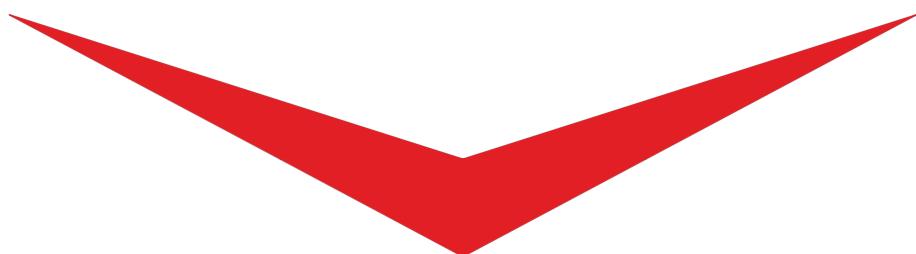




# F50-ENERGY

YÜKSEK YALITIMLI GİYDİRME CEPHE SİSTEMİ  
HIGH INSULATED CURTAIN WALL SYSTEM



KATALOGDA BULUNAN MARKA VE ÜRÜNLER, SİSTEM ALÜMİNYUM SAN. VE TİC. A.Ş. BÜNESİNDE OLUŞTURULMUŞ FİKRİ ESERLERİ OLUP TÜRK PATENT ENSTİTÜSÜ TARAFINDAN TESCİLLENMİŞTİR. HİC BİR SURETLE İZİNSİZ ÜRETİLEMEZ VEYA ÇOĞALTILAMAZ.

THE TRADEMARKS AND PRODUCTS IN THE CATALOGUE, WHICH IS CREATED WITHIN SİSTEM ALÜMİNYUM SAN. VE TİC. A.Ş. ARE REGISTERED BY TURKISH PATENT INSTITUTE. BY NO MEANS, CAN NOT PRODUCED AND COPIED WITHOUT AUTHORIZATION.

## İÇİNDEKİLER

### INDEX

<b>TEKNİK ÖZELLİKLER / TECHNICAL PROPERTIES .....</b>	: 3
<b>TERMAL HESAP SONUÇLARI / THERMAL CALCULATION RESULTS .....</b>	: 4
<b>TEST RAPORU SONUÇLARI / TEST REPORT RESULTS .....</b>	: 5 ... 7
<b>SİSTEMİN ÖNE ÇIKAN ÖZELLİKLERİ / PROMINENT PROPERTIES OF THE SYSTEM .....</b>	: 8 ... 15

### > PROFİLLER / PROFILES

<b>STATİK DEĞERLER TABLOSU / TABLE OF THE STATIC VALUES .....</b>	: 24
<b>DİKME PROFİLLERİ / MULLION PROFILES .....</b>	: 26 ... 34
<b>KAYIT PROFİLLERİ / TRANSOM PROFILES .....</b>	: 35 ... 39
<b>KANAT PROFİLLERİ / VENT PROFILES .....</b>	: 40 ... 43
<b>BASKI-KAPAK PROFİLLERİ / PRESSURE CAP-COVER CAP PROFILES .....</b>	: 44 ... 49
<b>ALÜMİNYUM AKSESUAR PROFİLLERİ / PROFILES OF ALUMINIUM ACCESORIES .....</b>	: 50 ... 52

### > DETAYLAR / DETAILS

<b>KAPAKLI SİSTEM / CAPPED CURTAIN WALL .....</b>	: 53 ... 75
<b>ENTEGRE SİSTEM / INTEGRATED CURTAIN WALL .....</b>	: 76-93 & 98-115
<b>YARI KAPAKLI SİSTEM / SEMI-CAPPED CURTAIN WALL .....</b>	: 94-97 & 116-119
<b>CAM KALINLIKLARINA GÖRE DETAYLAR / DETAILS ACCORDING TO THE GLASS THICKNESSES .....</b>	: 120 ... 139

### > AKSESUARLAR / ACCESSORIES

<b>EPDM FİTİLLER / EPDM GASKETS .....</b>	: 146 ... 149
<b>ISI BARİYERLERİ / INSULATION BARS .....</b>	: 150
<b>KÖŞE TAKOZLARI / CORNER CLEATS .....</b>	: 151, 152
<b>MAKASLAR / FRICTION STAYS .....</b>	: 153, 154
<b>KİITLEME AKSESUARLARI / LOCKING ACCESSORIES .....</b>	: 155, 156
<b>CEPHE KOLLARI / FACADE HANDLES .....</b>	: 157
<b>BAĞLANTI PARÇALARI / CONNECTION PIECES .....</b>	: 158, 159
<b>AÇILIM MOTORLARI / OPENING MOTORS .....</b>	: 160, 161
<b>MONTAJ TALİMATLI AKSESUARLAR / ACCESSORIES WITH FABRICATION MANUAL .....</b>	: 162 ... 183

## ÜRÜN KONSEPTİ PRODUCT CONCEPT

F50 - ENERGY ; kapaklı, yarı kapaklı ve silikon derzli cam cephe seçeneklerinin tümünü tek sistem altında ve yüksek performanslı olarak sunan yeni nesil giydirme cephe sistemidir.

### YENİLİKÇİ TASARIM

Tasarımda dik köşeli ve kalın hatlar sistemde konvansiyonel bir görüntüye neden olmaktadır. Bu duruma karşı F50 - ENERGY'de ince profil kesitleri, kıvrımlı yüzey ve eğimli kenarların yanında büyük radyüslü köşeler tercih edildi. Bunlar yapılrken sistemin kullanım kolaylığı ve imalat özelliklerinden de feragat edilmedi.

### ENERJİ TASARRUFU

Çevreye duyarlılık ve enerji tasarrufu konuları gün geçtikçe önem kazanmakta olduğundan F50 - ENERGY'de ısı yalıtım özellikleri üst düzeyde tutuldu. Alüminyum, yapısı gereği soğuk bir materyal olmasına rağmen gelişen malzeme çeşitliliği, dizayn yöntemleri ve teknolojilerle artık oldukça yalıtkan bir yapı haline dönüştürülebilmektedir.

F50 - ENERGY tamamen günümüz ihtiyaçlarına uygun şekilde performans odaklı olarak tasarlandı. Yüksek termal ve hava-su sızdırmazlık performanslarının yanı sıra, geniş kullanım seçenekleri ve kolay imalat özellikleri de sistemin öne çıkan yanlarındandır.

### GELİŞTİRİLEBİLİRLİK

F50 - ENERGY, genel sistem konsepti olarak kolaylıkla genişletilebilir yapıdadır. Bu sayede eklenecek yeni çözümlerinin sisteme adaptesi hızlı biçimde yapılabilmektedir.

F50 - ENERGY ; is the new generation curtain wall system that combines capped, two sided and four sided silicone curtain wall in a single system.

### INNOVATIVE DESIGN

General structure looks like conventional with vertical corner and thick lines in design. Conversely the corners with huge radius prefered with thin profile sections, curly surface and pitched edges. But ease of use and manufacturing specifications did not abandoned.

### ENERGY SAVING

Subjects of environment sensitivity and energy saving become important day by day. For this reason thermal insulation specifications was become on high level. In spite of aluminium is a cold material in accordance with its structure, it can be as insulative composite structure by variability of materials, design methods and technologies.

F50 - ENERGY was designed exactly performance-focused as requirements of present day. Important sides of F50 - ENERGY are high performances of thermal and air-water tightness, variously usage options, easy manufacturing specifications.

### IMPROVABILITY

F50 - ENERGY has the developable system concept as general. In this way adaptation of new system solutions can be done quickly.

## YÜKSEK YALITIMLI GİYDİRME CEPHE SİSTEMİ

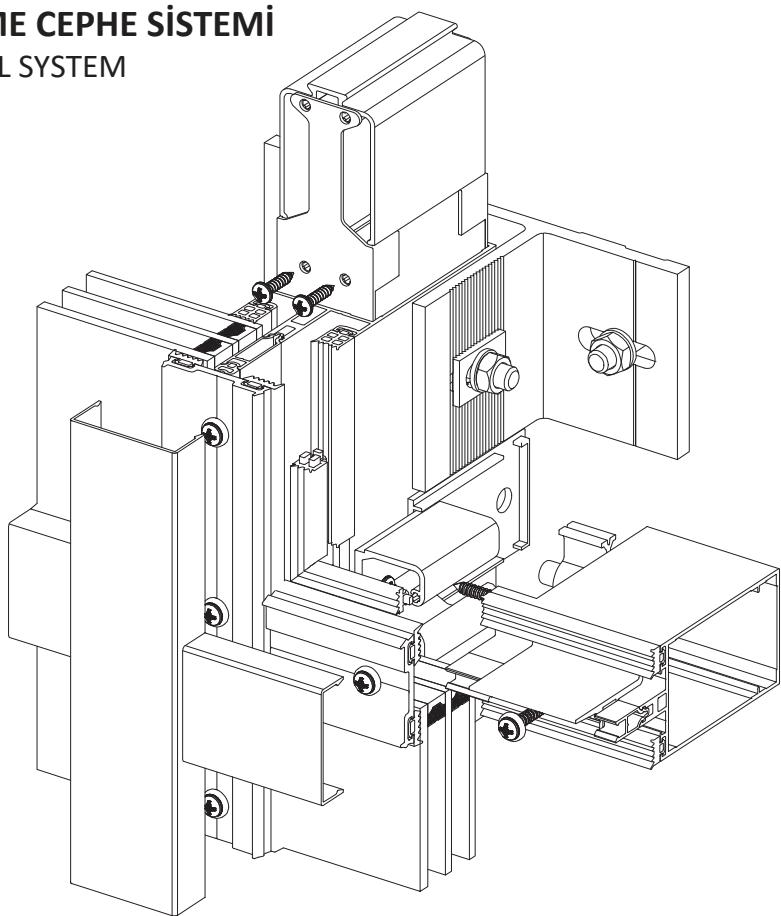
HIGH INSULATED CURTAIN WALL SYSTEM

### İMALAT KOLAYLIĞI

F50 - Energy sisteminin sahip olduğu aksesuarlar mümkün olduğunda tek tipe indirgenerek standartlaşmaya önem verildi. Daha az çeşitte ve ortak kullanımda olan bu aksesuarların bir getirisini olarak farklı tiplerdeki ürünlerini aynı aksesuarları kullanarak ortaya çıkarmak mümkün hale gelmektedir.

### EASE OF MANUFACTURING

Accessories of F50 - ENERGY was mostly standardized. These accessories used generally common with each other. By this method, different types of products is manufactured with the same accessories.



## TEKNİK ÖZELLİKLER

TECHNICAL PROPERTIES

<b>PROFİL GENİŞLİKLERİ / PROFILE WIDTHS :</b>	<b>50 mm</b>
<b>DİKME DERİNLİKLERİ / MULLION DEPTHS :</b>	<b>35,55,75,95,115,135,155,175,195,215</b>
<b>KAYIT DERİNLİKLERİ / TRANSOM DEPTHS :</b>	<b>40,60,80,100,120,140,160,180,200,220</b>
<b>PROFİL ET KALINLIĞI / PROFILE WALL THICKNESS :</b>	<b>1,6 mm - 2,8 mm</b>
<b>MAX. CAM KALINLIĞI / MAX. GLASS THICKNESS :</b>	<b>44 mm</b>
<b>ISI BARİYERLERİ / INSULATION BARS :</b>	<b>4 mm - 28 mm</b>
<b>ISI YALITIM DEĞERİ (Uf) / THERMAL INS. VALUE (Uf) :</b>	<b>1,7 W/m<sup>2</sup>K - 2,9 W/m<sup>2</sup>K</b>

## KULLANIM SEÇENEKLERİ

APPLICATION ALTERNATIVES

<b>KAPAKLI CEPHE / CAPPED CURTAIN WALL :</b>	●
<b>SİLİKON DERZLİ CAM CEPHE / FOUR SIDED SILICONE CURTAIN WALL :</b>	●
<b>YARI KAPAKLI CEPHE / TWO SIDED CURTAIN WALL :</b>	●
<b>DIŞA TERS VASİSTAS G.K. / TOP HUNG OUTWARD OPENING HIDDEN VENT :</b>	●
<b>DIŞA PARALEL AÇILIM G.K. / PARALLEL OUTWARD OPENING HIDDEN VENT :</b>	●

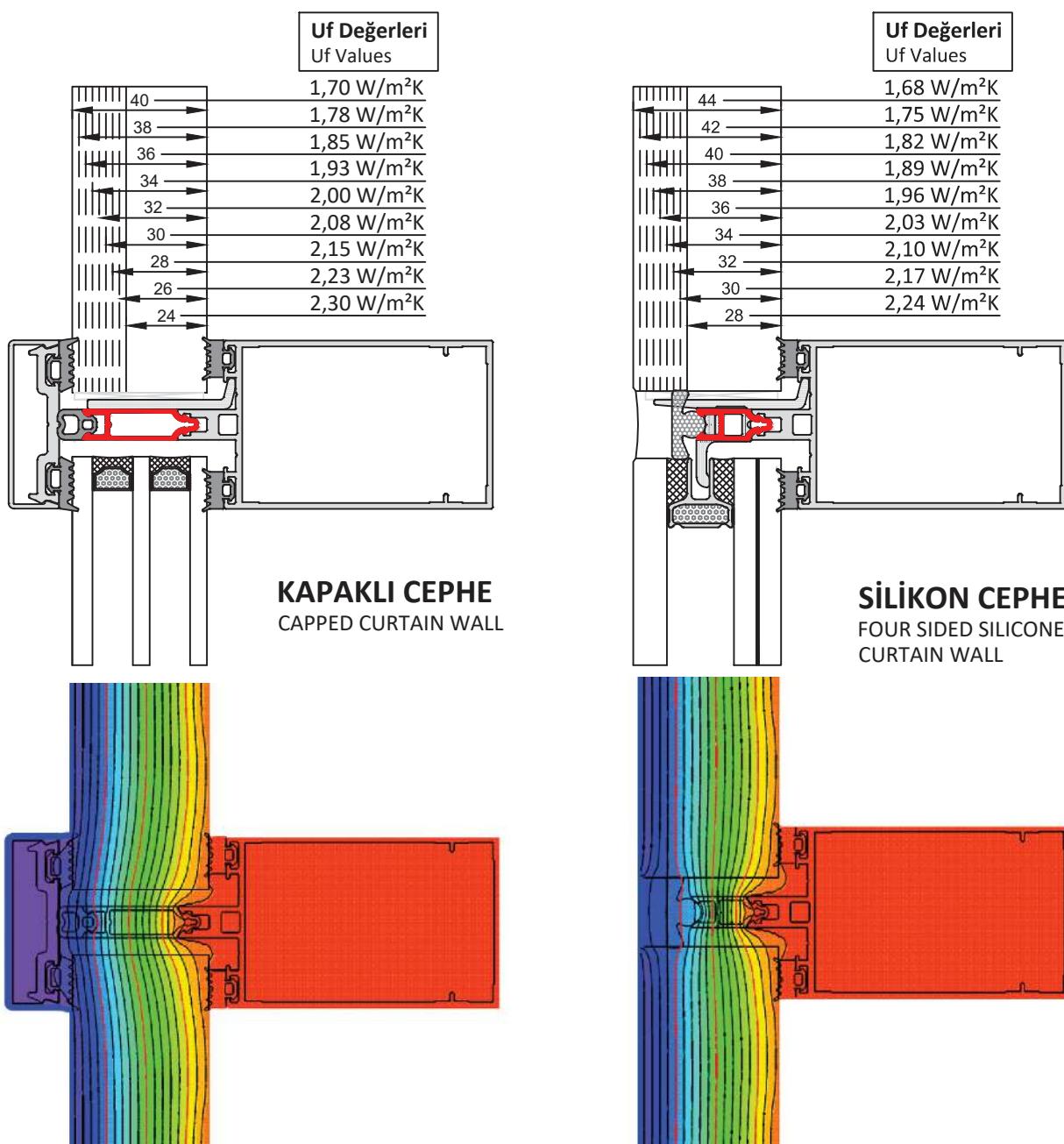
## ISI YALITIM DEĞERLERİ THERMAL INSULATION VALUES

Kış şartlarını düşündüğümüzde; iç bölgede yer alan taşıyıcı cephe profillerinin sahip olduğu iç mekan ısısının soğuk olan dış ortama kaçışı ne kadar az olursa, sistem o kadar yalıtımlıdır denilebilir. Bu noktada sistemin termal performansı, kullanılan cam kalınlığı ile doğrudan ilgilidir. Dolayısıyla camlar kalınlaştıkça ısı iletim katsayısı ( $U_f$ ) düşer ve ısı yalıtım performansı artar.

Aşağıdaki sistem kesitleri üzerinde  $U_f$  değerinin cam kalınlığına bağlı olarak ne ölçüde değiştiği görülmektedir.

Little heat transfer from the warm profiles at the inside to the outside cold area means; "more heat insulation" at the winter conditions. The main affect for the insulation level is glass thickness. So, when the glass thickness is higher, the insulation value ( $U_f$ ) will be lower.

You may see below; the  $U_f$  value variations according to the glass thickness.



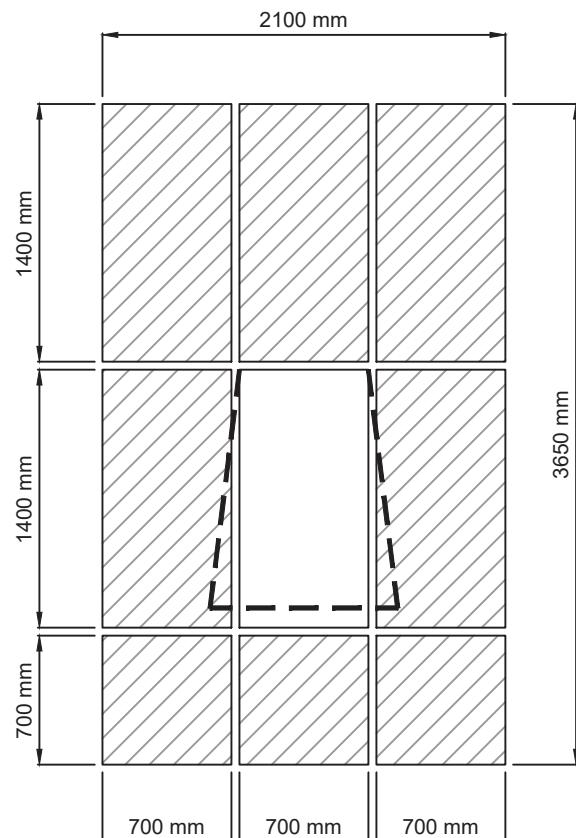
## HAVA-SU-RÜZGAR PERFORMANS TEST SONUÇLARI - 1

### AIR-WATER-WIND PERFORMANCE TEST RESULTS - 1

- F50-Energy kapaklı cephe sistemiyle gerçekleştirilen hava-su-rüzgar performans test sonuçlarıdır.  
There are the air-water-wind performance test results with the F50-Energy capped curtain wall system.

#### Test Numunesinin Ebatları

Test Sample Dimensions



Kapaklı Cephe / Capped Curtain Wall

Genişlik / Width: 2150 mm

Yükseklik / Height: 3650 mm

#### KAPAKLI CEPHE TEST SONUÇLARI

#### CAPPED CURTAIN WALL TEST RESULTS

HAVA GEÇİRGENLİĞİ - EN 12152  
(AIR PERMEABILITY)

A1 (150 Pa)	A2 (300 Pa)	A3 (450 Pa)	A4 (600 Pa)	AE (750 Pa)
----------------	----------------	----------------	----------------	----------------

SU SIZDIRMAZLIĞI - EN 12154  
(WATERTIGHTNESS)

R4 (150 Pa)	R5 (300 Pa)	R6 (450 Pa)	R7 (600 Pa)	RE... (750+ Pa)	RE1500 (1500 Pa)
----------------	----------------	----------------	----------------	--------------------	---------------------

RÜZGAR YÜKÜNE DAYANIM - EN 13116  
(RESISTANCE TO WIND LOAD)

2000 Pa ( Emniyet Testi: 3000 Pa )

- \*\* Akredite kuruluştan onaylı orijinal belge görseline katalogun sonundaki "sertifikalar" bölümünden ulaşılabilir. /  
Paper image approved from accredited society can be reached at the end of the catalogue "certificates" section.
- \* Daha detaylı bilgi için, lütfen test raporlarını isteyiniz. / For further information, please ask for the test reports.

## HAVA-SU-RÜZGAR PERFORMANS TEST SONUÇLARI - 2

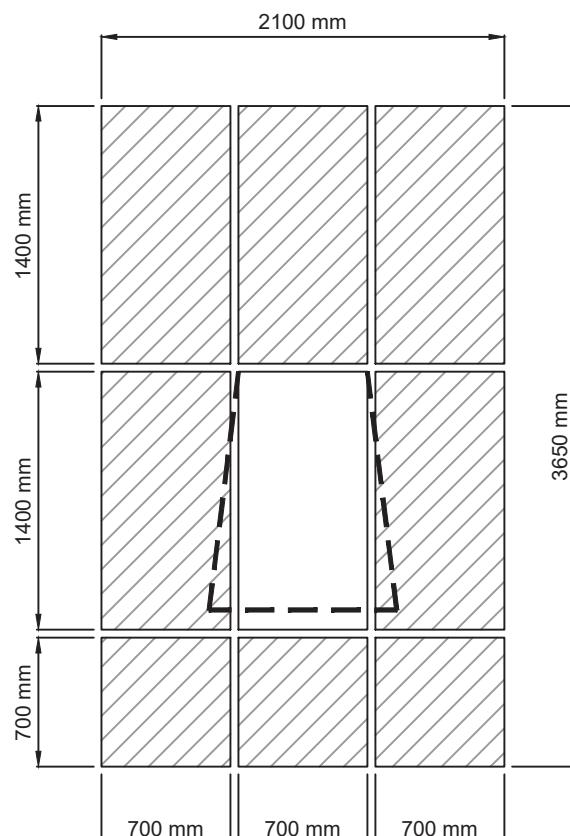
AIR-WATER-WIND PERFORMANCE TEST RESULTS - 2

- F50-Energy silikon derzli cam cephe sistemiyle gerçekleştirilen hava-su-rüzgar performans test sonuçlarıdır.  
There are the air-water-wind performance test results with the F50-Energy four sided silicone curtain wall system.



### Test Numunesinin Ebatları

Test Sample Dimensions



Silikon Cam Cephe / Foursided Curtain Wall

Genişlik / Width: 2150 mm

Yükseklik / Height: 3650 mm

## SİLİKON DERZLİ CAM CEPHE TEST SONUÇLARI

FOUR SIDED SILICONE CURTAIN WALL TEST RESULTS

HAVA GEÇİRGENLİĞİ - EN 12152  
(AIR PERMEABILITY)

A1 (150 Pa)	A2 (300 Pa)	A3 (450 Pa)	A4 (600 Pa)	AE (750 Pa)
----------------	----------------	----------------	----------------	----------------

SU SIZDIRMAZLIĞI - EN 12154  
(WATERTIGHTNESS)

R4 (150 Pa)	R5 (300 Pa)	R6 (450 Pa)	R7 (600 Pa)	RE... (750+ Pa)	RE1200 (1200 Pa)
----------------	----------------	----------------	----------------	--------------------	---------------------

RÜZGAR YÜKÜNE DAYANIM - EN 13116  
(RESISTANCE TO WIND LOAD)

2000 Pa ( Emniyet Testi: 3000 Pa )

\*\* Akredite kuruluştan onaylı orijinal belge görseline katalogun sonundaki "sertifikalar" bölümünden ulaşılabilir. /

Paper image approved from accredited society can be reached at the end of the catalogue "certificates" section.

\* Daha detaylı bilgi için, lütfen test raporlarını isteyiniz. / For further information, please ask for the test reports.

## AKUSTİK PERFORMANS TEST SONUÇLARI

### ACOUSTIC PERFORMANCE TEST RESULTS

► F50-Energy kapaklı ve entegre cephe sistem çözümleriyle gerçekleştirilen akustik test sonuçlarıdır.  
There are the acoustic test results with the F50-Energy capped and integrated curtain wall systems.



Kapaklı Cephe / Capped Curtain Wall  
Genişlik / Width: **2150 mm**  
Yükseklik / Height: **2820 mm**



Entegre Cephe / Integrated Curtain Wall  
Genişlik / Width: **2150 mm**  
Yükseklik / Height: **2820 mm**

## KAPAKLI CEPHE TEST SONUÇLARI

### CAPPED CURTAIN WALL TEST RESULTS

AKUSTİK PERFORMANS - EN 10140-2  
(ACOUSTIC PERFORMANCE)      EN 717-1

Rw (C ; Ctr) = **34** (-2; -5) dB

## SİLİKON DERZLİ CAM CEPHE TEST SONUÇLARI

### FOUR SIDED SILICONE CURTAIN WALL TEST RESULTS

AKUSTİK PERFORMANS - EN 10140-2  
(ACOUSTIC PERFORMANCE)      EN 717-1

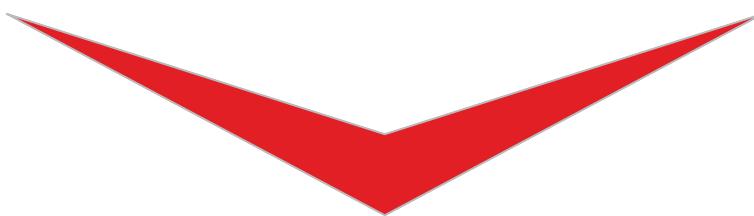
Rw (C ; Ctr) = **33** (-1; -3) dB

- \*\* Akredite kuruluştan onaylı orijinal belge görseline katalogun sonundaki "sertifikalar" bölümünden ulaşılabilir. /  
Paper image approved from accredited society can be reached at the end of the catalogue "certificates" section.
- \* Daha detaylı bilgi için, lütfen test raporlarını isteyiniz. / For further information, please ask for the test reports.



# **F50-ENERGY**

YÜKSEK YALITIMLI GİYDİRME CEPHE SİSTEMİ  
HIGH INSULATED CURTAIN WALL SYSTEM



## **SİSTEMİN ÖNE ÇIKAN ÖZELLİKLERİ** PROMINENT PROPERTIES OF THE SYSTEM

- 1. KOLAY VIDALAMA**  
EASY SCREW
- 2. AYNI KASADA YALITIMLI VEYA YALITIMSIZ KANAT KULLANILABİLME İMKANI**  
INSULATED AND UNINSULATED VENT PROFILES CAN BE USING WITH THE SAME FRAME
- 3. CAM CEPHEDE SICAK KENAR ANTİ YOĞUŞMA ÇITASI KULLANIMI**  
WARM EDGE SPACER USAGE IN FOURESIDED SILICONE CURTAIN WALL
- 4. DIŞA PARALEL AÇILIR KANAT**  
PARALEL OUTWARD OPENING VENT
- 5. ÖZEL DİLATASYON KAPAKLARI**  
SPECIAL DILATATION PLUGS
- 6. KONDENS YOLU İÇİN ÖZEL BAĞLANTI PARÇASI**  
SPECIAL CONNECTION PIECE FOR THE CONDENSATION LINE
- 7. VULKANİZE İÇ KÖŞE PARÇALARI**  
VULCANISED INNER CORNER PIECES

## KOLAY VIDALAMA

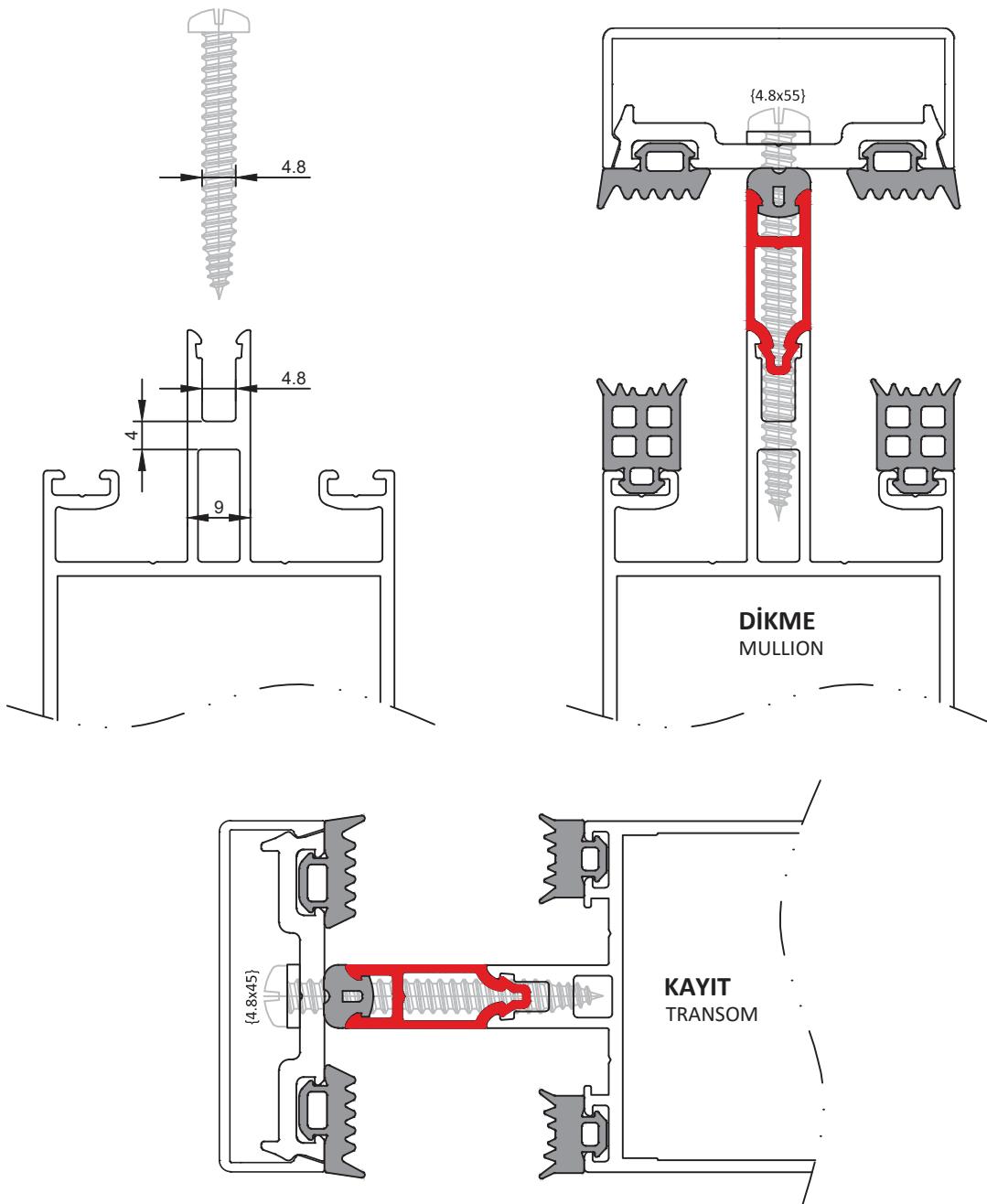
### EASY SCREW

Cephede montaj vidaları üzerine binen yükleri azaltmak; hem vidanın kırılma riskini minimize ettiğinden güvenliği artırmakta hem de vidalamanın daha rahat yapılabilmesi sayesinde imalat hızını artırmaktadır.

F50 - Energy sisteminin gaga yapısı 4.8mm'lik vidaların gaga duvarlarını ısrardan sadece temas ederek ilerlemesine ve son noktada 4mm'lik dolu profil etine bağlanarak yüksek bir tutunma mukavemeti elde edilmesine imkan sağlamaktadır.

Reducing applied forces on the screw provides minimizing screw breaking risks so it has more safety and increasing fabrication speed.

F50 - Energy system has unique beak structure suitable to the 4.8mm screws. When managing the application, screws barely contact the beak walls and completely pass through into the 4mm solid aluminium wall. So it provides high pull strength.



## AYNI KASADA YALITIMLI VEYA YALITIMSIZ KANAT KULLANILABİLME İMKANI

INSULATED AND UNINSULATED VENT PROFILES CAN BE USING WITH THE SAME FRAME

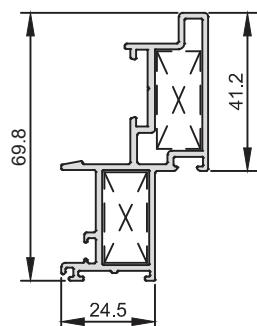
Cephe sistemlerinde kanat bölgeleri termal açıdan en zayıf bölgelerdir. Bu bölgede yaşanan terleme sorunları genellikle kasa yalitimındaki zafiyetlerden ötürü gerçekleşmektedir.

F50 - Energy sisteminde kasa profilleri her zaman ve mutlaka ısı yalitimlidir. Bu nedenle kanat profili yalitimsız bile kullanılmış olsa yoğunlaşma problemi yaşanma ihtimali minimum seviyededir.

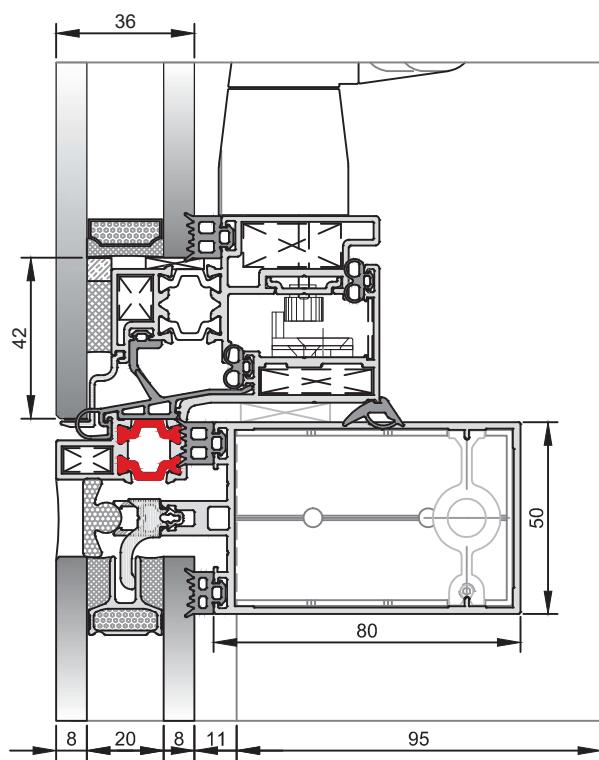
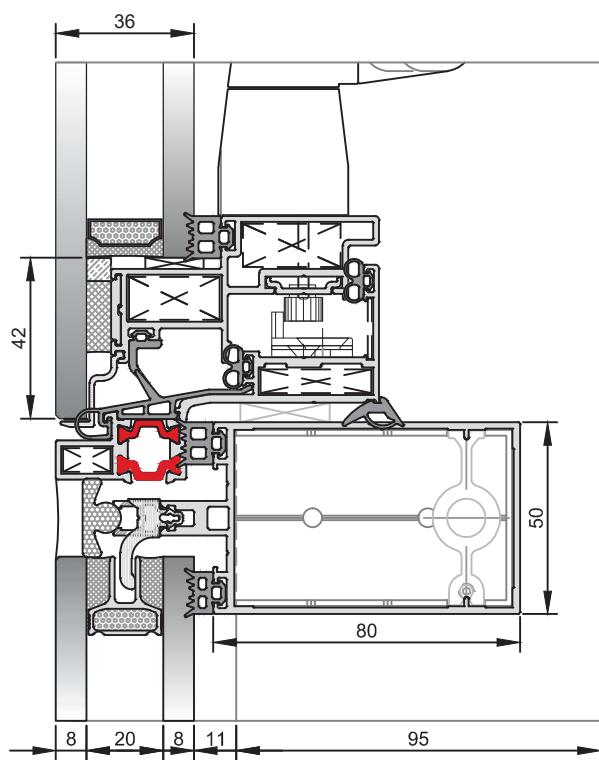
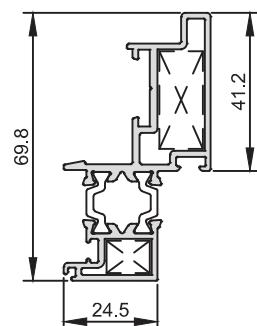
Thermally the weakest point in the curtain wall systems are opening vent areas. The condensation problems are usually result from the heat insulation issues on the frame.

F50 - Energy system's frame profiles are always heat insulated. Even uninsulated vent applications, the condensation risk is minimum.

Isı Yalıtımsız Kanat  
Uninsulated Vent



Isı Yalıtımlı Kanat  
Heat Insulated Vent



## CAM CEPHEDE SICAK KENAR ANTİ YOĞUŞMA ÇITASI KULLANIMI

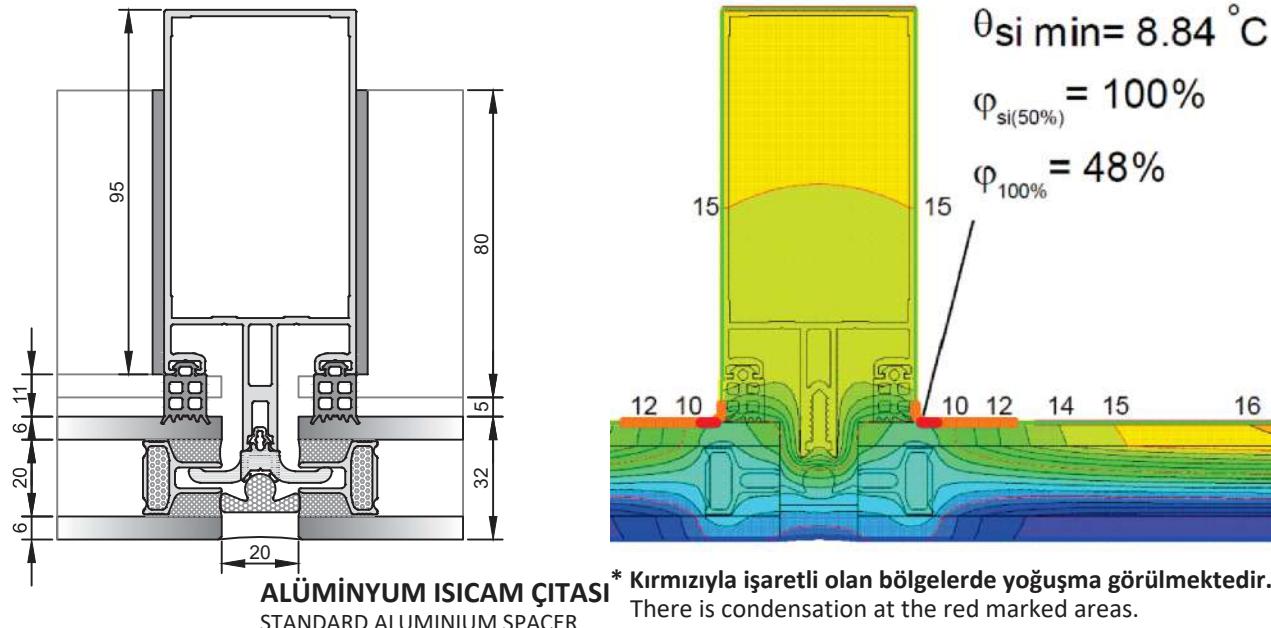
WARM EDGE SPACER USAGE IN FOURESIDED SILICONE CURTAIN WALL

Silikon cam cephelerde ısı yalıtmını sağlayan en büyük etmen camdır. Alüminyum ısıcamlar iç ve dış camlar arasında ısı köprüsü oluşturduğundan soğuk bölgelerde iç ortamın hızla ısı kaybetmesine neden olur.

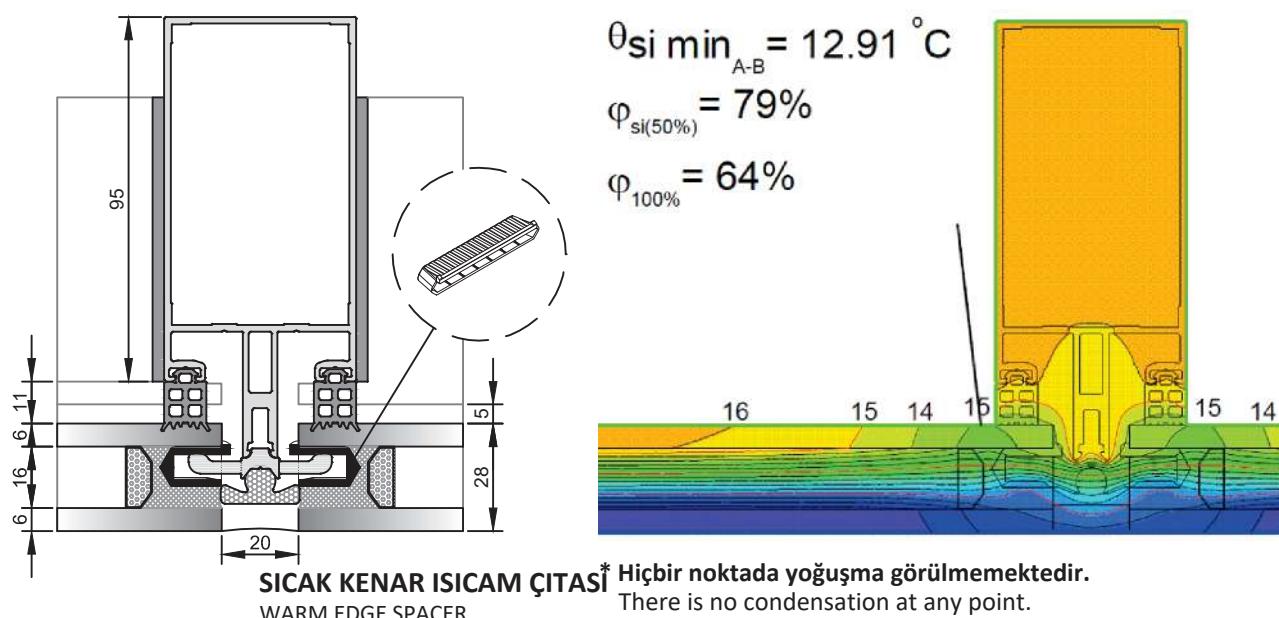
F50 - Energy sistemi sahip olduğu özel plastik kilitleme yuvaları sayesinde pvc malzemeden yapılmış olan sıcak kenar ısıcamlarının sorunsuz ve performanslı şekilde kullanımına imkan sağlamaktadır.

The biggest factor about thermal performance is glass. Standard aluminium spacer causes thermal bridge between inside and outside glass. Therefore especially in the low outside temperature conditions, inside area lose heat energy quickly.

F50 - Energy system's special plastic locking pieces provide completely thermally broke glass structure with using pvc based warm edge spacers. The result of this spacer solution condensation risks drop significantly.



Ug: 1,4 W/m<sup>2</sup>K değerinde cam ile 0°C dış ortam, 20°C iç ortam ve %50 bağıl nem koşullarına göre sistemde yoğunlaşma görülmemesi için minimum iç profil yüzey sıcaklığının (Qsi min.); 9,2°C olan yoğunlaşma başlangıç noktasının altında olması gereklidir.  
Without the condensation, glass Ug: 1,4 W/m<sup>2</sup>K at 0°C outside weather, 20°C inside weather and %50 relative humidity conditions, minimum inside profile surface temperature (Qsi min.), should be under the dewpoint beginning of 9,2°C.



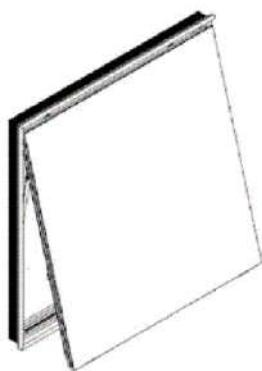
## DIŞA PARALEL AÇILIR KANAT PARALEL OUTWARD OPENING VENT

Konvansiyonel cephe uygulamalarında dışa açılır kanatlar ters vasistas şeklinde uygulanmaktadır. Bu tip kanatlar maliyet yönünden avantajlı konumdayken havalandırma ve estetik görünüm yönlerinden dezavantajlı durumdadır.

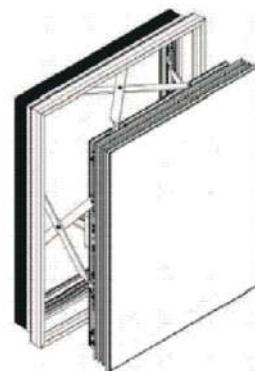
Ters vasistas tip kanatlarda cepheye dışarıdan bakıldığıda açık olan kanat bölümlerinde ışığın farklı kırılmasına ve o bölümde sanki delik varmış hissi oluşmasına neden olur. Havalandırma konusunda ise, oda içerisinde isınan hava yukarı yönde hareket etmeyeceğinden paralel açılım kanatlarda hava tahliye hızı ters vasistasına oranla 3 kat fazladır. Bu da odanın çok daha hızlı havalandırması anlamına gelmektedir.

Top hung outward opening hidden vent is the conventional low cost solution for the curtain walls. But it has disadvantages related to ventilation and aesthetic appearance.

When the vent is open, the outside appearance of the top hung hidden vent is the sort of hole feeling. For the ventilation, warm air wants to move higher so the parallel opening vents has more exhaust space at the top. Therefore it provides 3 times better air release speed and faster ventilation capability than top hung opening vents.

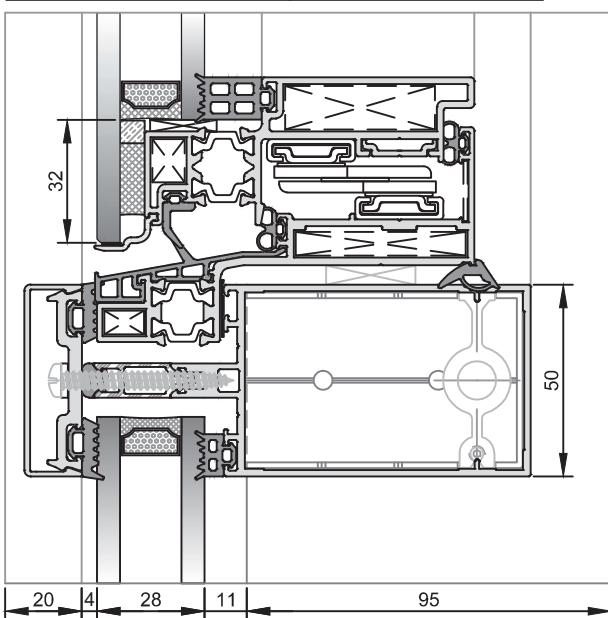


**Dışa Ters Vasistas Açılım**  
Top hung outward opening



**Dışa Paralel Açılım**  
Paralel Outward Opening

### PARALEL KANAT DETAYI / PARALLEL VENT DETAIL:



\*\* ÇEVRESEL KİMLEME YAPILABİLMEKTEDİR. /  
CAPABLE TO CIRCUMFERENCE MULTILOCKING.

### ÖRNEK UYGULAMA / SAMPLE APPLICATION:



## ÖZEL DİLATASYON KAPAKLARI SPECIAL DILATATION PLUGS

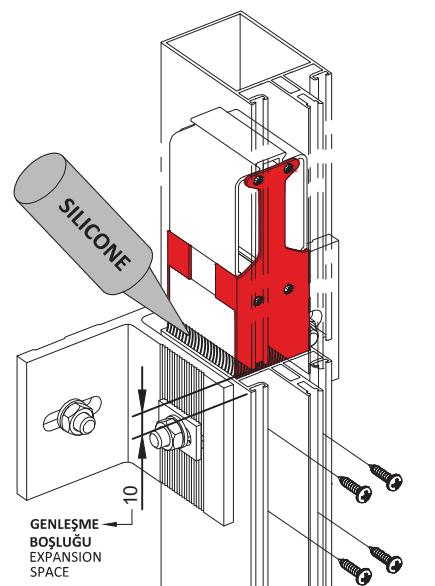
### 1. BOŞLUKSUZ SİLİKON UYGULAMASI / GAP FREE SILICONE APPLICATION

Genleşme boşluğununa silikon uygulaması yapılırken, silikonun bir kısmı profil içeresine düşerek boşluklara neden olmaktadır.

F50 - Energy sisteminin sahip olduğu dilatasyon kapakları sayesinde genleşme bölgesindeki silikon boşlukları engellenmekte ve kolay biçimde mükemmel bir hava-su izolasyonu sağlanabilmektedir.

When applying the silicone, some of the silicone drop into the mullion profile. It causes gap between bottom and top profiles.

F50-Energy system has special dilatation plugs and they prevent being gaps at the silicone application process and can be provided perfect air-water isolation at expansion spaces.



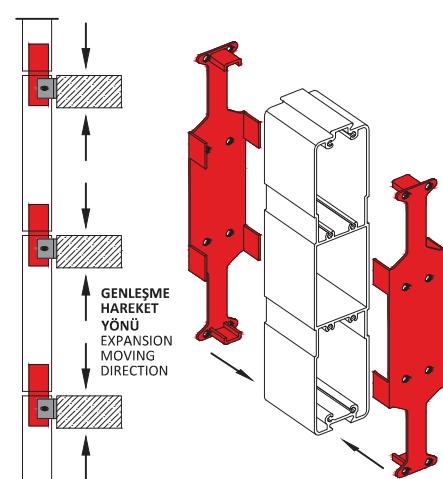
### 2. GENLEŞME GÜRLÜTÜSÜ ENGLELEME / PREVENTING EXPANSION NOISE

Gündüz ısınan taşıyıcı profiller akşam üstünden itibaren ısılmasını kayberek eski hallerine dönmeye çalışırlar. Bu hareket esnasında dilatasyon bölgesinde metal metale sürtünmelerden kaynaklı tıknır benzeri rahatsız edici sesler oluşur.

F50 - Energy sisteminin sahip olduğu özel dilatasyon kapakları sayesinde, genleşme esnasındaki sürtünmeler metaller ile plastik kapaklar arasında oluşturmaktadır. Bu da ses izolasyonu anlamına gelmektedir.

A reason of metal & metal friction, there is some disturbing noise according to the day-night temperature differences at the dilatation area.

F50-Energy system has special dilatation plugs and they provide the friction between metals & plastics. Consequently it means sound isolation.

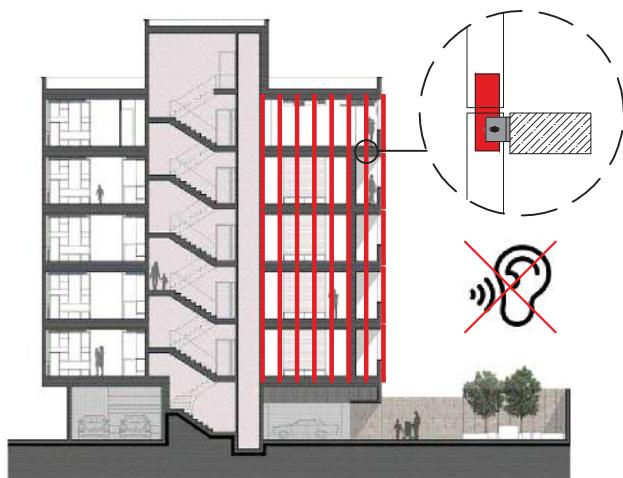


### 3. KATLAR ARASI SES İZOLASYONU / SOUND ISOLATION BETWEEN FLOORS

Dilatasyon bölgesinde metal metale temas eden bir ilişki varsa, ortamda oluşan ses dalgaları taşıyıcılarla çarptığında titreşim oluşturmaktır ve bu titreşimler yine taşıyıcılar aracılığıyla alt ve üst katlara gürültü olarak iletilmektedir.

F50 - Energy sisteminin sahip olduğu özel dilatasyon kapakları sayesinde, sürtünmeler metaller ile plastik kapaklar arasında gerçekleştiğinden ses dalgalarının oluşturduğu titreşimler sönmektedir, beraberinde taşıyıcılar içerisindeki boşluklardaki yankı oluşumu engellemektedir.

When the noise inside the room crash at the supporter profiles cause sound vibrations and they transmit up and down floors as a disturbing noise.



F50-Energy system has special dilatation plugs and they provide the friction between metals & plastics. Therefore sound vibration level dramatically drops and prevent being echo inside the supporter profiles.

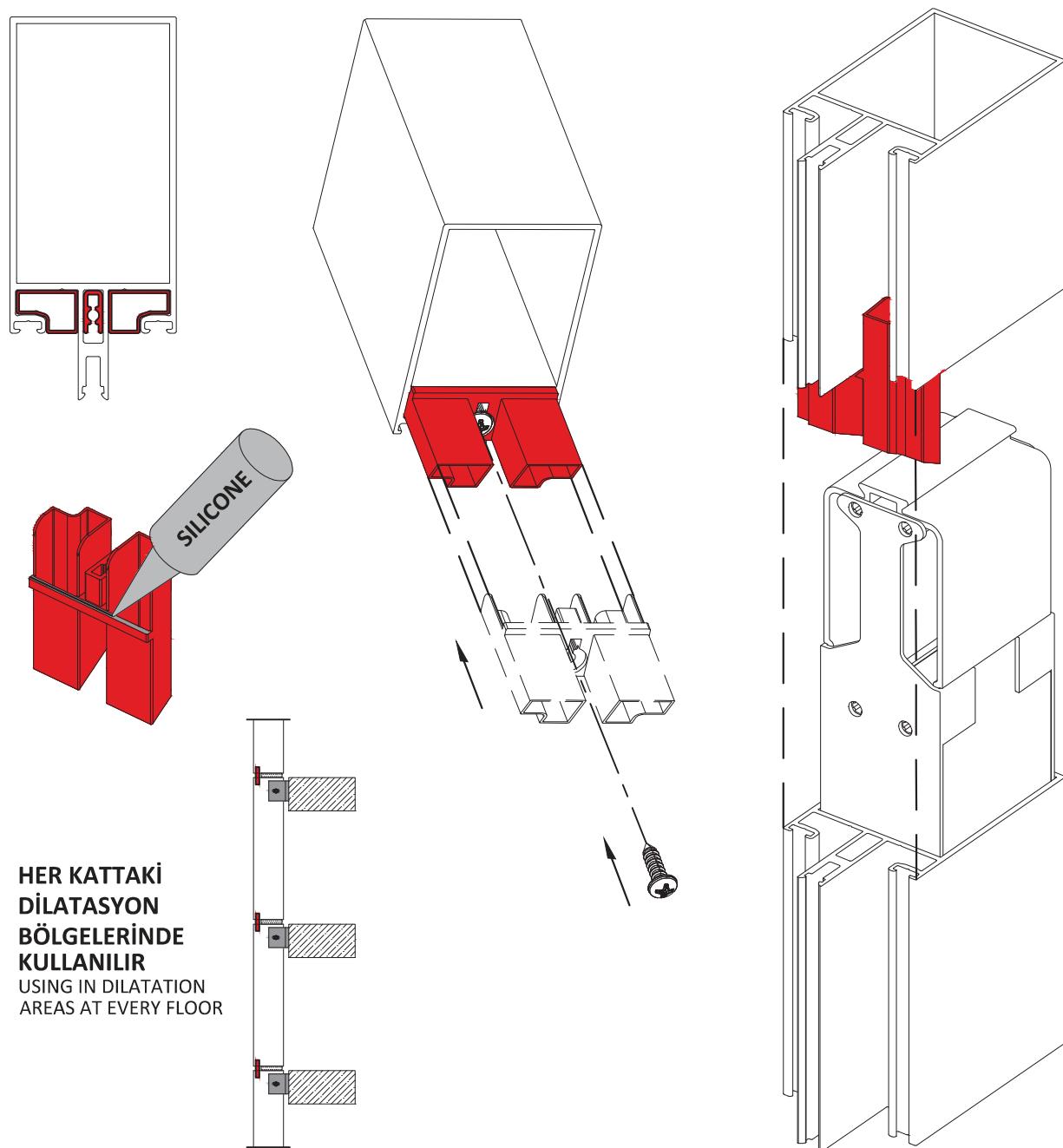
## KONDENS YOLU İÇİN ÖZEL BAĞLANTI PARÇASI SPECIAL CONNECTION PIECE FOR THE CONDENSATION LINE

Yapıda özellikle kış aylarında iç ve dış ortam sıcaklık farklarından ötürü yoğunlaşma suları oluşmakta ve kondens kanalları aracılığıyla cephenin en alt bölümünden dışarı atılmaktadır. Oluşan yoğunlaşma suları üst katlarda damlamalar şeklinde görülürken, aşağılara inildikçe birleşerek debisi olan bir su akışı haline gelirler.

F50 - Energy sisteminin sahip olduğu özel kondens yolu bağlantı parçası sayesinde suyun akışı kesintisiz ve sızdırmaz bir biçimde gerçekleşebilmektedir.

Especially in winter, system has condensation water which lunge with the condensation line because of the inside and outside temperature differences. These condensation water drop from top to bottom and when reach the lower levels they become a water stream.

F50 - Energy system's special connection piece provides uninterrupted and sealed water stream at the condensation line.



## VULKANİZE İÇ KÖŞE PARÇALARI

### VULCANISED INNER CORNER PIECES

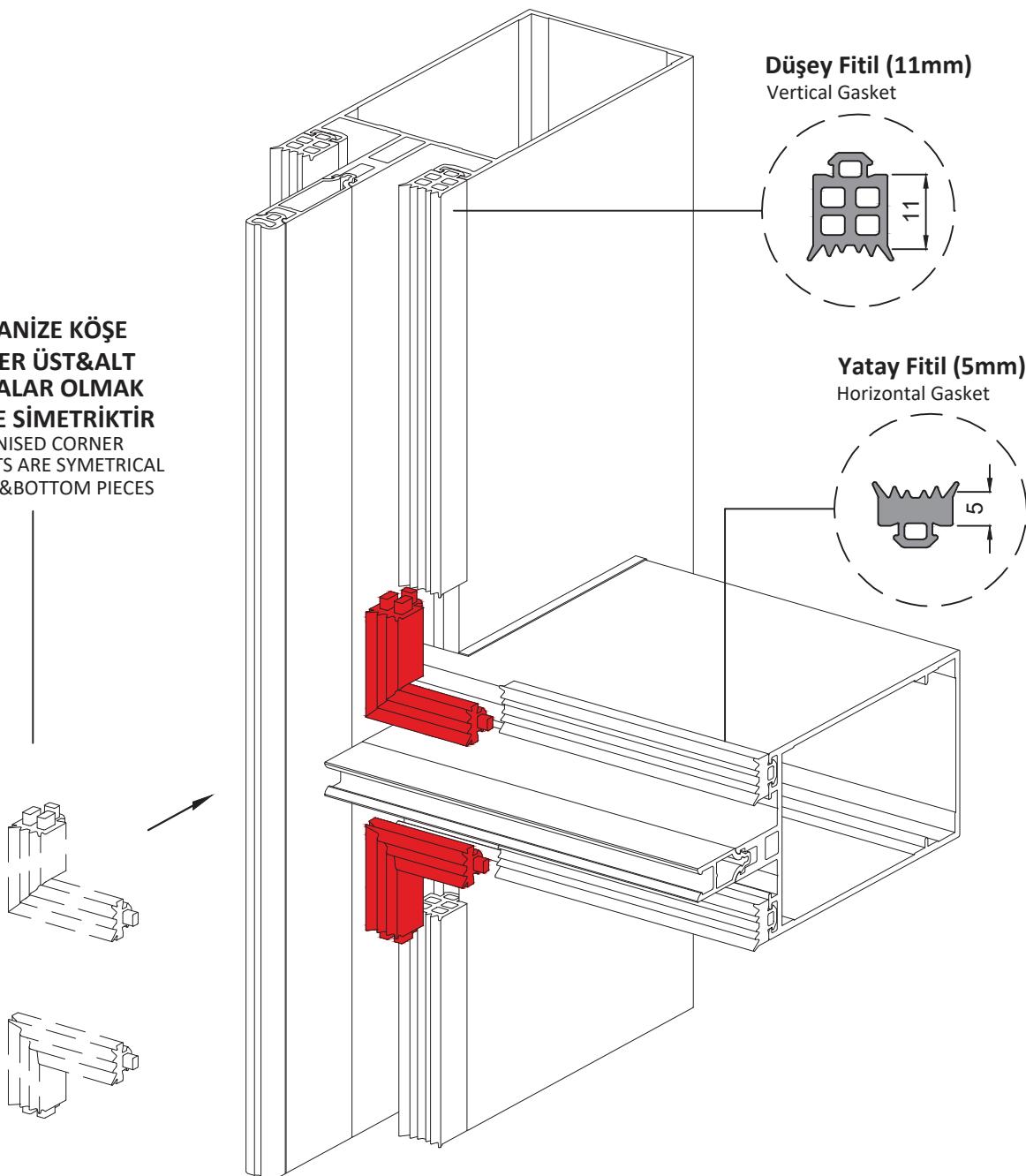
Cephe sistemlerinde tahliyelerden ve kondens boşluklarından giren hava sistem içerisinde dolaşmaktadır. Bu noktada havanın iç ortama geçişini engelleyen tek unsur, sistemin iç bini fitilleridir.

F50 - Energy sisteminin sahip olduğu özel vulkanize fitiller sayesinde, düşeyden gelen 11mm'lik filil ile yataydan gelen 5mm'lik fitil köşelerde kusursuz biçimde birleşmektedir. Köşe bireşim noktalarının eksiz ve yekpare biçimde dönülmesi sayesinde hem imalat yönünden hız&kolaylık sağlanmakta hem de işçilikten kaynaklanabilecek olası hataların önüne geçilmektedir.

Air coming from outside to inside with draine holes and condensation channel is rounding in the curtain wall. The only thing to prevent air passing into the system is the inner gaskets.

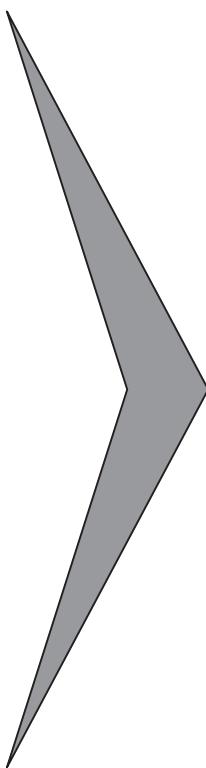
F50 - Energy system's special vulcanised corner pieces provide uninterrupted corner line between vertical gasket with 11mm thickness and horizontal gasket with 5mm thickness. These excellent corner connection also provides speed&easy manufacturing and prevents potential workmanship mistakes.

**VULKANİZE KÖŞE  
FİTİLLER ÜST&ALT  
PARÇALAR OLMAK  
ÜZERE SİMETRİK TİR**  
VULCANISED CORNER  
GASKETS ARE SYMETRICAL  
AS TOP&BOTTOM PIECES



# PROFİL FİHİRİSTİ

# PROFILE INDEX



- KATALOGDA BELİRTİLEN TÜM PROFİL AĞIRLIKLARI TEORİK OLUP PROFİLLERİN PRES(HAM) HALLERİNE AİTTİR. ISI BARIYERİ ÇEŞİDİNE VEYA PROFİL YÜZEVİNDEKİ BOYA KALI NLIKLARINA BAĞLI OLARAK AĞIRLIK FARKLILIKLARI OLUŞABİL MEKTEDİR. WEIGHTS IN THIS CATALOGUE ARE THEORETICAL AND BELONG TO MILL FINISH SURFACE. ACCORDING TO THE INSULATION BAR TYPE OR THICKNESSES OF THE PAINT ON THE PROFILE SURFACE, THERE COULD BE WEIGHT DIFFERENCES.
- SİSTEM ALÜMİNYUM® KATALOG İÇERİSİNDEKİ VERİLERDE DÜZELTME VEYA DEĞİŞİKLİK YAPMA HAKKINA SAHİPTİR. SİSTEM ALÜMİNYUM® HAS THE RIGHTS TO MAKE CORRECTION OR MODIFICATION IN THE CATALOGUE DATA.

## PROFİL FİHRİSTİ / PROFILE INDEX

PROFİL NUM. PROFILE NO.	TANIM DESCRIPTION	ÇİZİM DRAWING	AĞIRLIK WEIGHT (kg/m)	SAYFA PAGE
<b>FP101</b>	<b>DİKME PROFİLİ (35 mm/1.7 mm) MULLION PROFILE</b>		<b>1,283</b>	<b>26</b>
<b>FP102</b>	<b>DİKME PROFİLİ (55 mm/1.7 mm) MULLION PROFILE</b>		<b>1,467</b>	<b>26</b>
<b>FP103</b>	<b>DİKME PROFİLİ (55 mm/2 mm) MULLION PROFILE</b>		<b>1,568</b>	<b>26</b>
<b>FP104</b>	<b>DİKME PROFİLİ (75 mm/1.7 mm) MULLION PROFILE</b>		<b>1,651</b>	<b>27</b>
<b>FP105</b>	<b>DİKME PROFİLİ (75 mm/2 mm) MULLION PROFILE</b>		<b>1,785</b>	<b>27</b>
<b>FP106</b>	<b>DİKME PROFİLİ (95 mm/1.7 mm) MULLION PROFILE</b>		<b>1,835</b>	<b>27</b>
<b>FP107</b>	<b>DİKME PROFİLİ (95 mm/2 mm) MULLION PROFILE</b>		<b>2,001</b>	<b>27</b>
<b>FP108</b>	<b>DİKME PROFİLİ (115 mm/1.7 mm) MULLION PROFILE</b>		<b>2,081</b>	<b>28</b>
<b>FP109</b>	<b>DİKME PROFİLİ (115 mm/2 mm) MULLION PROFILE</b>		<b>2,343</b>	<b>28</b>
<b>FP110</b>	<b>DİKME PROFİLİ (135 mm/1.7 mm) MULLION PROFILE</b>		<b>2,291</b>	<b>29</b>
<b>FP111</b>	<b>DİKME PROFİLİ (135 mm/2 mm) MULLION PROFILE</b>		<b>2,684</b>	<b>29</b>
<b>FP112</b>	<b>DİKME PROFİLİ (155 mm/1.8 mm) MULLION PROFILE</b>		<b>2,594</b>	<b>30</b>
<b>FP113</b>	<b>DİKME PROFİLİ (155 mm/2 mm) MULLION PROFILE</b>		<b>2,963</b>	<b>30</b>
<b>FP114</b>	<b>DİKME PROFİLİ (175 mm/2.1 mm) MULLION PROFILE</b>		<b>3,004</b>	<b>31</b>
<b>FP115</b>	<b>DİKME PROFİLİ (175 mm/2.1 mm) MULLION PROFILE</b>		<b>3,327</b>	<b>31</b>

## PROFİL FİHRİSTİ / PROFILE INDEX

PROFİL NUM. PROFILE NO.	TANIM DESCRIPTION	ÇİZİM DRAWING	AĞIRLIK WEIGHT (kg/m)	SAYFA PAGE
<b>FP116</b>	<b>DİKME PROFİLİ (195 mm/2.3 mm) MULLION PROFILE</b>		<b>3,449</b>	<b>32</b>
<b>FP117</b>	<b>DİKME PROFİLİ (195 mm/2.3 mm) MULLION PROFILE</b>		<b>3,756</b>	<b>32</b>
<b>FP118</b>	<b>DİKME PROFİLİ (215 mm/2.4 mm) MULLION PROFILE</b>		<b>3,915</b>	<b>33</b>
<b>FP119</b>	<b>DİKME PROFİLİ (215 mm/2.4 mm) MULLION PROFILE</b>		<b>4,283</b>	<b>33</b>
<b>FP125</b>	<b>KÖŞE DÖNÜŞ PROFİLİ (75 mm) CORNER PROFILE</b>		<b>2,366</b>	<b>34</b>
<b>FP126</b>	<b>KÖŞE DÖNÜŞ PROFİLİ (95 mm) CORNER PROFILE</b>		<b>2,681</b>	<b>34</b>
<b>FP151</b>	<b>KAYIT PROFİLİ (5.5 mm) TRANSOM PROFILE</b>		<b>0,567</b>	<b>35</b>
<b>FP152</b>	<b>KAYIT PROFİLİ (20 mm/1.7 mm) TRANSOM PROFILE</b>		<b>0,933</b>	<b>35</b>
<b>FP153</b>	<b>KAYIT PROFİLİ (40 mm/1.7 mm) TRANSOM PROFILE</b>		<b>1,123</b>	<b>35</b>
<b>FP154</b>	<b>KAYIT PROFİLİ (50 mm/1.6 mm) TRANSOM PROFILE</b>		<b>1,161</b>	<b>35</b>
<b>FP155</b>	<b>KAYIT PROFİLİ (60 mm/1.7 mm) TRANSOM PROFILE</b>		<b>1,308</b>	<b>36</b>
<b>FP156</b>	<b>KAYIT PROFİLİ (80 mm/1.7 mm) TRANSOM PROFILE</b>		<b>1,515</b>	<b>36</b>
<b>FP157</b>	<b>KAYIT PROFİLİ (100 mm/1.7 mm) TRANSOM PROFILE</b>		<b>1,699</b>	<b>36</b>
<b>FP158</b>	<b>KAYIT PROFİLİ (120 mm/1.7 mm) TRANSOM PROFILE</b>		<b>1,884</b>	<b>36</b>
<b>FP159</b>	<b>KAYIT PROFİLİ (140 mm/2 mm) TRANSOM PROFILE</b>		<b>2,289</b>	<b>37</b>

## PROFİL FİHRİSTİ / PROFILE INDEX

PROFİL NUM. PROFILE NO.	TANIM DESCRIPTION	ÇİZİM DRAWING	AĞIRLIK WEIGHT (kg/m)	SAYFA PAGE
<b>FP160</b>	KAYIT PROFİLİ (160 mm/1.6 mm) TRANSOM PROFILE		<b>2,227</b>	<b>37</b>
<b>FP161</b>	KAYIT PROFİLİ (160 mm/2.1 mm) TRANSOM PROFILE		<b>2,601</b>	<b>38</b>
<b>FP162</b>	KAYIT PROFİLİ (180 mm/2.1 mm) TRANSOM PROFILE		<b>2,828</b>	<b>38</b>
<b>FP163</b>	KAYIT PROFİLİ (200 mm/2.1 mm) TRANSOM PROFILE		<b>3,230</b>	<b>39</b>
<b>FP164</b>	KAYIT PROFİLİ (220 mm/2.4 mm) TRANSOM PROFILE		<b>3,785</b>	<b>39</b>
<b>FP165</b>	KAYIT PROFİLİ (100 mm/1.7 mm) TRANSOM PROFILE		<b>1,485</b>	<b>40</b>
<b>FP301</b>	YALITIMSIZ KASA PROFİLİ UNINSULATED FRAME PROFILE		<b>1,053</b>	<b>40</b>
<b>FP302</b>	YALITIMLI KASA PROFİLİ INSULATED FRAME PROFILE		<b>1,235(PVC) 1,224(POL)</b>	<b>40</b>
<b>FP303</b>	YALITIMLI KASA PROFİLİ INSULATED FRAME PROFILE		<b>1,256(PVC) 1,245(POL)</b>	<b>41</b>
<b>FP304</b>	YALITIMLI KASA PROFİLİ INSULATED FRAME PROFILE		<b>1,272(PVC) 1,261(POL)</b>	<b>41</b>
<b>FP305</b>	YALITIMLI KASA PROFİLİ INSULATED FRAME PROFILE		<b>1,442(PVC) 1,431(POL)</b>	<b>42</b>
<b>FP306</b>	YALITIMLI KASA PROFİLİ INSULATED FRAME PROFILE		<b>1,458(PVC) 1,447(POL)</b>	<b>42</b>
<b>FP326</b>	YALITIMSIZ KANAT PROFİLİ UNINSULATED VENT PROFILE		<b>0,903</b>	<b>40</b>
<b>FP327</b>	YALITIMSIZ KANAT PROFİLİ UNINSULATED VENT PROFILE		<b>1,035</b>	<b>41</b>
<b>FP328</b>	YALITIMLI KANAT PROFİLİ INSULATED VENT PROFILE		<b>1,236(PVC) 1,225(POL)</b>	<b>41</b>

## PROFİL FİHRİSTİ / PROFILE INDEX

PROFİL NUM. PROFILE NO.	TANIM DESCRIPTION	ÇİZİM DRAWING	AĞIRLIK WEIGHT (kg/m)	SAYFA PAGE
<b>FP329</b>	<b>YALITIMSIZ KANAT PROFİLİ</b> UNINSULATED VENT PROFILE		<b>1,250</b>	<b>42</b>
<b>FP330</b>	<b>YALITIMLI KANAT PROFİLİ</b> INSULATED VENT PROFILE		<b>1,453(PVC) 1,443(POL)</b>	<b>42</b>
<b>FP359</b>	<b>SPANDREL BÖLGE PANEL PROFİLİ</b> PANEL PROFILE FOR SPANDREL AREA		<b>0,437</b>	<b>43</b>
<b>FP360</b>	<b>SPANDREL BÖLGE PANEL PROFİLİ</b> PANEL PROFILE FOR SPANDREL AREA		<b>0,385</b>	<b>43</b>
<b>FP361</b>	<b>SPANDREL BÖLGE PANEL PROFİLİ</b> PANEL PROFILE FOR SPANDREL AREA		<b>0,468</b>	<b>43</b>
<b>FP362</b>	<b>SPANDREL BÖLGE PANEL PROFİLİ</b> PANEL PROFILE FOR SPANDREL AREA		<b>0,416</b>	<b>43</b>
<b>FP377</b>	<b>CAM ARASI KİTLEME PROFİLİ</b> LOCKING PR. FOR DOUBLE GLAZED GLASS		<b>0,294</b>	<b>50</b>
<b>FP378</b>	<b>CAM ARASI KİTLEME PROFİLİ</b> LOCKING PR. FOR DOUBLE GLAZED GLASS		<b>0,318</b>	<b>50</b>
<b>FP379</b>	<b>CAM ARASI KİTLEME PROFİLİ</b> LOCKING PR. FOR DOUBLE GLAZED GLASS		<b>0,331</b>	<b>50</b>
<b>FP380</b>	<b>CAM ARASI KİTLEME PROFİLİ</b> LOCKING PR. FOR DOUBLE GLAZED GLASS		<b>0,354</b>	<b>50</b>
<b>FP381</b>	<b>CAM ARASI KİTLEME PROFİLİ</b> LOCKING PR. FOR DOUBLE GLAZED GLASS		<b>0,270</b>	<b>50</b>
<b>FP382</b>	<b>CAM ARASI KİTLEME PROFİLİ</b> LOCKING PR. FOR DOUBLE GLAZED GLASS		<b>0,281</b>	<b>50</b>
<b>FP383</b>	<b>CAM ARASI KİTLEME PROFİLİ</b> LOCKING PR. FOR DOUBLE GLAZED GLASS		<b>0,343</b>	<b>50</b>
<b>FP384</b>	<b>CAM ARASI KİTLEME PROFİLİ</b> LOCKING PR. FOR DOUBLE GLAZED GLASS		<b>0,340</b>	<b>50</b>
<b>FP390</b>	<b>CAM ALTI DESTEK PROFİLİ</b> GLAZING SUPPORT PROFILE		<b>0,277</b>	<b>50</b>

## PROFİL FİHRİSTİ / PROFILE INDEX

PROFİL NUM. PROFILE NO.	TANIM DESCRIPTION	ÇİZİM DRAWING	AĞIRLIK WEIGHT (kg/m)	SAYFA PAGE
<b>FP391</b>	<b>CAM ALTI DESTEK PROFİLİ</b> GLAZING SUPPORT PROFILE		<b>0,308</b>	<b>50</b>
<b>FP392</b>	<b>CAM ALTI DESTEK PROFİLİ</b> GLAZING SUPPORT PROFILE		<b>0,338</b>	<b>50</b>
<b>FP393</b>	<b>CAM ALTI DESTEK PROFİLİ</b> GLAZING SUPPORT PROFILE		<b>0,368</b>	<b>50</b>
<b>FP394</b>	<b>CAM ALTI DESTEK PROFİLİ</b> GLAZING SUPPORT PROFILE		<b>0,482</b>	<b>50</b>
<b>FP398</b>	<b>20mm ÖZEL İSICAM ÇITASI</b> 20mm SPECIAL GLASS SPACER		<b>0,240</b>	<b>43</b>
<b>FP399</b>	<b>YAPIŞMA YÜZYEY PROFİLİ</b> BONDING SURFACE PROFILE		<b>0,109</b>	<b>43</b>
<b>FP400</b>	<b>KANAT CAM ALTI DESTEK PROFİLİ</b> GLAZING SUPPORT PROFILE FOR VENT		<b>0,084</b>	<b>51</b>
<b>FP401</b>	<b>KANAT CAM ALTI DESTEK PROFİLİ</b> GLAZING SUPPORT PROFILE FOR VENT		<b>0,117</b>	<b>51</b>
<b>FP426</b>	<b>BASKI KAPAK PROFİLİ</b> PRESSURE CAP PROFILE		<b>0,395</b>	<b>44</b>
<b>FP427</b>	<b>BASKI KAPAK PROFİLİ</b> PRESSURE CAP PROFILE		<b>0,496</b>	<b>44</b>
<b>FP428</b>	<b>BASKI KAPAK PROFİLİ</b> PRESSURE CAP PROFILE		<b>0,413</b>	<b>44</b>
<b>FP429</b>	<b>BASKI KAPAK PROFİLİ</b> PRESSURE CAP PROFILE		<b>0,494</b>	<b>44</b>
<b>FP430</b>	<b>BASKI KAPAK PROFİLİ</b> PRESSURE CAP PROFILE		<b>0,183</b>	<b>44</b>
<b>FP440</b>	<b>KAPAK PROFİLİ</b> CAP PROFILE		<b>0,043</b>	<b>44</b>
<b>FP441</b>	<b>KAPAK PROFİLİ (12 mm)</b> CAP PROFILE		<b>0,283</b>	<b>44</b>

## PROFİL FİHRİSTİ / PROFILE INDEX

PROFİL NUM. PROFILE NO.	TANIM DESCRIPTION	ÇİZİM DRAWING	AĞIRLIK WEIGHT (kg/m)	SAYFA PAGE
<b>FP442</b>	KAPAK PROFİLİ (15 mm) CAP PROFILE		0,308	<b>44</b>
<b>FP443</b>	KAPAK PROFİLİ (20 mm) CAP PROFILE		0,343	<b>44</b>
<b>FP444</b>	KAPAK PROFİLİ (25 mm) CAP PROFILE		0,403	<b>44</b>
<b>FP445</b>	KAPAK PROFİLİ (30 mm) CAP PROFILE		0,455	<b>45</b>
<b>FP446</b>	KAPAK PROFİLİ (50 mm) CAP PROFILE		0,745	<b>45</b>
<b>FP447</b>	KAPAK PROFİLİ (75 mm) CAP PROFILE		0,954	<b>45</b>
<b>FP448</b>	KAPAK PROFİLİ (100 mm) CAP PROFILE		1,273	<b>45</b>
<b>FP449</b>	KAPAK PROFİLİ (150 mm) CAP PROFILE		2,065	<b>46</b>
<b>FP450</b>	KAPAK PROFİLİ (200 mm) CAP PROFILE		3,006	<b>46</b>
<b>FP461</b>	KAPAK PROFİLİ (18.5 mm) CAP PROFILE		0,262	<b>47</b>
<b>FP462</b>	KAPAK PROFİLİ (30 mm) CAP PROFILE		0,397	<b>47</b>
<b>FP463</b>	KAPAK PROFİLİ (50 mm) CAP PROFILE		0,611	<b>45</b>
<b>FP464</b>	KAPAK PROFİLİ (75 mm) CAP PROFILE		0,753	<b>47</b>
<b>FP465</b>	KAPAK PROFİLİ (75 mm) CAP PROFILE		0,879	<b>47</b>
<b>FP466</b>	KAPAK PROFİLİ (100 mm) CAP PROFILE		1,214	<b>47</b>

## PROFİL FİHRİSTİ / PROFILE INDEX

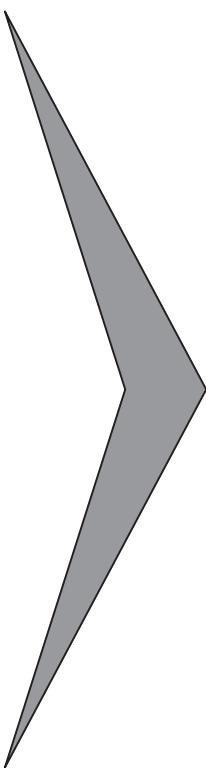
PROFİL NUM. PROFILE NO.	TANIM DESCRIPTION	ÇİZİM DRAWING	AĞIRLIK WEIGHT (kg/m)	SAYFA PAGE
<b>FP467</b>	<b>KAPAK PROFİLİ (150 mm) CAP PROFILE</b>		<b>1,885</b>	<b>48</b>
<b>FP468</b>	<b>KAPAK PROFİLİ (200 mm) CAP PROFILE</b>		<b>2,779</b>	<b>48</b>
<b>FP479</b>	<b>DIŞ KÖŞE DÖNÜŞ KAPAK PROFİLİ OUTER CORNER CAP PROFILE</b>		<b>1,804</b>	<b>49</b>
<b>FP480</b>	<b>İÇ KÖŞE BASKI KAPAK PROFİLİ INNER CORNER PRESSURE CAP PROFILE</b>		<b>0,384</b>	<b>49</b>
<b>FP481</b>	<b>İÇ KÖŞE DÖNÜŞ KAPAK PROFİLİ INNER CORNER CAP PROFILE</b>		<b>0,251</b>	<b>49</b>
<b>FP482</b>	<b>AÇILI BASKI KAPAK PROFİLİ ANGULAR PRESSURE CAP PROFILE</b>		<b>0,527</b>	<b>49</b>
<b>FP483</b>	<b>AÇILI KAPAK PROFİLİ ANGULAR CAP PROFILE</b>		<b>0,562</b>	<b>49</b>
<b>FP484</b>	<b>AÇILI BASKI KAPAK PROFİLİ ANGULAR PRESSURE CAP PROFILE</b>		<b>0,614</b>	<b>49</b>
<b>FP485</b>	<b>AÇILI KAPAK PROFİLİ ANGULAR CAP PROFILE</b>		<b>0,674</b>	<b>49</b>
<b>FP488</b>	<b>CAM ÇITASI (24 mm) GLAZING BEAD</b>		<b>0,235</b>	<b>43</b>
<b>FP489</b>	<b>AÇILI CAM ÇITASI ANGULAR GLAZING BEAD</b>		<b>0,098</b>	<b>43</b>
<b>FP490</b>	<b>AÇILI CAM ÇITASI ANGULAR GLAZING BEAD</b>		<b>0,105</b>	<b>43</b>
<b>FP491</b>	<b>AÇILI CAM ÇITASI ANGULAR GLAZING BEAD</b>		<b>0,112</b>	<b>43</b>
<b>FP492</b>	<b>CAM ÇITASI (6 mm) GLAZING BEAD</b>		<b>0,096</b>	<b>43</b>
<b>FP493</b>	<b>CAM ÇITASI (14 mm) GLAZING BEAD</b>		<b>0,154</b>	<b>43</b>

## PROFİL FİHRİSTİ / PROFILE INDEX

PROFİL NUM. PROFILE NO.	TANIM DESCRIPTION	ÇİZİM DRAWING	AĞIRLIK WEIGHT (kg/m)	SAYFA PAGE
<b>FP494</b>	<b>CAM ÇITASI (16 mm) GLAZING BEAD</b>		<b>0,183</b>	<b>43</b>
<b>FP495</b>	<b>CAM ÇITASI (18 mm) GLAZING BEAD</b>		<b>0,196</b>	<b>43</b>
<b>FP496</b>	<b>CAM ÇITASI (20 mm) GLAZING BEAD</b>		<b>0,209</b>	<b>43</b>
<b>FP497</b>	<b>CAM ÇITASI (22 mm) GLAZING BEAD</b>		<b>0,222</b>	<b>43</b>
<b>FP498</b>	<b>CAM ÇITASI (30 mm) GLAZING BEAD</b>		<b>0,274</b>	<b>43</b>
<b>FP499</b>	<b>ADAPTÖR PROFİLİ ADAPTER PROFILE</b>		<b>0,329</b>	<b>44</b>
<b>FP500</b>	<b>TİJ PROFİLİ ROD PROFILE</b>		<b>0,096</b>	<b>43</b>
<b>FP501</b>	<b>DİLATASYON PROFİLİ DILATATION PROFILE</b>		<b>3,864</b>	<b>52</b>
<b>FP502</b>	<b>GÜNEŞ KIRICILAR İÇİN BAĞLANTI PR. CARRIER PROFILE FOR SUNBREAKERS</b>		<b>3,533</b>	<b>52</b>
<b>FP506</b>	<b>U BAĞLANTI PROFİLİ U CONNECTION PROFILE</b>		<b>1,040</b>	<b>51</b>
<b>FP514</b>	<b>AÇILI U BAĞLANTI PROFİLİ ANGULAR U CONNECTION PROFILE</b>		<b>0,947</b>	<b>51</b>
<b>FP520</b>	<b>KÖŞE TAKOZU CORNER CLEAT</b>		<b>1,974</b>	<b>51</b>
<b>FP521</b>	<b>KÖŞE TAKOZU CORNER CLEAT</b>		<b>2,366</b>	<b>51</b>

# PROFİLER

# PROFILES



- KATALOGDA BELİRTİLEN TÜM PROFİL AĞIRLIKLARI TEORİK OLUP PROFİLLERİN PRES(HAM) HALLERİNE AİTTİR. ISI BARIYERİ ÇEŞİDİNE VEYA PROFİL YÜZEVİNDEKİ BOYA KALI NLIKLARINA BAĞLI OLARAK AĞIRLIK FARKLILIKLARI OLUŞABİL MEKTEDİR. WEIGHTS IN THIS CATALOGUE ARE THEORETICAL AND BELONG TO MILL FINISH SURFACE. ACCORDING TO THE INSULATION BAR TYPE OR THICKNESSES OF THE PAINT ON THE PROFILE SURFACE, THERE COULD BE WEIGHT DIFFERENCES.
- SİSTEM ALÜMİNYUM® KATALOG İÇERİSİNDEKİ VERİLERDE DÜZELTME VEYA DEĞİŞİKLİK YAPMA HAKKINA SAHİPTİR. SİSTEM ALÜMİNYUM® HAS THE RIGHTS TO MAKE CORRECTION OR MODIFICATION IN THE CATALOGUE DATA.

## STATİK DEĞERLER TABLOSU

TABLE OF THE STATIC VALUES

### TAŞIYICI DÜSEY PROFİLLER / MULLION PROFILES

PR. NUMARASI PROFILE NO.	PR. DERİNLİĞİ PROFILE DEPTH	ET KALINLIĞI WALL THICKNESS	SIRT ET KALINLIĞI BACK WALL THICKNESS	Wx (cm <sup>3</sup> )	Wy (cm <sup>3</sup> )	Jx (cm <sup>4</sup> )	Jy (cm <sup>4</sup> )	AĞIRLIK WEIGHT (kg/m)
<b>FP101</b>	35mm	1.7mm	1.7mm	3,41	4,78	10,93	11,95	1,283
<b>FP102</b>	55mm	1.7mm	1.7mm	6,76	6,37	26,56	15,92	1,467
<b>FP103</b>	55mm	2mm	2mm	6,99	6,85	28,18	17,12	1,568
<b>FP104</b>	75mm	1.7mm	1.7mm	10,96	7,95	52,42	19,88	1,651
<b>FP105</b>	75mm	2mm	2mm	11,54	8,69	56,01	21,73	1,785
<b>FP106</b>	95mm	1.7mm	1.7mm	15,13	9,54	90,05	23,85	1,835
<b>FP107</b>	95mm	2mm	2mm	16,92	10,53	96,69	26,34	2,001
<b>FP108</b>	115mm	1.7mm	2mm	21,05	11,43	146,54	28,57	2,081
<b>FP109</b>	115mm	2mm	3mm	24,60	12,79	171,14	31,77	2,343
<b>FP110</b>	135mm	1.7mm	2.2mm	27,51	13,08	219,98	32,71	2,291
<b>FP111</b>	135mm	2.2mm	4mm	33,15	14,87	272,66	37,19	2,684
<b>FP112</b>	155mm	2.2mm	2.3mm	35,11	15,42	316,68	38,56	2,594
<b>FP113</b>	155mm	2.4mm	4.5mm	41,83	16,88	391,21	42,20	2,963
<b>FP114</b>	175mm	2.4mm	2.4mm	45,10	18,71	447,36	46,78	3,004
<b>FP115</b>	175mm	2.6mm	5mm	51,78	19,54	544,51	48,85	3,327
<b>FP116</b>	195mm	2.6mm	2.5mm	56,50	22,24	613,16	55,61	3,449
<b>FP117</b>	195mm	2.8mm	5mm	63,09	23,02	726,42	57,56	3,756
<b>FP118</b>	215mm	2.8mm	3mm	71,82	26,19	840,60	65,26	3,915
<b>FP119</b>	215mm	2.8mm	6mm	78,78	26,35	1002	65,87	4,283

### YATAY KAYIT PROFİLLERİ / TRANSOM PROFILES

PR. NUMARASI PROFILE NO.	PR. DERİNLİĞİ PROFILE DEPTH	ET KALINLIĞI WALL THICKNESS	SIRT ET KALINLIĞI BACK WALL THICKNESS	Wx (cm <sup>3</sup> )	Wy (cm <sup>3</sup> )	Jx (cm <sup>4</sup> )	Jy (cm <sup>4</sup> )	AĞIRLIK WEIGHT (kg/m)
<b>FP151</b>	5.5mm	1.7mm	1.7mm	0,38	1,33	0,56	3,32	0,567
<b>FP152</b>	20mm	1.7mm	1.7mm	1,40	3,18	2,91	7,95	0,933
<b>FP153</b>	40mm	1.7mm	1.7mm	4,12	4,82	11,79	12,05	1,123
<b>FP154</b>	50mm	1.7mm	1.7mm	5,69	5,37	18,59	13,43	1,161
<b>FP155</b>	60mm	1.7mm	1.7mm	7,78	6,41	28,79	16,02	1,308
<b>FP156</b>	80mm	1.7mm	1.7mm	11,77	8,16	56,17	20,41	1,515
<b>FP157</b>	100mm	1.7mm	1.7mm	16,13	9,75	94,45	24,38	1,699
<b>FP158</b>	120mm	1.7mm	2mm	20,99	11,34	145,28	28,34	1,884
<b>FP159</b>	140mm	2mm	2mm	28,95	14,49	225,73	36,21	2,289
<b>FP160</b>	160mm	1.6mm	2mm	32,34	14,24	287,61	35,61	2,227
<b>FP161</b>	160mm	2.1mm	2.1mm	36,81	17,00	322,46	42,51	2,601
<b>FP162</b>	180mm	2.1mm	2.1mm	44,37	18,93	431,76	47,33	2,828
<b>FP163</b>	200mm	2.1mm	3mm	57,86	21,31	634,38	53,27	3,230
<b>FP164</b>	220mm	2.4mm	3mm	70,03	25,84	832	64,60	3,785

## MALZEME TEKNİK ÖZELLİKLERİ / TECHNICAL PROPERTIES OF MATERIALS

Alüminyum profil üretim tesisimiz ISO 9001 , ISO 14001 , OHSAS 18001 ve ISO/IEC 27001 kalite güvence belgelerine sahiptir.

