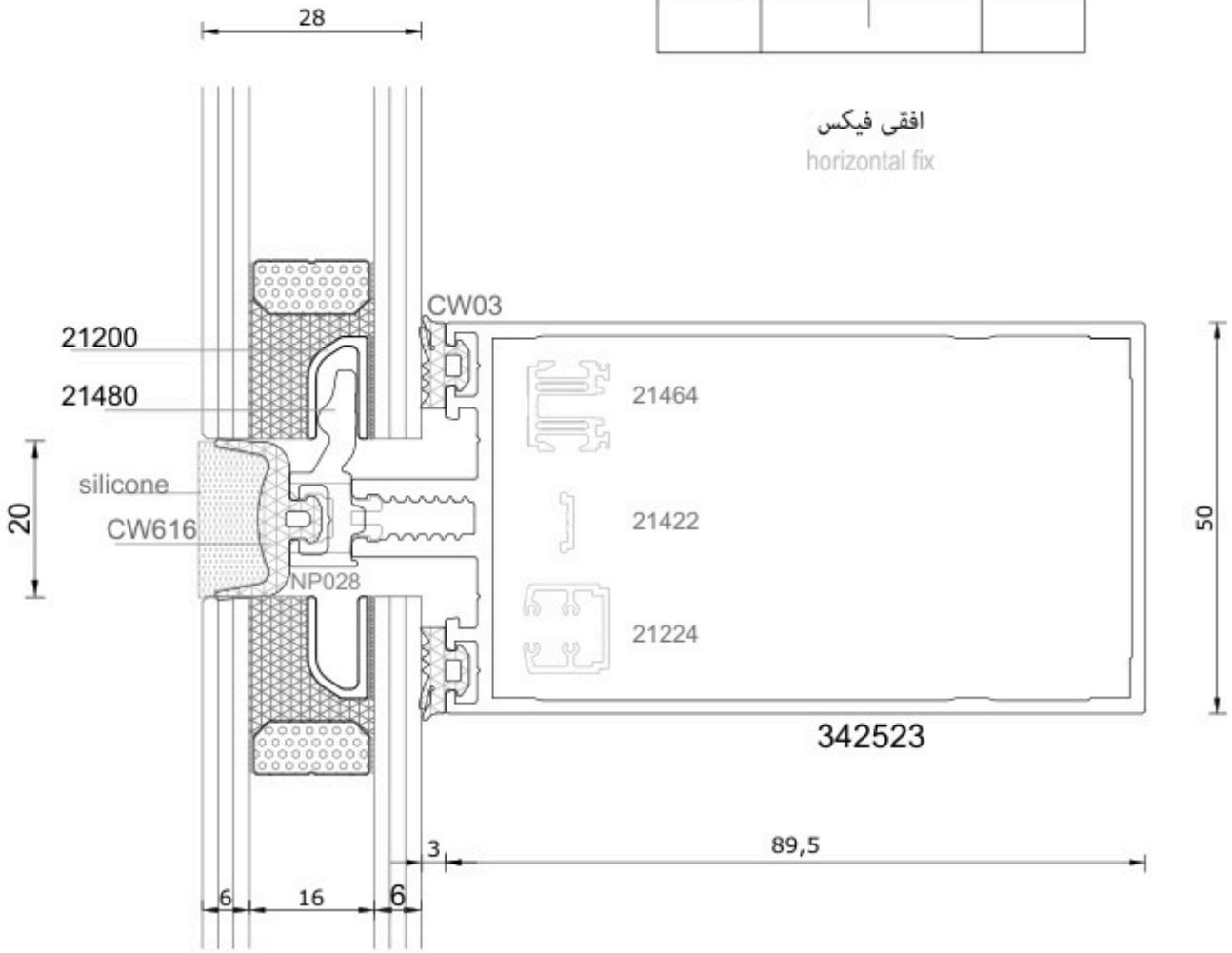


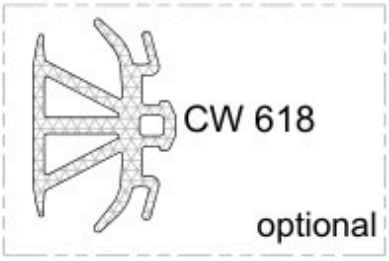


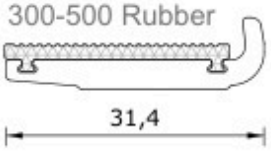
CW 618 optional



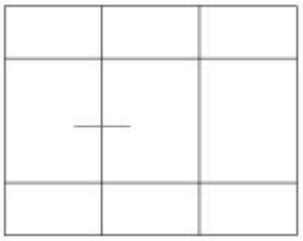
افقی فیکس
horizontal fix





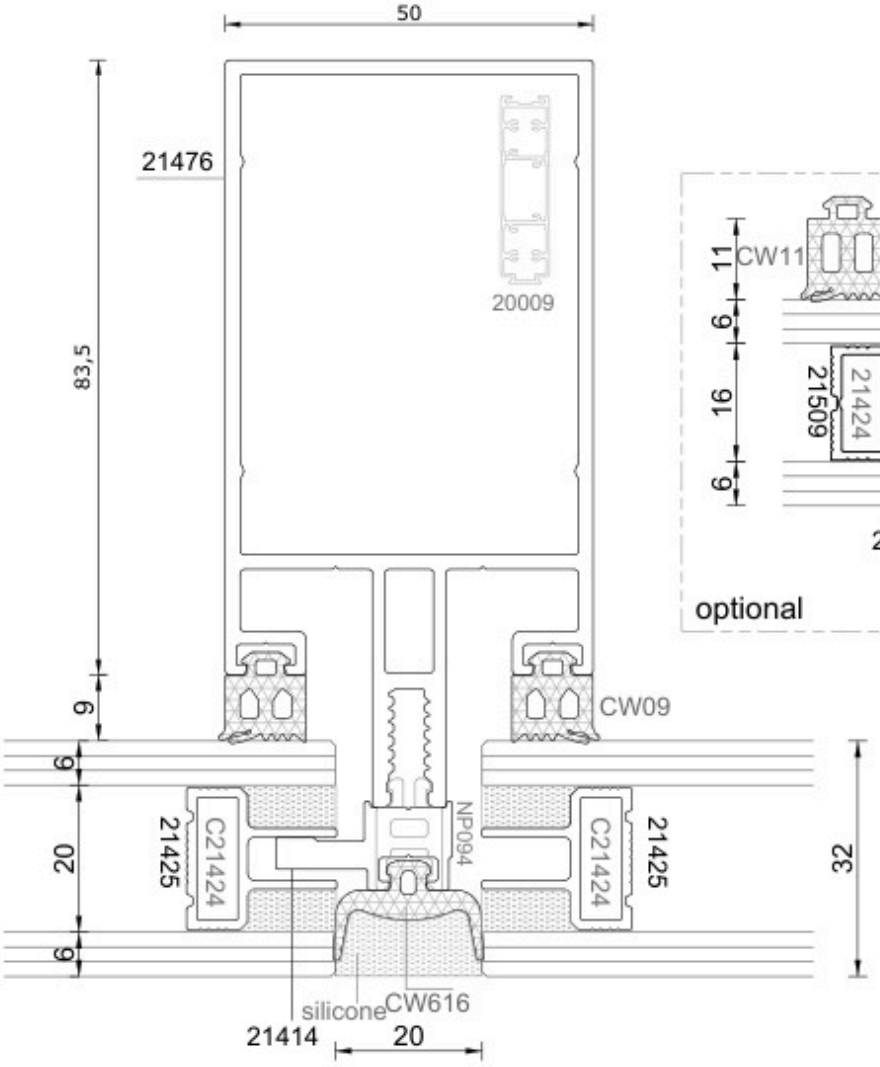


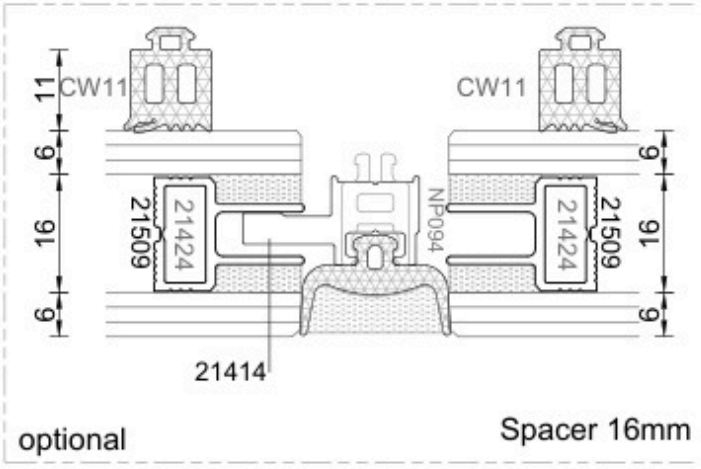
Raw color
20015
glass support pr
0.300kg/m

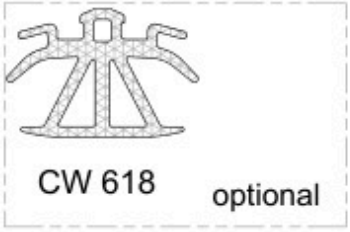


عمودی فیکس

vertical fix

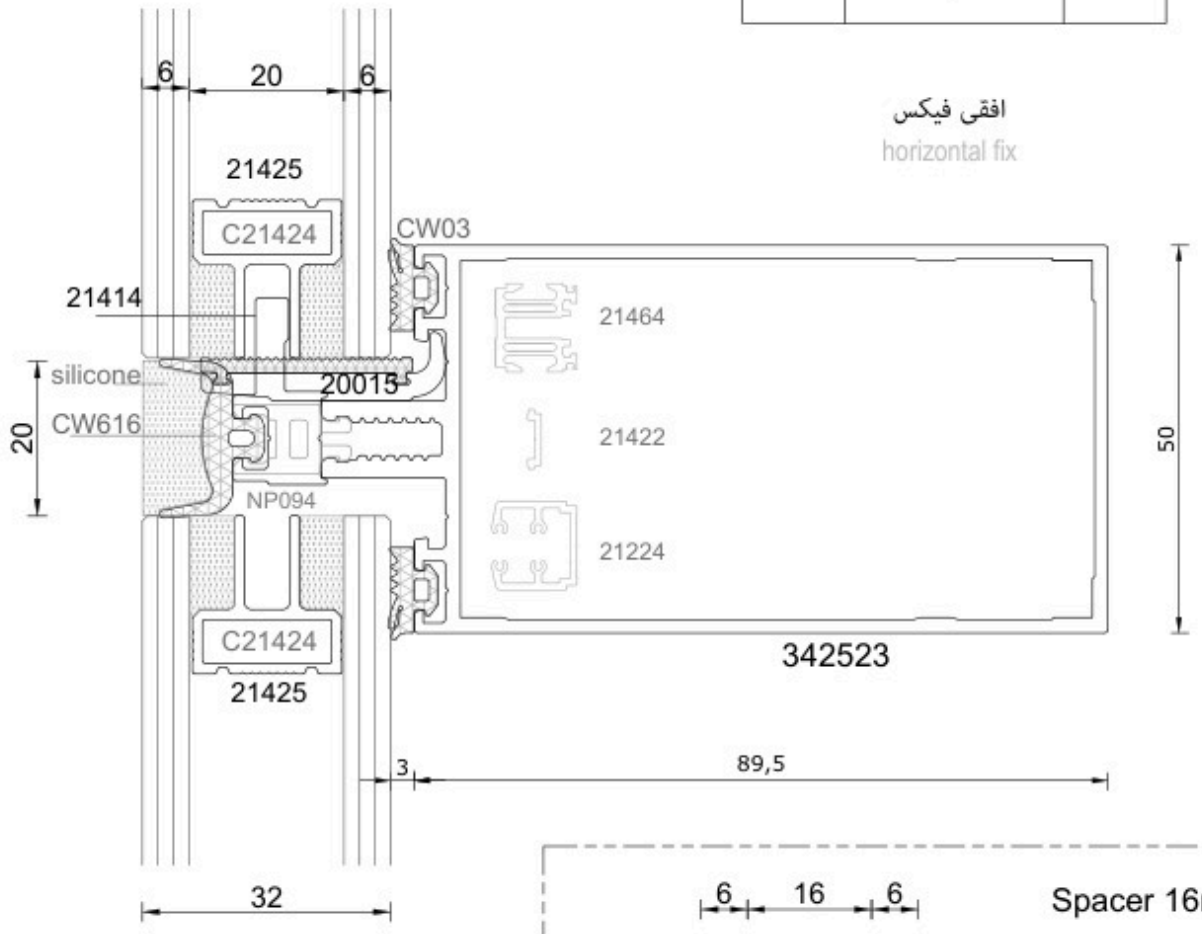


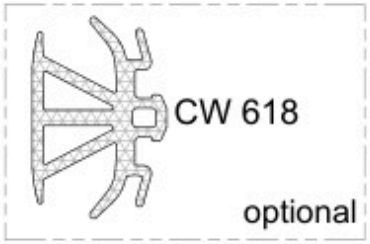


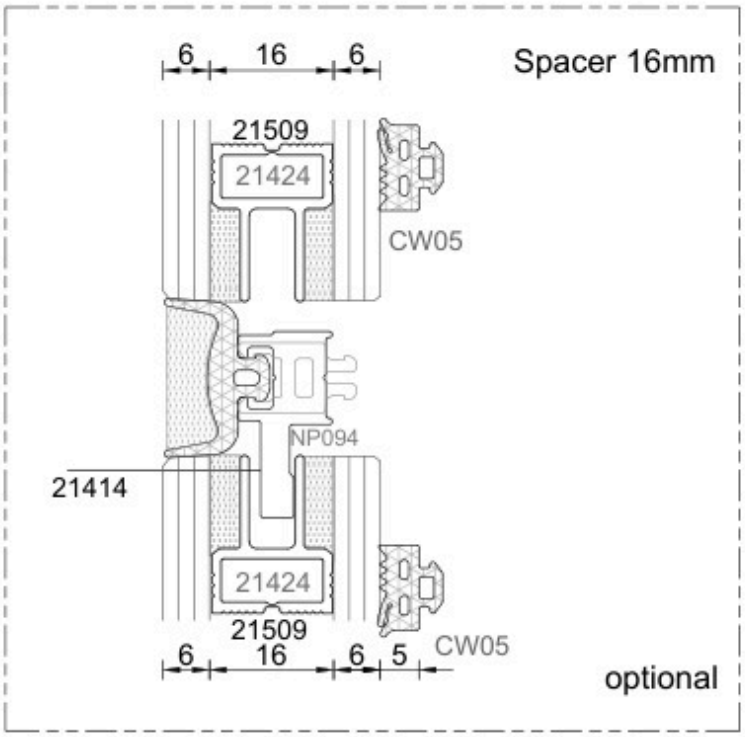


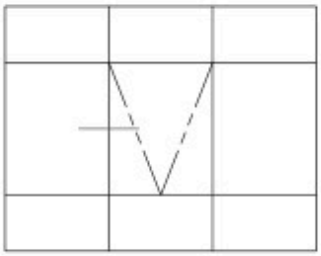


افقی فیکس
horizontal fix



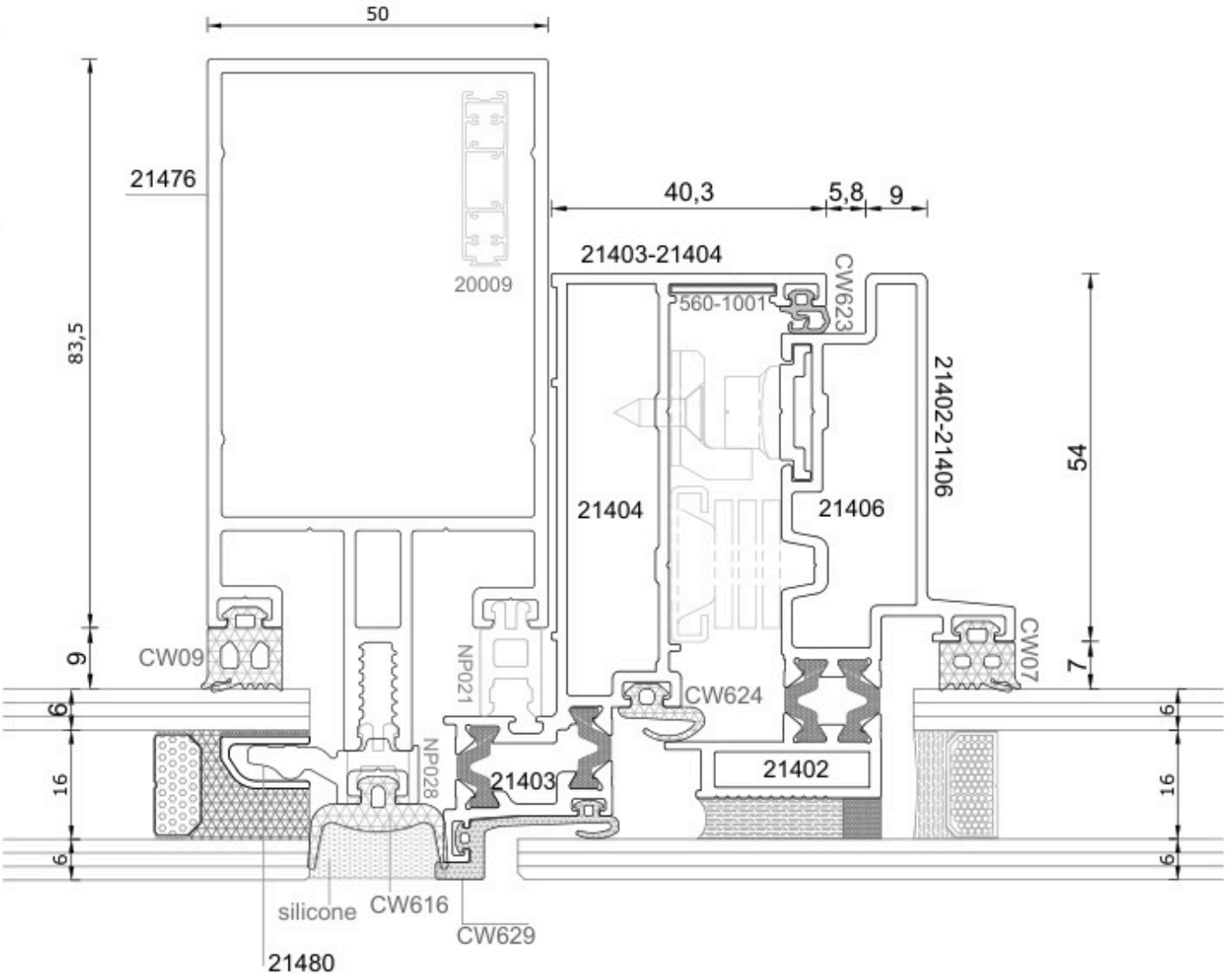


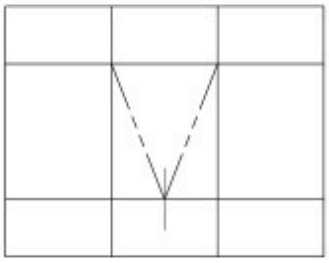




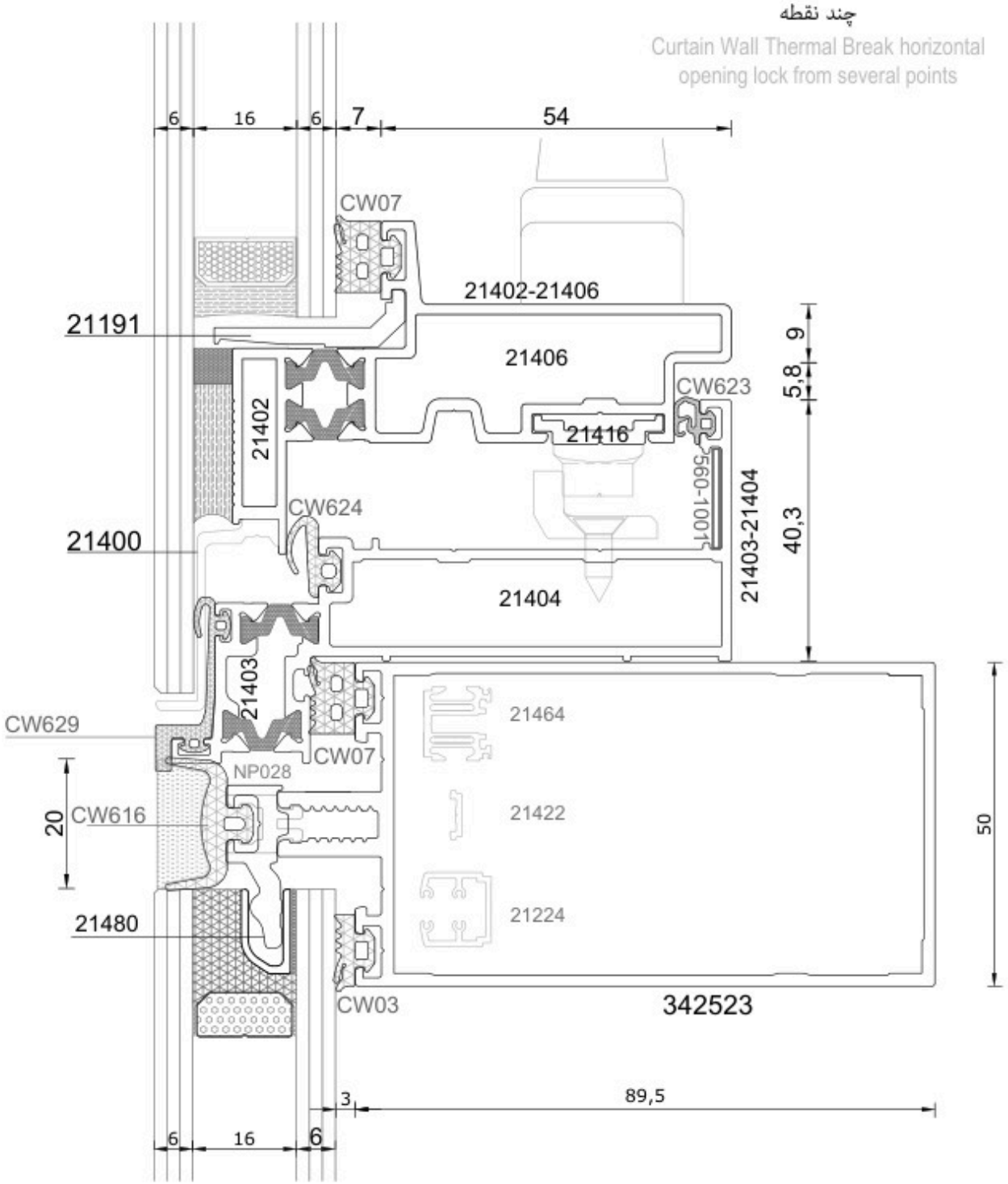
بازشو کرتین والی ترمال بریک عمودی قفل
از چند نقطه

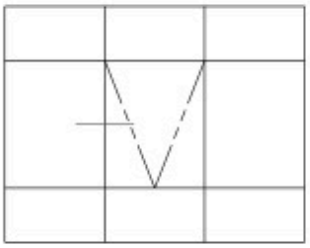
Curtain Wall Thermal Break vertical
opening lock from several points





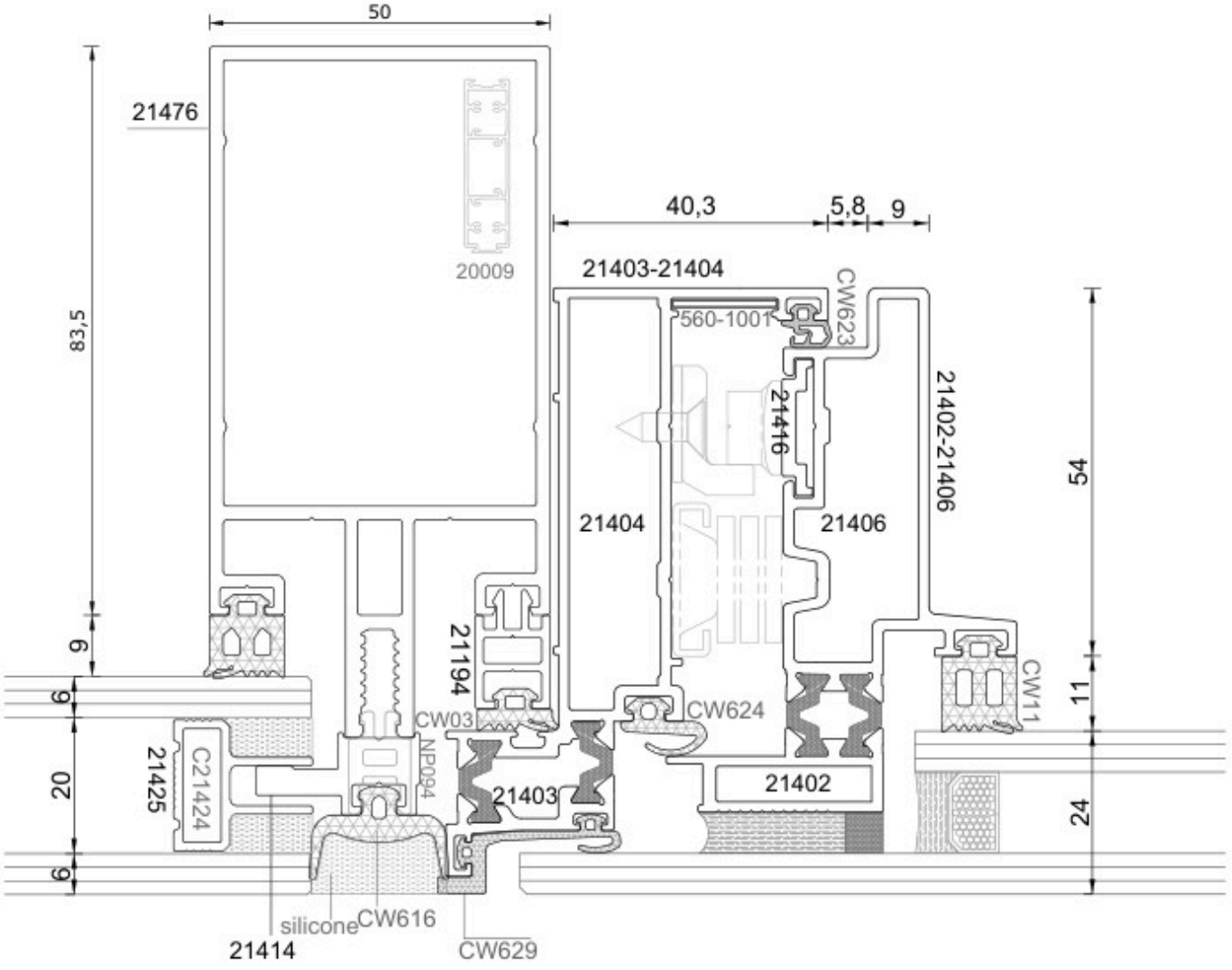
بازشو کرتین والی ترمال بریک افقی قفل از
چند نقطه
Curtain Wall Thermal Break horizontal
opening lock from several points

