



F50-ENERGY

YÜKSEK YALITIMLI GIYDİRME CEPHE SİSTEMİ
HIGH INSULATED CURTAIN WALL SYSTEM



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

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Sistem **Al**
A L Ü M İ N Y U M

Sistem ^{Al}

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SİSTEM ALÜMİNYUM SAN. VE TİC. A.Ş. 1994 yılında 1 adet 210 ton/ay 800 tonluk kapasitesiyle İstanbul Merter'de 750 m²'lik alanda alüminyum profil imalatına başlamıştır. 1998 yılına kadar burada imalatına devam eden firma daha sonra İstanbul Hadımköy'deki yerine taşınmıştır. Yeni anlayış içerisinde, 2013 Yılında Çorlu'da **300.000 m²** üzerine kurulan **70.000 m²**'lik kapalı alanda yeni yerinde günün koşullarına göre modernize edilen tesisimiz, 1.100 ton/ay kapasiteli 2.750 tonluk presimizin ilavesi ile yıllık üretim kapasitesini **50.000 ton/yıla** çıkarmıştır. Sistem Alüminyum kalıp üretiminden başlayıp ekstrüzyon imalatı, elektrostatik toz boya, ahşap kaplama, eloksal, mekanik işlem, kompozit panel imalatı ve nihai uygulamaları bünyesinde bulunduran entegre bir tesistir.

Kalıphanemiz; CNC işleme merkezleri, modern tezgâhlar ve kalifiye elemanlarla mevcut üretimimizi desteklemektedir. Müşteri özel profillerinin kalıp üretimini de modern ekipmanlarla burada gerçekleştirilmektedir. **18.500** çeşidin üstünde ürün yelpazesi ile sektöründeki yerini her geçen gün daha da güçlendirmektedir.

Yıllık kapasitesi **19.000** ton olan Statik Toz Boya Tesisimizde standart RAL renklerinin yanı sıra müşterimizin özel renk talepleri de karşılanmaktadır. Çorlu'da devreye alınan yeni boyahane ünitemizle 8000 mm boya sahip profiller proses edilebilmektedir. 2006 yılında devreye alınan Elokсал Tesisimize ilave olarak Çorlu'da devreye alınan son teknolojiye sahip, müşteri özel renklerinin de çalışıldığı yeni eloksal tesisimizle birlikte **yıllık kapasitesi 24.000 ton/yıl** ulaşmıştır. Alternatif yüzey kaplaması olarak 2010 yılında faaliyete geçen Ahşap Transfer Kaplama bölümümüzde özel renk ve desen çalışmaları yapılabilmektedir. 2010 yılında kurulan Mekanik İşlem Merkezimizle müşterilerimizden gelen talepler doğrultusunda profil yüzeyine delme, havşalı delme, boşaltma, CNC işlemleri, hassas kesim, açılı kesim, punch ile delme, matkapla delme, fitil v.b. işlemleri uygulanabilmektedir.

Üretim kapasitesinin büyük bölümünü ihracata ayıran firmamız yurt içinde de aynı kalitede hizmet vermektedir. Bu amaçla tümüyle kendi imkân, teknoloji ve **AR-GE** çalışmaları neticesinde **ALUTECH SYSTEM SERIES** markası altında giydirme cephe sistemlerini, yalıtımlı-yalıtımsız doğrama, sürme, ışıklık, çelik takviyeli cephe, kompoze ve taş kaplama alt taşıyıcı sistemlerini piyasaya sürmüştür. Sektöre sunulan sistemler her aşamada mühendislik testlerinde geçirilmiş ve Avrupa (EN) normlarında tüm aksesuarlarla uyumu sağlanmıştır. Şirketimiz, misyonu gereği müşteri memnuniyetini baz aldığından; gerek optimum çözümler sunan profil dizaynlarımızla, gerek montaj kolaylığı sağlayan detaylarımızla gerekse malzeme kalite ve tedarik hızımızla ayrıcalıklı hizmet vermeyi ilke kabul etmiştir. Ayrıca farklı tasarım ve uygulamalara cevap verebilecek şekilde cephelerin vazgeçilmez parçası olan, **Alüminyum Kompozit Panel (ALUTECHBOND)** tesislerimizde üretilmektedir. Dış cephe ve iç cephe uygulamaları için metalik renkli, mat renkli ve desenli renk seçeneklerinde farklı kompozit paneller mevcut olup istenilen ölçülerde panel üretimi yapılabilmektedir. Yıllık **4.200.000 m²** kapasitesi olan iki üretim hattı ile projelerinize optimum çözüm sunmaya hazırız. **ALUTECHBOND Alüminyum Kompozit Panel** -50°C'den +80°C'ye kadar olan sıcaklıklarda kullanılabilir. Ürünümüz **SİSTEM ALÜMİNYUM SAN. VE TİC. A.Ş.** güvencesiyle üretilmekte olup, garanti süresi 20 yıldır.

Alüminyum profil sektöründe sürekli gelişmeyi ve kalıcı olmayı hedefleyen firmamız kalite sistem çalışmalarıyla da bu amaca ulaşmada hızlı adımlarla ilerlemektedir. **CE, TSE**, statik toz boya uygulamaları için **Qualicoat**, eloksal uygulamaları için **Qualinoad** belgelerine sahip olan firmamız ayrıca; **ISO 9001, ISO 14001, ISO 45001** ve **ISO/EC 27001** Bilgi Güvenliği Yönetim Sistemi gibi sistem belgelerine sahiptir. Ayrıca **SİSTEM ALÜMİNYUM SAN. VE TİC. A.Ş.** temin ettiğiniz malzemeler içinde **REACH** ve **ROHS** kısıtlamasında bulunan kimyasalların (ağır metaller) yasal sınırlar içinde bulunduğunu teyit etmektedir. Tüm ürünlerimiz için müşterilerimize her türlü mühendislik mimari uyum konusunda teknik hizmet vermekten onur duyuyoruz. Yeni ürünler ve hizmetlerimizle birlikte çalışmak dileğiyle.

Saygılarımızla

Sistem^{Al}

A L Ü M İ N Y U M

SİSTEM ALUMINUM IND. and TRA. INC. It has started to produce aluminum profiles in 1994, with a capacity of 800 tons with 1 press machine of 210 tons/month on 750 m² area in Istanbul/Merter. The company had continued its production there until 1998 and then moved to its place in Istanbul/Hadımköy. With the new perspectives, our facility has been modernized with the conditions of modern time on its new place in Çorlu over an area of **300.000 m²** with **70.000 m²** of closed space and with the addition of new 2.750 tons press machine with capacity of 1.100 tons/month, it has increased the production capacity to **50.000 tons/year**. Sistem Aluminum is an integrated plant which includes all of the processes starting with mold production, continuing with extrusion production, electrostatic powder coating, wood siding, anodized coatings, mechanical process and composite panel production; all the way to final applications.

Our die house supports our current production with CNC processing centers, modern branches and qualified staff. Mold production for special customer profiles is also executed here with modern equipment. It strengthens its place in the industry everyday with its range over **18.500** products.

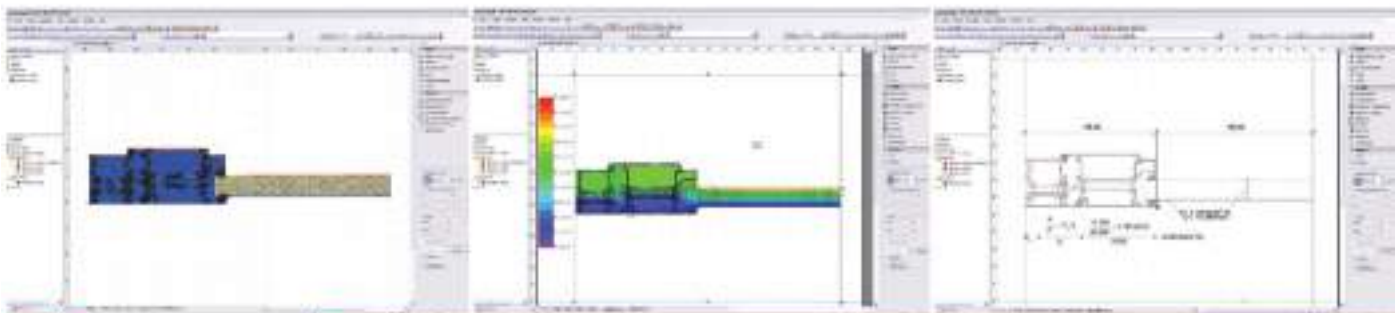
We also provide special color requests from our customers in addition to standard RAL colors, within our Static Powder Paint Facility with **19.000** tons of annual capacity. With our new Powder Coating unit becoming operational in Çorlu, we will be able to process profiles 8000 mm in length. Together with the new anodizing facility becoming operational in Çorlu with the latest technology and where special color requests from our customers are studied, in addition to our Anodizing Facility that became operational in 2006, our annual capacity will be **24.000 tons/year**. As an alternative surface coating, within our Wooden Transfer Coating department, which became operational in 2010, we can work on special colors and designs. Together with the Machining Center, which became operational in 2010, we are able to conduct processes such as profile surface drilling, countersink drilling, unloading, CNC processes, precision cut, angled cut, punch drilling, drilling, cord etc.

Our company allocates a large part of its production capacity for exportation and also serves with the same quality in domestic markets. With this purpose, it has released curtain wall systems, isolated-nonisolated frames, sliding, skylight, steel reinforced facade, composite and stone faced sub-carrier systems, under the brand of **ALUTECH SYSTEM SERIES**, as a result of entirely their own efforts, technology and **R & D** activities. Systems presented to the industry have been tested with engineering tests at every stage and compliance with all accessories in European (EN) standards is provided. Our company, which is based on customer satisfaction as of the nature of its mission; adopted the principle of providing exceptional service with the profile designs that provide optimum solutions, with ease of installation with our details and with quality of materials and supply speed. Besides that, **Aluminum Composite Panel (ALUTECHBOND)**, which is an irreplaceable part of facades, as it can respond to different designs and applications, is produced in our facility. For exterior and interior applications, different composite panels with the options of metallic color, matte color, and patterned colors are available and panels can be produced in the required measurements. With two production lines that have an annual capacity of **4.2 million m²**, we are ready to offer the optimum solutions for your projects. **ALUTECHBOND Aluminum Composite Panels** can be used at temperatures ranging from minus 50°C to plus 80°C Our product is produced under the guarantee of **SİSTEM ALÜMİNYUM IND. AND TRA. INC.** and has a warranty period of 20 years.

Our company, which aims to be permanent and improve continuously in Aluminum profile industry, is advancing at a rapid pace in achieving this objective with its quality system studies. Our company, which has **CE, TSE, Qualicoat** certificates for static powder coating applications and **Qualinoad** certificates for anodizing applications, also system certificates such as **ISO 9001, ISO 14001, ISO 45001** and **ISO / EC 27001** Information Security Management System certificates. Besides, **SİSTEM ALUMINUM IND. And. TRA. INC.** confirms that the chemicals in the materials provided to you within **REACH** and **ROHS** restrictions (heavy metals) are within legal limits. We are honored to provide technical service to our customers for all of our products with all kinds of engineering and architectural compliance. With all wishes to work together with our new products and services.

Best Regards.





3 Adımda Teknik Kataloglar Cebinizde!

Tüm teknik kataloglar,
ihtiyacınız olduğu her an yanınızda.

Mobil uygulamamızı indirin, hem şirketimiz
ile ilgili tüm güncel bilgileri edinin, hem de
ihtiyacınız olan tüm teknik bilgileri, ciltlerce
kalın kataloglar yerine cebinizde taşıyın.

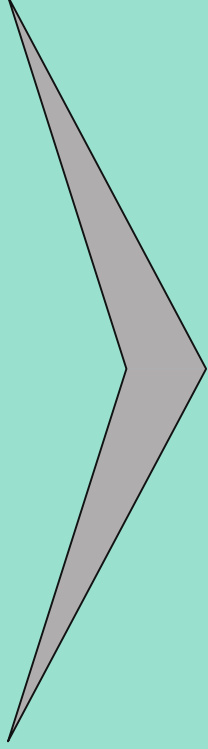


- 1 Aşağıdaki kare kodları telefon veya tabletinize okutun, uygulamayı indirin.
- 2 Uygulamanın kataloglar menüsünden istediğiniz katalogu seçin, derseniz cihazınıza indirin.
- 3 Cihazınıza indirdiğiniz katalogları, internet bağlantınız olmasa dahi, dilediğiniz zaman dilediğiniz yerde görüntüleyin.



TEKNİK ÖZELLİKLER

TECHNICAL PROPERTIES



► 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.

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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 yapılırken 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 preferred 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.

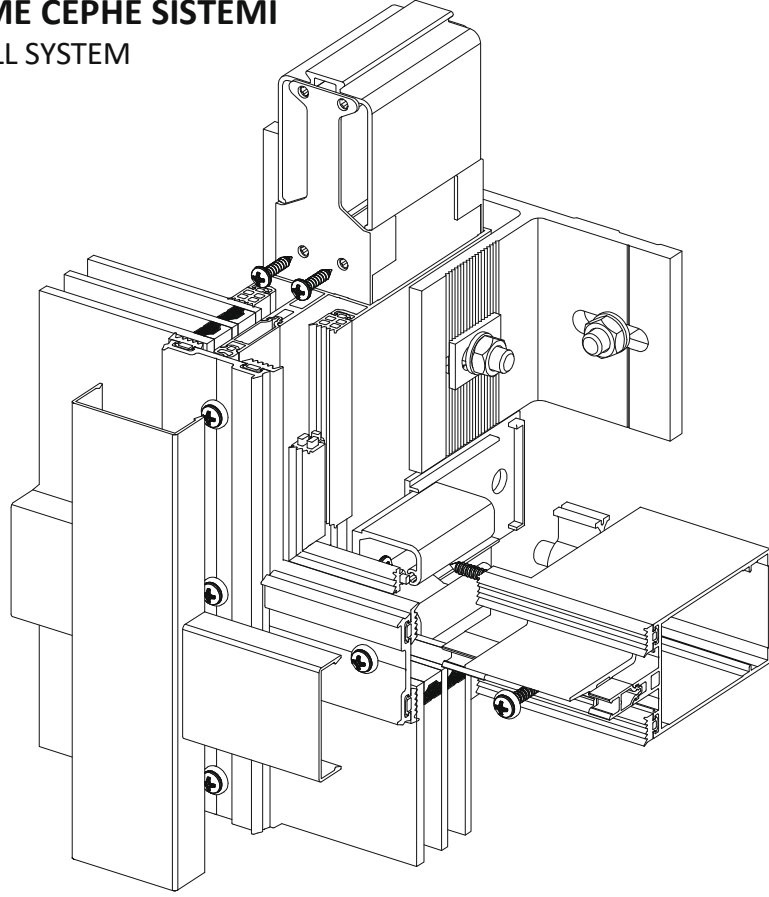
YÜKSEK YALITIMLI GİYDİRME CEPHE SİSTEMİ HIGH INSULATED CURTAIN WALL SYSTEM

İMALAT KOLAYLIĞI

F50 - Energy sisteminin sahip olduğu aksesuarlar mümkün olduğunca tek tipe indirgenerek standartlaşmaya önem verildi. Daha az çeşitte ve ortak kullanımda olan bu aksesuarların bir getirisi olarak farklı tiplerdeki ürünleri 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

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

KULLANIM SEÇENEKLERİ

APPLICATION ALTERNATIVES

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

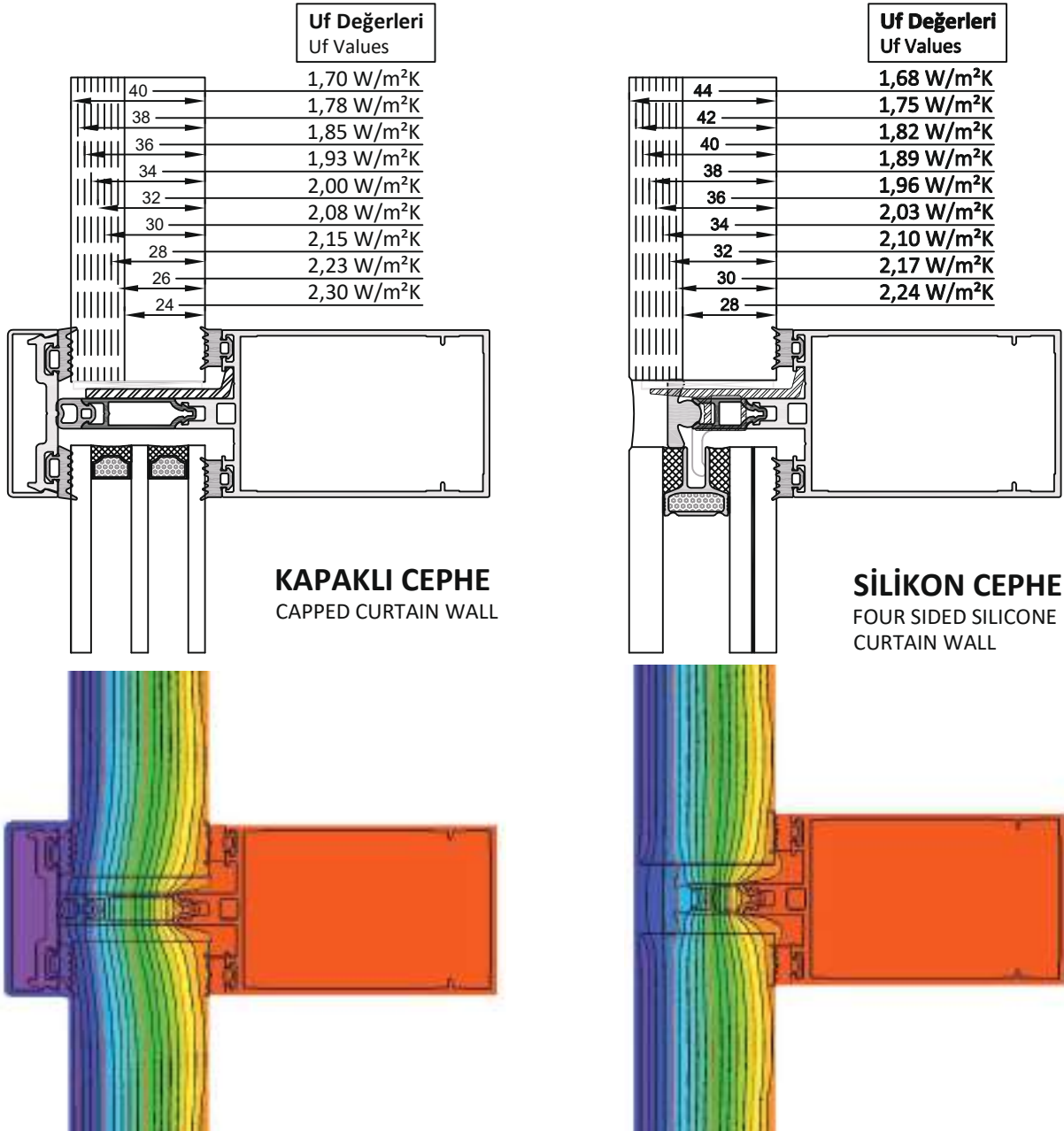
ISI YALITIM DEĞERLERİ THERMAL INSULATION VALUES

Kış şartlarını düşündüğümüzde; iç bölgede yer alan taşıyıcı cephe profillerinin sahip olduğu iç mekan ısısının soğuk olan dış ortama kaçıışı 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 (Uf) düşer ve ısı yalıtım performansı artar.

Aşağıdaki sistem kesitleri üzerinde Uf 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 (Uf) will be lower.

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

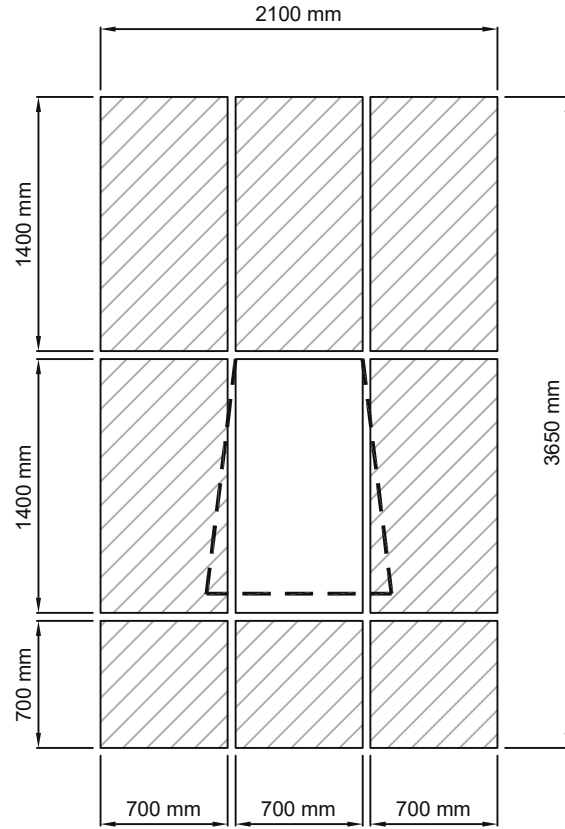


HAVA-SU-RÜZGAR PERFORMANS TEST SONUÇLARI - 1 AIR-WATER-WIND PERFORMANCE TEST RESULTS - 1

- 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)					

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

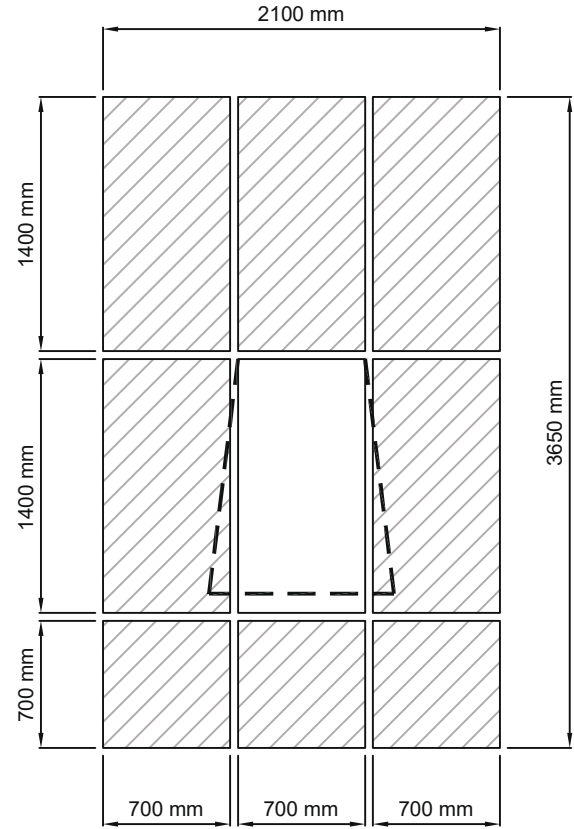
HAVA-SU-RÜZGAR PERFORMANS TEST SONUÇLARI - 2 AIR-WATER-WIND PERFORMANCE TEST RESULTS - 2

- 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)					

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

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

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F50-ENERGY

YÜKSEK YALITIMLI GİYDİRME CEPHE SİSTEMİ
HIGH INSULATED CURTAIN WALL SYSTEM

SİSTEMİN ÖNE ÇIKAN ÖZELLİKLERİ PROMINENT PROPERTIES OF THE SYSTEM

- 1. KOLAY VİDALAMA**
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 ANTI YOĞUŞMA ÇITASI KULLANIMI**
WARM EDGE SPACER USAGE IN FOURSIDED 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 VİDALAMA

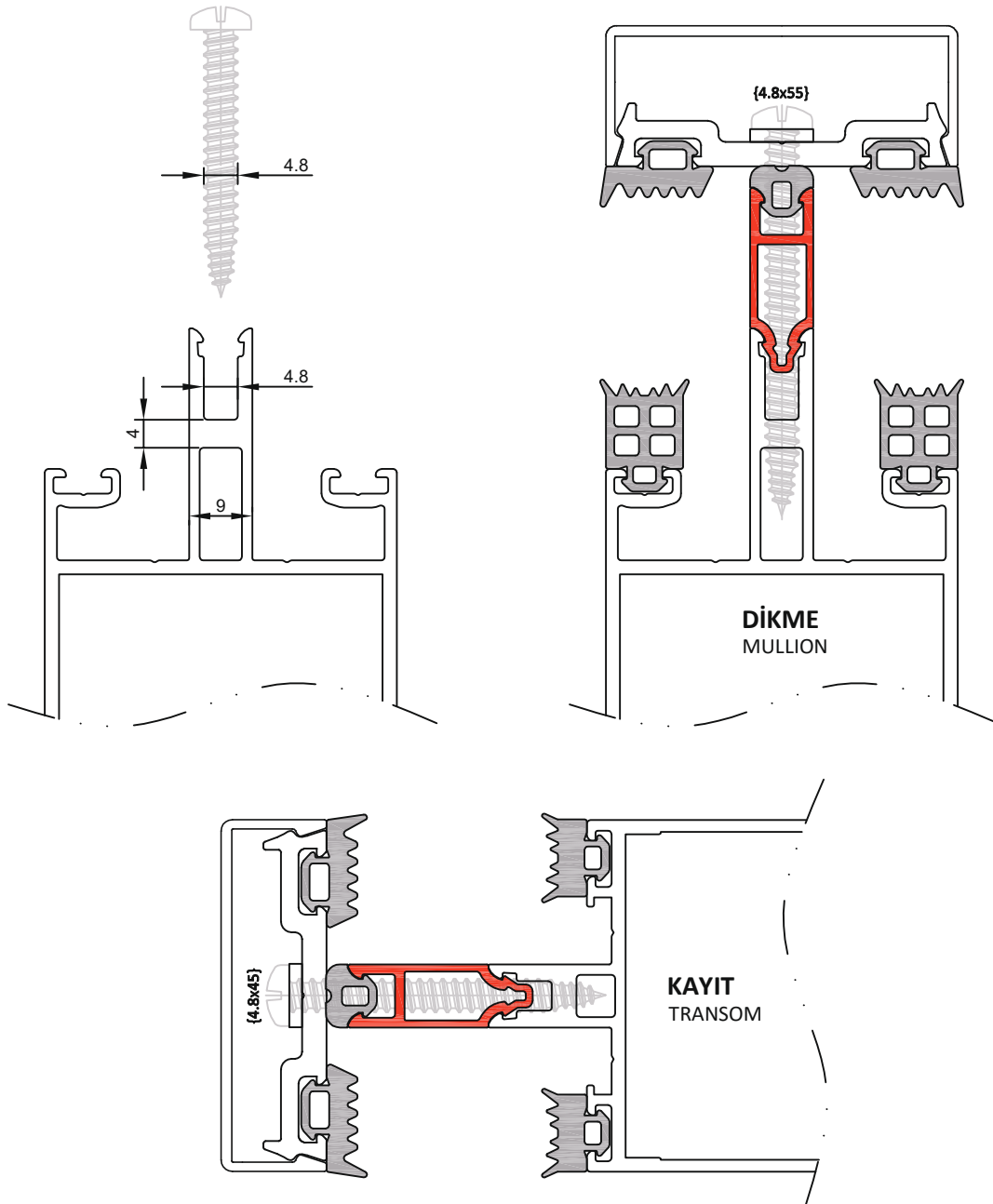
EASY SCREW

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 ısırmadan 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

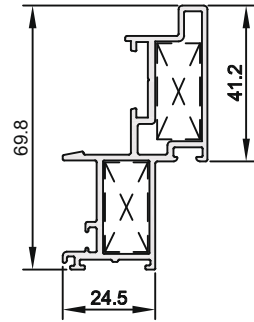
Cephe sistemlerinde kanat bölgeleri termal açıdan en zayıf bölgelerdir. Bu bölgede yaşanan terleme sorunları genellikle kasa yalıtımındaki zafiyetlerden ötürü gerçekleşmektedir.

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

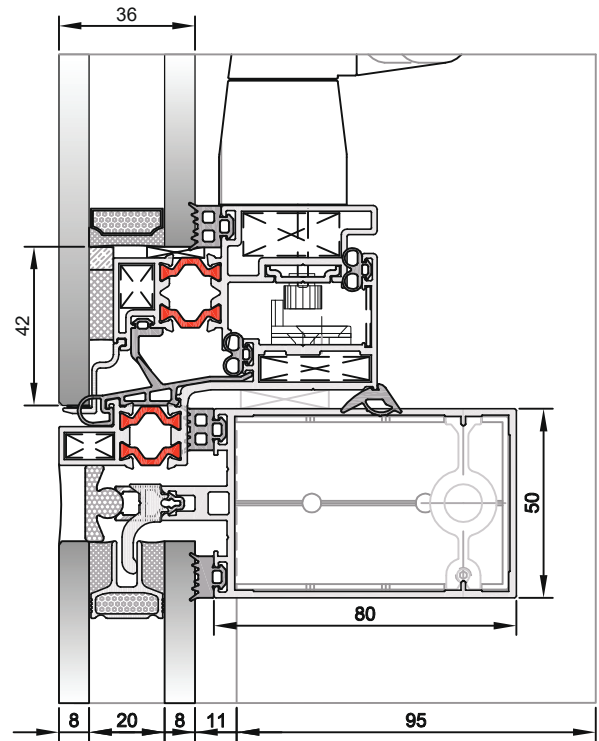
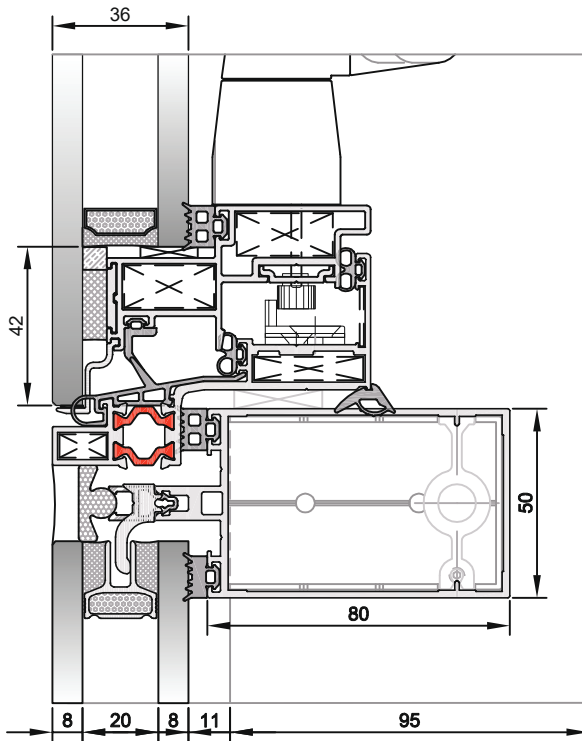
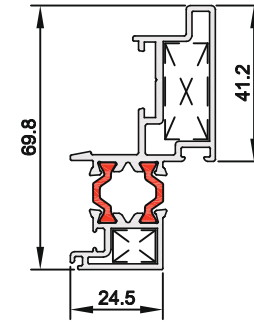
Thermally the weakest point in the curtain wall systems are opening vent areas. The condensation problems are usually result from the heat insulation issues on the frame.

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



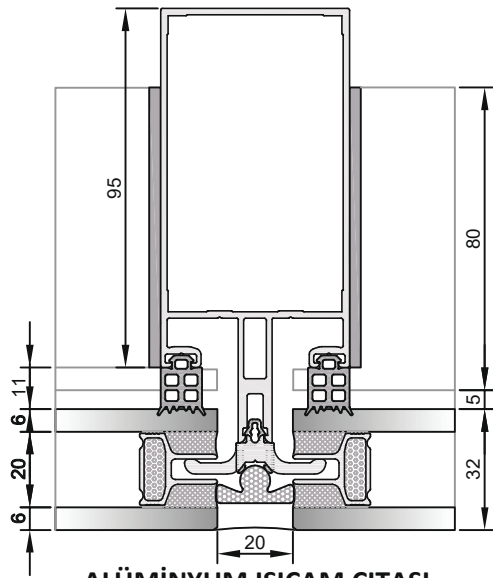
CAM CEPHEDE SICAK KENAR ANTI YOĞUŞMA ÇITASI KULLANIMI WARM EDGE SPACER USAGE IN FOURSIDED SILICONE CURTAIN WALL

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

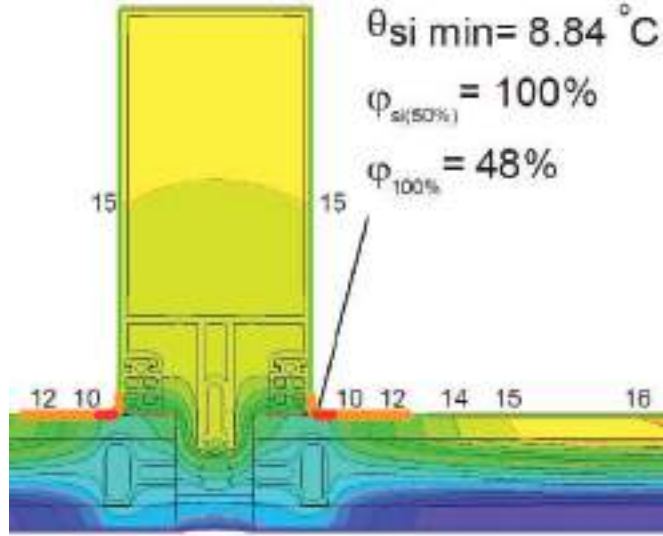
F50 - Energy sistemi sahip olduğu özel plastik kilitleme yuvaları sayesinde pvc malzemeden yapılmış olan sıcak kenar ısıcam çitalarının sorunsuz ve performanslı şekilde kullanımına imkan sağlamaktadır.

The biggest factor about thermal performance is glass. Standart 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.

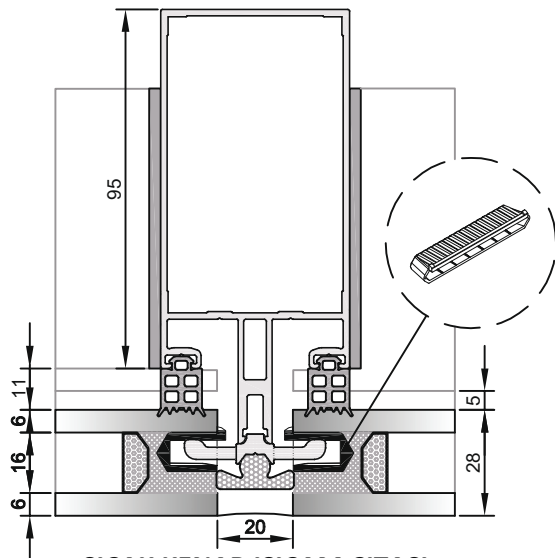


ALÜMİNYUM ISICAM ÇITASI
STANDARD ALUMINIUM SPACER

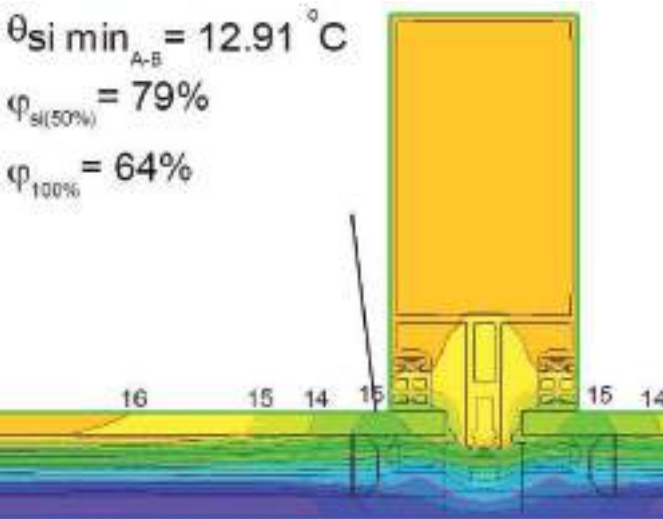


* Kırmızıyla işaretli olan bölgelerde yoğuşma görülmektedir.
There is condensation at the red marked areas.

Ug: 1,4 W/m²K değerinde cam ile 0°C dış ortam, 20°C iç ortam ve %50 bağıl nem koşullarına göre sistemde yoğuşma görülmemesi için minimum iç profil yüzey sıcaklığının (Q_{si min.}); 9,2°C olan yoğuşma başlangıç noktasının altında olmaması gerekir.
Without the condensation, glass Ug: 1,4 W/m²K at 0°C outside weather, 20°C inside weather and %50 relative humidity conditions, minimum inside profile surface temperature (Q_{si min.}), should be under the dewpoint beginning of 9,2°C.



SICAK KENAR ISICAM ÇITASI
WARM EDGE SPACER



* Hiçbir noktada yoğuşma görülmemektedir.
There is no condensation at any point.

▲ F50-ENERGY

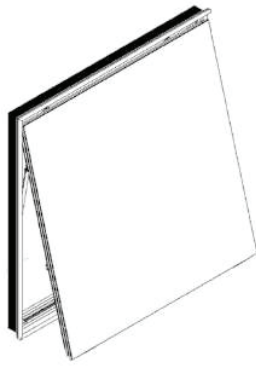
DIŞA PARALEL AÇILIR KANAT PARALEL OUTWARD OPENING VENT

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

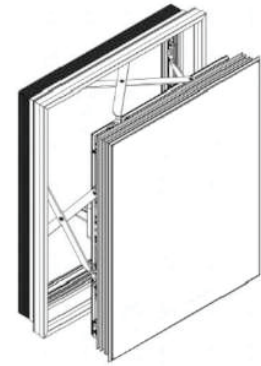
Ters vasistas tip kanatlarda cepheye dışarıdan bakıldığında açık olan kanat bölümlerinde ışığın farklı kırılmasına ve o bölümde sanki delik varmış hissi oluşmasına neden olur. Havalandırma konusunda ise, oda içerisinde ısınan hava yukarı yönde hareket etmek isteyeceğinden paralel açılım kanatlarda hava tahliye hızı ters vasistasla oranla 3 kat fazladır. Bu da odanın çok daha hızlı havalanması 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 paralel 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.

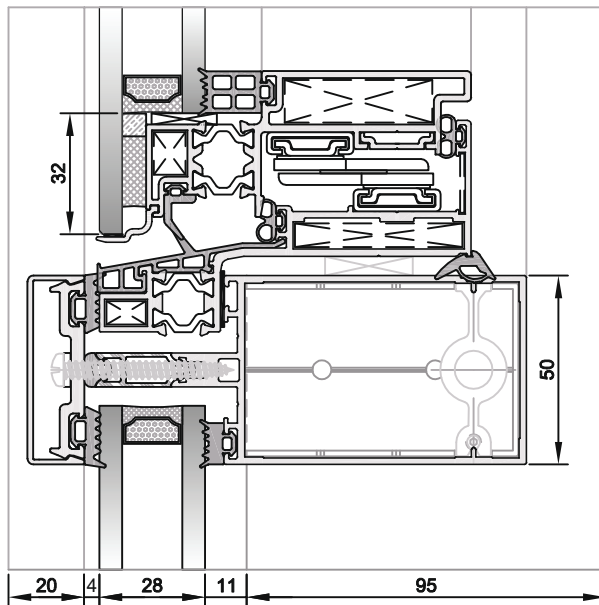


Dışa Ters Vasistas Açılım
Top hung outward opening



Dışa Paralel Açılım
Paralel Outward Opening

PARALEL KANAT DETAYI / PARALEL VENT DETAIL:



** ÇEVRESEL KİTLEME YAPILABİLMEKTEDİR. /
CAPABLE TO CIRCUMFERENCE MULTILOCKING.

ÖRNEK UYGULAMA / SAMPLE APPLICATION:



ÖZEL DİLATASYON KAPAKLARI SPECIAL DILATATION PLUGS

1. BOŞLUKSUZ SİLİKON UYGULAMASI /

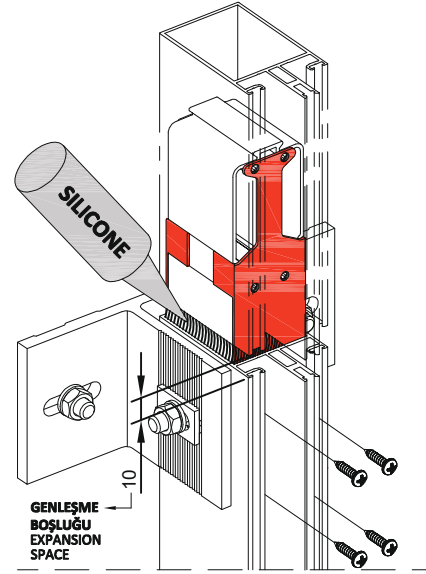
GAP FREE SILICONE APPLICATION

Genleşme boşluğuna silikon uygulaması yapılırken, silikonun bir kısmı profil içerisine 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 GÜRÜLTÜSÜ ENGELLEME /

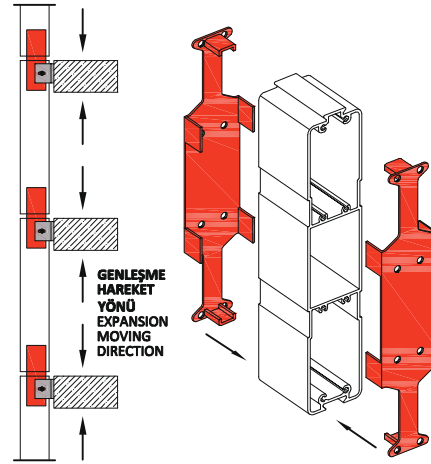
PREVENTING EXPANSION NOISE

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

F50 - Energy sisteminin sahip olduğu özel dilatasyon kapakları sayesinde, genleşme esnasındaki sürtünmeler metaller ile plastik kapaklar arasında oluşmaktadır. 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 /

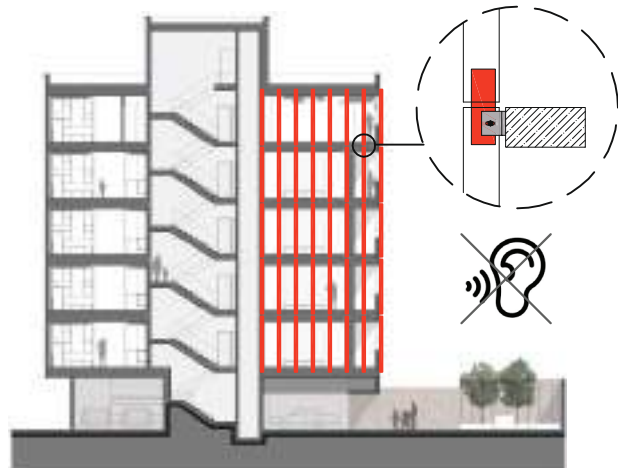
SOUND ISOLATION BETWEEN FLOORS

Dilatasyon bölgesinde metal metale temas eden bir ilişki varsa, ortamda oluşan ses dalgaları taşıyıcılara çarptığında titreşim oluşturmakta 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 sönümlemekte, 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.



▲ F50-ENERGY

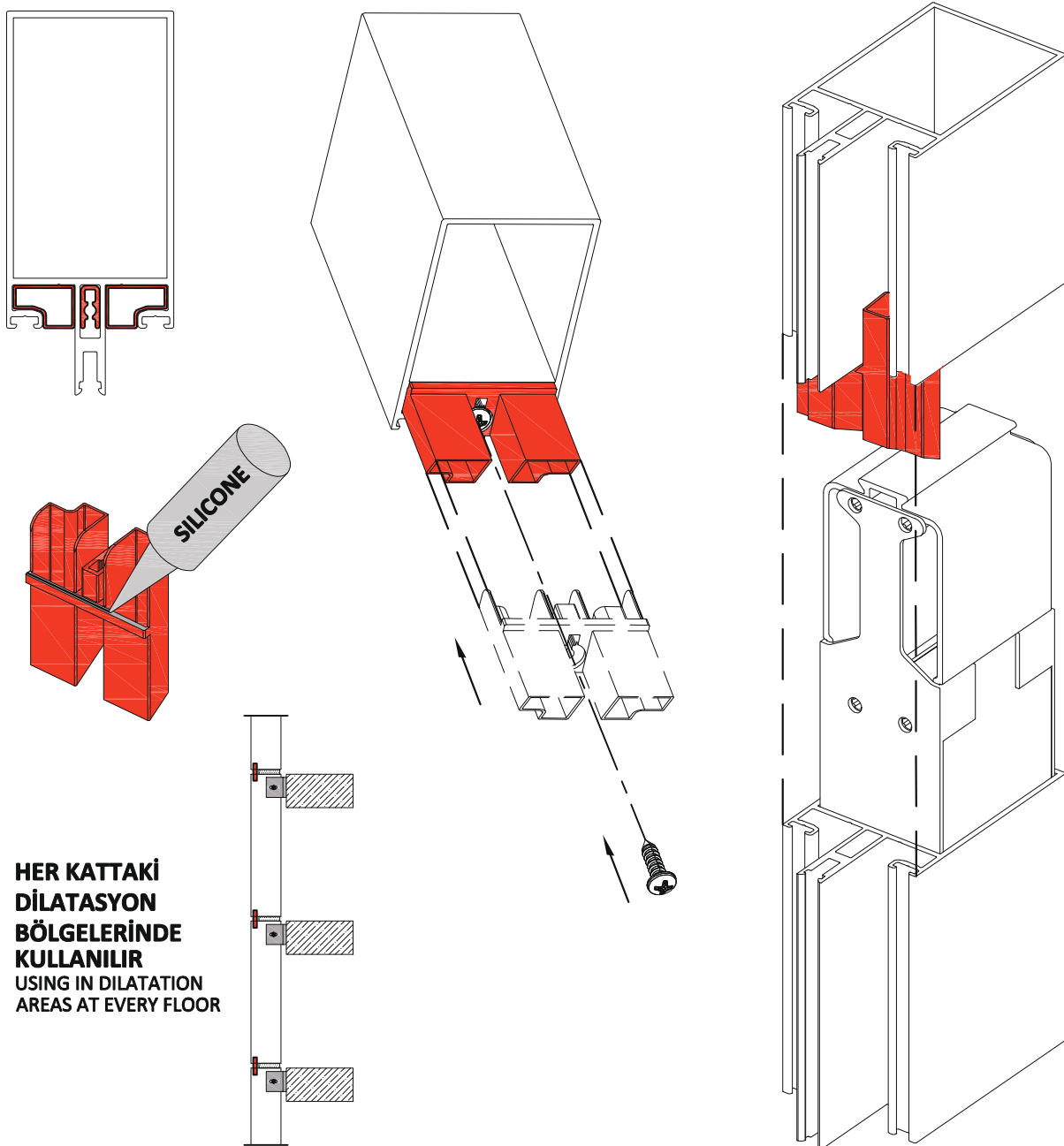
KONDENS YOLU İÇİN ÖZEL BAĞLANTI PARÇASI SPECIAL CONNECTION PIECE FOR THE CONDENSATION LINE

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.



**HER KATTAKI
DİLATASYON
BÖLGELERİNDE
KULLANILIR
USING IN DILATATION
AREAS AT EVERY FLOOR**

VULKANİZE İÇ KÖŞE PARÇALARI

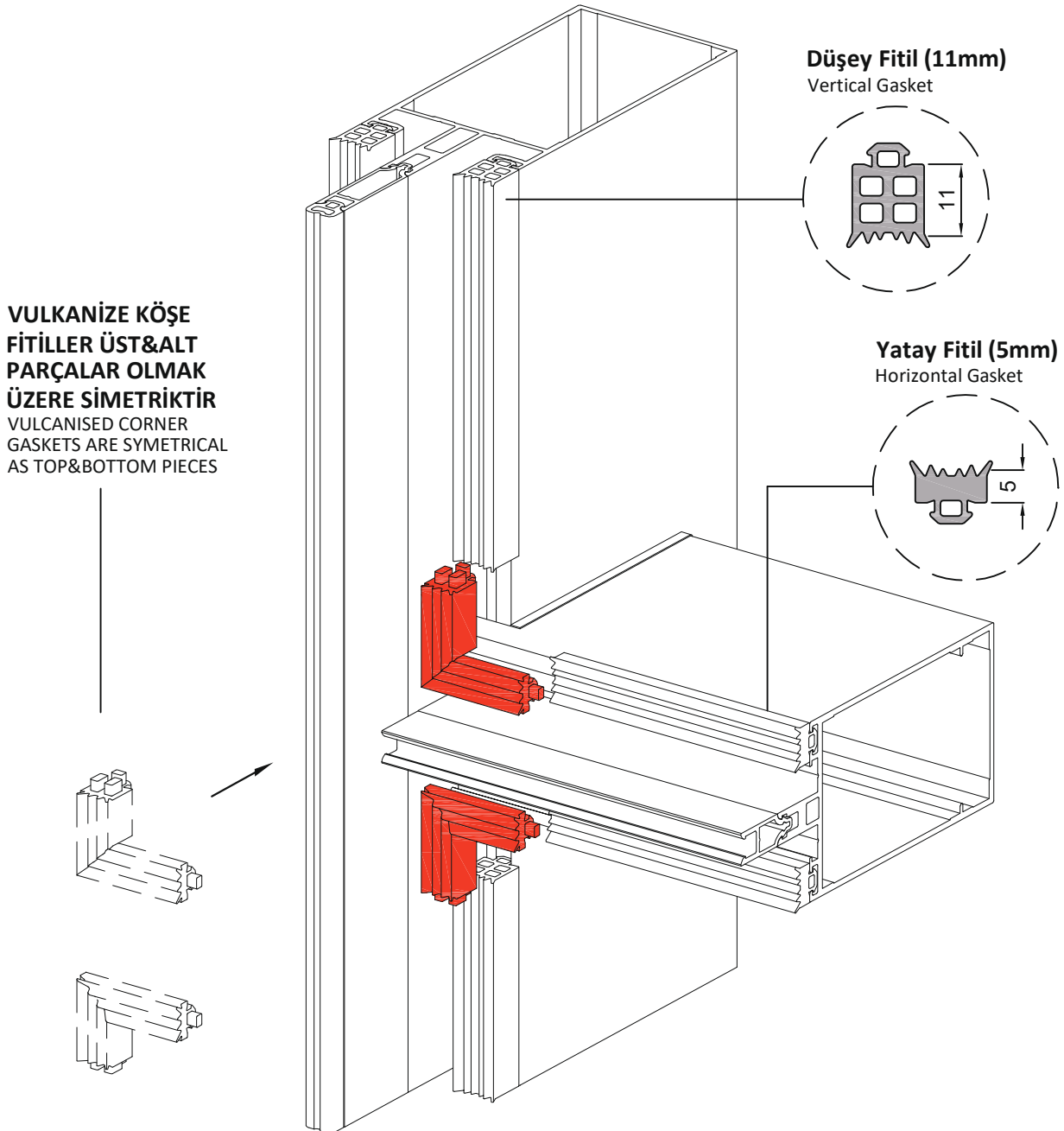
VULCANISED INNER CORNER PIECES

Cephe sistemlerinde tahliyelerden ve kondens boşluklarından giren hava sistem içerisinde dolmaktadır. 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 fitil ile yataydan gelen 5mm'lik fitil köşelerde kusursuz biçimde birleşmektedir. Köşe birleşim noktalarının eksiz ve yekpare biçimde dönülmesi sayesinde hem imalat yönünden hız&kolaylık sağlanmakta hem de işçilikten kaynaklanabilecek olası hataların önüne geçilmektedir.

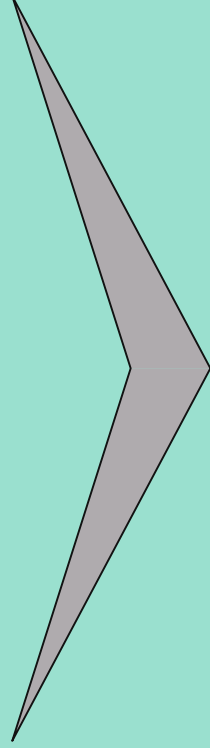
Air coming from outside to inside with draine holes and condensation channel is rounding in the curtain wall. The only thing to prevent air passing into the system is the inner gaskets.

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.



PROFİL FİHRİSTİ
















PROFILE INDEX


















► KATALOGDA BELİRTİLEN TÜM PROFİL AĞIRLIKLARI TEORİK OLUP PROFİLLERİN PRES(HAM) HALLERİNE AİTTİR. ISI BARIYERİ ÇEŞİDİNE VEYA PROFİL YÜZEYİNDEKİ BOYA KALINLIKLARINA 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.

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
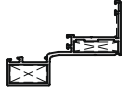
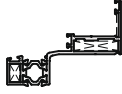
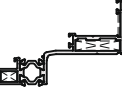
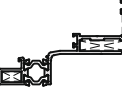
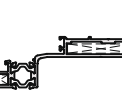
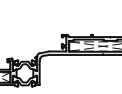
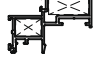
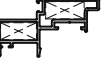

PROFİL FİHRİSTİ / PROFILE INDEX

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

PROFİL FİHRİSTİ / PROFILE INDEX

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
















PROFİL FİHRİSTİ / PROFILE INDEX

PROFİL NUM. PROFILE NO.	TANIM DESCRIPTION	ÇİZİM DRAWING	AĞIRLIK WEIGHT (kg/m)	SAYFA PAGE
FP160	KAYIT PROFİLİ (160 mm/1.6 mm) TRANSOM PROFILE		2,227	37
FP161	KAYIT PROFİLİ (160 mm/2.1 mm) TRANSOM PROFILE		2,601	38
FP162	KAYIT PROFİLİ (180 mm/2.1 mm) TRANSOM PROFILE		2,828	38
FP163	KAYIT PROFİLİ (200 mm/2.1 mm) TRANSOM PROFILE		3,230	39
FP164	KAYIT PROFİLİ (220 mm/2.4 mm) TRANSOM PROFILE		3,785	39
FP165	KAYIT PROFİLİ (100 mm/1.7 mm) TRANSOM PROFILE		1,485	40
FP301	YALITIMSIZ KASA PROFİLİ UNINSULATED FRAME PROFILE		1,053	40
FP302	YALITIMLI KASA PROFİLİ INSULATED FRAME PROFILE		1,218	40
FP303	YALITIMLI KASA PROFİLİ INSULATED FRAME PROFILE		1,239	41
FP304	YALITIMLI KASA PROFİLİ INSULATED FRAME PROFILE		1,255	41
FP305	YALITIMLI KASA PROFİLİ INSULATED FRAME PROFILE		1,425	42
FP306	YALITIMLI KASA PROFİLİ INSULATED FRAME PROFILE		1,441	42
FP326	YALITIMSIZ KANAT PROFİLİ UNINSULATED VENT PROFILE		0,909	40
FP327	YALITIMSIZ KANAT PROFİLİ UNINSULATED VENT PROFILE		1,037	41
FP328	YALITIMLI KANAT PROFİLİ INSULATED VENT PROFILE		1,219	41
















PROFİL FİHRİSTİ / PROFILE INDEX

PROFİL NUM. PROFILE NO.	TANIM DESCRIPTION	ÇİZİM DRAWING	AĞIRLIK WEIGHT (kg/m)	SAYFA PAGE
FP329	YALITIMSIZ KANAT PROFİLİ UNINSULATED VENT PROFILE		1,255	42
FP330	YALITIMLI KANAT PROFİLİ INSULATED VENT PROFILE		1,437	42
FP359	SPANDREL BÖLGE PANEL PROFİLİ PANEL PROFILE FOR SPANDREL AREA		0,437	43
FP360	SPANDREL BÖLGE PANEL PROFİLİ PANEL PROFILE FOR SPANDREL AREA		0,485	43
FP361	SPANDREL BÖLGE PANEL PROFİLİ PANEL PROFILE FOR SPANDREL AREA		0,468	43
FP362	SPANDREL BÖLGE PANEL PROFİLİ PANEL PROFILE FOR SPANDREL AREA		0,416	43
FP377	CAM ARASI KİTLEME PROFİLİ LOCKING PR. FOR DOUBLE GLAZED GLASS		0,294	50
FP378	CAM ARASI KİTLEME PROFİLİ LOCKING PR. FOR DOUBLE GLAZED GLASS		0,319	50
FP379	CAM ARASI KİTLEME PROFİLİ LOCKING PR. FOR DOUBLE GLAZED GLASS		0,332	50
FP380	CAM ARASI KİTLEME PROFİLİ LOCKING PR. FOR DOUBLE GLAZED GLASS		0,354	50
FP381	CAM ARASI KİTLEME PROFİLİ LOCKING PR. FOR DOUBLE GLAZED GLASS		0,270	50
FP382	CAM ARASI KİTLEME PROFİLİ LOCKING PR. FOR DOUBLE GLAZED GLASS		0,281	50
FP383	CAM ARASI KİTLEME PROFİLİ LOCKING PR. FOR DOUBLE GLAZED GLASS		0,343	50
FP384	CAM ARASI KİTLEME PROFİLİ LOCKING PR. FOR DOUBLE GLAZED GLASS		0,340	50
FP390	CAM ALTI DESTEK PROFİLİ GLAZING SUPPORT PROFILE		0,277	50








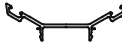







PROFİL FİHRİSTİ / PROFILE INDEX

PROFİL NUM. PROFILE NO.	TANIM DESCRIPTION	ÇİZİM DRAWING	AĞIRLIK WEIGHT (kg/m)	SAYFA PAGE
FP391	CAM ALTI DESTEK PROFİLİ GLAZING SUPPORT PROFILE		0,308	50
FP392	CAM ALTI DESTEK PROFİLİ GLAZING SUPPORT PROFILE		0,338	50
FP393	CAM ALTI DESTEK PROFİLİ GLAZING SUPPORT PROFILE		0,368	50
FP394	CAM ALTI DESTEK PROFİLİ GLAZING SUPPORT PROFILE		0,482	50
FP398	20mm ÖZEL ISICAM ÇITASI 20mm SPECIAL GLASS SPACER		0,240	43
FP399	YAPIŞMA YÜZEY PROFİLİ BONDING SURFACE PROFILE		0,109	43
FP400	KANAT CAM ALTI DESTEK PROFİLİ GLAZING SUPPORT PROFILE FOR VENT		0,078	51
FP401	KANAT CAM ALTI DESTEK PROFİLİ GLAZING SUPPORT PROFILE FOR VENT		0,112	51
FP426	BASKI KAPAK PROFİLİ PRESSURE CAP PROFILE		0,395	44
FP427	BASKI KAPAK PROFİLİ PRESSURE CAP PROFILE		0,496	44
FP428	BASKI KAPAK PROFİLİ PRESSURE CAP PROFILE		0,413	44
FP429	BASKI KAPAK PROFİLİ PRESSURE CAP PROFILE		0,494	44
FP430	BASKI KAPAK PROFİLİ PRESSURE CAP PROFILE		0,183	44
FP440	KAPAK PROFİLİ CAP PROFILE		0,043	44
FP441	KAPAK PROFİLİ (12 mm) CAP PROFILE		0,283	44








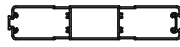





PROFİL FİHRİSTİ / PROFILE INDEX

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

PROFİL FİHRİSTİ / PROFILE INDEX

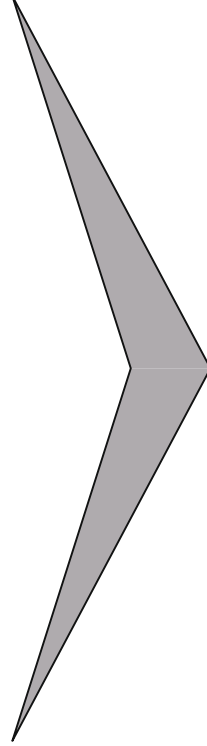
PROFİL NUM. PROFILE NO.	TANIM DESCRIPTION	ÇİZİM DRAWING	AĞIRLIK WEIGHT (kg/m)	SAYFA PAGE
FP467	KAPAK PROFİLİ (150 mm) CAP PROFILE		1,885	48
FP468	KAPAK PROFİLİ (200 mm) CAP PROFILE		2,779	48
FP479	DIŞ KÖŞE DÖNÜŞ KAPAK PROFİLİ OUTER CORNER CAP PROFILE		1,785	49
FP480	İÇ KÖŞE BASKI KAPAK PROFİLİ INNER CORNER PRESSURE CAP PROFILE		0,384	49
FP481	İÇ KÖŞE DÖNÜŞ KAPAK PROFİLİ INNER CORNER CAP PROFILE		0,251	49
FP482	AÇILI BASKI KAPAK PROFİLİ ANGULAR PRESSURE CAP PROFILE		0,524	49
FP483	AÇILI KAPAK PROFİLİ ANGULAR CAP PROFILE		0,562	49
FP484	AÇILI BASKI KAPAK PROFİLİ ANGULAR PRESSURE CAP PROFILE		0,614	49
FP485	AÇILI KAPAK PROFİLİ ANGULAR CAP PROFILE		0,674	49
FP488	CAM ÇİTASI (24 mm) GLAZING BEAD		0,234	43
FP489	AÇILI CAM ÇİTASI ANGULAR GLAZING BEAD		0,098	43
FP490	AÇILI CAM ÇİTASI ANGULAR GLAZING BEAD		0,105	43
FP491	AÇILI CAM ÇİTASI ANGULAR GLAZING BEAD		0,112	43
FP492	CAM ÇİTASI (6 mm) GLAZING BEAD		0,096	43
FP493	CAM ÇİTASI (14 mm) GLAZING BEAD		0,151	43

PROFİL FİHRİSTİ / PROFILE INDEX

PROFİL NUM. PROFILE NO.	TANIM DESCRIPTION	ÇİZİM DRAWING	AĞIRLIK WEIGHT (kg/m)	SAYFA PAGE
FP494	CAM ÇITASI (16 mm) GLAZING BEAD		0,179	43
FP495	CAM ÇITASI (18 mm) GLAZING BEAD		0,192	43
FP496	CAM ÇITASI (20 mm) GLAZING BEAD		0,207	43
FP497	CAM ÇITASI (22 mm) GLAZING BEAD		0,218	43
FP498	CAM ÇITASI (30 mm) GLAZING BEAD		0,270	43
FP499	ADAPTÖR PROFİLİ ADAPTER PROFILE		0,329	44
FP500	TİJ PROFİLİ ROD PROFILE		0,096	43
FP501	DİLATASYON PROFİLİ DILATATION PROFILE		3,864	52
FP502	GÜNEŞ KIRICILAR İÇİN BAĞLANTI PR. CARRIER PROFILE FOR SUNBREAKERS		3,533	52
FP506	U BAĞLANTI PROFİLİ U CONNECTION PROFILE		0,841	51
FP514	AÇILI U BAĞLANTI PROFİLİ AÑGULAR U CONNECTION PROFILE		0,947	51
FP520	KÖŞE TAKOZU CORNER CLEAT		1,974	51
FP521	KÖŞE TAKOZU CORNER CLEAT		2,366	51

PROFİLLER

PROFILES



► KATALOGDA BELİRTİLEN TÜM PROFİL AĞIRLIKLARI TEORİK OLUP PROFİLLERİN PRES(HAM) HALLERİNE AİTTİR. ISI BARIYERİ ÇEŞİDİNE VEYA PROFİL YÜZEYİNDEKİ BOYA KALINLIKLARINA BAĞLI OLARAK AĞIRLIK FARKLILIKLARI OLUŞABİLMEKTEDİR. 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 DÜŞEY PROFİLLER / MULLION PROFILES								
PR. NUMARASI PROFILE NO.	PR. DERİNLİĞİ PROFILE DEPTH	ET KALINLIĞI WALL THICKNESS	SIRT ET KALINLIĞI BACK WALL THICKNESS	Wx (cm ³)	Wy (cm ³)	Jx (cm ⁴)	Jy (cm ⁴)	AĞIRLIK WEIGHT (kg/m)
FP101	35mm	1.7mm	1.7mm	3,41	4,78	10,93	11,95	1,283
FP102	55mm	1.7mm	1.7mm	6,76	6,37	26,56	15,92	1,467
FP103	55mm	2mm	2mm	6,99	6,85	28,18	17,12	1,568
FP104	75mm	1.7mm	1.7mm	10,96	7,95	52,42	19,88	1,651
FP105	75mm	2mm	2mm	11,54	8,69	56,01	21,73	1,785
FP106	95mm	1.7mm	1.7mm	15,13	9,54	90,05	23,85	1,835
FP107	95mm	2mm	2mm	16,92	10,53	96,69	26,34	2,001
FP108	115mm	1.7mm	2mm	21,05	11,43	146,54	28,57	2,081
FP109	115mm	2mm	3mm	24,60	12,79	171,14	31,77	2,343
FP110	135mm	1.7mm	2.2mm	27,51	13,08	219,98	32,71	2,291
FP111	135mm	2.2mm	4mm	33,15	14,87	272,66	37,19	2,684
FP112	155mm	2.2mm	2.3mm	35,11	15,42	316,68	38,56	2,594
FP113	155mm	2.4mm	4.5mm	41,83	16,88	391,21	42,20	2,963
FP114	175mm	2.4mm	2.4mm	45,10	18,71	447,36	46,78	3,004
FP115	175mm	2.6mm	5mm	51,78	19,54	544,51	48,85	3,327
FP116	195mm	2.6mm	2.5mm	56,50	22,24	613,16	55,61	3,449
FP117	195mm	2.8mm	5mm	63,09	23,02	726,42	57,56	3,756
FP118	215mm	2.8mm	3mm	71,82	26,19	840,60	65,26	3,915
FP119	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 ³)	Wy (cm ³)	Jx (cm ⁴)	Jy (cm ⁴)	AĞIRLIK WEIGHT (kg/m)
FP151	5.5mm	1.7mm	1.7mm	0,38	1,33	0,56	3,32	0,567
FP152	20mm	1.7mm	1.7mm	1,40	3,18	2,91	7,95	0,933
FP153	40mm	1.7mm	1.7mm	4,12	4,82	11,79	12,05	1,123
FP154	50mm	1.7mm	1.7mm	5,69	5,37	18,59	13,43	1,161
FP155	60mm	1.7mm	1.7mm	7,78	6,41	28,79	16,02	1,308
FP156	80mm	1.7mm	1.7mm	11,77	8,16	56,17	20,41	1,515
FP157	100mm	1.7mm	1.7mm	16,13	9,75	94,45	24,38	1,699
FP158	120mm	1.7mm	2mm	20,99	11,34	145,28	28,34	1,884
FP159	140mm	2mm	2mm	28,95	14,49	225,73	36,21	2,289
FP160	160mm	1.6mm	2mm	32,34	14,24	287,61	35,61	2,227
FP161	160mm	2.1mm	2.1mm	36,81	17,00	322,46	42,51	2,601
FP162	180mm	2.1mm	2.1mm	44,37	18,93	431,76	47,33	2,828
FP163	200mm	2.1mm	3mm	57,86	21,31	634,38	53,27	3,230
FP164	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/cm³
Elastisite Modülü (Elasticity Modul) : 7000 kN/cm²
Kopma Mukavemeti (Yield Strenght) : 215 N/mm²
Akma Mukavemeti (Flow Strenght) : 160 N/mm²
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 polyamid) : Elokسال ve toz boya işleminden **önce** yerleştirilir. (Placed into the aluminium profiles **before** anodic oxidation and powder coating.)

b- PVC :

Elokسال ve toz boya 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 Polyamid insulation bars .)

4-Elokسال (Anodic Oxidation)

Elokسال Ürünler ile İlişkin Teknik Resim Standardı : **DIN 17611** , **EN 12371-1 (QUALANOD)**

(The Standarts of Technical Delivery Terms Regarding Eloxal Products)

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

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

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

5-Toz Boya Standartları (The Standarts 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,pütürlük,kabarıklık,leke,soyulma vb. hatalar görülmemelidir. (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)

Hammadde (Raw material) : EPDM

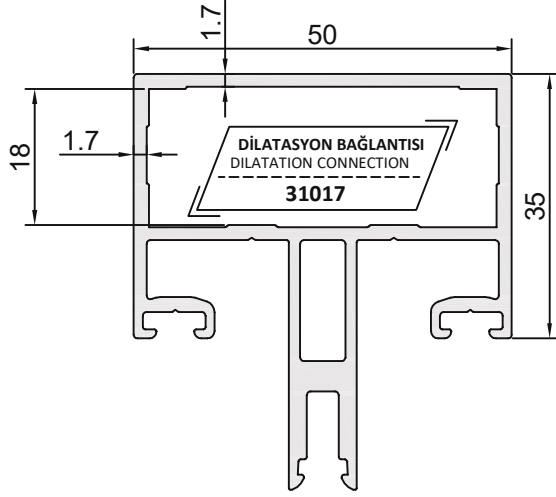
Derz fitilleri hammaddesi (Raw material of Gaskets for suture) : Silikon (Silicone)

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

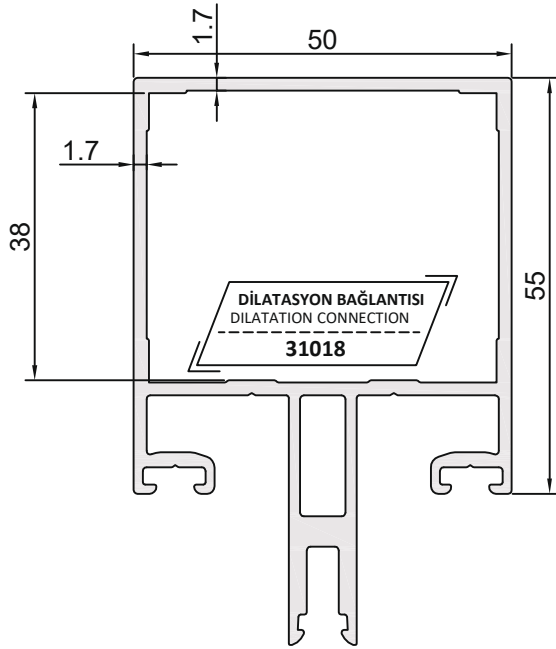
Kalite Kontrol Standardı (Quality Control Standart) : **RAL-GZ 716**

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

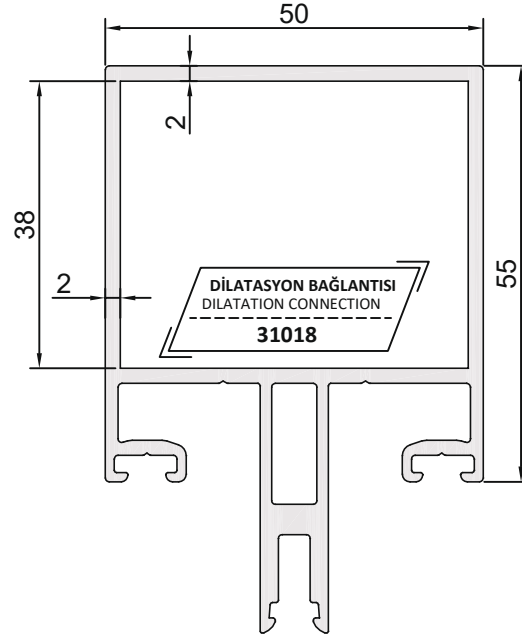
(Measurement Tolerances Standarts for Profile Design and Manufacturing)



FP101			
Jx (cm ²)	y x	Jy (cm ²)	
10,93		11,95	
Wx (cm ²)		Wy (cm ²)	
3,41		4,78	
AĞIRLIK / WEIGHT (KG/M.) 1,283			



FP102			
Jx (cm ²)	y x	Jy (cm ²)	
26,56		15,92	
Wx (cm ²)		Wy (cm ²)	
6,76		6,37	
AĞIRLIK / WEIGHT (KG/M.) 1,467			

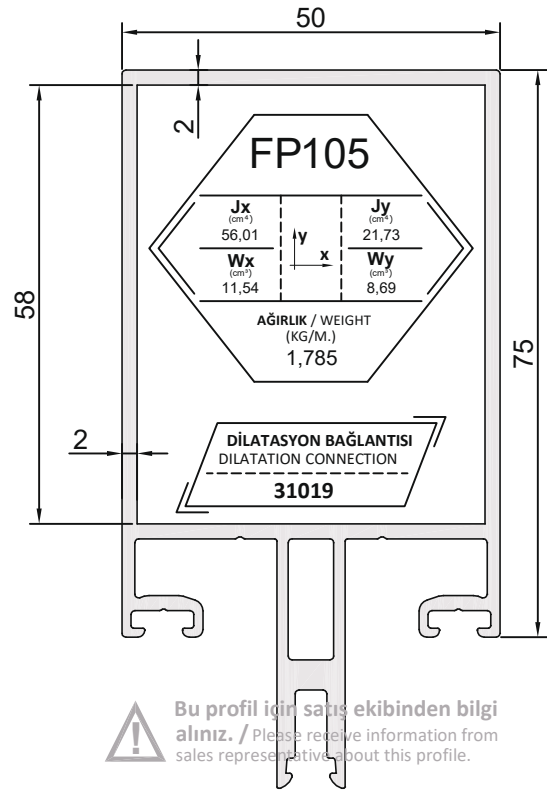
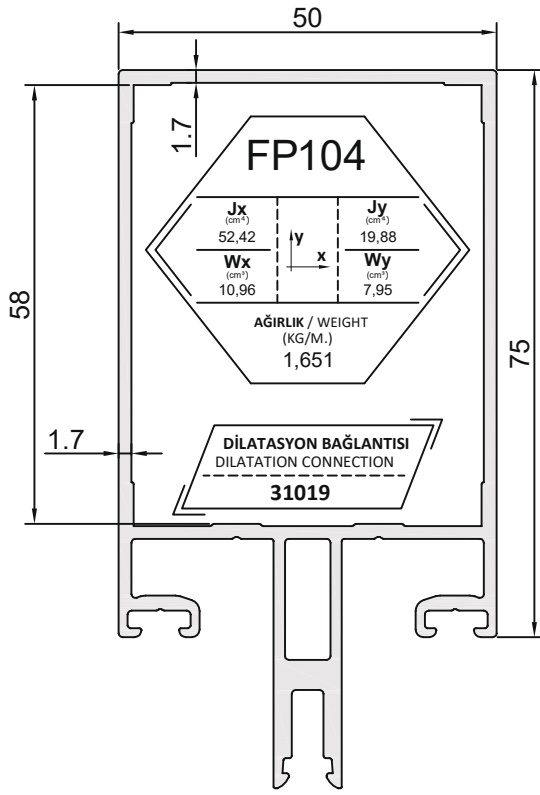


FP103			
Jx (cm ²)	y x	Jy (cm ²)	
28,18		17,13	
Wx (cm ²)		Wy (cm ²)	
6,99		6,85	
AĞIRLIK / WEIGHT (KG/M.) 1,568			

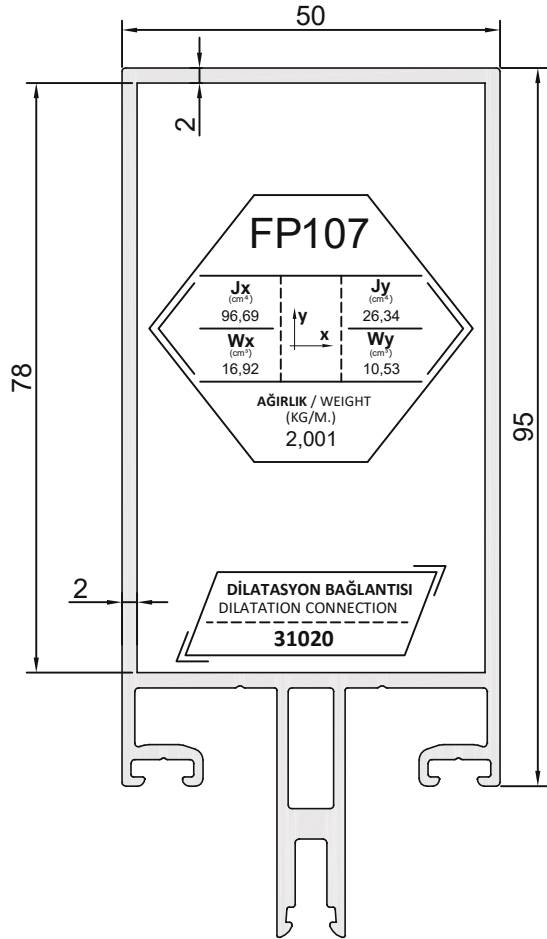
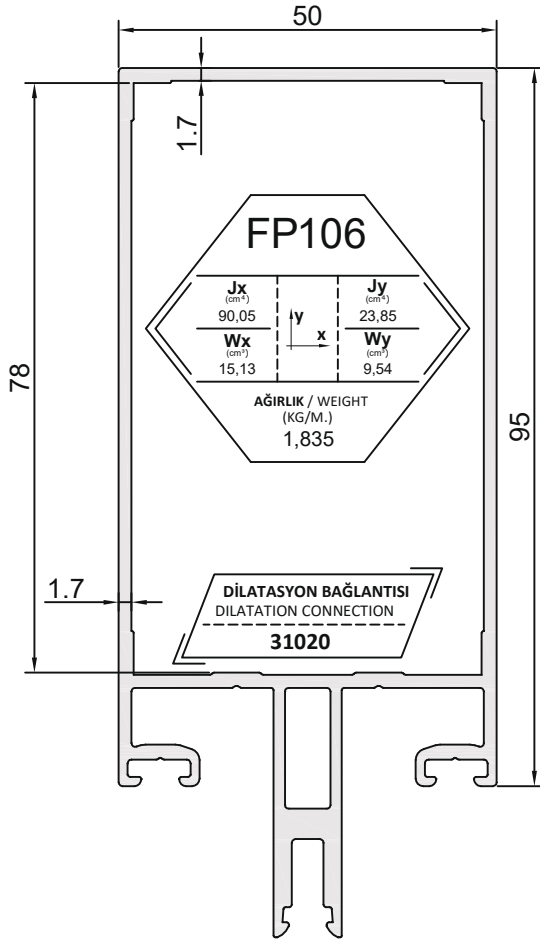


Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.

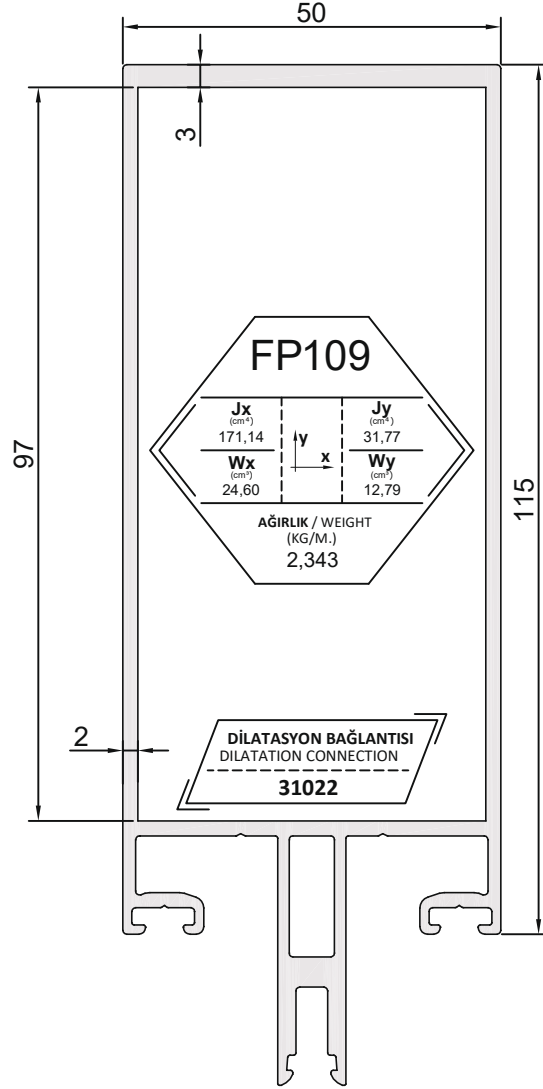
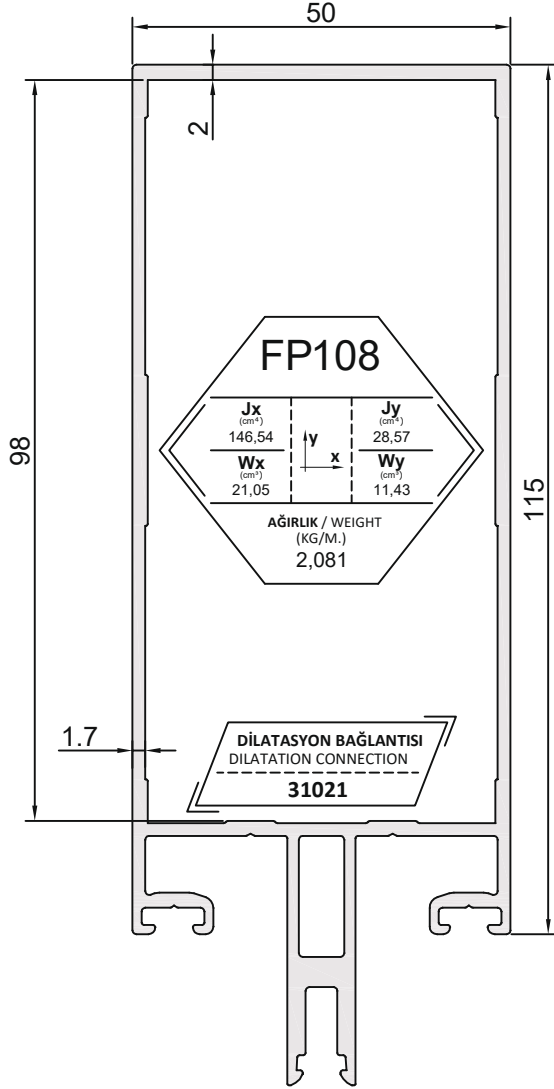
F50-ENERGY



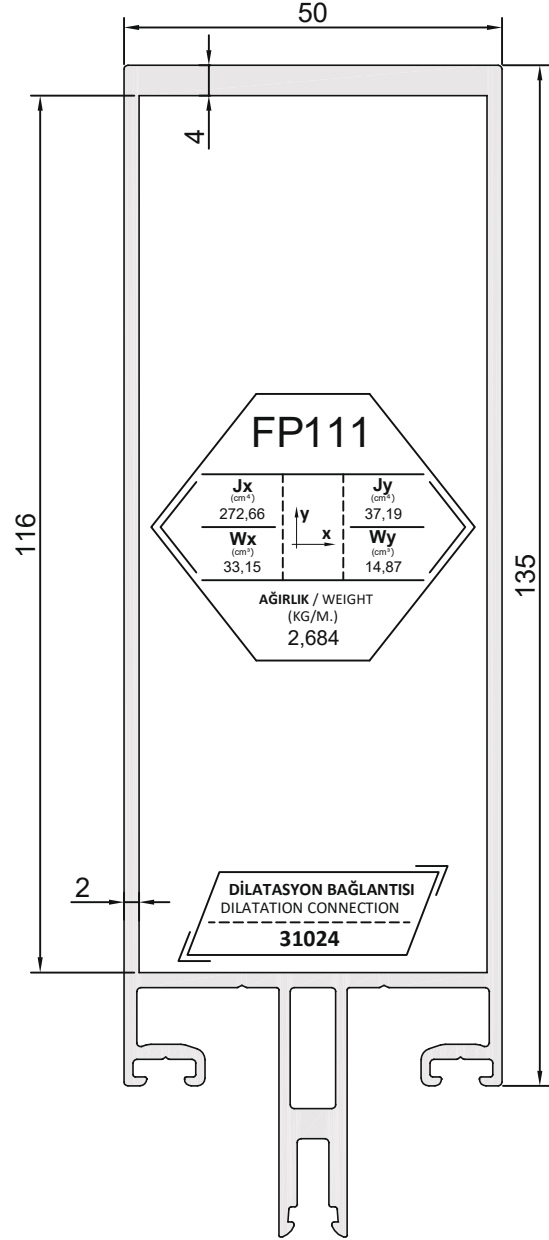
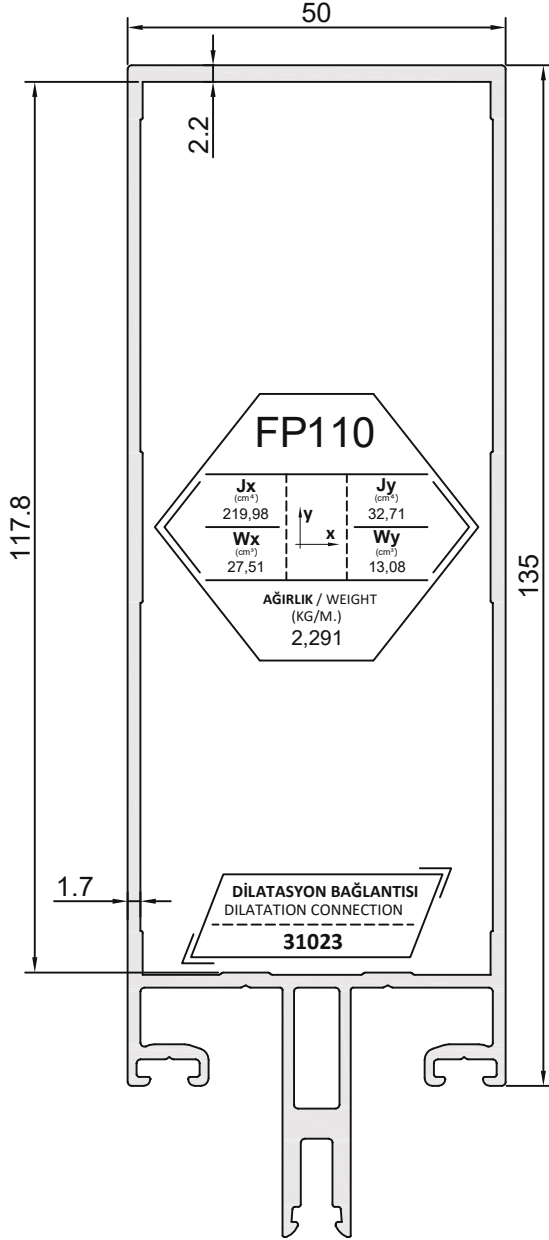
Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.



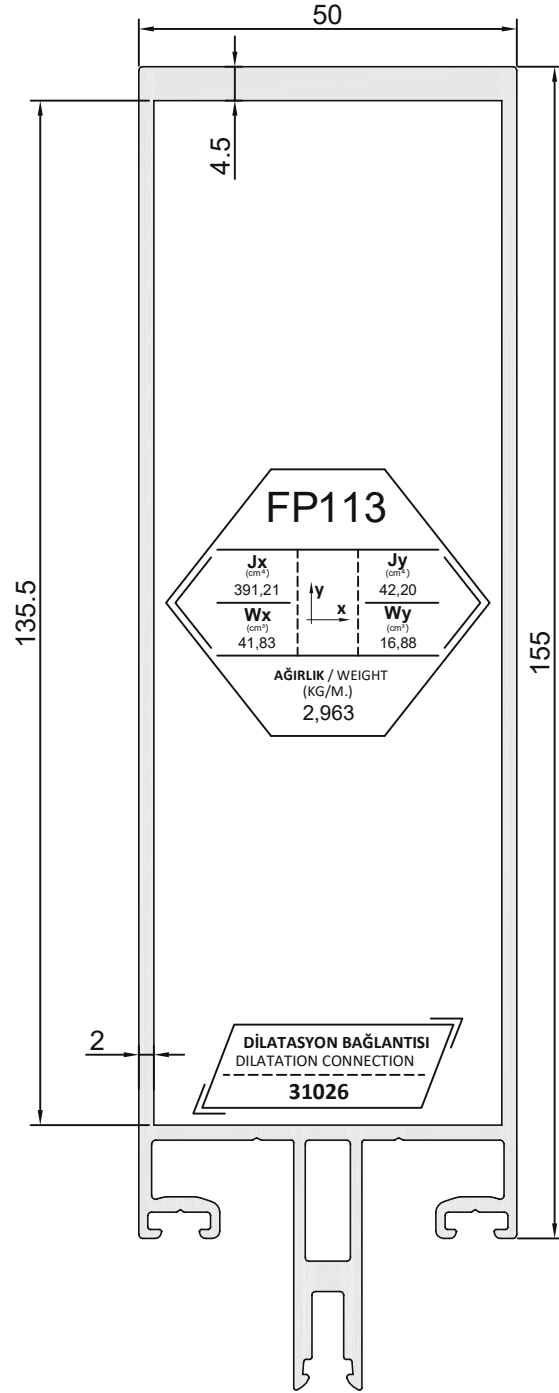
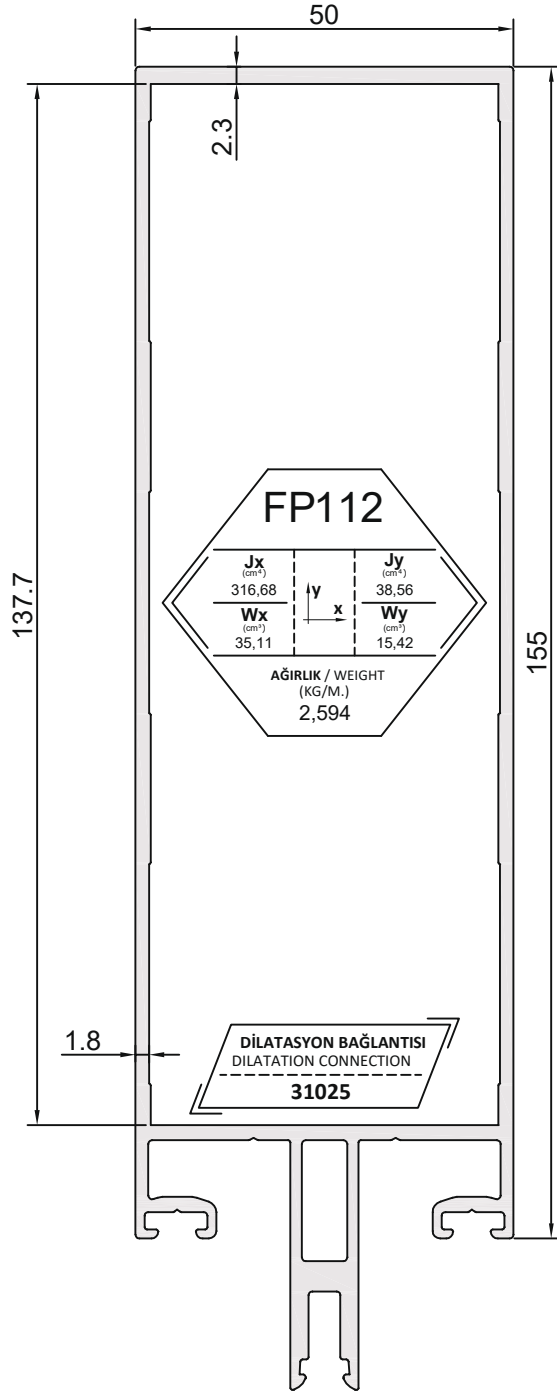
Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.