### 1-Profil Hammaddesi (*Raw Material*) : AA 6063 (AlMgSi 0.5 F22) , EN 573-3

### 2-Mekanik Özellikler (*Mechanical Properties*) : EN 755-2

Yoğunluk (*Density*) : 2.71 g/cm<sup>3</sup>

Elastisite Modülü (*Elasticity Modul*) : 7000 kN/cm<sup>2</sup>

Kopma Mukavemeti (*Yield Strenght*) : 215 N/mm<sup>2</sup>

Akma Mukavemeti (*Flow Strenght*) : 160 N/mm<sup>2</sup>

Uzama (*Elongation*) : minimum 6 %

Sertlik (*Hardness*) : 70 HRB

### 3-Bariyer Hammaddesi

**a-PA 66 GF 25 (25 % cam elyaf takviyeli polyamid)** (*25 % the manufactured from glass stiffened polyamide*) :

Eloksal ve toz boyası işleminden önce yerleştirilir. (*Placed into the aluminium profiles before anodic oxidation and powder coating.*)

#### b- PVC :

Eloksal ve toz boyası işleminden sonra yerleştirilir. (*Placed into the aluminium profiles after anodic oxidation and powder coating.*)

PVC bariyerler, Polyamid bariyerlere göre 10 % daha ağırdır. (*PVC insulation bars are 10 % heavier than Polyamide insulation bars .*)

### 4-Eloksal (*Anodic Oxidation*)

Eloksallı Ürünlere İlişkin Teknik Resim Standardı : DIN 17611 , EN 12371-1 (QUALANOD)

(*The Standards of Technical Delivery Terms Regarding Elokal Products*)

Eloksal Tabakasının Kalınlığı (*Thickness of Elokal Coating*): 10-15 mikron, EN ISO 2360

Daldırma ve Renklendirme Standardı (*The Standards of Immersion Coloring*) : DIN 50018

Tesbit İşlemi Standardı (*Sealing Standarts*) : EN 12373-5 , ISO 3210 (TS 2676)

### 5-Toz Boya Standartları (*The Standards of Powder Coating*)

Kalınlık (*Thickness*) : min. 60 mikron

Adhezyon (*Adhesion*) : EN ISO 2409

Esneklik (*Elasticity*) : EN ISO 1519

Deformasyon (*Deformation*) : EN ISO 6272-1

Sertlik (*Hardness*) : EN ISO 2815

**6-Yüzey Görünümü** (*Surface Appearance*) : Gözle yapılacak kontrolde,yüzey üzerinde kaplanmış alan,çizik,pütürülük,kabarıklık,leke,soyulma vb. hatalar görülmelidir. (*By visual observation,there has been no defects seen on the surface,such as scratches cramped shapes,swellings,stain etc. on the exposed areas.*)

### 7-Tüm Fitiller (*All gaskets*)

Hammaddesi (*Raw material*) : EPDM

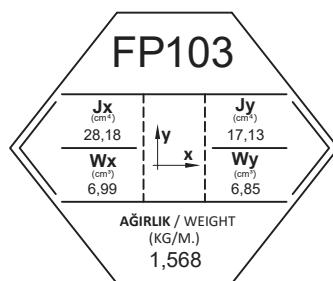
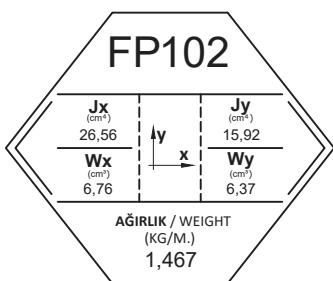
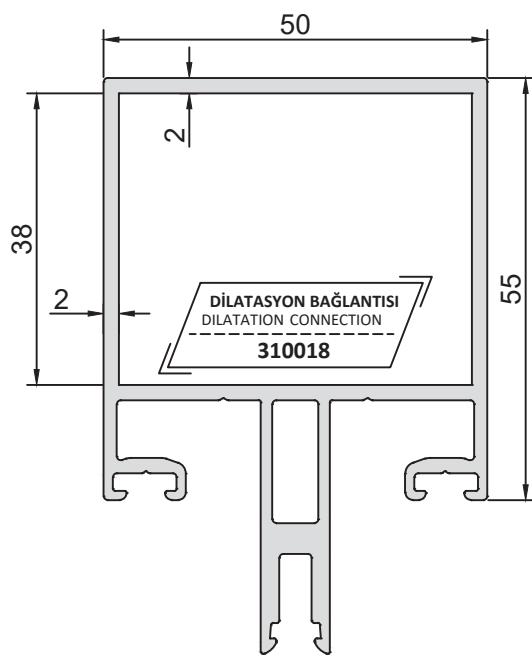
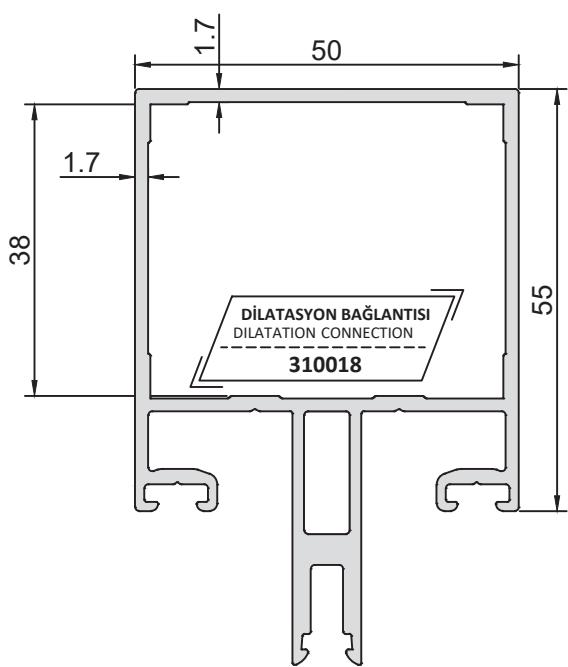
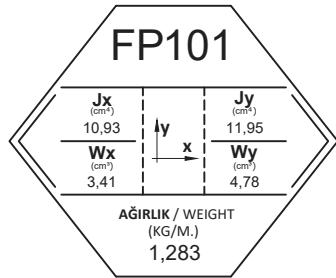
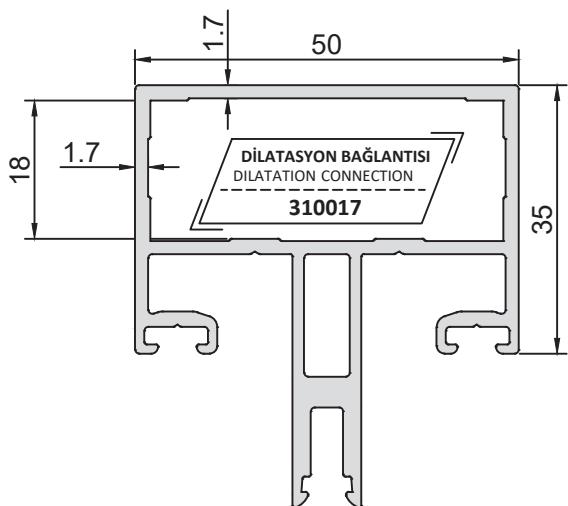
Derz fitilleri hammaddesi (*Raw material of Gaskets for suture*) : Silikon (*Silicone*)

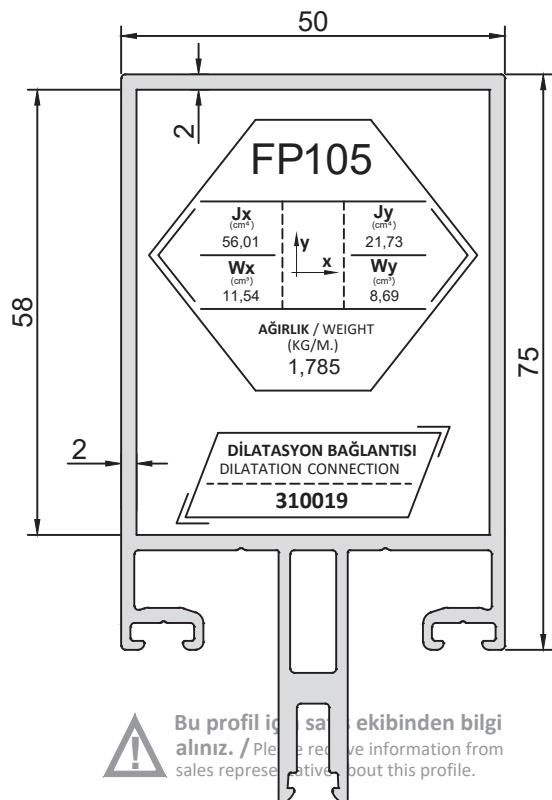
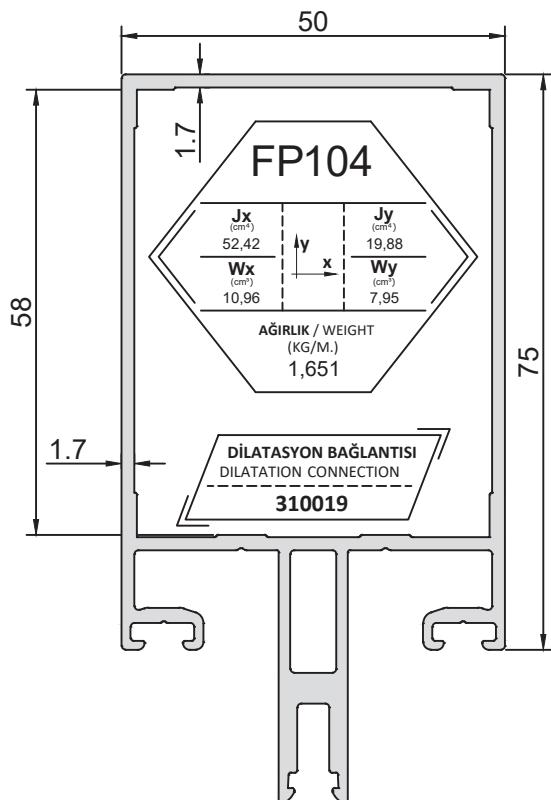
Ölçü Toleransları Standardı (*Measurement Tolerances Standards*) : DIN ISO 3302-1/E2

Kalite Kontrol Standardı (*Quality Control Standart*) : RAL-GZ 716

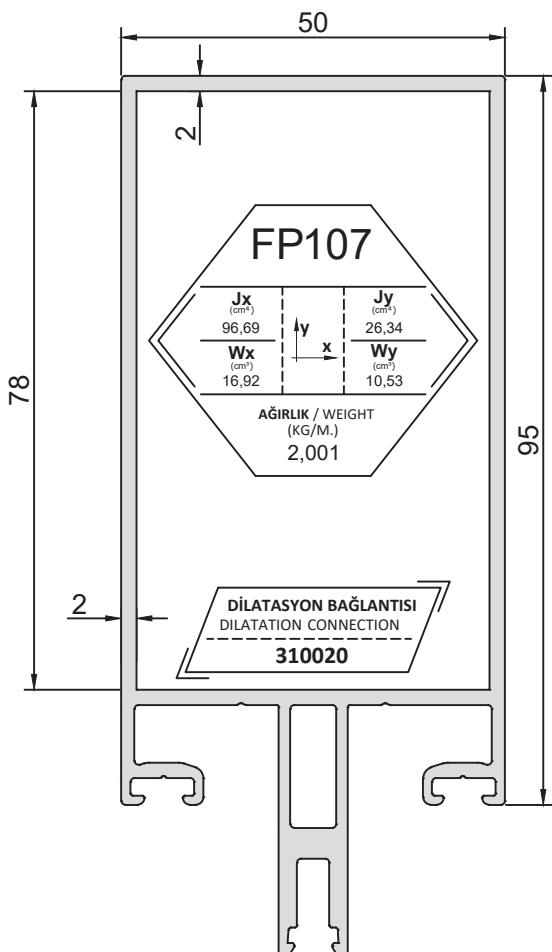
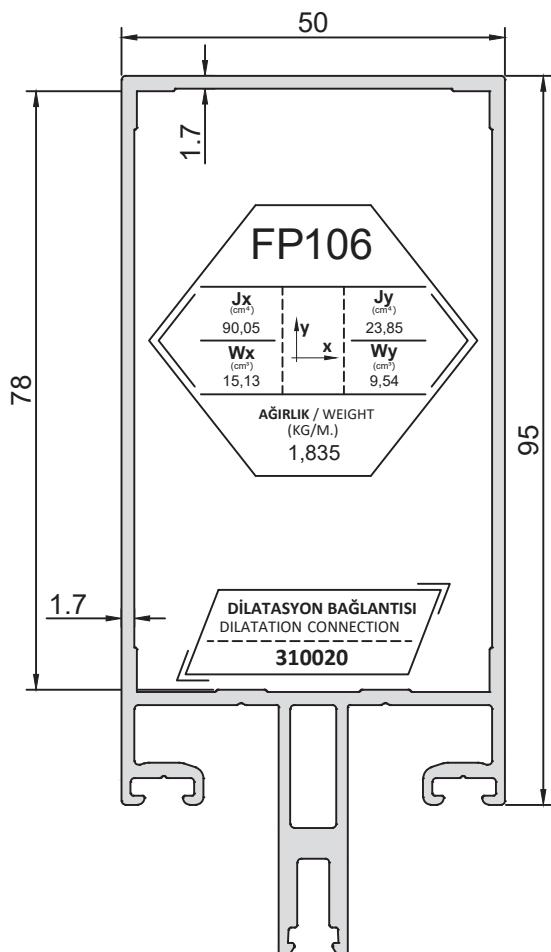
### 8-Profil Tasarım ve Üretimindeki Ölçü Toleransları Standartları : EN 12020-2

(*Measurement Tolerances Standards for Profile Design and Manufacturing*)

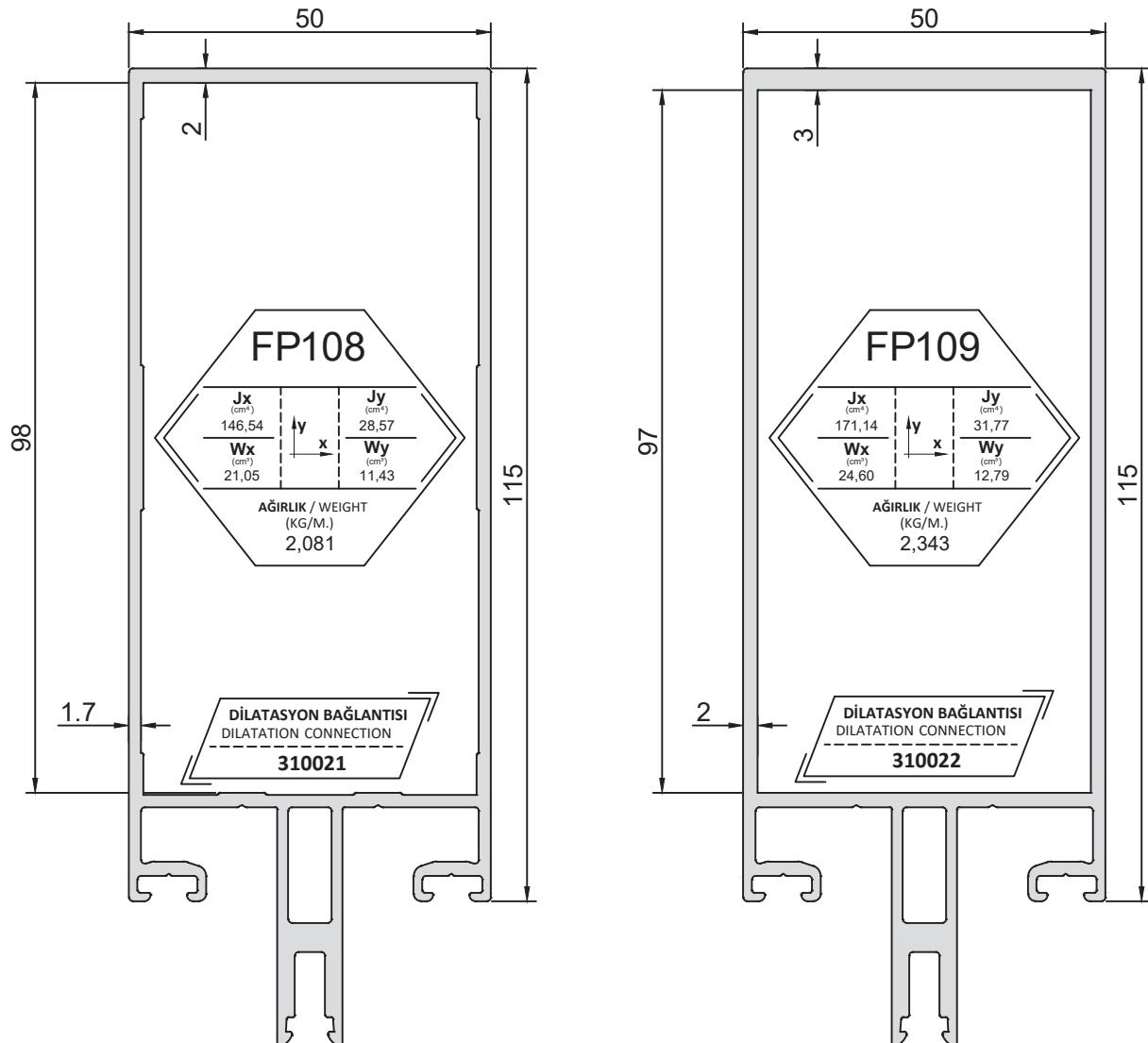




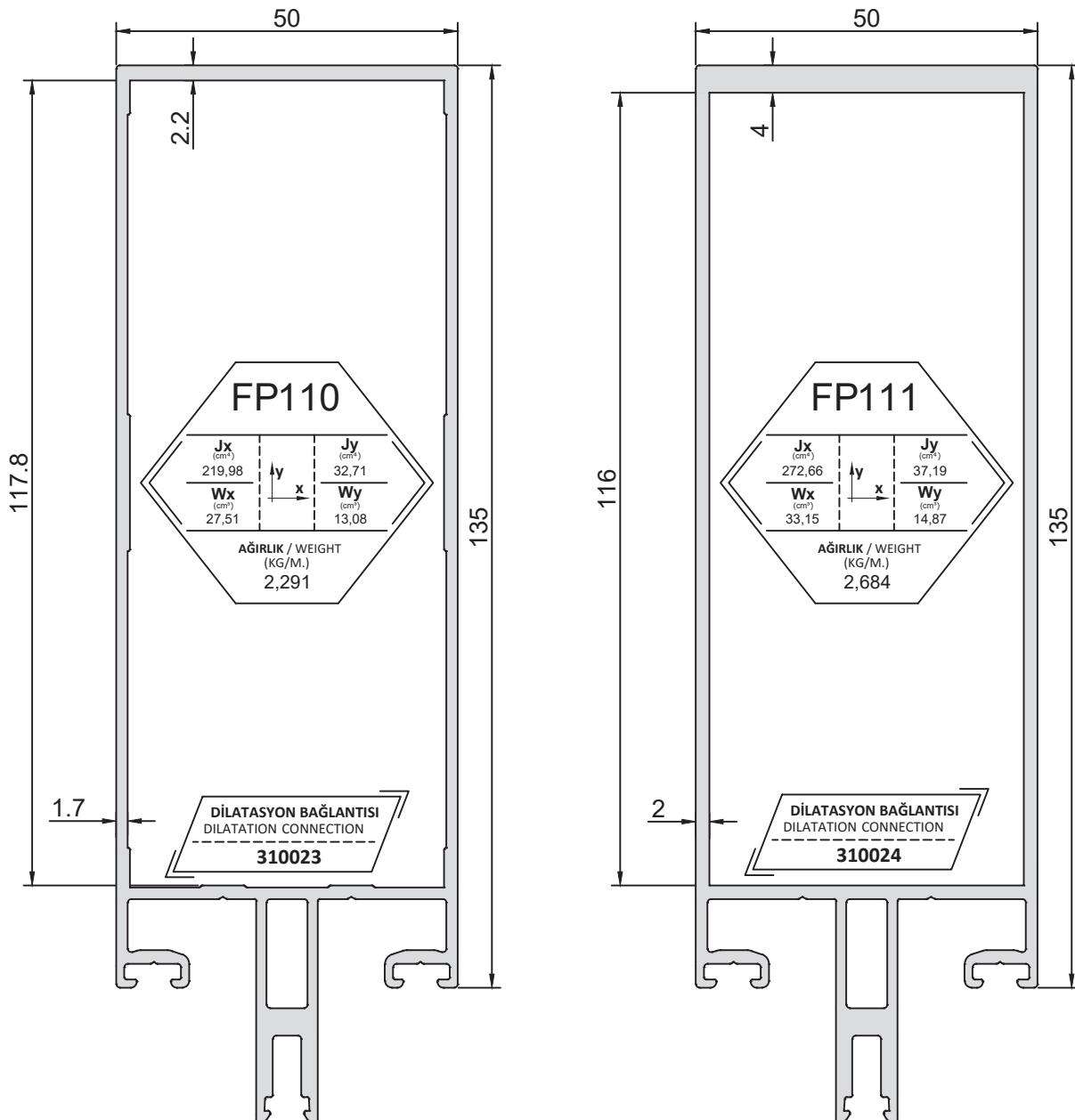
Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.



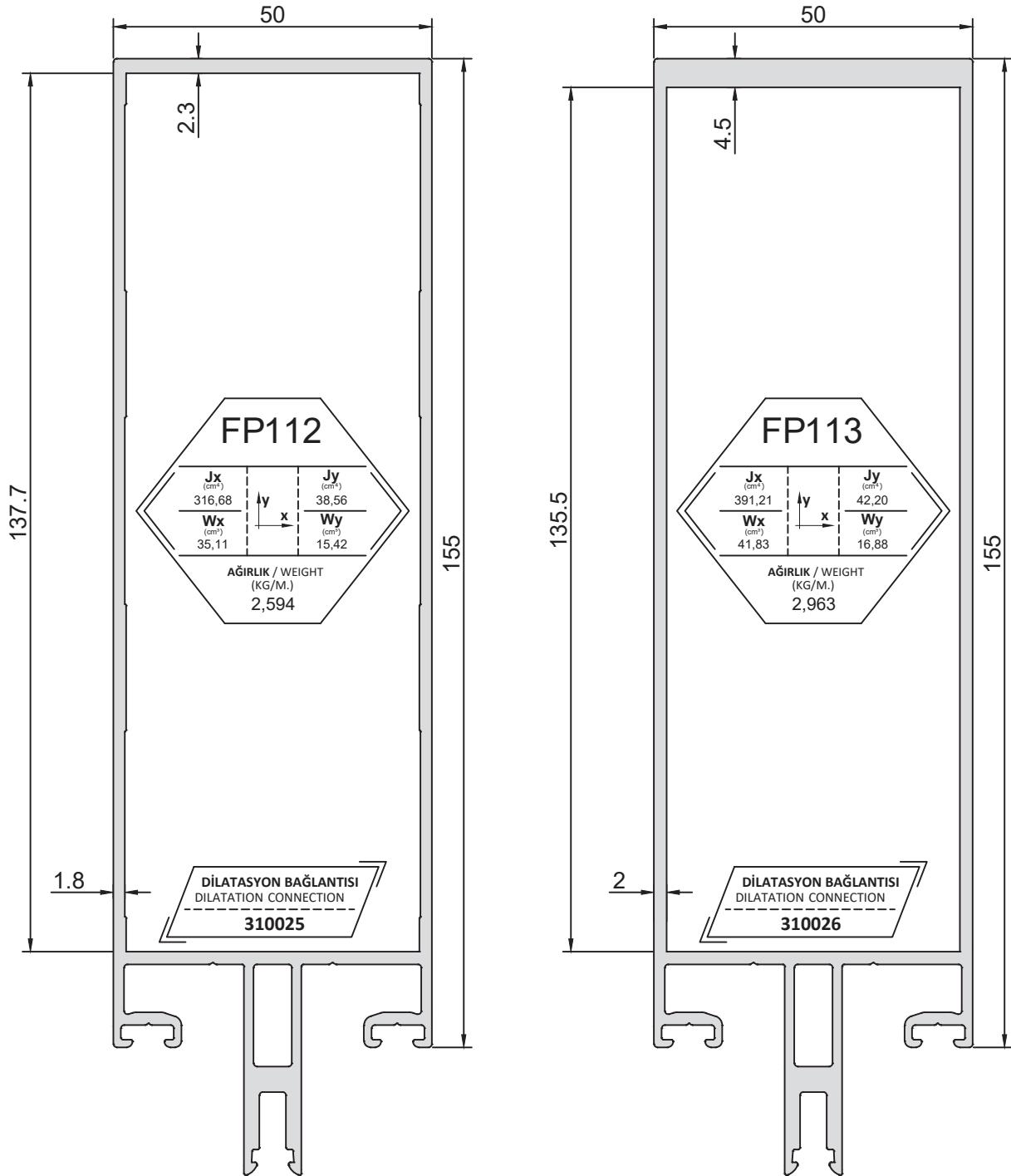
Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.

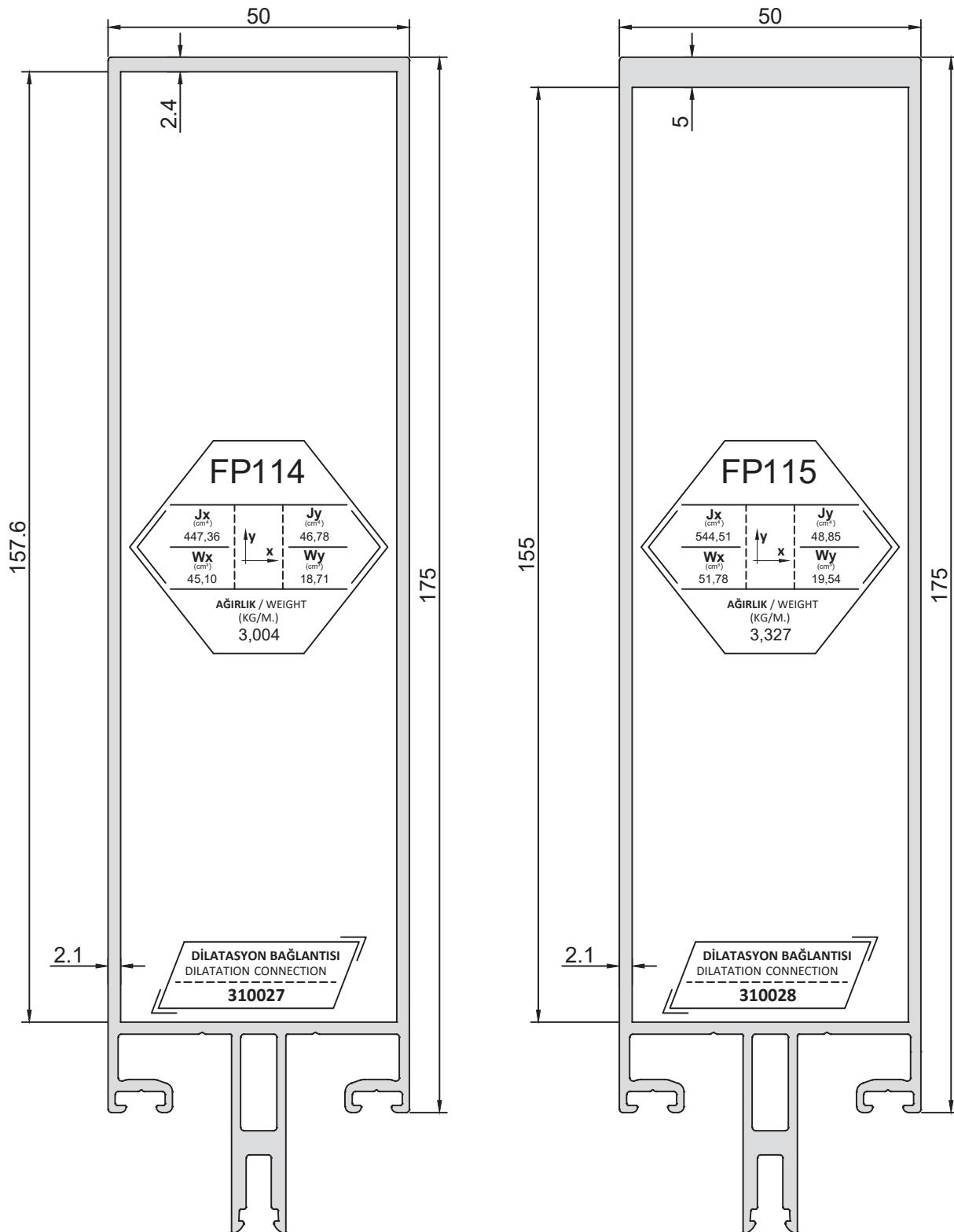


Bu profil için satış ekibinden bilgi alınınız. / Please receive information from sales representative about this profile.

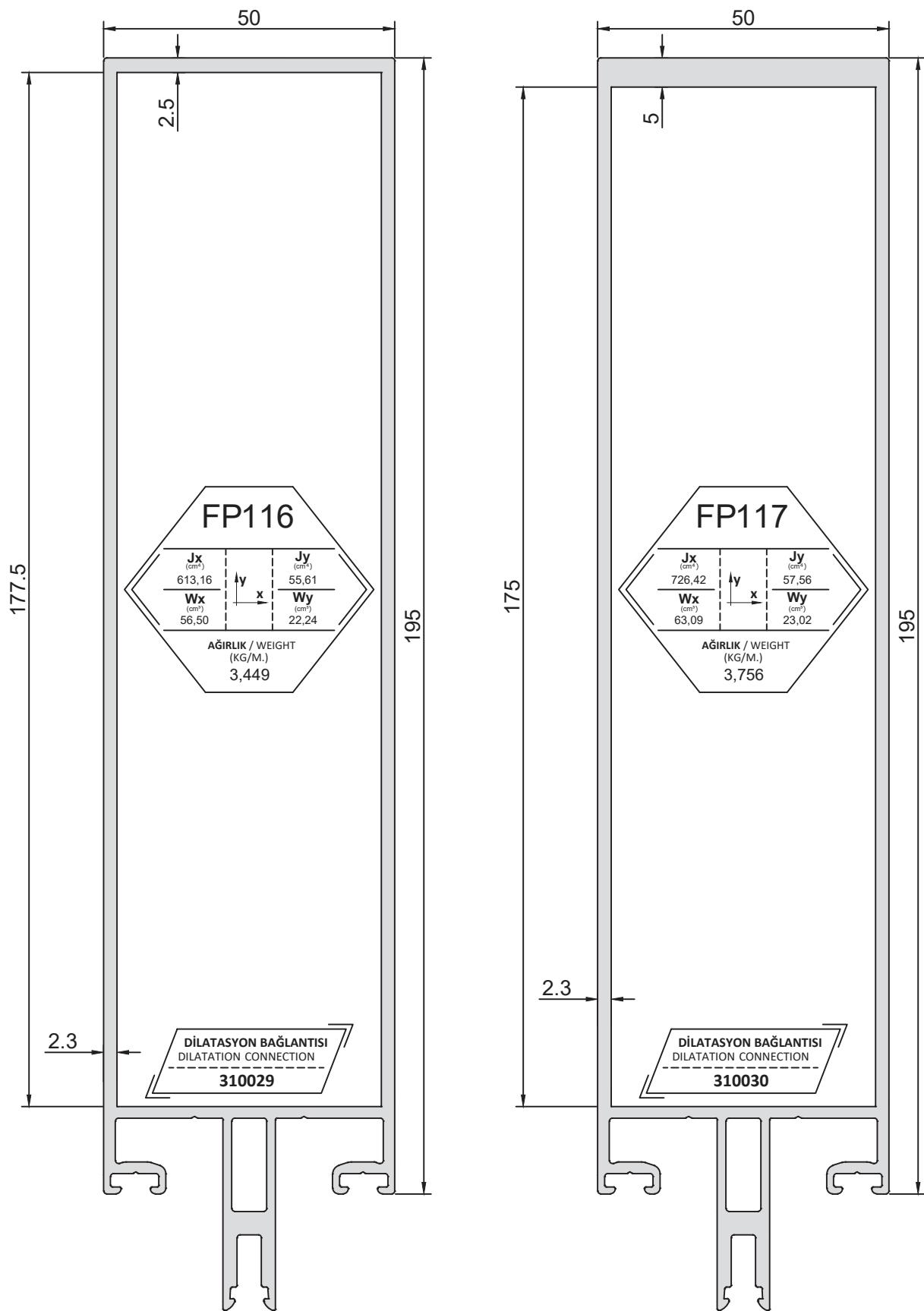


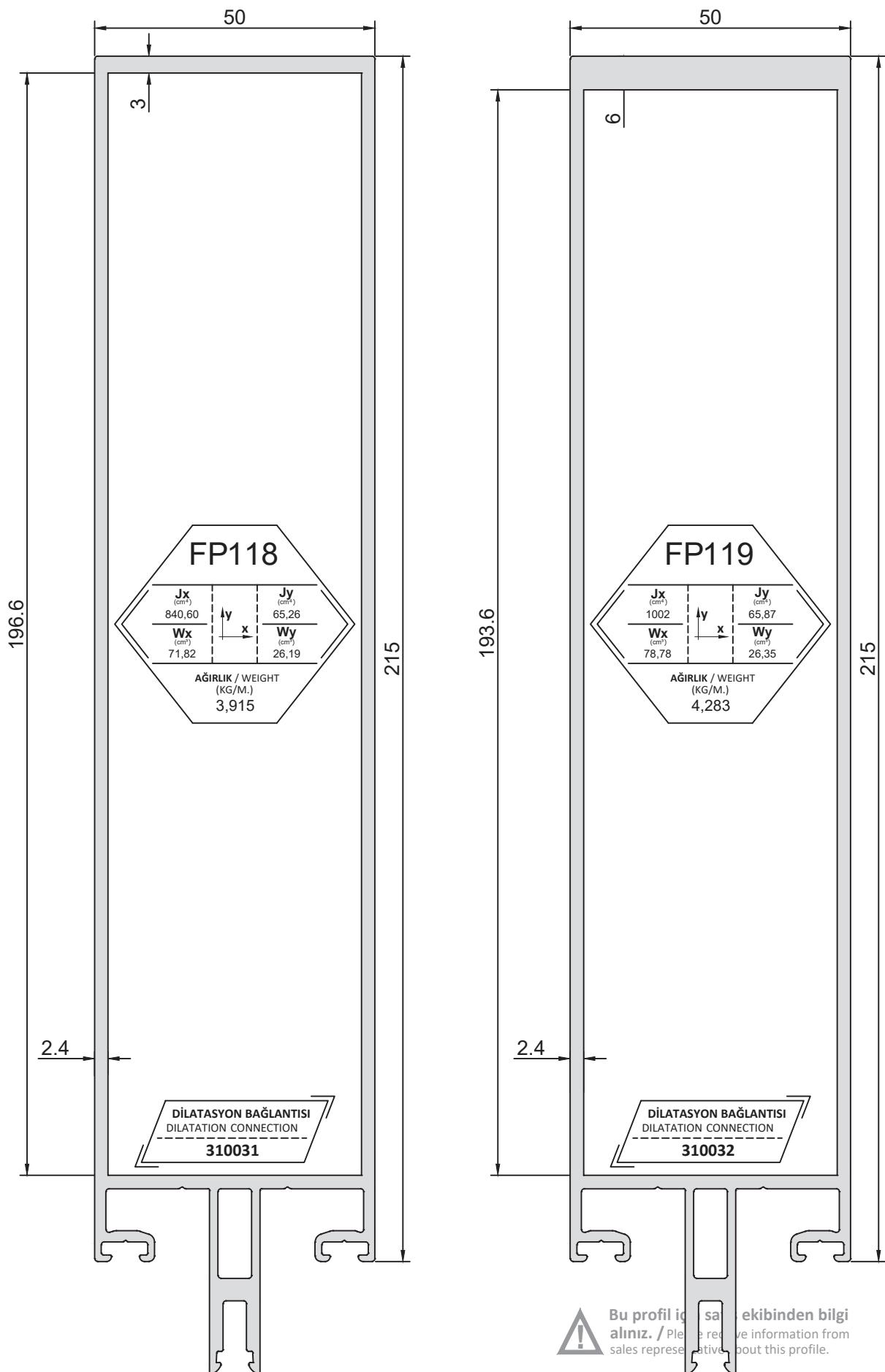
Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.

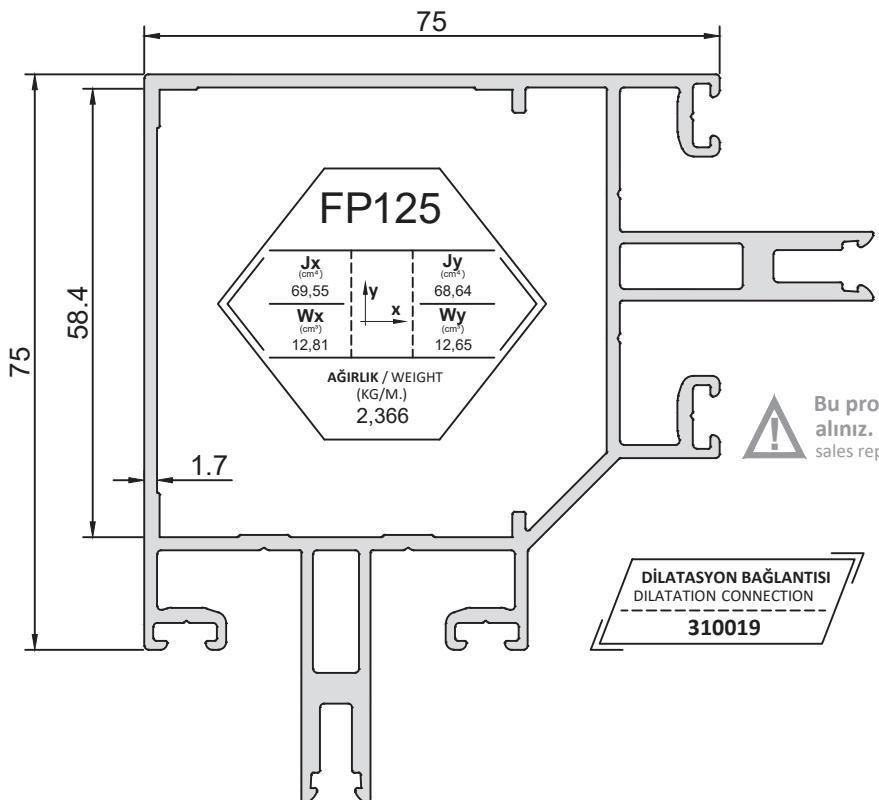




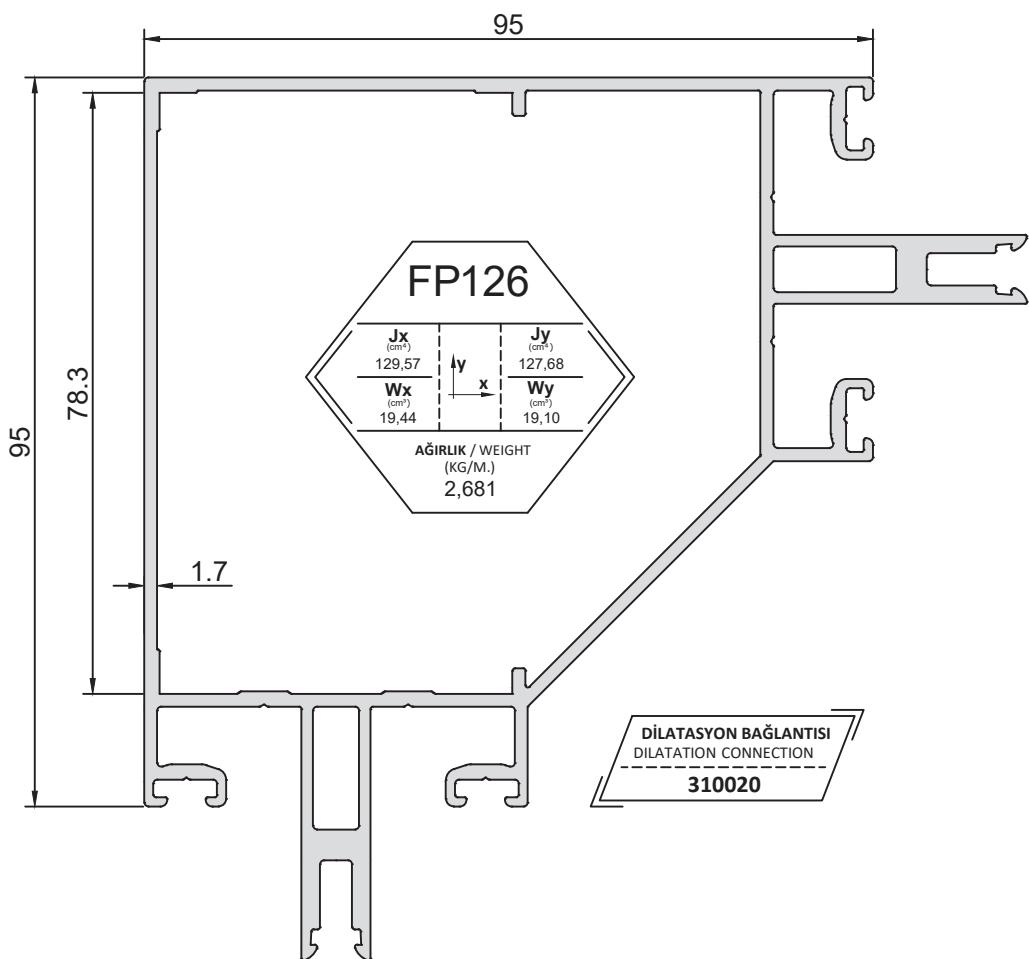
Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.

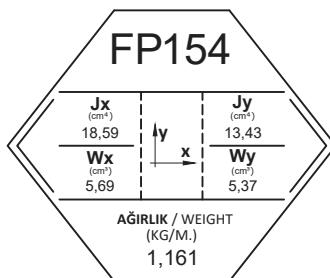
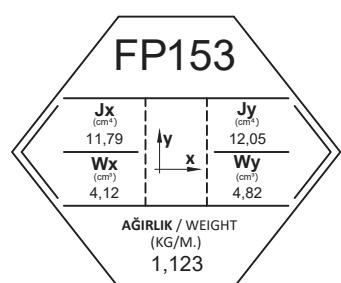
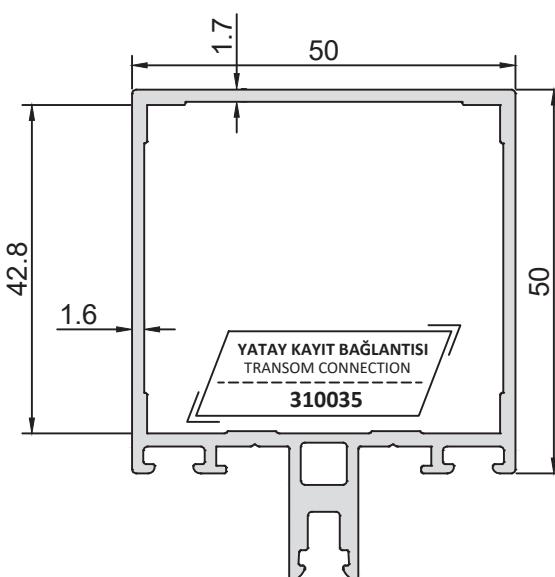
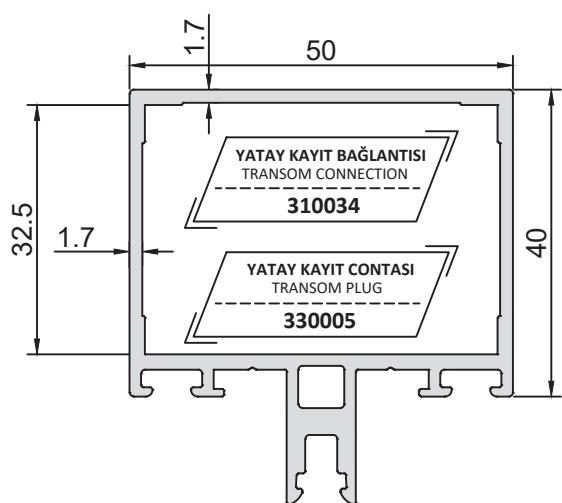
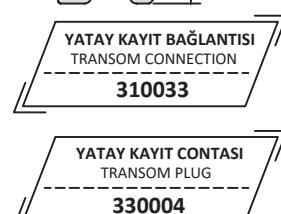
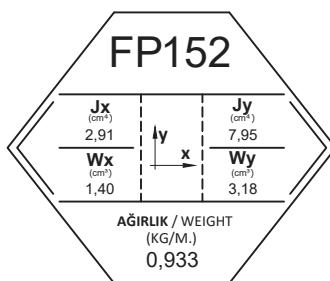
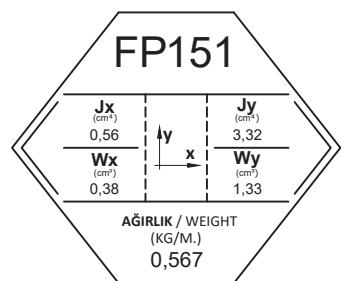
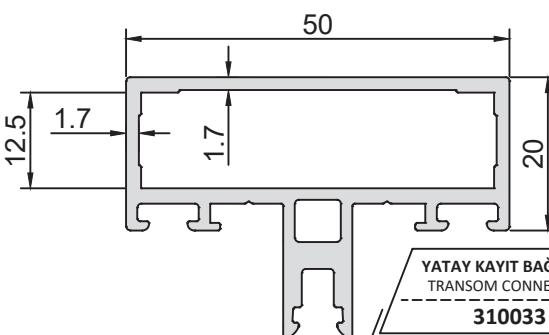
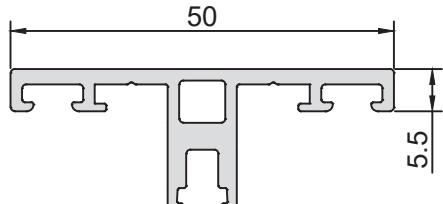


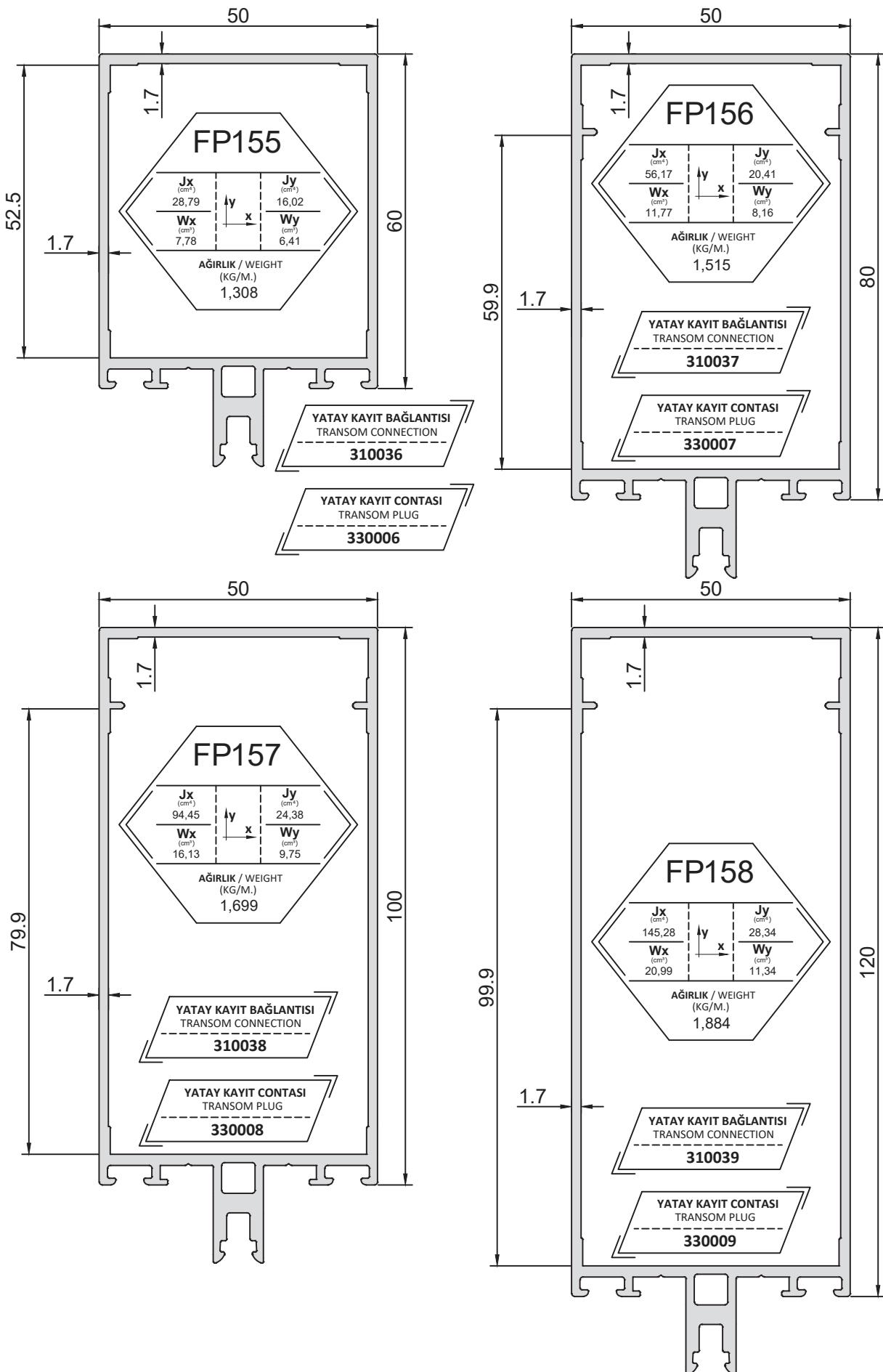


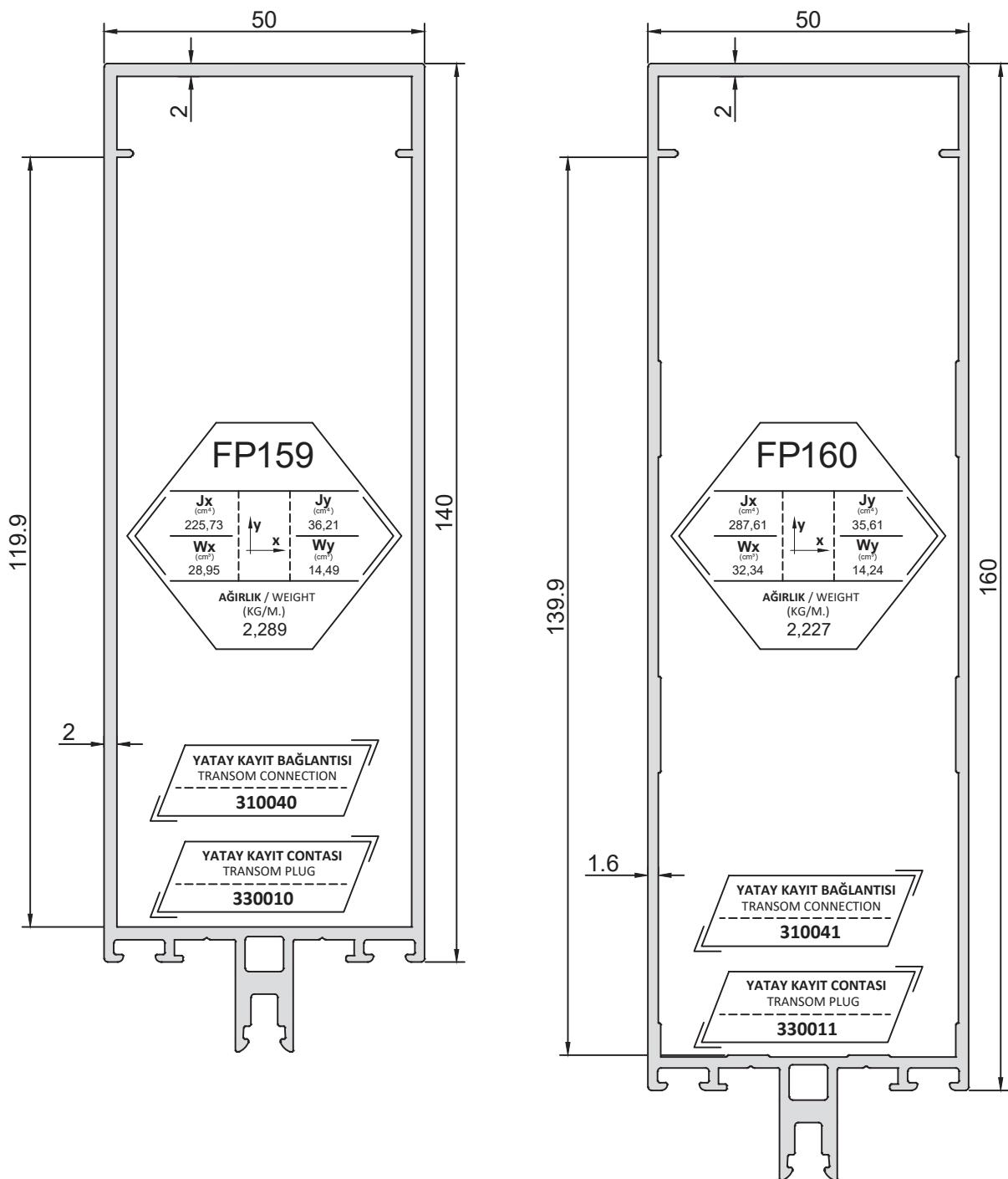


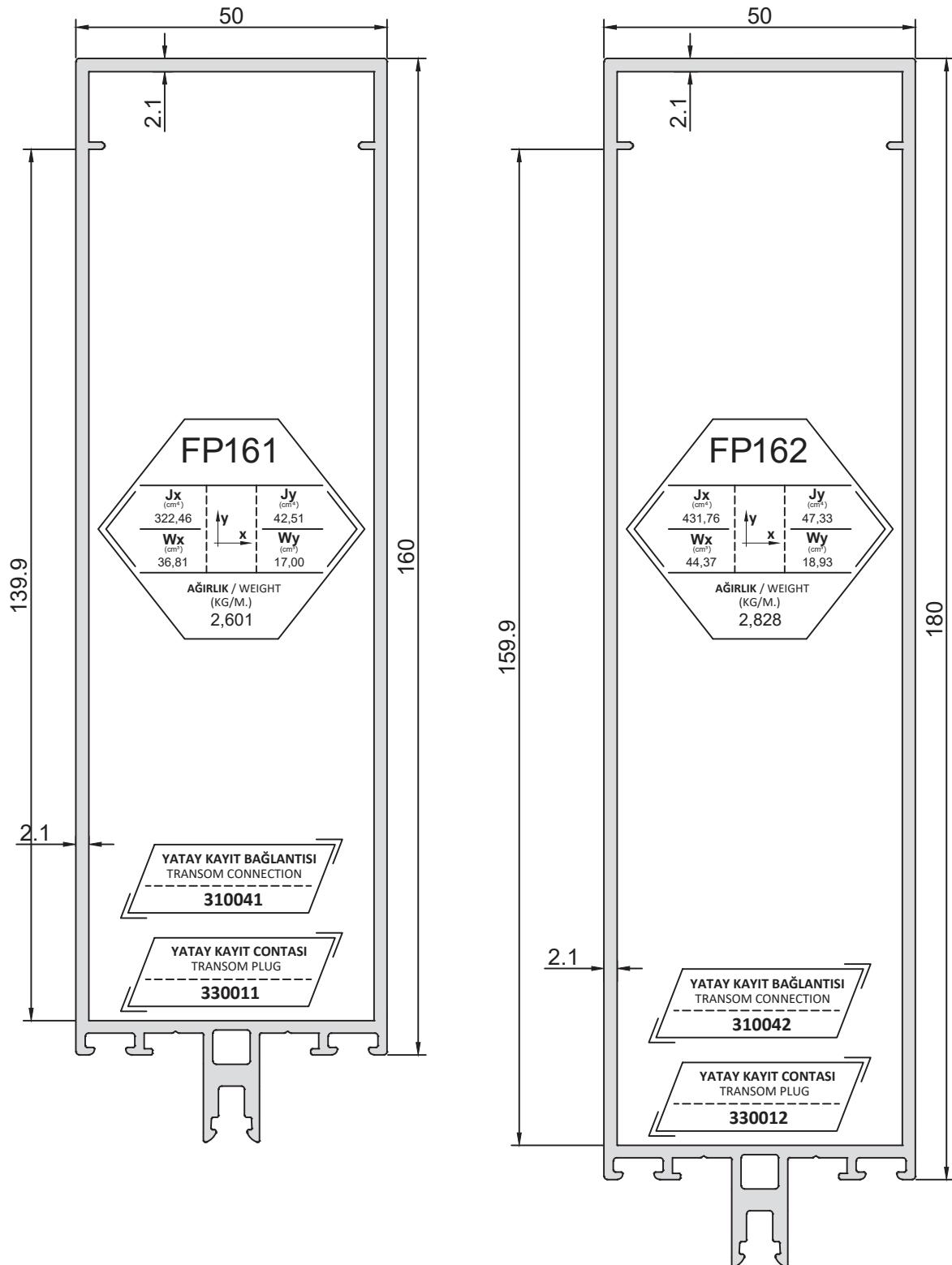
**!** Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.

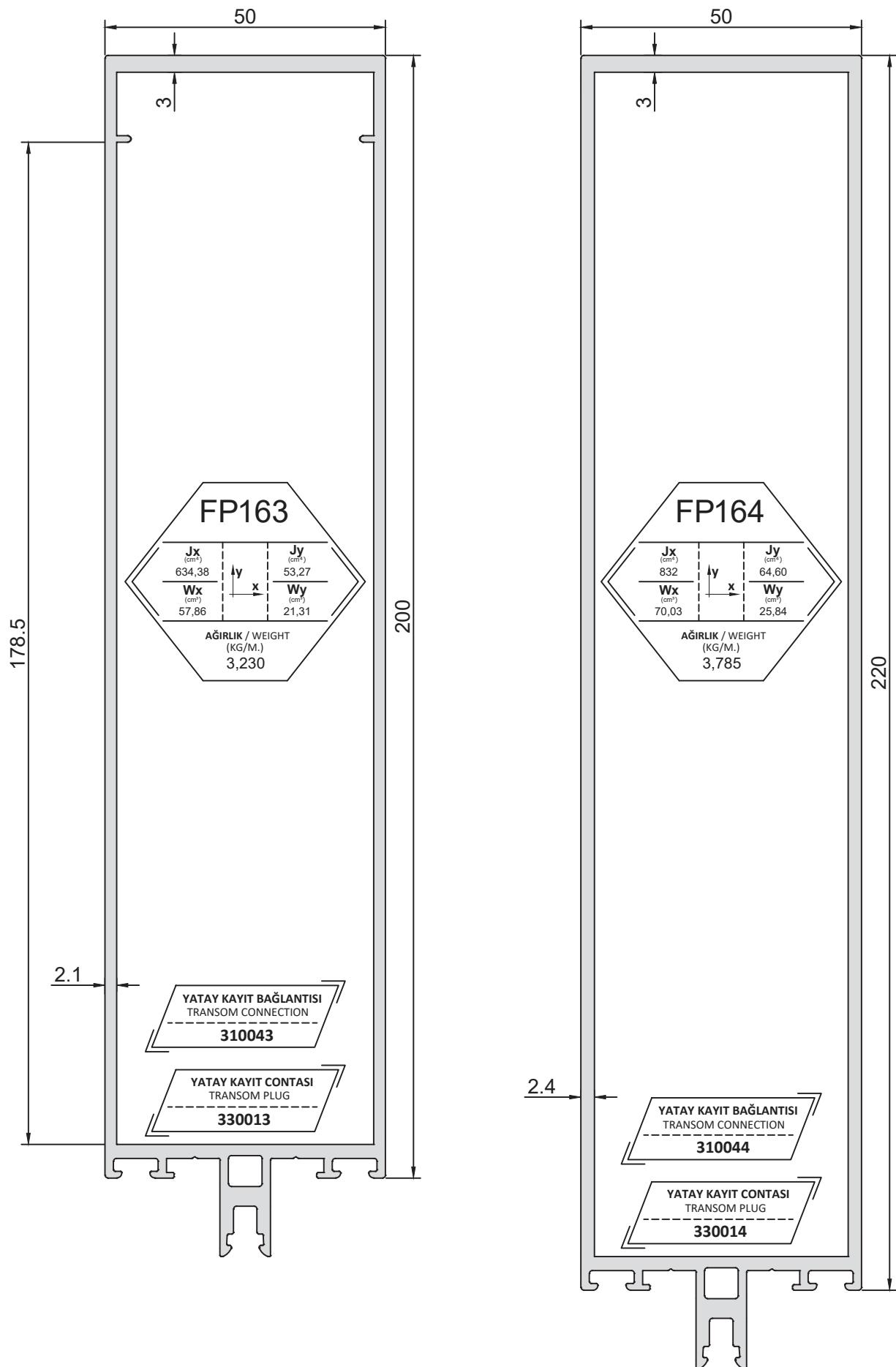


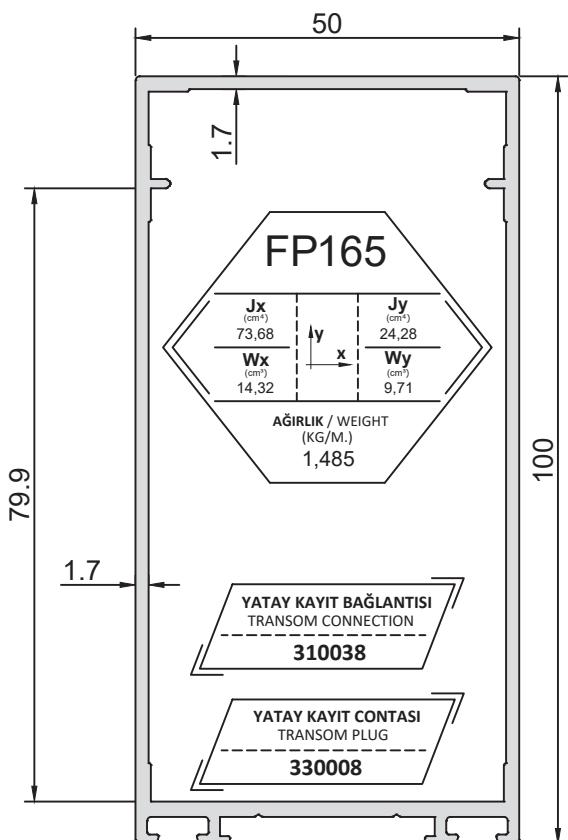
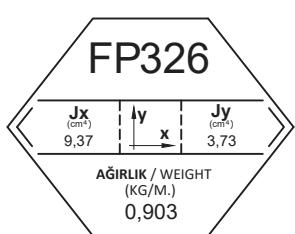
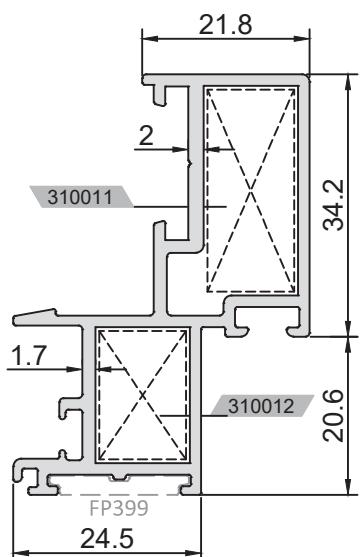
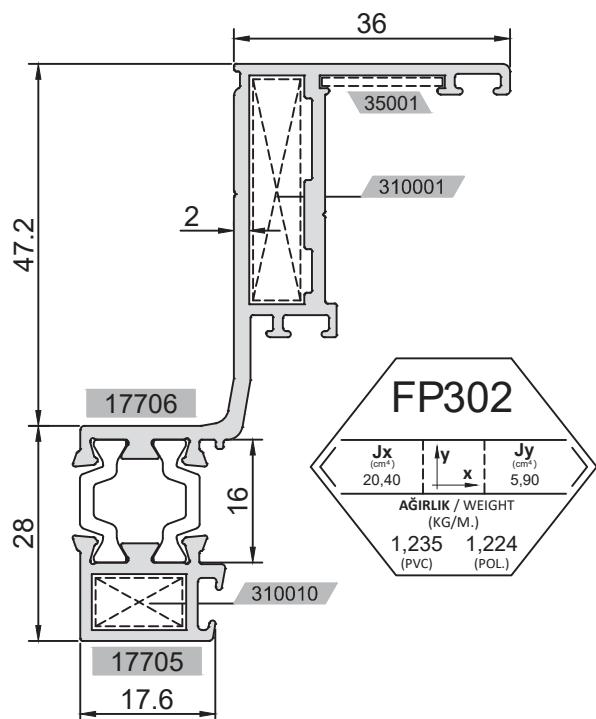
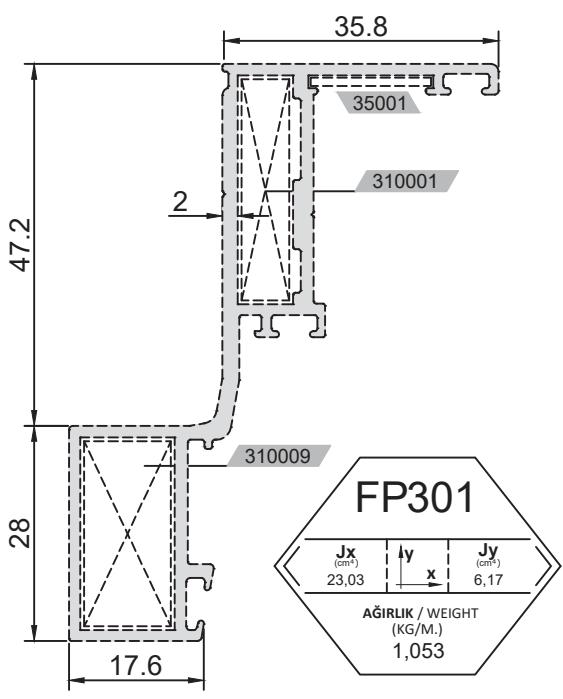


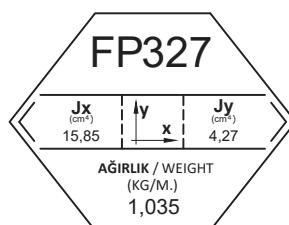
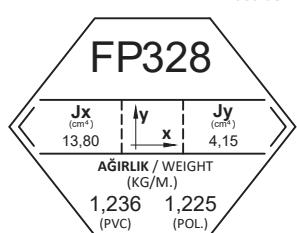
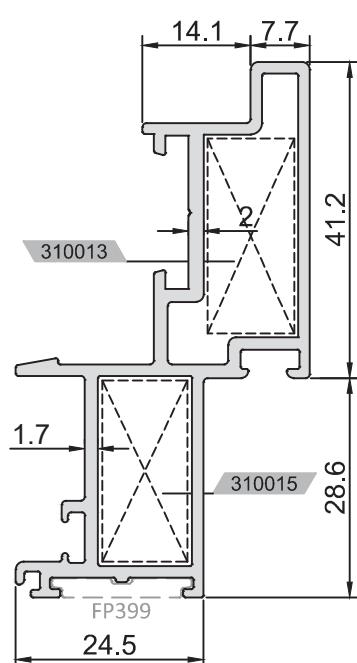
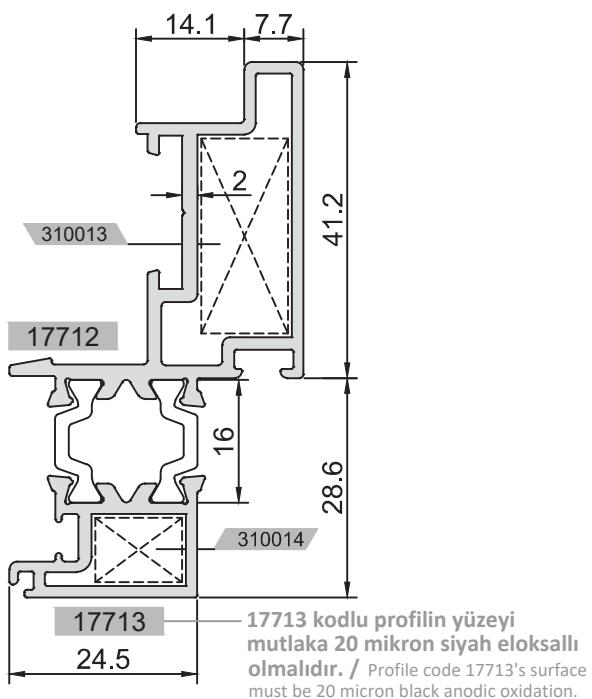
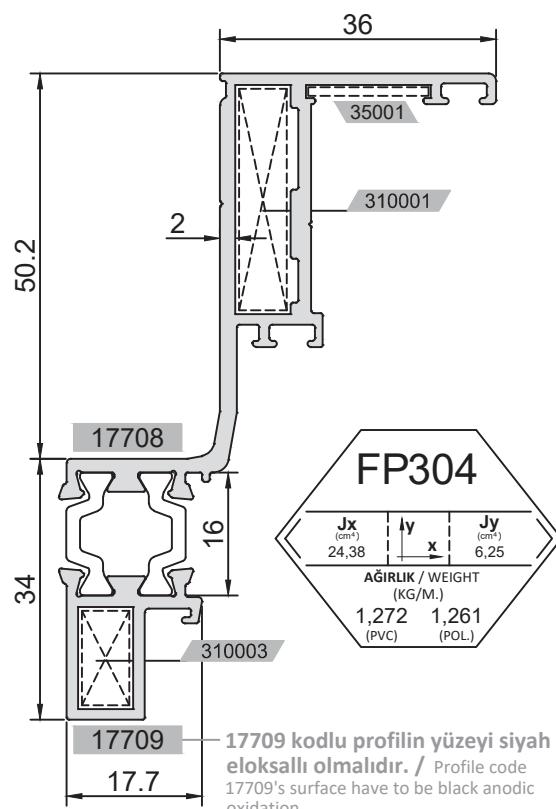
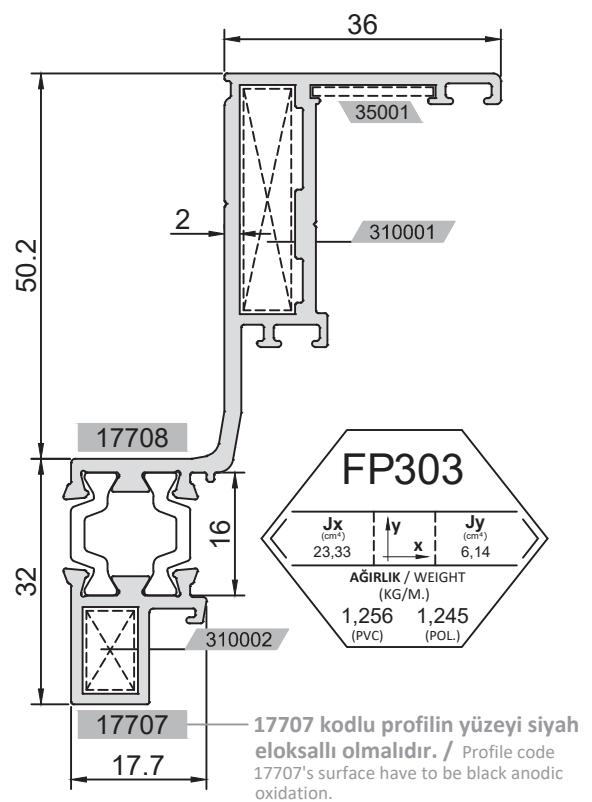


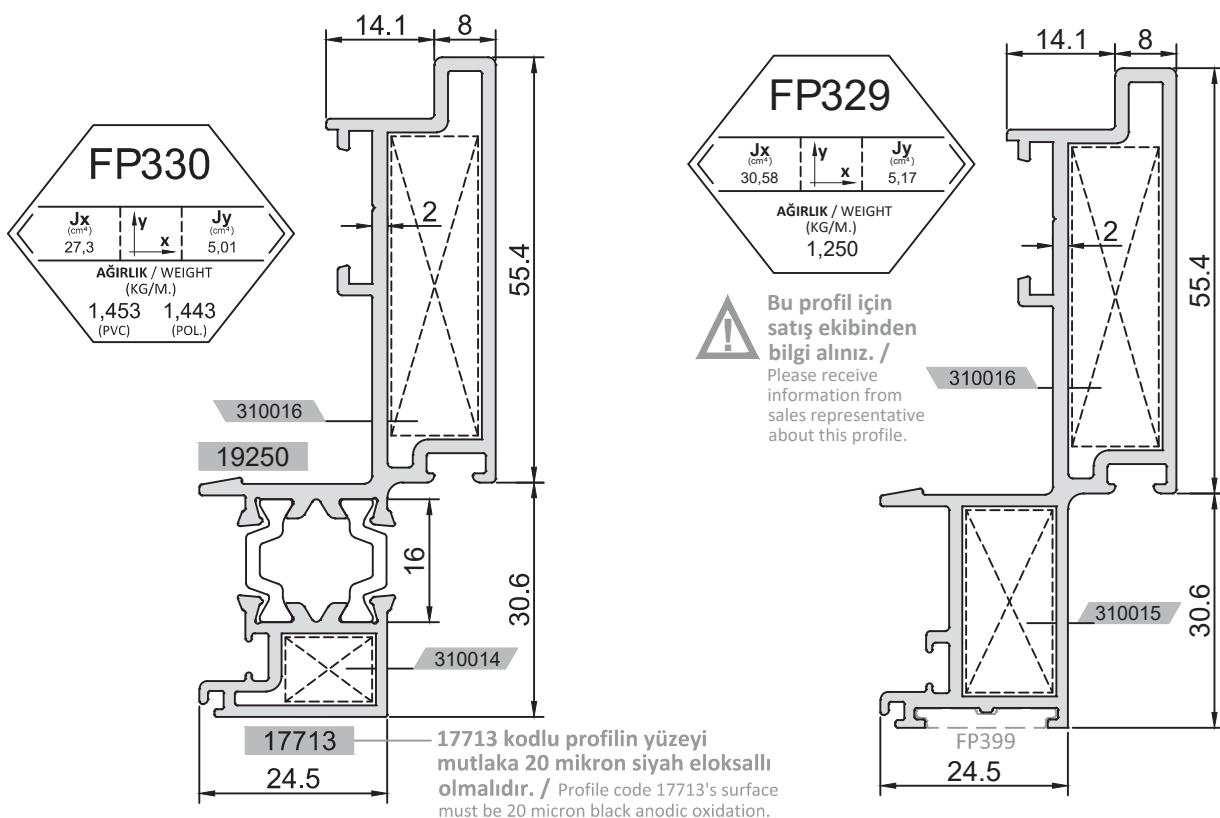
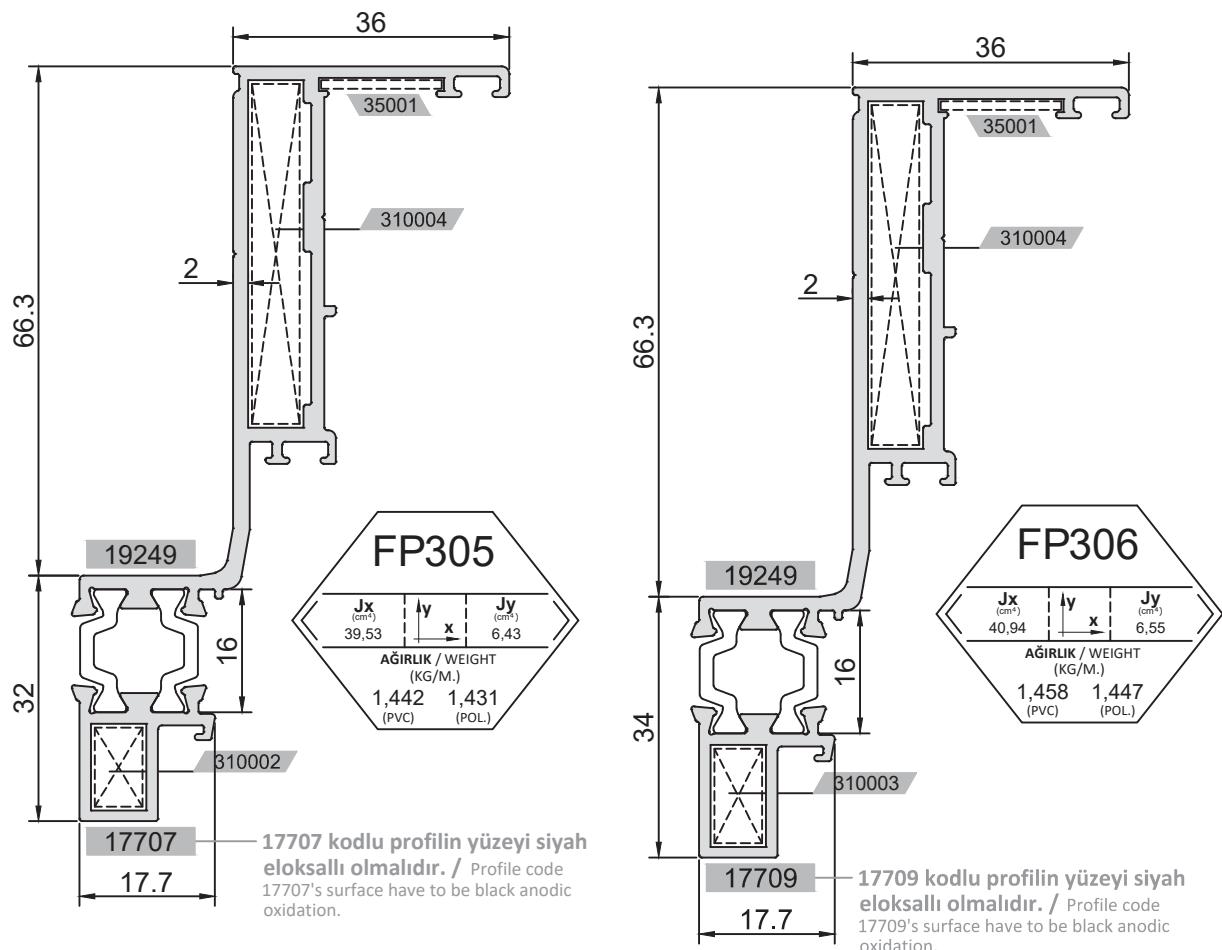




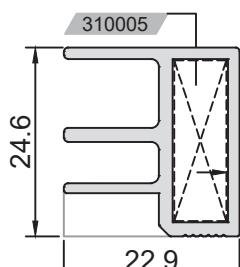








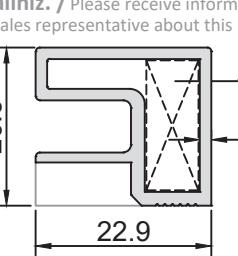
# F50-ENERGY



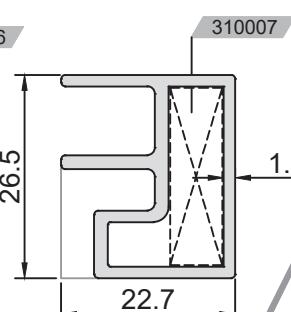
FP359 kodlu profilin yüzeyi mutlaka 20 mikron siyah eloksalli olmalıdır. / Profile code FP359's surface must be 20 micron black anodic oxidation.



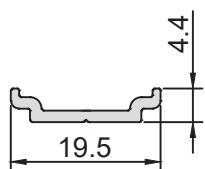
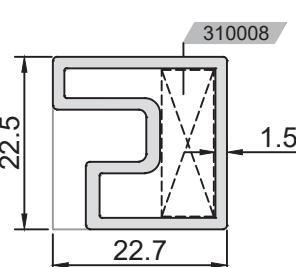
**!** Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.



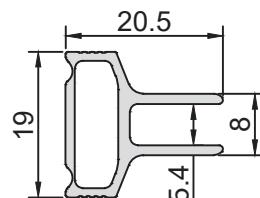
FP360 kodlu profilin yüzeyi mutlaka 20 mikron siyah eloksalli olmalıdır. / Profile code FP360's surface must be 20 micron black anodic oxidation.



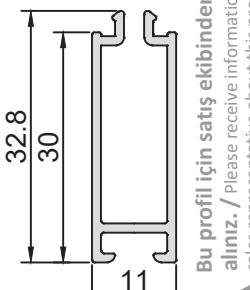
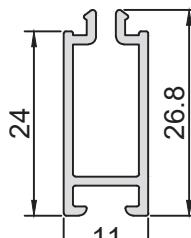
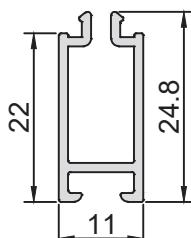
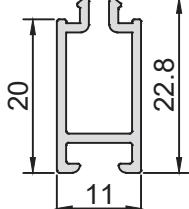
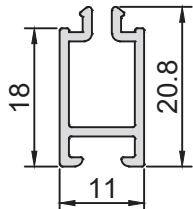
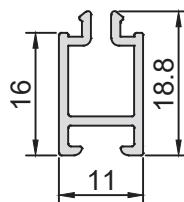
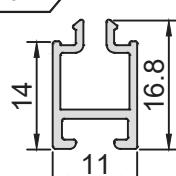
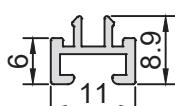
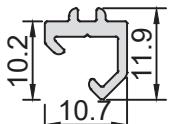
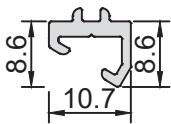
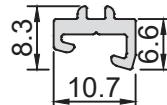
**!** Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.



FP399 kodlu profilin yüzeyi mutlaka 20 mikron siyah eloksalli olmalıdır. / Profile code FP399's surface must be 20 micron black anodic oxidation.

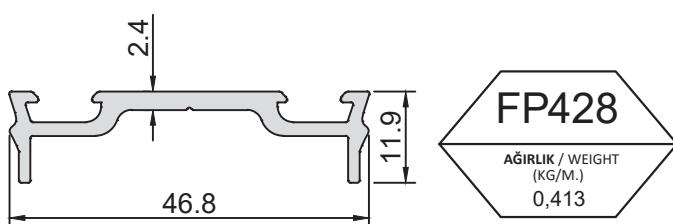
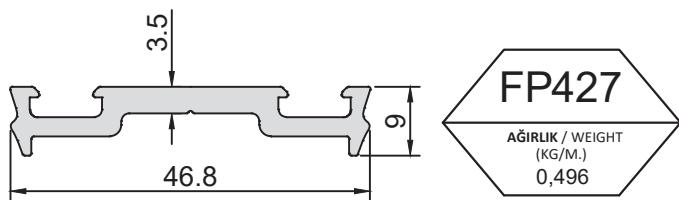
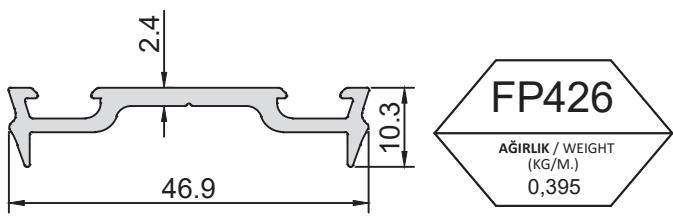


FP398 kodlu profilin yüzeyi mutlaka 20 mikron siyah eloksalli olmalıdır. / Profile code FP398's surface must be 20 micron black anodic oxidation.

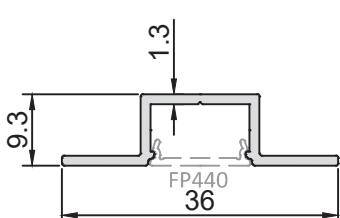
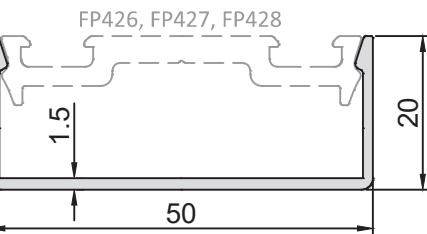
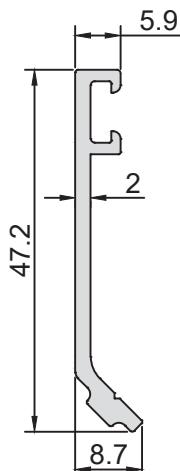
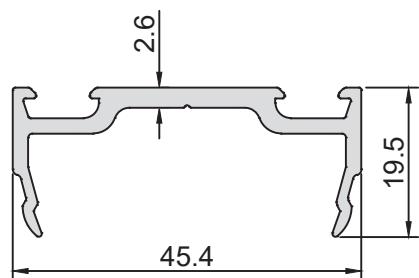
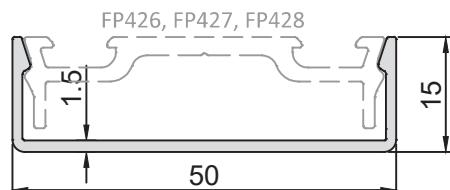
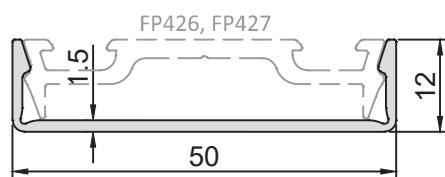


**!** Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.

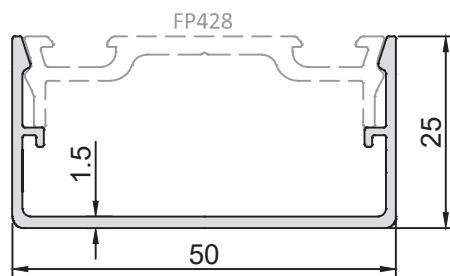
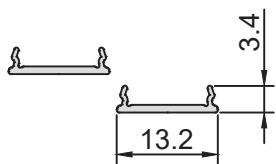


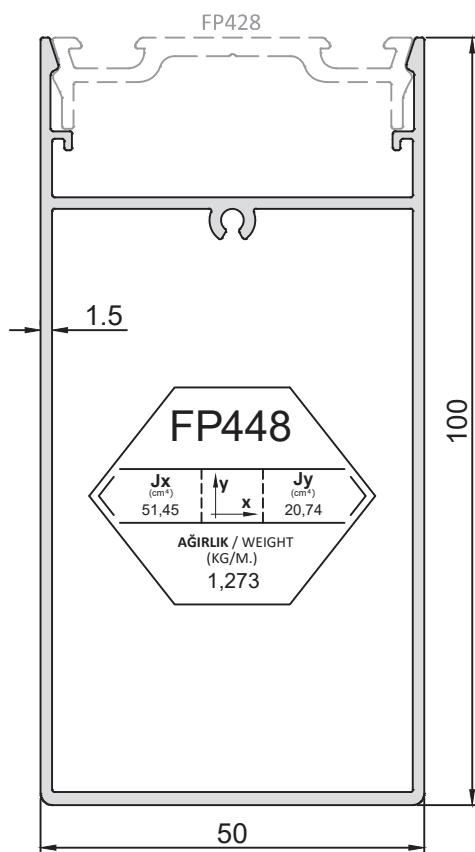
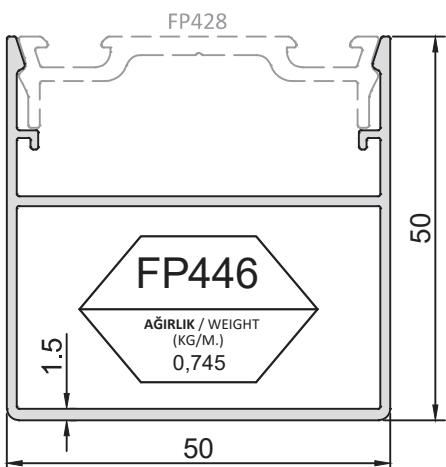
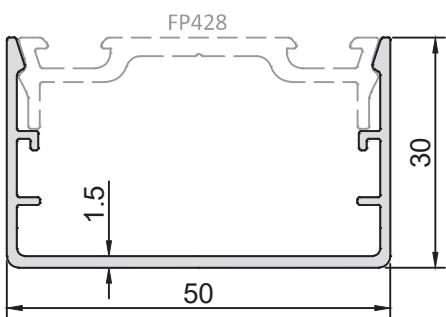


Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.

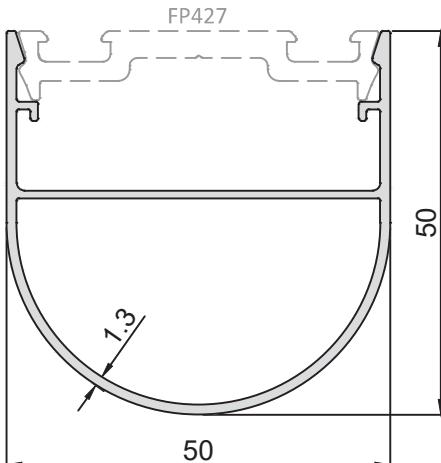
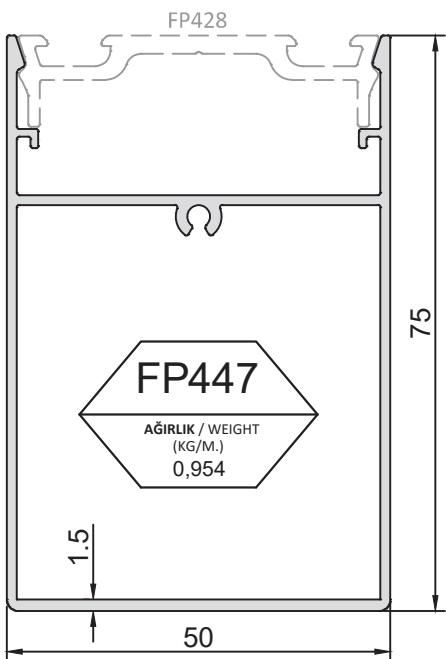


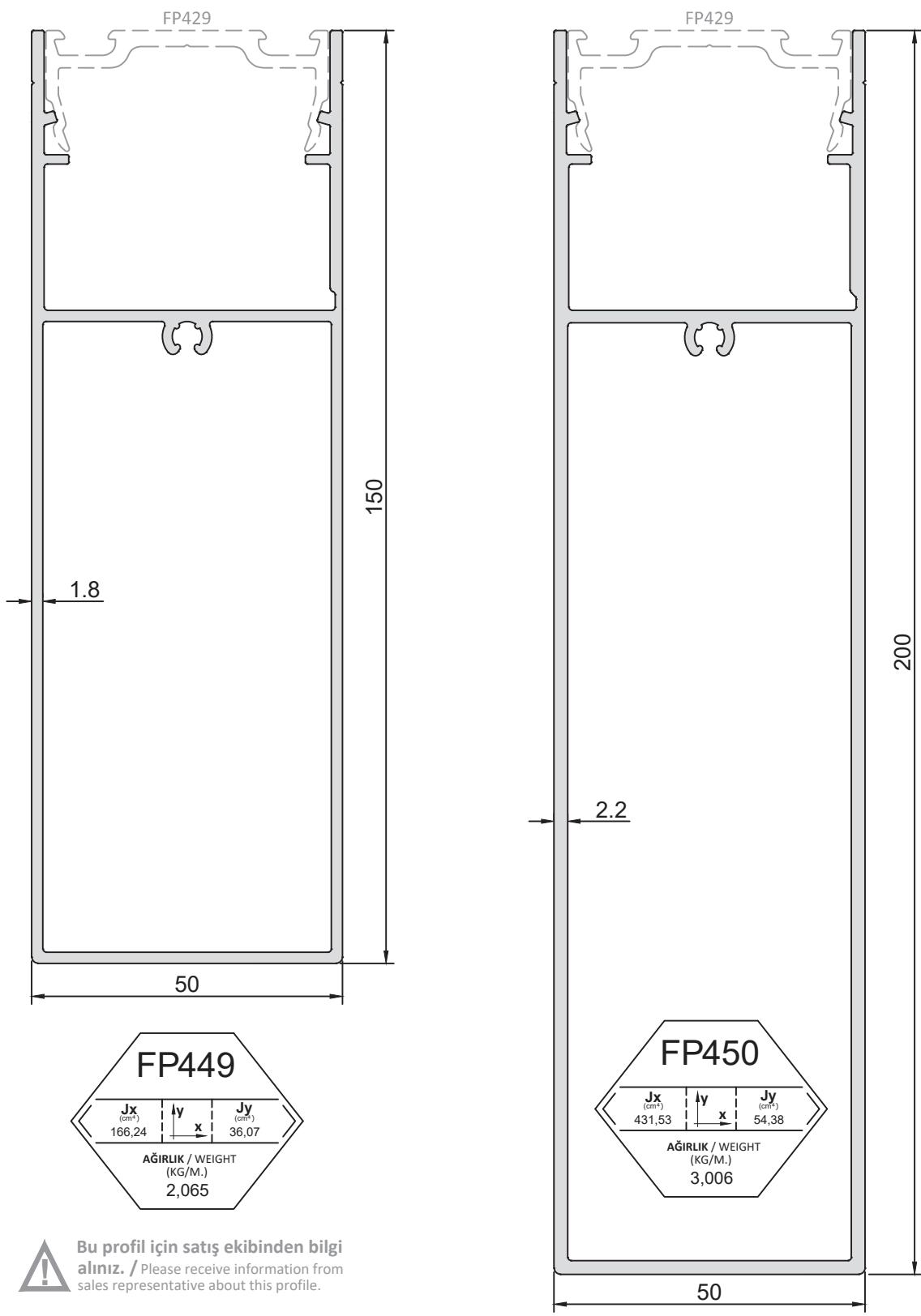
Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.





Bu profil için satış ekibinden bilgi alınınız. / Please receive information from sales representative about this profile.

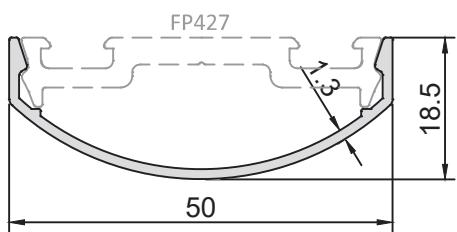




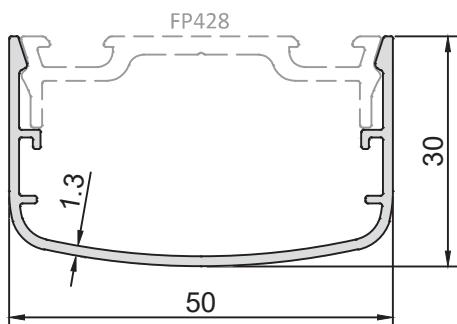
Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.



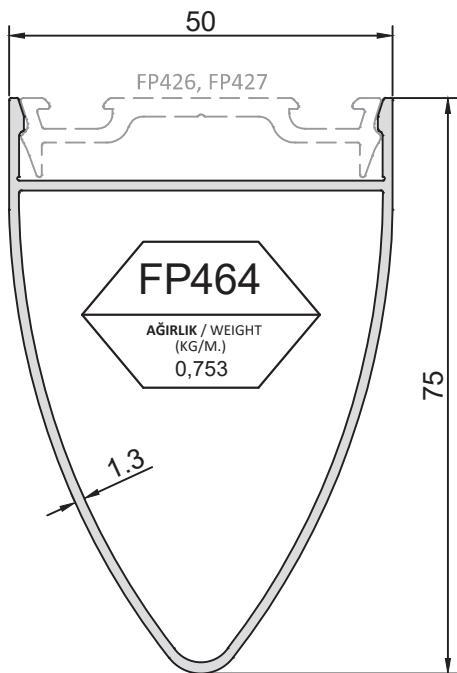
Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.



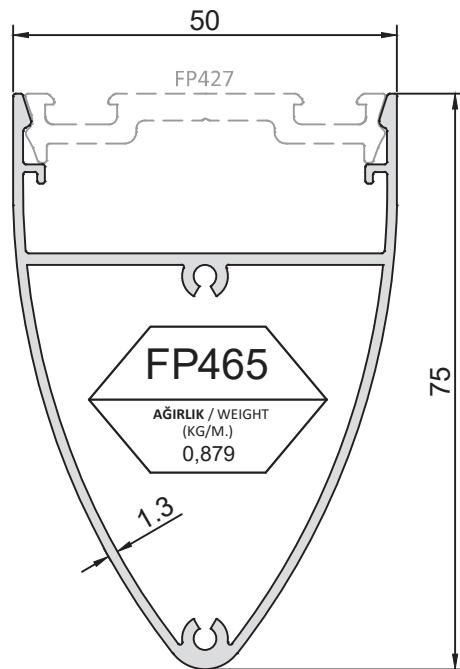
**FP461**  
AĞIRLIK / WEIGHT  
(KG/M.)  
0,262



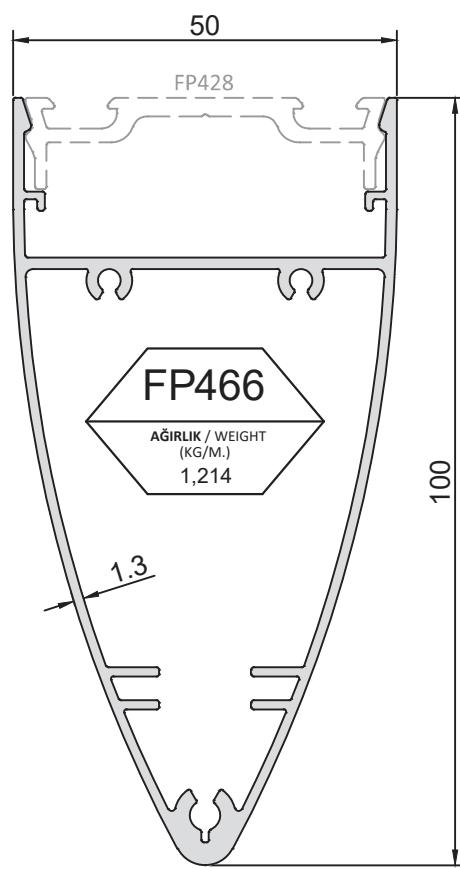
**FP462**  
AĞIRLIK / WEIGHT  
(KG/M.)  
0,397



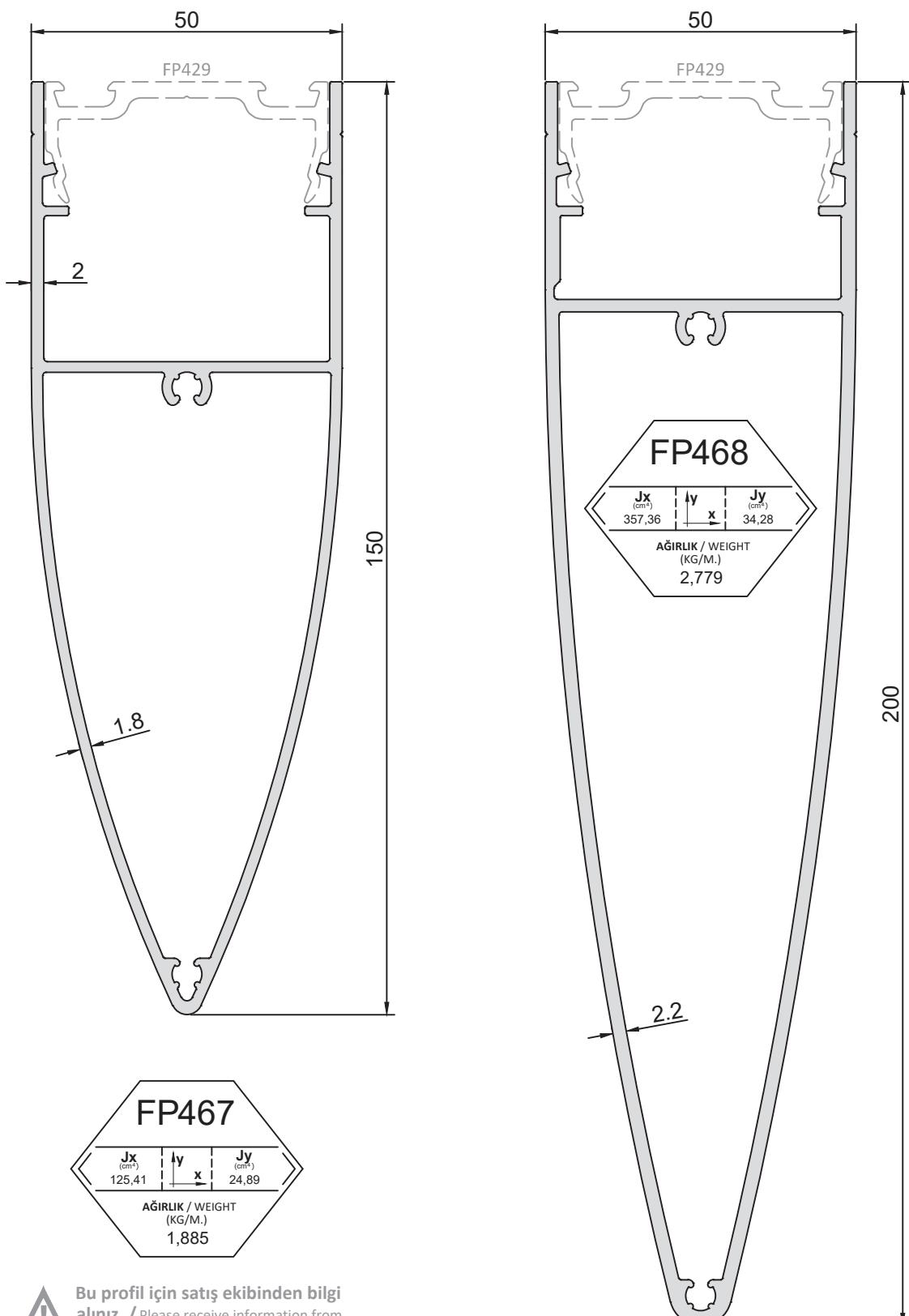
**FP464**  
AĞIRLIK / WEIGHT  
(KG/M.)  
0,753



**FP465**  
AĞIRLIK / WEIGHT  
(KG/M.)  
0,879



**FP466**  
AĞIRLIK / WEIGHT  
(KG/M.)  
1,214



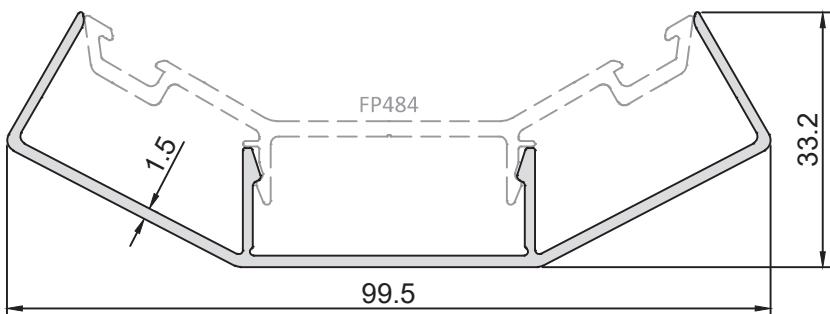
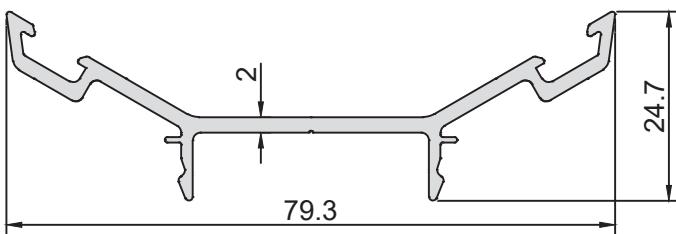
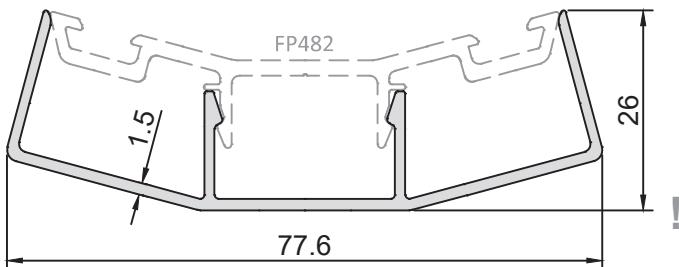
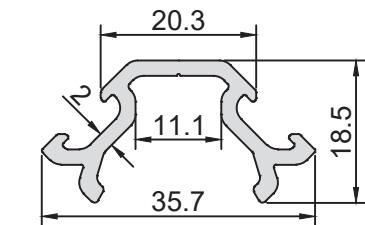
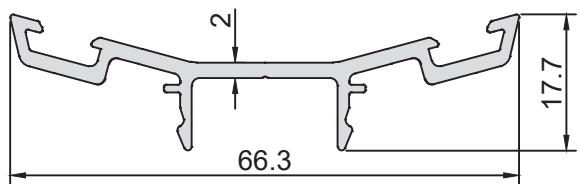
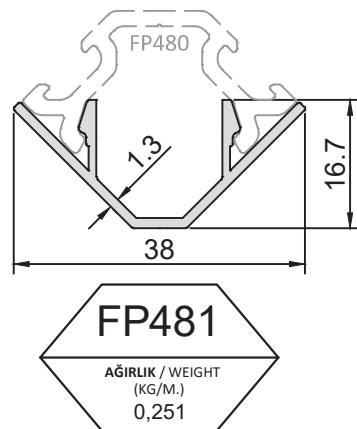
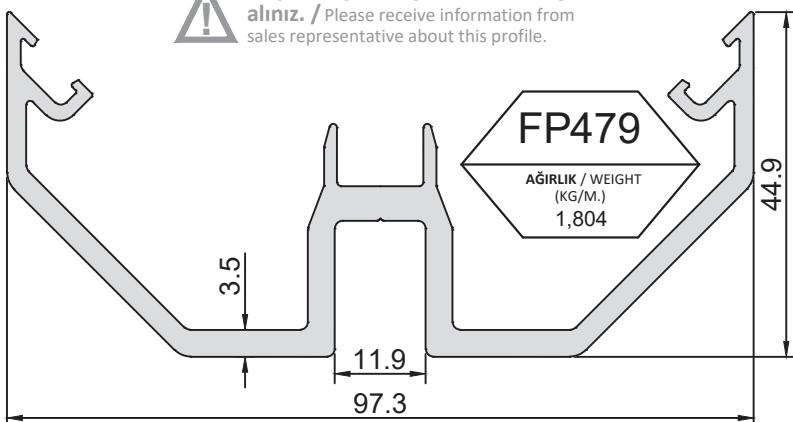
Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.



Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.

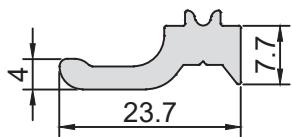


Bu profil için satış ekibinden bilgi alınınız. / Please receive information from sales representative about this profile.