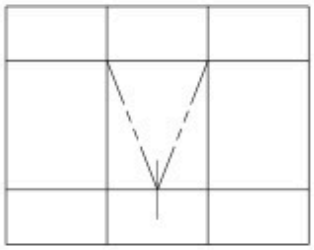




بازشو کرتین والی ترمال بریک عمودی قفل
از چند نقطه

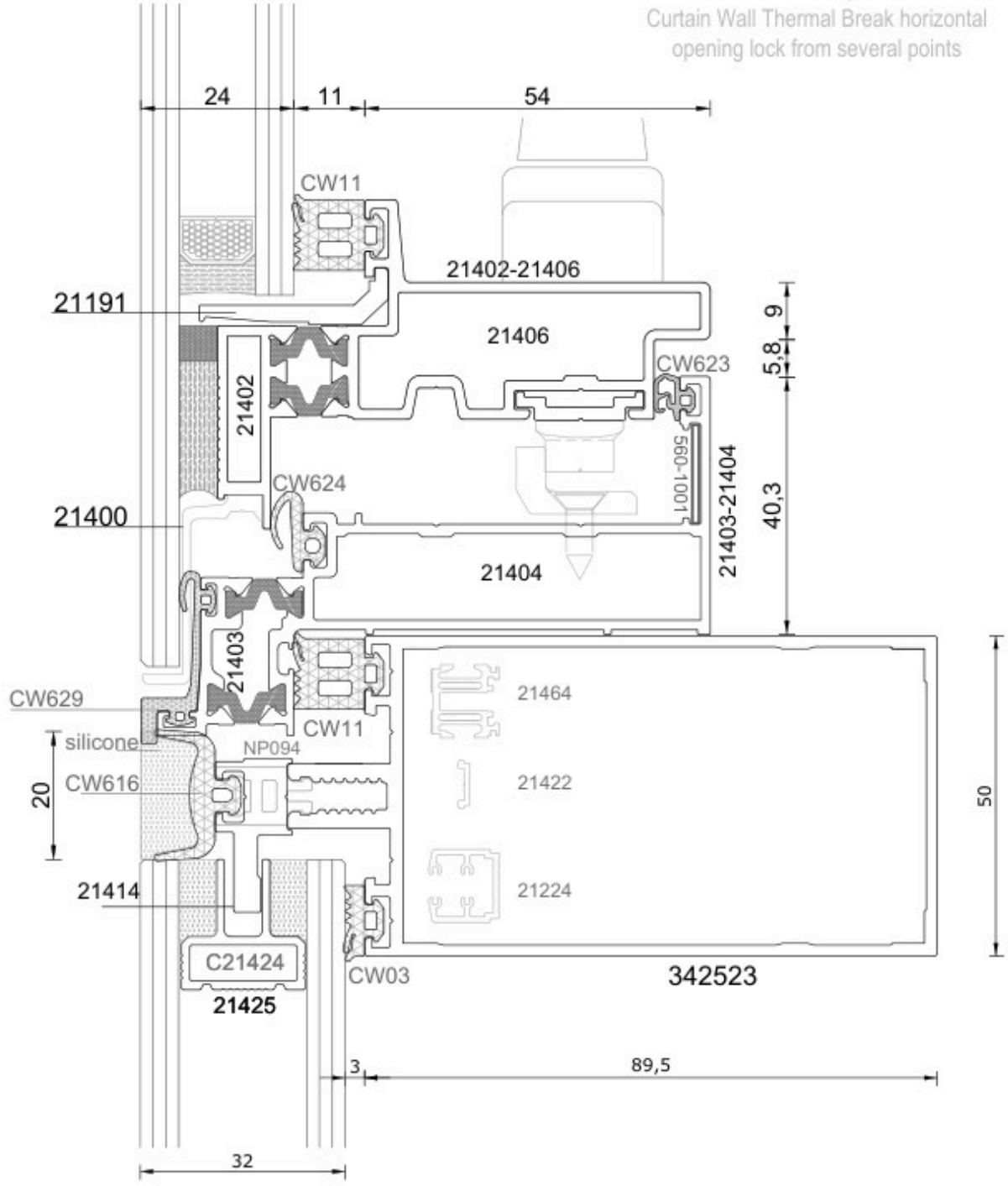
Curtain Wall Thermal Break vertical
opening lock from several points

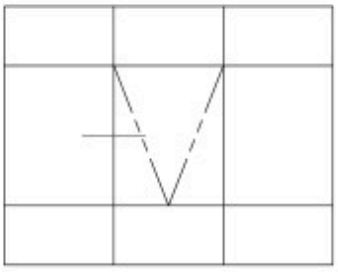




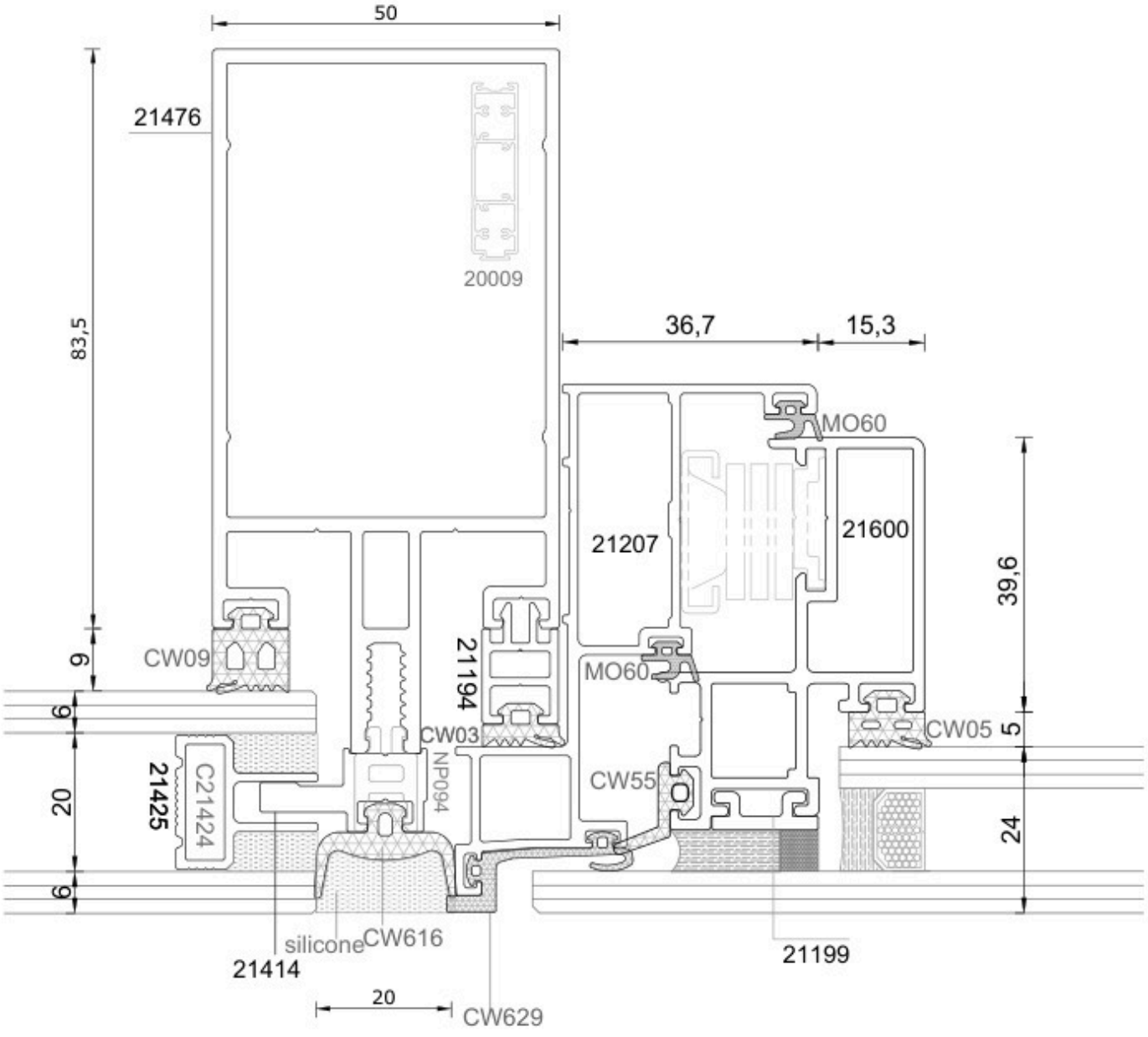
بازشو کرتین والی ترمال بریک افقی قفل از چند نقطه

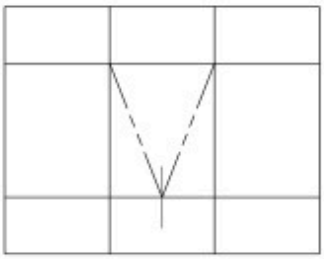
Curtain Wall Thermal Break horizontal opening lock from several points



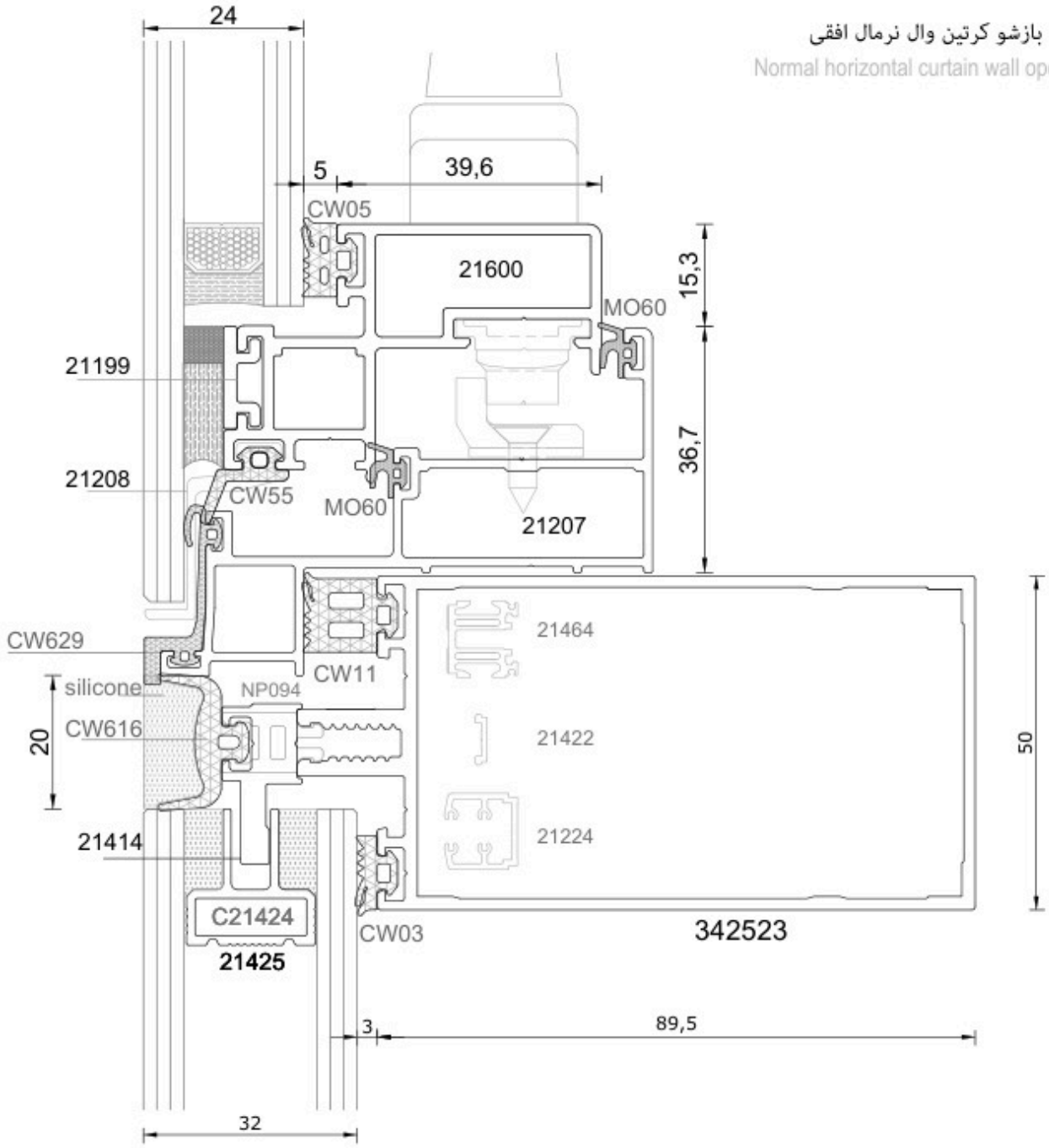


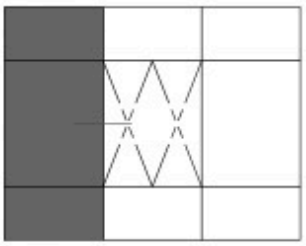
بازشو کرتین والی ترمال بریک عمودی
قفل از چند نقطه
Curtain Wall Thermal Break vertical opening lock from several points



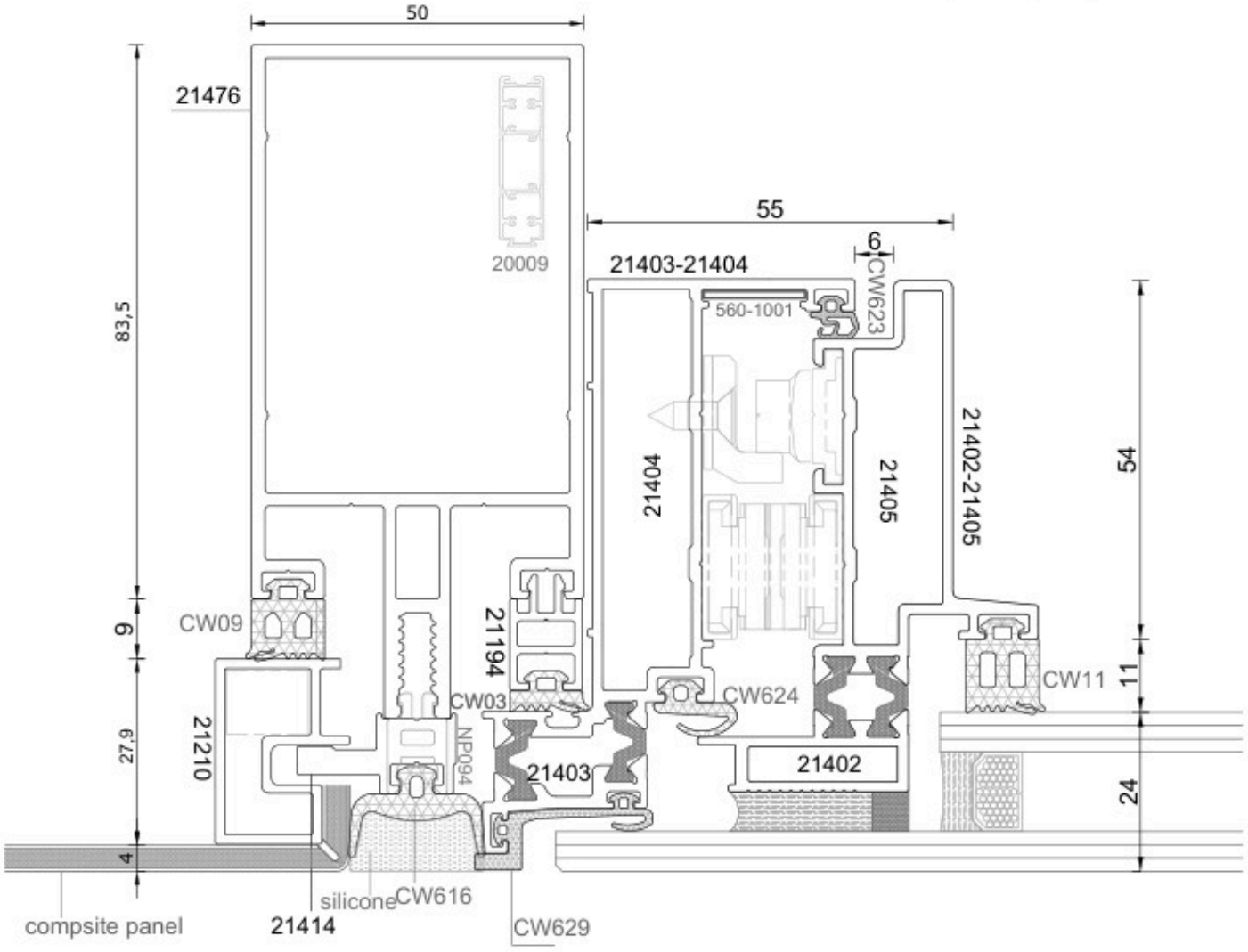


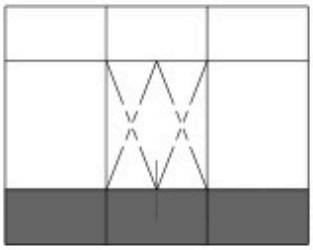
بازشو کرتین وال نرمال افقی
Normal horizontal curtain wall opening



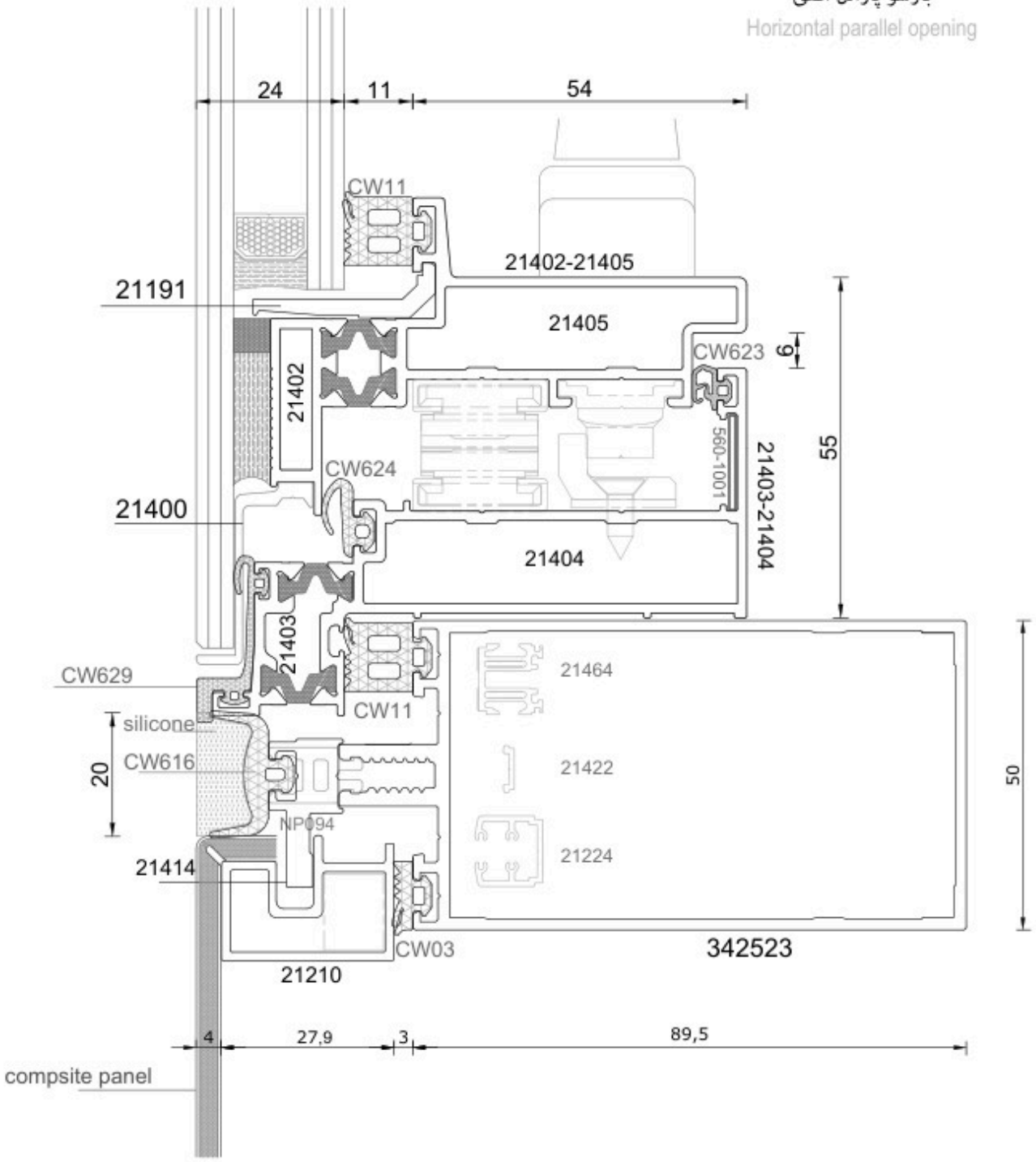


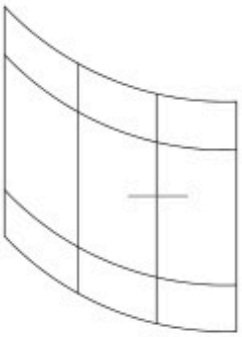
بازشو پارالل عمودی
Vertical parallel opening



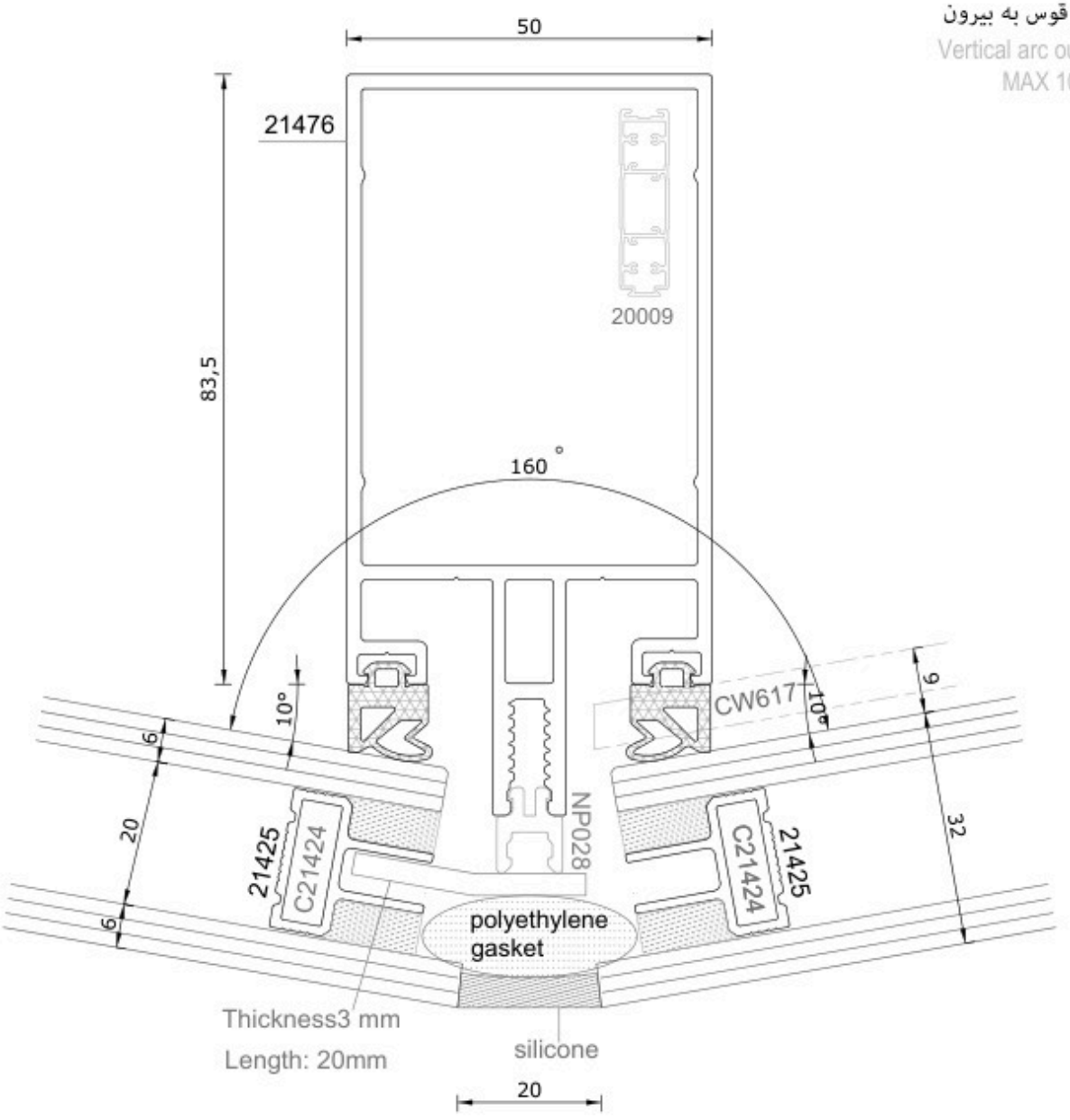


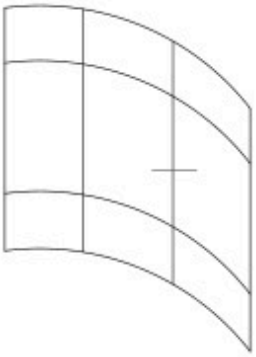
بازشو پارالل افقی
Horizontal parallel opening