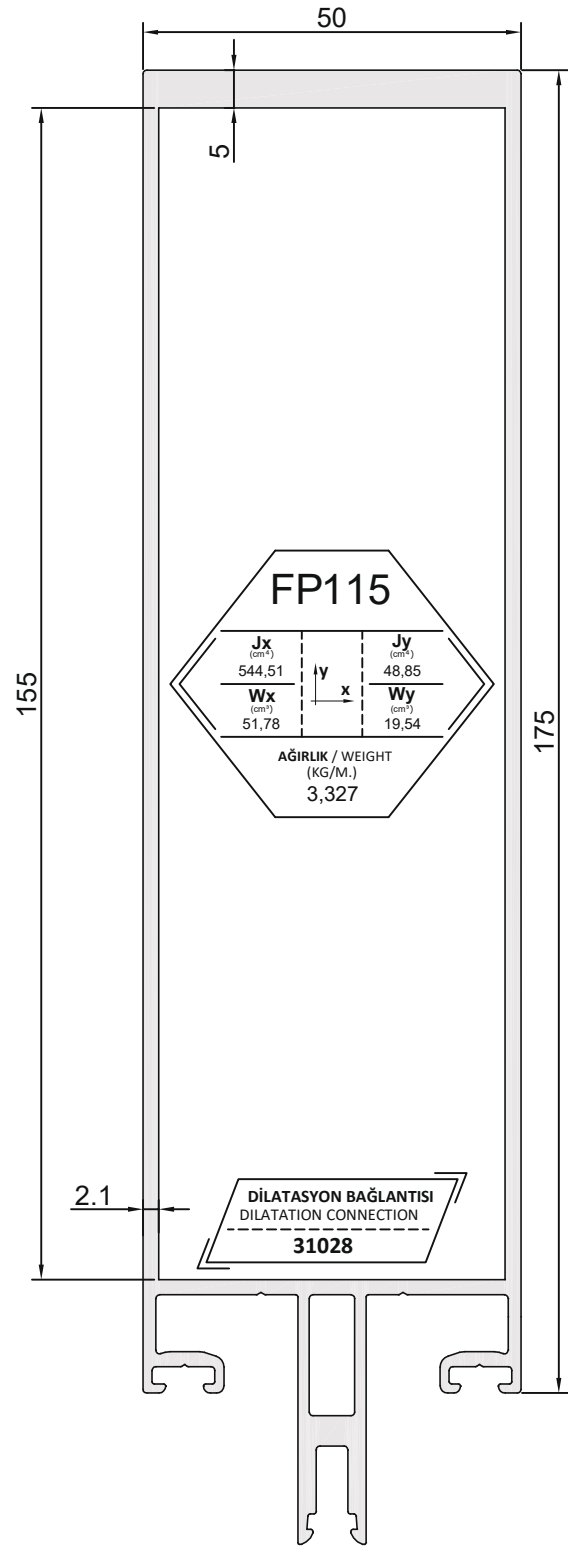
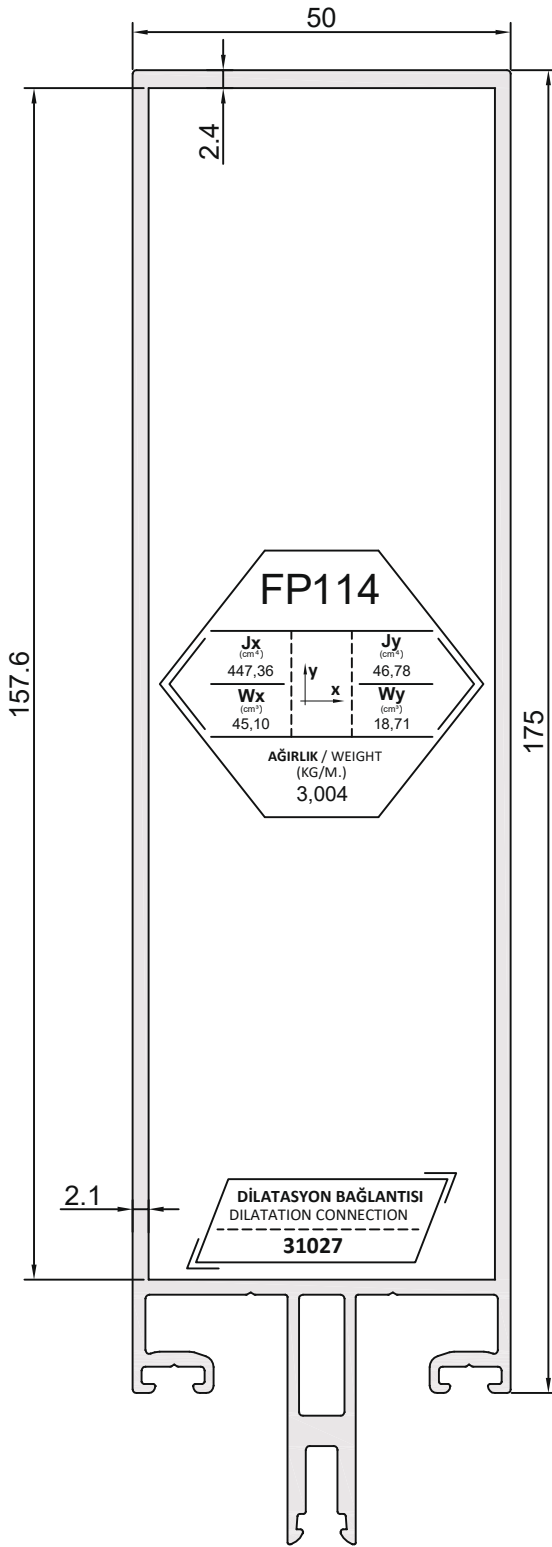
Bu profil için satış ekibinden bilgi alınınız. / Please receive information from sales representative about this profile.



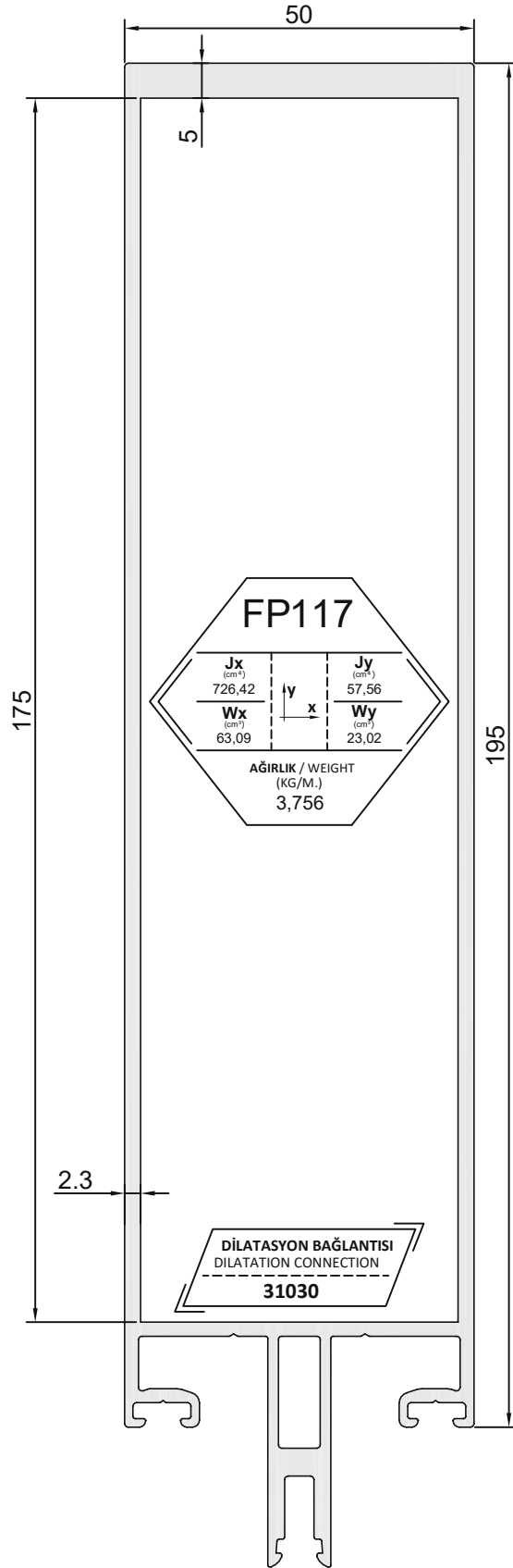
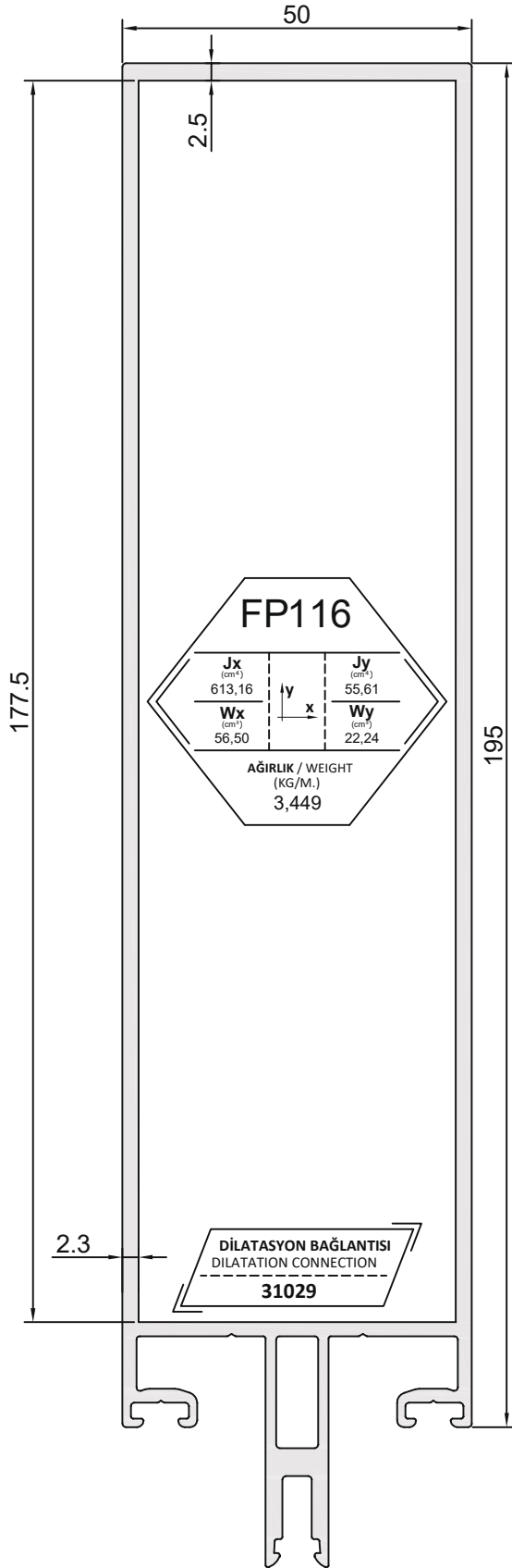
Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.



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

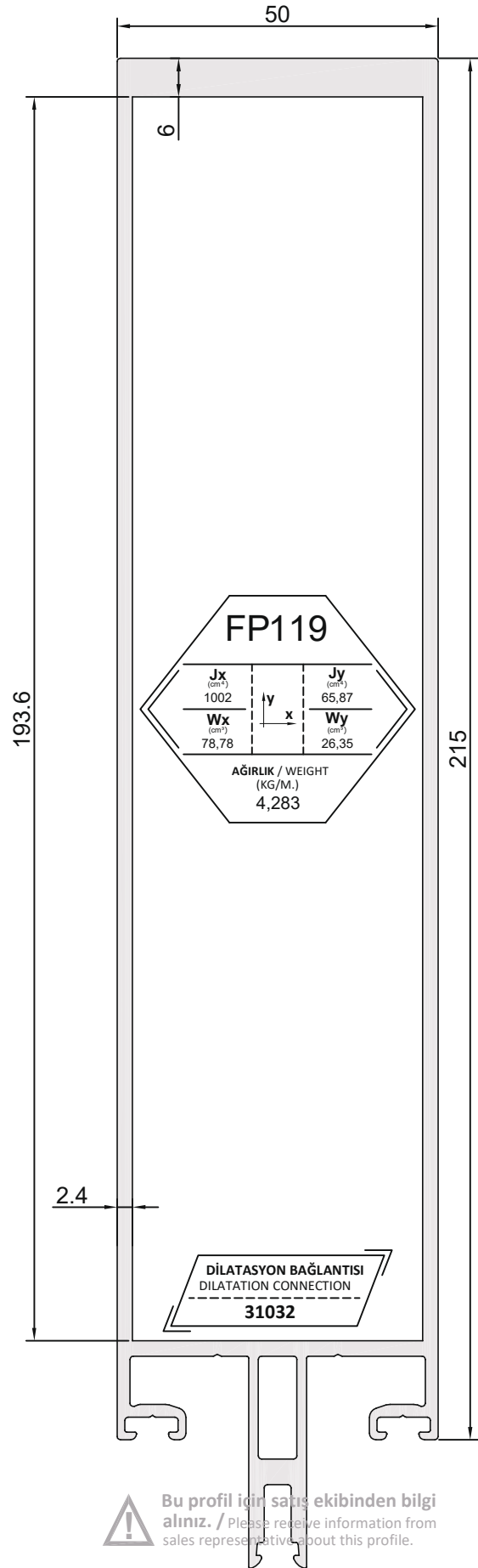
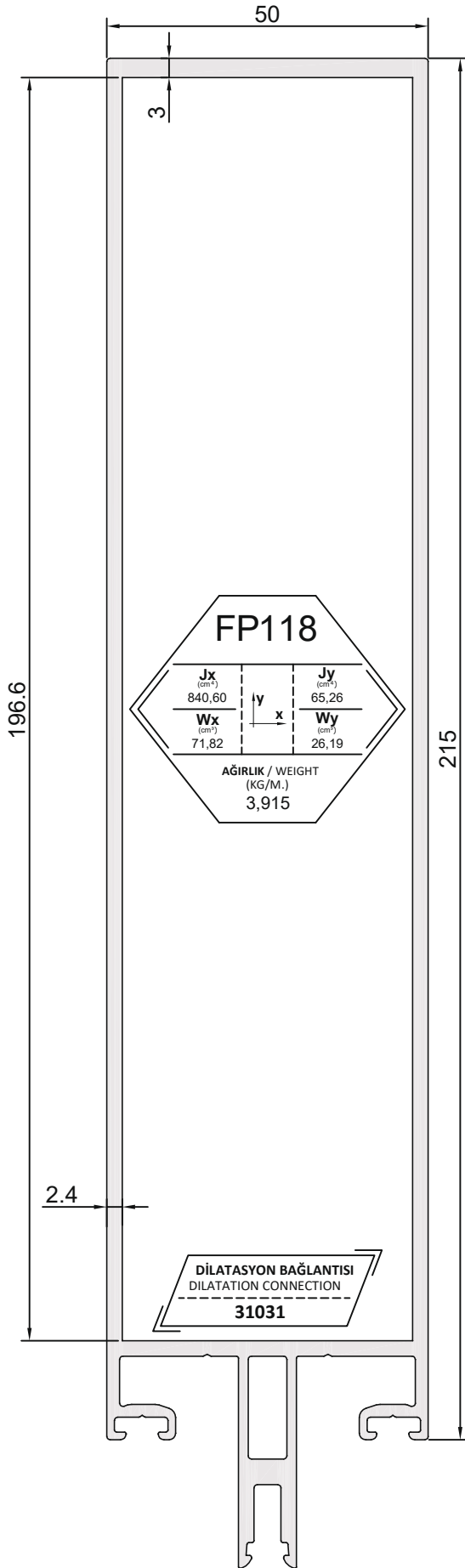


Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.

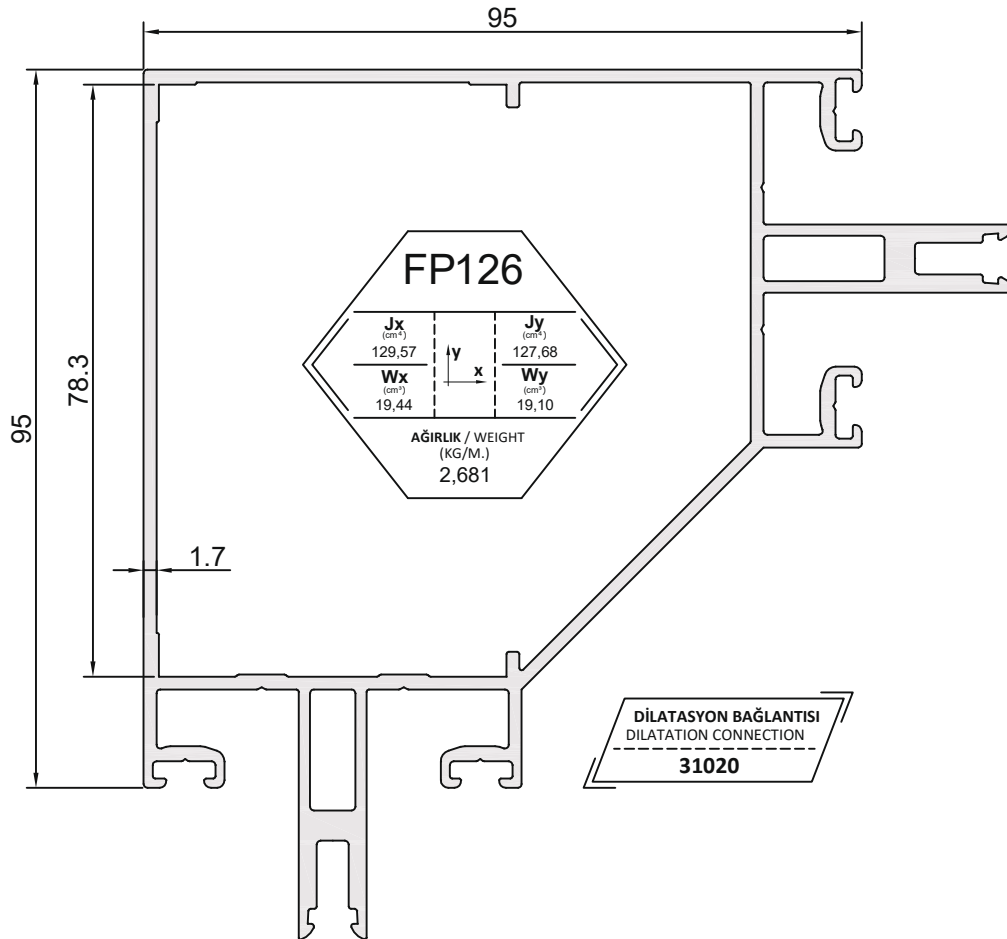
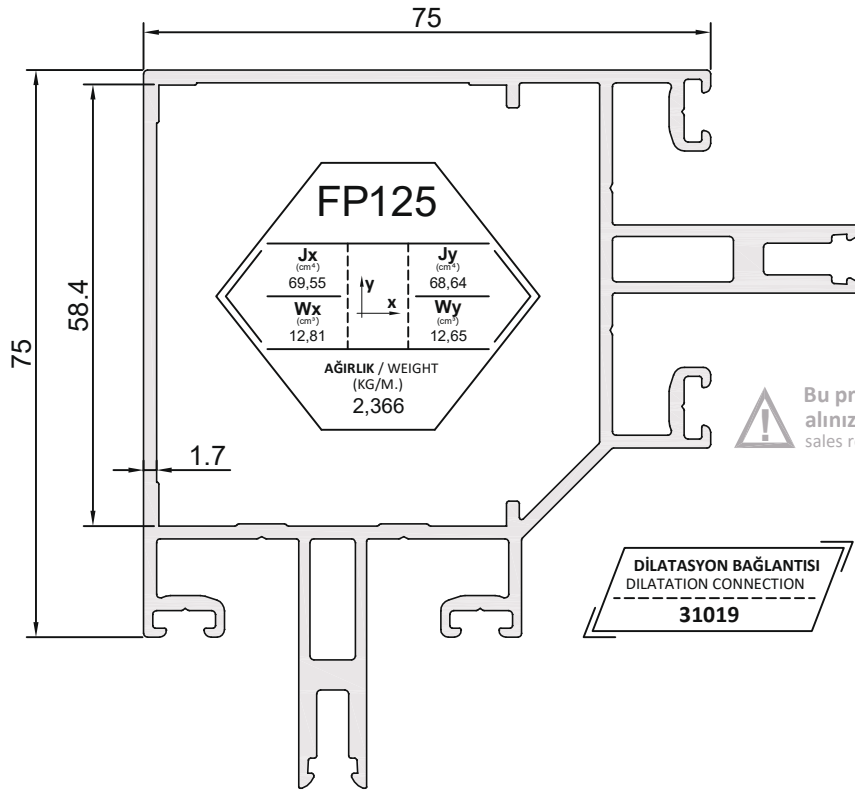


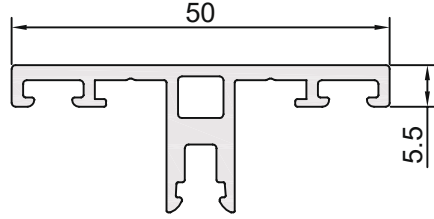
Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.

▲ F50-ENERGY

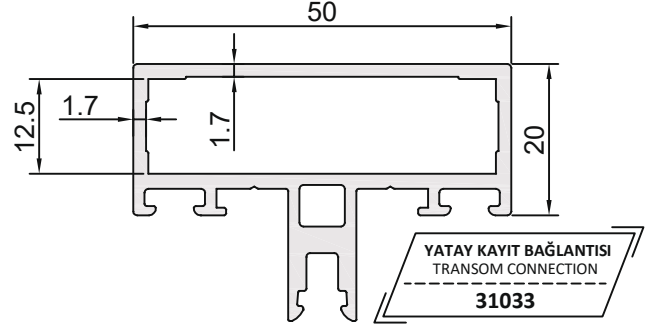


Bu profil için satış ekibinden bilgi alınınız. / Please receive information from sales representative about this profile.

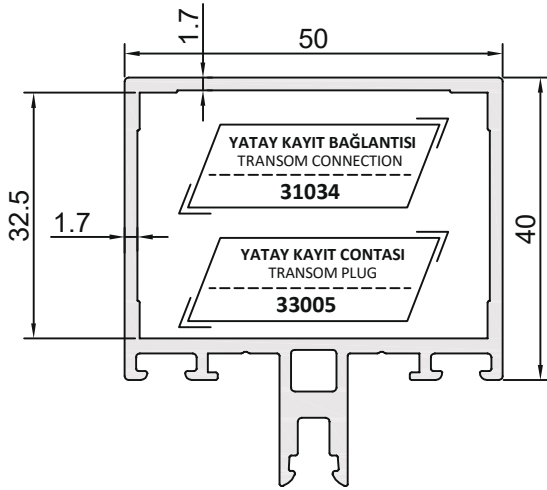




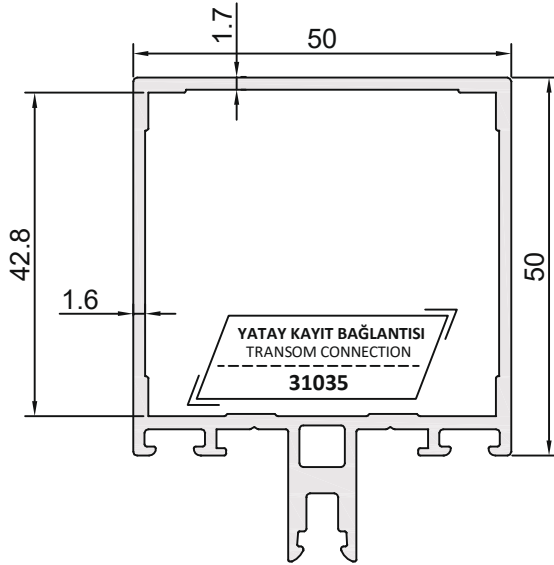
FP151			
J_x (cm ⁴)	y	x	J_y (cm ⁴)
0,56			3,32
W_x (cm ³)			W_y (cm ³)
0,38			1,33
AĞIRLIK / WEIGHT (KG/M.) 0,567			



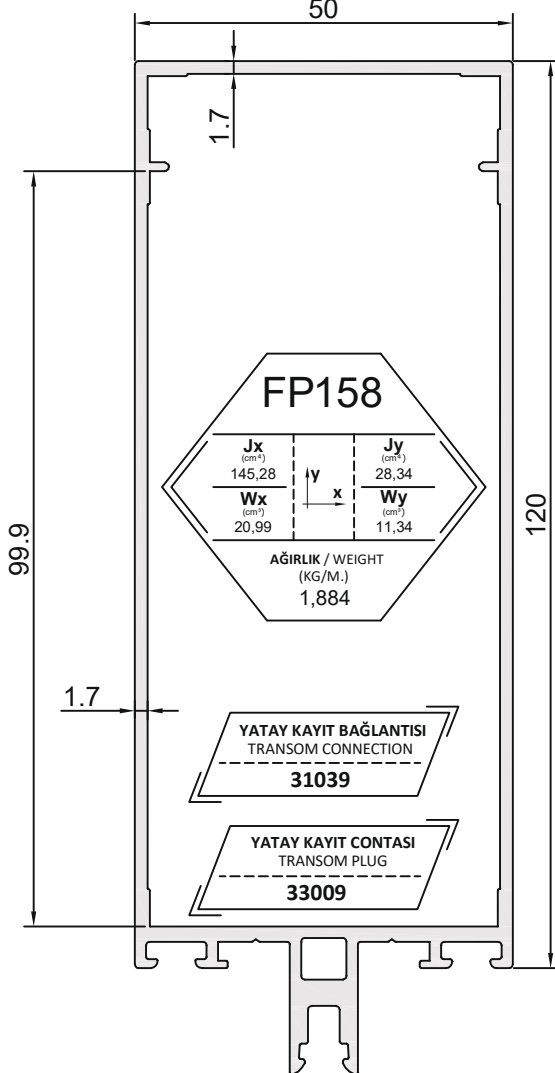
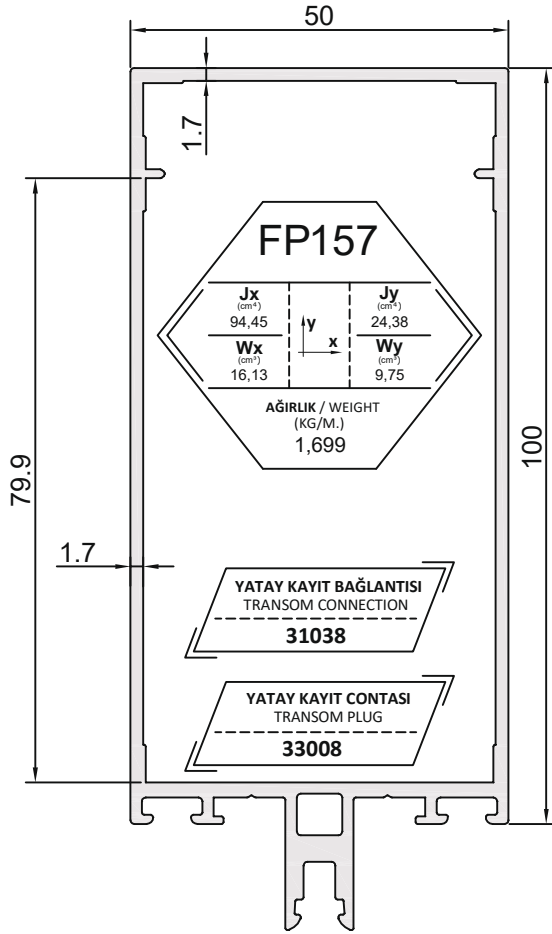
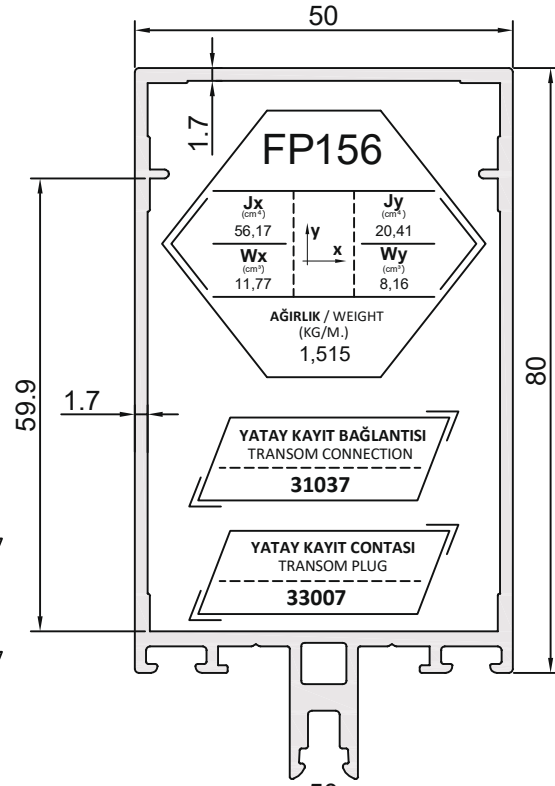
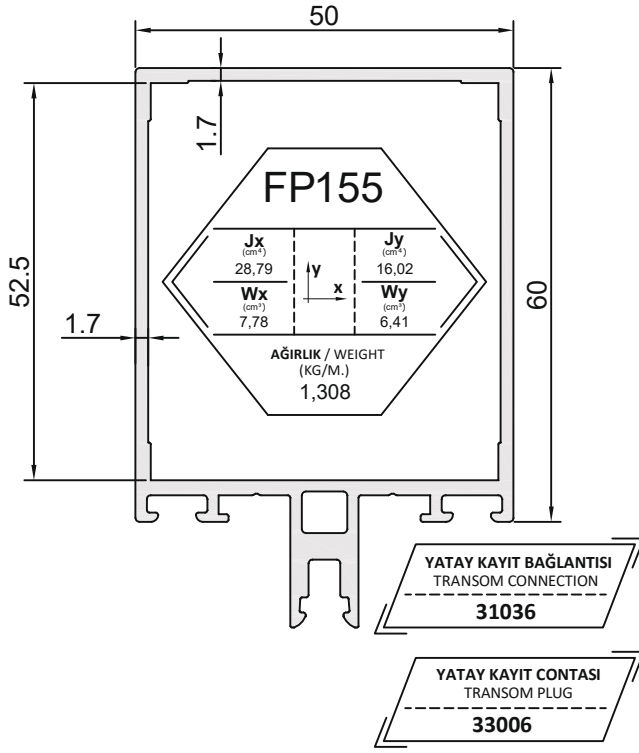
FP152			
J_x (cm ⁴)	y	x	J_y (cm ⁴)
2,91			7,95
W_x (cm ³)			W_y (cm ³)
1,40			3,18
AĞIRLIK / WEIGHT (KG/M.) 0,933			

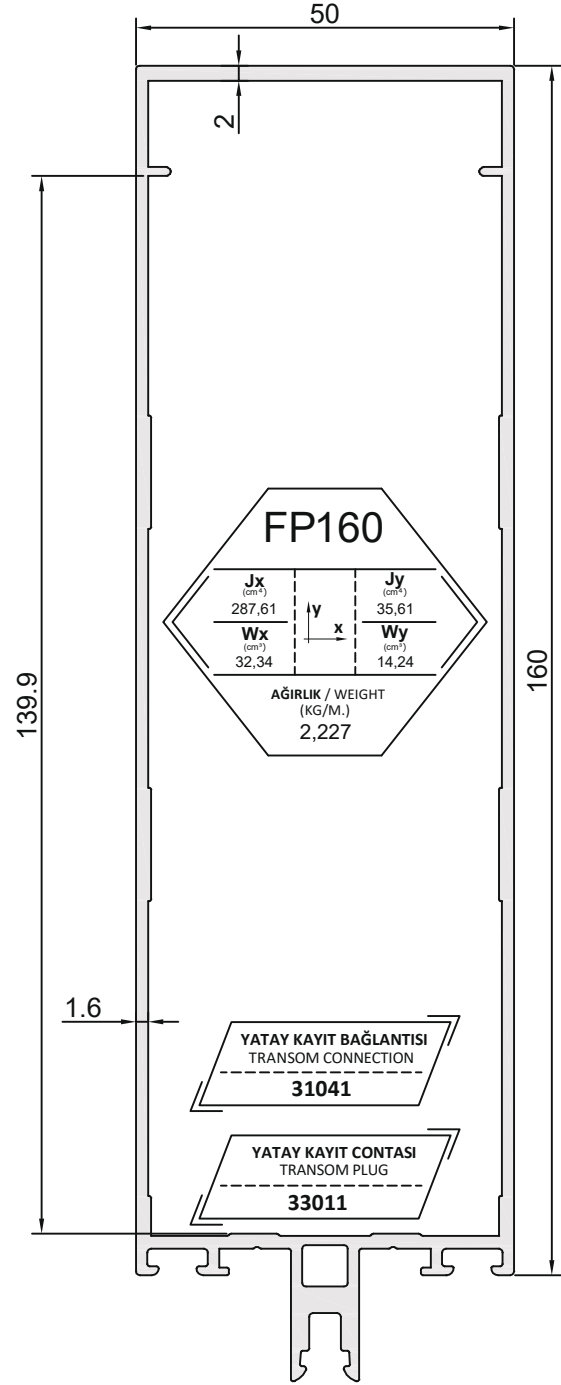
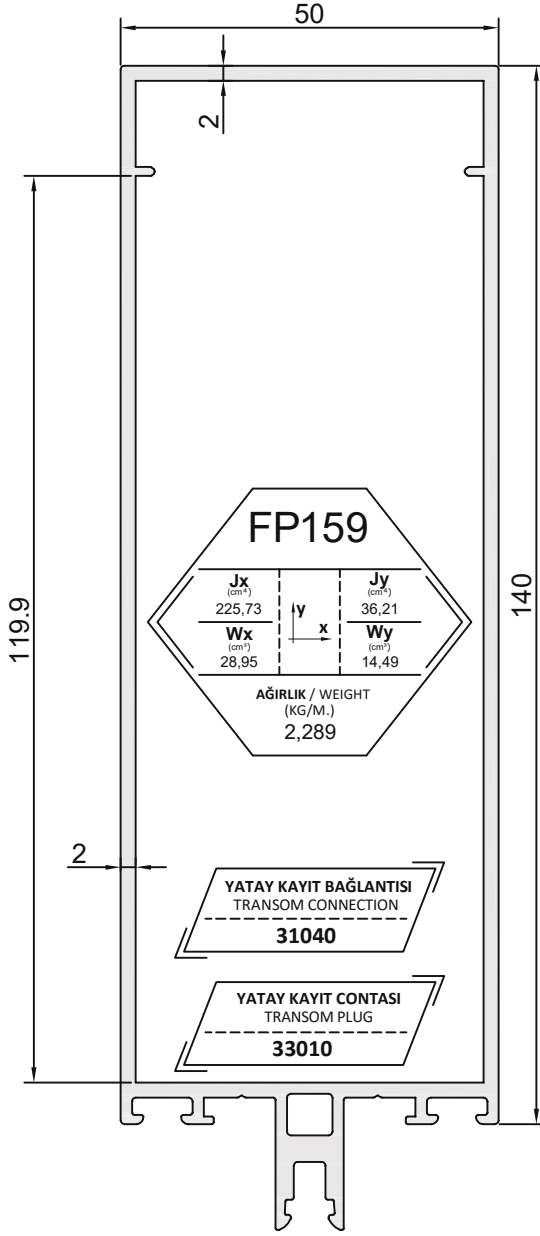


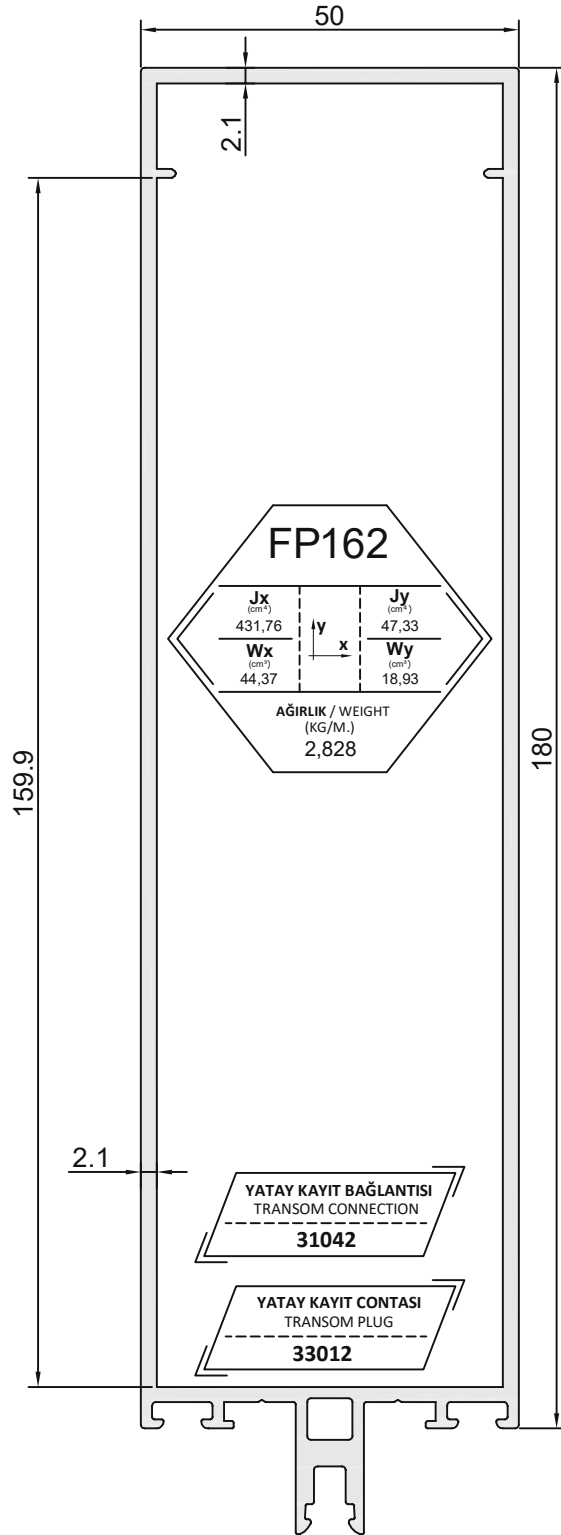
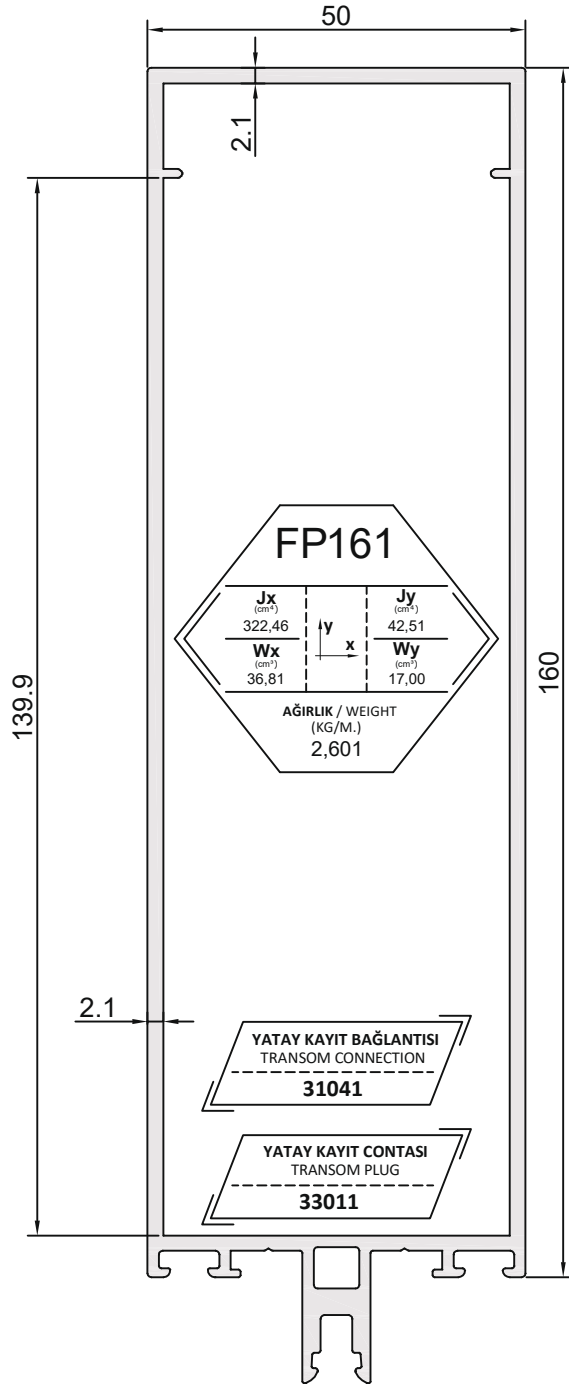
FP153			
J_x (cm ⁴)	y	x	J_y (cm ⁴)
11,79			12,05
W_x (cm ³)			W_y (cm ³)
4,12			4,82
AĞIRLIK / WEIGHT (KG/M.) 1,123			



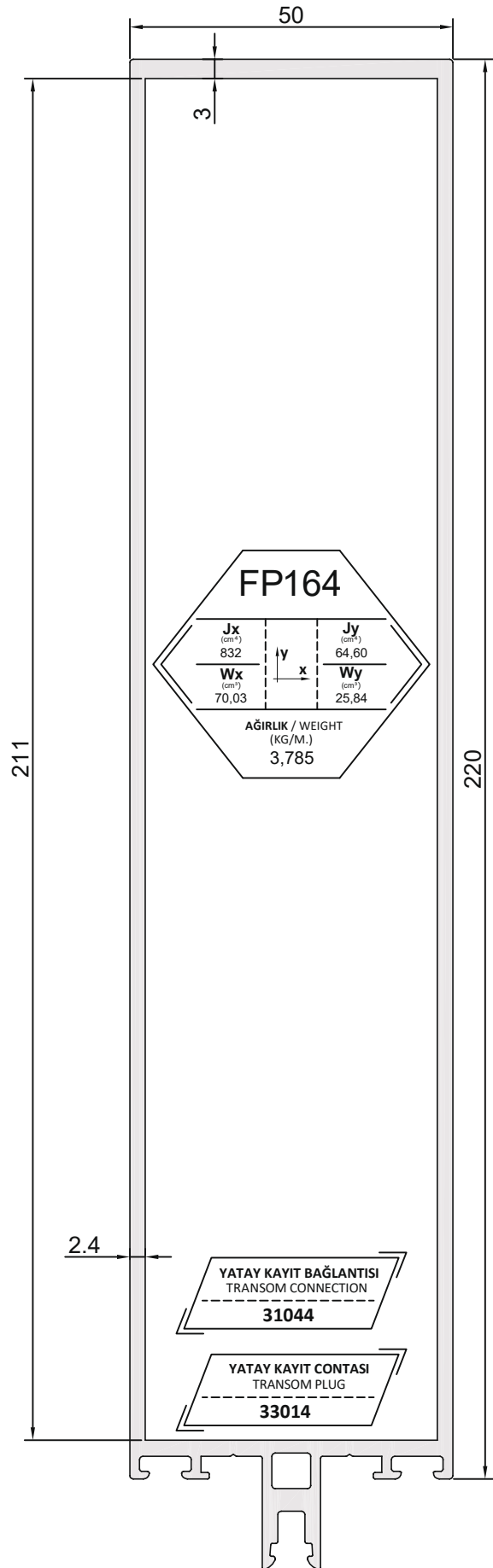
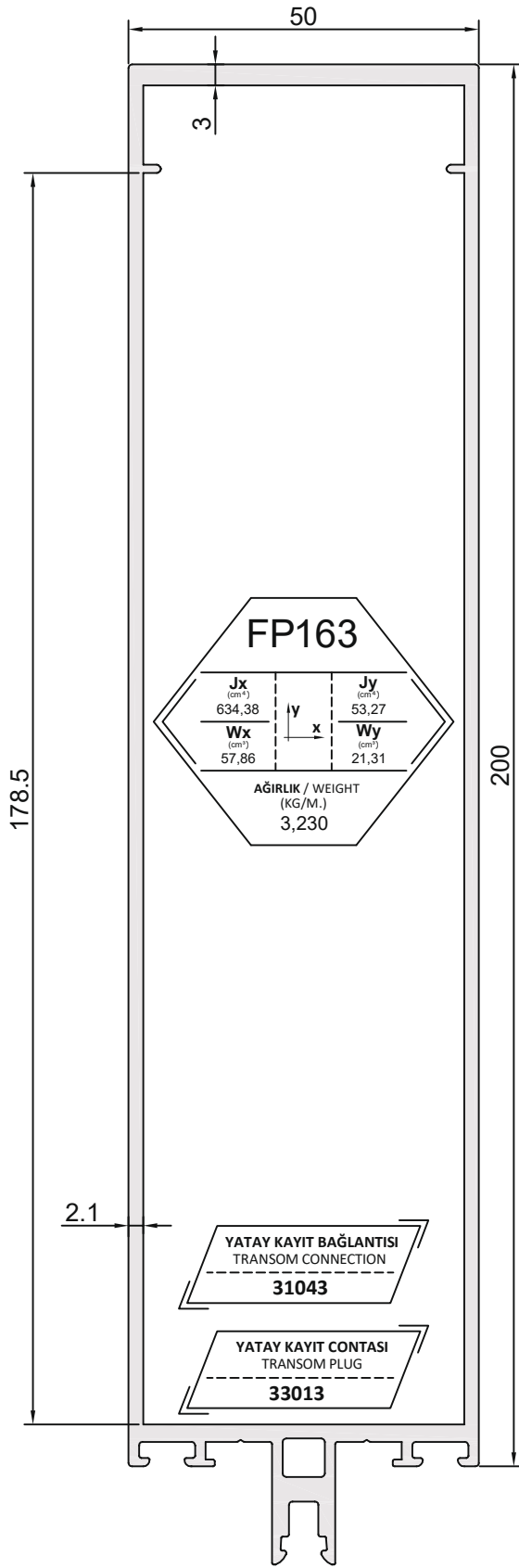
FP154			
J_x (cm ⁴)	y	x	J_y (cm ⁴)
18,59			13,43
W_x (cm ³)			W_y (cm ³)
5,69			5,37
AĞIRLIK / WEIGHT (KG/M.) 1,161			

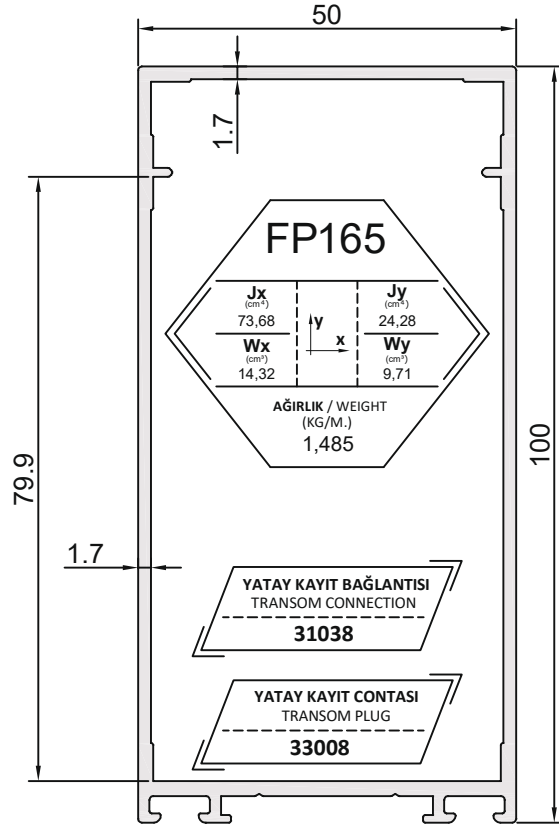
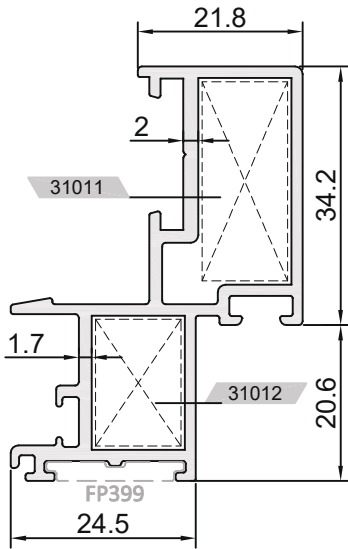
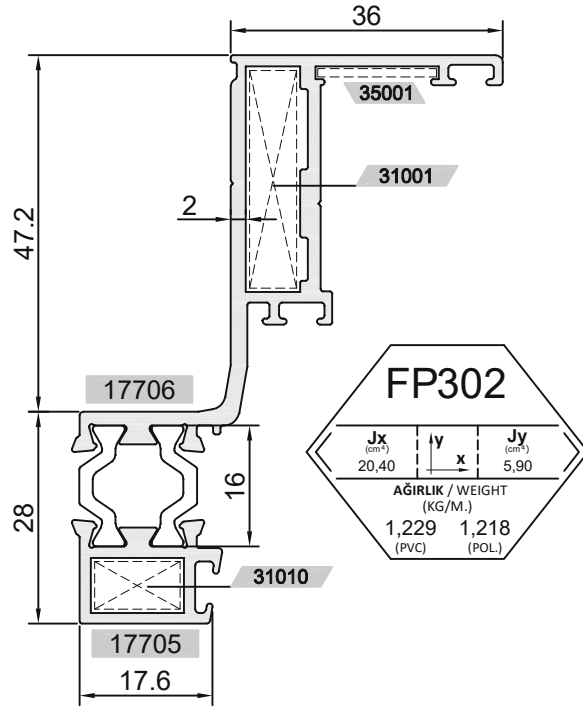
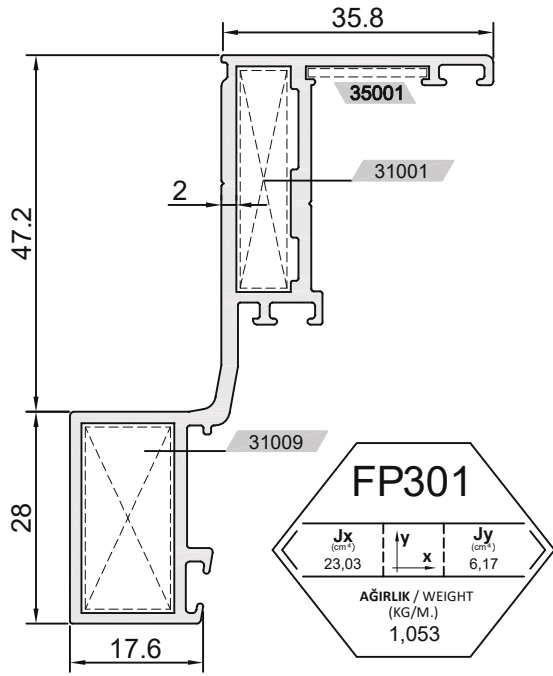


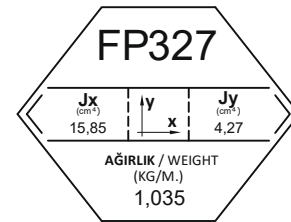
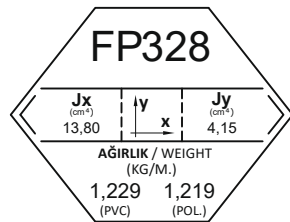
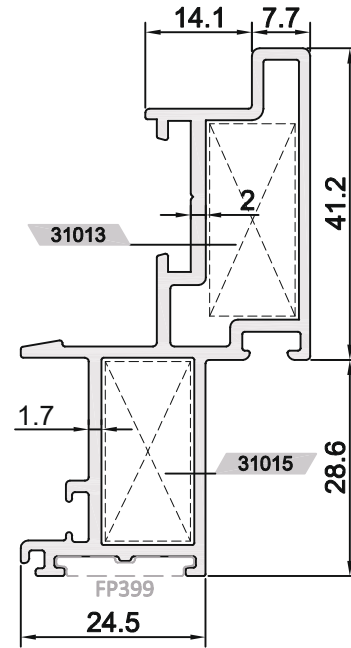
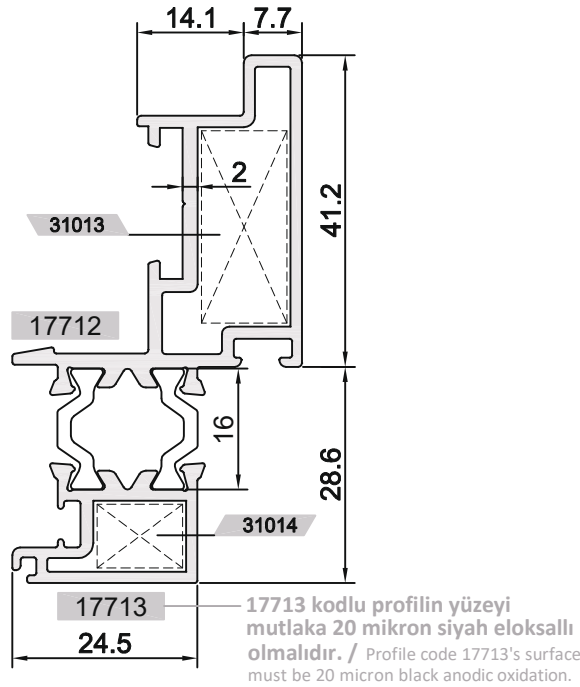
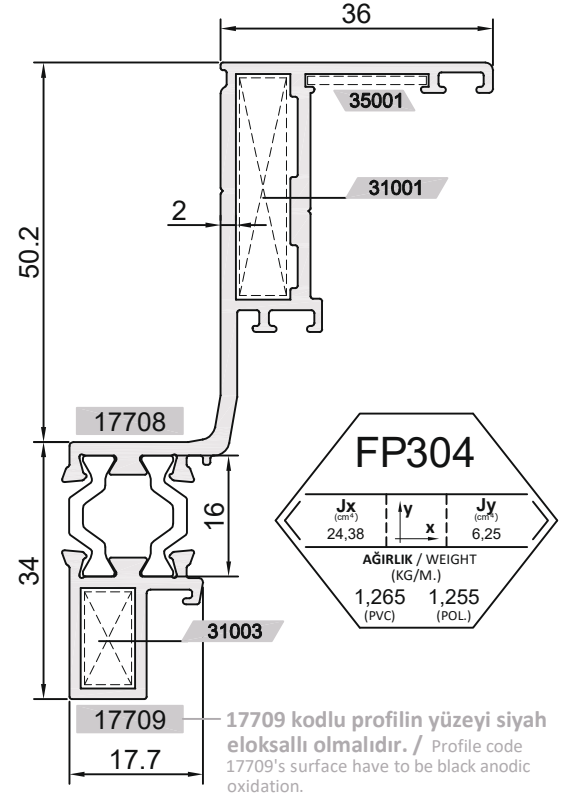
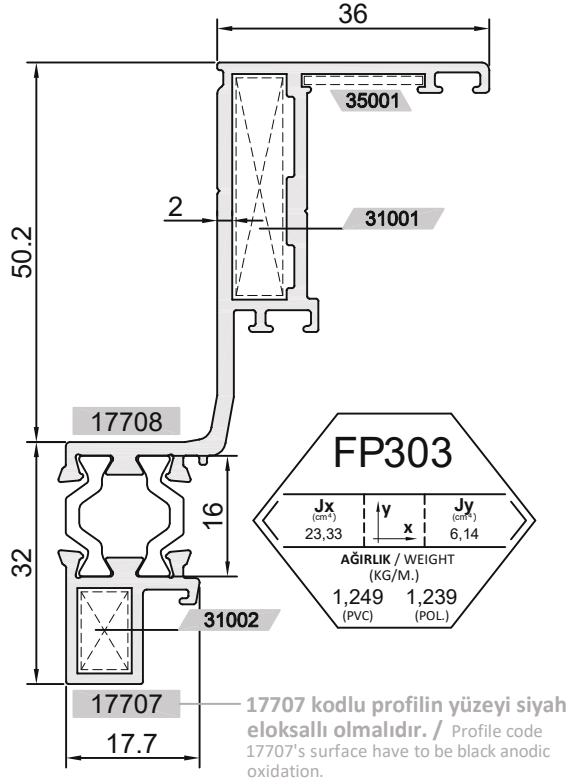


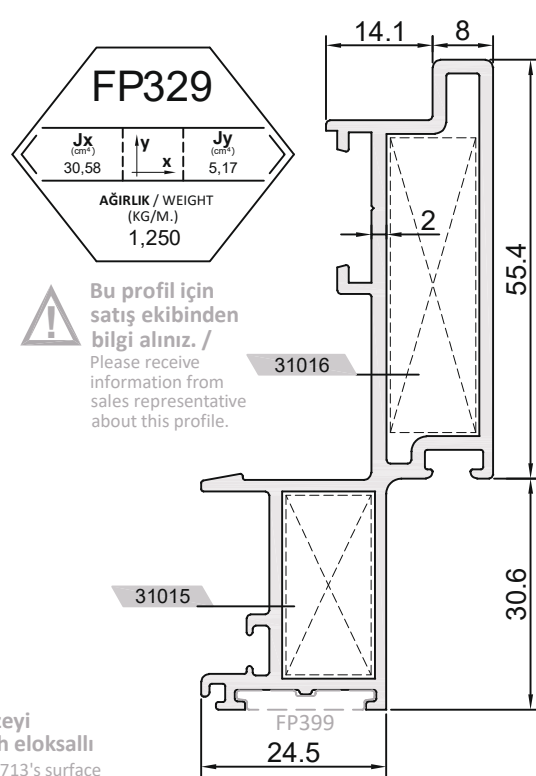
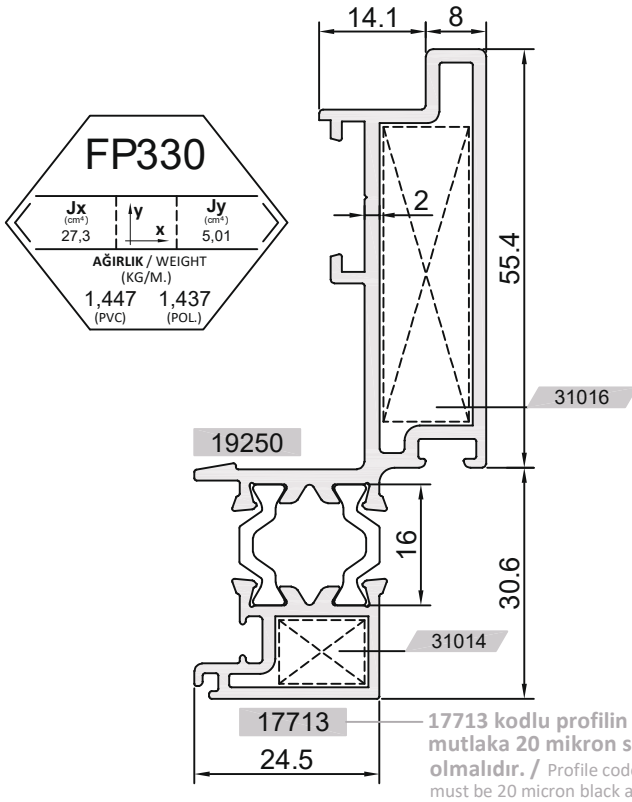
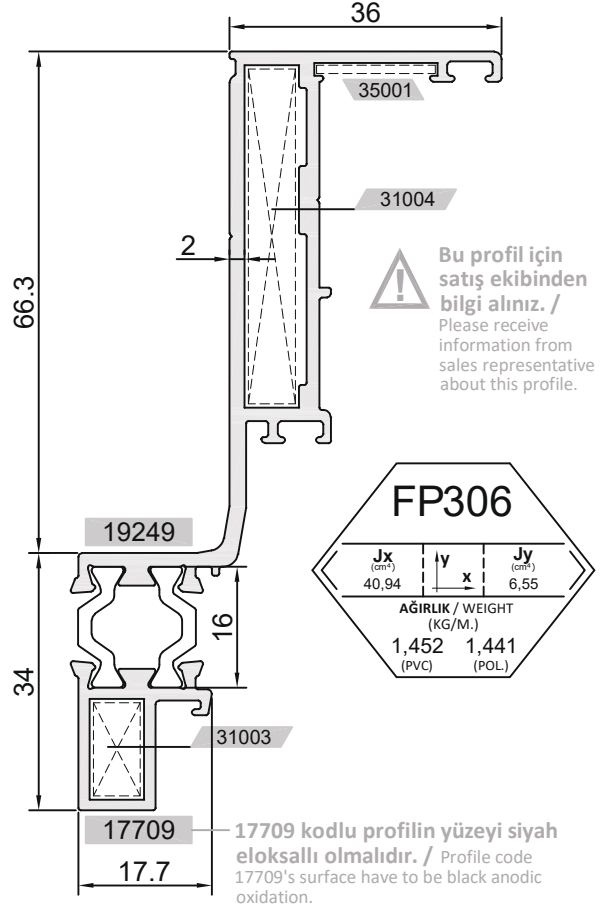
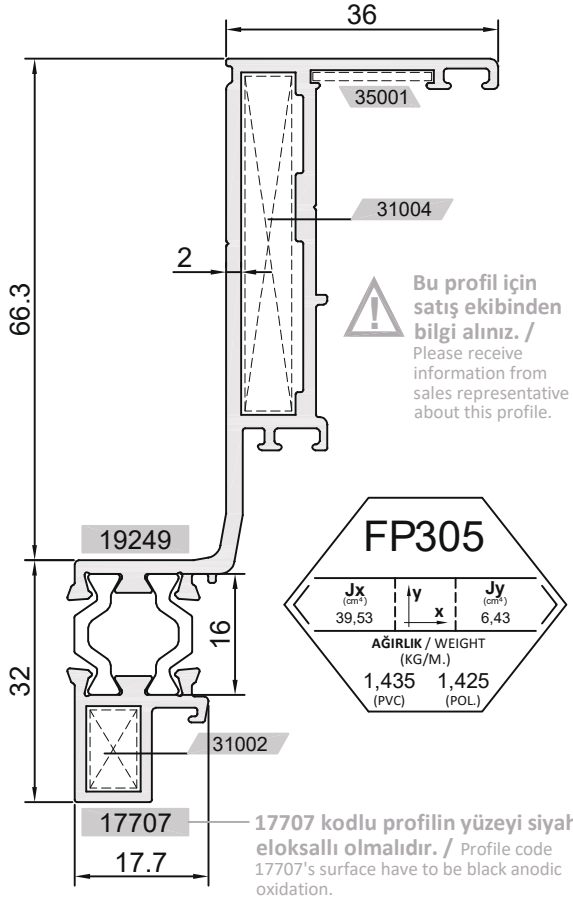


▲ F50-ENERGY

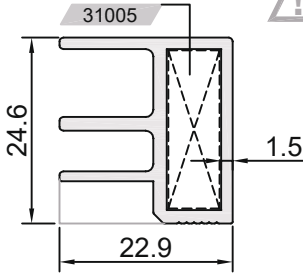




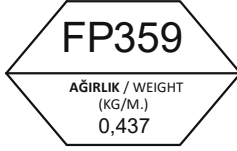




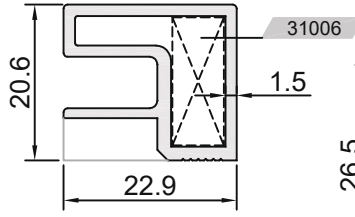
F50-ENERGY



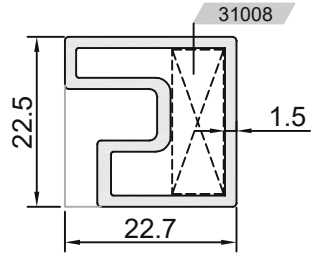
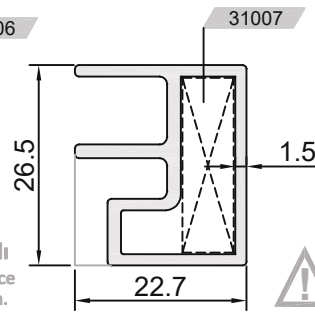
FP359 kodlu profilin yüzeyi mutlaka 20 mikron siyah eloksallı olmalıdır. / Profile code FP359's surface must be 20 micron black anodic oxidation.



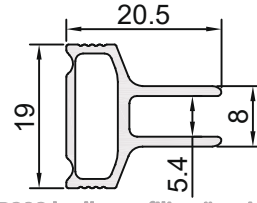
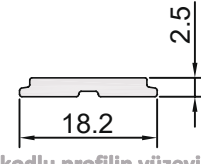
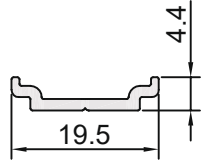
Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.



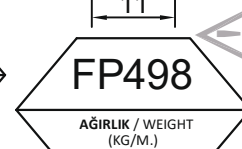
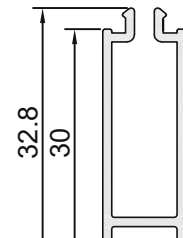
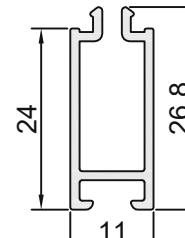
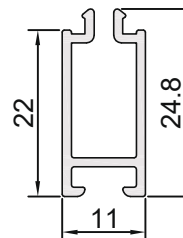
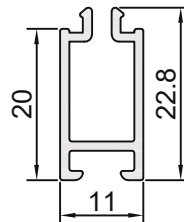
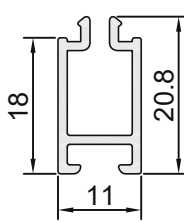
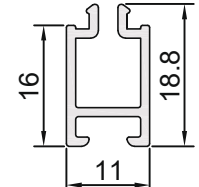
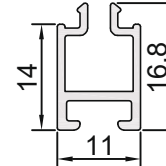
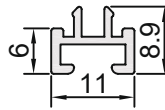
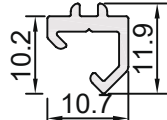
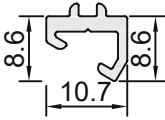
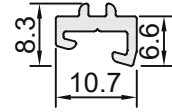
FP360 kodlu profilin yüzeyi mutlaka 20 mikron siyah eloksallı olmalıdır. / Profile code FP360's surface must be 20 micron black anodic oxidation.



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

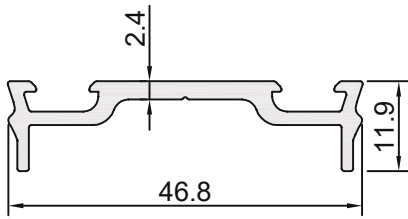
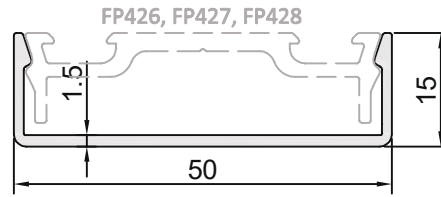
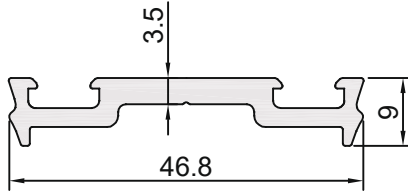
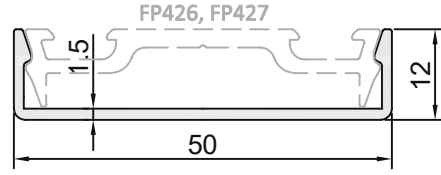
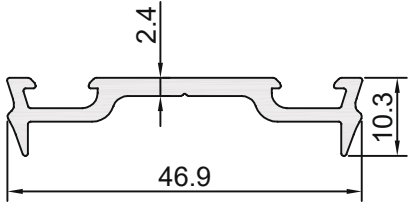


FP398 kodlu profilin yüzeyi mutlaka 20 mikron siyah eloksallı olmalıdır. / Profile code FP398's surface must be 20 micron black anodic oxidation.

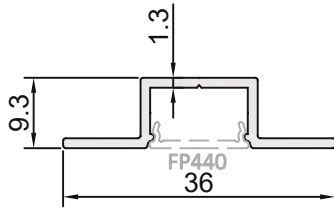
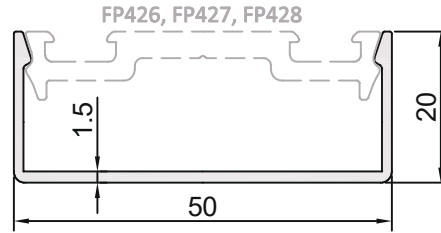
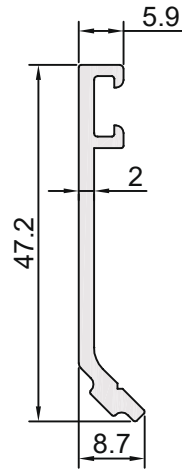
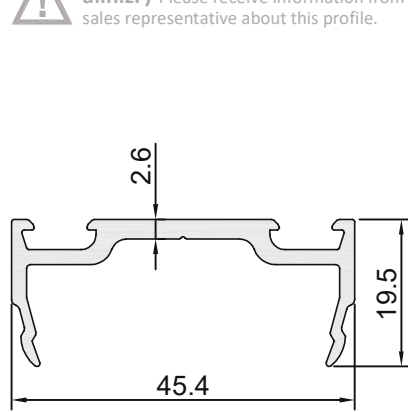


Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.

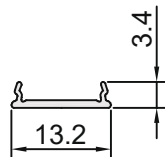
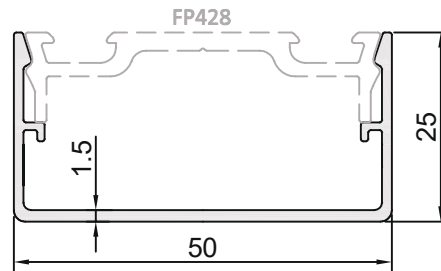


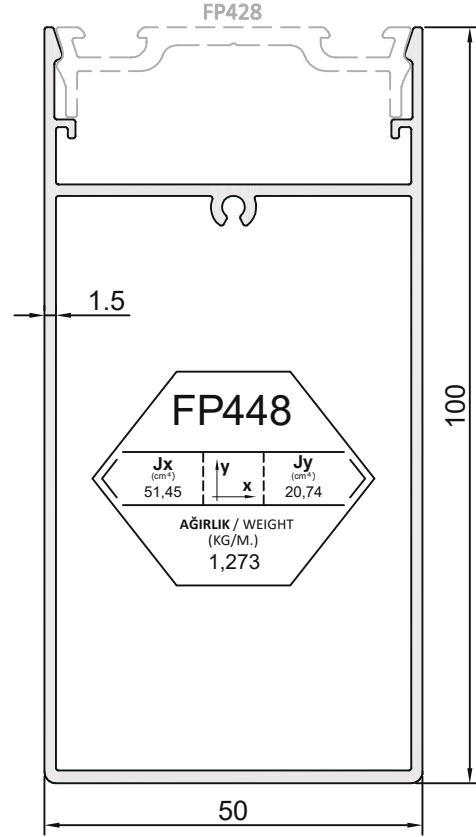
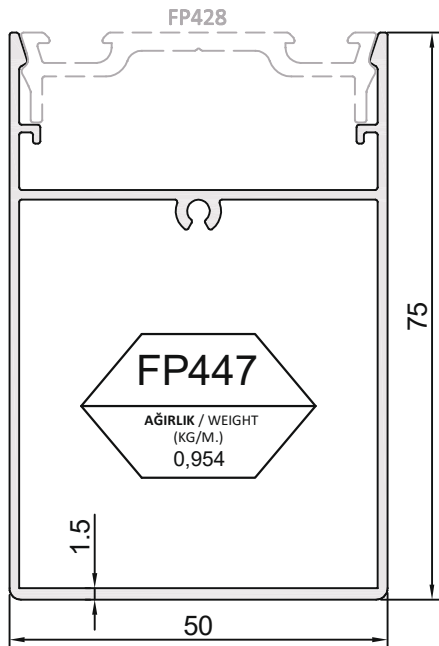
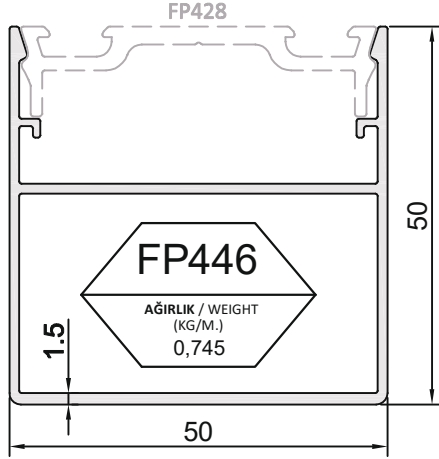
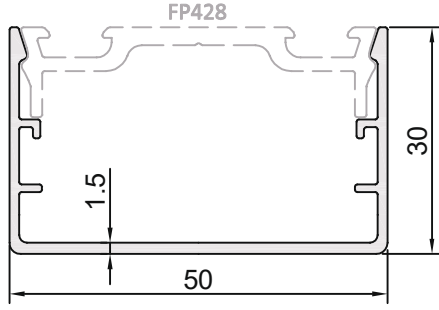


Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.

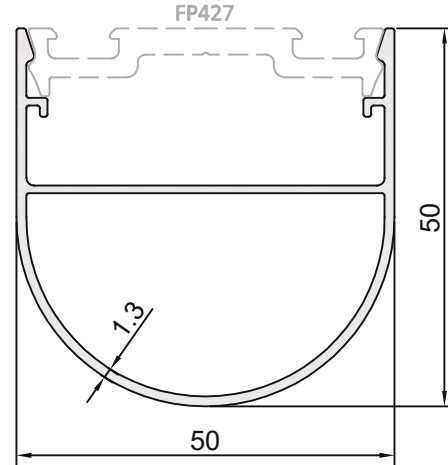


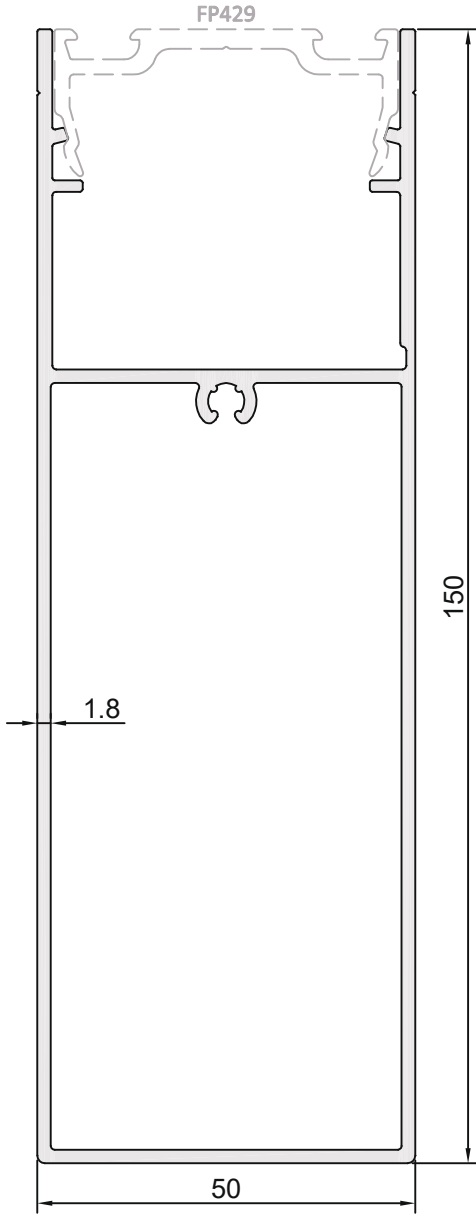
Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.





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

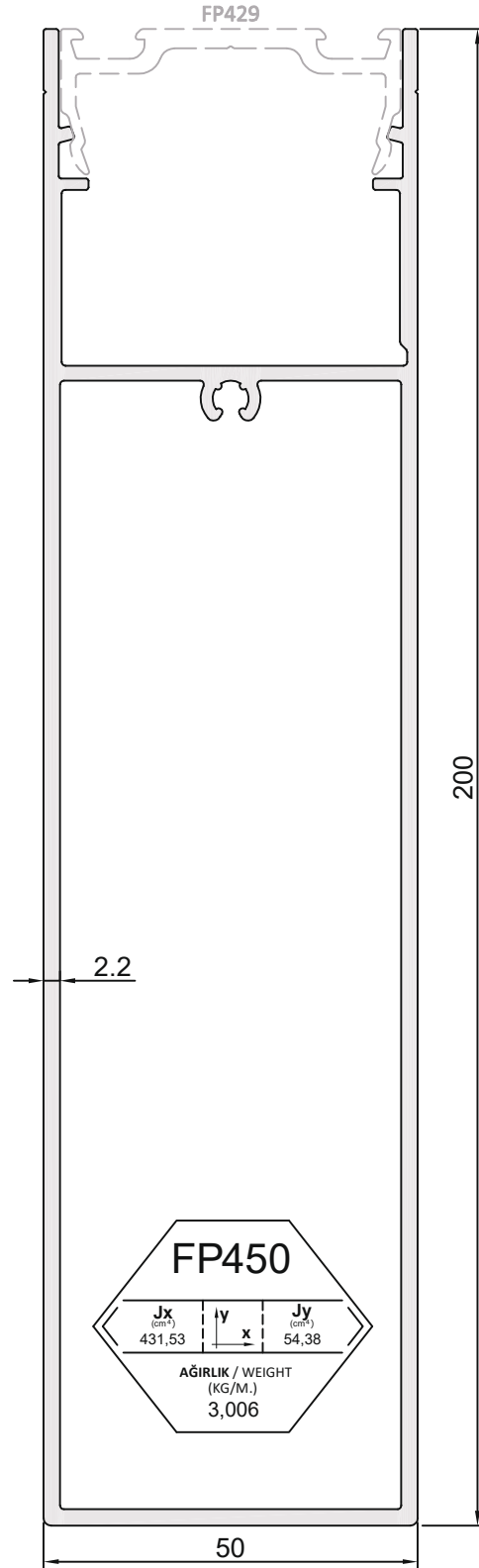




FP449		
J_x (cm ⁴)	I_y x	J_y (cm ⁴)
166,24		36,07
AĞIRLIK / WEIGHT (KG/M.)		
2,065		



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

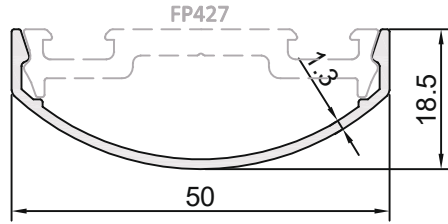


FP450		
J_x (cm ⁴)	I_y x	J_y (cm ⁴)
431,53		54,38
AĞIRLIK / WEIGHT (KG/M.)		
3,006		

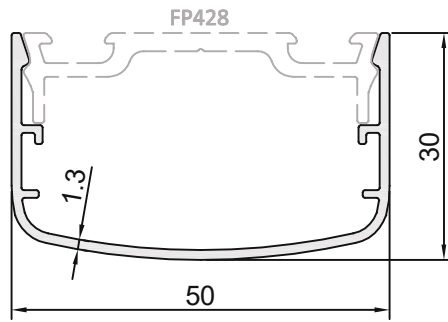


Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.

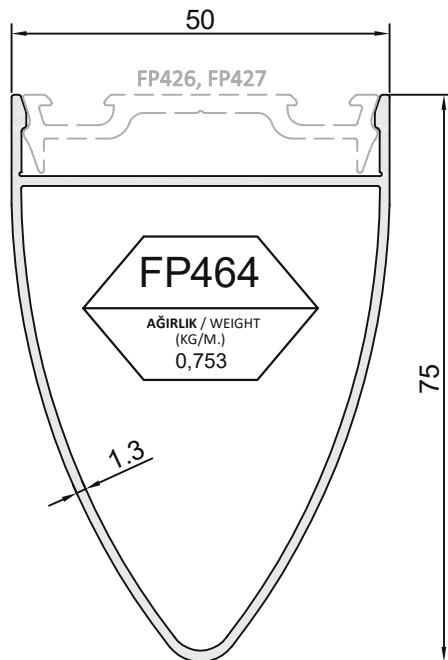
F50-ENERGY



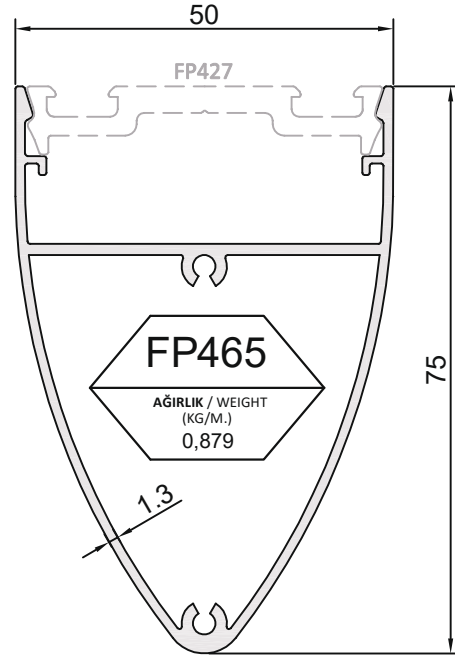
FP461
AĞIRLIK / WEIGHT
(KG/M.)
0,262



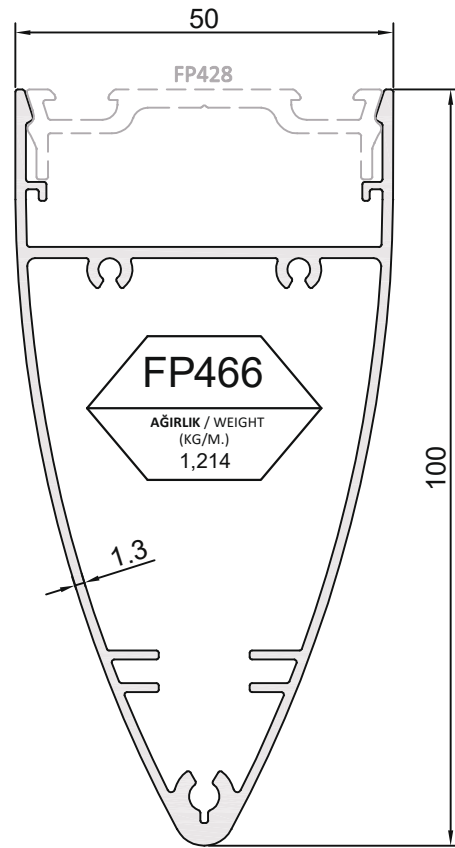
FP462
AĞIRLIK / WEIGHT
(KG/M.)
0,397



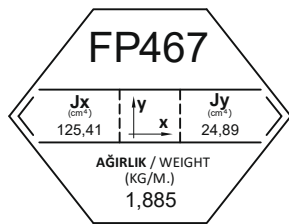
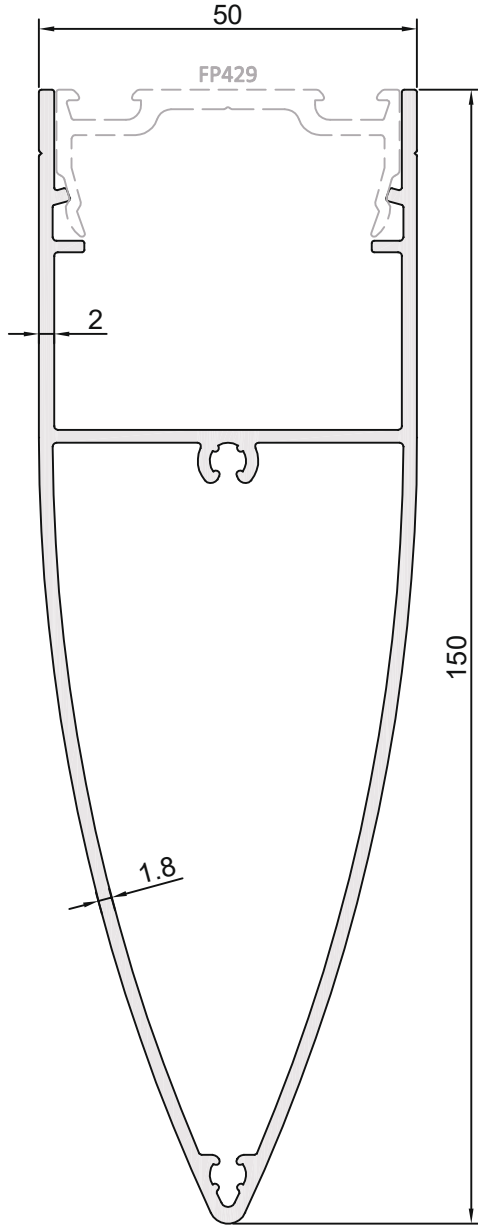
FP464
AĞIRLIK / WEIGHT
(KG/M.)
0,753



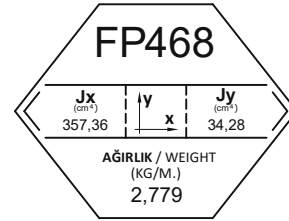
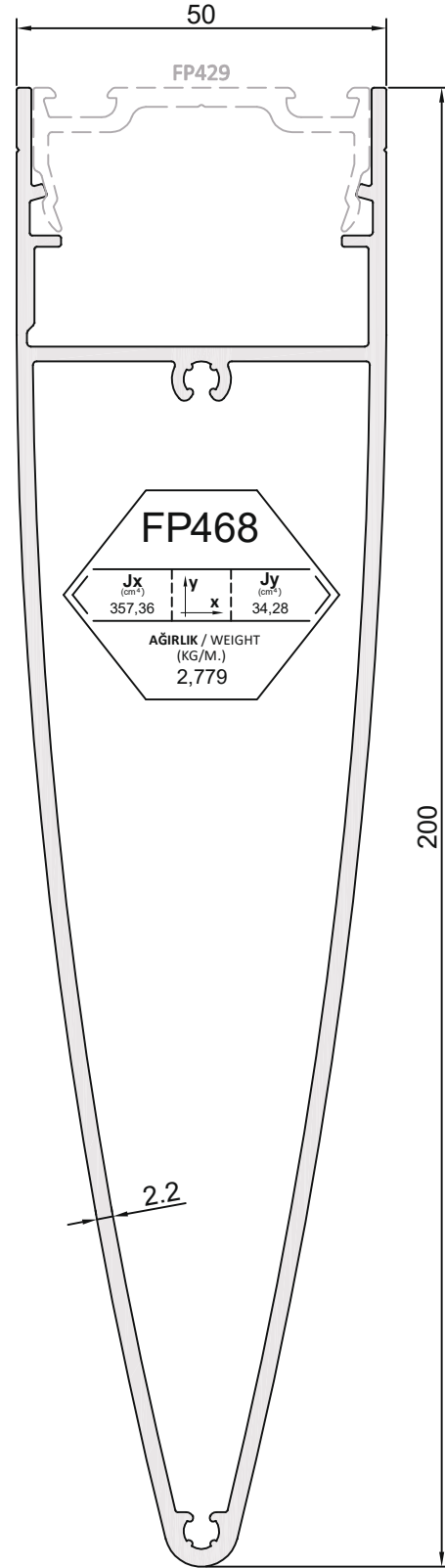
FP465
AĞIRLIK / WEIGHT
(KG/M.)
0,879



FP466
AĞIRLIK / WEIGHT
(KG/M.)
1,214



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

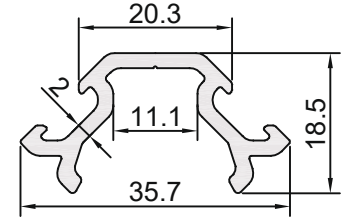
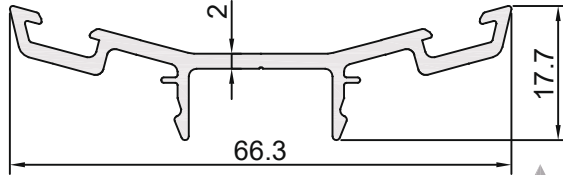
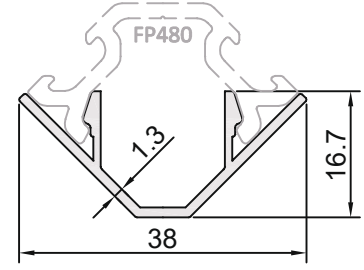
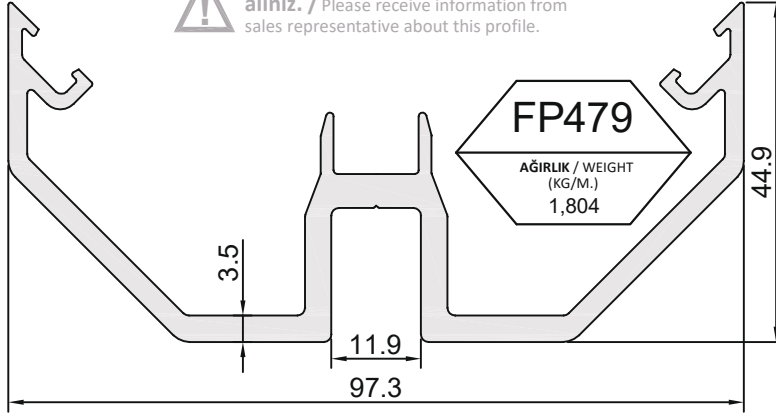


⚠ Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.