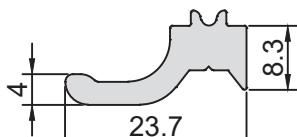


## ALÜMİNYUM AKSESUAR PROFİLLERİ

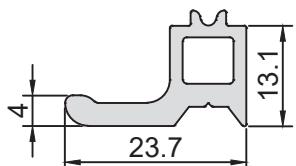
PROFILES OF ALUMINIUM ACCESSORIES



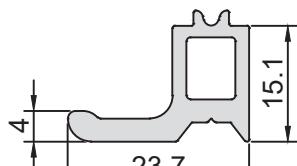
**FP377**  
AĞIRLIK / WEIGHT  
(KG/M.)  
0,294



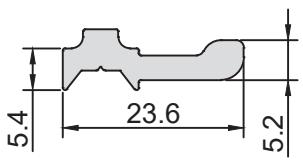
**FP378**  
AĞIRLIK / WEIGHT  
(KG/M.)  
0,318



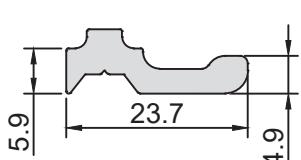
**FP379**  
AĞIRLIK / WEIGHT  
(KG/M.)  
0,331



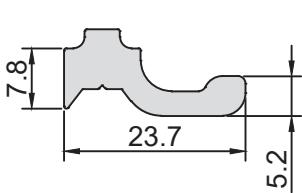
**FP380**  
AĞIRLIK / WEIGHT  
(KG/M.)  
0,354



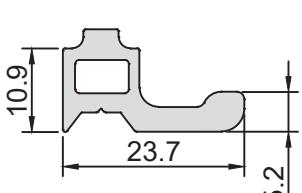
**FP381**  
AĞIRLIK / WEIGHT  
(KG/M.)  
0,270



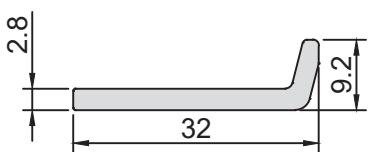
**FP382**  
AĞIRLIK / WEIGHT  
(KG/M.)  
0,281



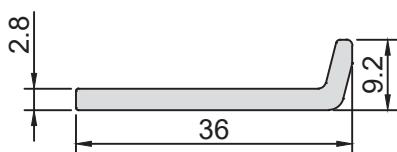
**FP383**  
AĞIRLIK / WEIGHT  
(KG/M.)  
0,343



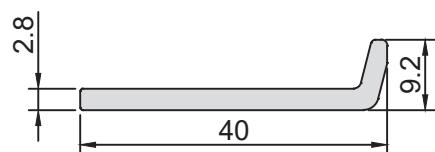
**FP384**  
AĞIRLIK / WEIGHT  
(KG/M.)  
0,340



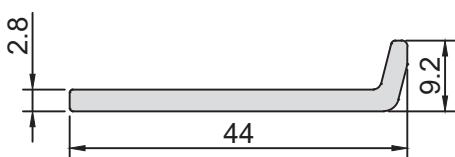
**FP390**  
AĞIRLIK / WEIGHT  
(KG/M.)  
0,277



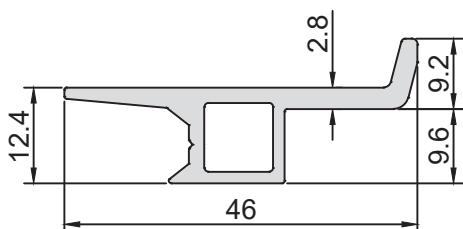
**FP391**  
AĞIRLIK / WEIGHT  
(KG/M.)  
0,308



**FP392**  
AĞIRLIK / WEIGHT  
(KG/M.)  
0,338



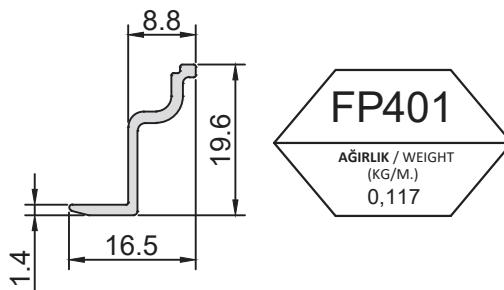
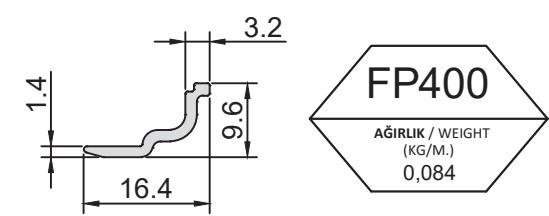
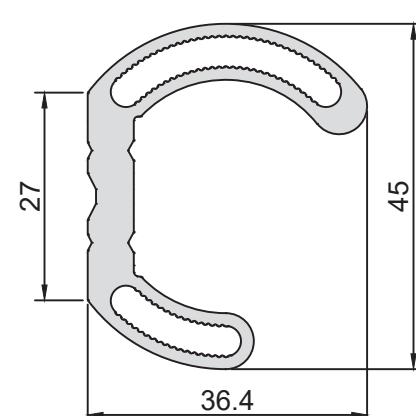
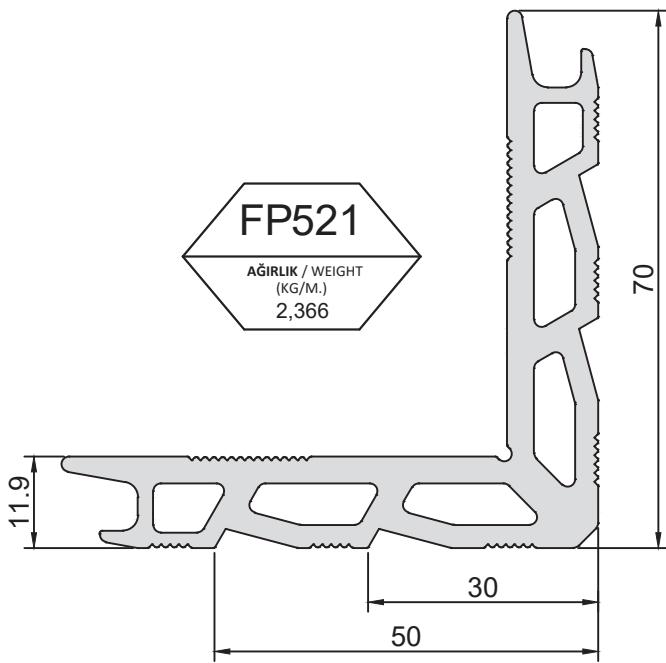
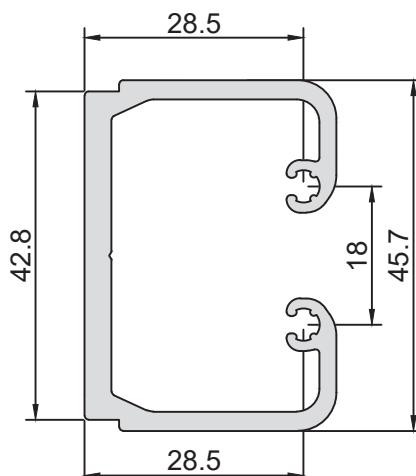
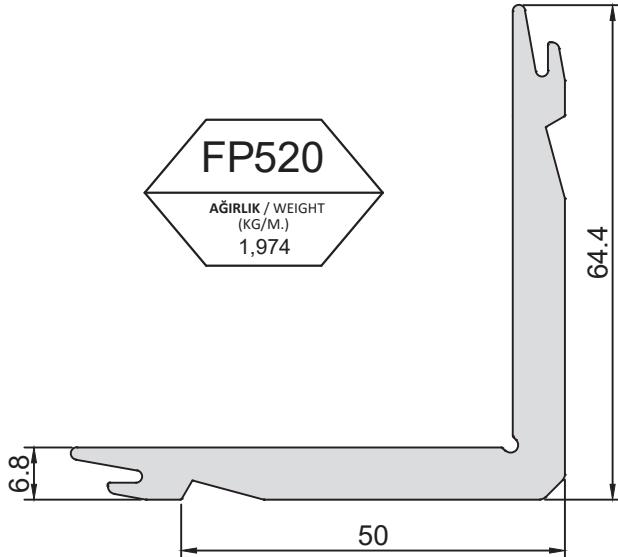
**FP393**  
AĞIRLIK / WEIGHT  
(KG/M.)  
0,368



**FP394**  
AĞIRLIK / WEIGHT  
(KG/M.)  
0,482

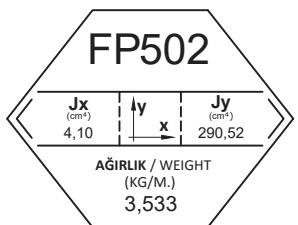
## ALÜMİNYUM AKSESUAR PROFİLLERİ

PROFILES OF ALUMINIUM ACCESSORIES

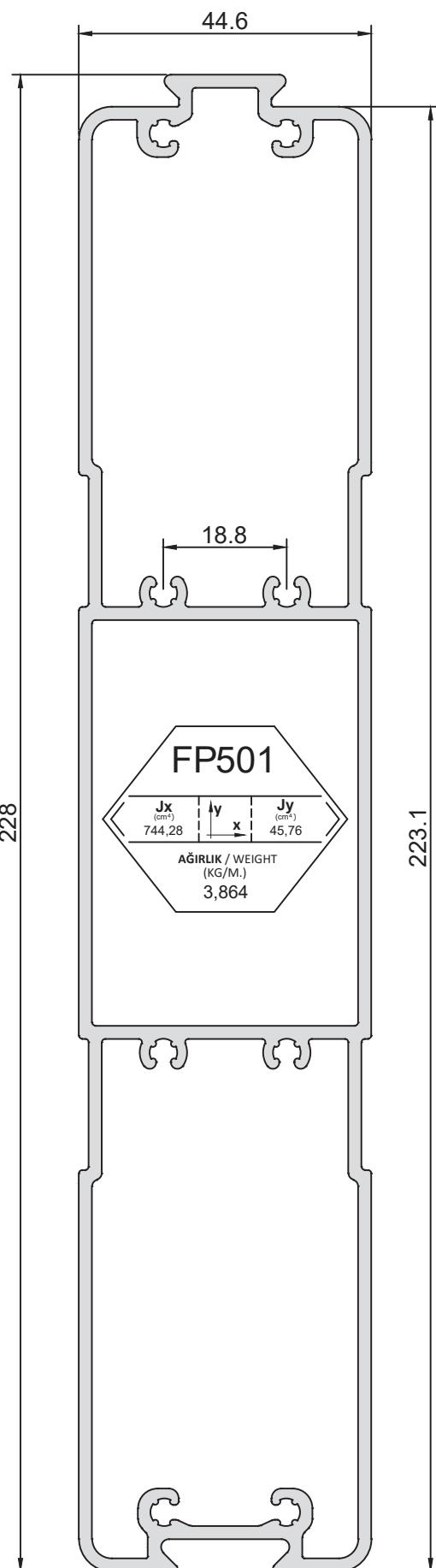
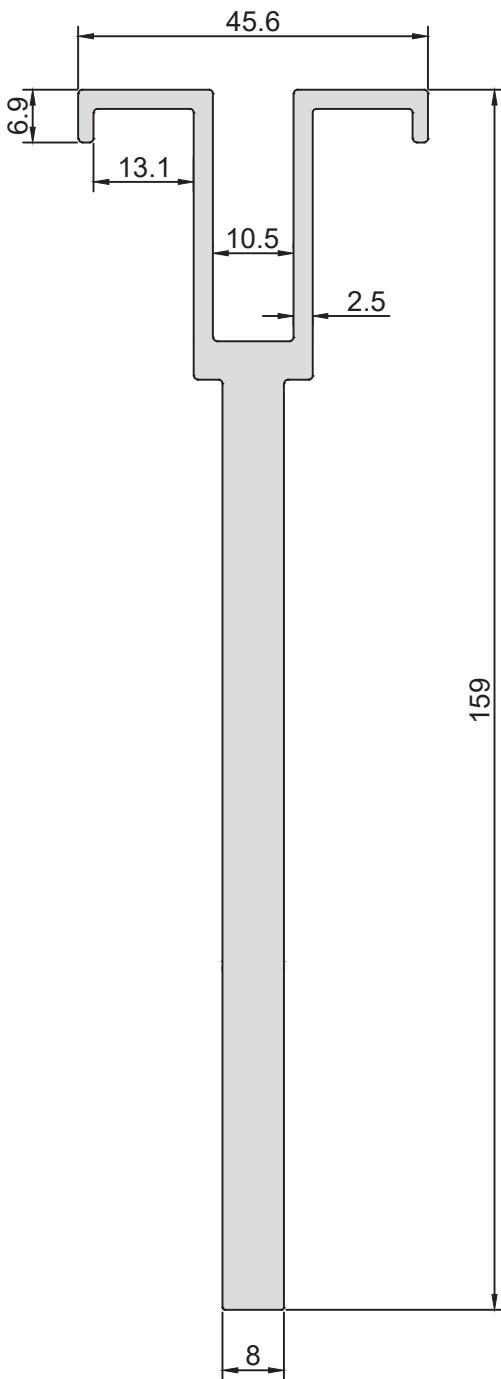


## ALÜMİNYUM AKSESUAR PROFİLLERİ

PROFILES OF ALUMINIUM ACCESSORIES



Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.



FP501

$J_x$ (cm <sup>4</sup> ) 744,28	$y$	$J_y$ (cm <sup>4</sup> ) 45,76
AĞIRLIK / WEIGHT (KG/M.) 3,864		

# DETAYLAR

# DETAILS

1. KAPAKLI CEPHE / CAPPED CURTAIN WALL
2. ENTEGRE CEPHE / INTEGRATED CURTAIN WALL
3. YARI-KAPAKLI CEPHE / SEMI-CAPPED CURTAIN WALL
4. CAM KALINLIKLARINA GÖRE SİSTEM DETAYLARI / SYSTEM DETAILS ACCORDING TO THE GLASS THICKNESSES

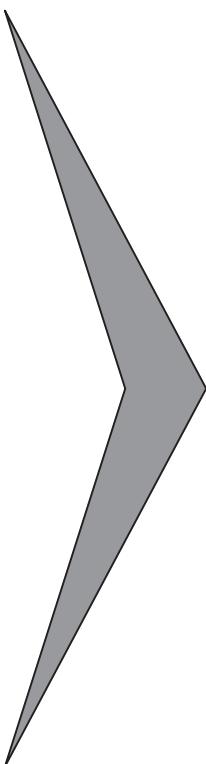
## TARAMA STİLLERİ / HATCH STYLES

 EPDM FİTİL / EPDM GASKET	 PVC PROFİL / PVC PROFILE
 STRÜKTÜREL SİLİKON / STRUCTURAL SILICONE	 ÇELİK PROFİL / STEEL PROFILE
 MESAFE BELİRLEYİCİ / SPACE ADJUSTER	 SU YALITIM MEMBRANI / WATERPROOFING MEMBRANE
 ALÜMİNYUM PROFİL / ALUMINIUM PROFILE	 POLİETİLEN CONTA / POLYETHYLENE GASKET
 PROFİL PARÇA (AI) / PIECE OF PROFILE (AI)	 TAŞYUNÜ / ROCKWOOL
 ISI BARIYERİ / INSULATION BAR	 CAM / GLASS

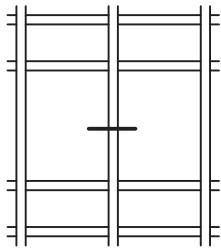
► SİSTEM ALÜMİNYUM® KATALOG İÇERİSİNDEKİ VERİLERDE DÜZELTME VEYA DEĞİŞİKLİK YAPMA HAKKINA SAHİPTİR.  
SİSTEM ALÜMİNYUM® HAS THE RIGHTS TO MAKE CORRECTION OR MODIFICATION IN THE CATALOGUE DATA.

# KAPAKLI CEPHE

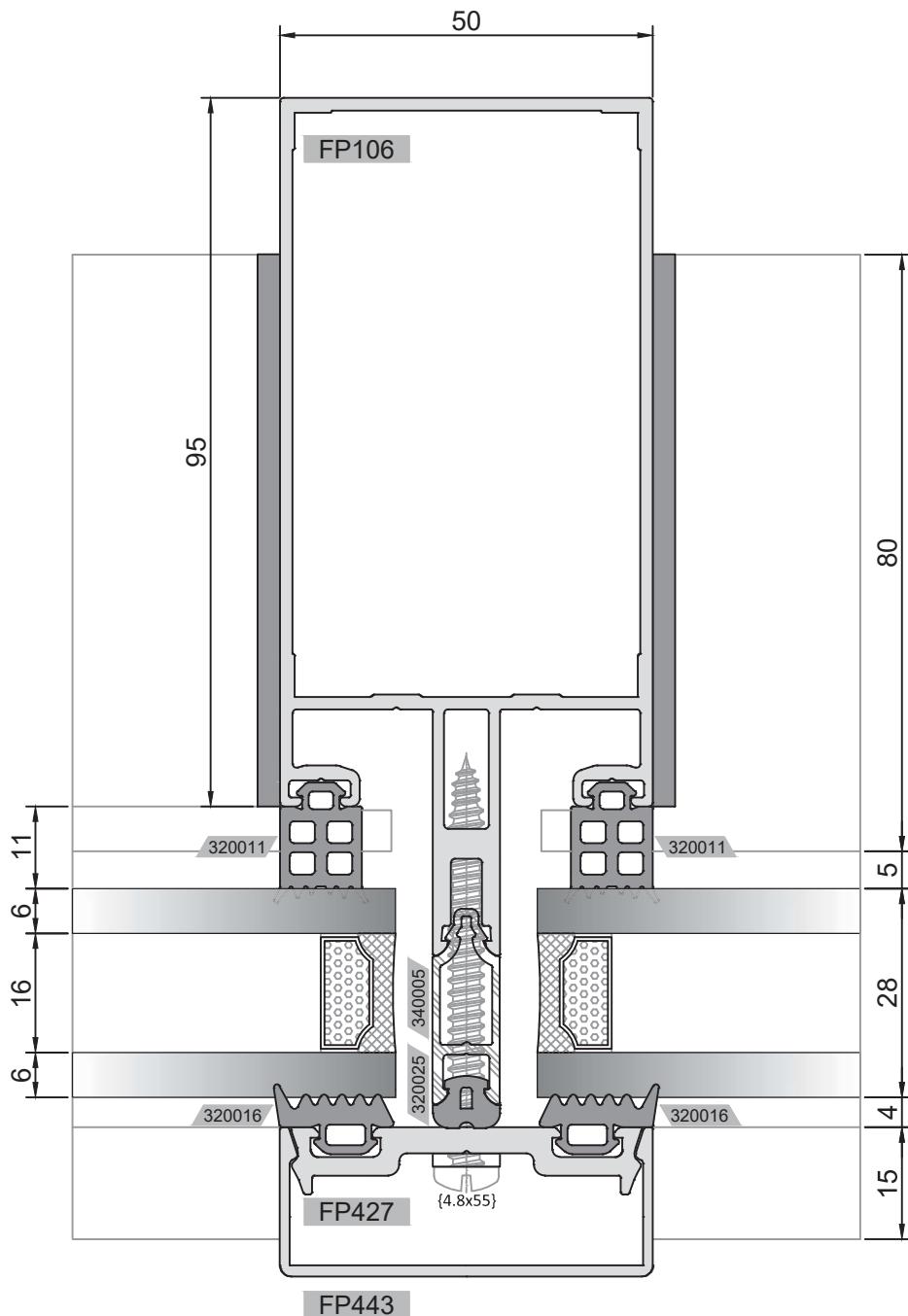
## CAPPED CURTAIN WALL

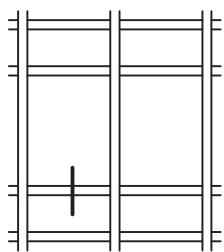


➤ SİSTEM ALÜMİNYUM® KATALOG İÇERİSİNDEKİ VERİLERDE DÜZELTME VEYA DEĞİŞİKLİK YAPMA HAKKINA SAHİPTİR.  
SİSTEM ALÜMİNYUM® HAS THE RIGHTS TO MAKE CORRECTION OR MODIFICATION IN THE CATALOGUE DATA.

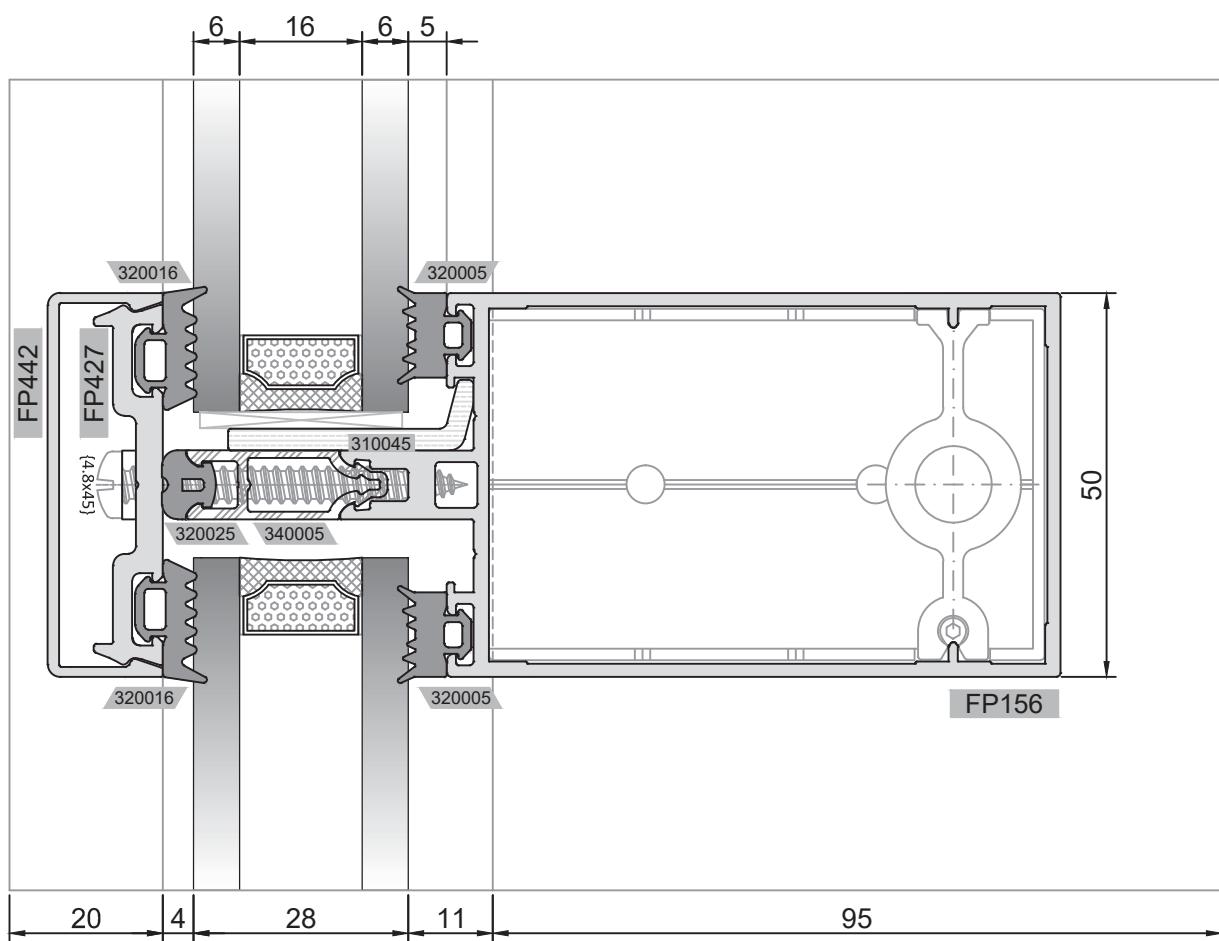


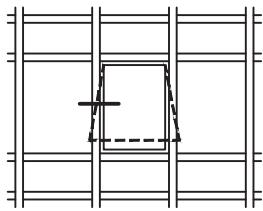
**DÜŞEY DETAYI**  
VERTICAL DETAIL





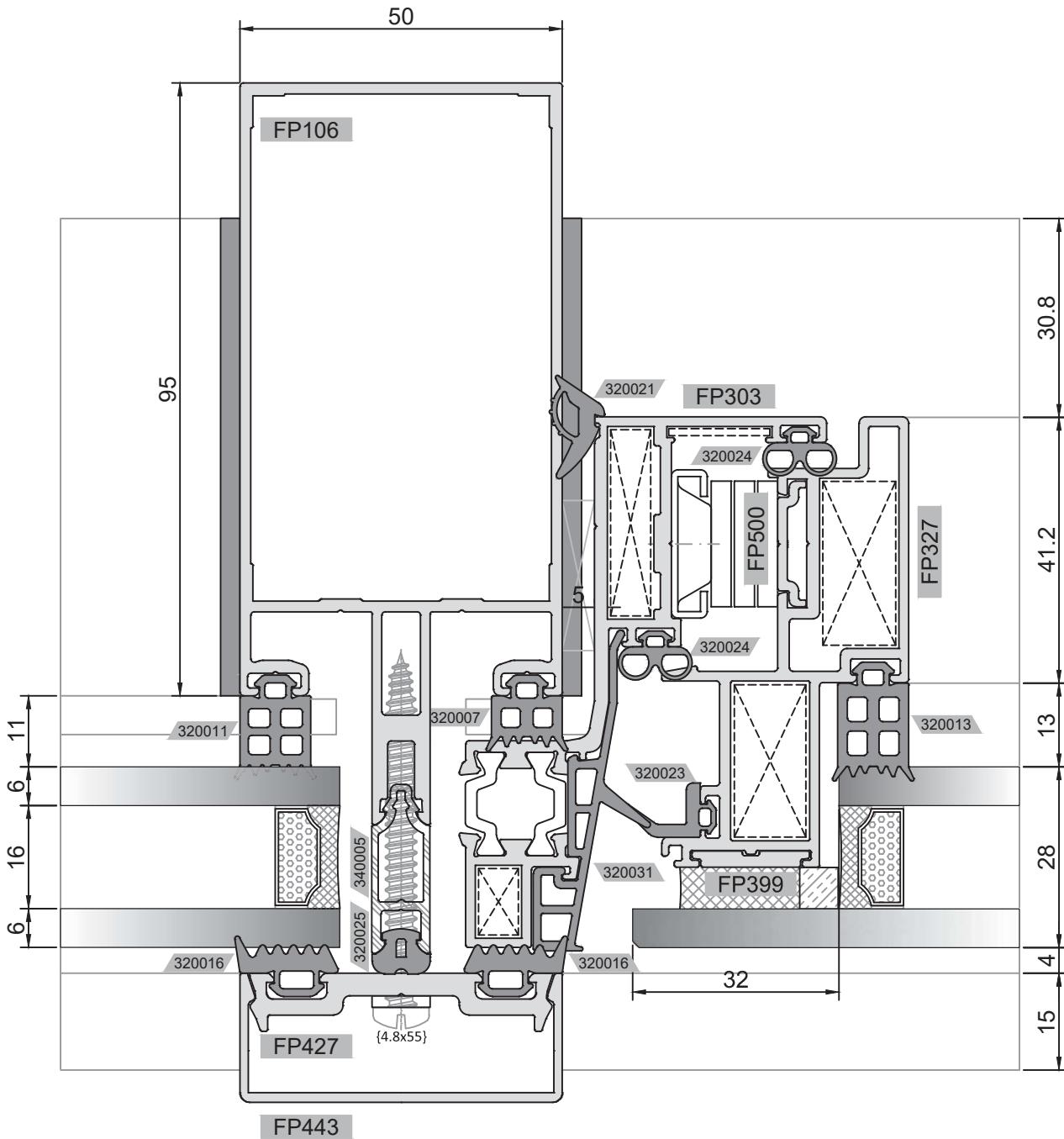
YATAY DETAYI  
HORIZONTAL DETAIL

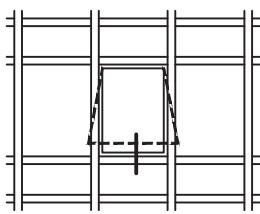




**ALTERNATİF 1: YALITIMSIZ KANAT DETAYI**  
**ALTERNATIVE 1 : UNINSULATED VENT DETAIL**

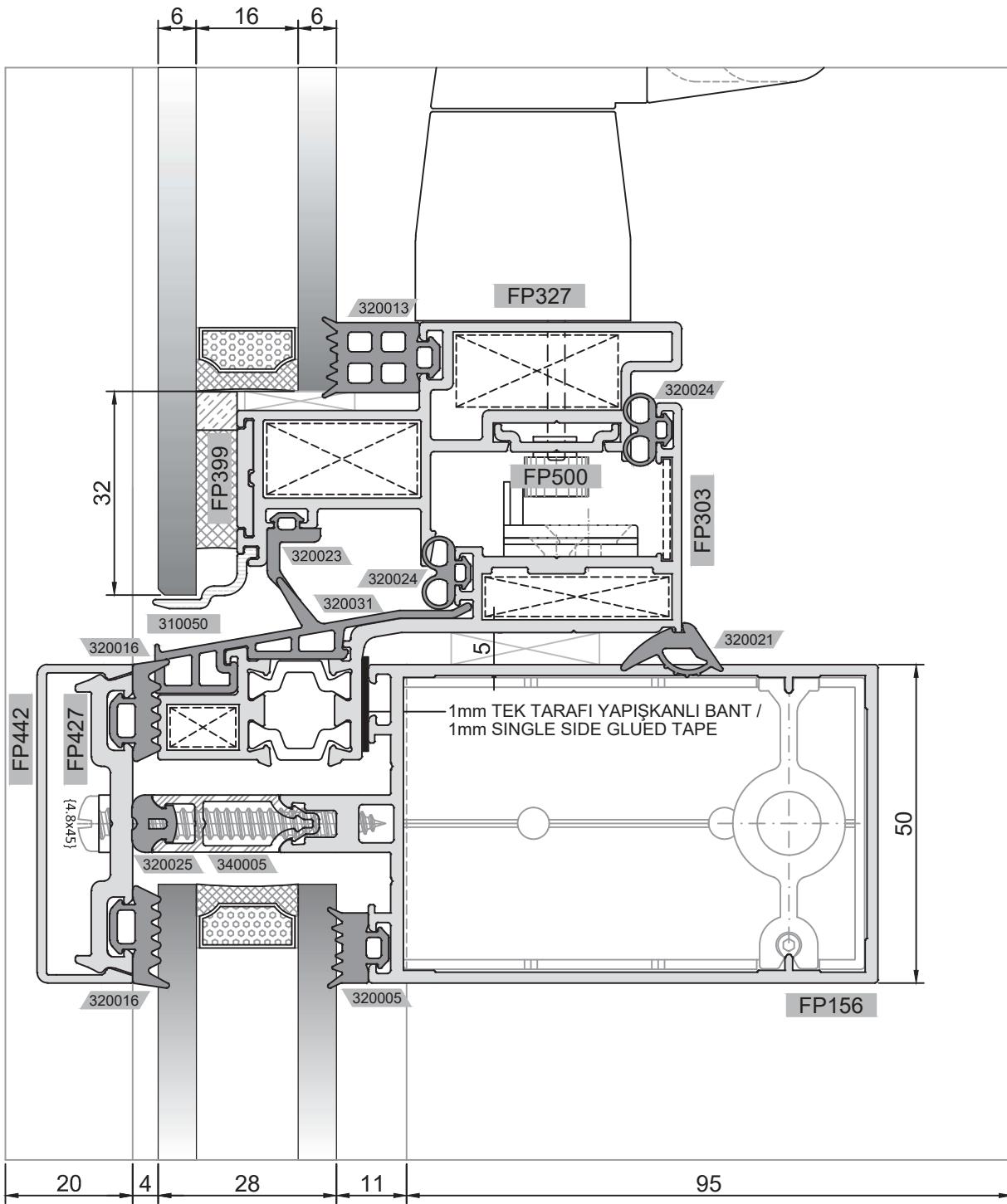
**DÜSEY DETAYI**  
 VERTICAL DETAIL

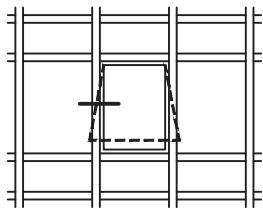




**ALTERNATİF 1: YALITIMSIZ KANAT DETAYI**  
**ALTERNATIVE 1 : UNINSULATED VENT DETAIL**

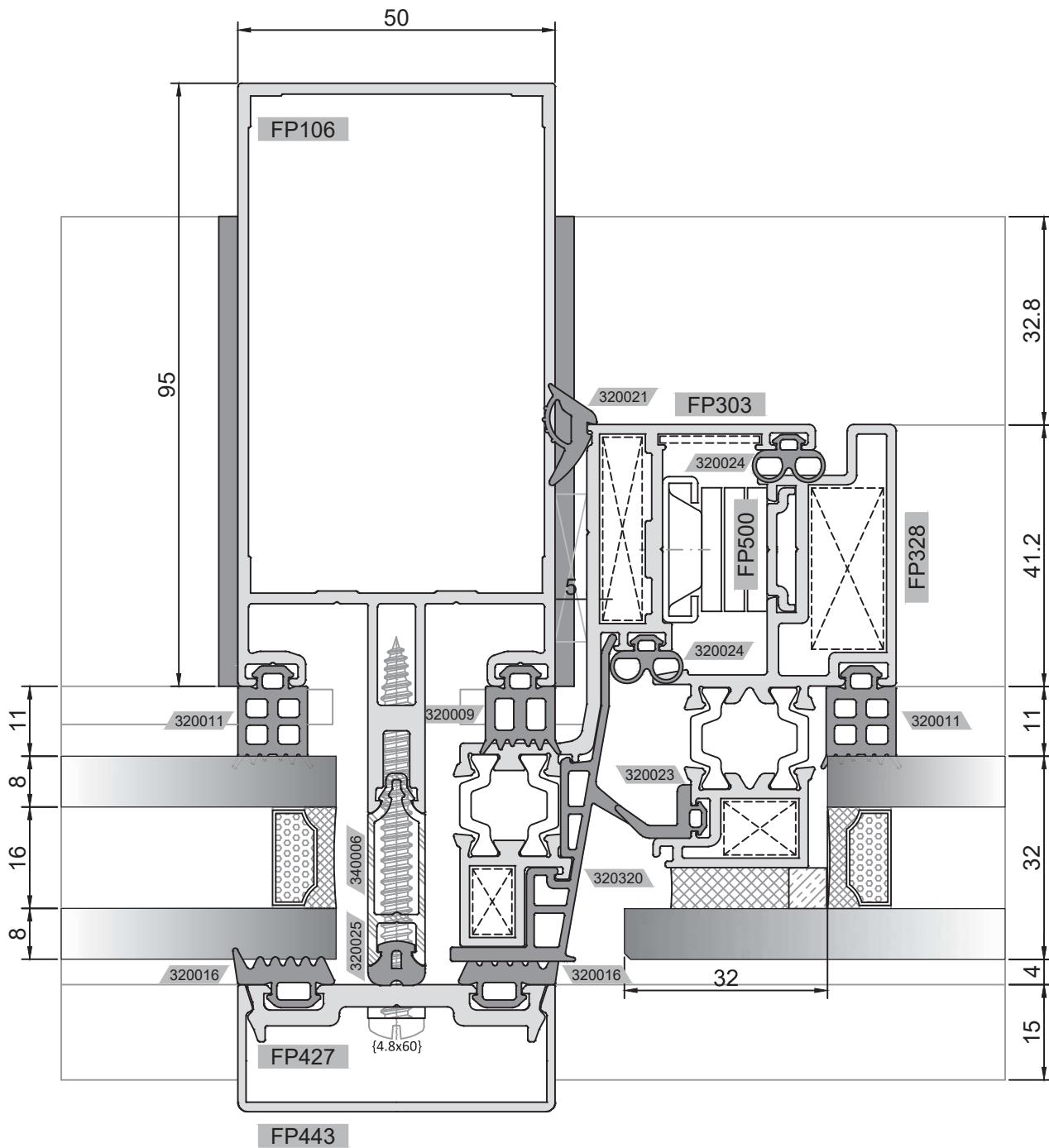
**YATAY DETAYI**  
 HORIZONTAL DETAIL

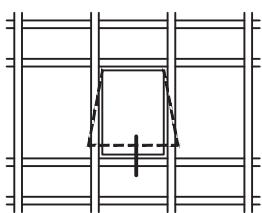


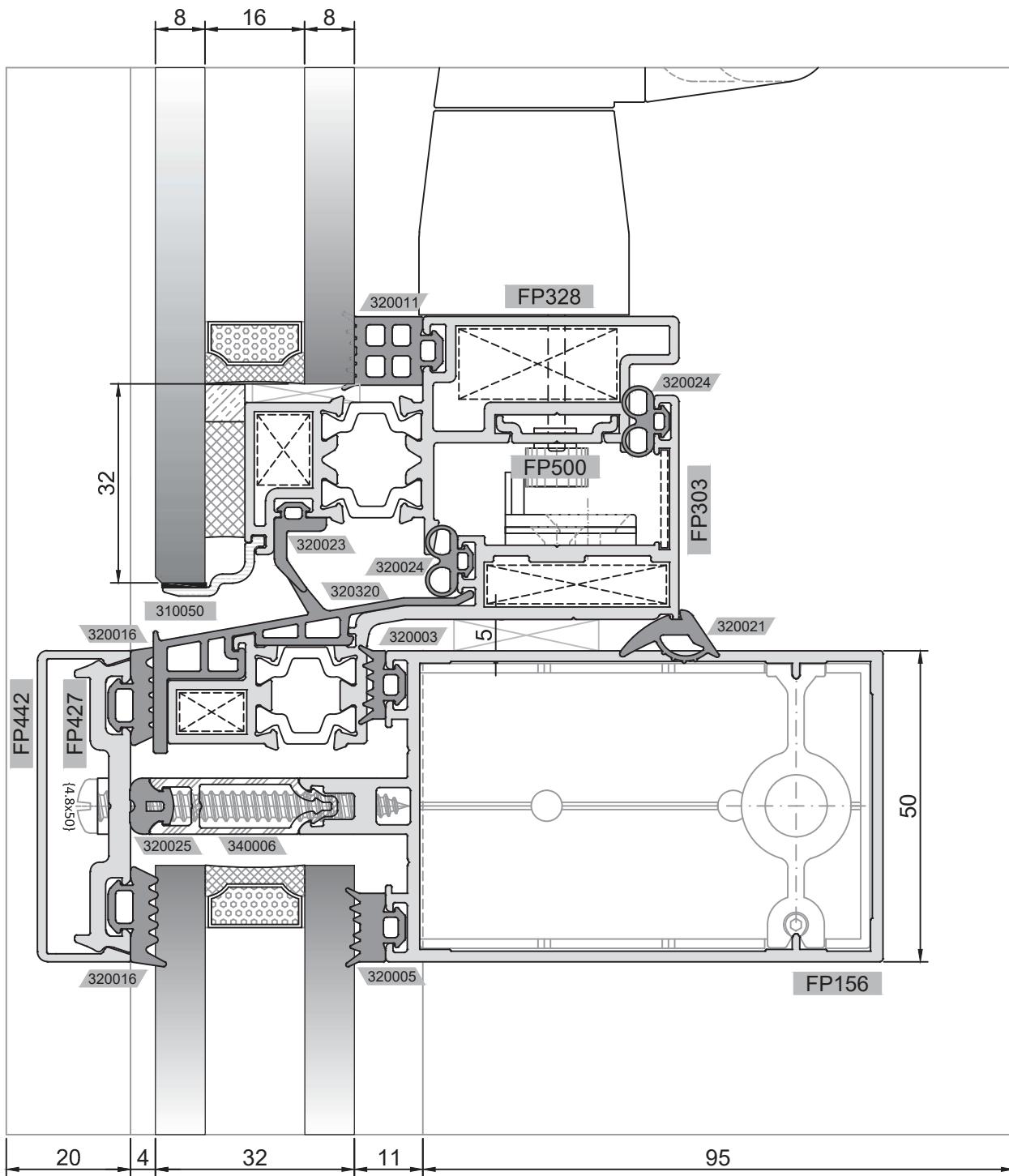


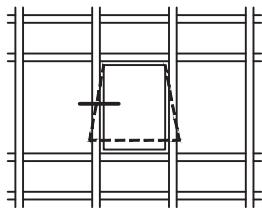
ALTERNATİF 2: YALITIMLI KANAT DETAYI  
ALTERNATIVE 2 : INSULATED VENT DETAIL

DÜSEY DETAYI  
VERTICAL DETAIL



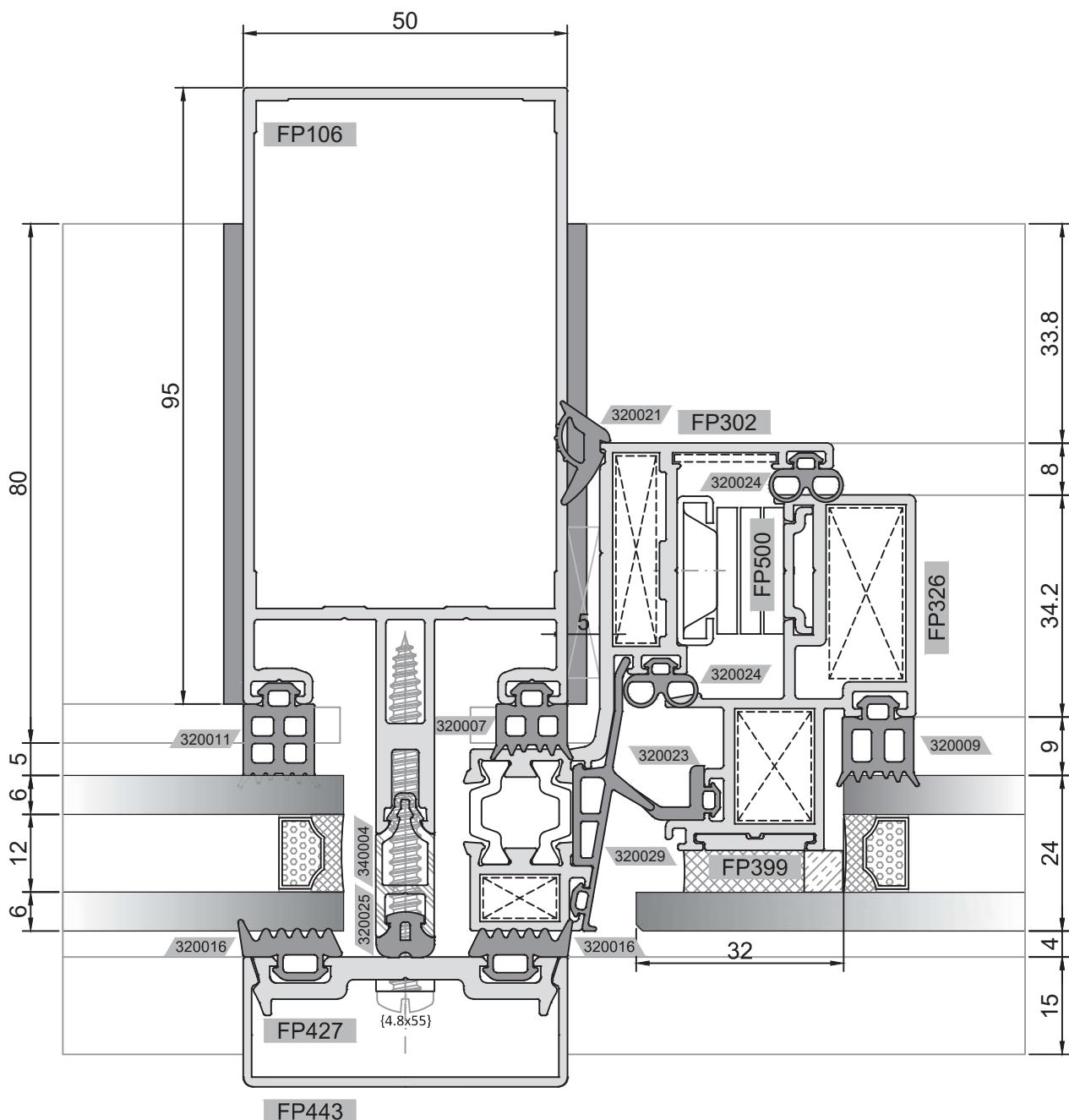

**ALTERNATİF 2: YALITIMLI KANAT DETAYI**  
 ALTERNATIVE 2 : INSULATED VENT DETAIL

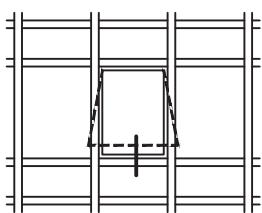
**YATAY DETAYI**  
 HORIZONTAL DETAIL




ALTERNATİF 3: EKONOMİK KANAT DETAYI  
ALTERNATIVE 3 : ECONOMICAL VENT DETAIL

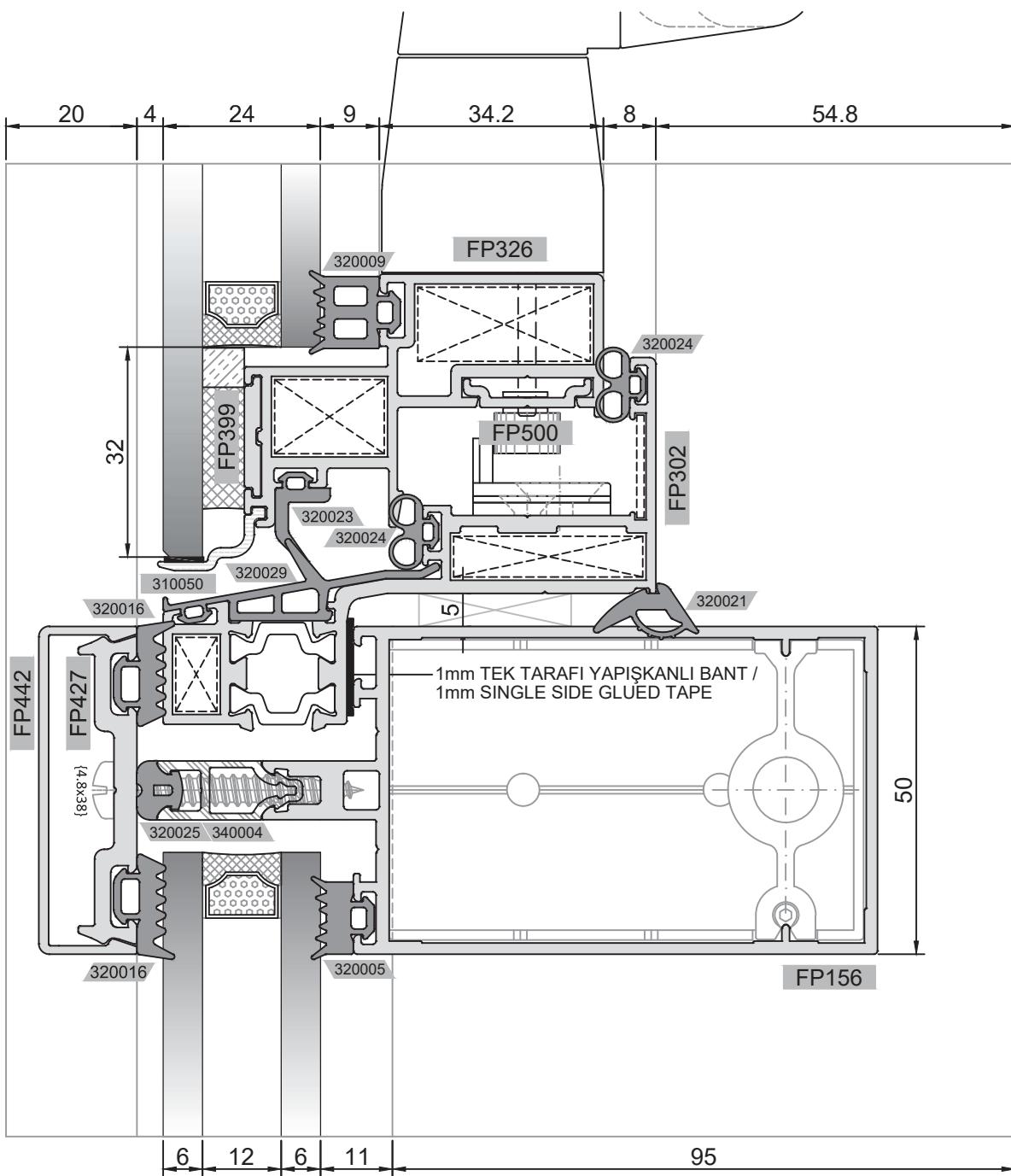
DÜSEY DETAYI  
VERTICAL DETAIL

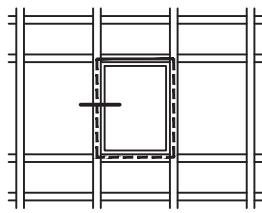




YATAY DETAYI  
HORIZONTAL DETAIL

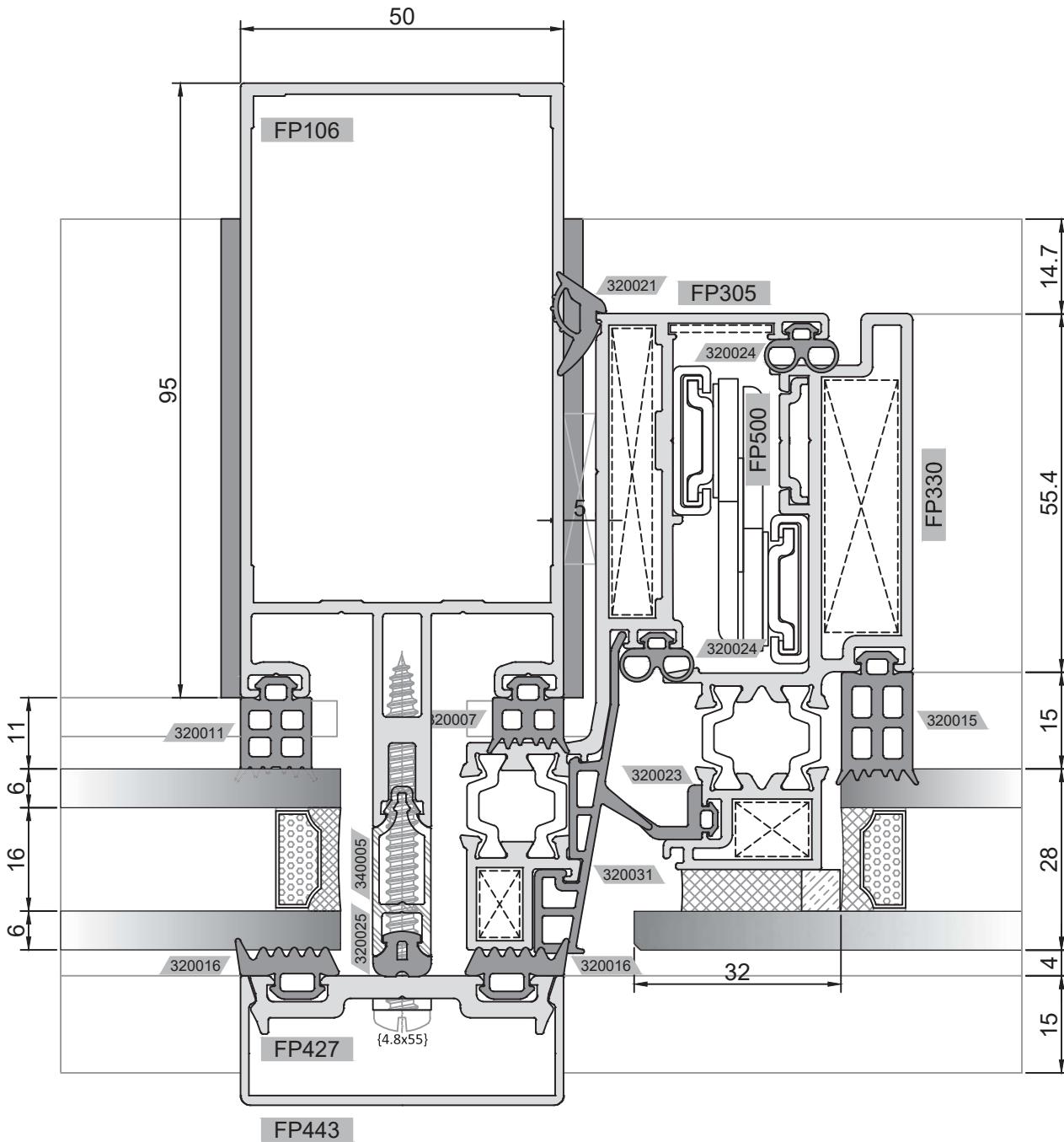
ALTERNATİF 3: EKONOMİK KANAT DETAYI  
ALTERNATIVE 3 : ECONOMICAL VENT DETAIL

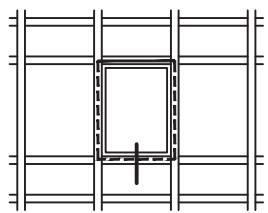




ALTERNATİF 1: YALITIMLI PARALEL AÇILIR KANAT DETAYI  
 ALTERNATIVE 1 : PARALLEL OPENING INSULATED VENT DETAIL

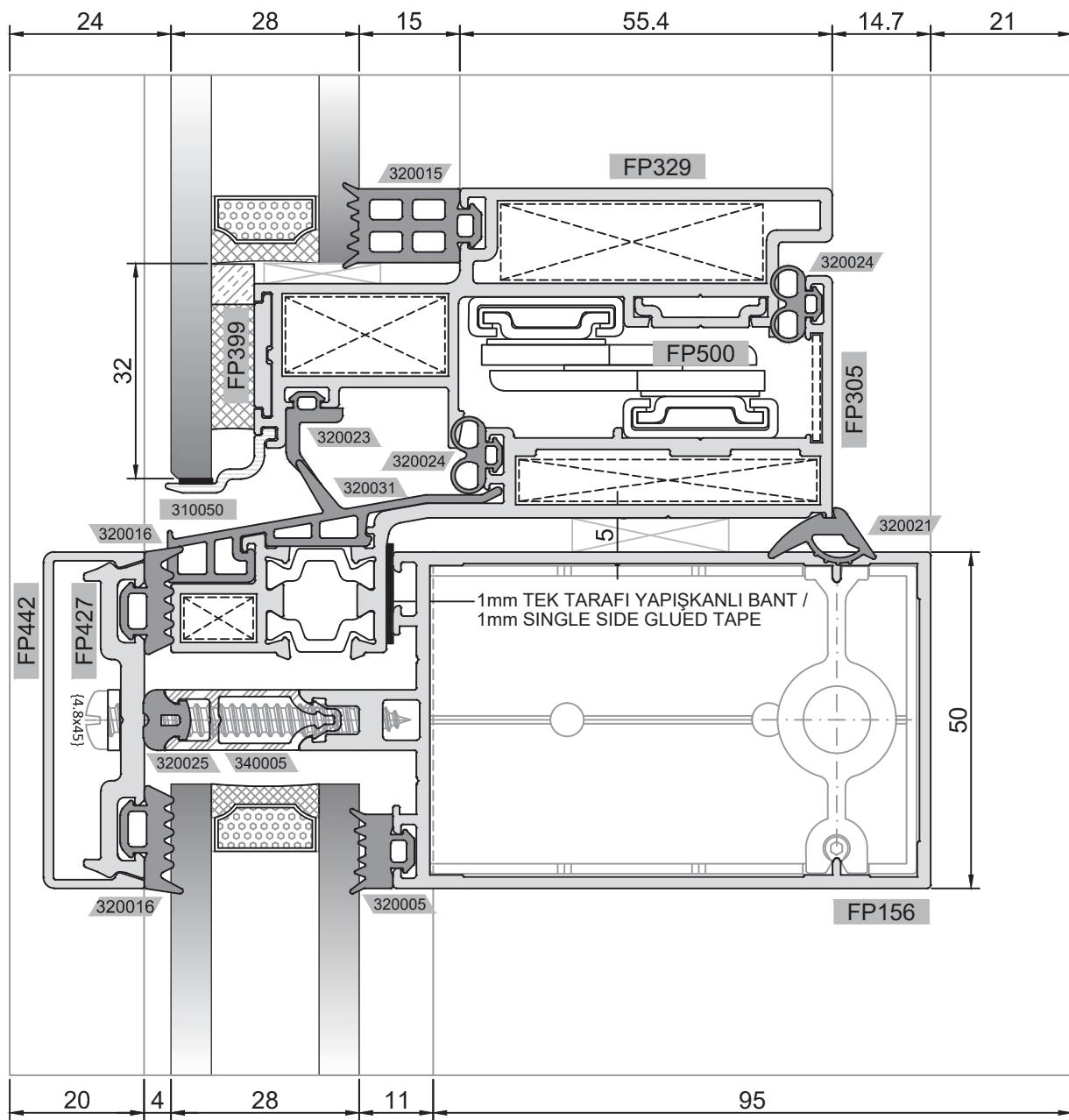
DÜŞEY DETAYI  
 VERTICAL DETAIL

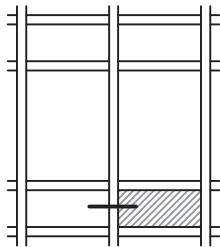




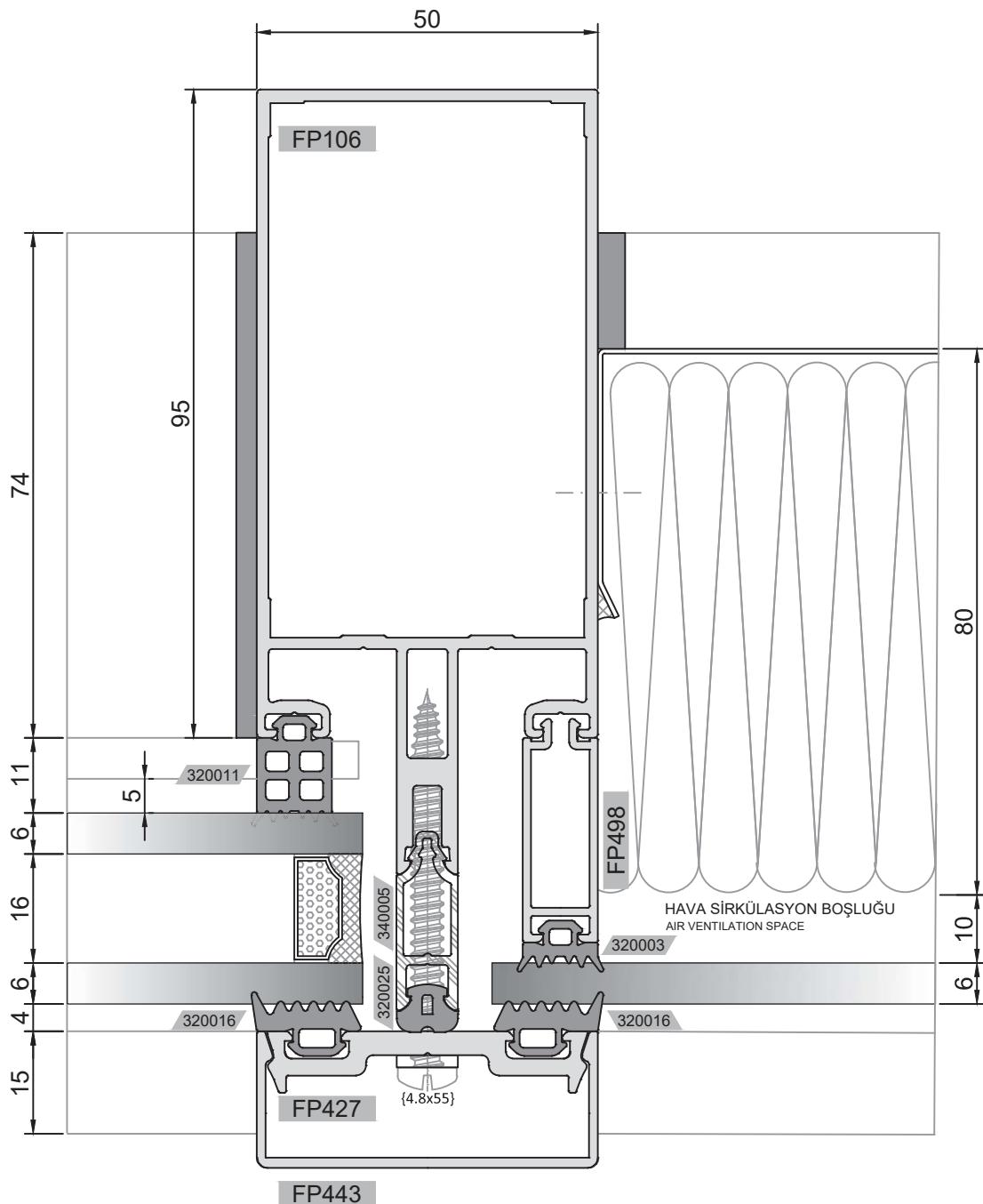
**ALTERNATİF 2: YALITIMSIZ PARALEL AÇILIR KANAT DETAYI**  
**ALTERNATIVE 2 : PARALLEL OPENING UNINSULATED VENT DETAIL**

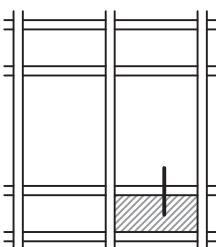
**YATAY DETAYI**  
**HORIZONTAL DETAIL**



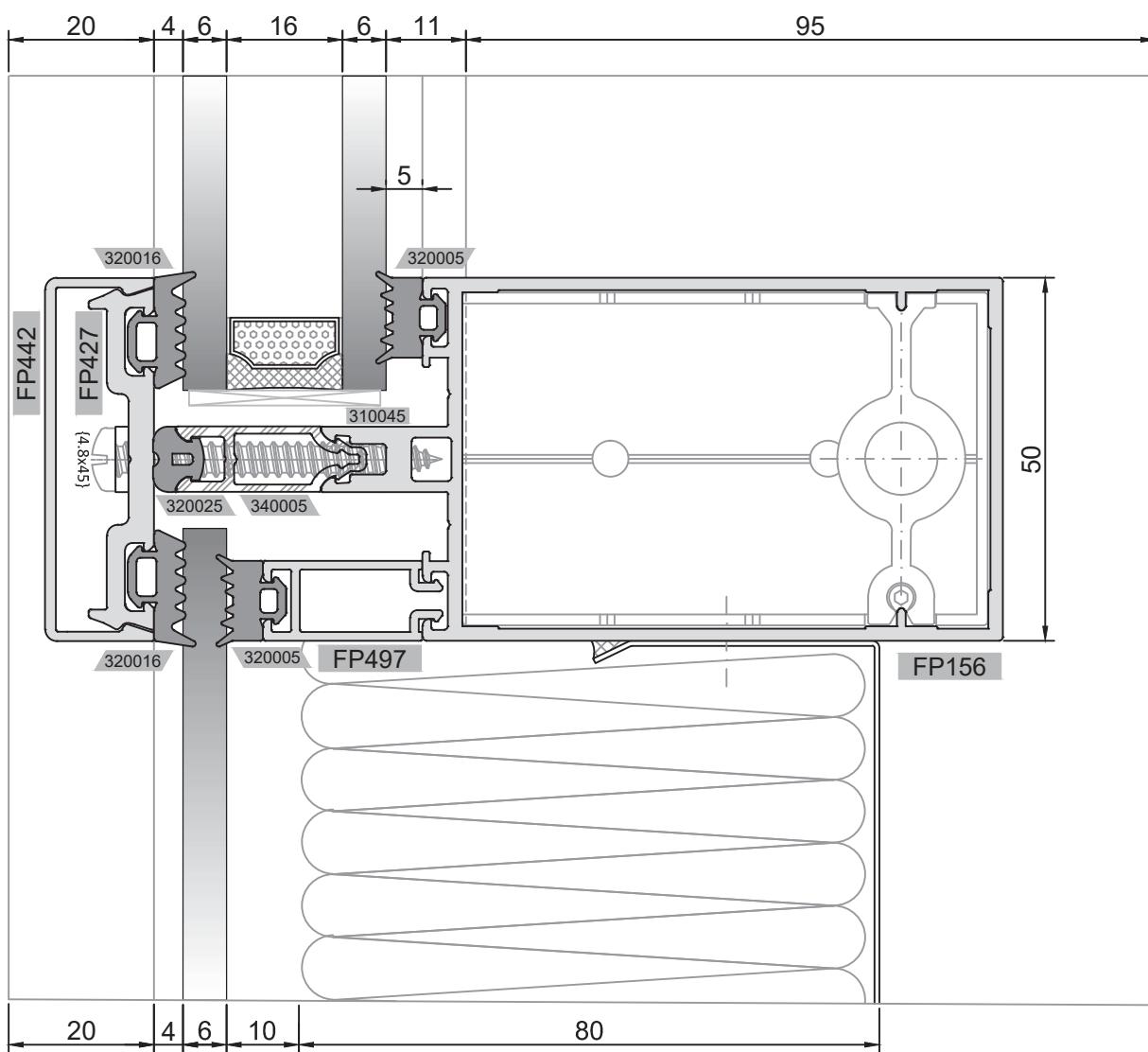


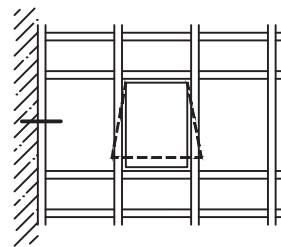
**SPANDREL BÖLGE DÜŞEY DETAYI**  
SPANDREL AREA VERTICAL DETAIL



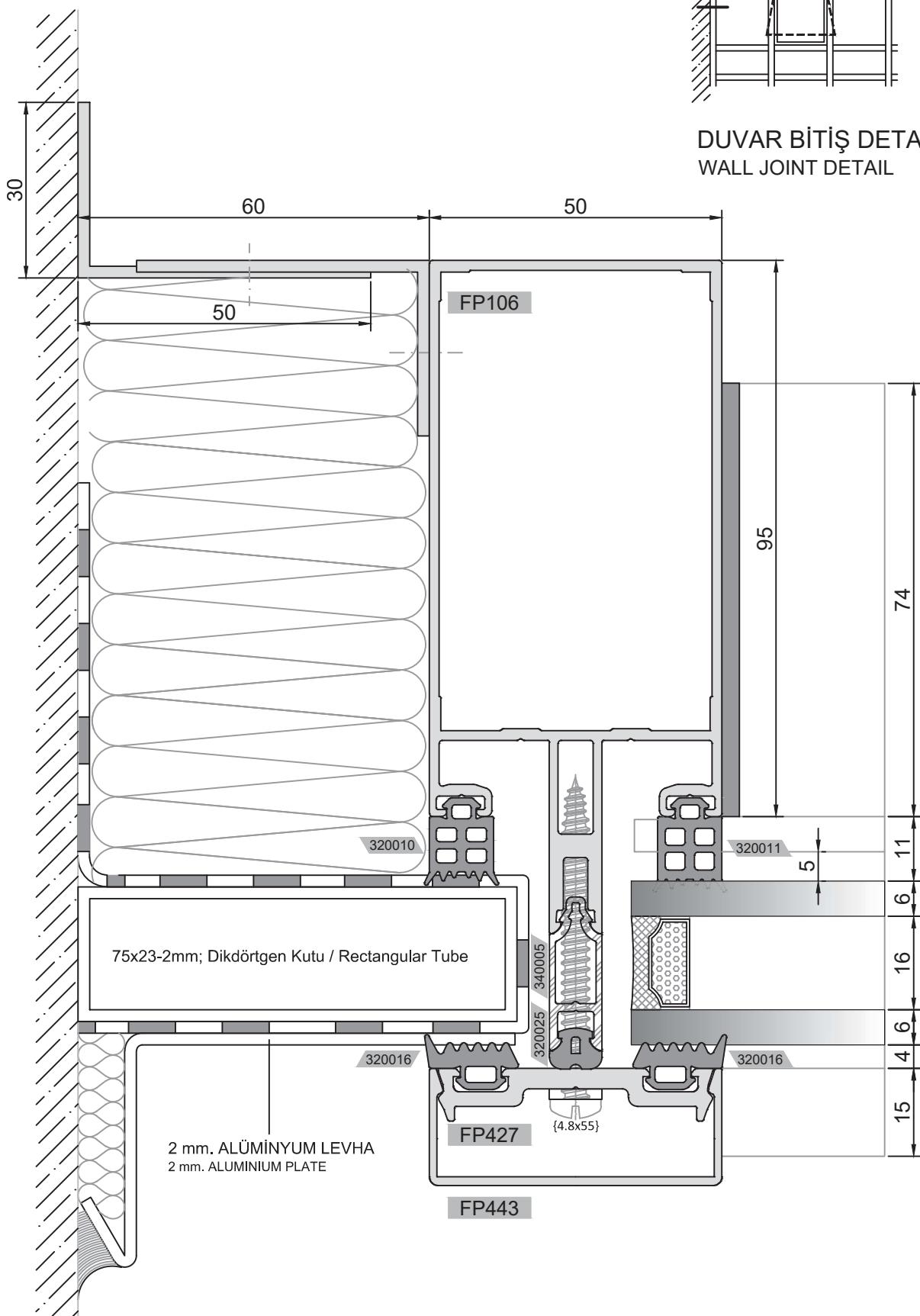


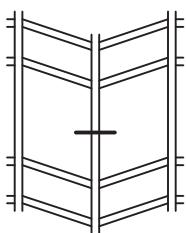
**SPANDREL BÖLGE YATAY DETAYI**  
SPANDREL AREA HORIZONTAL DETAIL



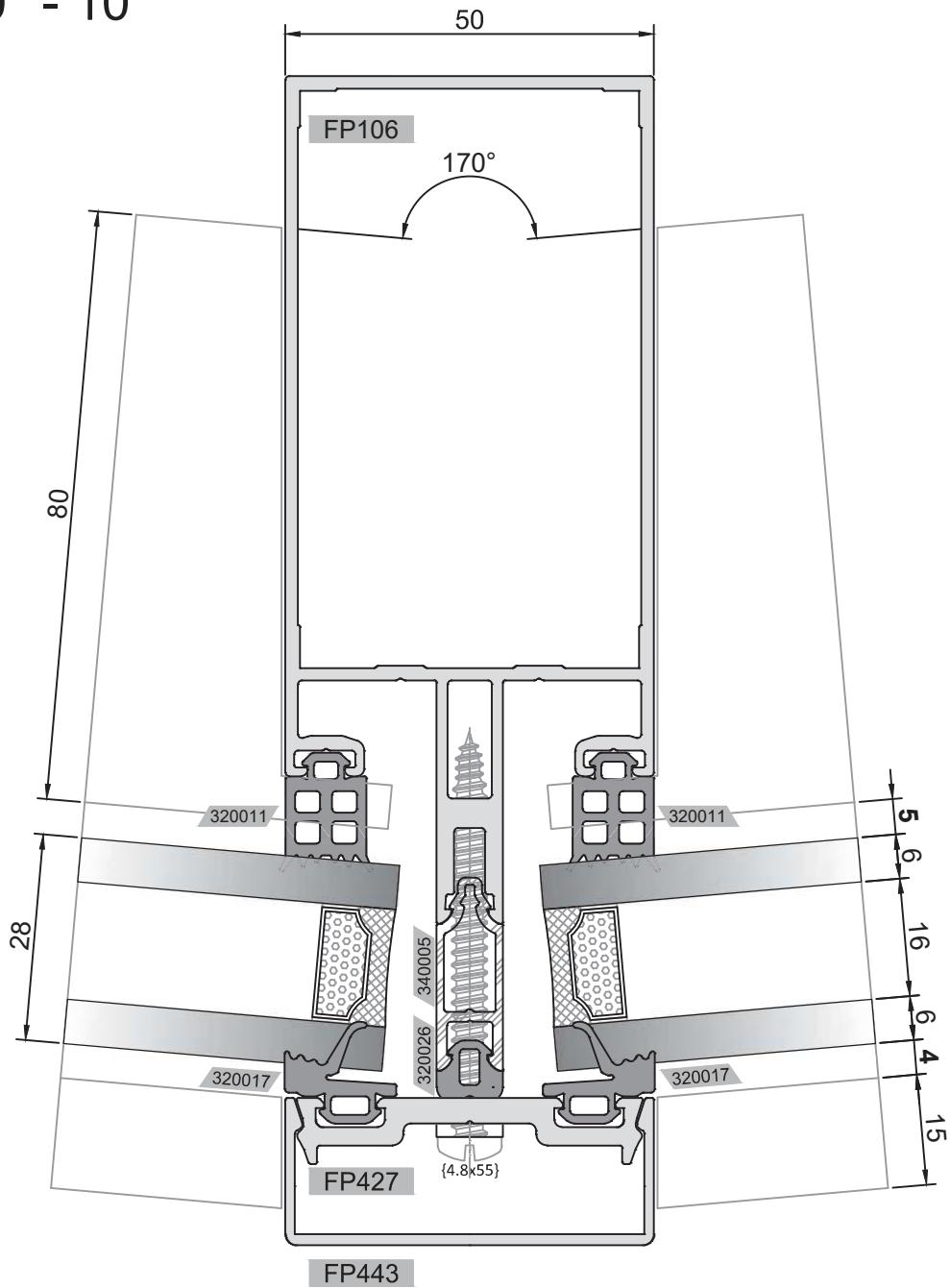


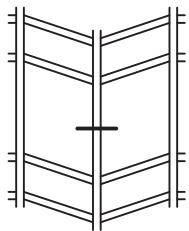
**DUVAR BİTİŞ DETAYI**  
WALL JOINT DETAIL



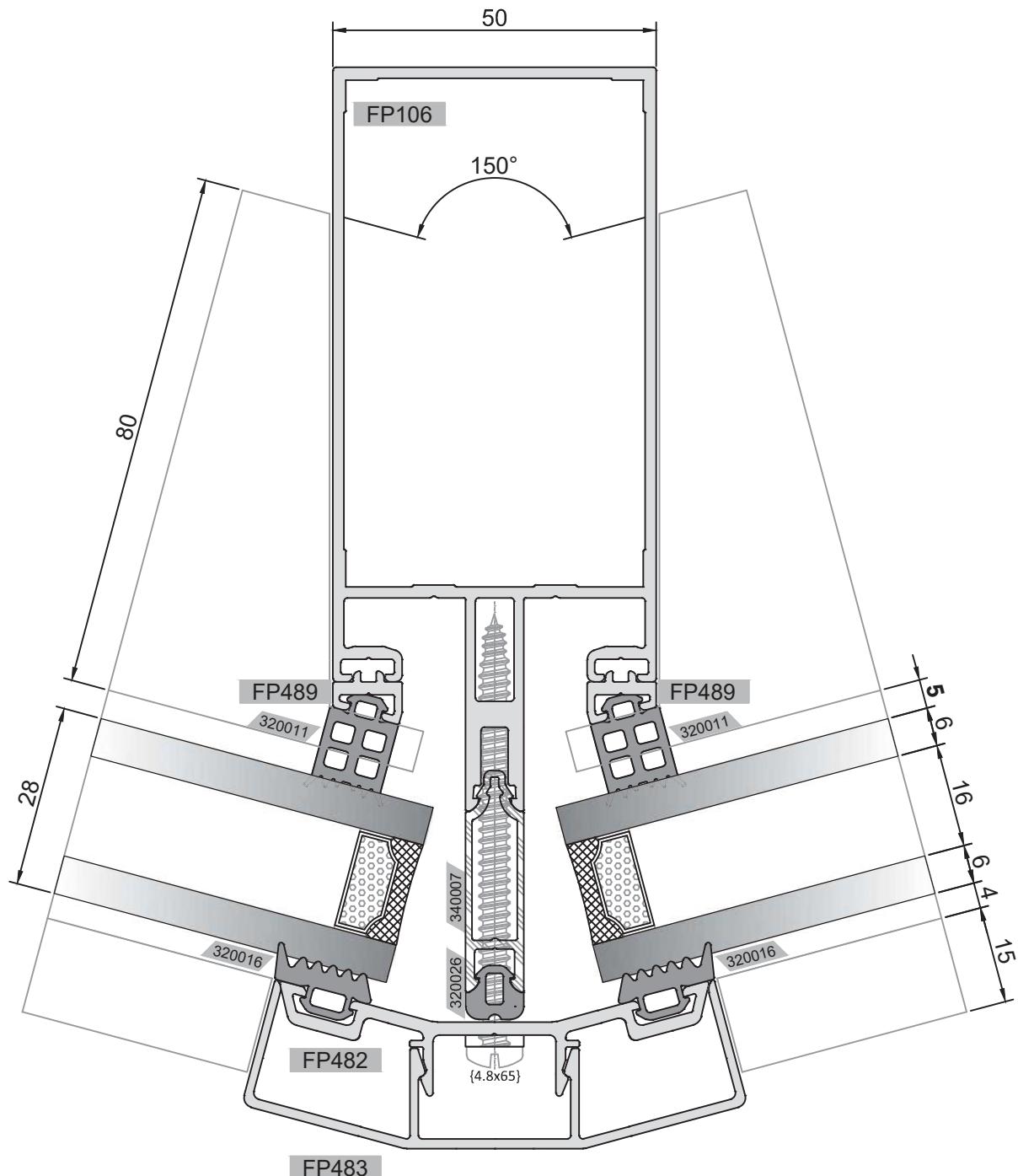


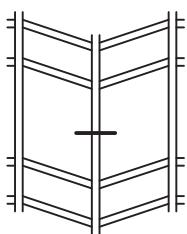
0° - 10°



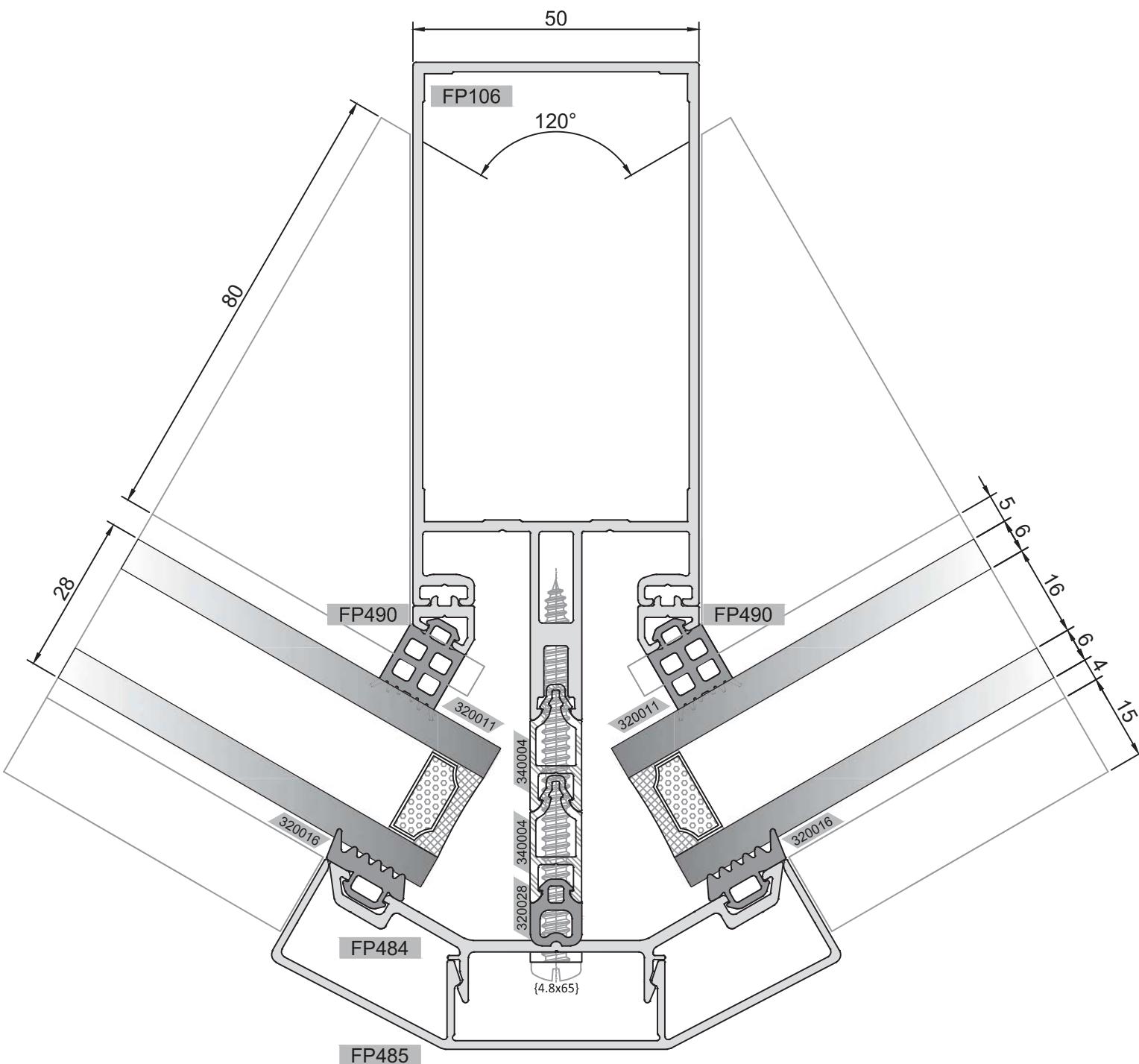


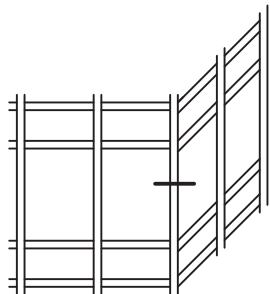
10° - 30°



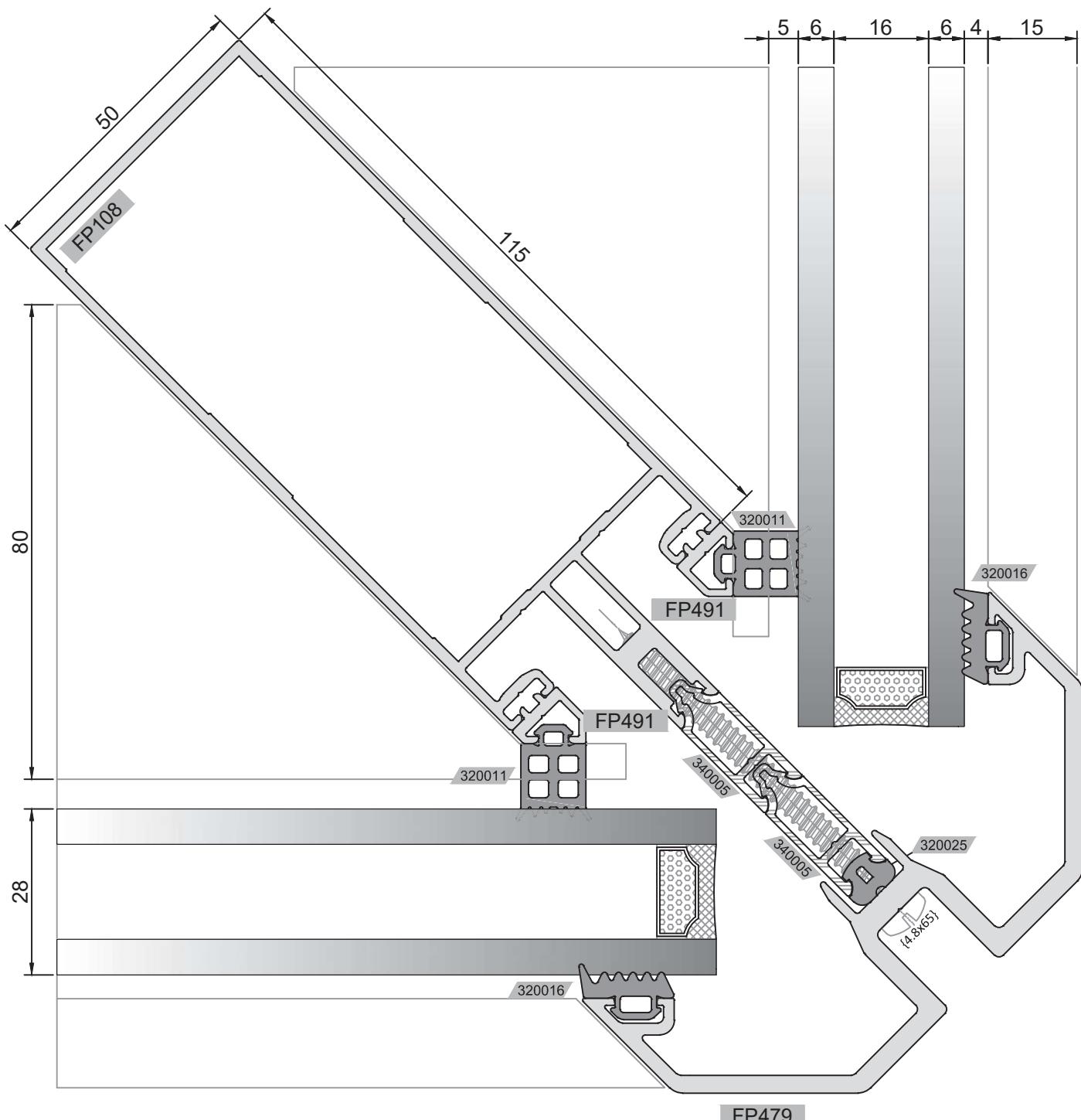


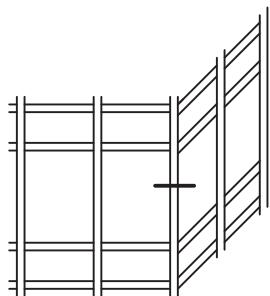
30° - 60°





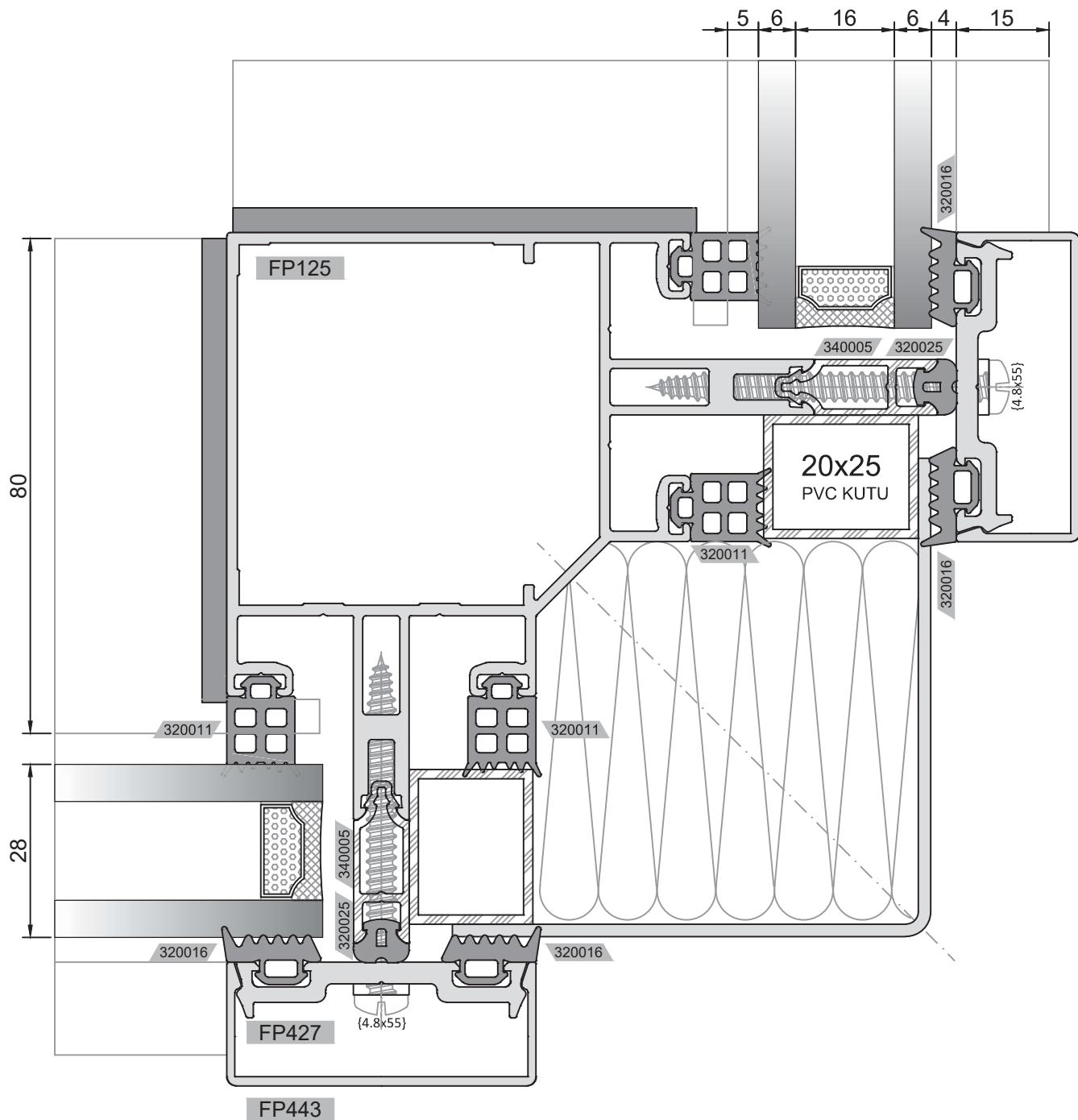
ALTERNATİF 1: TEK KAPAKLI KÖŞE DETAYI  
ALTERNATIVE 1 : CORNER DETAIL WITH SINGLE CAP

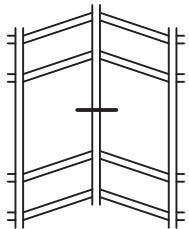




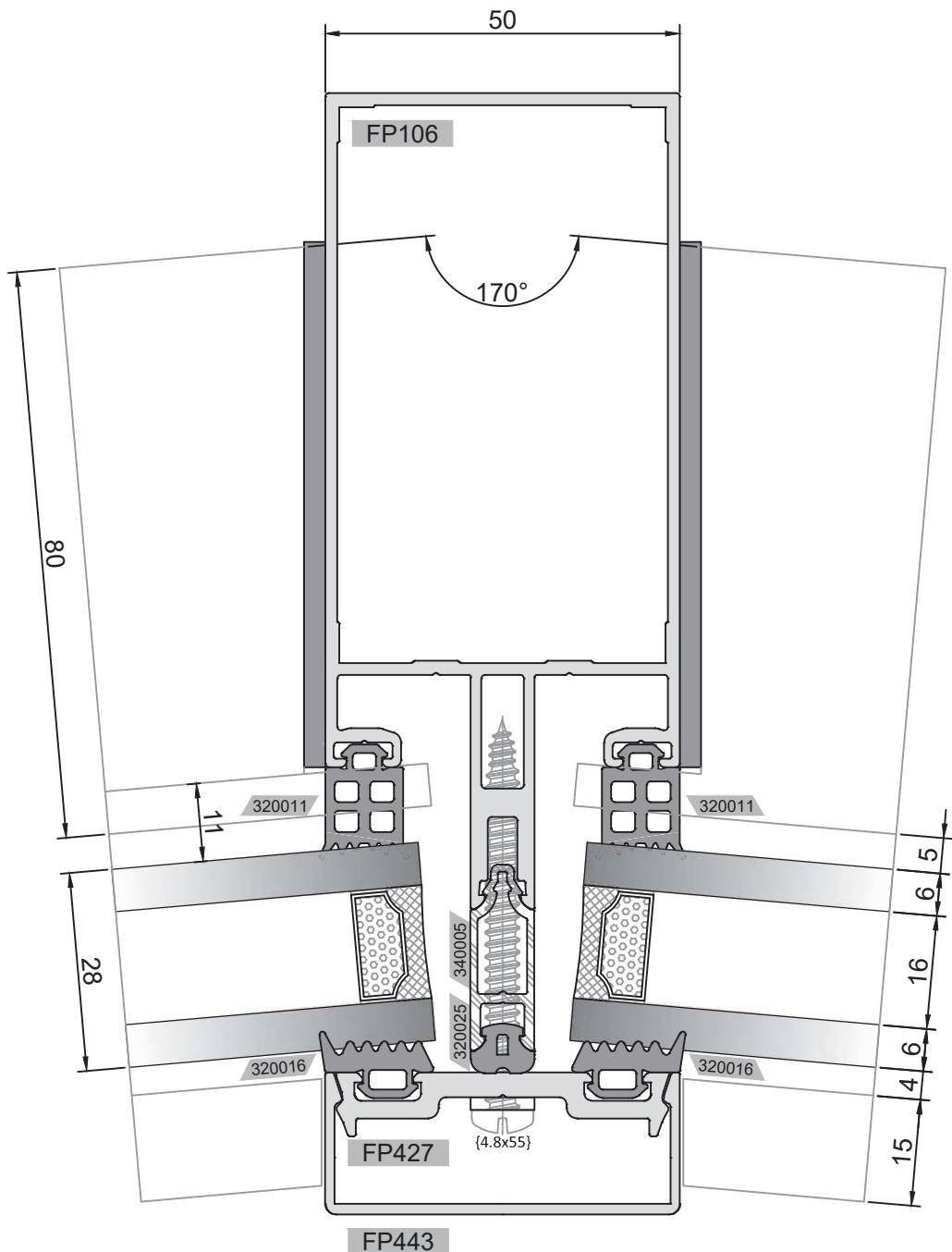
90°

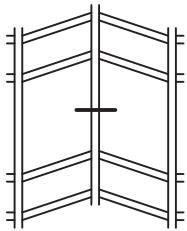
**ALTERNATİF 2: ÇİFT KAPAKLI KÖŞE DETAYI**  
**ALTERNATIVE 2 : CORNER DETAIL WITH DOUBLE CAP**



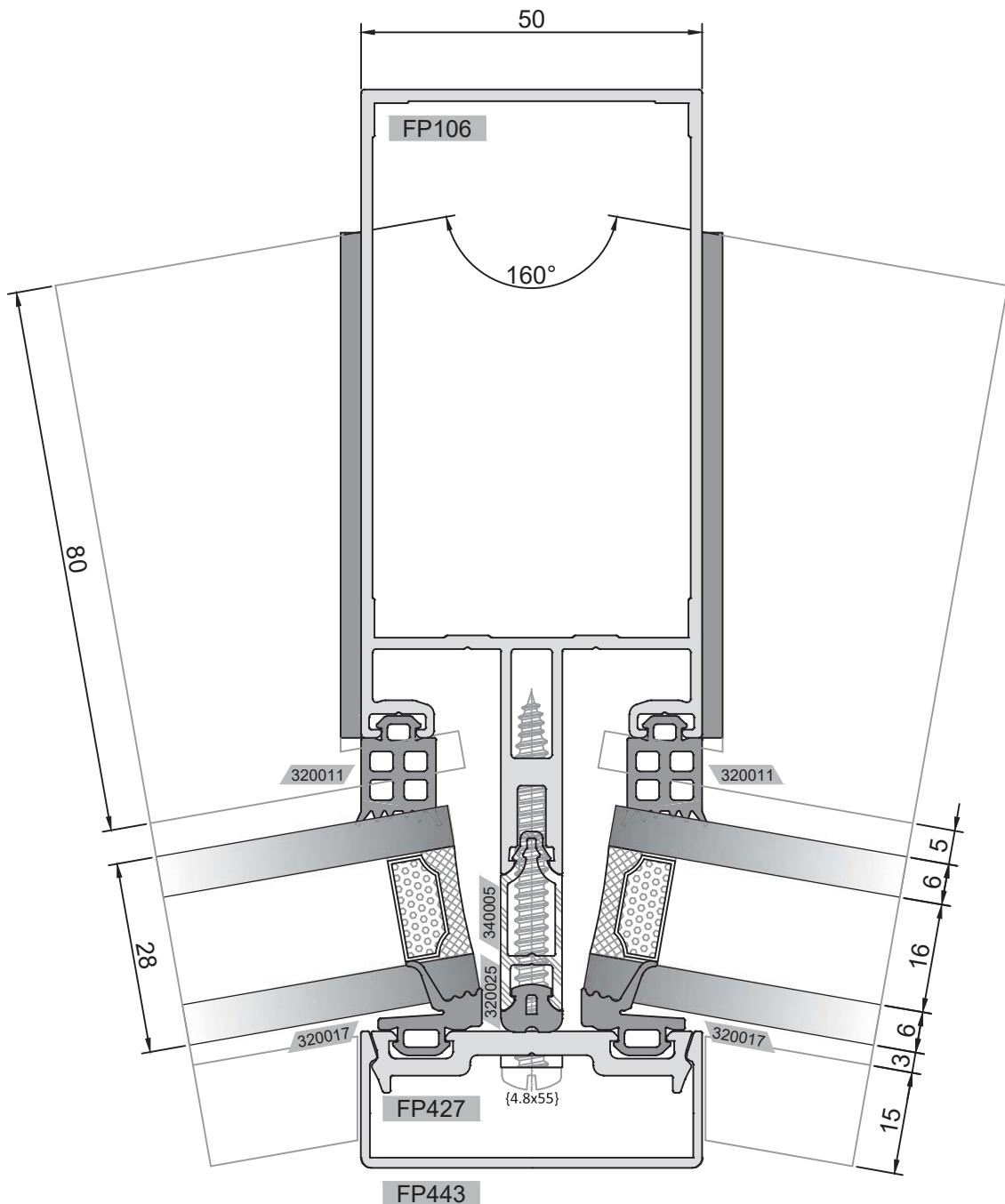


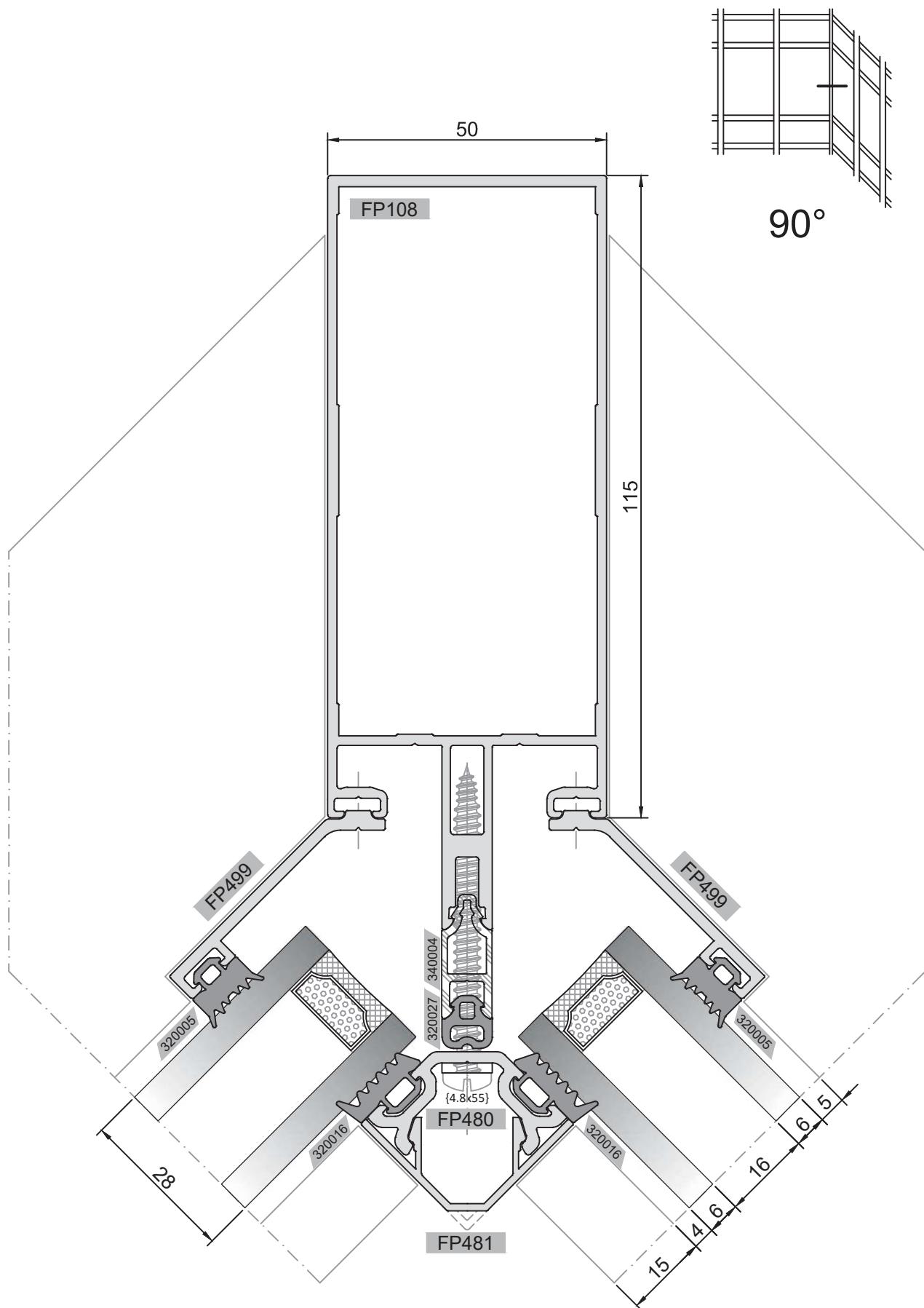
10° - 0°

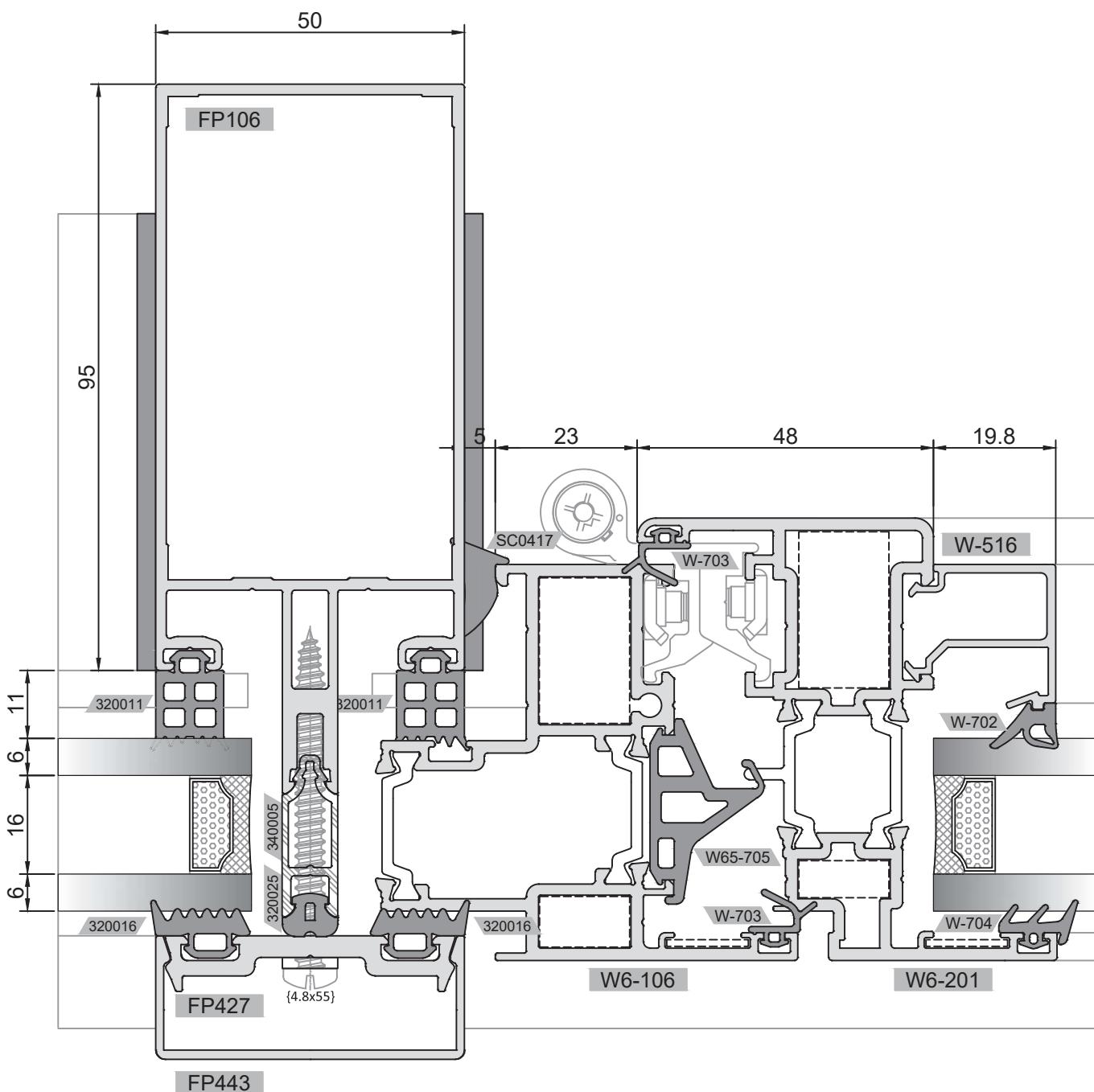
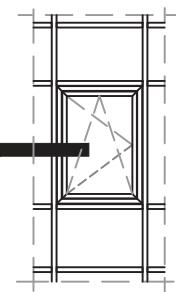


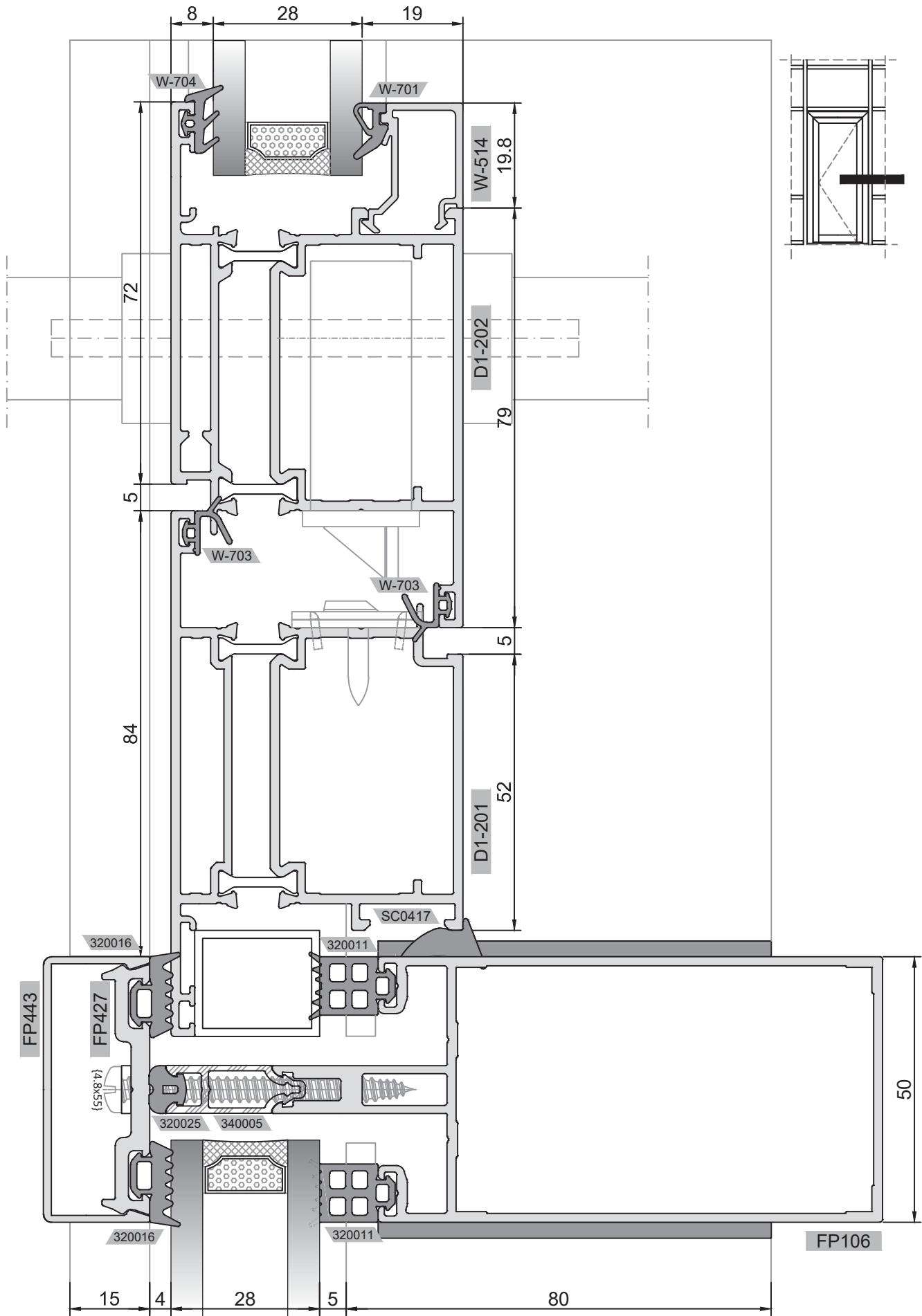


$20^\circ - 10^\circ$



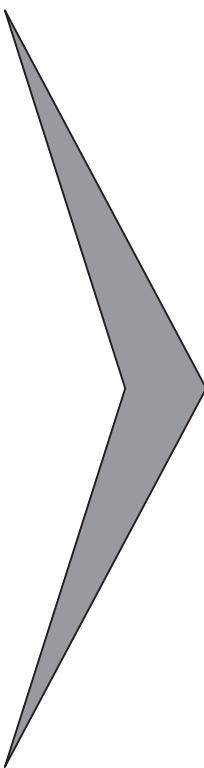






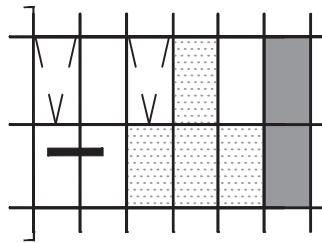
# ENTEGRE CEPHE

## INTEGRATED CURTAIN WALL

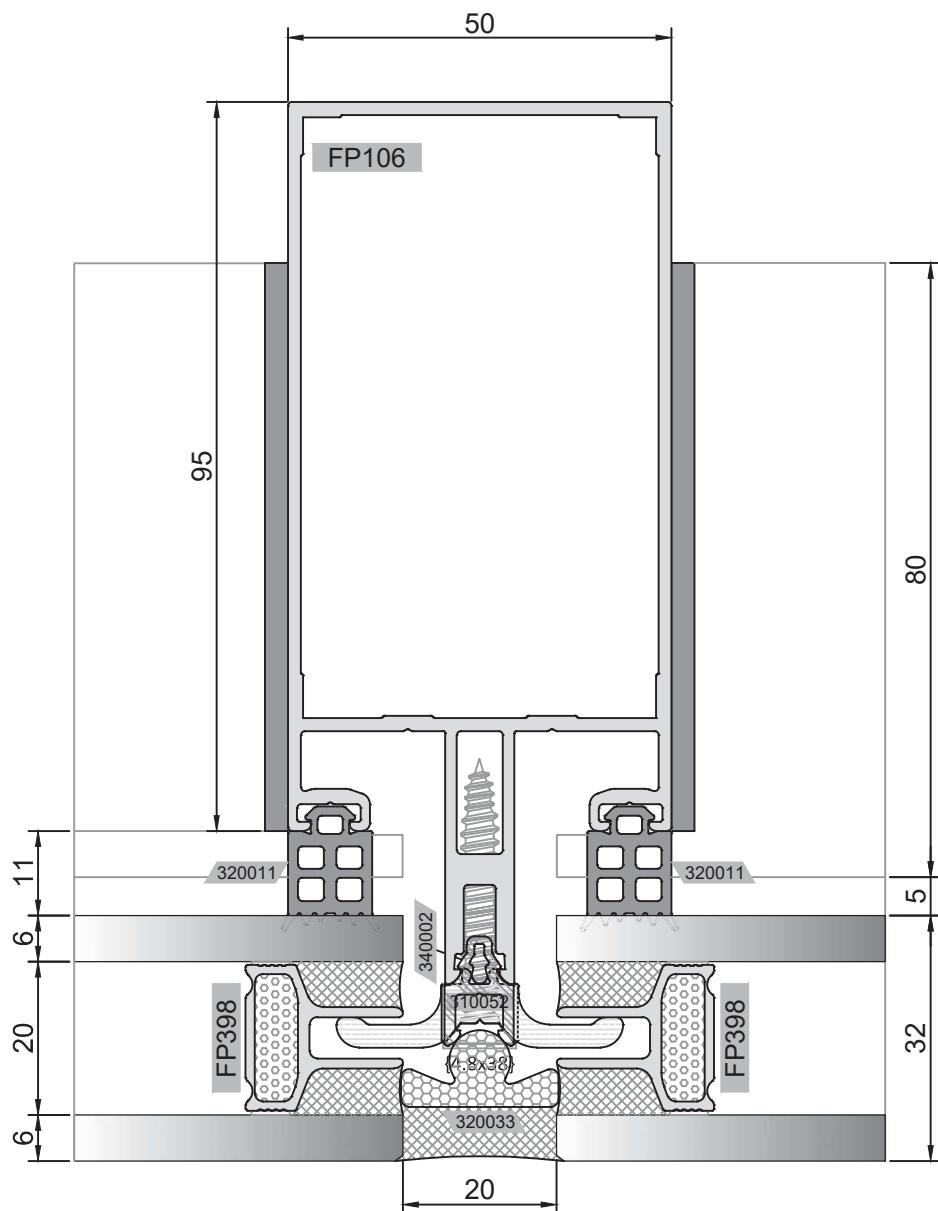


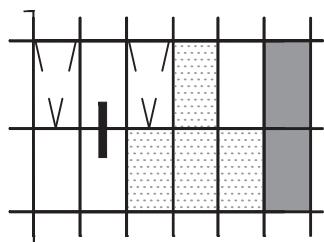
**\* 20mm STANDART  
ALÜMİNYUM ISICAM  
ÇITASI  
20mm STANDARD  
ALUMINIUM SPACER**

➤ SİSTEM ALÜMİNYUM® KATALOG İÇERİSİNDEKİ VERİLERDE DÜZELTME VEYA DEĞİŞİKLİK YAPMA HAKKINA SAHİPTİR.  
SİSTEM ALUMINIUM® HAS THE RIGHTS TO MAKE CORRECTION OR MODIFICATION IN THE CATALOGUE DATA.