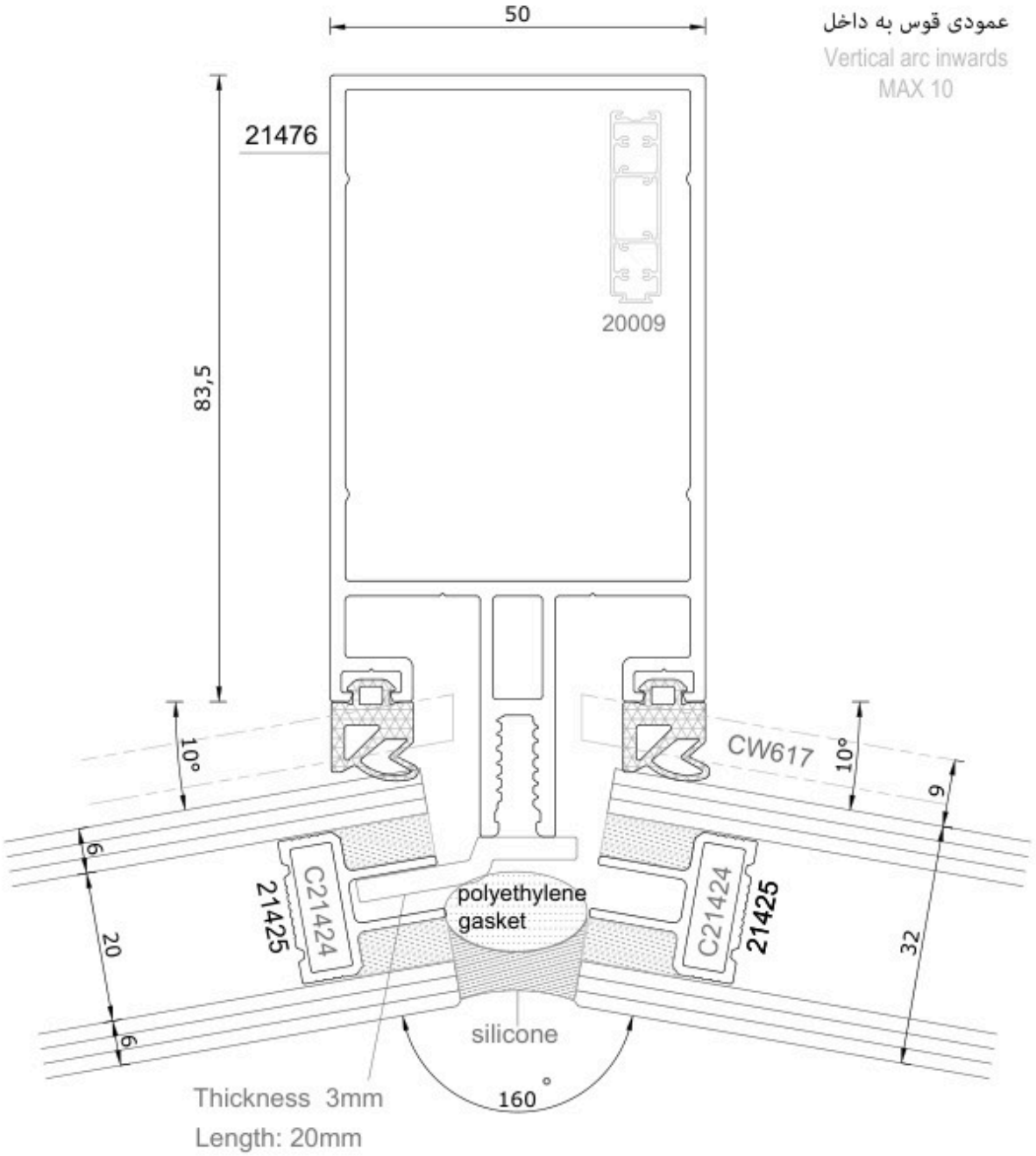


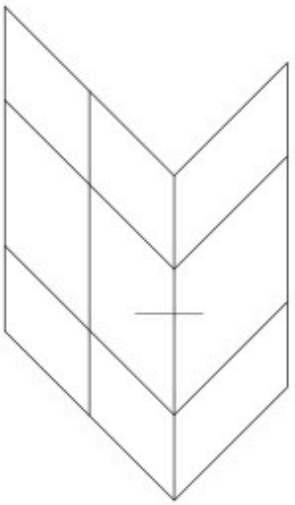
عمودی قوس به بیرون
Vertical arc outwards
MAX 10





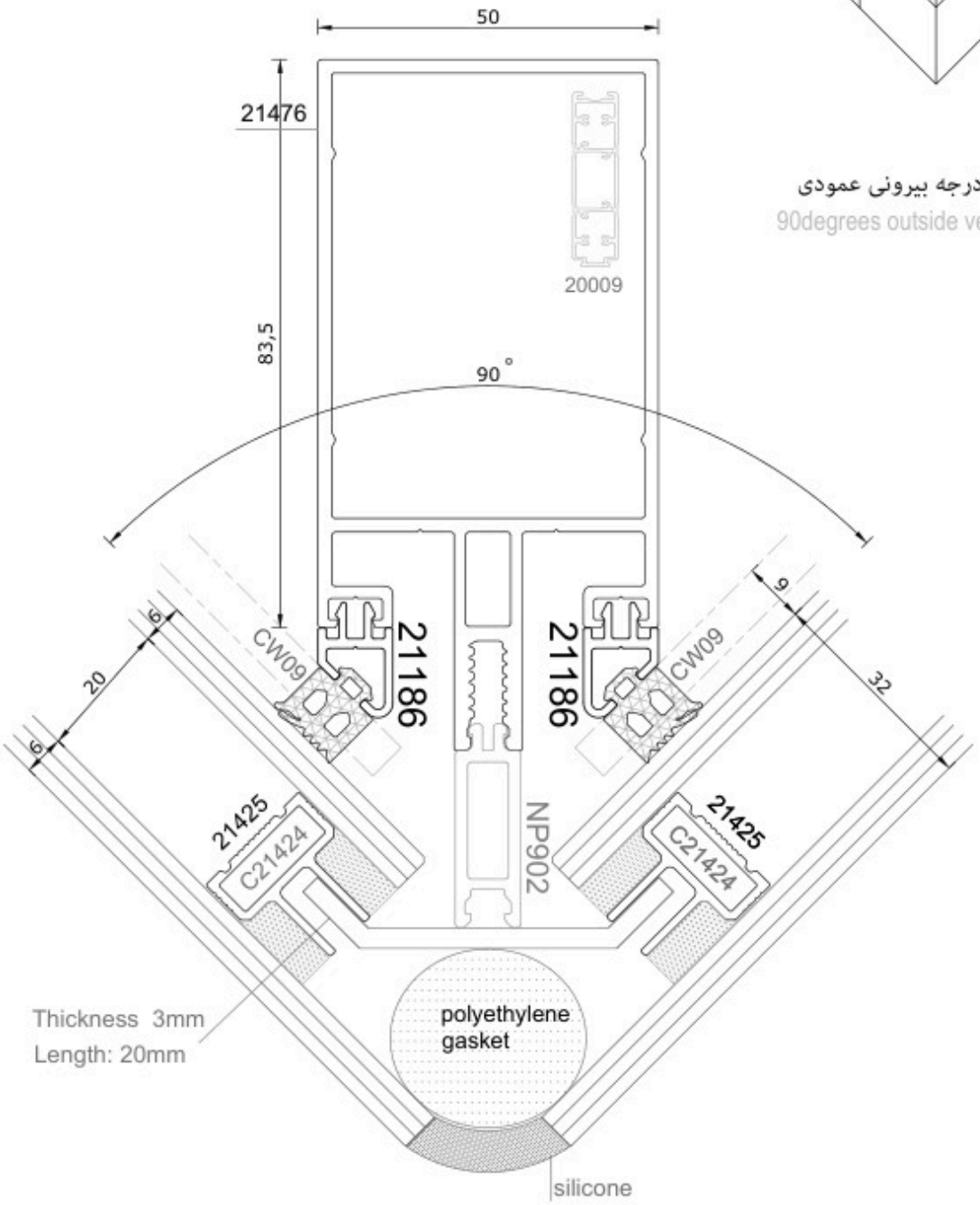
عمودی قوس به داخل
Vertical arc inwards
MAX 10

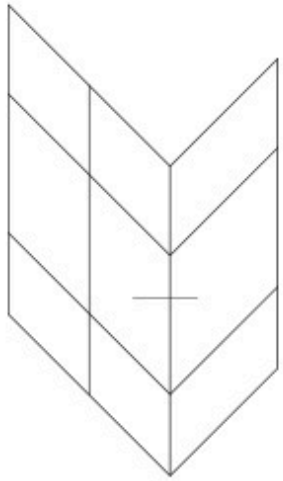




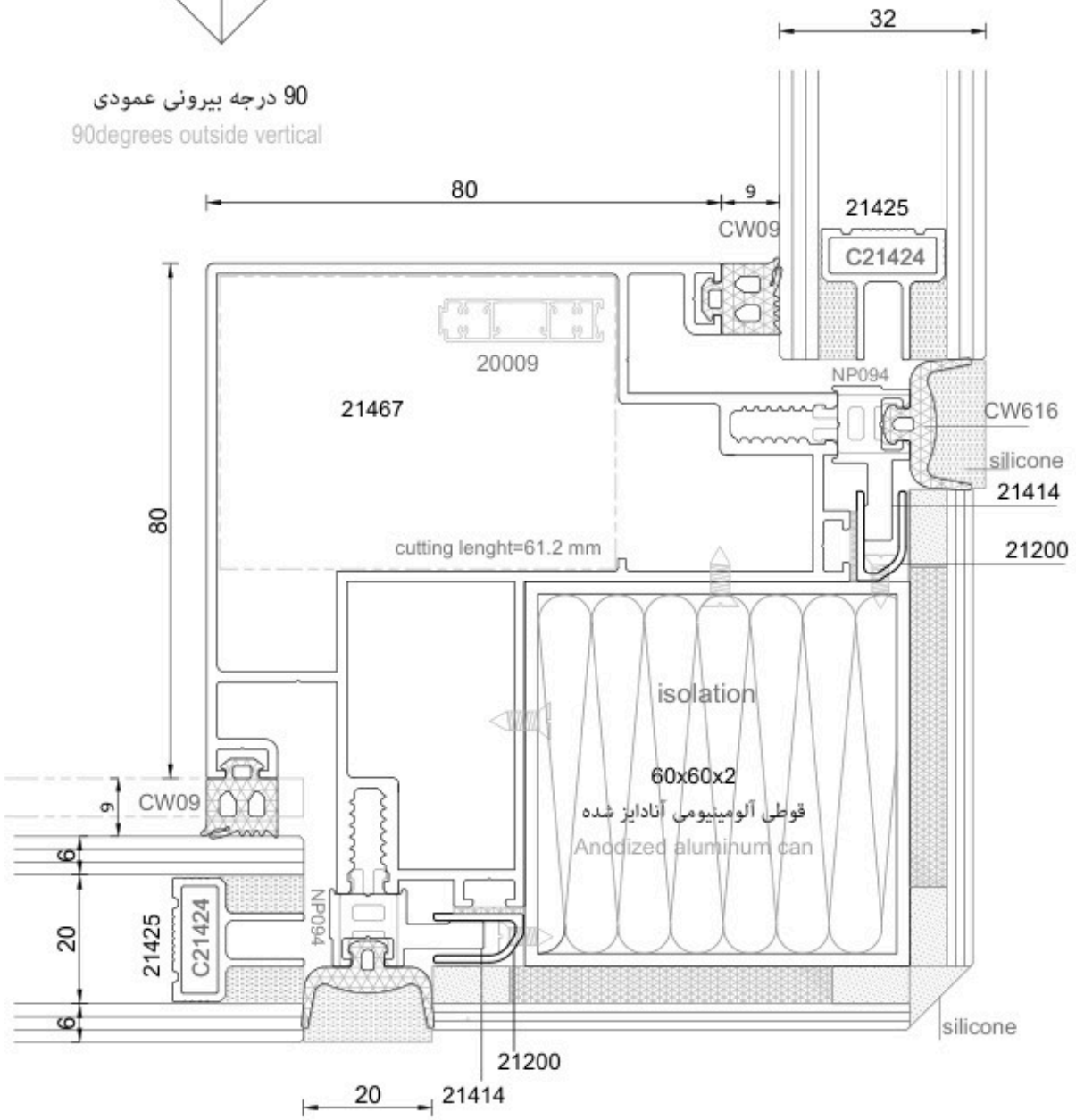
90 درجه بیرونی عمودی

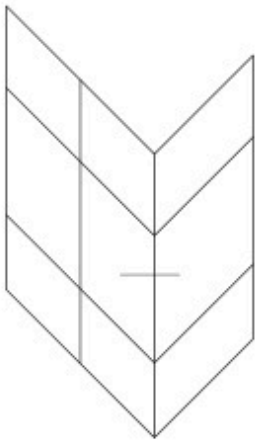
90degrees outside vertical



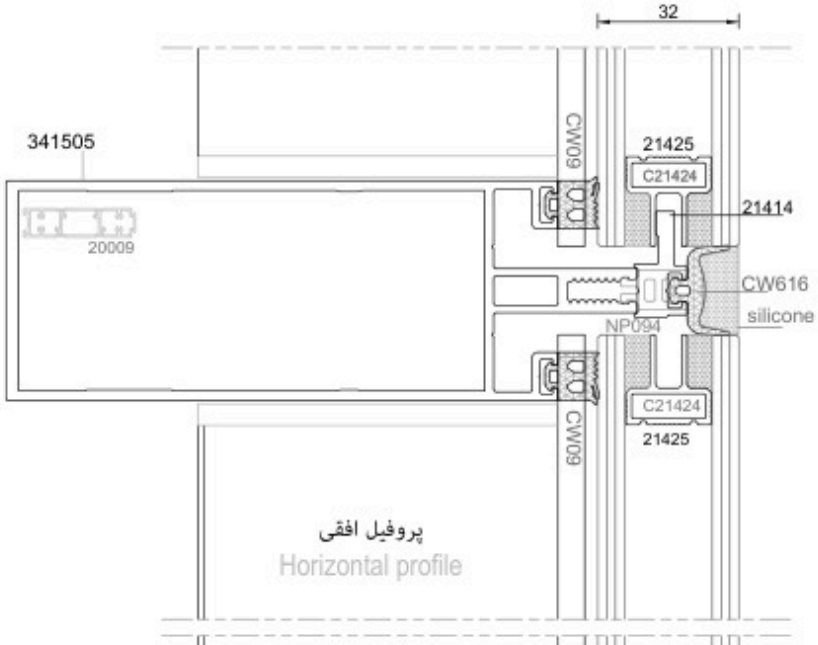


90 درجه بیرونی عمودی
90degrees outside vertical

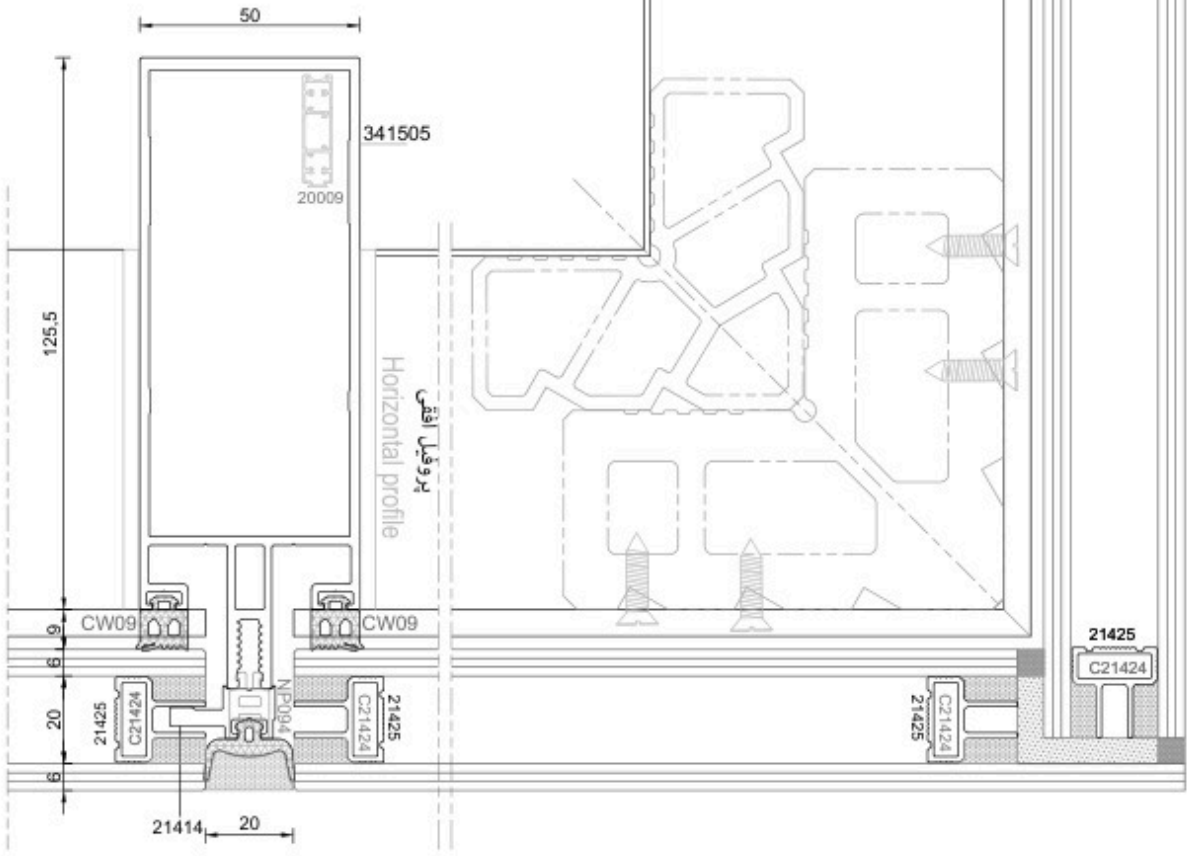




90 درجه بیرونی عمودی
90degrees outside vertical

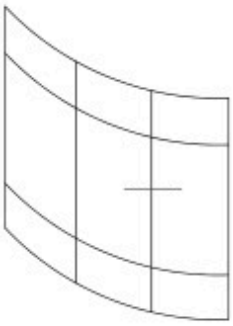


پروفیل افقی
Horizontal profile

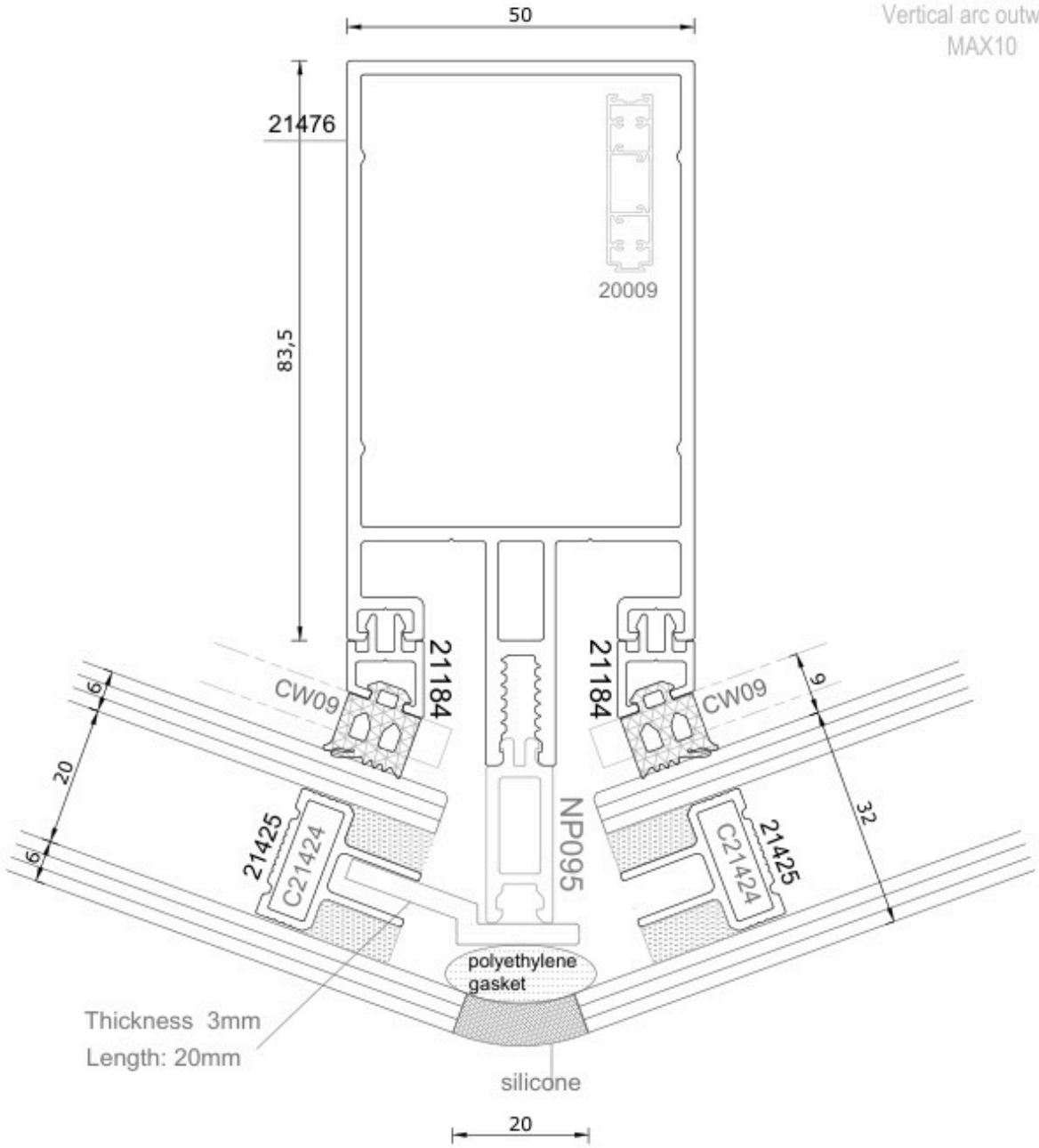


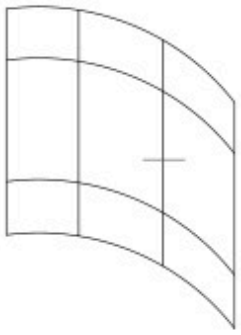


90 درجه داخلی عمودی
90degrees internal vertical

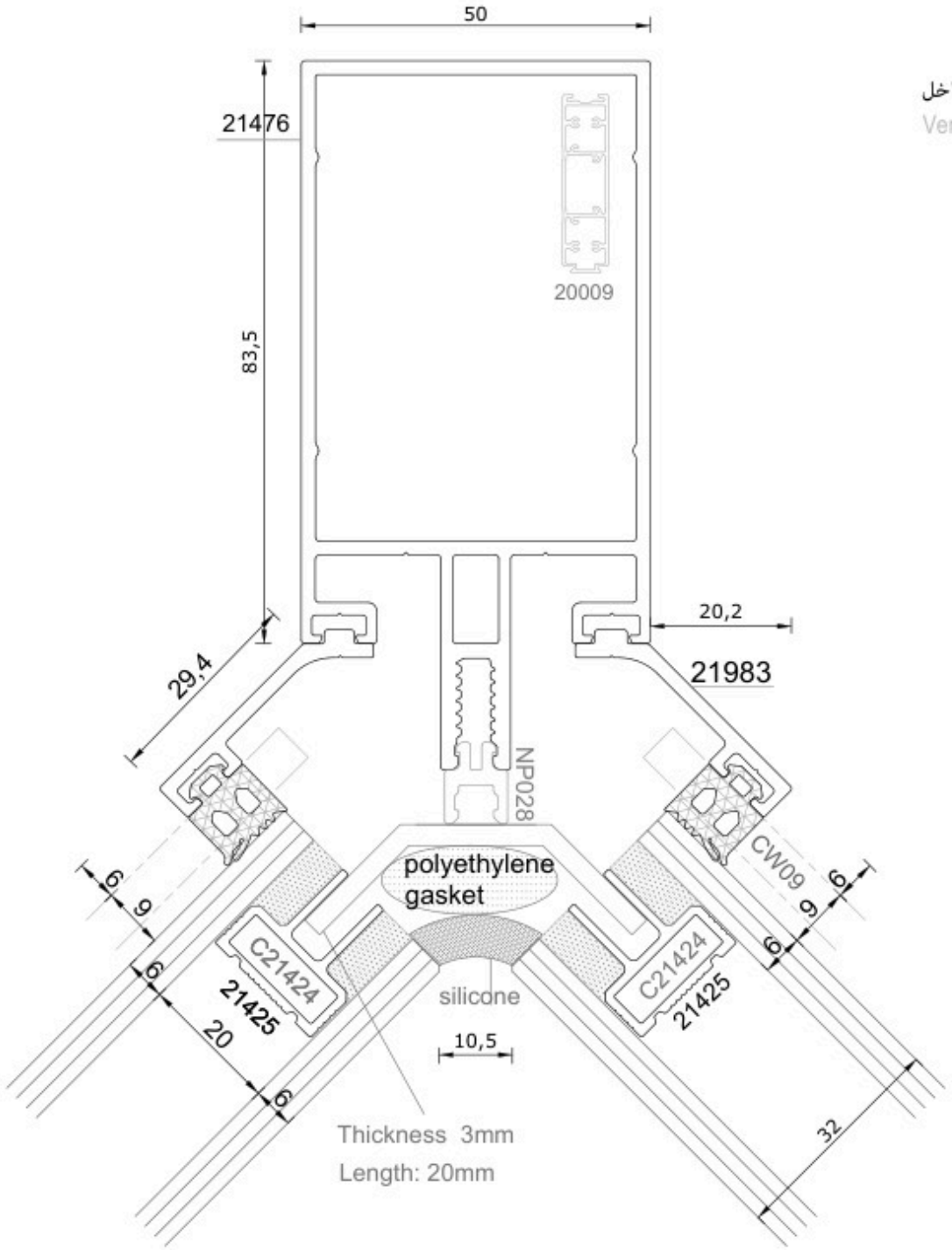


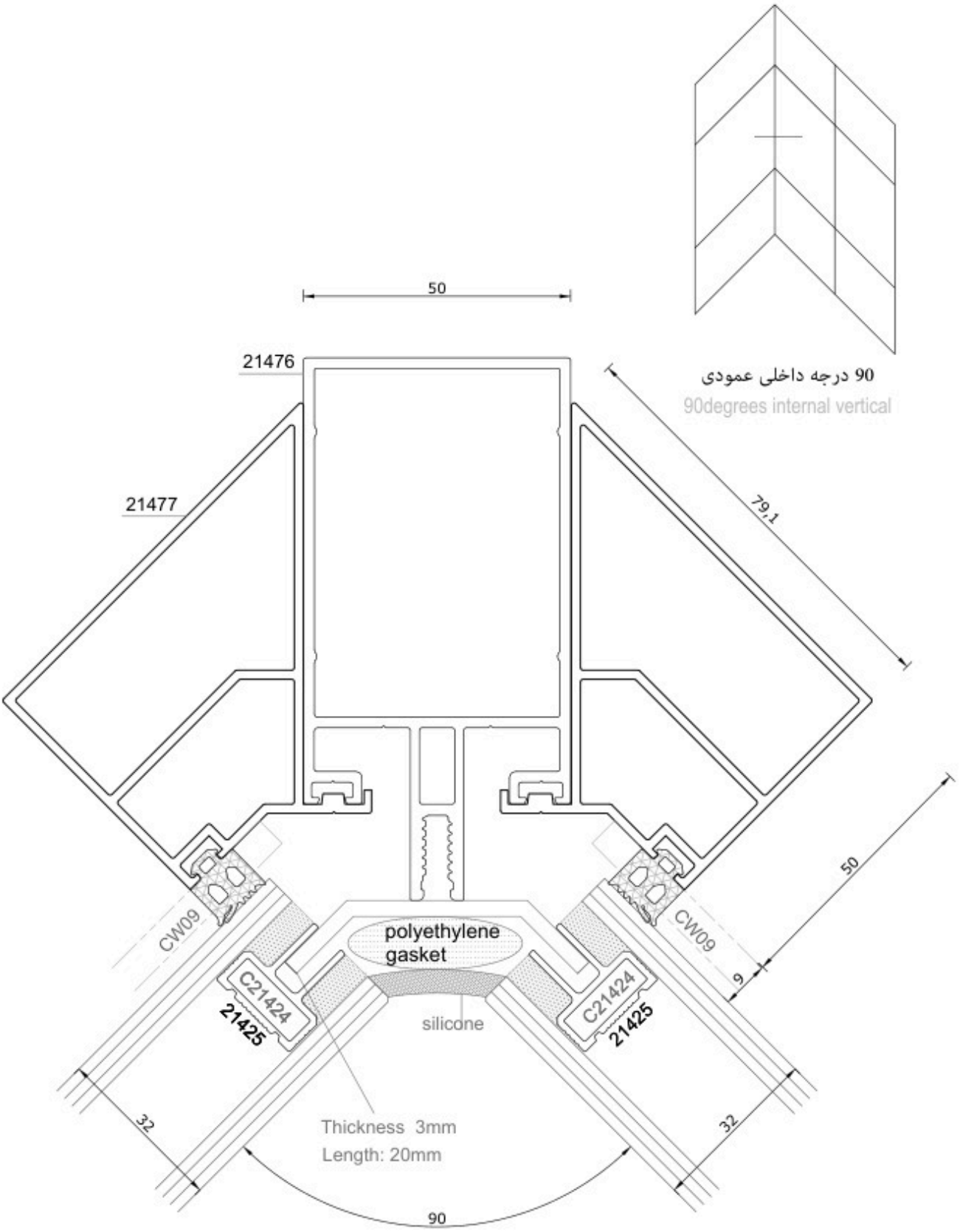
عمودی قوس به بیرون
Vertical arc outwards
MAX10