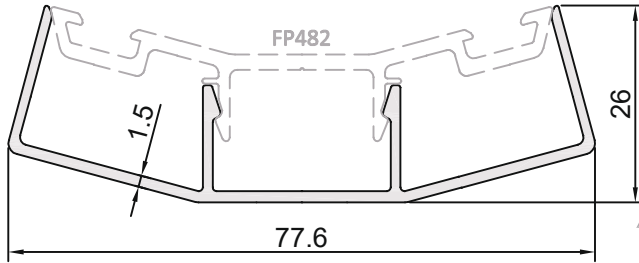
▲ F50-ENERGY



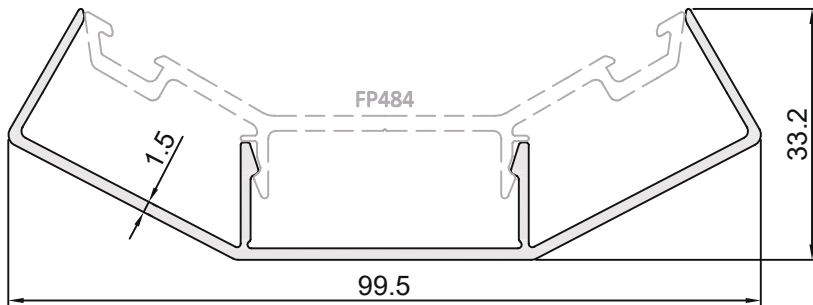
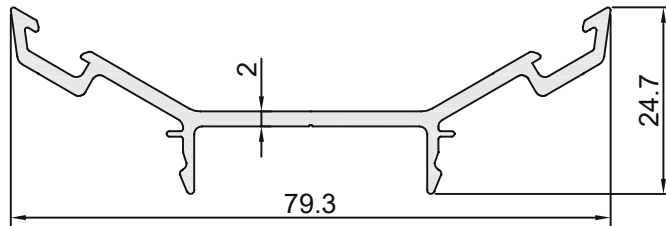
Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.



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

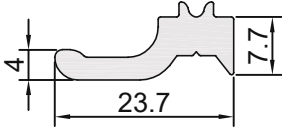


Bu profil için satış ekibinden bilgi alınız. / Please receive information from sales representative about this profile.

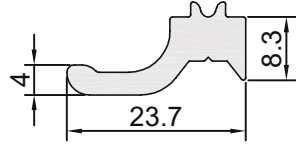


ALÜMİNYUM AKSESUAR PROFİLLERİ

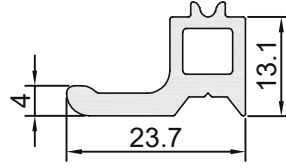
PROFILES OF ALUMINIUM ACCESSORIES



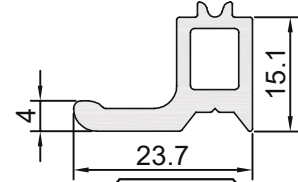
FP377
AĞIRLIK / WEIGHT
(KG/M.)
0,294



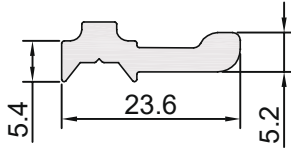
FP378
AĞIRLIK / WEIGHT
(KG/M.)
0,319



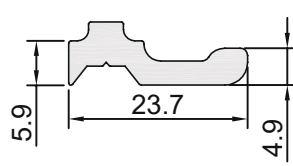
FP379
AĞIRLIK / WEIGHT
(KG/M.)
0,332



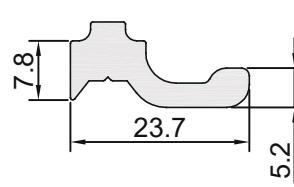
FP380
AĞIRLIK / WEIGHT
(KG/M.)
0,354



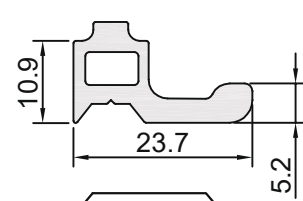
FP381
AĞIRLIK / WEIGHT
(KG/M.)
0,270



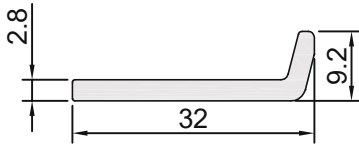
FP382
AĞIRLIK / WEIGHT
(KG/M.)
0,281



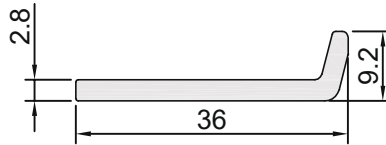
FP383
AĞIRLIK / WEIGHT
(KG/M.)
0,343



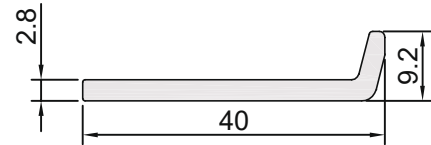
FP384
AĞIRLIK / WEIGHT
(KG/M.)
0,340



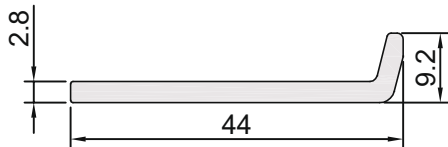
FP390
AĞIRLIK / WEIGHT
(KG/M.)
0,277



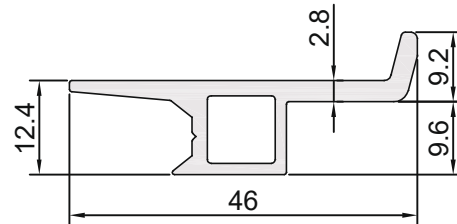
FP391
AĞIRLIK / WEIGHT
(KG/M.)
0,308



FP392
AĞIRLIK / WEIGHT
(KG/M.)
0,338



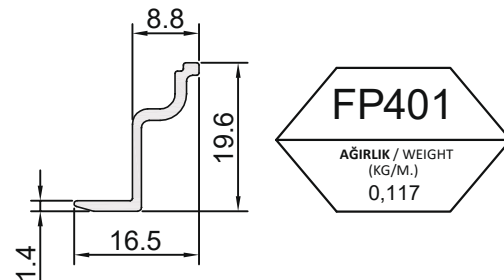
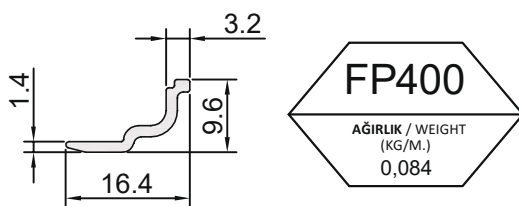
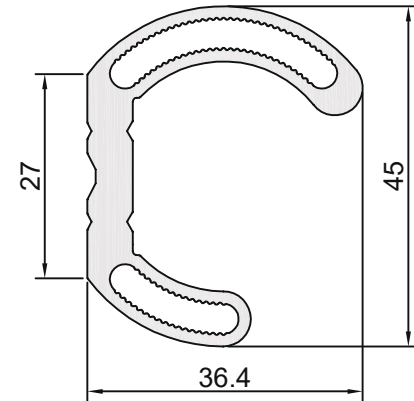
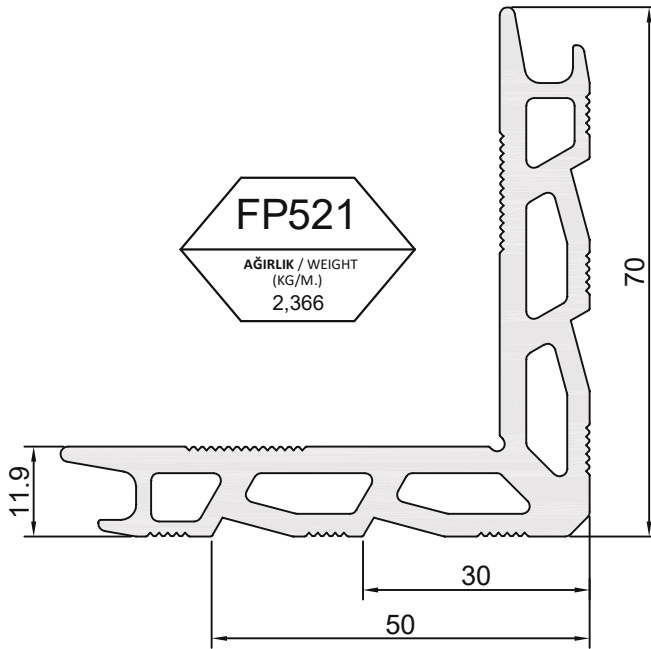
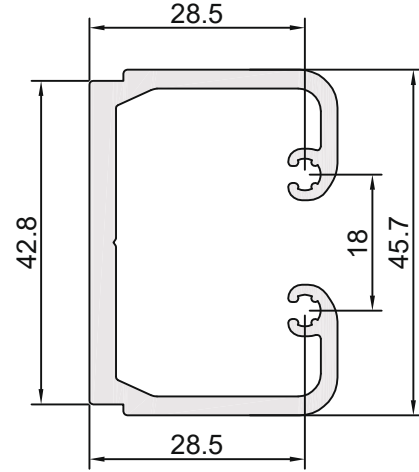
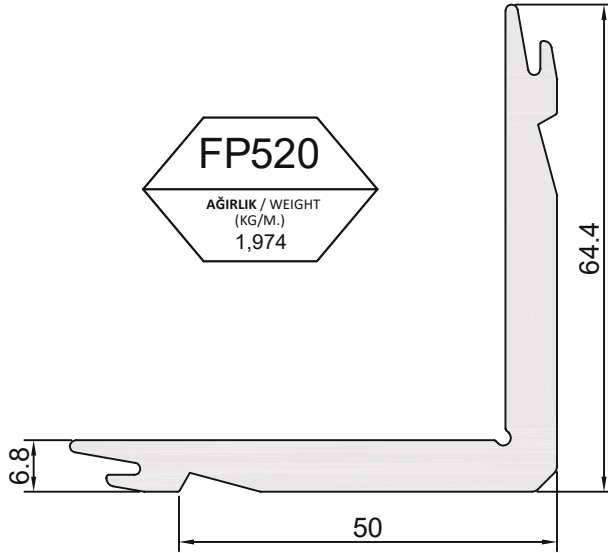
FP393
AĞIRLIK / WEIGHT
(KG/M.)
0,368



FP394
AĞIRLIK / WEIGHT
(KG/M.)
0,482

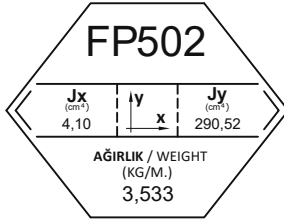
ALÜMİNYUM AKSESUAR PROFİLLERİ

PROFILES OF ALUMINIUM ACCESSORIES

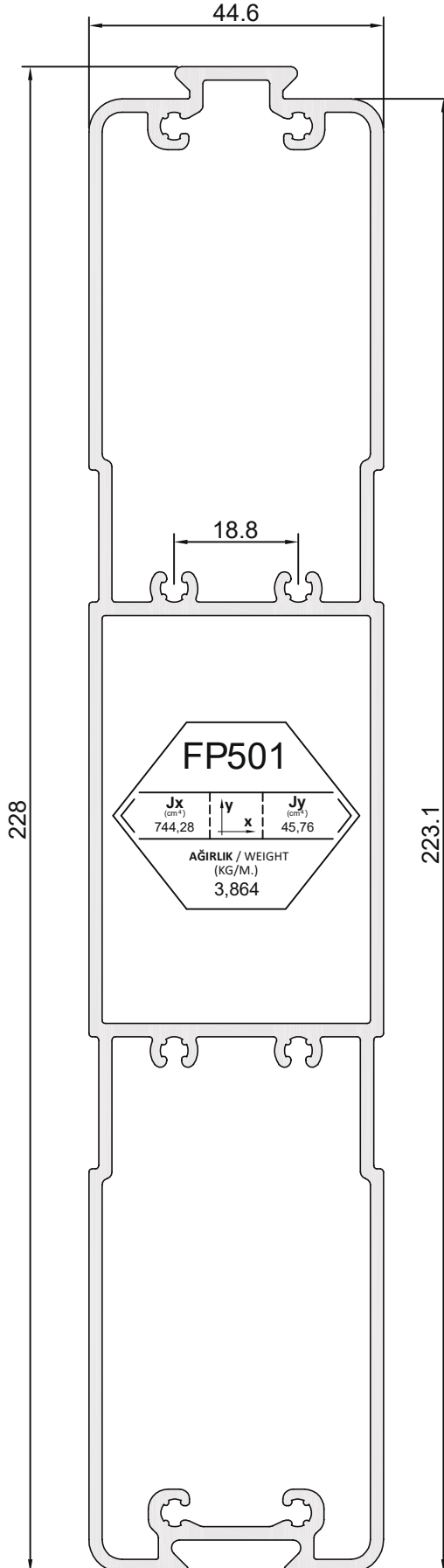
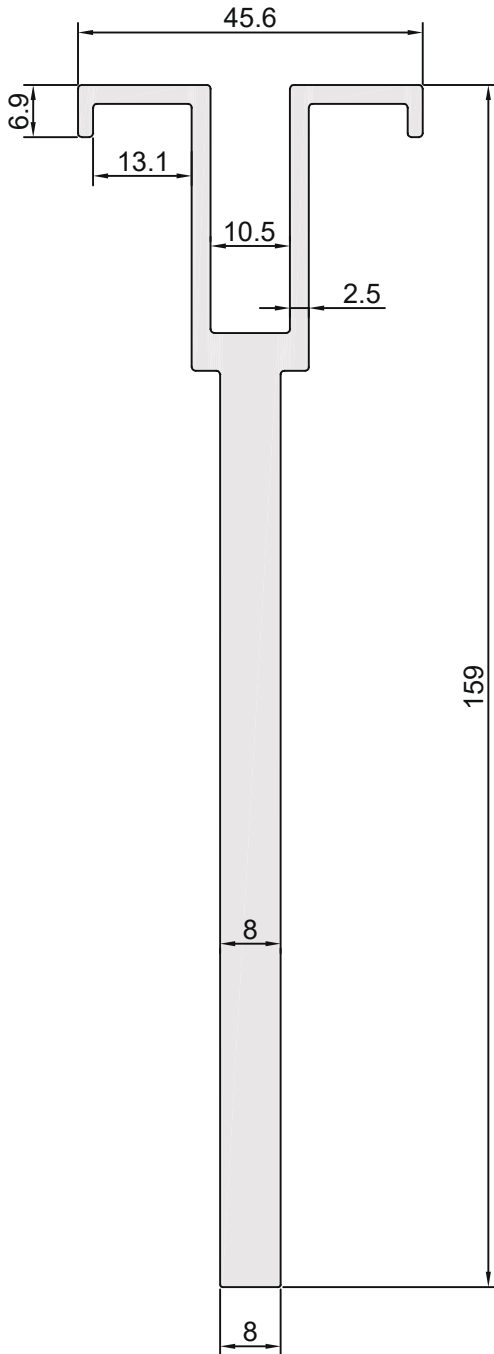


ALÜMİNYUM AKSESUAR PROFİLLERİ

PROFILES OF ALUMINIUM ACCESSORIES



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















DETAYLAR

DETAILS

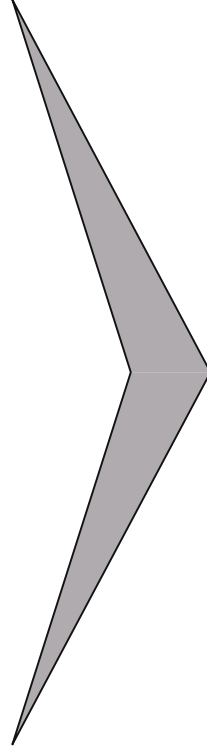
1. KAPAKLI CEPHE / CAPPED CURTAIN WALL
2. ENTEGRE CEPHE / INTEGRATED CURTAIN WALL
3. YARI-KAPAKLI CEPHE / SEMI-CAPPED CURTAIN WALL
4. CAM KALINLIKLARINA GÖRE SİSTEM DETAYLARI / SYSTEM DETAILS ACCORDING TO THE GLASS THICKNESSES

TARAMA STİLLERİ / HATCH STYLES

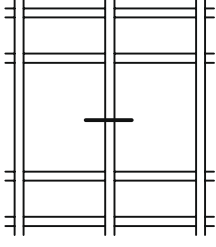
	EPDM FİTİL / EPDM GASKET		PVC PROFİL / PVC PROFILE
	STRÜKTÜREL SİLİKON / STRUCTURAL SILICONE		ÇELİK PROFİL / STEEL PROFILE
	MESAFE BELİRLEYİCİ / SPACE ADJUSTER		SU YALITIM MEMBRANI / WATERPROOFING MEMBRANE
	ALÜMİNYUM PROFİL / ALUMINIUM PROFILE		POLİETİLEN CONTA / POLYETHYLENE GASKET
	PROFİL PARÇA (Al) / PIECE OF PROFILE (Al)		TAŞYÜNÜ / ROCKWOOL
	ISI BARİYERİ / 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.

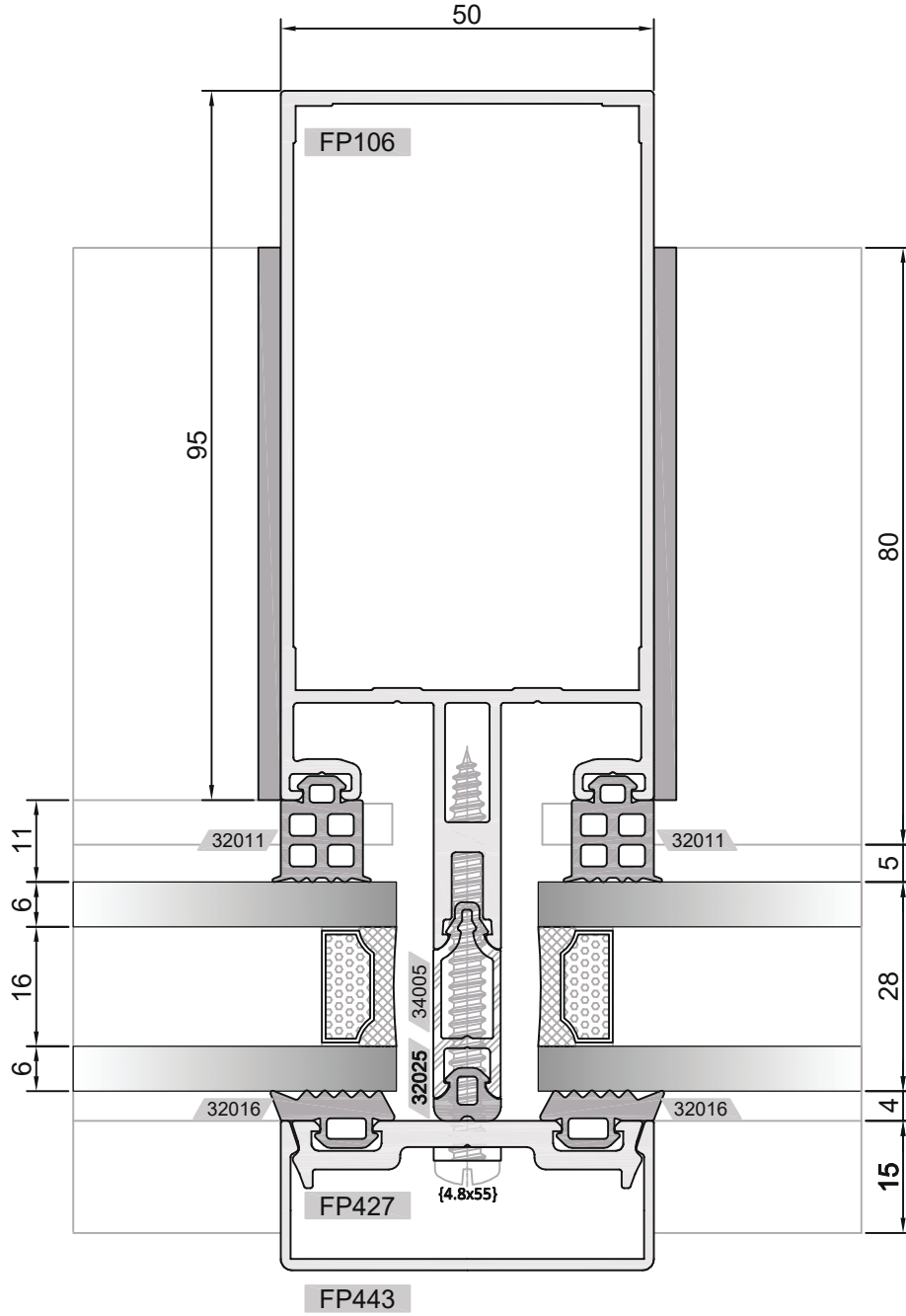
KAPAKLI CEPHE CAPPED CURTAIN WALL

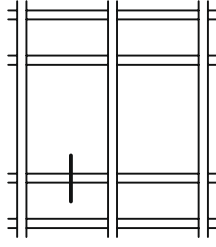


► SİSTEM ALÜMİNYUM® KATALOG İÇERİSİNDEKİ VERİLERDE DÜZELTME VEYA DEĞİŞİKLİK YAPMA HAKKINA SAHİPTİR.
SİSTEM ALÜMİNYUM® HAS THE RIGHTS TO MAKE CORRECTION OR MODIFICATION IN THE CATALOGUE DATA.

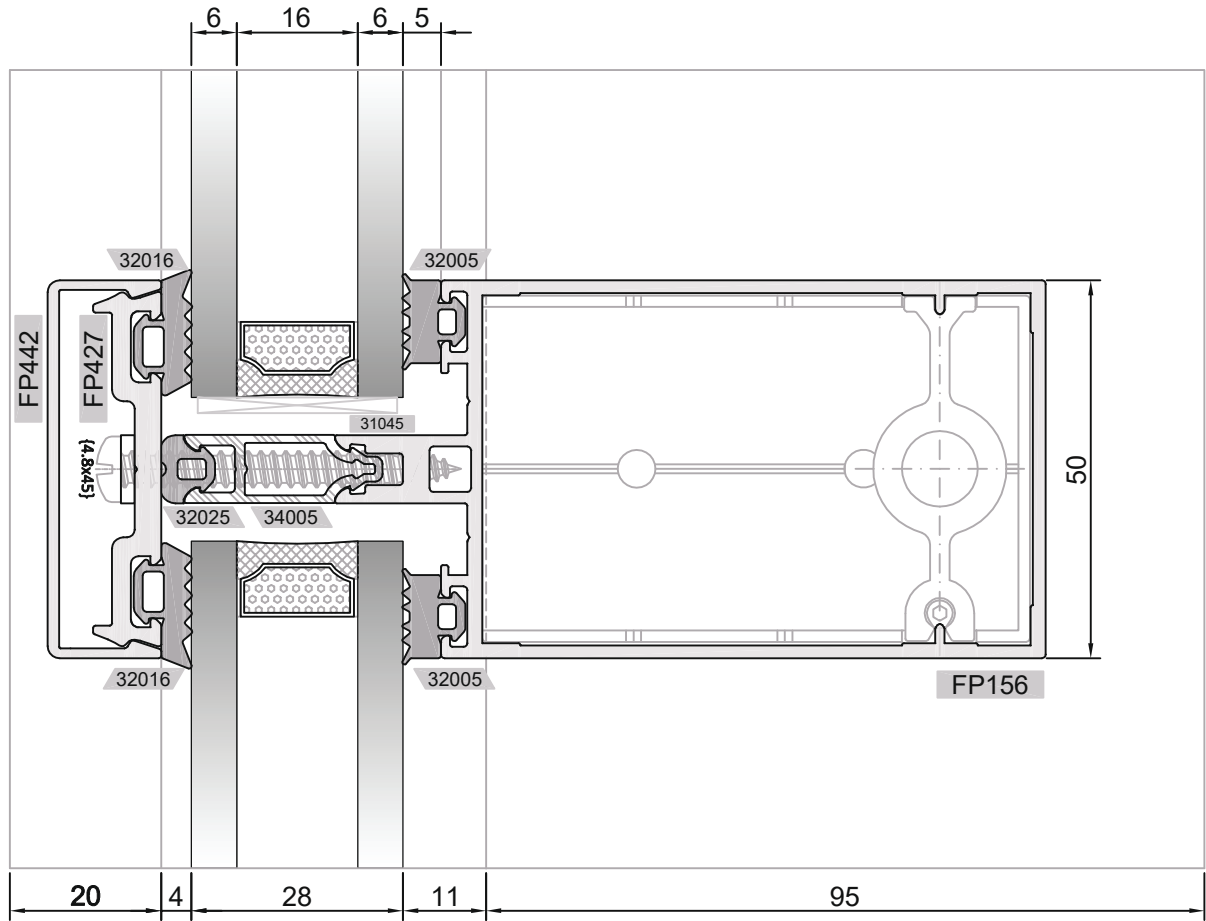


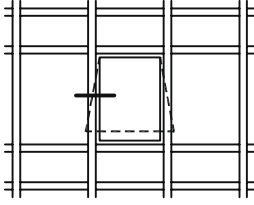
DÜŞEY DETAYI
VERTICAL DETAIL





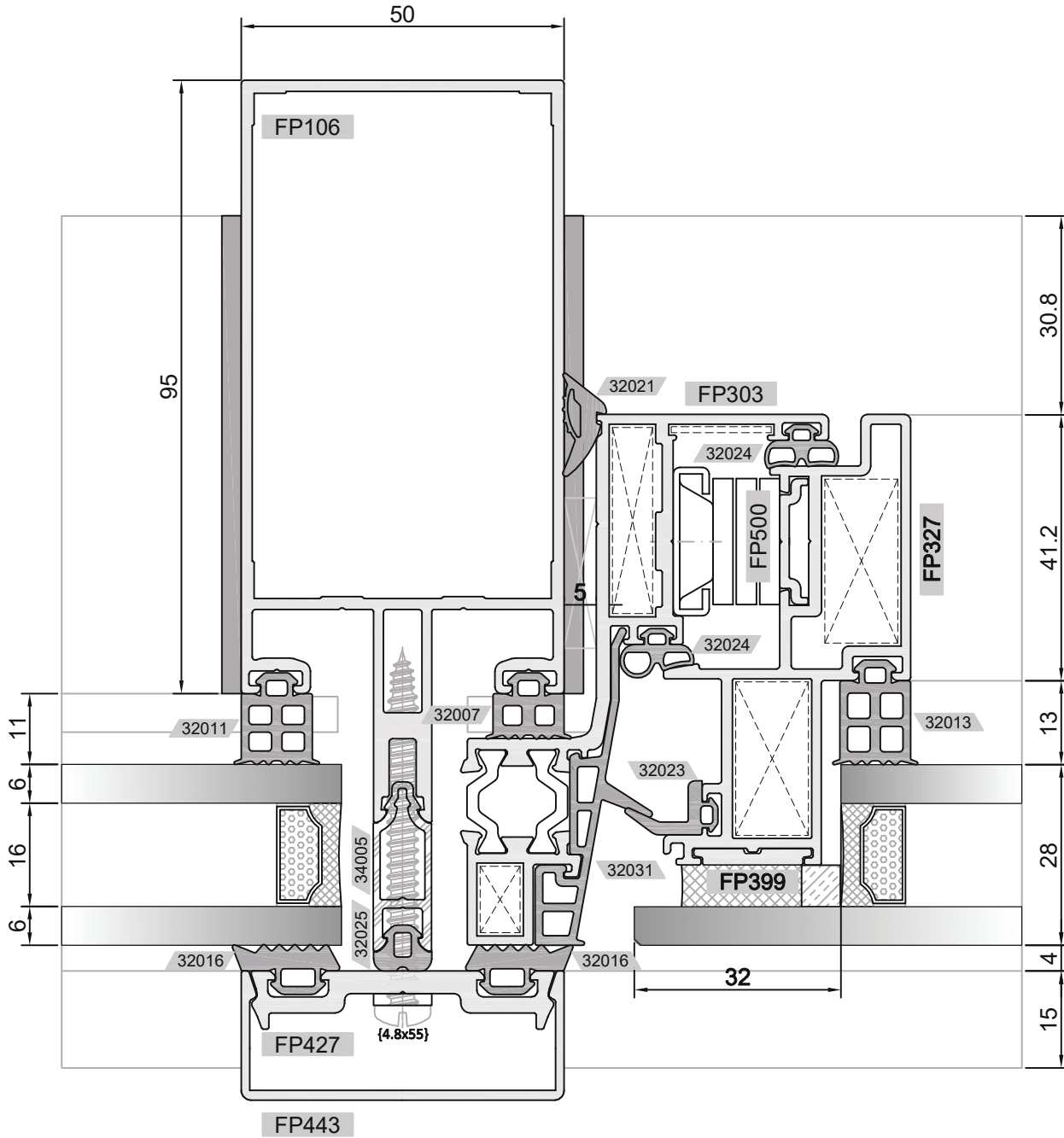
YATAY DETAYI
HORIZONTAL DETAIL

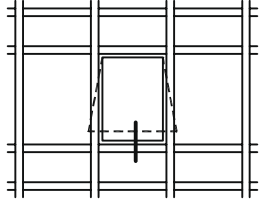




ALTERNATİF 1: YALITIMSIZ KANAT DETAYI
ALTERNATIVE 1 : UNINSULATED VENT DETAIL

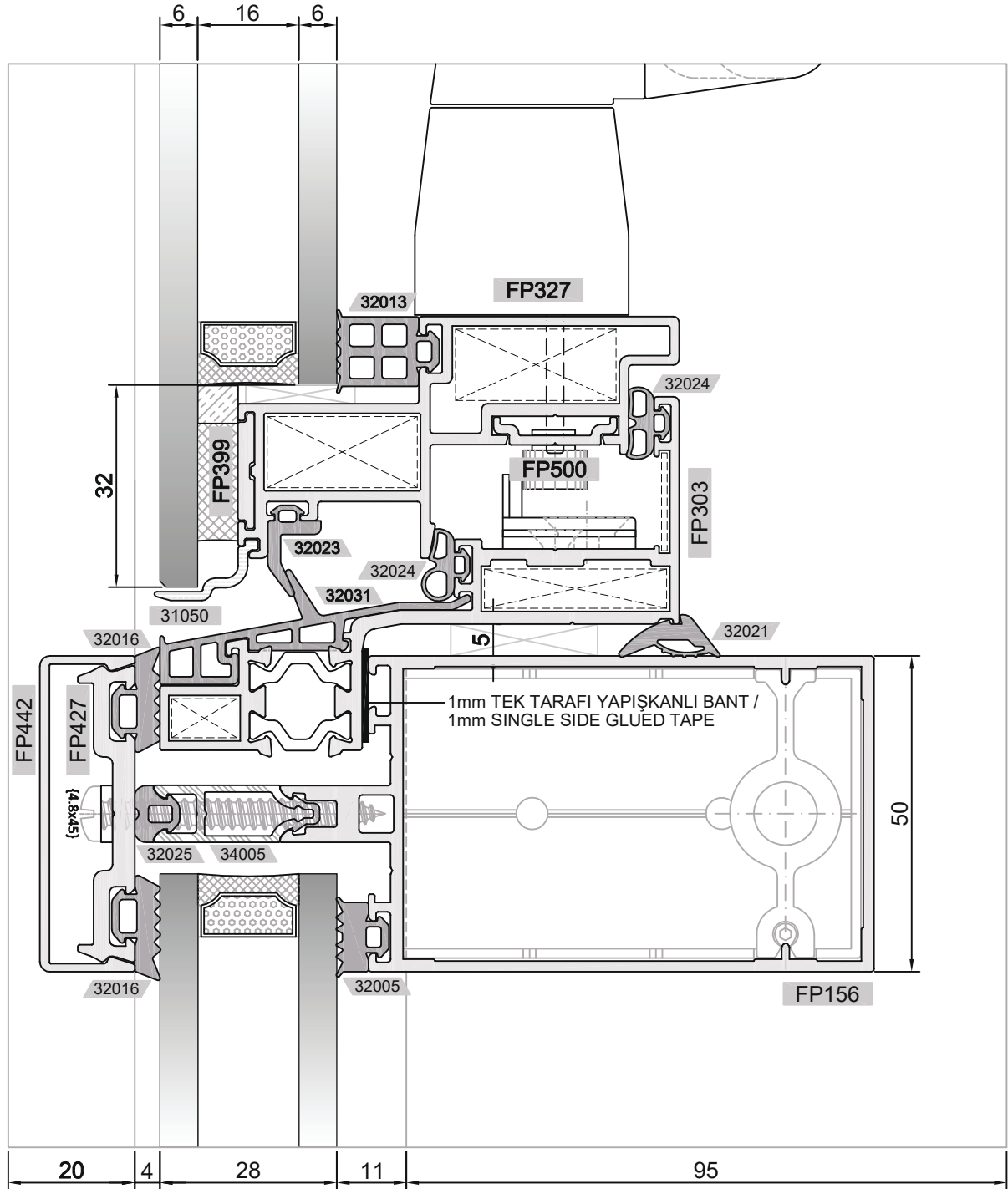
DÜŞEY DETAYI
VERTICAL DETAIL

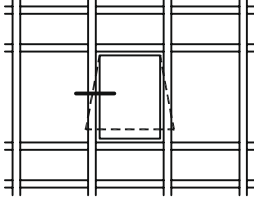




ALTERNATİF 1: YALITIMSIZ KANAT DETAYI
ALTERNATIVE 1 : UNINSULATED VENT DETAIL

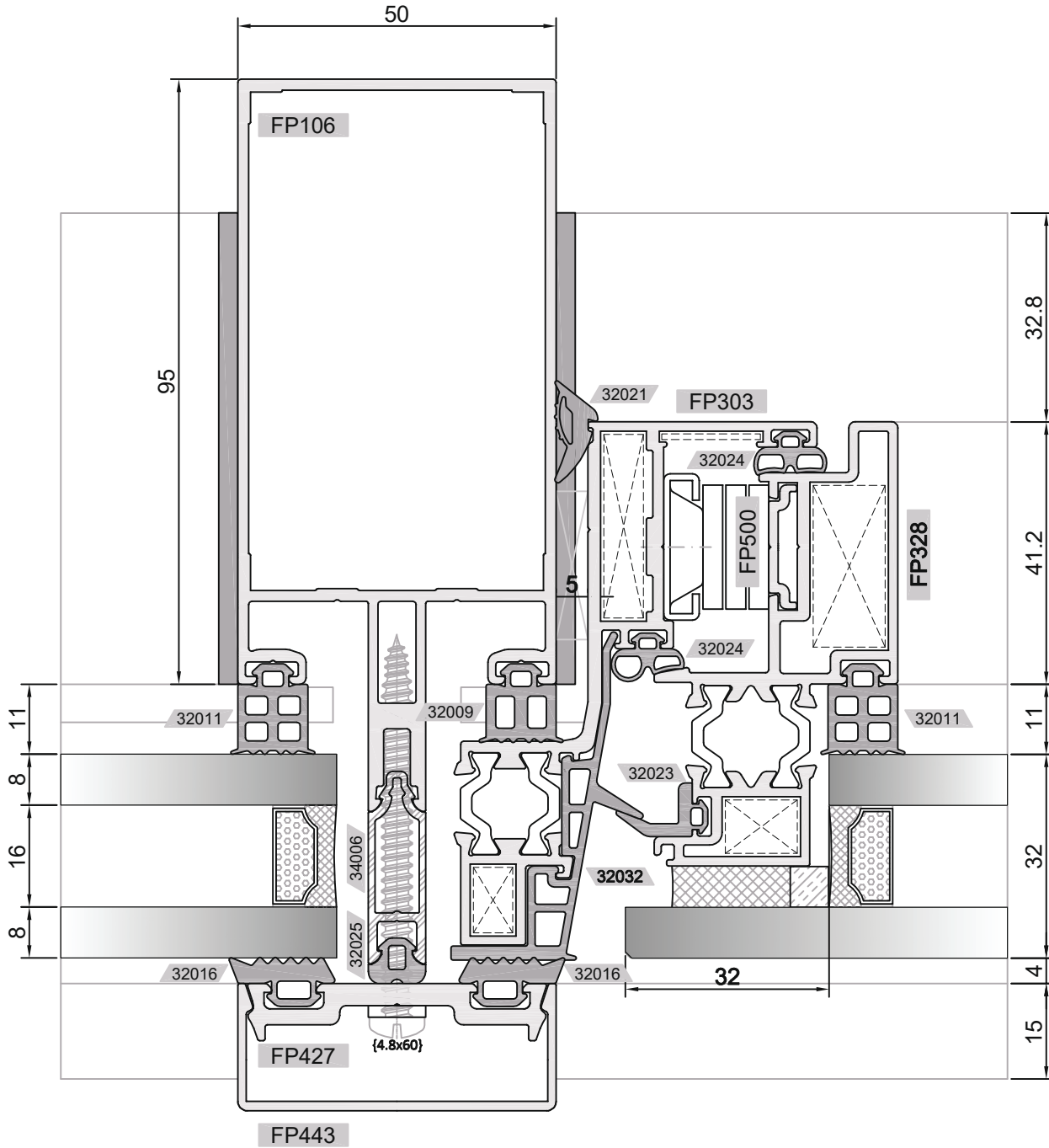
YATAY DETAYI
HORIZONTAL DETAIL

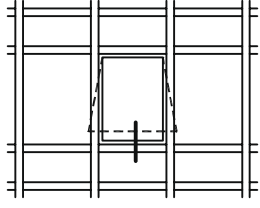




ALTERNATİF 2: YALITIMLI KANAT DETAYI
ALTERNATIVE 2 : INSULATED VENT DETAIL

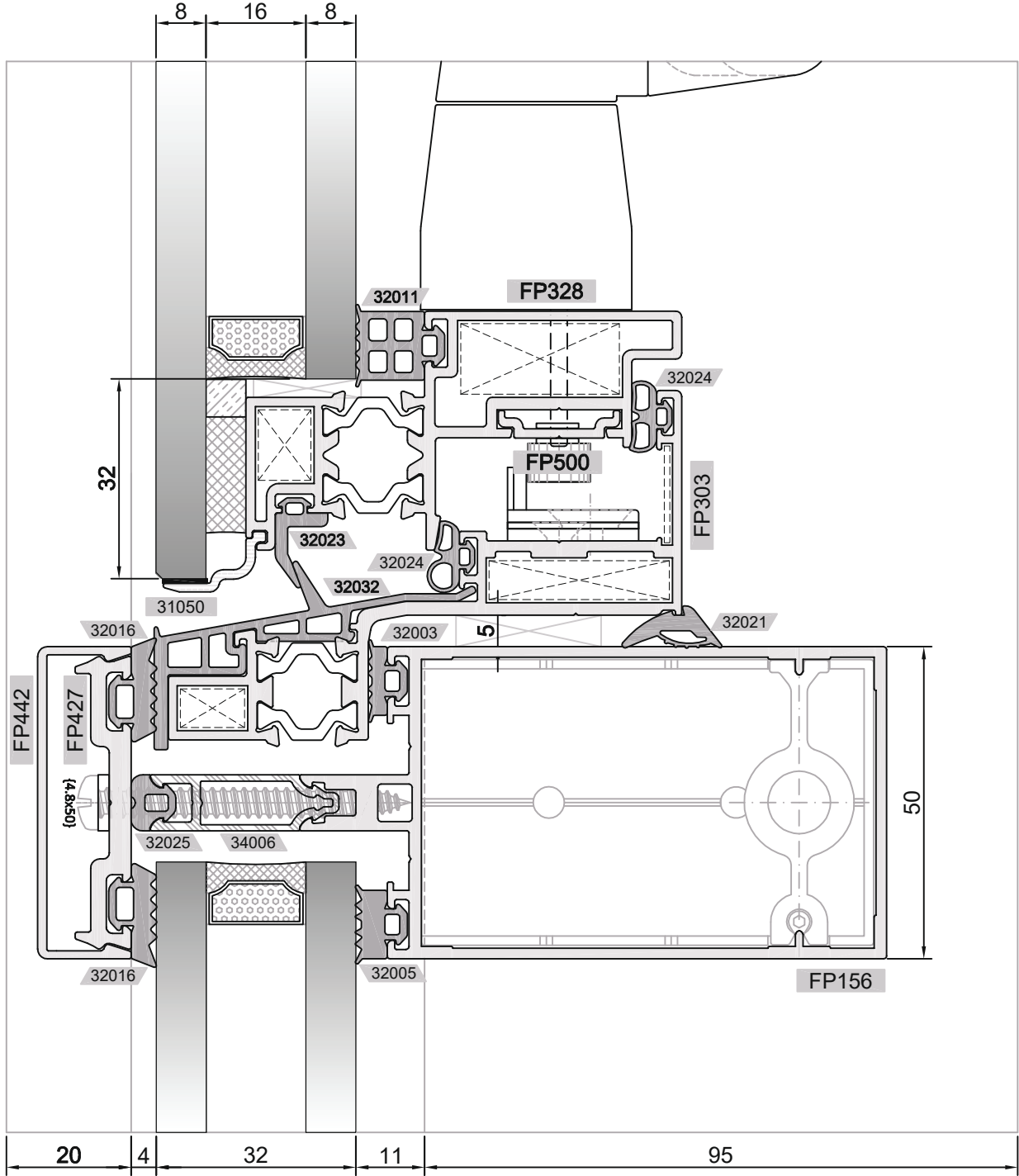
DÜŞEY DETAYI
VERTICAL DETAIL

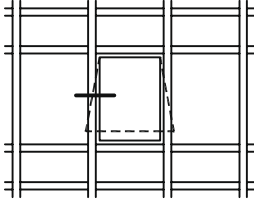




ALTERNATİF 2: YALITIMLI KANAT DETAYI
ALTERNATIVE 2 : INSULATED VENT DETAIL

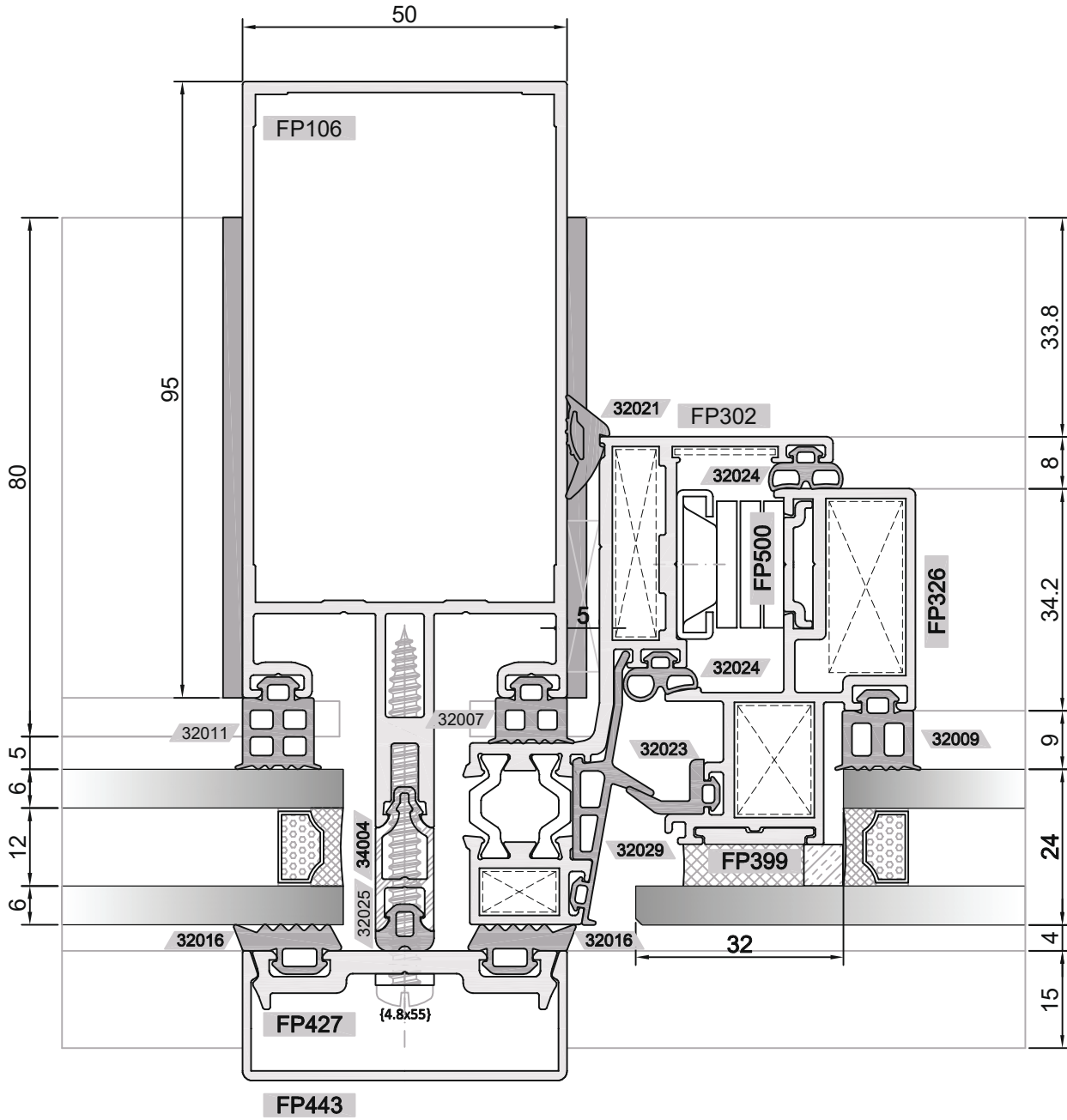
YATAY DETAYI
HORIZONTAL DETAIL

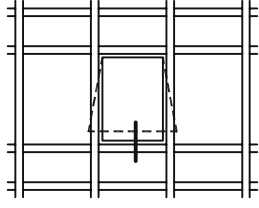




ALTERNATİF 3: EKONOMİK KANAT DETAYI
ALTERNATIVE 3 : ECONOMICAL VENT DETAIL

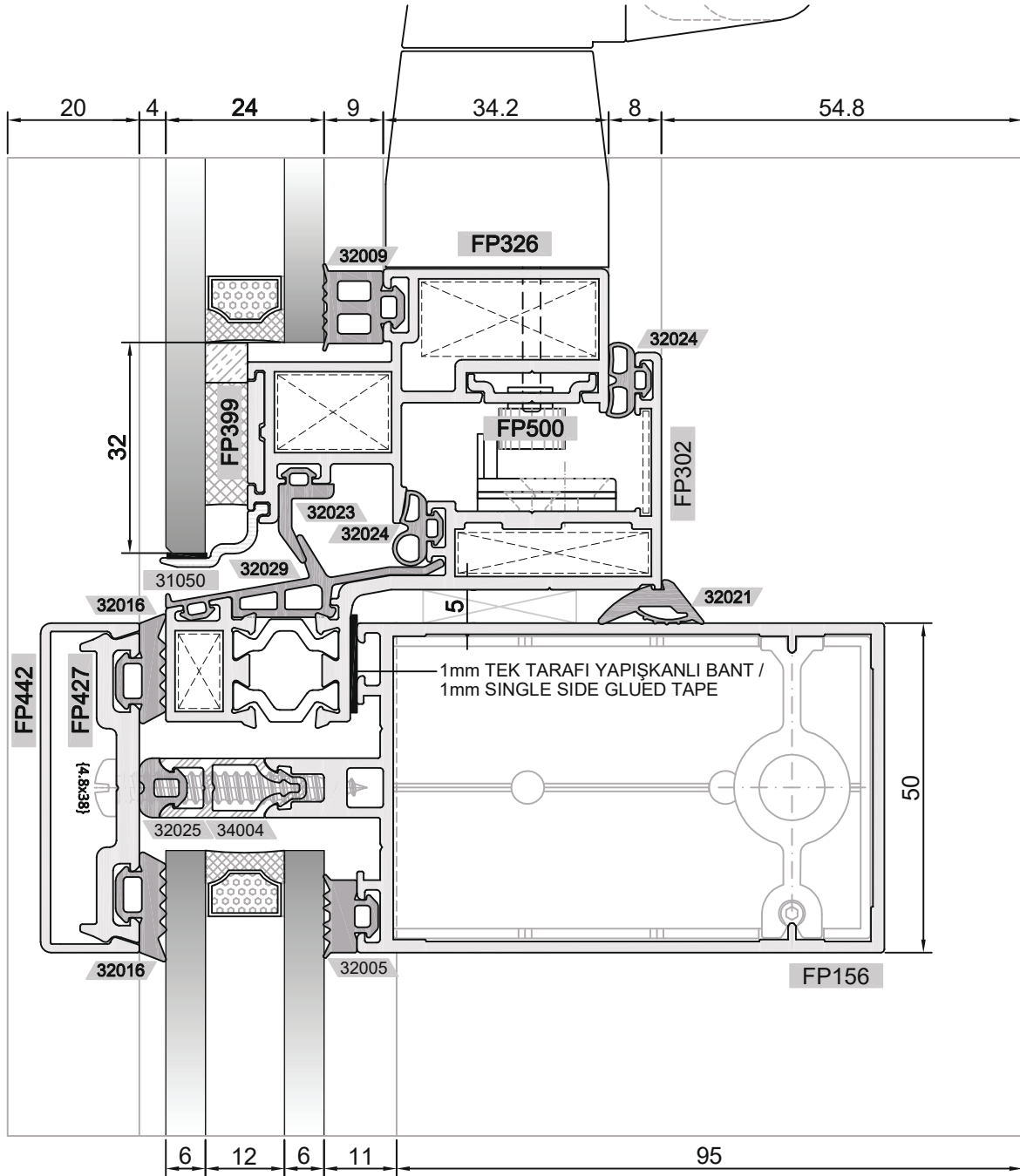
DÜŞEY DETAYI
VERTICAL DETAIL

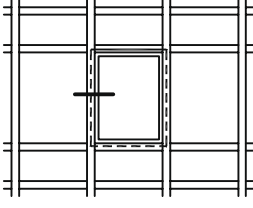




ALTERNATİF 3: EKONOMİK KANAT DETAYI
ALTERNATIVE 3 : ECONOMICAL VENT DETAIL

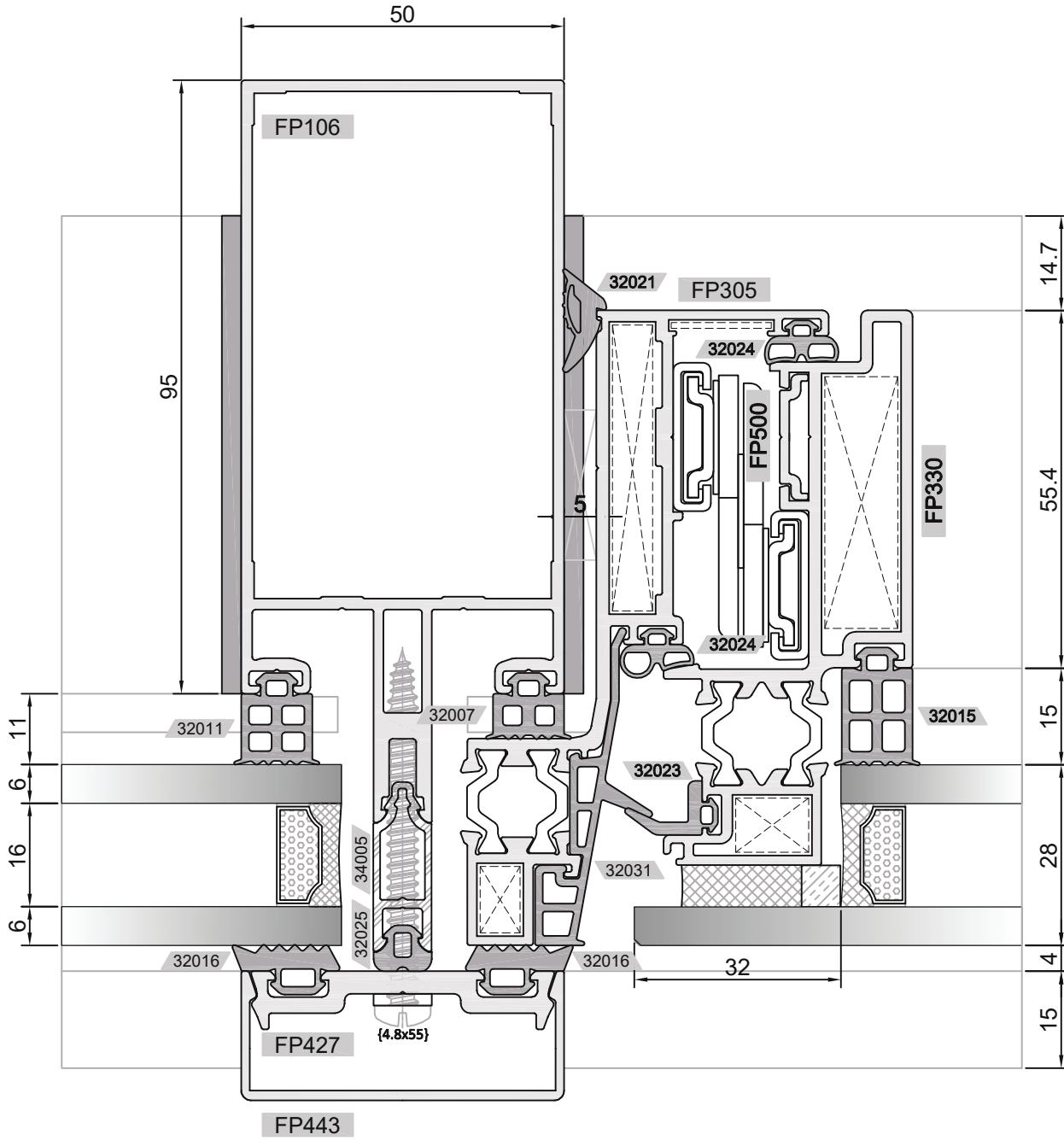
YATAY DETAYI
HORIZONTAL DETAIL

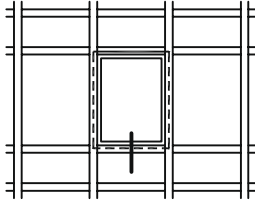




ALTERNATİF 1: YALITIMLI PARALEL AÇILIR KANAT DETAYI
ALTERNATIVE 1 : PARALLEL OPENING INSULATED VENT DETAIL

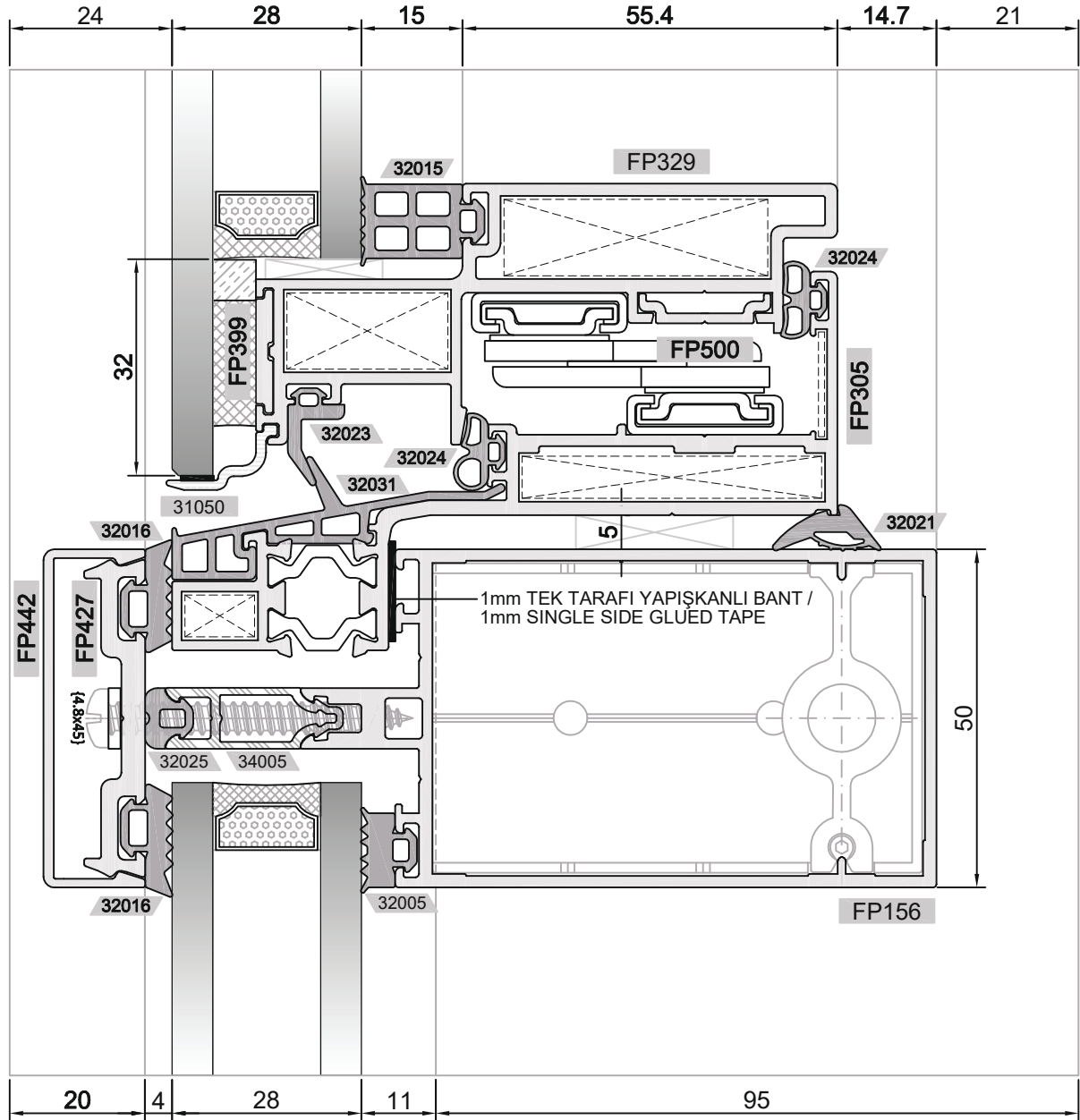
DÜŞEY DETAYI
VERTICAL DETAIL

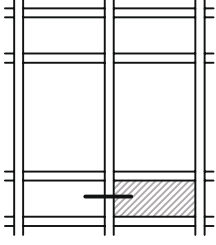




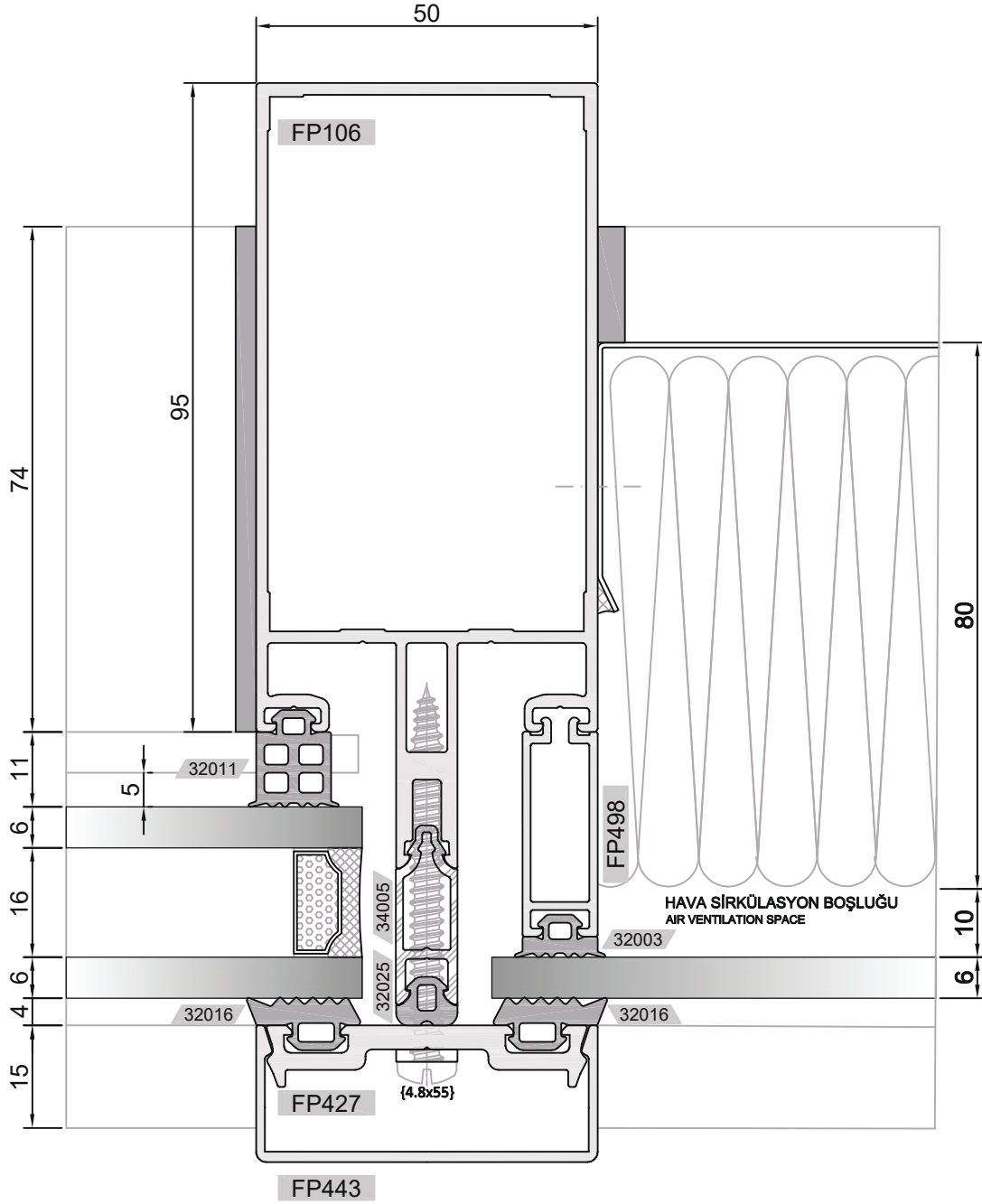
ALTERNATİF 2: YALITIMSIZ PARALEL AÇILIR KANAT DETAYI
ALTERNATIVE 2 : PARALEL OPENING UNINSULATED VENT DETAIL

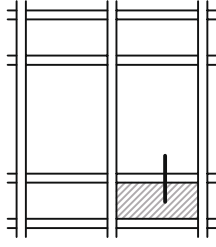
YATAY DETAYI
HORIZONTAL DETAIL



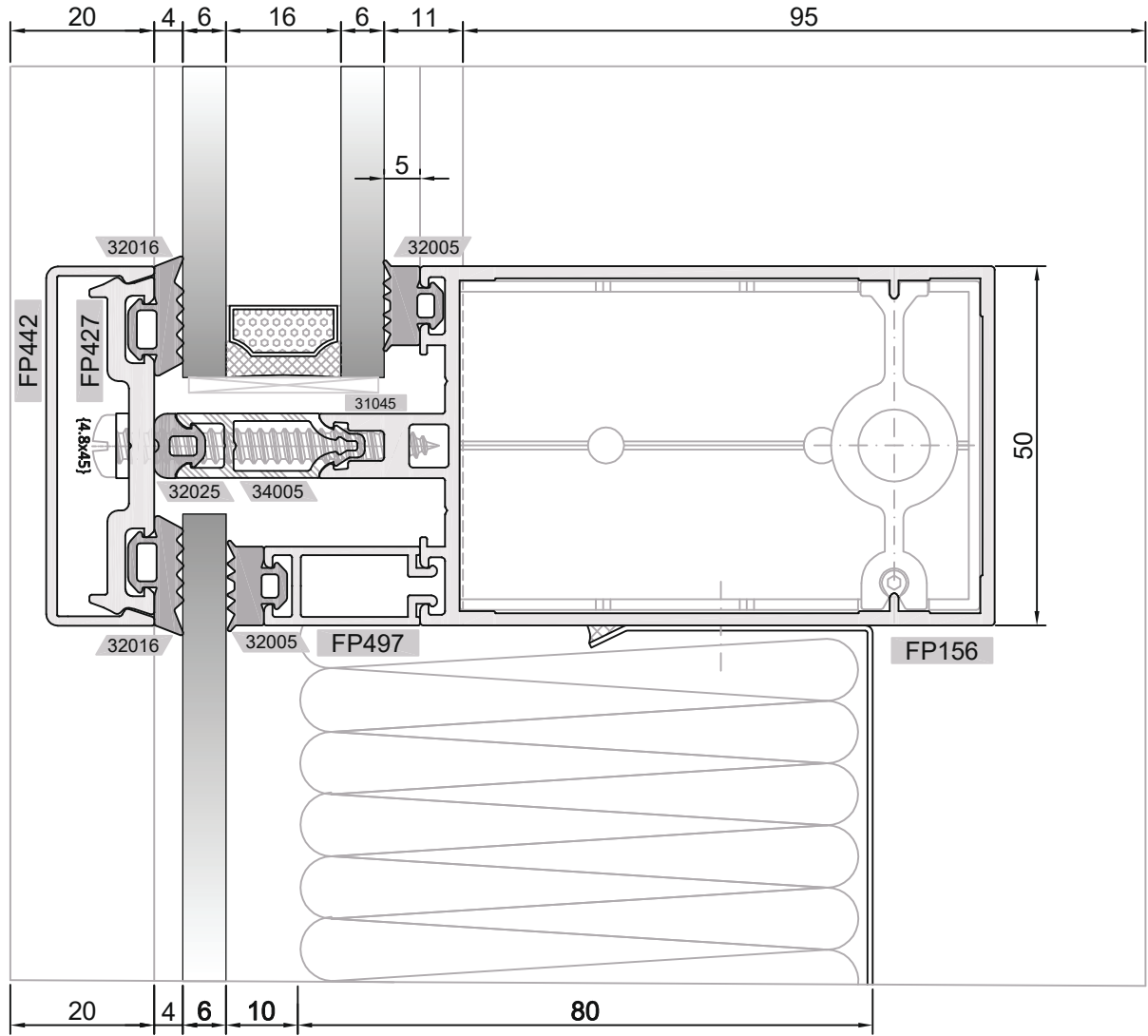


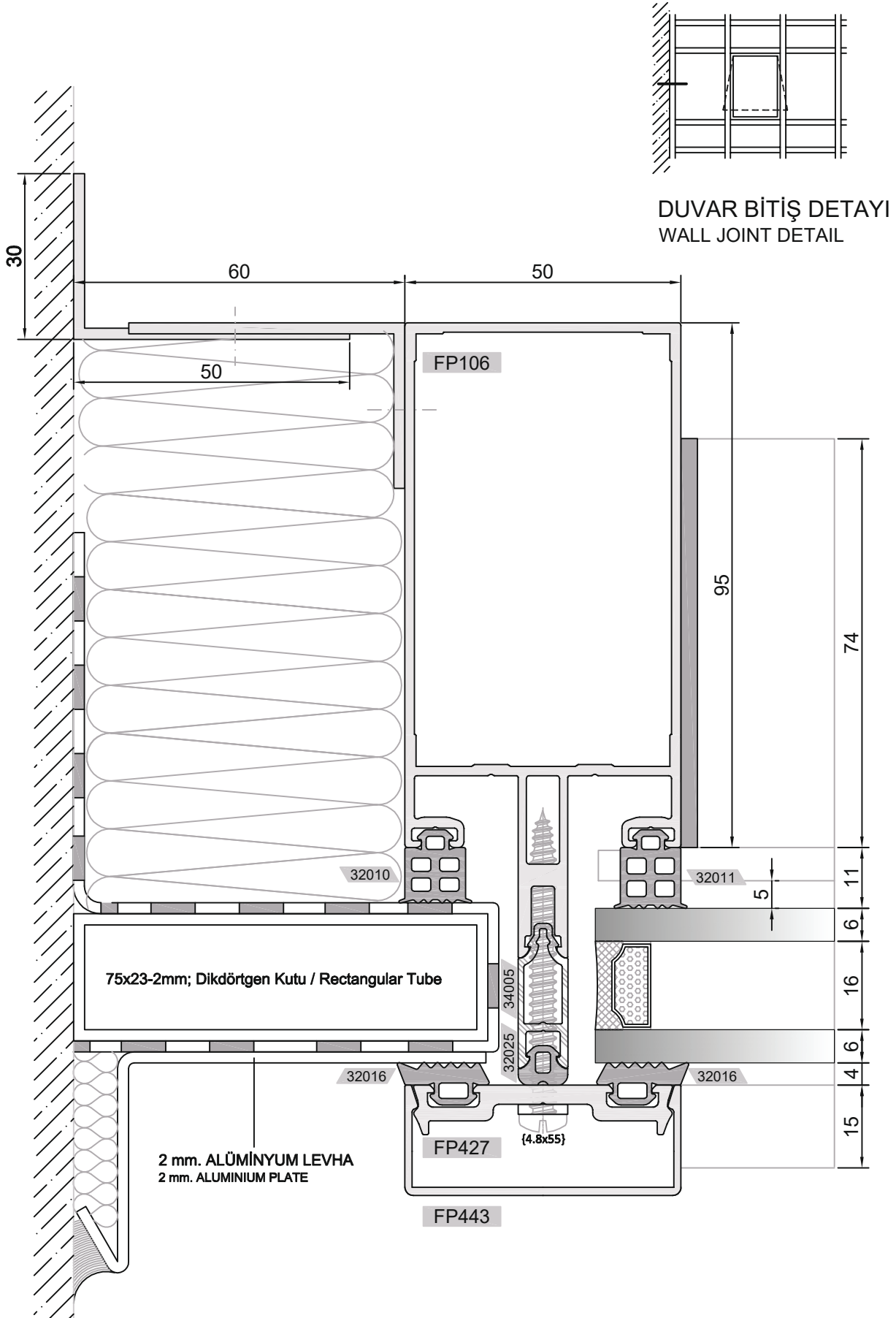
SPANDREL BÖLGE DÜŞEY DETAYI
SPANDREL AREA VERTICAL DETAIL

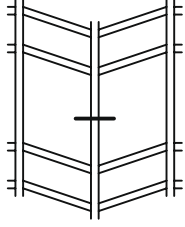




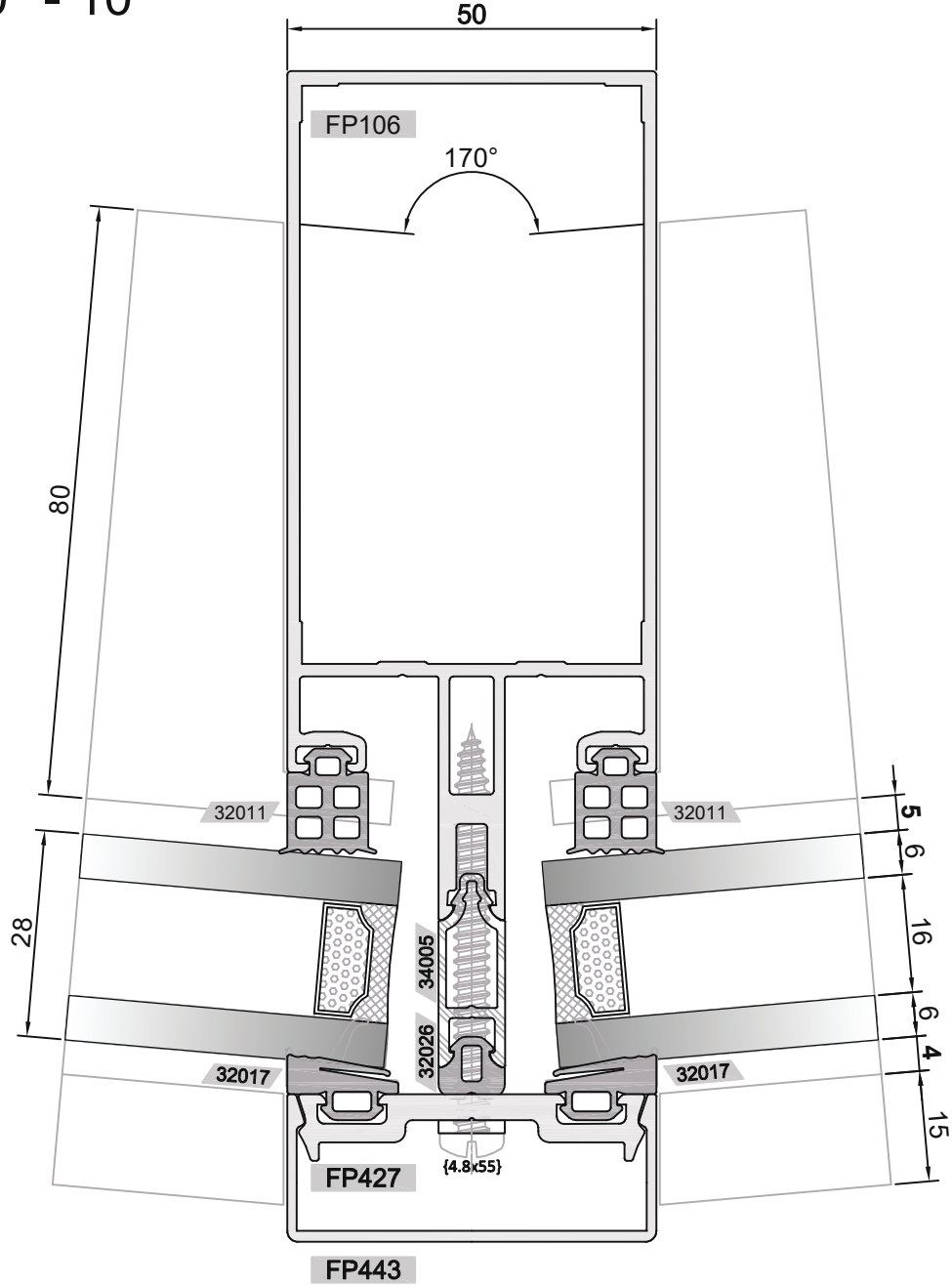
SPANDREL BÖLGE YATAY DETAYI
SPANDREL AREA HORIZONTAL DETAIL

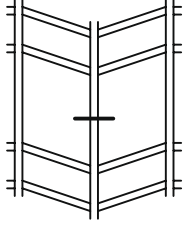




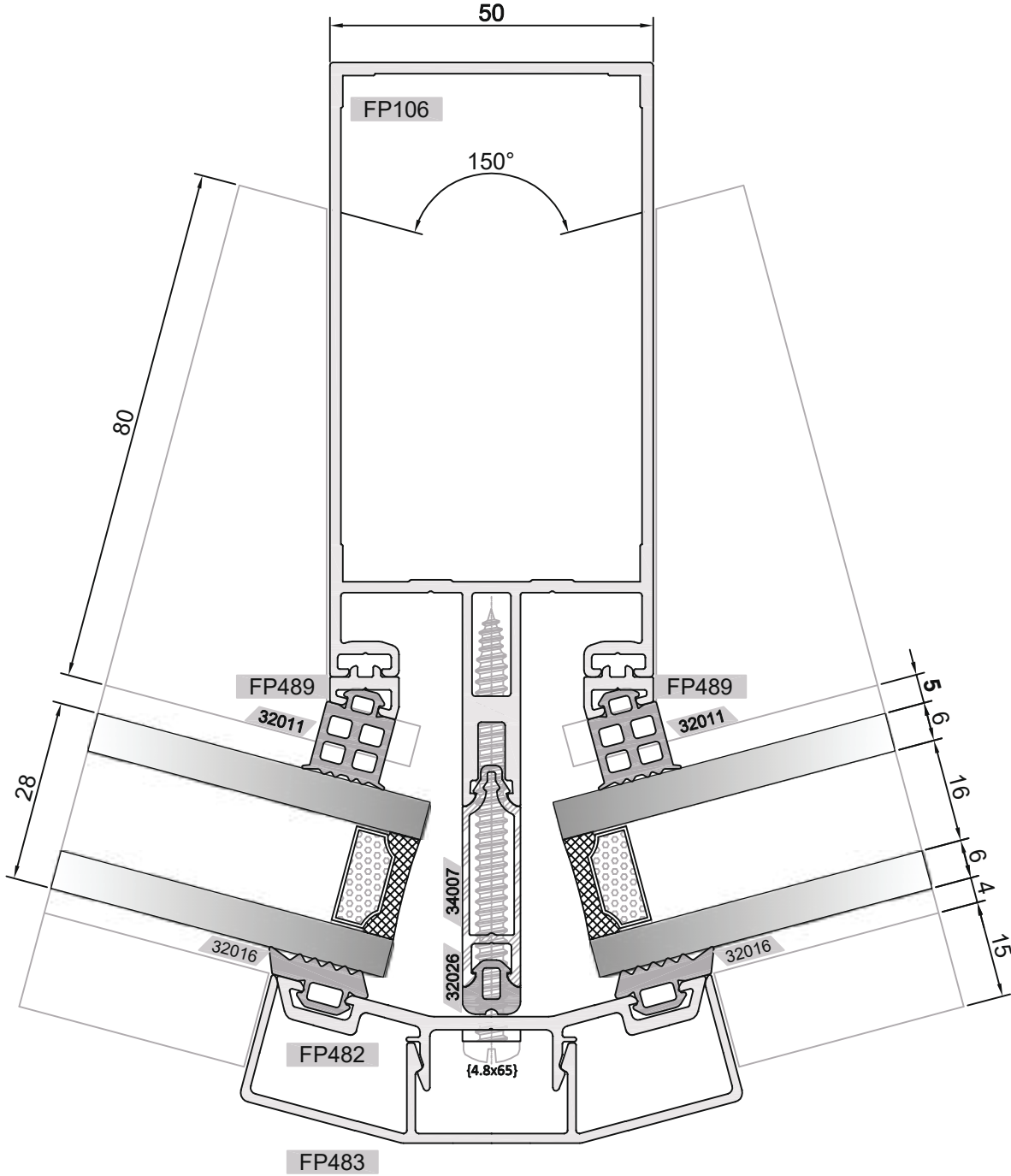


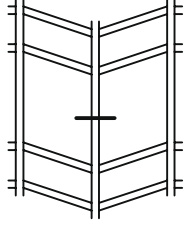
0° - 10°



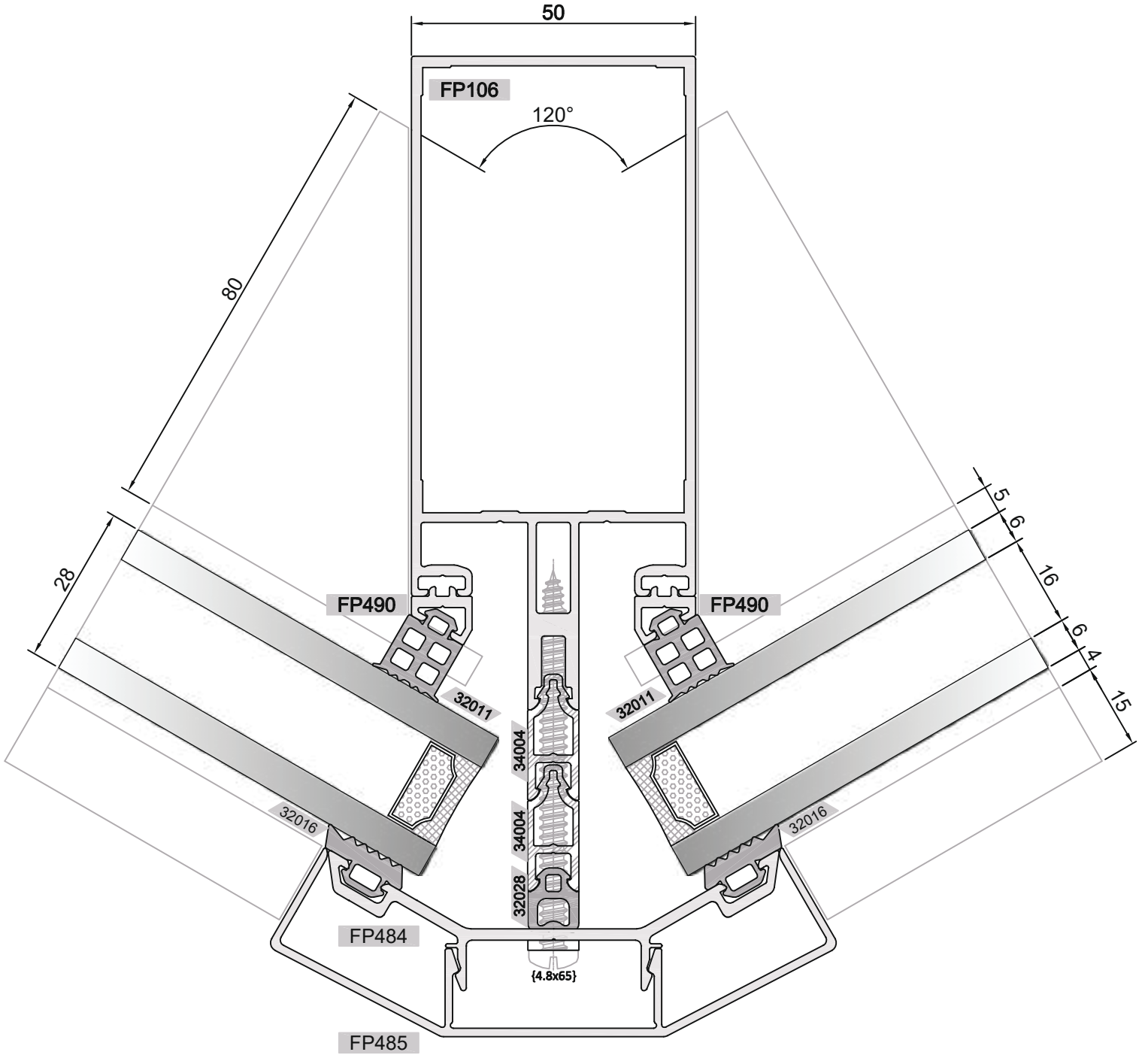


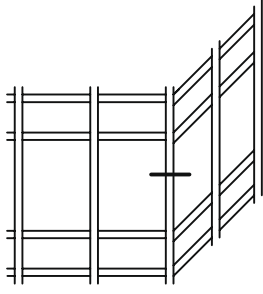
10° - 30°



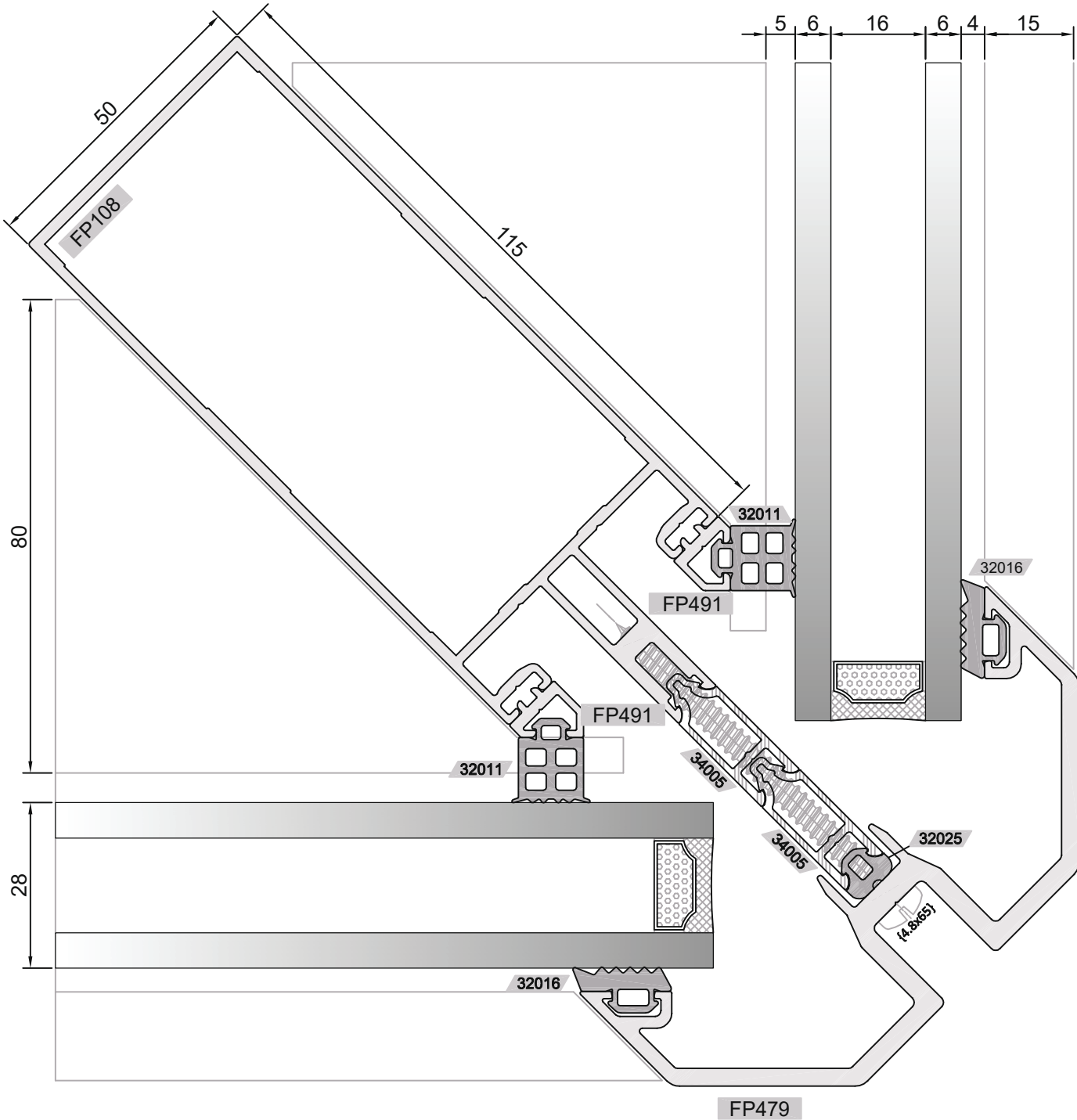


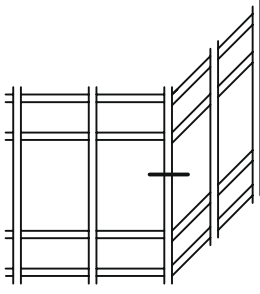
30° - 60°





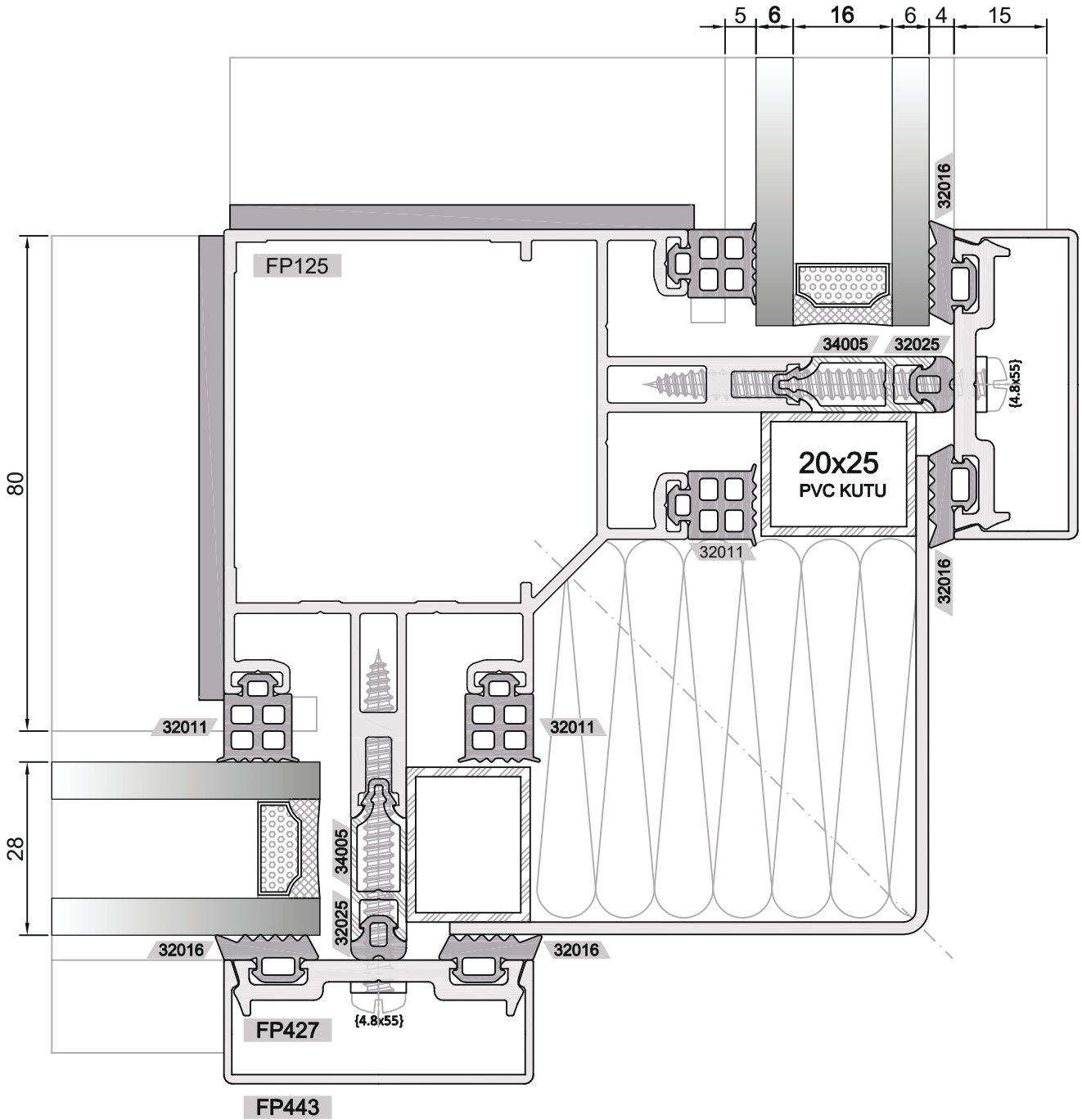
ALTERNATİF 1: TEK KAPAKLI KÖŞE DETAYI
ALTERNATIVE 1 : CORNER DETAIL WITH SINGLE CAP