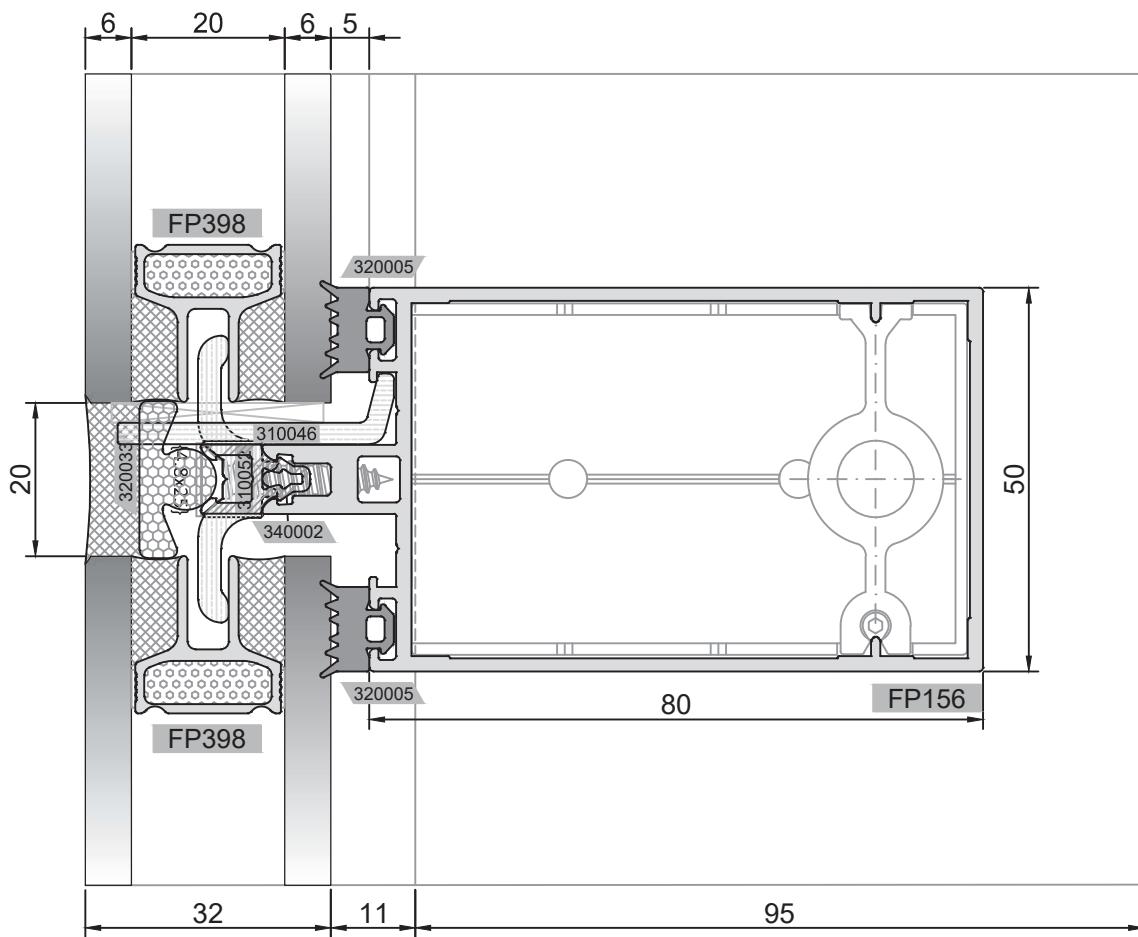


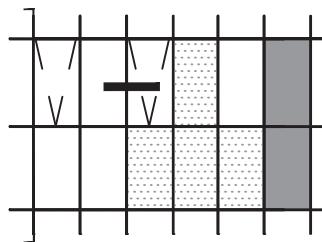
DÜSEY DETAYI  
VERTICAL DETAIL





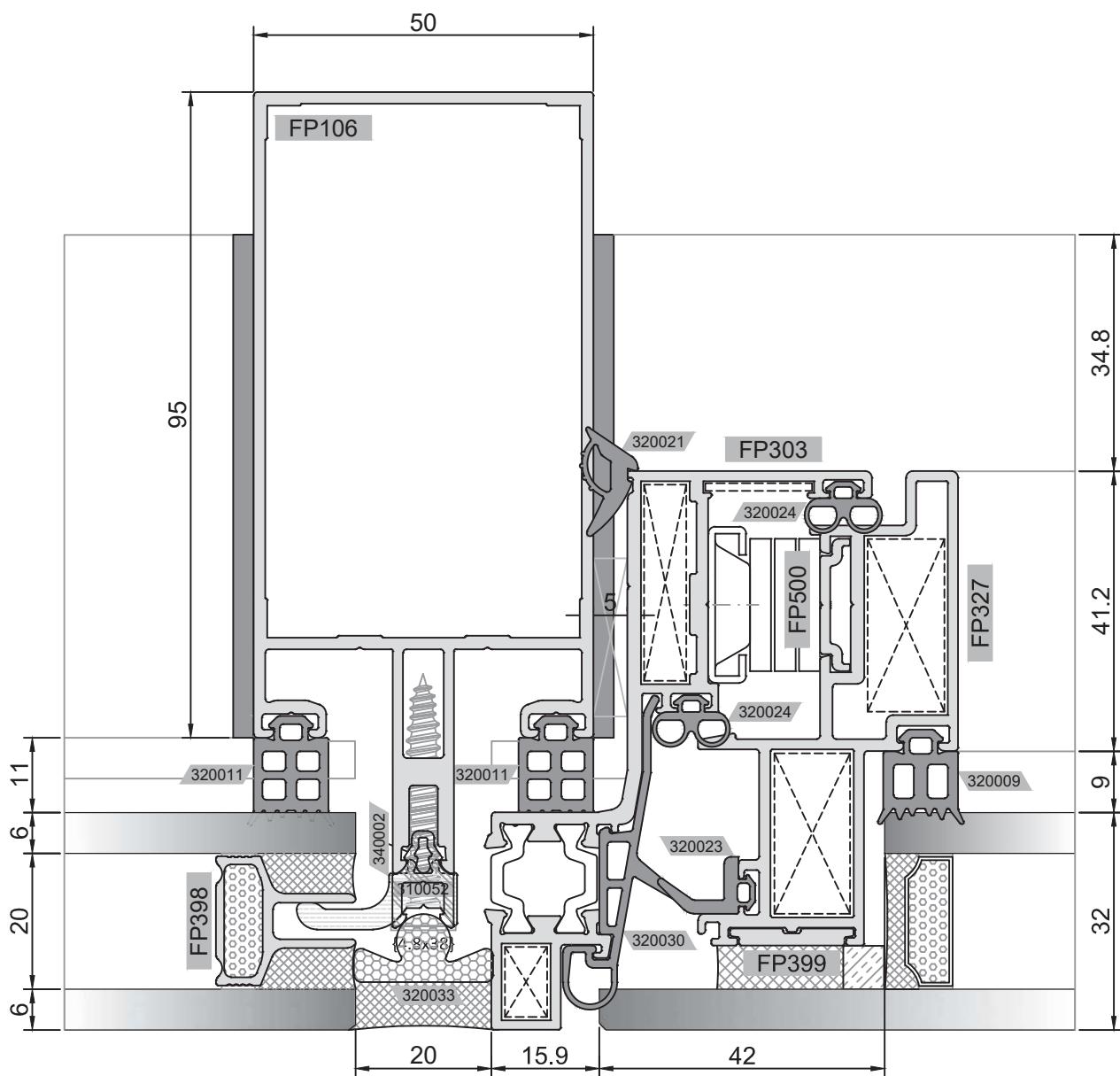
YATAY DETAYI  
HORIZONTAL DETAIL

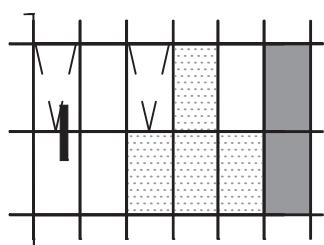




DÜSEY DETAYI  
VERTICAL DETAIL

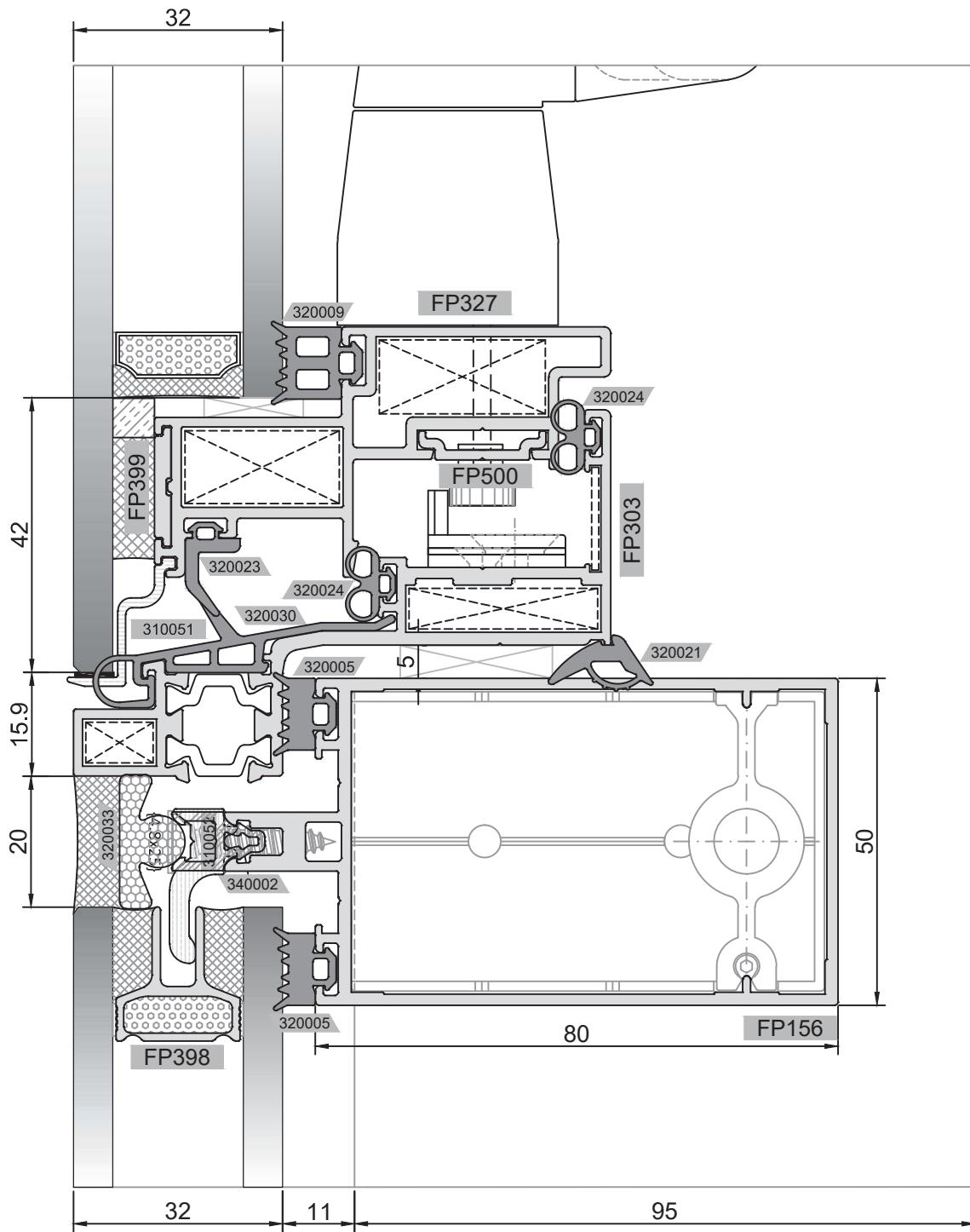
ALTERNATİF 1: YALITIMSIZ KANAT DETAYI  
ALTERNATIVE 1 : UNINSULATED VENT DETAIL

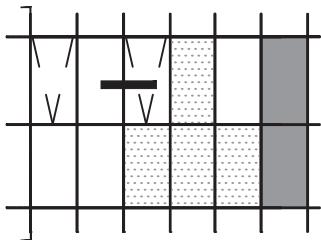




ALTERNATİF 1: YALITIMSIZ KANAT DETAYI  
ALTERNATIVE 1 : UNINSULATED VENT DETAIL

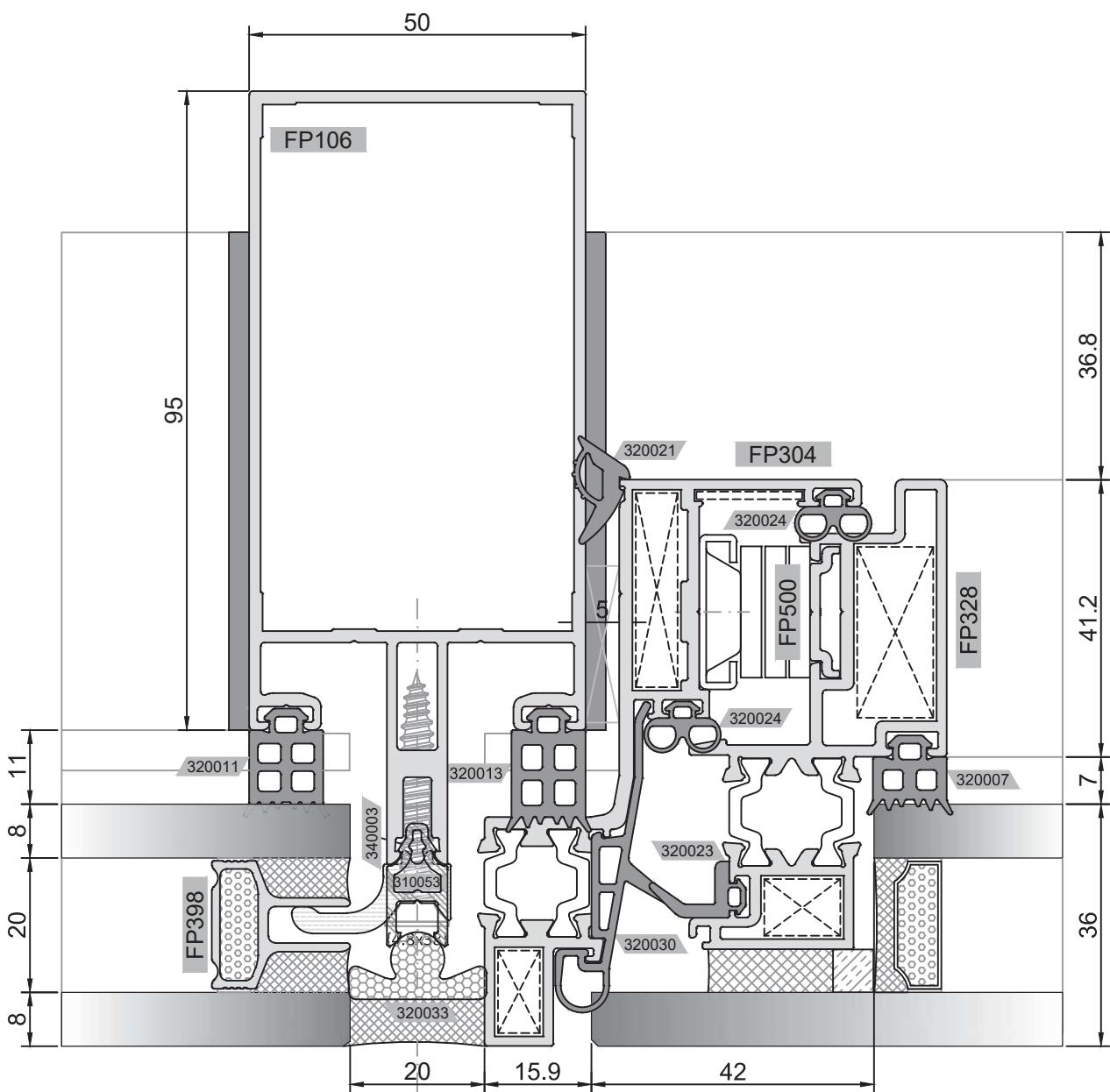
YATAY DETAYI  
HORIZONTAL DETAIL

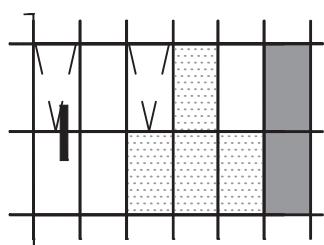




ALTERNATİF 2: YALITIMLI KANAT DETAYI  
ALTERNATIVE 2 : INSULATED VENT DETAIL

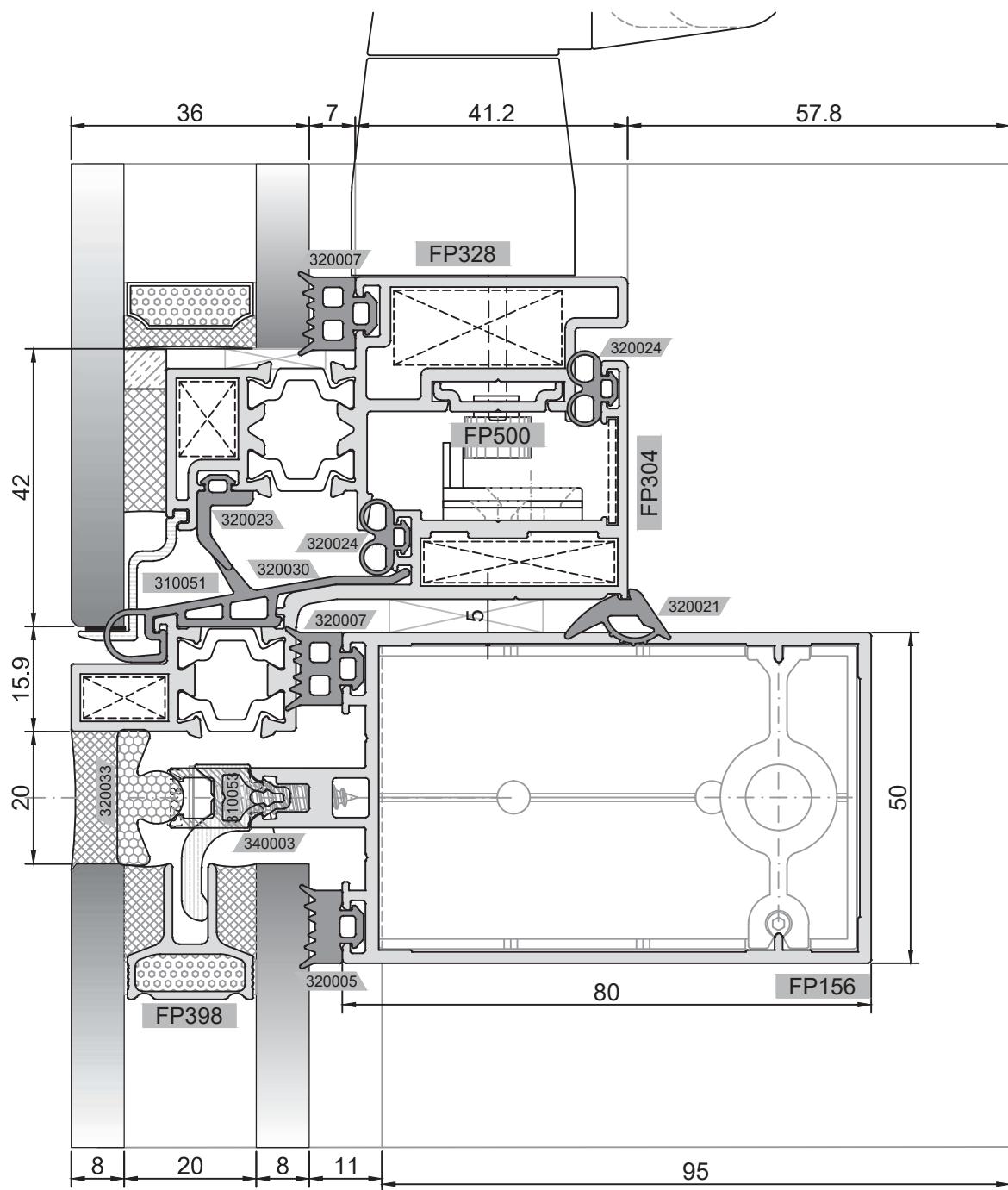
DÜSEY DETAYI  
VERTICAL DETAIL

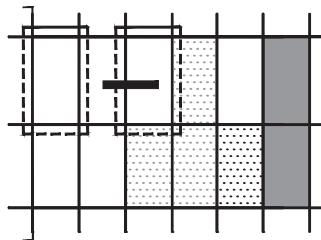




**ALTERNATİF 2: YALITIMLI KANAT DETAYI**  
**ALTERNATIVE 2 : INSULATED VENT DETAIL**

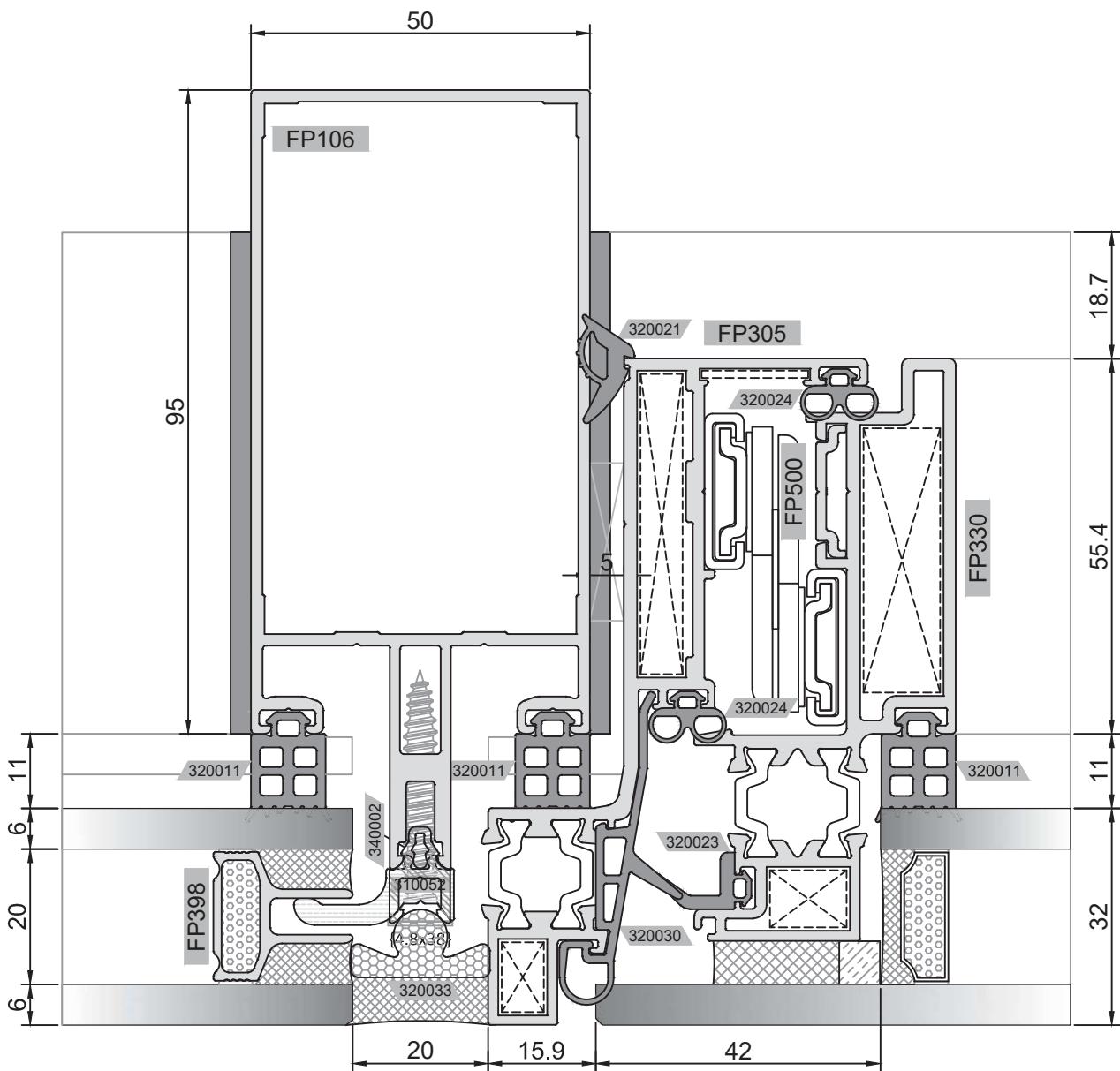
**YATAY DETAYI**  
**HORIZONTAL DETAIL**

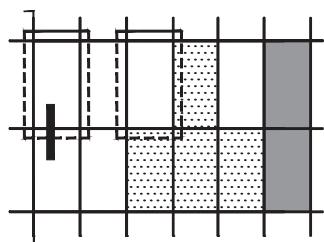




ALTERNATİF 1: YALITIMLI PARALEL AÇILIR KANAT DETAYI  
 ALTERNATIVE 1 : PARALLEL OPENING INSULATED VENT DETAIL

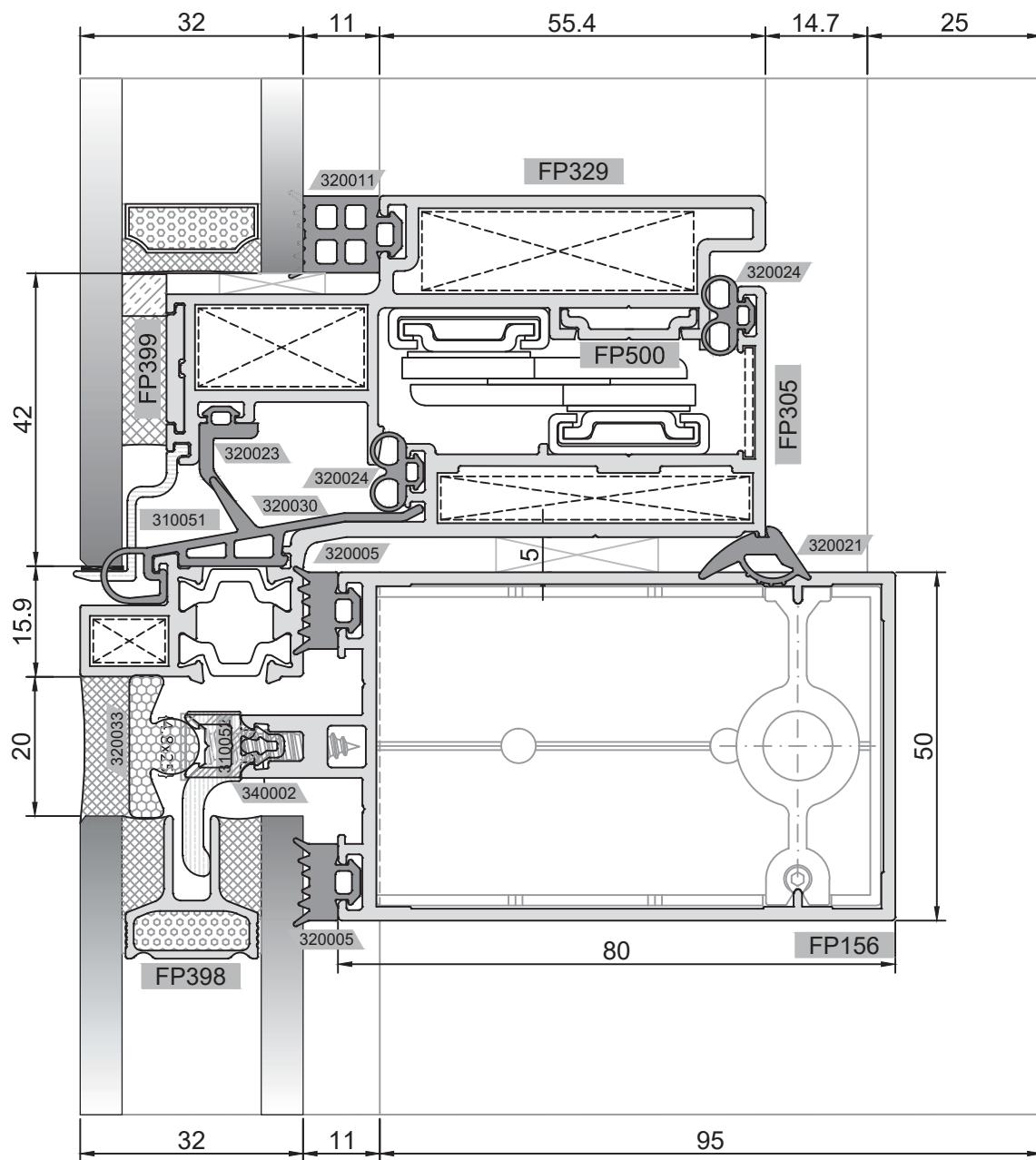
DÜSEY DETAYI  
 VERTICAL DETAIL

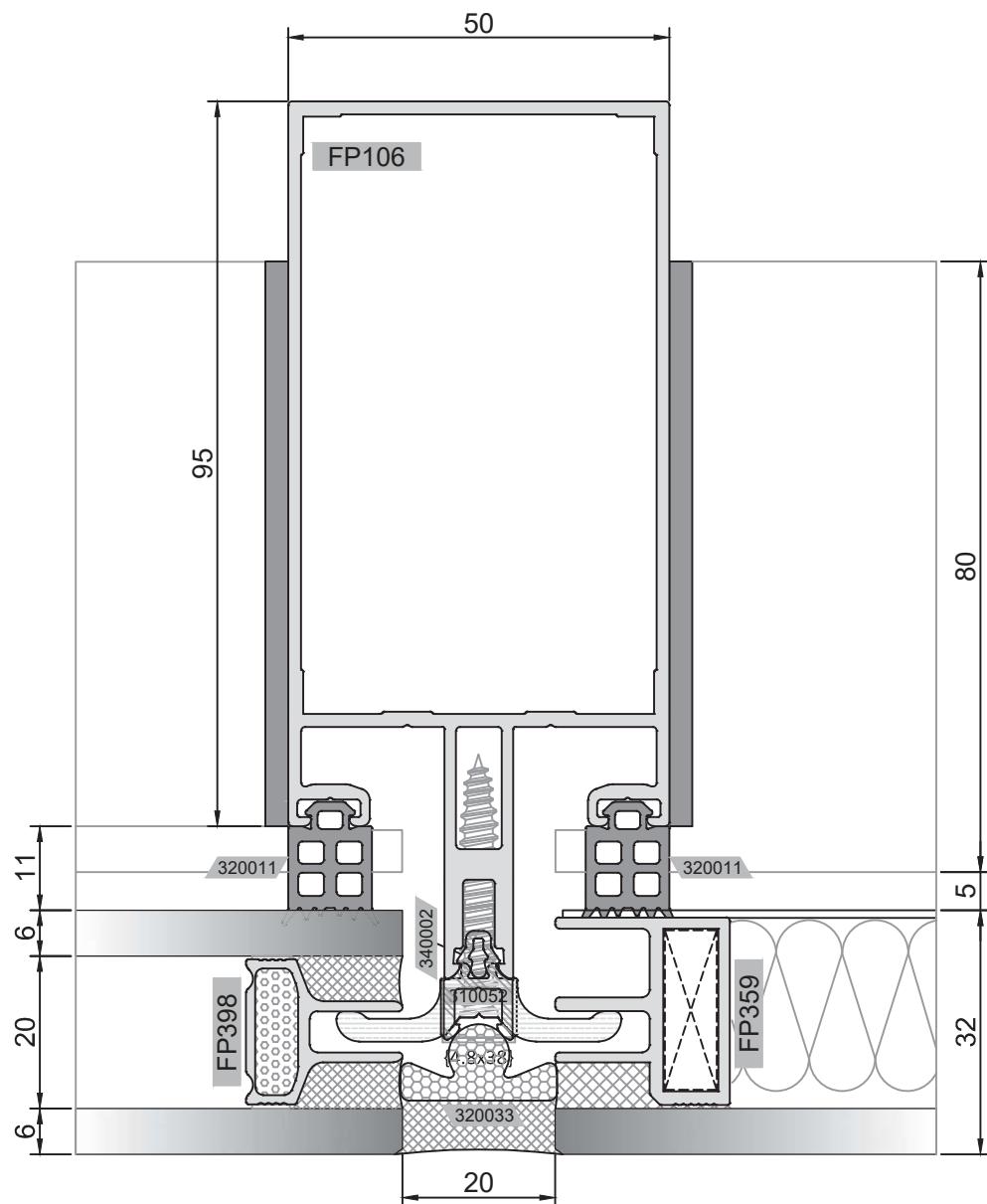
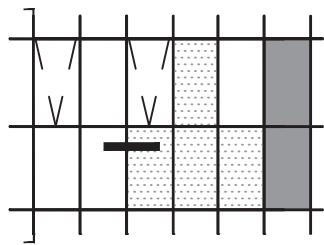


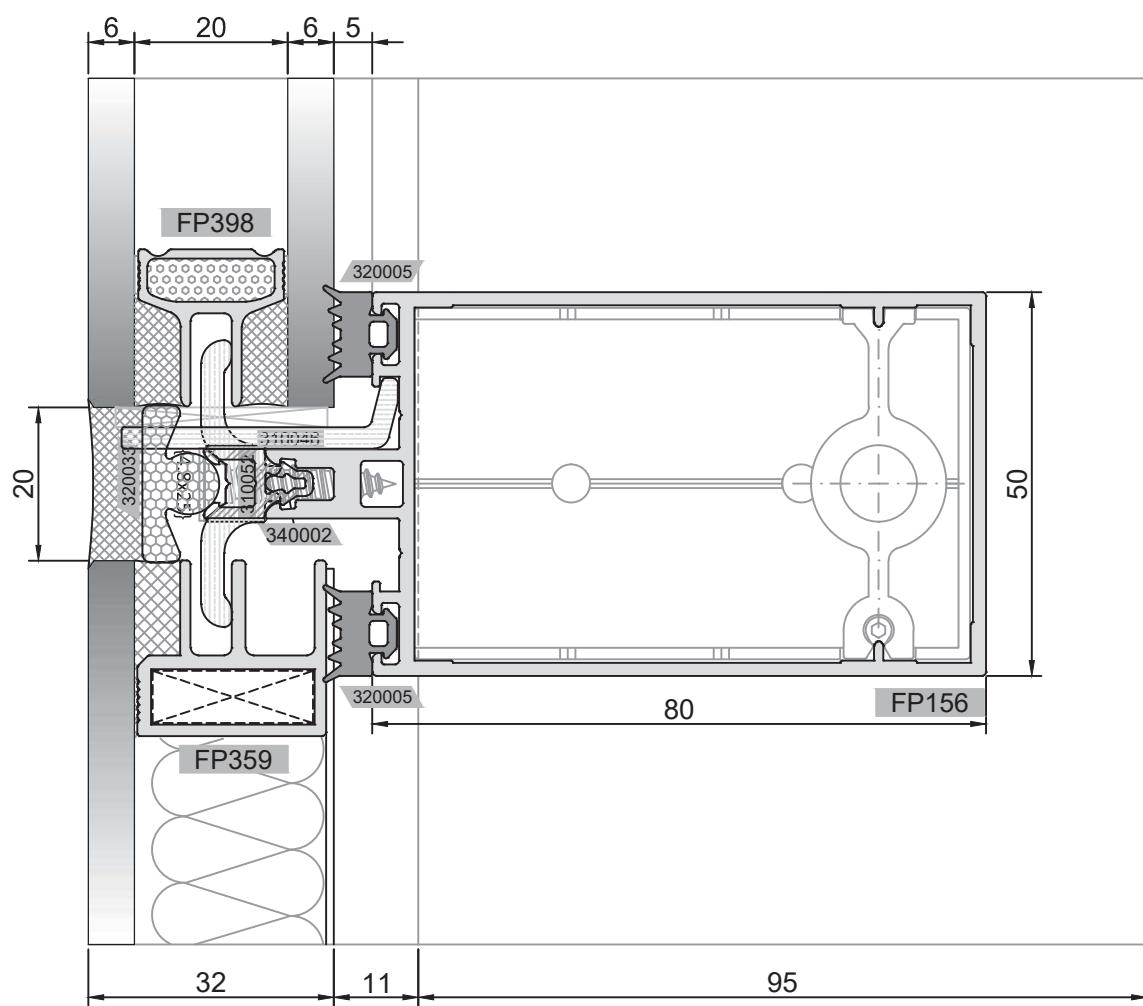
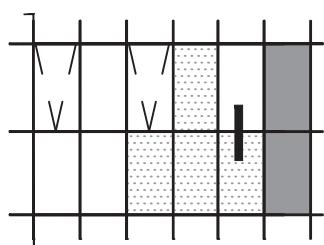


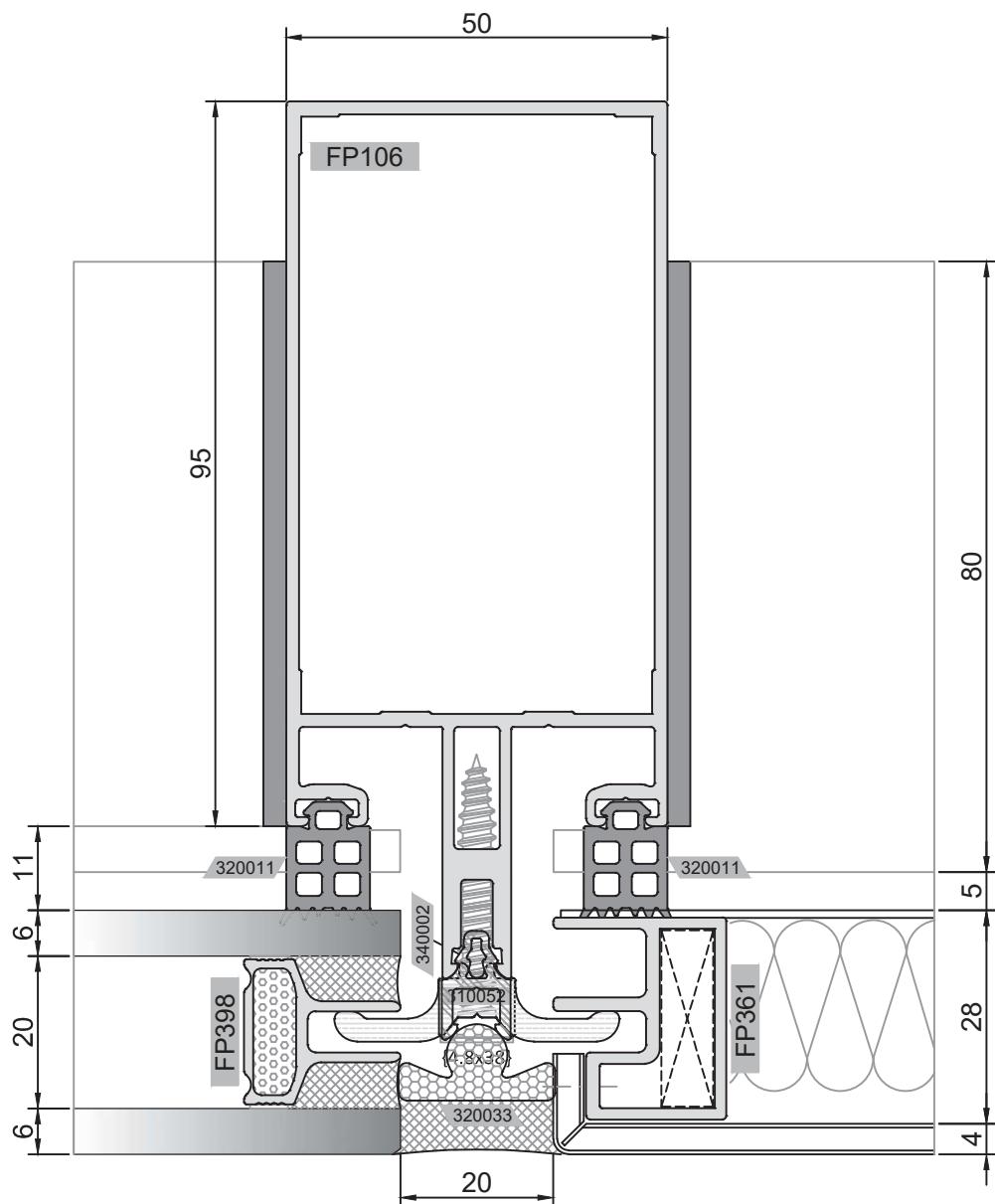
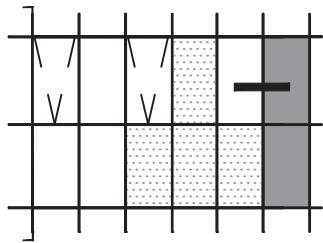
YATAY DETAYI  
HORIZONTAL DETAIL

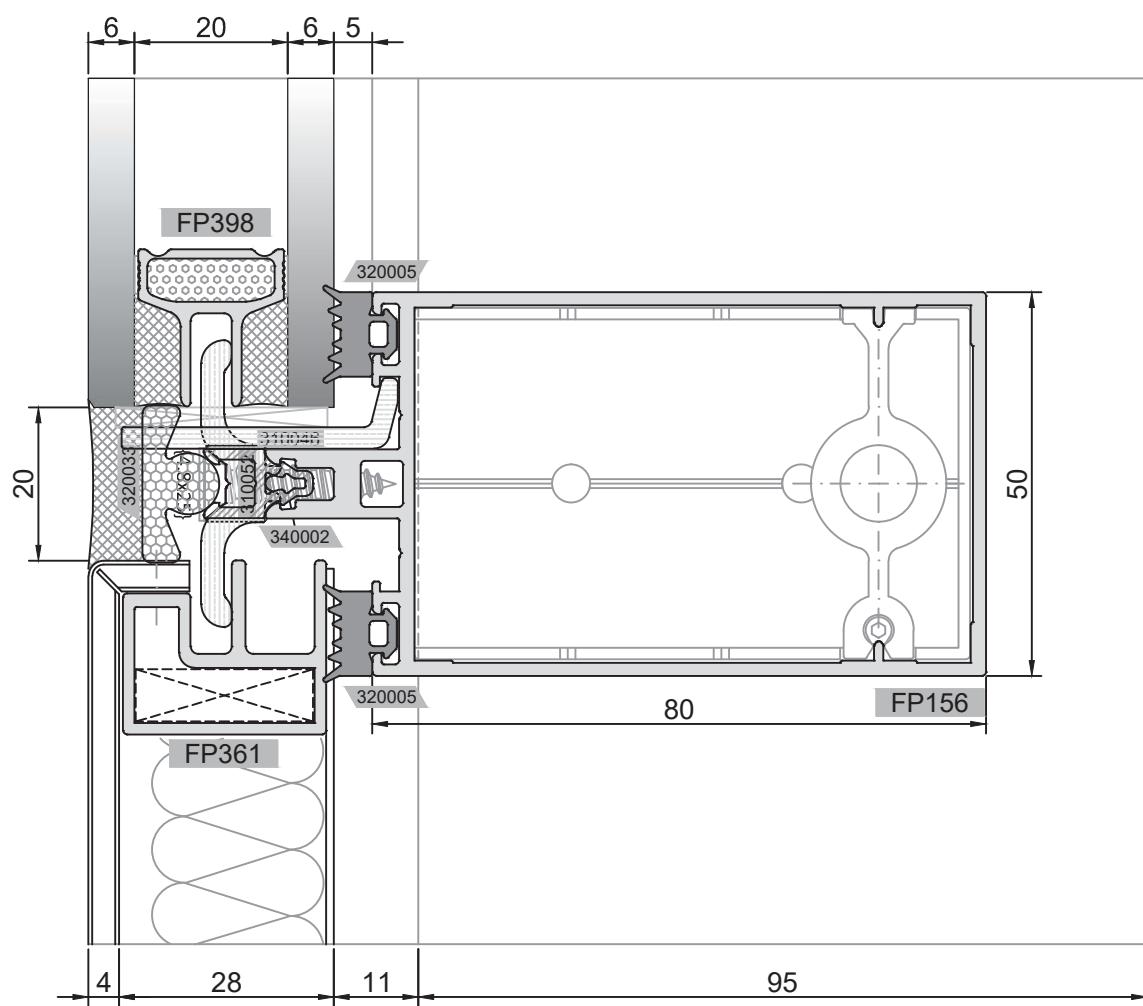
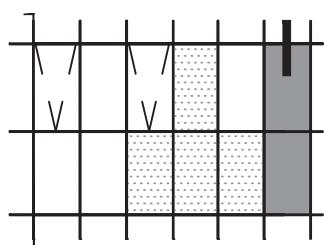
ALTERNATİF 2: YALITIMSIZ PARALEL AÇILIR KANAT DETAYI  
ALTERNATIVE 2 : PARALLEL OPENING UNINSULATED VENT DETAIL

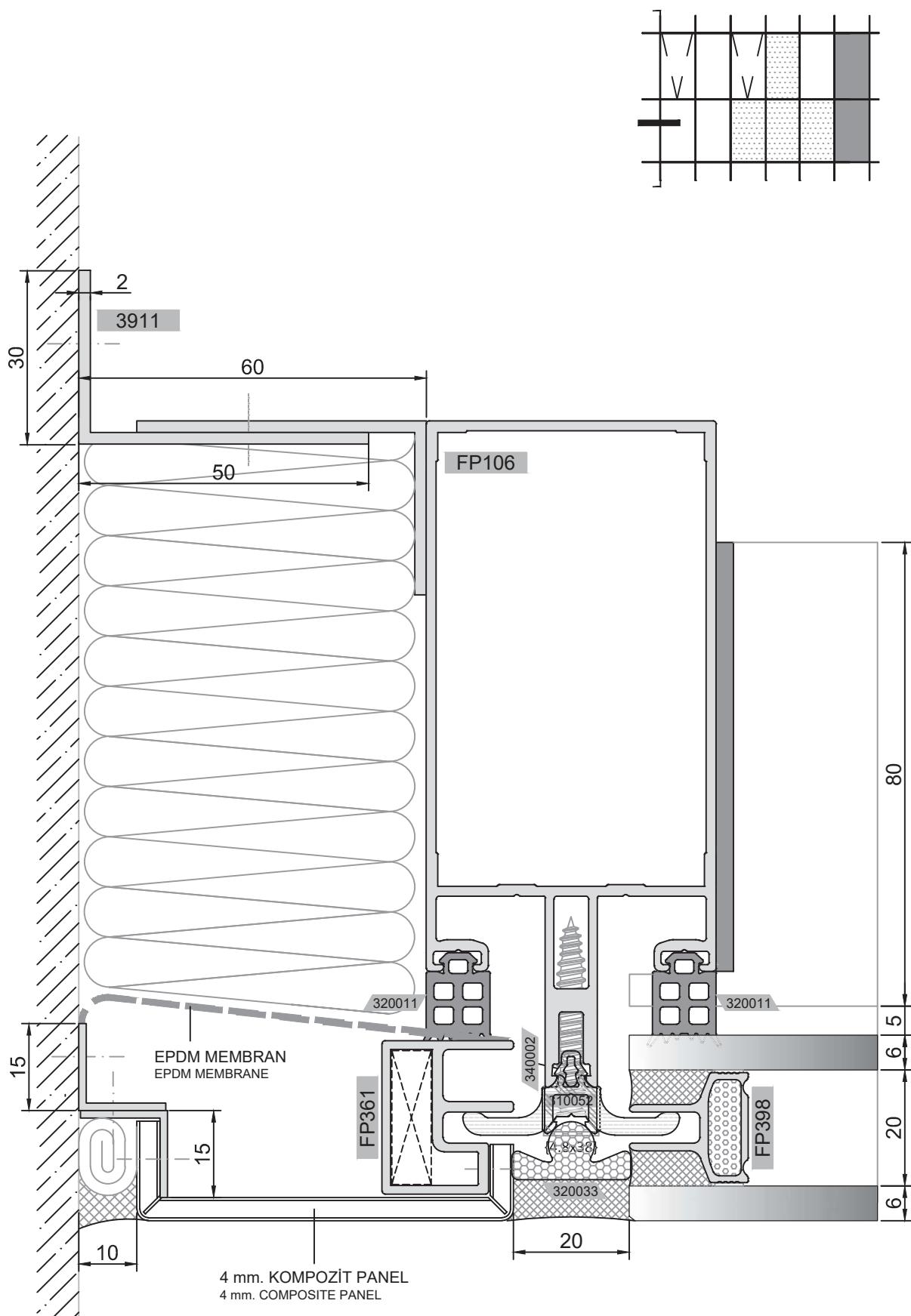


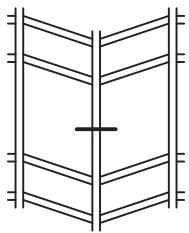




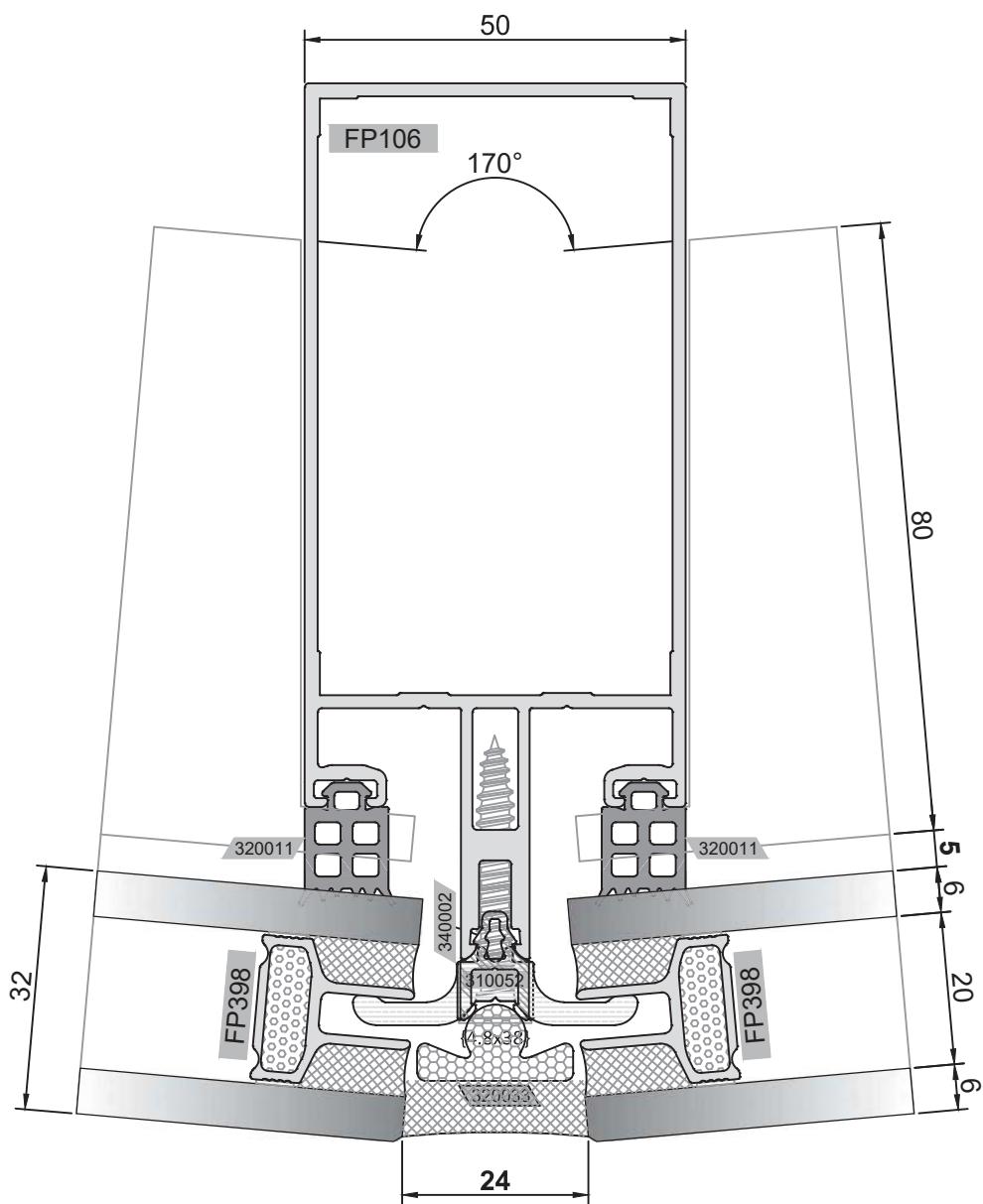


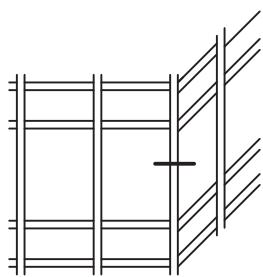




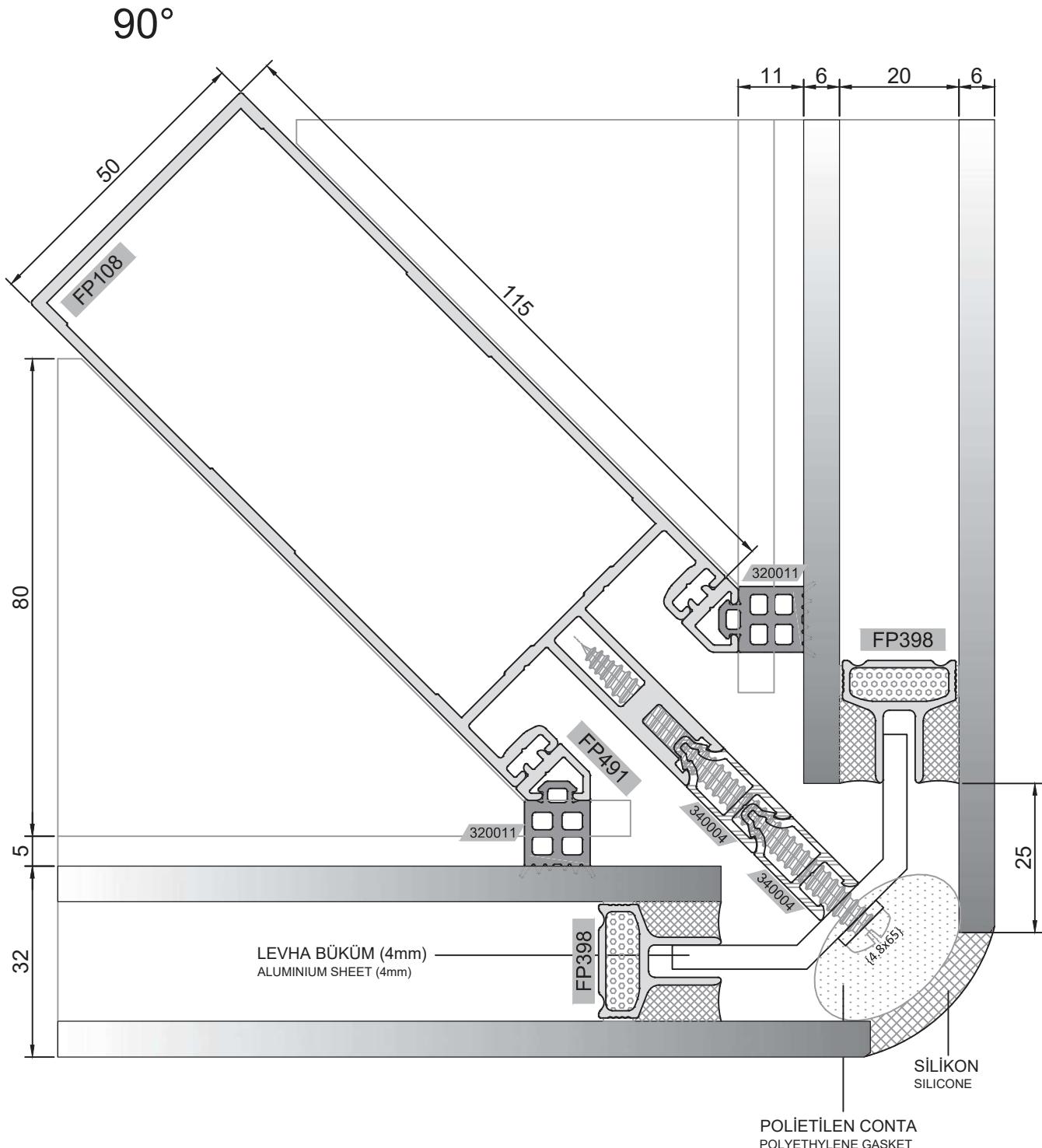


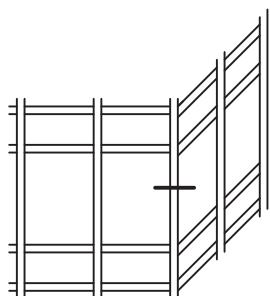
0° - 10°





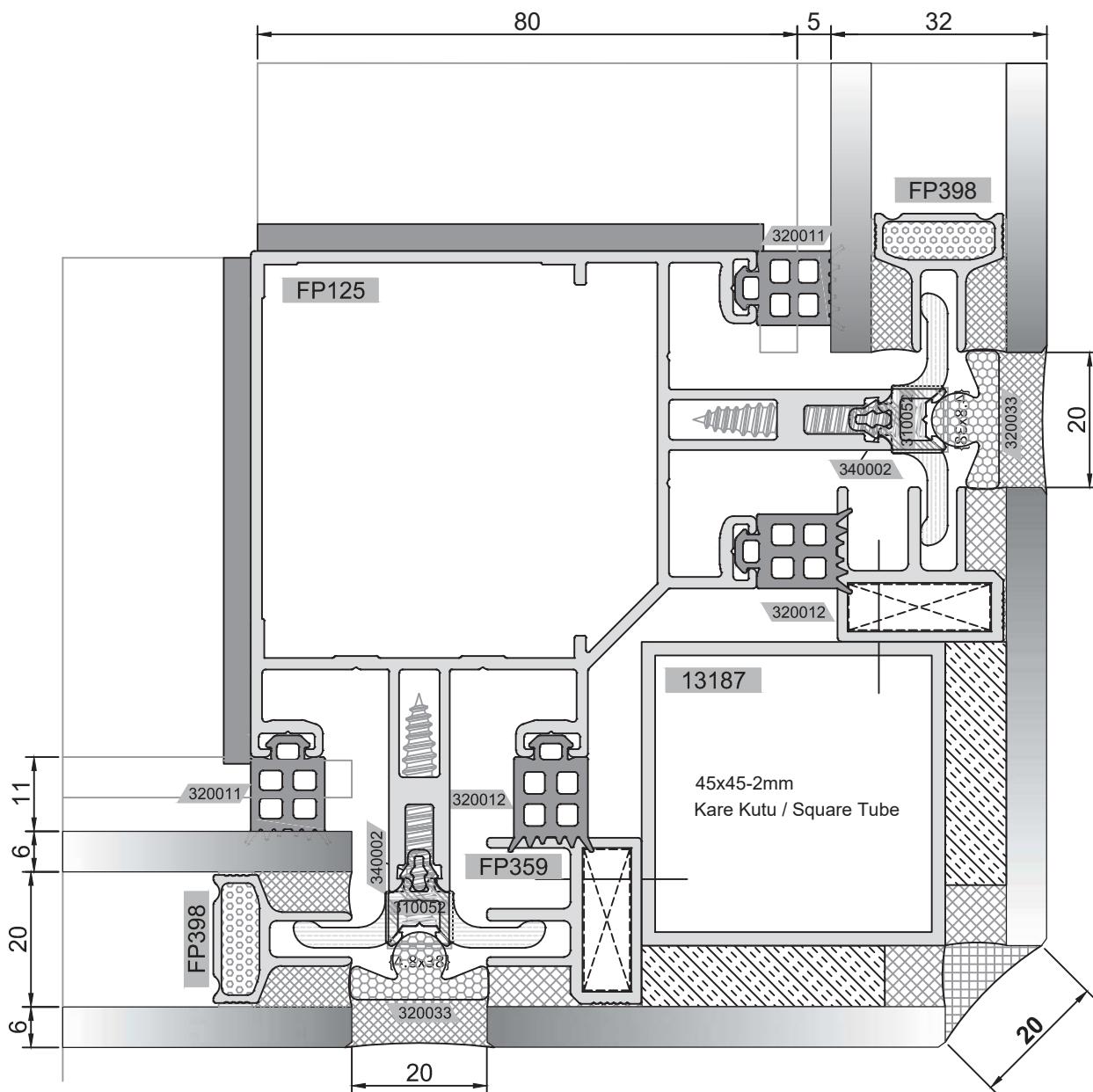
**ALTERNATİF 1: TEK DİKMELİ KÖŞE DETAYI**  
ALTERNATIVE 1 : CORNER DETAIL WITH SINGLE MULLION

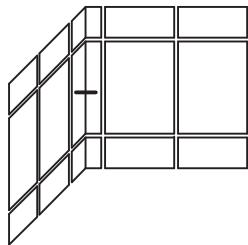




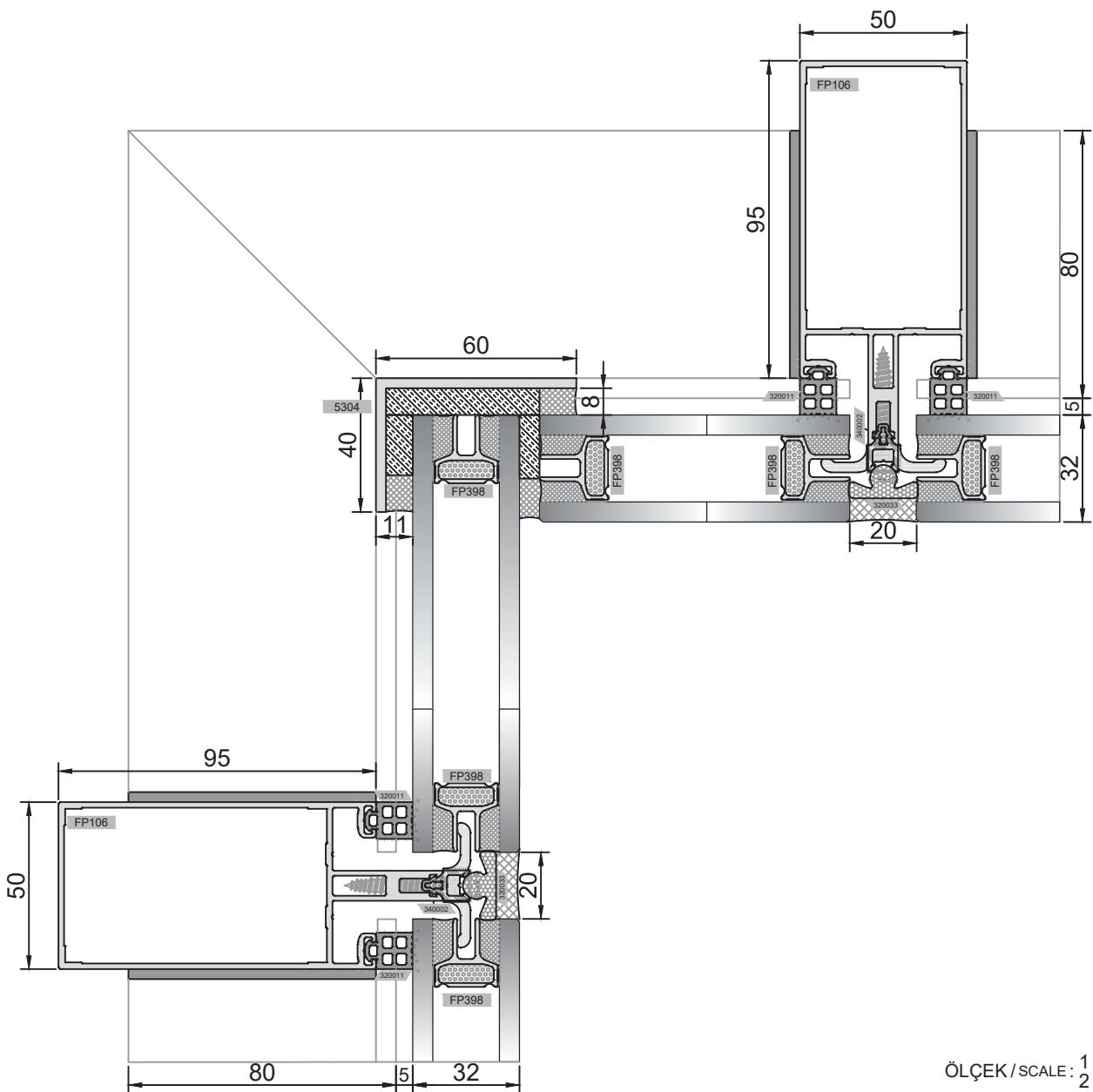
90°

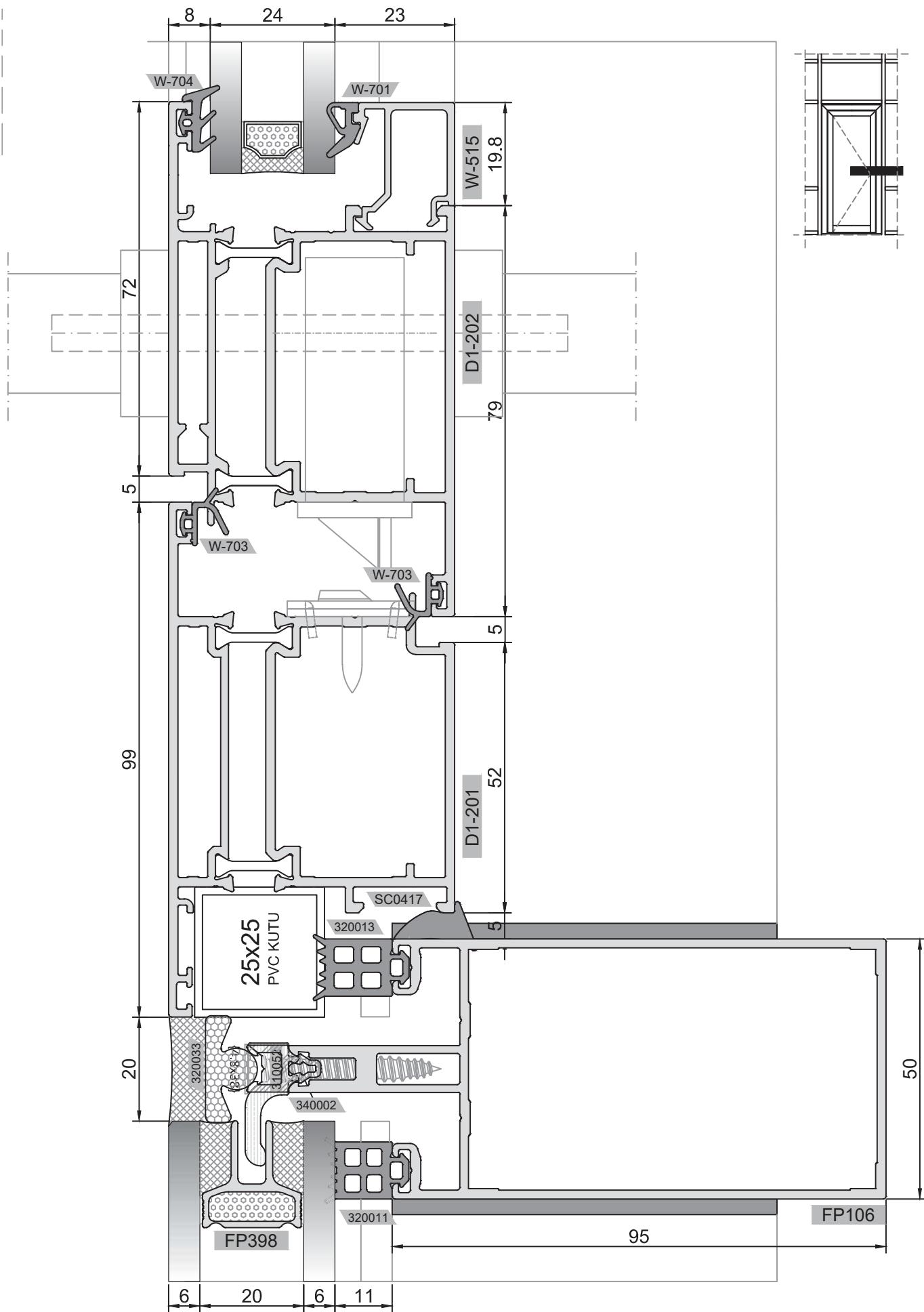
**ALTERNATİF 2: ÇİFT DİKMELİ KÖŞE DETAYI**  
ALTERNATIVE 2 : CORNER DETAIL WITH DOUBLE MULLION





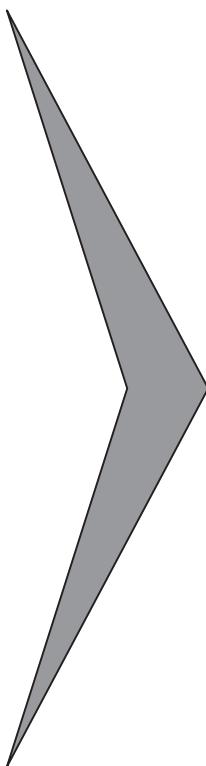
**90° İÇ AÇILI CAM CEPHE DÜŞEY KESİT DETAYI**  
FOUR SIDE WITH 90° INTERNAL ANGLE VERTICAL DETAIL

ÖLÇEK / SCALE :  $\frac{1}{2}$



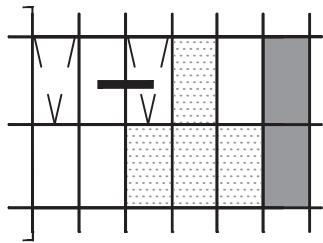
# **YARI-KAPAKLI CEPHE**

## **SEMI-CAPPED CURTAIN WALL**

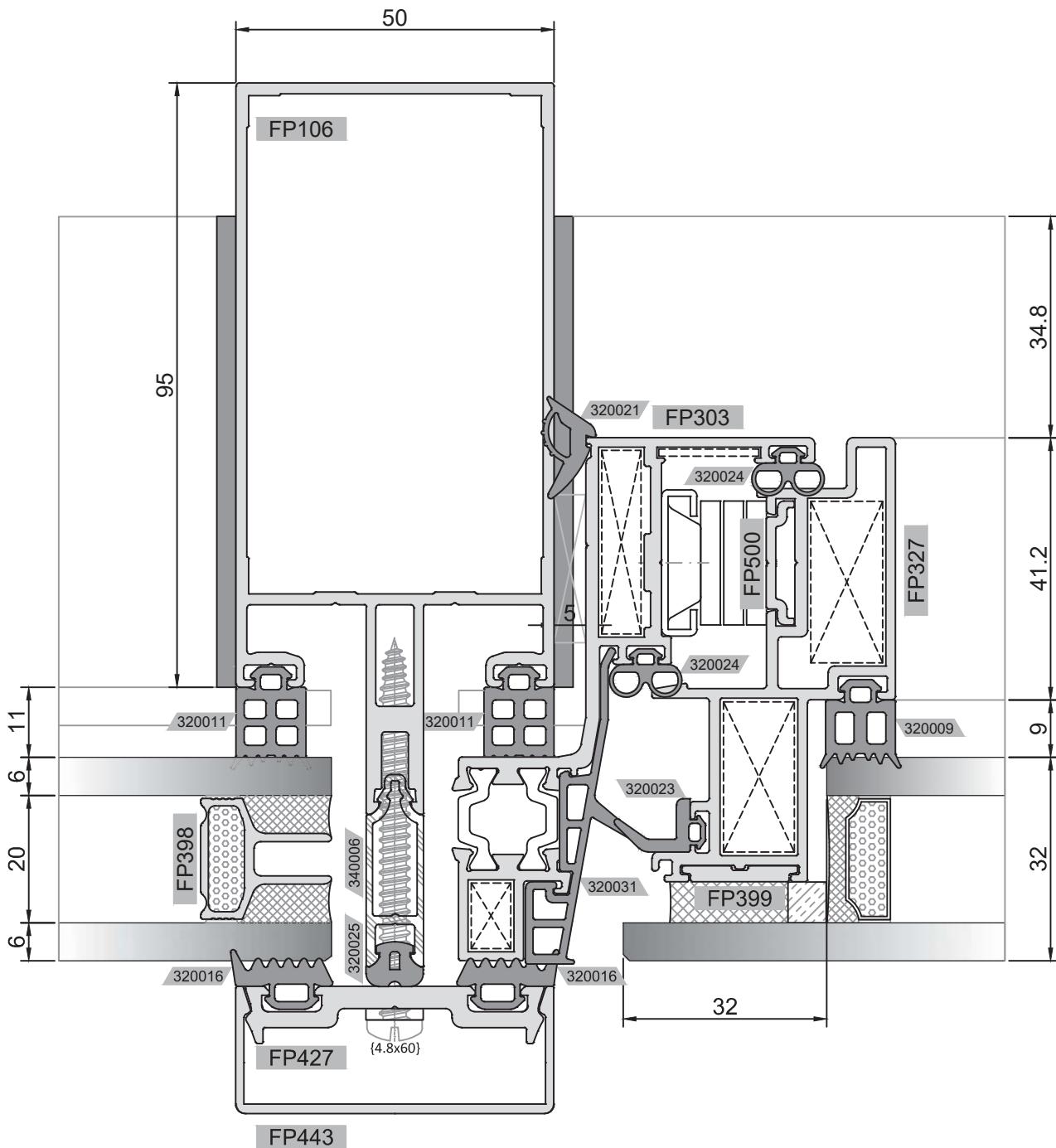


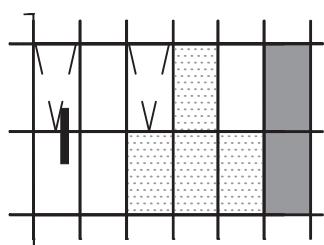
**\* 20mm STANDART  
ALÜMİNYUM ISICAM  
ÇITASI**  
20mm STANDARD  
ALUMINIUM SPACER

► SİSTEM ALÜMİNYUM® KATALOG İÇERİSİNDEKİ VERİLERDE DÜZELTME VEYA DEĞİŞİKLİK YAPMA HAKKINA SAHİPTİR.  
SİSTEM ALUMINIUM® HAS THE RIGHTS TO MAKE CORRECTION OR MODIFICATION IN THE CATALOGUE DATA.

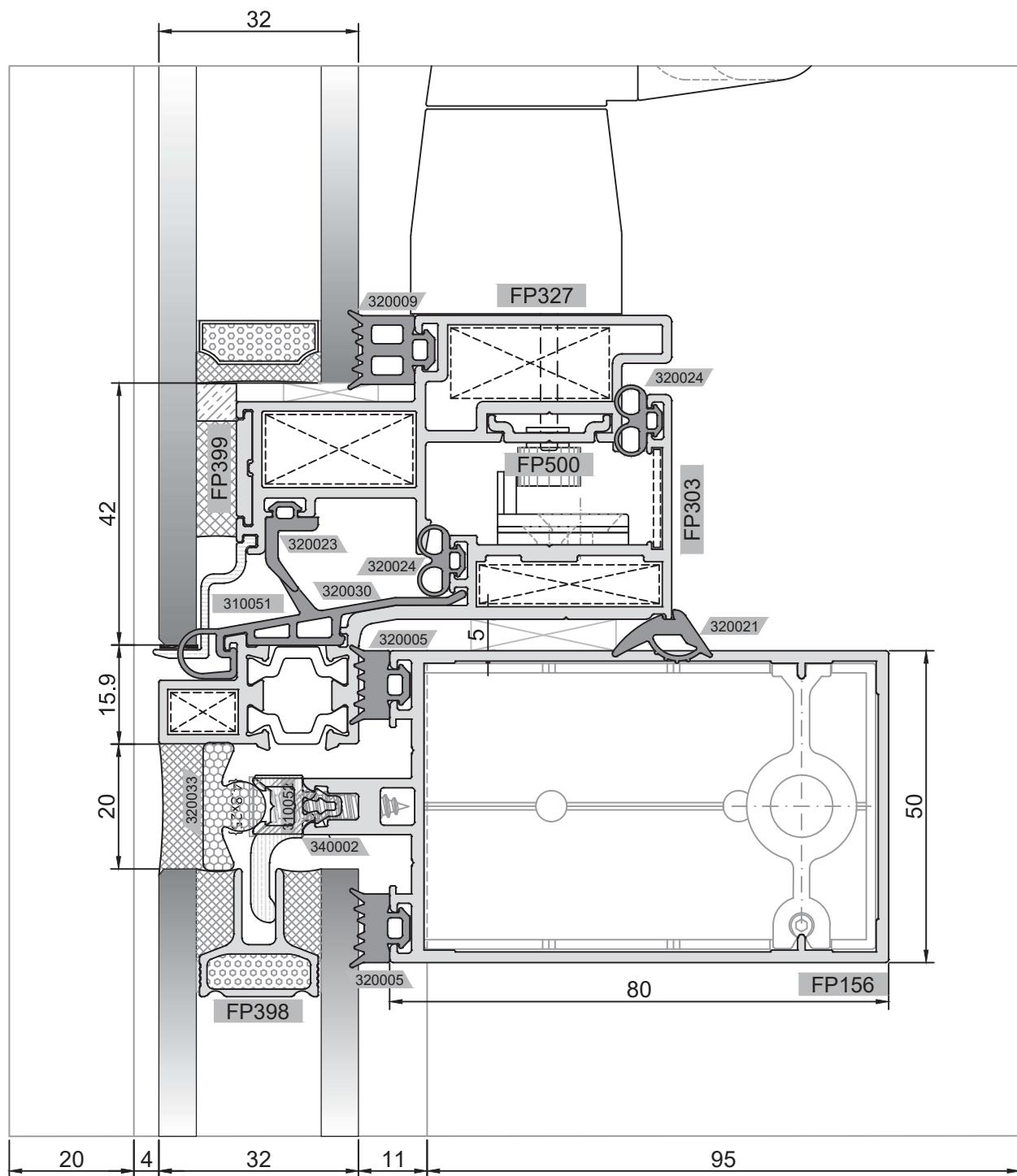


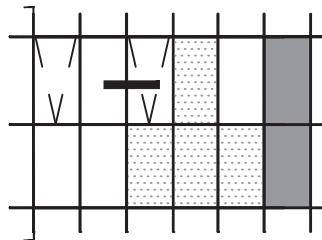
DÜŞEY DETAYI  
VERTICAL DETAIL



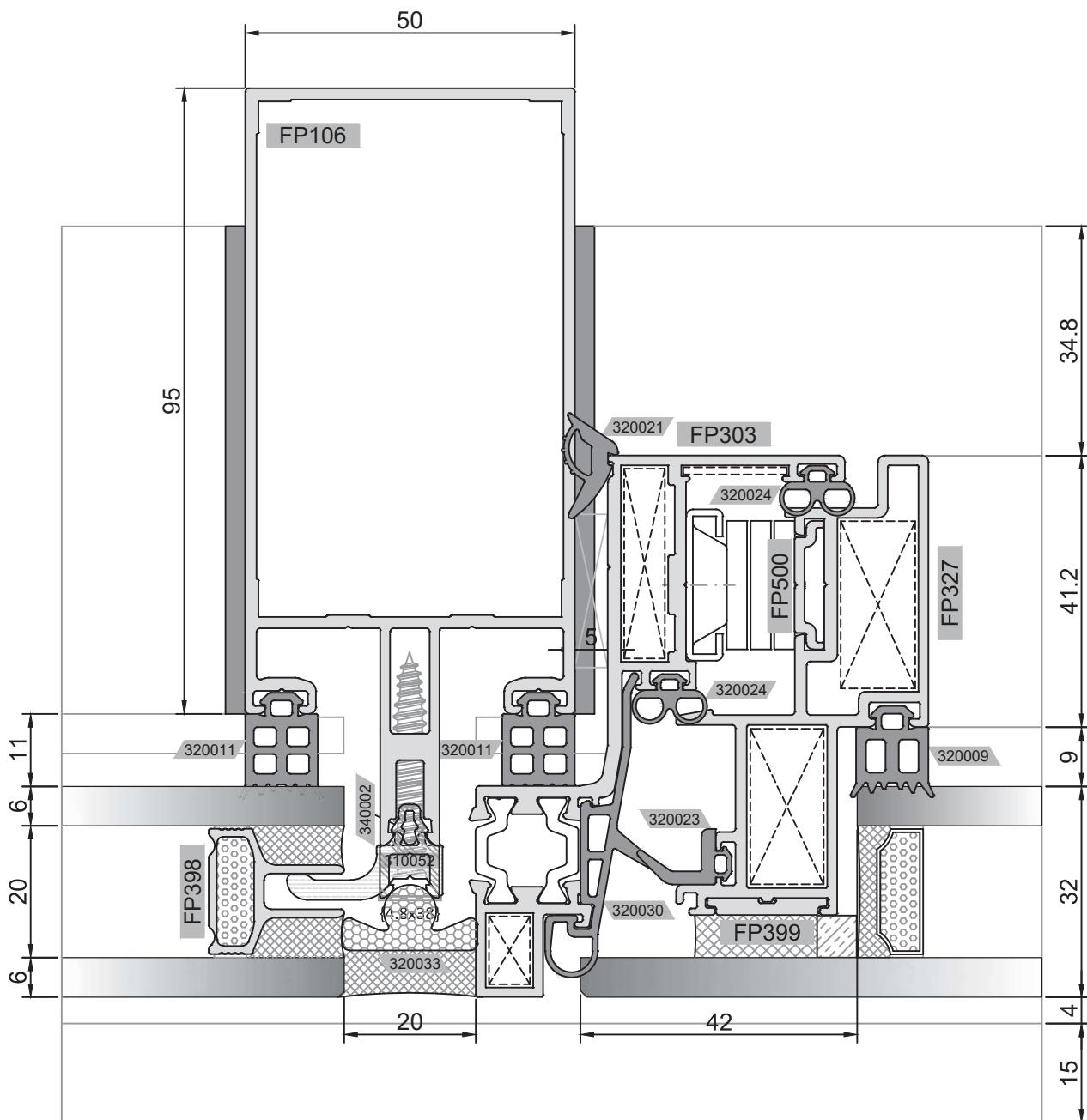


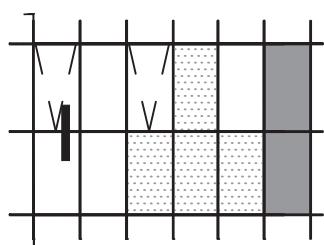
**YATAY DETAYI**  
HORIZONTAL DETAIL



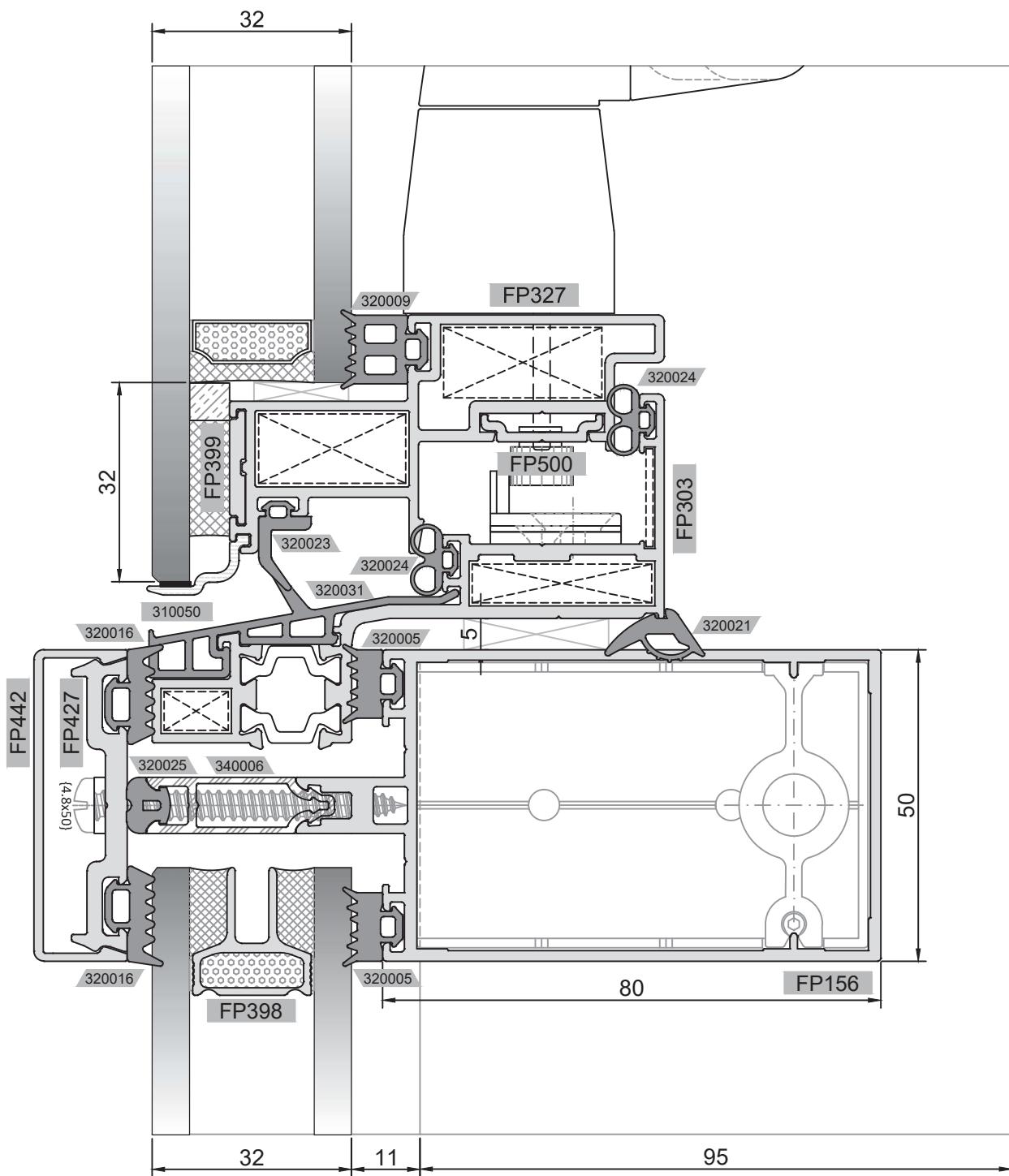


DÜŞEY DETAYI  
VERTICAL DETAIL



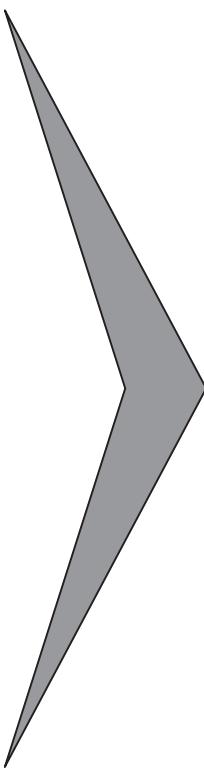


**YATAY DETAYI**  
HORIZONTAL DETAIL



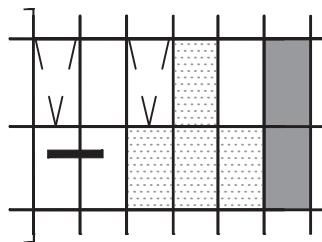
# ENTEGRE CEPHE

## INTEGRATED CURTAIN WALL

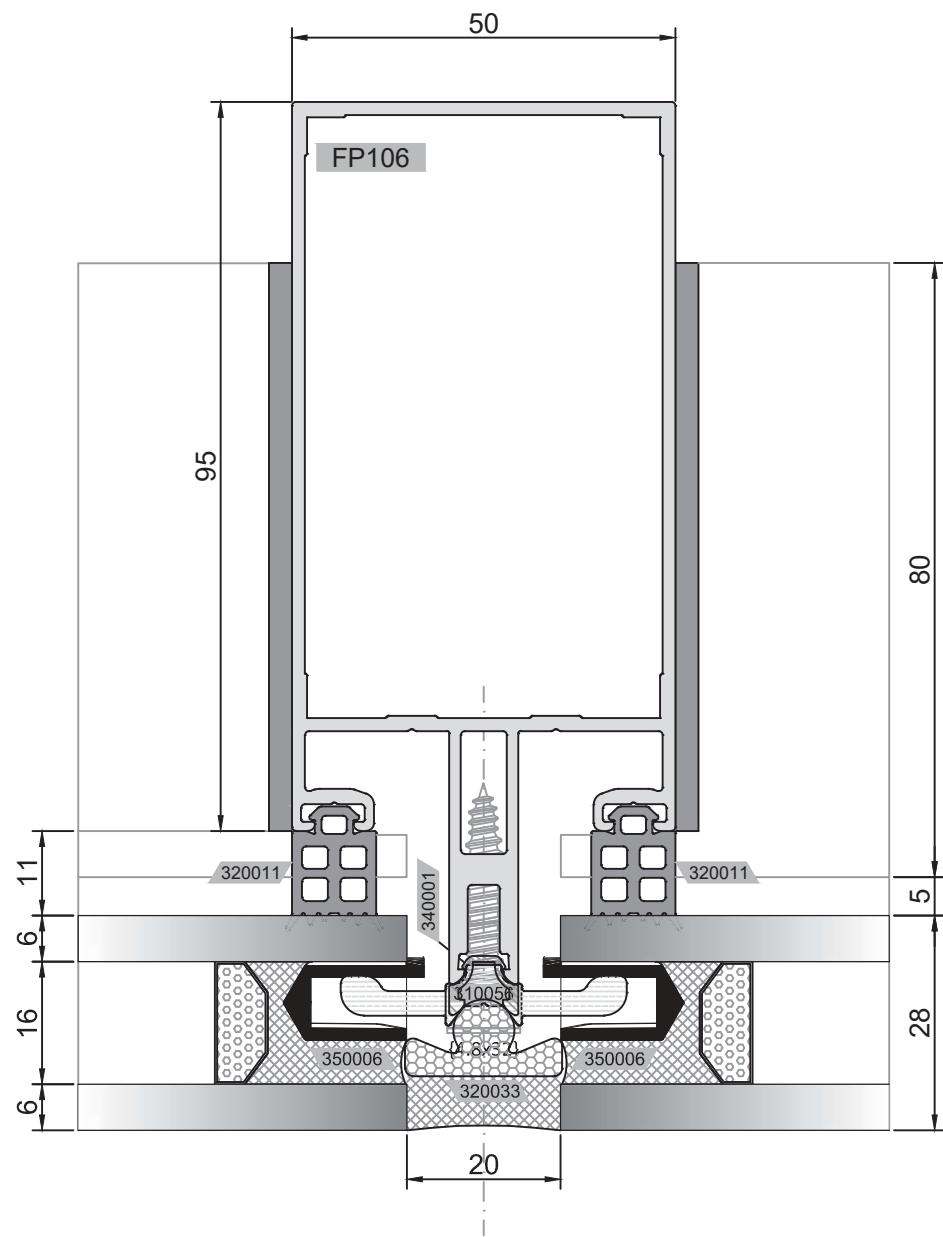


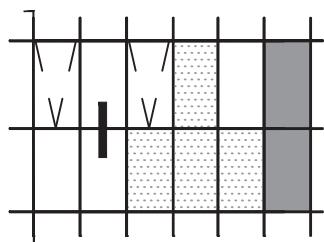
**\* 16mm ÖZEL SICAK  
KENAR ISICAM ÇITASI**  
16mm SPECIAL WARM  
EDGE SPACER

➤ SİSTEM ALÜMİNYUM® KATALOG İÇERİSİNDEKİ VERİLERDE DÜZELTME VEYA DEĞİŞİKLİK YAPMA HAKKINA SAHİPTİR.  
SİSTEM ALUMINIUM® HAS THE RIGHTS TO MAKE CORRECTION OR MODIFICATION IN THE CATALOGUE DATA.