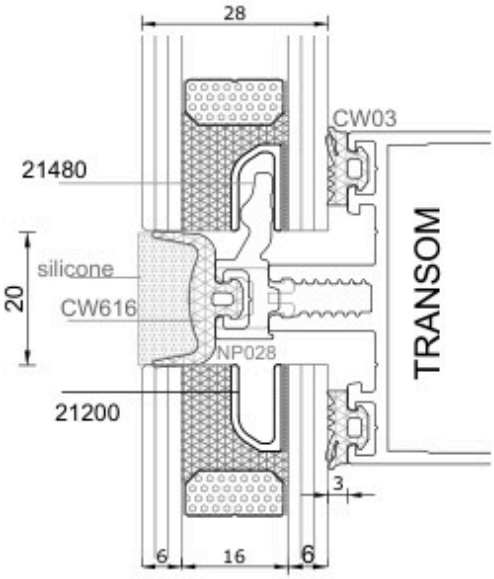


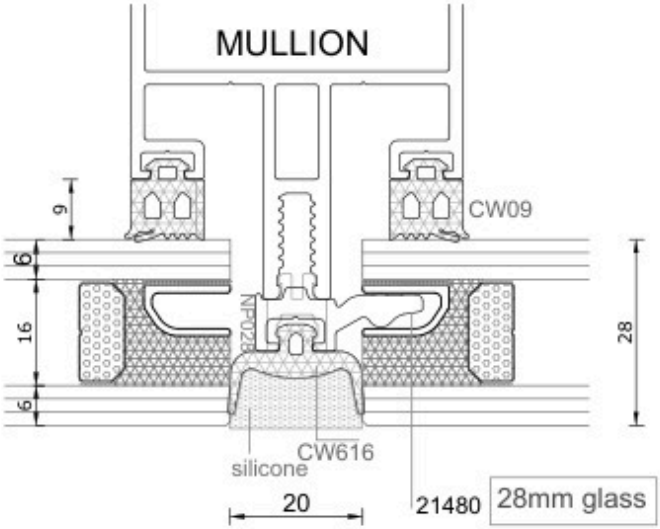
عمودی قوس به داخل
Vertical arc inwards
MAX 10

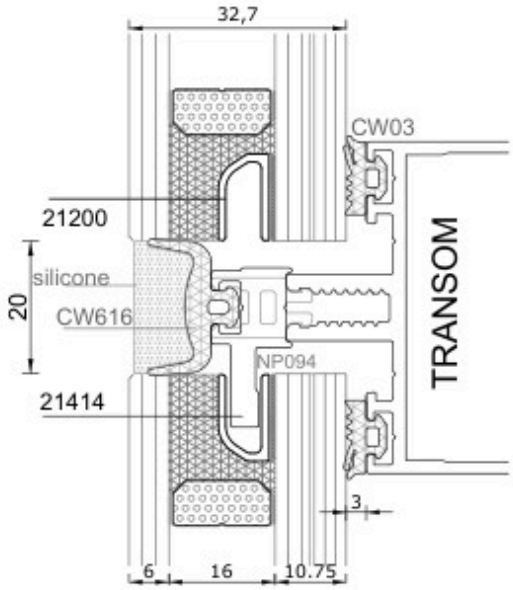


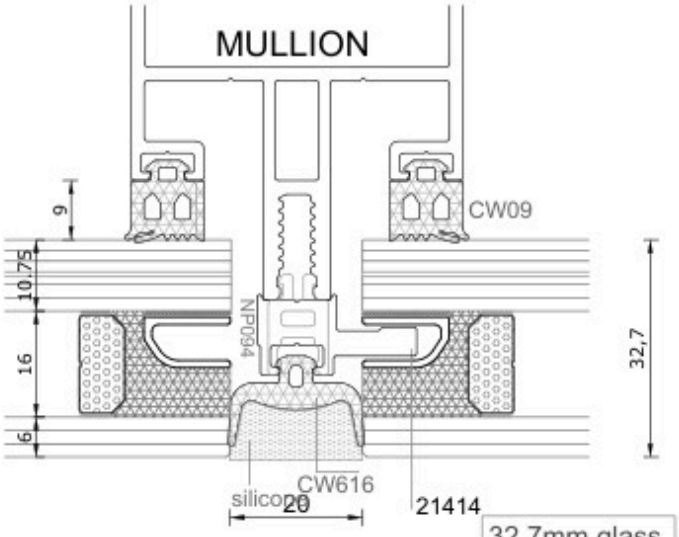

50
21476
21477
79,1
90 درجه داخلی عمودی
90degrees internal vertical
CW09
CW09
polyethylene gasket
silicone
C21424
21425
C21424
21425
50
9
32
32
Thickness 3mm
Length: 20mm
90

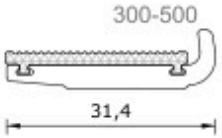
ضخامت شیشه و اسپیسر یوچنل
Glass thickness and U-channel spacer