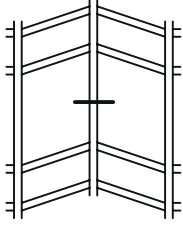




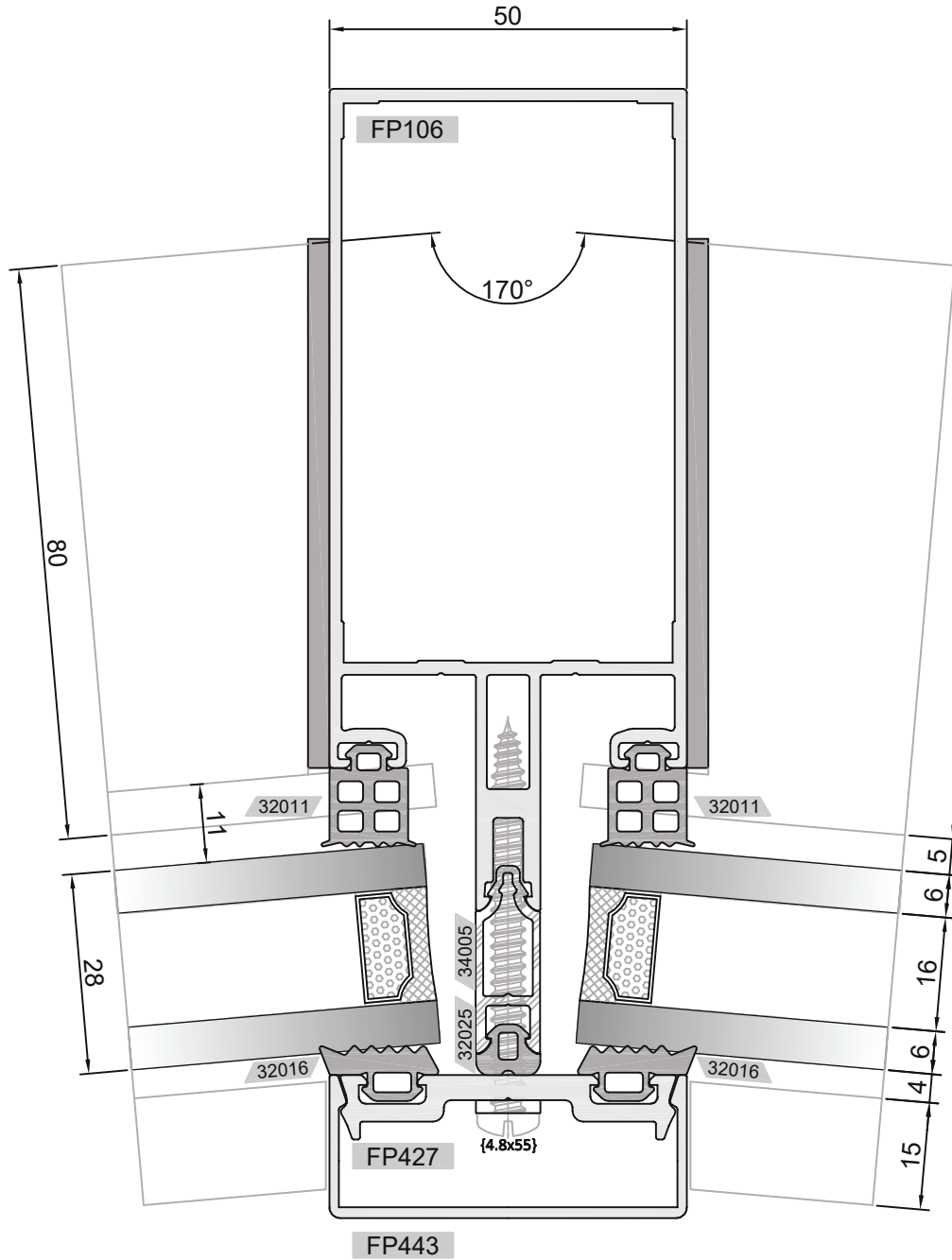
ALTERNATİF 2: ÇİFT KAPAKLI KÖŞE DETAYI
ALTERNATIVE 2 : CORNER DETAIL WITH DOUBLE CAP

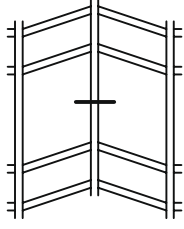
90°



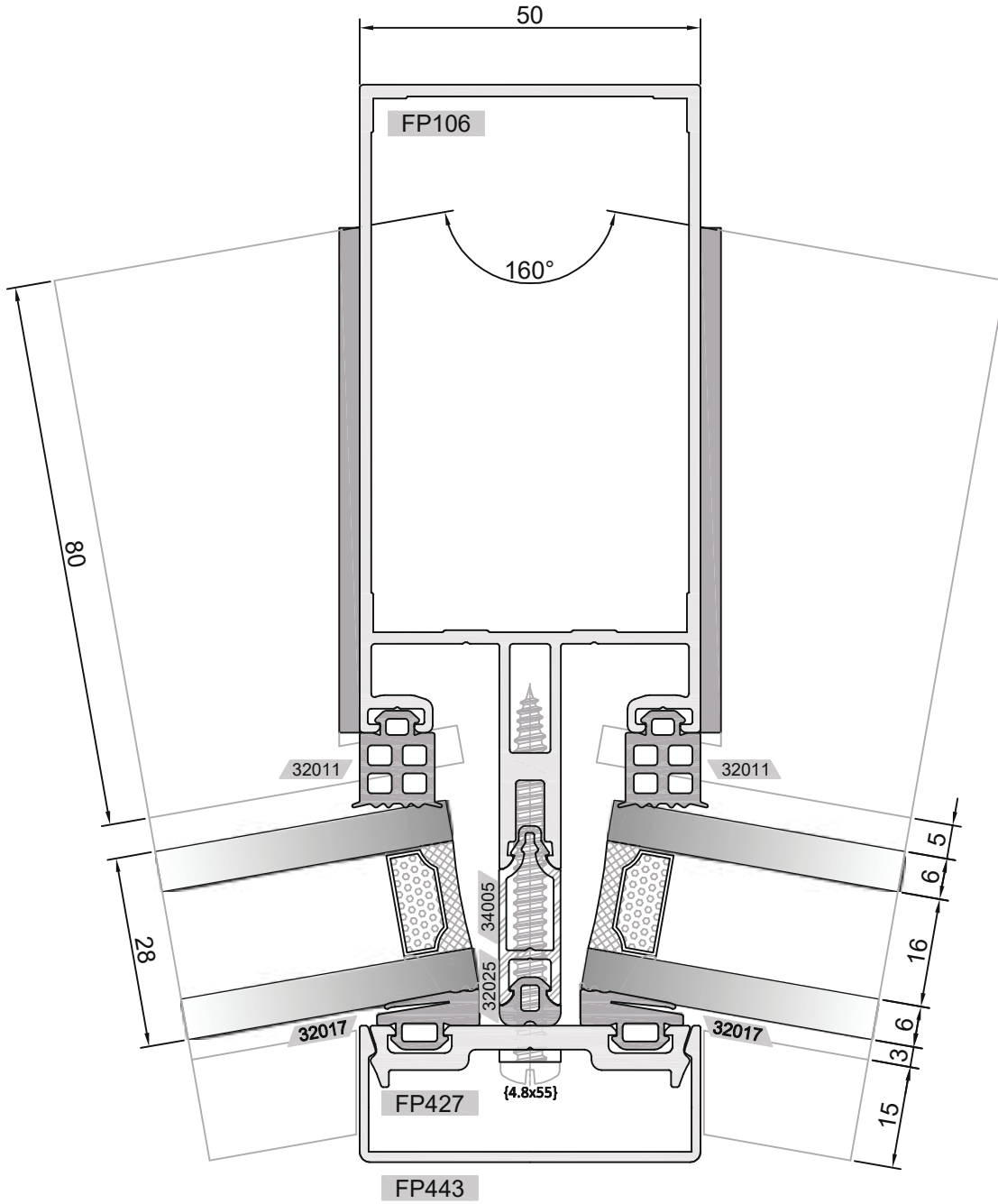


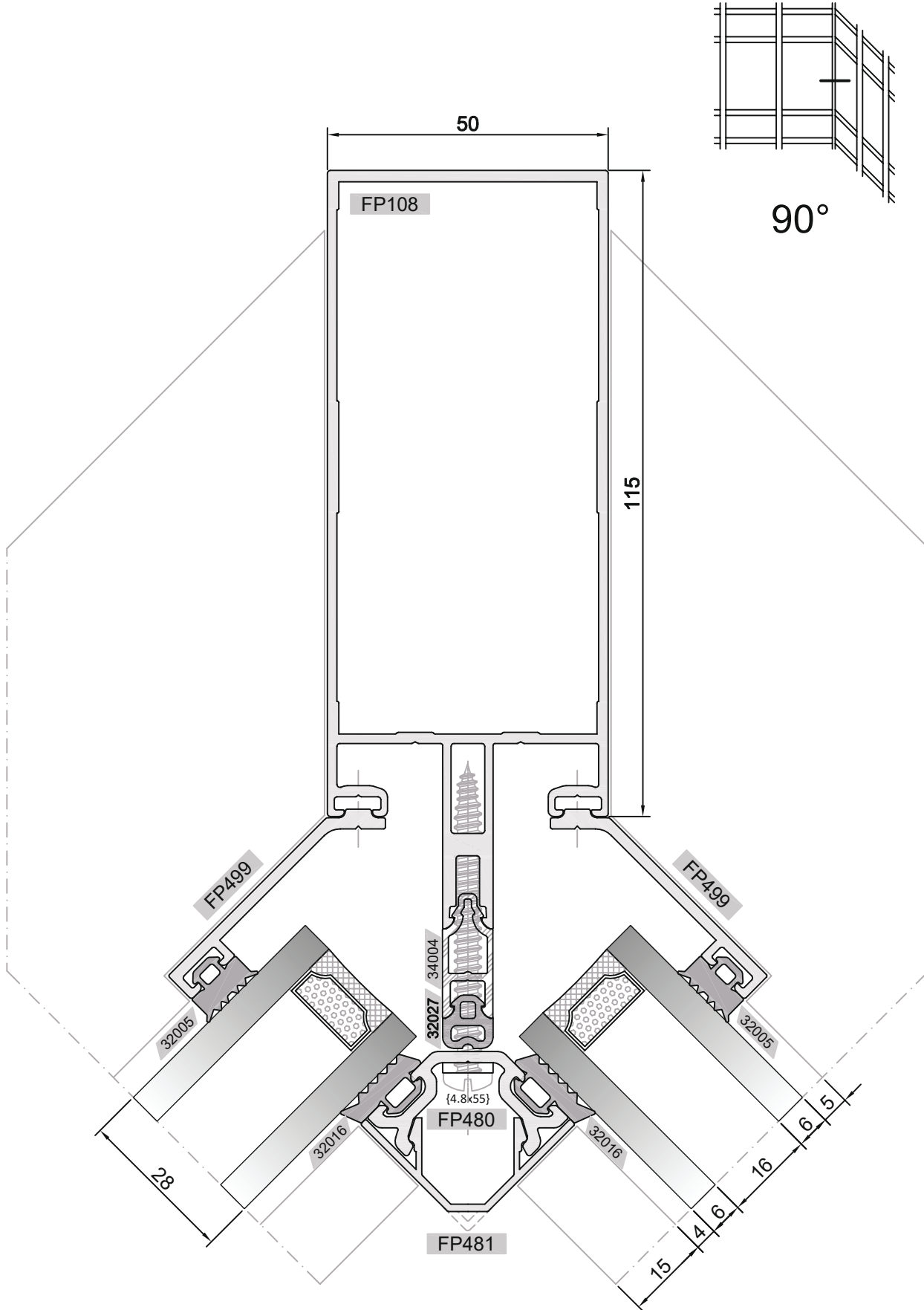
10° - 0°

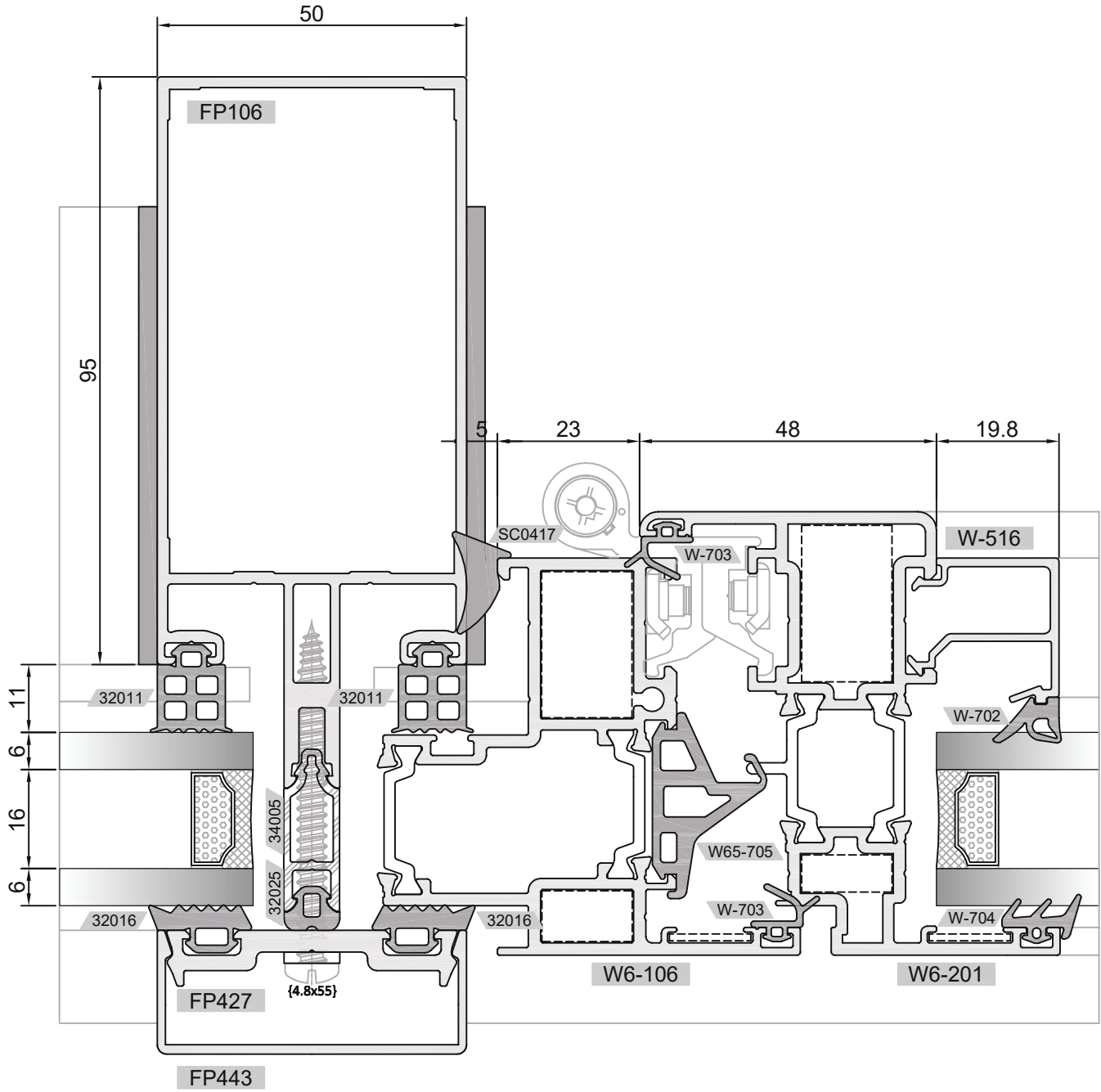
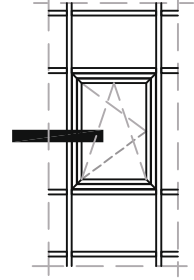


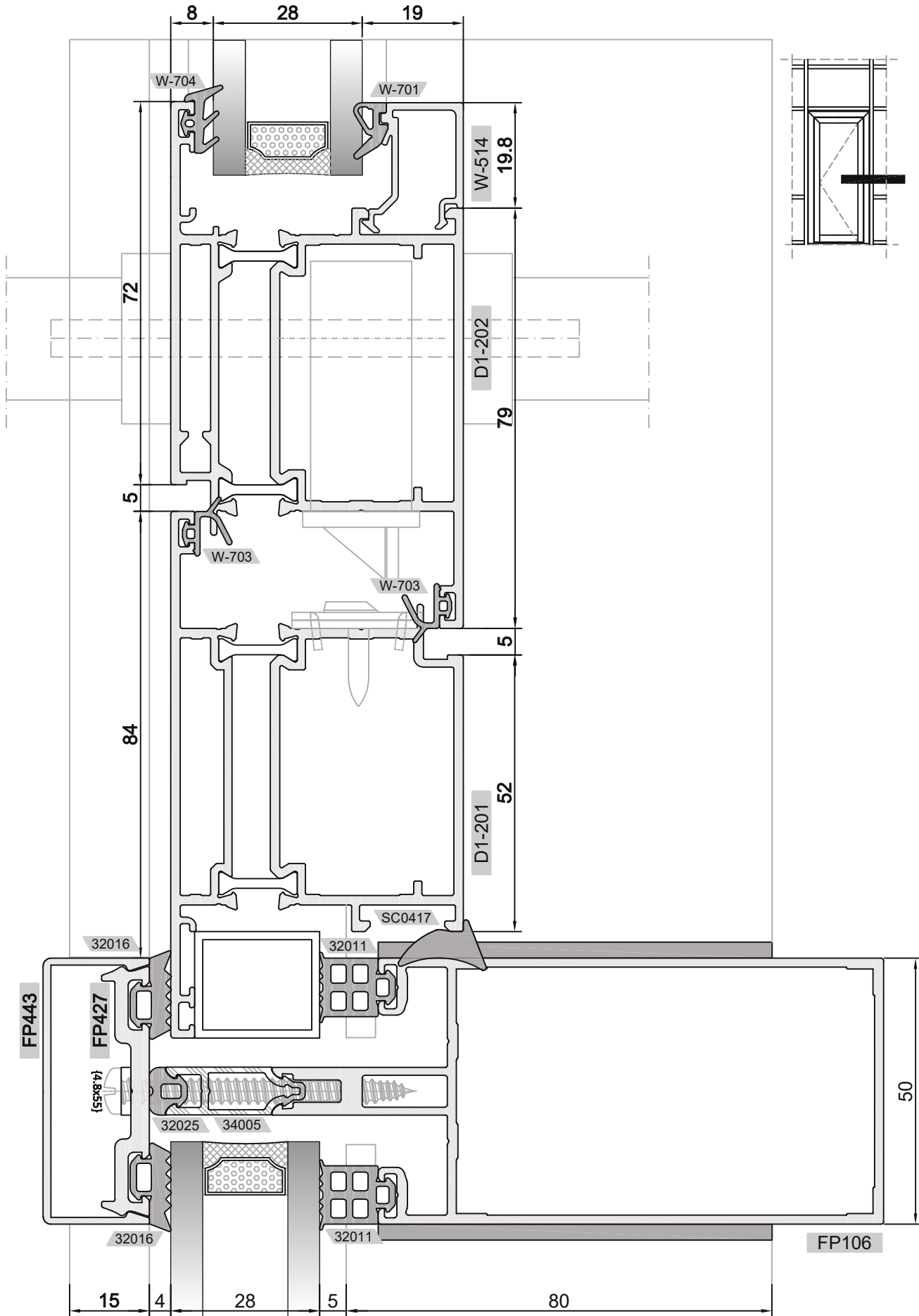


20° - 10°

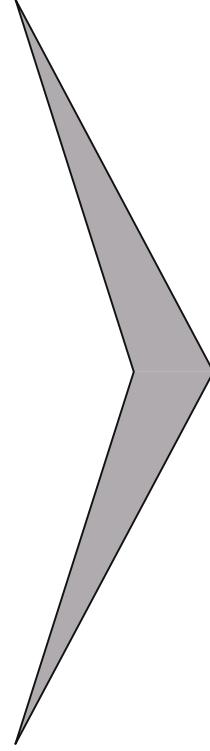




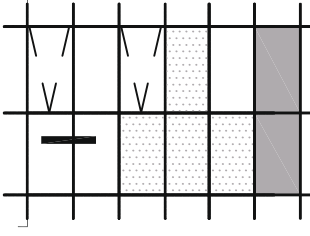




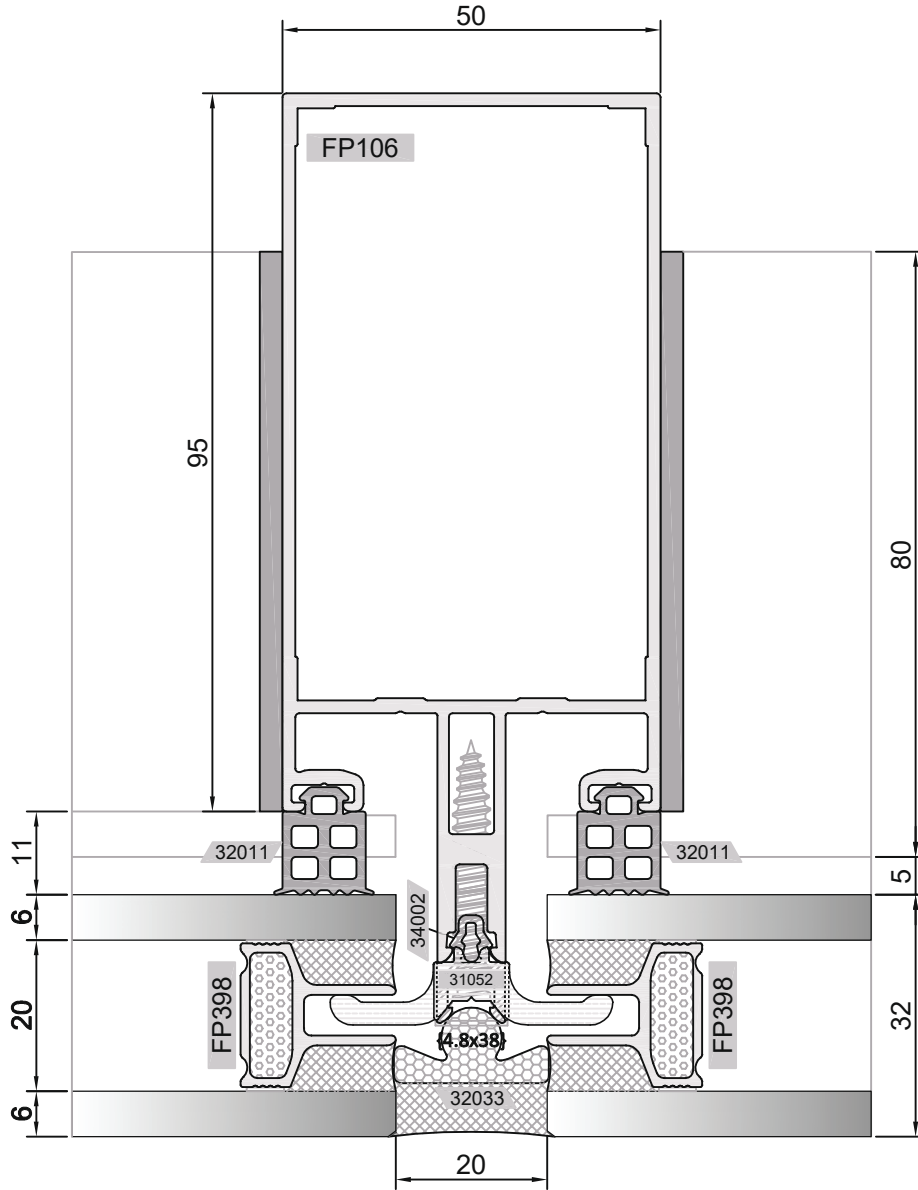
ENTEĞRE CEPHE INTEGRATED CURTAIN WALL

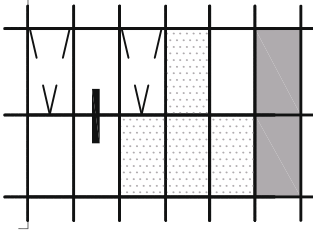


- * 20mm STANDART
ALÜMİNYUM ISICAM
ÇİTASI
20mm STANDARD
ALUMINIUM SPACER

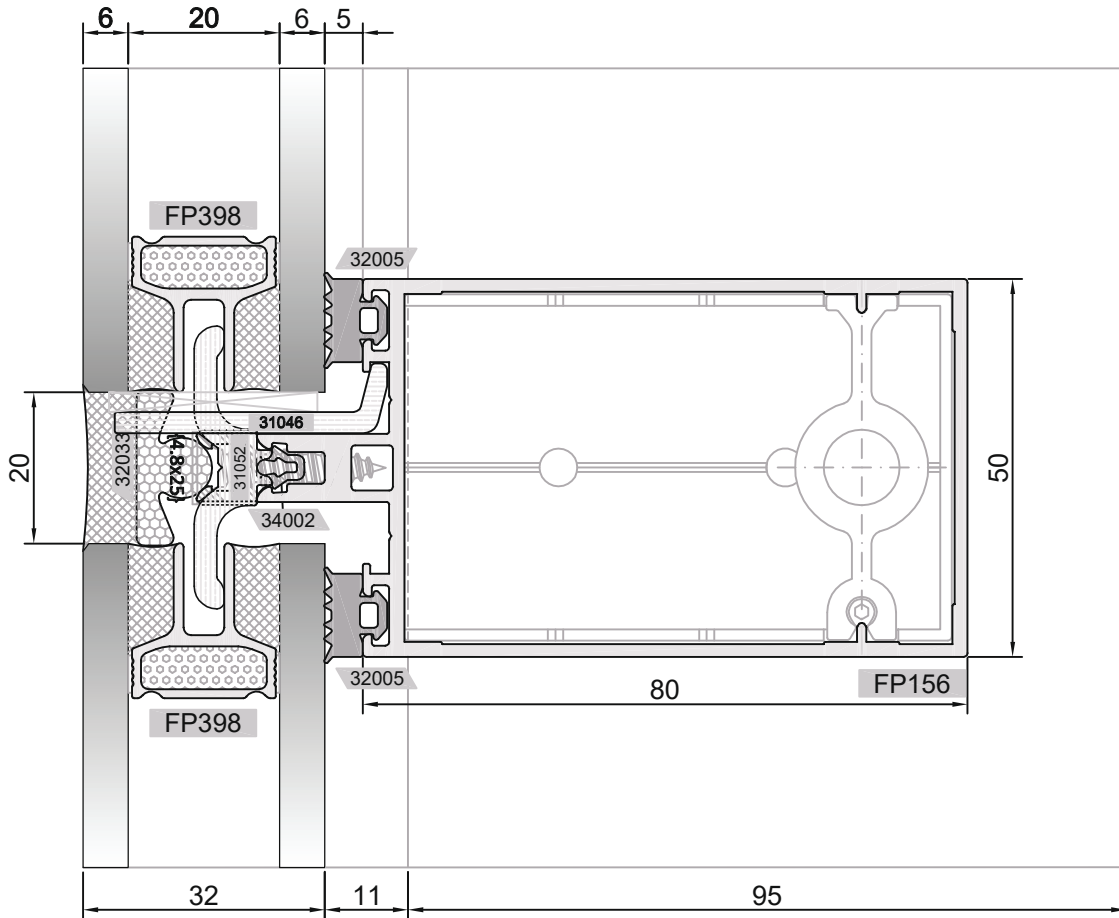


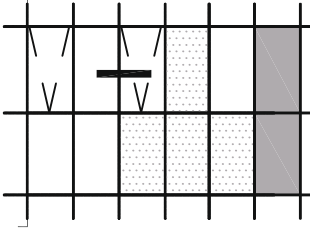
DÜŞEY DETAYI
VERTICAL DETAIL





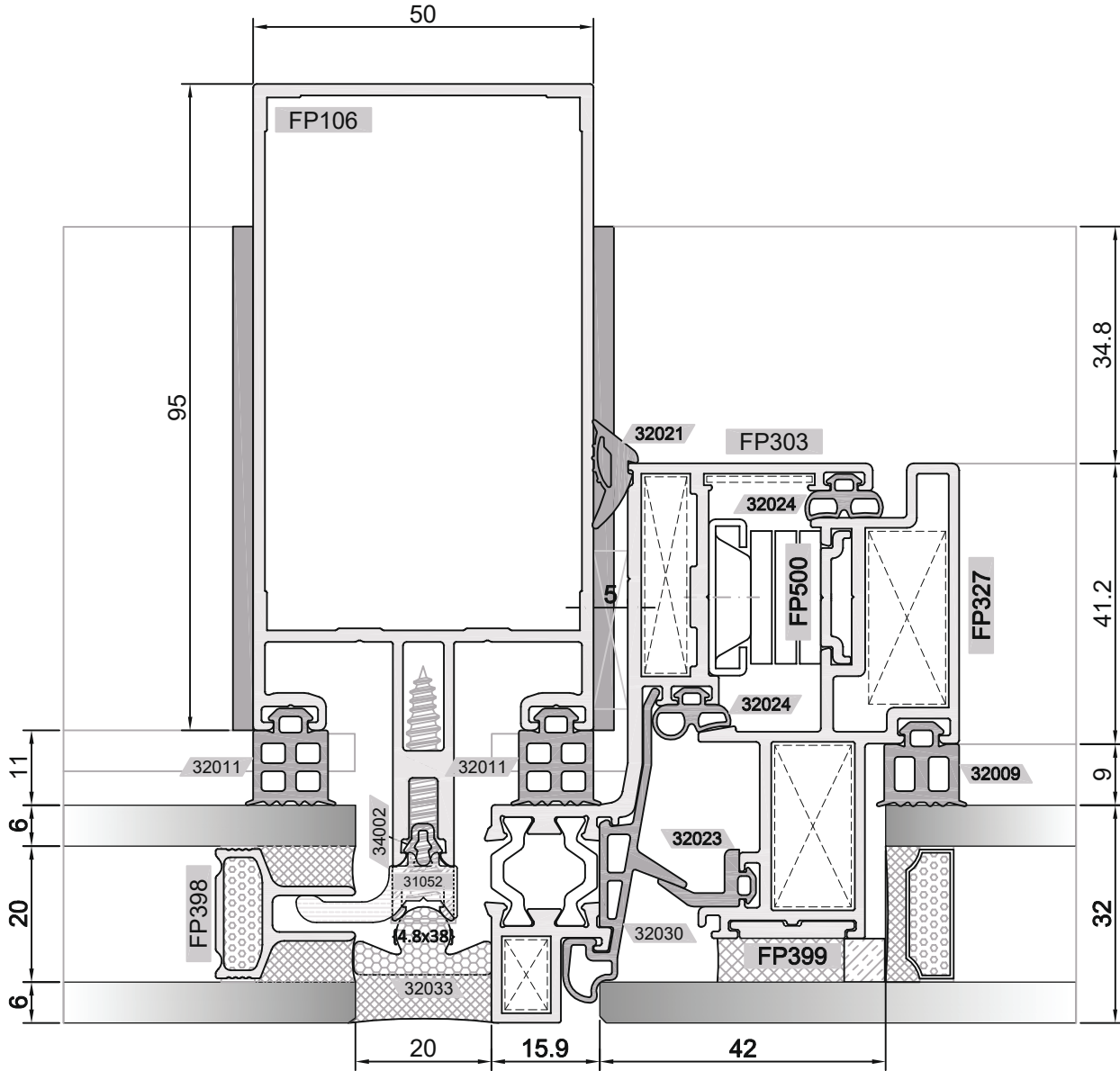
YATAY DETAYI
HORIZONTAL DETAIL

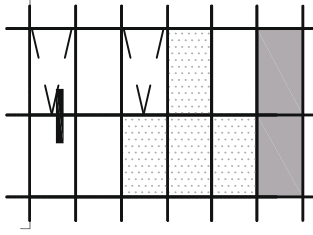




ALTERNATİF 1: YALITIMSIZ KANAT DETAYI
ALTERNATIVE 1 : UNINSULATED VENT DETAIL

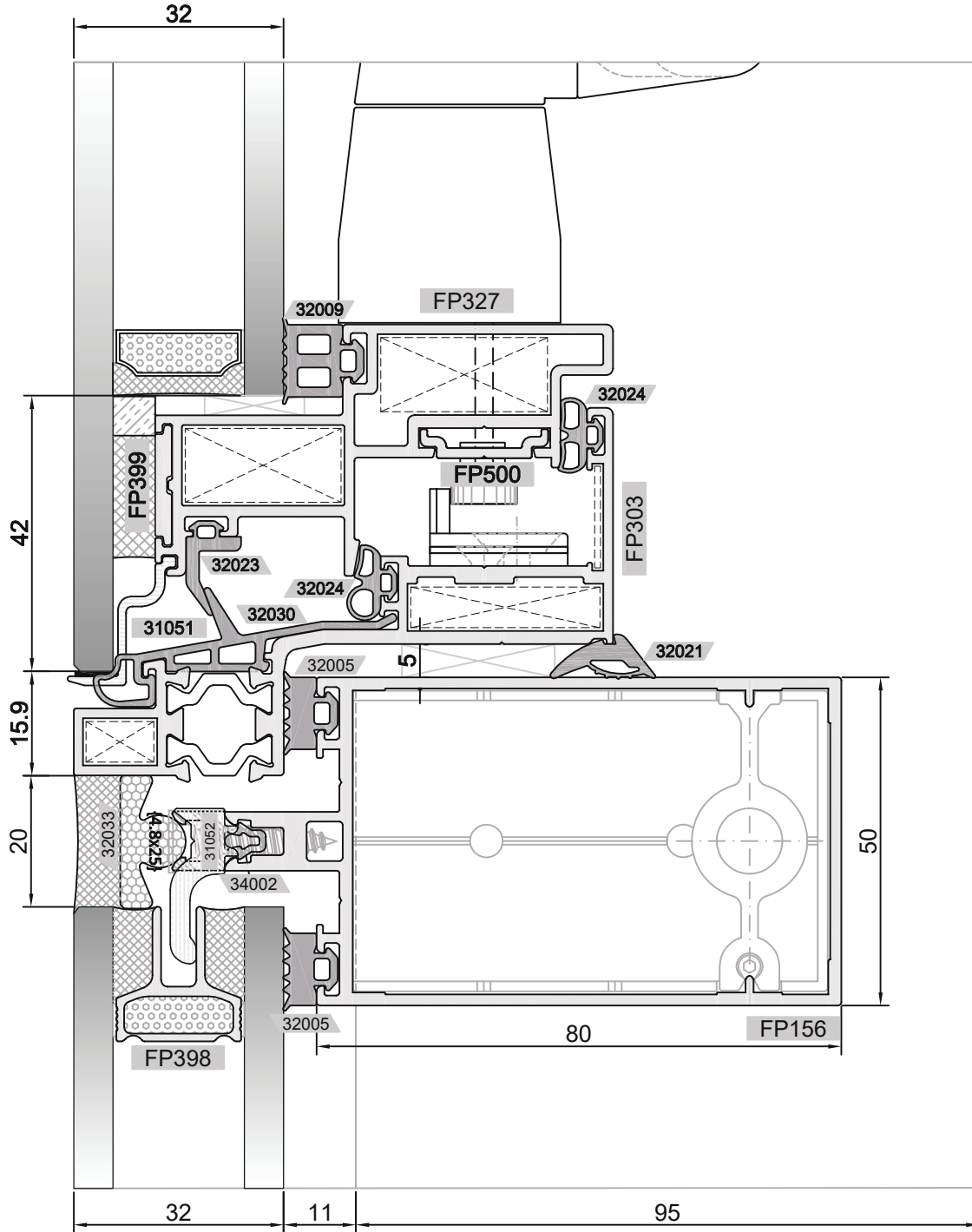
DÜŞEY DETAYI
VERTICAL DETAIL

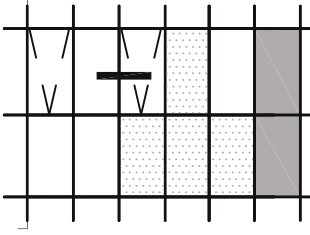




ALTERNATİF 1: YALITIMSIZ KANAT DETAYI
ALTERNATIVE 1 : UNINSULATED VENT DETAIL

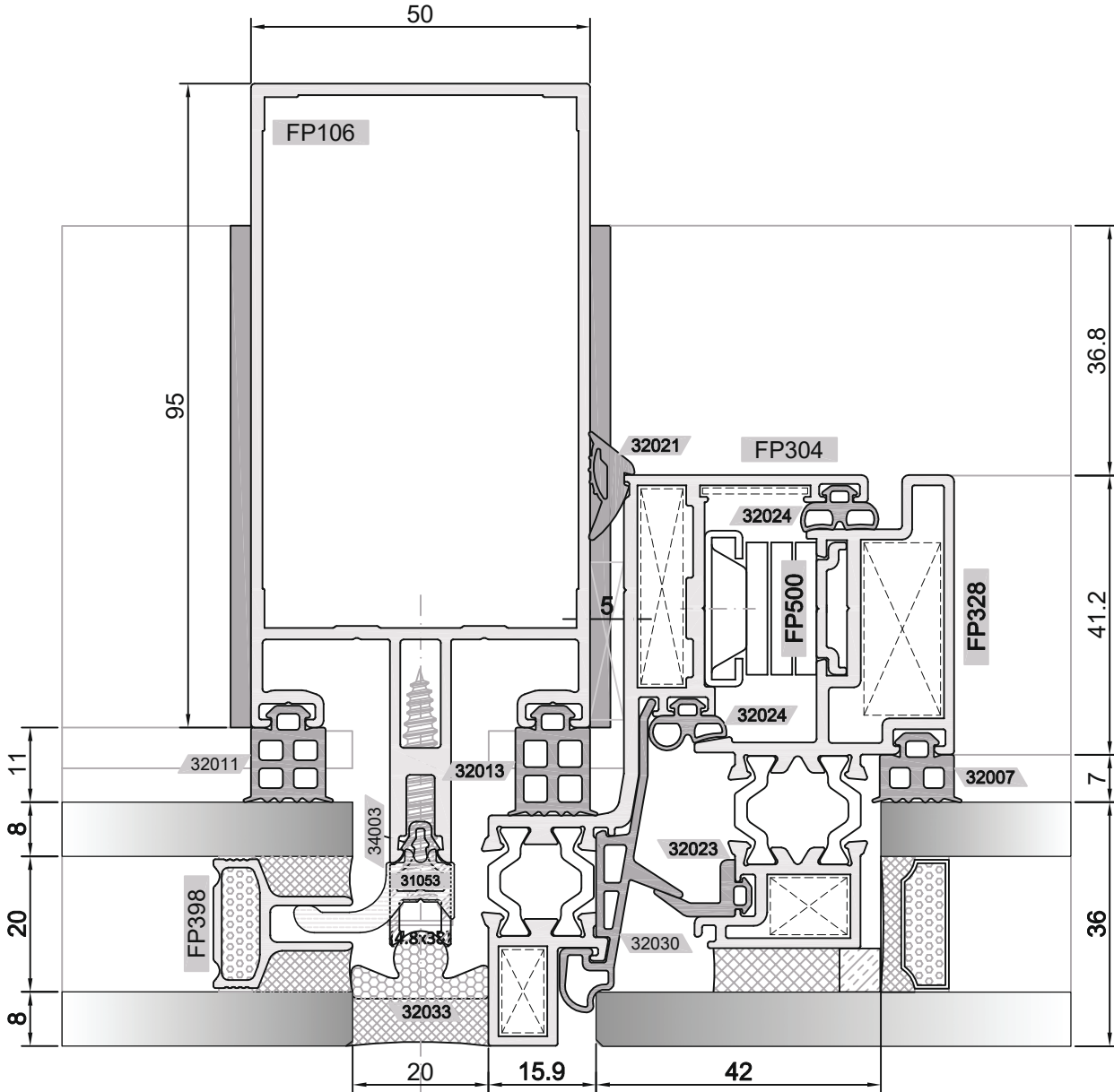
YATAY DETAYI
HORIZONTAL DETAIL

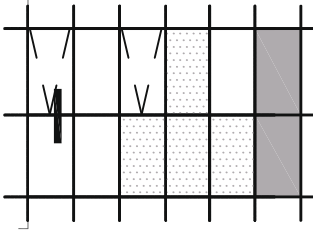




DÜŞEY DETAYI
VERTICAL DETAIL

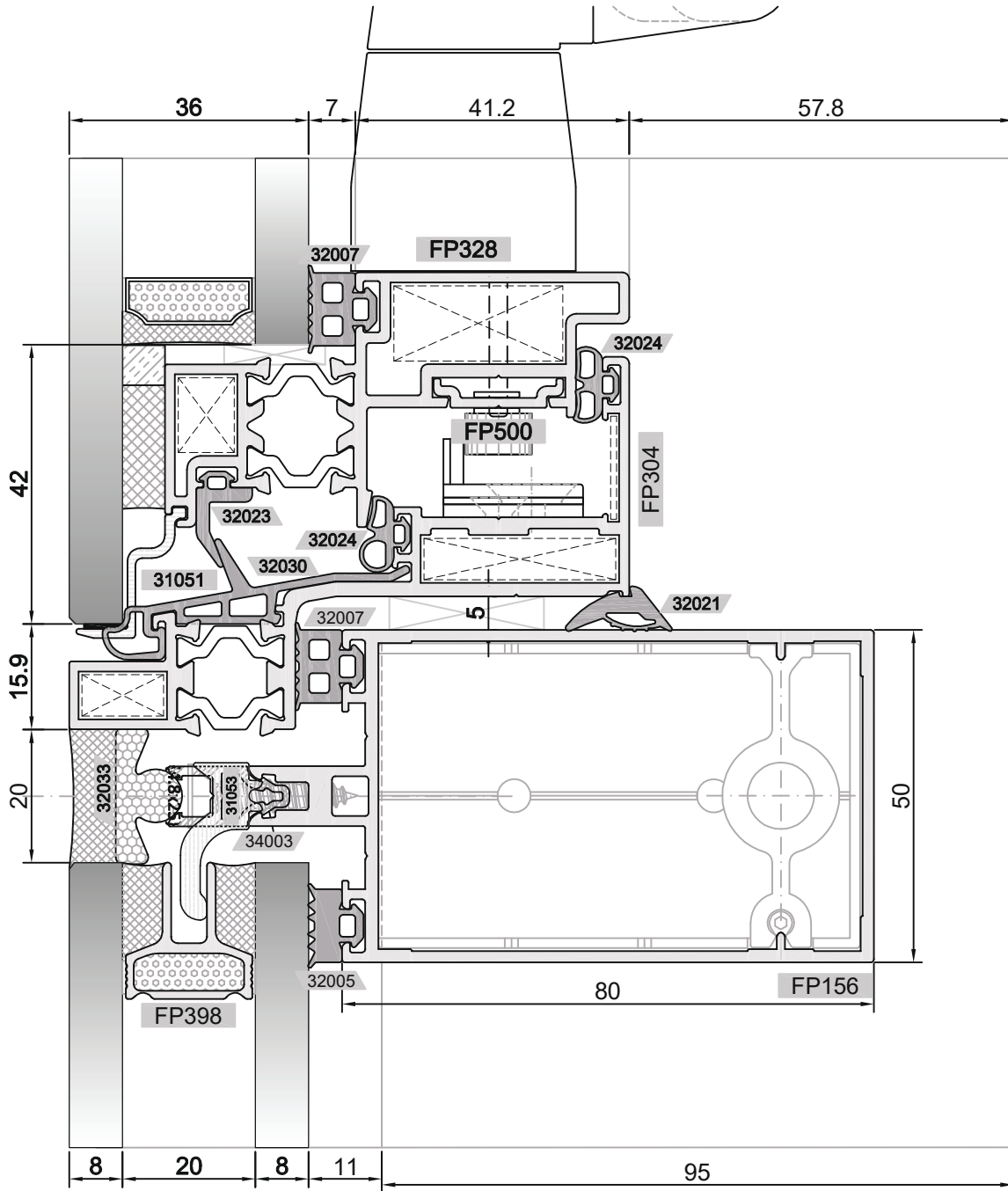
ALTERNATİF 2: YALITIMLI KANAT DETAYI
ALTERNATIVE 2 : INSULATED VENT DETAIL

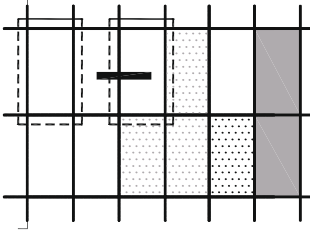




ALTERNATİF 2: YALITIMLI KANAT DETAYI
ALTERNATIVE 2 : INSULATED VENT DETAIL

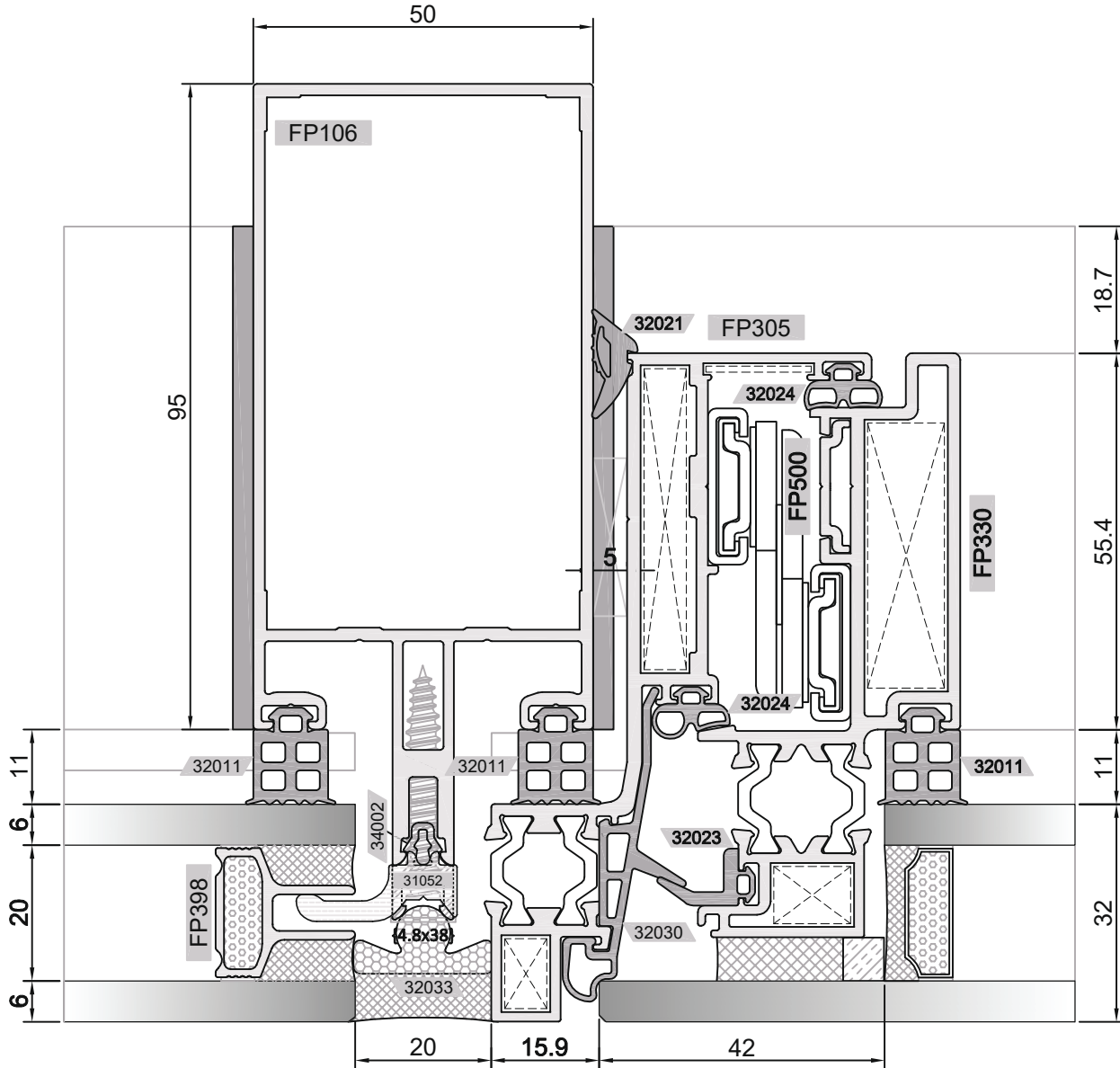
YATAY DETAYI
HORIZONTAL DETAIL

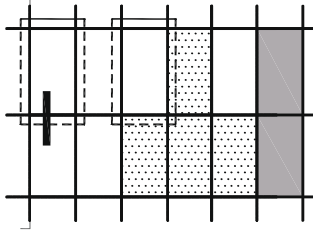




ALTERNATİF 1: YALITIMLI PARALEL AÇILIR KANAT DETAYI
ALTERNATIVE 1 : PARALLEL OPENING INSULATED VENT DETAIL

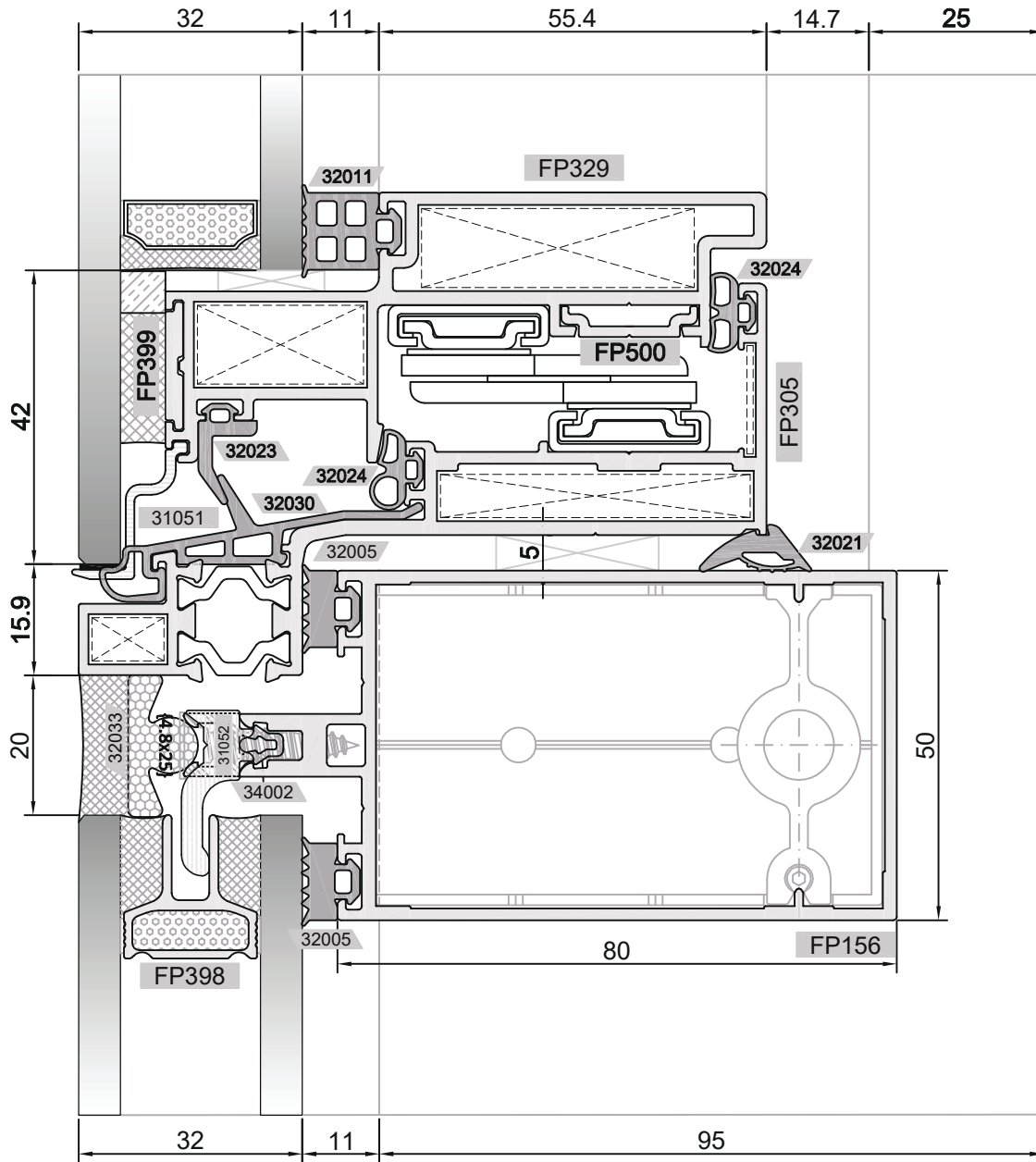
DÜŞEY DETAYI
VERTICAL DETAIL

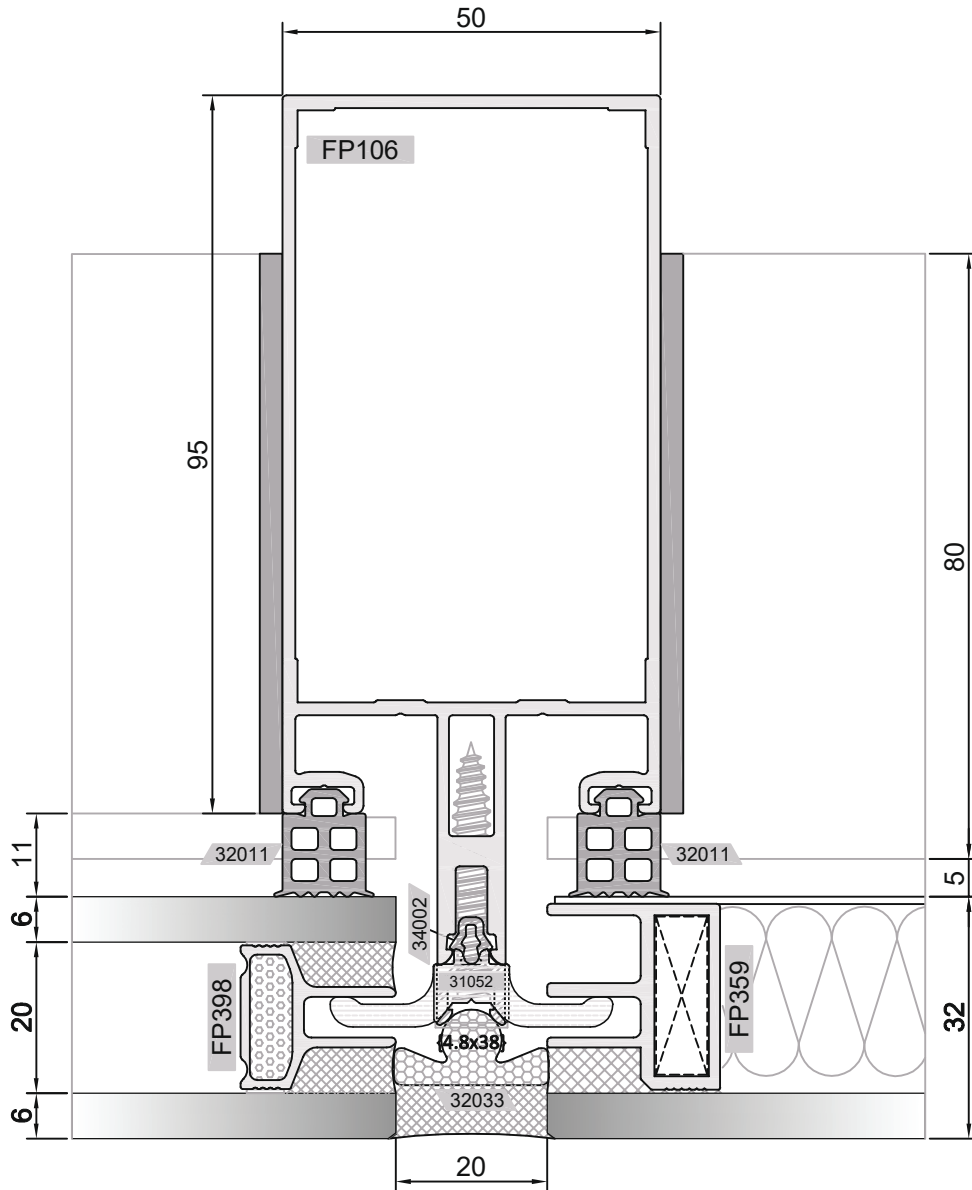
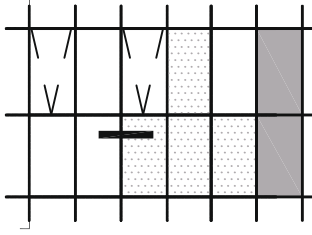


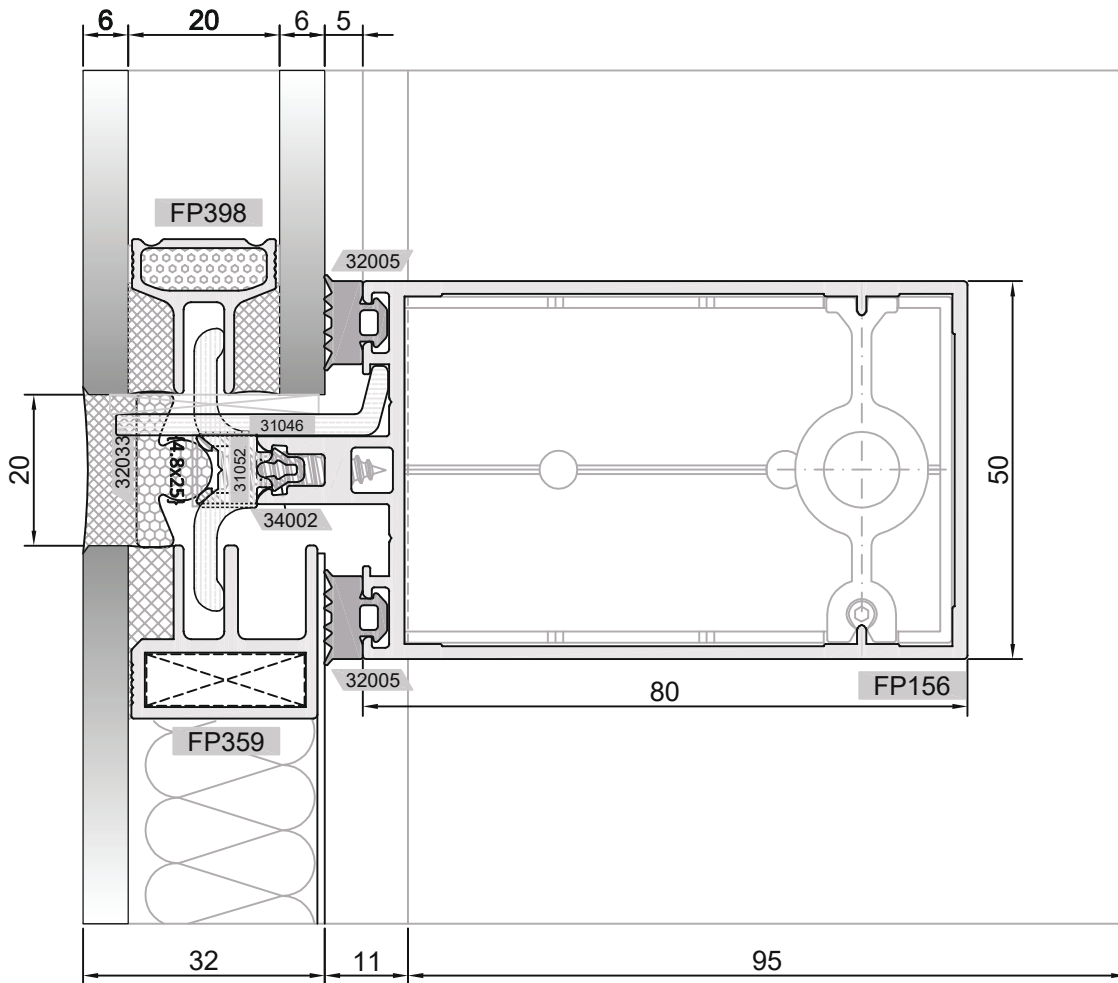
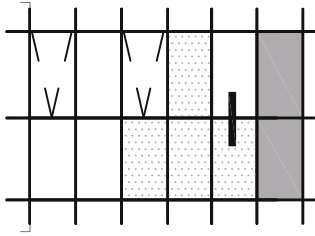


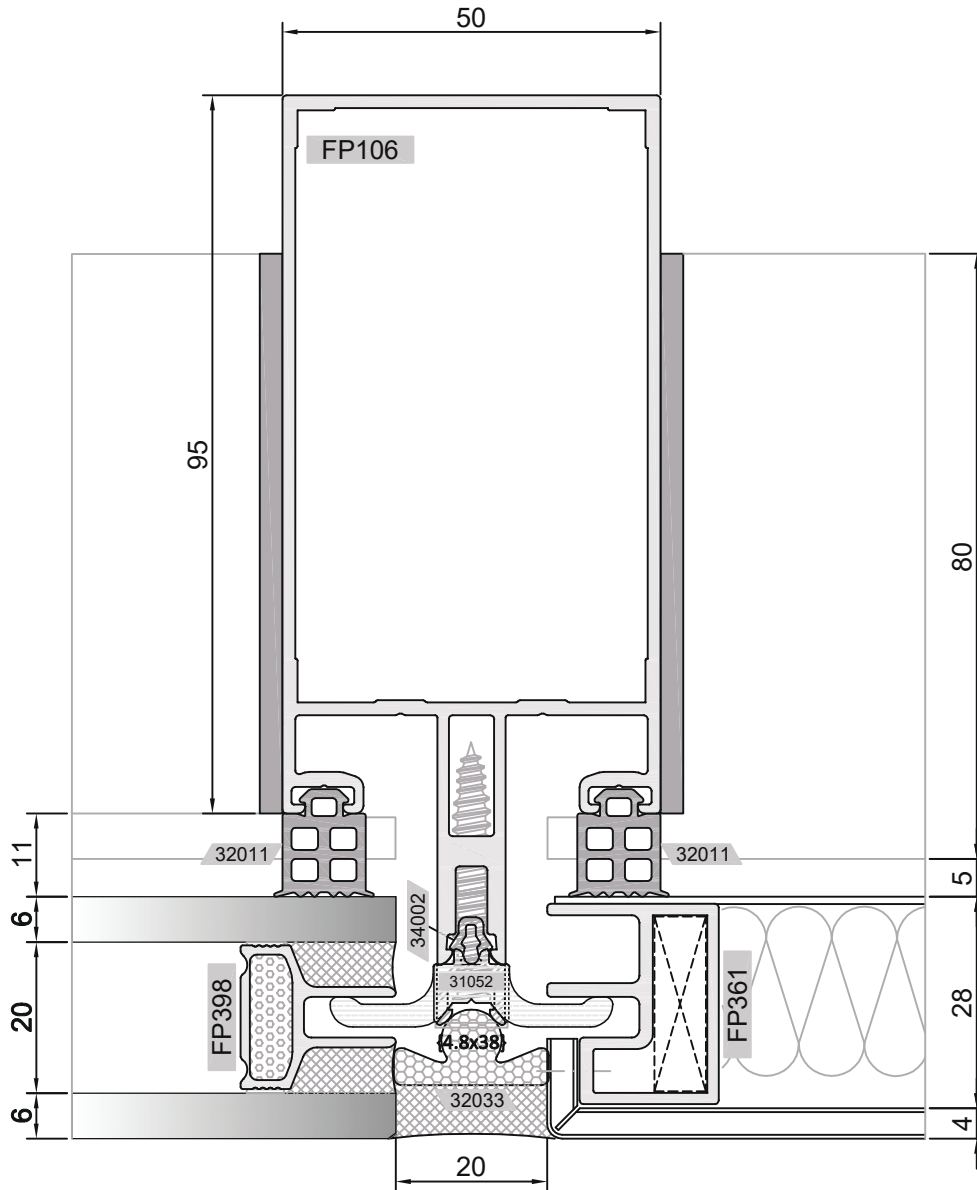
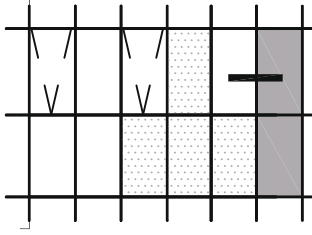
ALTERNATİF 2: YALITIMSIZ PARALEL AÇILIR KANAT DETAYI
ALTERNATIVE 2 : PARALEL OPENING UNINSULATED VENT DETAIL

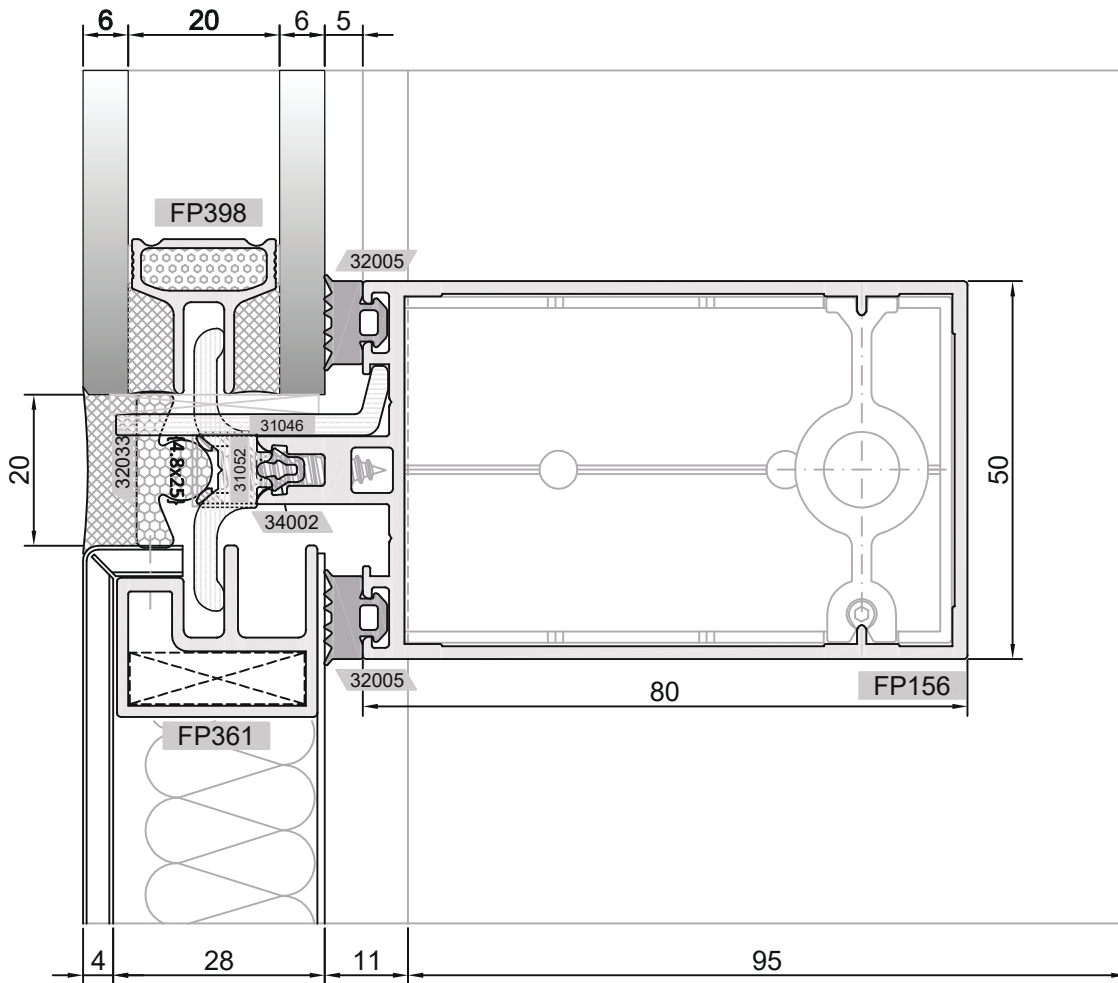
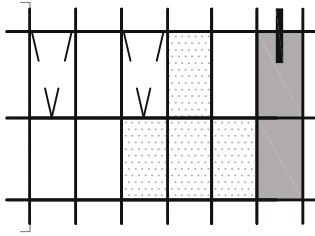
YATAY DETAYI
HORIZONTAL DETAIL

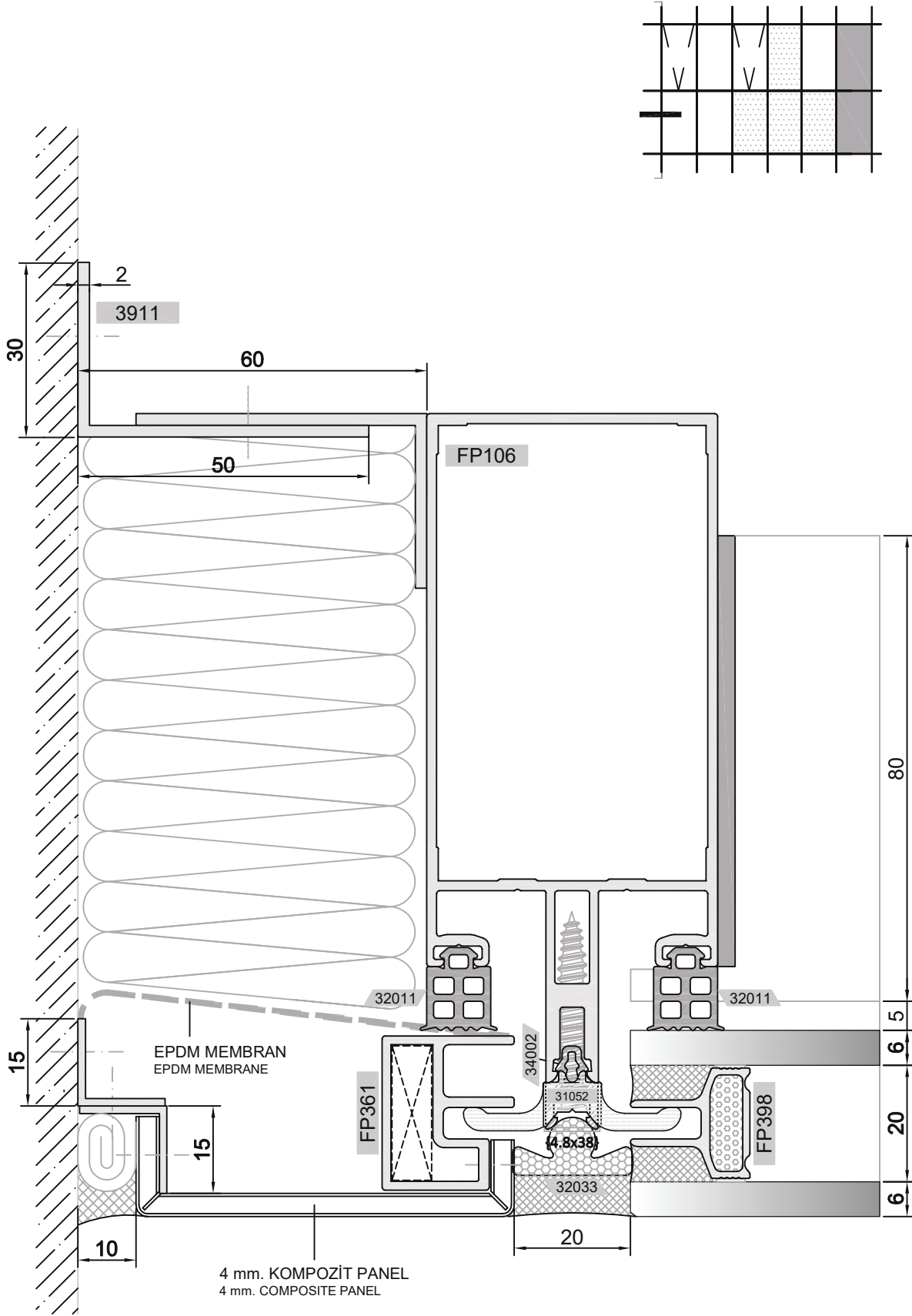


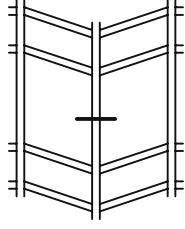




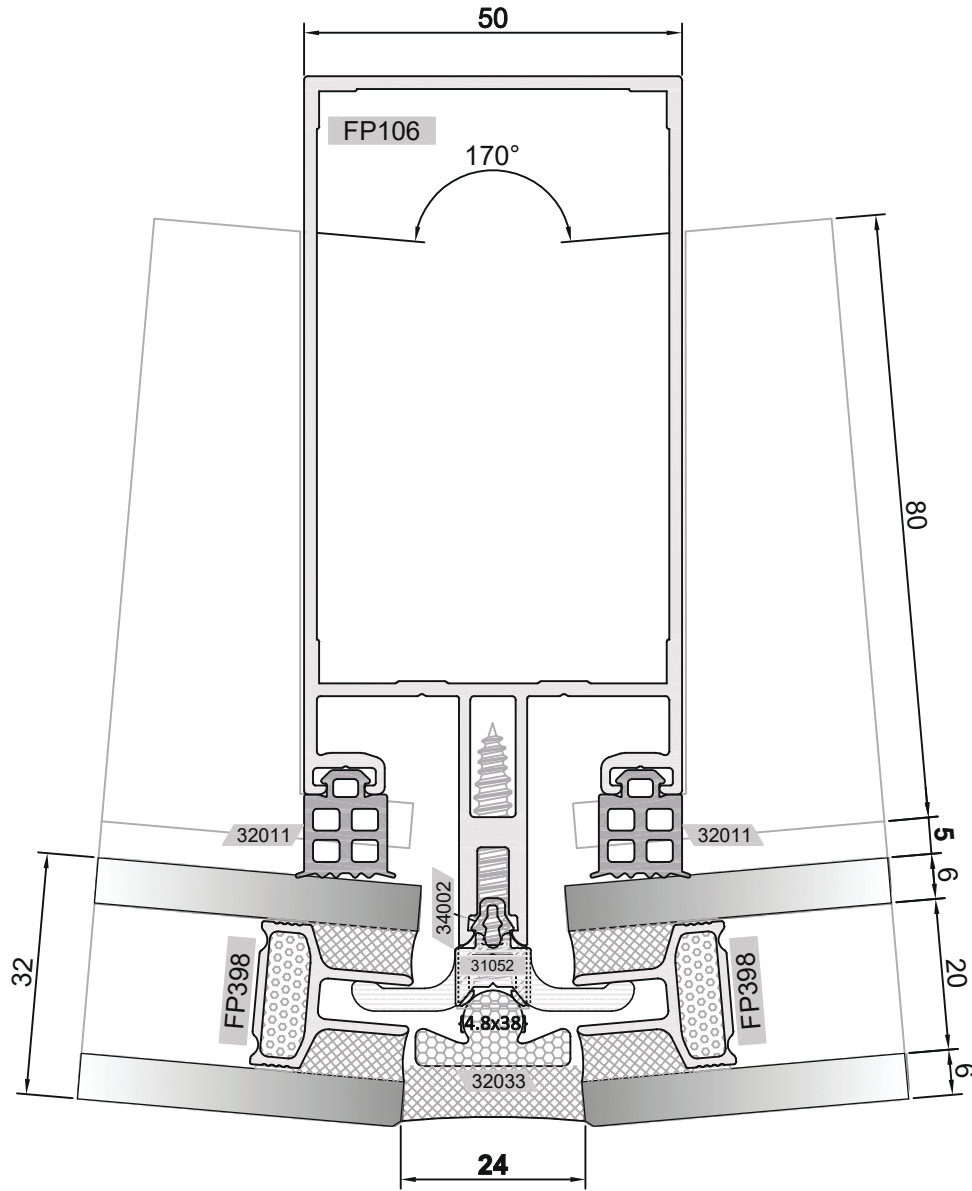


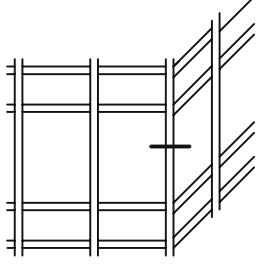




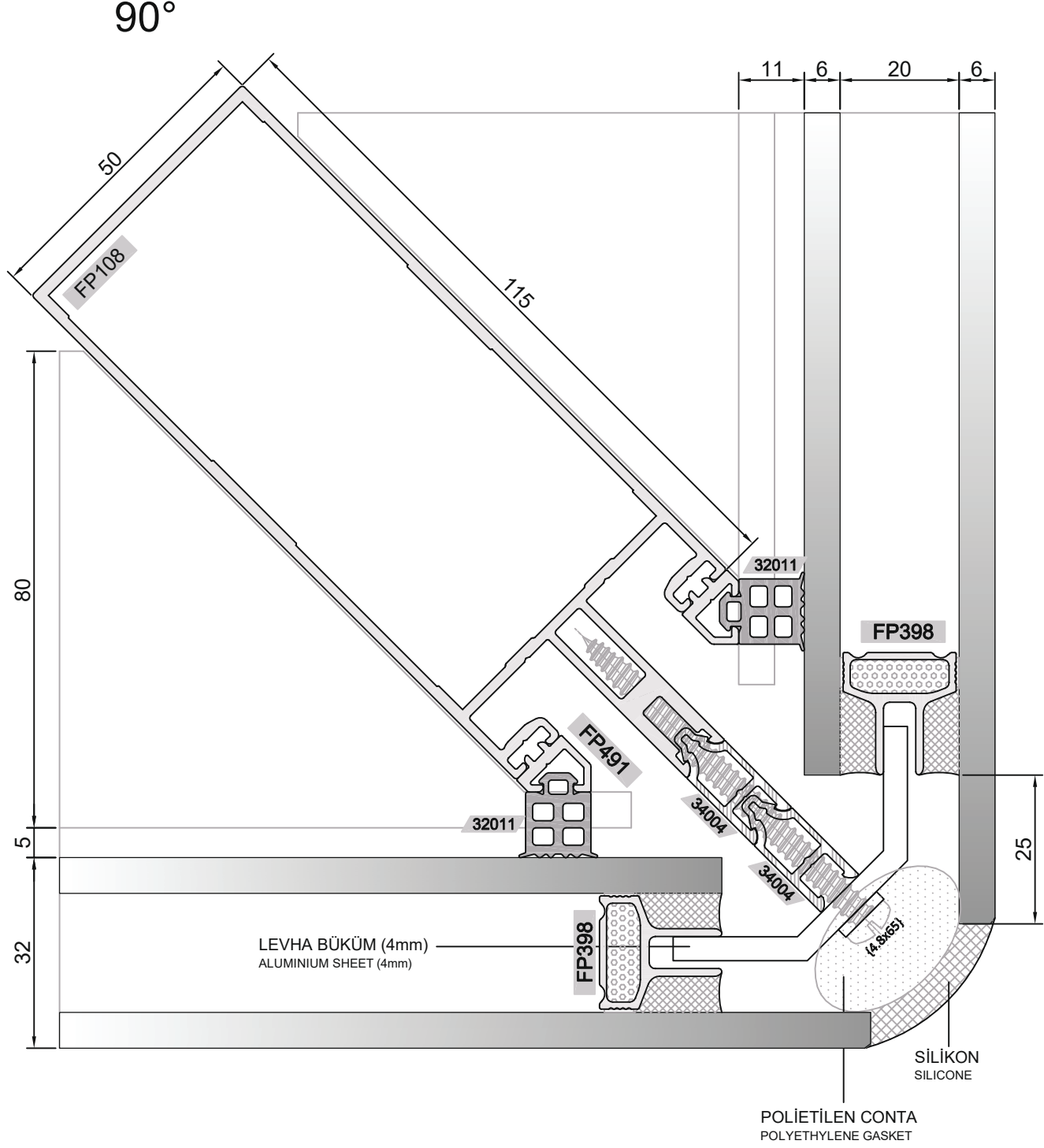


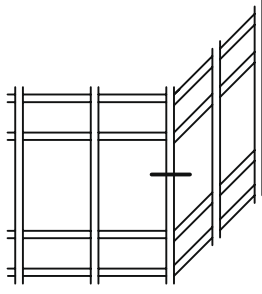
0° - 10°





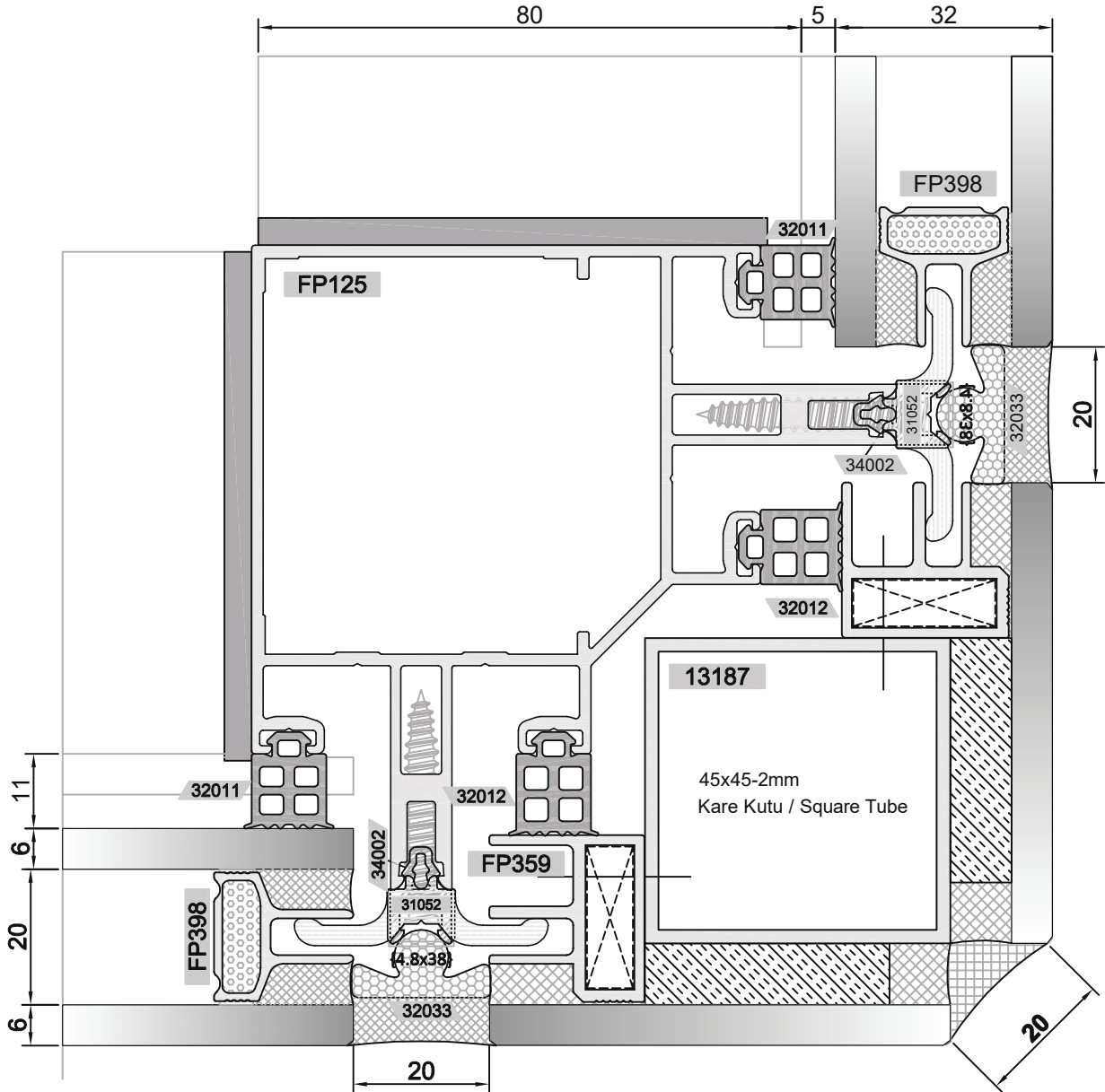
ALTERNATİF 1: TEK DİKMELİ KÖŞE DETAYI
ALTERNATIVE 1 : CORNER DETAIL WITH SINGLE MULLION

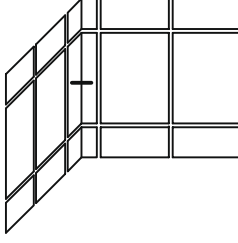




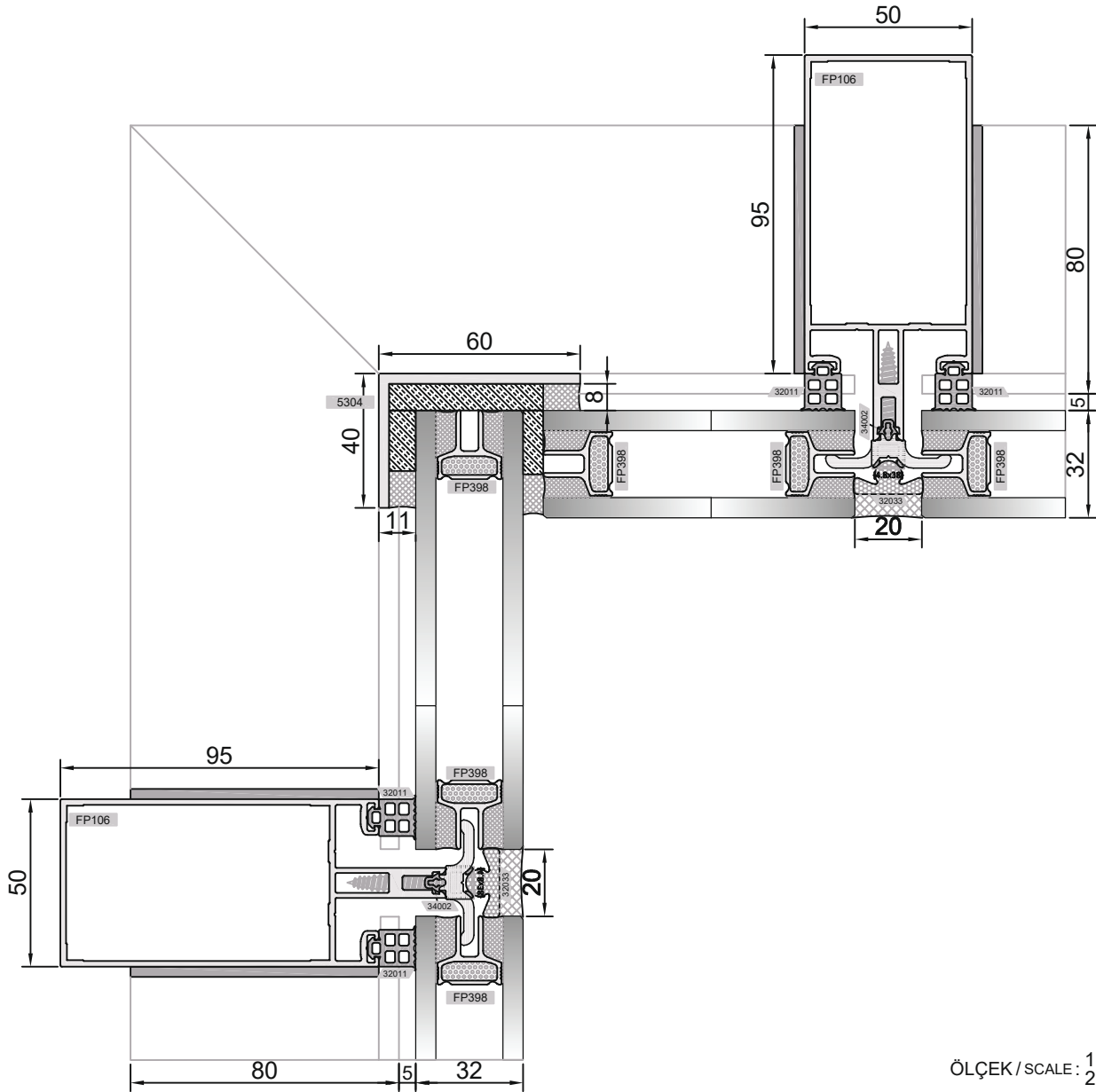
90°

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

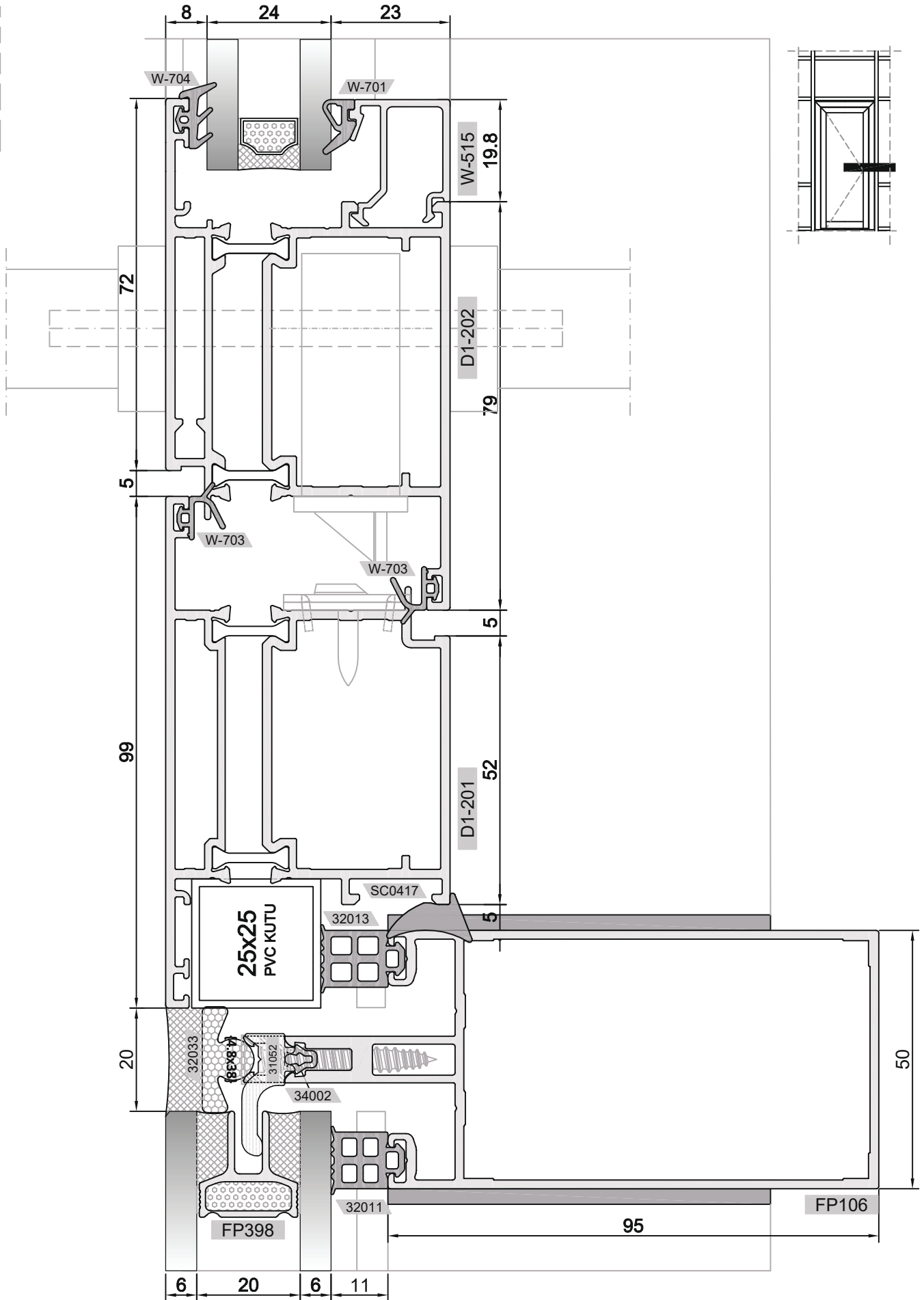




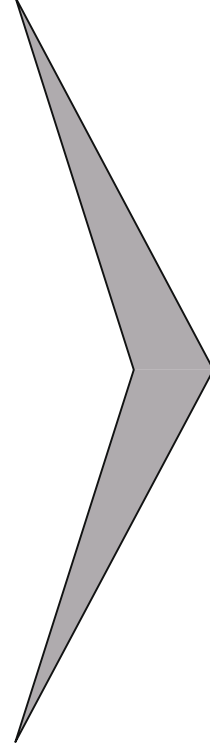
90° İÇ AÇILI CAM CEPHE DÜŞEY KESİT DETAYI
FOUR SIDE WITH 90° INTERNAL ANGLE VERTICAL DETAIL