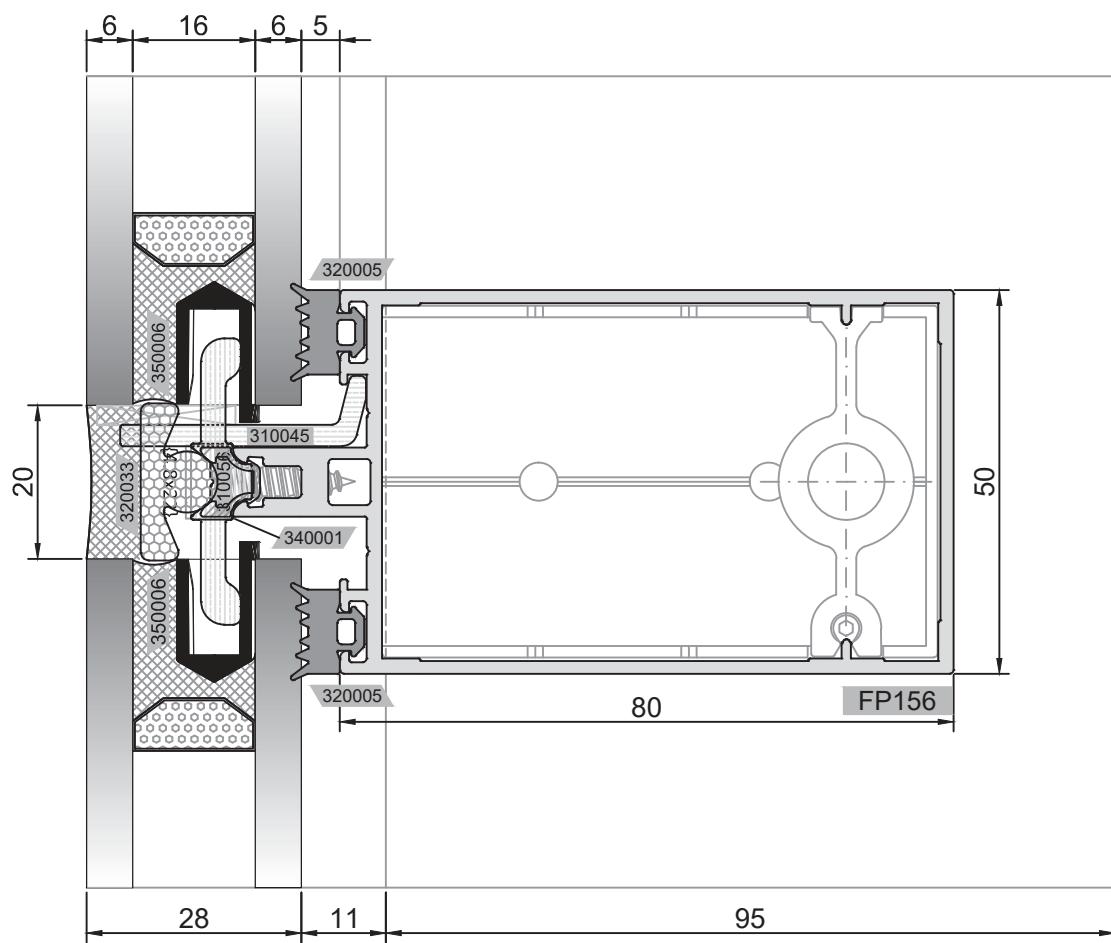


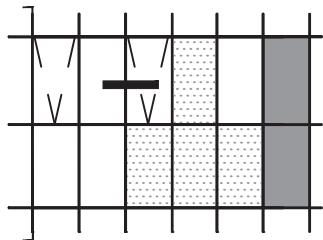
DÜSEY DETAYI  
VERTICAL DETAIL





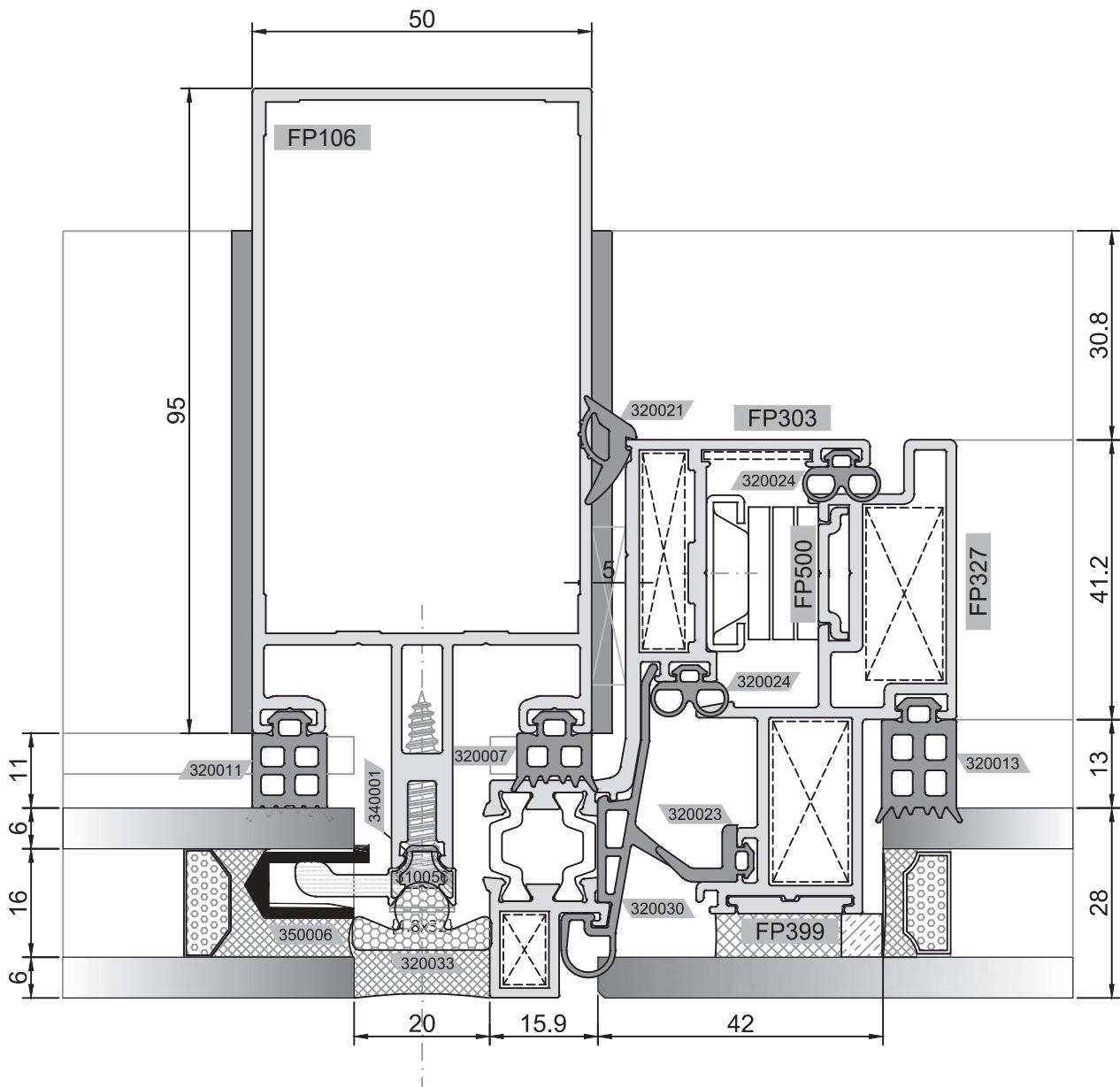
YATAY DETAYI  
HORIZONTAL DETAIL

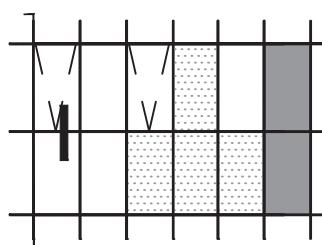




DÜSEY DETAYI  
VERTICAL DETAIL

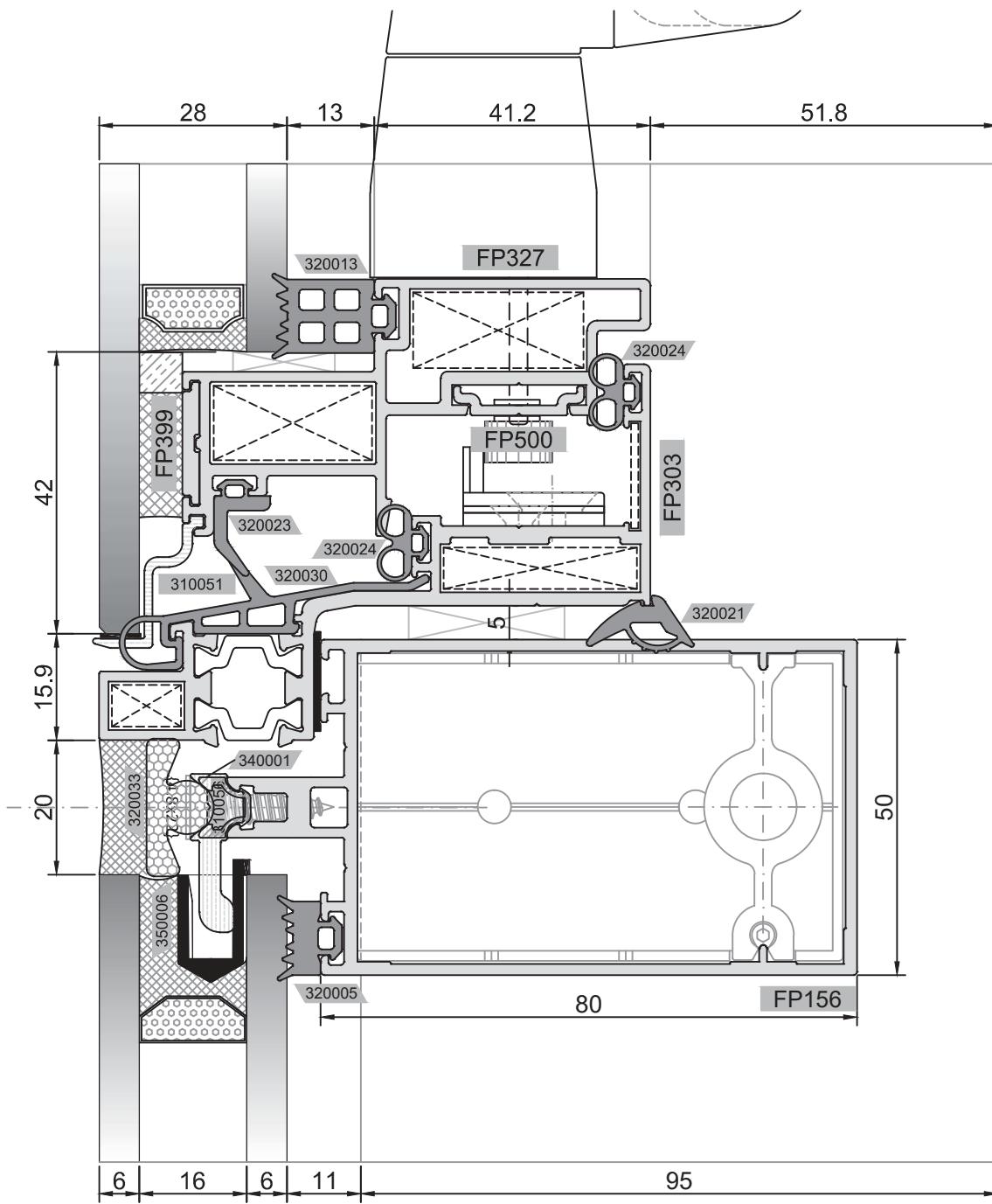
ALTERNATİF 1: YALITIMSIZ KANAT DETAYI  
ALTERNATIVE 1 : UNINSULATED VENT DETAIL

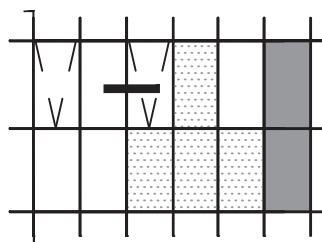




ALTERNATİF 1: YALITIMSIZ KANAT DETAYI  
ALTERNATIVE 1 : UNINSULATED VENT DETAIL

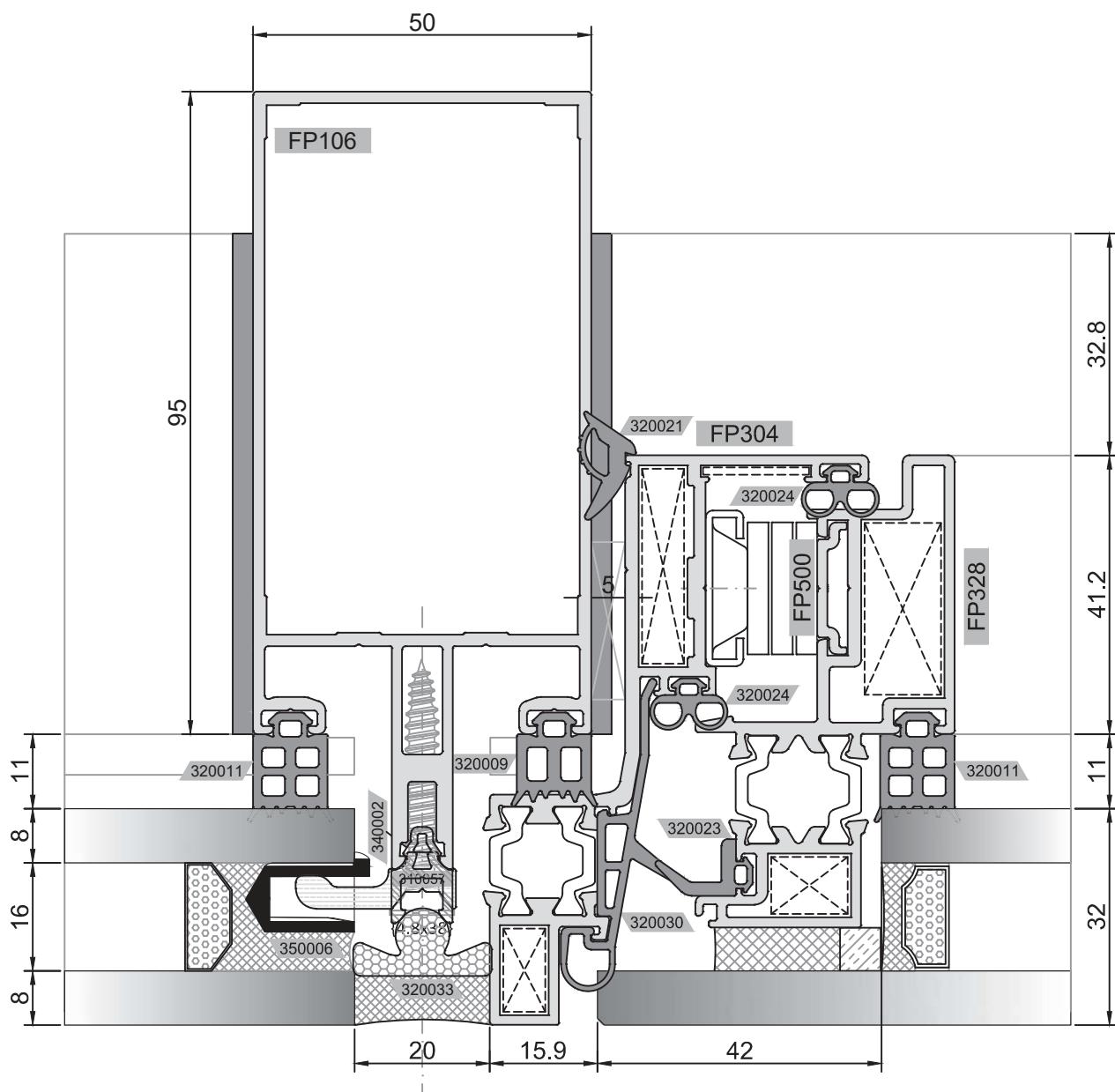
YATAY DETAYI  
HORIZONTAL DETAIL

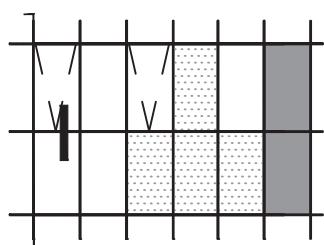




ALTERNATİF 2: YALITIMLI KANAT DETAYI  
ALTERNATIVE 2 : INSULATED VENT DETAIL

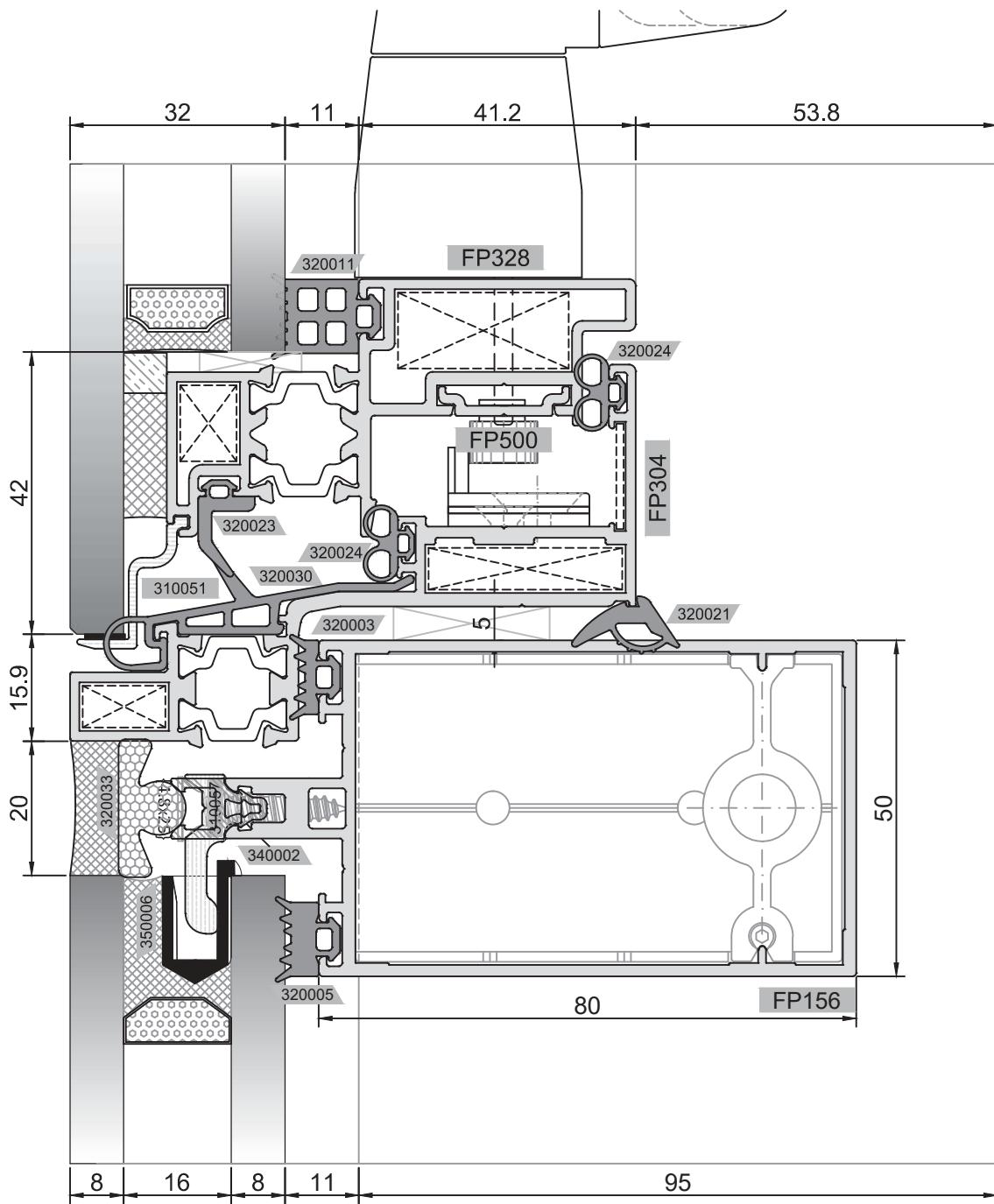
DÜSEY DETAYI  
VERTICAL DETAIL

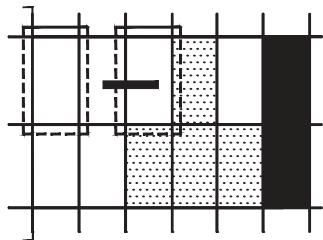




YATAY DETAYI  
HORIZONTAL DETAIL

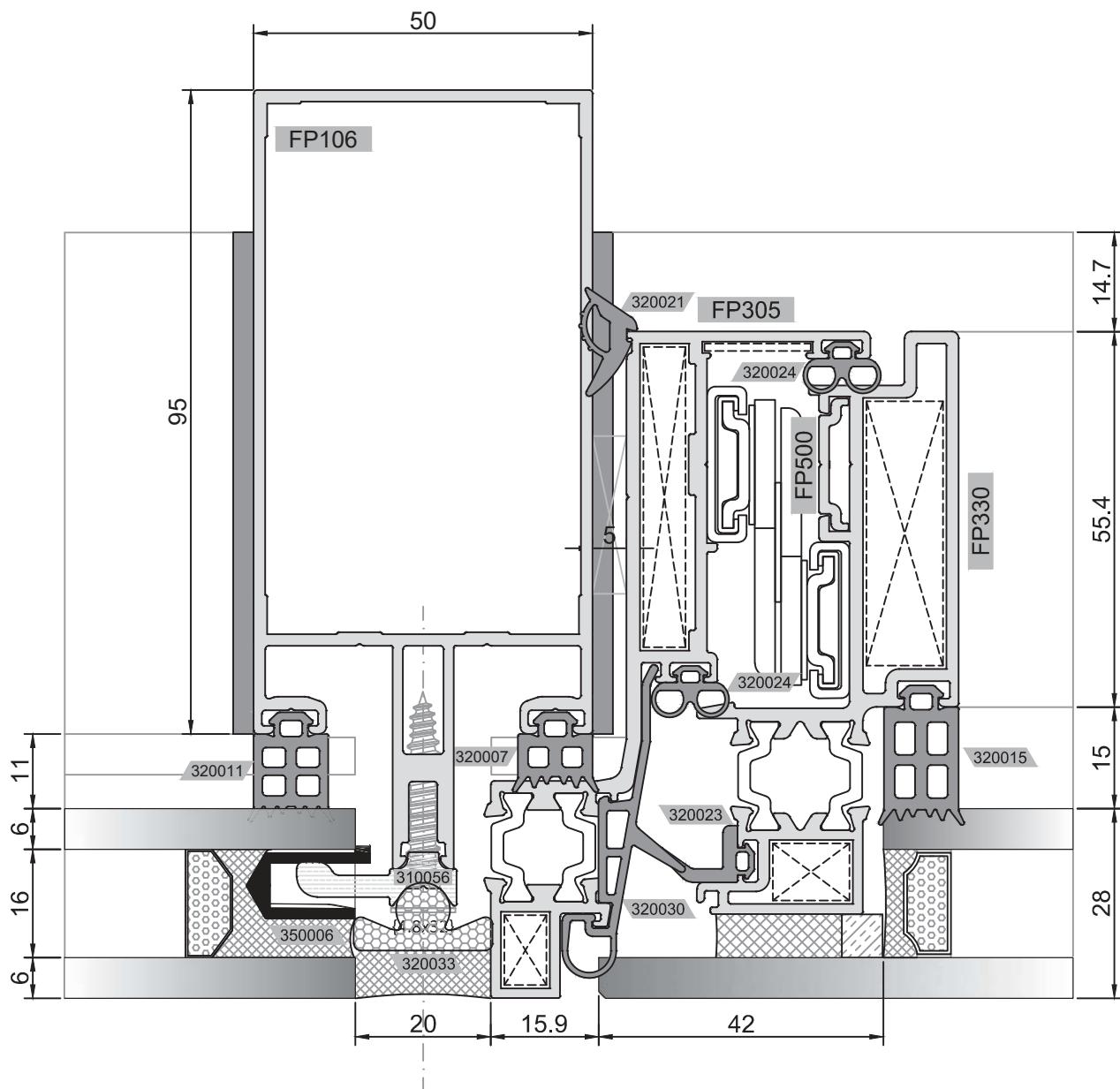
ALTERNATİF 2: YALITIMLI KANAT DETAYI  
ALTERNATIVE 2 : INSULATED VENT DETAIL

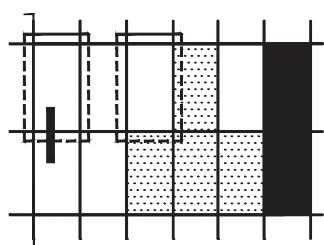




ALTERNATİF 1: YALITIMLI PARALEL AÇILIR KANAT DETAYI  
ALTERNATIVE 1 : PARALLEL OPENING INSULATED VENT DETAIL

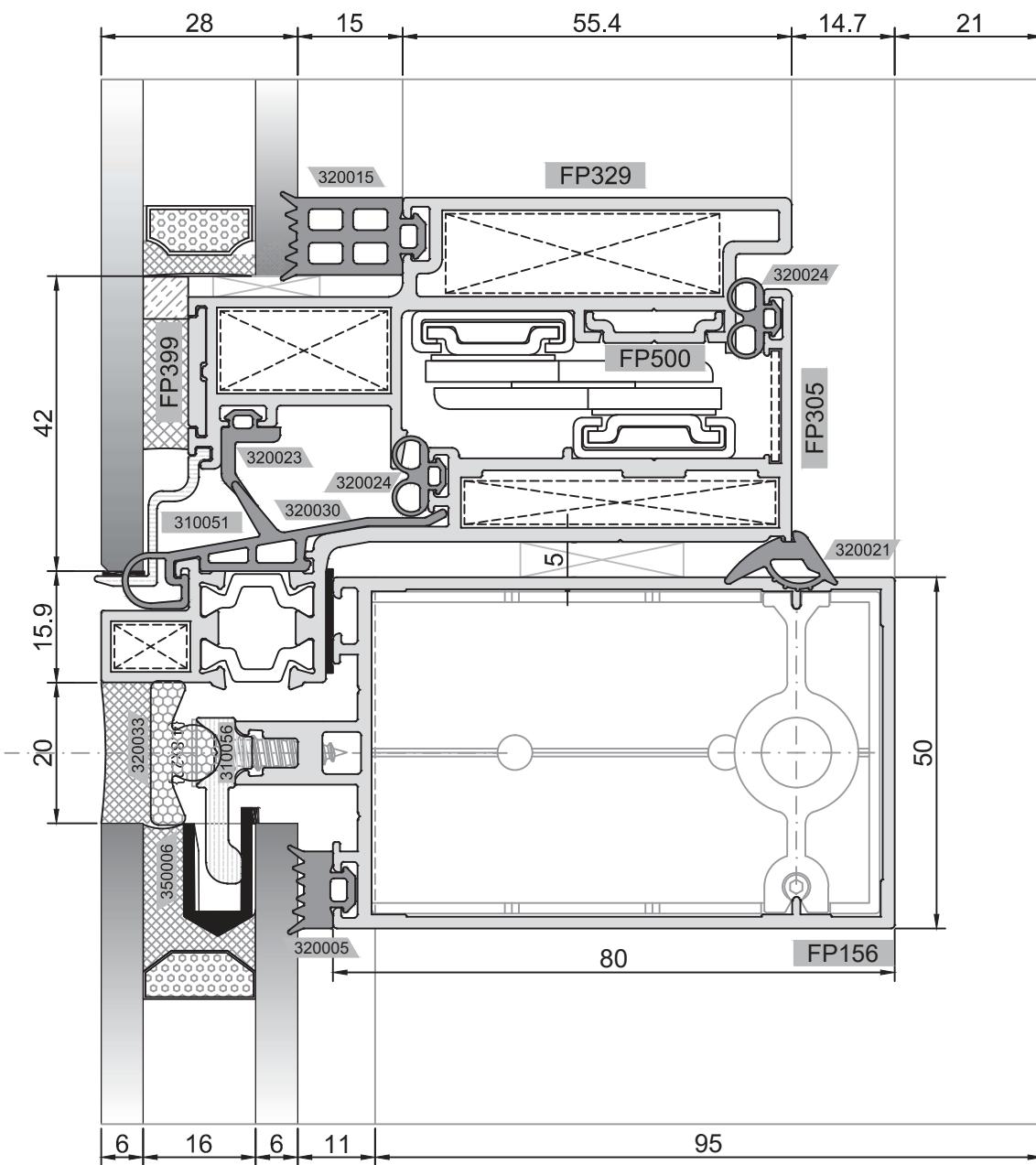
DÜSEY DETAYI  
VERTICAL DETAIL

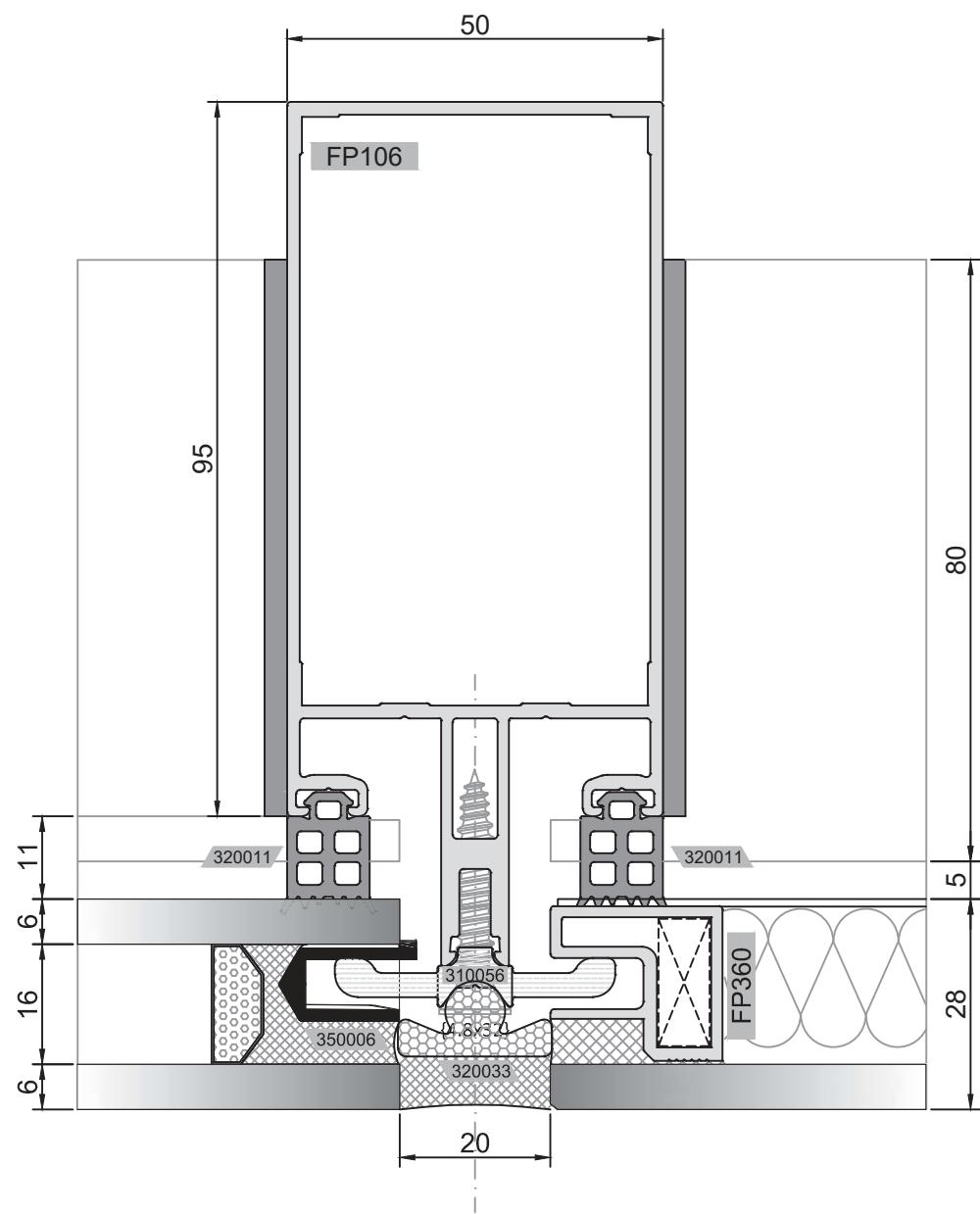
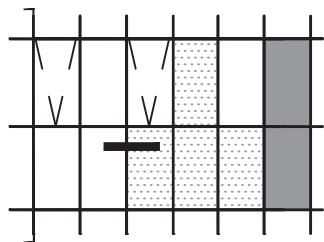


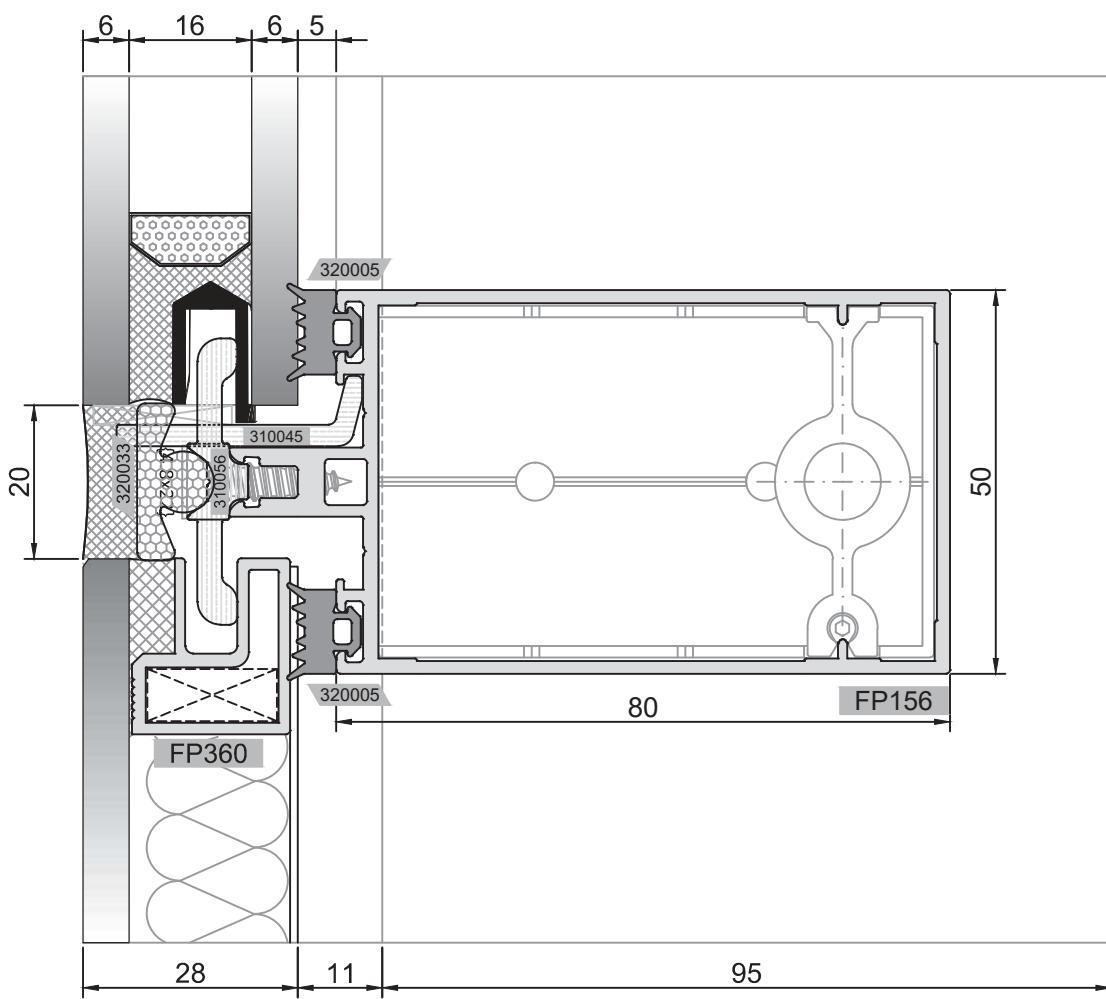
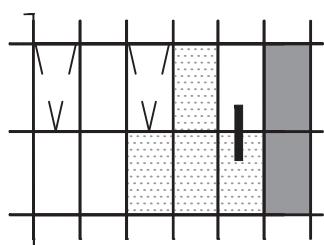


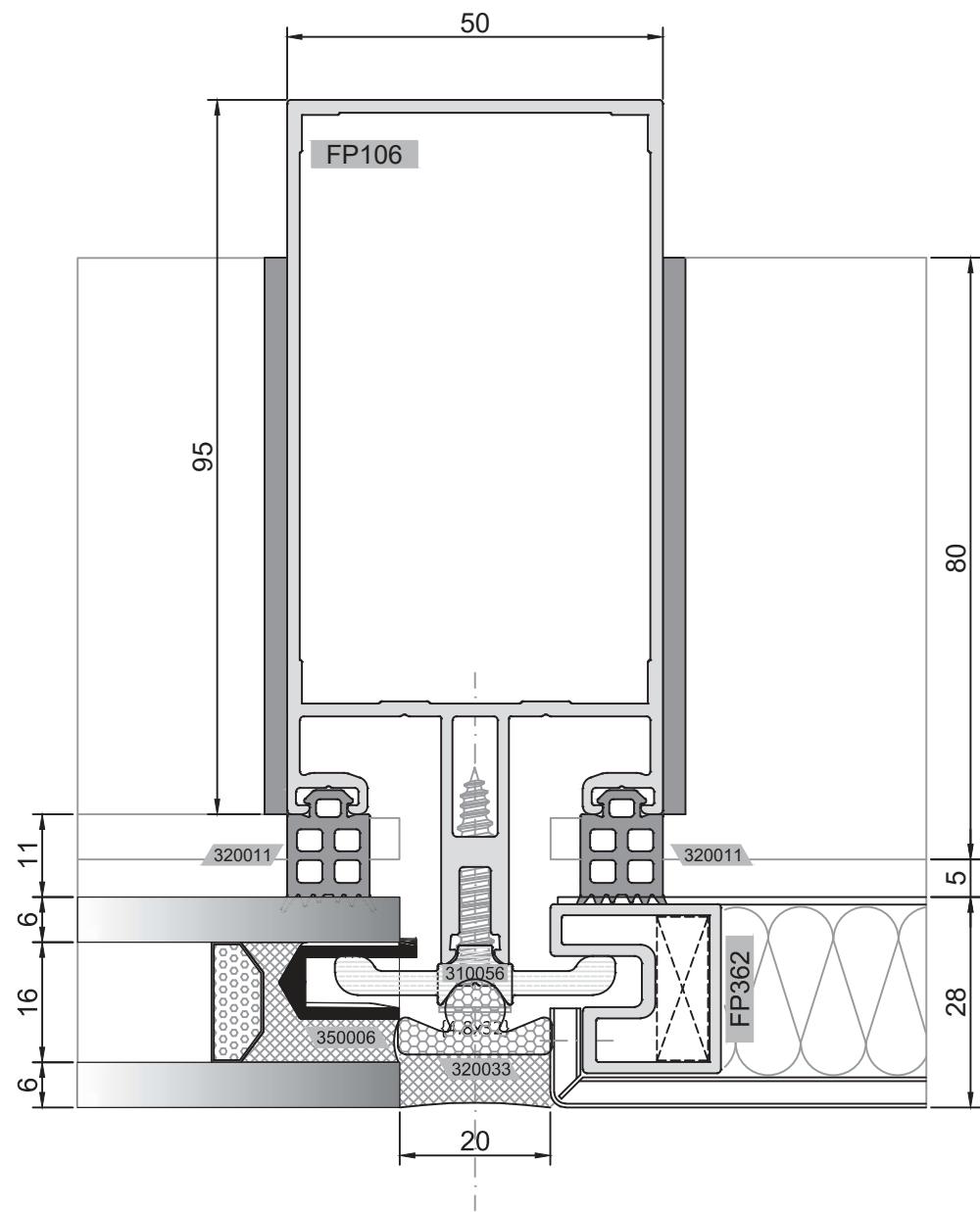
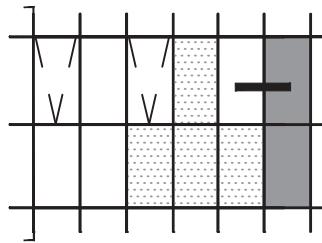
**YATAY DETAYI**  
HORIZONTAL DETAIL

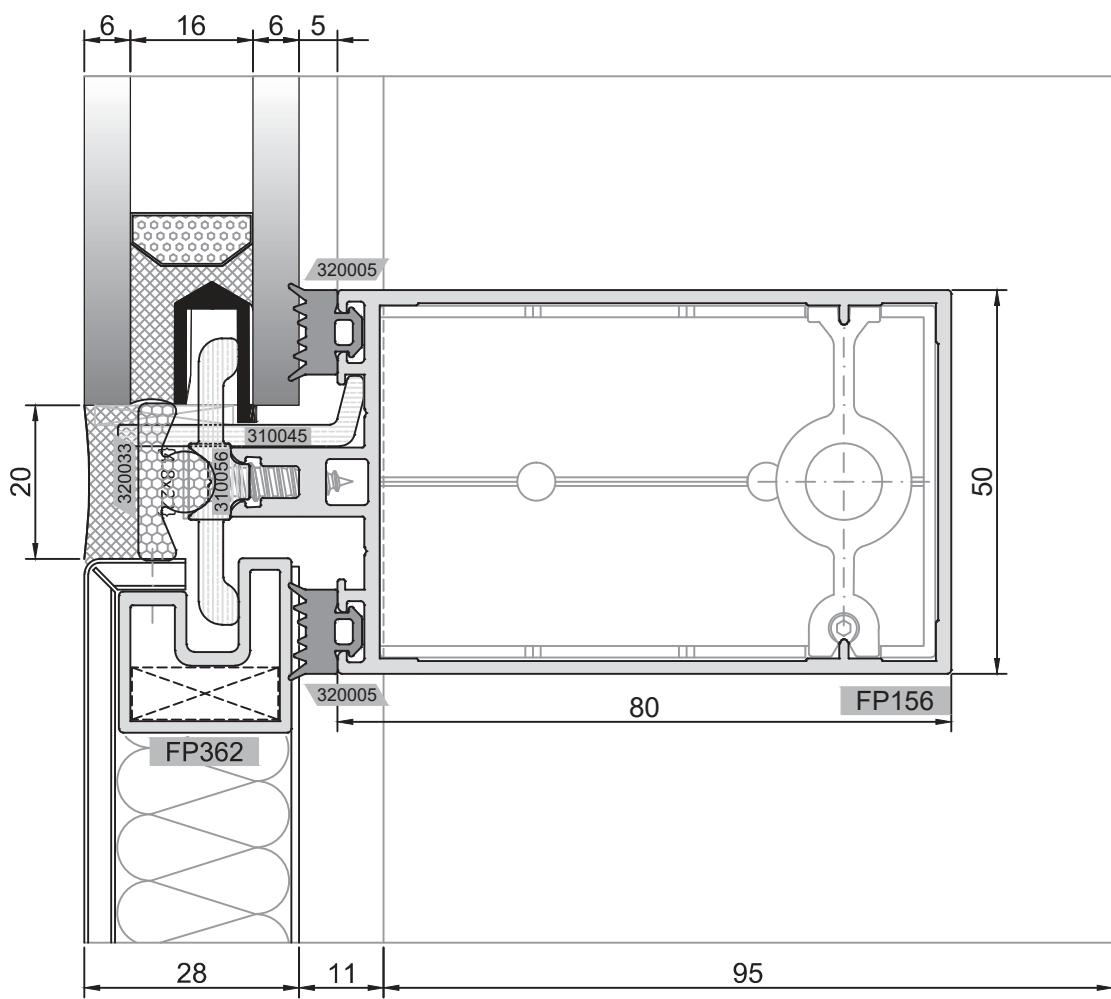
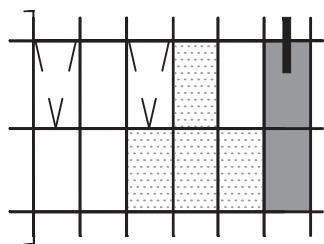
**ALTERNATİF 2: YALITIMSIZ PARALEL AÇILIR KANAT DETAYI**  
ALTERNATIVE 2 : PARALLEL OPENING UNINSULATED VENT DETAIL

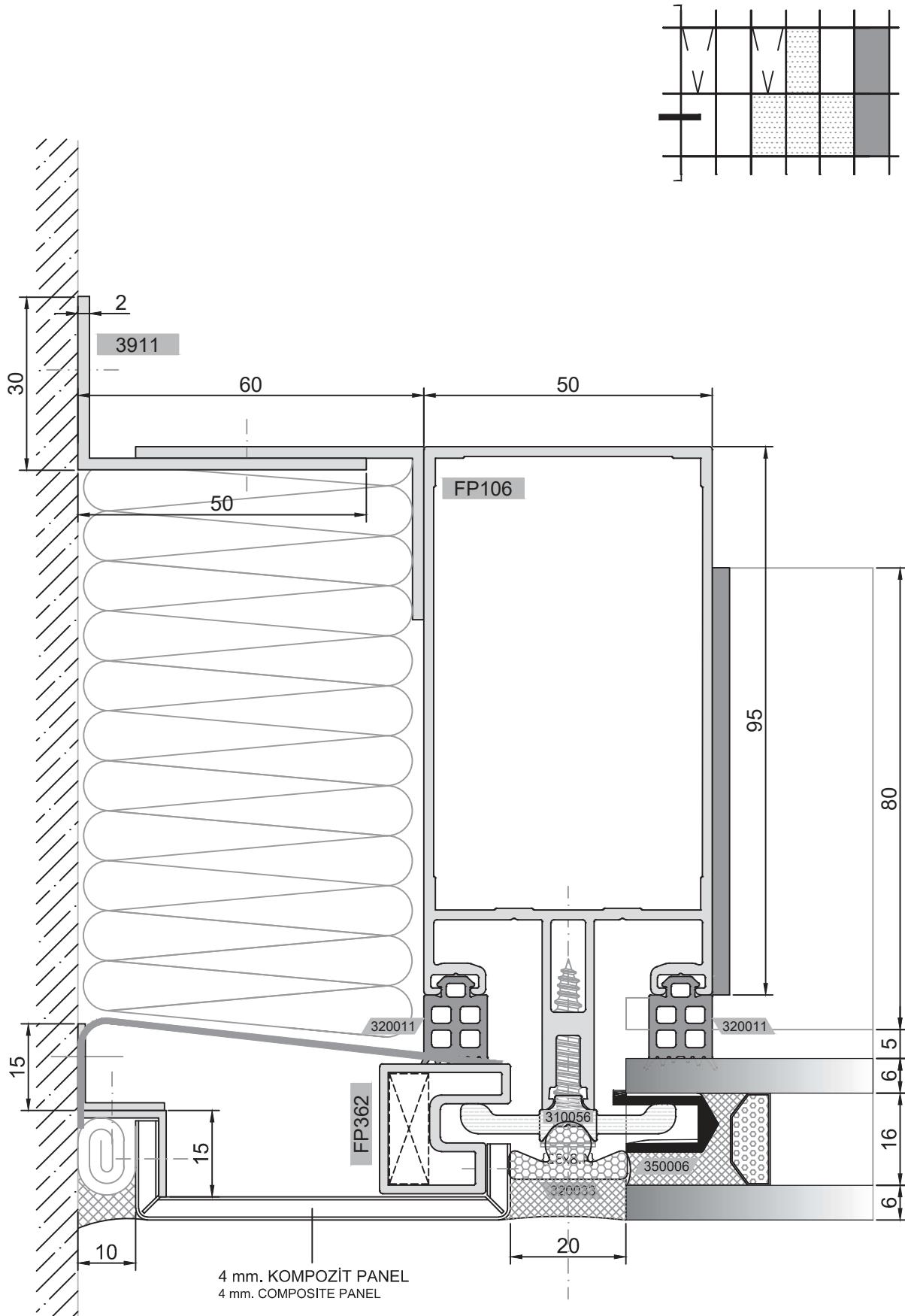


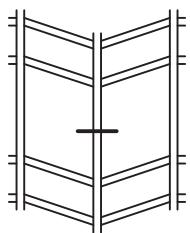




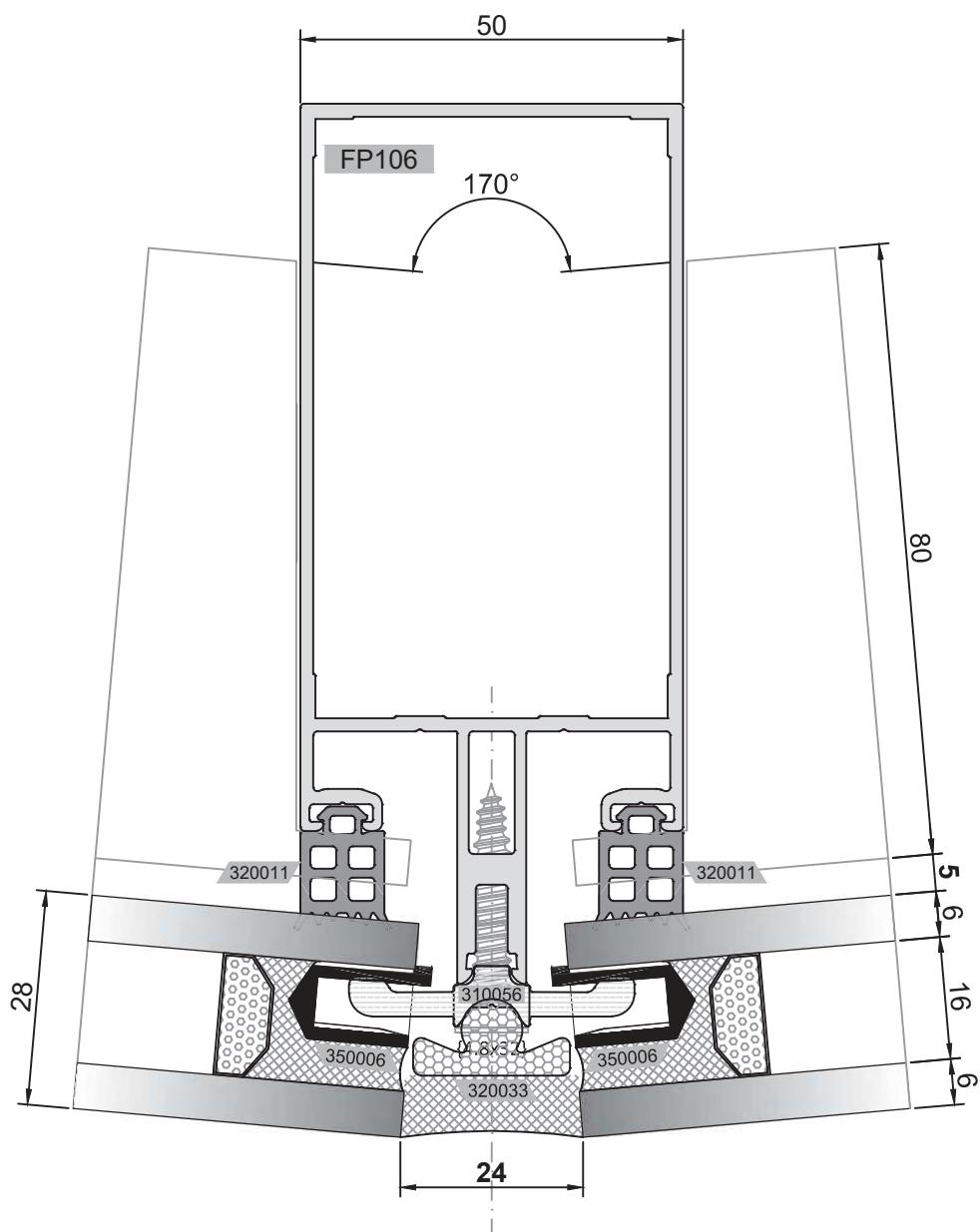


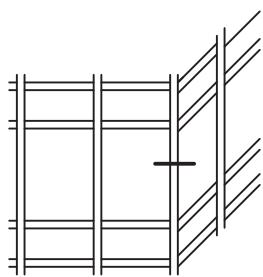




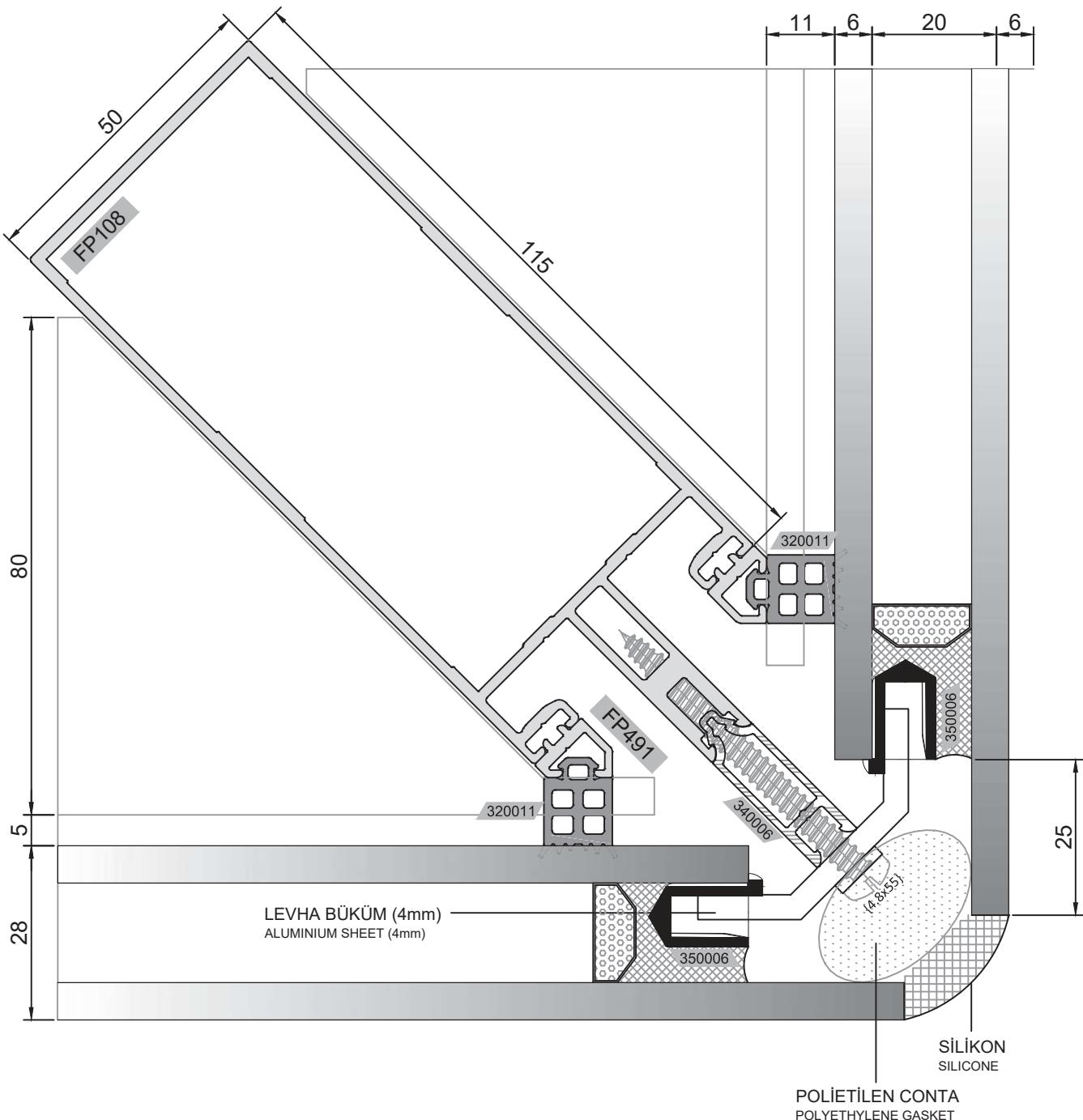


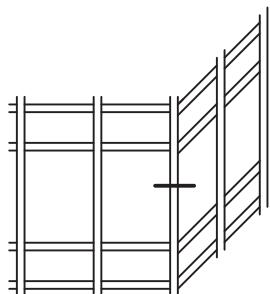
0° - 10°





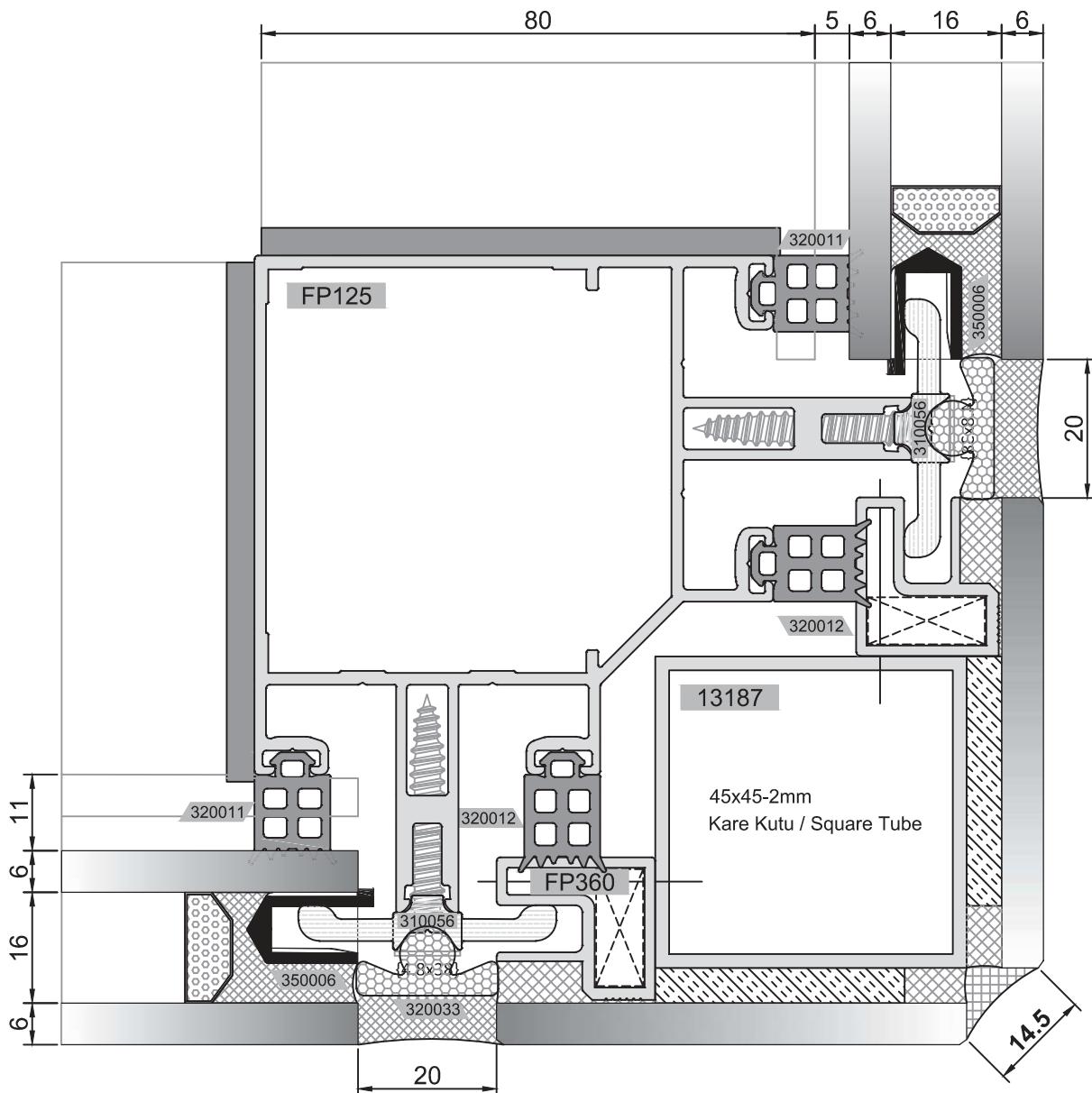
90°

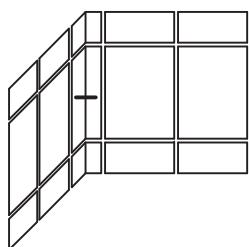
**ALTERNATİF 1: TEK DİKMELİ KÖŞE DETAYI**  
**ALTERNATIVE 1 : CORNER DETAIL WITH SINGLE MULLION**




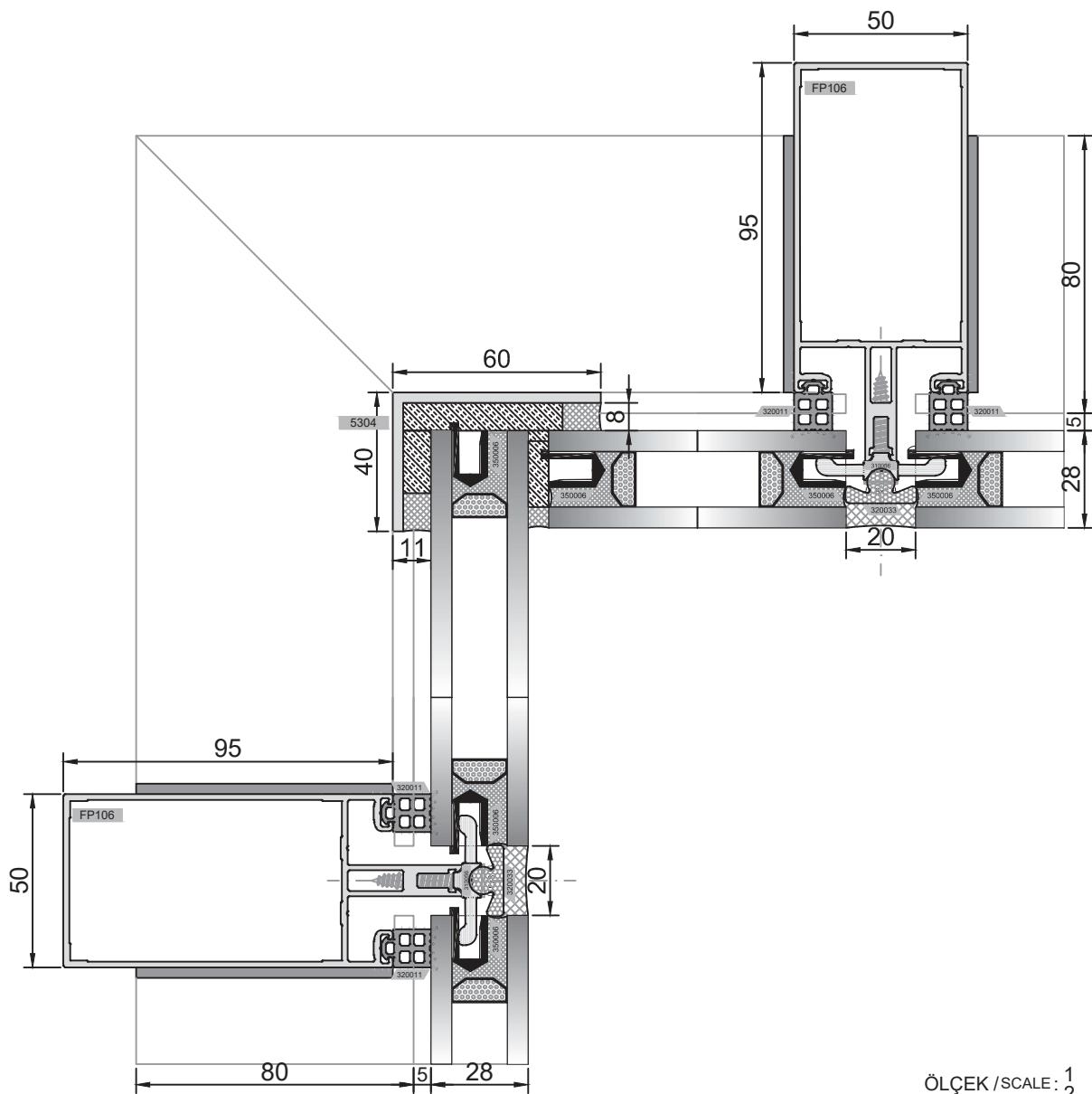
90°

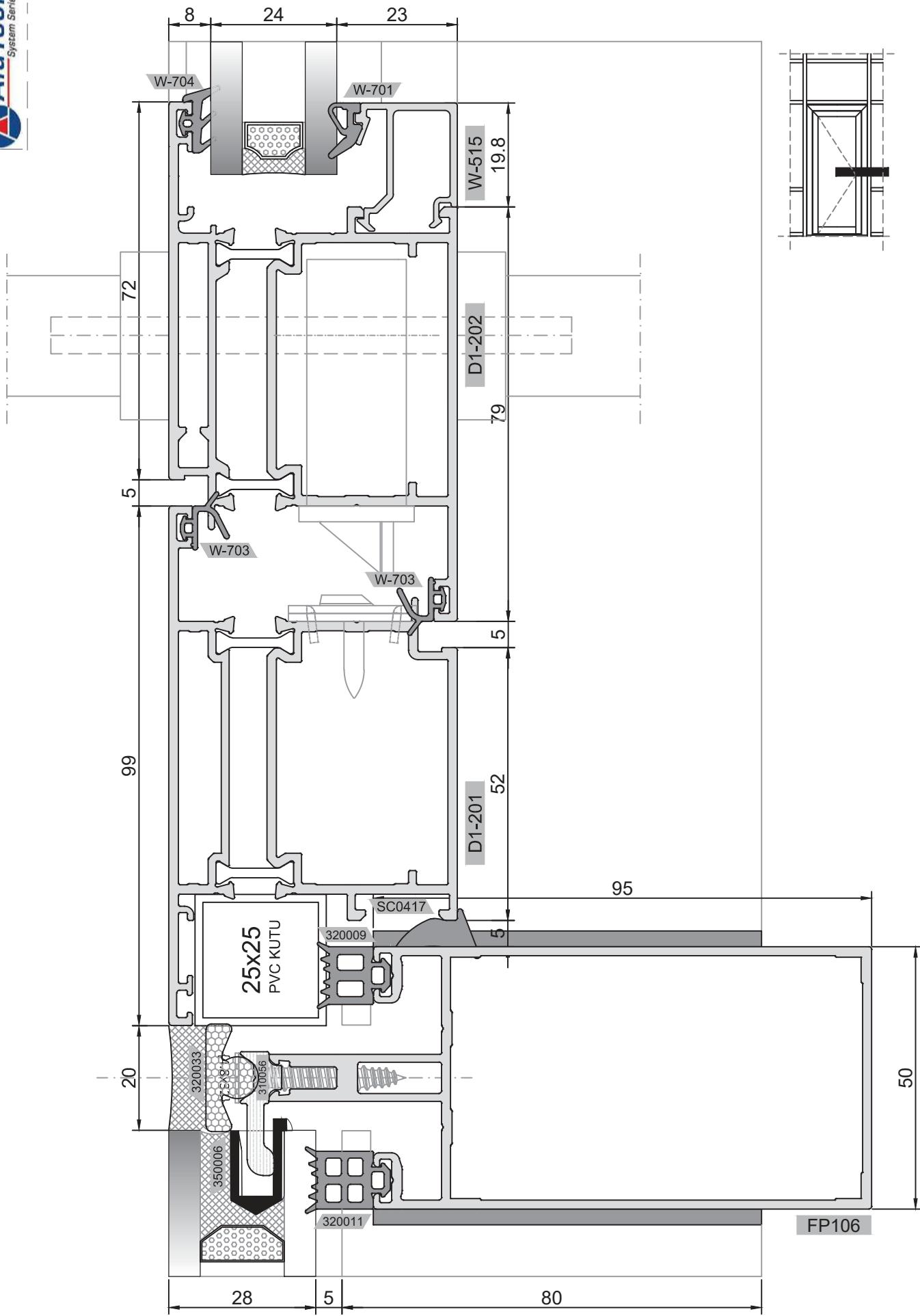
**ALTERNATİF 2: ÇİFT DİKMELİ KÖŞE DETAYI**  
**ALTERNATIVE 2 : CORNER DETAIL WITH DOUBLE MULLION**



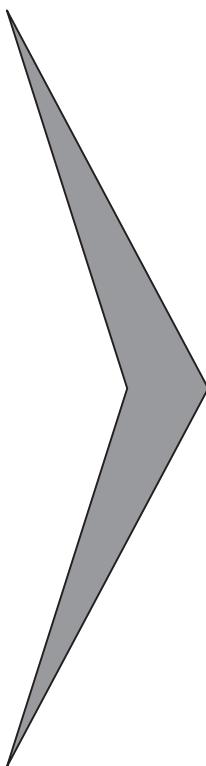


**90° İÇ AÇILI CAM CEPHE DÜŞEY KESİT DETAYI**  
FOUR SIDE WITH 90° INTERNAL ANGLE VERTICAL DETAIL



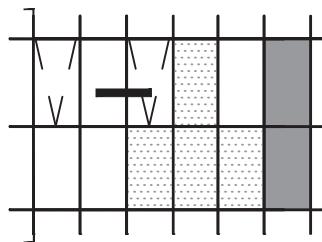


# YARI-KAPAKLI CEPHE SEMI-CAPPED CURTAIN WALL

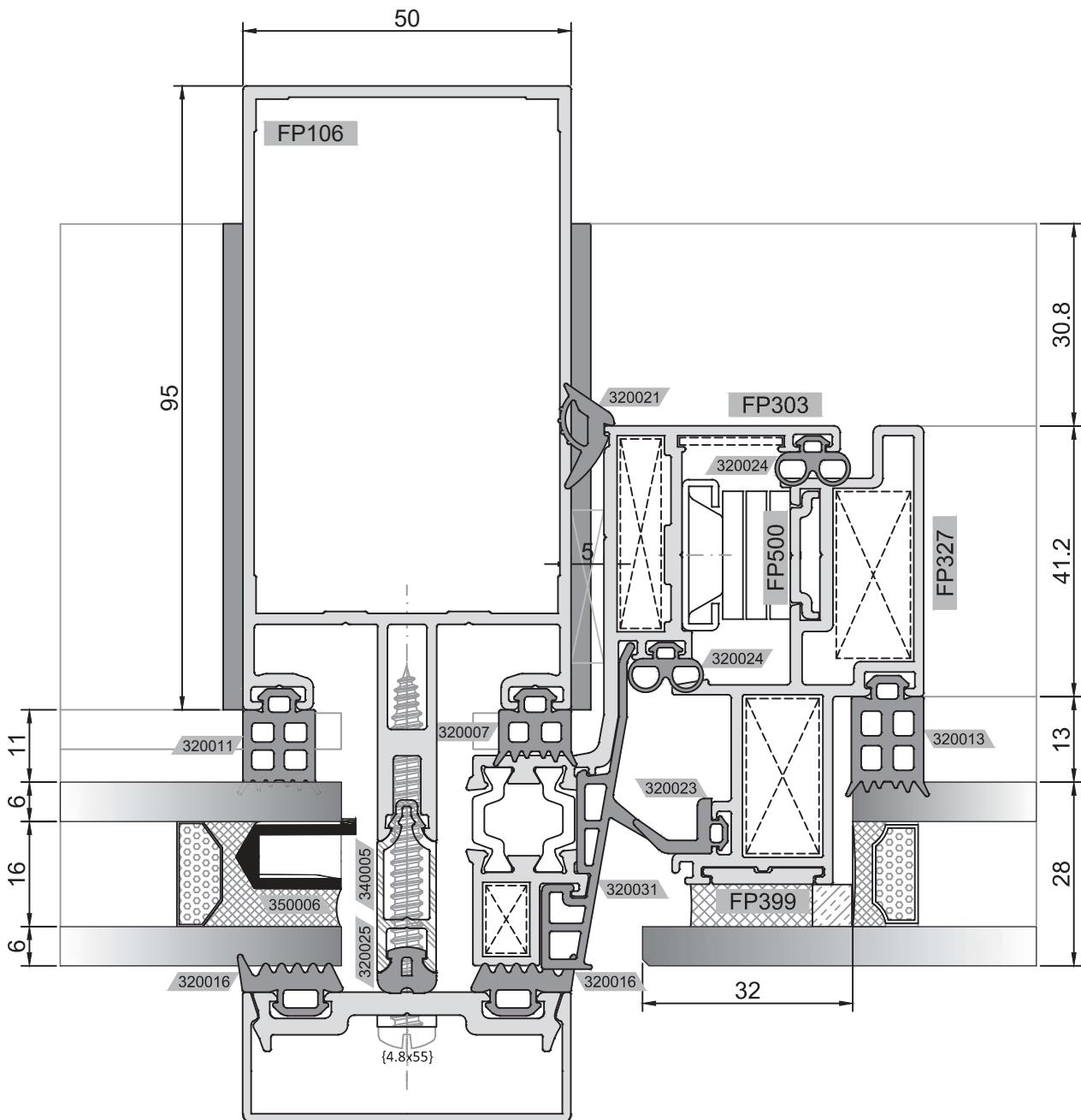


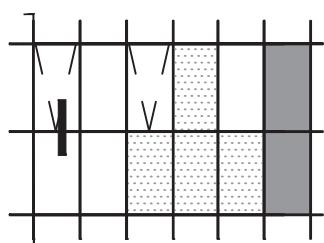
\* **16mm ÖZEL SICAK  
KENAR ISICAM ÇITASI**  
16mm SPECIAL WARM  
EDGE SPACER

➤ SİSTEM ALÜMİNYUM® KATALOG İÇERİSİNDEKİ VERİLERDE DÜZELTME VEYA DEĞİŞİKLİK YAPMA HAKKINA SAHİPTİR.  
SİSTEM ALUMINIUM® HAS THE RIGHTS TO MAKE CORRECTION OR MODIFICATION IN THE CATALOGUE DATA.

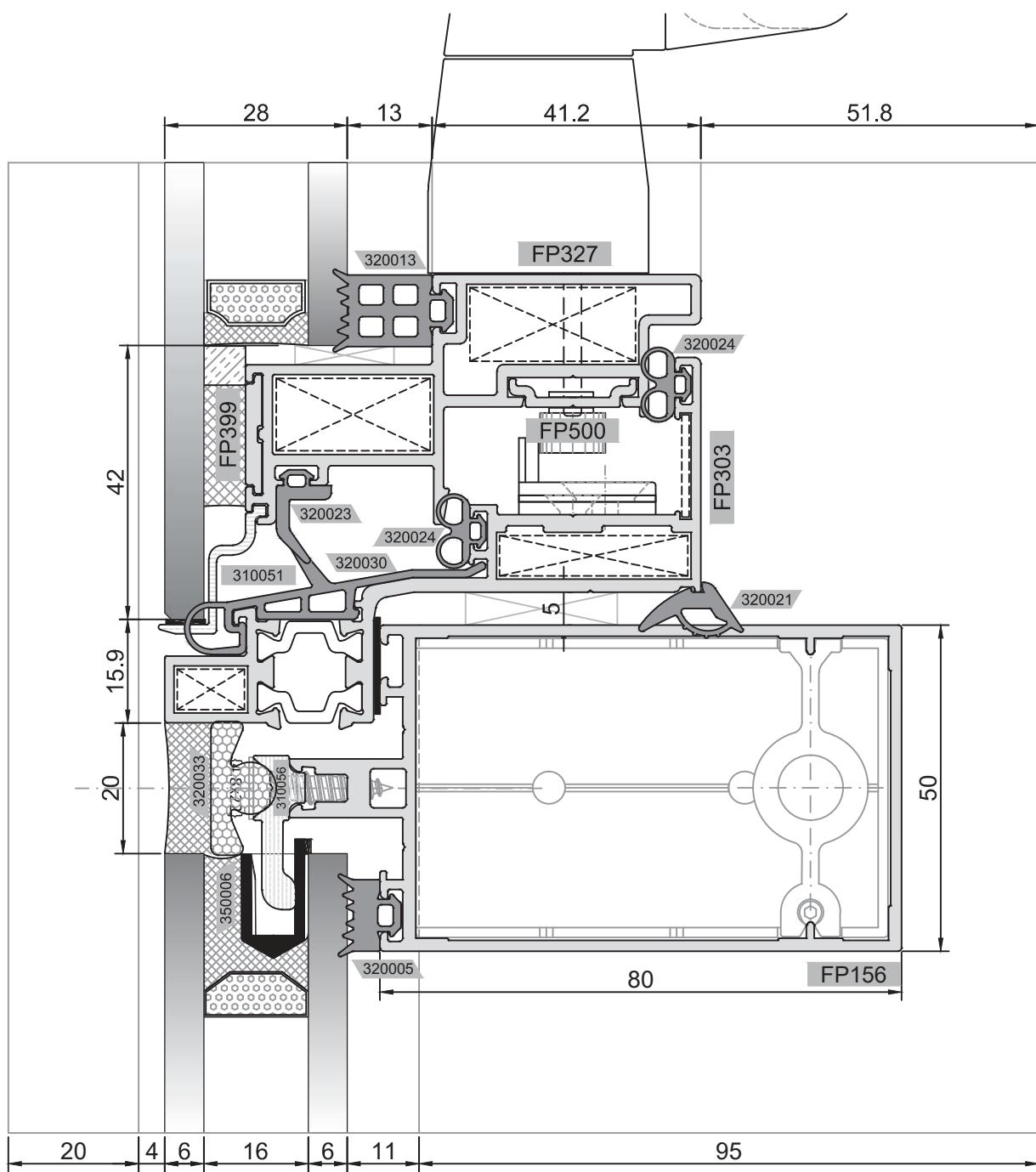


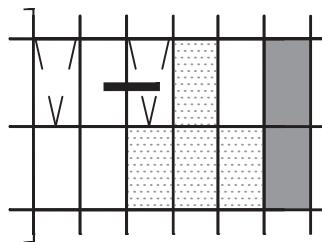
DÜŞEY DETAYI  
VERTICAL DETAIL



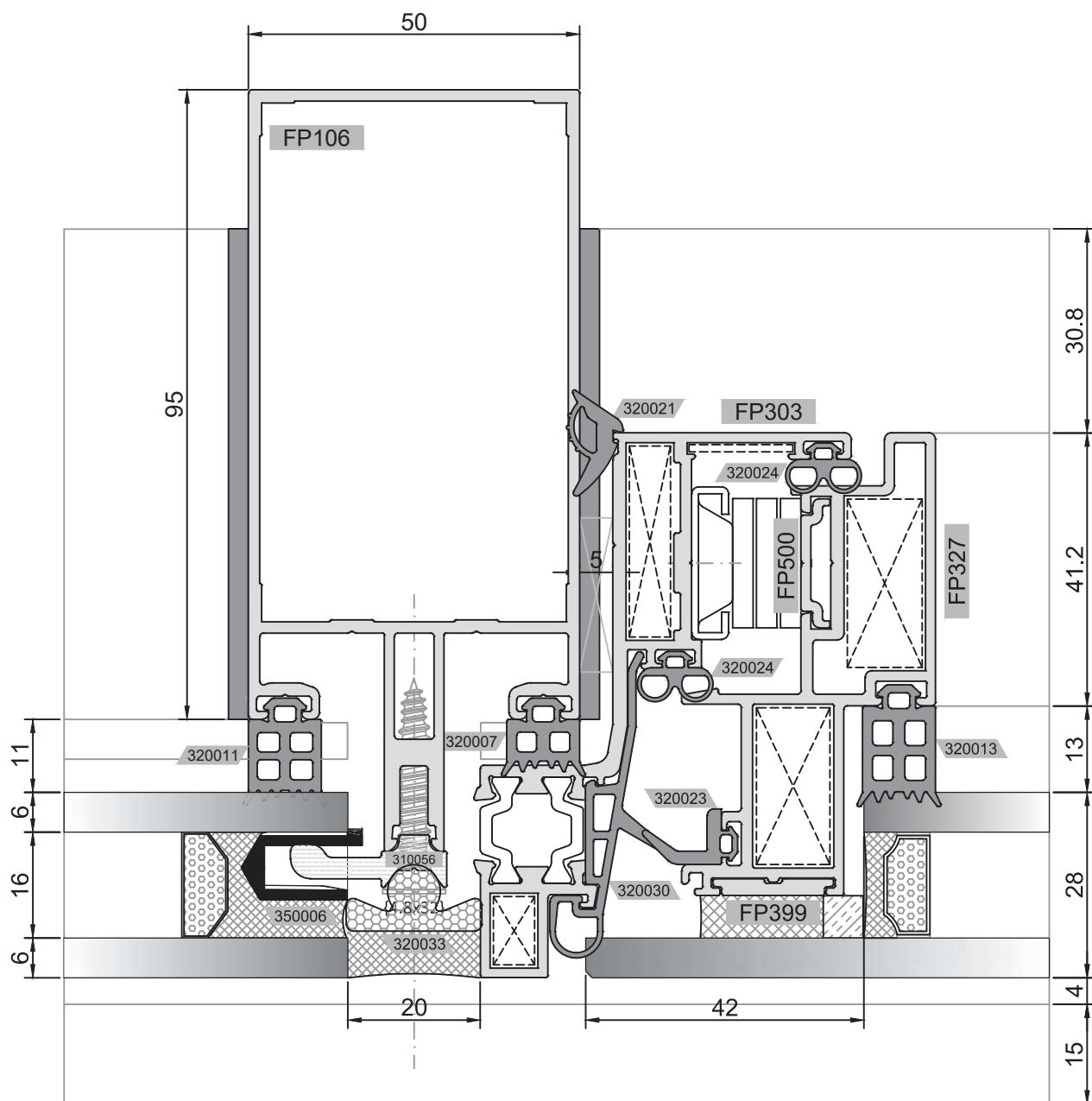


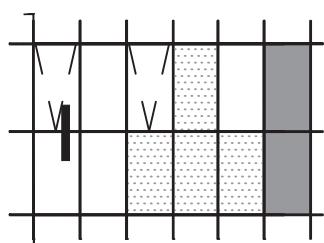
**YATAY DETAYI**  
HORIZONTAL DETAIL



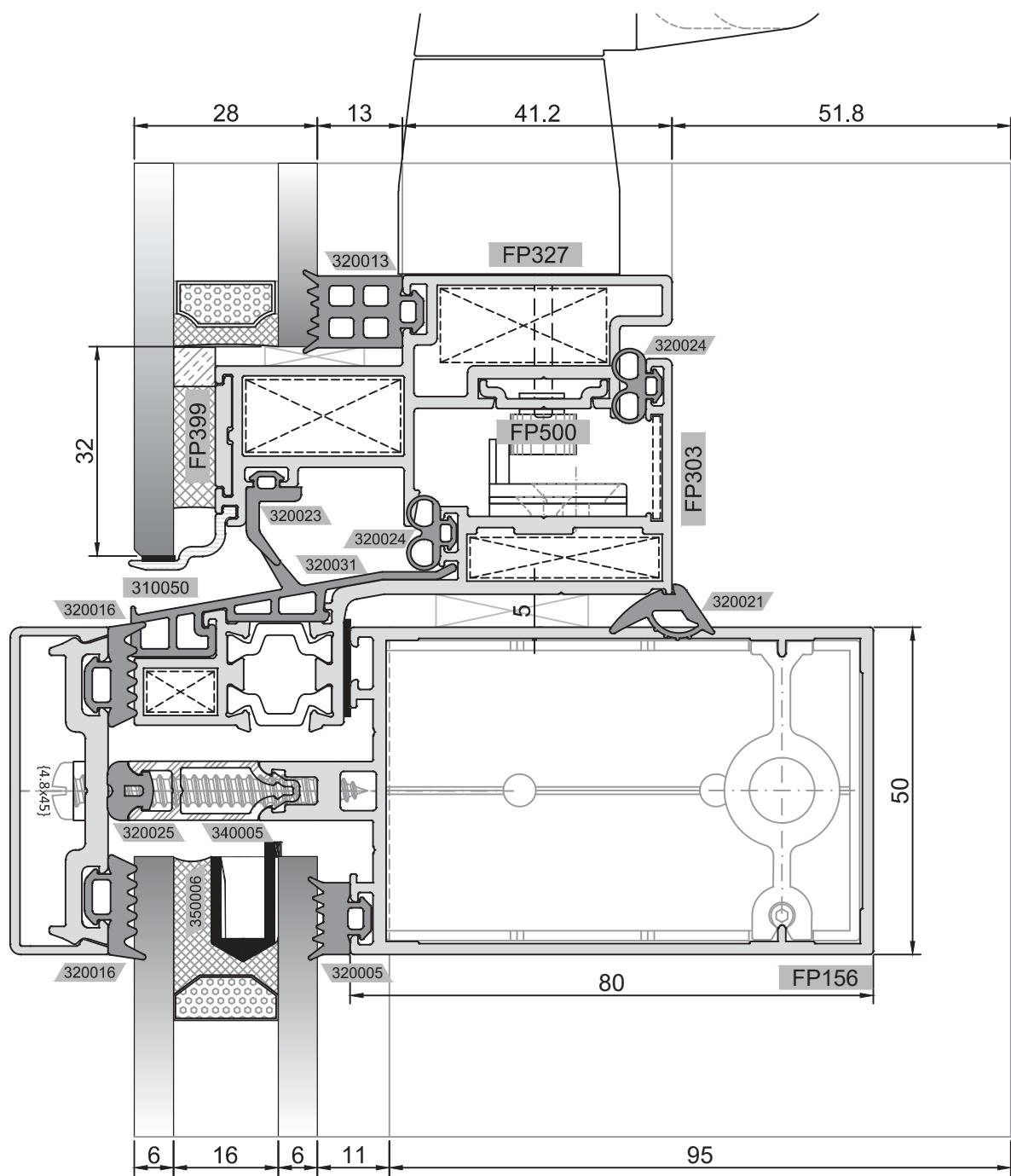


DÜŞEY DETAYI  
VERTICAL DETAIL





YATAY DETAYI  
HORIZONTAL DETAIL



**CAM KALINLIKLARI NA GÖRE**

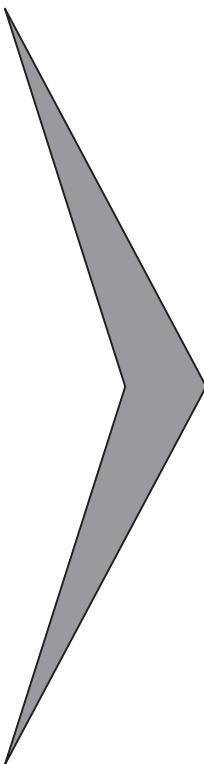
**KAPAKLI SİSTEM DETAYLARI**

---

**CAPPED CURTAIN WALL DETAILS**

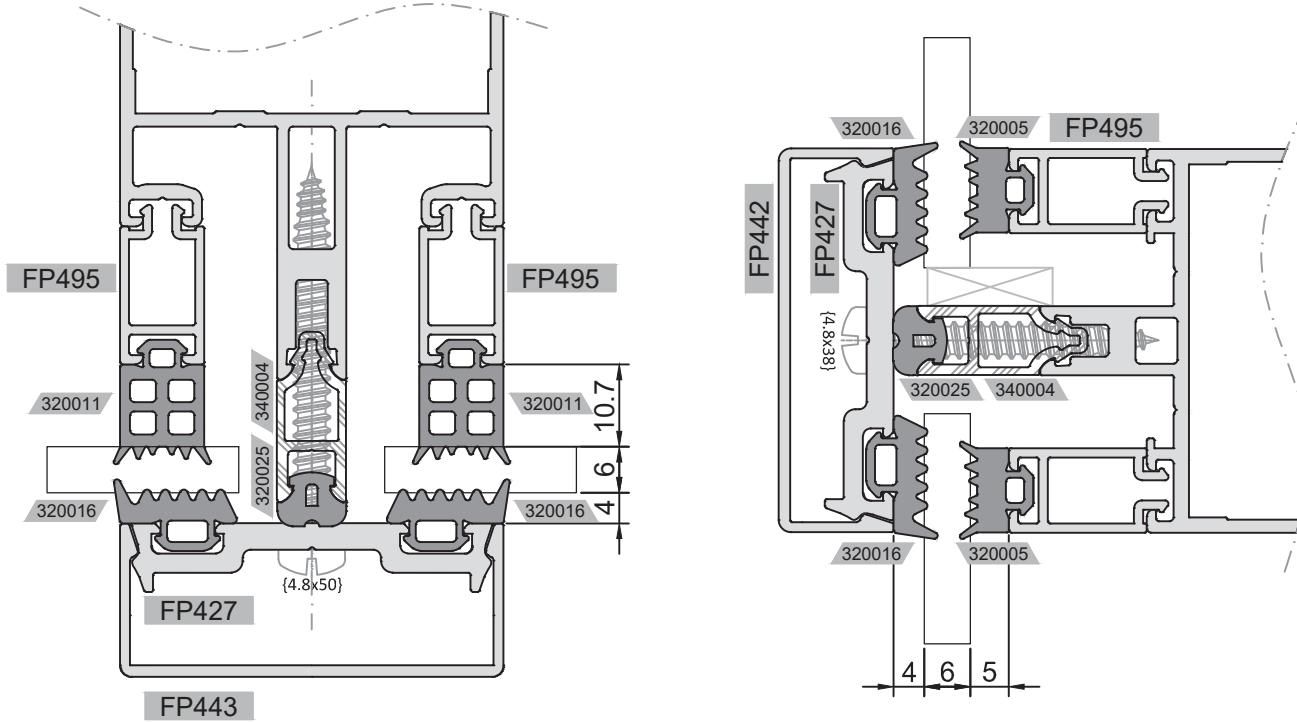
**ACCORDING TO THE GLASS**

**THICKNESSES**

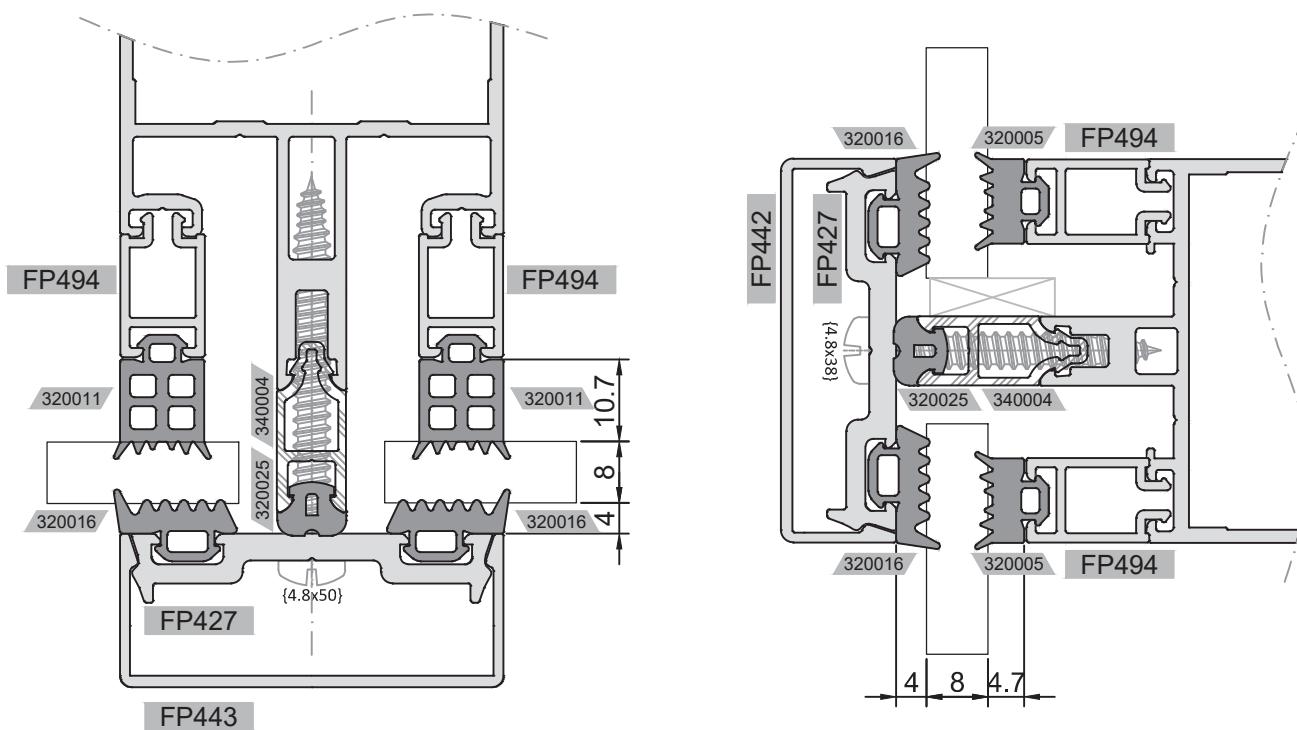


► SİSTEM ALÜMİNYUM® KATALOG İÇERİSİNDEKİ VERİLERDE DÜZELTME VEYA DEĞİŞİKLİK YAPMA HAKKINA SAHİPTİR.  
SİSTEM ALUMINIUM® HAS THE RIGHTS TO MAKE CORRECTION OR MODIFICATION IN THE CATALOGUE DATA.