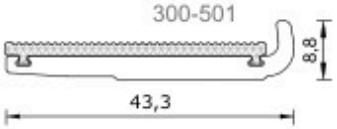


Raw color

20015

glass support pr

0.300kg/m



Raw color

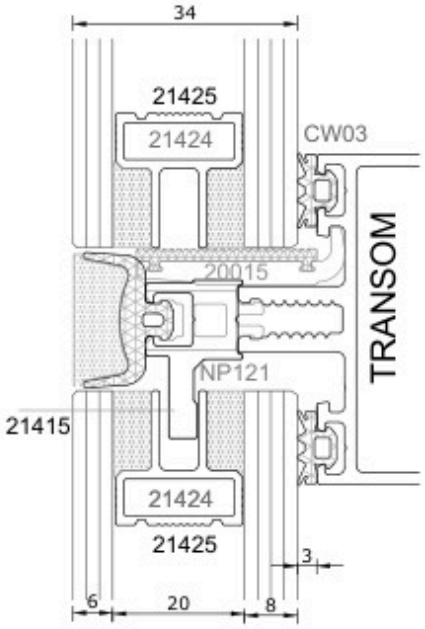
20026

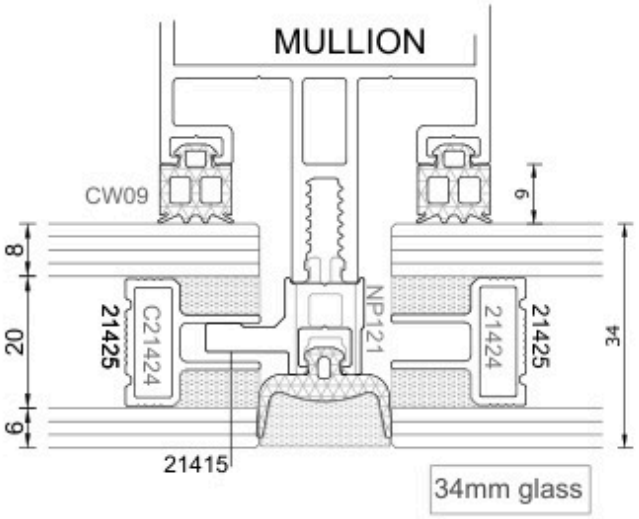
glass support pr

0.420 kg/m

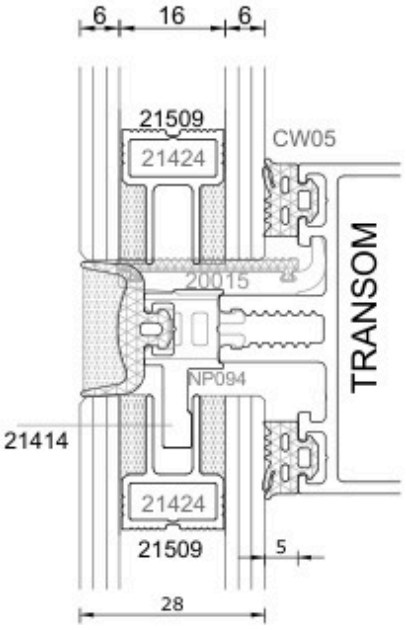
ضخامت شیشه و اسپیسر یوچنل

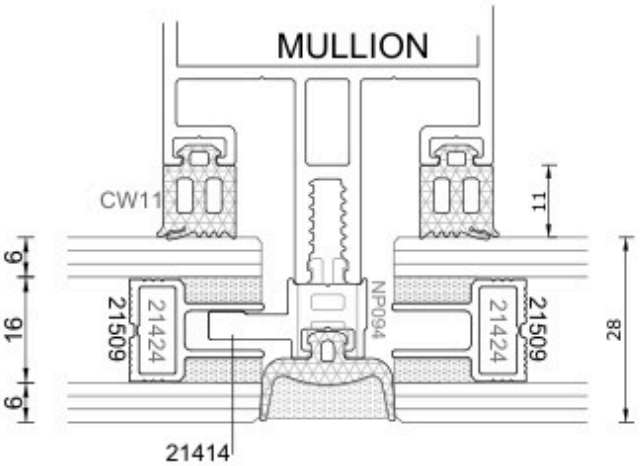
Glass thickness and U-channel spacer



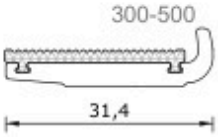


34mm glass





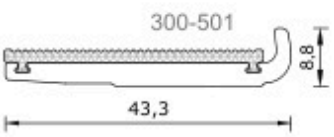
28mm glass



20015 Raw color

glass support pr

0.300kg/m



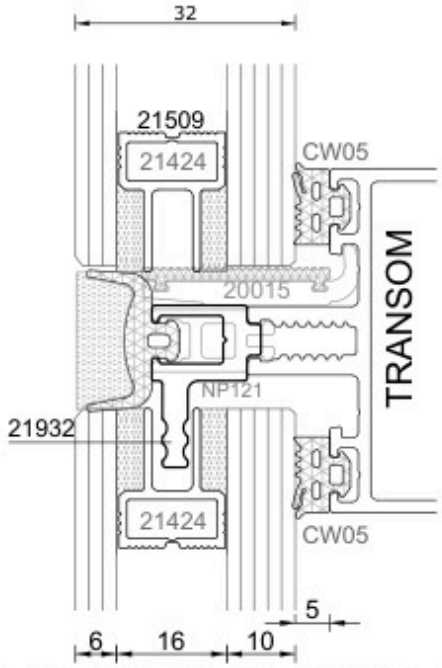
20026 Raw color

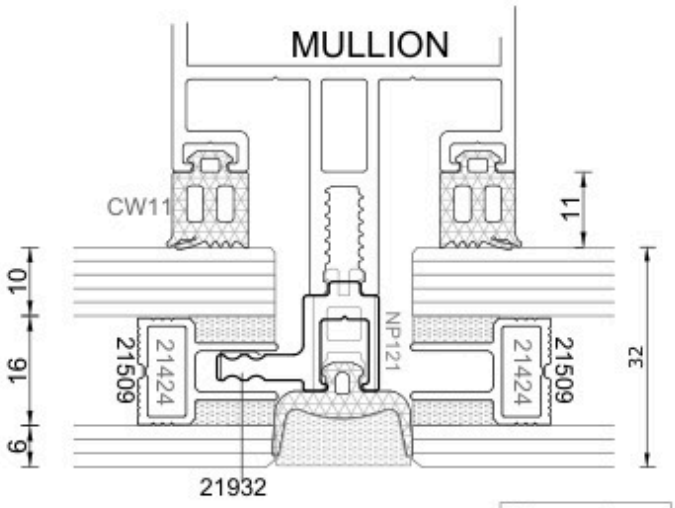
glass support pr

0.420 kg/m

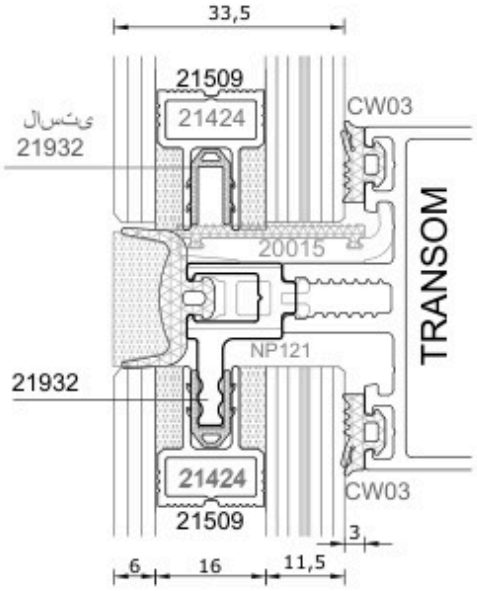
ضخامت شیشه و اسپیسر یوچنل

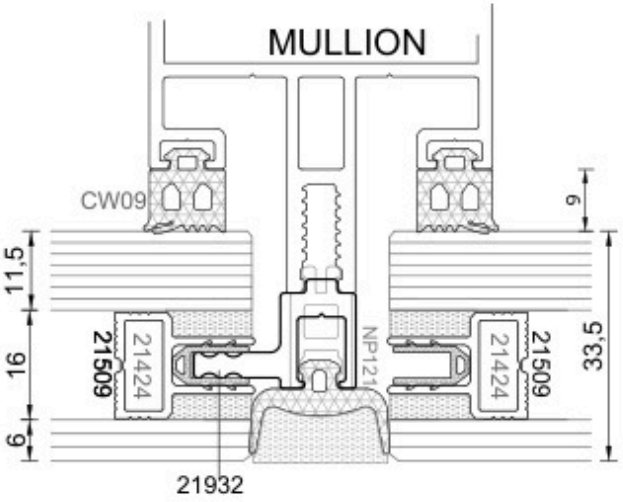
Glass thickness and U-channel spacer



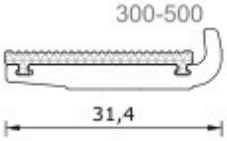


32mm glass





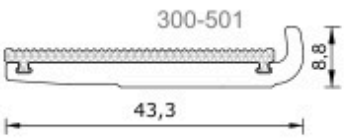
33.5mm glass



20015 Raw color

glass support pr

0.300kg/m



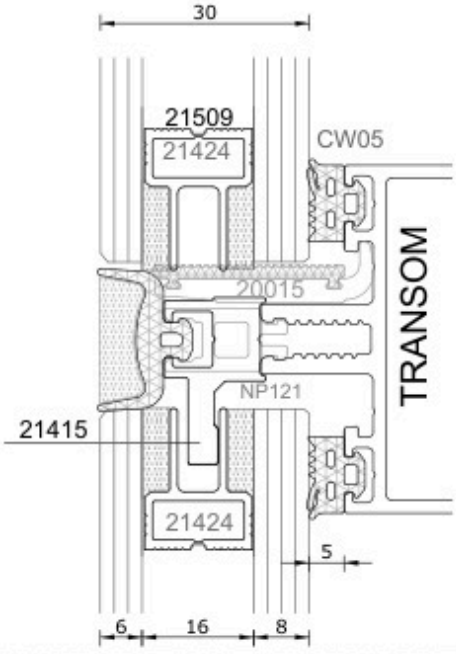
20026 Raw color

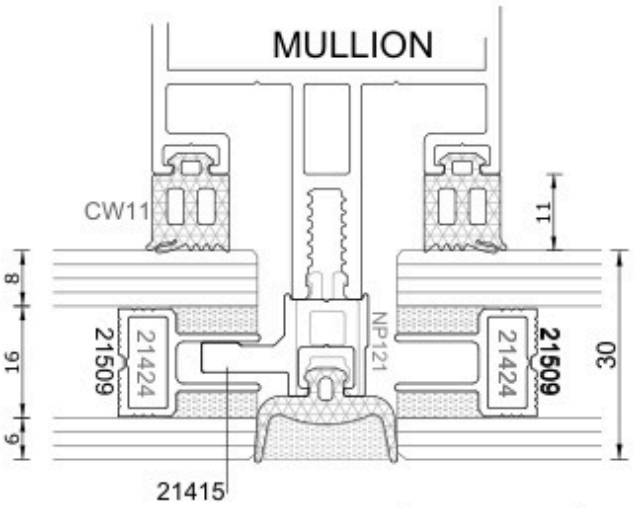
glass support pr

0.420 kg/m

ضخامت شیشه و اسپیسر یوچنل

Glass thickness and U-channel spacer

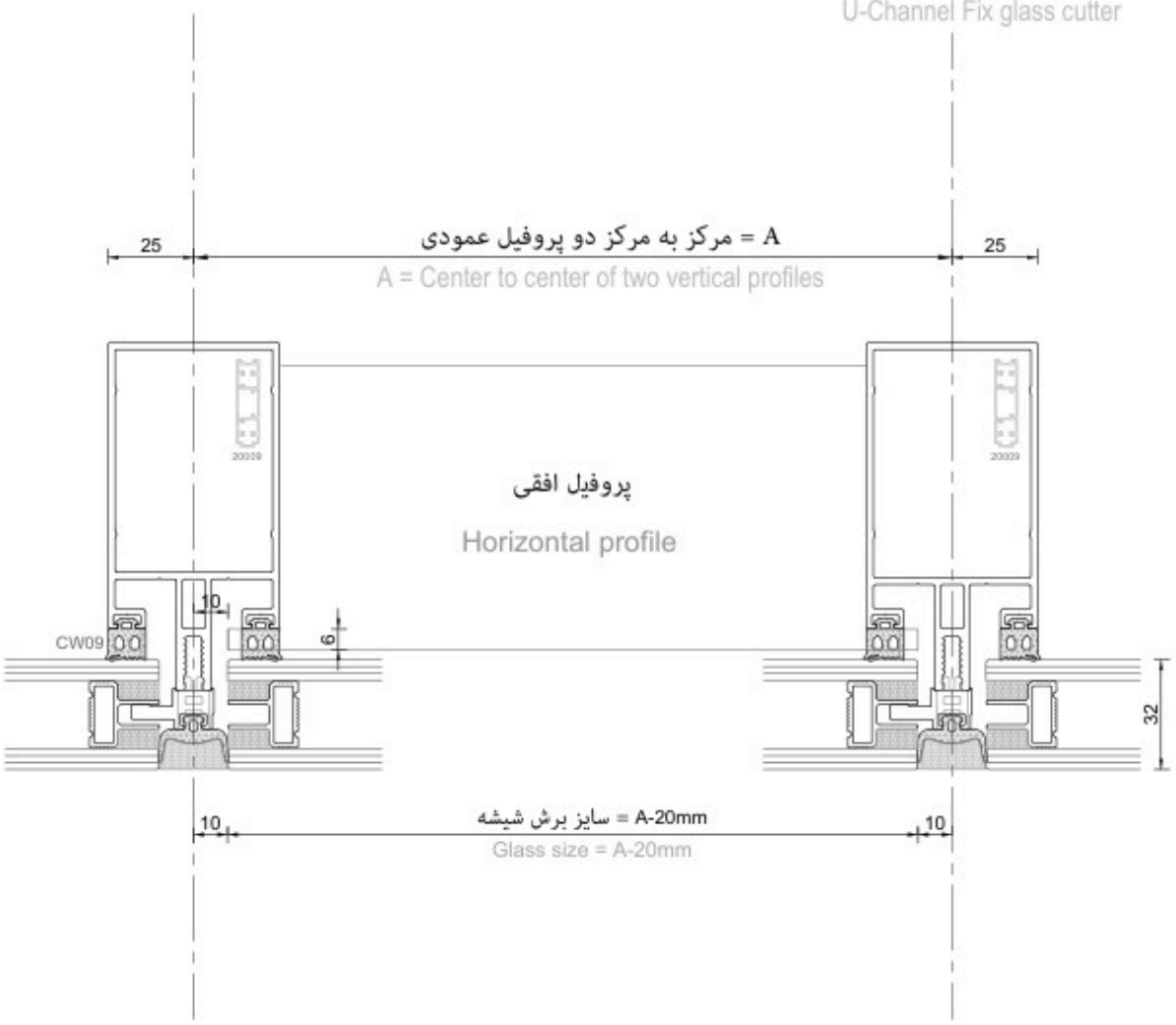


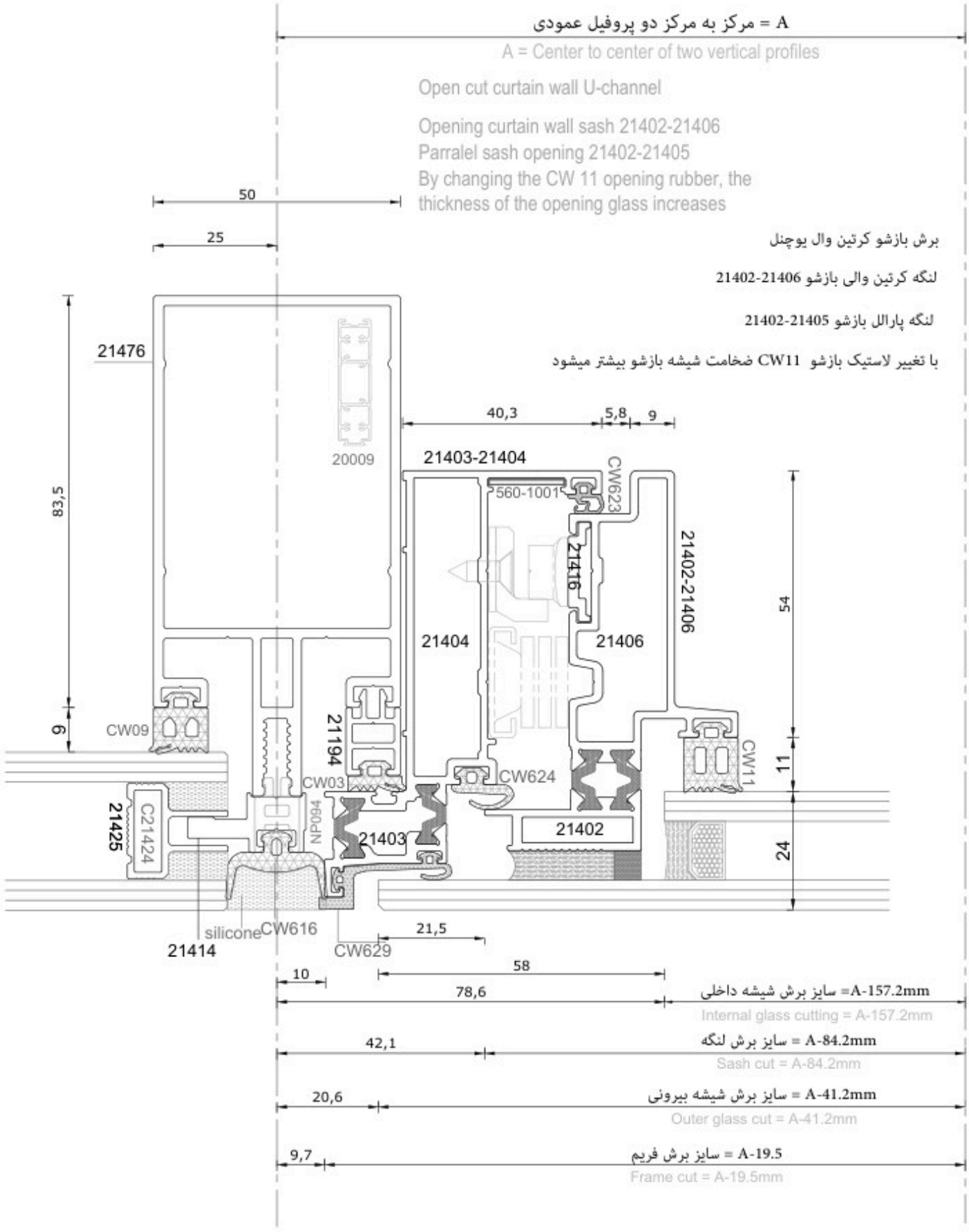


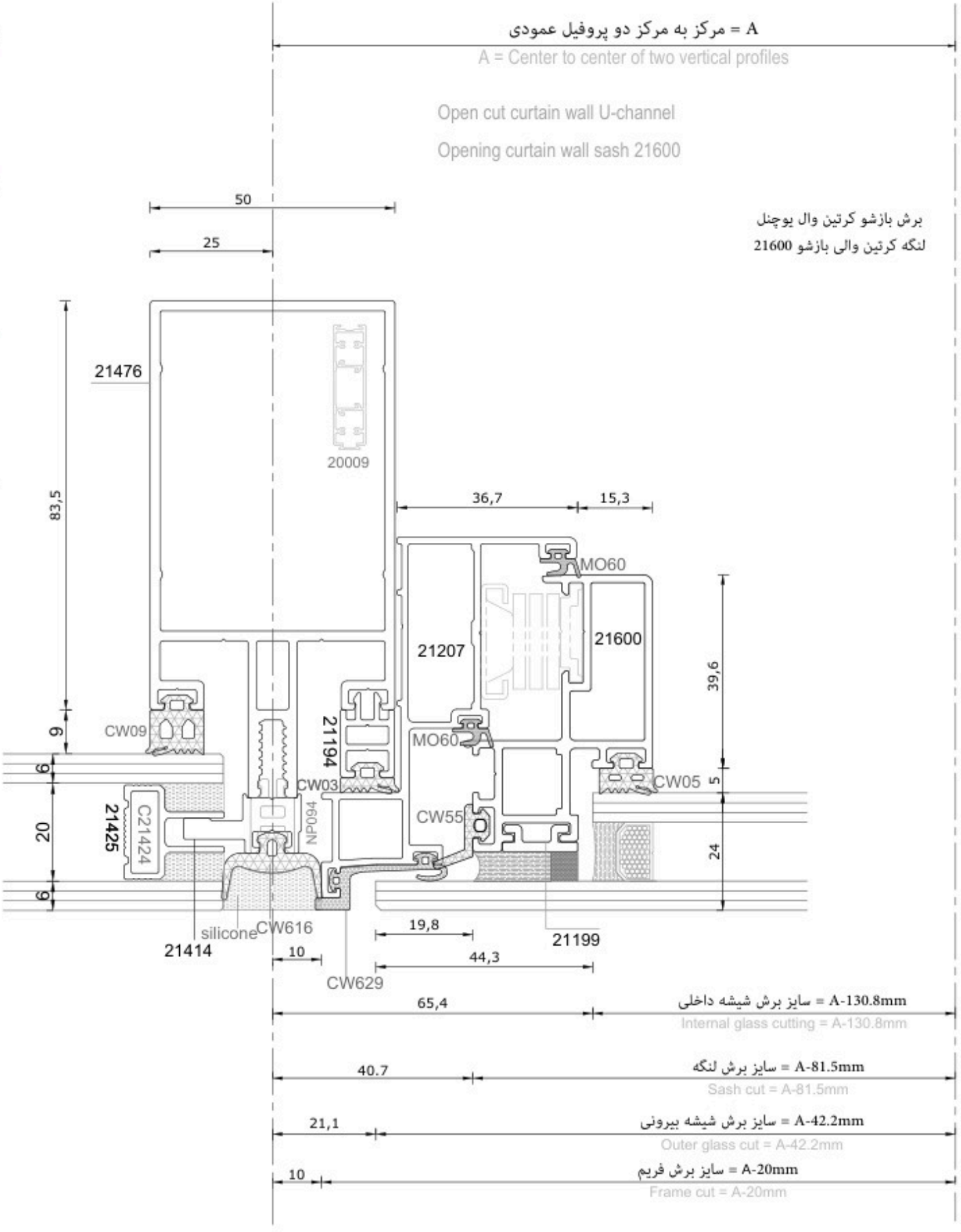
30mm glass

برش شیشه یوچنل فیکس

U-Channel Fix glass cutter

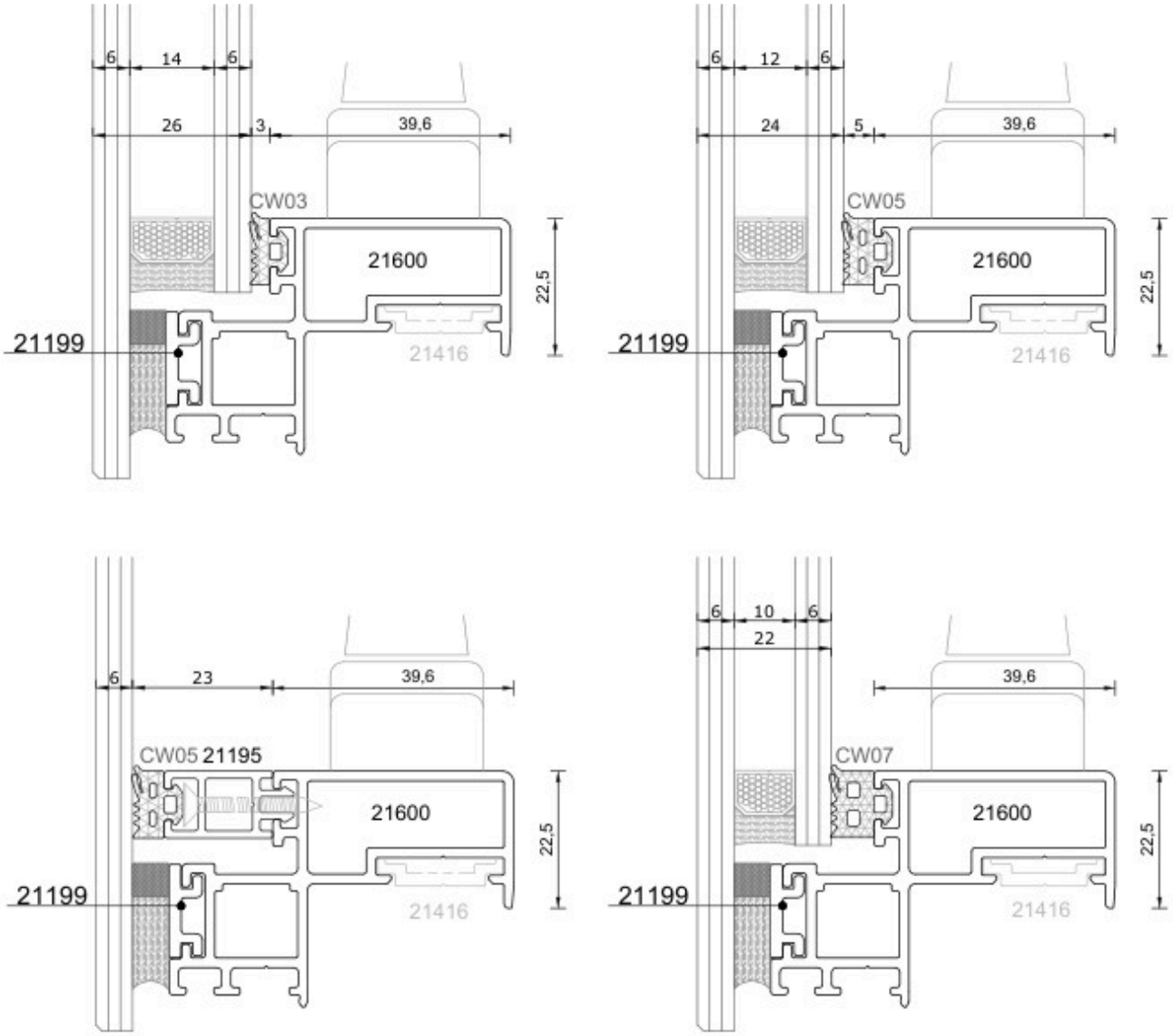



A = مرکز به مرکز دو پروفیل عمودی
A = Center to center of two vertical profiles
Open cut curtain wall U-channel
Opening curtain wall sash 21402-21406
Parralel sash opening 21402-21405
By changing the CW 11 opening rubber, the thickness of the opening glass increases
50
25
برش بازشو کرتین وال یوچنل
لنگه کرتین والی بازشو 21402-21406
لنگه پارالل بازشو 21402-21405
با تغییر لاستیک بازشو CW11 ضخامت شیشه بازشو بیشتر میشود
21476
83,5
6
20009
40,3
5,8
9
21403-21404
560-1001
CW623
21416
21402-21406
21404
21406
54
CW09
21194
CW03
CW624
CW11
11
21425
C21424
NP0494
21403
21402
24
silicone
CW616
21414
CW629
21,5
58
10
78,6
A-157.2mm= سایز برش شیشه داخلی
Internal glass cutting = A-157.2mm
42,1
A-84.2mm = سایز برش لنگه
Sash cut = A-84.2mm
20,6
A-41.2mm = سایز برش شیشه بیرونی
Outer glass cut = A-41.2mm
9,7
A-19.5 = سایز برش فریم
Frame cut = A-19.5mm


A = مرکز به مرکز دو پروفیل عمودی
A = Center to center of two vertical profiles
Open cut curtain wall U-channel
Opening curtain wall sash 21600
برش بازشو کرتین وال یوچنل
لنگه کرتین والی بازشو 21600
50
25
21476
20009
83,5
36,7
15,3
MO60
21207
21600
39,6
6
CW09
21194
MO60
9
CW03
CW05
5
9
21425
C21424
NP094
CW55
20
24
9
silicone
CW616
21414
10
19,8
44,3
21199
CW629
65,4
A-130.8mm = سایز برش شیشه داخلی
Internal glass cutting = A-130.8mm
40.7
A-81.5mm = سایز برش لنگه
Sash cut = A-81.5mm
21,1
A-42.2mm = سایز برش شیشه بیرونی
Outer glass cut = A-42.2mm
10
A-20mm = سایز برش فریم
Frame cut = A-20mm

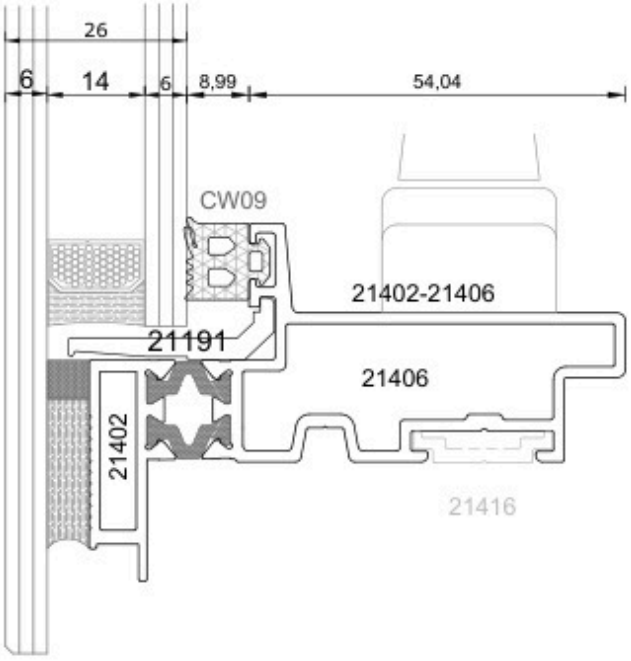
اندازه ضخامت شیشه در بازشو 21600

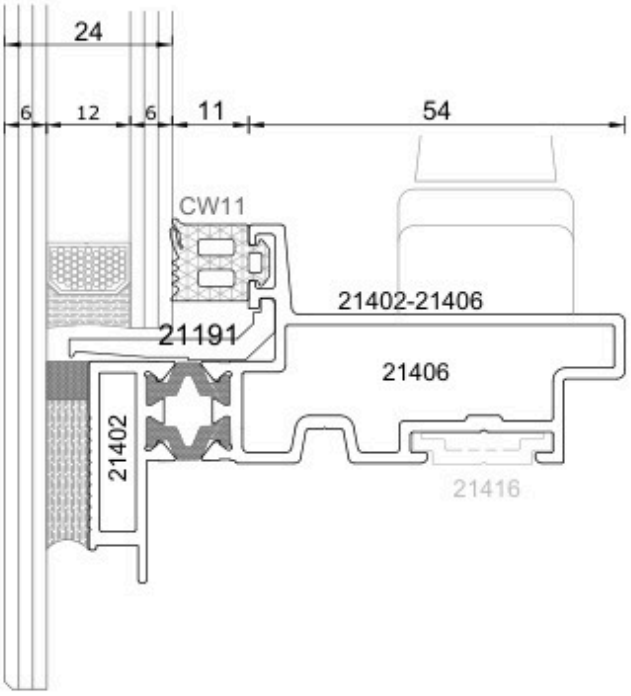
The thickness of the glass in the opening is 21600

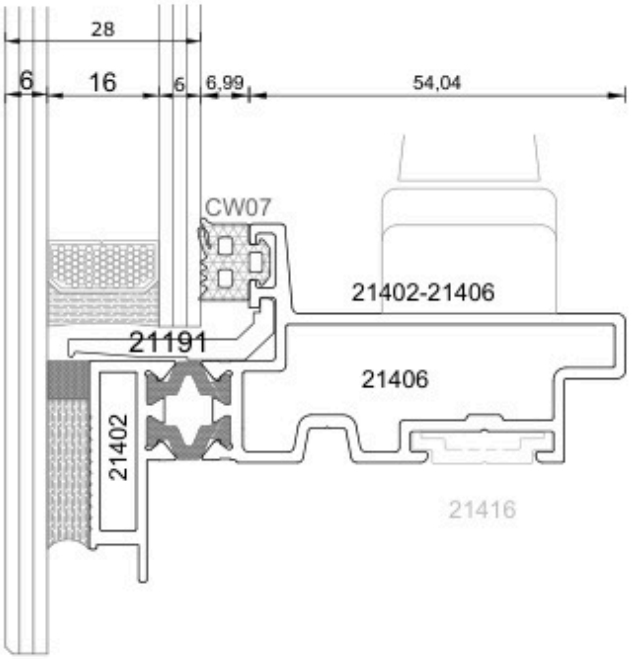


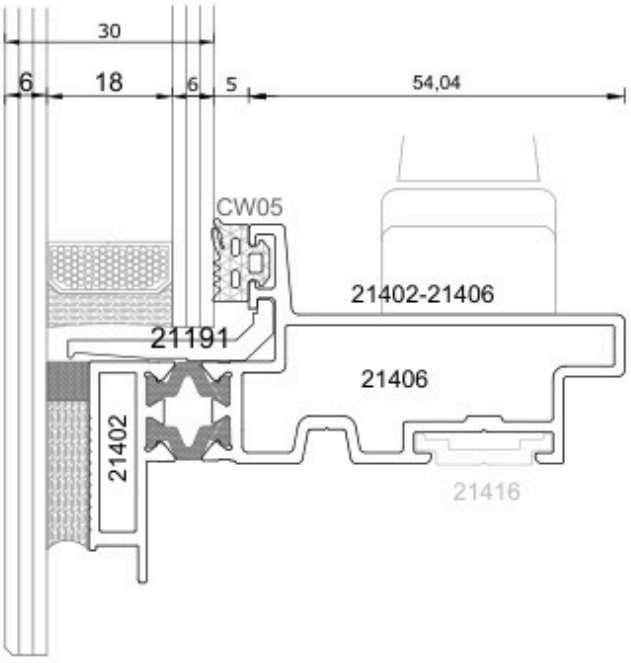
اندازه ضخامت شیشه در بازشو 21402-21406/21402-21405

The thickness of the glass in the opening is 21402-21406 / 21402-21405



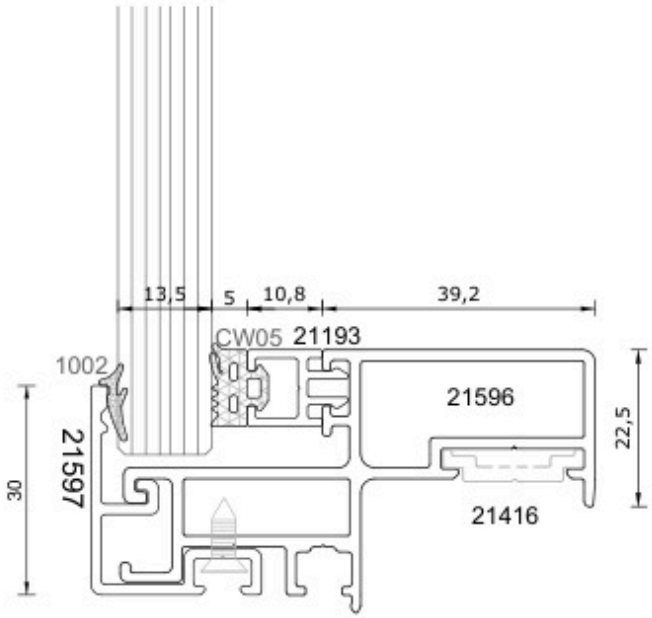


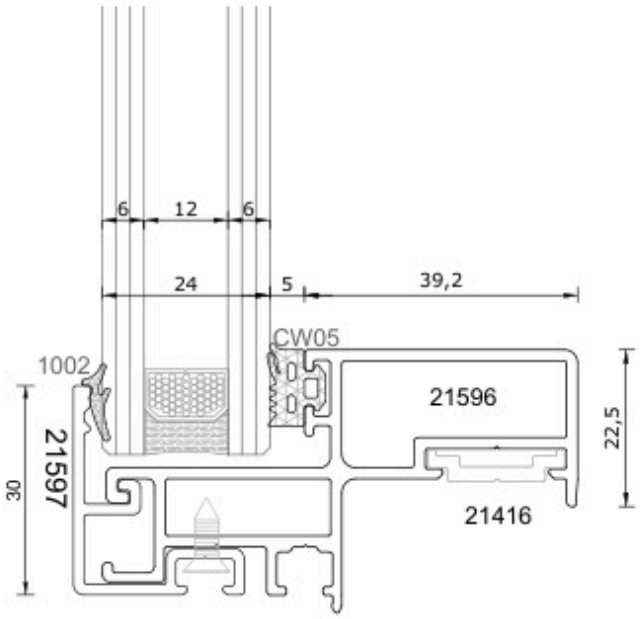


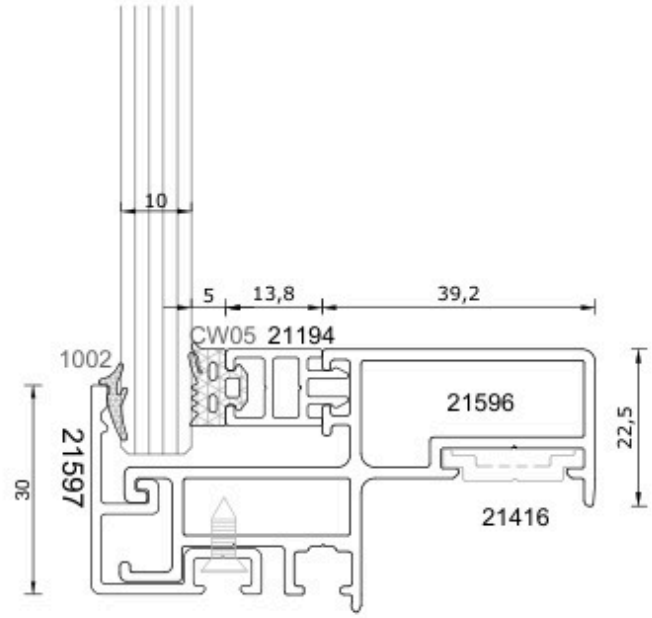


اندازه ضخامت شیشه در بازشو 21596

The thickness of the glass in the opening is 21596

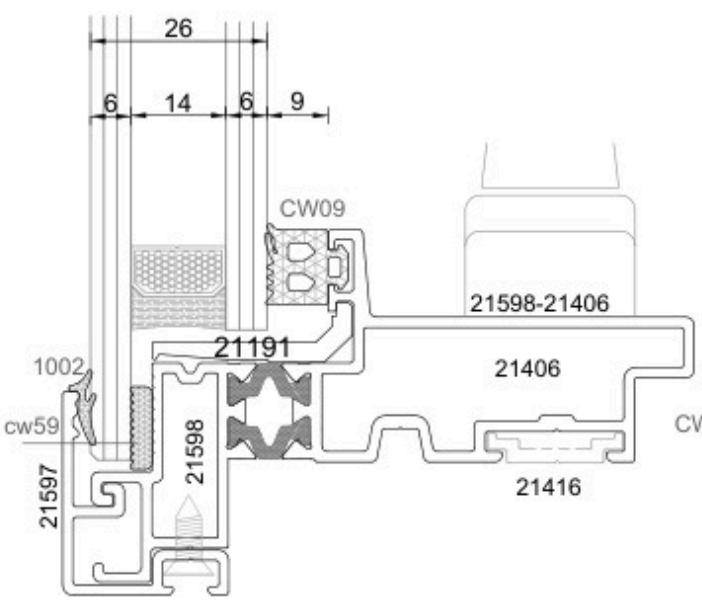


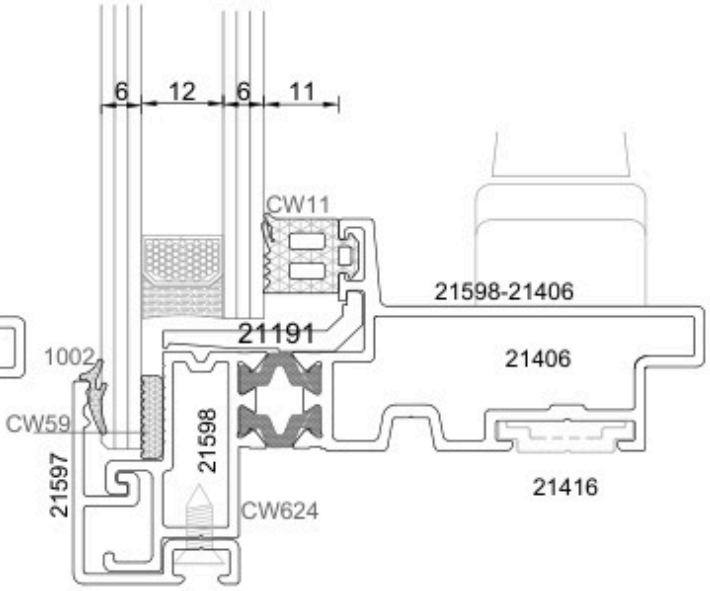


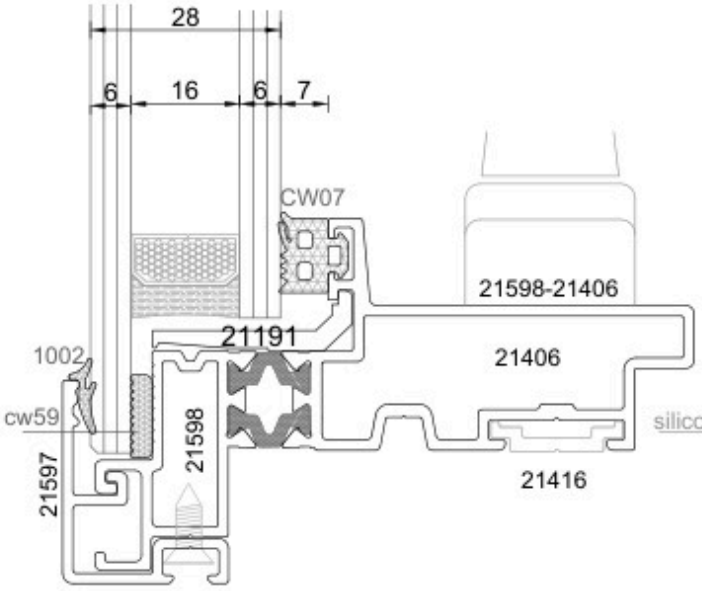


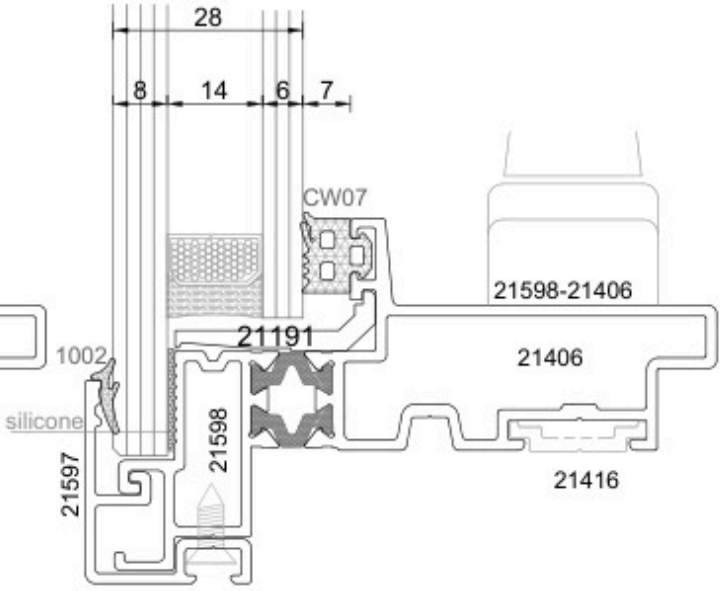
اندازه ضخامت شیشه در بازشو 21598-21406/21598-21405