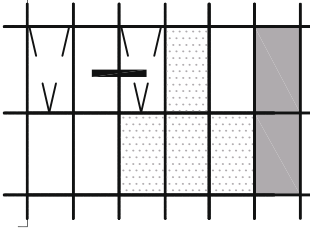
ÖLÇEK / SCALE: 1/2



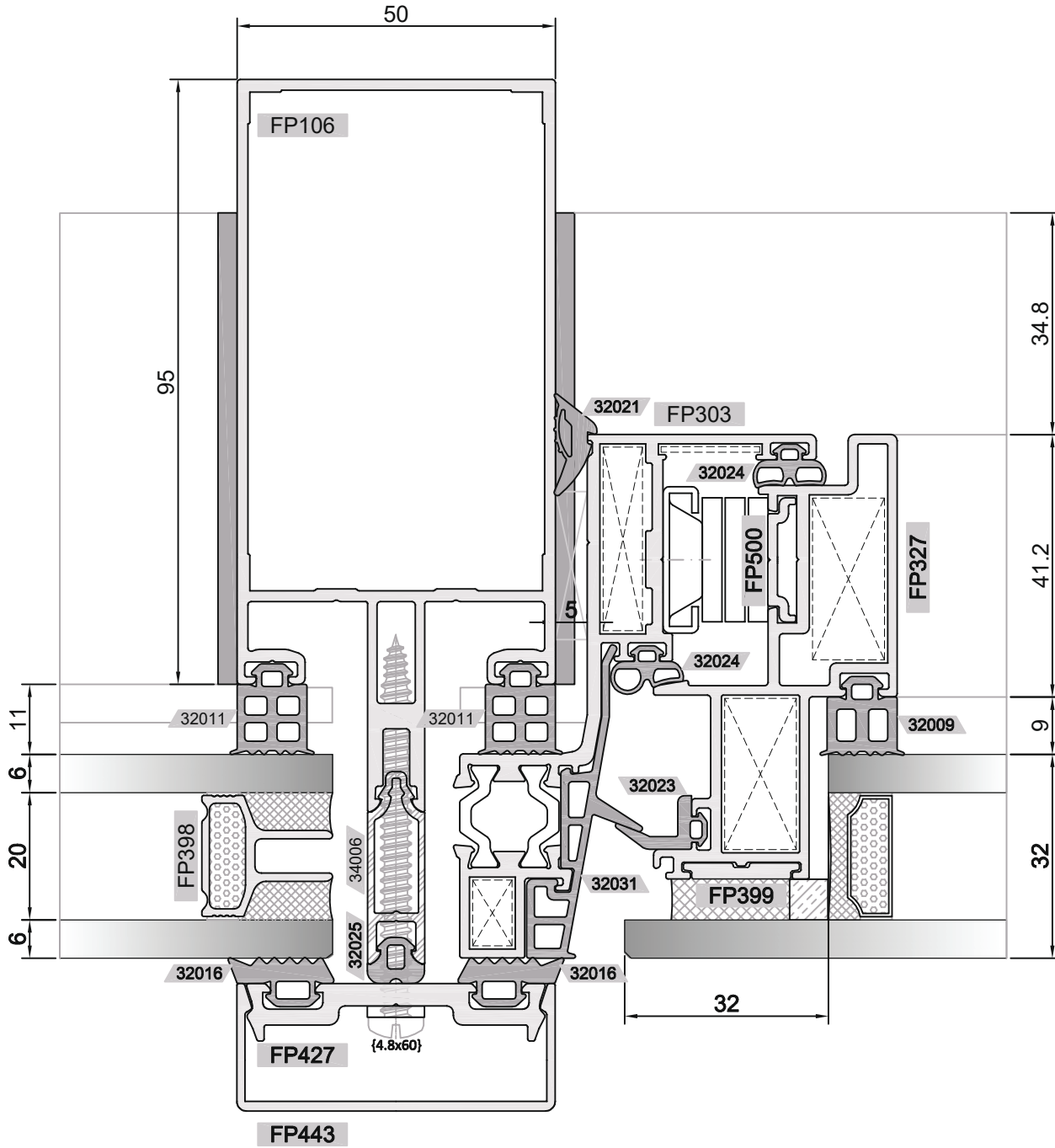
YARI-KAPAKLI CEPHE SEMI-CAPPED CURTAIN WALL

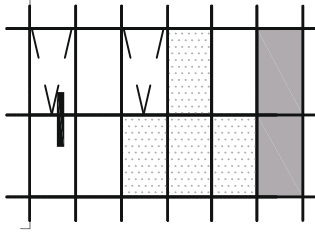


- * 20mm STANDART
ALÜMİNYUM ISICAM
ÇİTASI
20mm STANDARD
ALUMINIUM SPACER

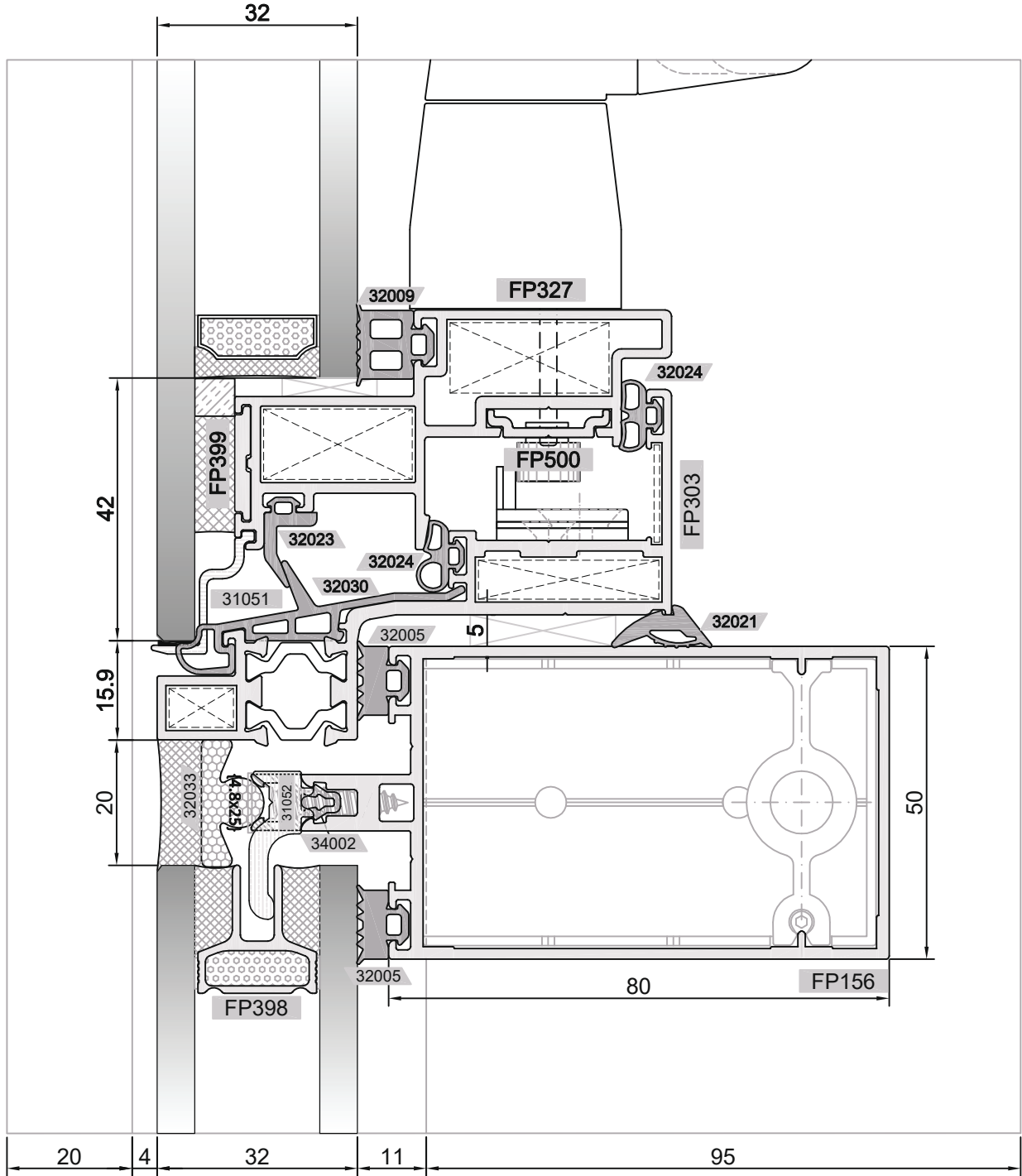


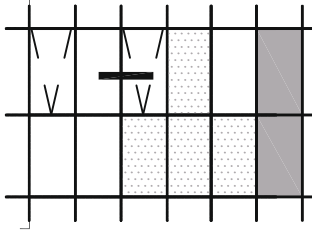
DÜŞEY DETAYI
VERTICAL DETAIL



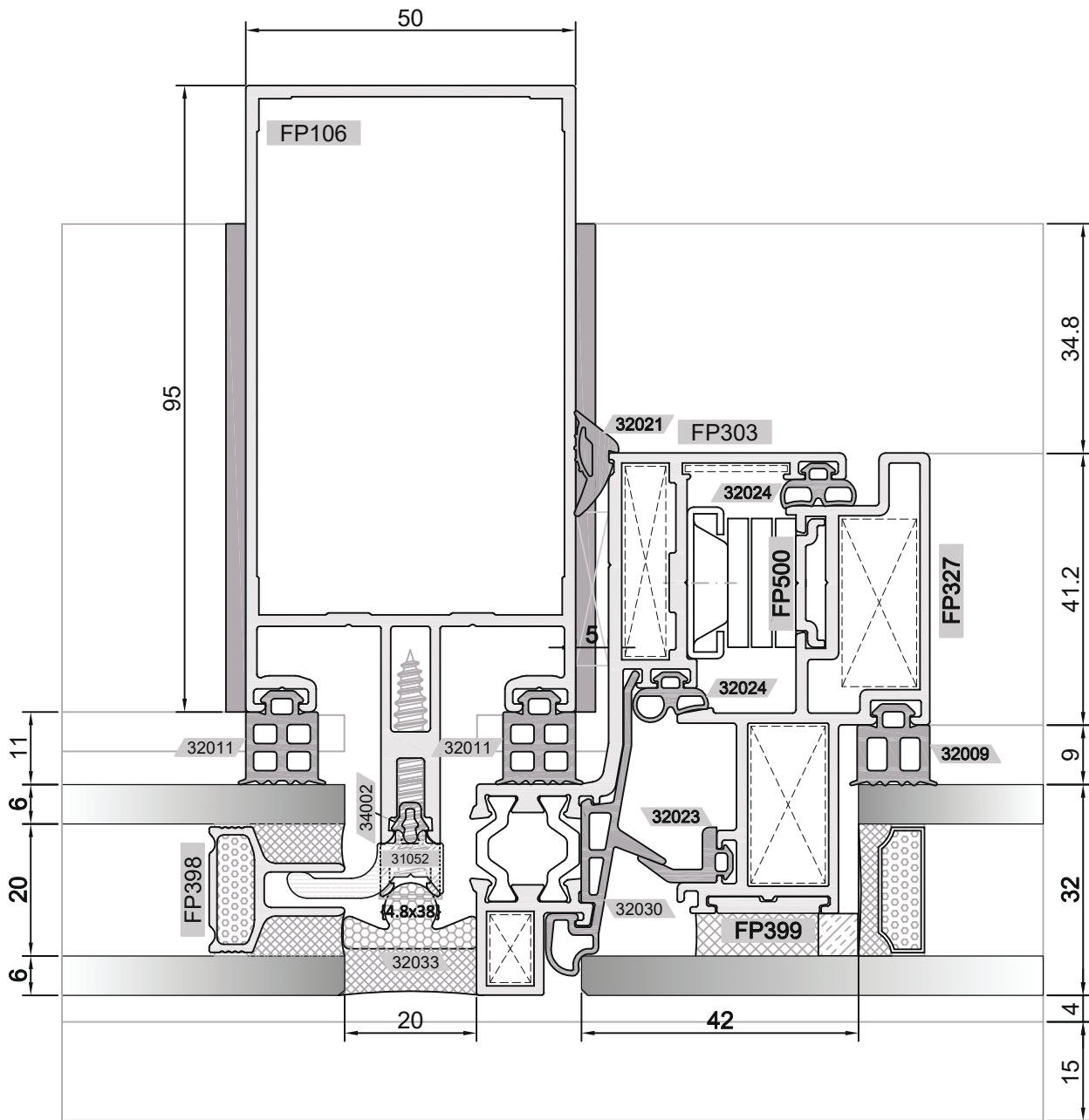


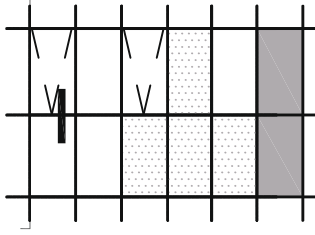
YATAY DETAYI
HORIZONTAL DETAIL



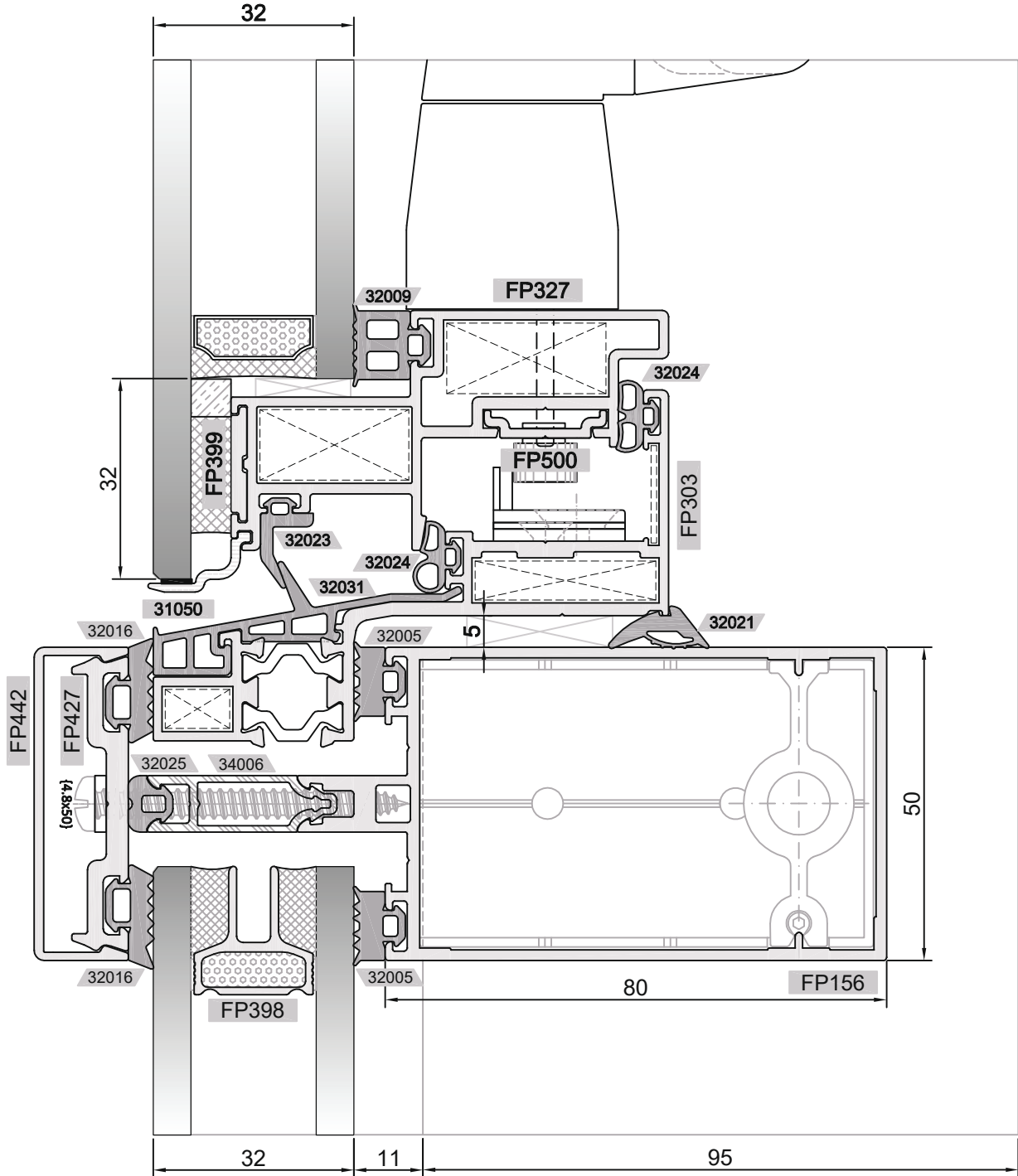


DÜŞEY DETAYI
VERTICAL DETAIL

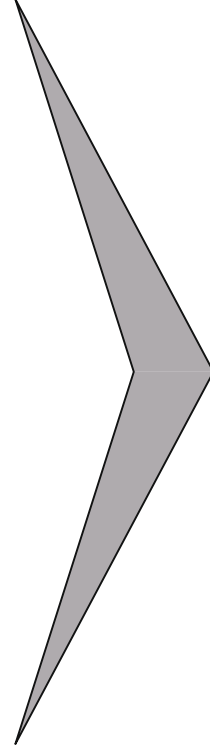




YATAY DETAYI
HORIZONTAL DETAIL

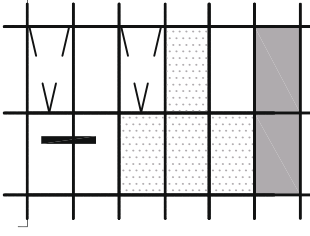


ENTEĞRE CEPHE INTEGRATED CURTAIN WALL

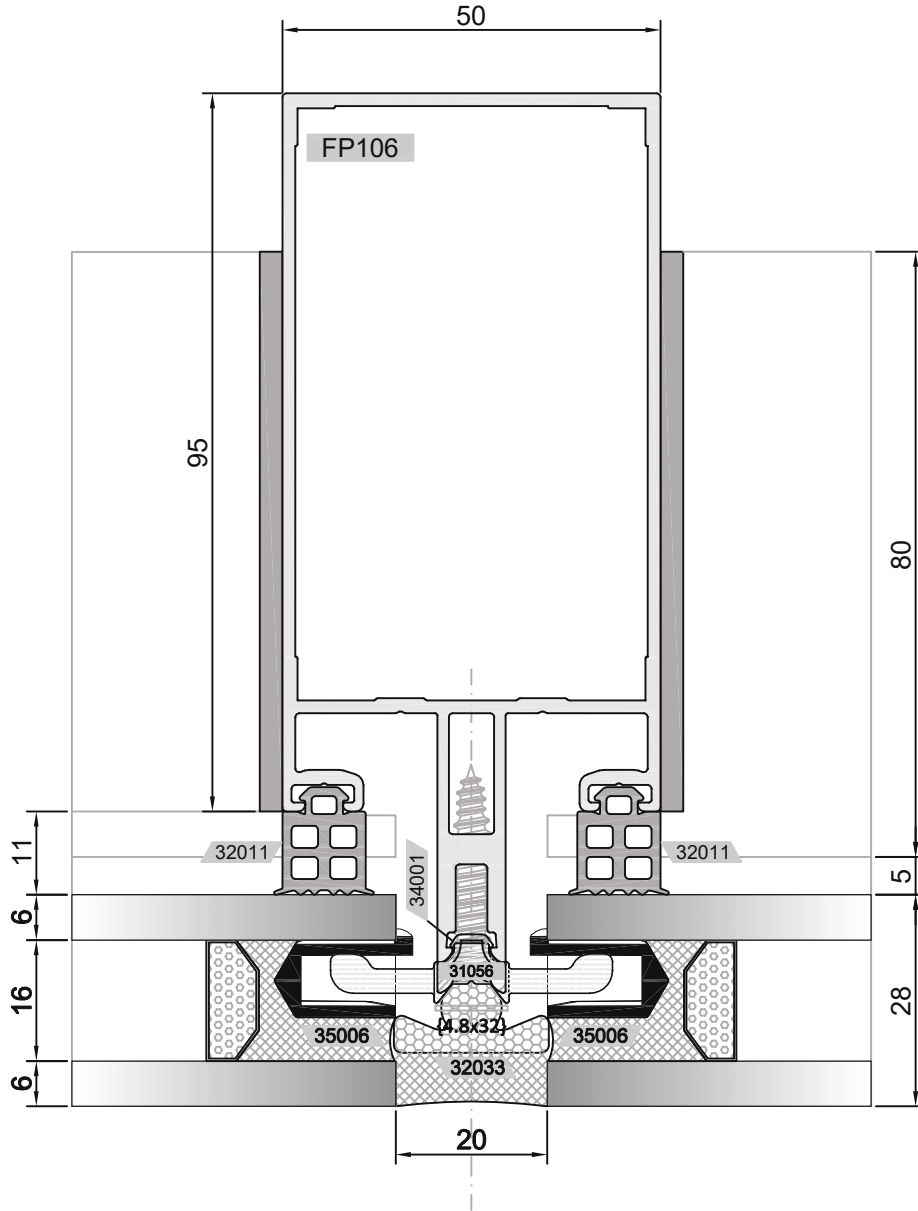


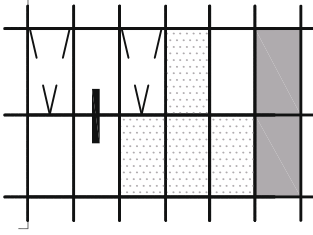
* 16mm ÖZEL SICAK
KENAR ISICAM ÇITASI
16mm SPECIAL WARM
EDGE SPACER

► 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.

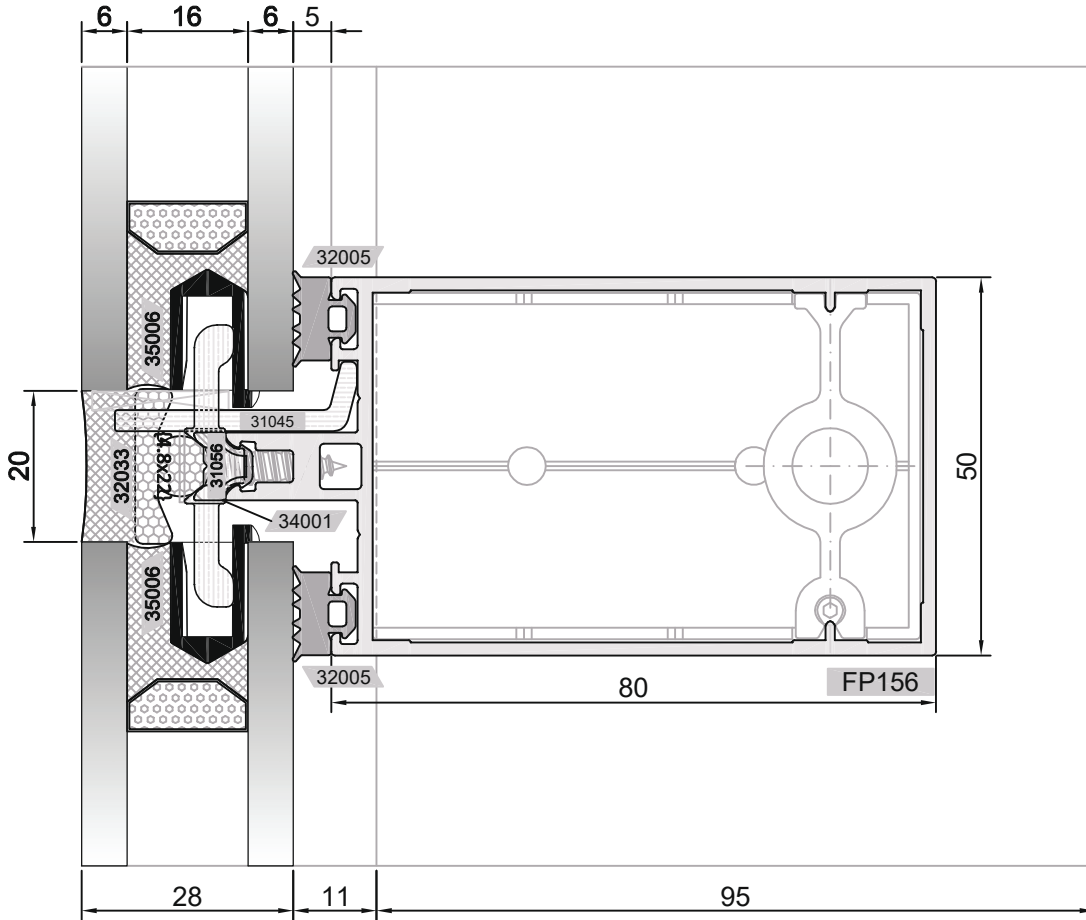


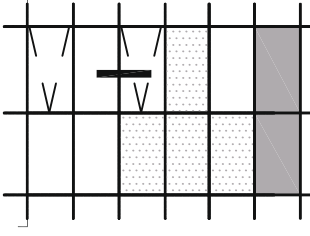
DÜŞEY DETAYI
VERTICAL DETAIL





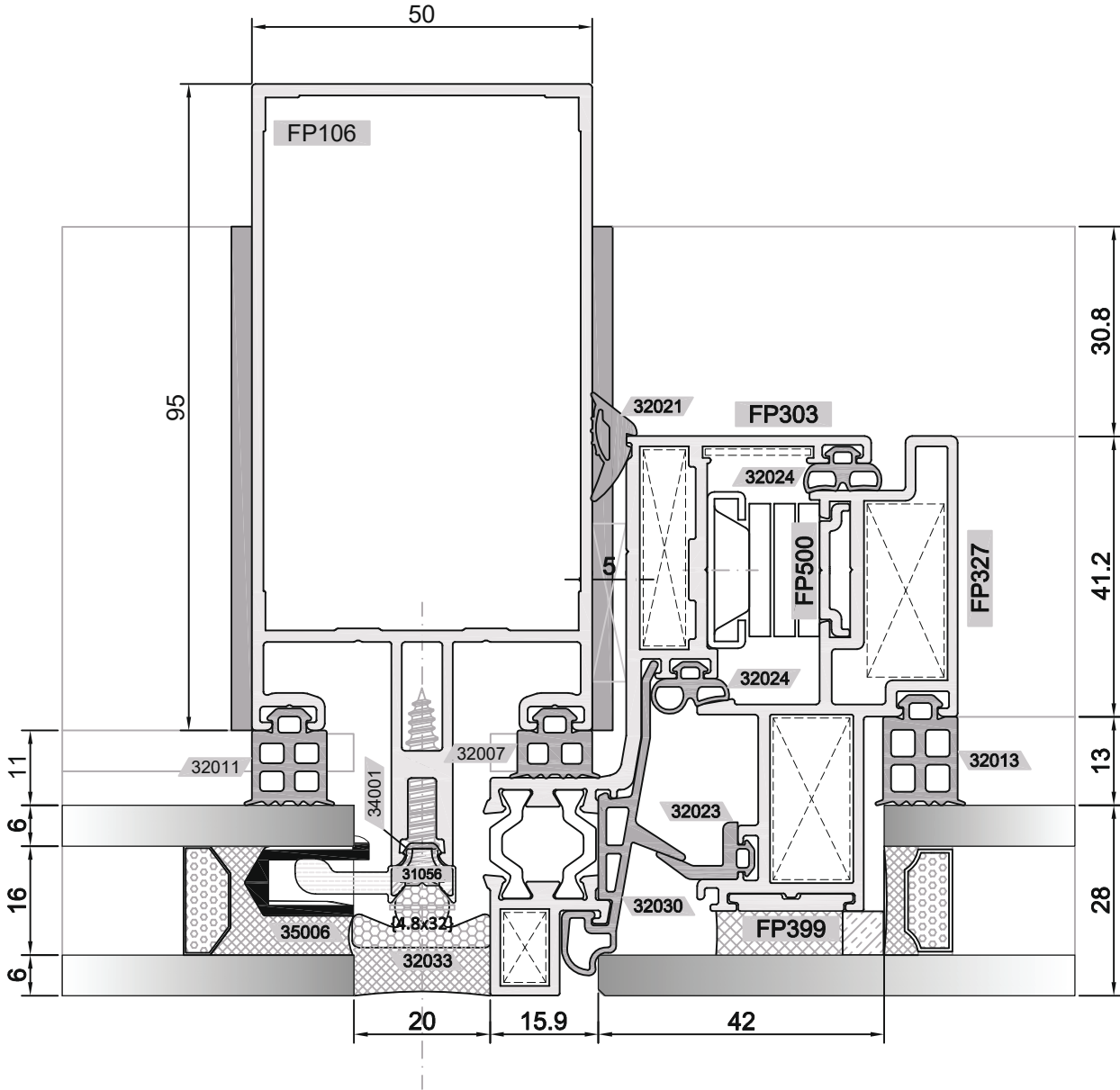
YATAY DETAYI
HORIZONTAL DETAIL

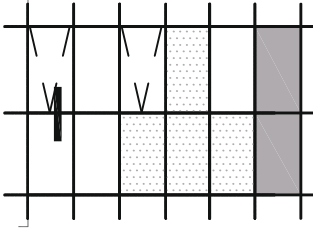




ALTERNATİF 1: YALITIMSIZ KANAT DETAYI
ALTERNATIVE 1 : UNINSULATED VENT DETAIL

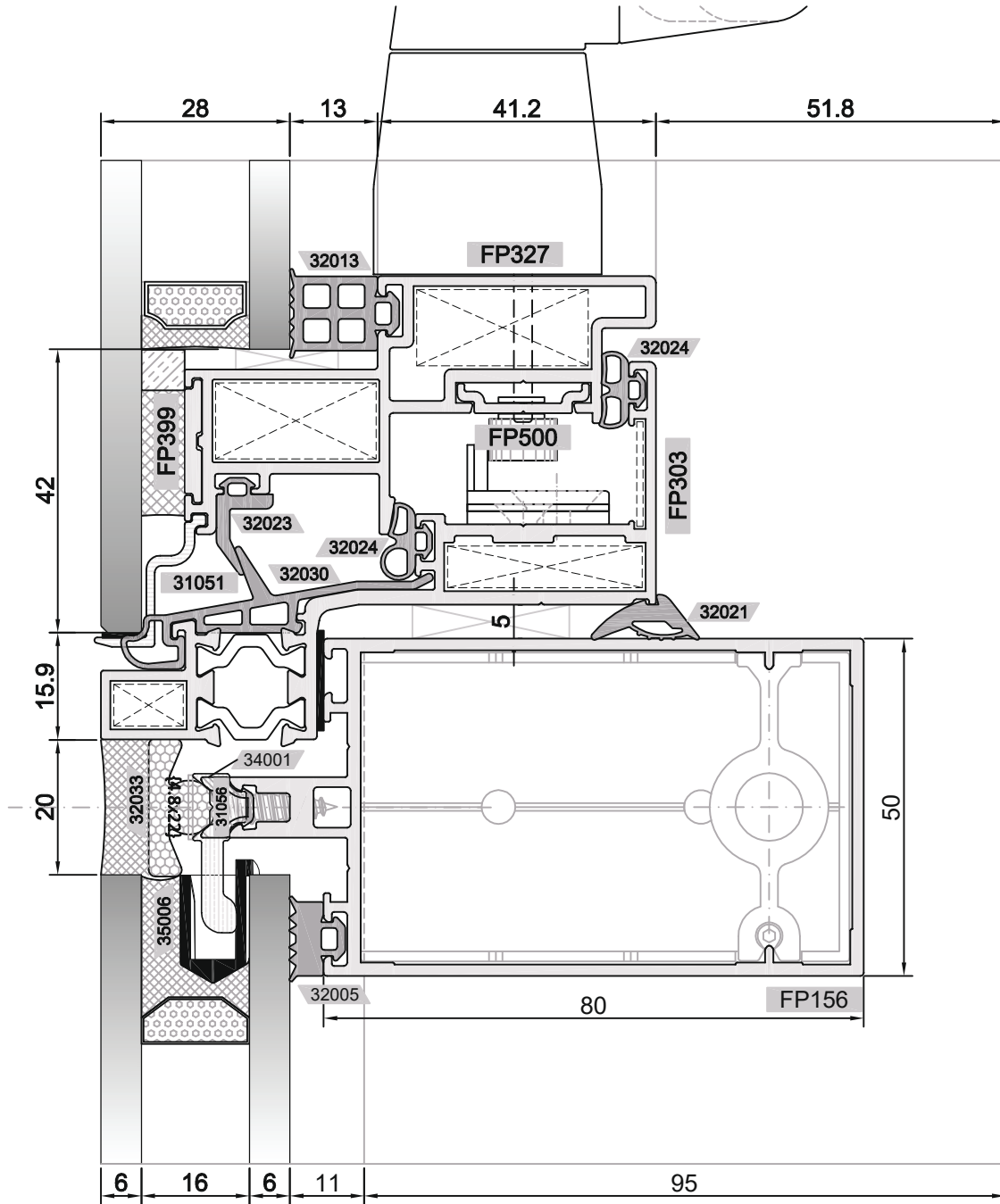
DÜŞEY DETAYI
VERTICAL DETAIL

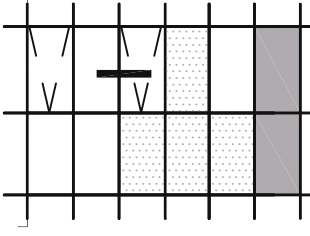




ALTERNATİF 1: YALITIMSIZ KANAT DETAYI
ALTERNATIVE 1 : UNINSULATED VENT DETAIL

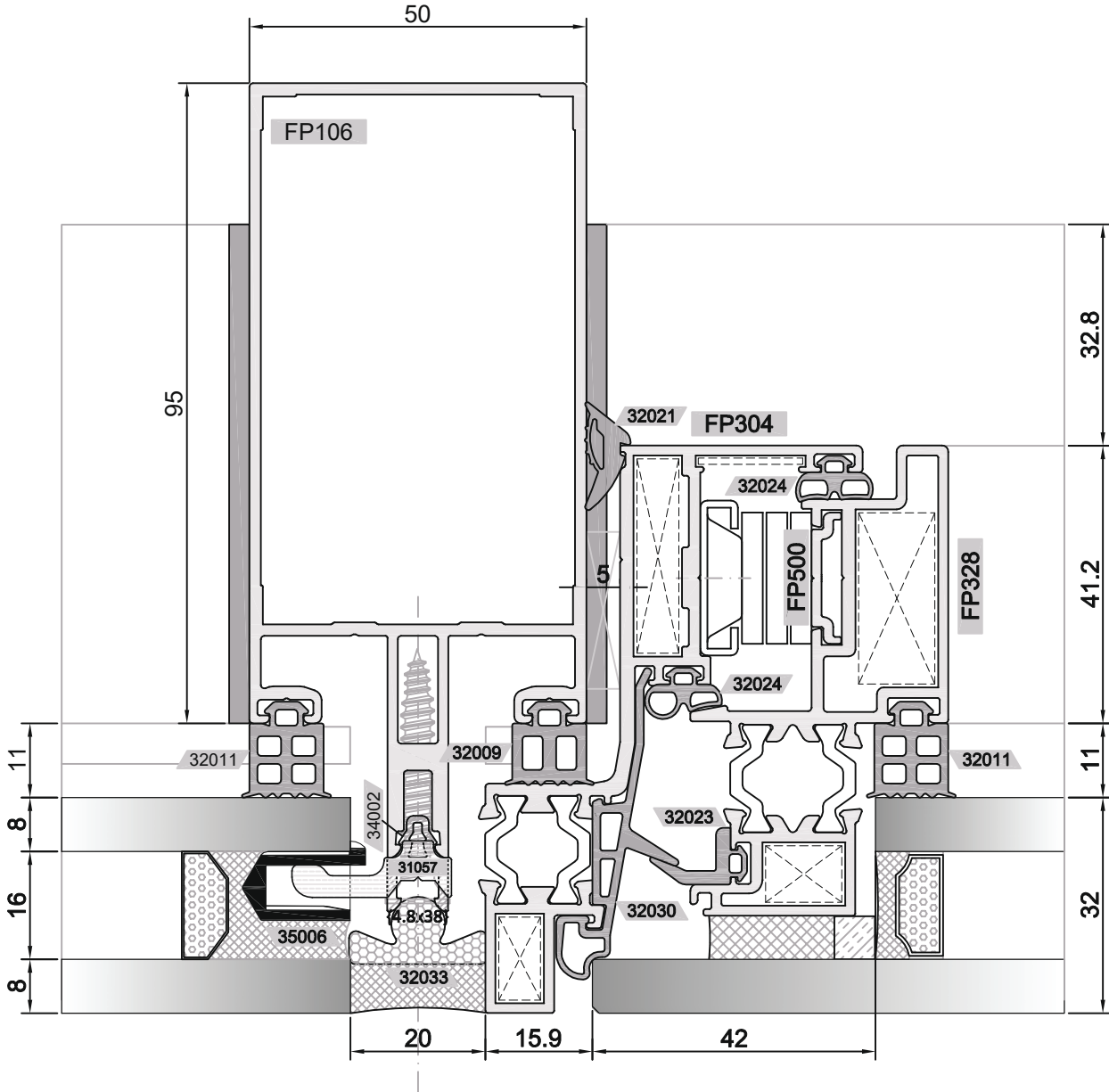
YATAY DETAYI
HORIZONTAL DETAIL

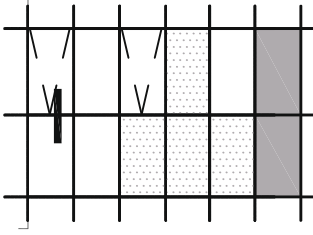




DÜŞEY DETAYI
VERTICAL DETAIL

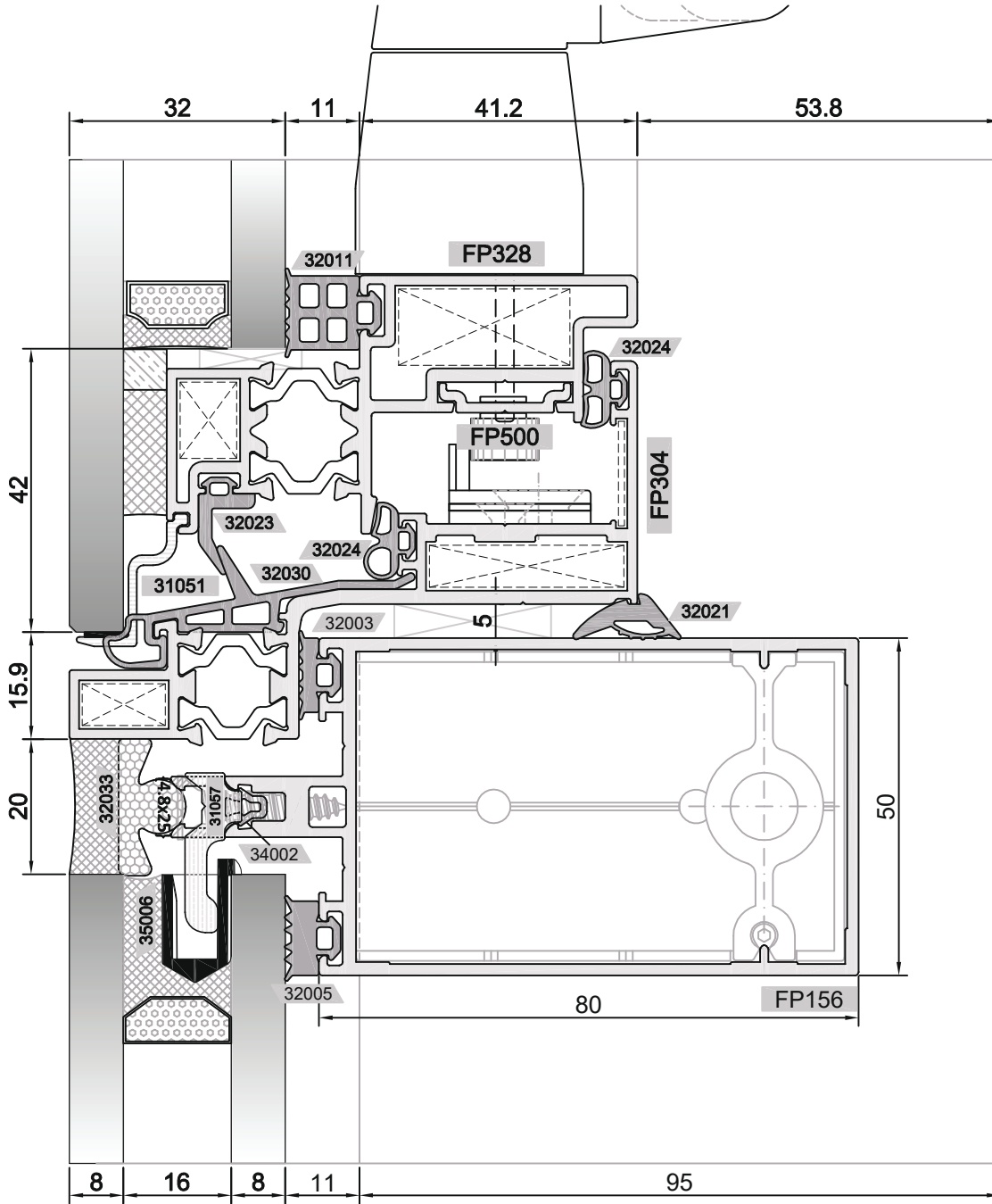
ALTERNATİF 2: YALITIMLI KANAT DETAYI
ALTERNATIVE 2 : INSULATED VENT DETAIL

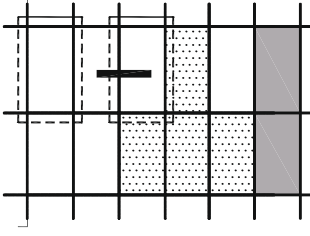




ALTERNATİF 2: YALITIMLI KANAT DETAYI
ALTERNATIVE 2 : INSULATED VENT DETAIL

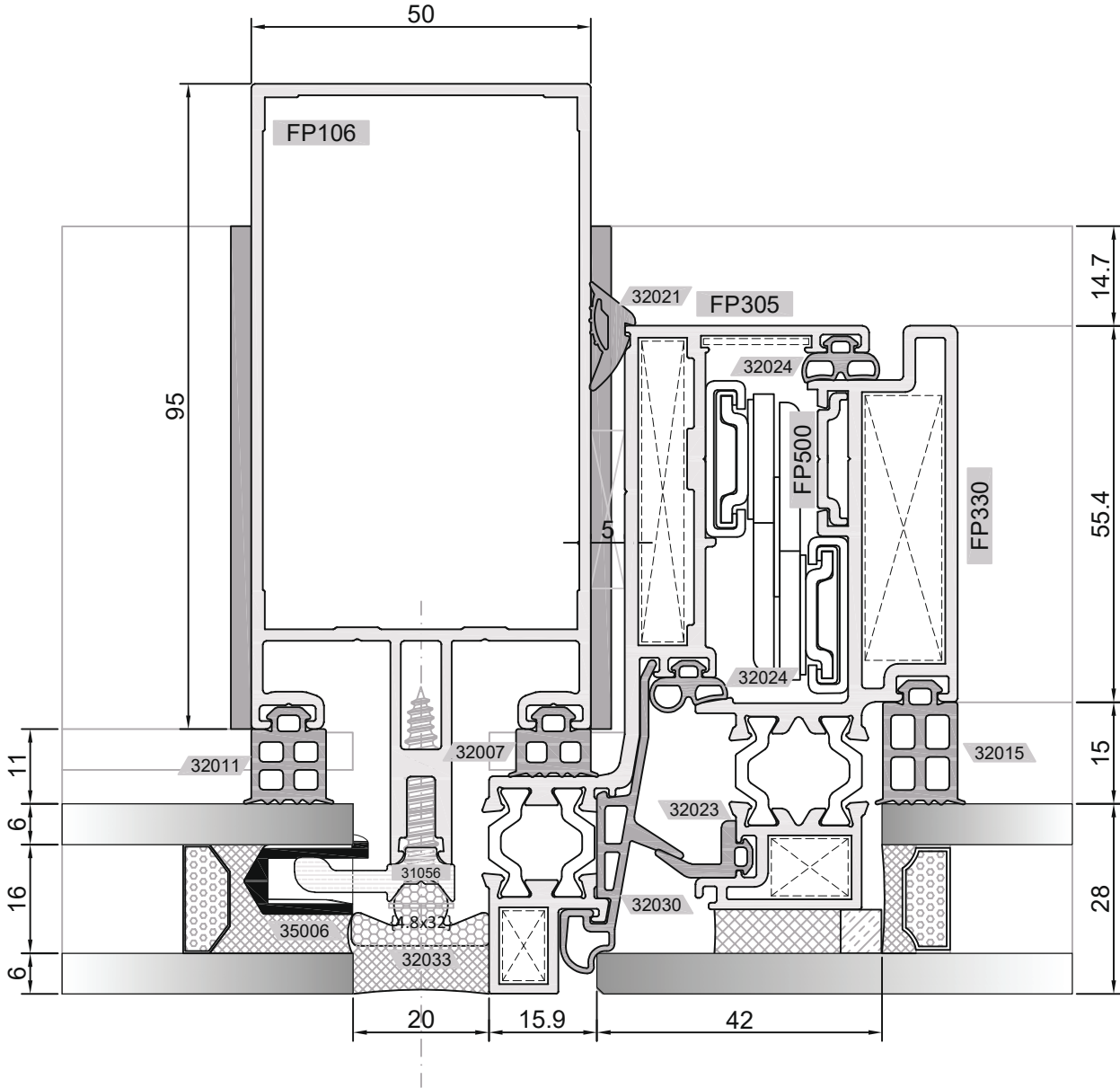
YATAY DETAYI
HORIZONTAL DETAIL

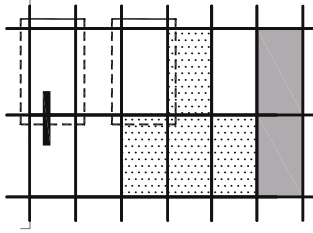




ALTERNATİF 1: YALITIMLI PARALEL AÇILIR KANAT DETAYI
ALTERNATIVE 1 : PARALLEL OPENING INSULATED VENT DETAIL

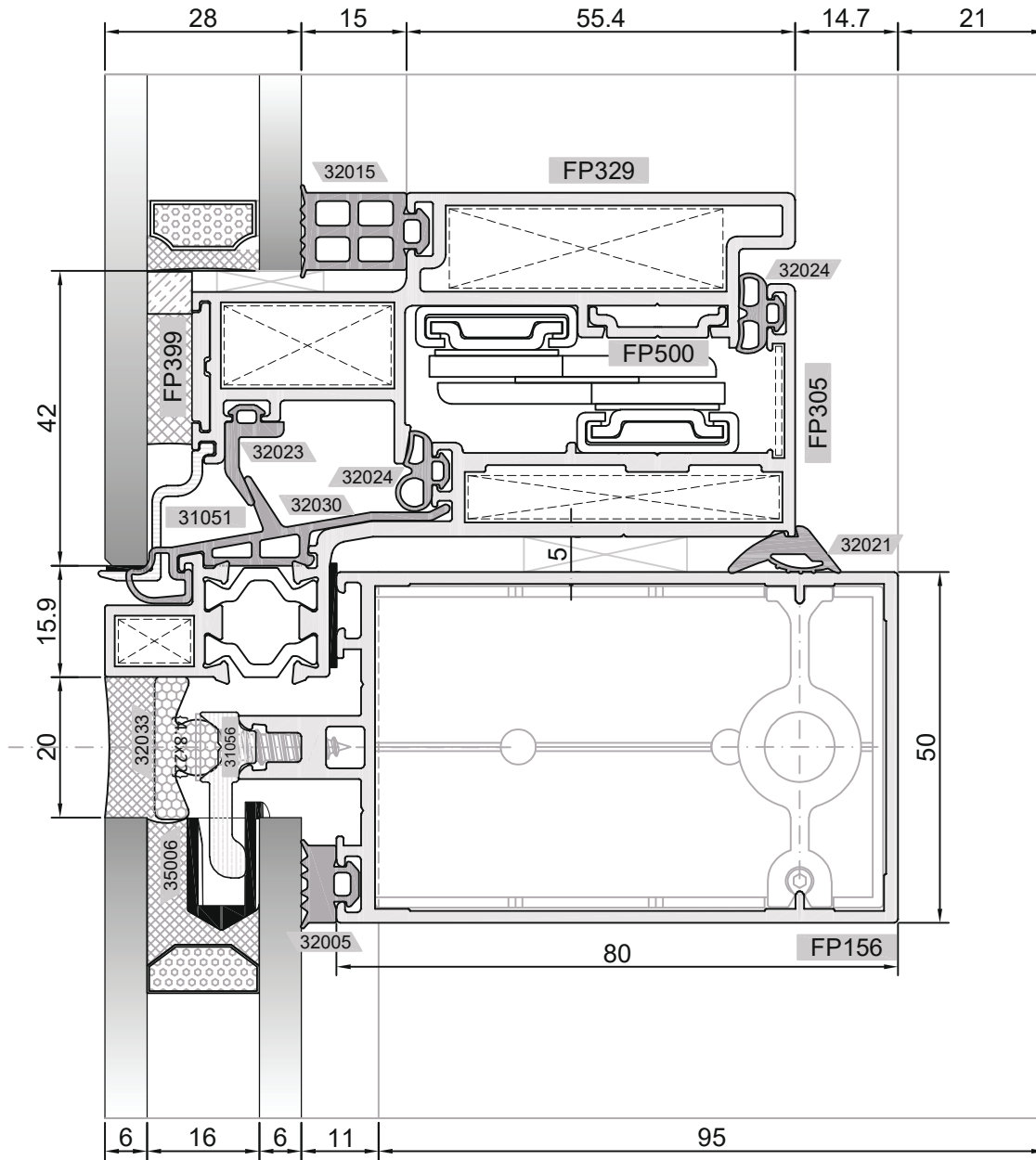
DÜŞEY DETAYI
VERTICAL DETAIL

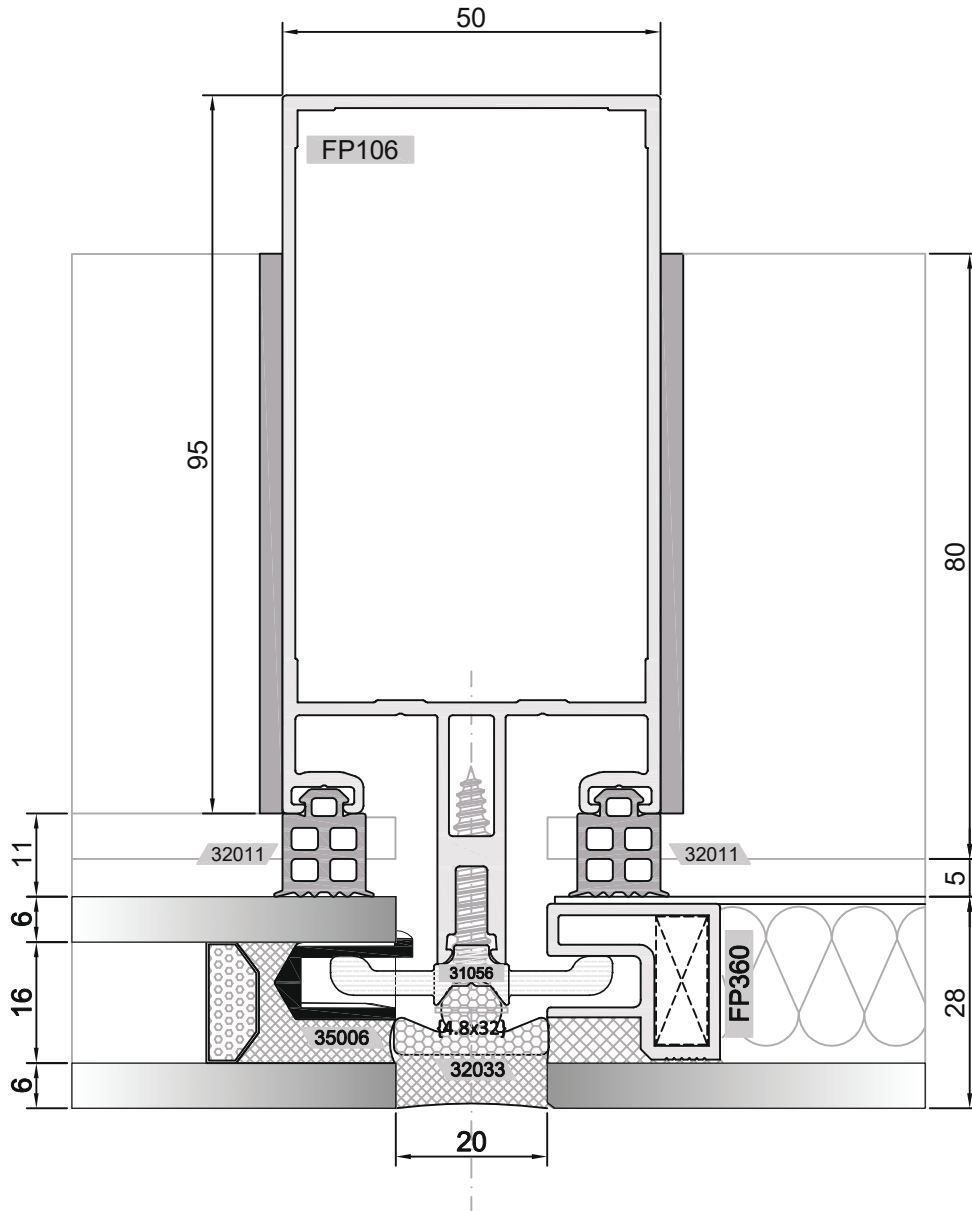
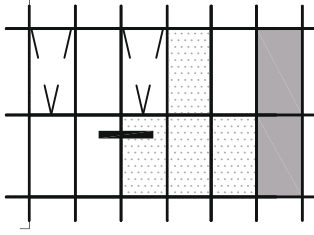


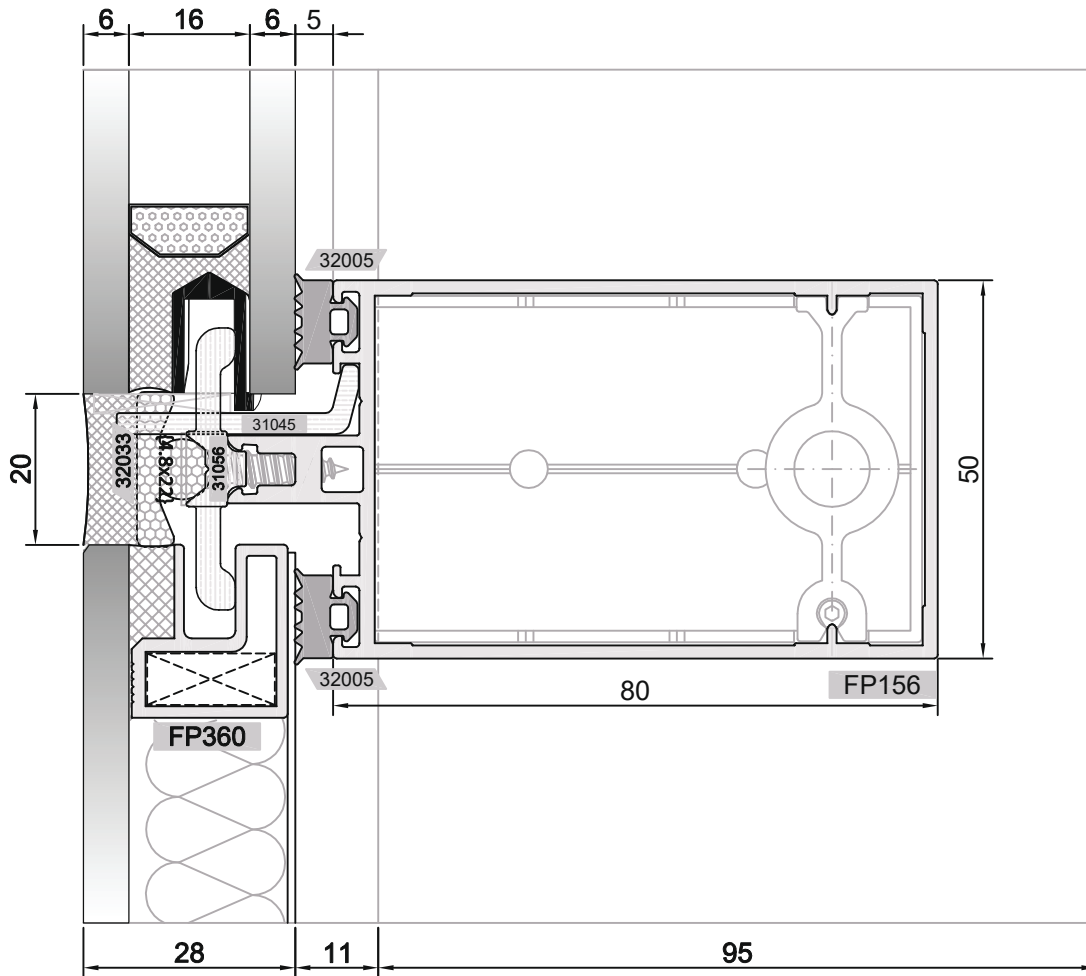
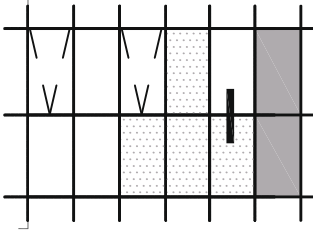


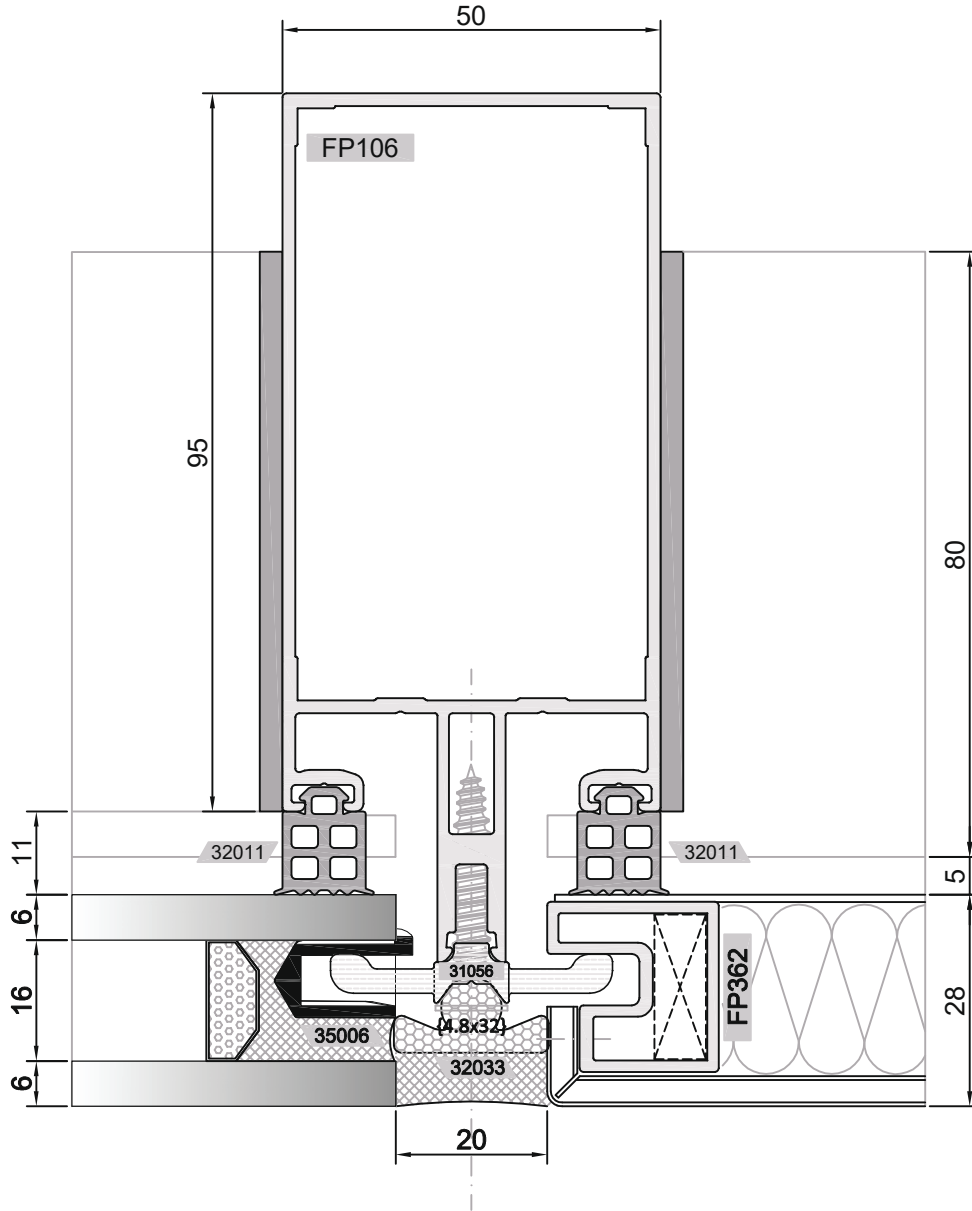
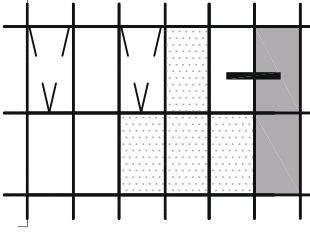
ALTERNATİF 2: YALITIMSIZ PARALEL AÇILIR KANAT DETAYI
ALTERNATIVE 2 : PARALLEL OPENING UNINSULATED VENT DETAIL

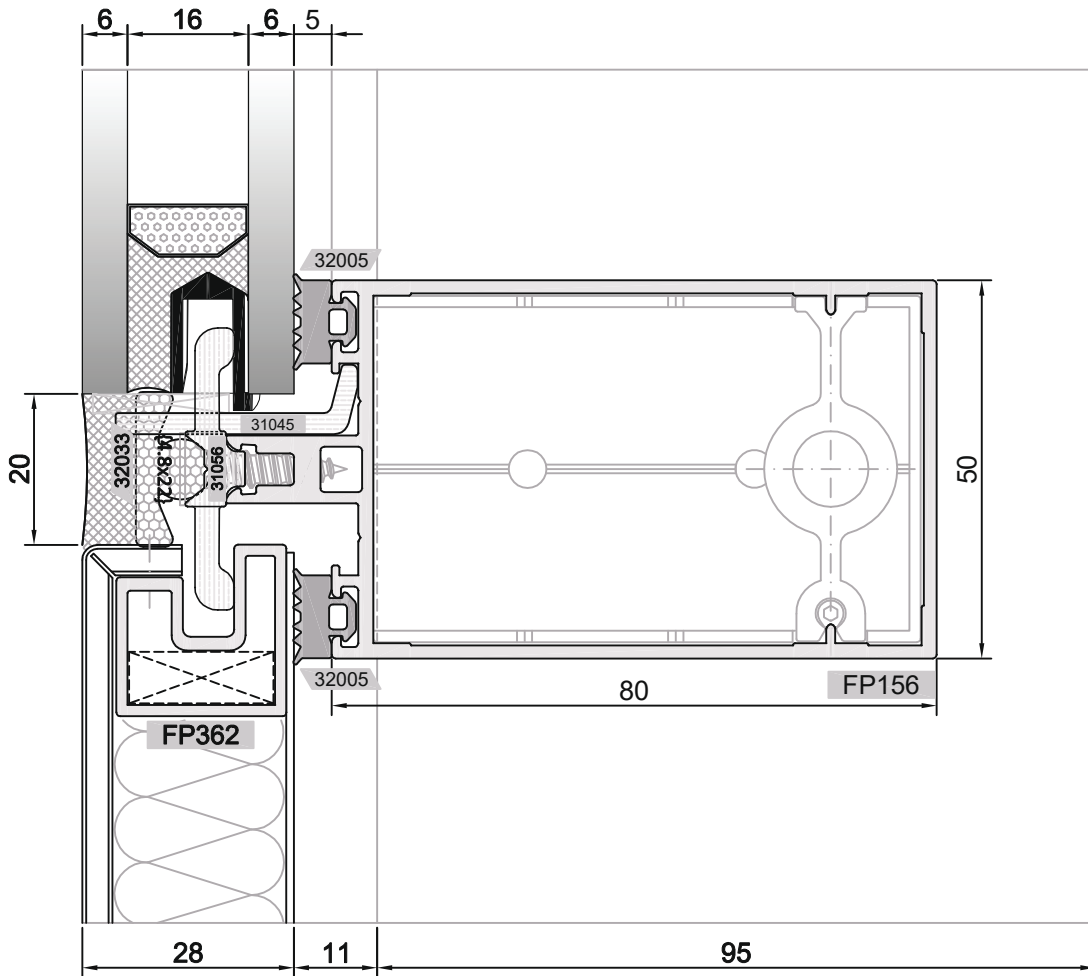
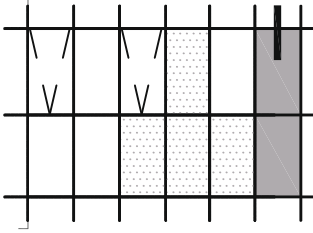
YATAY DETAYI
HORIZONTAL DETAIL

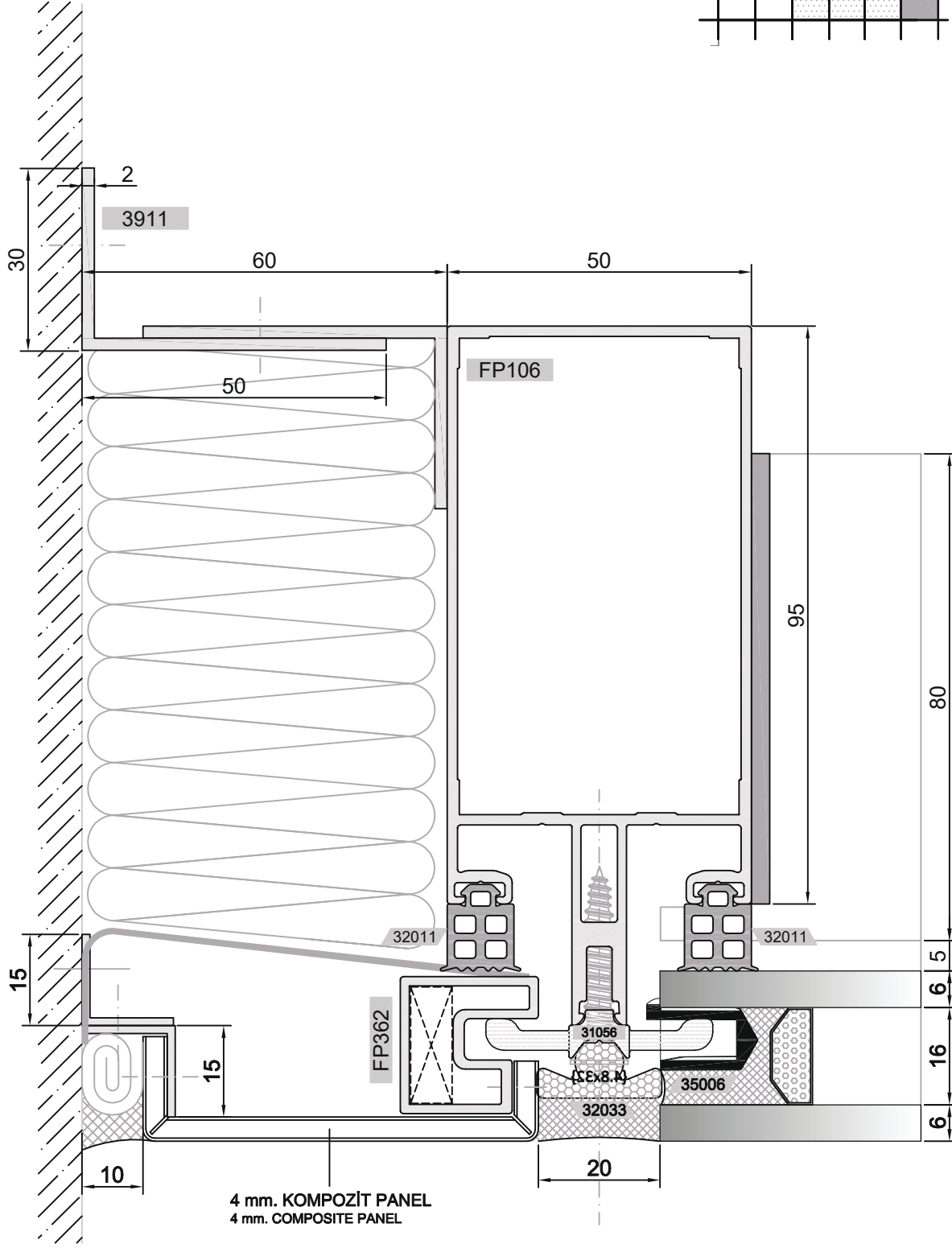


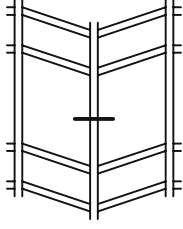




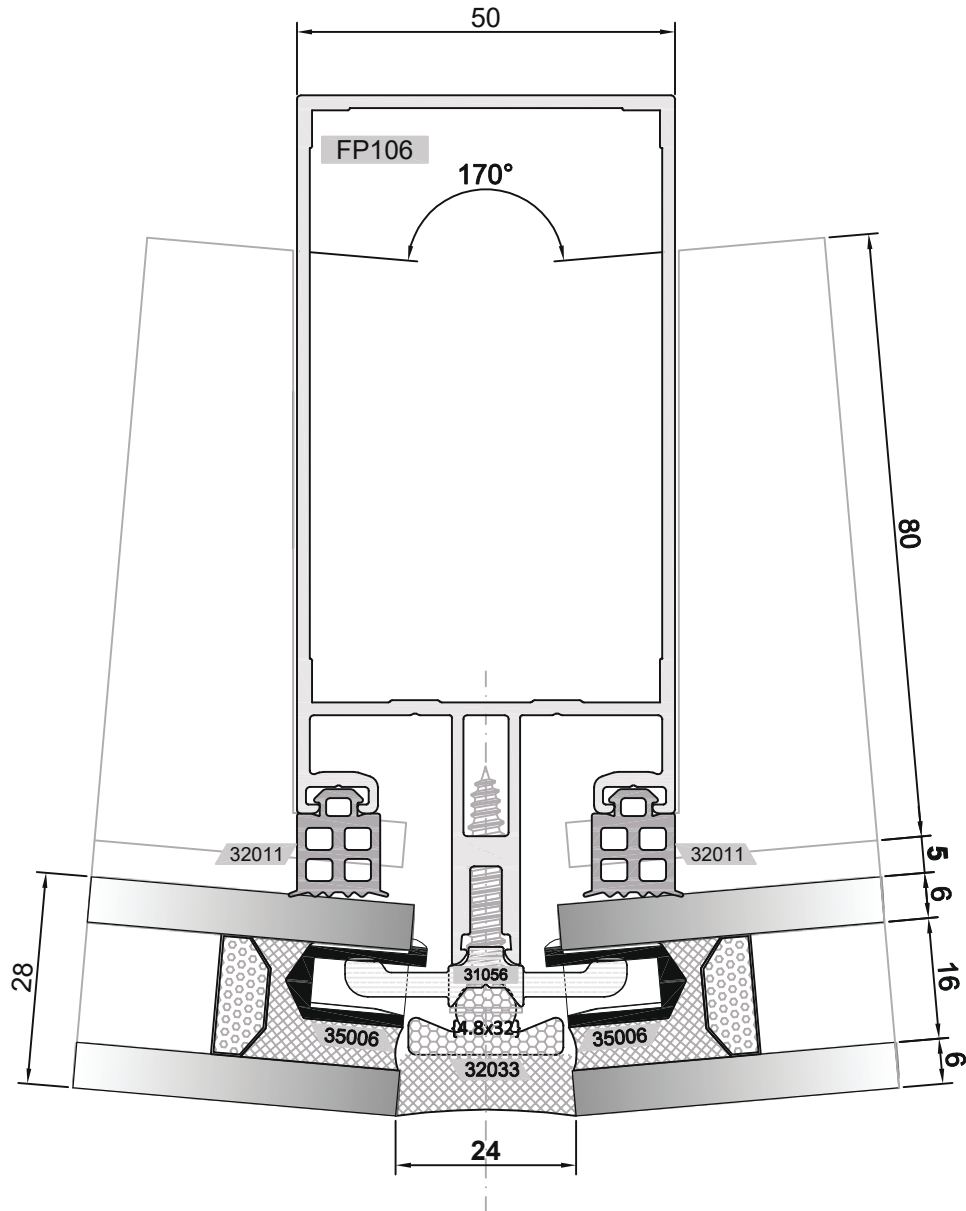


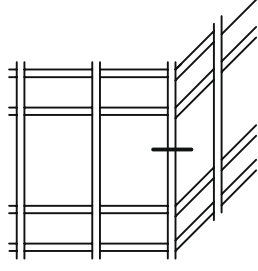






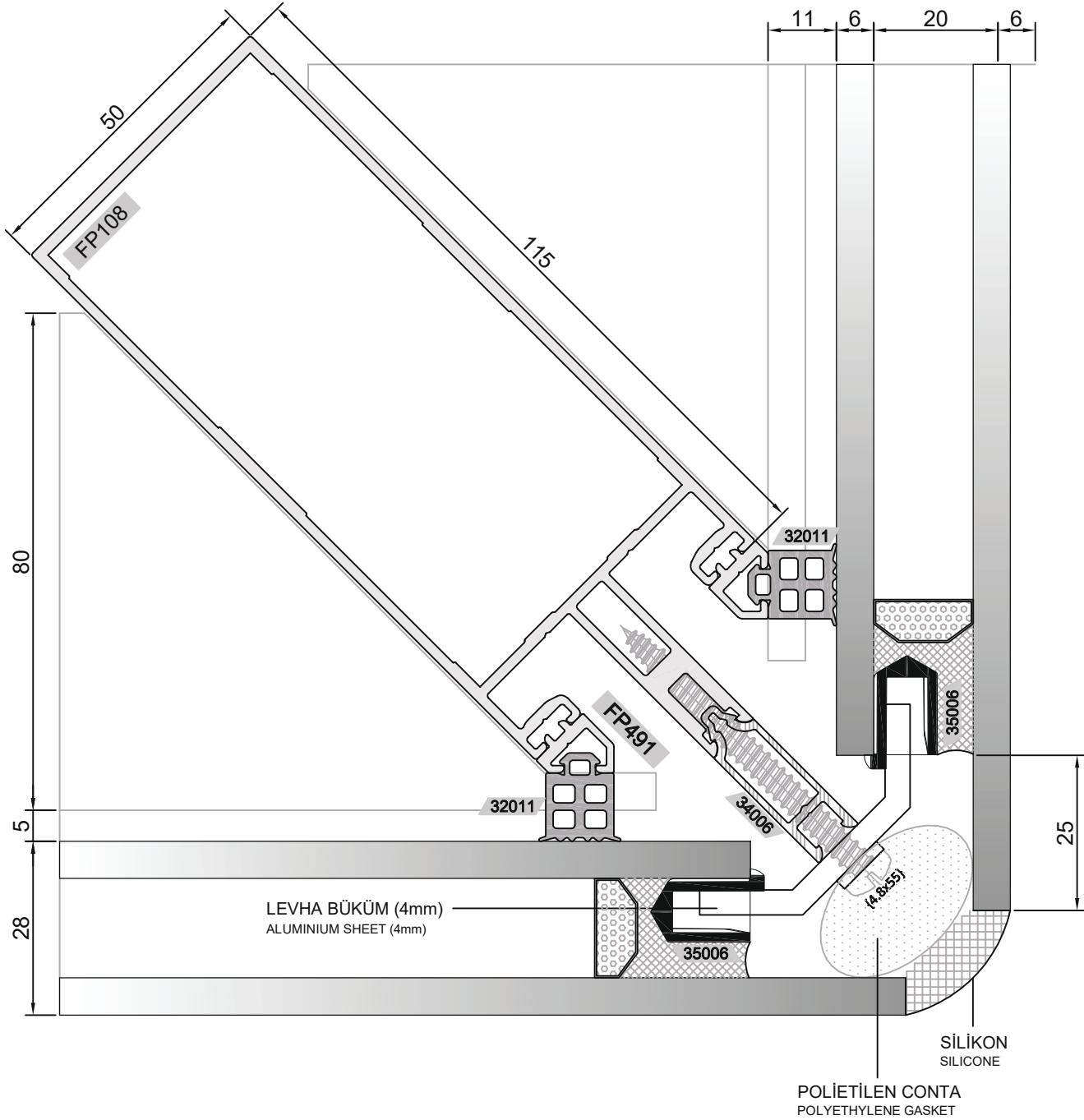
0° - 10°

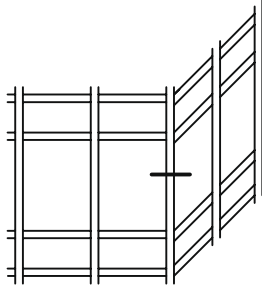




ALTERNATİF 1: TEK DİKMELİ KÖŞE DETAYI
ALTERNATIVE 1 : CORNER DETAIL WITH SINGLE MULLION

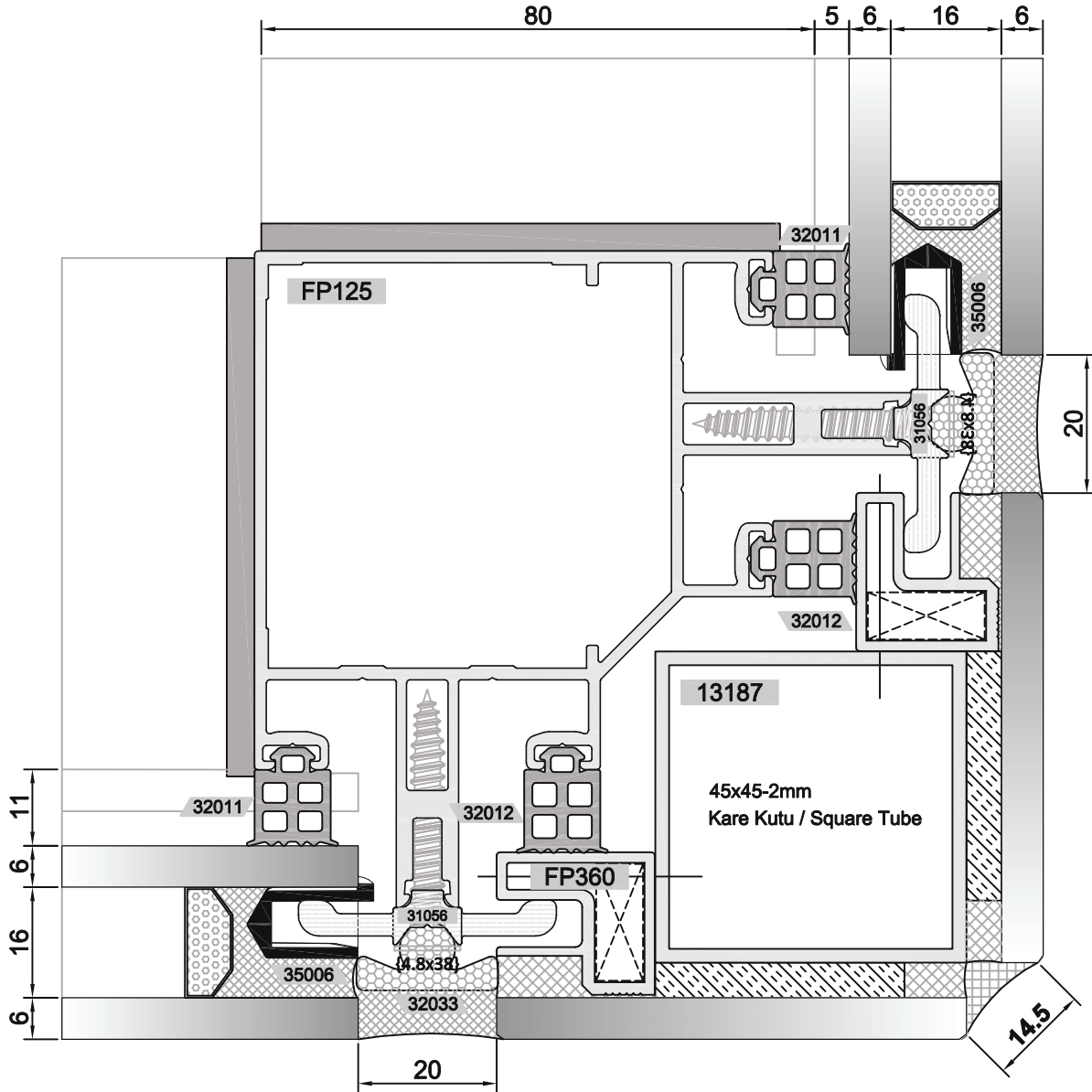
90°

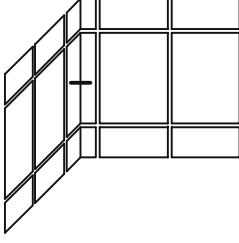




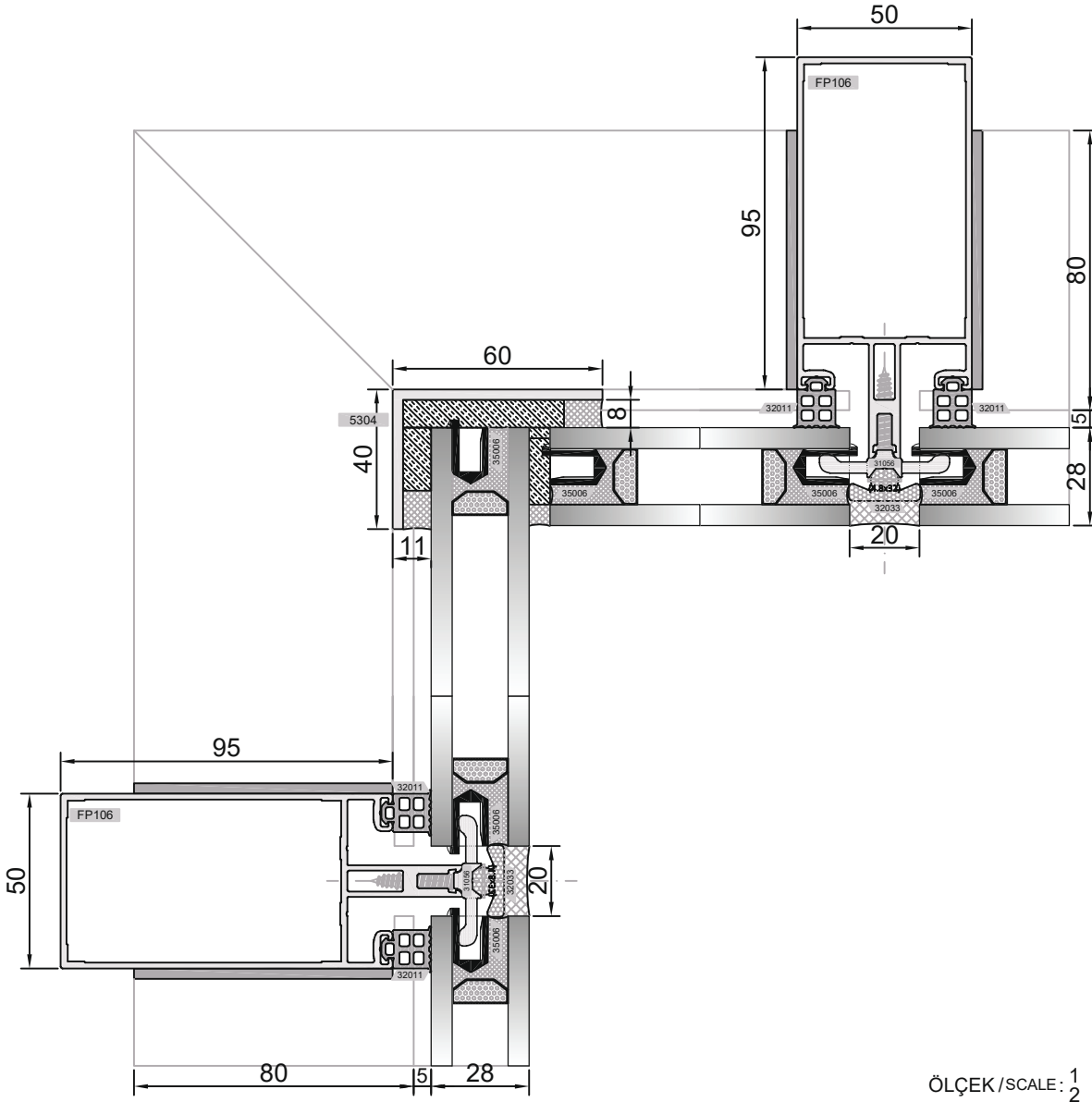
90°

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





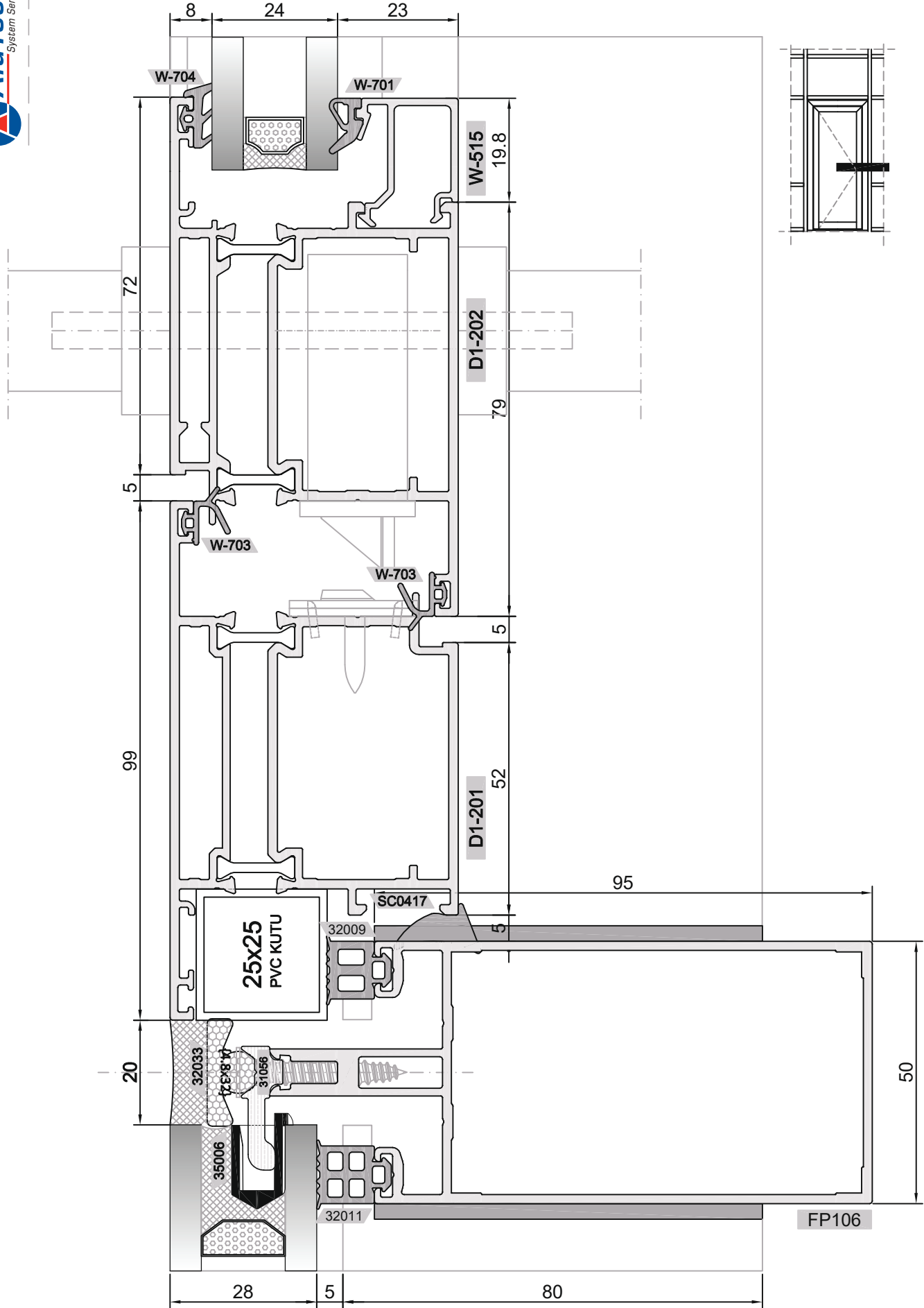
90° İÇ AÇILI CAM CEPHE DÜŞEY KESİT DETAYI
FOUR SIDE WITH 90° INTERNAL ANGLE VERTICAL DETAIL



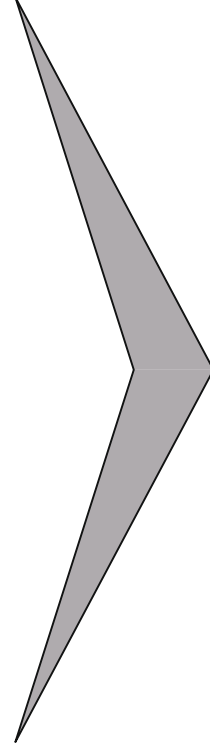
ÖLÇEK / SCALE: $\frac{1}{2}$

F50-ENERGY

* ENTEGRE CEPHE / INTEGRATED CURTAIN WALL

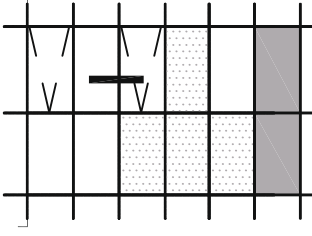


YARI-KAPAKLI CEPHE SEMI-CAPPED CURTAIN WALL

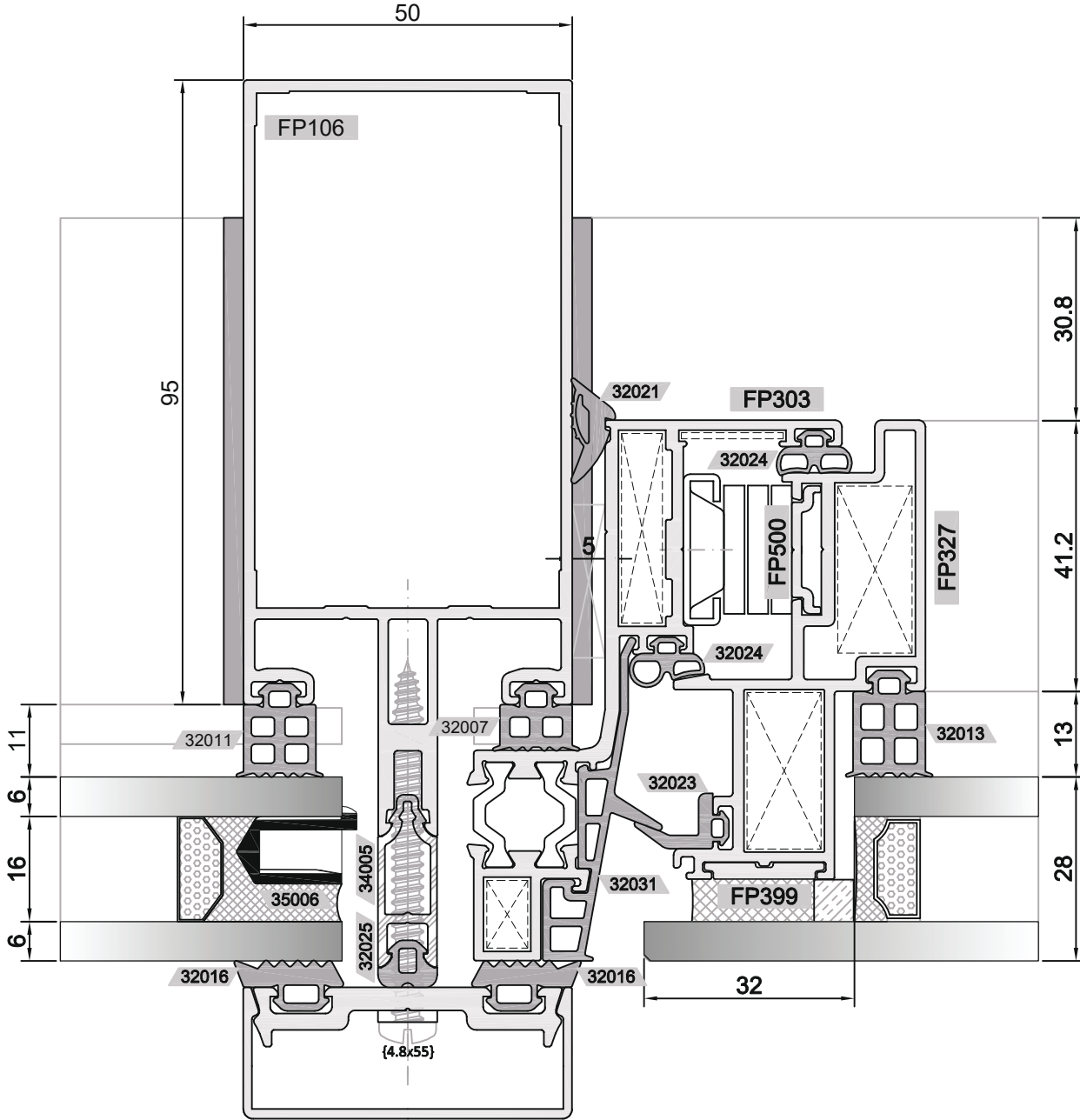


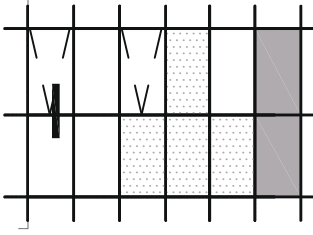
* **16mm ÖZEL SICAK
KENAR ISICAM ÇITASI**
16mm SPECIAL WARM
EDGE SPACER

► **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.