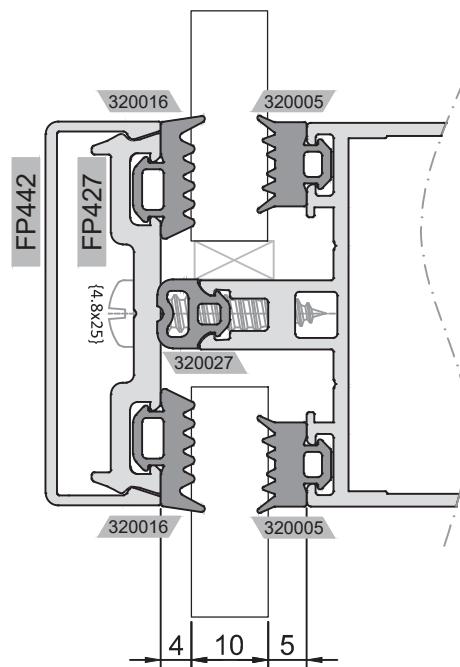
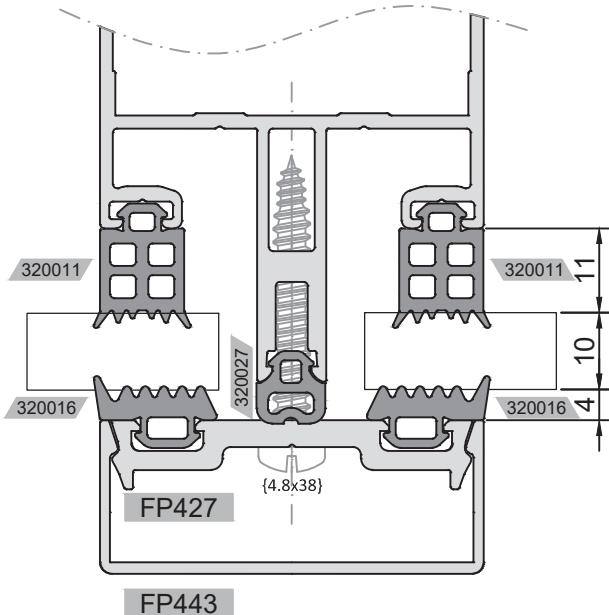
6mm



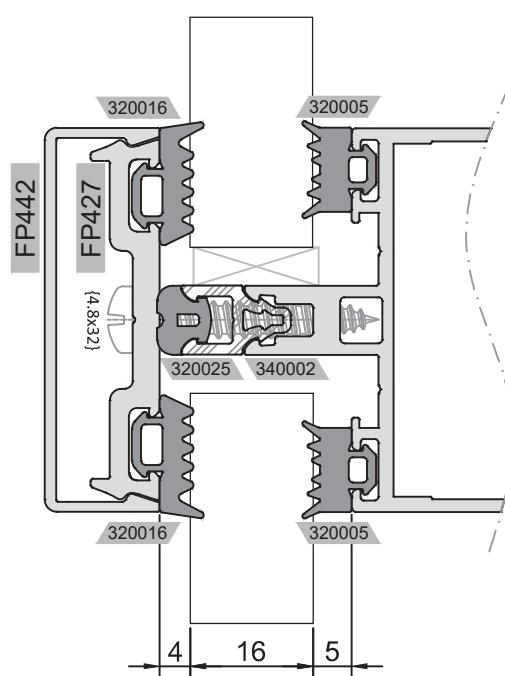
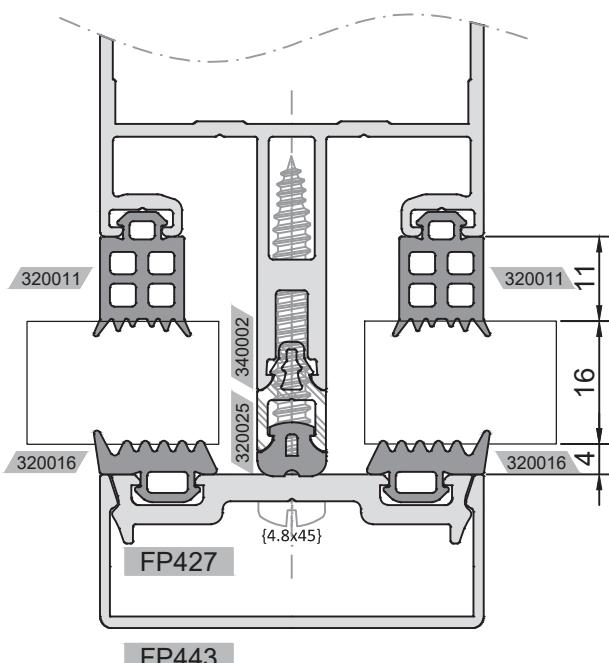
8mm



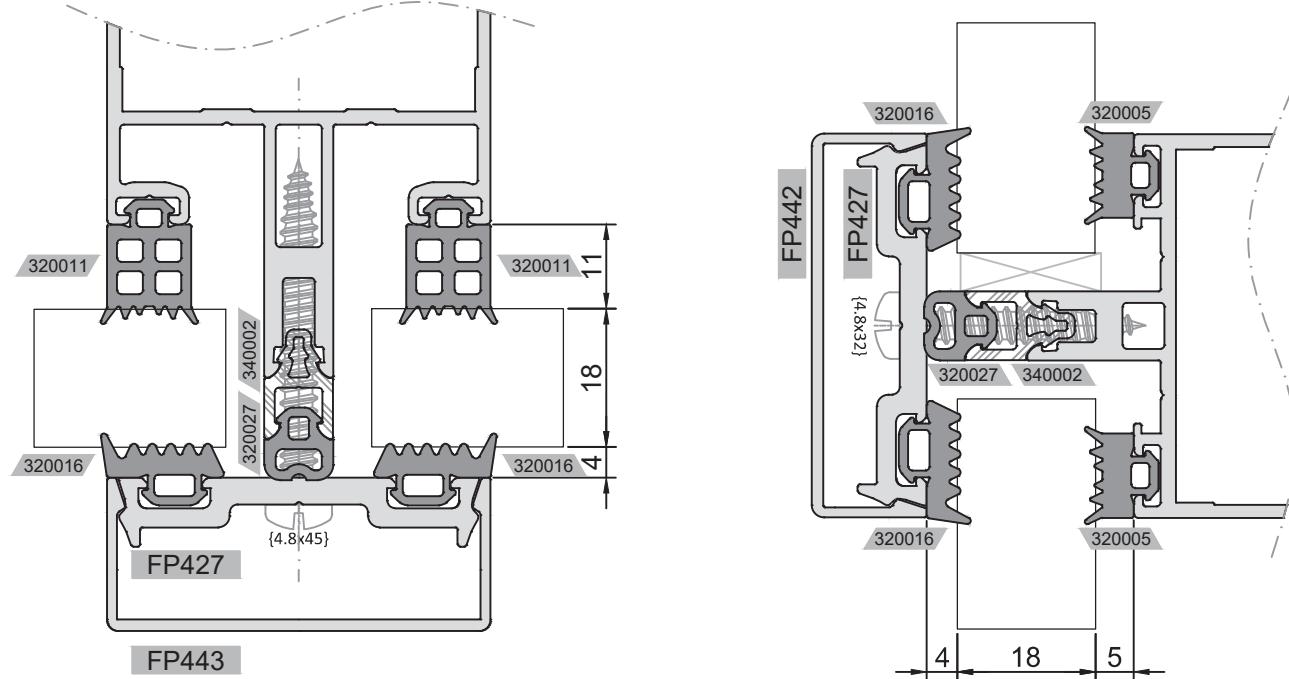
10mm



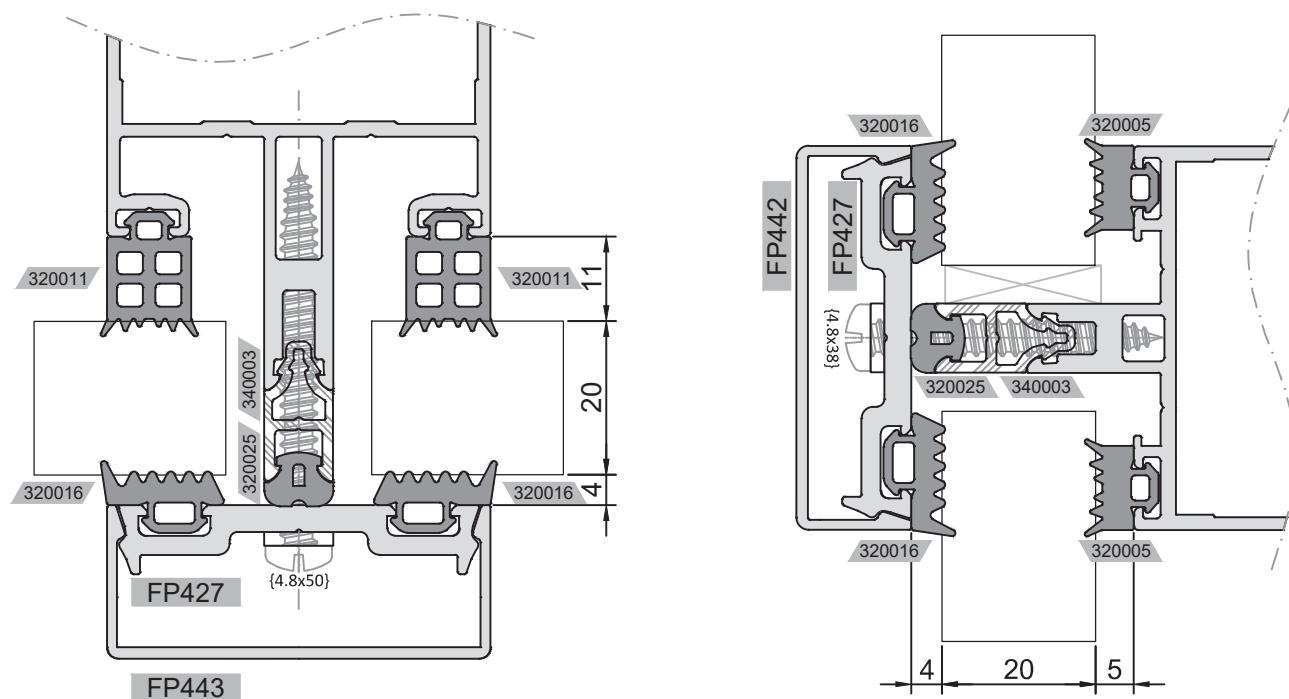
16mm



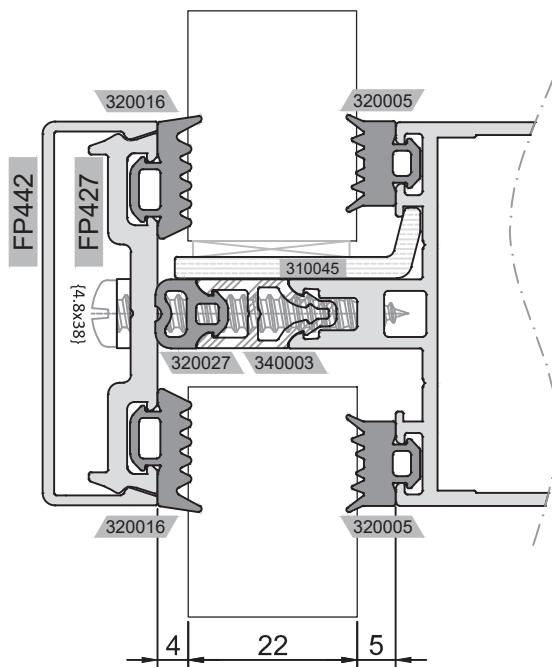
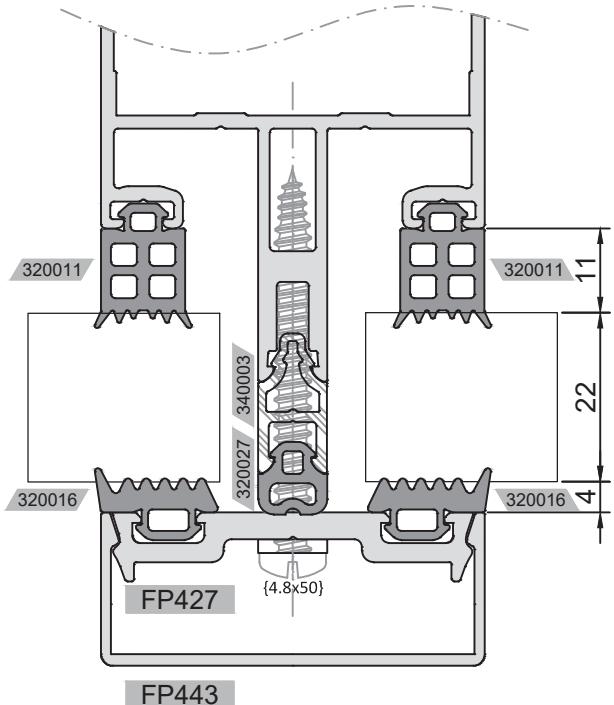
18mm



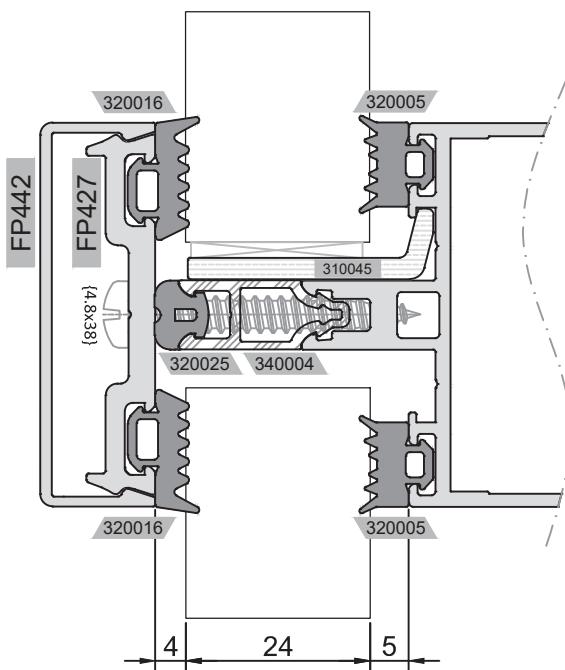
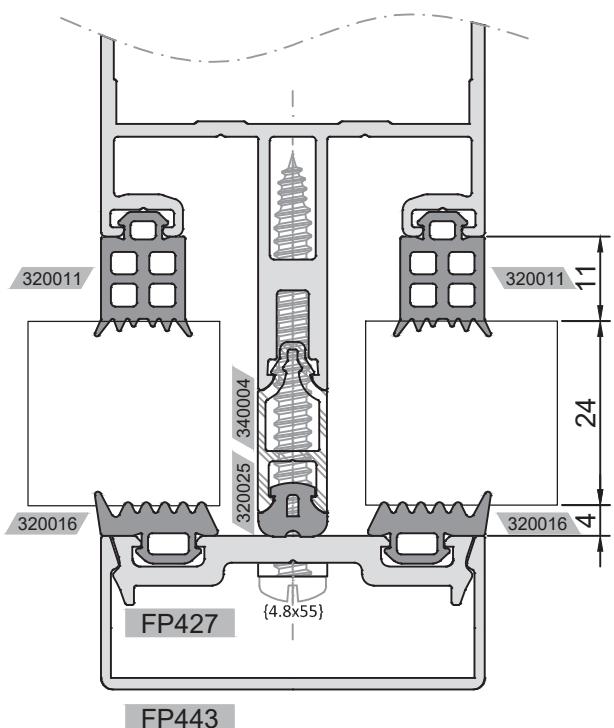
20mm



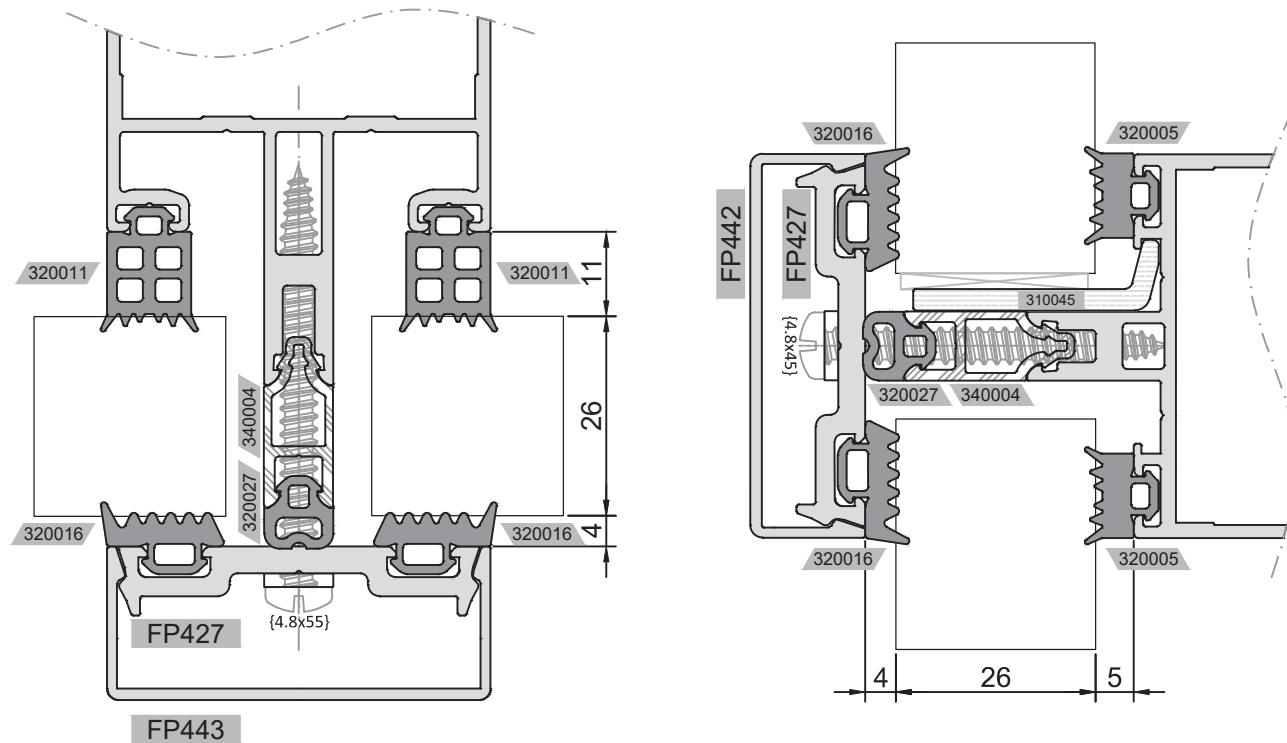
22mm



24mm

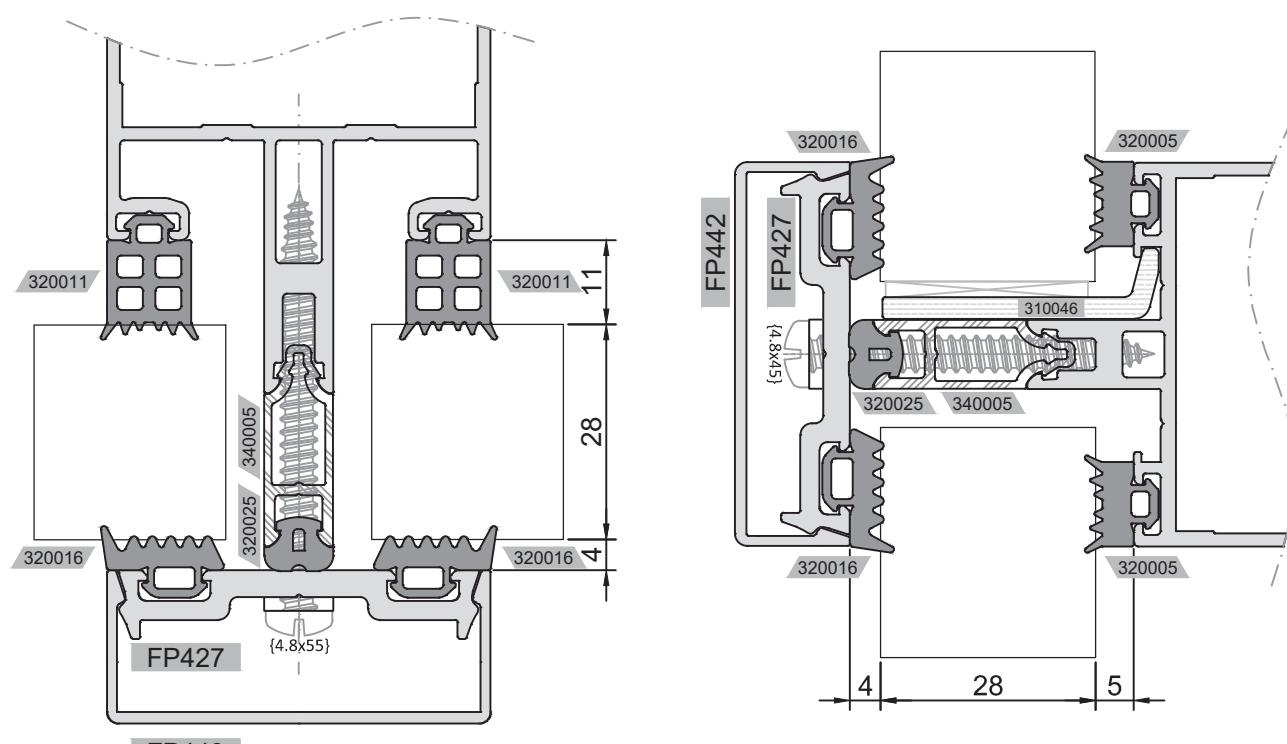


26mm



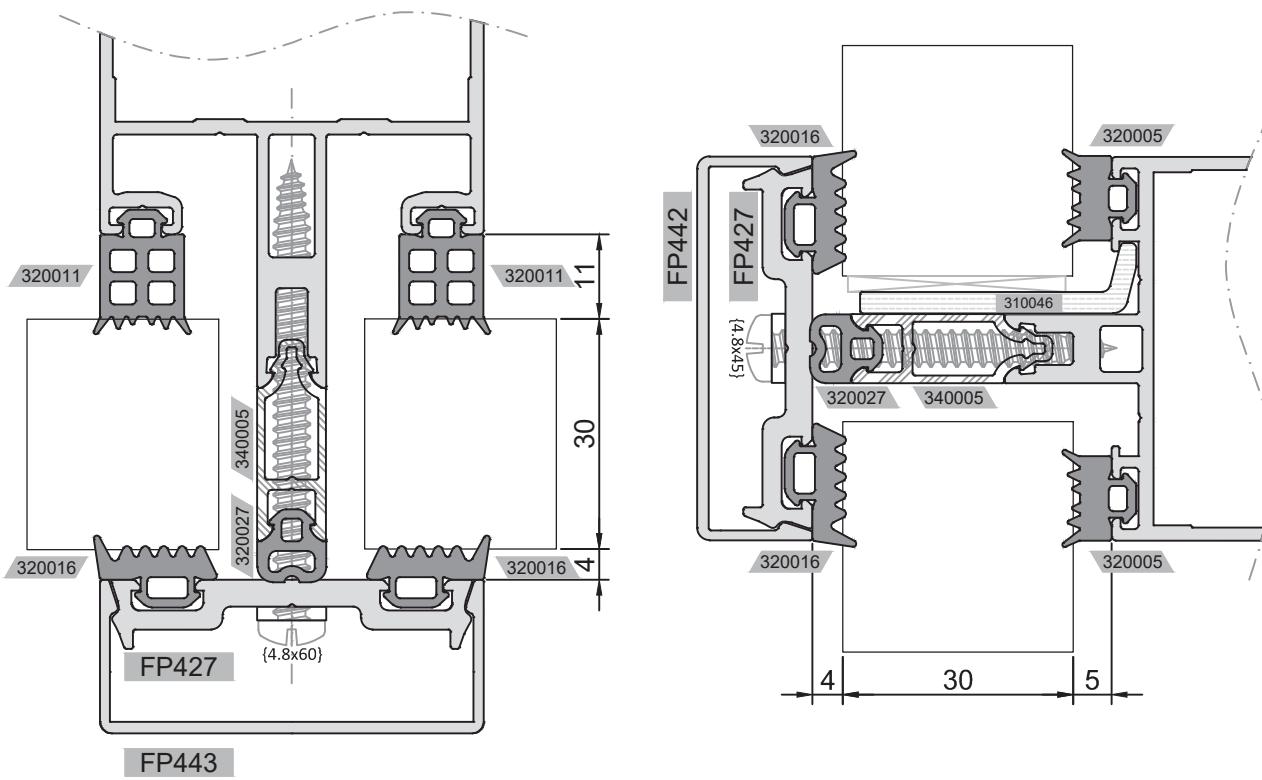
FP443

28mm

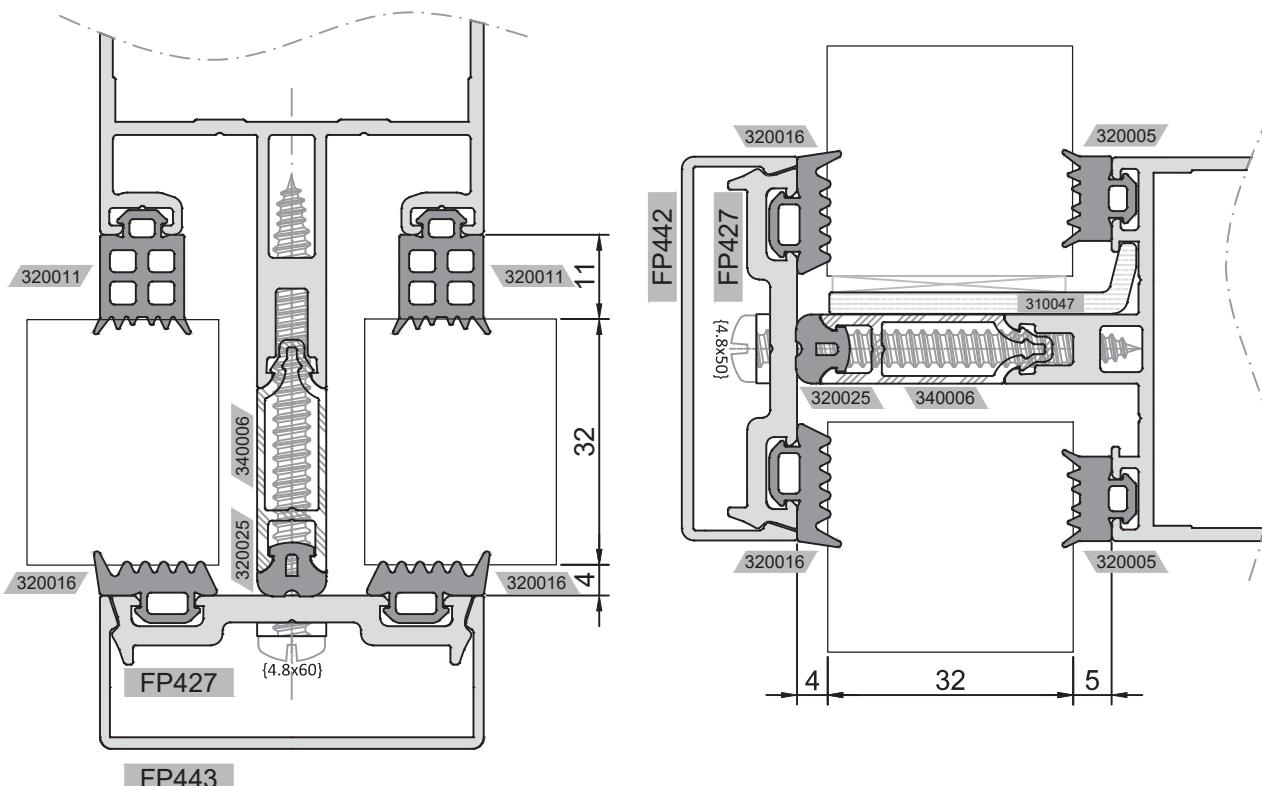


FP443

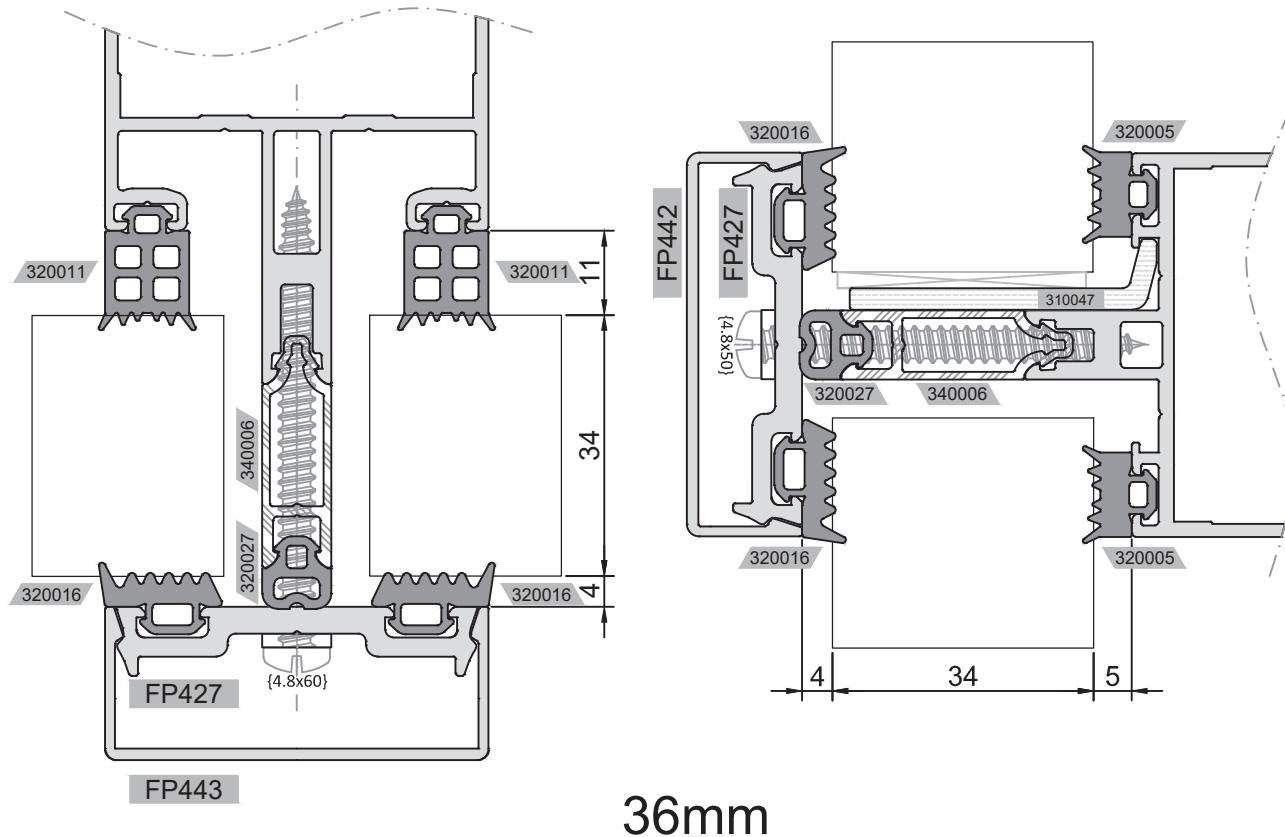
30mm



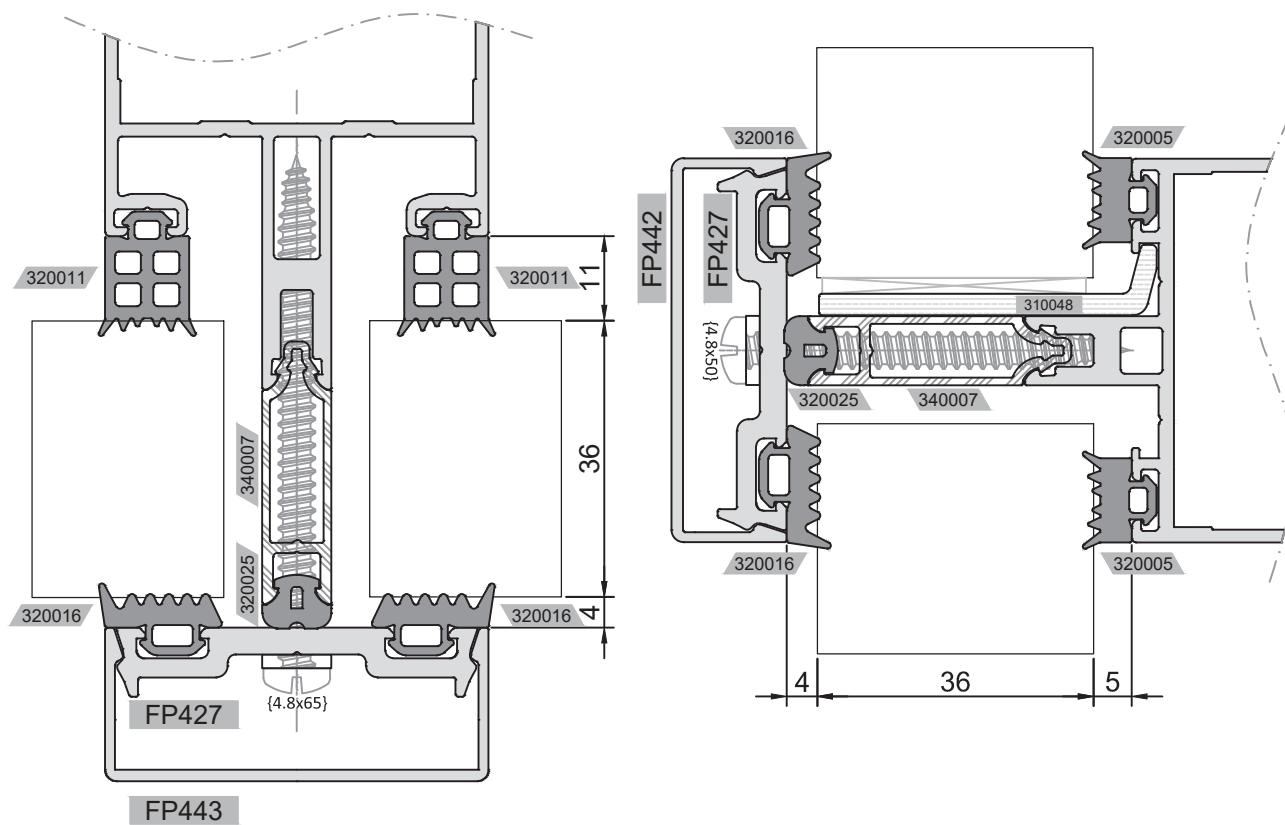
32mm



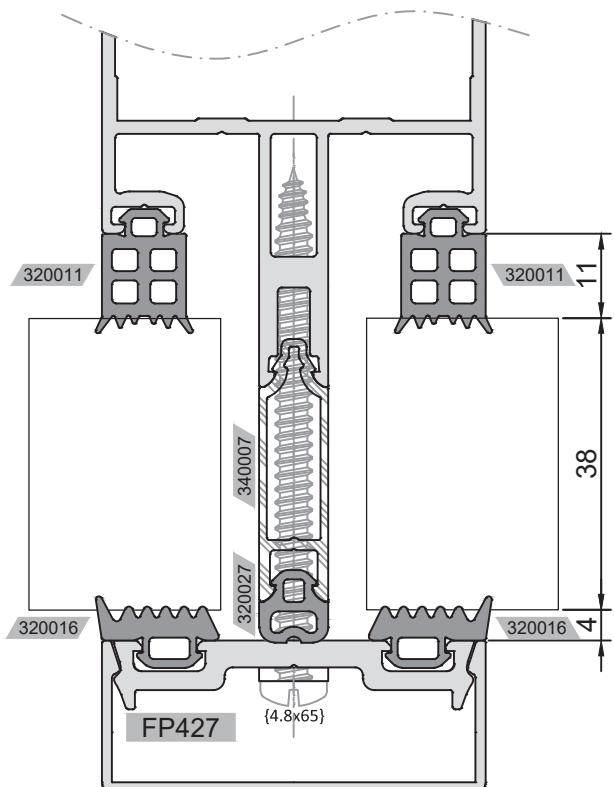
34mm



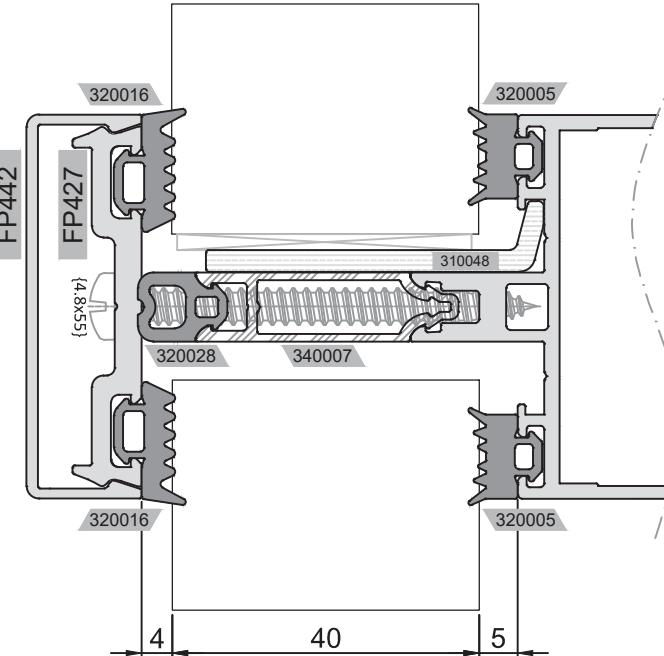
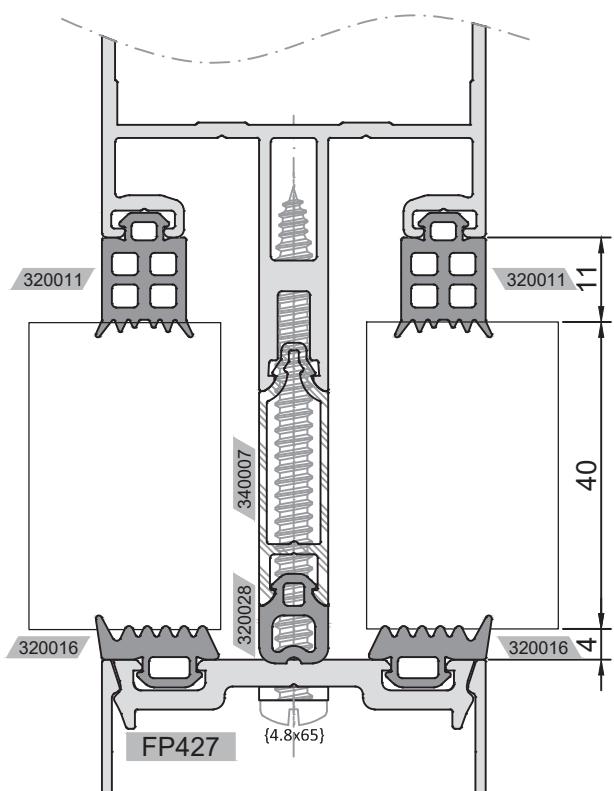
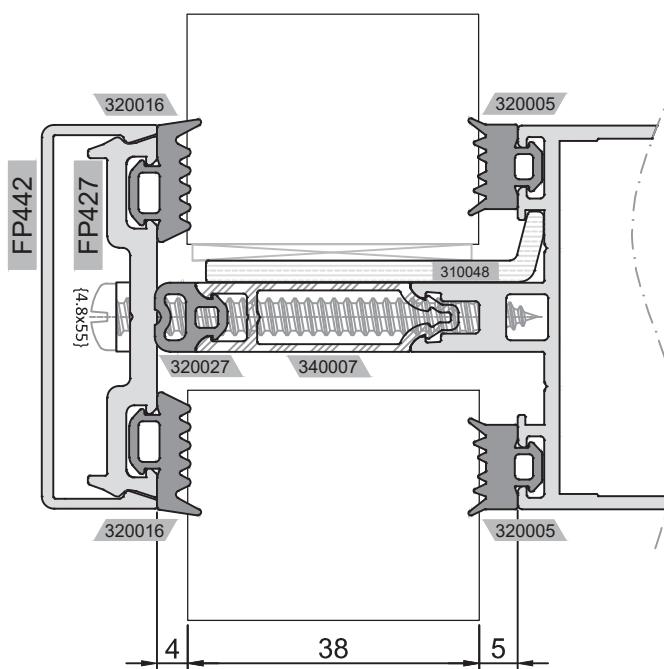
36mm



38mm



40mm

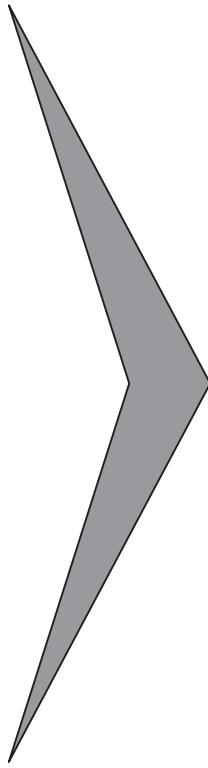


FP443

# CAM KALINLIKLARINA GÖRE ENTEGRİ SİSTEM DETAYLARI

---

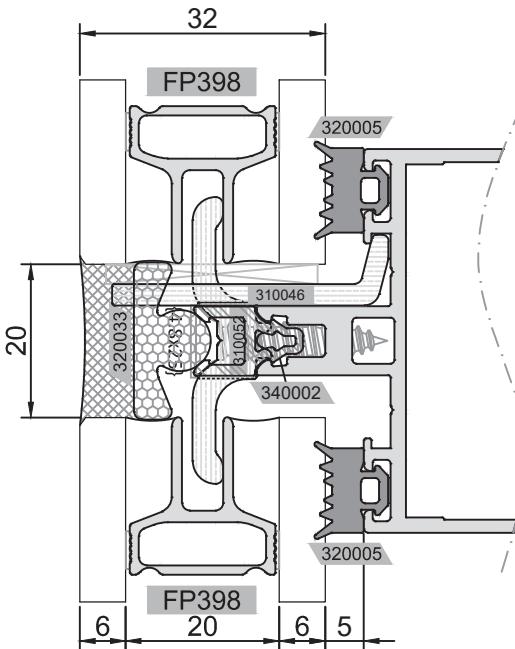
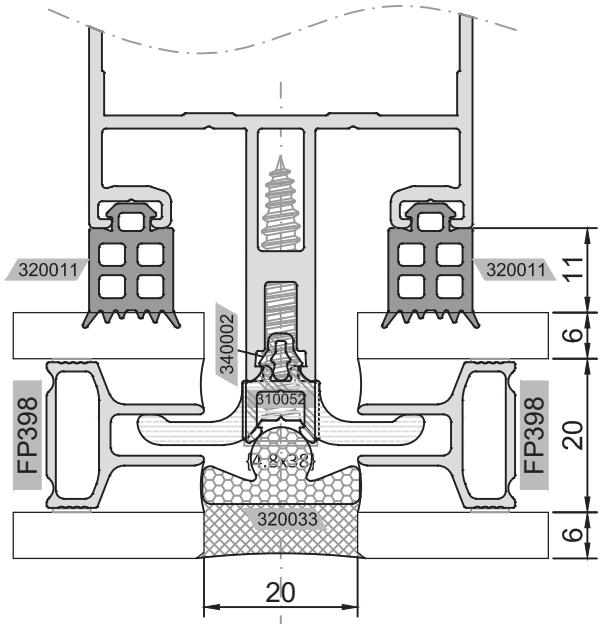
## INTEGRATED CURTAIN WALL DETAILS ACCORDING TO THE GLASS THICKNESSES



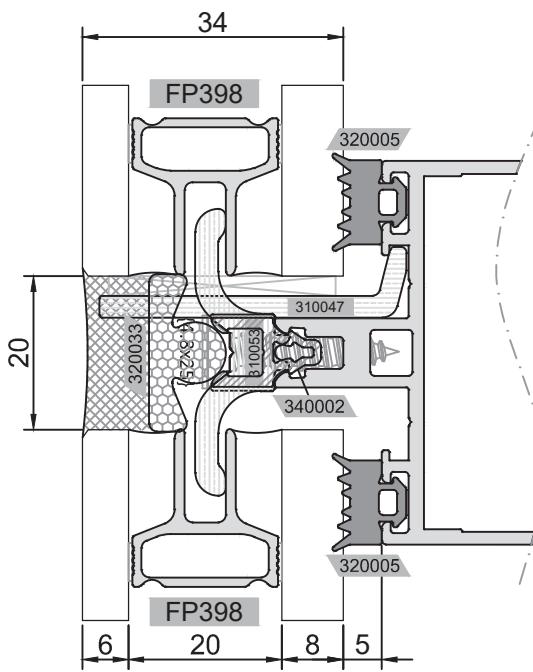
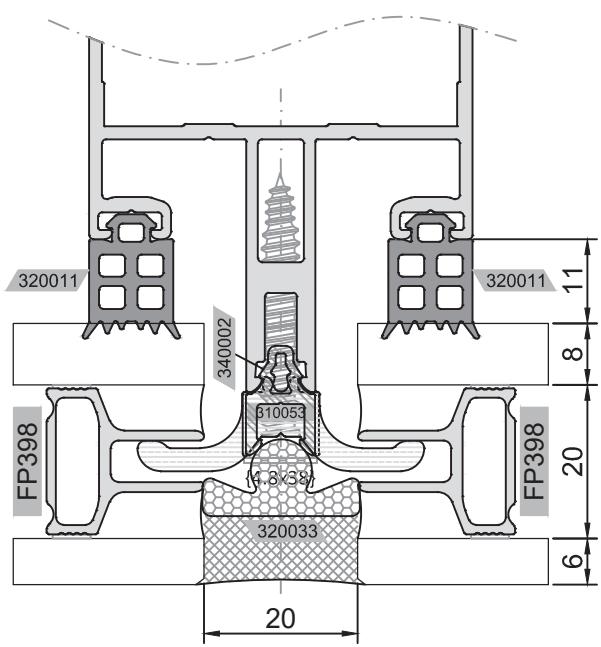
\* 20mm STANDART  
ALÜMİNYUM  
ISICAM ÇITASI  
20mm STANDARD  
ALUMINIUM SPACER

► SİSTEM ALÜMİNYUM® KATALOG İÇERİSİNDEKİ VERİLERDE DÜZELTME VEYA DEĞİŞİKLİK YAPMA HAKKINA SAHİPTİR.  
SİSTEM ALUMINIUM® HAS THE RIGHTS TO MAKE CORRECTION OR MODIFICATION IN THE CATALOGUE DATA.

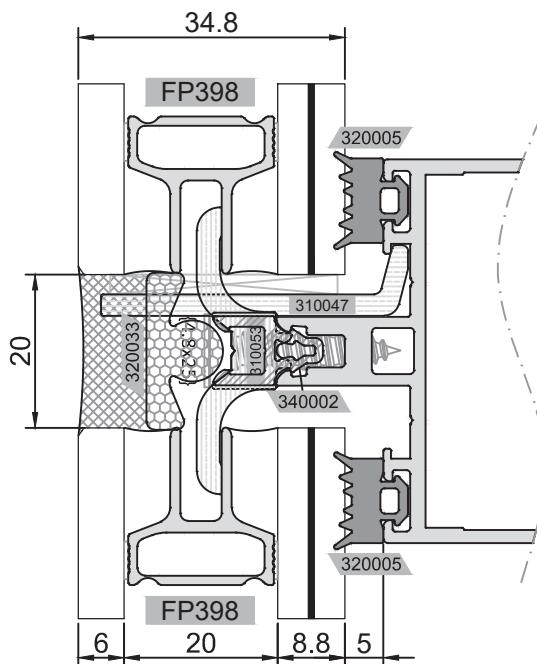
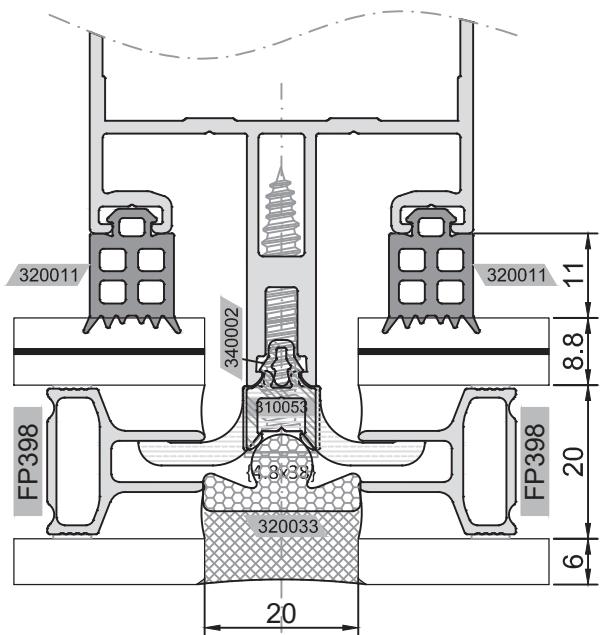
32mm



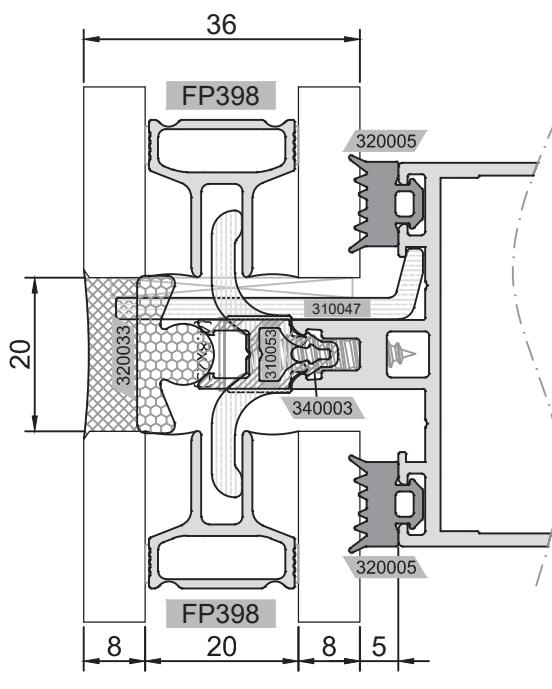
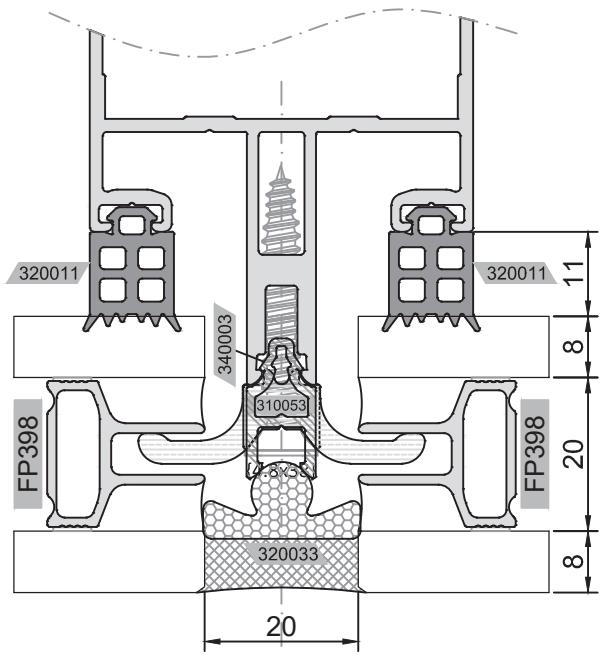
34mm



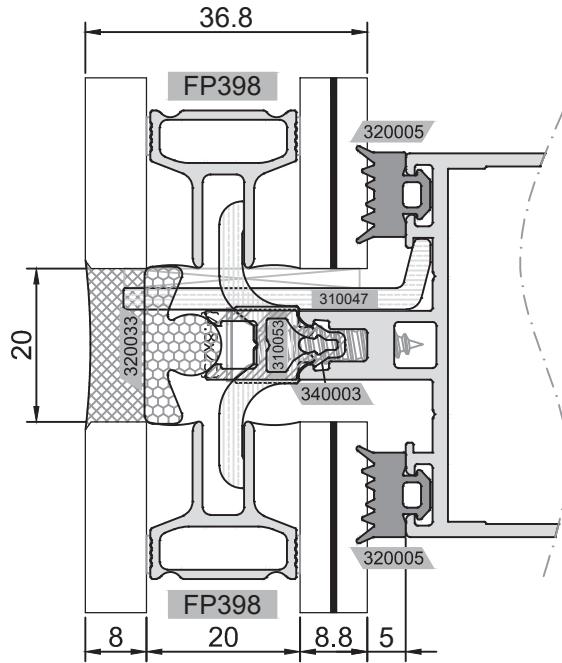
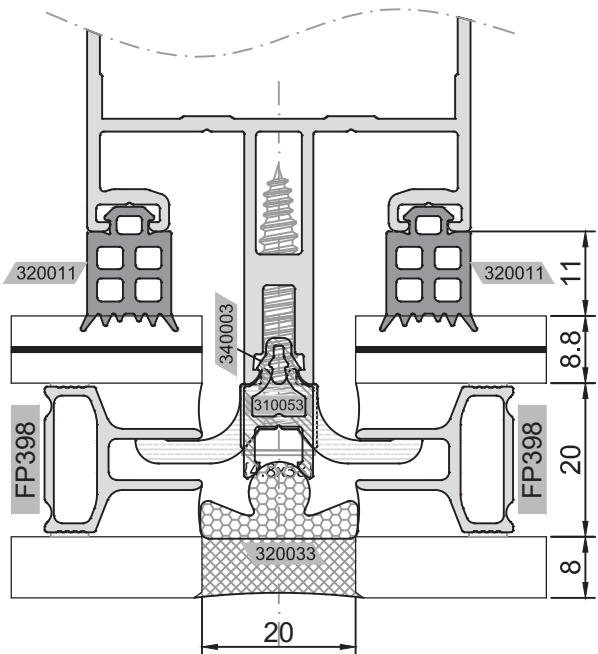
34,76mm



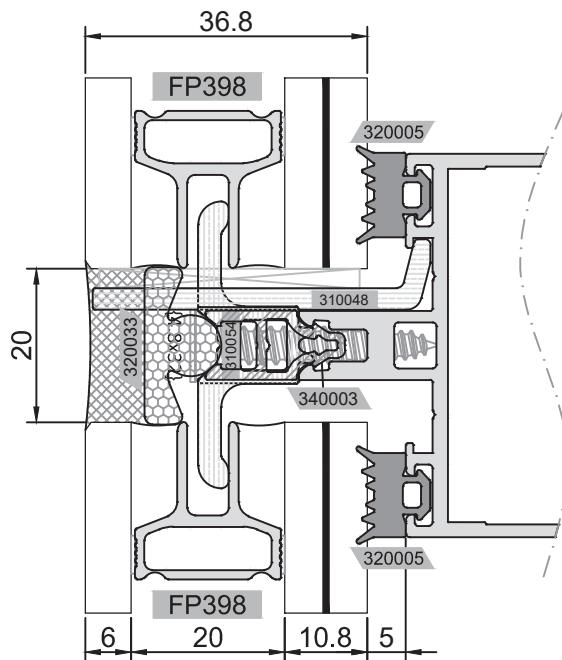
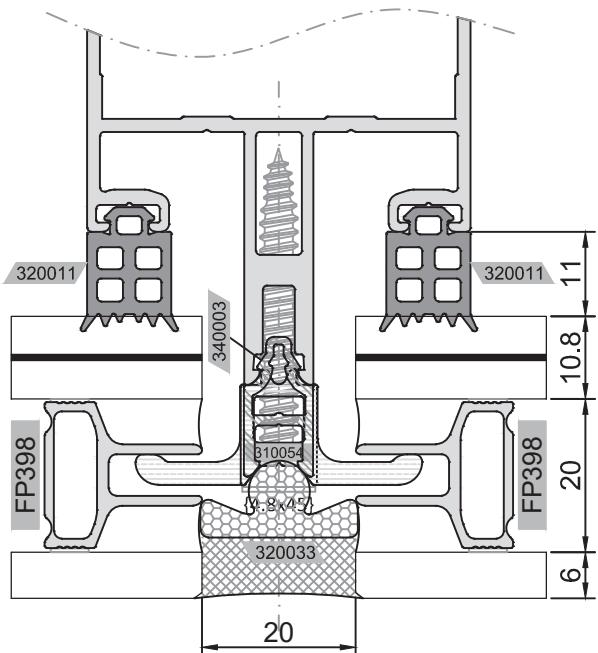
36mm



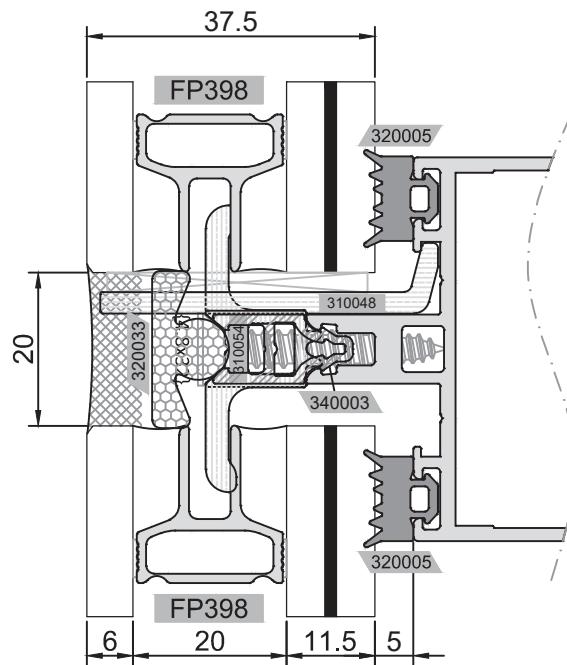
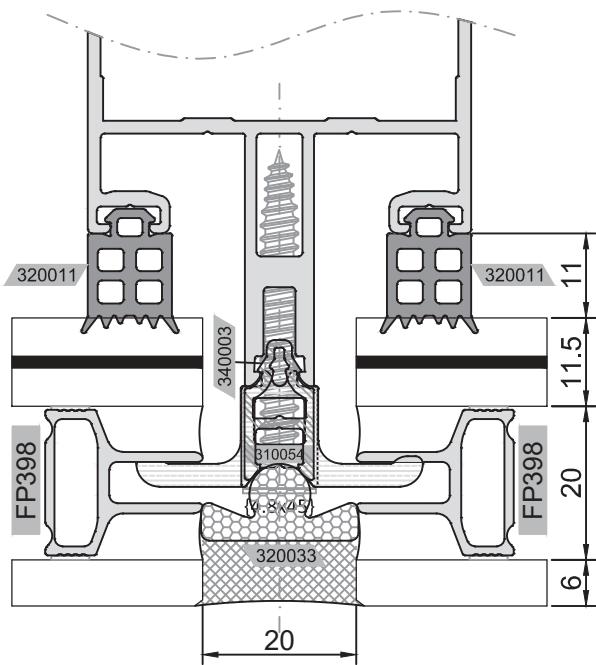
36,76mm



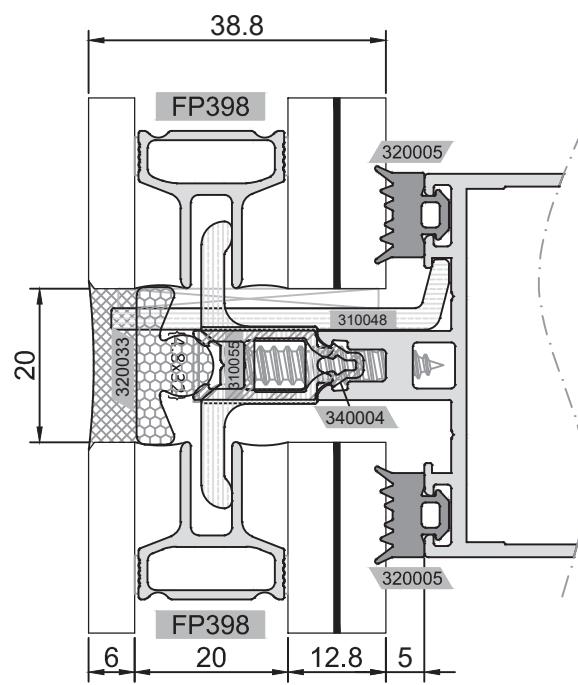
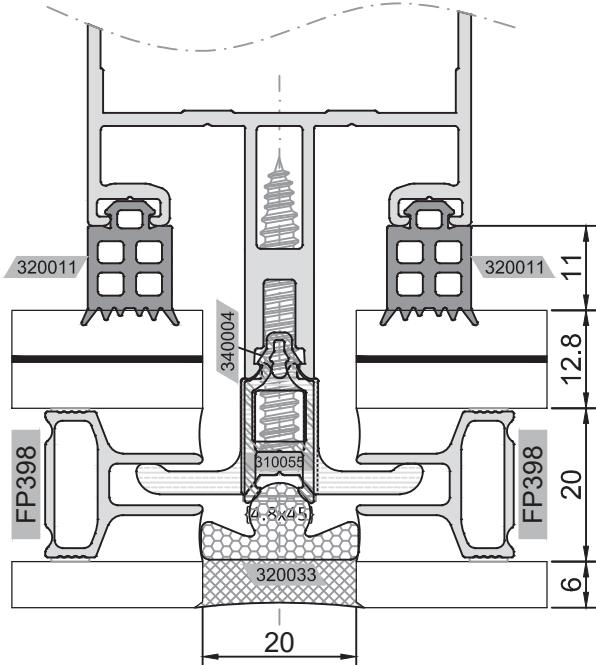
36,76mm



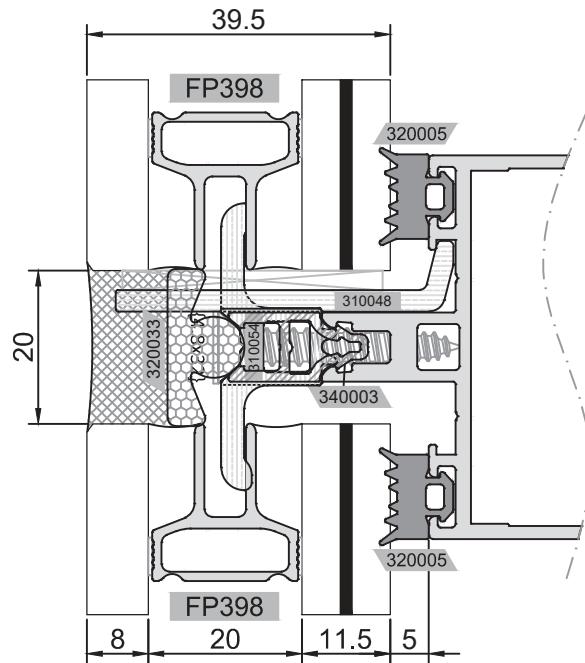
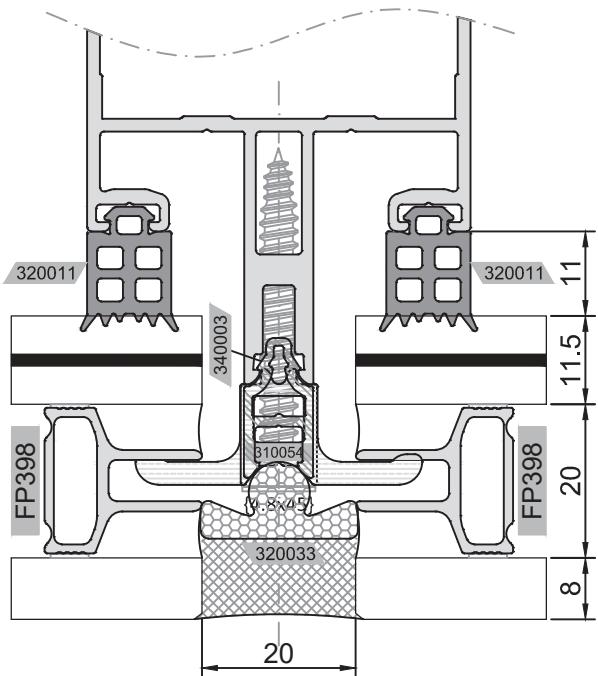
37,52mm



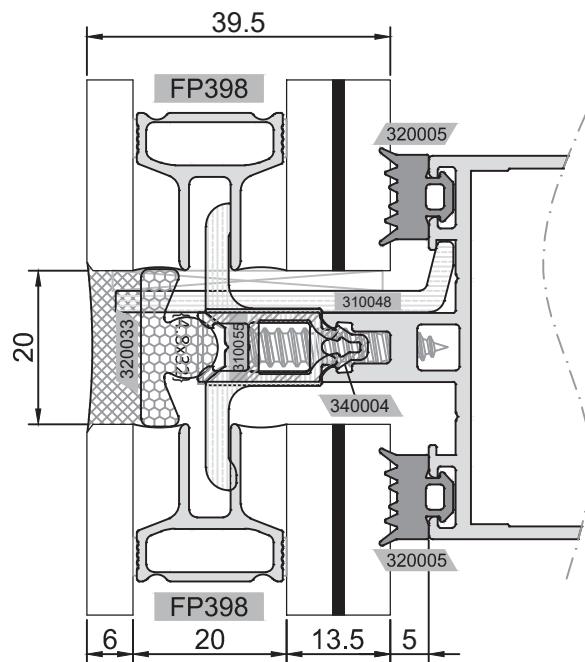
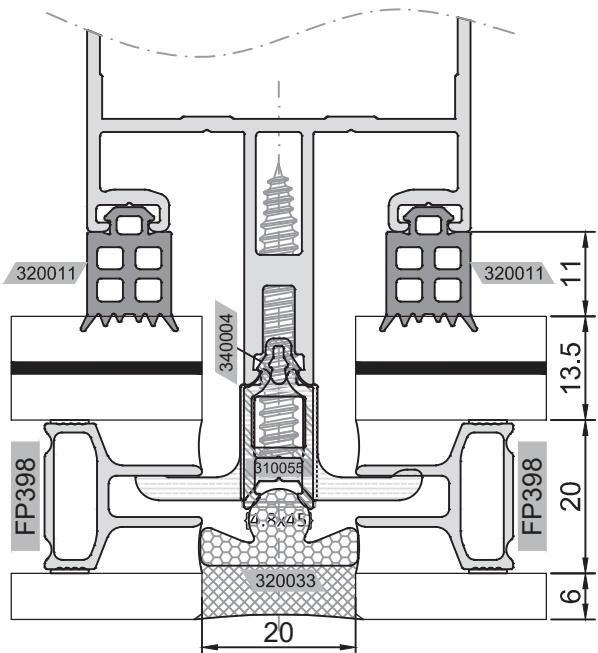
38,76mm



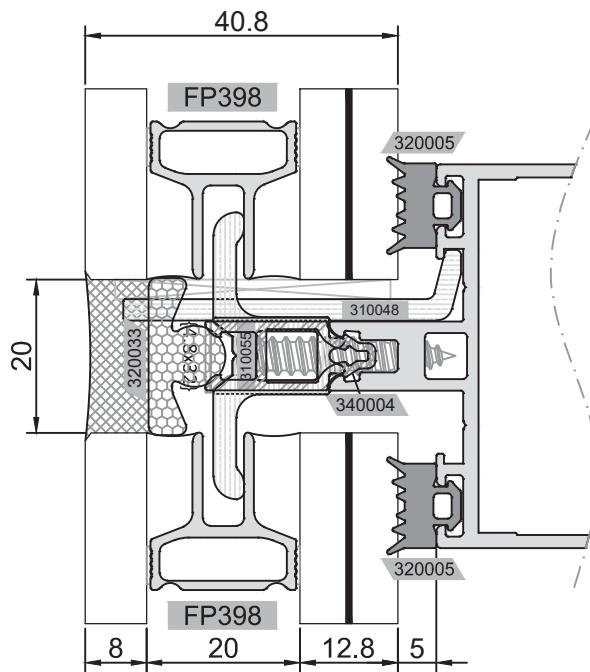
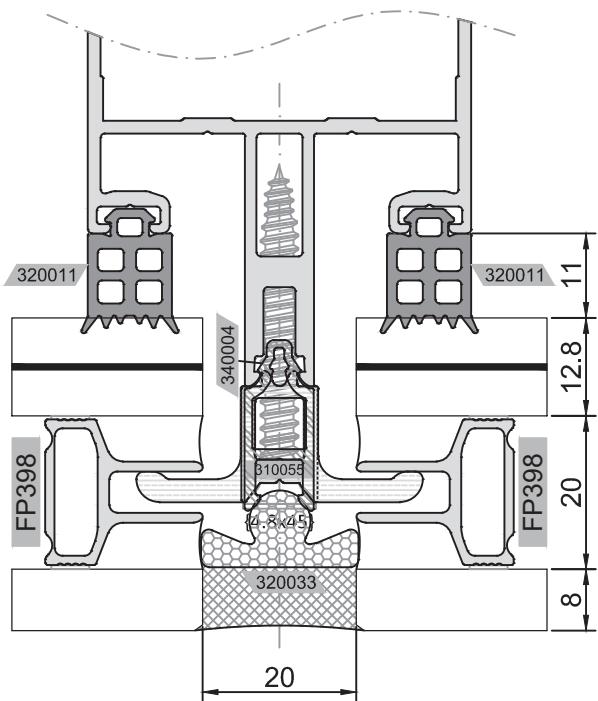
39,52mm



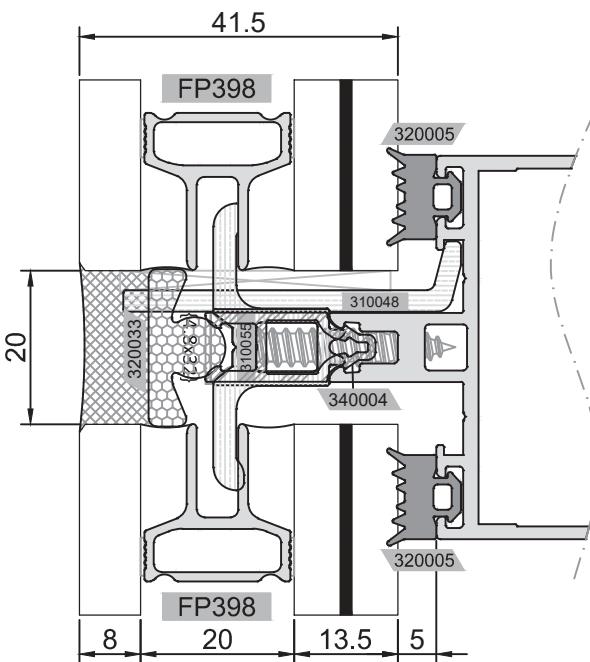
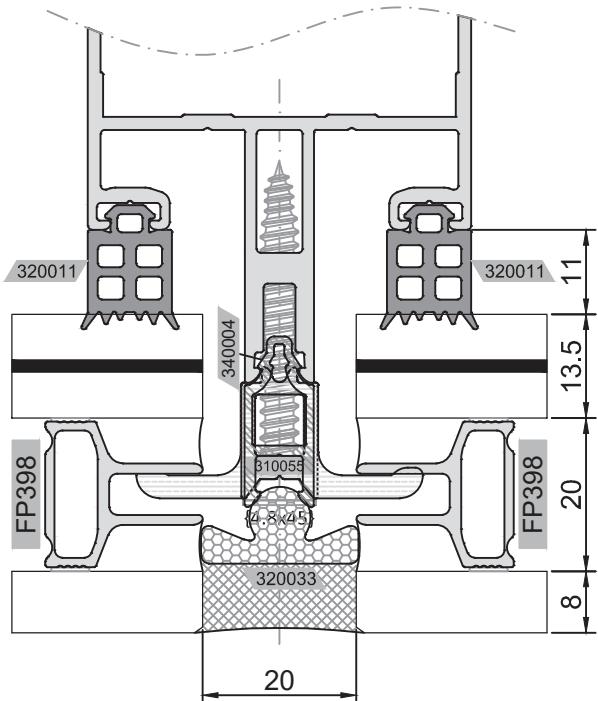
39,52mm



40,76mm



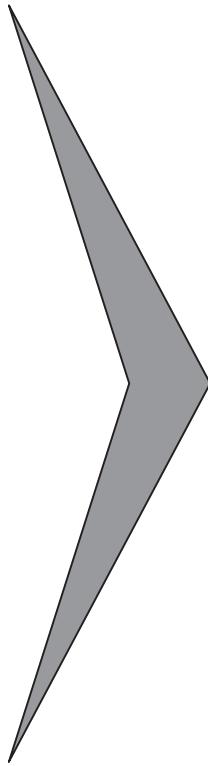
41,52mm



# CAM KALINLIKLARINA GÖRE ENTEGRİ SİSTEM DETAYLARI

---

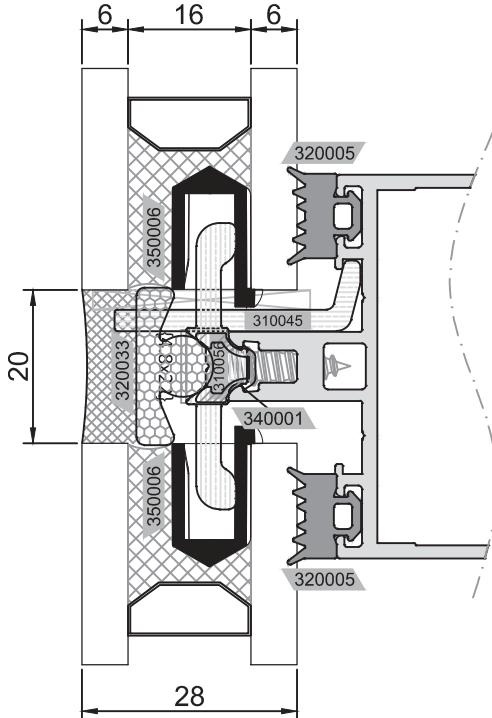
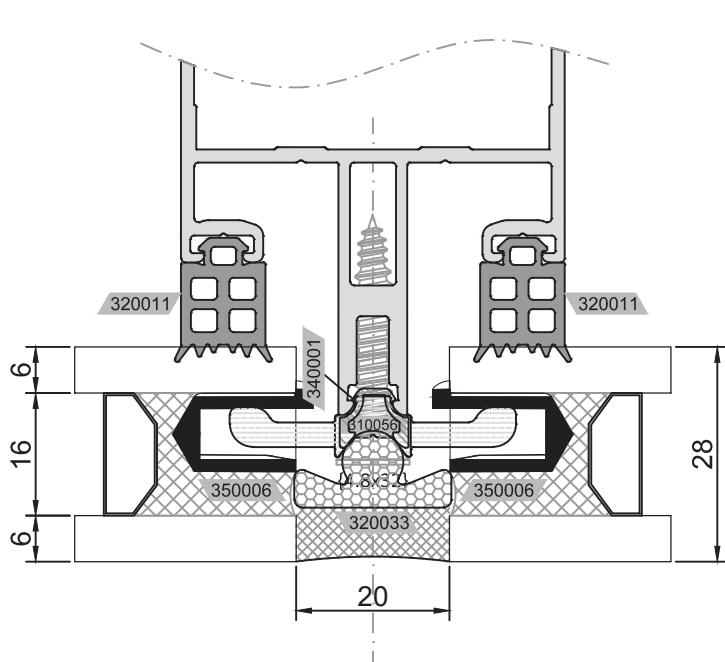
## INTEGRATED CURTAIN WALL DETAILS ACCORDING TO THE GLASS THICKNESSES



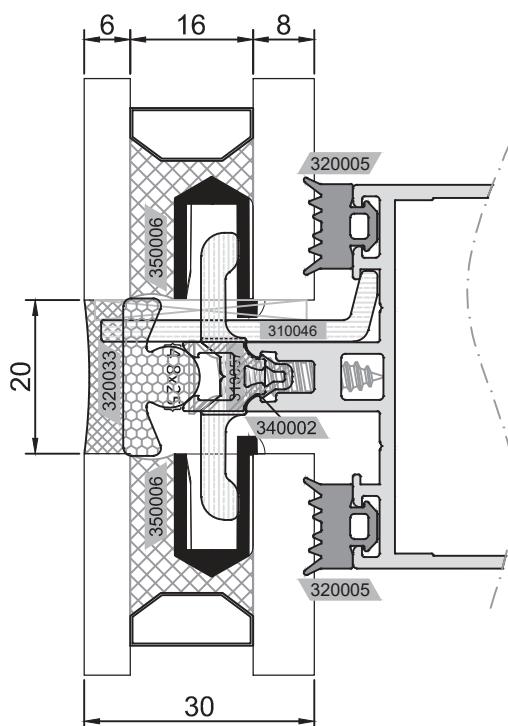
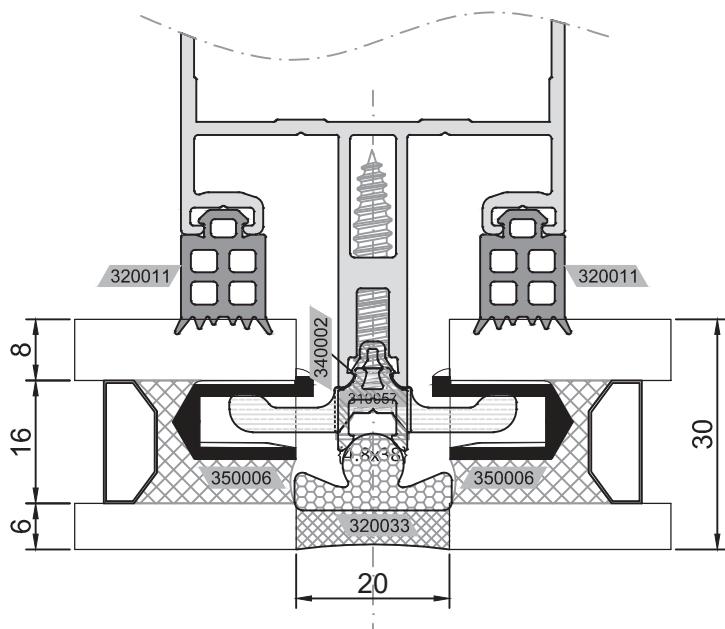
\* 16mm ÖZEL  
SICAK KENAR  
ISICAM ÇITASI  
16mm SPECIAL  
WARM EDGE  
SPACER

► SİSTEM ALÜMİNYUM® KATALOG İÇERİSİNDEKİ VERİLERDE DÜZELTME VEYA DEĞİŞİKLİK YAPMA HAKKINA SAHİPTİR.  
SİSTEM ALUMINIUM® HAS THE RIGHTS TO MAKE CORRECTION OR MODIFICATION IN THE CATALOGUE DATA.

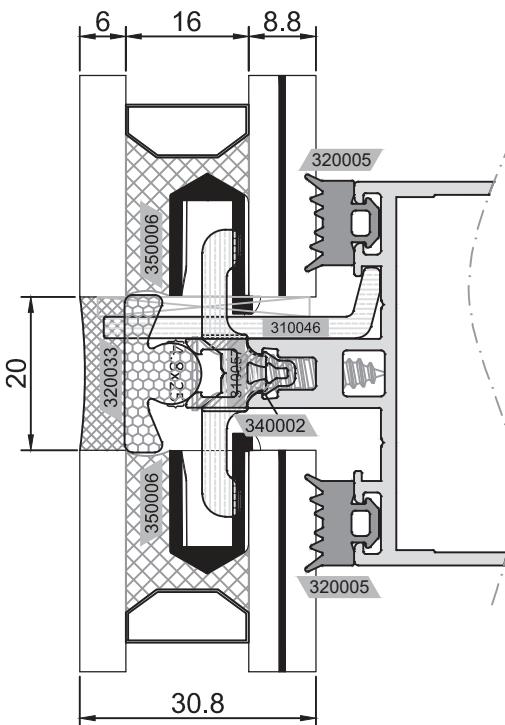
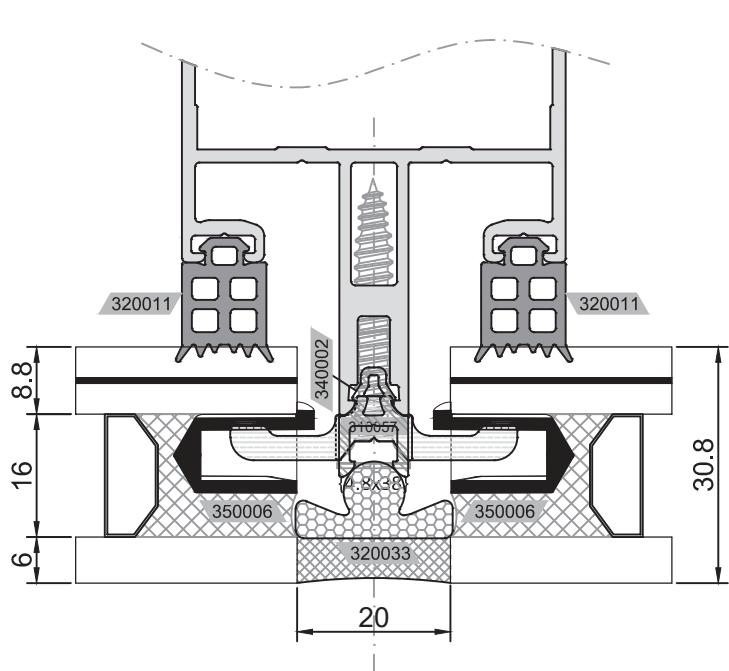
28mm



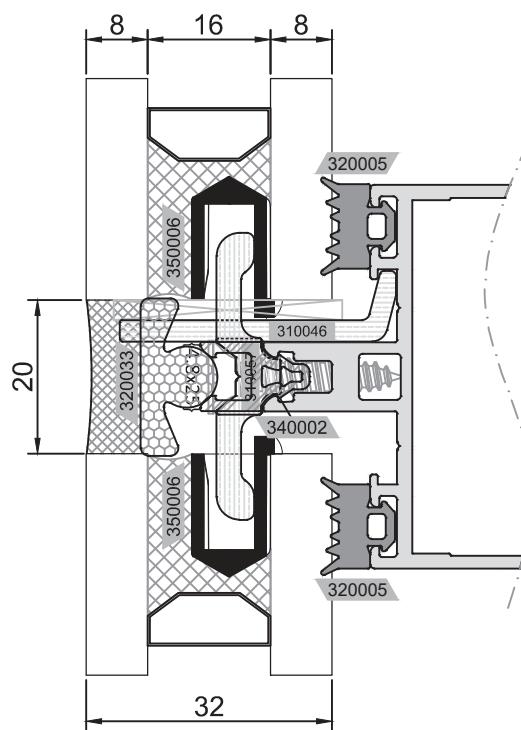
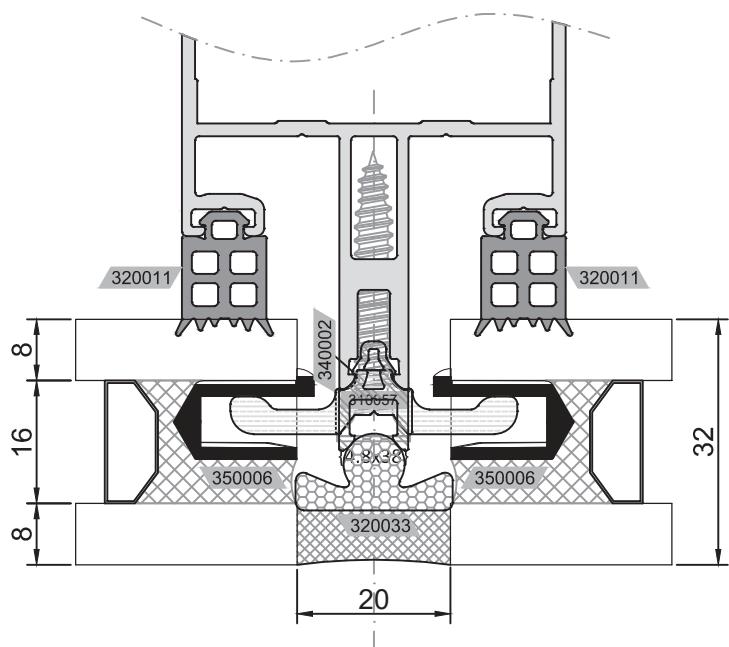
30mm



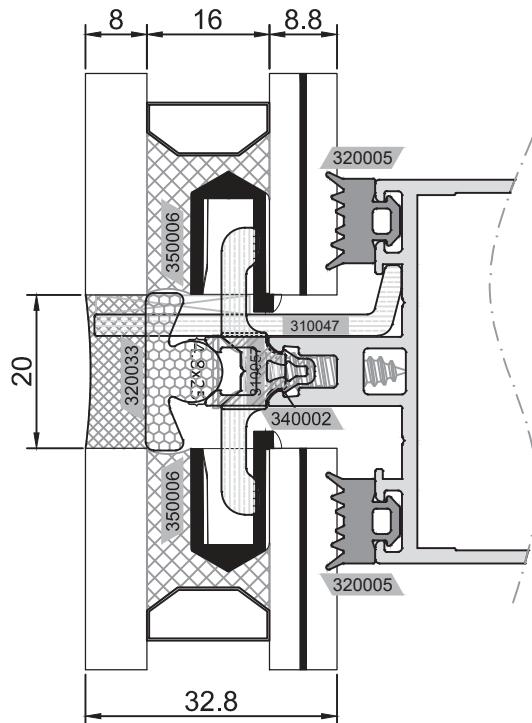
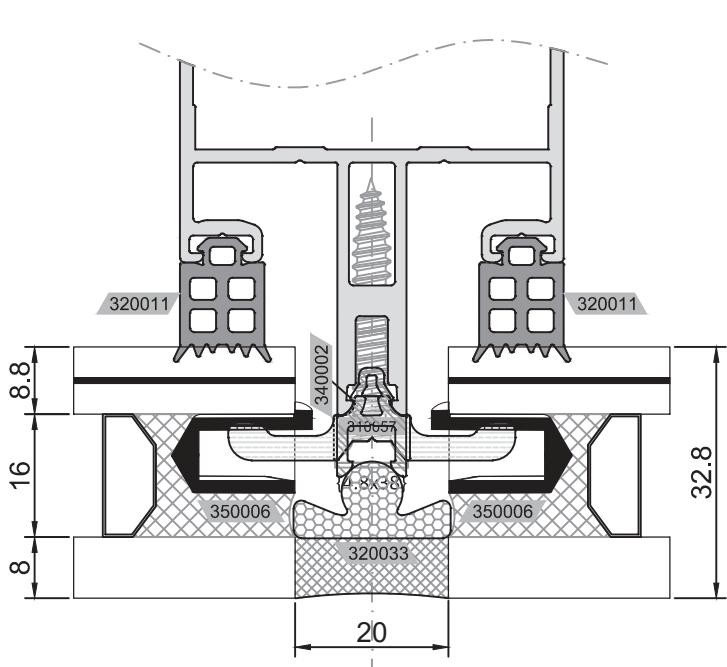
30,76mm



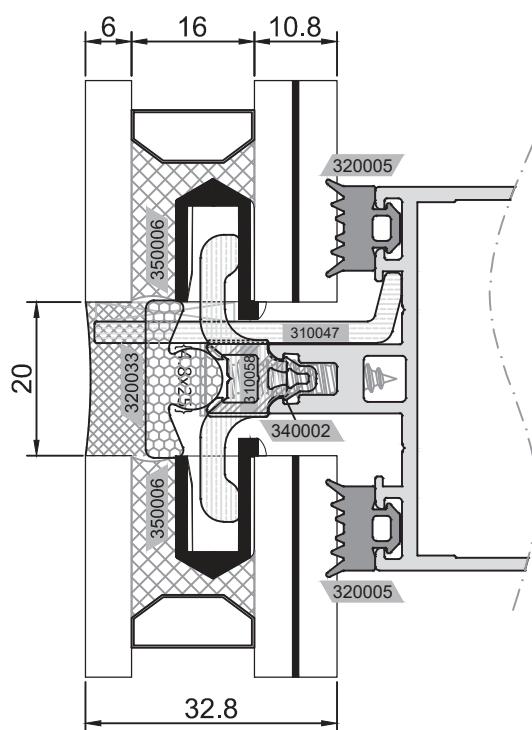
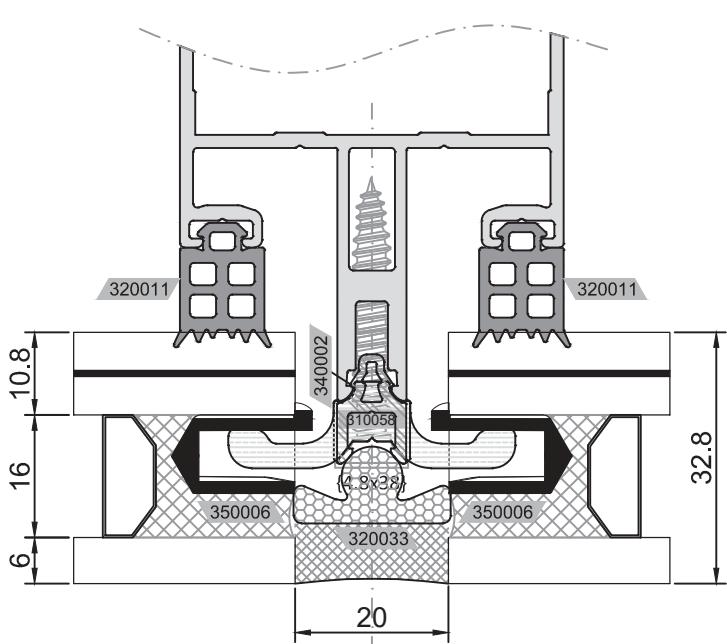
32mm

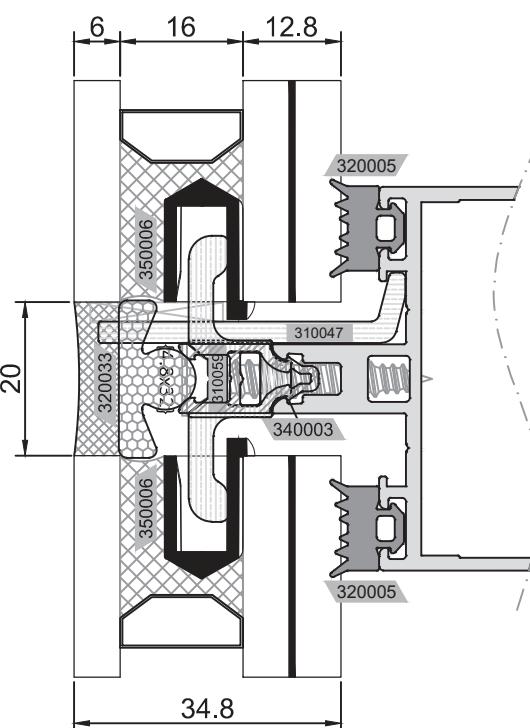
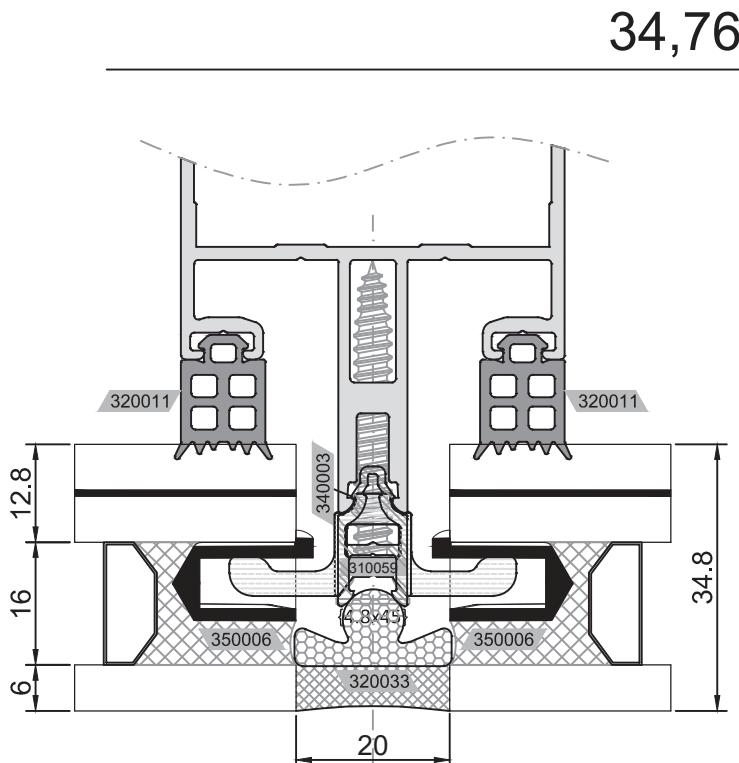
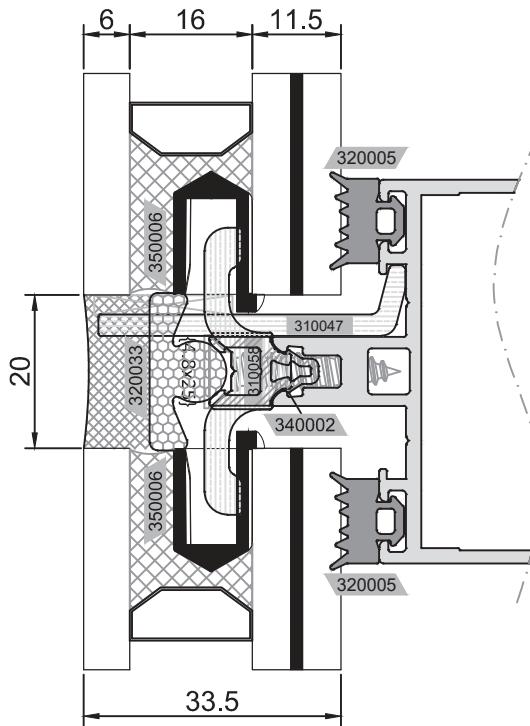
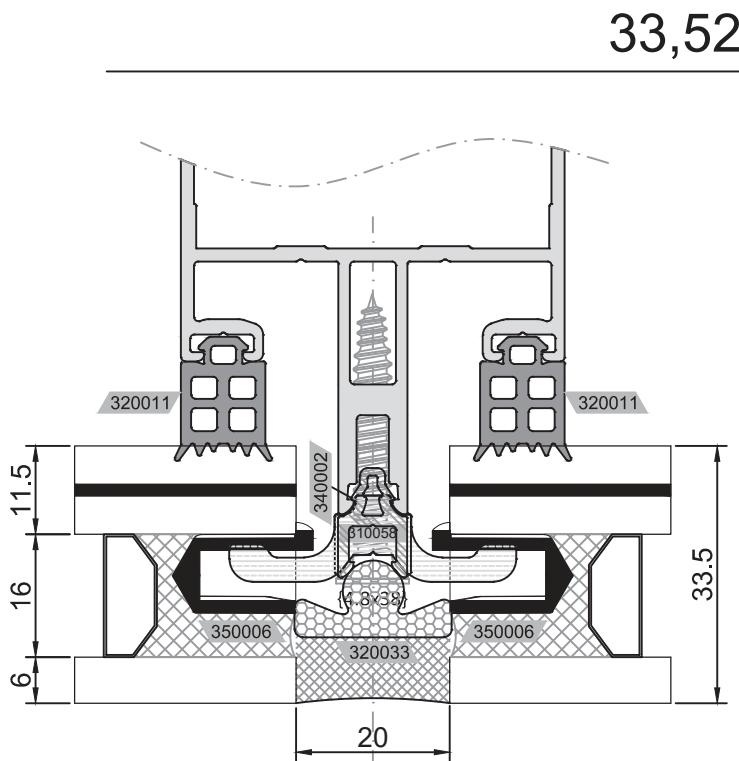


32,76mm

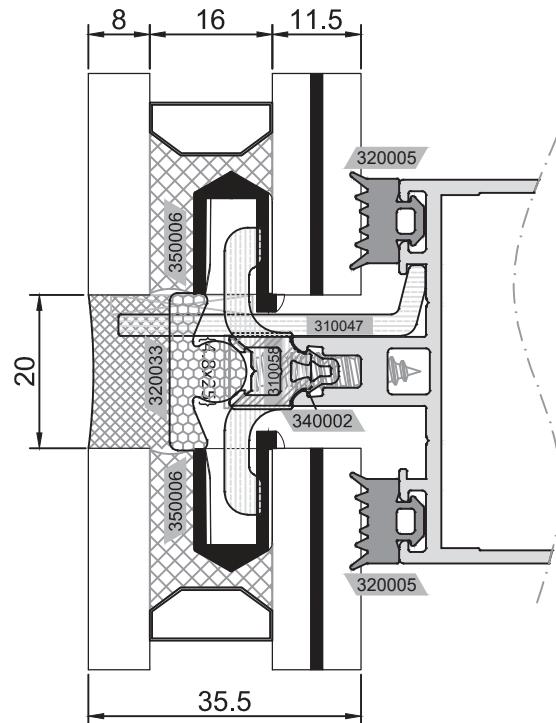
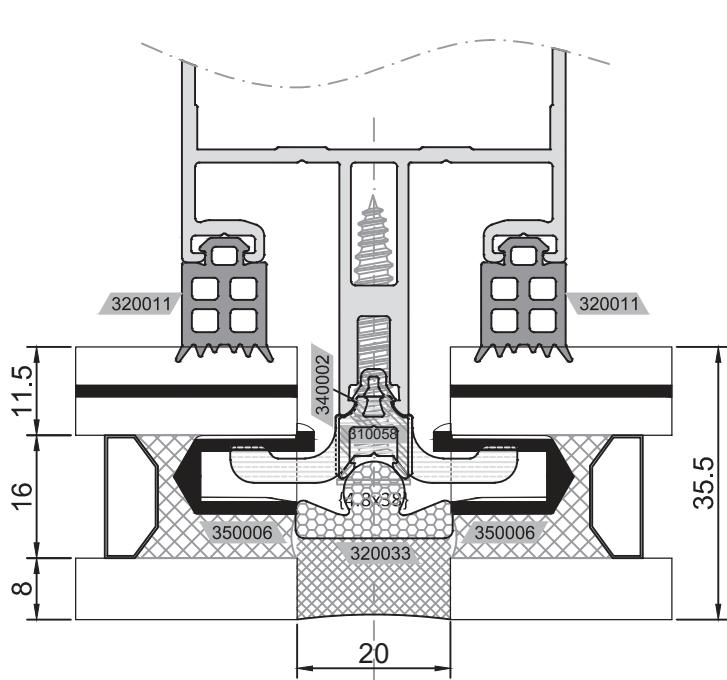


32,76mm

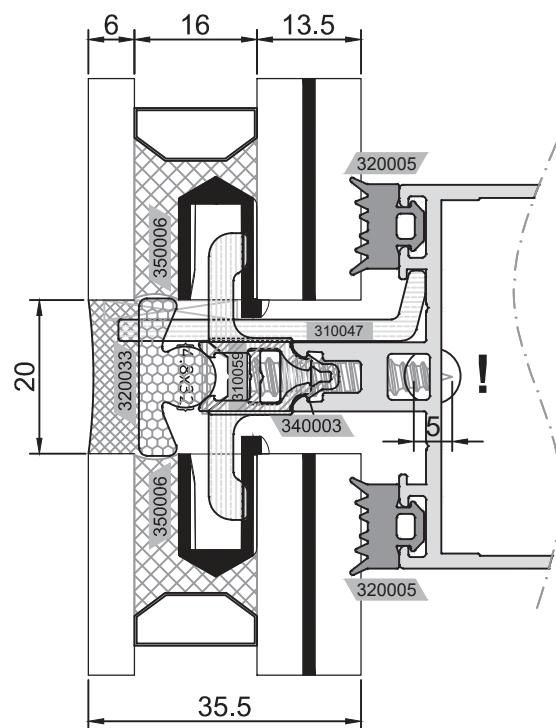
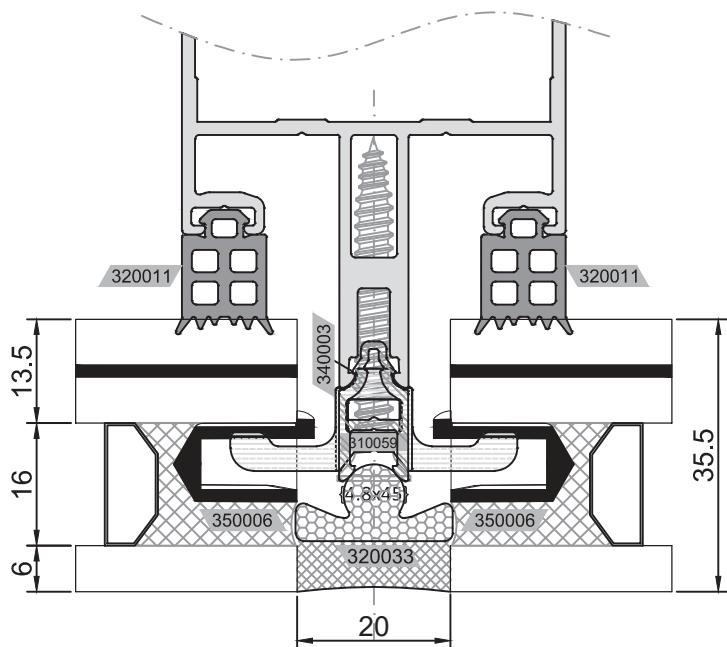




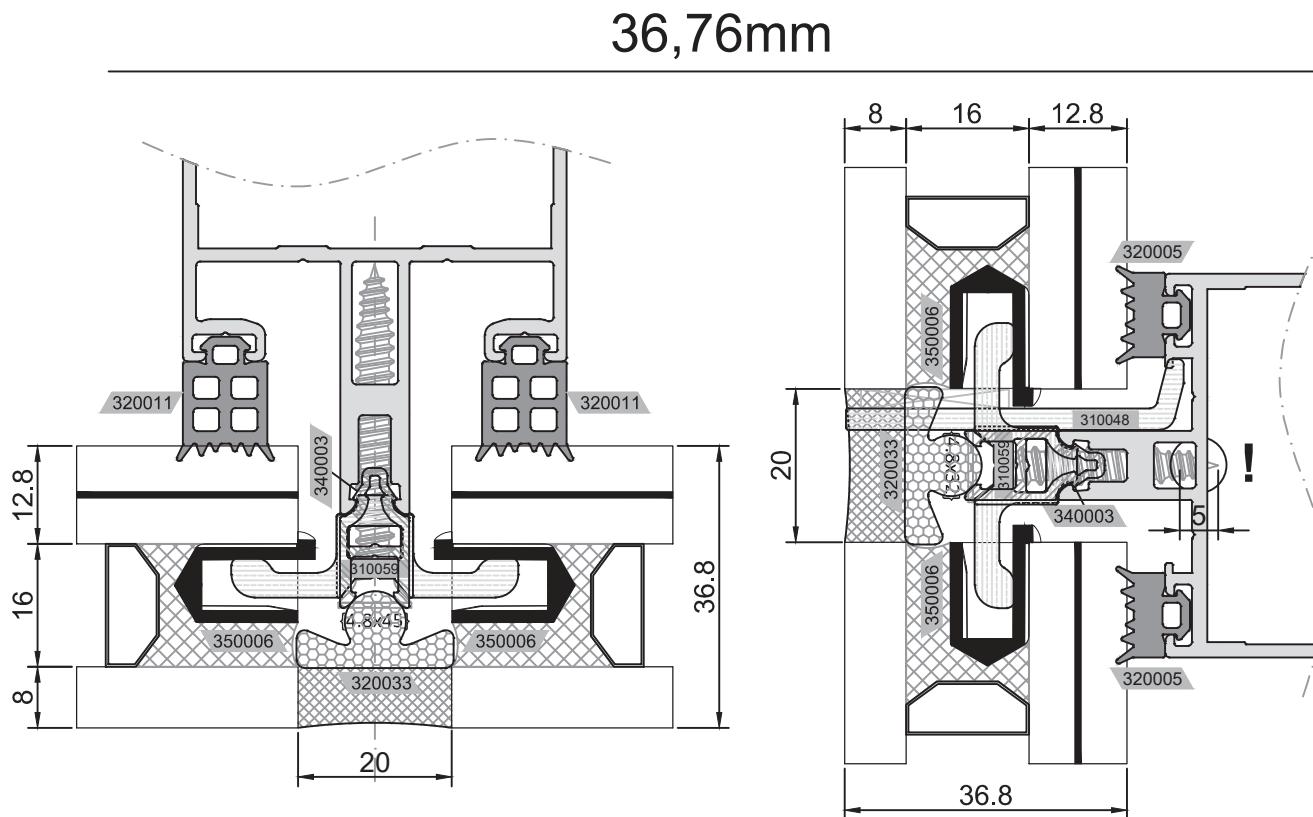
35,52mm



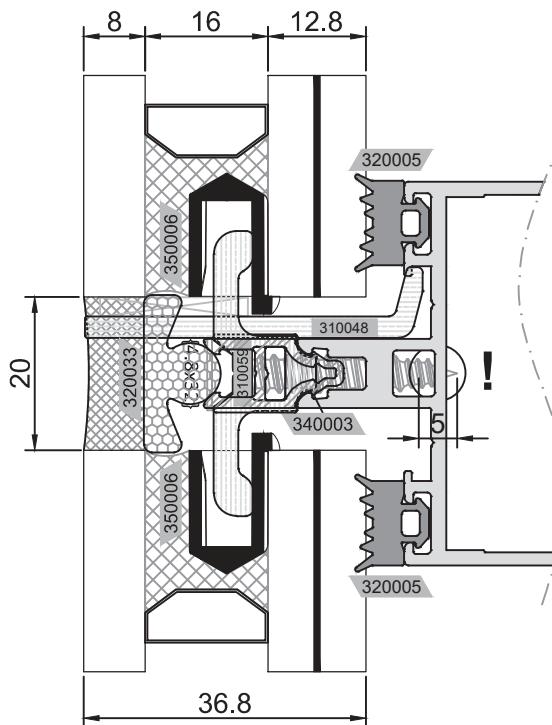
35,52mm



! Kertme / Notching

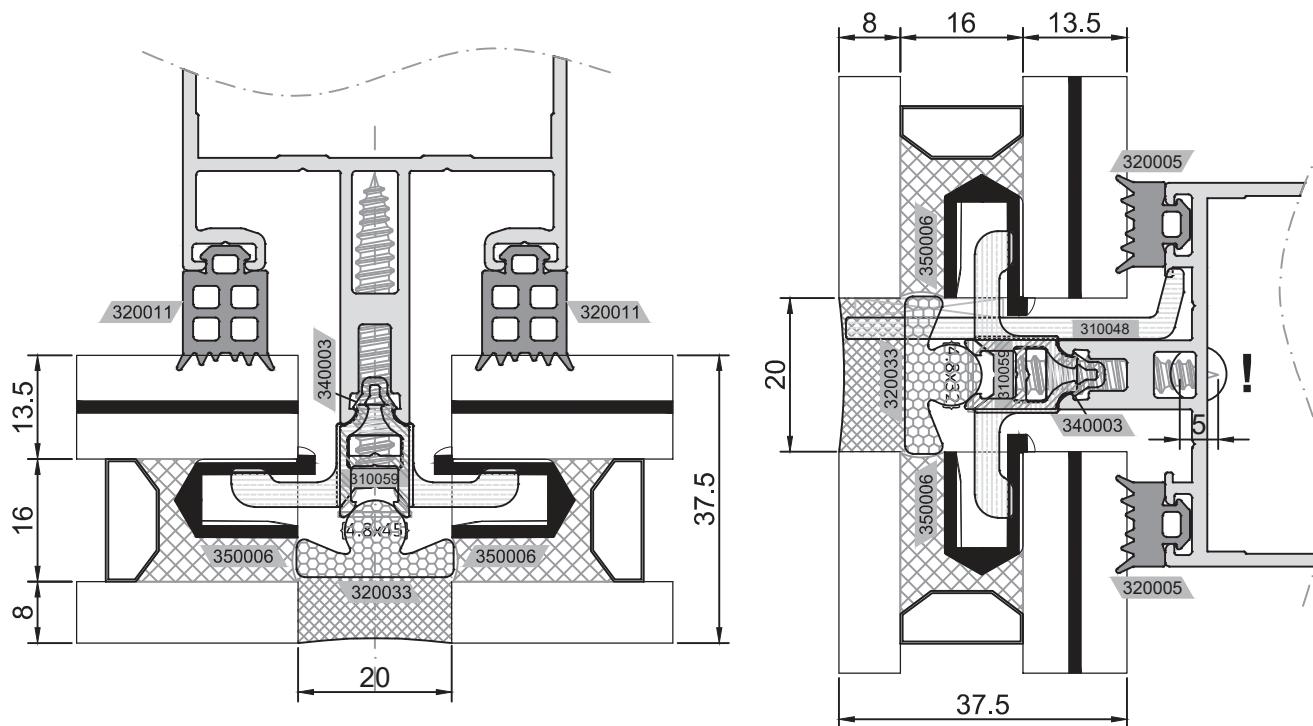


36,76mm



! Kertme / Notching

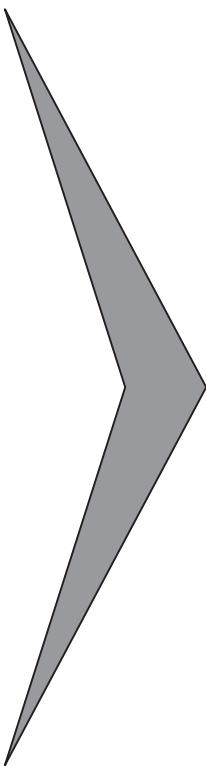
37,52mm



! Kertme / Notching

# AKSESUAR FİHİRİSTİ

## ACCESSORY INDEX



► SİSTEM ALÜMİNYUM® KATALOG İÇERİSİNDEKİ VERİLERDE DÜZELTME VEYA DEĞİŞİKLİK YAPMA HAKKINA SAHİPTİR.  
SİSTEM ALÜMİNYUM® HAS THE RIGHTS TO MAKE CORRECTION OR MODIFICATION IN THE CATALOGUE DATA.