The thickness of the glass in the opening is 21598-21406 / 21598-21405

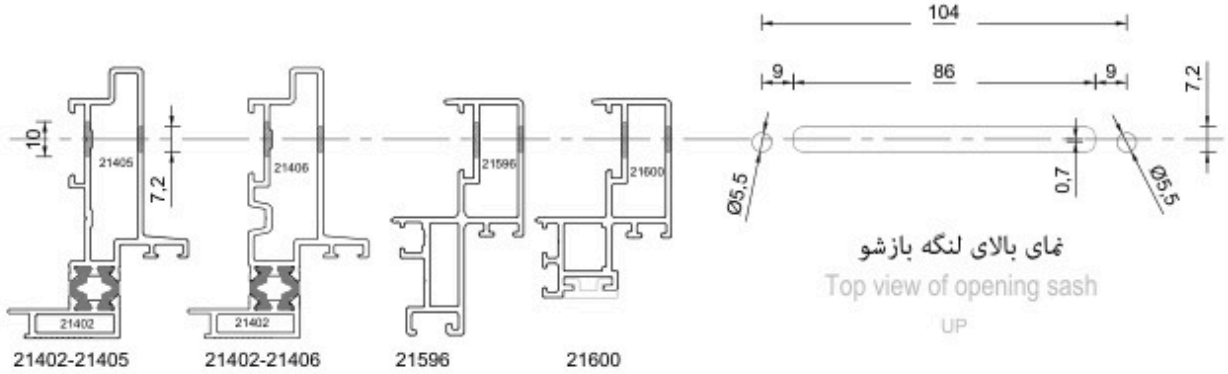








CUTTING ASSEMBLY DRAWING

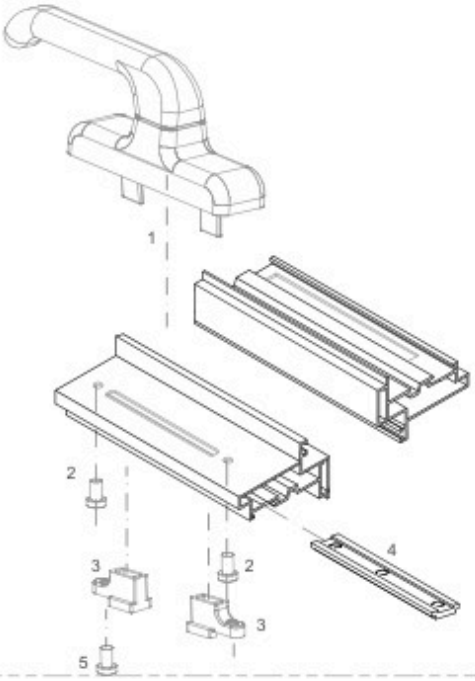


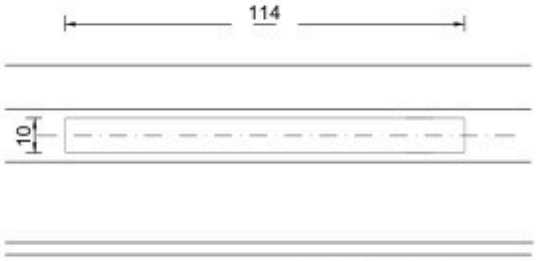
21402-21405 21402-21406 21596 21600

نمای بالای لنگه بازشو

Top view of opening sash

UP





نمای پایین لنگه بازشو

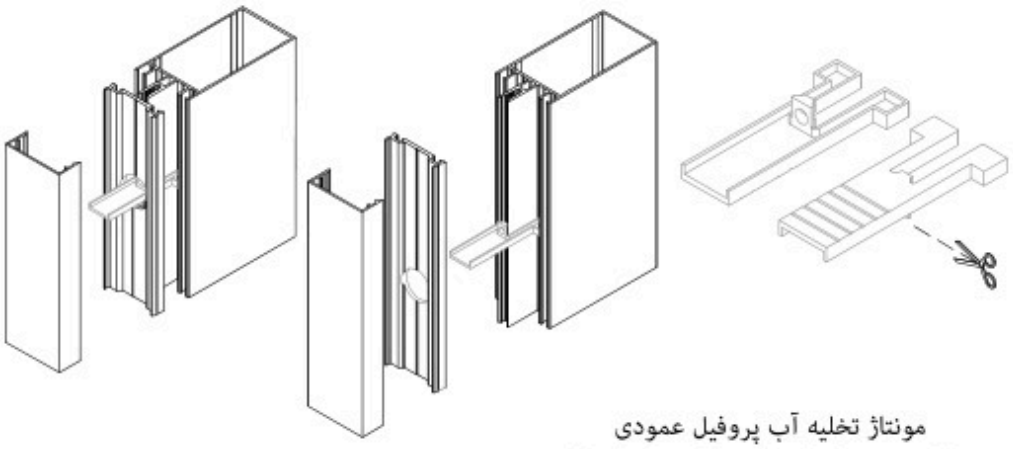
Bottom view of the opening sash

BOTTOM

مراحل مونتاژ دستگیره کرتین وال

Curtain wall handle assembly steps

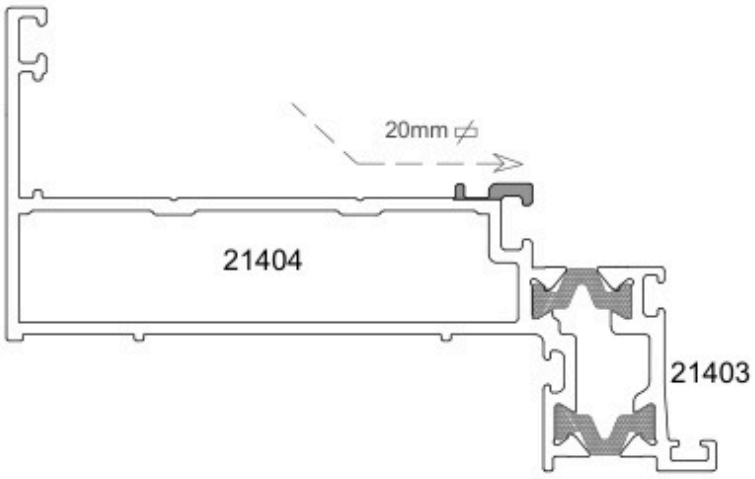
assembly sequence

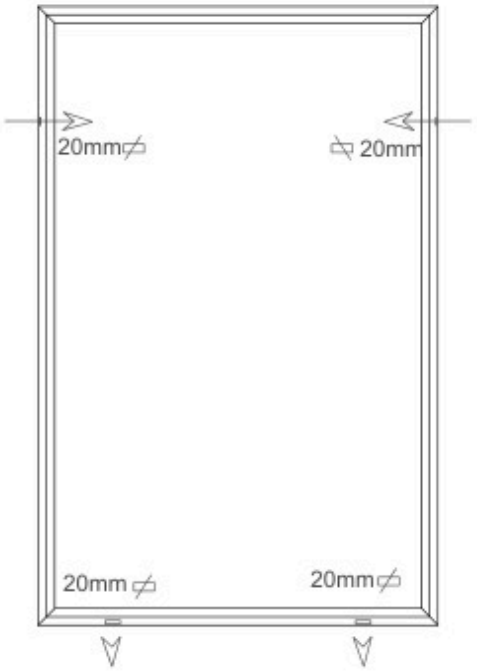


مونتاژ تخلیه آب پروفیل عمودی

Vertical profile water drain assembly

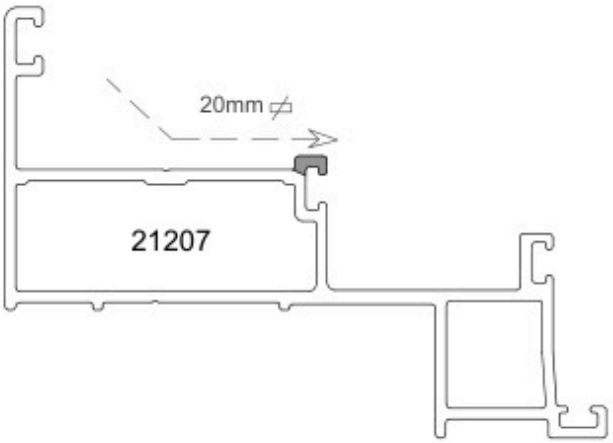
condensat pvc for mullion

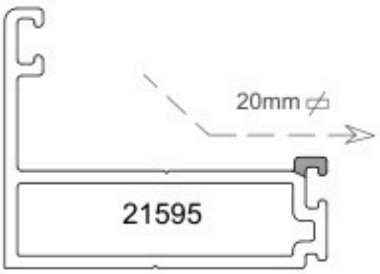


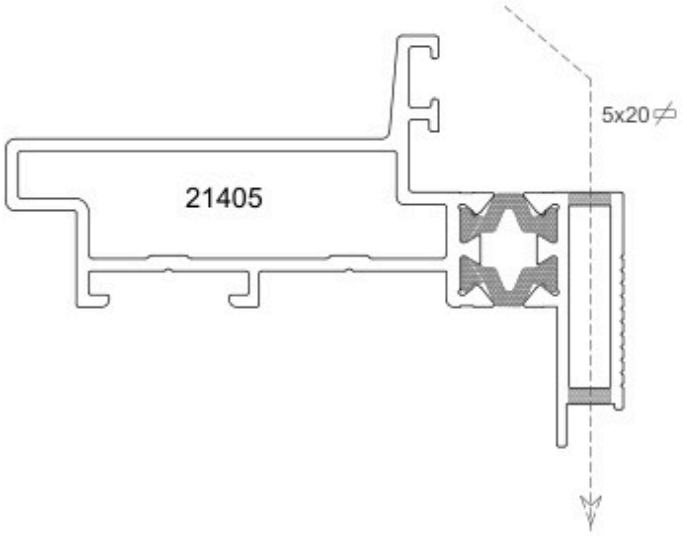


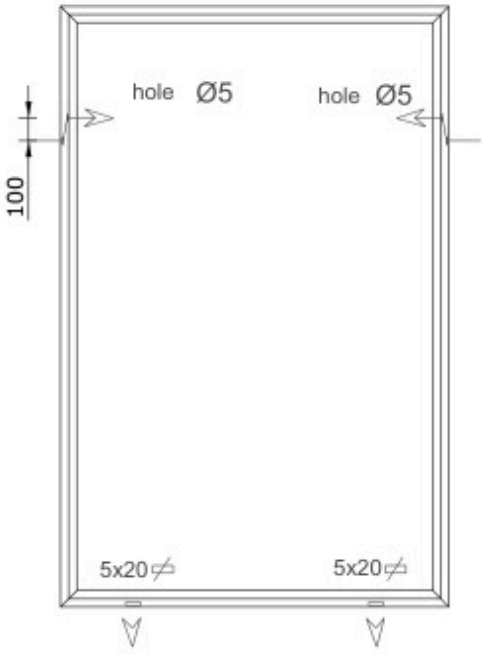
ماشین کاری تخلیه آب و تهویه هوا

drainage and centilation schema

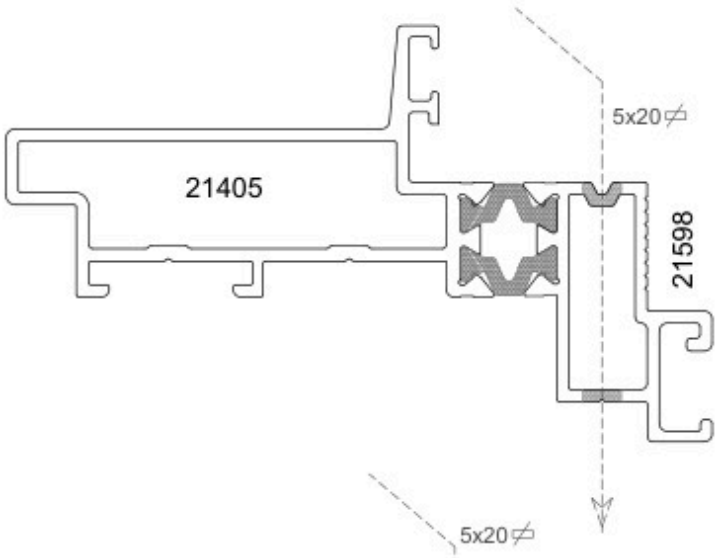


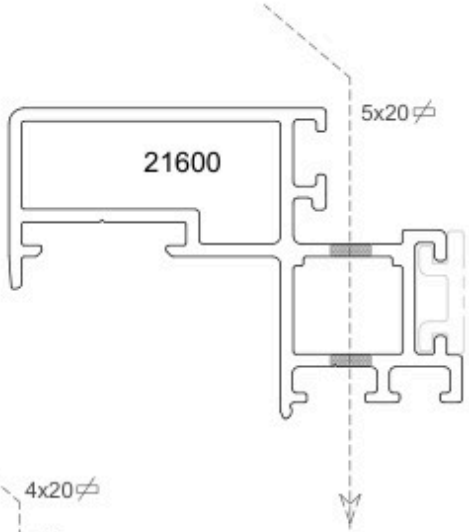


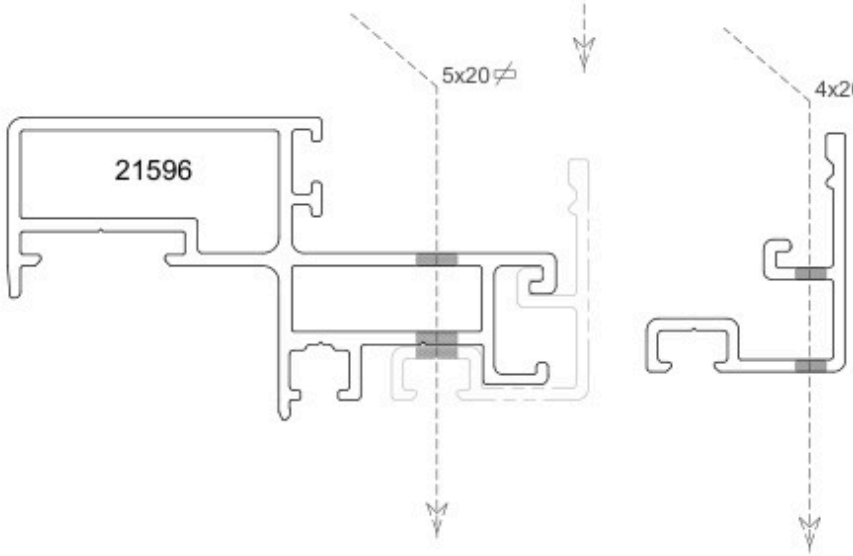


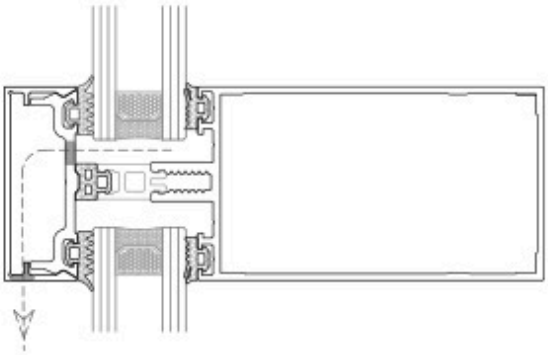


ماشین کاری تخلیه آب و تهویه هوا
drainage and centilation schema





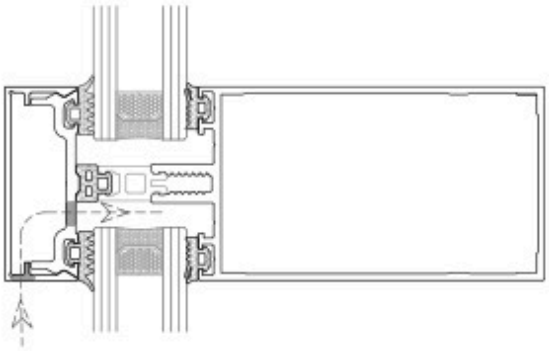




drainage

ماشین کاری تخلیه آب

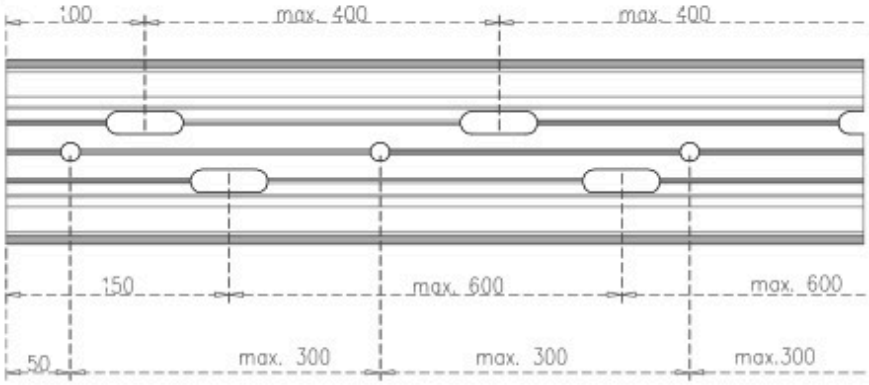
Water drainage machinery

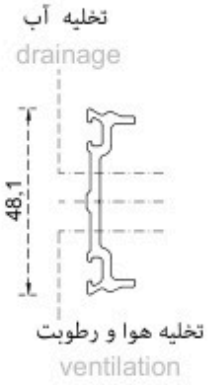


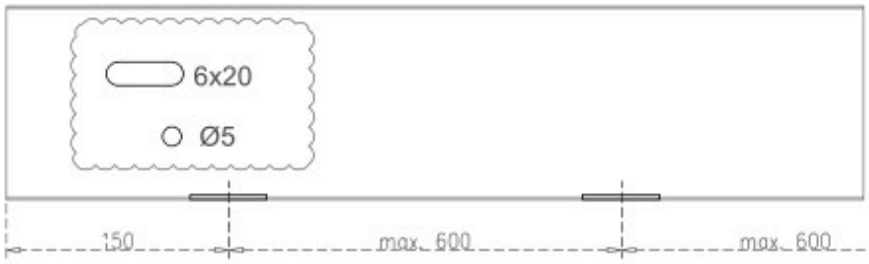
ventilation

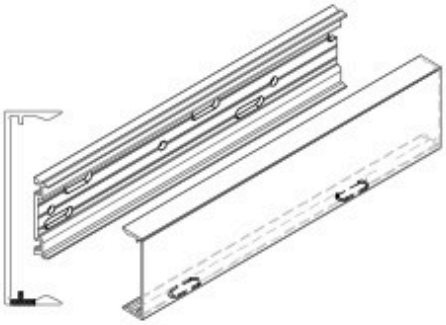
ماشین کاری تهویه هوا و رطوبت

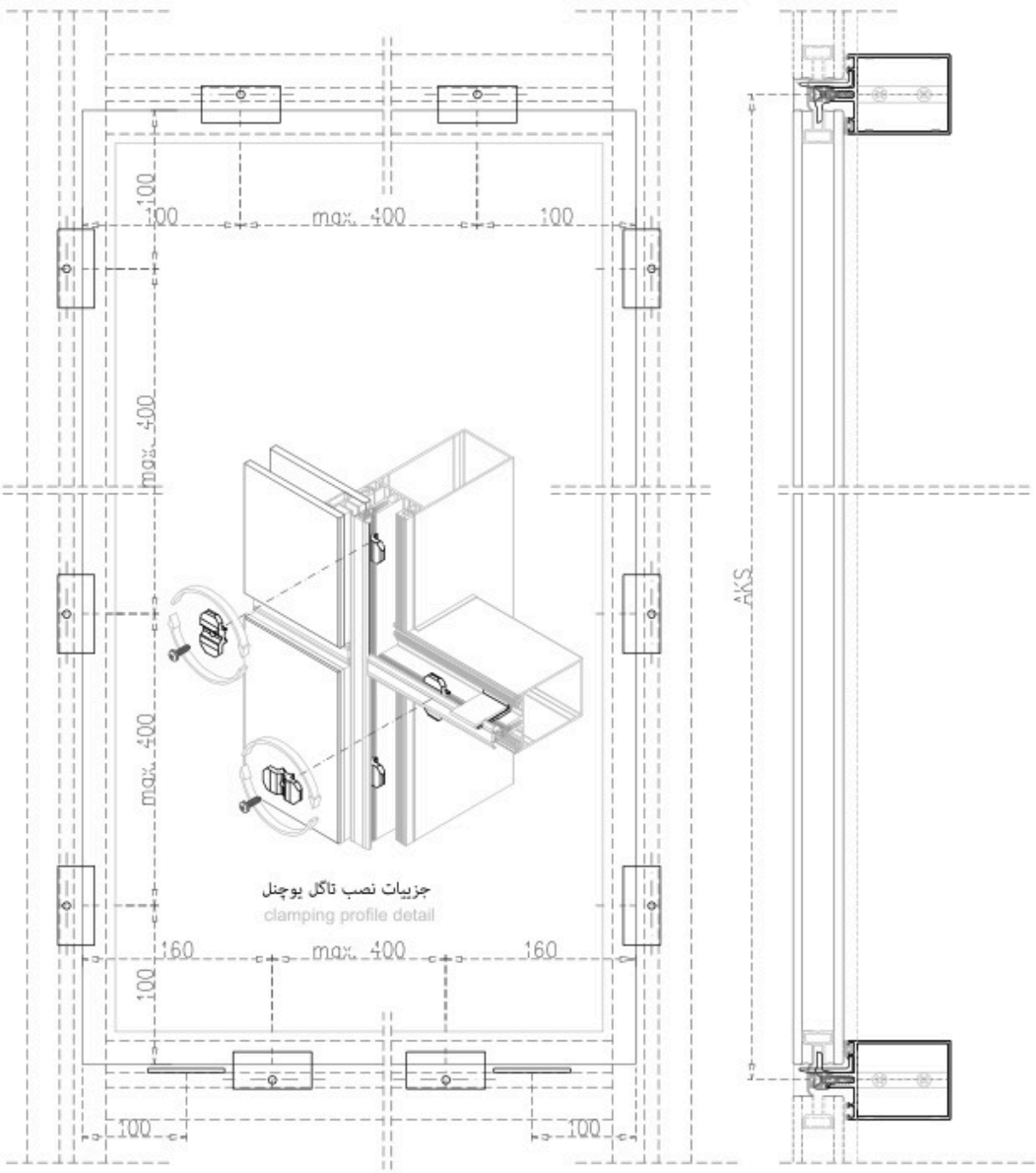
Air conditioning and humidity control



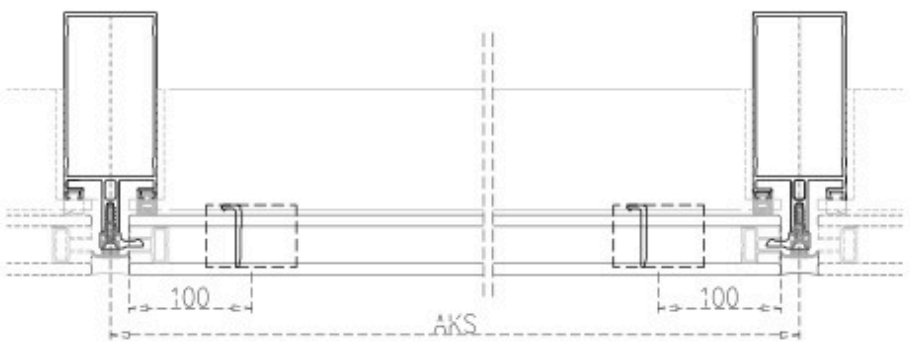


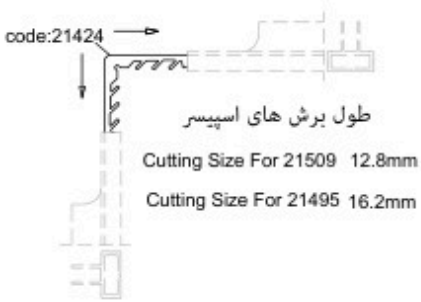


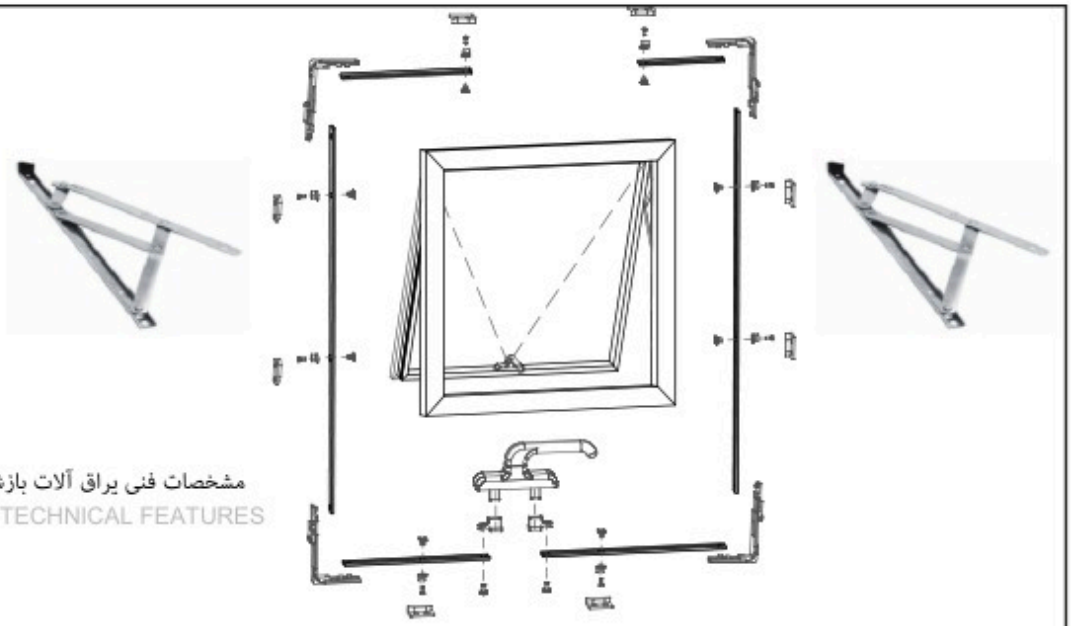




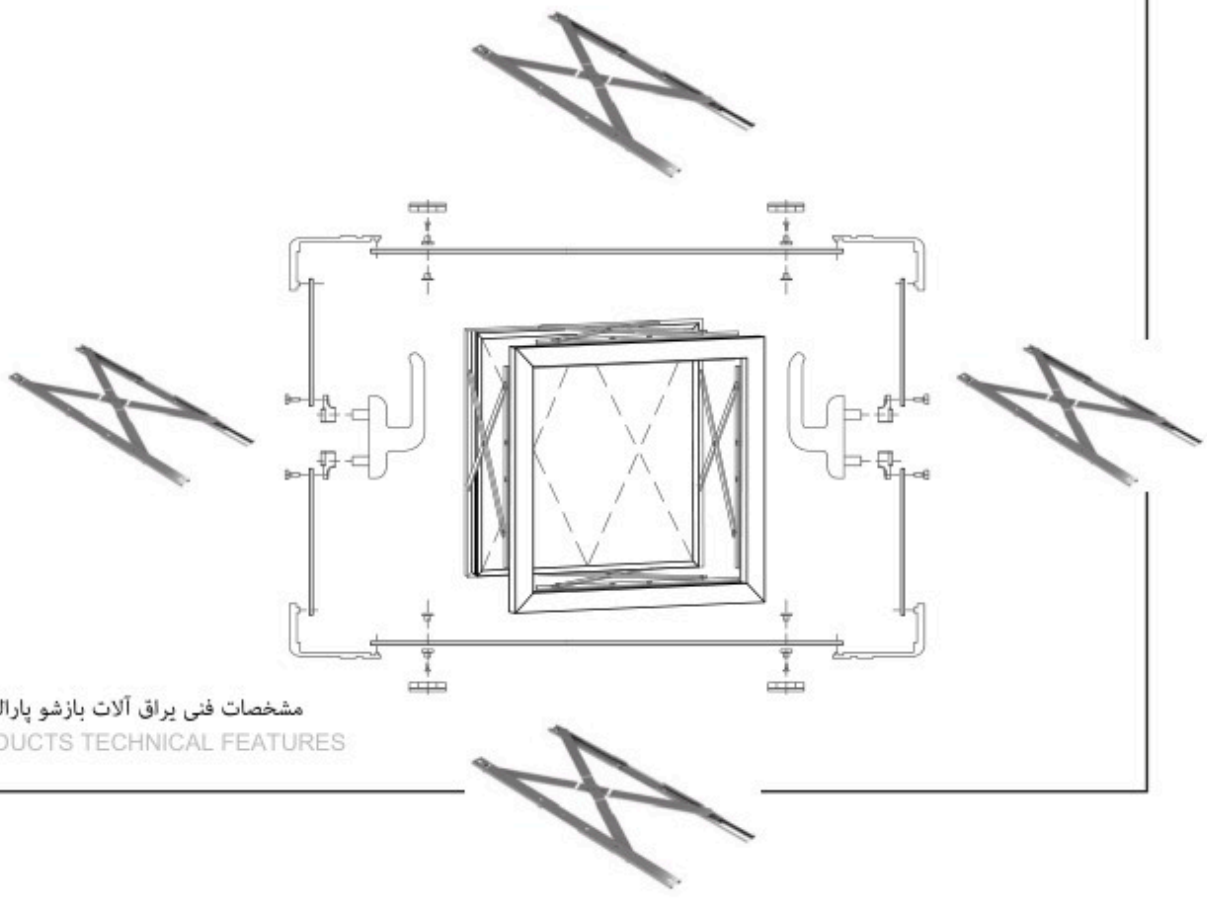
جزییات نصب تاگل یوچنل
clamping profile detail







مشخصات فنی یراق آلات بازشو کرتین والی
PRODUCTS TECHNICAL FEATURES



مشخصات فنی یراق آلات بازشو پارالل
PRODUCTS TECHNICAL FEATURES

نوع لولای کرتین وال arm type	ارتفاع لولای کرتین وال arm lenght	حداکثر زاویه ی بازشو max.opening	حداکثر ارتفاع بازشو max.vent H	حداکثر عرض بازشو max.vent L	حداکثر وزن بازشو max.weight kg
TYPE P- 10"	261,5	35°	700	1200	50
TYPE P- 12"	317,5	30°/ 35°	800	1200	60
TYPE P- 14"	353,5	30°/ 35°	1000	1300	69,5
TYPE P- 16"	414,5	25°/ 30°	1200	1400	88,5
TYPE P- 18"	458,5	25°/ 30°	1400	1400	102
TYPE P- 20"	511,5	20°/ 25°	1600	1500	135
TYPE P- 22"	556,5	20°/ 25°	1700	1500	137
TYPE P- 24"	602,5	20°/ 25°	1800	1500	139
TYPE P- 28"	707,5	10°/ 15°/ 20°	2000	1500	155



خلاصی نصب لولای کرتین وال : 16+0.5 mm

اندازه های بازشو کرتین والی بر حسب ارتفاع و وزن لنگه

widht according to the weight and the height



دستگیره دو زبانه کرتین وال

facade handle



دستگیره کلید دار کرتین وال

facade handle (key)