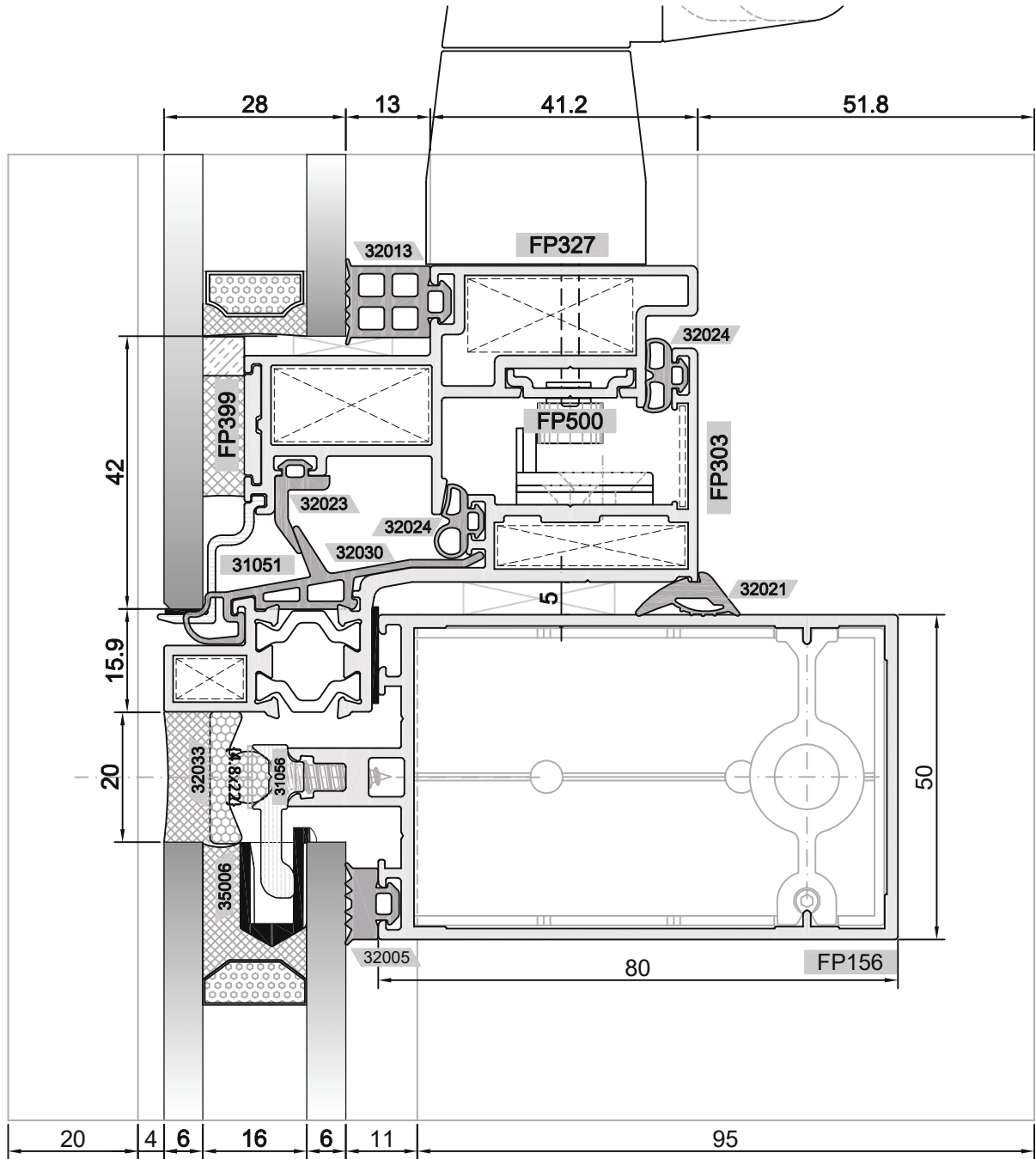


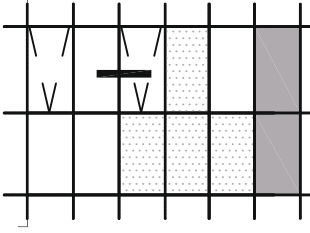
DÜŞEY DETAYI
VERTICAL DETAIL



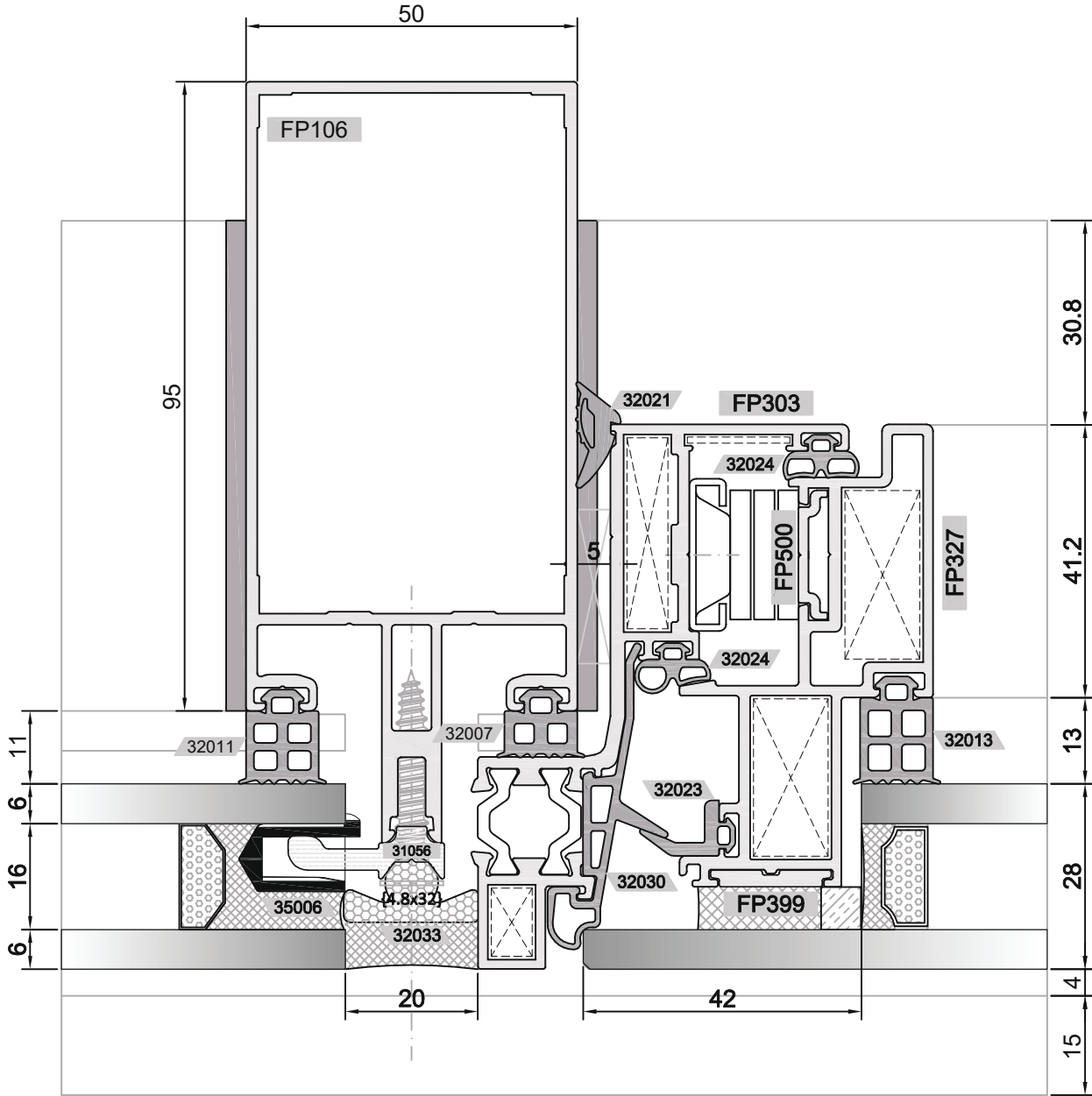


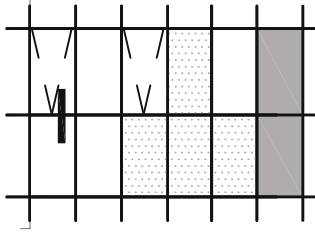
YATAY DETAYI
HORIZONTAL DETAIL



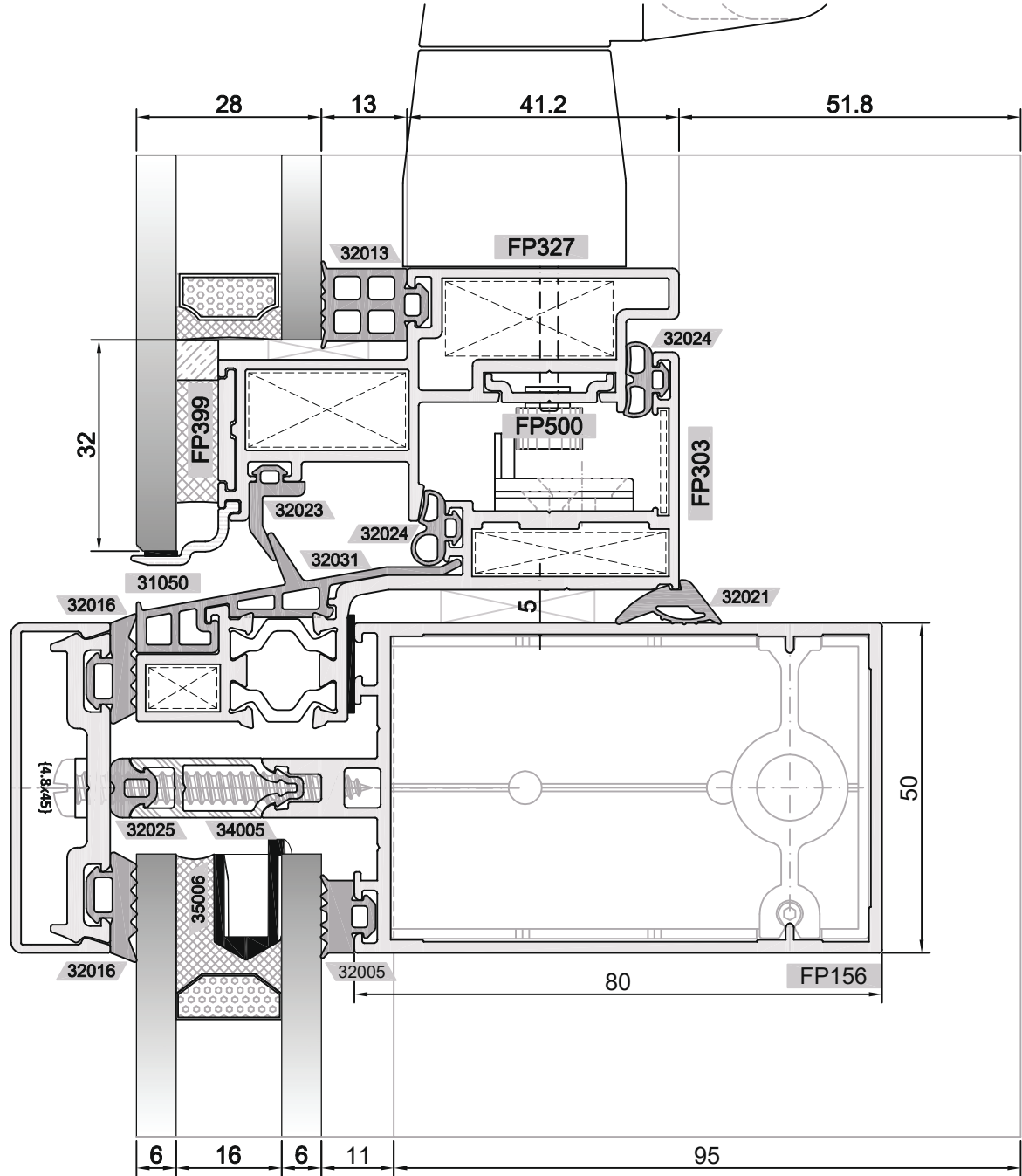


DÜŞEY DETAYI
VERTICAL DETAIL

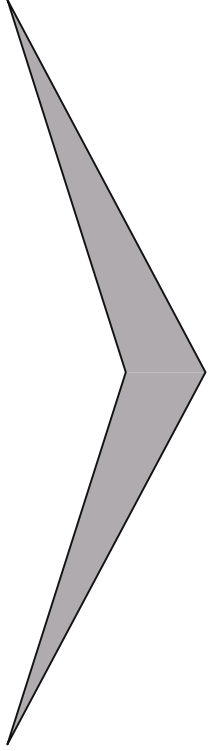




YATAY DETAYI
HORIZONTAL DETAIL

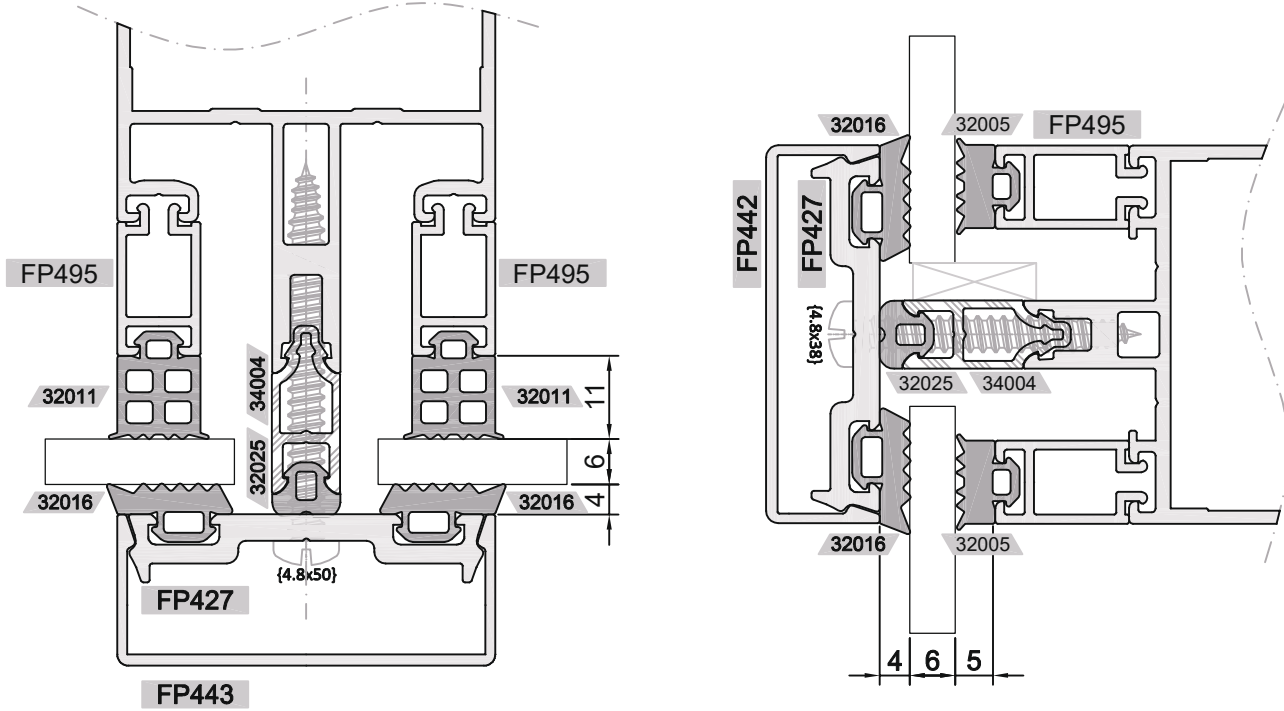


**CAM KALINLIKLARINA GÖRE
KAPAKLI SİSTEM DETAYLARI**
CAPPED CURTAIN WALL DETAILS
ACCORDING TO THE GLASS
THICKNESSES

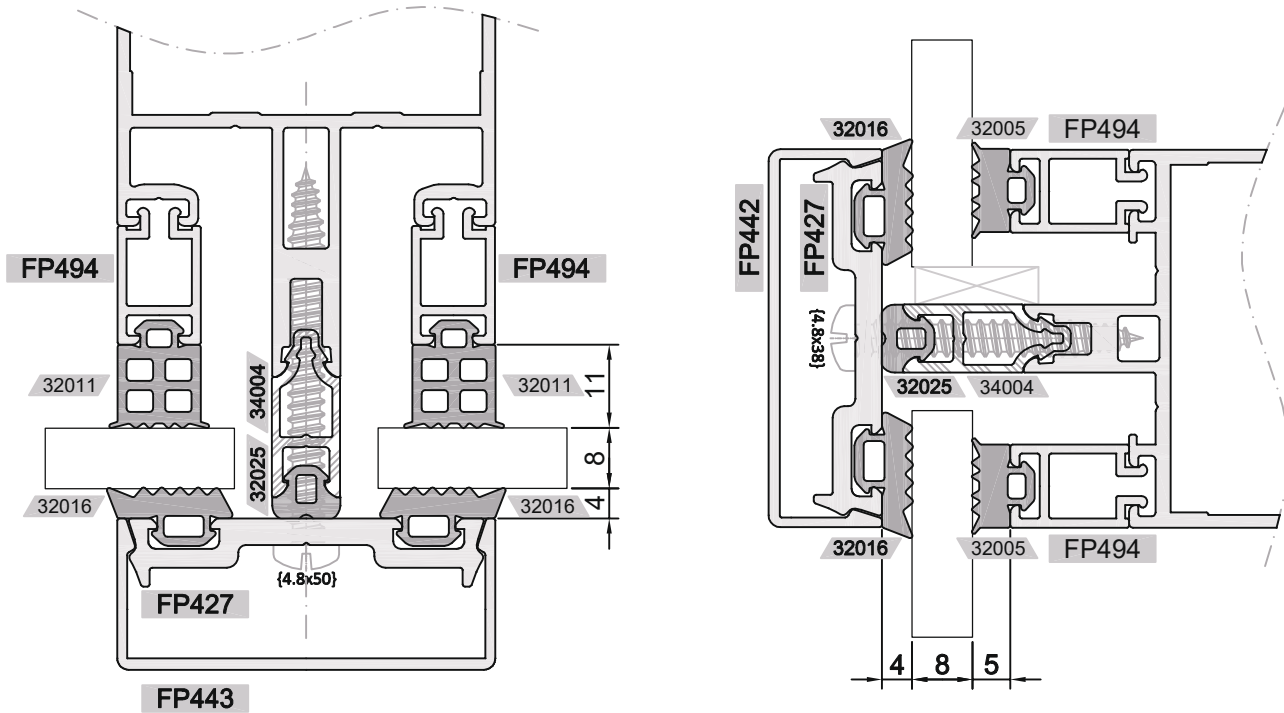


► SİSTEM ALÜMİNYUM® KATALOG İÇERİSİNDEKİ VERİLERDE DÜZELTME VEYA DEĞİŞİKLİK YAPMA HAKKINA SAHİPTİR.
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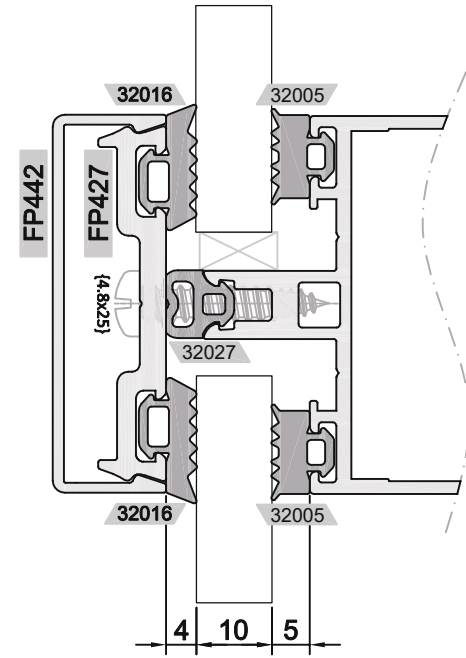
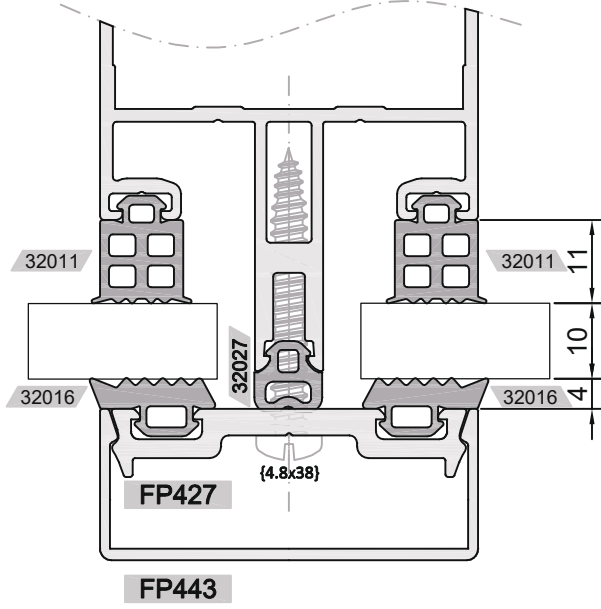
6mm



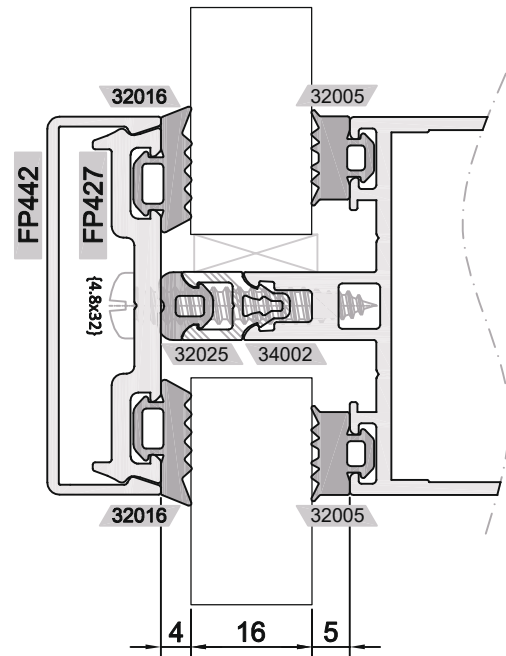
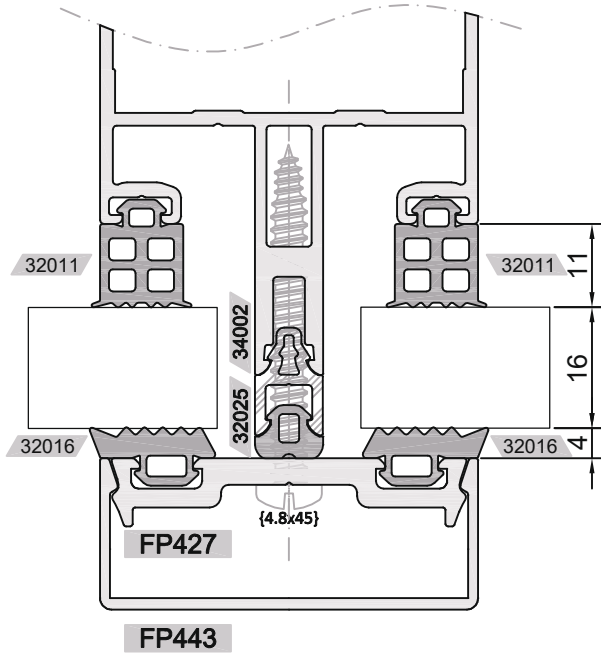
8mm



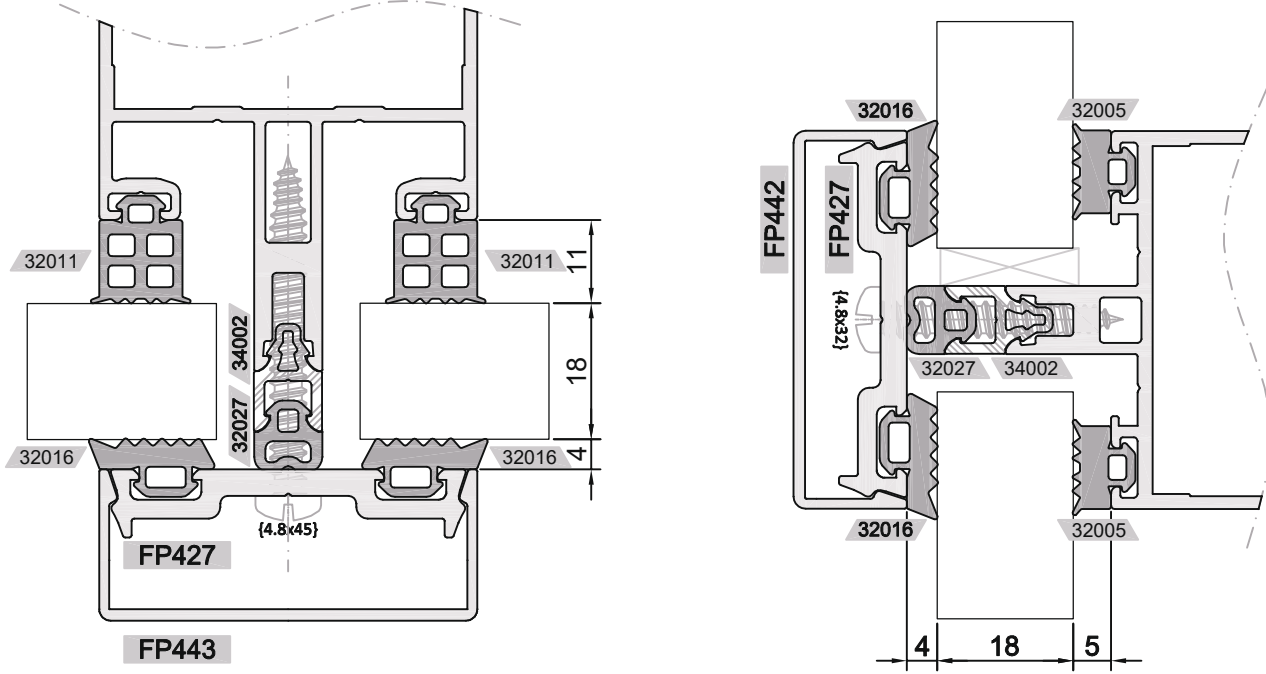
10mm



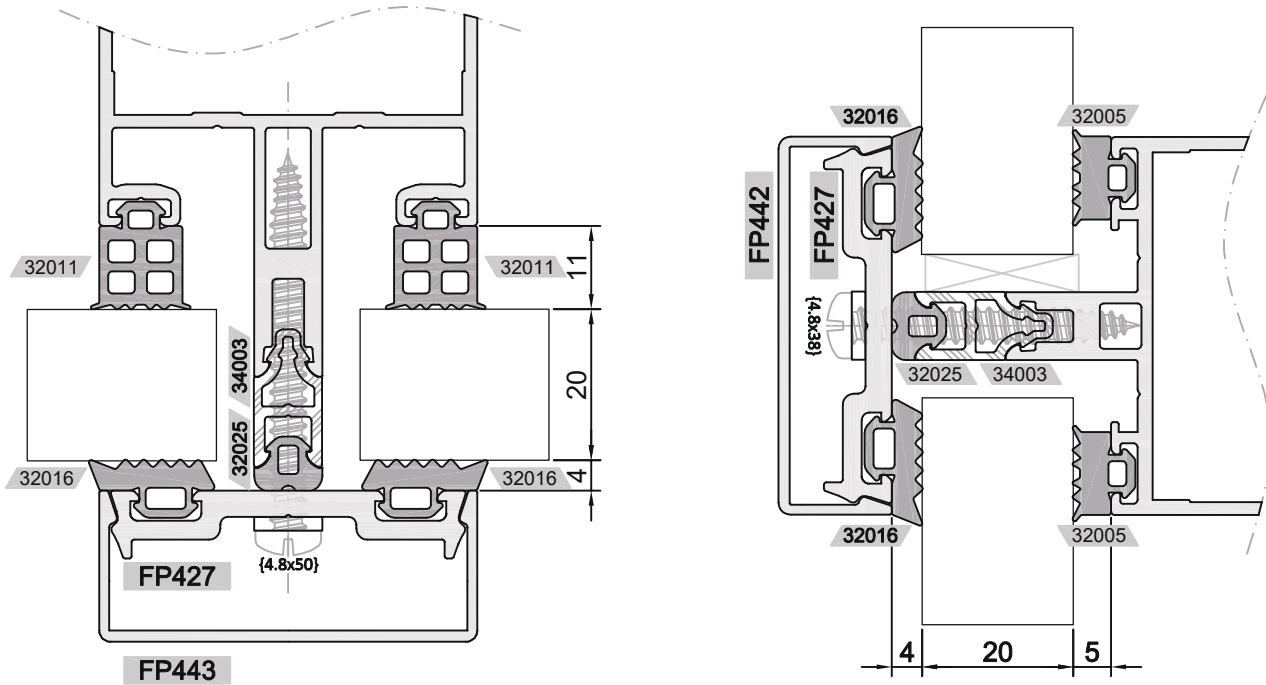
16mm



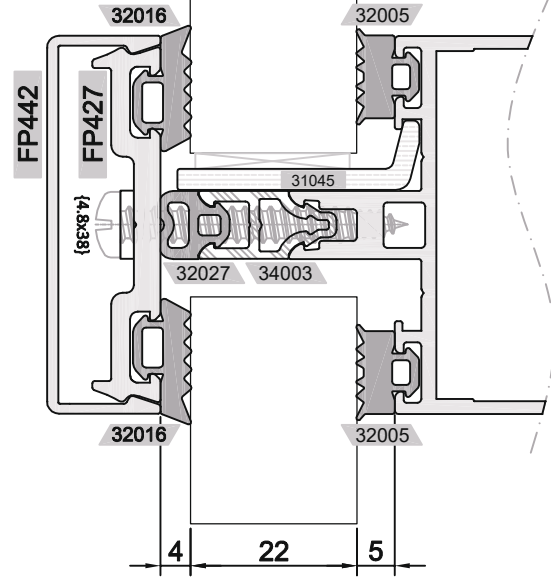
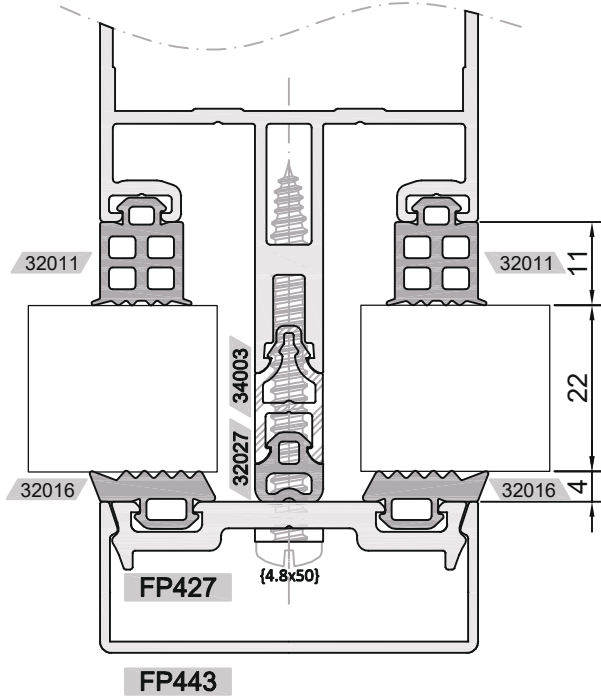
18mm



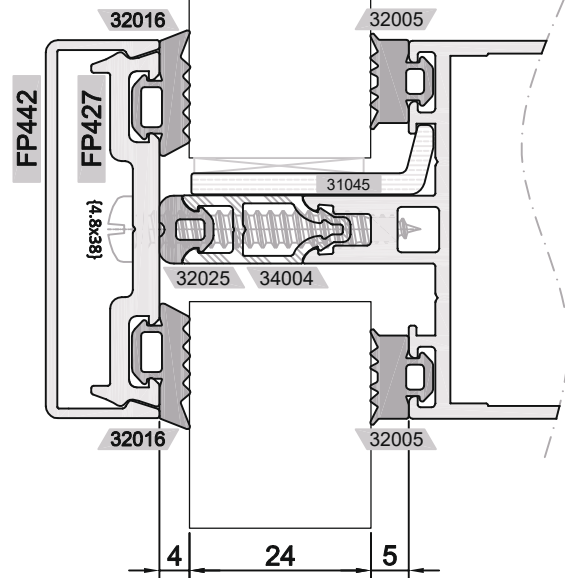
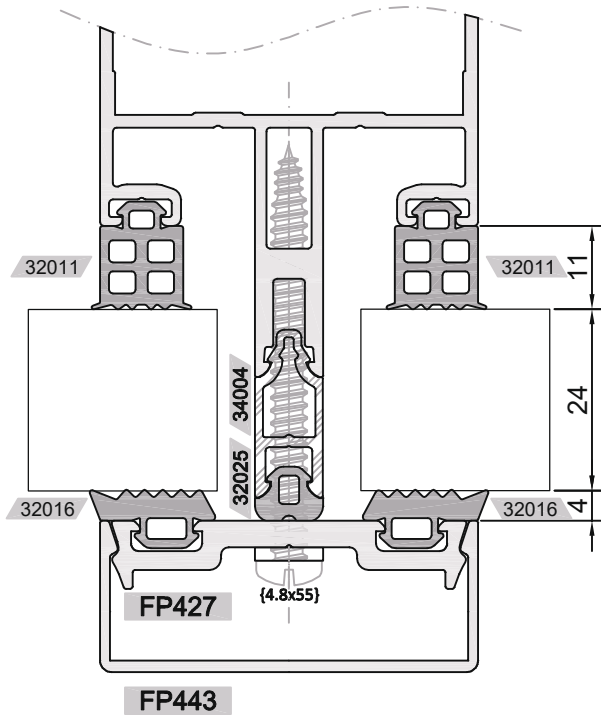
20mm



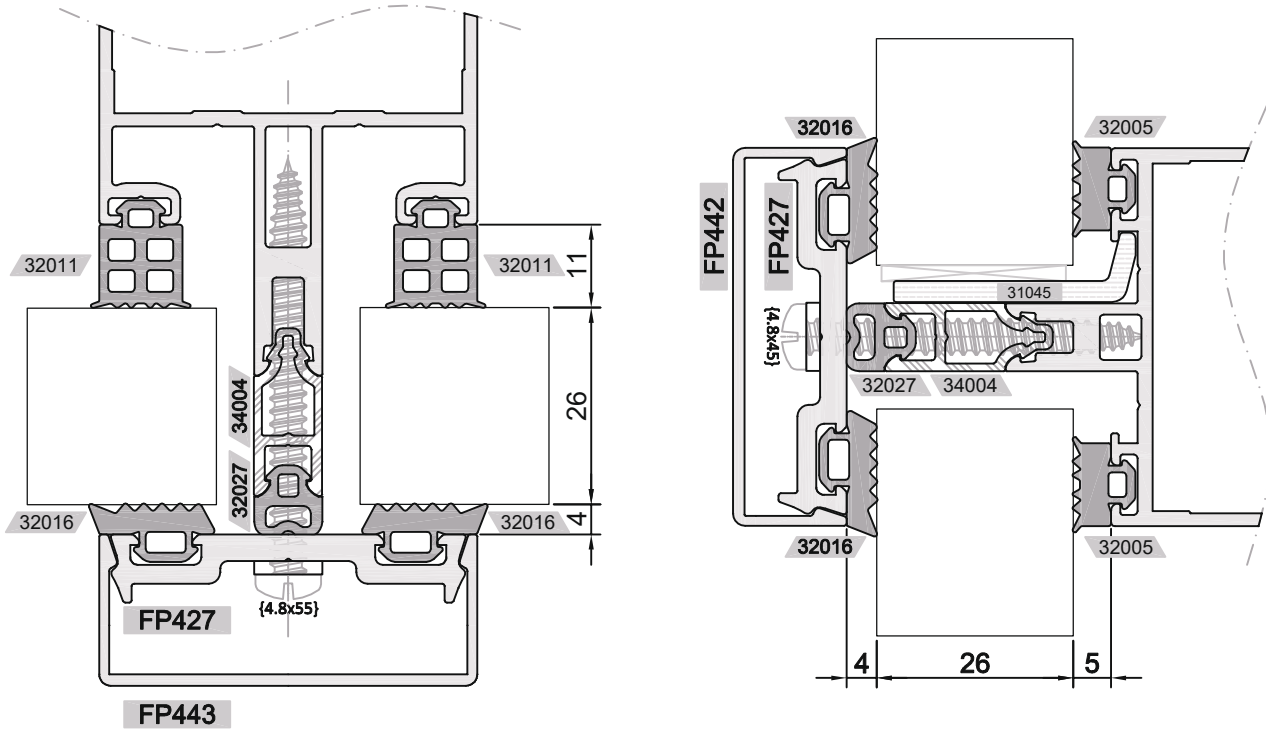
22mm



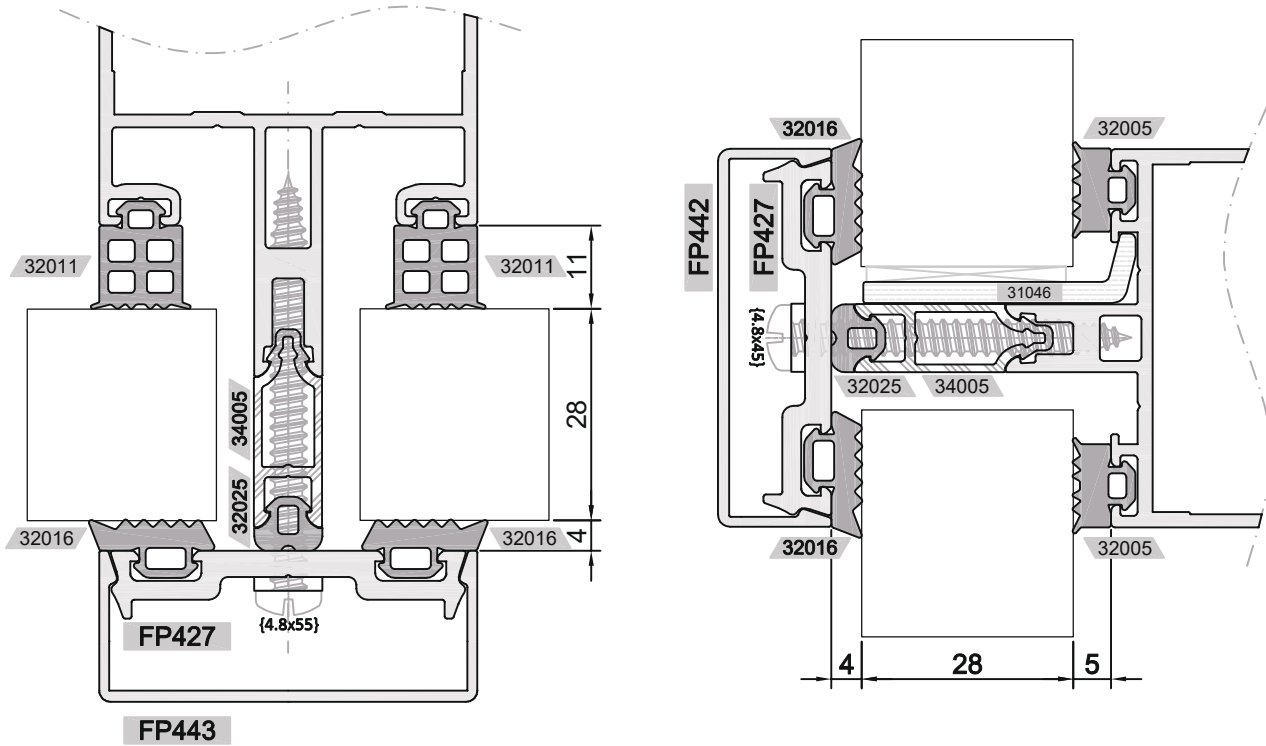
24mm



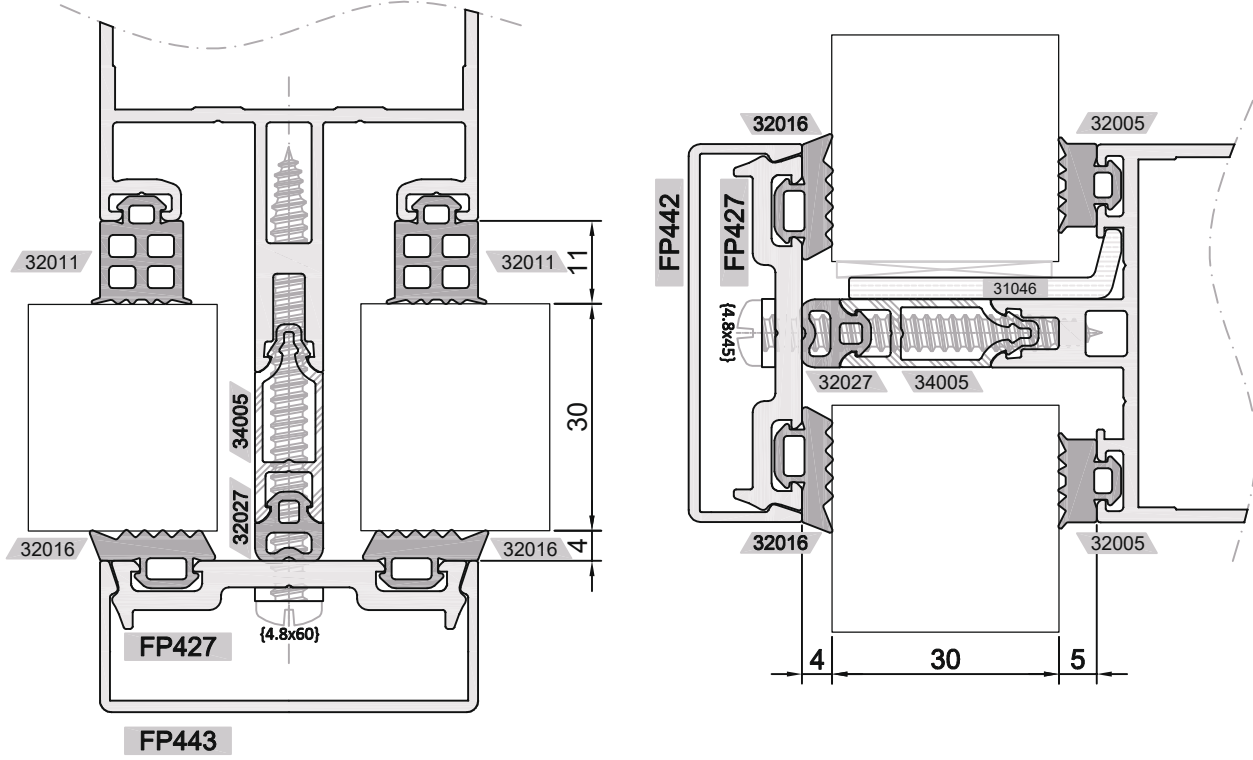
26mm



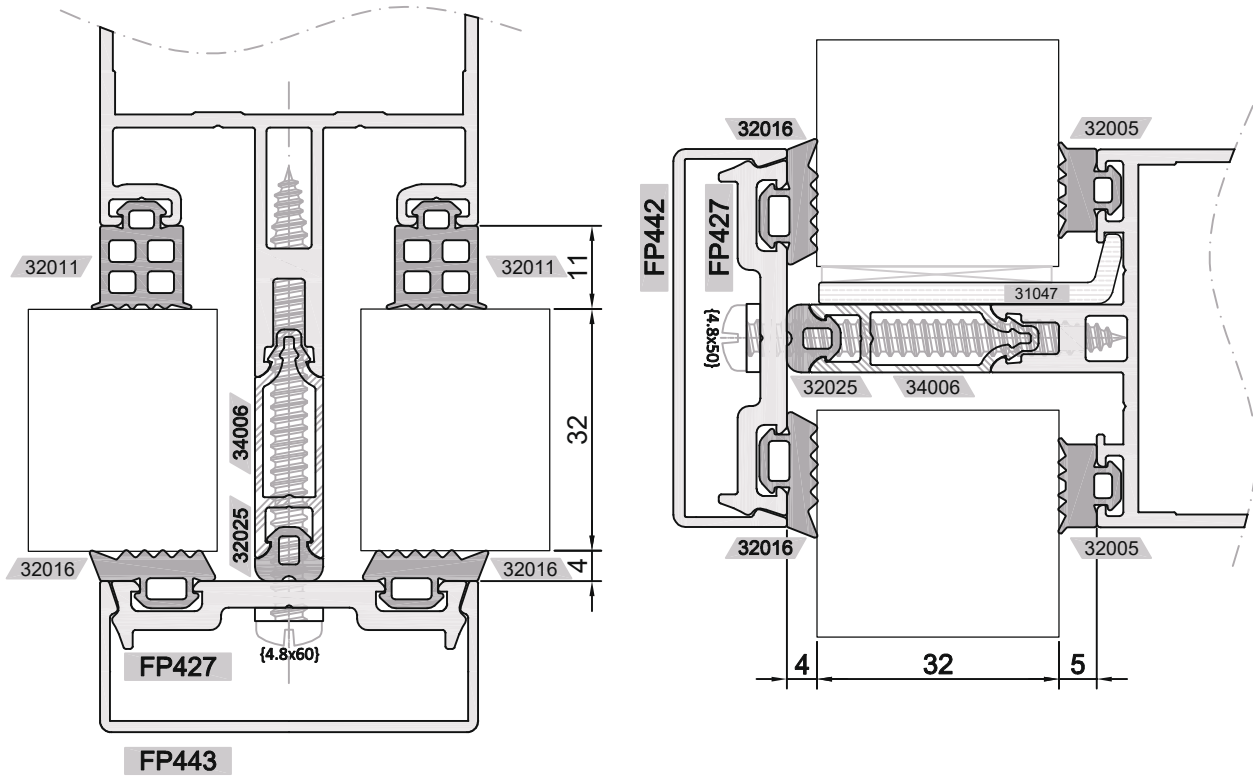
28mm



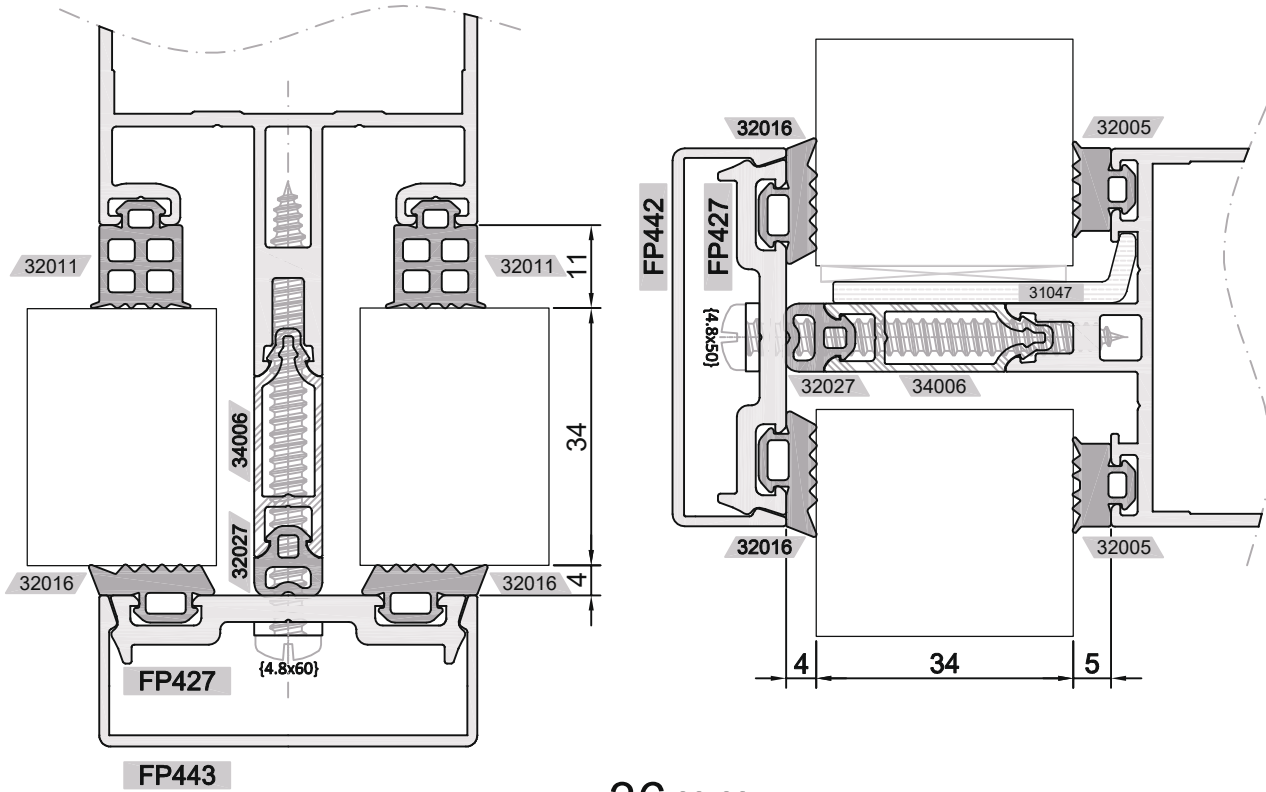
30mm



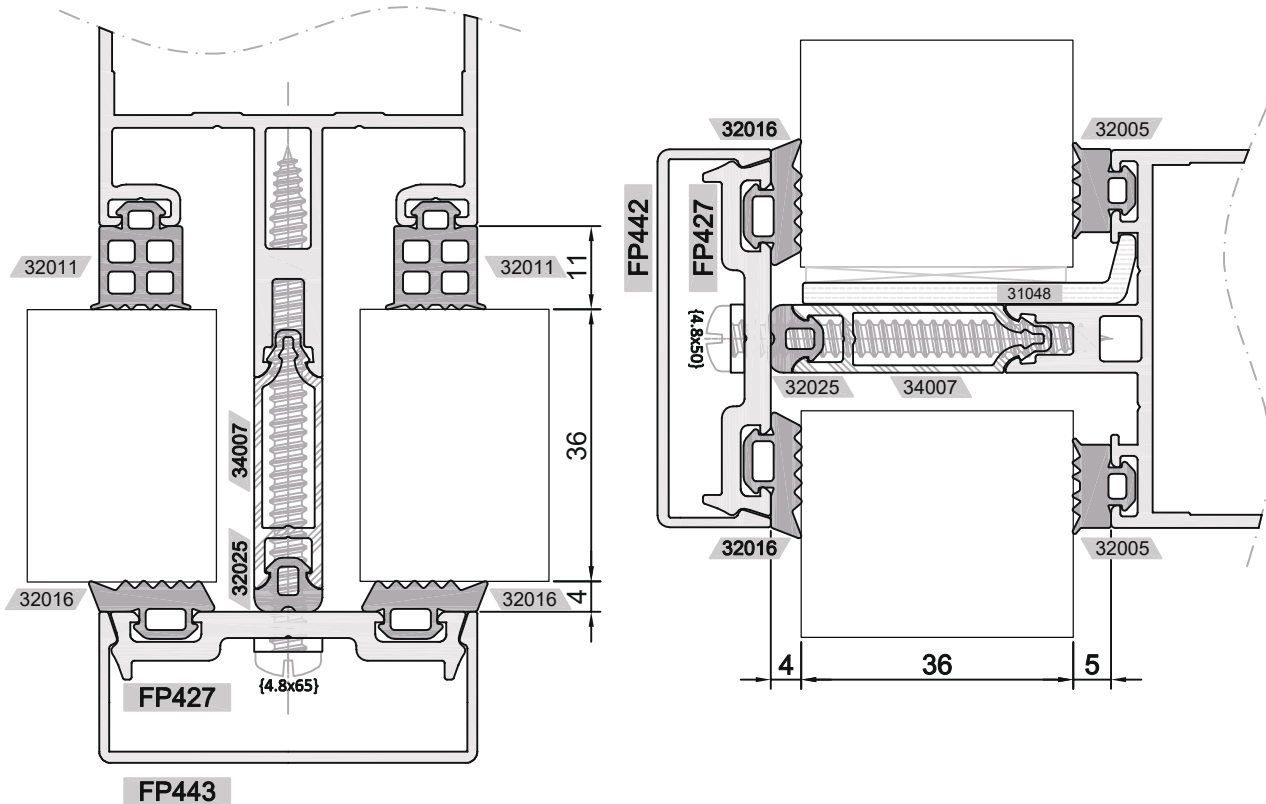
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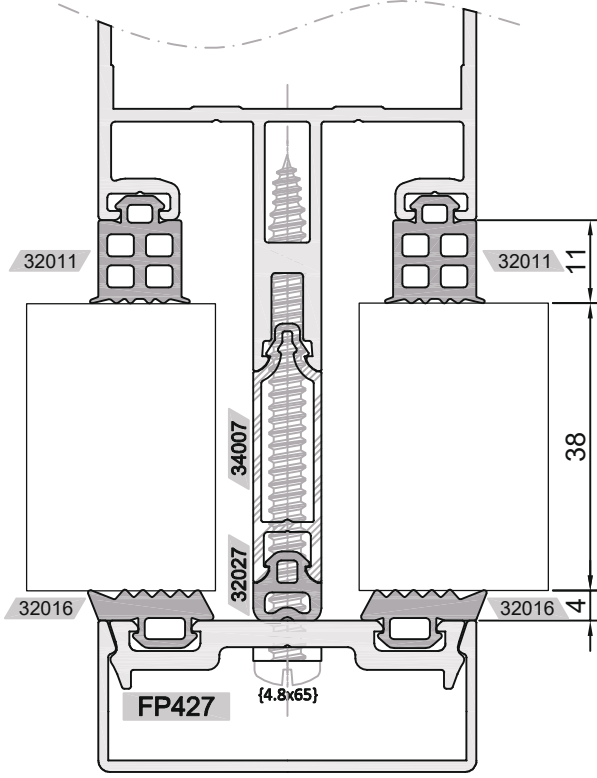
34mm



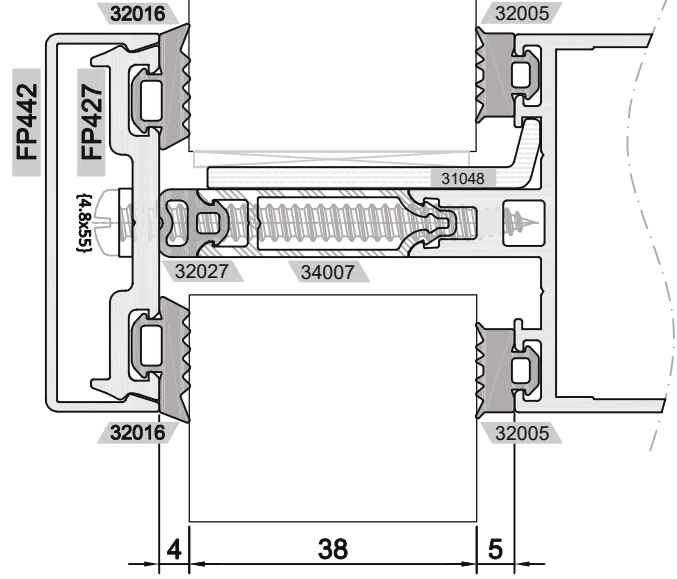
36mm



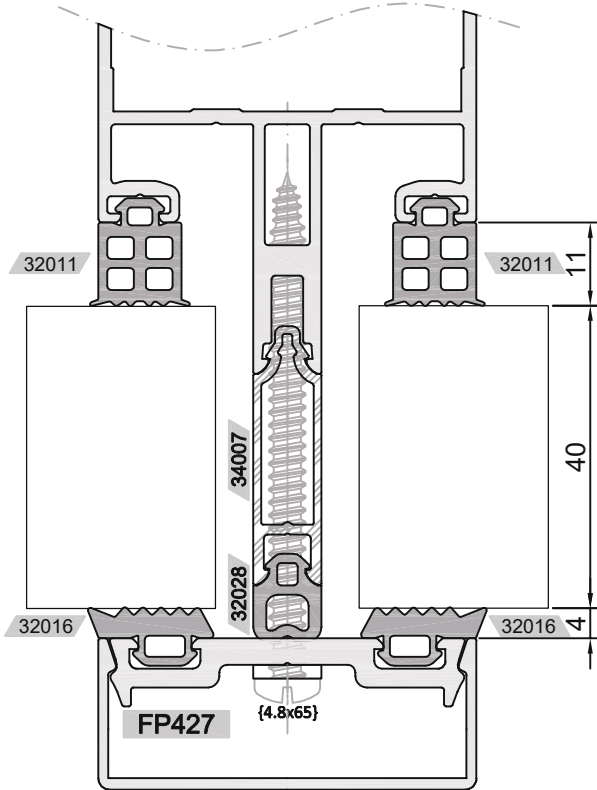
38mm



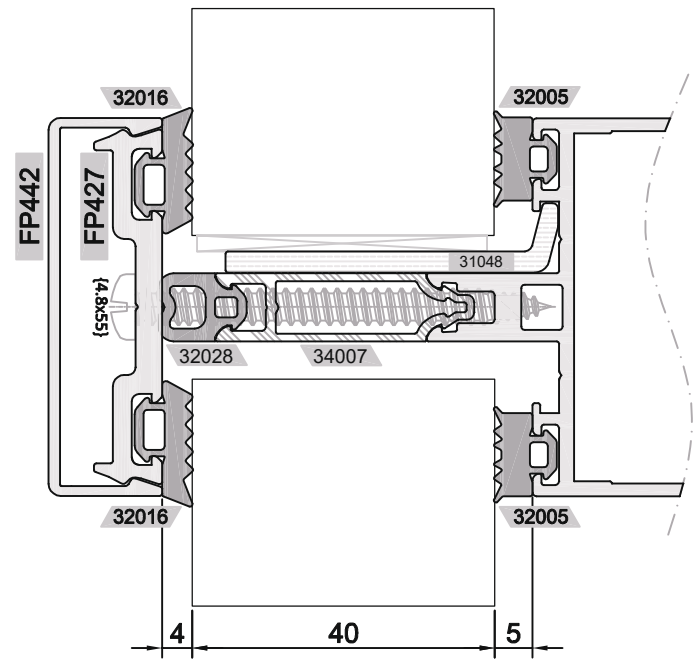
FP443



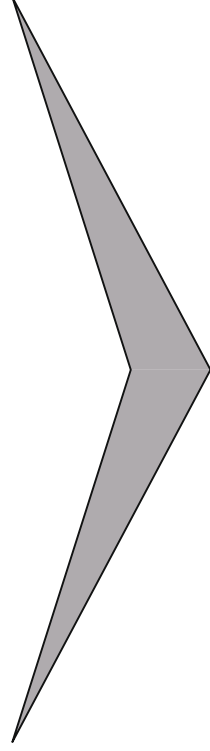
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FP443



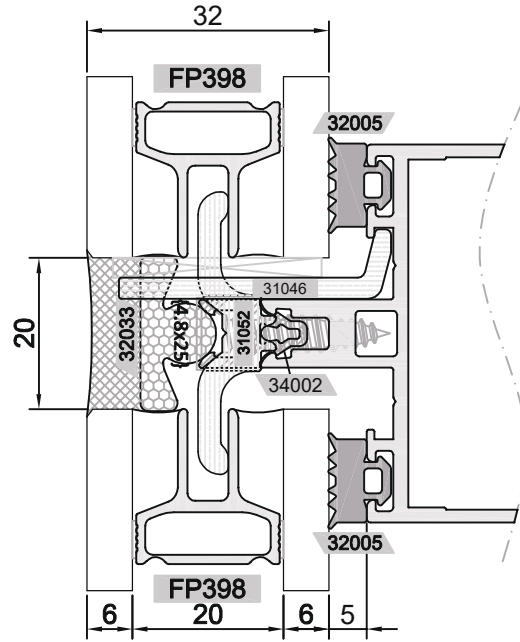
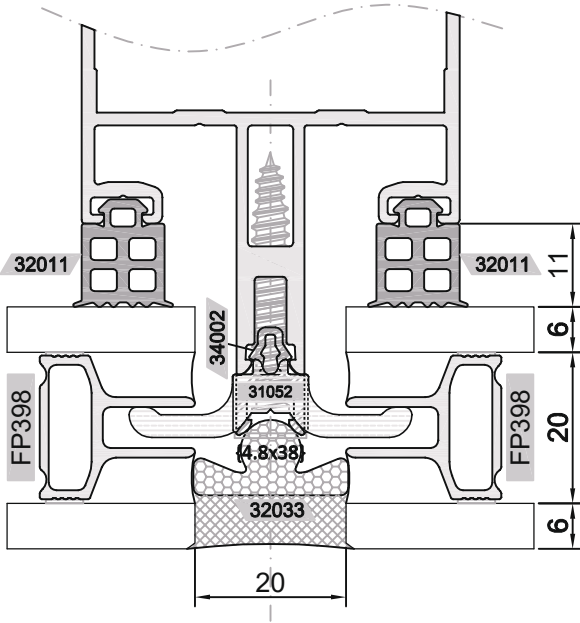
**CAM KALINLIKLARINA GÖRE
ENTEĞRE SİSTEM DETAYLARI**
**INTEGRATED CURTAIN WALL
DETAILS ACCORDING TO THE
GLASS THICKNESSES**



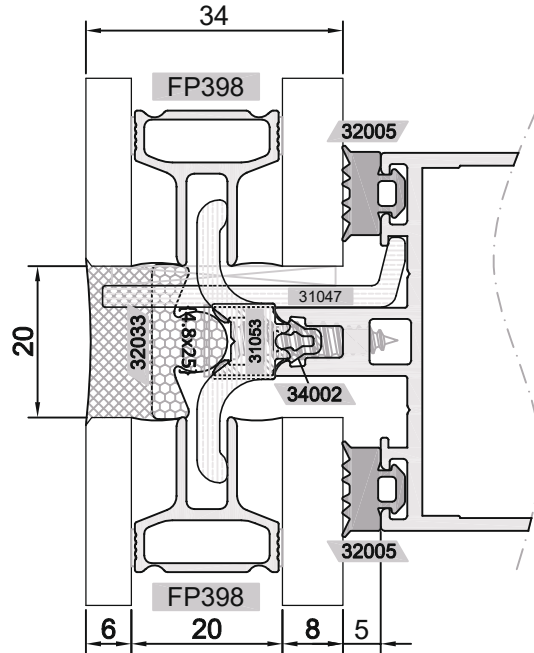
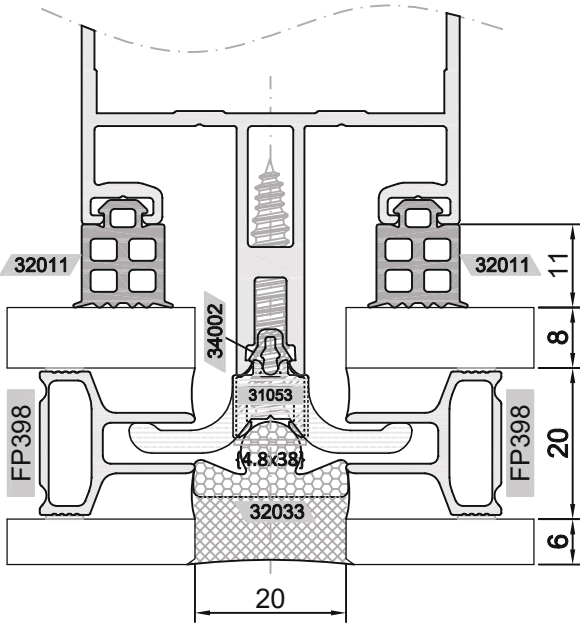
*** 20mm STANDART
ALÜMİNYUM
ISICAM ÇİTASI
20mm STANDARD
ALUMINIUM SPACER**

► 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.

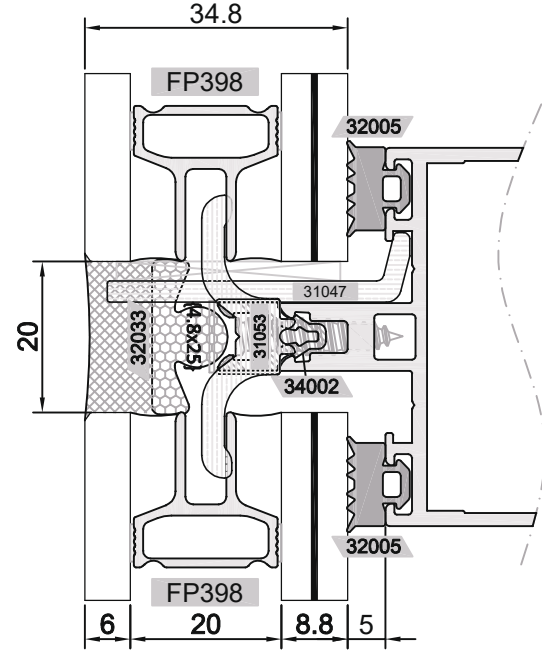
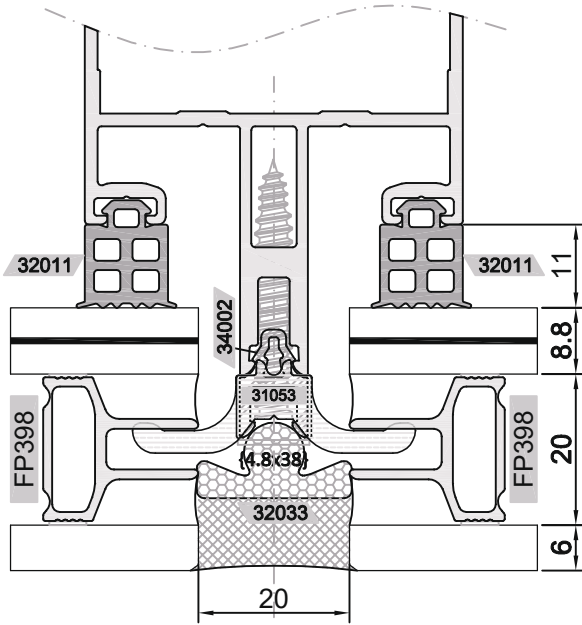
32mm



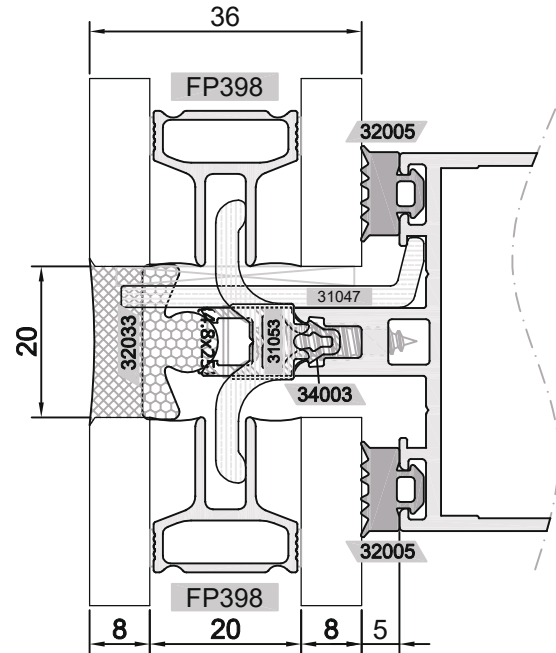
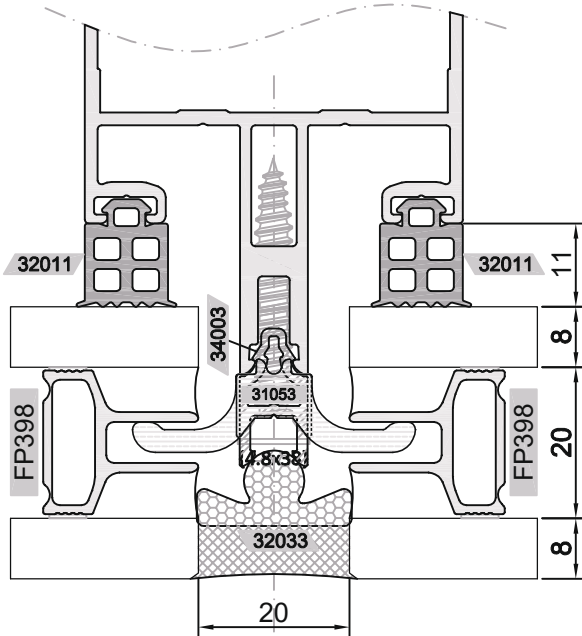
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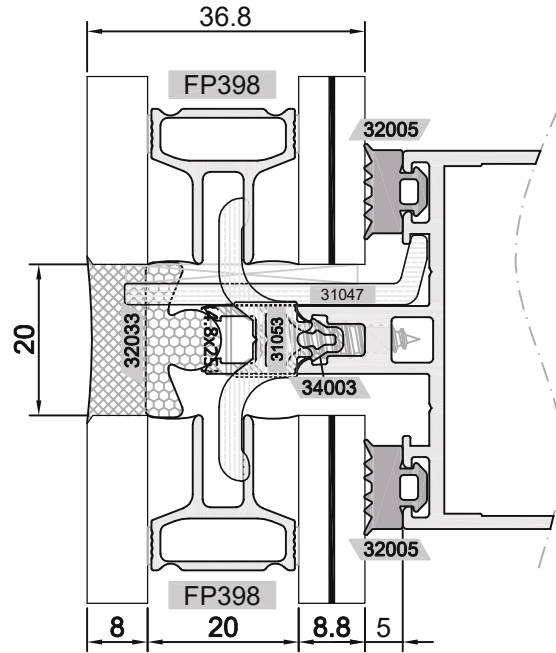
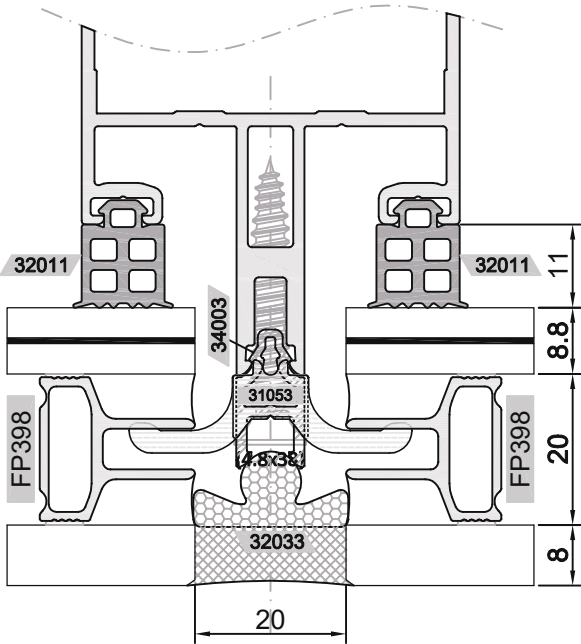
34,76mm



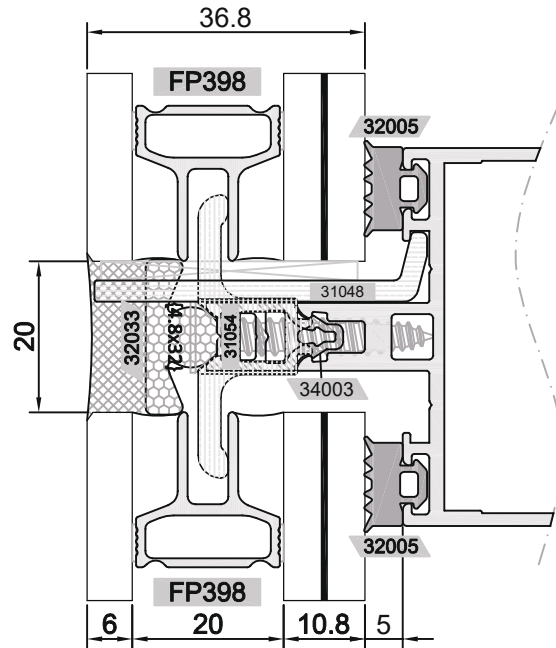
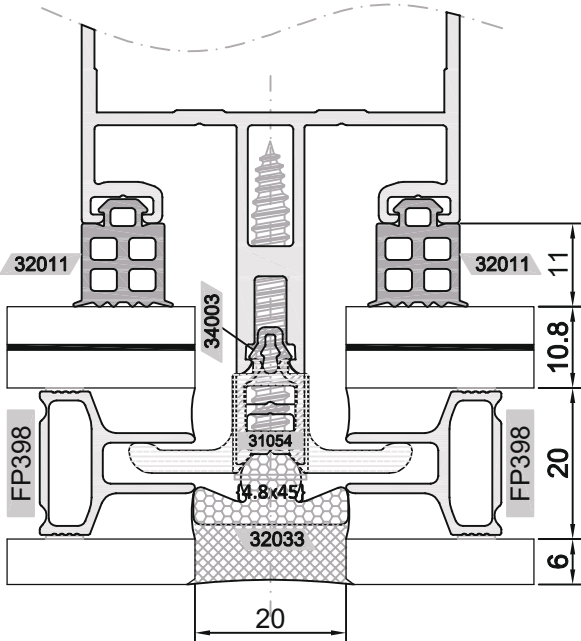
36mm



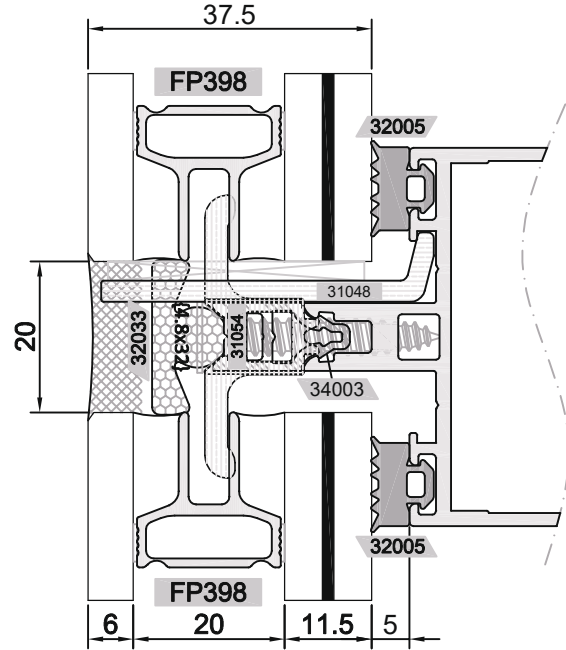
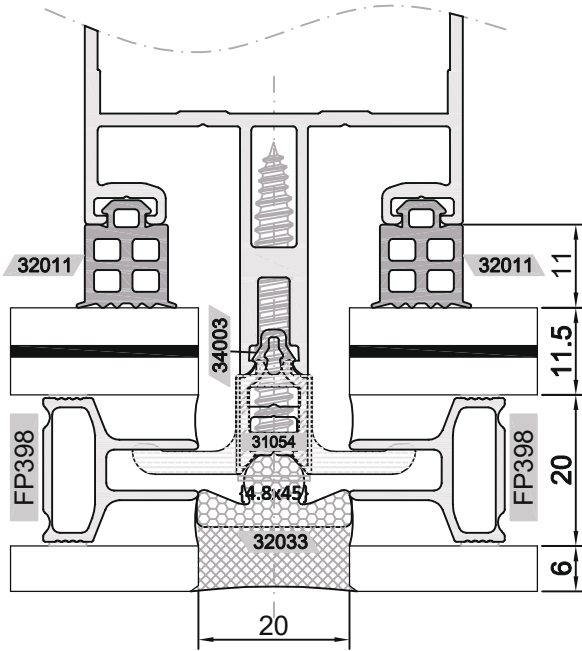
36,76mm



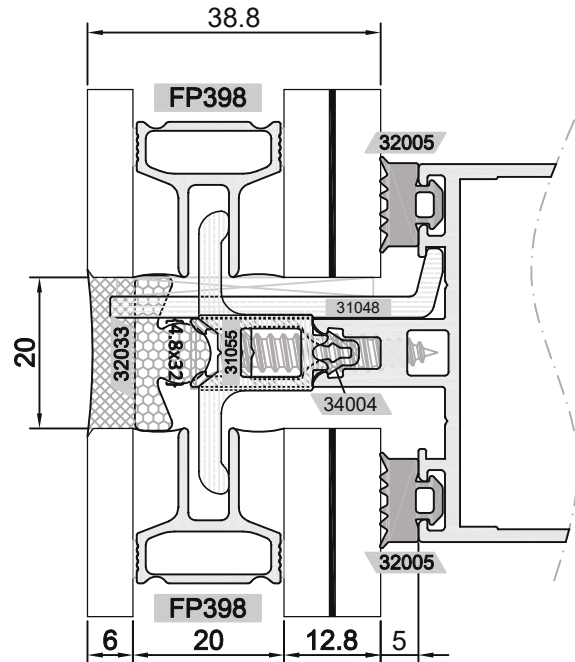
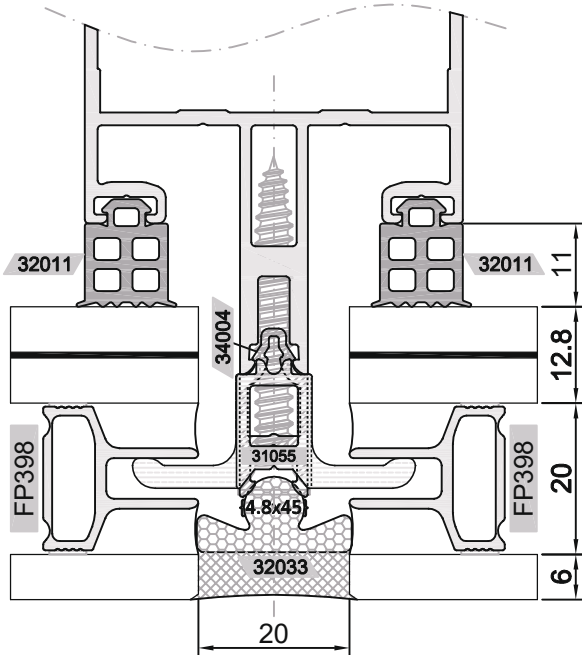
36,76mm



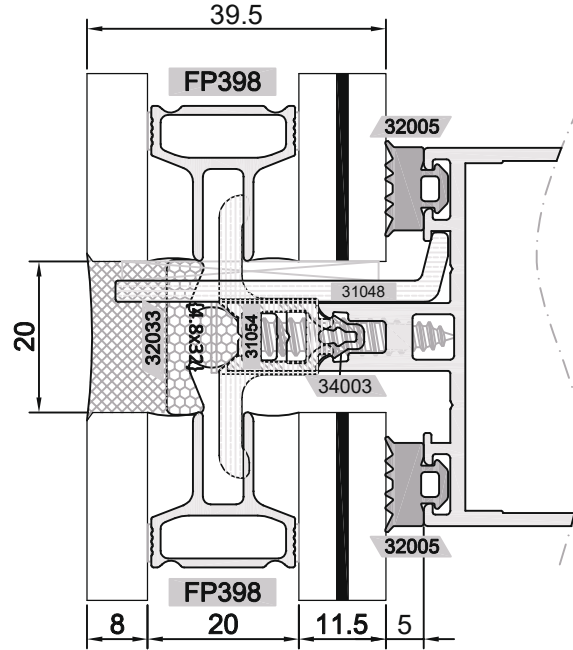
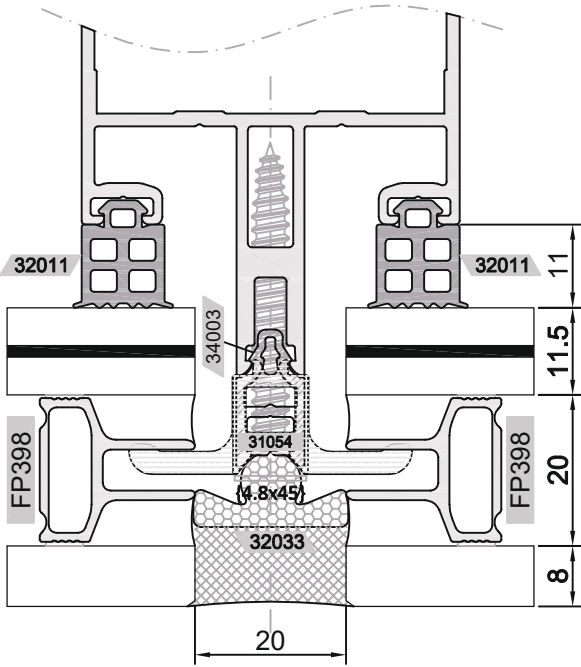
37,52mm



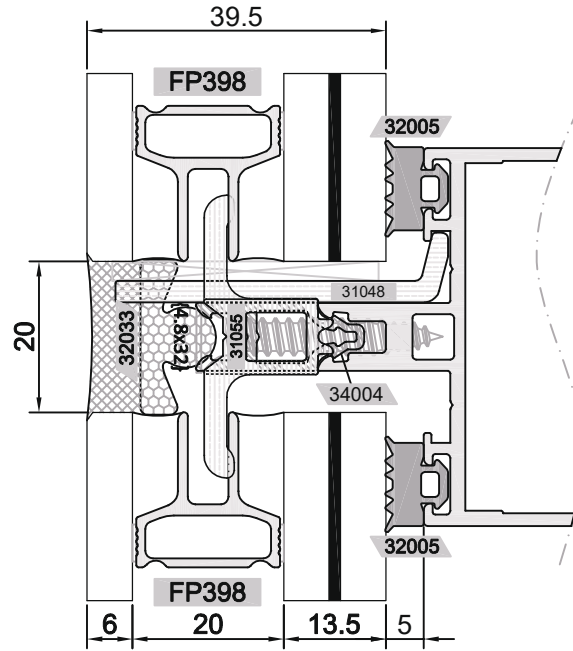
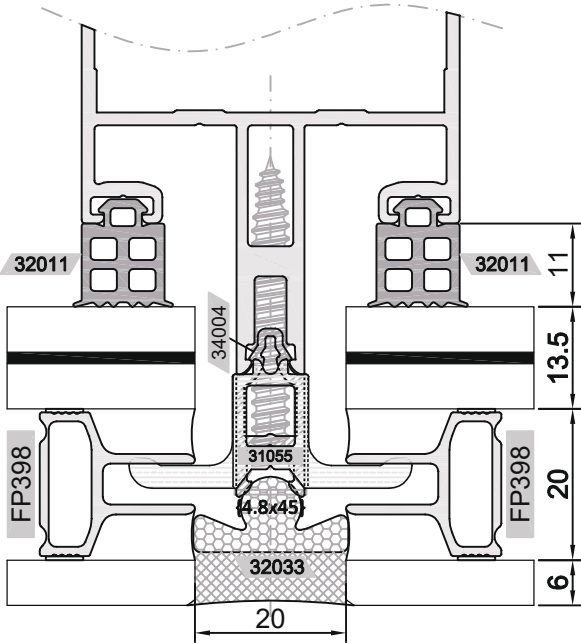
38,76mm