**AKSESUAR FİHRİSTİ / ACCESSORY INDEX**

ÜRÜN KODU PRODUCT CODE	ÜRÜN ADI PRODUCT NAME	SAYFA NO PAGE NO
<b>310001</b>	KÖŞE TAKOZU - 29,4 mm / CORNER CLEAT	<b>151</b>
<b>310002</b>	KÖŞE TAKOZU - 11 mm / CORNER CLEAT	<b>151</b>
<b>310003</b>	KÖŞE TAKOZU - 13 mm / CORNER CLEAT	<b>151</b>
<b>310004</b>	KÖŞE TAKOZU - 44,9 mm / CORNER CLEAT	<b>151</b>
<b>310005</b>	KÖŞE TAKOZU - 21 mm / CORNER CLEAT	<b>151</b>
<b>310006</b>	KÖŞE TAKOZU - 17 mm / CORNER CLEAT	<b>151</b>
<b>310007</b>	KÖŞE TAKOZU - 23 mm / CORNER CLEAT	<b>151</b>
<b>310008</b>	KÖŞE TAKOZU - 19 mm / CORNER CLEAT	<b>151</b>
<b>310009</b>	KÖŞE TAKOZU - 24,7 mm / CORNER CLEAT	<b>152</b>
<b>310010</b>	KÖŞE TAKOZU - 7 mm / CORNER CLEAT	<b>152</b>
<b>310011</b>	KÖŞE TAKOZU - 26,9 mm / CORNER CLEAT	<b>152</b>
<b>310012</b>	KÖŞE TAKOZU - 17,5 mm / CORNER CLEAT	<b>152</b>
<b>310013</b>	KÖŞE TAKOZU - 26 mm / CORNER CLEAT	<b>152</b>
<b>310014</b>	KÖŞE TAKOZU - 9 mm / CORNER CLEAT	<b>152</b>
<b>310015</b>	KÖŞE TAKOZU - 24,4 mm / CORNER CLEAT	<b>152</b>
<b>310016</b>	KÖŞE TAKOZU - 39,6 mm / CORNER CLEAT	<b>152</b>
<b>310017</b>	DİLATASYON BAĞLANTISI - 17,5 mm / DILATATION CONNECTION	<b>162</b>
<b>310018</b>	DİLATASYON BAĞLANTISI - 32,5 mm / DILATATION CONNECTION	<b>162</b>
<b>310019</b>	DİLATASYON BAĞLANTISI - 52,5 mm / DILATATION CONNECTION	<b>162</b>
<b>310020</b>	DİLATASYON BAĞLANTISI - 72,5 mm / DILATATION CONNECTION	<b>162</b>
<b>310021</b>	DİLATASYON BAĞLANTISI - 92,5 mm / DILATATION CONNECTION	<b>162</b>
<b>310022</b>	DİLATASYON BAĞLANTISI - 91,5 mm / DILATATION CONNECTION	<b>162</b>
<b>310023</b>	DİLATASYON BAĞLANTISI - 112 mm / DILATATION CONNECTION	<b>162</b>
<b>310024</b>	DİLATASYON BAĞLANTISI - 110 mm / DILATATION CONNECTION	<b>162</b>
<b>310025</b>	DİLATASYON BAĞLANTISI - 132 mm / DILATATION CONNECTION	<b>162</b>
<b>310026</b>	DİLATASYON BAĞLANTISI - 129,5 mm / DILATATION CONNECTION	<b>162</b>
<b>310027</b>	DİLATASYON BAĞLANTISI - 151,5 mm / DILATATION CONNECTION	<b>162</b>
<b>310028</b>	DİLATASYON BAĞLANTISI - 149 mm / DILATATION CONNECTION	<b>162</b>
<b>310029</b>	DİLATASYON BAĞLANTISI - 171,5 mm / DILATATION CONNECTION	<b>162</b>
<b>310030</b>	DİLATASYON BAĞLANTISI - 169 mm / DILATATION CONNECTION	<b>162</b>
<b>310031</b>	DİLATASYON BAĞLANTISI - 190 mm / DILATATION CONNECTION	<b>162</b>
<b>310032</b>	DİLATASYON BAĞLANTISI - 187 mm / DILATATION CONNECTION	<b>162</b>
<b>310033</b>	U BAĞLANTI - 12 mm / U CONNECTION	<b>163</b>
<b>310034</b>	U BAĞLANTI - 32 mm / U CONNECTION	<b>163</b>
<b>310035</b>	U BAĞLANTI - 42 mm / U CONNECTION	<b>163</b>
<b>310036</b>	U BAĞLANTI - 52 mm / U CONNECTION	<b>163</b>
<b>310037</b>	U BAĞLANTI - 59,4 mm / U CONNECTION	<b>163</b>

## AKSESUAR FİHRİSTİ / ACCESSORY INDEX

ÜRÜN KODU PRODUCT CODE	ÜRÜN ADI PRODUCT NAME	SAYFA NO PAGE NO
<b>310037</b>	U BAĞLANTI - 59,4 mm / U CONNECTION	163
<b>310038</b>	U BAĞLANTI - 79,4 mm / U CONNECTION	163
<b>310039</b>	U BAĞLANTI - 99,4 mm / U CONNECTION	163
<b>310040</b>	U BAĞLANTI - 119,4 mm / U CONNECTION	163
<b>310041</b>	U BAĞLANTI - 139,4 mm / U CONNECTION	163
<b>310042</b>	U BAĞLANTI - 159,4 mm / U CONNECTION	163
<b>310043</b>	U BAĞLANTI - 178 mm / U CONNECTION	163
<b>310044</b>	U BAĞLANTI - 210 mm / U CONNECTION	163
<b>310045</b>	CAM ALTI DESTEK PARÇASI - 32 mm / GLAZING SUPPORT	167
<b>310046</b>	CAM ALTI DESTEK PARÇASI - 36 mm / GLAZING SUPPORT	167
<b>310047</b>	CAM ALTI DESTEK PARÇASI - 40 mm / GLAZING SUPPORT	167
<b>310048</b>	CAM ALTI DESTEK PARÇASI - 44 mm / GLAZING SUPPORT	167
<b>310049</b>	CAM ALTI DESTEK PARÇASI - 46 mm / GLAZING SUPPORT	167
<b>310050</b>	KANAT İÇİN CAM ALTI DESTEK PARÇASI - 9,5 mm / GLAZING SUPPORT FOR VENT	168
<b>310051</b>	KANAT İÇİN CAM ALTI DESTEK PARÇASI - 19,5 mm / GLAZING SUPPORT FOR VENT	168
<b>310052</b>	CAM ARASI KİLİTLEME PARÇASI - 4,3 mm / FOURESIDE LOCKING PIECE	169
<b>310053</b>	CAM ARASI KİLİTLEME PARÇASI - 6,3 mm / FOURESIDE LOCKING PIECE	169
<b>310054</b>	CAM ARASI KİLİTLEME PARÇASI - 9,1 mm / FOURESIDE LOCKING PIECE	169
<b>310055</b>	CAM ARASI KİLİTLEME PARÇASI - 11,1 mm / FOURESIDE LOCKING PIECE	169
<b>310056</b>	CAM ARASI KİLİTLEME PARÇASI - 1,1 mm / FOURESIDE LOCKING PIECE	171
<b>310057</b>	CAM ARASI KİLİTLEME PARÇASI - 1 mm / FOURESIDE LOCKING PIECE	171
<b>310058</b>	CAM ARASI KİLİTLEME PARÇASI - 3,6 mm / FOURESIDE LOCKING PIECE	171
<b>310059</b>	CAM ARASI KİLİTLEME PARÇASI - 5,6 mm / FOURESIDE LOCKING PIECE	171
<b>310060</b>	GÜNEŞ KIRICI TAŞIYICI APARATI / CARRIER APPARATUS FOR SUNBREAKER	177
<b>320002</b>	İÇ BİNİ FİTİLİ - 2 mm / INNER STEP GASKET	146
<b>320003</b>	İÇ BİNİ FİTİLİ - 3 mm / INNER STEP GASKET	146
<b>320004</b>	İÇ BİNİ FİTİLİ - 4 mm / INNER STEP GASKET	146
<b>320005</b>	İÇ BİNİ FİTİLİ - 5 mm / INNER STEP GASKET	146
<b>320006</b>	İÇ BİNİ FİTİLİ - 6 mm / INNER STEP GASKET	146
<b>320007</b>	İÇ BİNİ FİTİLİ - 7 mm / INNER STEP GASKET	146
<b>320008</b>	İÇ BİNİ FİTİLİ - 8 mm / INNER STEP GASKET	146
<b>320009</b>	İÇ BİNİ FİTİLİ - 9 mm / INNER STEP GASKET	146
<b>320010</b>	İÇ BİNİ FİTİLİ - 10 mm / INNER STEP GASKET	146
<b>320011</b>	İÇ BİNİ FİTİLİ - 11 mm / INNER STEP GASKET	147
<b>320012</b>	İÇ BİNİ FİTİLİ - 12 mm / INNER STEP GASKET	147
<b>320013</b>	İÇ BİNİ FİTİLİ - 13 mm / INNER STEP GASKET	147
<b>320014</b>	İÇ BİNİ FİTİLİ - 14 mm / INNER STEP GASKET	147

## AKSESUAR FİHRİSTİ / ACCESSORY INDEX

ÜRÜN KODU PRODUCT CODE	ÜRÜN ADI PRODUCT NAME	SAYFA NO PAGE NO
<b>320015</b>	İÇ BİNİ FİTİLİ - 15 mm / INNER STEP GASKET	<b>147</b>
<b>320016</b>	DIŞ BİNİ FİTİLİ - 4 mm / OUTER STEP GASKET	<b>147</b>
<b>320017</b>	AÇILI DIŞ CAM FİTİLİ / ANGULAR OUTER STEP GASKET	<b>147</b>
<b>320018</b>	YEKPARE DIŞ BİNİ FİTİLİ / ONE PIECE STEP GASKET	<b>147</b>
<b>320019</b>	KAMA FİTİLİ - 3 mm / GLAZING SUPPORT GASKET	<b>147</b>
<b>320020</b>	KAMA FİTİLİ - 4 mm / GLAZING SUPPORT GASKET	<b>148</b>
<b>320021</b>	KAMA FİTİLİ - 5 mm / GLAZING SUPPORT GASKET	<b>148</b>
<b>320022</b>	KAMA FİTİLİ - 6 mm / GLAZING SUPPORT GASKET	<b>148</b>
<b>320023</b>	KANAT DESTEK FİTİLİ / SUPPORT GASKET FOR VENT	<b>148</b>
<b>320024</b>	KANAT İÇ BİNİ FİTİLİ / GLAZING SUPPORT FOR VENT	<b>148</b>
<b>320025</b>	TAŞIYICI ÖN FİTİL - 3 mm / MULLION FRONT GASKET	<b>148</b>
<b>320026</b>	TAŞIYICI ÖN FİTİL - 4 mm / MULLION FRONT GASKET	<b>148</b>
<b>320027</b>	TAŞIYICI ÖN FİTİL - 5 mm / MULLION FRONT GASKET	<b>148</b>
<b>320028</b>	TAŞIYICI ÖN FİTİL - 7 mm / MULLION FRONT GASKET	<b>148</b>
<b>320029</b>	KANAT ÇARŞAF FİTİLİ - 1 / SHEET GASKET FOR VENT	<b>149</b>
<b>320030</b>	KANAT ÇARŞAF FİTİLİ - 2 / SHEET GASKET FOR VENT	<b>149</b>
<b>320031</b>	KANAT ÇARŞAF FİTİLİ - 3 / SHEET GASKET FOR VENT	<b>149</b>
<b>320032</b>	KANAT ÇARŞAF FİTİLİ - 4 / SHEET GASKET FOR VENT	<b>149</b>
<b>320033</b>	POLİETİLEN DERZ KAPATMA FİTİLİ / POLYETHYLENE SEAM GASKET	<b>149</b>
<b>320034</b>	İÇ MEKAN DERZ KAPATMA FİTİLİ / INSIDE SEAM GASKET	<b>149</b>
<b>320035</b>	SİLİKON DERZ KAPATMA FİTİLİ / SILICONE SEAM GASKET	<b>149</b>
<b>330001</b>	VULKANİZE KÖŞE PARÇASI - 320005 & 320011 / VULCANISED CORNER PIECE	<b>173</b>
<b>330002</b>	VULKANİZE KÖŞE PARÇASI - 320023 / VULCANISED CORNER PIECE	<b>174</b>
<b>330003</b>	VULKANİZE KÖŞE PARÇASI - 320024 / VULCANISED CORNER PIECE	<b>174</b>
<b>330004</b>	YATAY KAYIT CONTASI - 20 mm / TRANSOM CONNECTION PLUGS	<b>164</b>
<b>330005</b>	YATAY KAYIT CONTASI - 40 mm / TRANSOM CONNECTION PLUGS	<b>164</b>
<b>330006</b>	YATAY KAYIT CONTASI - 60 mm / TRANSOM CONNECTION PLUGS	<b>164</b>
<b>330007</b>	YATAY KAYIT CONTASI - 80 mm / TRANSOM CONNECTION PLUGS	<b>164</b>
<b>330008</b>	YATAY KAYIT CONTASI - 100 mm / TRANSOM CONNECTION PLUGS	<b>164</b>
<b>330009</b>	YATAY KAYIT CONTASI - 120 mm / TRANSOM CONNECTION PLUGS	<b>164</b>
<b>330010</b>	YATAY KAYIT CONTASI - 140 mm / TRANSOM CONNECTION PLUGS	<b>164</b>
<b>330011</b>	YATAY KAYIT CONTASI - 160 mm / TRANSOM CONNECTION PLUGS	<b>164</b>
<b>330012</b>	YATAY KAYIT CONTASI - 180 mm / TRANSOM CONNECTION PLUGS	<b>164</b>
<b>330013</b>	YATAY KAYIT CONTASI - 200 mm / TRANSOM CONNECTION PLUGS	<b>164</b>
<b>330014</b>	YATAY KAYIT CONTASI - 220 mm / TRANSOM CONNECTION PLUGS	<b>164</b>
<b>340001</b>	TAŞIYICI ÖN İZOLASYON (PVC) - 4 mm / MULLION OR TRANSOM FRONT ISOLATOR (PVC)	<b>150</b>
<b>340002</b>	TAŞIYICI ÖN İZOLASYON (PVC) - 8 mm / MULLION OR TRANSOM FRONT ISOLATOR (PVC)	<b>150</b>

**AKSESUAR FİHRİSTİ / ACCESSORY INDEX**

ÜRÜN KODU PRODUCT CODE	ÜRÜN ADI PRODUCT NAME	SAYFA NO PAGE NO
<b>340003</b>	TAŞIYICI ÖN İZOLASYON (PVC) - 12 mm / MULLION OR TRANSOM FRONT ISOLATOR (PVC)	<b>150</b>
<b>340004</b>	TAŞIYICI ÖN İZOLASYON (PVC) - 16 mm / MULLION OR TRANSOM FRONT ISOLATOR (PVC)	<b>150</b>
<b>340005</b>	TAŞIYICI ÖN İZOLASYON (PVC) - 20 mm / MULLION OR TRANSOM FRONT ISOLATOR (PVC)	<b>150</b>
<b>340006</b>	TAŞIYICI ÖN İZOLASYON (PVC) - 24 mm / MULLION OR TRANSOM FRONT ISOLATOR (PVC)	<b>150</b>
<b>340007</b>	TAŞIYICI ÖN İZOLASYON (PVC) - 28 mm / MULLION OR TRANSOM FRONT ISOLATOR (PVC)	<b>150</b>
<b>350001</b>	KÖŞE ÇAVUŞU - 16 x 1,5mm / CORNER ALIGNMENT	<b>152</b>
<b>350002</b>	DİLATASYON TAPASI / DILATATION PLUG	<b>162</b>
<b>350003</b>	KONDENS YOLU İÇİN BAĞLANTI PARÇASI / CONNECTION PIECE FOR CONDENSATION LINE	<b>165</b>
<b>350004</b>	ÇÖRTEN / WATERSPOUT	<b>166</b>
<b>350005</b>	ISICAM KÖŞE BİRLEŞTİRME PARÇASI / CORNER CONNECTION PIECE FOR DOUBLE GLAZING	<b>170</b>
<b>350006</b>	CAM ARASI KİITLEME HAVUZU / LOCKING HOLE FOR DOUBLE GLAZING	<b>172</b>
<b>350007</b>	MAKAS ALTI BESLEME TAKOZU / FRICTION STAY REINFORCEMENT PLUG	<b>153</b>
<b>360001</b>	ISICAM KÖŞE BİRLEŞTİRME PARÇASI / CORNER CONNECTION PIECE FOR DOUBLE GLAZING	<b>170</b>
<b>360002</b>	YATAY BAKLALI SABİT ANKRAJ - 80 mm / HORIZONTAL MOVABLE FIXED ANCHORAGE	<b>179</b>
<b>360003</b>	YATAY BAKLALI SABİT ANKRAJ - 100 mm / HORIZONTAL MOVABLE FIXED ANCHORAGE	<b>179</b>
<b>360004</b>	YATAY BAKLALI SABİT ANKRAJ - 120 mm / HORIZONTAL MOVABLE FIXED ANCHORAGE	<b>179</b>
<b>360005</b>	YATAY BAKLALI SABİT ANKRAJ - 150 mm / HORIZONTAL MOVABLE FIXED ANCHORAGE	<b>179</b>
<b>360006</b>	YATAY BAKLALI SABİT ANKRAJ - 200 mm / HORIZONTAL MOVABLE FIXED ANCHORAGE	<b>179</b>
<b>360007</b>	DÜŞEY BAKLALI SABİT ANKRAJ - 80 mm / VERTICAL MOVABLE FIXED ANCHORAGE	<b>179</b>
<b>360008</b>	DÜŞEY BAKLALI SABİT ANKRAJ - 100 mm / VERTICAL MOVABLE FIXED ANCHORAGE	<b>179</b>
<b>360009</b>	DÜŞEY BAKLALI SABİT ANKRAJ - 120 mm / VERTICAL MOVABLE FIXED ANCHORAGE	<b>179</b>
<b>360010</b>	DÜŞEY BAKLALI SABİT ANKRAJ - 150 mm / VERTICAL MOVABLE FIXED ANCHORAGE	<b>179</b>
<b>360011</b>	DÜŞEY BAKLALI SABİT ANKRAJ - 200 mm / VERTICAL MOVABLE FIXED ANCHORAGE	<b>179</b>
<b>360012</b>	METRİK PERÇİN VE VİDA SETİ / METRIC PIN AND SCREW KIT	<b>153</b>
<b>370001</b>	10" - CEPHE MAKASI / FRICTION STAY - 10"	<b>153</b>
<b>370002</b>	12" - CEPHE MAKASI / FRICTION STAY - 12"	<b>153</b>
<b>370003</b>	14" - CEPHE MAKASI / FRICTION STAY - 14"	<b>153</b>
<b>370004</b>	16" - CEPHE MAKASI / FRICTION STAY - 16"	<b>153</b>
<b>370005</b>	18" - CEPHE MAKASI / FRICTION STAY - 18"	<b>153</b>
<b>370006</b>	20" - CEPHE MAKASI / FRICTION STAY - 20"	<b>153</b>
<b>370007</b>	22" - CEPHE MAKASI / FRICTION STAY - 22"	<b>153</b>
<b>370008</b>	24" - CEPHE MAKASI / FRICTION STAY - 24"	<b>153</b>
<b>370009</b>	26" - CEPHE MAKASI / FRICTION STAY - 26"	<b>153</b>
<b>370010</b>	28" - CEPHE MAKASI / FRICTION STAY - 28"	<b>153</b>
<b>370011</b>	CEPHE KOLU / FACADE HANDLE	<b>157</b>
<b>370012</b>	CEPHE KOLU BAĞLANTISI - 14,5mm / FACADE HANDLE CONNECTION 14,5mm	<b>157</b>
<b>370013</b>	CEPHE KOLU BAĞLANTISI - 17,5mm / FACADE HANDLE CONNECTION 17,5mm	<b>157</b>

**AKSESUAR FİHRİSTİ / ACCESSORY INDEX**

ÜRÜN KODU PRODUCT CODE	ÜRÜN ADI PRODUCT NAME	SAYFA NO PAGE NO
<b>370014</b>	SABİT PİM / FIXED PIN	<b>157</b>
<b>370015</b>	AYARLI PİM / ADJUSTABLE PIN	<b>158</b>
<b>370016</b>	SABİT KARŞILIK / FIXED STRIKER	<b>158</b>
<b>370017</b>	AYARLI KARŞILIK / ADJUSTABLE STRIKER	<b>158</b>
<b>370018</b>	KÖŞE DÖNÜŞ AKTARMA PARÇASI / CORNER TRANSFER DEVICE	<b>158</b>
<b>370019</b>	CEPHE MAKASLARI İÇİN YÜKSEKLİK AYAR PARÇASI / HEIGHT ADJUSTMENT PIECE FOR FRI. STAYS	<b>158</b>
<b>370020</b>	ÜST ÇEKİRME PARÇASI / TOP FASTENING PIECE	<b>159</b>
<b>370021</b>	LİMİTLEME MAKASI / LIMITOR ARM	<b>159</b>
<b>370023</b>	TELESKOPİK MAKAS (KÜCÜK) / TELESCOPIC ARM (SMALL)	<b>159</b>
<b>370024</b>	TELESKOPİK MAKAS (ORTA) / TELESCOPIC ARM (MEDIUM)	<b>159</b>
<b>370025</b>	TELESKOPİK MAKAS (BÜYÜK) / TELESCOPIC ARM (LARGE)	<b>159</b>
<b>370051</b>	ANAHTARLI CEPHE KOLU / FACADE HANDLE WITH KEY	<b>157</b>
<b>370052</b>	SÖKÜLEBİLİR CEPHE KOLU MEKANİZMASI / DEMOUNTABLE FACADE HANDLE MECHANISM	<b>157</b>
<b>370053</b>	SÖKÜLEBİLİR CEPHE KOLU SAPI / DETACHABLE FACADE HANDLE	<b>157</b>
<b>380001</b>	KANAT KİITLEME SETİ - 1 / VENT LOCKING KIT	<b>156</b>
<b>380002</b>	KANAT KİITLEME SETİ - 2 / VENT LOCKING KIT	<b>156</b>
<b>380003</b>	KANAT KİITLEME SETİ - 3 / VENT LOCKING KIT	<b>156</b>
<b>380004</b>	KANAT KİITLEME SETİ - 4 / VENT LOCKING KIT	<b>156</b>
<b>450007</b>	MAKAS ALTI BESLEME TAKOZU / FRICTION STAY REINFORCEMENT PLUG	<b>153</b>
<b>460012</b>	METRİK PERÇİN VE VİDA SETİ / METRIC PIN AND SCREW KIT	<b>153</b>
<b>470001</b>	10" - CEPHE MAKASI / FRICTION STAY - 10"	<b>153</b>
<b>470002</b>	12" - CEPHE MAKASI / FRICTION STAY - 12"	<b>153</b>
<b>470003</b>	14" - CEPHE MAKASI / FRICTION STAY - 14"	<b>153</b>
<b>470004</b>	16" - CEPHE MAKASI / FRICTION STAY - 16"	<b>153</b>
<b>470005</b>	18" - CEPHE MAKASI / FRICTION STAY - 18"	<b>153</b>
<b>470006</b>	20" - CEPHE MAKASI / FRICTION STAY - 20"	<b>153</b>
<b>470007</b>	22" - CEPHE MAKASI / FRICTION STAY - 22"	<b>153</b>
<b>470008</b>	24" - CEPHE MAKASI / FRICTION STAY - 24"	<b>153</b>
<b>470009</b>	26" - CEPHE MAKASI / FRICTION STAY - 26"	<b>153</b>
<b>470010</b>	28" - CEPHE MAKASI / FRICTION STAY - 28"	<b>153</b>
<b>470011</b>	CEPHE KOLU / FACADE HANDLE	<b>157</b>
<b>470012</b>	CEPHE KOLU BAĞLANTISI - 14,5mm / FACADE HANDLE CONNECTION 14,5mm	<b>157</b>
<b>470013</b>	CEPHE KOLU BAĞLANTISI - 17,5mm / FACADE HANDLE CONNECTION 17,5mm	<b>157</b>
<b>470014</b>	SABİT PİM / FIXED PIN	<b>157</b>
<b>470015</b>	AYARLI PİM / ADJUSTABLE PIN	<b>158</b>
<b>470016</b>	SABİT KARŞILIK / FIXED STRIKER	<b>158</b>
<b>470017</b>	AYARLI KARŞILIK / ADJUSTABLE STRIKER	<b>158</b>

## AKSESUAR FİHRİSTİ / ACCESSORY INDEX

ÜRÜN KODU PRODUCT CODE	ÜRÜN ADI PRODUCT NAME	SAYFA NO PAGE NO
<b>470018</b>	KÖŞE DÖNÜŞ AKTARMA PARÇASI / CORNER TRANSFER DEVICE	<b>158</b>
<b>470019</b>	CEPHE MAKASLARI İÇİN YÜKSEKLİK AYAR PARÇASI / HEIGHT ADJUSTMENT PIECE FOR FRI. STAYS	<b>158</b>
<b>470020</b>	ÜST ÇEKİRME PARÇASI / TOP FASTENING PIECE	<b>159</b>
<b>470021</b>	LİMİTLEME MAKASI / LIMITOR ARM	<b>159</b>
<b>470023</b>	TELESKOPİK MAKAS (KÜCÜK) / TELESCOPIC ARM (SMALL)	<b>159</b>
<b>470024</b>	TELESKOPİK MAKAS (ORTA) / TELESCOPIC ARM (MEDIUM)	<b>159</b>
<b>470025</b>	TELESKOPİK MAKAS (BÜYÜK) / TELESCOPIC ARM (LARGE)	<b>159</b>
<b>470026</b>	PARALEL MAKAS - (SOL YAN MAKAS - 1) / PARALEL FRICTION STAY (LEFT SIDE - 1)	<b>154</b>
<b>470027</b>	PARALEL MAKAS - (SOL YAN MAKAS - 2) / PARALEL FRICTION STAY (LEFT SIDE - 2)	<b>154</b>
<b>470028</b>	PARALEL MAKAS - (SOL YAN MAKAS - 3) / PARALEL FRICTION STAY (LEFT SIDE - 3)	<b>154</b>
<b>470029</b>	PARALEL MAKAS - (SOL YAN MAKAS - 4) / PARALEL FRICTION STAY (LEFT SIDE - 4)	<b>154</b>
<b>470030</b>	PARALEL MAKAS - (SAĞ YAN MAKAS - 1) / PARALEL FRICTION STAY (RIGHT SIDE - 1)	<b>154</b>
<b>470031</b>	PARALEL MAKAS - (SAĞ YAN MAKAS - 2) / PARALEL FRICTION STAY (RIGHT SIDE - 2)	<b>154</b>
<b>470032</b>	PARALEL MAKAS - (SAĞ YAN MAKAS - 3) / PARALEL FRICTION STAY (RIGHT SIDE - 3)	<b>154</b>
<b>470033</b>	PARALEL MAKAS - (SAĞ YAN MAKAS - 4) / PARALEL FRICTION STAY (RIGHT SIDE - 4)	<b>154</b>
<b>470034</b>	PARALEL MAKAS İÇİN MANUEL STOPlama - 1 / MANUEL STOPER FOR PARALEL FRICTION STAY	<b>154</b>
<b>470035</b>	PARALEL MAKAS İÇİN MANUEL STOPlama - 2 / MANUEL STOPER FOR PARALEL FRICTION STAY	<b>154</b>
<b>470036</b>	PARALEL MAKAS İÇİN MANUEL STOPlama - 3 / MANUEL STOPER FOR PARALEL FRICTION STAY	<b>154</b>
<b>470037</b>	PARALEL MAKAS İÇİN MANUEL STOPlama - 4 / MANUEL STOPER FOR PARALEL FRICTION STAY	<b>154</b>
<b>470038</b>	PARALEL ÜST KONTROL MAKASI / PARALEL TOP CONTROL FRICTION STAY	<b>154</b>
<b>470039</b>	SMART AÇILIM MOTORU AC - SİYAH / OPENING MOTOR - BLACK	<b>160</b>
<b>470040</b>	SMART AÇILIM MOTORU AC - GRİ / OPENING MOTOR - GRAY	<b>160</b>
<b>470041</b>	SMART AÇILIM MOTORU DC - SİYAH / OPENING MOTOR - BLACK	<b>160</b>
<b>470042</b>	SMART AÇILIM MOTORU DC - GRİ / OPENING MOTOR - GRAY	<b>160</b>
<b>470043</b>	LIVIN AÇILIM MOTORU AC - SİYAH / OPENING MOTOR - BLACK	<b>160</b>
<b>470044</b>	LIVIN AÇILIM MOTORU AC - GRİ / OPENING MOTOR - GRAY	<b>160</b>
<b>470045</b>	LIVIN AÇILIM MOTORU DC - SİYAH / OPENING MOTOR - BLACK	<b>160</b>
<b>470046</b>	LIVIN AÇILIM MOTORU DC - GRİ / OPENING MOTOR - GRAY	<b>160</b>
<b>470047</b>	FAST 50 AÇILIM MOTORU - GRİ / OPENING MOTOR - GRAY	<b>160</b>
<b>470048</b>	AIRWIN A65 AÇILIM MOTORU - GRİ / OPENING MOTOR - GRAY	<b>161</b>
<b>470049</b>	UZAKTAN KUMANDA / REMOTE CONTROL	<b>161</b>
<b>470050</b>	UZAKTAN KUMANDA ALICISI / REMOTE CONTROL RECEIVER	<b>161</b>
<b>470051</b>	ANAHTARLI CEPHE KOLU / FACADE HANDLE WITH KEY	<b>157</b>
<b>470052</b>	SÖKÜLEBİLİR CEPHE KOLU MEKANİZMASI / DEMOUNTABLE FACADE HANDLE MECHANISM	<b>157</b>
<b>470053</b>	SÖKÜLEBİLİR CEPHE KOLU SAPI / DETACHABLE FACADE HANDLE	<b>157</b>
<b>480001</b>	KANAT KİMLEME SETİ - 1 / VENT LOCKING KIT	<b>156</b>
<b>480002</b>	KANAT KİMLEME SETİ - 2 / VENT LOCKING KIT	<b>156</b>

# AKSESUARLAR

# ACCESSORIES

1. AKSESUAR FİHRİSTİ / ACCESSORY INDEX
2. EPDM FİTİLLER / EPDM GASKETS
3. ISI BARİYERLERİ / INSULATION BARS
4. KÖŞE TAKOZLARI / CORNER CLEATS
5. MAKASLAR / FRICTION STAYS
6. KİTLEME AKSESUARLARI / LOCKING ACCESSORIES
7. CEPHE KOLLARI / FAÇADE HANDLES
8. BAĞLANTI PARÇALARI / CONNECTION PIECES
9. AÇILIM MOTORLARI / OPENING MOTORS
10. MONTAJ TALİMATLI AKSESUARLAR /  
ACCESSORIES WITH FABRICATION MANUAL

› SİSTEM ALÜMİNYUM® KATALOG İÇERİSİNDEKİ VERİLERDE DÜZELTME VEYA DEĞİŞİKLİK YAPMA HAKKINA SAHİPTİR.  
SİSTEM ALÜMİNYUM® HAS THE RIGHTS TO MAKE CORRECTION OR MODIFICATION IN THE CATALOGUE DATA.

## EPDM FİTİLLER / EPDM GASKETS

AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	ÇİZİM / DRAWING	TAKILMA BÖLGESİ / APPLICATION AREA
<b>320002</b> <i>İÇ BİNİ FİTİİLİ 2 mm / INNER STEP GASKET 2 mm</i> <i>BİRİM AĞIRLIK / UNIT WEIGHT: 39 g/m</i> <i>KOLİ MİKTARI / PACKAGE QUANTITY: 382 m</i>		
<b>320003</b> <i>İÇ BİNİ FİTİİLİ 3 mm / INNER STEP GASKET 3 mm</i> <i>BİRİM AĞIRLIK / UNIT WEIGHT: 52 g/m</i> <i>KOLİ MİKTARI / PACKAGE QUANTITY: 288 m</i>		
<b>320004</b> <i>İÇ BİNİ FİTİİLİ 4 mm / INNER STEP GASKET 4 mm</i> <i>BİRİM AĞIRLIK / UNIT WEIGHT: 68 g/m</i> <i>KOLİ MİKTARI / PACKAGE QUANTITY: 220 m</i>		
<b>320005</b> <i>İÇ BİNİ FİTİİLİ 5 mm / INNER STEP GASKET 5 mm</i> <i>BİRİM AĞIRLIK / UNIT WEIGHT: 82 g/m</i> <i>KOLİ MİKTARI / PACKAGE QUANTITY: 183 m</i>		
<b>320006</b> <i>İÇ BİNİ FİTİİLİ 6 mm / INNER STEP GASKET 6 mm</i> <i>BİRİM AĞIRLIK / UNIT WEIGHT: 86 g/m</i> <i>KOLİ MİKTARI / PACKAGE QUANTITY: 174 m</i>		
<b>320007</b> <i>İÇ BİNİ FİTİİLİ 7 mm / INNER STEP GASKET 7 mm</i> <i>BİRİM AĞIRLIK / UNIT WEIGHT: 91 g/m</i> <i>KOLİ MİKTARI / PACKAGE QUANTITY: 166 m</i>		
<b>320008</b> <i>İÇ BİNİ FİTİİLİ 8 mm / INNER STEP GASKET 8 mm</i> <i>BİRİM AĞIRLIK / UNIT WEIGHT: 98 g/m</i> <i>KOLİ MİKTARI / PACKAGE QUANTITY: 153 m</i>		
<b>320009</b> <i>İÇ BİNİ FİTİİLİ 9 mm / INNER STEP GASKET 9 mm</i> <i>BİRİM AĞIRLIK / UNIT WEIGHT: 105 g/m</i> <i>KOLİ MİKTARI / PACKAGE QUANTITY: 143 m</i>		
<b>320010</b> <i>İÇ BİNİ FİTİİLİ 10 mm / INNER STEP GASKET 10 mm</i> <i>BİRİM AĞIRLIK / UNIT WEIGHT: 115 g/m</i> <i>KOLİ MİKTARI / PACKAGE QUANTITY: 130 m</i>		

## EPDM FİTİLLER / EPDM GASKETS

AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	ÇİZİM / DRAWING	TAKILMA BÖLGESİ / APPLICATION AREA
<b>320011</b> <i>İÇ BİNİ FİTİİLİ 11 mm / INNER STEP GASKET 11 mm</i> <i>BİRİM AĞIRLIK / UNIT WEIGHT: 125,3 g/m</i> <i>KOLİ MİKTARI / PACKAGE QUANTITY: 120 m</i>		
<b>320012</b> <i>İÇ BİNİ FİTİİLİ 12 mm / INNER STEP GASKET 12 mm</i> <i>BİRİM AĞIRLIK / UNIT WEIGHT: 140,9 g/m</i> <i>KOLİ MİKTARI / PACKAGE QUANTITY: 106 m</i>		
<b>320013</b> <i>İÇ BİNİ FİTİİLİ 13 mm / INNER STEP GASKET 13 mm</i> <i>BİRİM AĞIRLIK / UNIT WEIGHT: 148,6 g/m</i> <i>KOLİ MİKTARI / PACKAGE QUANTITY: 101 m</i>		
<b>320014</b> <i>İÇ BİNİ FİTİİLİ 14 mm / INNER STEP GASKET 14 mm</i> <i>BİRİM AĞIRLIK / UNIT WEIGHT: 157,7 g/m</i> <i>KOLİ MİKTARI / PACKAGE QUANTITY: 95 m</i>		
<b>320015</b> <i>İÇ BİNİ FİTİİLİ 15 mm / INNER STEP GASKET 15 mm</i> <i>BİRİM AĞIRLIK / UNIT WEIGHT: 142,6 g/m</i> <i>KOLİ MİKTARI / PACKAGE QUANTITY: 91 m</i>		
<b>320016</b> <i>DIŞ BİNİ FİTİİLİ 4 mm / OUTER STEP GASKET 4 mm</i> <i>BİRİM AĞIRLIK / UNIT WEIGHT: 88 g/m</i> <i>KOLİ MİKTARI / PACKAGE QUANTITY: 170 m</i>		
<b>320017</b> <i>AÇILI DIŞ CAM FİTİİLİ / ANGULAR OUTER STEP GASKET</i> <i>BİRİM AĞIRLIK / UNIT WEIGHT: 91 g/m</i> <i>KOLİ MİKTARI / PACKAGE QUANTITY: 165 m</i>		
<b>320018</b> <i>YEKPARE DIŞ BİNİ FİTİİLİ / ONE PIECE STEP GASKET</i> <i>BİRİM AĞIRLIK / UNIT WEIGHT: 124 g/m</i> <i>KOLİ MİKTARI / PACKAGE QUANTITY: 121 m</i>		
<b>320019</b> <i>KAMA FİTİİLİ 3 mm / GLAZING SUPPORT GASKET 3 mm</i> <i>BİRİM AĞIRLIK / UNIT WEIGHT: 41 g/m</i> <i>KOLİ MİKTARI / PACKAGE QUANTITY: 365 m</i>		

## EPDM FİTİLLER / EPDM GASKETS

AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	ÇİZİM / DRAWING	TAKILMA BÖLGESİ / APPLICATION AREA
<b>320020</b> <i>KAMA FİTİİLİ 4 mm / GLAZING SUPPORT GASKET 4 mm BİRİM AĞIRLIK / UNIT WEIGHT: 54 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 280 m</i>		
<b>320021</b> <i>KAMA FİTİİLİ 5 mm / GLAZING SUPPORT GASKET 5 mm BİRİM AĞIRLIK / UNIT WEIGHT: 67 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 224 m</i>		
<b>320022</b> <i>KAMA FİTİİLİ 6 mm / GLAZING SUPPORT GASKET 6 mm BİRİM AĞIRLIK / UNIT WEIGHT: 89 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 168 m</i>		
<b>320023</b> <i>KANAT DESTEK FİTİİLİ / SUPPORT GASKET FOR VENT BİRİM AĞIRLIK / UNIT WEIGHT: 54 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 275 m</i>		
<b>320024</b> <i>KANAT İÇ BİNİ FİTİİLİ / INNER STEP GASKET FOR VENT BİRİM AĞIRLIK / UNIT WEIGHT: 40 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 370 m</i>		
<b>320025</b> <i>TAŞIYICI ÖN FİTİİL 3mm / MULLION FRONT GASKET 3mm BİRİM AĞIRLIK / UNIT WEIGHT: 47 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 316 m</i>		
<b>320026</b> <i>TAŞIYICI ÖN FİTİİL 4mm / MULLION FRONT GASKET 4mm BİRİM AĞIRLIK / UNIT WEIGHT: 56 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 266 m</i>		
<b>320027</b> <i>TAŞIYICI ÖN FİTİİL 5mm / MULLION FRONT GASKET 5mm BİRİM AĞIRLIK / UNIT WEIGHT: 58 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 260 m</i>		
<b>320028</b> <i>TAŞIYICI ÖN FİTİİL 7mm / MULLION FRONT GASKET 7mm BİRİM AĞIRLIK / UNIT WEIGHT: 71 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 212 m</i>		

## EPDM FİTİLLER / EPDM GASKETS

AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	ÇİZİM / DRAWING	TAKILMA BÖLGESİ / APPLICATION AREA
<b>320029</b>  KANAT ÇARŞAF FİTİİLİ - 1 / SHEET GASKET FOR VENT BİRİM AĞIRLIK / UNIT WEIGHT: 125 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 120 m		
<b>320030</b>  KANAT ÇARŞAF FİTİİLİ - 2 / SHEET GASKET FOR VENT BİRİM AĞIRLIK / UNIT WEIGHT: 153 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 98 m		
<b>320031</b>  KANAT ÇARŞAF FİTİİLİ - 3 / SHEET GASKET FOR VENT BİRİM AĞIRLIK / UNIT WEIGHT: 185 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 81 m		
<b>320032</b>  KANAT ÇARŞAF FİTİİLİ - 4 / SHEET GASKET FOR VENT BİRİM AĞIRLIK / UNIT WEIGHT: 229 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 66 m		
<b>320033</b>  POLİETİLEN DERZ FİTİİL / POLYETHYLENE SEAM GASKET BİRİM AĞIRLIK / UNIT WEIGHT: 30 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 500 m		
<b>320034</b>  İÇ MEKAN DERZ KAPATMA FİTİİL / INSIDE SEAM GASKET BİRİM AĞIRLIK / UNIT WEIGHT: 204 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 73 m		
<b>320035</b>  SİLİKON DERZ KAPATMA FİTİİL / SILICONE SEAM GASKET BİRİM AĞIRLIK / UNIT WEIGHT: 200 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 75 m		
<b>320057</b>  SİLİKON DERZ KAPATMA FİTİİL / SILICONE SEAM GASKET BİRİM AĞIRLIK / UNIT WEIGHT: 83 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 180 m		
<b>330001</b>  VULKANİZE KÖŞE PARÇASI / VULCANISED CORNER PIECE İLİŞKİLİ FİTİLLER / RELATED GASKETS: 320005 & 320011		

## ISI BARIYERLERİ / INSULATION BARS

AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	ÇİZİM / DRAWING	TAKILMA BÖLGESİ / APPLICATION AREA
<b>330002</b> VULKANİZÉ KÖŞE PARÇASI / VULCANISED CORNER PIECE İLİŞKİLİ FİTİL / RELATED GASKET: 320023		
<b>330003</b> VULKANİZÉ KÖŞE PARÇASI / VULCANISED CORNER PIECE İLİŞKİLİ FİTİL / RELATED GASKET: 320024		
<b>340001</b> TAŞIYICI ÖN İZOLASYON ( PVC ) 4 MM MULLION OR TRANSOM FRONT ISOLATOR (PVC) MİKTAR / QUANTITY: BOY 6 m /Adet		
<b>340002</b> TAŞIYICI ÖN İZOLASYON ( PVC ) 8 MM MULLION OR TRANSOM FRONT ISOLATOR (PVC) MİKTAR / QUANTITY: BOY 6 m /Adet		
<b>340003</b> TAŞIYICI ÖN İZOLASYON ( PVC ) 12 MM MULLION OR TRANSOM FRONT ISOLATOR (PVC) MİKTAR / QUANTITY: BOY 6 m /Adet		
<b>340004</b> TAŞIYICI ÖN İZOLASYON ( PVC ) 16 MM MULLION OR TRANSOM FRONT ISOLATOR (PVC) MİKTAR / QUANTITY: BOY 6 m /Adet		
<b>340005</b> TAŞIYICI ÖN İZOLASYON ( PVC ) 20 MM MULLION OR TRANSOM FRONT ISOLATOR (PVC) MİKTAR / QUANTITY: BOY 6 m /Adet		
<b>340006</b> TAŞIYICI ÖN İZOLASYON ( PVC ) 24 MM MULLION OR TRANSOM FRONT ISOLATOR (PVC) MİKTAR / QUANTITY: BOY 6 m /Adet		
<b>340007</b> TAŞIYICI ÖN İZOLASYON ( PVC ) 28 MM MULLION OR TRANSOM FRONT ISOLATOR (PVC) MİKTAR / QUANTITY: BOY 6 m /Adet		

## KÖŞE TAKOZLARI / CORNER CLEATS

AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	ÇİZİM / DRAWING	KESİM ÖLÇÜSÜ / CUTTING DIMENSION
<b>310001</b> <b>KÖŞE TAKOZU / CORNER CLEAT</b> PROFİL NUMARASI / PROFILE NUMBER: <b>FP520</b> PROFİL AĞIRLIĞI / PROFILE WEIGHT: 1,974 kg/m.		
<b>310002</b> <b>KÖŞE TAKOZU / CORNER CLEAT</b> PROFİL NUMARASI / PROFILE NUMBER: <b>FP520</b> PROFİL AĞIRLIĞI / PROFILE WEIGHT: 1,974 kg/m.		
<b>310003</b> <b>KÖŞE TAKOZU / CORNER CLEAT</b> PROFİL NUMARASI / PROFILE NUMBER: <b>FP520</b> PROFİL AĞIRLIĞI / PROFILE WEIGHT: 1,974 kg/m.		
<b>310004</b> <b>KÖŞE TAKOZU / CORNER CLEAT</b> PROFİL NUMARASI / PROFILE NUMBER: <b>FP520</b> PROFİL AĞIRLIĞI / PROFILE WEIGHT: 1,974 kg/m.		
<b>310005</b> <b>KÖŞE TAKOZU / CORNER CLEAT</b> PROFİL NUMARASI / PROFILE NUMBER: <b>FP520</b> PROFİL AĞIRLIĞI / PROFILE WEIGHT: 1,974 kg/m.		
<b>310006</b> <b>KÖŞE TAKOZU / CORNER CLEAT</b> PROFİL NUMARASI / PROFILE NUMBER: <b>FP520</b> PROFİL AĞIRLIĞI / PROFILE WEIGHT: 1,974 kg/m.		
<b>310007</b> <b>KÖŞE TAKOZU / CORNER CLEAT</b> PROFİL NUMARASI / PROFILE NUMBER: <b>FP520</b> PROFİL AĞIRLIĞI / PROFILE WEIGHT: 1,974 kg/m.		
<b>310008</b> <b>KÖŞE TAKOZU / CORNER CLEAT</b> PROFİL NUMARASI / PROFILE NUMBER: <b>FP520</b> PROFİL AĞIRLIĞI / PROFILE WEIGHT: 1,974 kg/m.		

## KÖŞE TAKOZLARI / CORNER CLEATS

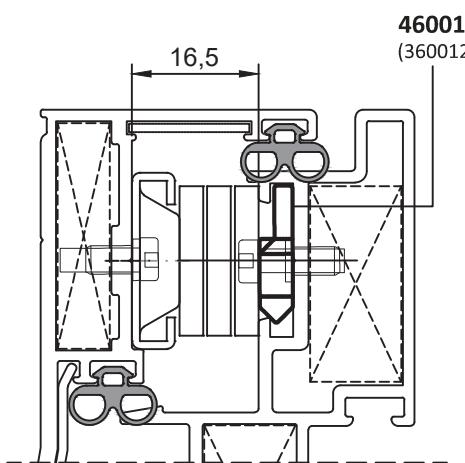
AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	ÇİZİM / DRAWING	KESİM ÖLÇÜSÜ / CUTTING DIMENSION
<b>310009</b> <b>KÖŞE TAKOZU / CORNER CLEAT</b> PROFİL NUMARASI / PROFILE NUMBER: <b>FP521</b> PROFİL AĞIRLIĞI / PROFILE WEIGHT: 2,367 kg/m.		
<b>310010</b> <b>KÖŞE TAKOZU / CORNER CLEAT</b> PROFİL NUMARASI / PROFILE NUMBER: <b>FP521</b> PROFİL AĞIRLIĞI / PROFILE WEIGHT: 2,367 kg/m.		
<b>310011</b> <b>KÖŞE TAKOZU / CORNER CLEAT</b> PROFİL NUMARASI / PROFILE NUMBER: <b>FP521</b> PROFİL AĞIRLIĞI / PROFILE WEIGHT: 2,367 kg/m.		
<b>310012</b> <b>KÖŞE TAKOZU / CORNER CLEAT</b> PROFİL NUMARASI / PROFILE NUMBER: <b>FP521</b> PROFİL AĞIRLIĞI / PROFILE WEIGHT: 2,367 kg/m.		
<b>310013</b> <b>KÖŞE TAKOZU / CORNER CLEAT</b> PROFİL NUMARASI / PROFILE NUMBER: <b>FP521</b> PROFİL AĞIRLIĞI / PROFILE WEIGHT: 2,367 kg/m.		
<b>310014</b> <b>KÖŞE TAKOZU / CORNER CLEAT</b> PROFİL NUMARASI / PROFILE NUMBER: <b>FP521</b> PROFİL AĞIRLIĞI / PROFILE WEIGHT: 2,367 kg/m.		
<b>310015</b> <b>KÖŞE TAKOZU / CORNER CLEAT</b> PROFİL NUMARASI / PROFILE NUMBER: <b>FP521</b> PROFİL AĞIRLIĞI / PROFILE WEIGHT: 2,367 kg/m.		
<b>310016</b> <b>KÖŞE TAKOZU / CORNER CLEAT</b> PROFİL NUMARASI / PROFILE NUMBER: <b>FP521</b> PROFİL AĞIRLIĞI / PROFILE WEIGHT: 2,367 kg/m.		
<b>350001</b> <b>KÖŞE ÇAVUŞU / CORNET ALIGNMENT</b> MALZEME / MATERIAL: POLYAMID		

## MAKASLAR / FRICTION STAYS



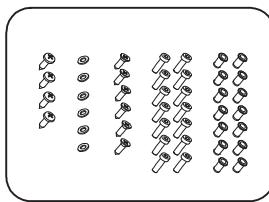
ÜRÜN KODU PRODUCT CODE	ALTERNATİF YERLİ ÜRÜN KODLARI ALTERNATIVE NATIVE PRODUCT CODES	MAKAS BOYU FRICTION STAY LENGTH (inch)	MAKAS BOYU FRICTION STAY LENGTH (mm)	KANAT AÇMA DERECESİ OPENING ANGLE	MAKS. KANAT YÜKSEKLİĞİ MAX. VENT HEIGHT (mm)	MAKS. KANAT AĞIRLIĞI MAX. VENT WEIGHT (kg)
<b>470001</b>	<b>370001</b>	10"	255	35°	700	50
<b>470002</b>	<b>370002</b>	12"	305	30°/35°	800	60
<b>470003</b>	<b>370003</b>	14"	355	30°/35°	1000	70
<b>470004</b>	<b>370004</b>	16"	405	25°/30°	1200	90
<b>470005</b>	<b>370005</b>	18"	460	25°/30°	1400	100
<b>470006</b>	<b>370006</b>	20"	505	20°/25°	1600	135
<b>470007</b>	<b>370007</b>	22"	560	20°/25°	1700	140
<b>470008</b>	<b>370008</b>	24"	610	20°/25°	1800	145
<b>470009</b>	<b>370009</b>	26"	660	10°/15°/20°	2000	155
<b>470010</b>	<b>370010</b>	28"	710	10°/15°/20°	2500	180

! TABLODA BELİRTİLEN TEKNİK DEĞERLER, İTHAL ÜRÜNLERE AİTTİR. YERLİ ALTERNATİFLERİ İÇİN DEĞERLER FARKLI OLABİLİR.  
! TECHNICAL VALUES ARE BELONG TO IMPORTED PRODUCTS AS SHOWN AT THE TABLE. VALUES CAN BE DIFFERENT AT THE NATIVE ALTERNATIVES.

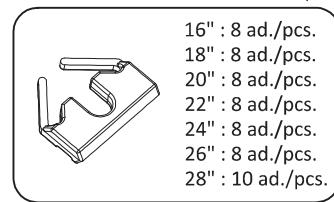


\* STANDART AKSESUAR SETİNDE YER ALMAYAN 460012 KODLU METRİK PERÇİN VE VIDALARIN KULLANILMASI DURUMUNDA TÜM MAKAS TIPLERİ İÇİN MAKSİMUM KANAT AĞIRLIĞI 180 KG OLUP ÜRETİCİ FİRMA GARANTİSİ ALTINDADIR.  
IF USING THE METRIC PIN & SCREWS WITH THE CODE OF 460012 WHICH DOESN'T INCLUDE AT STANDARD ACCESSORY KIT, MAXIMUM CARRIAGE CAPACITY FIXED TO 180 KG FOR ALL FRICTION STAY TYPES.

**460012 (360012)**  
METRİK PERÇİN VE VİDA SETİ  
METRIC PIN AND SCREW KIT



**450007 (350007)**  
MAKAS ALTI BESLEME TAKOZU (PVC)  
FRICTION STAY REINFORCEMENT PLUG (PVC)



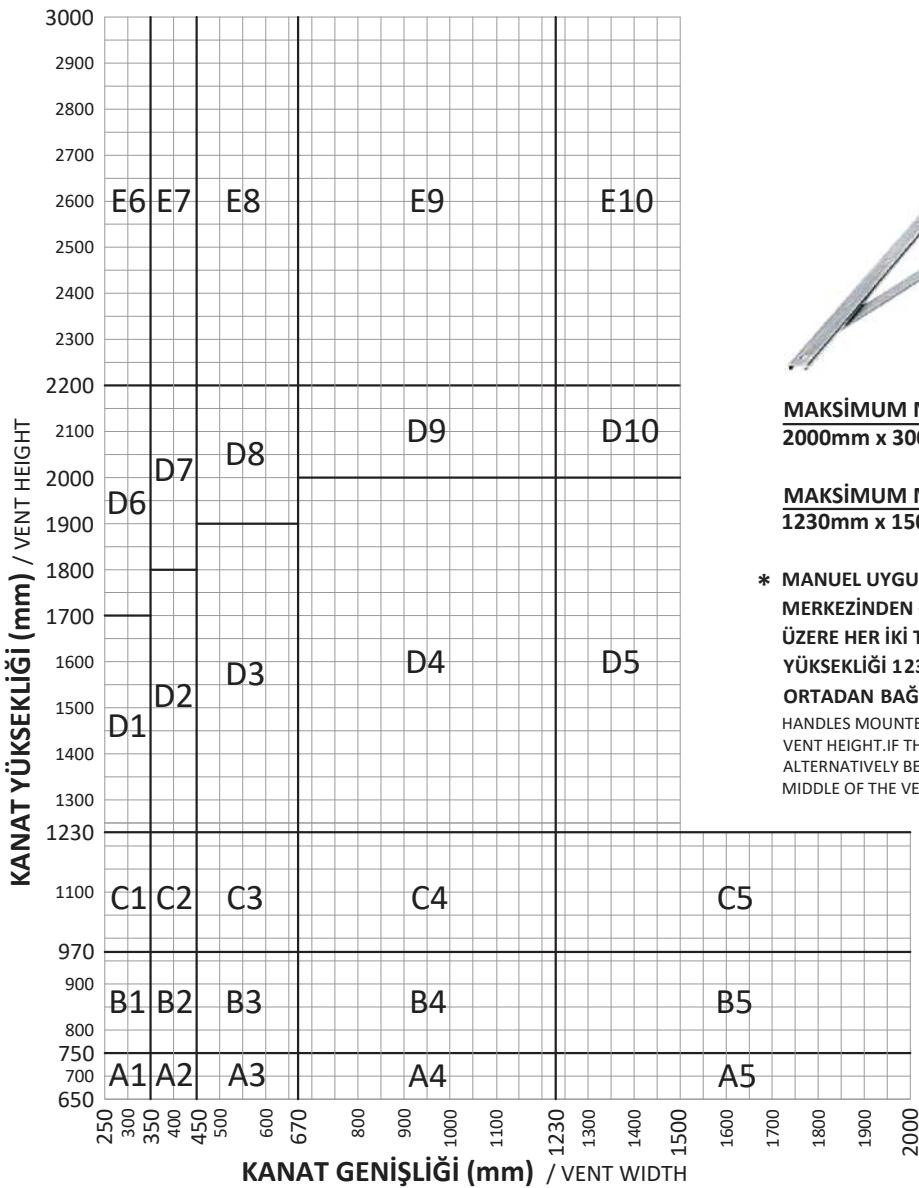
16" : 8 ad./pcs.  
18" : 8 ad./pcs.  
20" : 8 ad./pcs.  
22" : 8 ad./pcs.  
24" : 8 ad./pcs.  
26" : 8 ad./pcs.  
28" : 10 ad./pcs.

\* ( ) PARANTEZ İÇERİSİNDEKİ KODLAR YERLİ AKSESUARLARA AİTTİR.  
( ) CODES INTO THE PARENTHESIS BELONG TO NATIVE ACCESSORIES.

! BU SAYFADA BELİRTİLEN AKSESUAR GÖRSELLERİ TEMSİLDİR.  
ACCESSORY IMAGES ARE REPRESENTATIVE AT THIS PAGE.

## PARALEL MAKASLAR / PARALEL FRICTION STAYS

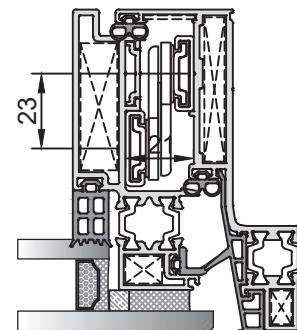
### MAKAS SEÇİM DİYAGRAMI / FRICTION STAY SELECTION DIAGRAM



**MAKSİMUM MOTORLU UYGULAMA ÖLÇÜSÜ:**  
2000mm x 3000mm

**MAKSİMUM MANUEL UYGULAMA ÖLÇÜSÜ:**  
1230mm x 1500mm

- \* MANUEL UYGULAMADA KOLLAR KANAT YÜKSEKLİĞİNİN MERKEZİNDEN +/- 15% MESAFESİNE SAĞ VE SOL OLMAK ÜZERE HER İKİ TARAFÀ MONTAJLANMALIDIR. KANAT YÜKSEKLİĞİ 1230 mm'NIN ALTINDA İSE KANATLAR ALT ORTADAN BAĞLANAN TEK KOL İLE AÇILABİLİR.
- HANDLES MOUNTED CENTRALLY ON THE VERTICAL SIDES +/- 15% OF THE VENT HEIGHT. IF THE VENTS HEIGHT BELOW 1230 mm HIGH, IT CAN ALTERNATIVELY BE OPERATED FROM A SINGLE HANDLE AT THE BOTTOM MIDDLE OF THE VENT.



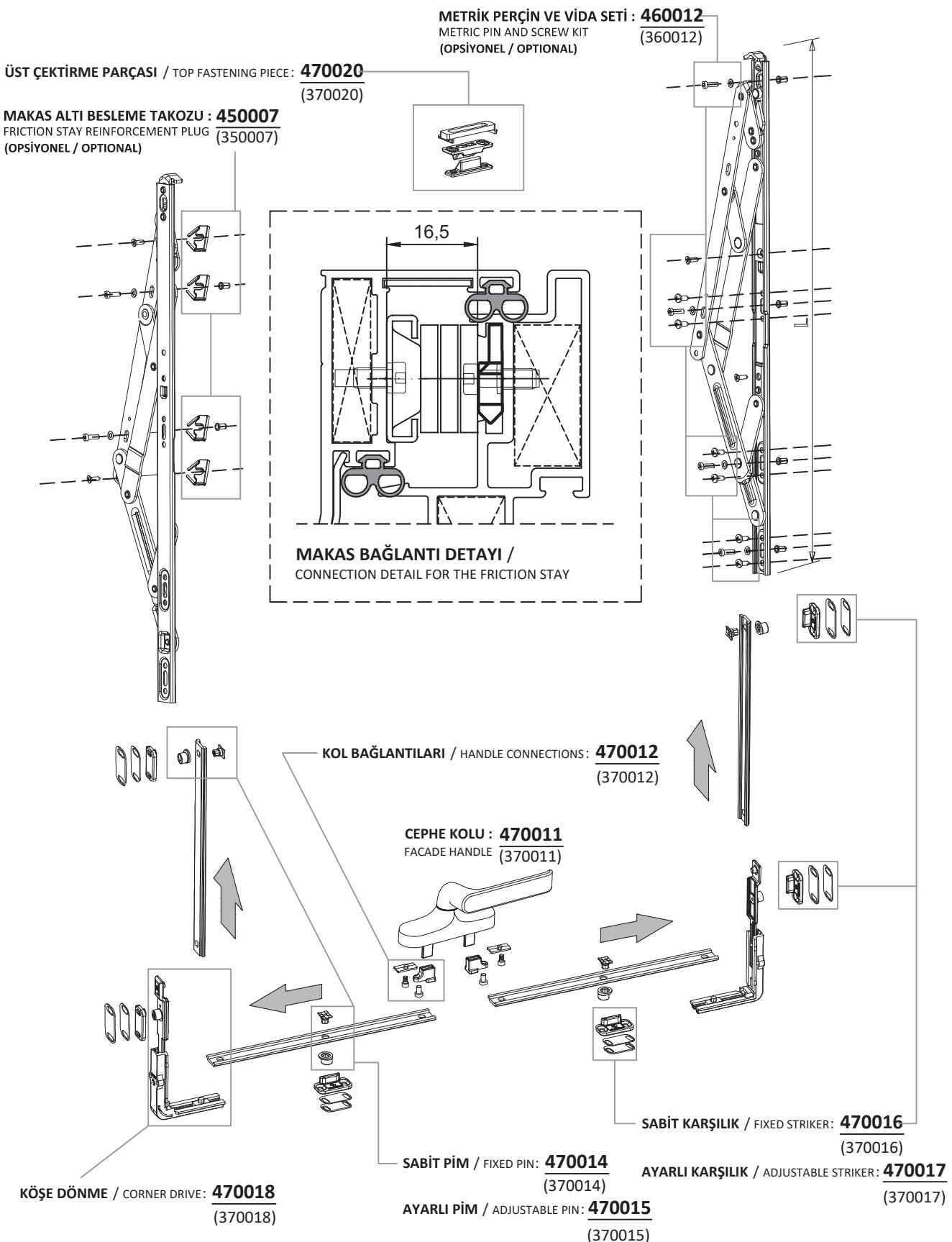
YAN MAKASLAR SIDE MOUNTED FRICTION STAYS					ALT&ÜST KONTROL MAKASLARI TOP&BOTTOM CONTROL FRICTION STAYS		
	SOL TARAF LEFT SIDE	SAĞ TARAF RIGHT SIDE	STOPLAMALAR STOPERS	MAKS. AĞIRLIK MAX. WEIGHT (mm)		ÜST TOP	ALT BOTTOM
<b>A</b>	<b>1 x 470026</b>	<b>1 x 470030</b>	<b>2 x 470034</b>	100	<b>1</b>	470038	-
<b>B</b>	<b>1 x 470027</b>	<b>1 x 470031</b>	<b>2 x 470035</b>	100	<b>2</b>	470030	-
<b>C</b>	<b>1 x 470028</b>	<b>1 x 470032</b>	<b>2 x 470036</b>	200	<b>3</b>	470031	-
<b>D</b>	<b>1 x 470029</b>	<b>1 x 470033</b>	<b>2 x 470037</b>	200	<b>4</b>	470032	-
<b>E</b>	<b>2 x 470029</b>	<b>2 x 470033</b>	<b>4 x 470037</b>	200	<b>5</b>	470033	-
* 470038 KONTROL MAKASLARI KULLANILIRKEN 470035 STOPLAMA YERİNE 470034 KULLANILIR. / WHEN USING 470038 CONTROL FRICTION STAYS, REPLACE 470035 STOPERS WITH 470034 STOPERS.					<b>6</b>	470038	470038
* MANUEL UYGULAMALAR İÇİN KANATLARIN MAKSİMUM AÇILMA MESAFESİ 150 mm 'DİR. / MAXIMUM OPENING DISTANCE FOR VENTS ARE 150 mm FOR MANUAL APPLICATIONS.					<b>7</b>	470030	470030
* PARALEL MAKAS FİYATLANDIRMASI İÇİN LÜTFEN SİSTEM ALÜMİNYUM'A BAŞVURUNUZ. / FOR PARALEL FRICTION STAY PRICING DETAILS PLEASE CONTACT WITH SİSTEM ALUMINIUM.					<b>8</b>	470031	470031
					<b>9</b>	470032	470032
					<b>10</b>	470033	470033

\* ( ) PARANTEZ İÇERİSİNDEKİ KODLAR YERLİ AKSESUARLARA AİTTİR.

( ) CODES INTO THE PARENTHESIS BELONG TO NATIVE ACCESSORIES.

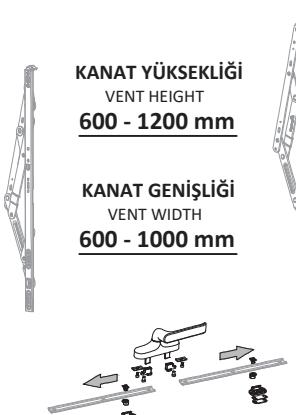
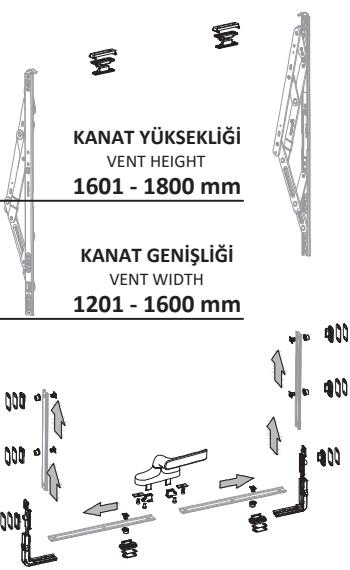
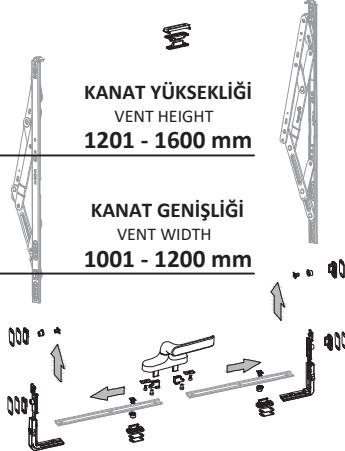
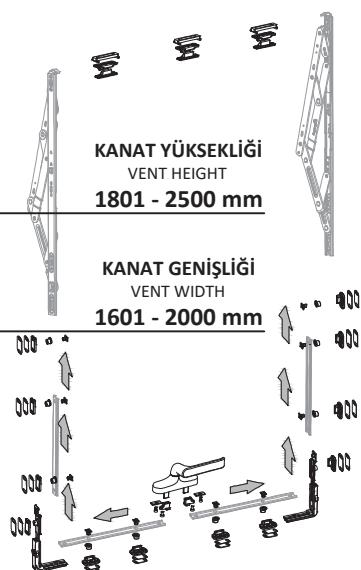
! BU SAYFADA BELİRTİLEN AKSESUAR GÖRSELLERİ TEMSİLİDİR.  
ACCESORY IMAGES ARE REPRESENTATIVE AT THIS PAGE.

## KANAT KİTLEME AKSESUARLARI / VENT LOCKING ACCESSORIES



\* ( ) PARANTEZ İÇERİSİNDEKİ KODLAR YERLİ AKSESUARLARA AİTTİR.  
 ( ) CODES INTO THE PARENTHESIS BELONG TO NATIVE ACCESSORIES.

! BU SAYFADA BELİRTİLEN AKSESUAR GÖRSELLERİ TEMSİLİDİR.  
 ! ACCESSORY IMAGES ARE REPRESENTATIVE AT THIS PAGE.

**KANAT KİLEME SETLERİ / VENT LOCKING KITS**
**480001 (380001)**

**480003 (380003)**

**480002 (380002)**

**480004 (380004)**

**SET KODU / KIT CODE :**

ÜRÜN KODU PRODUCT CODE	ALTERNATİF YERLİ ÜRÜN KODLARI ALTERNATIVE NATIVE PRODUCT CODES	ÜRÜN ADI PRODUCT NAME	480001 ( 380001 )	480002 ( 380002 )	480003 ( 380003 )	480004 ( 380004 )
470011	370011	CEPHE KOLU CURTAIN WALL HANDLE	1 ADET / PCS.	1 ADET / PCS.	1 ADET / PCS.	1 ADET / PCS.
470012	370012	KOL BAĞLANTILARI HANDLE CONNECTIONS	2 ADET / PCS.	2 ADET / PCS.	2 ADET / PCS.	2 ADET / PCS.
470015	370015	AYARLI PİM ADJUSTABLE PIN	2 ADET / PCS.	4 ADET / PCS.	6 ADET / PCS.	10 ADET / PCS.
470017	370017	AYARLI KARŞILIK ADJUSTABLE STRIKER	2 ADET / PCS.	6 ADET / PCS.	8 ADET / PCS.	12 ADET / PCS.
470018	370018	KÖŞE DÖNME CORNER DRIVE	-	2 ADET / PCS.	2 ADET / PCS.	2 ADET / PCS.
470020	370020	ÜST ÇEKİRME PARÇASI TOP FASTENING PIECE	-	1 ADET / PCS.	2 ADET / PCS.	3 ADET / PCS.

\* ( ) PARANTEZ İÇERİSİNDEKİ SET KODLARI YERLİ AKSESUARLARA AİTTİR.  
( ) KIT CODES INTO THE PARENTHESIS BELONG TO NATIVE ACCESSORIES.

! BU SAYFADA BELİRTİLEN AKSESUAR GÖRSELLERİ TEMSİLİDİR.  
! ACCESSORY IMAGES ARE REPRESENTATIVE AT THIS PAGE.

## AKSESUARLAR / ACCESSORIES

AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	GÖRSELLER / IMAGES
<b>470011 (370011)</b> <i>CEPHE KOLU / FACADE HANDLE</i>	 
<b>470051 (370051)</b> <i>ANAHTARLI CEPHE KOLU / FACADE HANDLE WITH KEY</i>	
<b>470052 (370052)</b> <i>SÖKÜLEBİLİR CEPHE KOLU MEKANİZMASI / DETACHABLE FACADE CREMONE MECHANISM</i>	
<b>470053 (370053)</b> <i>SÖKÜLEBİLİR CEPHE KOLU SAPI / DETACHABLE FACADE HANDLE</i>	
<b>470012 (370012)</b> <i>CEPHE KOLU BAĞLANTI ELEMANI / FACADE HANDLE FASTENING ELEMENT</i>	<p><math>H=14,5</math> mm</p>
<b>470013 (370013)</b> <i>CEPHE KOLU BAĞLANTI ELEMANI / FACADE HANDLE FASTENING ELEMENT</i>	<p><math>H=17,5</math> mm</p>
<b>470014 (370014)</b> <i>SABİT PİM / FIXED PIN</i>	

( ) PARANTEZ İÇERİSİNDEKİ KODLAR YERLİ AKSESUARLARA AİTTİR.  
( ) CODES INTO THE PARENTHESIS BELONG TO NATIVE ACCESSORIES.

! BU SAYFADA BELİRTİLEN AKSESUAR GÖRSELLERİ TEMSİLİDİR.  
! ACCESSORY IMAGES ARE REPRESENTATIVE AT THIS PAGE.

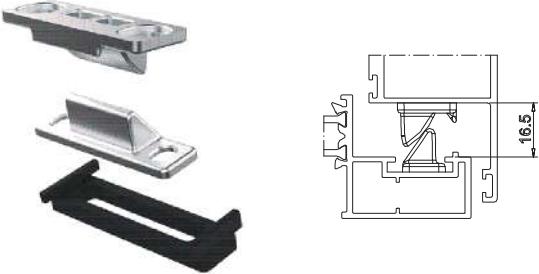
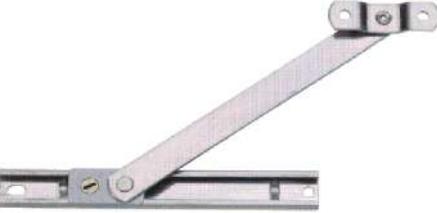
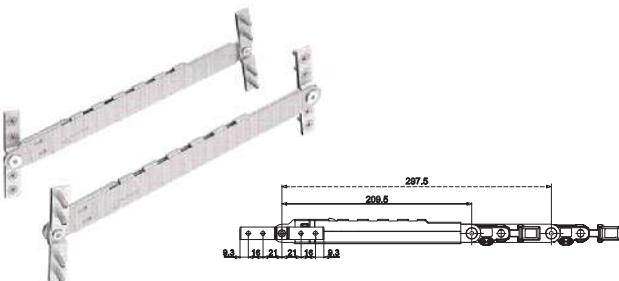
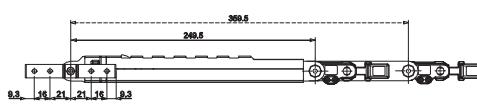
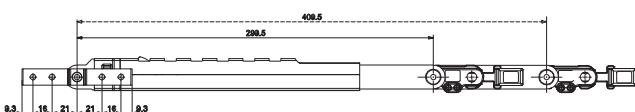
## AKSESUARLAR / ACCESSORIES

AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	GÖRSELLER / IMAGES
<b>470015 (370015)</b> <i>AYARLI PİM / ADJUSTABLE PIN</i>	
<b>470016 (370016)</b> <i>SABİT KARŞILIK / FIXED STRIKER</i>	
<b>470017 (370017)</b> <i>AYARLI KARŞILIK / ADJUSTABLE STRIKER</i>	
<b>470018 (370018)</b> <i>KÖŞE DÖNÜŞ AKTARMA PARÇASI / CORNER TRANSFER DEVICE</i>	
<b>470019 (370019)</b> <i>CEPHE MAKASLARI İÇİN YÜKSEKLİK AYAR PARÇASI / HEIGHT ADJUSTMENT PIECE FOR FRICTION STAYS</i>	

\* ( ) PARANTEZ İÇERİSİNDEKİ KODLAR YERLİ AKSESUARLARA AİTTİR.  
 ( ) CODES INTO THE PARENTHESIS BELONG TO NATIVE ACCESSORIES.

! BU SAYFADA BELİRTİLEN AKSESUAR GÖRSELLERİ TEMSİLİDİR.  
 ! ACCESSORY IMAGES ARE REPRESENTATIVE AT THIS PAGE.

## AKSESUARLAR / ACCESSORIES

AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	GÖRSELLER / IMAGES
<b>470020 (370020)</b> <i>ÜST ÇEKTİRME PARÇASI / TOP FASTENING PIECE</i>	
<b>470021 (370021)</b> <i>LİMİTLEME MAKASI / LIMITOR ARM</i>	
<b>470023 (370023)</b> <i>TELESKOPİK MAKAS (KÜÇÜK) / TELESCOPIC ARM (SMALL)</i>	
<b>470024 (370024)</b> <i>TELESKOPİK MAKAS (ORTA) / TELESCOPIC ARM (MEDIUM)</i>	
<b>470025 (370025)</b> <i>TELESKOPİK MAKAS (BÜYÜK) / TELESCOPIC ARM (LARGE)</i>	

\* ( ) PARANTEZ İÇERİSİNDEKİ KODLAR YERLİ AKSESUARLARA AİTTİR.  
 ( ) CODES INTO THE PARENTHESIS BELONG TO NATIVE ACCESSORIES.

! BU SAYFADA BELİRTİLEN AKSESUAR GÖRSELLERİ TEMSİLİDİR.  
 ! ACCESSORY IMAGES ARE REPRESENTATIVE AT THIS PAGE.

## AKSESUARLAR / ACCESSORIES

AKSESUAR KODU VE GÖRSELİ / ACCESSORY CODE AND IMAGE	TEKNİK ÖZELLİKLER / TECHNICAL SPECIFICATIONS
<p><b>470039</b> - SİYAH / BLACK  <b>470040</b> - GRİ / GRAY  <i>VASİSTAS VE İŞIKLIK KANATLARI İÇİN AÇMA MOTORU / OPENING MOTOR FOR BOTTOM-HUNG &amp; SKYLIGHT VENTS</i></p>	<p><b>ALUTECH SMART ( 230V AC ) MOTOR</b></p> <p>Ayarlanabilir Açılma Mesafesi : 180 mm ile 380 mm      İtme Gücü .....: 200 N      Cekme Gücü .....: 250 N      Çalışma Hızı .....: 18 mm/sec      Maks.Kanat Ağırlığı-Vasistas ve Pivot .....: 50 kg      Maks.Kanat Ağırlığı-Yatay ve Çatı Pencerelerde ....: 38 kg      Kanat Eni .....: 600 - 1250 mm      Maksimum Kanat Boyu .....: 2600 mm</p>
<p><b>470041</b> - SİYAH / BLACK  <b>470042</b> - GRİ / GRAY  <i>VASİSTAS VE İŞIKLIK KANATLARI İÇİN AÇMA MOTORU / OPENING MOTOR FOR BOTTOM-HUNG &amp; SKYLIGHT VENTS</i></p>	<p><b>ALUTECH SMART ( 24V DC ) MOTOR</b></p> <p>Ayarlanabilir Açılma Mesafesi : 180 mm ile 380 mm      İtme Gücü .....: 200 N      Cekme Gücü .....: 250 N      Çalışma Hızı .....: 18 mm/sec      Maks.Kanat Ağırlığı-Vasistas ve Pivot .....: 50 kg      Maks.Kanat Ağırlığı-Yatay ve Çatı Pencerelerde ....: 38 kg      Kanat Eni .....: 600 - 1250 mm      Maksimum Kanat Boyu .....: 2600 mm</p>
<p><b>470043</b> - SİYAH / BLACK  <b>470044</b> - GRİ / GRAY  <i>PARALEL, VASİSTAS VE İŞIKLIK KANATLARI İÇİN MOTOR / MOTOR FOR PARALLEL, BOTTOM-HUNG &amp; SKYLIGHT VENTS</i></p>	<p><b>ALUTECH LIVIN L25 ( 230V AC ) MOTOR</b></p> <p>Ayarlanabilir Açılma Mesafesi : 200 mm ile 380 mm      İtme Gücü .....: 250 N      Cekme Gücü .....: 250 N      Çalışma Hızı .....: 18 mm/sec      Maks.Kanat Ağırlığı-Vasistas ve Pivot .....: 60 kg      Maks.Kanat Ağırlığı-Yatay ve Çatı Pencerelerde ....: 45 kg      Kanat Eni .....: 450 - 1250 mm      Maksimum Kanat Boyu .....: 2600 mm</p>
<p><b>470045</b> - SİYAH / BLACK  <b>470046</b> - GRİ / GRAY  <i>PARALEL, VASİSTAS VE İŞIKLIK KANATLARI İÇİN MOTOR / MOTOR FOR PARALLEL, BOTTOM-HUNG &amp; SKYLIGHT VENTS</i></p>	<p><b>ALUTECH LIVIN L35 ( 24V DC ) MOTOR</b></p> <p>Ayarlanabilir Açılma Mesafesi : 200 mm ile 380 mm      İtme Gücü .....: 250 N      Cekme Gücü .....: 250 N      Çalışma Hızı .....: 18 mm/sec      Maks.Kanat Ağırlığı-Vasistas ve Pivot .....: 80 kg      Maks.Kanat Ağırlığı-Yatay ve Çatı Pencerelerde ....: 65 kg      Kanat Eni .....: 450 - 1250 mm      Maksimum Kanat Boyu .....: 2600 mm</p>
<p><b>470047</b> - GRİ / GRAY  <i>PARALEL, VASİSTAS VE İŞIKLIK KANATLARI İÇİN MOTOR / MOTOR FOR PARALLEL, BOTTOM-HUNG &amp; SKYLIGHT VENTS</i></p>	<p><b>ALUTECH FAST 50 ( 230V AC ) MOTOR</b></p> <p>Ayarlanabilir Açılma Mesafesi : 300 mm      İtme Gücü .....: 500 N      Cekme Gücü .....: 500 N      Çalışma Hızı .....: 23 mm/sec      Maks.Kanat Ağırlığı-Vasistas ve Pivot .....: 160 kg      Maks.Kanat Ağırlığı-Yatay ve Çatı Pencerelerde ....: 90 kg      Kanat Eni .....: 200 - 1250 mm      Maksimum Kanat Boyu .....: 2600 mm</p>

\* ( ) PARANTEZ İÇERİSİNDEKİ KODLAR YERLİ AKSESUARLARA AİTTİR.  
 ( ) CODES INTO THE PARENTHESIS BELONG TO NATIVE ACCESSORIES.

! BU SAYFADA BELİRTİLEN AKSESUAR GÖRSELLERİ TEMSİLİDİR.  
 ! ACCESSORY IMAGES ARE REPRESENTATIVE AT THIS PAGE.

## AKSESUARLAR / ACCESSORIES

AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	GÖRSELLER / IMAGES
 <p><b>470048 - GRİ / GRAY</b>  <b>PARALEL, VASİSTAS VE İŞIKLIK KANATLARI İÇİN MOTOR /</b>  <b>MOTOR FOR PARALEL, BOTTOM-HUNG &amp; SKYLIGHT VENTS</b></p>	<p><b>ALUTECH AIRWIN A 65 ( 230V AC ) MOTOR</b></p> <p>Ayarlanabilir Açılma Mesafesi : 550 mm          İtme Gücü .....: 650 N          Cekme Gücü .....: 650 N          Çalışma Hızı .....: 10 mm/sec          Maks.Kanat Ağırlığı-Vasistas ve Pivot .....: 120 kg          Maks.Kanat Ağırlığı-Yatay ve Çatı Pencerelerde .....: 120 kg          Kanat Eni .....: 200 - 1250 mm          Maksimum Kanat Boyu .....: 2600 mm</p>
<p><b>470049</b>  <b>ALUTECH GNS 02A - 2 KANAL UZAKTAN KUMANDA /</b>  <b>ALUTECH GNS 02A - 2 CHANNEL REMOTE CONTROL</b></p>	
<p><b>470050</b>  <b>ALUTECH GNS 202 / 220V - UZAKTAN KUMANDA ALICISI /</b>  <b>ALUTECH GNS 202 / 220V - REMOTE CONTROL RECEIVER</b></p>	

\* ( ) PARANTEZ İÇERİSİNDEKİ KODLAR YERLİ AKSESUARLARA AİTTİR.  
 ( ) CODES INTO THE PARENTHESIS BELONG TO NATIVE ACCESSORIES.

! BU SAYFADA BELİRTİLEN AKSESUAR GÖRSELLERİ TEMSİLİDİR.  
 ! ACCESSORY IMAGES ARE REPRESENTATIVE AT THIS PAGE.

# MONTAJ TALİMATLI AKSESUARLAR

## ACCESSORIES WITH FABRICATION MANUAL

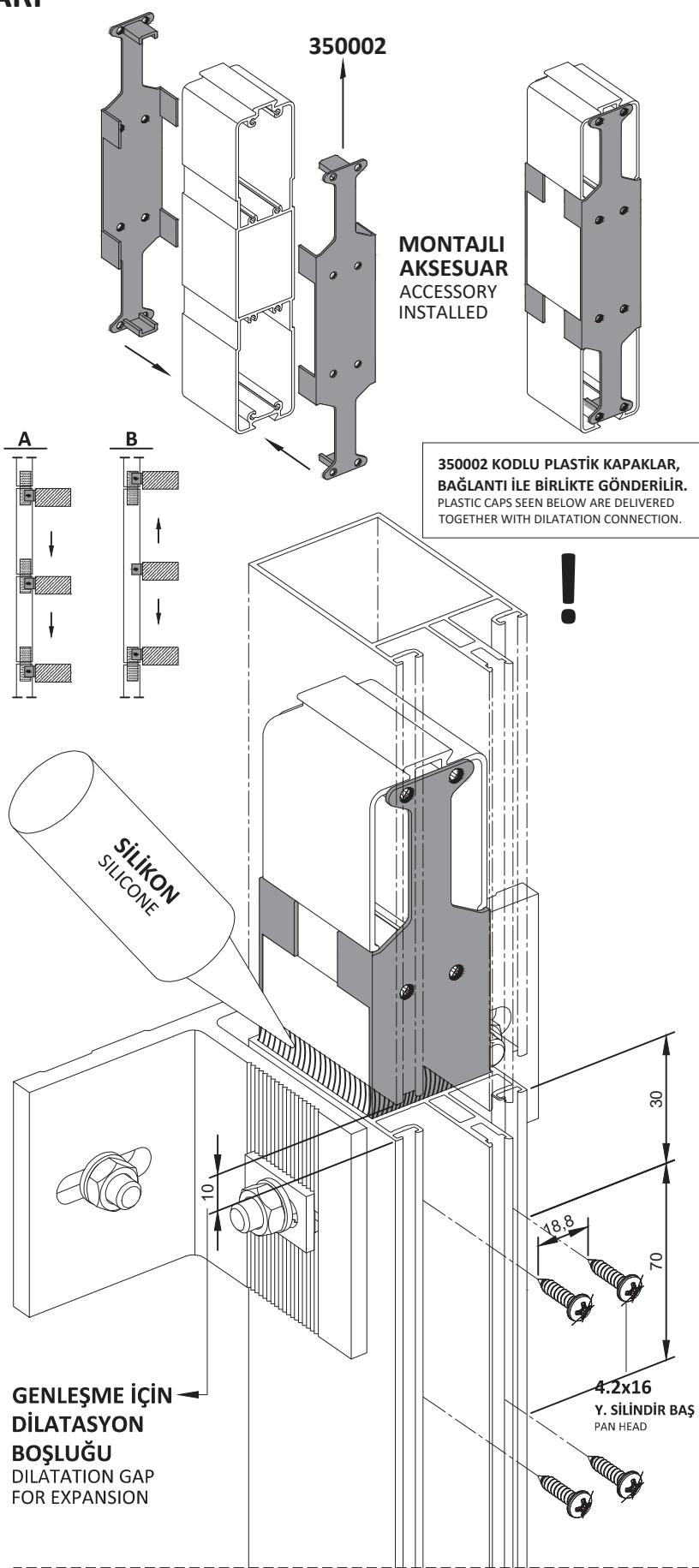
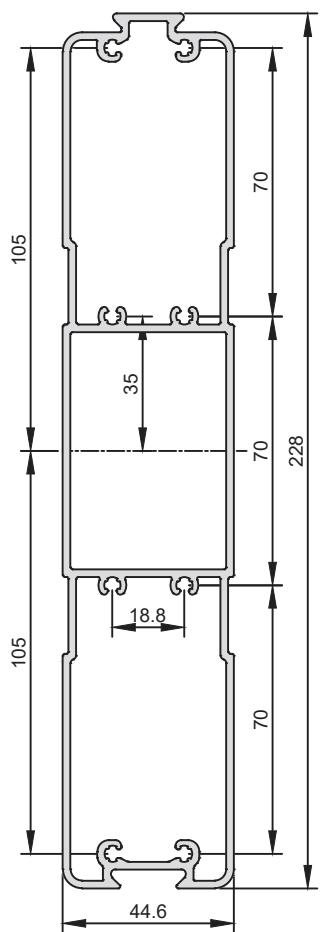
1. DİLATASYON BAĞLANTILARI /  
DILATATION CONNECTIONS
2. U BAĞLANTILARI / U CONNECTIONS
3. YATAY KAYIT CONTALARI /  
TRANSOM CONNECTION PLUGS
4. KONDENS YOLU İÇİN BAĞLANTI PARÇASI  
CON. PIECE FOR THE CONDENSATION LINE
5. ÇÖRTEN / WATERSPOUT
6. CAM ALTı DESTEK PARÇALARI /  
GLAZING SUPPORT PIECES
7. KANAT İÇİN CAM ALTı DESTEK PARÇALARI /  
GLAZING SUPPORT PIECES FOR VENT
8. STANDART CAM ARASI KİMLEME PARÇALARI /  
LOCKING PIECES FOR THE STANDARD SPACER
9. SICAK KENAR ÇITALI KİMLEME PARÇALARI /  
LOCKING PIECES FOR WARM EDGE SPACER
10. VULKANİZE İÇ KÖŞE PARÇALARI /  
VULCANISED INNER CORNER PIECES
11. TAHLİYE DELİK ŞEMALARI /  
SCHEMAS OF THE DRAINAGE HOLES
12. ANKRAJLAR /  
ANCHORAGES
13. GÜNEŞ KIRICI TAŞIYICI APARATI /  
CARRIER APPARATUS FOR SUNBREAKER
14. KÖŞE TAKOZU BİRLEŞİM DETAYLARI /  
CORNER CLEAT CONECTION DETAILS

➤ SİSTEM ALÜMİNYUM® KATALOG İÇERİSİNDEKİ VERİLERDE DÜZELTME VEYA DEĞİŞİKLİK YAPMA HAKKINA SAHİPTİR.  
SİSTEM ALÜMİNYUM® HAS THE RIGHTS TO MAKE CORRECTION OR MODIFICATION IN THE CATALOGUE DATA.