دستگیره دو زبانه کرتین وال

facade handle



پیم قابل تنظیم

adjustable fastening pawl



آداپتور اتصال قفل از چند ضلع

montion corner transmitter



کانکتور تسمه به دستگیره کرتین وال

connection block for facade handle



مقابلی قفل قابل تنظیم

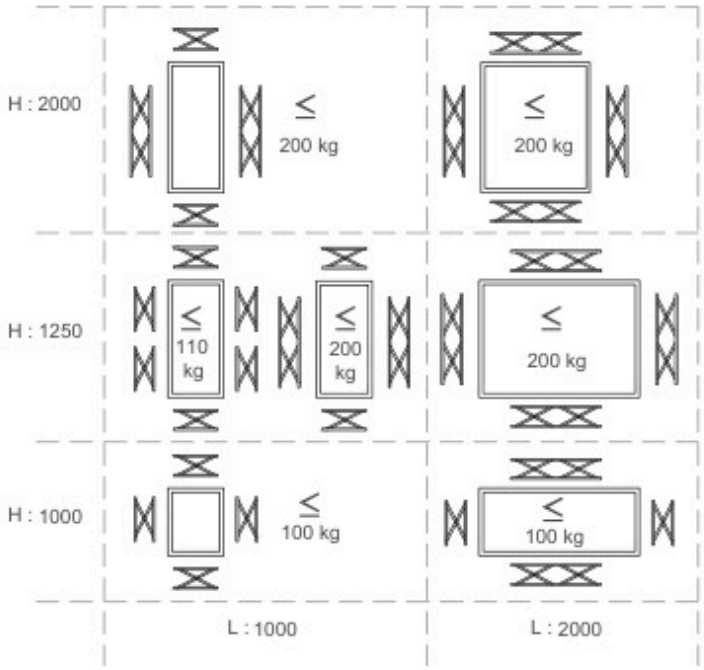
adjustable striker for window

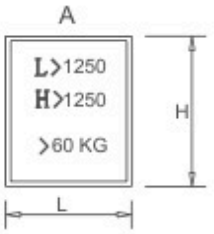
لولای بازشو پارالل
Parallel opening hinge

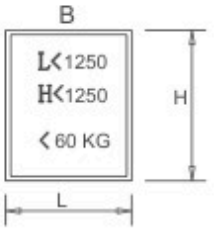


جفت لولای بازشو پارالل
Pair of parallel opening hinges







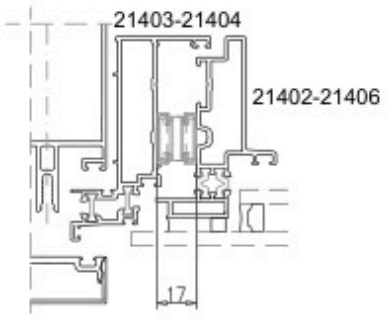


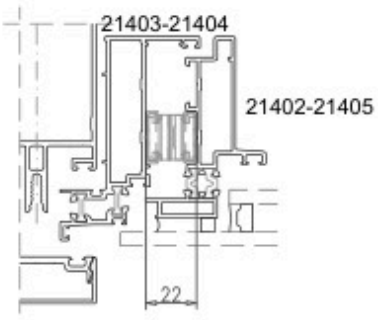
1) مکانیزم نصب یر اق پارالل اتوماتیک
2) مکانیزم نصب یراق پارالل اتوماتیک یا دستی

(A) *automatic fastening mechanism*

(B) *manual or automatic fastening mechanism*

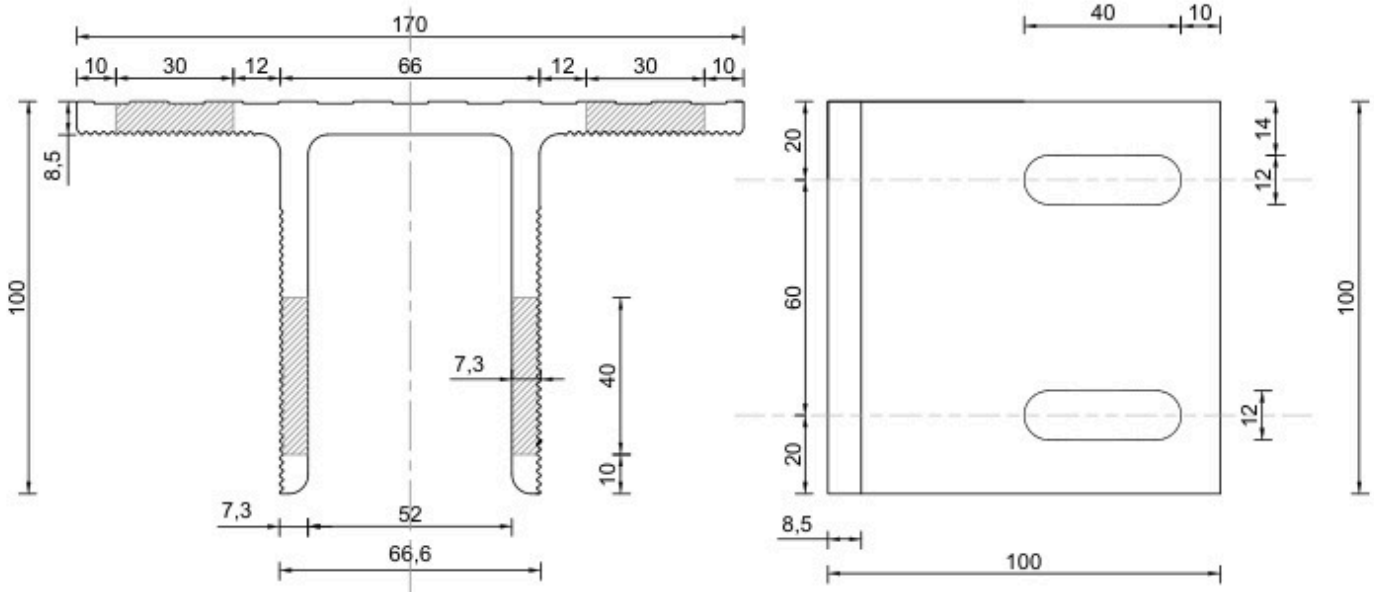
شرح description	سیستم بازشو type	حداکثر زاویه ی بازشو max.opening	ارتفاع لولای کنترتین وال arm lenght	حداکثر ارتفاع بازشو max.vent h	حداکثر عرض بازشو max.vent L	حداکثر وزن بازشو max.weight (kg)
16.9 Parallel hinge	parallel	180	470	1000	1000	100
16.9 Pair of parallel hinges	parallel	180	940	2000	2000	200
21 Parallel hinge	parallel	180	470	1000	1000	100
21 Pair of parallel hinges	parallel	180	940	2000	2000	200





ماشین کاری براکت آلومینیومی حرکت افقی

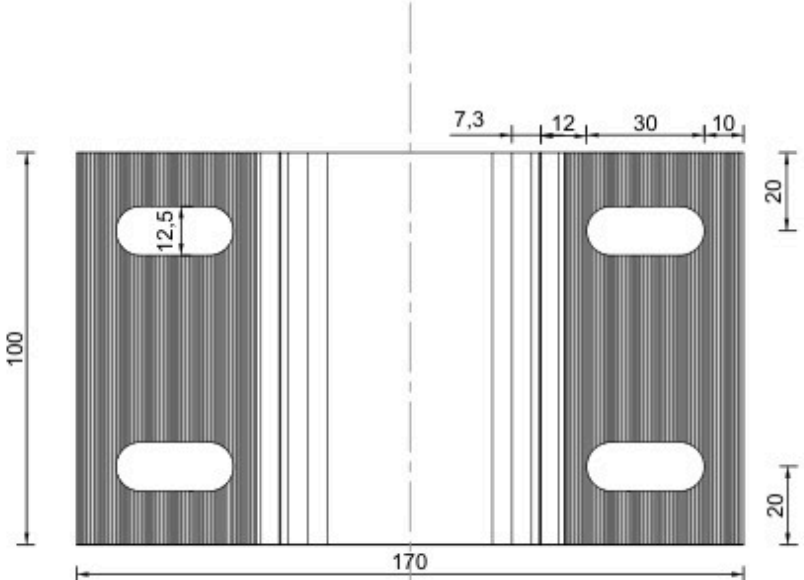
dip aluminium anchor horizontal

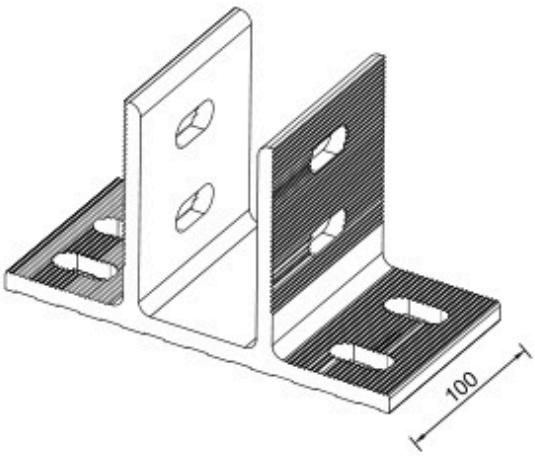


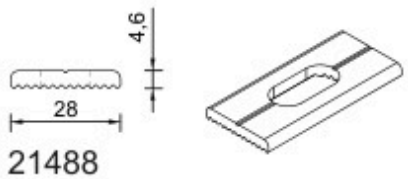
21482

10 cm bracket

7.262 kg/m







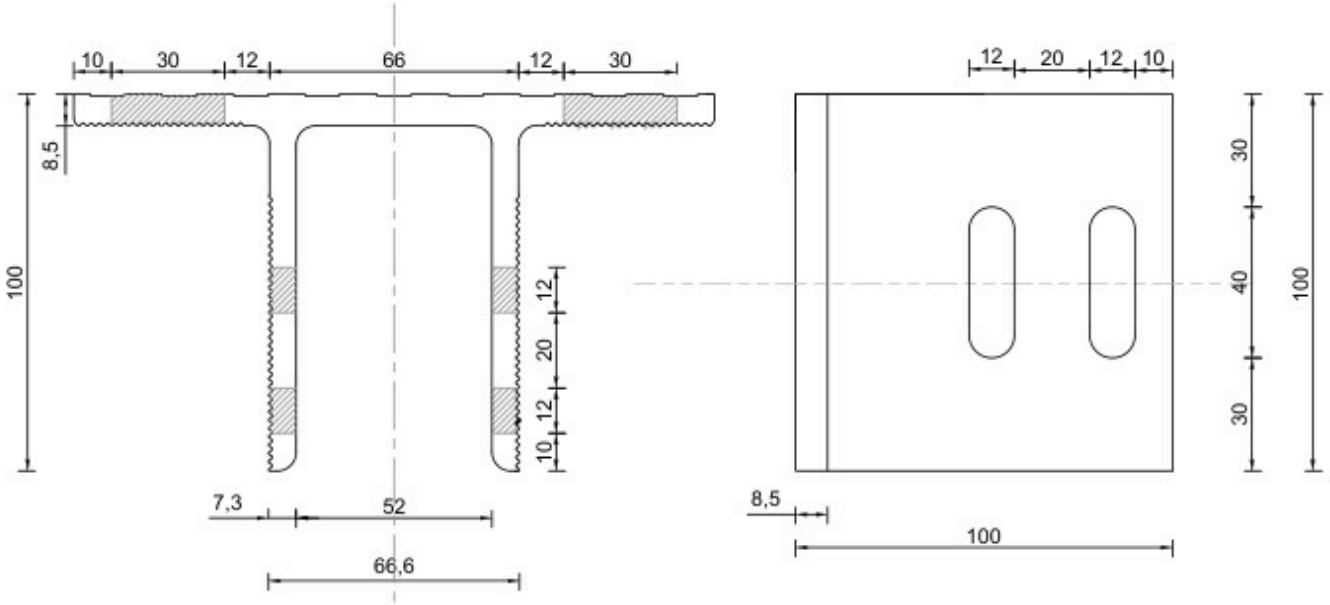
21488

Washer profile

0.315 kg/m

ماشین کاری براکت آلومینیومی حرکت عمودی

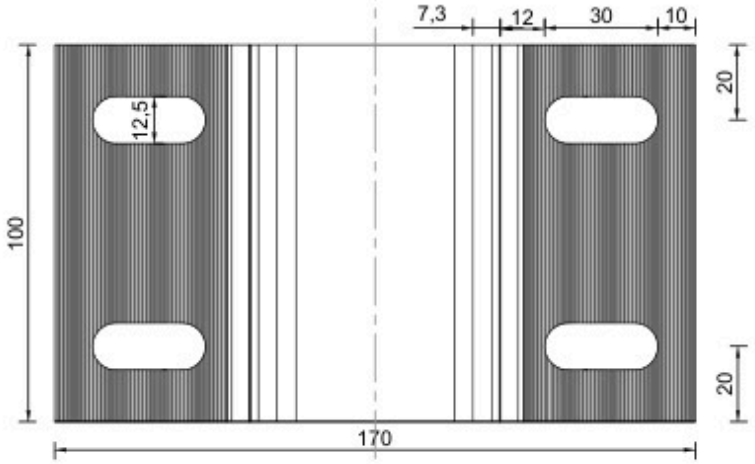
dip aluminium anchor vertical

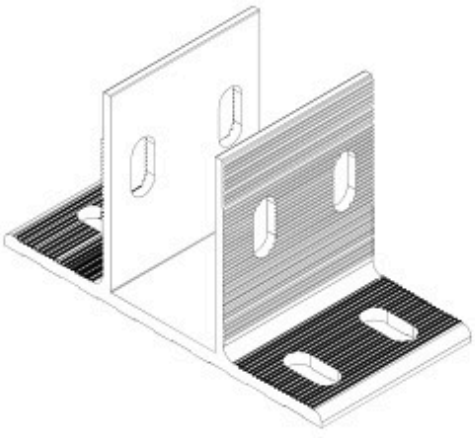


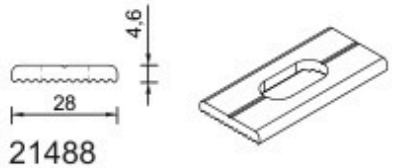
21482

10 cm bracket

7.262 kg/m







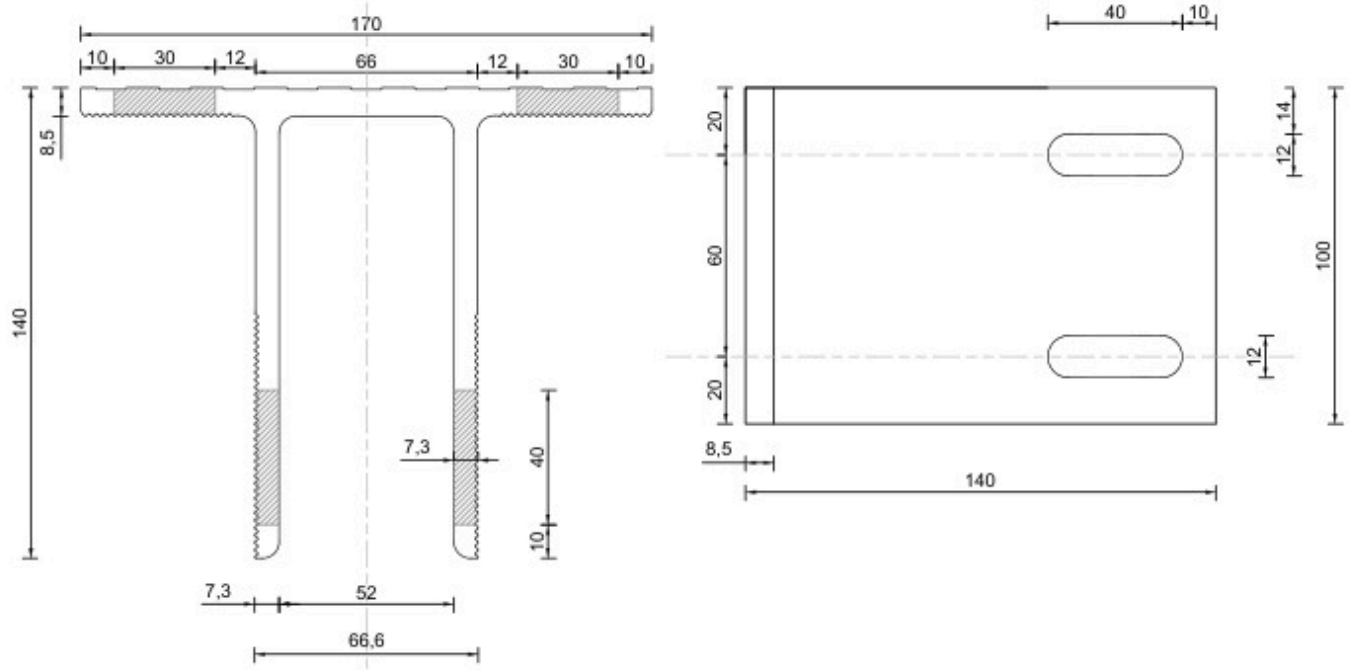
21488

Washer profile

0.315 kg/m

ماشین کاری براکت آلومینیومی حرکت افقی

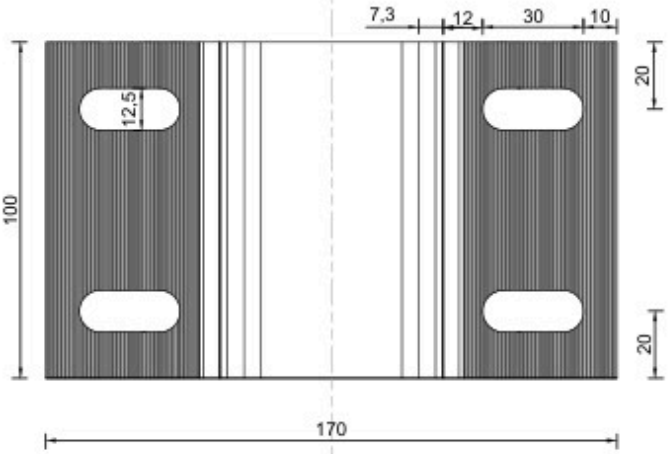
dip aluminium anchor horizontal

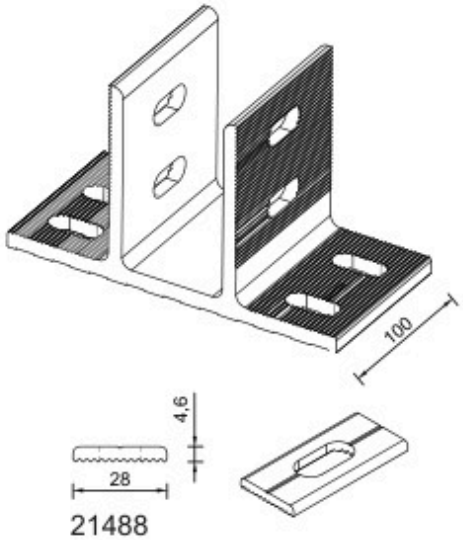


21483

14 cm bracket

8.650 kg/m





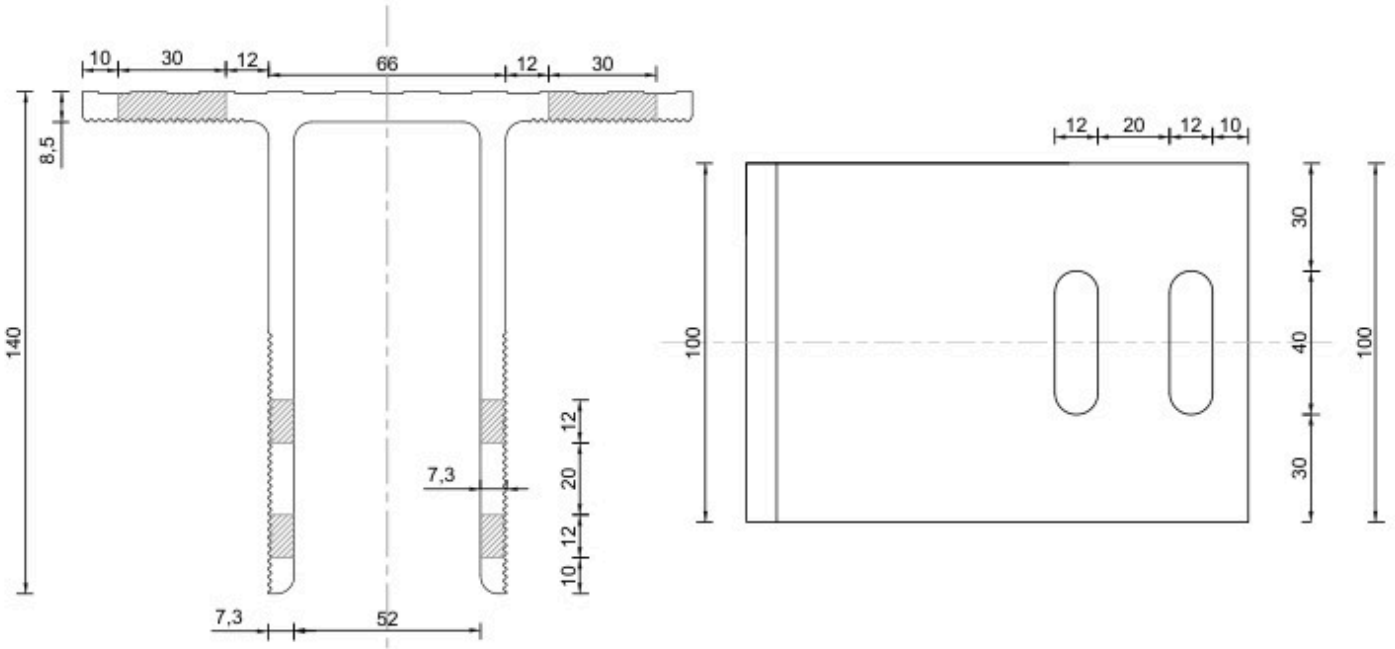
21488

Washer profile

0.315 kg/m

ماشین کاری براکت آلومینیومی حرکت عمودی

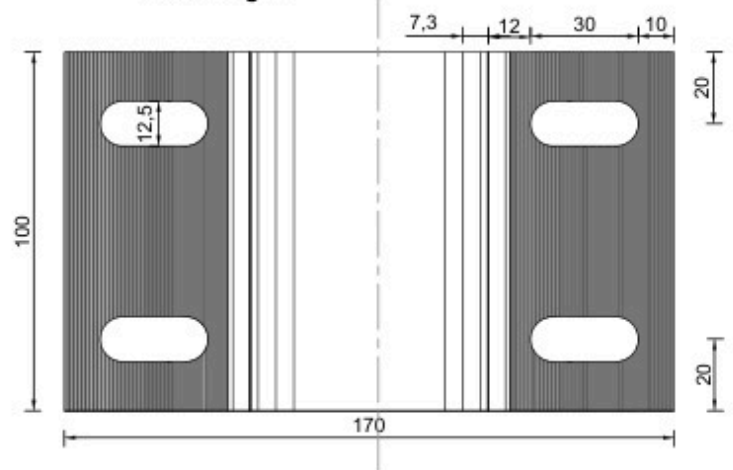
dip aluminium anchor vertical

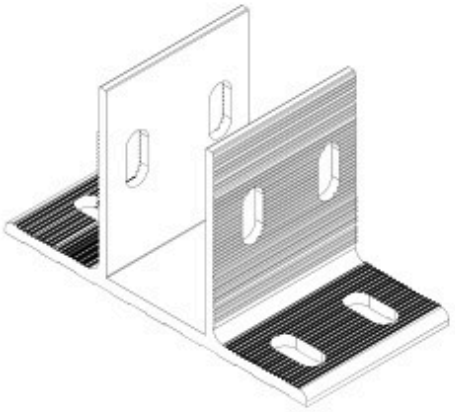


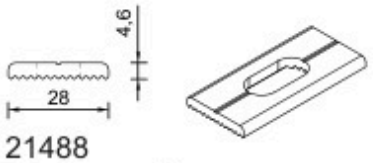
21483

14 cm bracket

8.650 kg/m



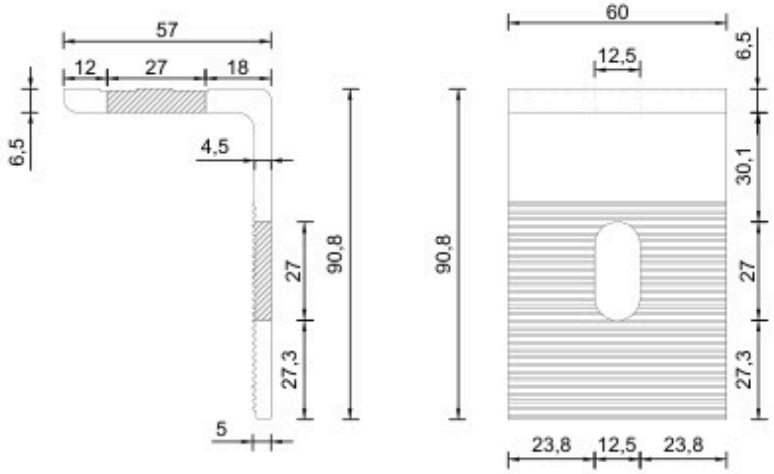




21488

Washer profile

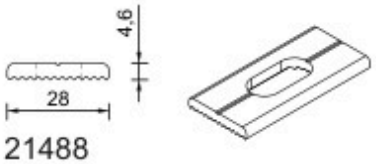
0.315 kg/m



21487
L *bracket*

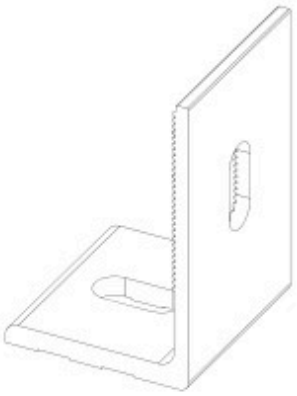
2.080kg/m

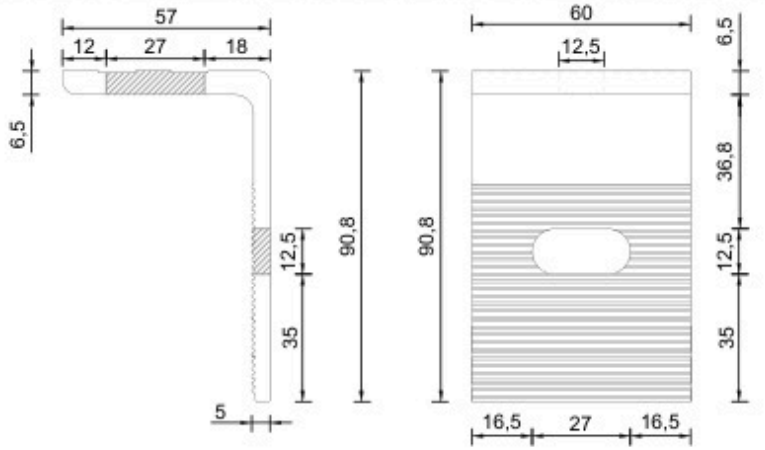
ماشین کاری براکت آلومینیومی حرکت افقی
dip aluminium anchor horizontal