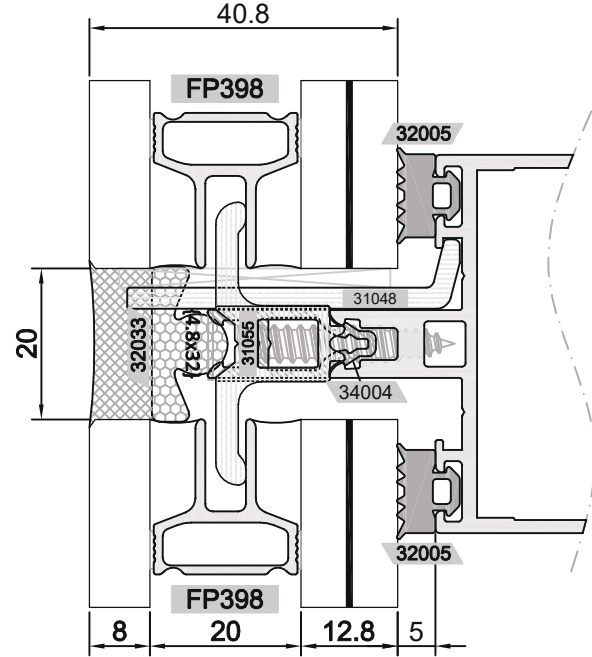
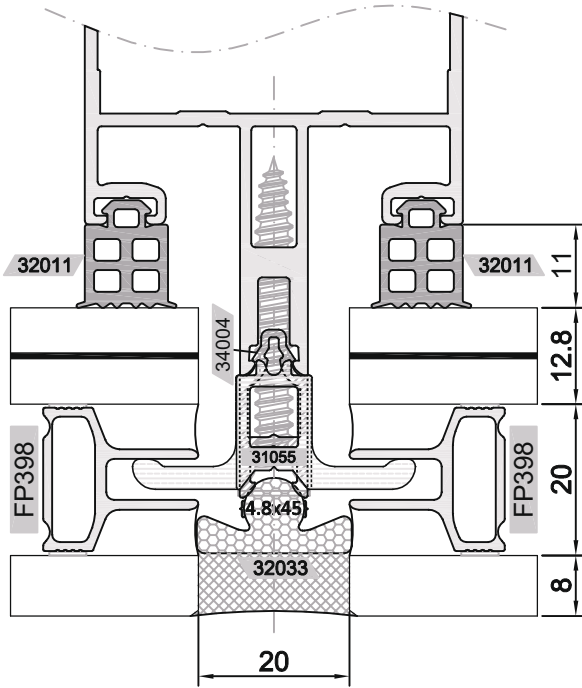
39,52mm



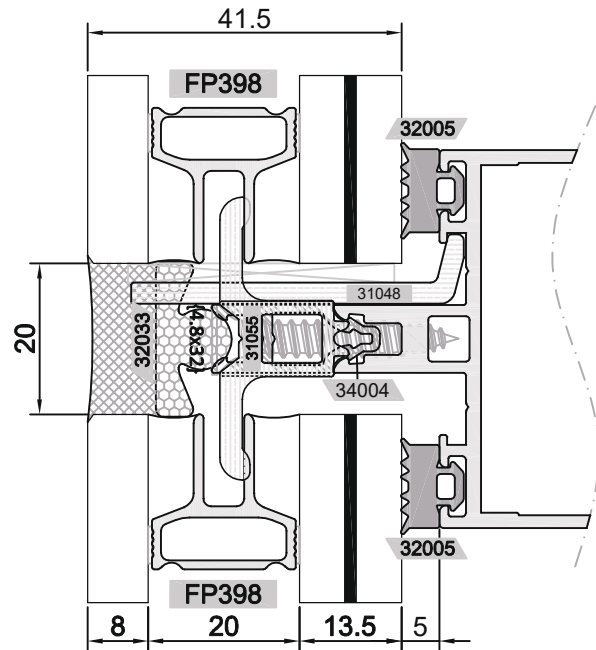
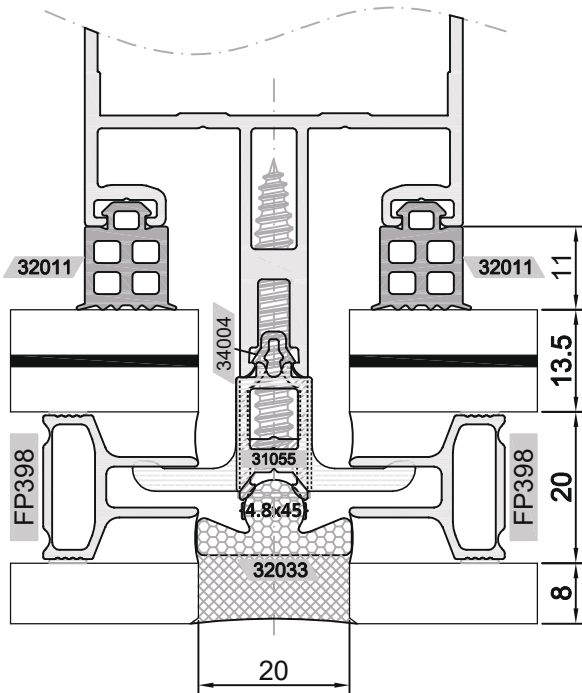
39,52mm



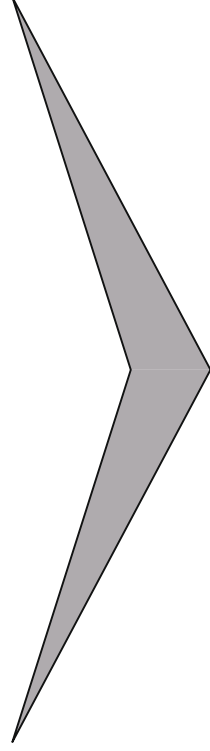
40,76mm



41,52mm



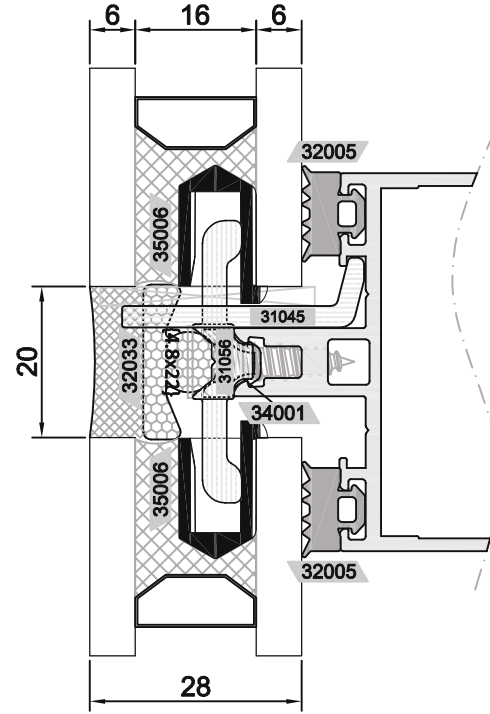
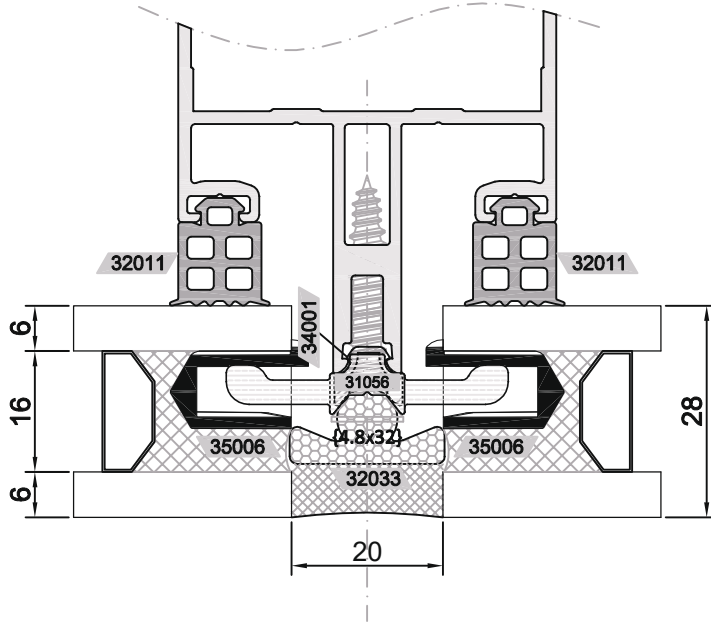
**CAM KALINLIKLARINA GÖRE
ENTEĞRE SİSTEM DETAYLARI**
**INTEGRATED CURTAIN WALL
DETAILS ACCORDING TO THE
GLASS THICKNESSES**



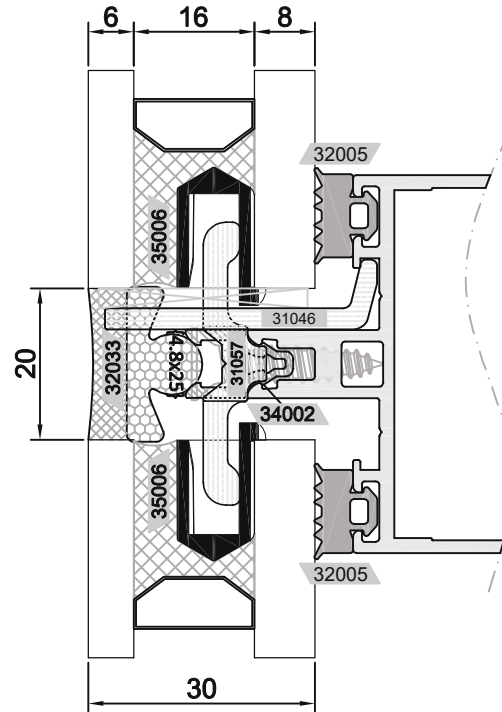
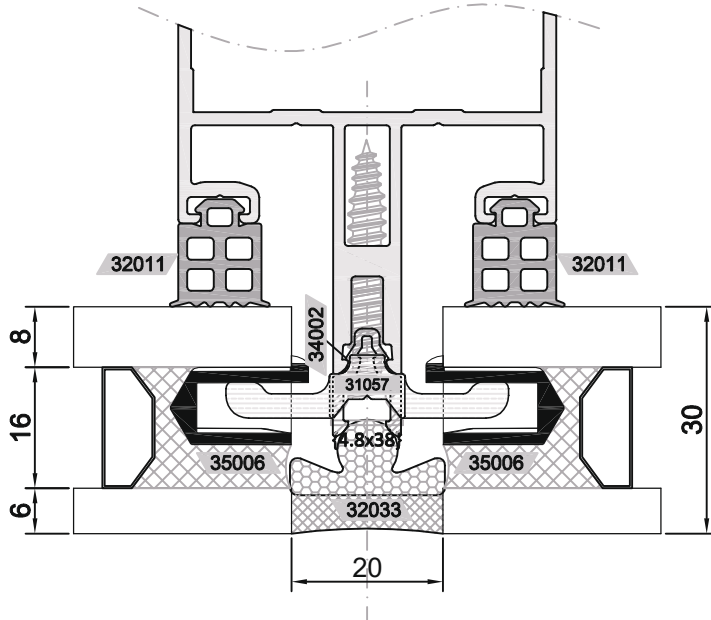
*** 16mm ÖZEL
SICAK KENAR
ISICAM ÇİTASI**
16mm SPECIAL
WARM EDGE
SPACER

► SİSTEM ALÜMİNYUM® KATALOG İÇERİSİNDEKİ VERİLERDE DÜZELTME VEYA DEĞİŞİKLİK YAPMA HAKKINA SAHİPTİR.
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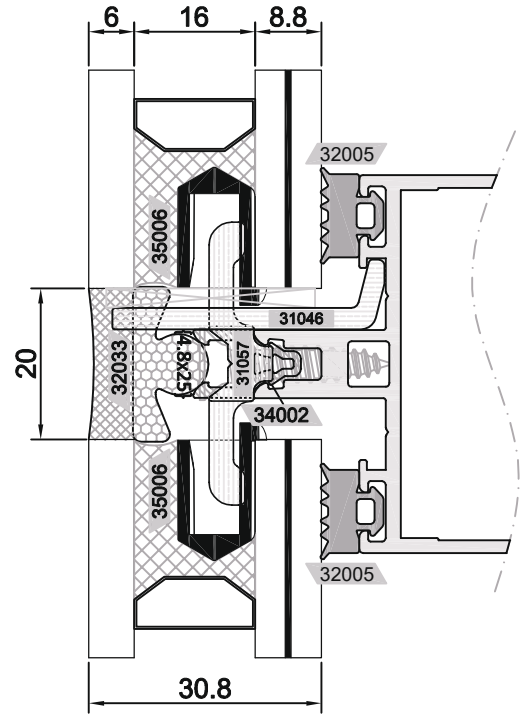
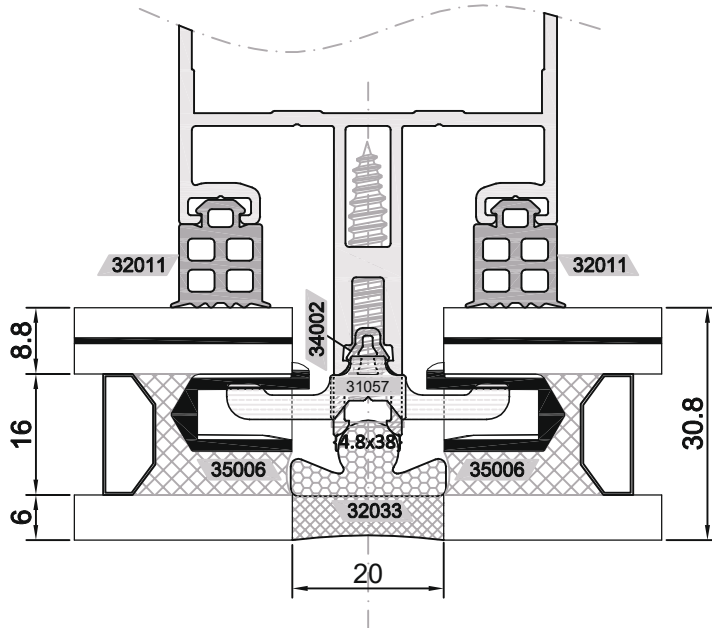
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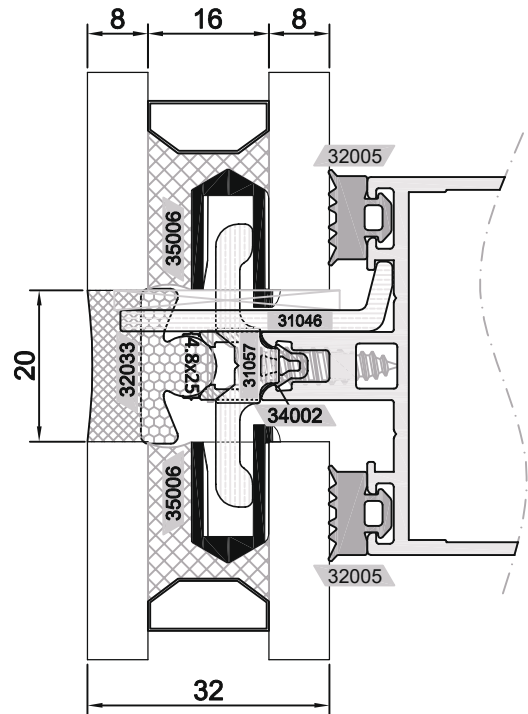
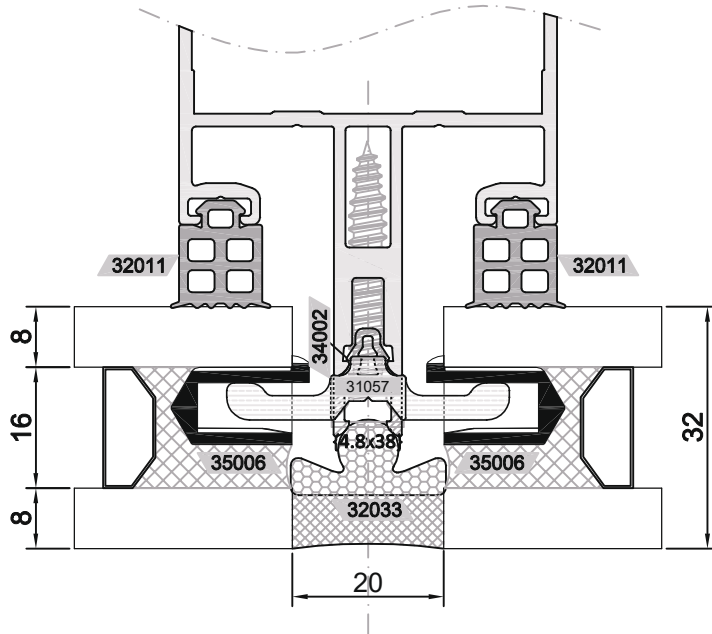
30mm



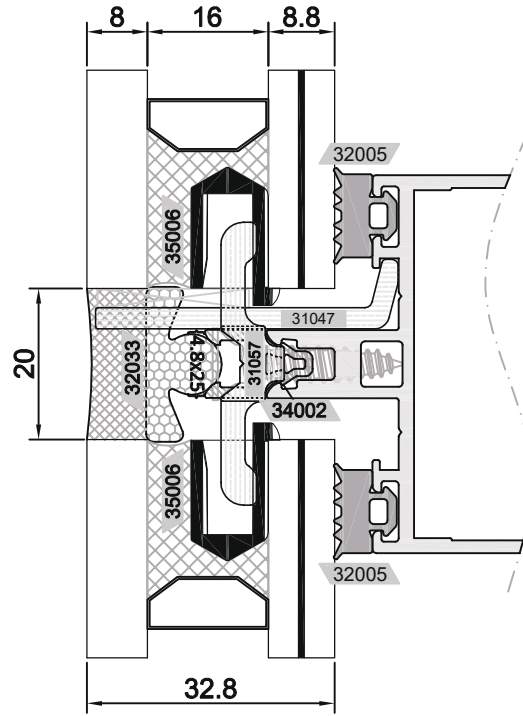
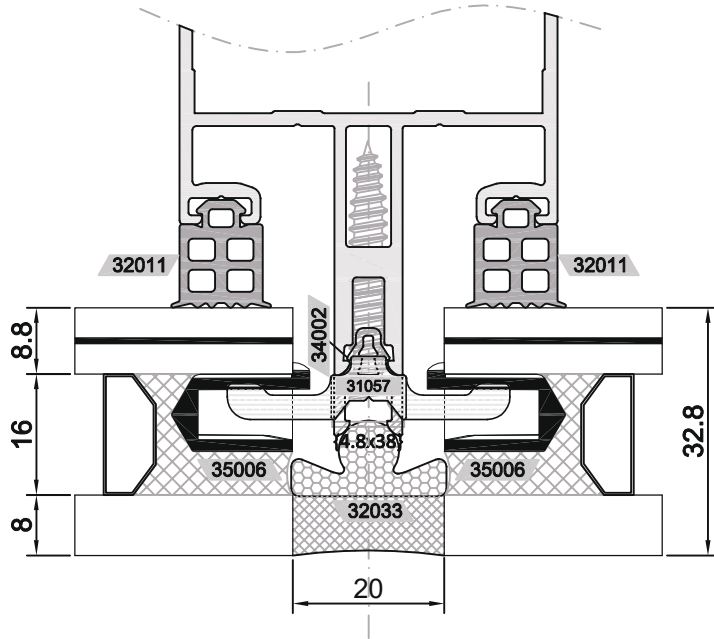
30,76mm



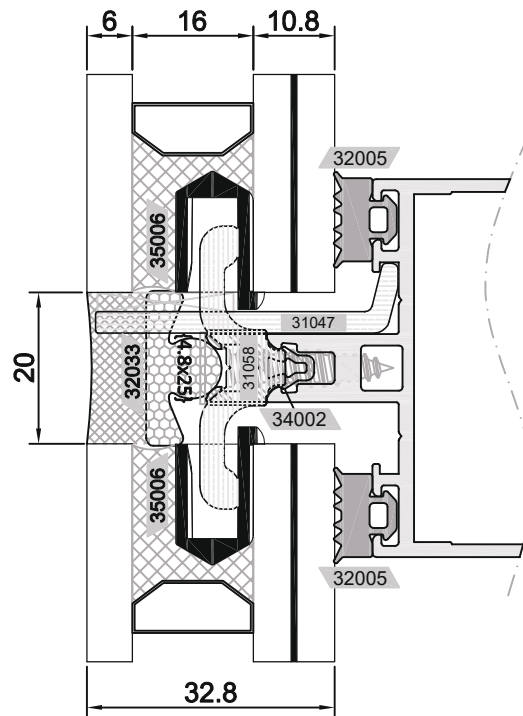
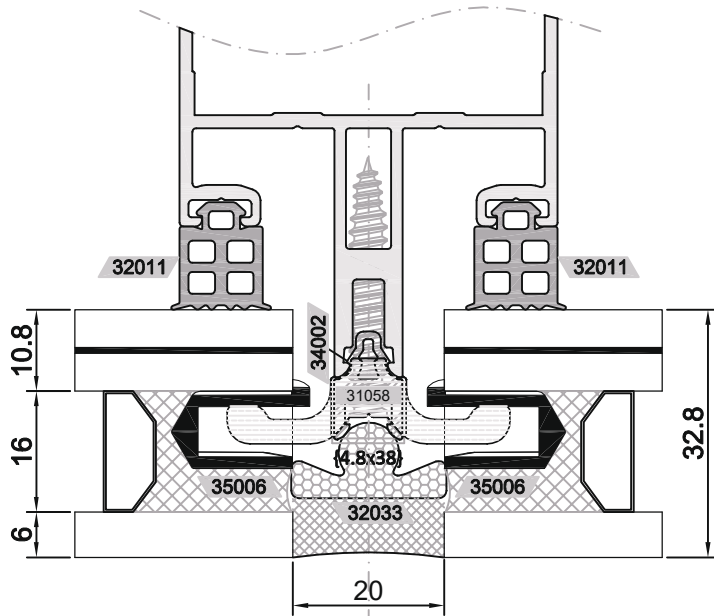
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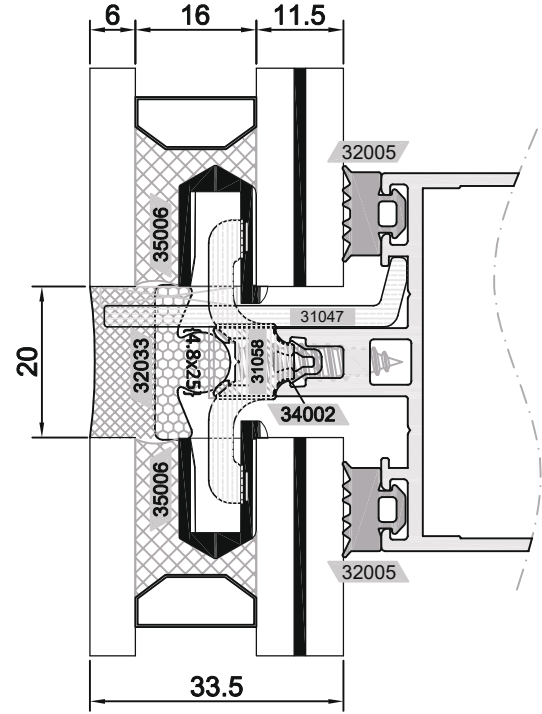
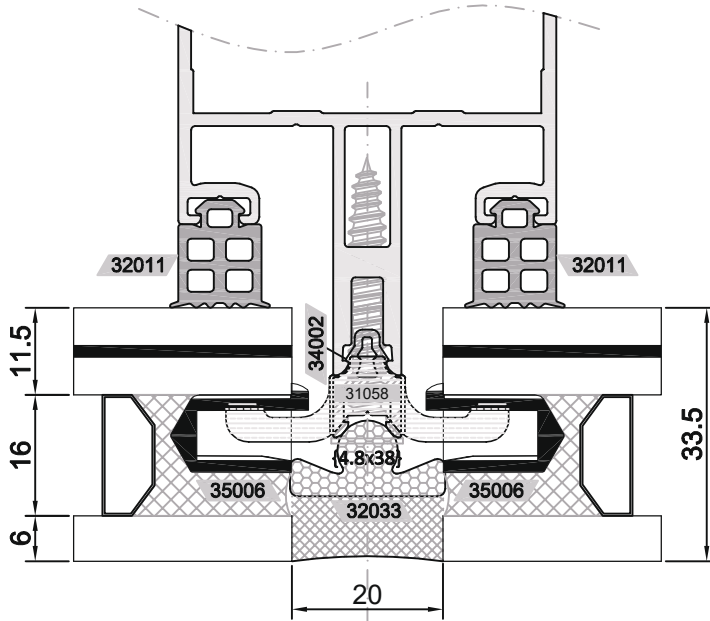
32,76mm



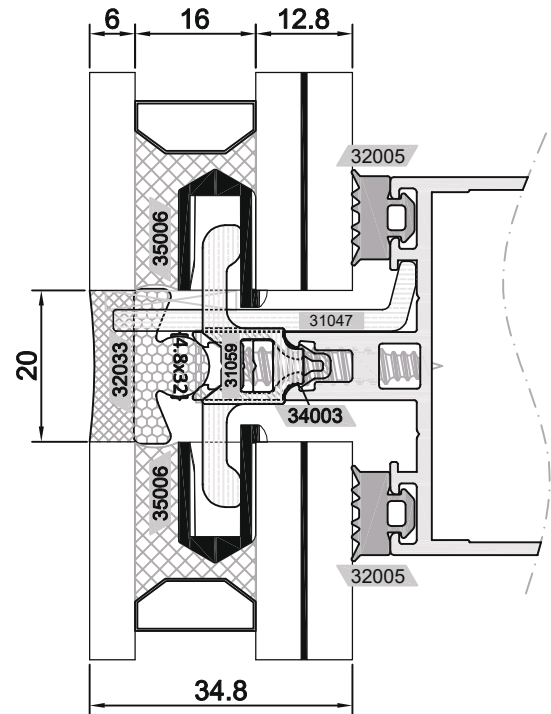
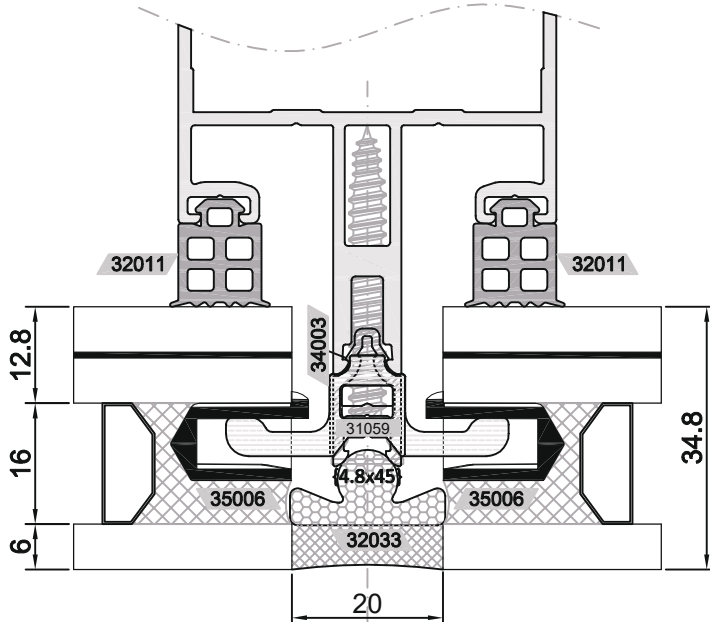
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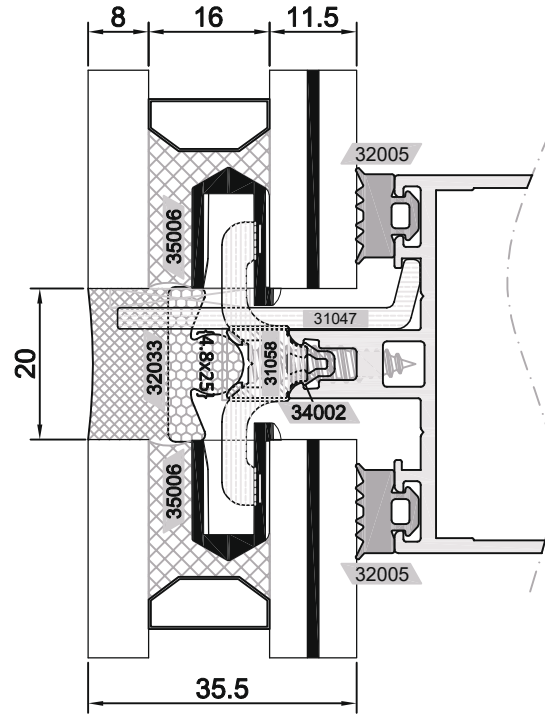
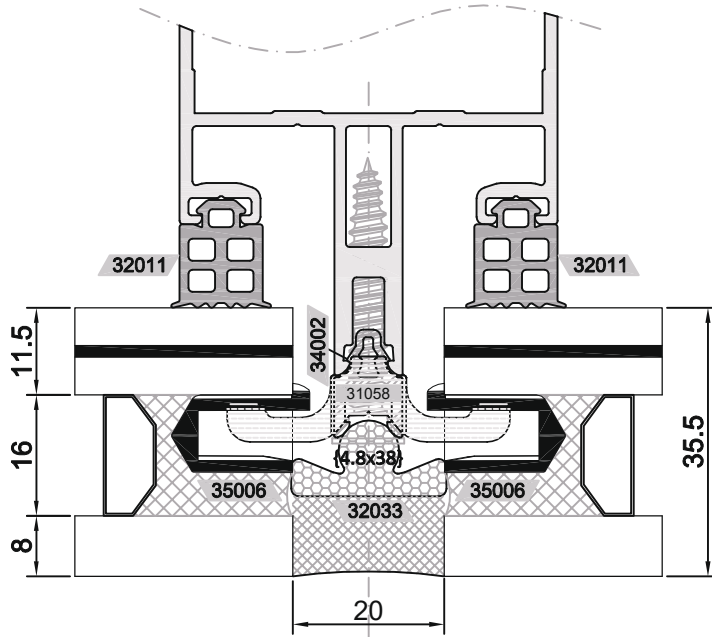
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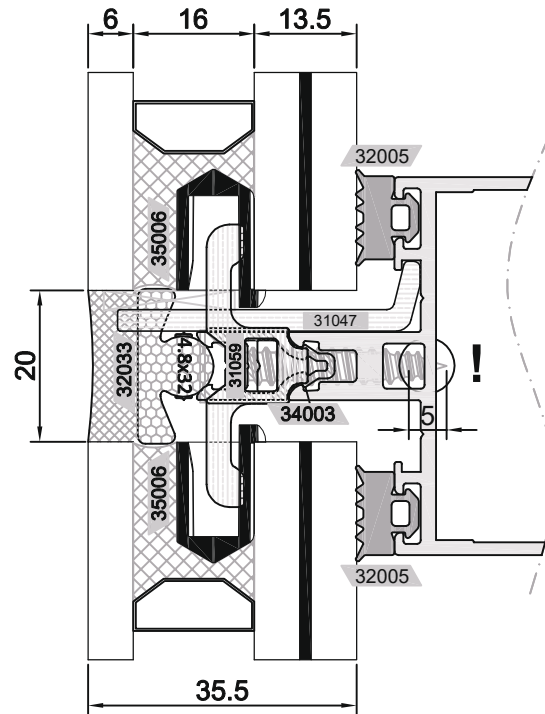
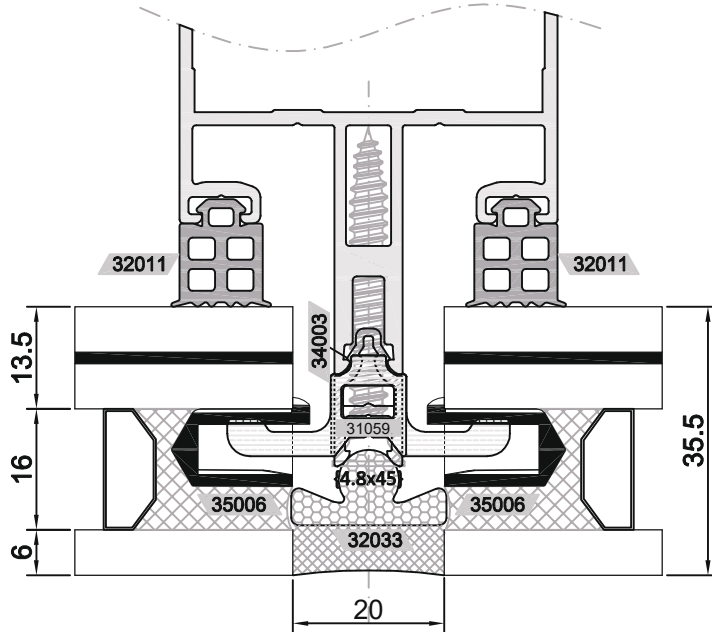
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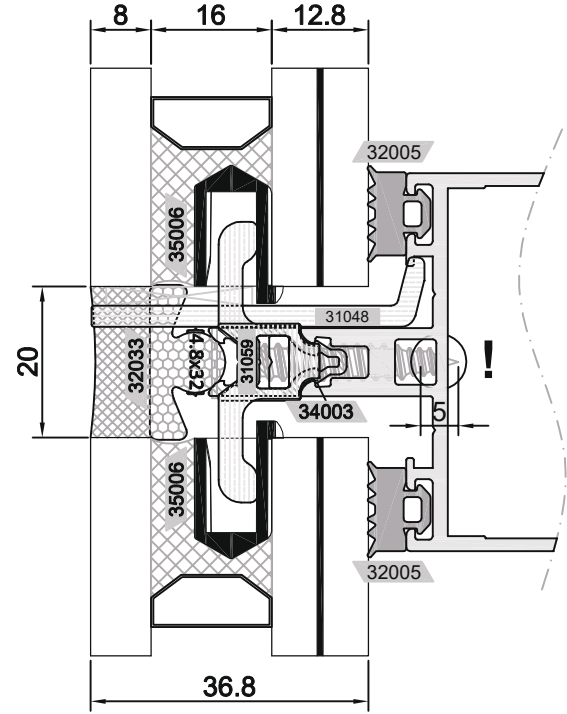
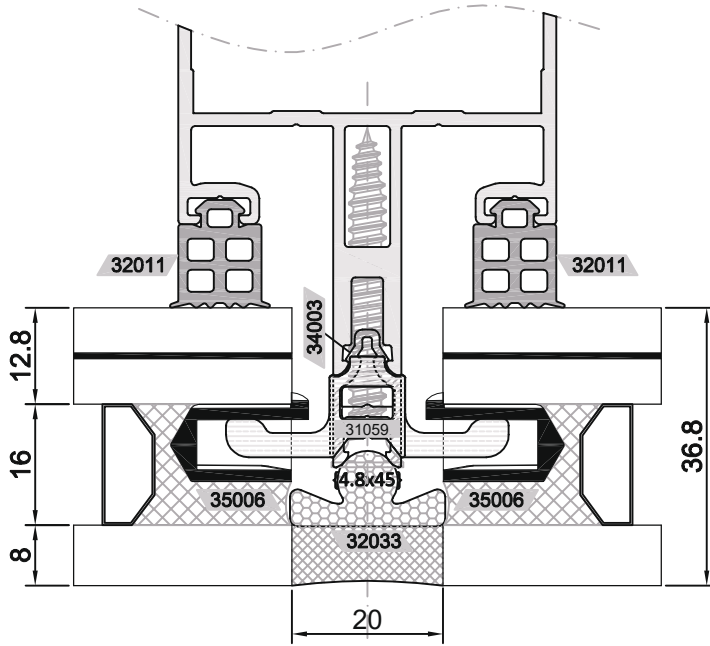


35,52mm



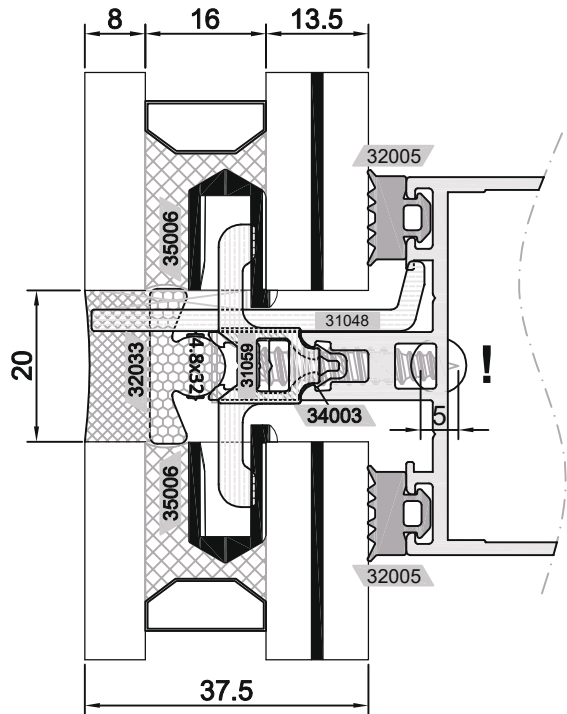
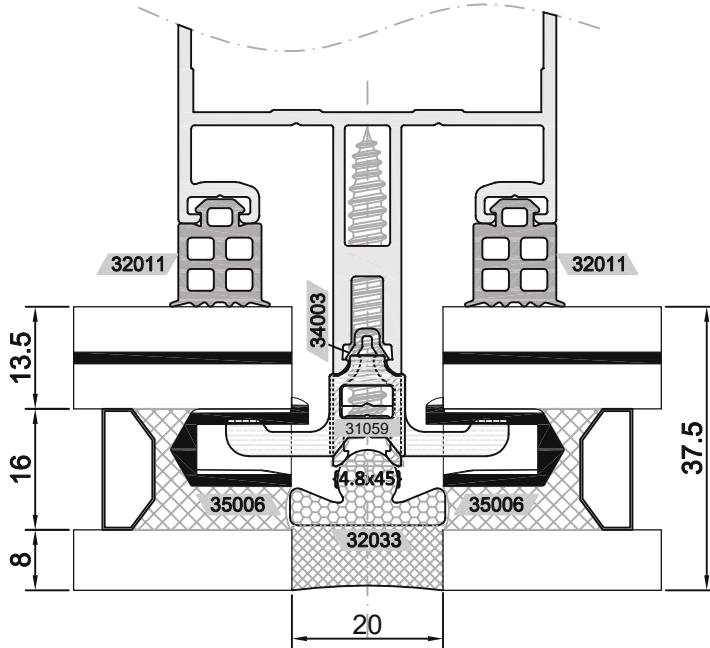
! Kertme / Notching

36,76mm



! Kertme / Notching

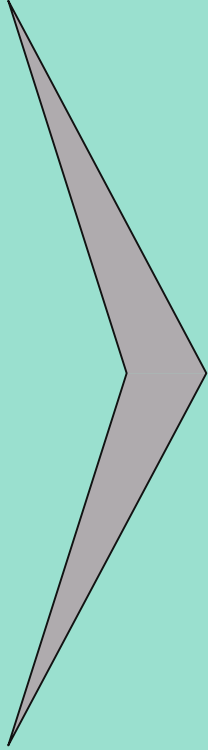
37,52mm



! Kertme / Notching

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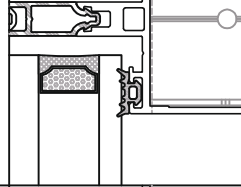

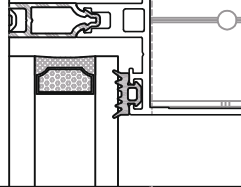

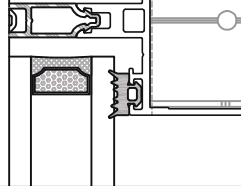

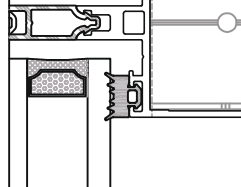

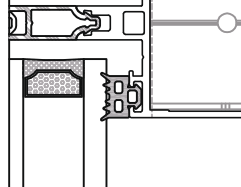
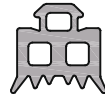
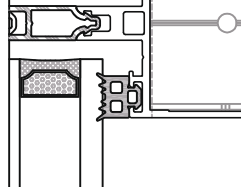
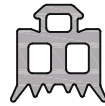
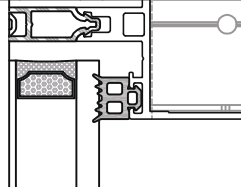

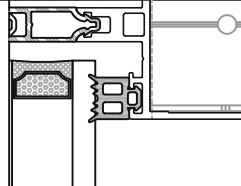

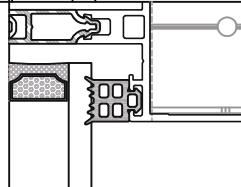
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AKSESUARLAR ACCESSORIES

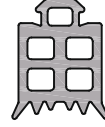
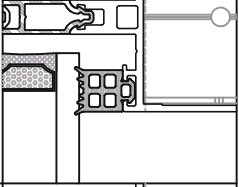
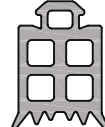
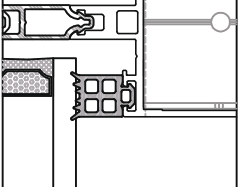
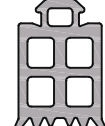
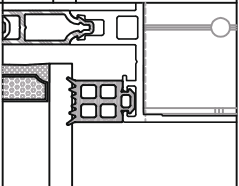
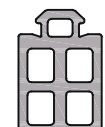
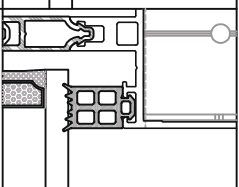
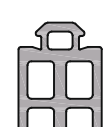
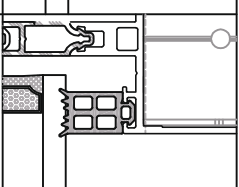

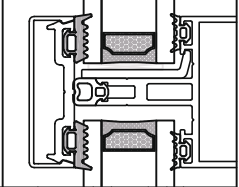

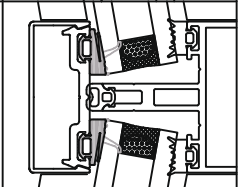

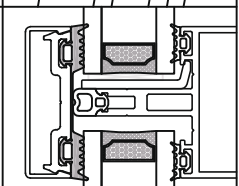

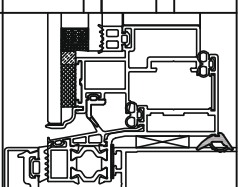
1. AKSESUAR FİHRİSTİ / ACCESSORY INDEX
2. EPDM FİTİLLER / EPDM GASKETS
3. ISI BARIYERLERİ / INSULATION BARS
4. KÖŞE TAKOZLARI / CORNER CLEATS
5. MAKASLAR / FRICTION STAYS
6. KİTLEME AKSESUARLARI / LOCKING ACCESSORIES
7. CEPHE KOLLARI / FACADE HANDLES
8. BAĞLANTI PARÇALARI / CONNECTION PIECES
9. AÇILIM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

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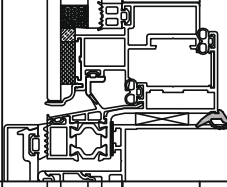

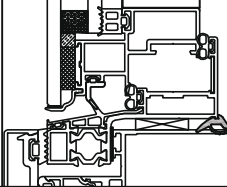

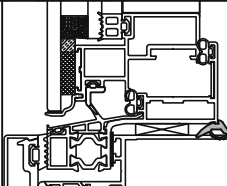
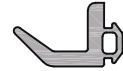
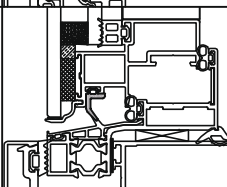

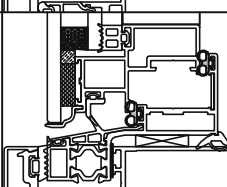

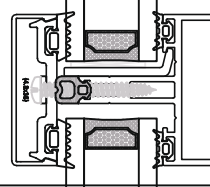

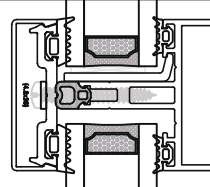

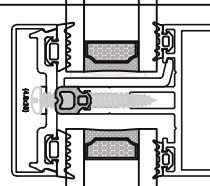

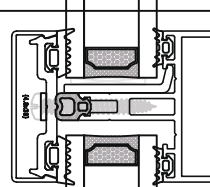
EPDM FİTİLLER / EPDM GASKETS

AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	ÇİZİM / DRAWING	TAKILMA BÖLGESİ / APPLICATION AREA
32002 İÇ BİNİ FİTİLİ 2 mm / INNER STEP GASKET 2 mm BİRİM AĞIRLIK / UNIT WEIGHT: 39 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 382 m		
32003 İÇ BİNİ FİTİLİ 3 mm / INNER STEP GASKET 3 mm BİRİM AĞIRLIK / UNIT WEIGHT: 52 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 288 m		
32004 İÇ BİNİ FİTİLİ 4 mm / INNER STEP GASKET 4 mm BİRİM AĞIRLIK / UNIT WEIGHT: 68 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 220 m		
32005 İÇ BİNİ FİTİLİ 5 mm / INNER STEP GASKET 5 mm BİRİM AĞIRLIK / UNIT WEIGHT: 82 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 183 m		
32006 İÇ BİNİ FİTİLİ 6 mm / INNER STEP GASKET 6 mm BİRİM AĞIRLIK / UNIT WEIGHT: 86 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 174 m		
32007 İÇ BİNİ FİTİLİ 7 mm / INNER STEP GASKET 7 mm BİRİM AĞIRLIK / UNIT WEIGHT: 91 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 166 m		
32008 İÇ BİNİ FİTİLİ 8 mm / INNER STEP GASKET 8 mm BİRİM AĞIRLIK / UNIT WEIGHT: 98 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 153 m		
32009 İÇ BİNİ FİTİLİ 9 mm / INNER STEP GASKET 9 mm BİRİM AĞIRLIK / UNIT WEIGHT: 105 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 143 m		
32010 İÇ BİNİ FİTİLİ 10 mm / INNER STEP GASKET 10 mm BİRİM AĞIRLIK / UNIT WEIGHT: 115 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 130 m		

EPDM FİTİLLER / EPDM GASKETS

AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	ÇİZİM / DRAWING	TAKILMA BÖLGESİ / APPLICATION AREA
<p>32011 İÇ BİNİ FİTİLİ 11 mm / INNER STEP GASKET 11 mm BİRİM AĞIRLIK / UNIT WEIGHT: 120 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 125 m</p>		
<p>32012 İÇ BİNİ FİTİLİ 12 mm / INNER STEP GASKET 12 mm BİRİM AĞIRLIK / UNIT WEIGHT: 126 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 120 m</p>		
<p>32013 İÇ BİNİ FİTİLİ 13 mm / INNER STEP GASKET 13 mm BİRİM AĞIRLIK / UNIT WEIGHT: 131 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 115 m</p>		
<p>32014 İÇ BİNİ FİTİLİ 14 mm / INNER STEP GASKET 14 mm BİRİM AĞIRLIK / UNIT WEIGHT: 137 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 110 m</p>		
<p>32015 İÇ BİNİ FİTİLİ 15 mm / INNER STEP GASKET 15 mm BİRİM AĞIRLIK / UNIT WEIGHT: 143 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 105 m</p>		
<p>32016 DIŞ BİNİ FİTİLİ 4 mm / OUTER STEP GASKET 4 mm BİRİM AĞIRLIK / UNIT WEIGHT: 88 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 170 m</p>		
<p>32017 AÇILI DIŞ CAM FİTİLİ / ANGULAR OUTER STEP GASKET BİRİM AĞIRLIK / UNIT WEIGHT: 91 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 165 m</p>		
<p>32018 YEKPARE DIŞ BİNİ FİTİLİ / ONE PIECE STEP GASKET BİRİM AĞIRLIK / UNIT WEIGHT: 124 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 121 m</p>		
<p>32019 KAMA FİTİLİ 3 mm / GLAZING SUPPORT GASKET 3 mm BİRİM AĞIRLIK / UNIT WEIGHT: 41 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 365 m</p>		

EPDM FİTİLLER / EPDM GASKETS

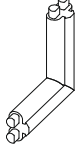

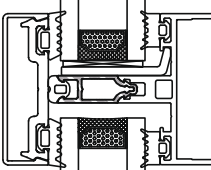
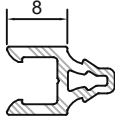
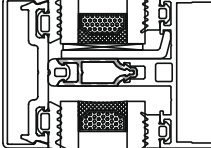
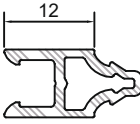
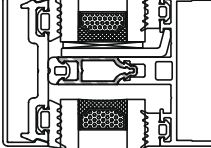
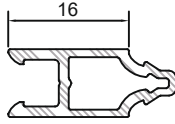
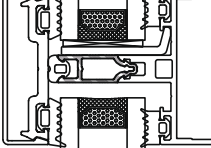
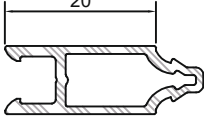
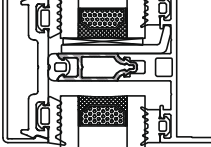
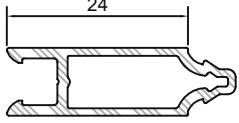
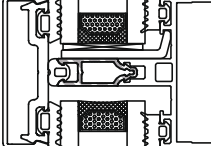

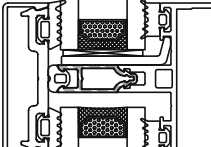
AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	ÇİZİM / DRAWING	TAKILMA BÖLGESİ / APPLICATION AREA
32020 KAMA FİTİLİ 4 mm / GLAZING SUPPORT GASKET 4 mm BİRİM AĞIRLIK / UNIT WEIGHT: 54 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 280 m		
32021 KAMA FİTİLİ 5 mm / GLAZING SUPPORT GASKET 5 mm BİRİM AĞIRLIK / UNIT WEIGHT: 67 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 224 m		
32022 KAMA FİTİLİ 6 mm / GLAZING SUPPORT GASKET 6 mm BİRİM AĞIRLIK / UNIT WEIGHT: 89 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 168 m		
32023 KANAT DESTEK FİTİLİ / SUPPORT GASKET FOR VENT BİRİM AĞIRLIK / UNIT WEIGHT: 54 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 275 m		
32024 KANAT İÇ BİNİ FİTİLİ / INNER STEP GASKET FOR VENT BİRİM AĞIRLIK / UNIT WEIGHT: 40 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 370 m		
32025 TAŞIYICI ÖN FİTİL 3mm / MULLION FRONT GASKET 3mm BİRİM AĞIRLIK / UNIT WEIGHT: 47 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 316 m		
32026 TAŞIYICI ÖN FİTİL 4mm / MULLION FRONT GASKET 4mm BİRİM AĞIRLIK / UNIT WEIGHT: 56 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 266 m		
32027 TAŞIYICI ÖN FİTİL 5mm / MULLION FRONT GASKET 5mm BİRİM AĞIRLIK / UNIT WEIGHT: 58 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 260 m		
32028 TAŞIYICI ÖN FİTİL 7mm / MULLION FRONT GASKET 7mm BİRİM AĞIRLIK / UNIT WEIGHT: 71 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 212 m		

▲ F50-ENERGY

EPDM FİTİLLER / EPDM GASKETS

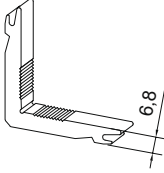
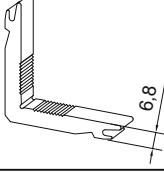
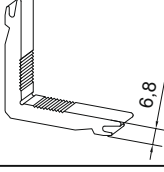
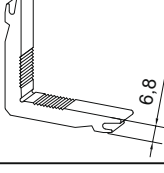
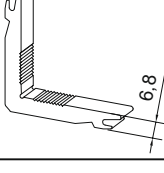
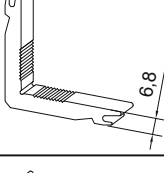
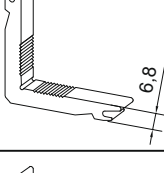
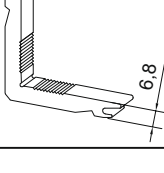
AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	çizim / DRAWING	TAKILMA BÖLGESİ / APPLICATION AREA
32029 KANAT ÇARŞAF FİTİLİ - 1 / SHEET GASKET FOR VENT BİRİM AĞIRLIK / UNIT WEIGHT: 125 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 120 m		
32030 KANAT ÇARŞAF FİTİLİ - 2 / SHEET GASKET FOR VENT BİRİM AĞIRLIK / UNIT WEIGHT: 153 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 98 m		
32031 KANAT ÇARŞAF FİTİLİ - 3 / SHEET GASKET FOR VENT BİRİM AĞIRLIK / UNIT WEIGHT: 185 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 81 m		
32032 KANAT ÇARŞAF FİTİLİ - 4 / SHEET GASKET FOR VENT BİRİM AĞIRLIK / UNIT WEIGHT: 229 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 66 m		
32033 POLİETİLEN DERZ FİTİL / POLYETHYLENE SEAM GASKET BİRİM AĞIRLIK / UNIT WEIGHT: 30 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 500 m		
32034 İÇ MEKAN DERZ KAPATMA FİTİLİ / INSIDE SEAM GASKET BİRİM AĞIRLIK / UNIT WEIGHT: 204 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 73 m		
32035 SİLİKON DERZ KAPATMA FİTİLİ / SILICONE SEAM GASKET BİRİM AĞIRLIK / UNIT WEIGHT: 194 g/m KOLİ MİKTARI / PACKAGE QUANTITY: 77 m		
33001 VULKANİZE KÖŞE PARÇASI / VULCANISED CORNER PIECE İLİŞKİLİ FİTİLLER / RELATED GASKETS: 32005 & 32011		
33002 VULKANİZE KÖŞE PARÇASI / VULCANISED CORNER PIECE İLİŞKİLİ FİTİL / RELATED GASKET: 32023		

İSİ BARIYERLERİ / INSULATION BARS

AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	ÇİZİM / DRAWING	TAKILMA BÖLGESİ / APPLICATION AREA
33003 VULKANİZE KÖŞE PARÇASI / VULCANISED CORNER PIECE İLİŞKİLİ FİTİL / RELATED GASKET: 32024		
34001 TAŞIYICI ÖN İZOLASYON (PVC) 4 MM MULLION OR TRANSOM FRONT ISOLATOR (PVC) MİKTAR / QUANTITY: BOY 6 m /Adet		
34002 TAŞIYICI ÖN İZOLASYON (PVC) 8 MM MULLION OR TRANSOM FRONT ISOLATOR (PVC) MİKTAR / QUANTITY: BOY 6 m /Adet		
34003 TAŞIYICI ÖN İZOLASYON (PVC) 12 MM MULLION OR TRANSOM FRONT ISOLATOR (PVC) MİKTAR / QUANTITY: BOY 6 m /Adet		
34004 TAŞIYICI ÖN İZOLASYON (PVC) 16 MM MULLION OR TRANSOM FRONT ISOLATOR (PVC) MİKTAR / QUANTITY: BOY 6 m /Adet		
34005 TAŞIYICI ÖN İZOLASYON (PVC) 20 MM MULLION OR TRANSOM FRONT ISOLATOR (PVC) MİKTAR / QUANTITY: BOY 6 m /Adet		
34006 TAŞIYICI ÖN İZOLASYON (PVC) 24 MM MULLION OR TRANSOM FRONT ISOLATOR (PVC) MİKTAR / QUANTITY: BOY 6 m /Adet		
34007 TAŞIYICI ÖN İZOLASYON (PVC) 28 MM MULLION OR TRANSOM FRONT ISOLATOR (PVC) MİKTAR / QUANTITY: BOY 6 m /Adet		

▲ F50-ENERGY

KÖŞE TAKOZLARI / CORNER CLEATS

AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	ÇİZİM / DRAWING	KESİM ÖLÇÜSÜ / CUTTING DIMENSION
31001 KÖŞE TAKOZU / CORNER CLEAT PROFİL NUMARASI / PROFILE NUMBER: FP520 PROFİL AĞIRLIĞI / PROFILE WEIGHT: 1,974 kg/m.		29,4 mm
31002 KÖŞE TAKOZU / CORNER CLEAT PROFİL NUMARASI / PROFILE NUMBER: FP520 PROFİL AĞIRLIĞI / PROFILE WEIGHT: 1,974 kg/m.		11 mm
31003 KÖŞE TAKOZU / CORNER CLEAT PROFİL NUMARASI / PROFILE NUMBER: FP520 PROFİL AĞIRLIĞI / PROFILE WEIGHT: 1,974 kg/m.		13 mm
31004 KÖŞE TAKOZU / CORNER CLEAT PROFİL NUMARASI / PROFILE NUMBER: FP520 PROFİL AĞIRLIĞI / PROFILE WEIGHT: 1,974 kg/m.		44,9 mm
31005 KÖŞE TAKOZU / CORNER CLEAT PROFİL NUMARASI / PROFILE NUMBER: FP520 PROFİL AĞIRLIĞI / PROFILE WEIGHT: 1,974 kg/m.		21 mm
31006 KÖŞE TAKOZU / CORNER CLEAT PROFİL NUMARASI / PROFILE NUMBER: FP520 PROFİL AĞIRLIĞI / PROFILE WEIGHT: 1,974 kg/m.		17 mm
31007 KÖŞE TAKOZU / CORNER CLEAT PROFİL NUMARASI / PROFILE NUMBER: FP520 PROFİL AĞIRLIĞI / PROFILE WEIGHT: 1,974 kg/m.		23 mm
31008 KÖŞE TAKOZU / CORNER CLEAT PROFİL NUMARASI / PROFILE NUMBER: FP520 PROFİL AĞIRLIĞI / PROFILE WEIGHT: 1,974 kg/m.		19 mm

KÖŞE TAKOZLARI / CORNER CLEATS

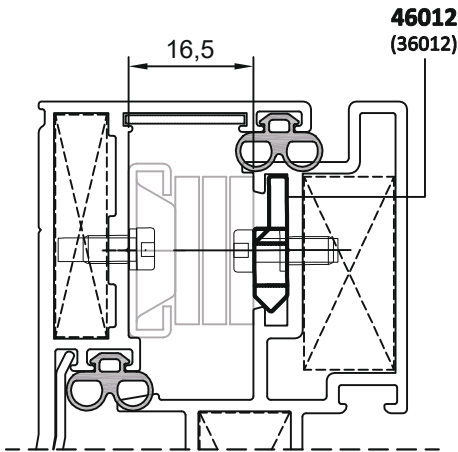
AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	ÇİZİM / DRAWING	KESİM ÖLÇÜSÜ / CUTTING DIMENSION
31009 KÖŞE TAKOZU / CORNER CLEAT PROFİL NUMARASI / PROFILE NUMBER: FP521 PROFİL AĞIRLIĞI / PROFILE WEIGHT: 2,367 kg/m.		24,7 mm
31010 KÖŞE TAKOZU / CORNER CLEAT PROFİL NUMARASI / PROFILE NUMBER: FP521 PROFİL AĞIRLIĞI / PROFILE WEIGHT: 2,367 kg/m.		7 mm
31011 KÖŞE TAKOZU / CORNER CLEAT PROFİL NUMARASI / PROFILE NUMBER: FP521 PROFİL AĞIRLIĞI / PROFILE WEIGHT: 2,367 kg/m.		26,9 mm
31012 KÖŞE TAKOZU / CORNER CLEAT PROFİL NUMARASI / PROFILE NUMBER: FP521 PROFİL AĞIRLIĞI / PROFILE WEIGHT: 2,367 kg/m.		17,5 mm
31013 KÖŞE TAKOZU / CORNER CLEAT PROFİL NUMARASI / PROFILE NUMBER: FP521 PROFİL AĞIRLIĞI / PROFILE WEIGHT: 2,367 kg/m.		26 mm
31014 KÖŞE TAKOZU / CORNER CLEAT PROFİL NUMARASI / PROFILE NUMBER: FP521 PROFİL AĞIRLIĞI / PROFILE WEIGHT: 2,367 kg/m.		9 mm
31015 KÖŞE TAKOZU / CORNER CLEAT PROFİL NUMARASI / PROFILE NUMBER: FP521 PROFİL AĞIRLIĞI / PROFILE WEIGHT: 2,367 kg/m.		24,4 mm
31016 KÖŞE TAKOZU / CORNER CLEAT PROFİL NUMARASI / PROFILE NUMBER: FP521 PROFİL AĞIRLIĞI / PROFILE WEIGHT: 2,367 kg/m.		39,6 mm
35001 KÖŞE ÇAVUŞU / CORNET ALIGNMENT MALZEME / MATERIAL: POLYAMID		16 x 1,5

MAKASLAR / FRICTION STAYS



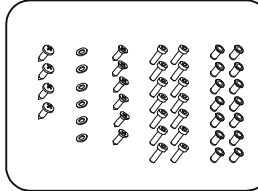
ÜRÜN KODU PRODUCT CODE	ALTERNATİF YERLİ ÜRÜN KODLARI ALTERNATIVE NATİVE PRODUCT CODES	MAKAS BOYU FRICTION STAY LENGTH (inch)	MAKAS BOYU FRICTION STAY LENGTH (mm)	KANAT AÇMA DERECESİ OPENING ANGLE	MAKS. KANAT YÜKSEKLİĞİ MAX. VENT HEIGHT (mm)	MAKS. KANAT AĞIRLIĞI MAX. VENT WEIGHT (kg)
47001	37001	10"	255	35°	700	50
47002	37002	12"	305	30°/35°	800	60
47003	37003	14"	355	30°/35°	1000	70
47004	37004	16"	405	25°/30°	1200	90
47005	37005	18"	460	25°/30°	1400	100
47006	37006	20"	505	20°/25°	1600	135
47007	37007	22"	560	20°/25°	1700	140
47008	37008	24"	610	20°/25°	1800	145
47009	37009	26"	660	10°/15°/20°	2000	155
47010	37010	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 NATİVE ALTERNATİVES.

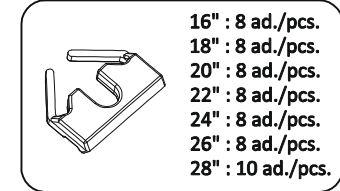


* STANDART AKSESUAR SETİNDE YER ALMAYAN 46012 KODLU METRİK PERÇİN VE VİDALARIN KULLANILMASI DURUMUNDA TÜM MAKAS TIPLERİ İÇİN MAKSİMUM KANAT AĞIRLIĞI 180 KG OLUP ÜRETİCİ FİRMA GARANTİSİ ALTINDADIR.
IF USING THE METRIC PIN & SCREWS WITH THE CODE OF 46012 WHICH DOESN'T INCLUDE AT STANDARD ACCESSORY KIT, MAXIMUM CARRIAGE CAPACITY FIXED TO 180 KG FOR ALL FRICTION STAY TYPES.

46012 (36012)
METRİK PERÇİN VE VİDA SETİ
METRIC PIN AND SCREW KIT



45007 (35007)
MAKAS ALTI BESLEME TAKOZU (PVC)
FRICTION STAY REINFORCEMENT PLUG (PVC)

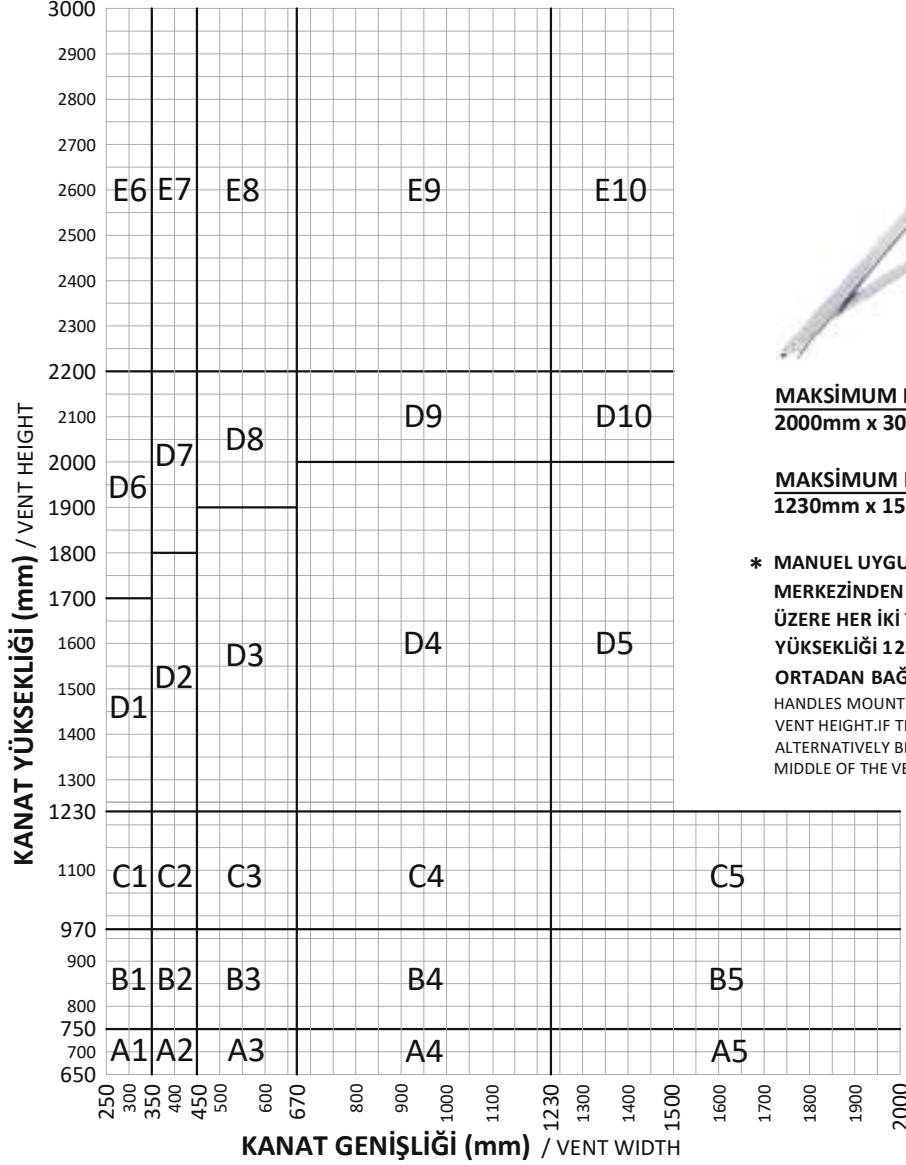


* () PARANTEZ İÇERİSİNDEKİ KODLAR YERLİ AKSESUARLARA AİTTİR.
() CODES INTO THE PARENTHESIS BELONG TO NATİVE ACCESSORIES.

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

PARALEL MAKASLAR / PARALEL FRICTION STAYS

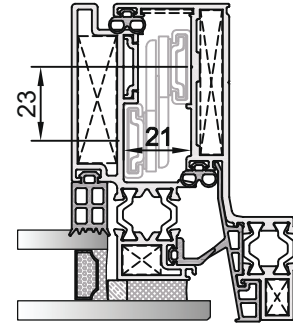
MAKAS SEÇİM DİYAGRAMI / FRICTION STAY SELECTION DIAGRAM



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 TARAFA MONTAJLANMALIDIR. KANAT YÜKSEKLİĞİ 1230 mm'NİN 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.

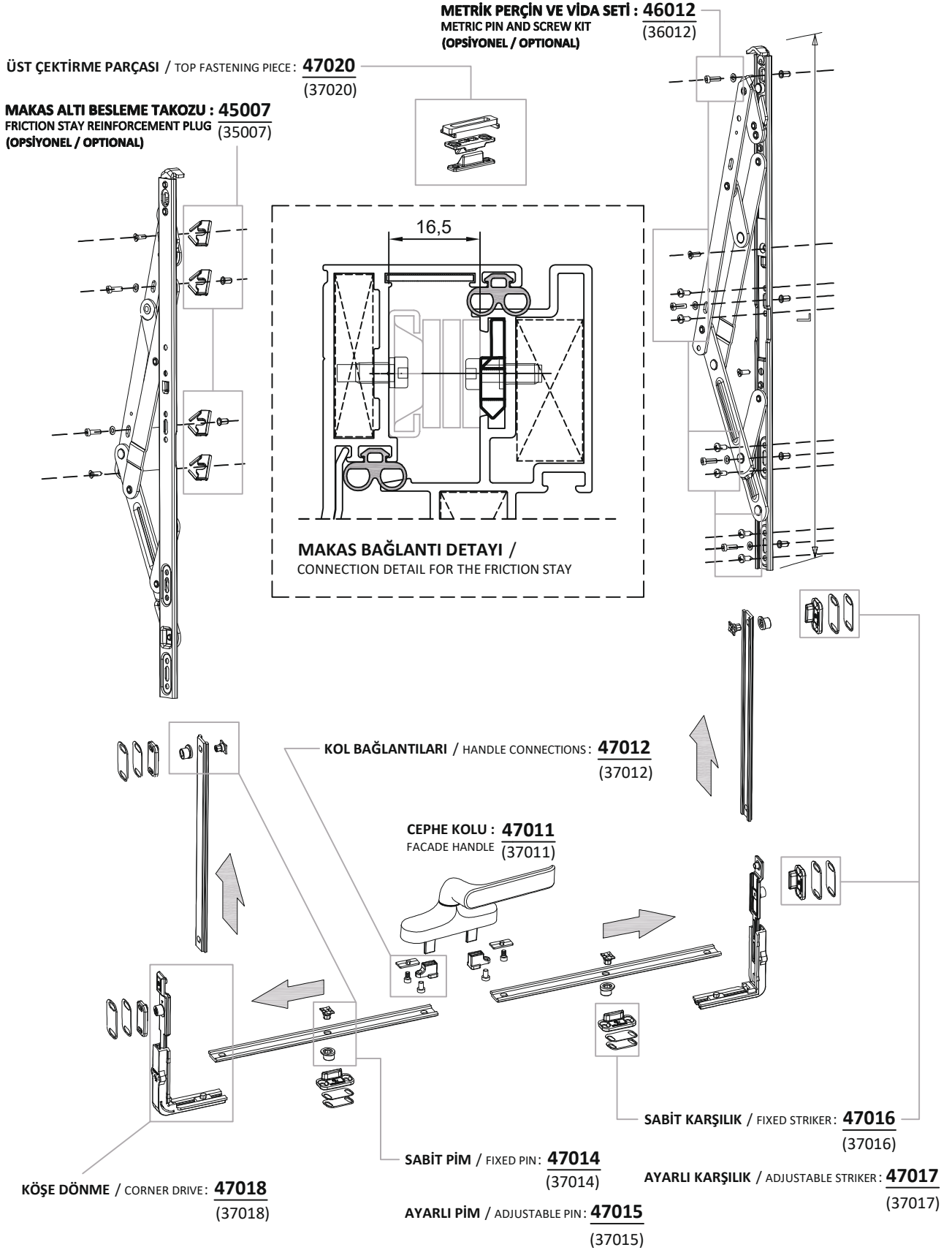


YAN MAKASLAR SIDE MOUNTED FRICTION STAYS				ALT&ÜST KONTROL MAKASLARI TOP&BOTTOM CONTROL FRICTION STAYS			
	SOL TARAF LEFT SIDE	SAĞ TARAF RIGHT SIDE	STOPLAMALAR STOPERS	MAKS. AĞIRLIK MAX. WEIGHT (mm)	ÜST TOP	ALT BOTTOM	
A	1 x 47026	1 x 47030	2 x 47034	100	1	47038	-
B	1 x 47027	1 x 47031	2 x 47035	100	2	47030	-
C	1 x 47028	1 x 47032	2 x 47036	200	3	47031	-
D	1 x 47029	1 x 47033	2 x 47037	200	4	47032	-
E	2 x 47029	2 x 47033	4 x 47037	200	5	47033	-
* 47038 KONTROL MAKASLARI KULLANILIRKEN 47035 STOPLAMA YERİN E 47034 KULLANILIR. / WHEN USING 47038 CONTROL FRICTION STAYS, REPLACE 47035 STOPERS WITH 47034 STOPERS. * MANUEL UYGULAMALAR İÇİN KANATLARIN MAKSİMUM AÇILMA MESAFESİ 150 mm 'DİR. / MAXIMUM OPENING DISTANCE FOR VENTS ARE 150 mm FOR MANUAL APPLICATIONS. * PARALEL MAKAS FİYATLANDIRMASI İÇİN LÜTFEN SİSTEM ALÜMİNYUM'A BAŞVURUNUZ. / FOR PARALLEL FRICTION STAY PRICING DETAILS PLEASE CONTACT WITH SİSTEM ALUMINIUM.					6	47038	47038
					7	47030	47030
					8	47031	47031
					9	47032	47032
					10	47033	47033

* () 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.

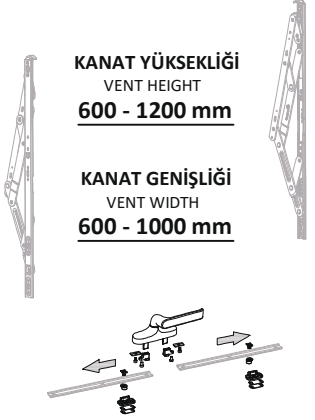
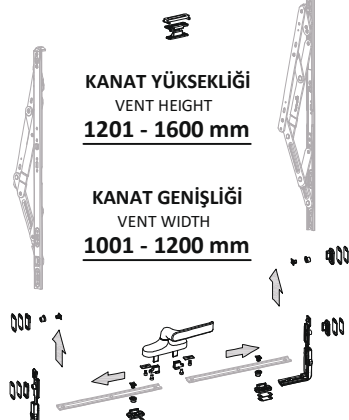
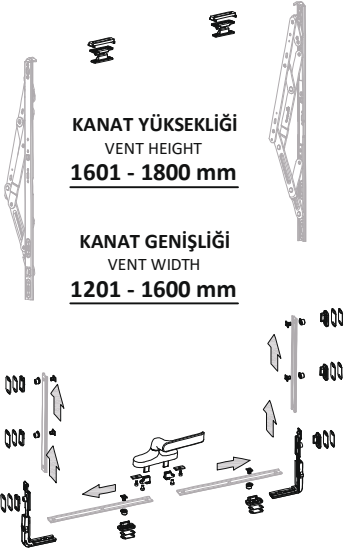
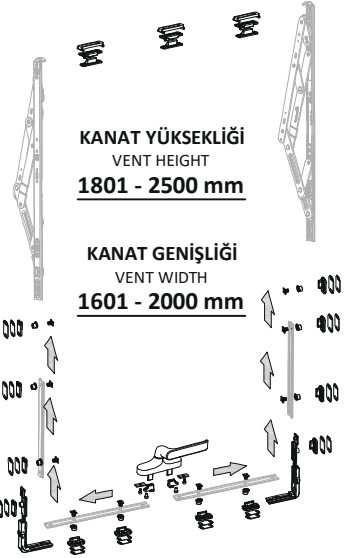
KANAT KİTLEME AKSESUARLARI / VENT LOCKING ACCESSORIES



* () 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.

KANAT KİTLEME SETLERİ / VENT LOCKING KITS

48001 (38001)	 <p>KANAT YÜKSEKLİĞİ VENT HEIGHT 600 - 1200 mm</p> <p>KANAT GENİŞLİĞİ VENT WIDTH 600 - 1000 mm</p>
48002 (38002)	 <p>KANAT YÜKSEKLİĞİ VENT HEIGHT 1201 - 1600 mm</p> <p>KANAT GENİŞLİĞİ VENT WIDTH 1001 - 1200 mm</p>
48003 (38003)	 <p>KANAT YÜKSEKLİĞİ VENT HEIGHT 1601 - 1800 mm</p> <p>KANAT GENİŞLİĞİ VENT WIDTH 1201 - 1600 mm</p>
48004 (38004)	 <p>KANAT YÜKSEKLİĞİ VENT HEIGHT 1801 - 2500 mm</p> <p>KANAT GENİŞLİĞİ VENT WIDTH 1601 - 2000 mm</p>

SET KODU / KIT CODE :			48001 (38001)	48002 (38002)	48003 (38003)	48004 (38004)
ÜRÜN KODU PRODUCT CODE	ALTERNATİF YERLİ ÜRÜN KODLARI ALTERNATIVE NATIVE PRODUCT CODES	ÜRÜN ADI PRODUCT NAME	2 NOKTADAN KİTLEME 2 POINTS LOCKING	7 NOKTADAN KİTLEME 7 POINTS LOCKING	10 NOKTADAN KİTLEME 10 POINTS LOCKING	15 NOKTADAN KİTLEME 15 POINTS LOCKING
47011	37011	CEPHE KOLU CURTAIN WALL HANDLE	1 ADET / PCS.	1 ADET / PCS.	1 ADET / PCS.	1 ADET / PCS.
47012	37012	KOL BAĞLANTILARI HANDLE CONNECTIONS	2 ADET / PCS.	2 ADET / PCS.	2 ADET / PCS.	2 ADET / PCS.
47015	37015	AYARLI PİM ADJUSTABLE PIN	2 ADET / PCS.	4 ADET / PCS.	6 ADET / PCS.	10 ADET / PCS.
47017	37017	AYARLI KARŞILIK ADJUSTABLE STRIKER	2 ADET / PCS.	6 ADET / PCS.	8 ADET / PCS.	12 ADET / PCS.
47018	37018	KÖŞE DÖNME CORNER DRIVE	-	2 ADET / PCS.	2 ADET / PCS.	2 ADET / PCS.
47020	37020	ÜST ÇEKTİRME 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
<p>47011 (37011) CEPHE KOLU / FACADE HANDLE</p>	
<p>47051 (37051) ANAHTARLI CEPHE KOLU / FACADE HANDLE WITH KEY</p>	
<p>47052 (37052) SÖKÜLEBİLİR CEPHE KOLU MEKANİZMASI / DETACHABLE FACADE CREMONE MECANISM</p>	
<p>47053 (37053) SÖKÜLEBİLİR CEPHE KOLU SAPI / DETACHABLE FACADE HANDLE</p>	
<p>47012 (37012) CEPHE KOLU BAĞLANTI ELEMANI / FACADE HANDLE FASTENING ELEMENT</p>	 <p>14,5mm</p>
<p>47013 (37013) CEPHE KOLU BAĞLANTI ELEMANI / FACADE HANDLE FASTENING ELEMENT</p>	 <p>17,5mm</p>
<p>47014 (37014) SABİT PİM / FIXED PIN</p>	

() 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.

AKSESUARLAR / ACCESSORIES

AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	GÖRSELLER / IMAGES
<p>47015 (37015) AYARLI PİM / ADJUSTABLE PIN</p>	
<p>47016 (37016) SABİT KARŞILIK / FIXED STRIKER</p>	
<p>47017 (37017) AYARLI KARŞILIK / ADJUSTABLE STRIKER</p>	
<p>47018 (37018) KÖŞE DÖNÜŞ AKTARMA PARÇASI / CORNER TRANSFER DEVICE</p>	
<p>47019 (37019) CEPHE MAKASLARI İÇİN YÜKSEKLİK AYAR PARÇASI / HEIGHT ADJUSTMENT PIECE FOR FRICTION STAYS</p>	

* () 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.

AKSESUARLAR / ACCESSORIES

AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	GÖRSELLER / IMAGES
<p>47020 (37020) ÜST ÇEKTİRME PARÇASI / TOP FASTENING PIECE</p>	
<p>47021 (37021) LİMİTLEME MAKASI / LIMITOR ARM</p>	
<p>47023 (37023) TELESKOPİK MAKAS (KÜÇÜK) / TELESCOPIC ARM (SMALL)</p>	
<p>47024 (37024) TELESKOPİK MAKAS (ORTA) / TELESCOPIC ARM (MEDIUM)</p>	
<p>47025 (37025) TELESKOPİK MAKAS (BÜYÜK) / TELESCOPIC ARM (LARGE)</p>	

* () 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.

AKSESUARLAR / ACCESSORIES

AKSESUAR KODU VE GÖRSELİ / ACCESSORY CODE AND IMAGE	TEKNİK ÖZELLİKLER / TECHNICAL SPECIFICATIONS
 <p>47039 - SİYAH / BLACK 47040 - GRİ / GRAY VASİSTAS VE İŞIKLIK KANATLARI İÇİN AÇMA MOTORU / OPENING MOTOR FOR BOTTOM-HUNG & SKYLIGHT VENTS</p>	<p>ALUTECH SMART (230V AC) MOTOR 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>47041 - SİYAH / BLACK 47042 - GRİ / GRAY VASİSTAS VE İŞIKLIK KANATLARI İÇİN AÇMA MOTORU / OPENING MOTOR FOR BOTTOM-HUNG & SKYLIGHT VENTS</p>	<p>ALUTECH SMART (24V DC) MOTOR 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>47043 - SİYAH / BLACK 47044 - GRİ / GRAY PARALEL, VASİSTAS VE İŞIKLIK KANATLARI İÇİN MOTOR / MOTOR FOR PARALEL, BOTTOM-HUNG & SKYLIGHT VENTS</p>	<p>ALUTECH LIVIN L25 (230V AC) MOTOR 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>47045 - SİYAH / BLACK 47046 - GRİ / GRAY PARALEL, VASİSTAS VE İŞIKLIK KANATLARI İÇİN MOTOR / MOTOR FOR PARALEL, BOTTOM-HUNG & SKYLIGHT VENTS</p>	<p>ALUTECH LIVIN L35 (24V DC) MOTOR 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>47047 - GRİ / GRAY PARALEL, VASİSTAS VE İŞIKLIK KANATLARI İÇİN MOTOR / MOTOR FOR PARALEL, BOTTOM-HUNG & SKYLIGHT VENTS</p>	<p>ALUTECH FAST 50 (230V AC) MOTOR 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 TEMSİLDİR.
! ACCESSORY IMAGES ARE REPRESENTATIVE AT THIS PAGE.

AKSESUARLAR / ACCESSORIES

AKSESUAR KODU VE ÜRÜN BİLGİLERİ / ACCESSORY CODE AND PRODUCT DESCRIPTION	GÖRSELLER / IMAGES
 <p>47048 - GRİ / GRAY <i>PARALEL, VASİSTAS VE IŞIKLIK KANATLARI İÇİN MOTOR / MOTOR FOR PARALEL, BOTTOM-HUNG & SKYLIGHT VENTS</i></p>	<p>ALUTECH AIRWIN A 65 (230V AC) MOTOR Ayarlanabilir Açılma Mesafesi : 550 mm İtme Gücü: 650 N Çekme Gücü: 650 N Çalışma Hızı: 10 mm/sec Maks.Kanat Ağırlığı-Vasistas ve Pivot: 120 kg Maks.Kanat Ağırlığı-Yatay ve Çatı Pencerelede .: 120 kg Kanat Eni: 200 - 1250 mm Maksimum Kanat Boyu: 2600 mm</p>
<p>47049 <i>ALUTECH GNS 02A - 2 KANAL UZAKTAN KUMANDA / ALUTECH GNS 02A - 2 CHANNEL REMOTE CONTROL</i></p>	
<p>47050 <i>ALUTECH GNS 202 / 220V - UZAKTAN KUMANDA ALICISI / ALUTECH GNS 202 / 220V - REMOTE CONTROL RECEIVER</i></p>	

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

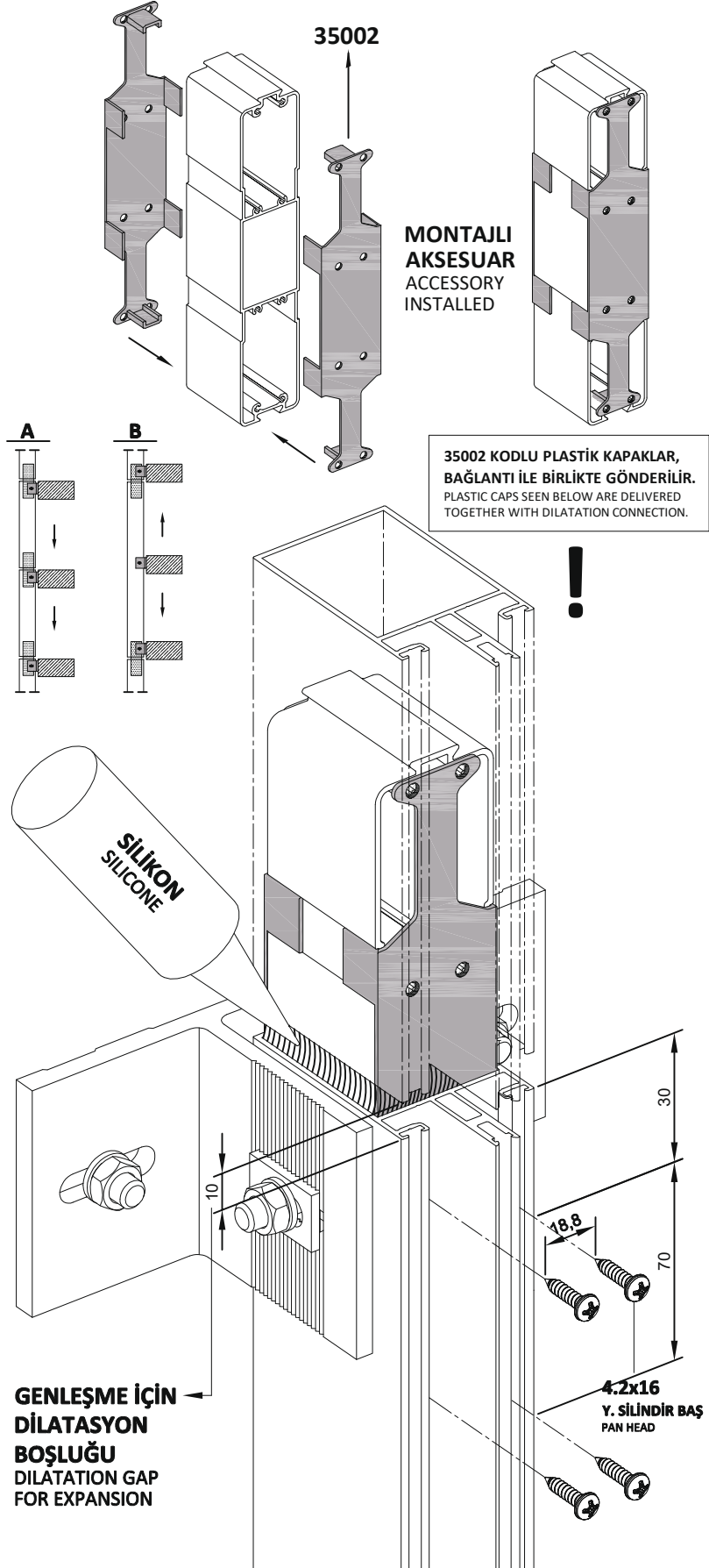
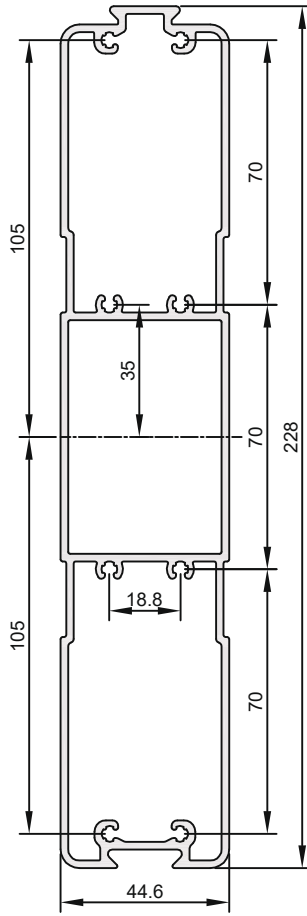
! BU SAYFADA BELİRTİLEN AKSESUAR GÖRSELLERİ TEMSİLDİR.
ACCESSORY IMAGES ARE REPRESENTATIVE AT THIS PAGE.