## DİLATASYON BAĞLANTILARI

DILATATION CONNECTIONS

AKSESUAR KODU ACCESSORY CODE	KESİM ÖLÇÜSÜ CUTTING DIMENSION
310017	17,5 mm
310018	32,5 mm
310019	52,5 mm
310020	72,5 mm
310021	92,5 mm
310022	91,5 mm
310023	112 mm
310024	110 mm
310025	132 mm
310026	129,5 mm
310027	151,5 mm
310028	149 mm
310029	171,5 mm
310030	169 mm
310031	190 mm
310032	187 mm

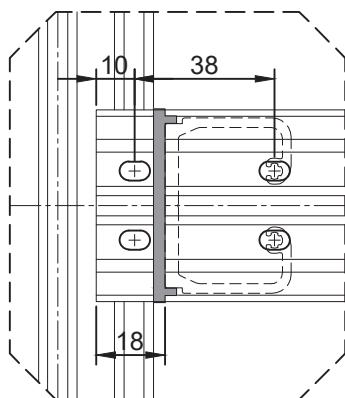


## U BAĞLANTILARI U CONNECTIONS

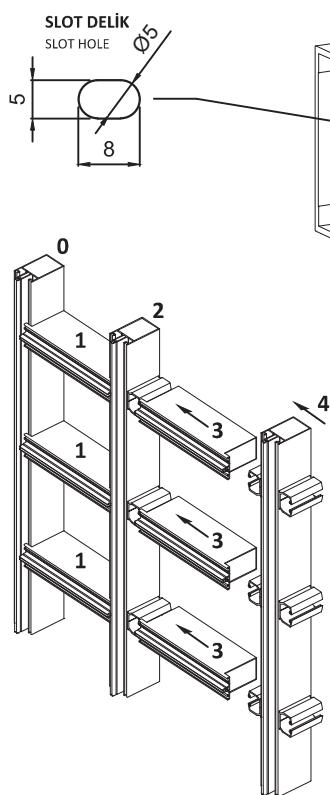
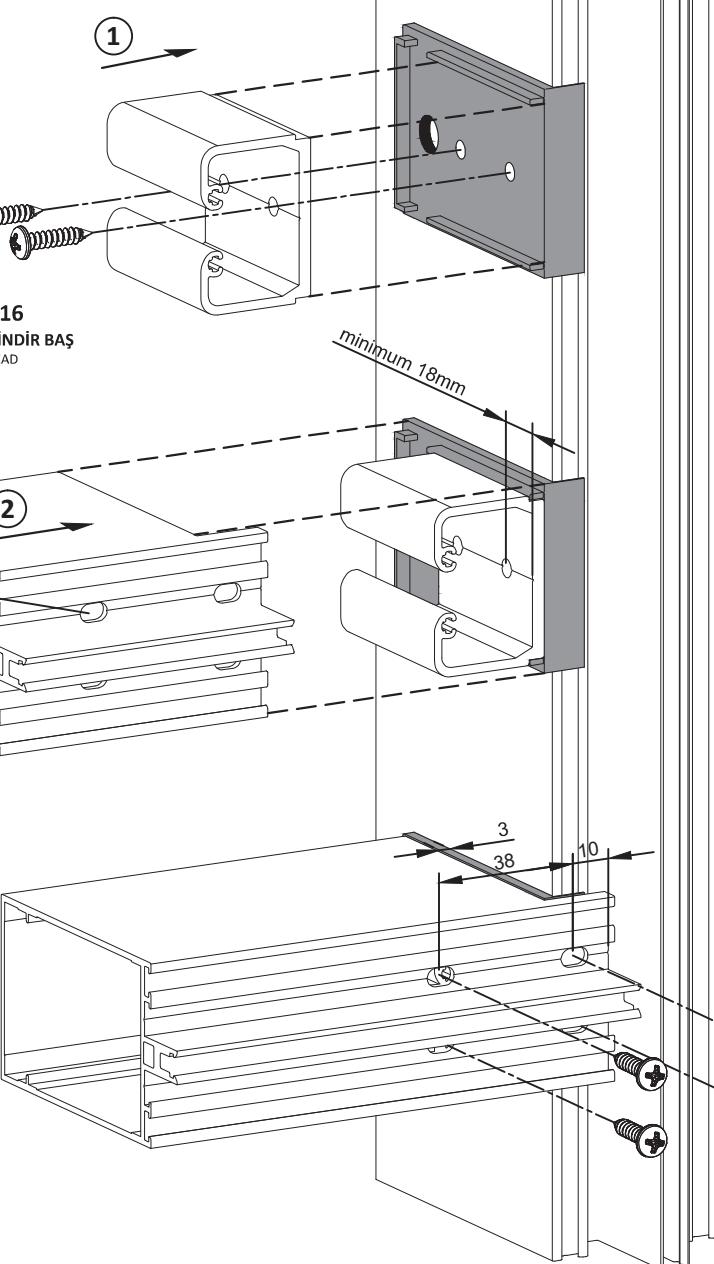
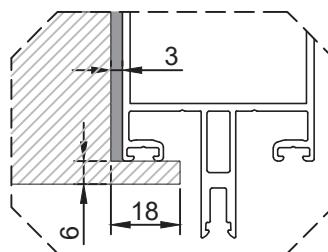
AKSESUAR KODU ACCESSORY CODE	KESİM ÖLÇÜSÜ CUTTING DIMENSION
310033	12 mm
310034	32 mm
310035	42 mm
310036	52 mm
310037	59,4 mm
310038	79,4 mm
310039	99,4 mm
310040	119,4 mm
310041	139,4 mm
310042	159,4 mm
310043	178 mm
310044	210 mm

**FP506 (1,040 kg/m.)**

SLOT DELİK ÖLÇÜLERİ  
SLOT HOLE DIMENSIONS



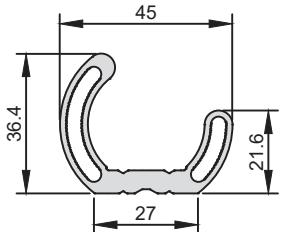
KERTME ÖLÇÜLERİ  
NOTCHING DIMENSIONS



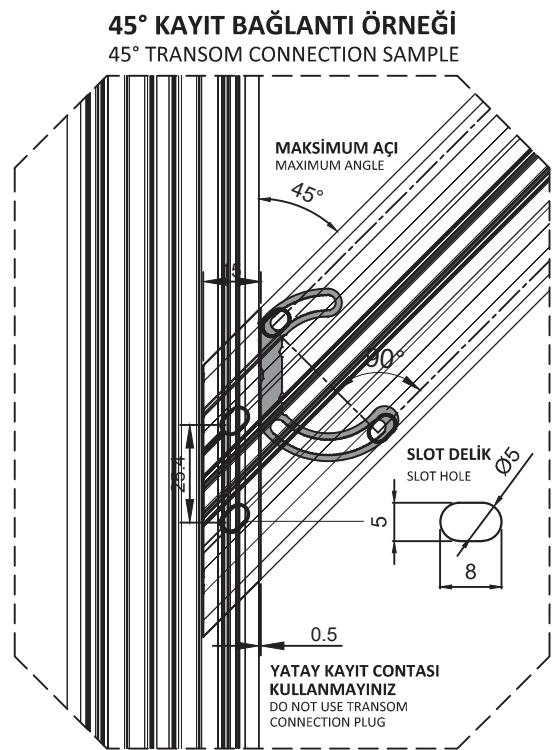
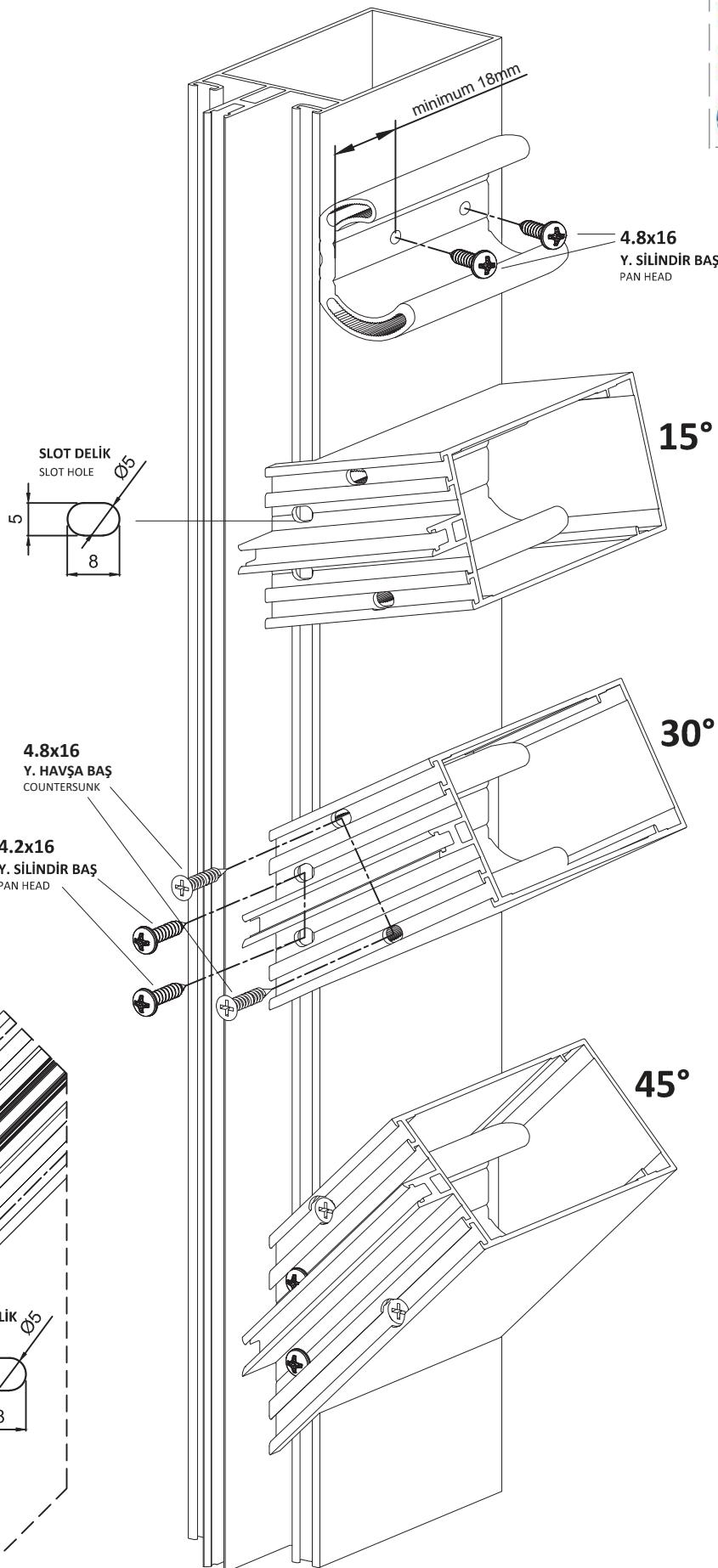
## AÇILI U BAĞLANTILAR

### ANGULAR U CONNECTIONS

AKSESUAR KODU ACCESSORY CODE	KESİM ÖLÇÜSÜ CUTTING DIMENSION
310318	12 mm
310319	32 mm
310320	42 mm
310321	52 mm
310322	59,4 mm
310323	79,4 mm
310324	99,4 mm
310325	119,4 mm
310326	139,4 mm
310327	159,4 mm
310328	178 mm
310329	210 mm



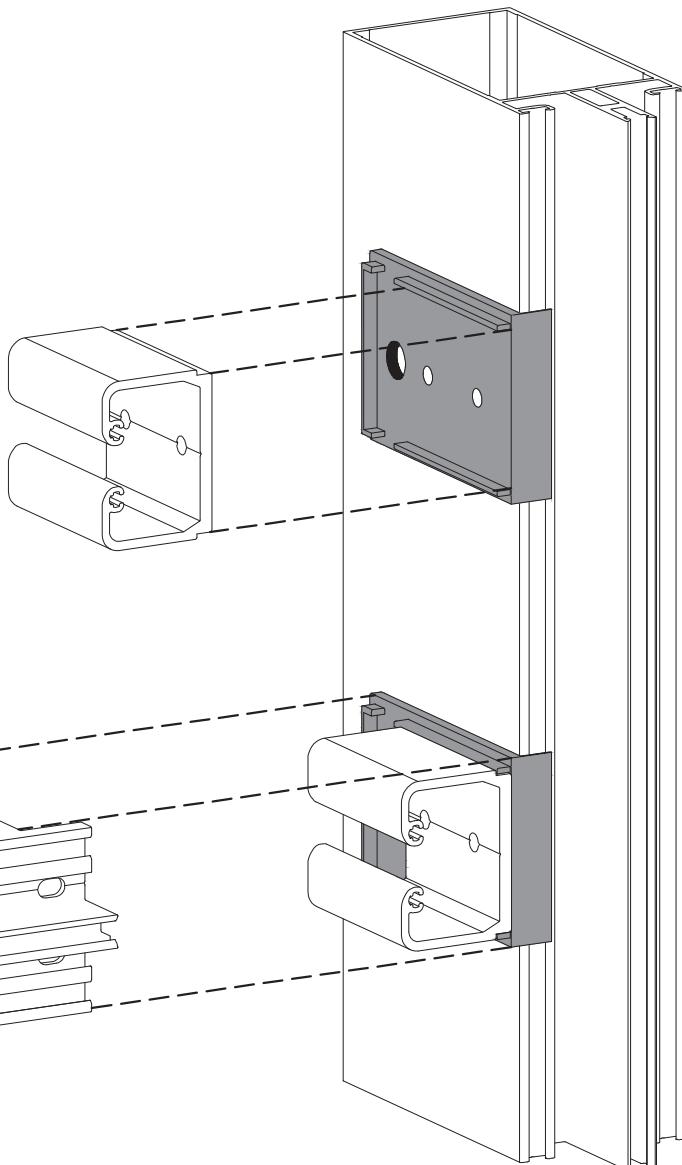
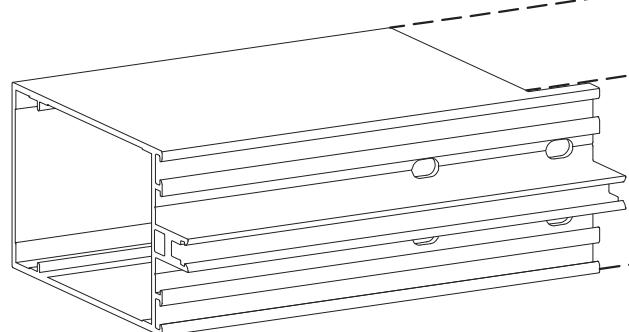
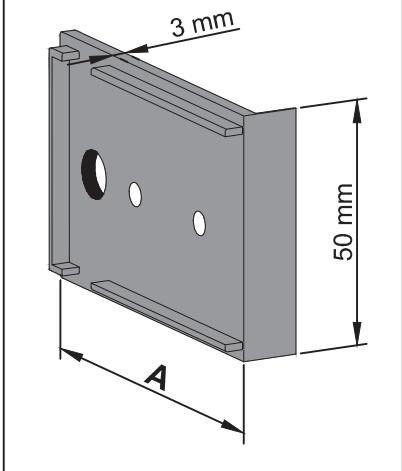
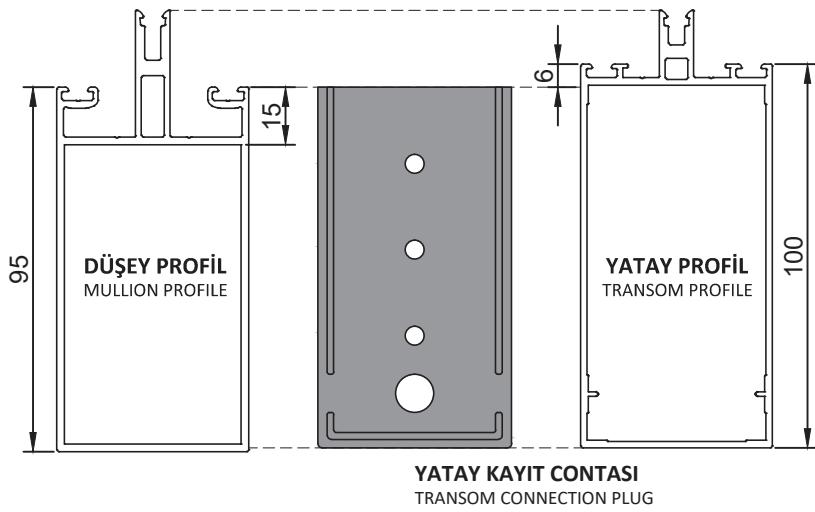
**FP514 (0,947 kg/m.)**



## YATAY KAYIT CONTALARI

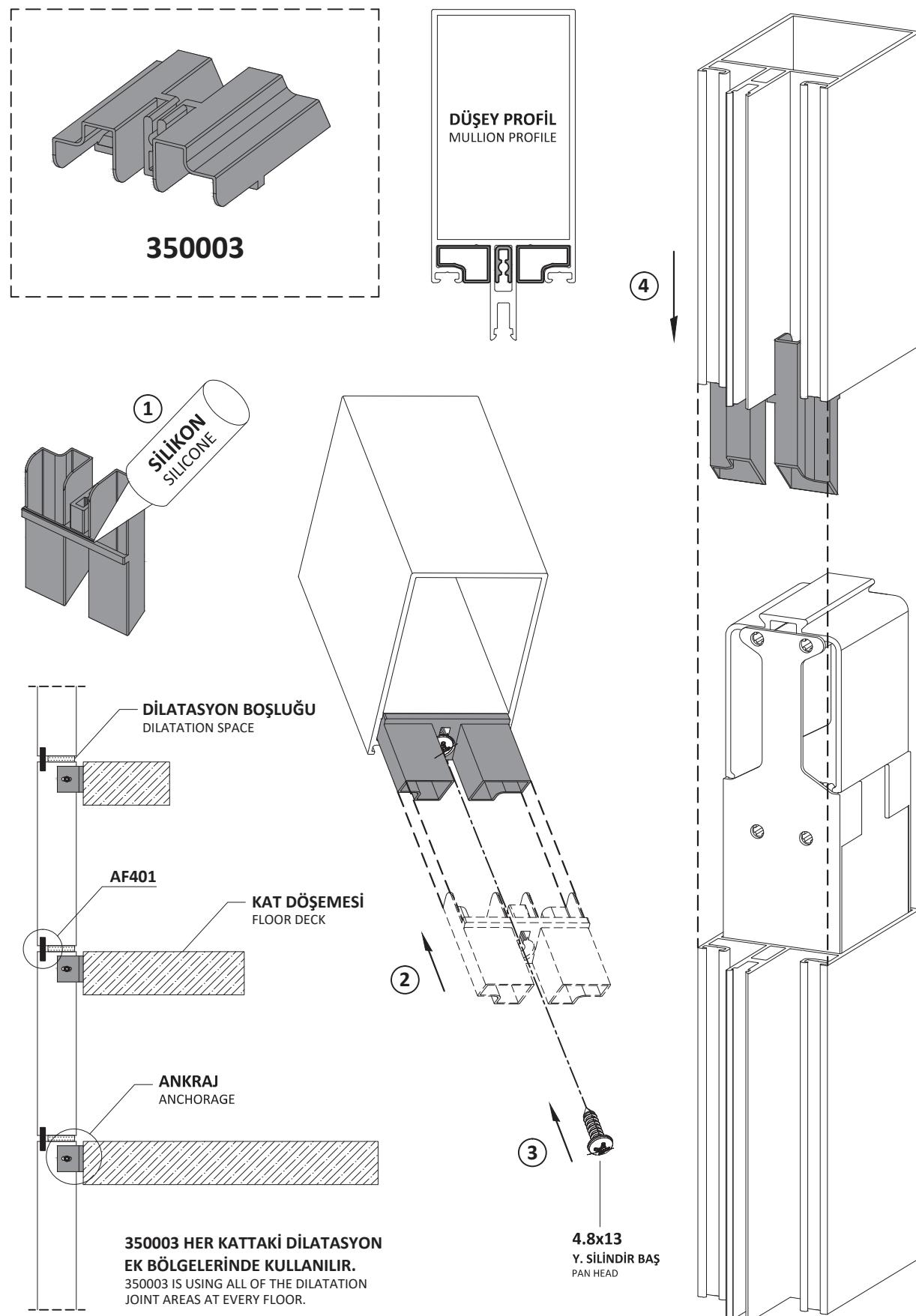
TRANSOM CONNECTION PLUGS

AKSESUAR KODU ACCESSORY CODE	A (mm)
330004	20 mm
330005	40 mm
330006	60 mm
330007	80 mm
330008	100 mm
330009	120 mm
330010	140 mm
330011	160 mm
330012	180 mm
330013	200 mm
330014	220 mm

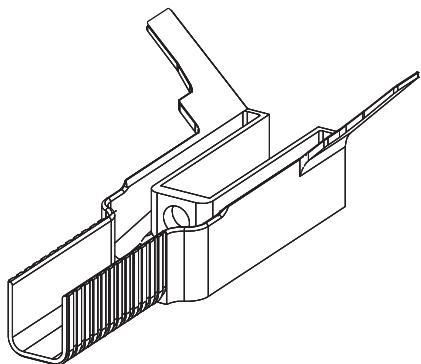


## KONDENS YOLU İÇİN BAĞLANTI PARÇASI

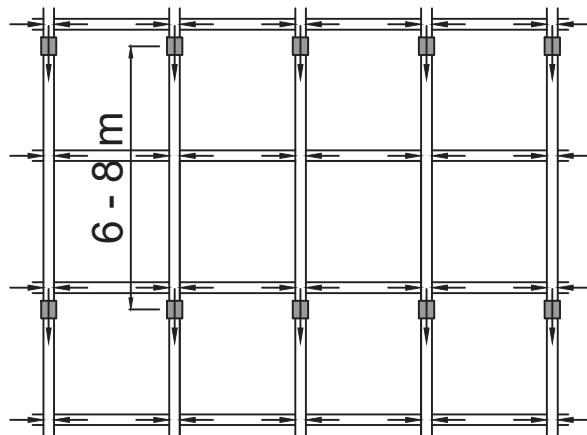
CONNECTION PIECE FOR THE CONDENSATION LINE



## ÇÖRTEN (YÜKSEK KATLI YAPILAR İÇİN) WATERSPOUT (FOR ONLY HIGH BUILDINGS)



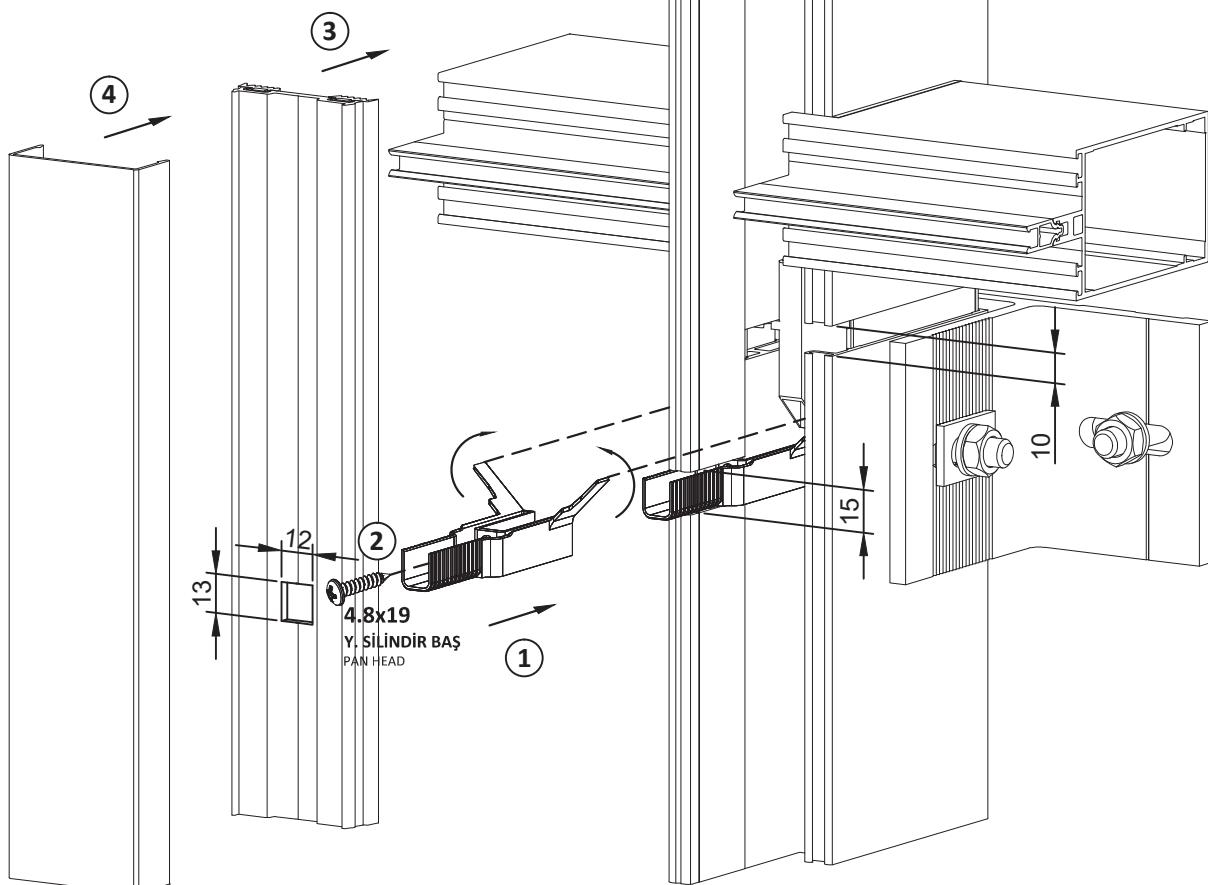
**350004**



**60 METRE BİNA YÜKSEKLİĞİNDEN SONRA HER İKİ KATTA BİR UYGULANMASI TAVSİYE EDİLİR.  
USING ONE AT EACH TWO FLOORS AFTER THE BUILDING HEIGHT OF 60 METERS RECOMMENDED.**

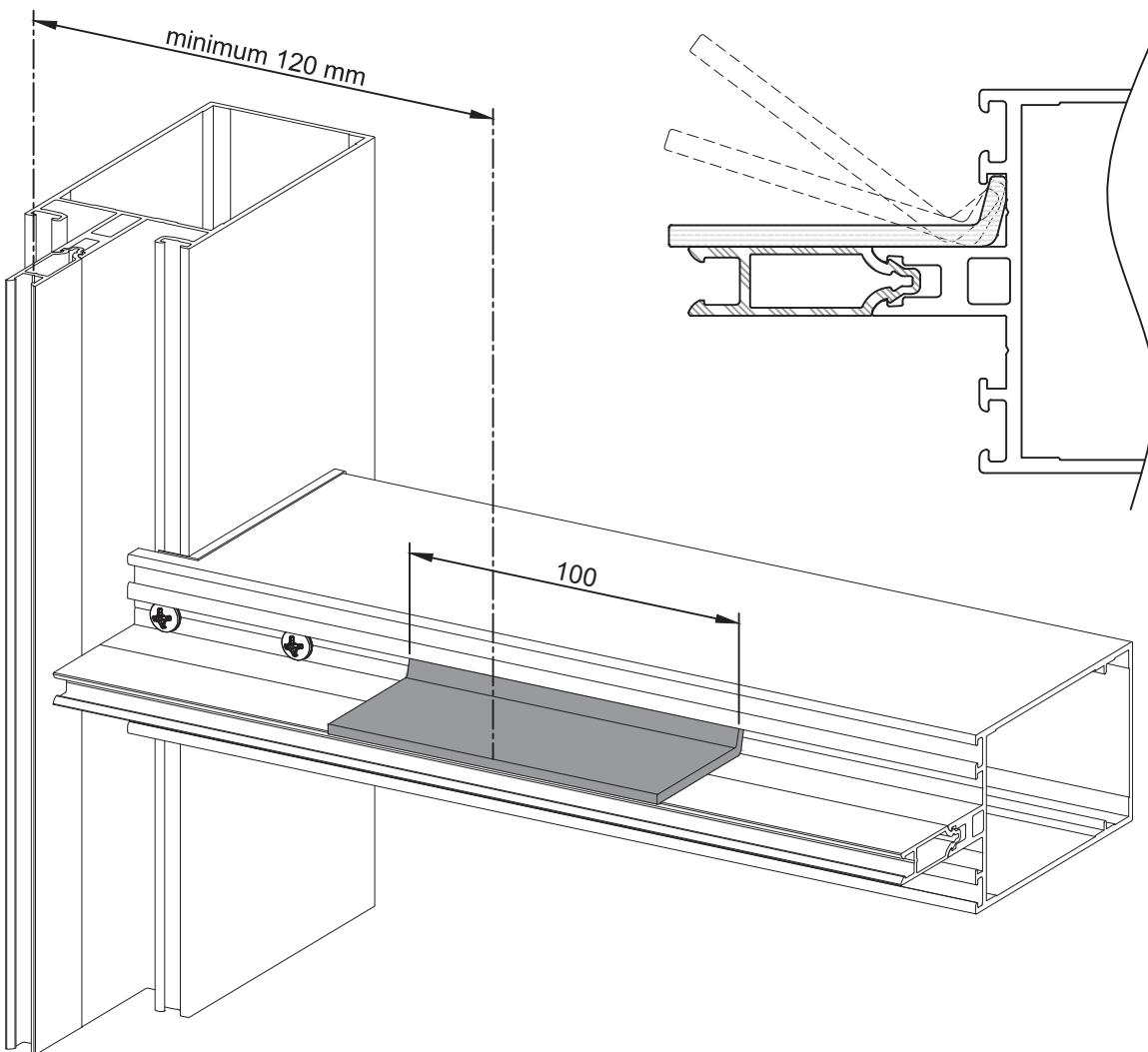
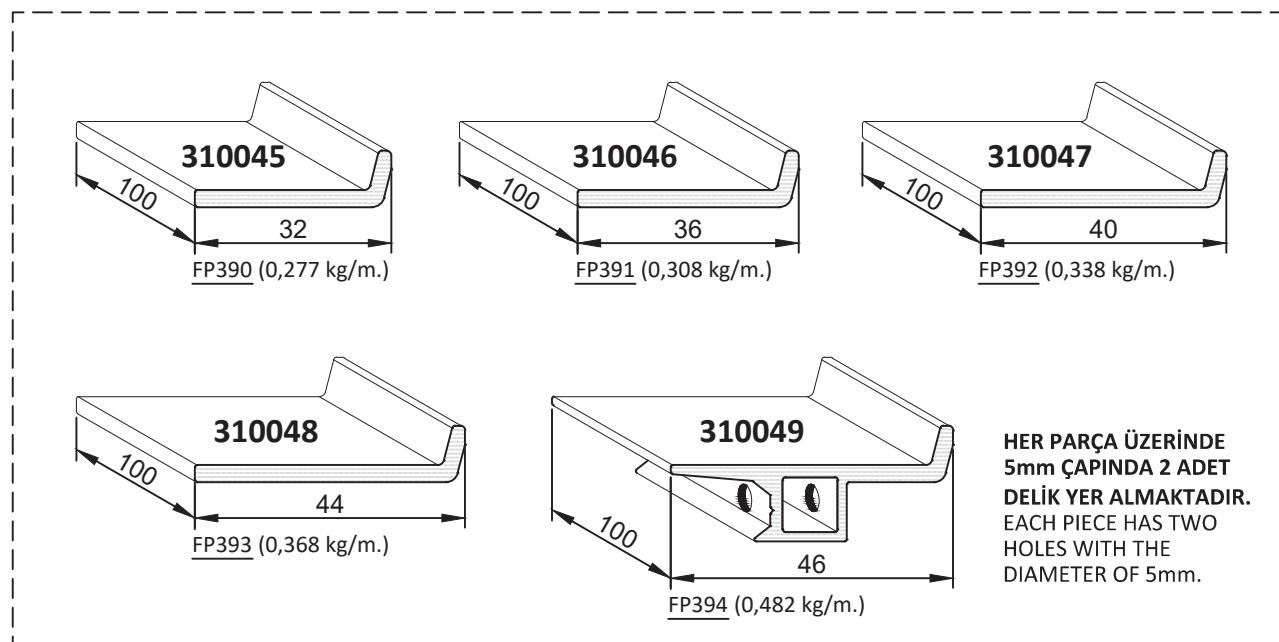
**ÇÖRTEN, ÜSTTEN Veya ALTTAN SÜRÜLEREK  
TAKILABİLDİĞİ GİBİ DİŞ TARAFtan KULAKLARI  
EĞİLEREK EN SONRA DA TAKILABİLİR.**

WATERSPOUT CAN BE INSTALLED AT TOP OR BOTTOM  
THROUGH TO THE CONDENSATION CHANNELS. ALSO IT CAN  
BE INSTALLED FROM OUTSIDE AT LAST.



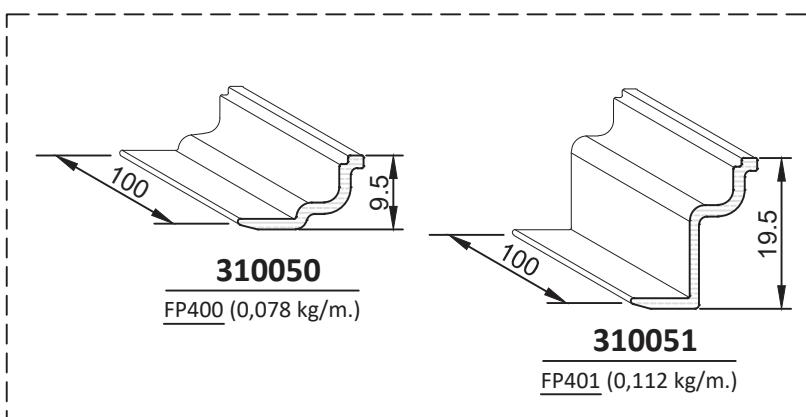
## CAM ALTI DESTEK PARÇALARI

GLAZING SUPPORT PIECES

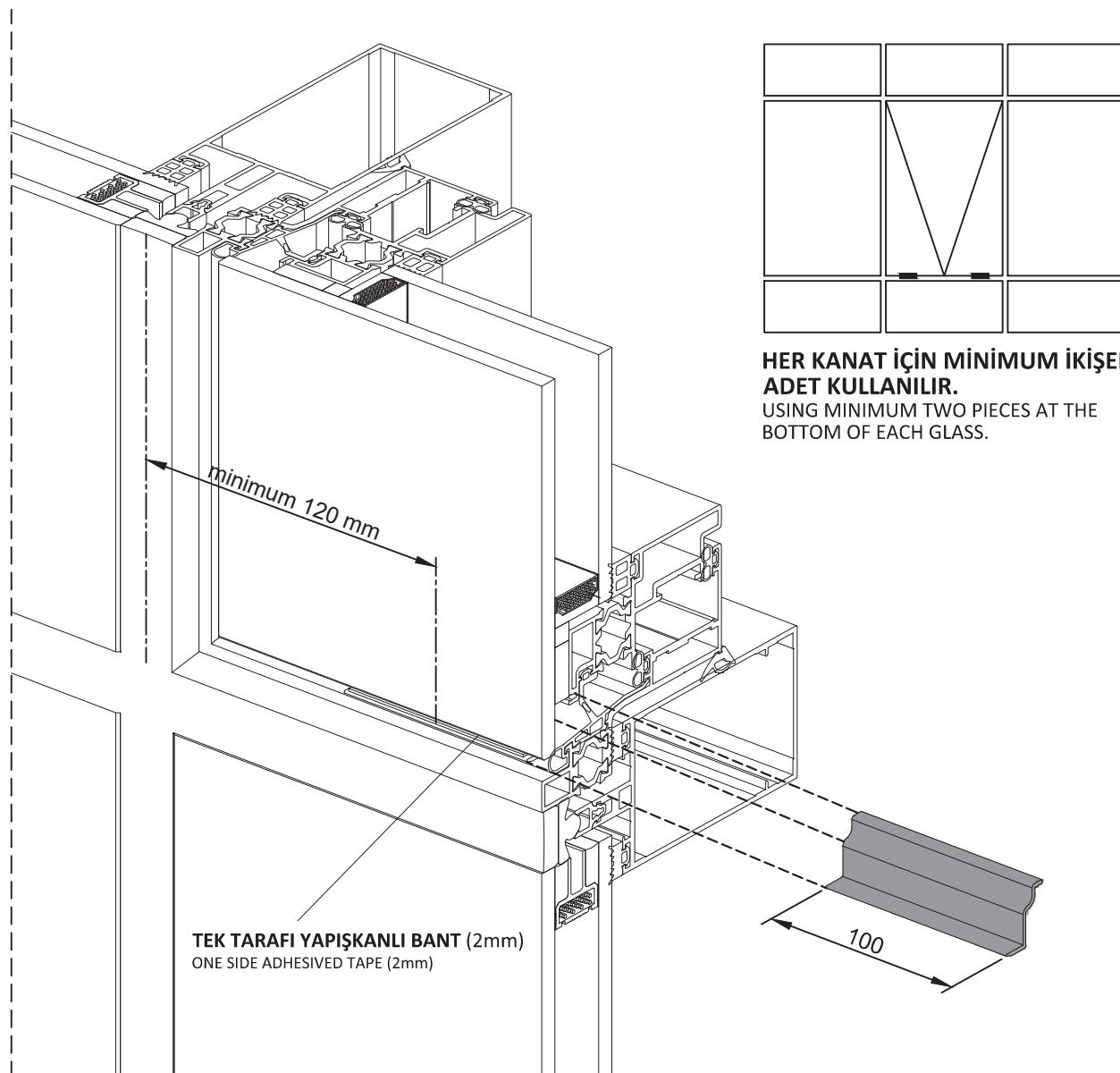


## KANAT İÇİN CAM ALTI DESTEK PARÇALARI

GLAZING SUPPORT PIECES FOR VENT

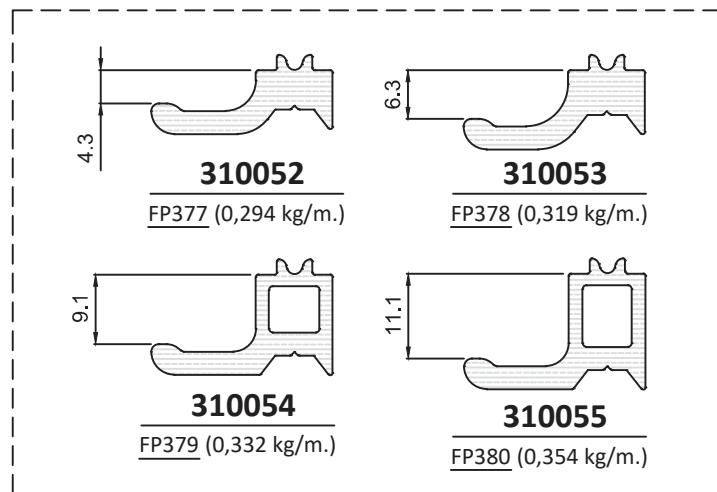


**CAM ALTI DESTEK  
PARÇALARI, KANAT  
KÖSELERİ PRESLENMEDEN  
ÖNCE TAKILMALIDIR.**  
GLAZING SUPPORTS SHOULD BE  
INSTALLED BEFORE THE CORNER  
CLEAT JOINTS OF VENT APPLIED.



## STANDART 20mm ISICAM ÇITALI CAM ARASI KİLEME PARÇALARI

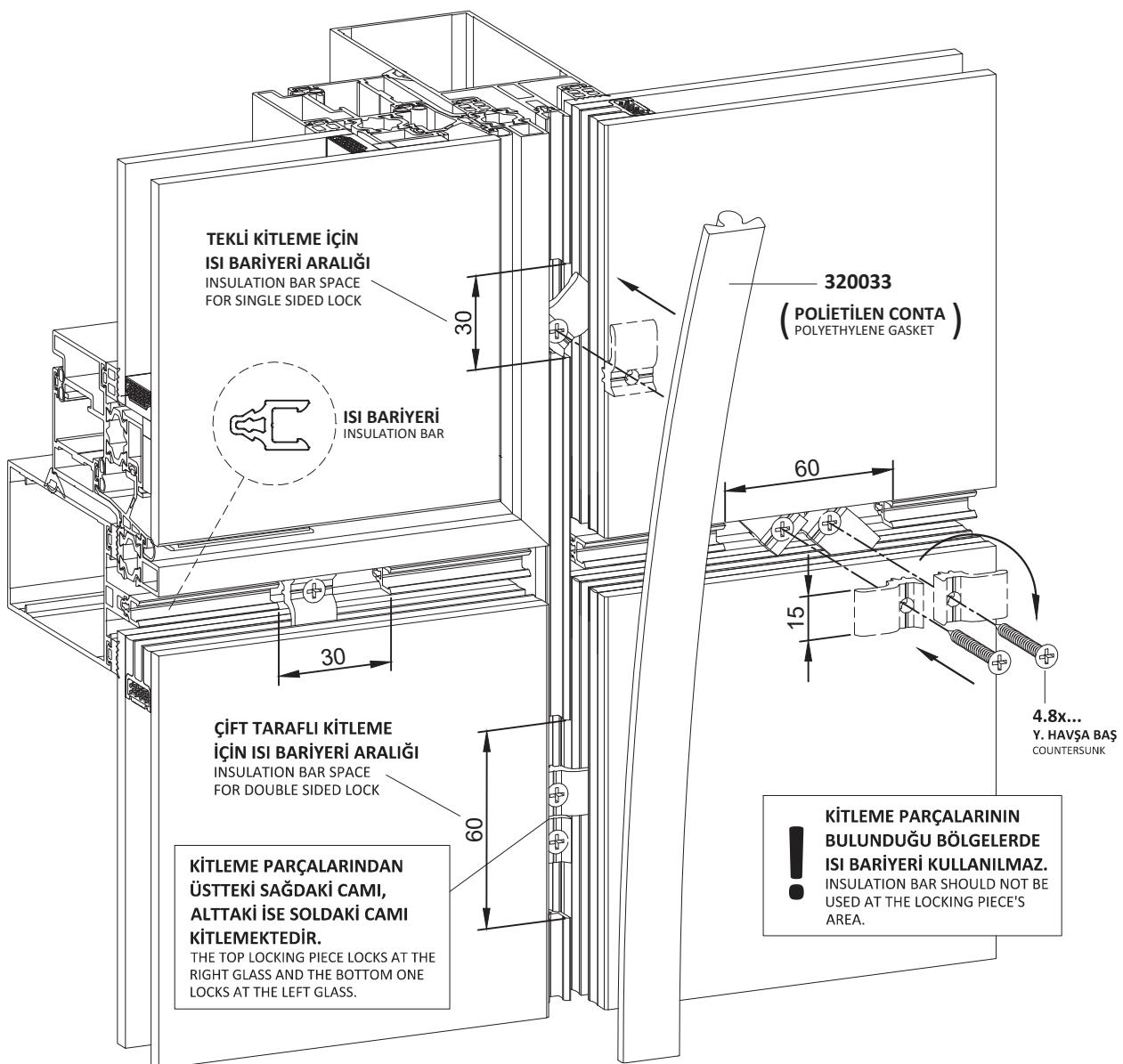
LOCKING PIECES FOR THE STANDARD 20mm DOUBLE GLAZED GLASS SPACER



**BUTİL BANT (0,5mm)**  
BUTYL TAPE (0,5mm)

**FP398**  
(0,240 kg/m)

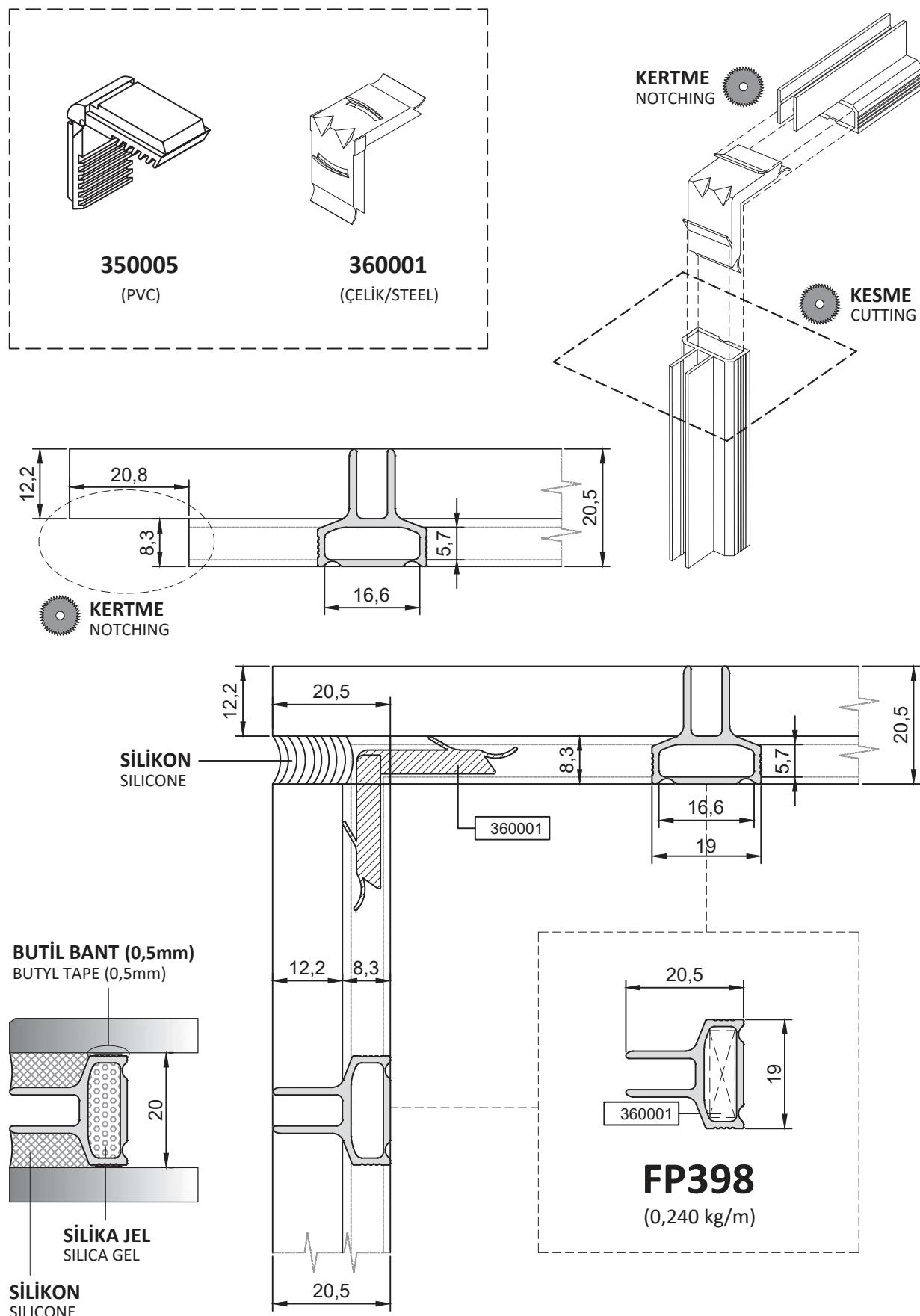
**SİLİKA JEL**  
SILICA GEL  
**SİLİKON**  
SILICON



! AYNI CAM MODÜLÜNDEKİ KİLEMELER ARASI MESAFE YAKLAŞIK 30 CM OLMALIDIR.  
DISTANCE BETWEEN LOCKING PIECES SHOULD BE APPROXIMATELY 30 CM AT THE SAME GLASS MODULE.

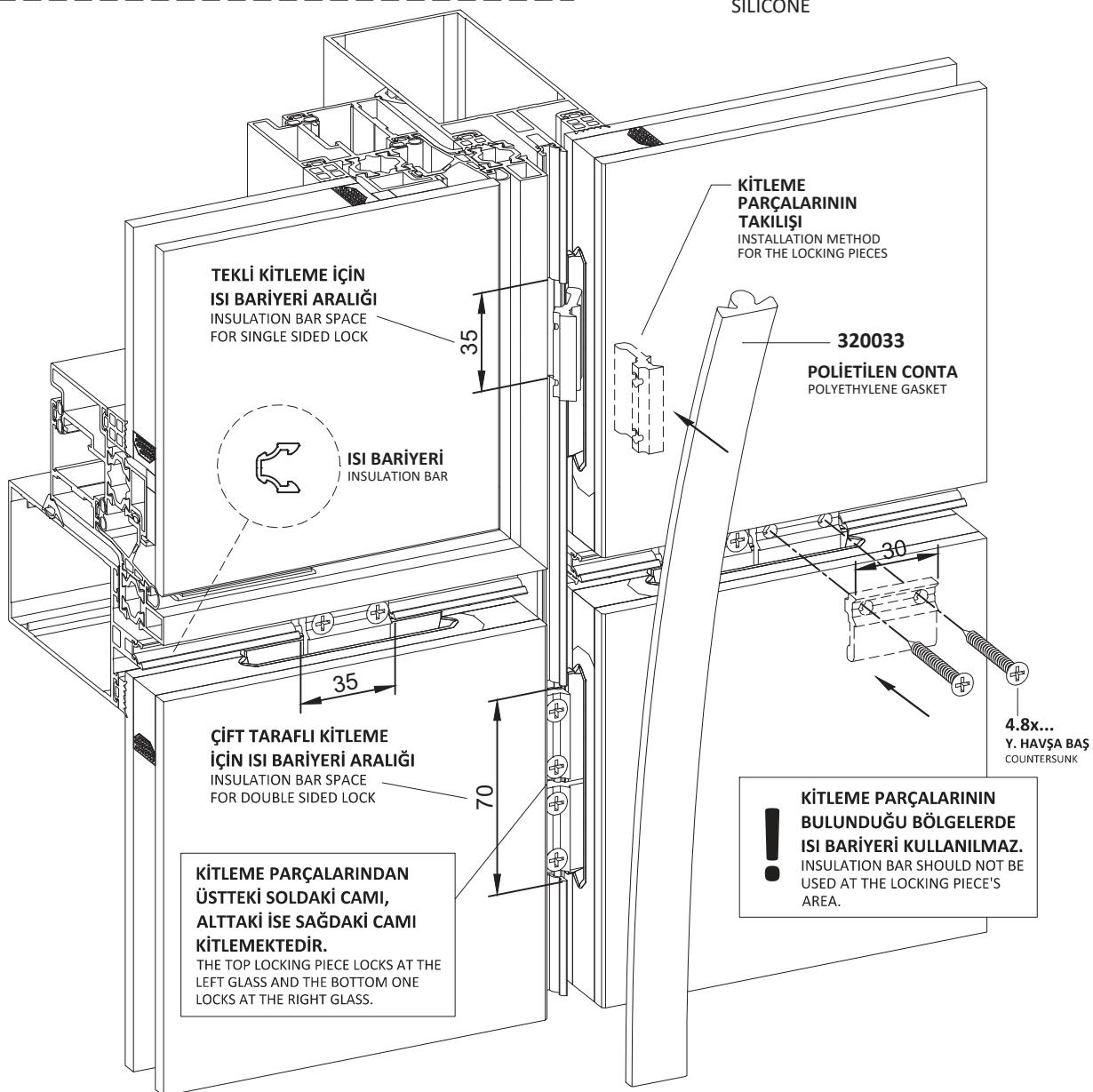
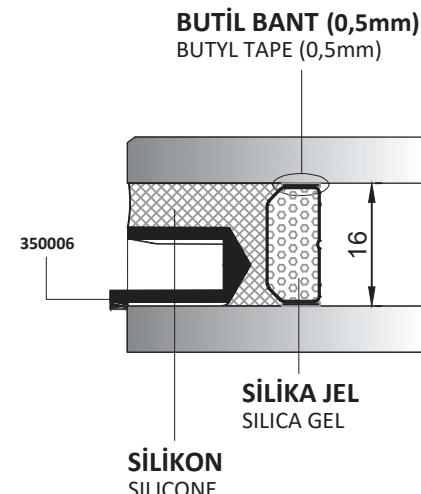
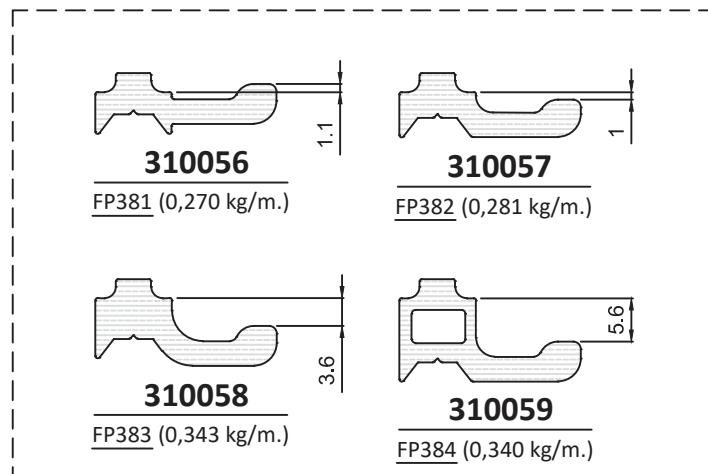
## STANDART 20mm ISICAM ÇITASI İÇİN KÖŞE BİRLEŞTİRME METODU

CORNER CONNECTION METHOD FOR THE STANDARD 20mm DOUBLE GLAZED GLASS SPACER



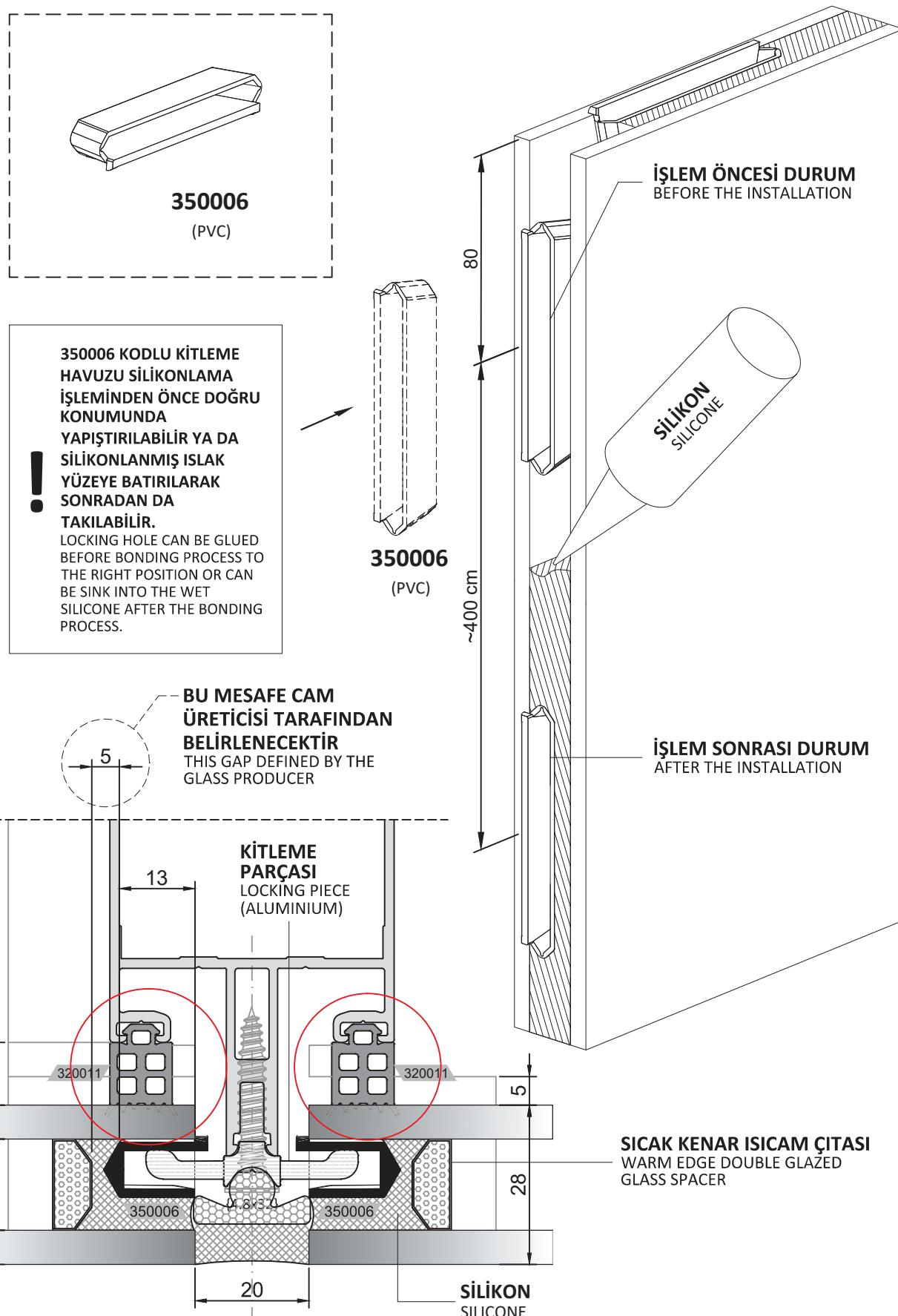
## 16mm SICAK KENAR ISICAM ÇITALI CAM ARASI KİLEME PARÇALARI

LOCKING PIECES FOR 16mm WARM EDGE DOUBLE GLAZED GLASS SPACER



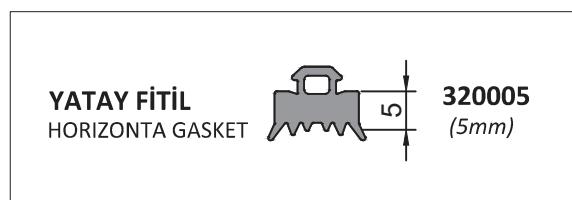
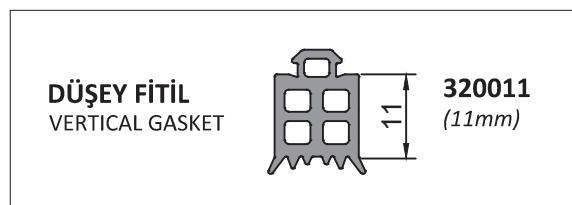
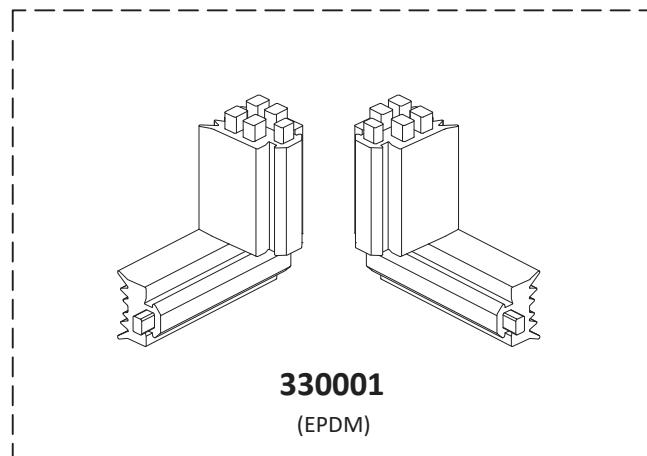
! AYNI CAM MODÜLÜNDEKİ KİLEMELER ARASI MESAFE YAKLAŞIK 40 CM OLMALIDIR.  
DISTANCE BETWEEN LOCKING PIECES SHOULD BE APPROXIMATELY 40 CM AT THE SAME GLASS MODULE.

## 16mm SICAK KENAR ISICAM ÇITASI İÇİN CAM ARASI KİLEME HAVUZU LOCKING HOLE FOR 16mm WARM EDGE DOUBLE GLAZED GLASS SPACER

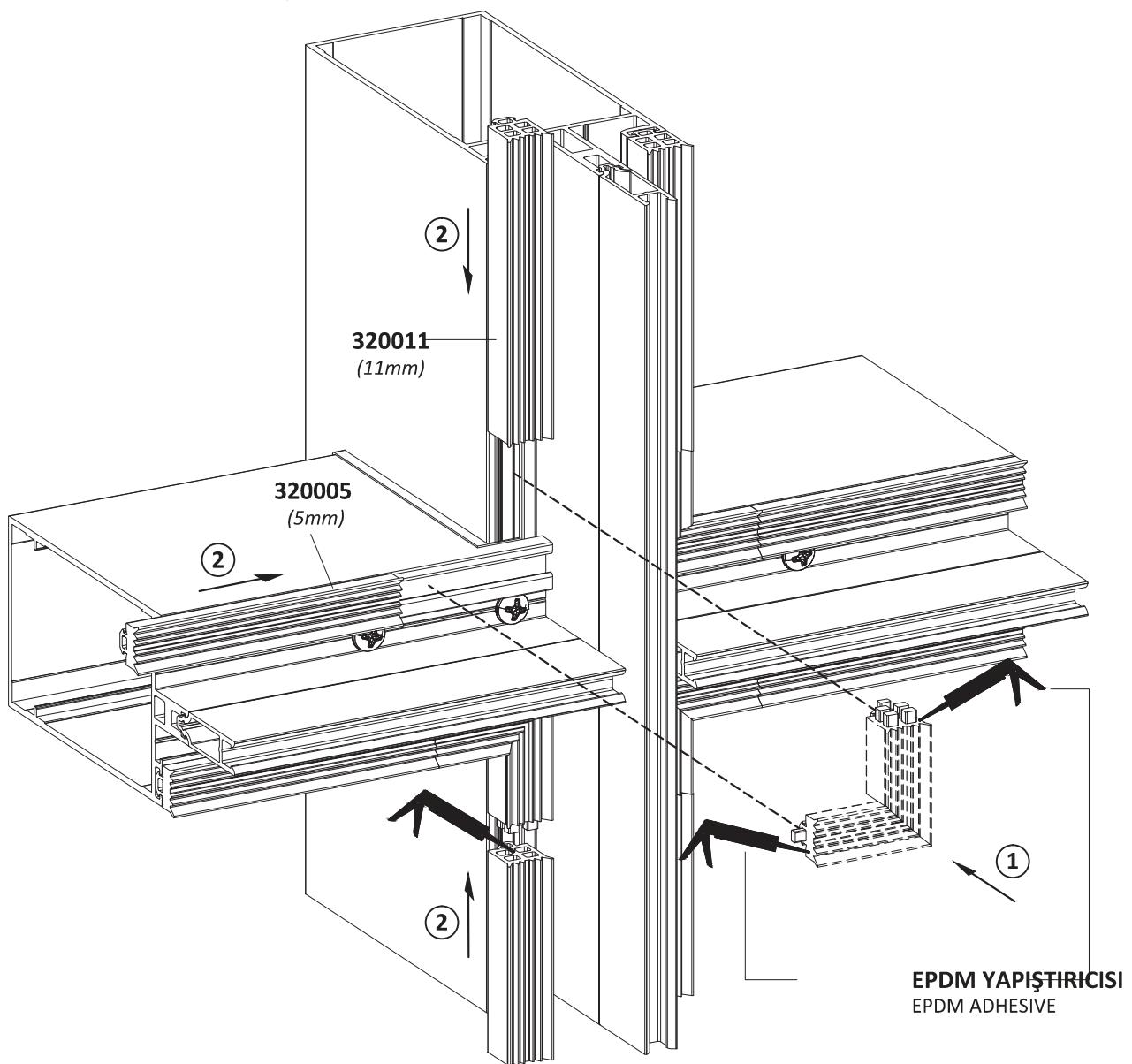


## VULKANİZE İÇ KÖŞE PARÇALARI

VULCANISED INNER CORNER PIECES

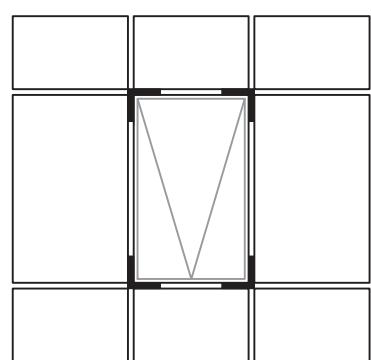
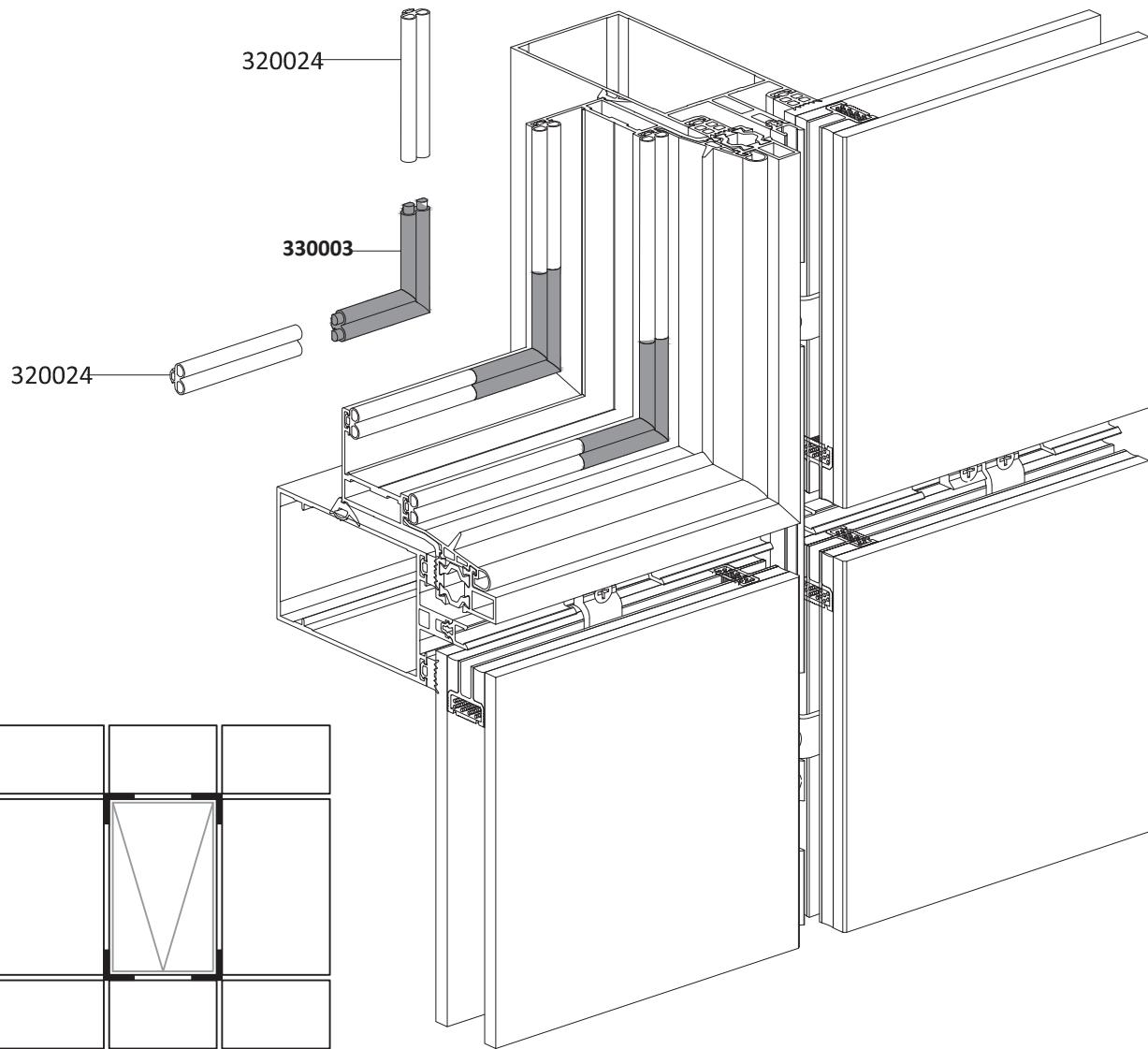
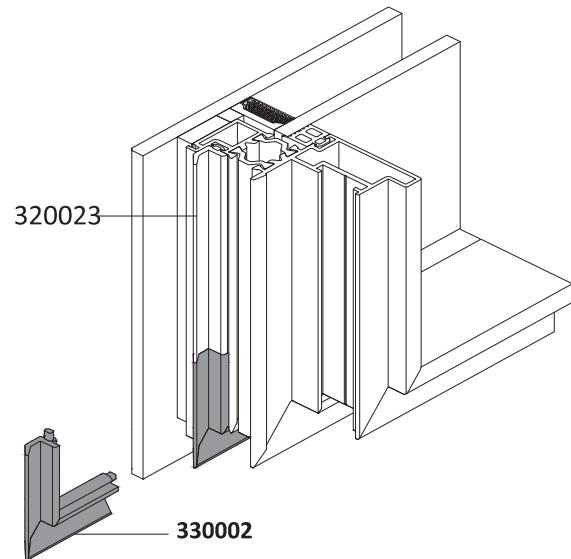
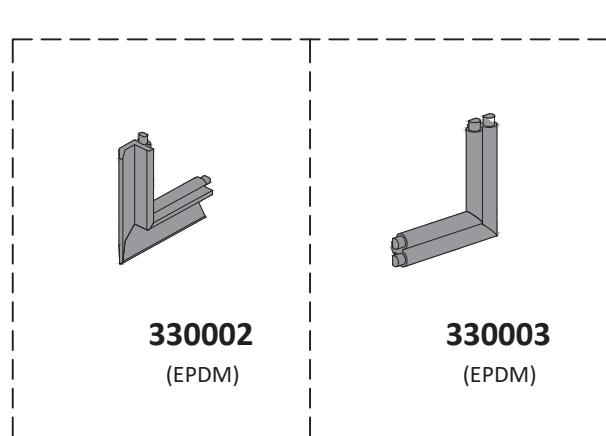


! ( SAĞ VE SOL PARÇALAR OLMAK ÜZERE TAKIMDIR. /  
SET AS LEFT AND RIGHT PAIRS. )



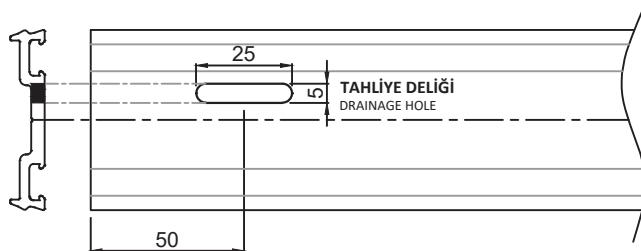
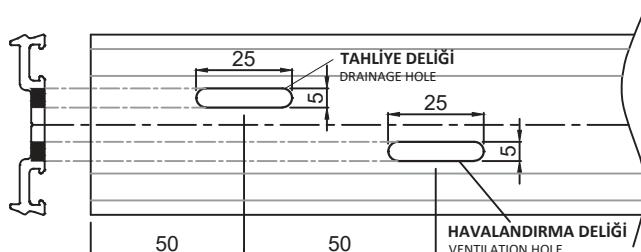
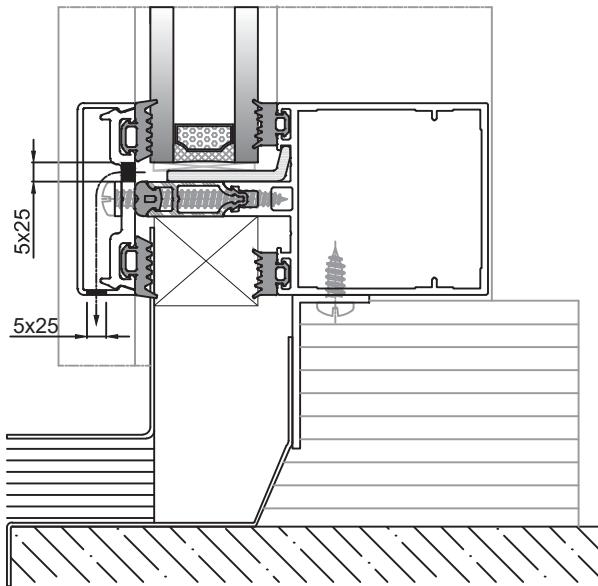
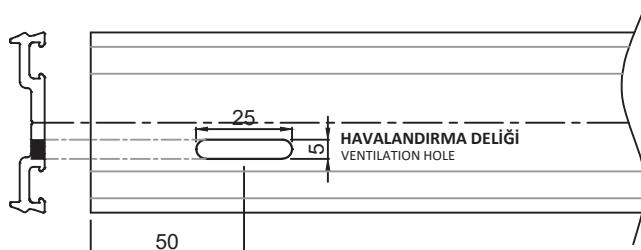
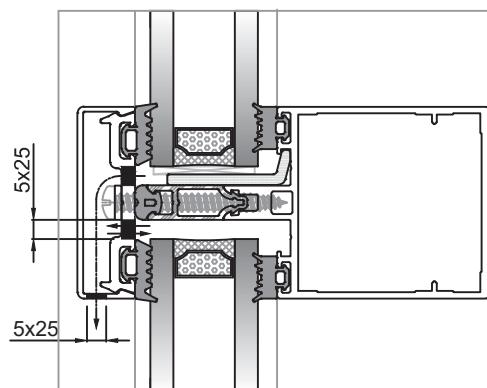
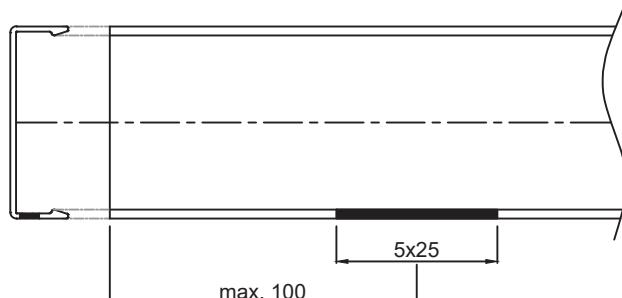
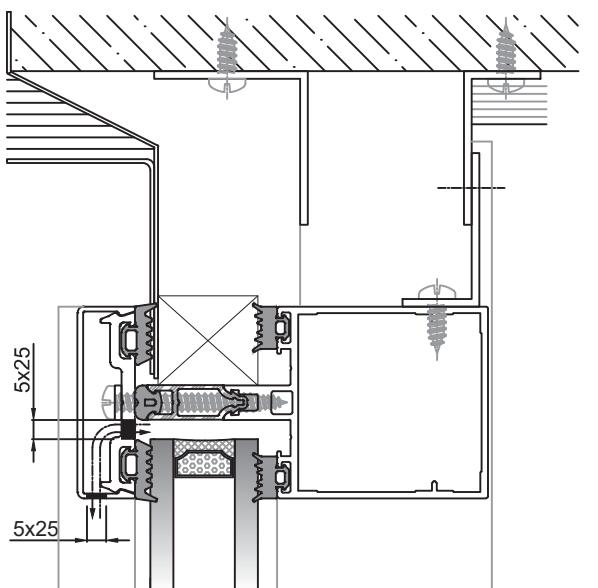
## DIŞA AÇILIR KANAT İÇİN VULKANİZE KÖŞE PARÇALARI

VULCANISED CORNER PIECES FOR OUTWARD OPENING VENT



## KAPAKLAR İÇİN TAHLİYE DELİK ŞEMALARI

SCHEMAS OF THE DRAINAGE HOLES FOR THE CAPS



**ÖNEMLİ: AÇILAN İKİ DELİK ARASINDA HER DURUMDA EN AZ 50mm HİZA FARKI(ŞAŞIRTMA) OLMALIDIR.**

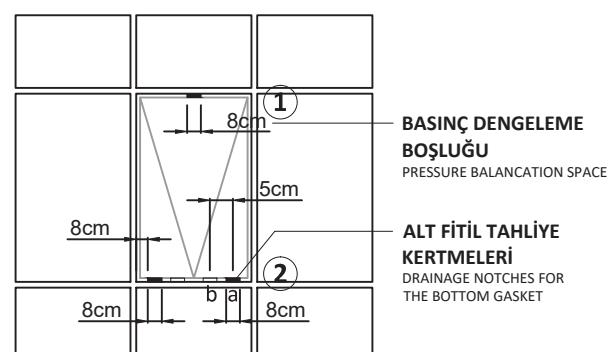
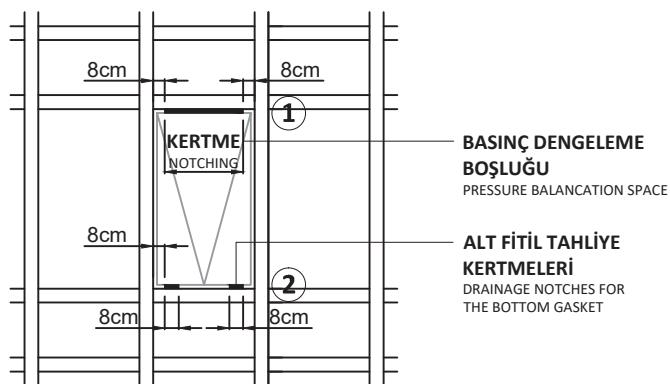
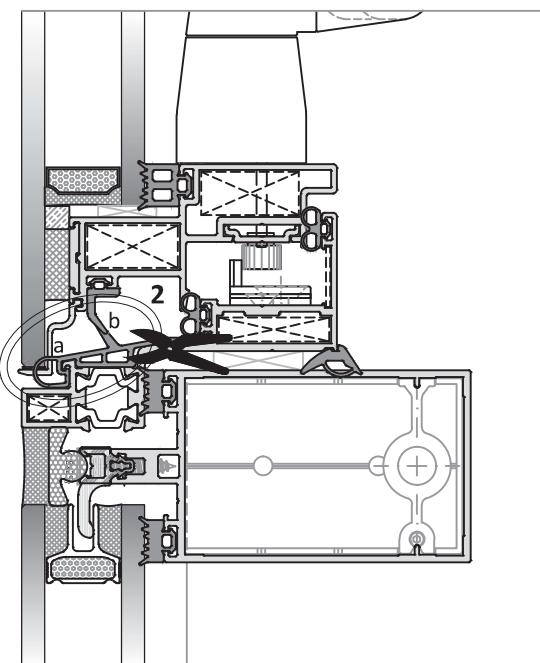
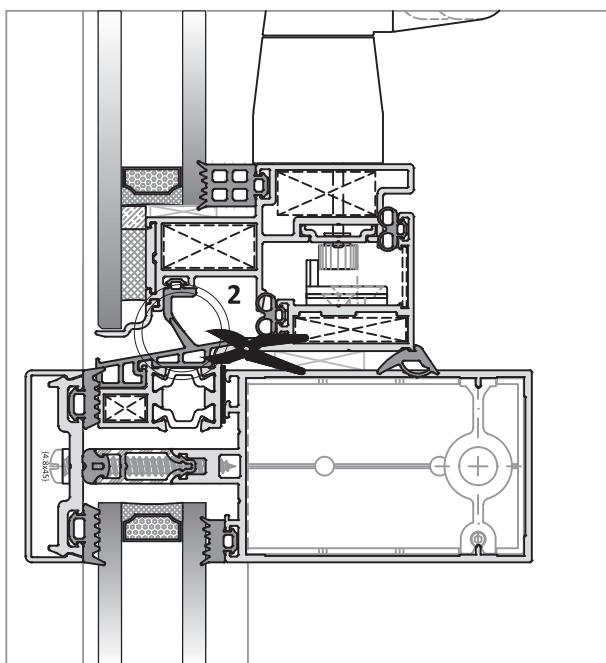
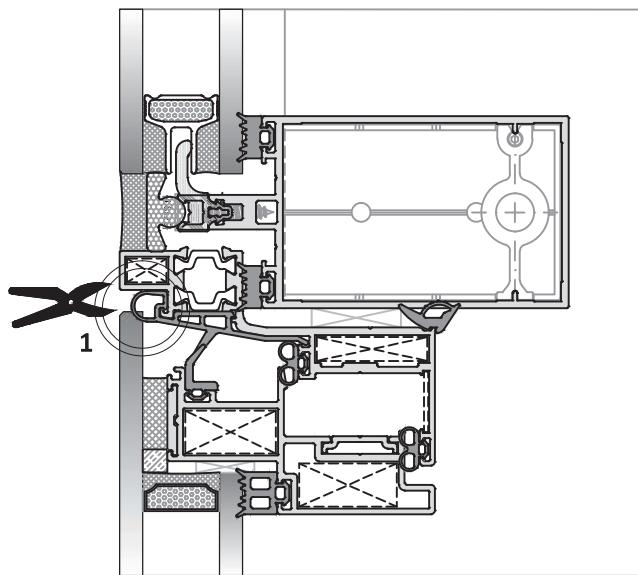
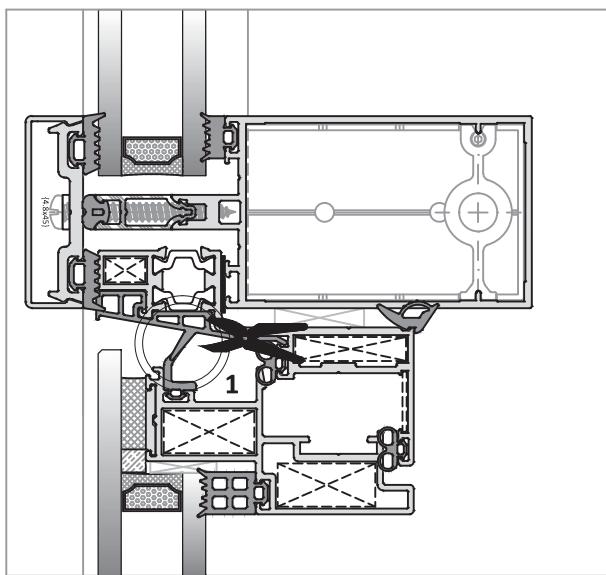
**IMPORTANT: AT LEAST 50mm ALIGNING DIFFERENCE SHOULD BE MADE BETWEEN TWO HOLES EVERYTIME.**

**NOT: 1,5 METREDEN UZUN KAYITLarda TAM ORTAYA İLAVE BİR TAHLİYE DAHA AÇILMALIDIR.**

**NOTE: ADDITIONAL DRAINAGE HOLE SHOULD BE REQUIRED AT THE MIDDLE FOR TRANSOMS LONGER THAN 1,5 METER.**

## KANATLAR İÇİN TAHLİYE DELİK ŞEMALARI

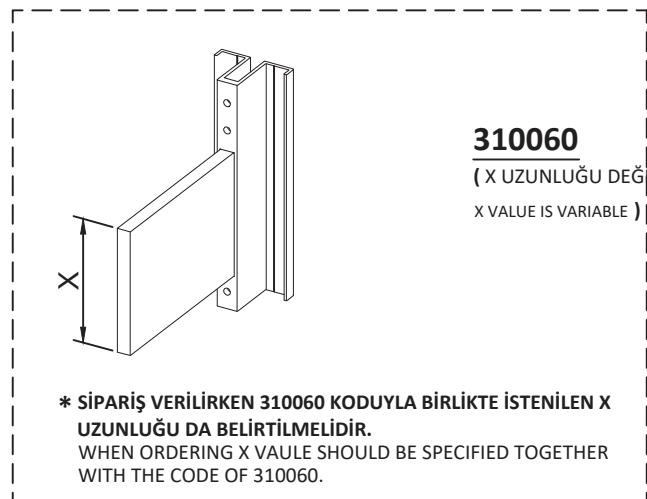
SCHEMAS OF THE DRAINAGE HOLES FOR VENTS



**NOT:** a ve b tahliye kertmeleri 5cm şartsızlıktır açırmalıdır.  
**NOTE:** a and b drainage notches should be misaligned as 5cm.

## KAPAKLI CEPHEDE G.KIRICI TAŞIYICI APARAT İÇİN BAĞLANTI DETAYI

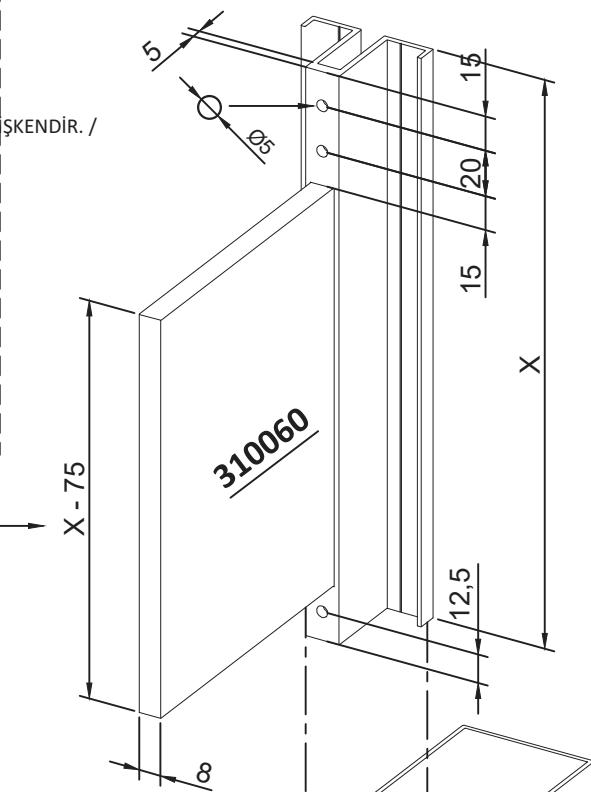
CARRIER APPARATUS FOR SUNBREAKER CONNECTION DETAIL AT THE CAPPED CURTAIN WALL



**310060**

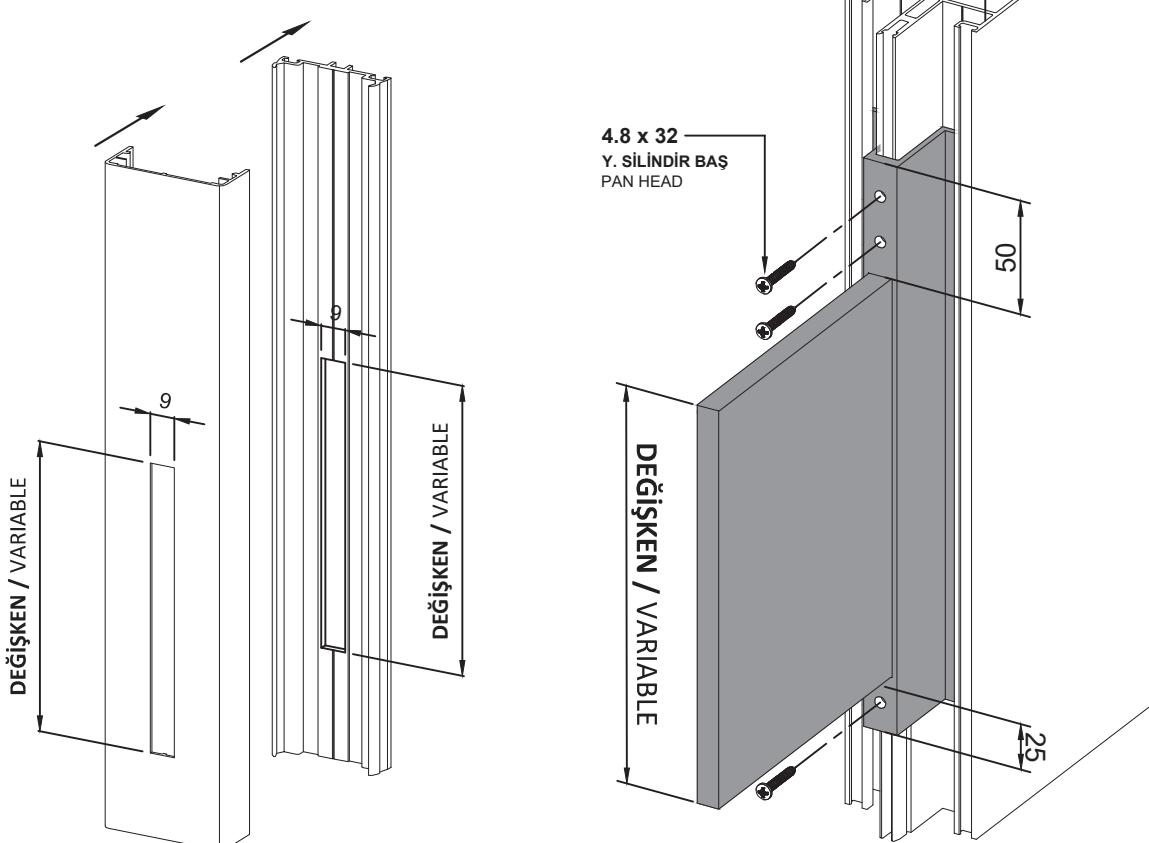
( X UZUNLUĞU DEĞİŞKEN /  
X VALUE IS VARIABLE )

\* SİPARİŞ VERİLİRKEN 310060 KODUYLA BİRLİKTE İSTENİLEN X  
UZUNLUĞU DA BELİRTİLMELİDİR.  
WHEN ORDERING X VAULE SHOULD BE SPECIFIED TOGETHER  
WITH THE CODE OF 310060.



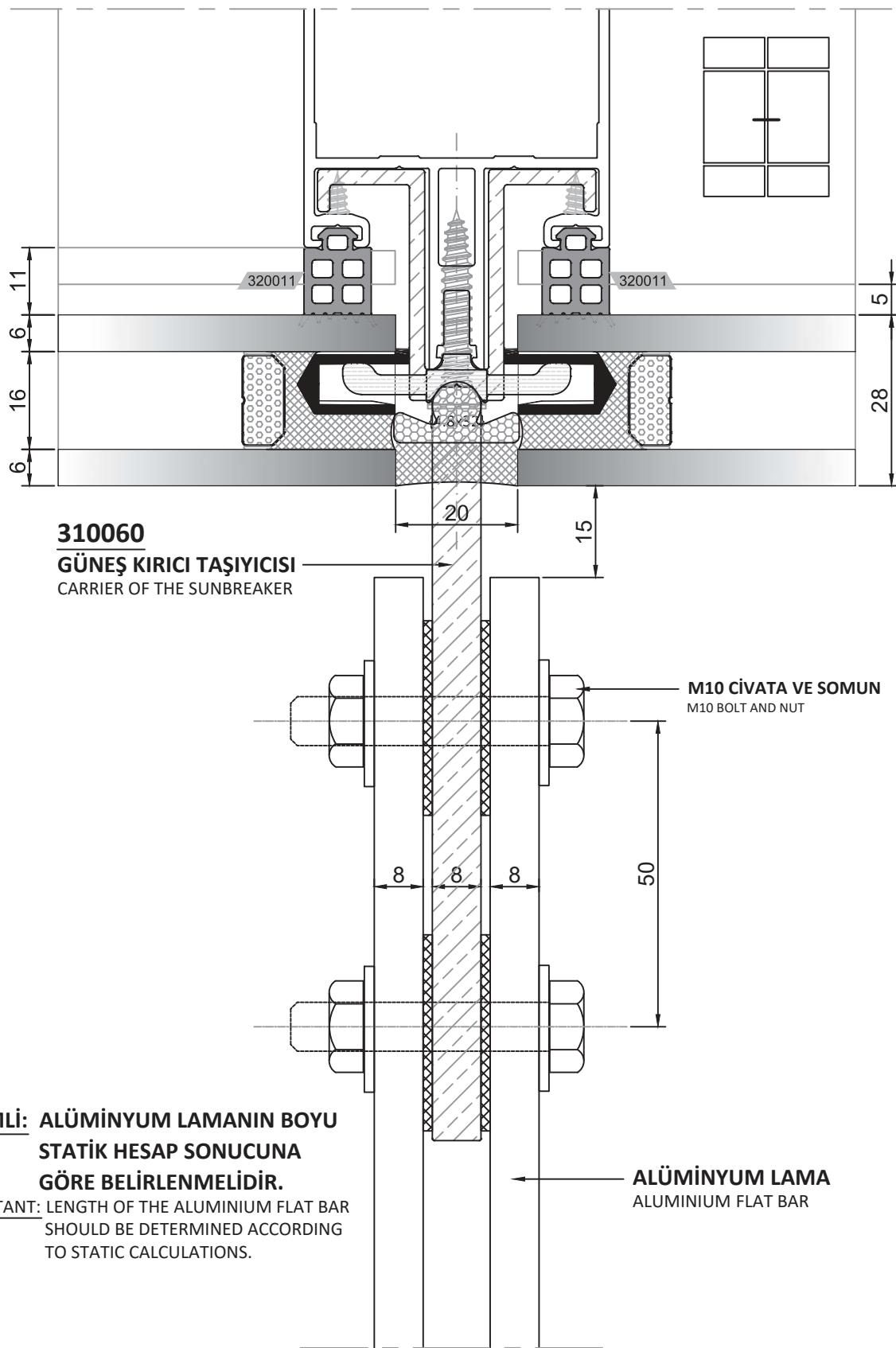
**ÖNEMLİ:** TAŞIYICI APARATIN UZUNLUĞU ( X ),  
ÜZERİNE BAĞLANACAK LAMALARIN  
GENİŞLİĞİNE VE GÜNEŞ KIRICILARIN  
UYGULADIĞI TOPLAM AĞIRLIĞA  
GÖRE HESAPLANMALIDIR.

**IMPORTANT:** LENGTH OF THE CARRIAGE PART SHOULD BE  
CALCULATED ACCORDING TO THE WIDTH OF  
THE ALUMINIUM ROD AND THE TOTAL WEIGHT  
APPLIED FROM THE SUNBREAKERS.



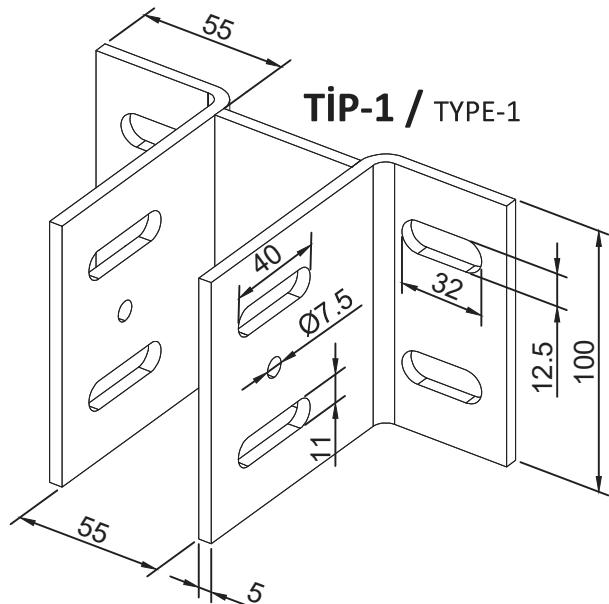
## CAM CEPHEDE TAŞIYICI APARAT ÜZERİNE G.KIRICI BAĞLANTI DETAYI

SUNBREAKER CONNECTION DETAIL ABOVE THE CARRIER APPARATUS AT THE FOURSIDED C.WALL

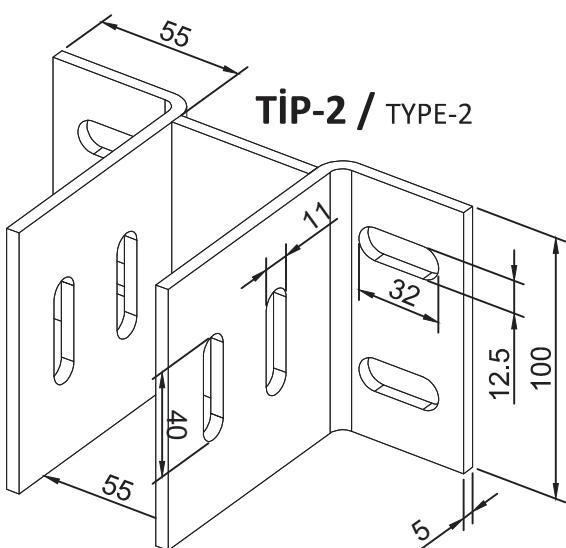


## ANKRAJLAR

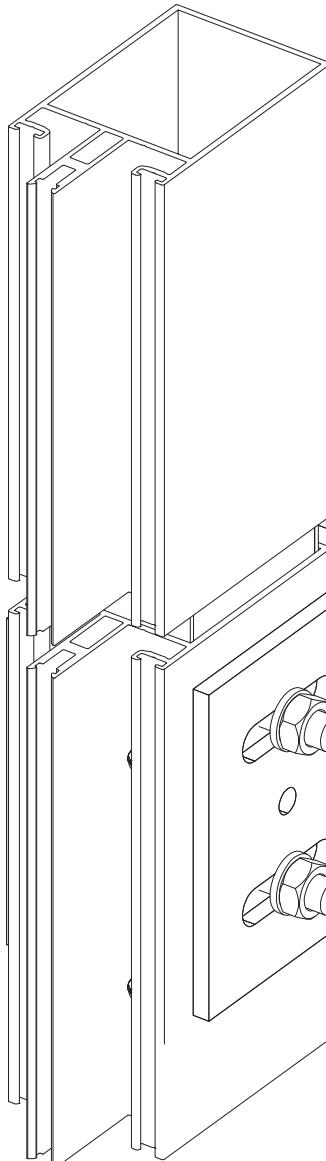
ANCHORAGES



**TİP-1 / TYPE-1**

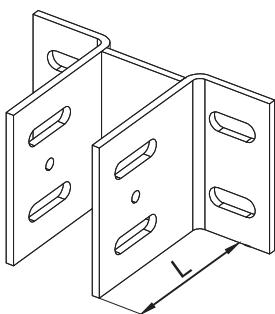


**TİP-2 / TYPE-2**



**DÜŞEY BAKLALI SABIT ANKRAJ**

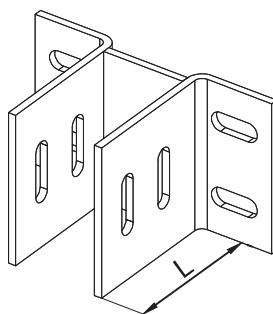
VERTICAL MOVABLE FIXED ANCHORAGE



**YATAY BAKLALI SABIT ANKRAJ**

HORIZONTAL MOVABLE FIXED ANCHORAGE

ÜRÜN KODU PRODUCT CODE	BAYRAK UZUNLUĞU (L) EXTENSION LENGTH (L)
360002	80 mm
360003	100 mm
360004	120 mm
360005	150 mm
360006	200 mm



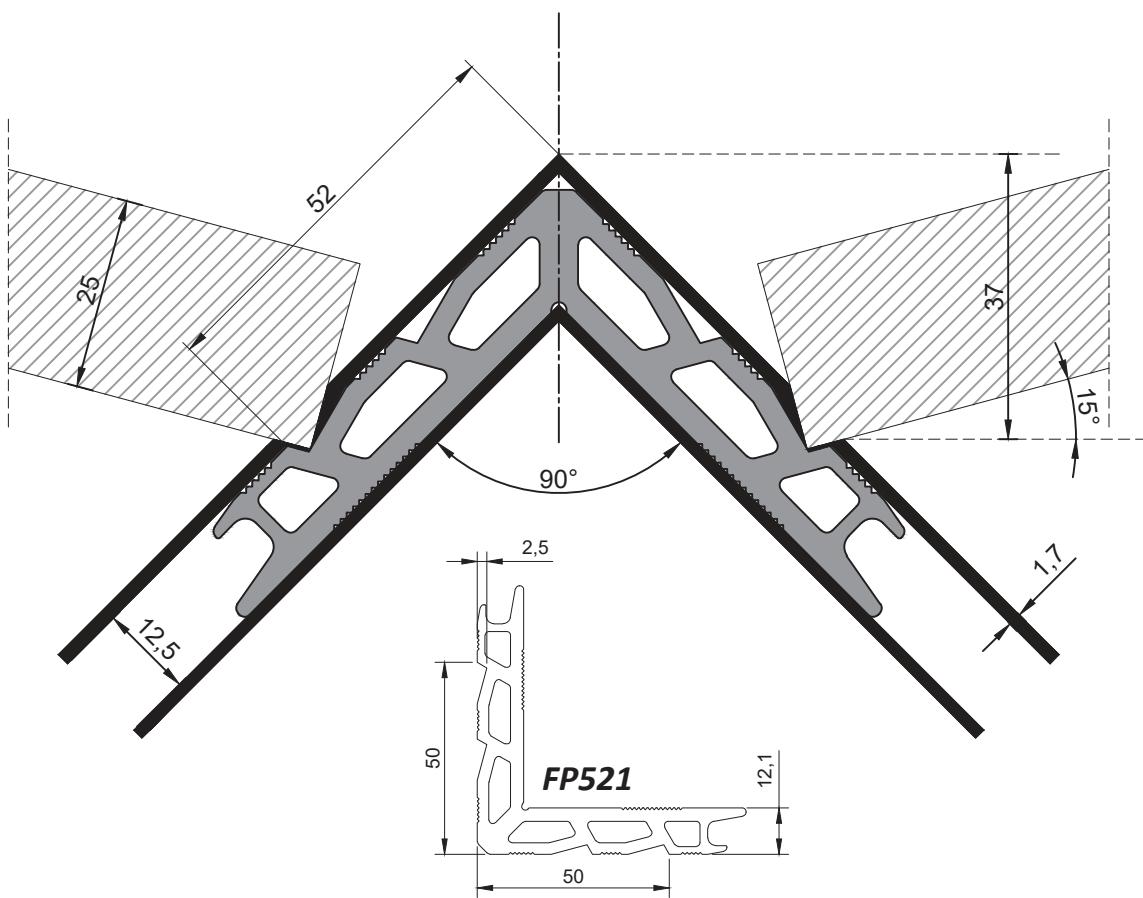
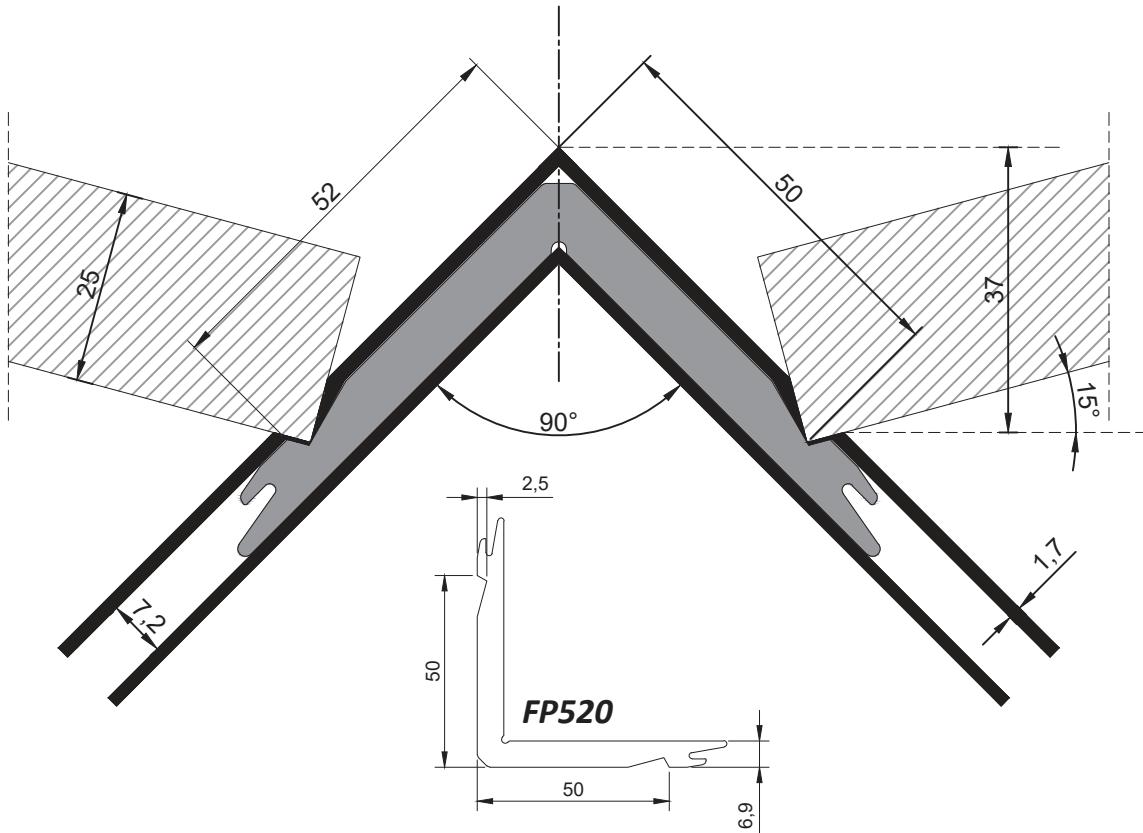
ÜRÜN KODU PRODUCT CODE	BAYRAK UZUNLUĞU (L) EXTENSION LENGTH (L)
360007	80 mm
360008	100 mm
360009	120 mm
360010	150 mm
360011	200 mm

\* BAYRAK UZUNLUKLARI TAŞIYICI DİKME DERİNLİKLERİNE VE YAPININ DÖŞEME ALIN HİZA FARKLARINA GÖRE DEĞİŞMELİKTİR.  
EXTENSION LENGTHS CHANGE ACCORDING TO THE MULLION DEPTH AND FRONT LEVEL DIFFERENCES OF THE FLOOR.

\* TÜM ANKRAJLAR DALDIRMA GALVANİZLİDİR.  
ALL ANCHORAGES ARE DIP GALVANIZED.

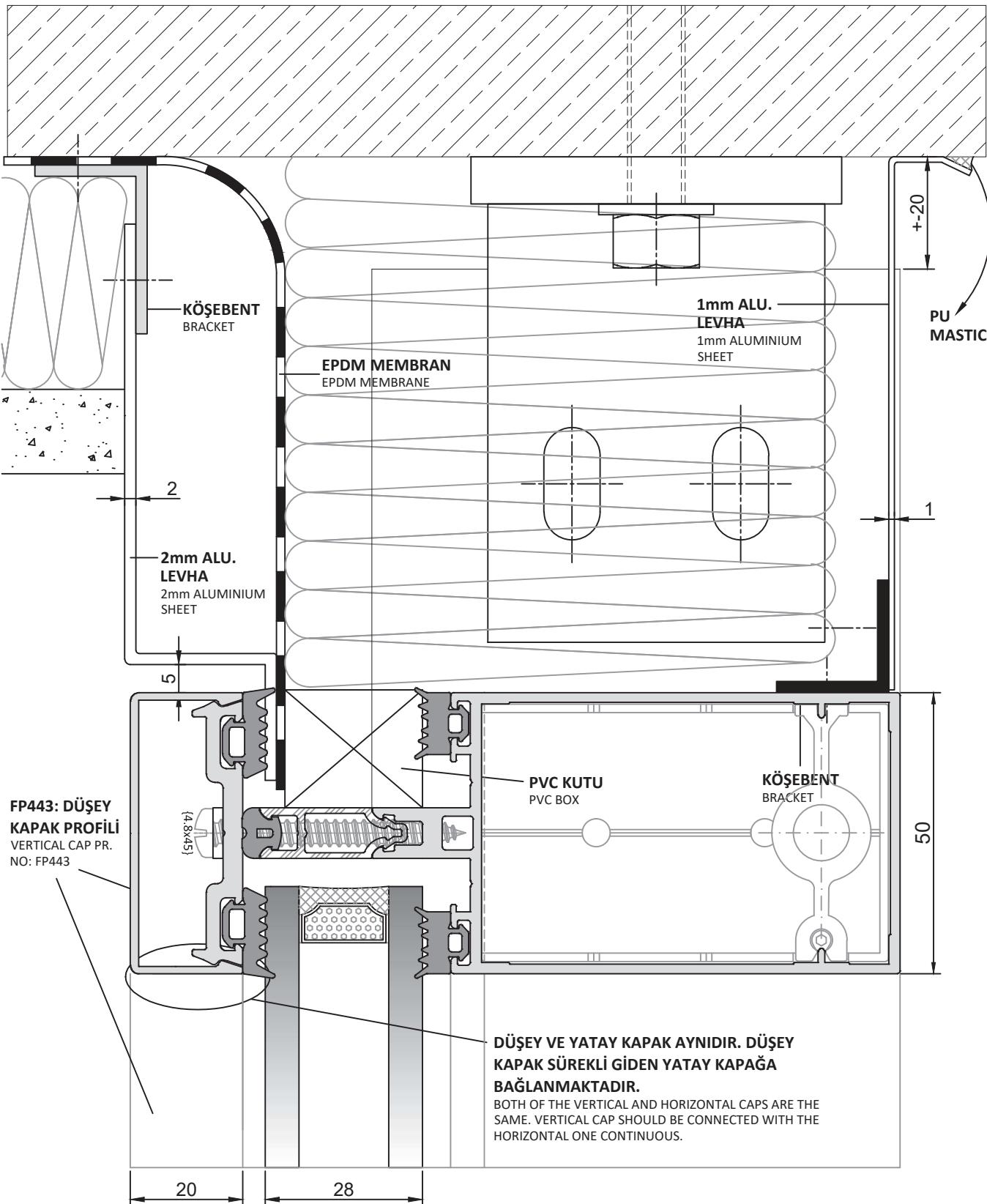
## KÖŞE TAKOZU BİRLEŞİM DETAYLARI

CORNER CLEAT CONECTION DETAILS



## ÖRNEK CEPHE ÜST BİTİŞ DETAYI

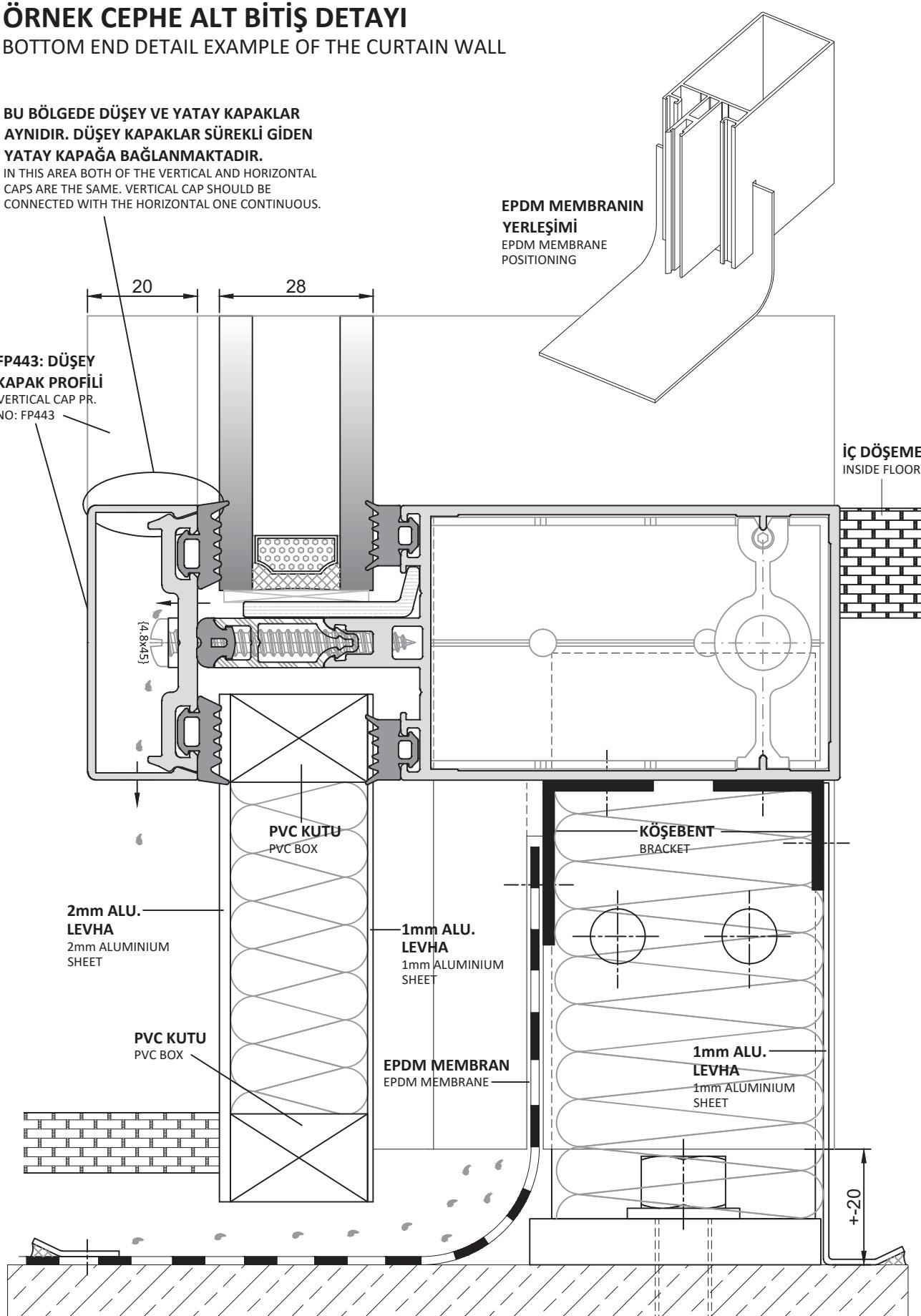
TOP END DETAIL EXAMPLE OF THE CURTAIN WALL



## ÖRNEK CEPHE ALT BİTİŞ DETAYI

### BOTTOM END DETAIL EXAMPLE OF THE CURTAIN WALL

BU BÖLGEDE DÜŞEY VE YATAY KAPAKLAR  
AYNIDIR. DÜŞEY KAPAKLAR SÜREKLİ GİDEN  
YATAY KAPAĞA BAĞLANMAKTADIR.  
IN THIS AREA BOTH OF THE VERTICAL AND HORIZONTAL  
CAPS ARE THE SAME. VERTICAL CAP SHOULD BE  
CONNECTED WITH THE HORIZONTAL ONE CONTINUOUS.



## KULLANIM ŞARTLARI

Profiller, folyolu muhafaza edilmeli, folyoları inşaat bitiminde çıkartılmalıdır. Kireç ve çimento gibi inşaat malzemeleri alüminyum yüzeylerle temas etmemelidir.

Profiller binaya uygulandıktan sonra düzenli aralıklarla temizlenmelidir. Profillerin temizliği, hafifçe sabunlu ılık su ve/veya bu suyla ıslatılmış yumuşak bir bez ile yapılmalı, deterjan, çamaşır suyu, zımpara, tel fırça ve aşındırıcı, alkali, asidik temizleyici kullanılmamalıdır.

Sistem için önerilen aksesuar ve sarf malzemeleri katalogda belirtilen biçimde uygulanmalı ve tüm aksesuarları eksiksiz olarak kullanılmalıdır.

Sistemin katalogda belirtilen fitilleme, silikonlama, su tahliyesi ve havalandırma metodlarına uyulmalıdır. İlave her türlü uygulama için Sistem Alüminyum'dan destek ve onay alınmalıdır.

## GARANTİ KOŞULLARI

Profiller, yukarıda belirtilen şartlara uygun biçimde kullanılmış ve hiçbir şekilde mekanik hasara veya deformasyona uğramamış ise, herhangi bir kusur durumunda, garantimiz yalnız kusurlu parçaların de-montajı, tekrar üretimi, tekrar eloksali ve tekrar yerine takılması ile sınırlı olacaktır. Yukarıda bahsedilmeyen konular iş hukukuna tabidir.

Mimari sistem kataloğuunda belirtilmeyen veya Sistem Alüminyum'un onay vermediği aksesuar ve sarf malzemesi kullanımından doğabilecek her türlü sorumluluk uygulamacı firmaya aittir.

Mimari sistem kataloğuunda belirtilen detay ve sistem çözümleri haricindeki uygulamalar için Sistem Alüminyum'un onayı alınmalıdır. Aksi takdirde bu uygulamalardan meydana gelebilecek problem ve aksaklılıklardan Sistem Alüminyum sorumlu değildir.

## TERMS OF SERVICE

Profiles must be protected with folio tapes and they must be taken out when the structure was finished. Building materials as similar lime and cement must not be touched with the aluminium surfaces.

The profiles must be cleaned periodically after the structure was finished. Cleaning of profiles must be done by the fabric that was damped with warm water and soap. Don't use detergent, chlorine water, emery, wire brush, abrasive, base, acidic cleaner.

Accessories and consumables should be applied as shown at the catalogue and used completely.

Glazing, siliconing, water drainage and ventilation methods specified on the catalogue should be applied completely. Any type of the additional methods should be approved by Sistem Aluminium.

## TERMS OF WARRANTY

If the profiles was used according to terms of service and they have no mechanical damage or deformation,in any defect situation,our warranty is limited by disassembly, re-product, re-eloxal, re-assembly of faulty pieces. These are subjected to labor law.

Builder is responsible for all conditions by using of accessories and consumables that did not confirmed by Sistem Aluminium are not mentioned in catalogue of Architectural System.

Confirmation must be taken from Sistem Aluminium for applications without details and system solutions that are mentioned in catalogue of architectural sytem. If not Sistem Aluminium is not responsible because of any wrong applications.