21488
frame profile

0.315 kg/m

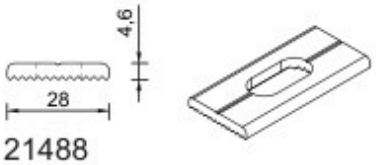




21487
L *bracket*

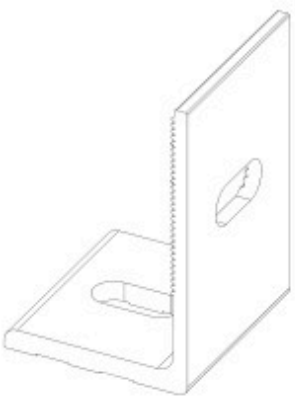
2.080kg/m

ماشین کاری براکت آلومینیومی حرکت عمودی
dip aluminium anchor vertical



21488
Washer profile

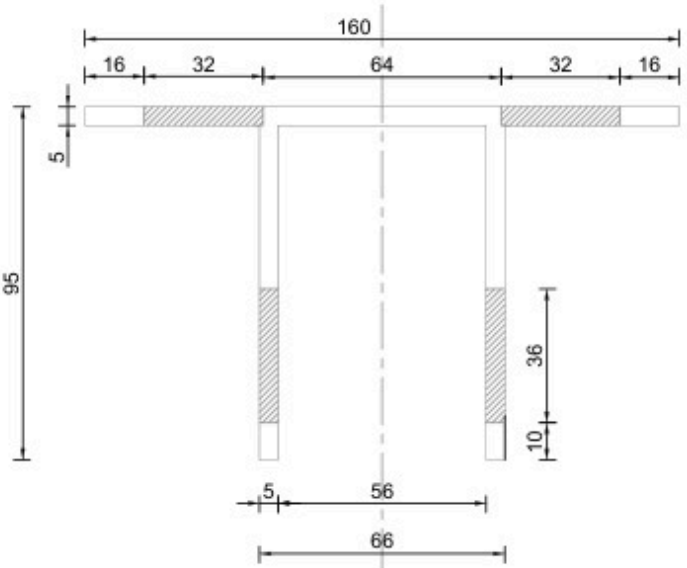
0.315 kg/m

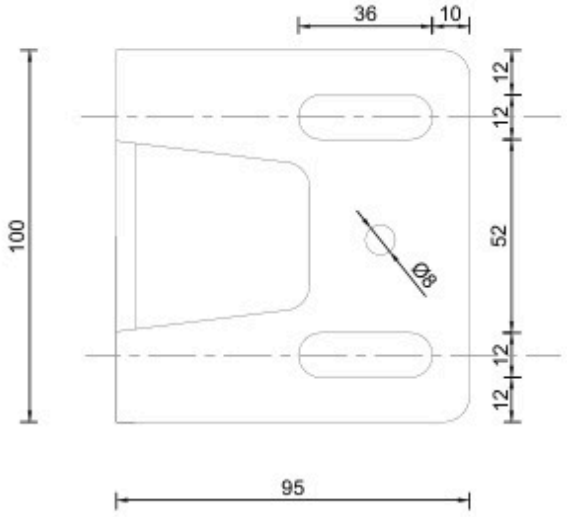


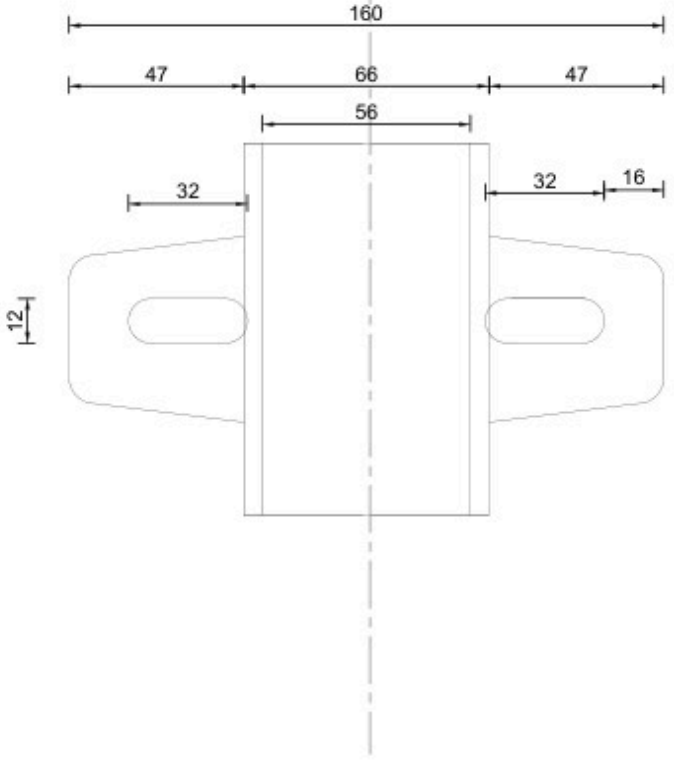
براکت گالوانیزه حرکت افقی 4-5 میلی متر

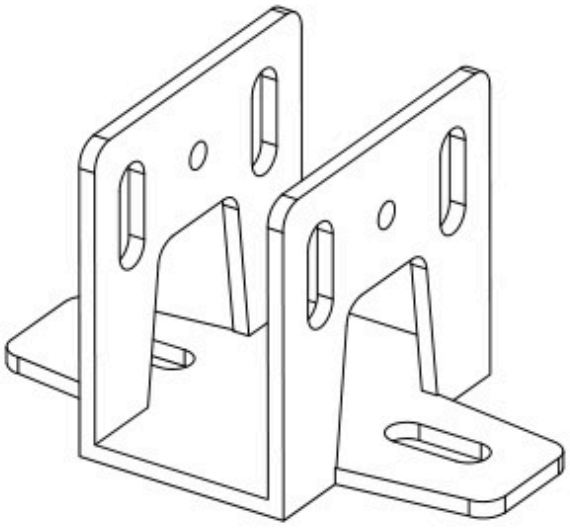
dip galvanized anchor horizontal 4-5 mm

CODE :21711





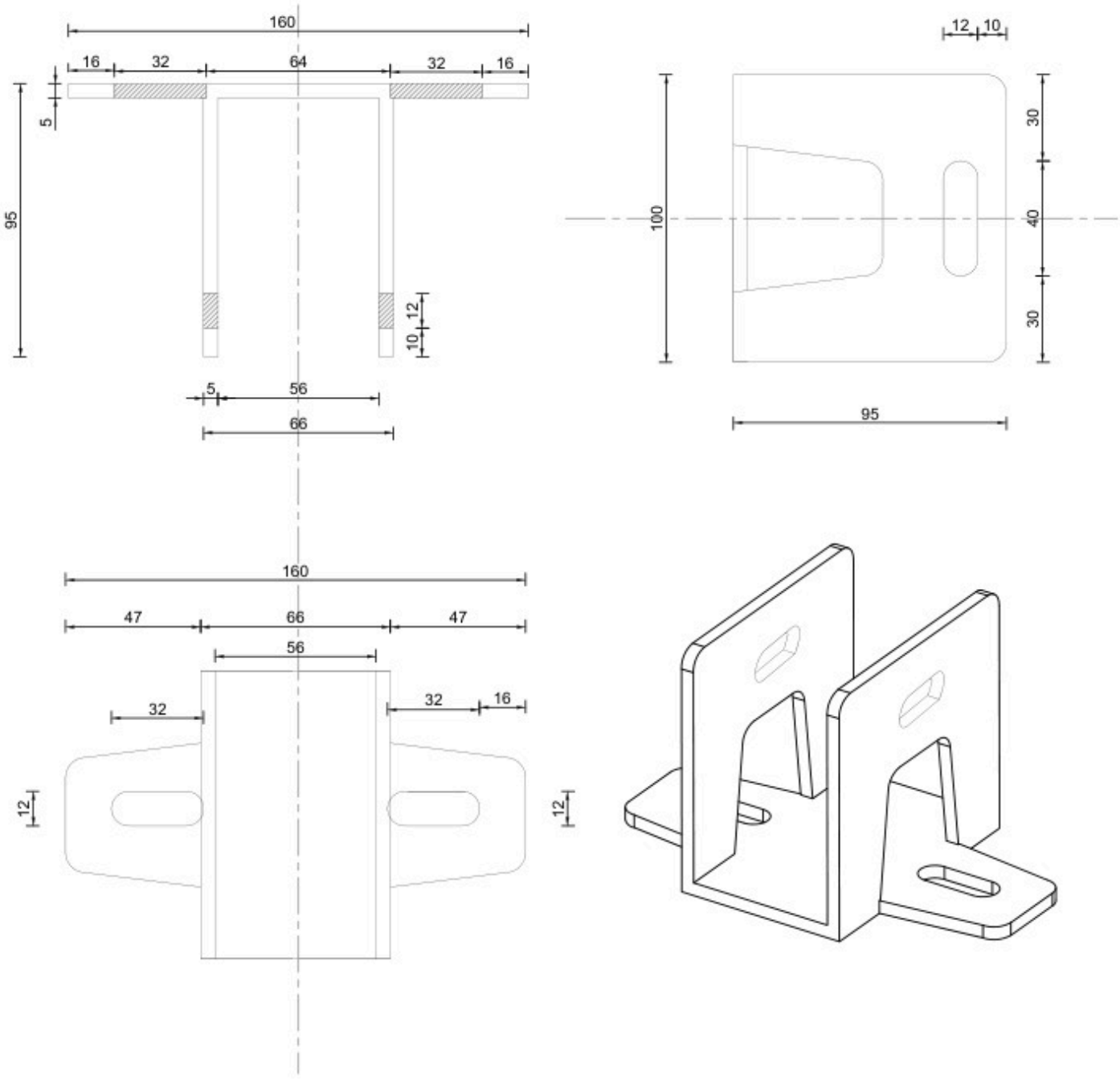




براکت گالوانیزه حرکت عمودی 4-5 میلی متر

dip galvanized anchor vertical 4-5 mm

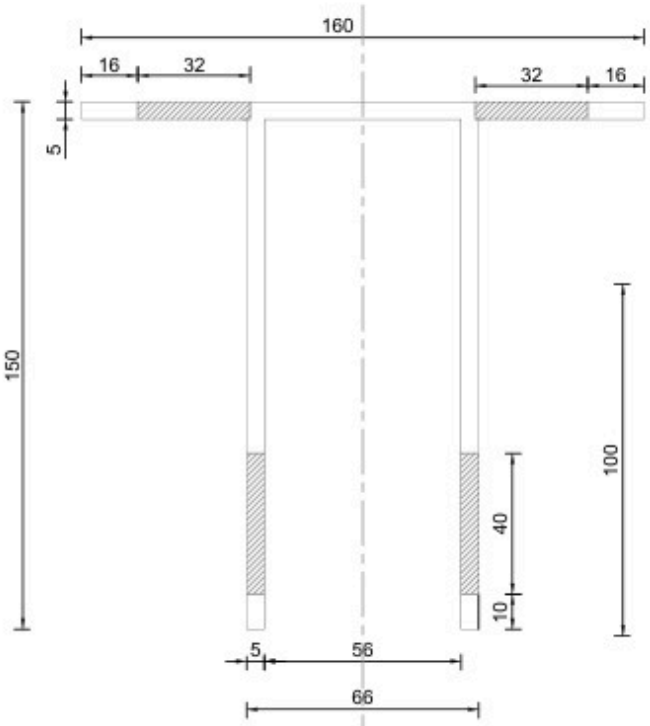
CODE :21710

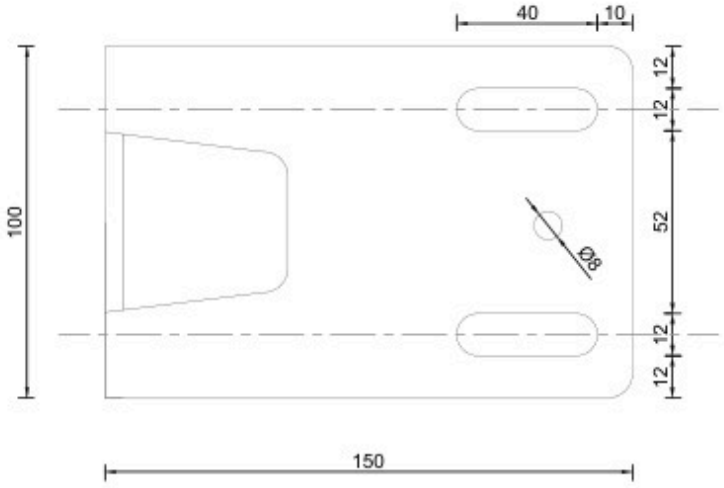


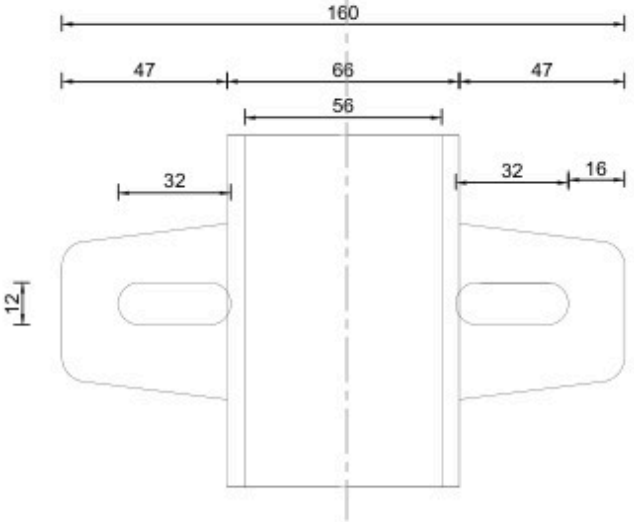
براکت گالوانیزه حرکت افقی 5 میلی متر

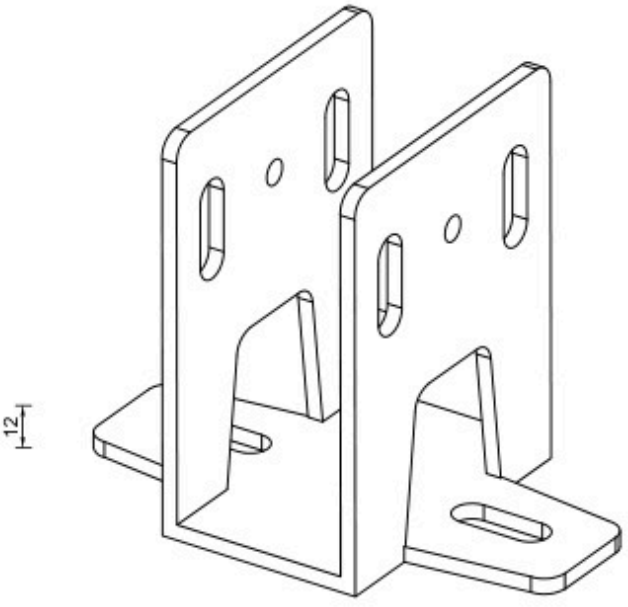
dip galvanized anchor horizontal 5 mm

CODE :21708





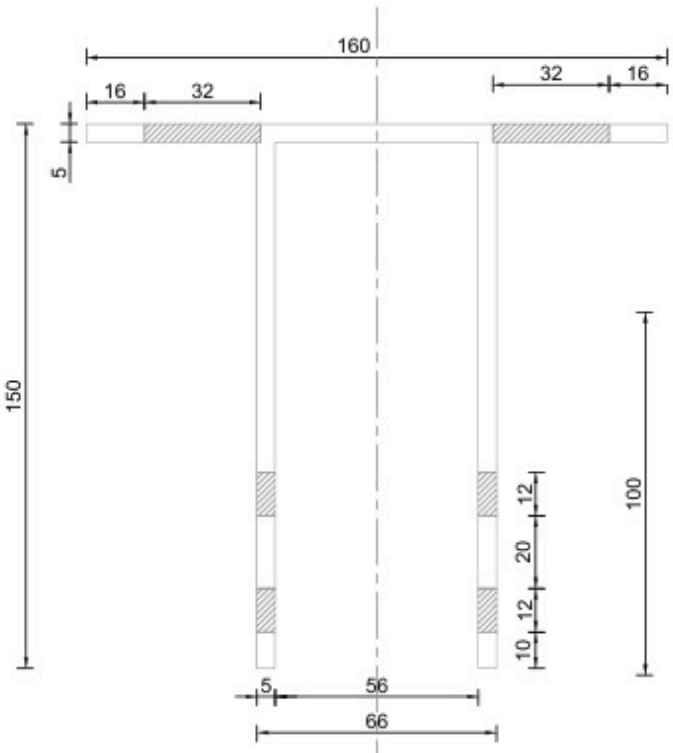


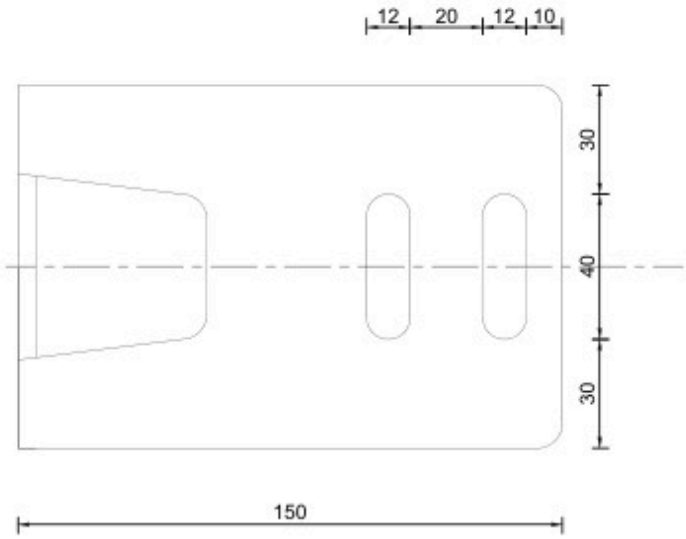


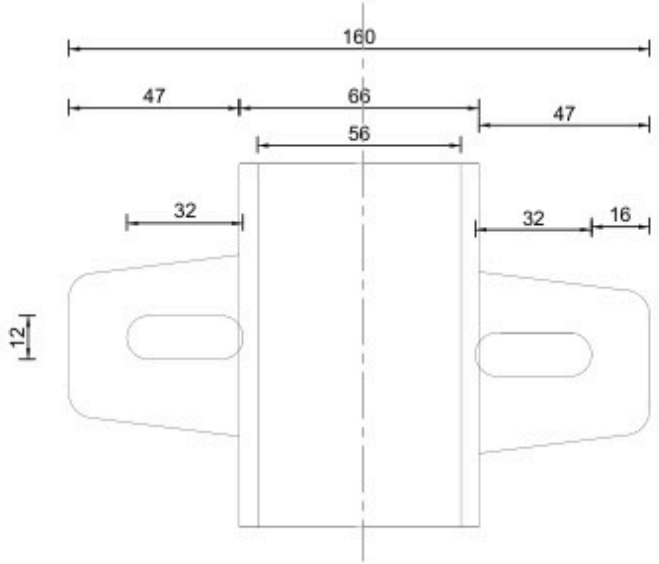
براکت گالوانیزه حرکت عمودی 5 میلی متر

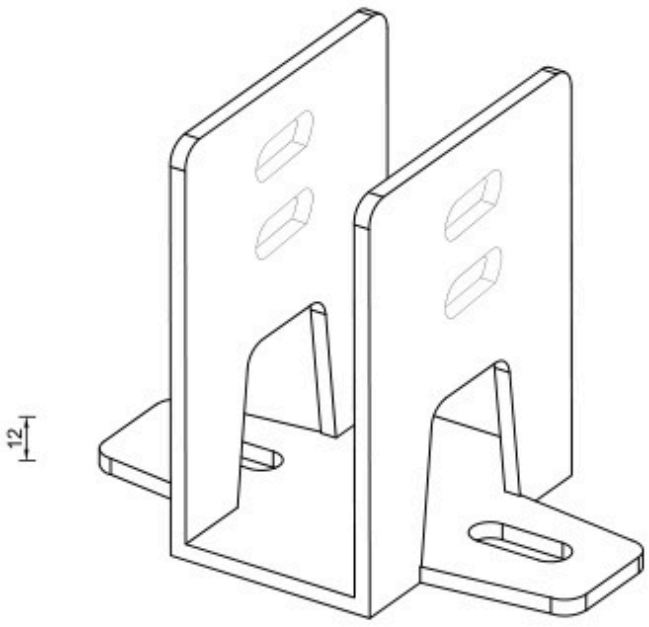
dip galvanized anchor vertical 5 mm

CODE :21709





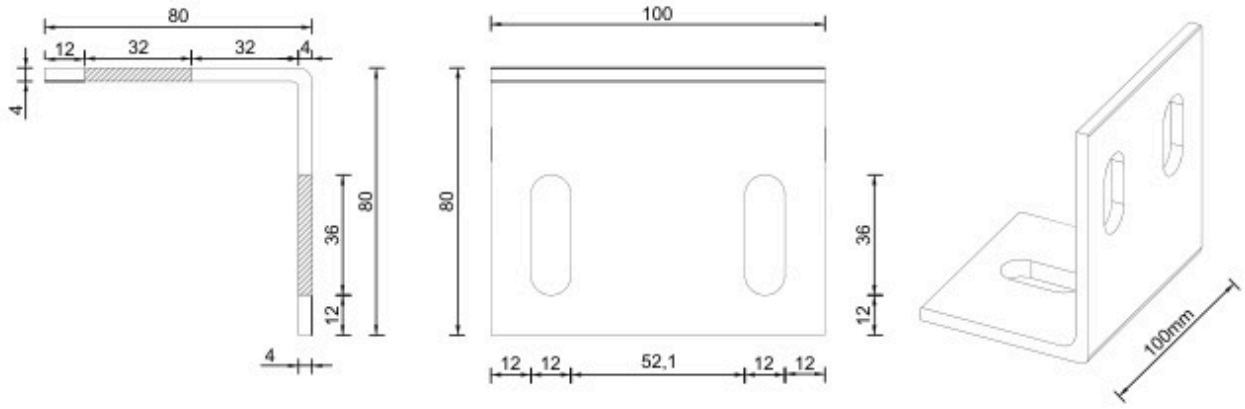




براکت گالوانزه حرکت افقی 4 میلی متر

dip galvanized anchor horizontal 4 mm

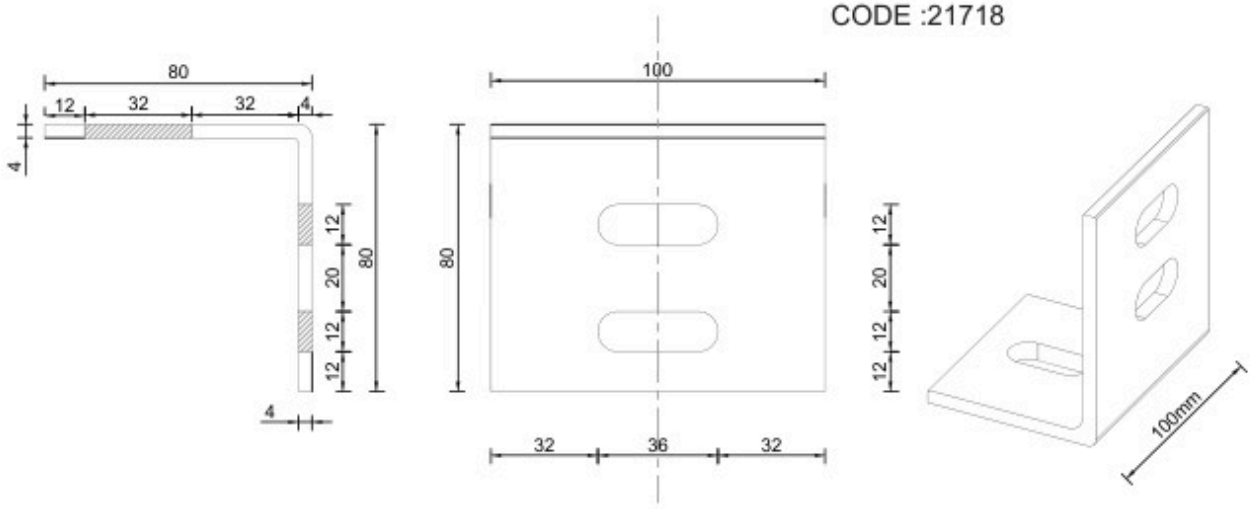
CODE :21712

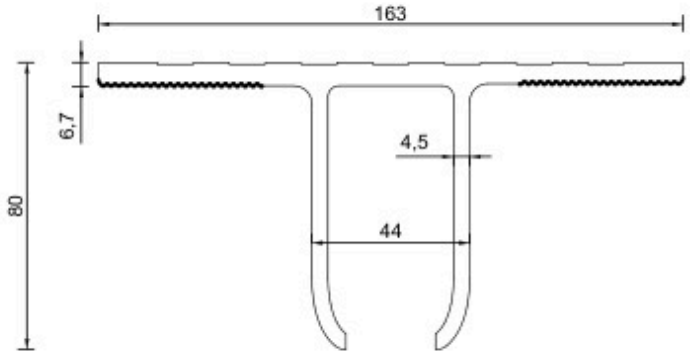


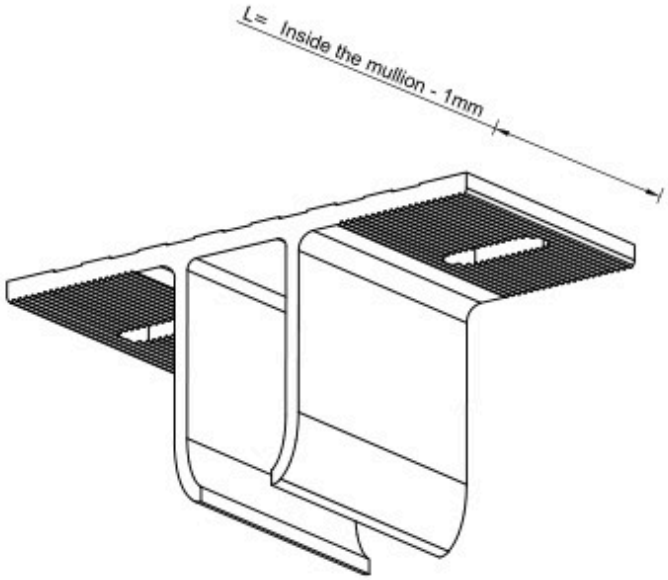
براکت گالوانیزه حرکت عمودی 4 میلی متر

dip galvanized anchor vertical 4 mm

CODE :21718

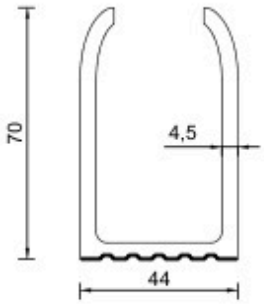


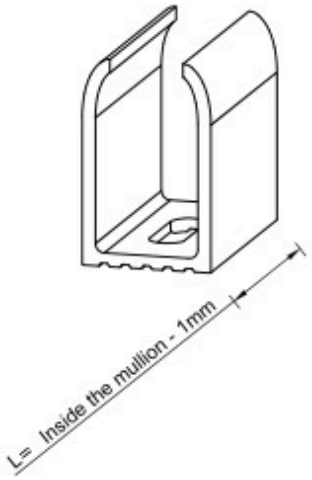




21485
Mullion up bracket

4.680 kg/m





21484
Mullion bottom bracket

2.170 kg/m