MONTAJ TALİMATLI AKSESUARLAR ACCESSORIES WITH FABRICATION MANUAL

1. DİLATASYON BAĞLANTILARI /
DILATATION CONNECTIONS
2. U BAĞLANTILAR / 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 ALTI DESTEK PARÇALARI /
GLAZING SUPPORT PIECES
7. KANAT İÇİN CAM ALTI DESTEK PARÇALARI /
GLAZING SUPPORT PIECES FOR VENT
8. STANDART CAM ARASI KİTLEME PARÇALARI /
LOCKING PIECES FOR THE STANDARD SPACER
9. SICAK KENAR ÇITALI KİTLEME 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

DİLATASYON BAĞLANTILARI
DILATATION CONNECTIONS

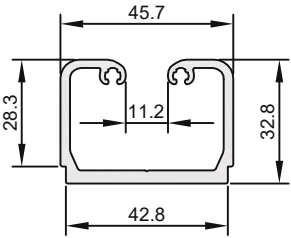
AKSESUAR KODU ACCESSORY CODE	KESİM ÖLÇÜSÜ CUTTING DIMENSION
31017	17,5 mm
31018	32,5 mm
31019	52,5 mm
31020	72,5 mm
31021	92,5 mm
31022	91,5 mm
31023	112 mm
31024	110 mm
31025	132 mm
31026	129,5 mm
31027	151,5 mm
31028	149 mm
31029	171,5 mm
31030	169 mm
31031	190 mm
31032	187 mm



U BAĞLANTILAR

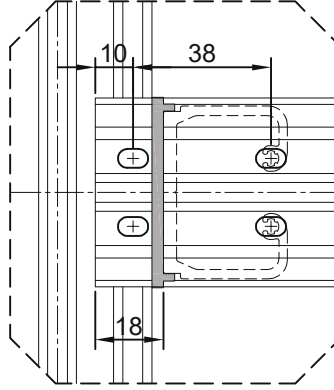
U CONNECTIONS

AKSESUAR KODU ACCESSORY CODE	KESİM ÖLÇÜSÜ CUTTING DIMENSION
31033	12 mm
31034	32 mm
31035	42 mm
31036	52 mm
31037	59,4 mm
31038	79,4 mm
31039	99,4 mm
31040	119,4 mm
31041	139,4 mm
31042	159,4 mm
31043	178 mm
31044	210 mm

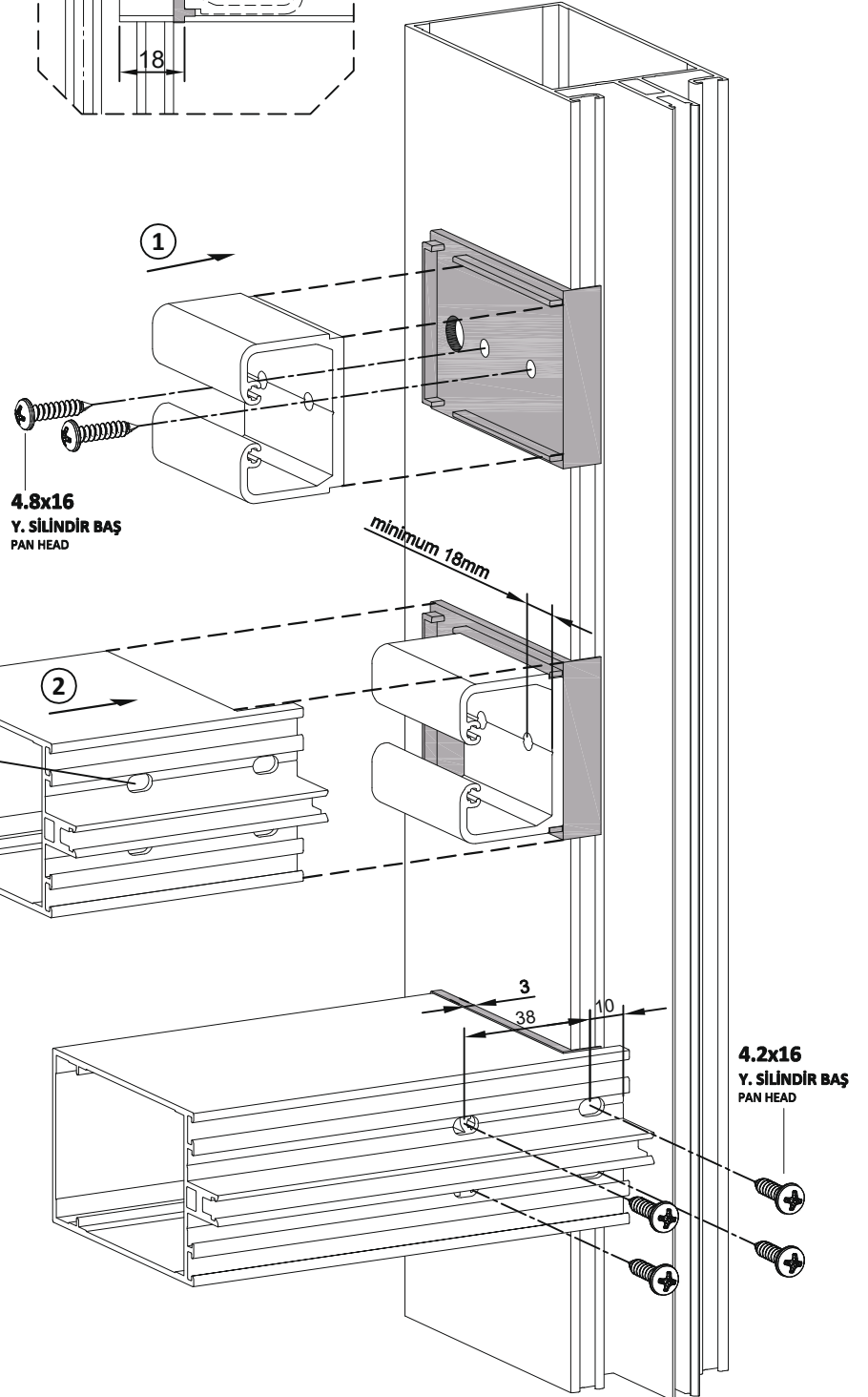
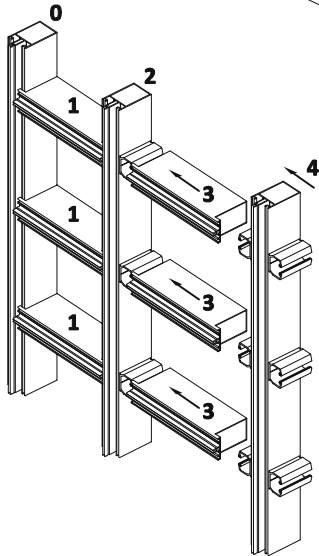
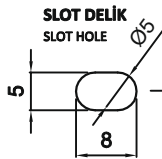
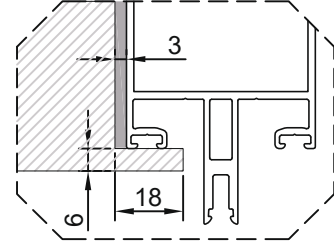


FP506 (1,040 kg/m.)

SLOT DELİK ÖLÇÜLERİ SLOT HOLE DIMENSIONS

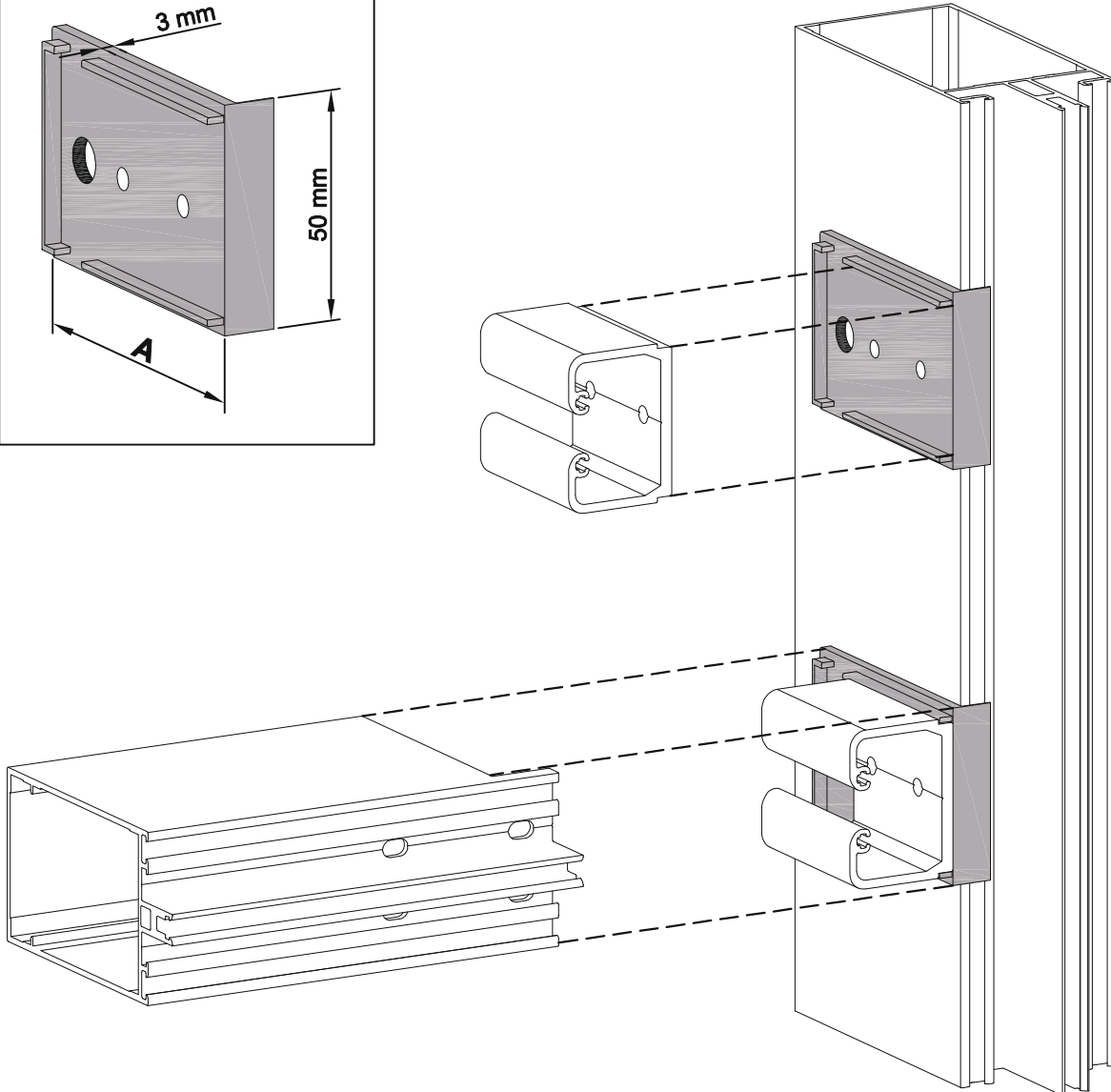
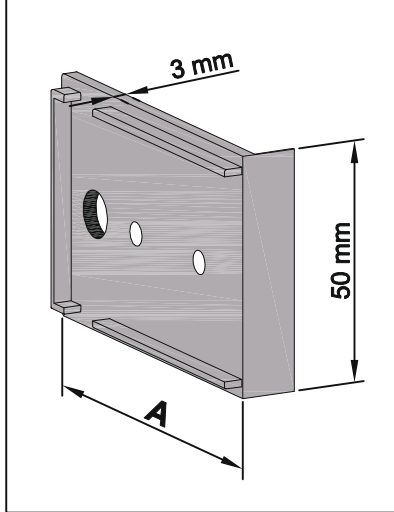
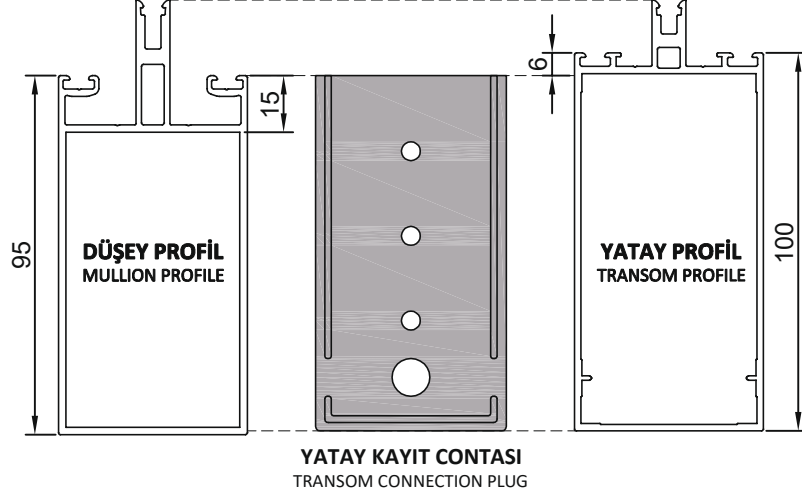


KERTME ÖLÇÜLERİ NOTCHING DIMENSIONS

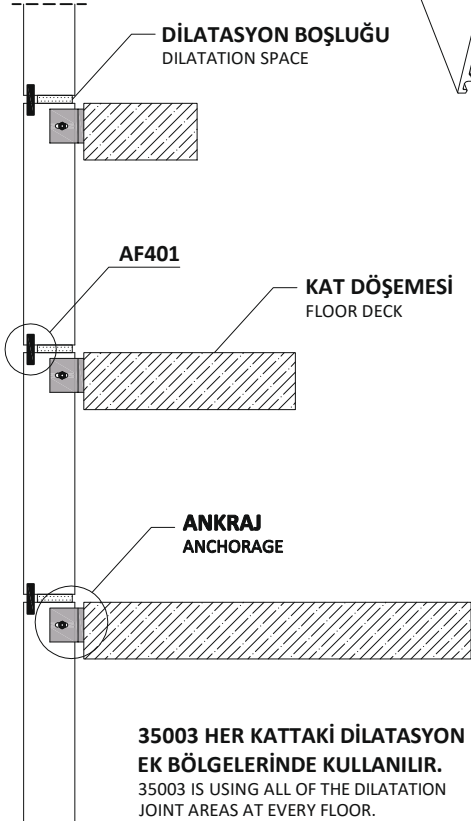
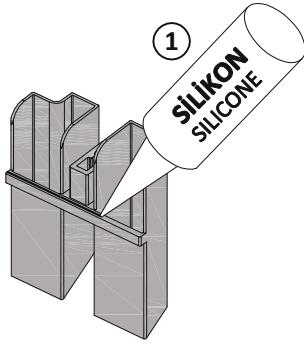
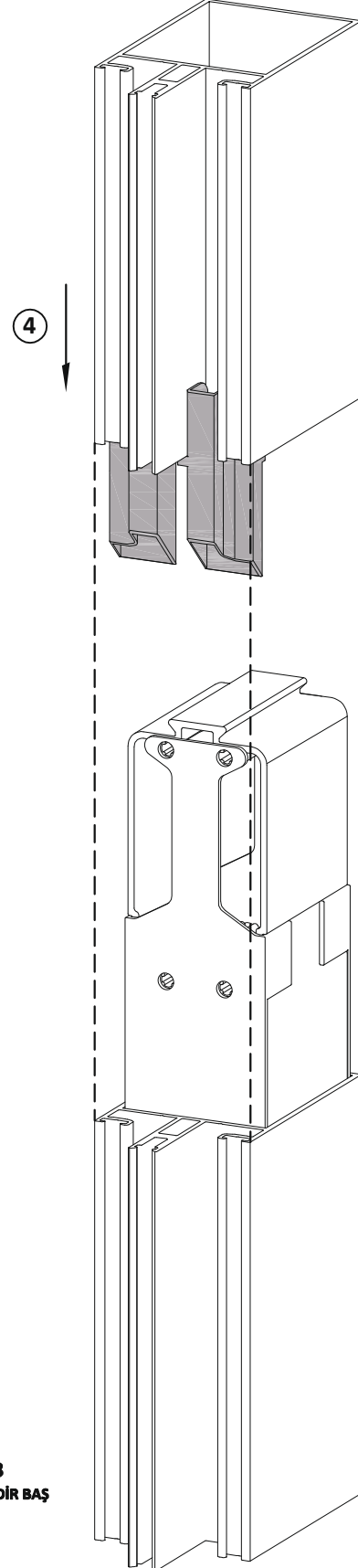
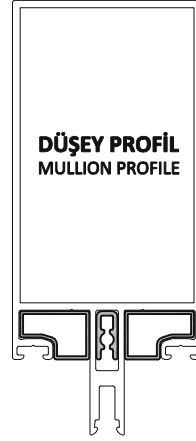
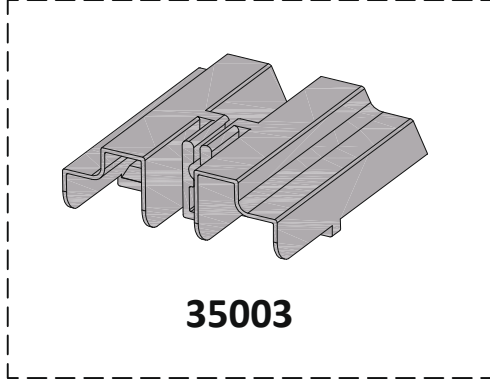


YATAY KAYIT CONTALARI
TRANSOM CONNECTION PLUGS

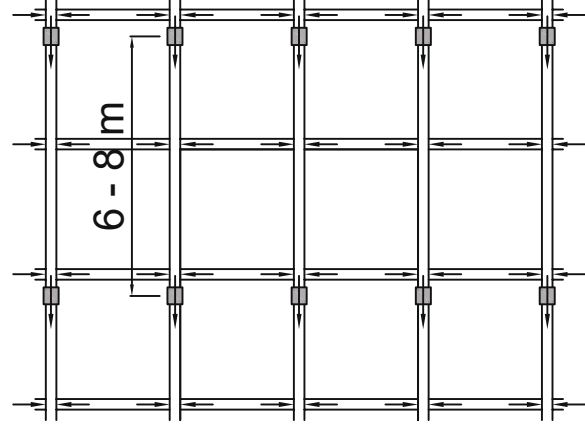
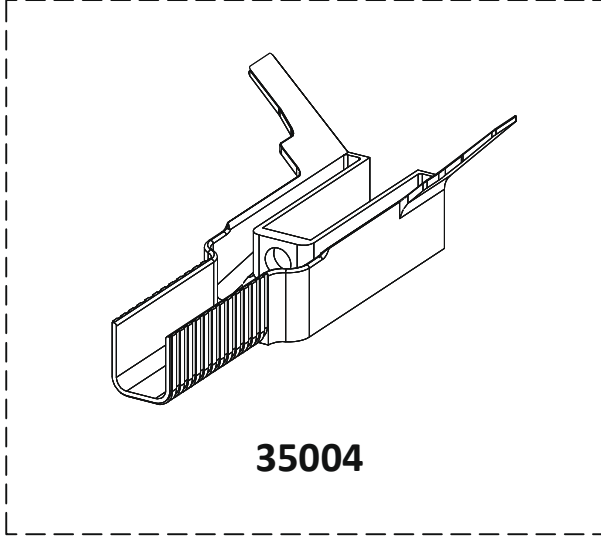
AKSESUAR KODU ACCESSORY CODE	A (mm)
33004	20 mm
33005	40 mm
33006	60 mm
33007	80 mm
33008	100 mm
33009	120 mm
33010	140 mm
33011	160 mm
33012	180 mm
33013	200 mm
33014	220 mm



KONDENS YOLU İÇİN BAĞLANTI PARÇASI
CONNECTION PIECE FOR THE CONDENSATION LINE

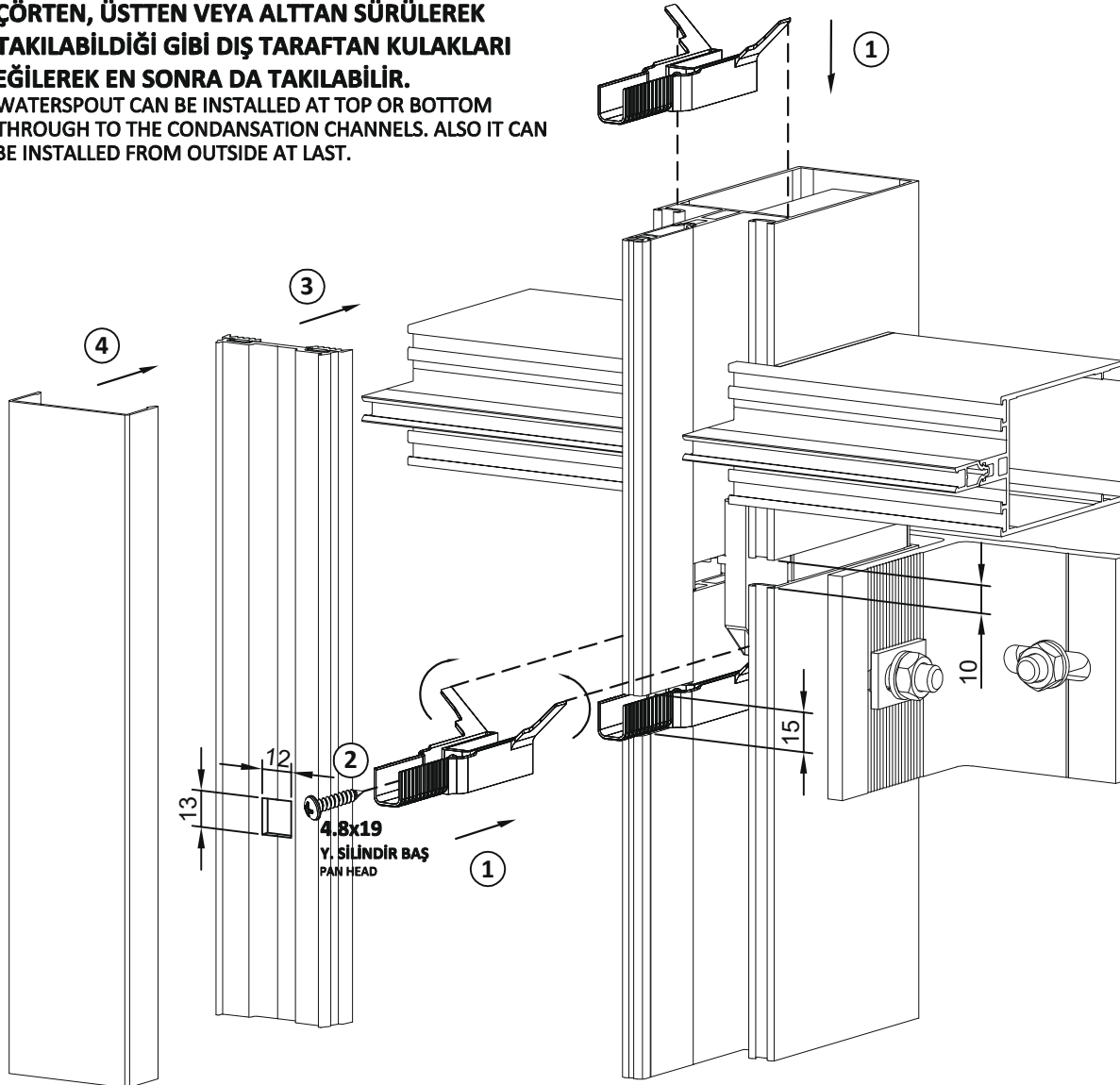


ÇÖRTEN (YÜKSEK KATLI YAPILAR İÇİN)
WATERSPOUT (FOR ONLY HIGH BUILDINGS)

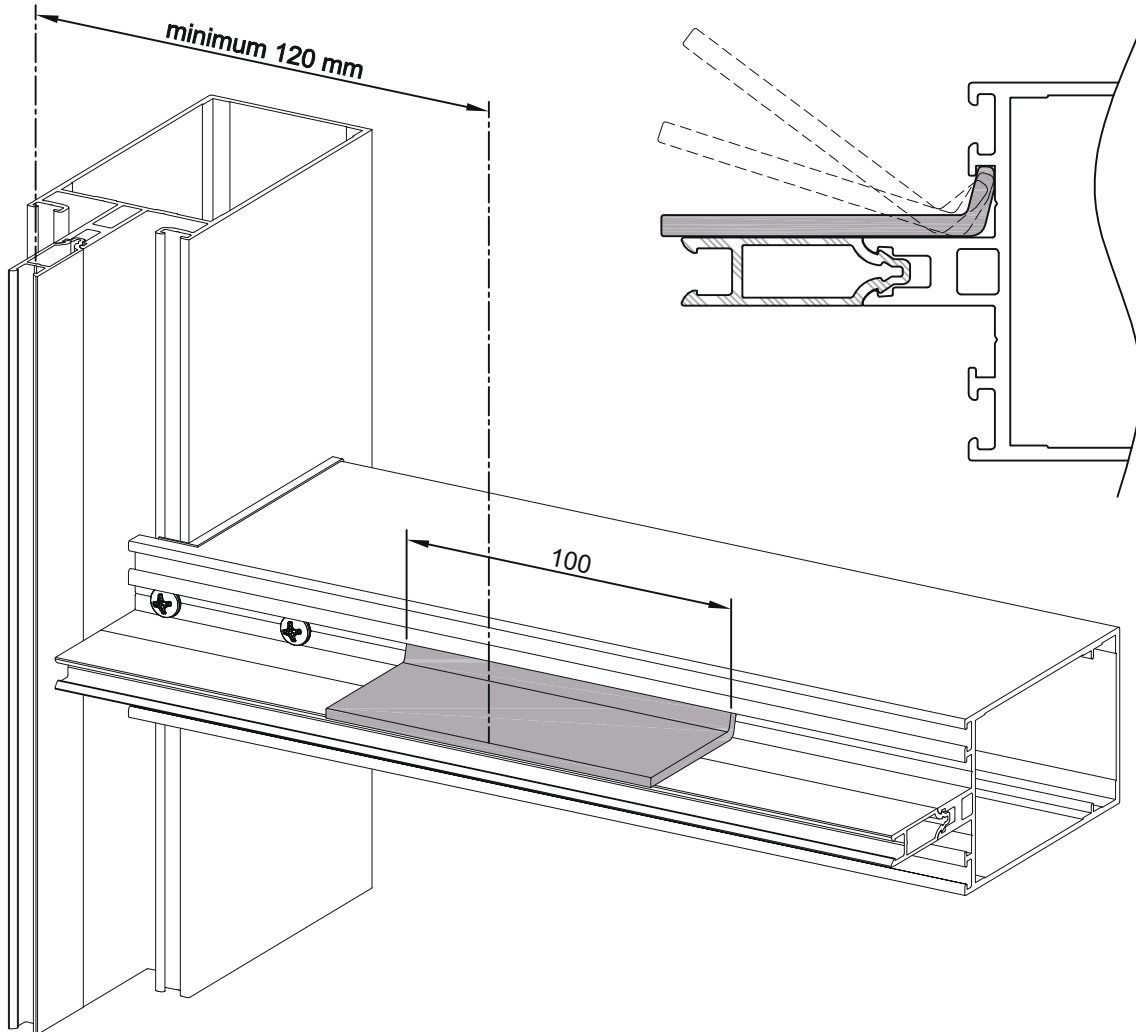
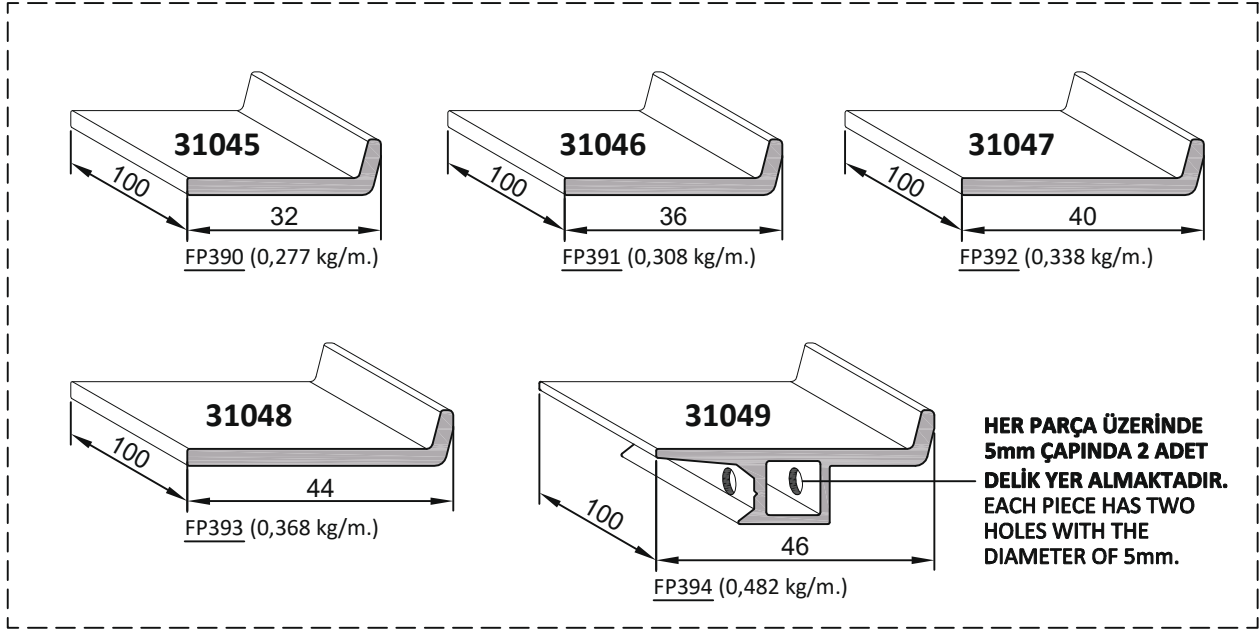


60 METRE BİNA YÜKSEKLİĞİNDEN SONRA HER İKİ KATTA BİR UYGULANMASI TAVSİYE EDİLİR.
USING ONE AT EACH TWO FLOORS AFTER THE BUILDING HEIGHT OF 60 METERS RECOMMENDED.

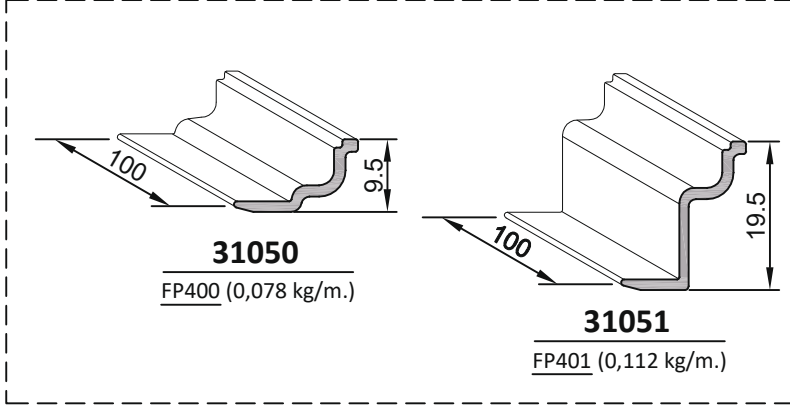
ÇÖRTEN, ÜSTTEN VEYA ALTAN SÜRÜLEREK TAKILABİLDİĞİ GİBİ DİŞ TARAFTAN KULAKLARI EĞİLEREK EN SONRA DA TAKILABİLİR.
WATERSPOUT CAN BE INSTALLED AT TOP OR BOTTOM THROUGH TO THE CONDANSATION CHANNELS. ALSO IT CAN BE INSTALLED FROM OUTSIDE AT LAST.



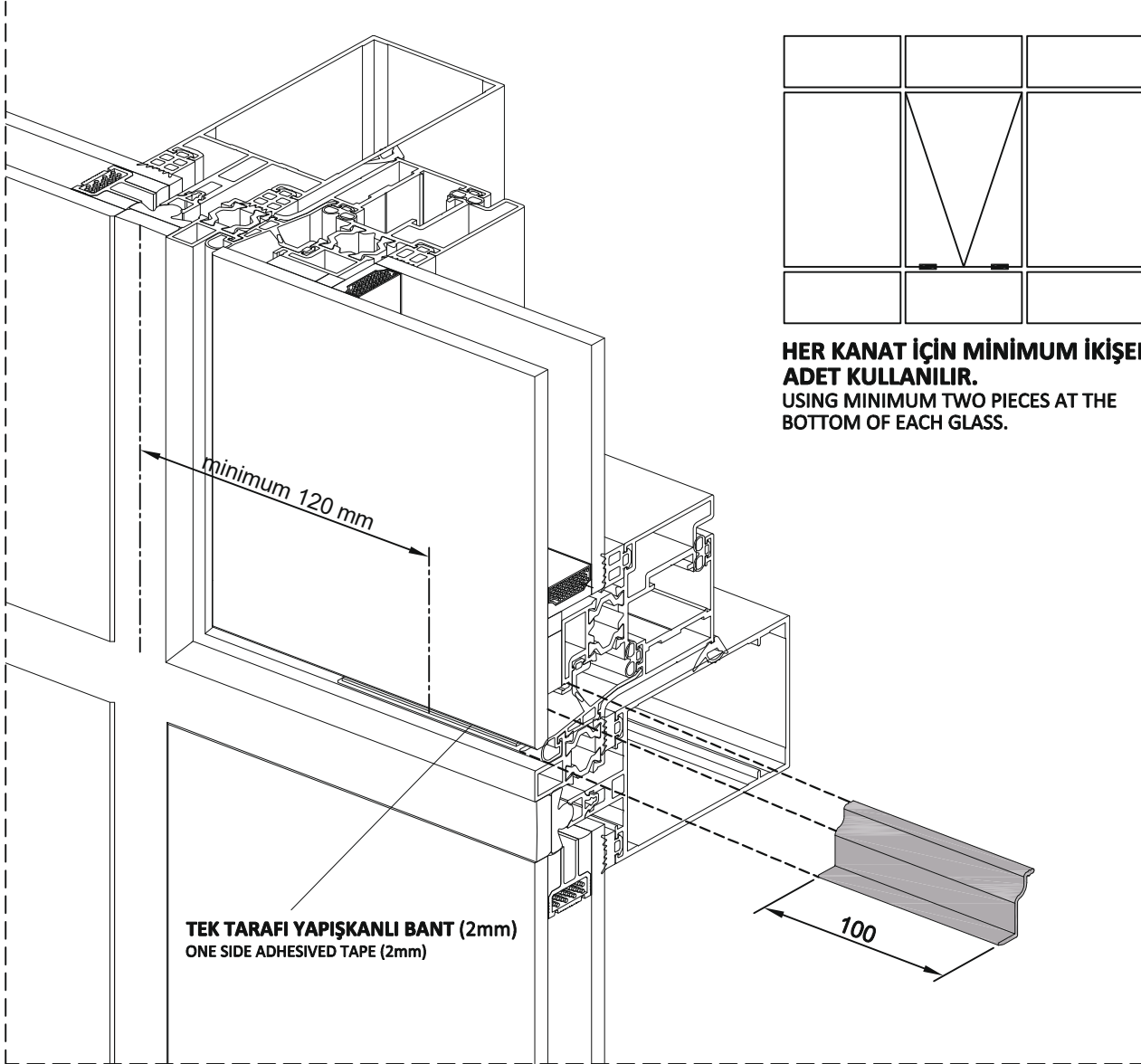
CAM ALTI DESTEK PARÇALARI
GLAZING SUPPORT PICES



KANAT İÇİN CAM ALTI DESTEK PARÇALARI
GLAZING SUPPORT PIECES FOR VENT

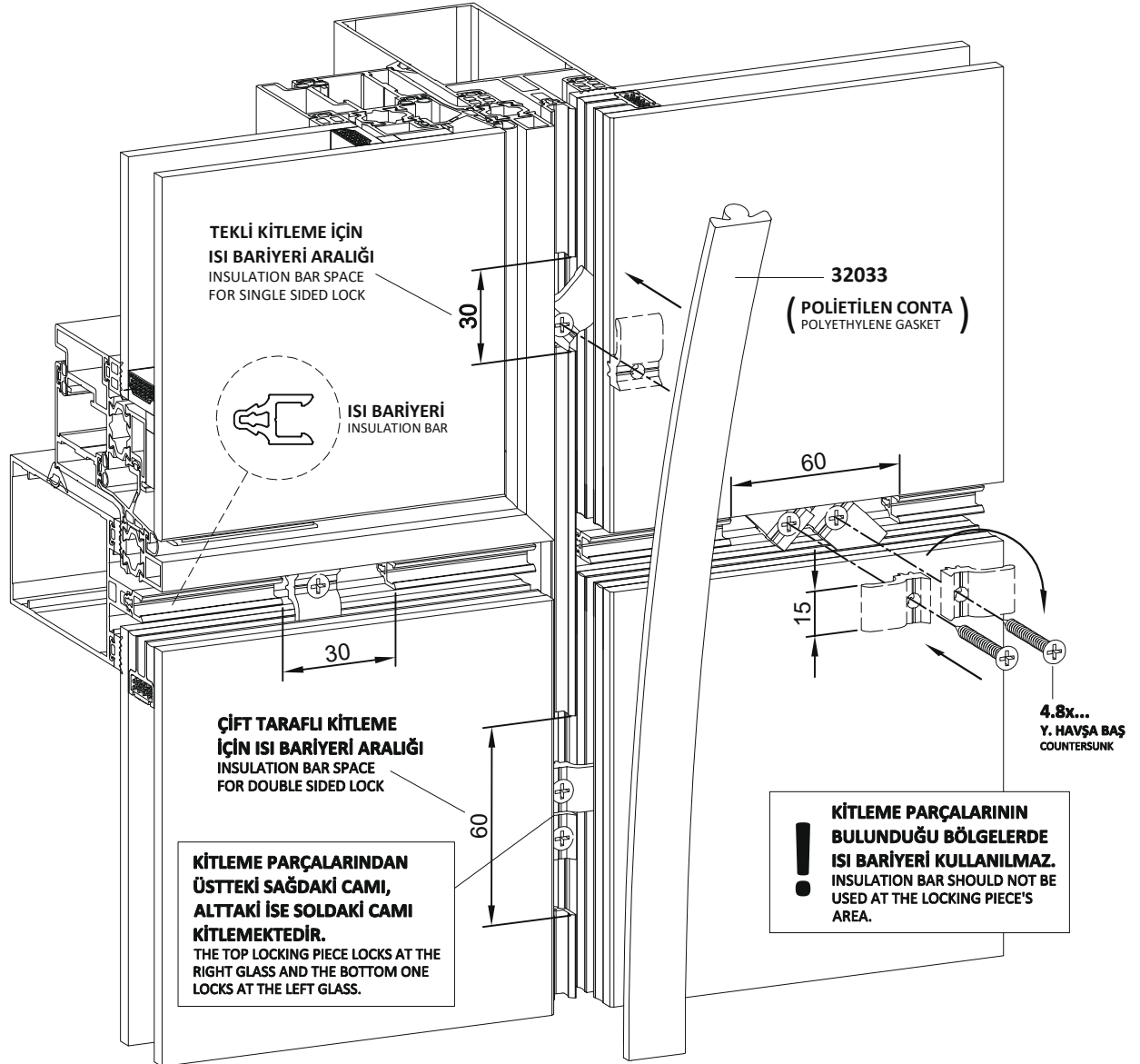
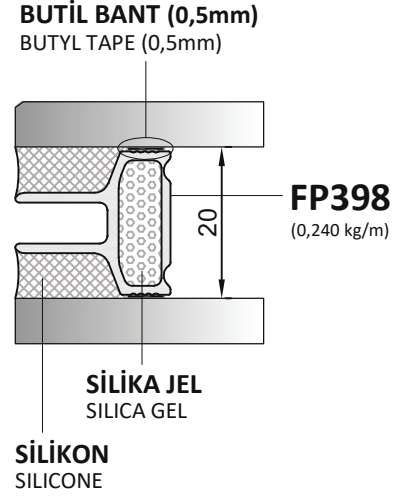
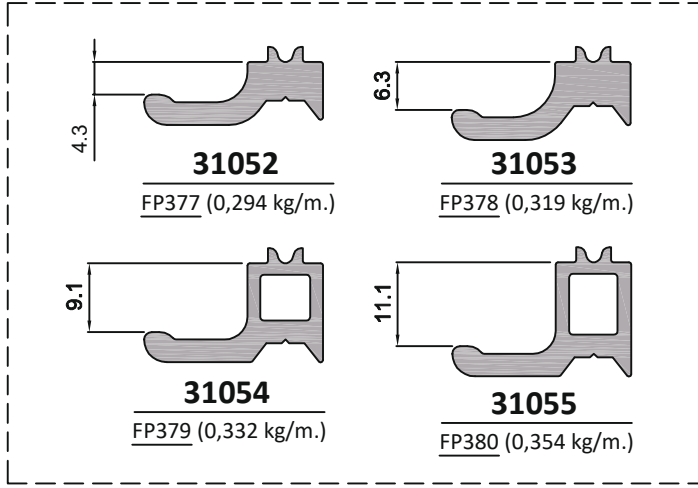


CAM ALTI DESTEK PARÇALARI, KANAT KÖŞELERİ PRESLENMEDEN ÖNCE TAKILMALIDIR.
GLAZING SUPPORTS SHOULD BE INSTALLED BEFORE THE CORNER CLEAT JOINTS OF VENT APPLIED.



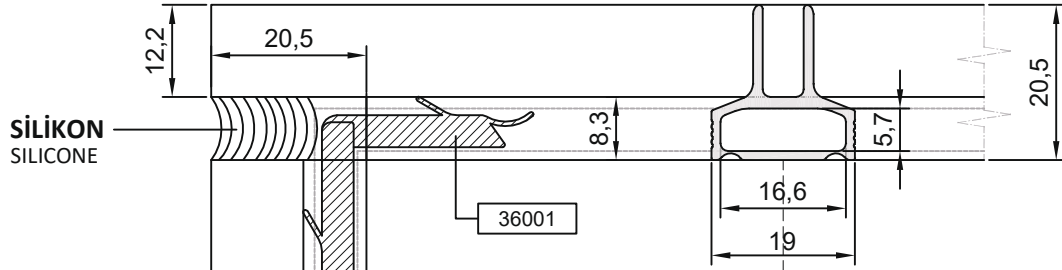
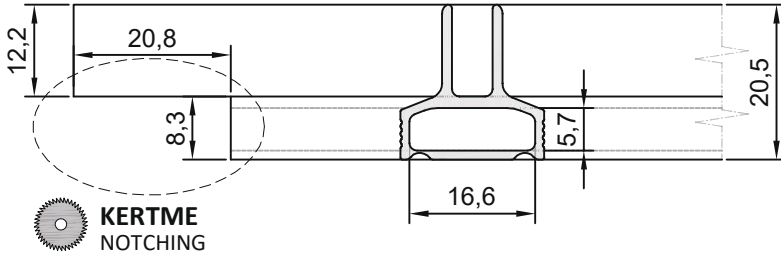
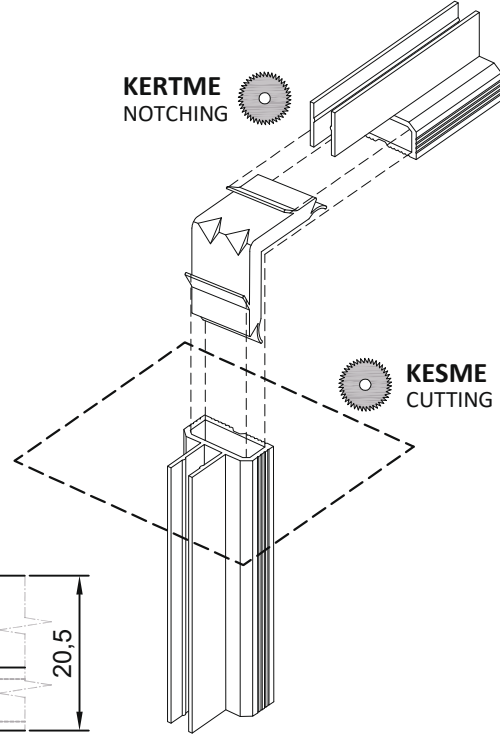
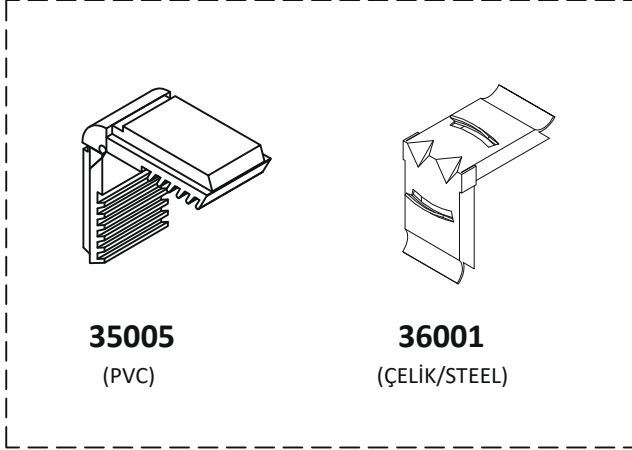
STANDART 20mm ISICAM ÇITALI CAM ARASI KİTLEME PARÇALARI

LOCKING PIECES FOR THE STANDARD 20mm DOUBLE GLAZED GLASS SPACER

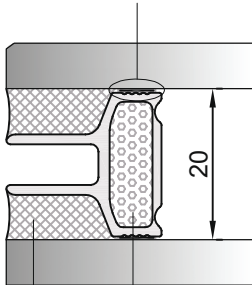


! AYNI CAM MODÜLÜNDEKİ KİTLEMELER ARASI MESAFE YAKLAŞIK 30 CM OLMALIDIR.
DISTANCE BETWEEN LOCKING PIECES SHOULD BE APPROXIMATELY 30 CM AT THE SAME GLASS MODULE.

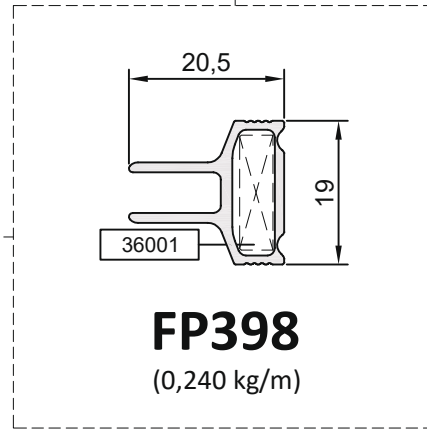
STANDART 20mm ISICAM ÇITASI İÇİN KÖŞE BİRLEŞTİRME METODU
CORNER CONNECTION METHOD FOR THE STANDARD 20mm DOUBLE GLAZED GLASS SPACER



BUTİL BANT (0,5mm)
BUTYL TAPE (0,5mm)

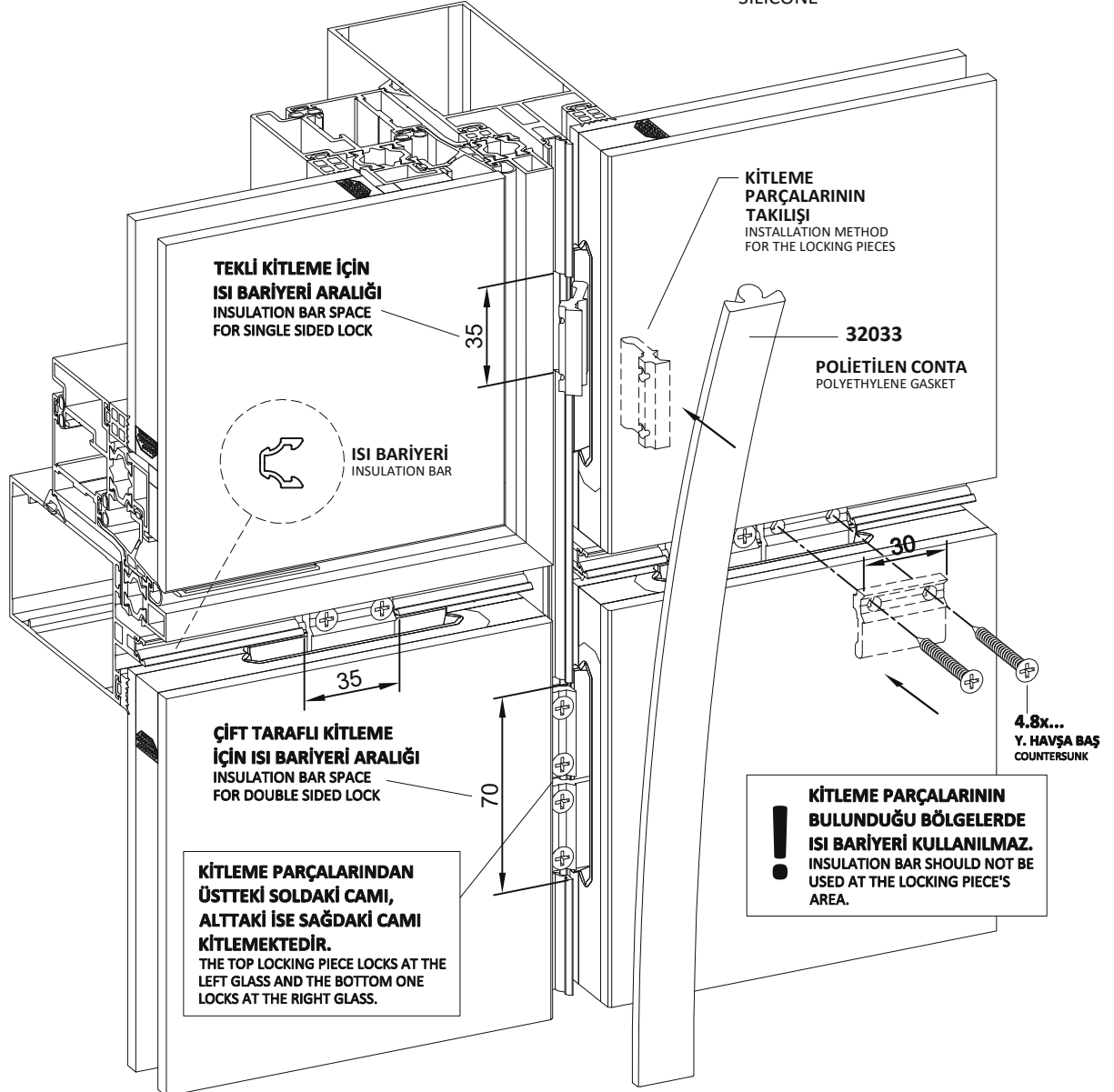
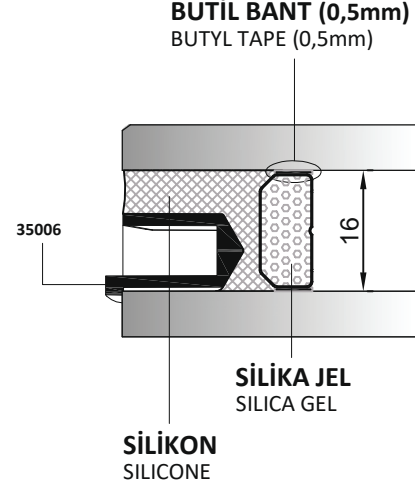
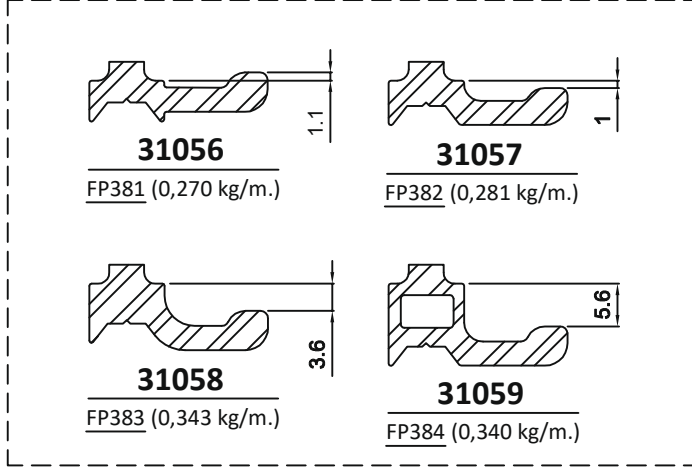


SİLİKON
SILICONE



16mm SICAK KENAR ISICAM ÇITALI CAM ARASI KİTLEME PARÇALARI

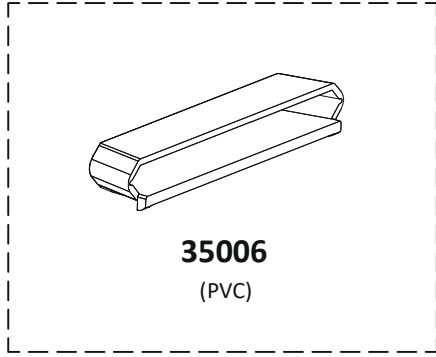
LOCKING PIECES FOR 16mm WARM EDGE DOUBLE GLAZED GLASS SPACER



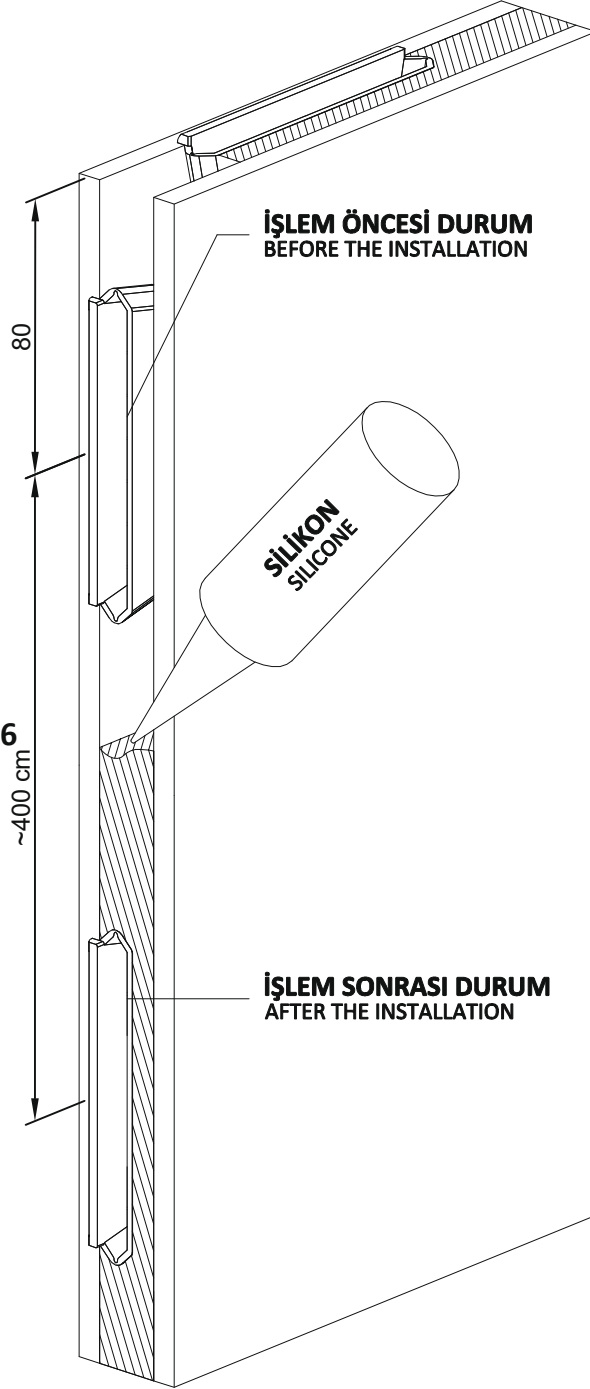
! AYNI CAM MODÜLÜNDEKİ KİTLEMELER ARASI MESAFE YAKLAŞIK 40 CM OLMALIDIR.
DISTANCE BETWEEN LOCKING PIECES SHOULD BE APPROXIMATELY 40 CM AT THE SAME GLASS MODULE.

16mm SICAK KENAR ISICAM ÇITASI İÇİN CAM ARASI KİTLEME HAVUZU

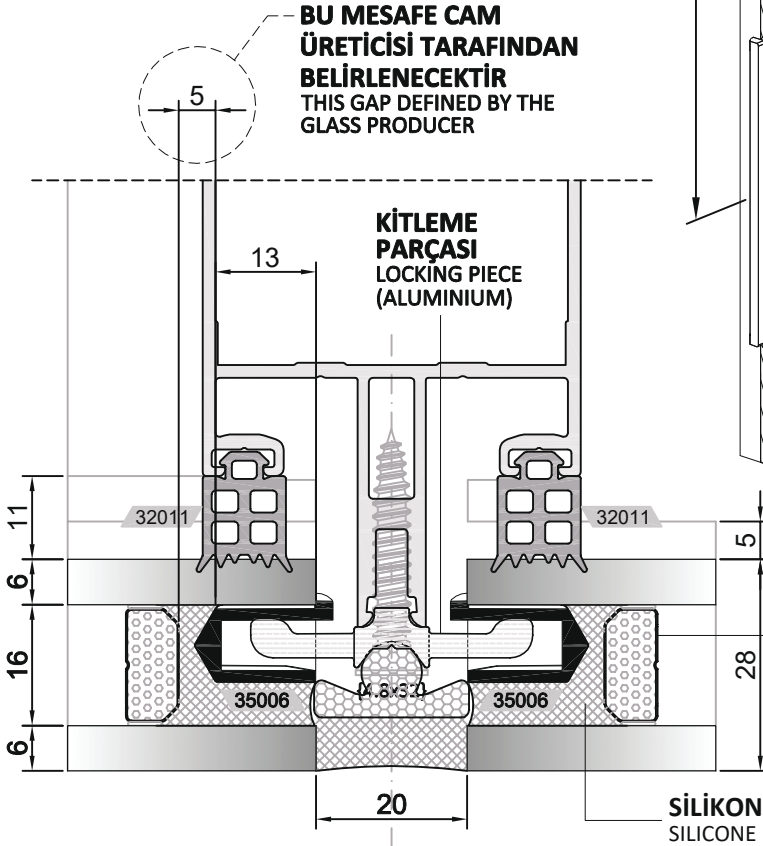
LOCKING HOLE FOR 16mm WARM EDGE DOUBLE GLAZED GLASS SPACER



35006 KODLU KİTLEME HAVUZU SİLİKONLAMA İŞLEMİNDEN ÖNCE DOĞRU KONUMUNDA YAPIŞTIRILABİLİR YA DA SİLİKONLANMIŞ ISLAK YÜZEYE BATIRILARAK SONRADAN DA TAKILABİLİR.
LOCKING HOLE CAN BE GLUED BEFORE BONDING PROCESS TO THE RIGHT POSITION OR CAN BE SINK INTO THE WET SILICONE AFTER THE BONDING PROCESS.

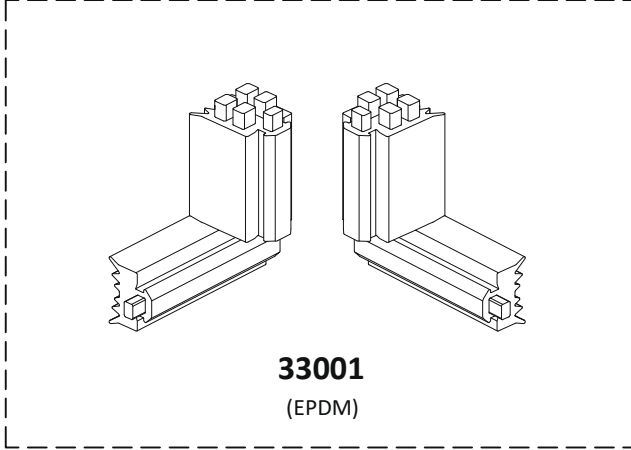


BU MESAFE CAM ÜRETİCİSİ TARAFINDAN BELİRLENECEKTİR
THIS GAP DEFINED BY THE GLASS PRODUCER

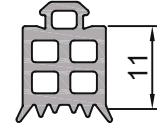


SICAK KENAR ISICAM ÇITASI
WARM EDGE DOUBLE GLAZED
GLASS SPACER

VULKANİZE İÇ KÖŞE PARÇALARI
VULCANISED INNER CORNER PIECES

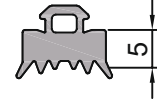


DÜŞEY FİTİL
VERTICAL GASKET



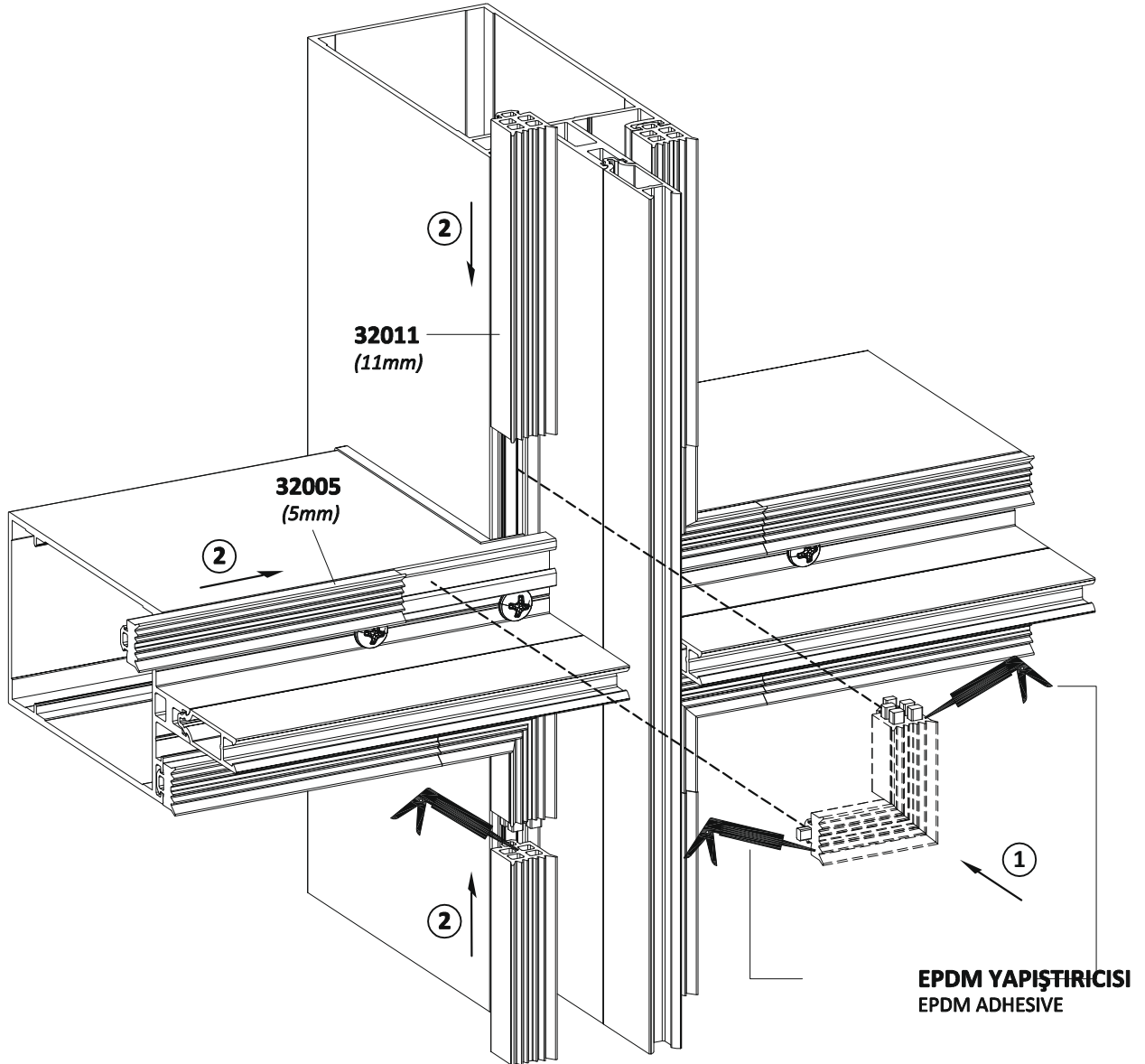
32011
(11mm)

YATAY FİTİL
HORIZONTAL GASKET

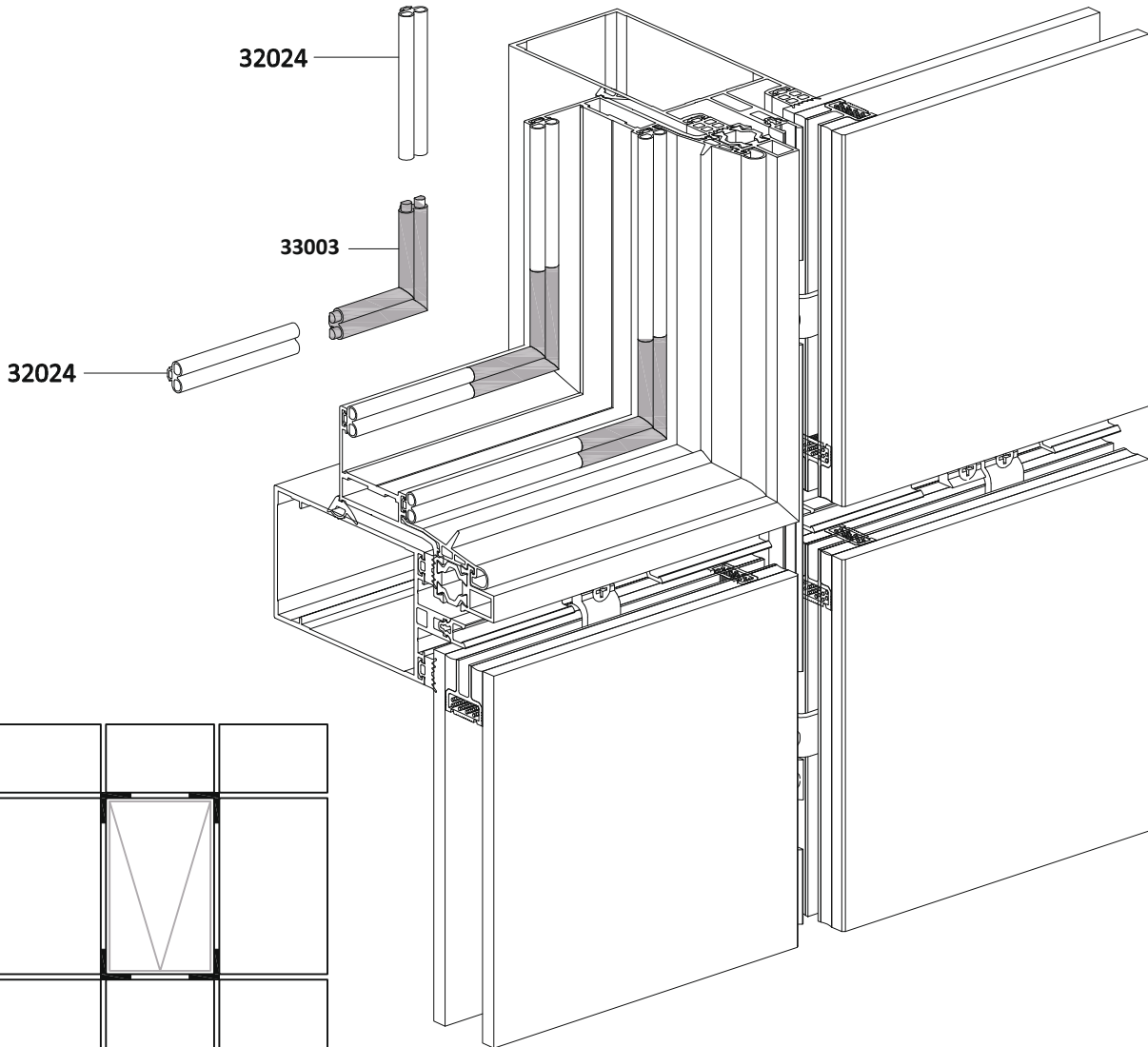
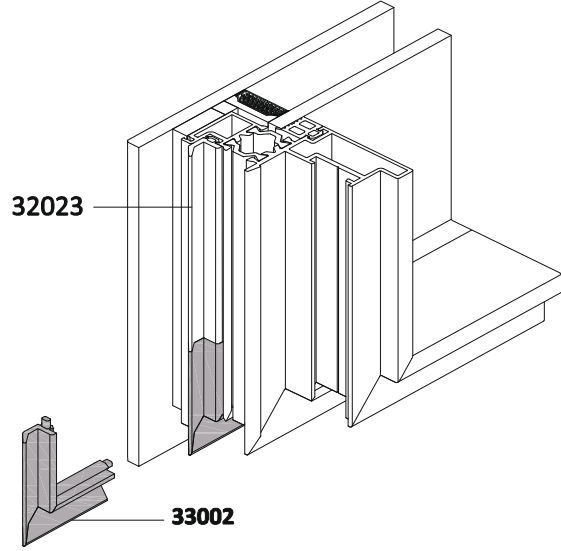
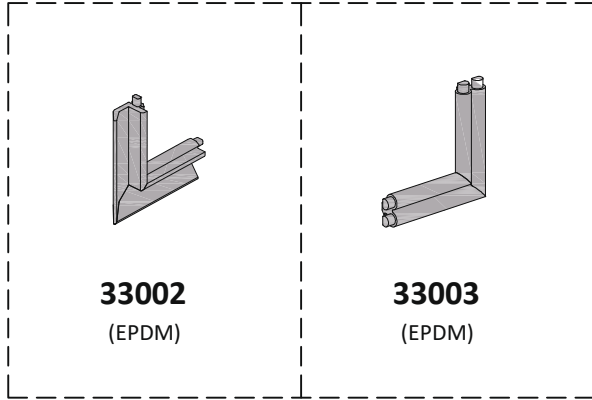


32005
(5mm)

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

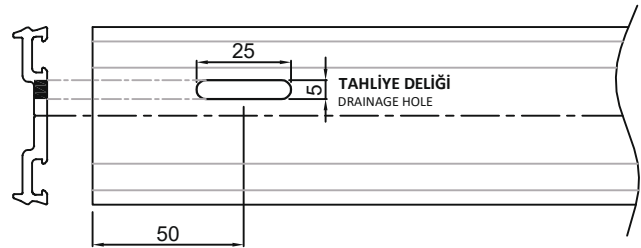
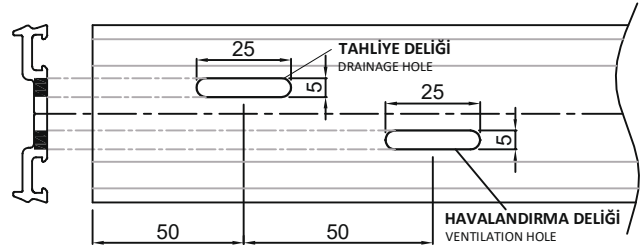
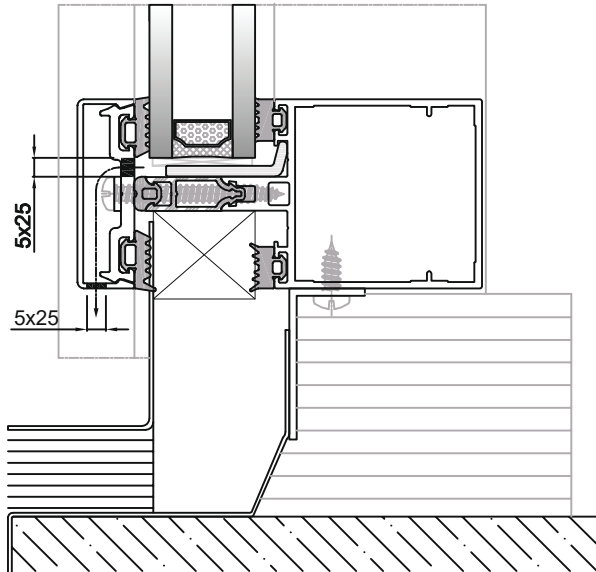
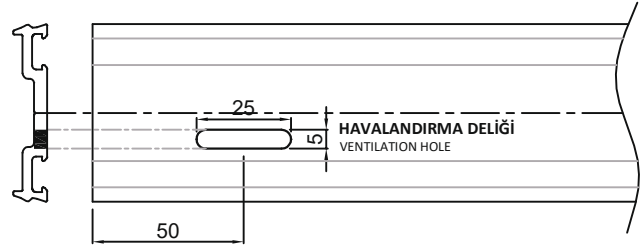
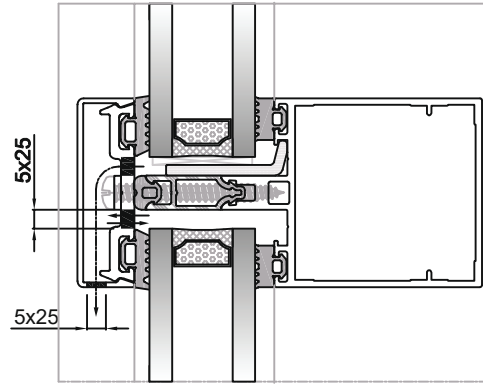
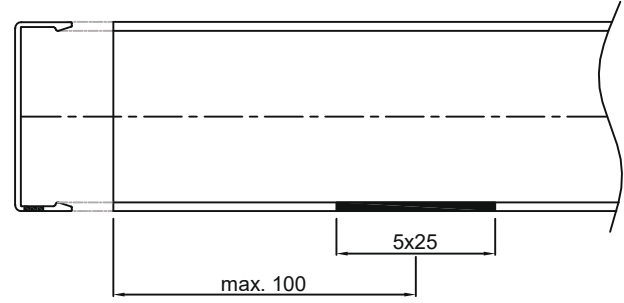
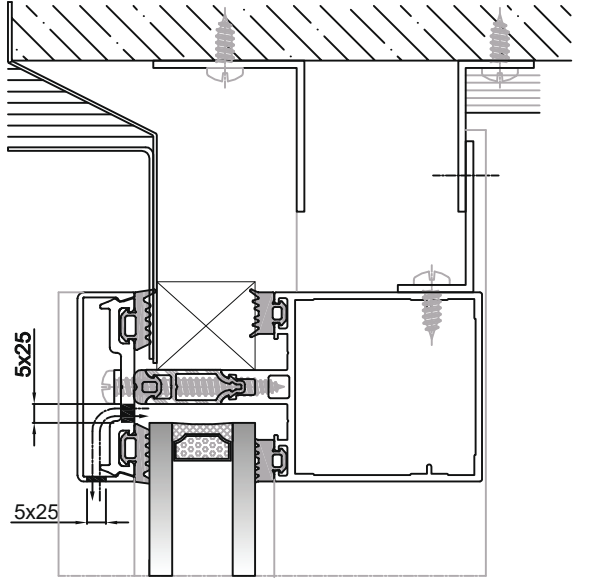


DIŐA AÇILIR KANAT İÇİN VULKANİZE KÖŐE PARÇALARI
VULCANISED CORNER PIECES FOR OUTWARD OPENING VENT



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.

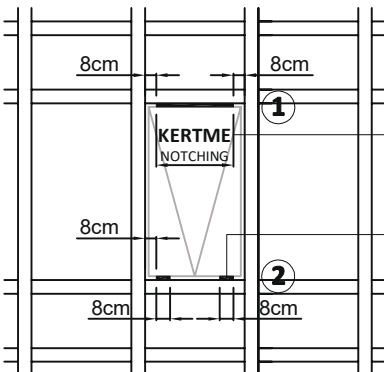
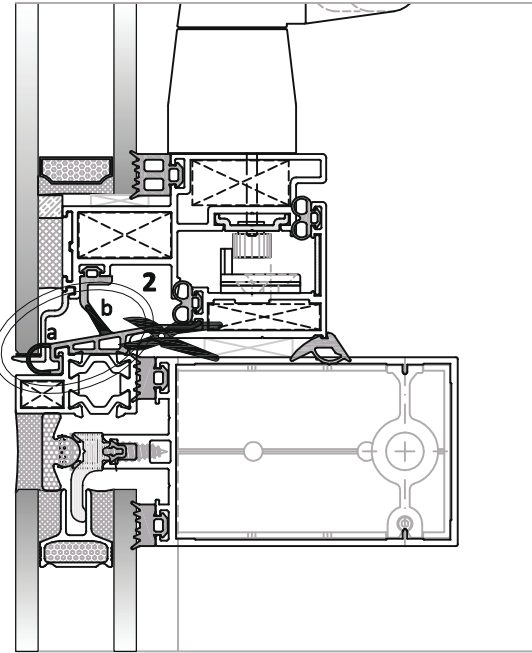
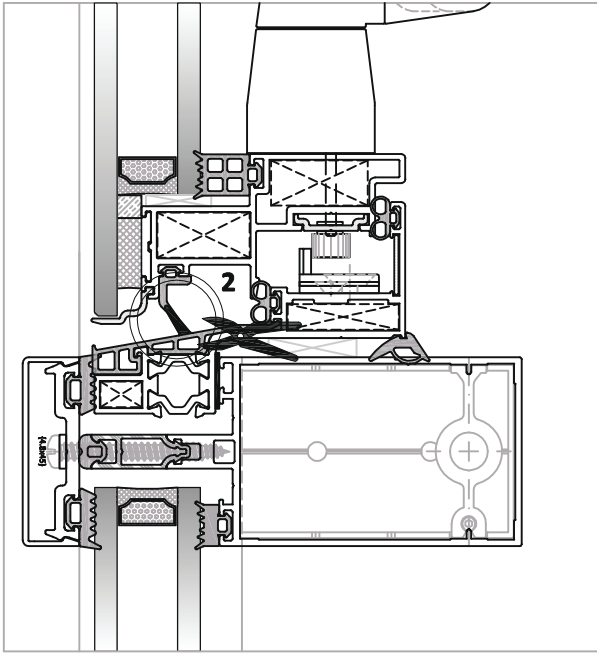
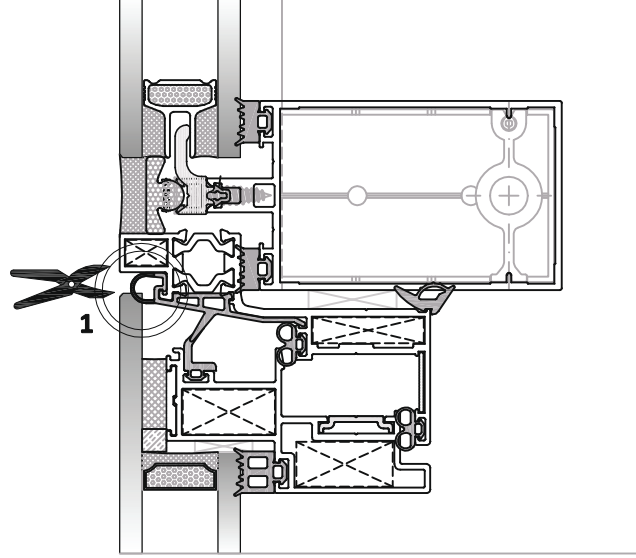
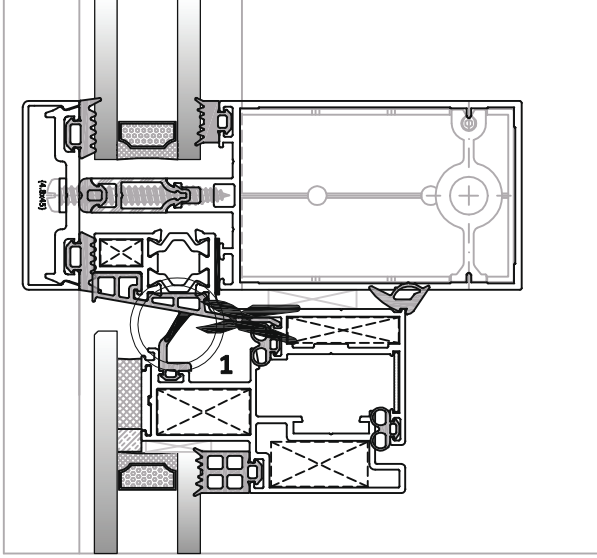
IMPORTANT: AT LEAST 50mm ALIGNING DIFFERENCE SHOULD BE MADE BETWEEN TWO HOLES EVERYTIME.

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.

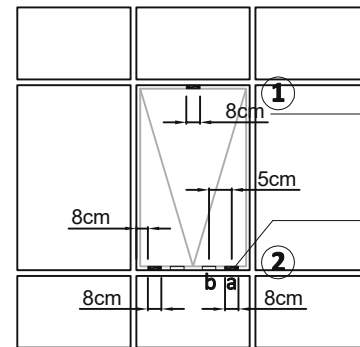
KANATLAR İÇİN TAHLİYE DELİK ŞEMALARI

SCHEMAS OF THE DRAINAGE HOLES FOR VENTS



**BASINÇ DENGELEME
BOŞLUĞU**
PRESSURE BALANCATION SPACE

**ALT FİTİL TAHLİYE
KERTMELERİ**
DRAINAGE NOTCHES FOR
THE BOTTOM GASKET

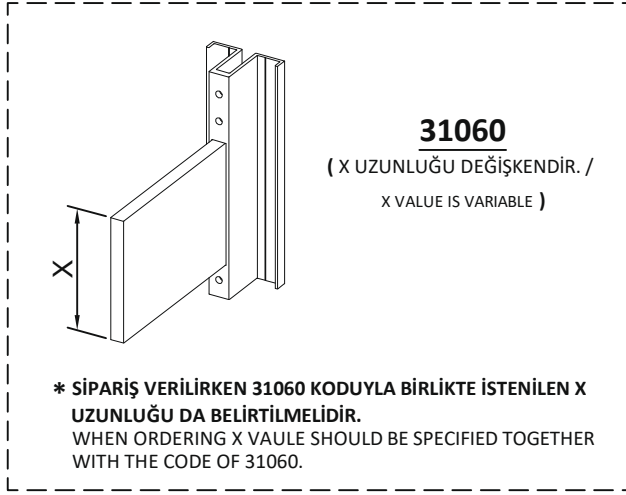


**BASINÇ DENGELEME
BOŞLUĞU**
PRESSURE BALANCATION SPACE

**ALT FİTİL TAHLİYE
KERTMELERİ**
DRAINAGE NOTCHES FOR
THE BOTTOM GASKET

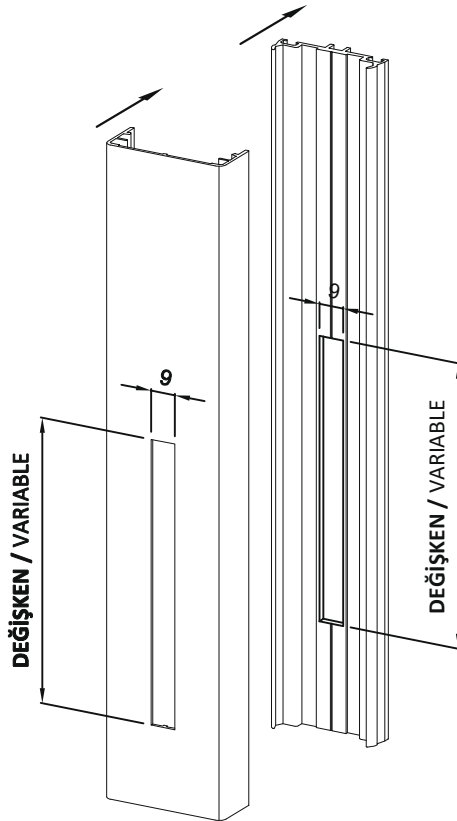
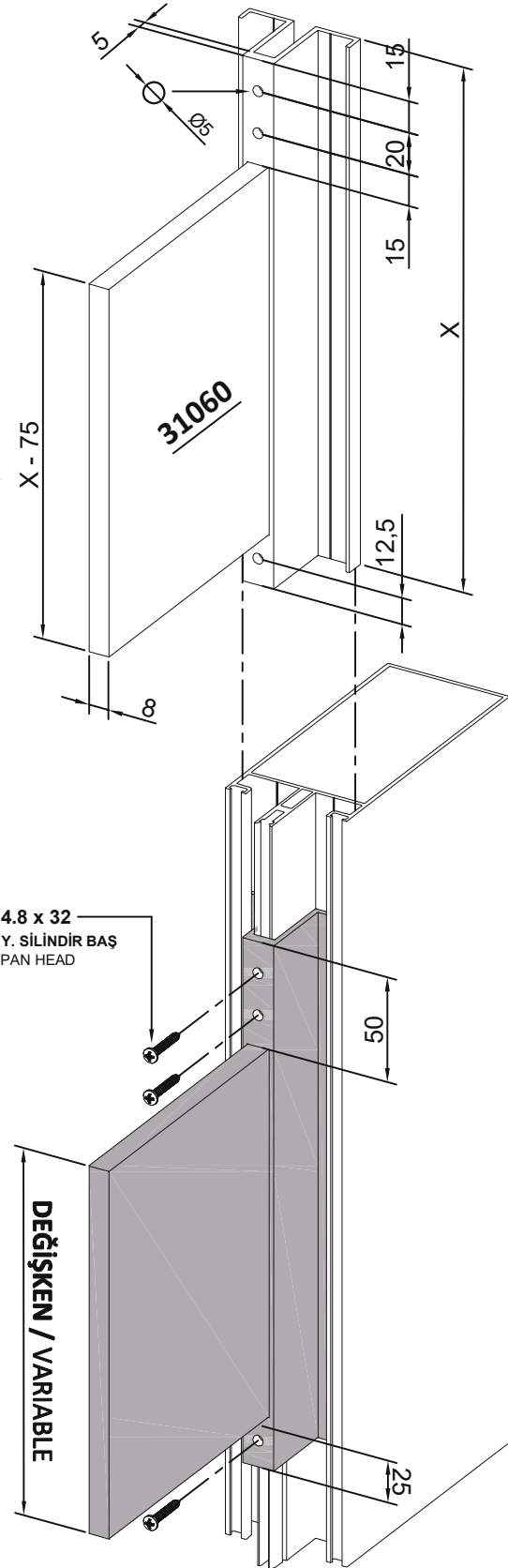
NOT: a ve b tahliye kermeleri 5cm şaşırtmalı açılmalıdır.
NOTE: a and b drainage notches should be misaligned as 5cm.

KAPAKLI CEPHEDE G.KIRICI TAŞIYICI APARAT İÇİN BAĞLANTI DETAYI CARRIER APPARATUS FOR SUNBREAKER CONNECTION DETAIL AT THE CAPPED CURTAIN WALL



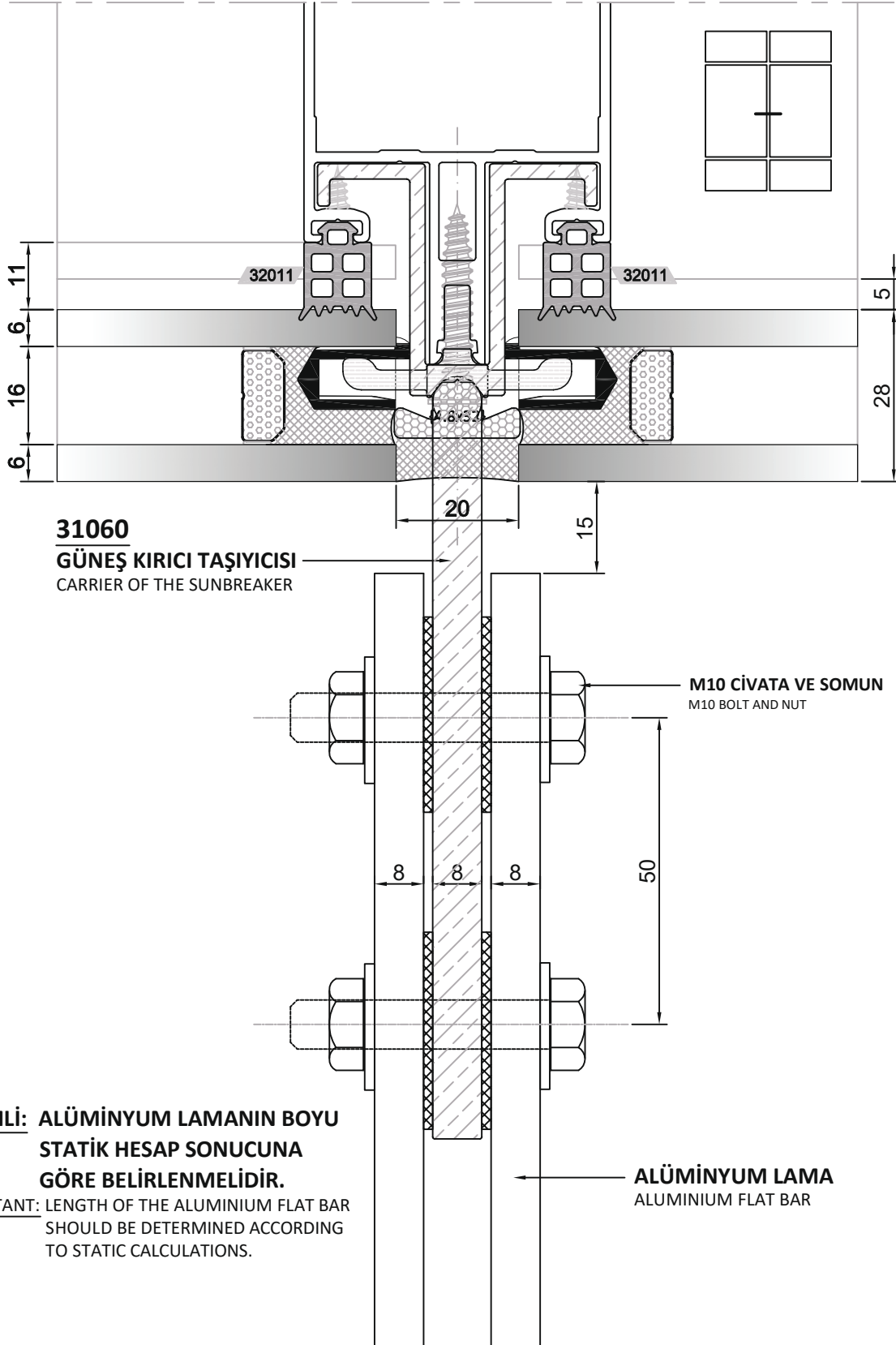
ÖNEMLİ: TAŞIYICI APARATIN UZUNLUĞU (X), ÜZERİNE BAĞLANACAK LAMALARIN GENİŞLİĞİNE VE GÜNEŞ KIRICILARIN UYGULADIĞI TOPLAM AĞIRLIĞA GÖRE HESAPLANMALIDIR.

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

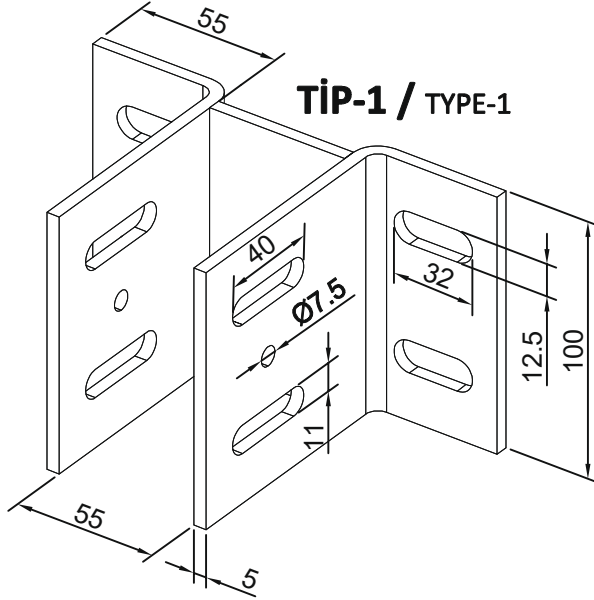
SUNBREAKER CONNECTION DETAIL ABOVE THE CARRIER APPARATUS AT THE FOURSIDED C.WALL



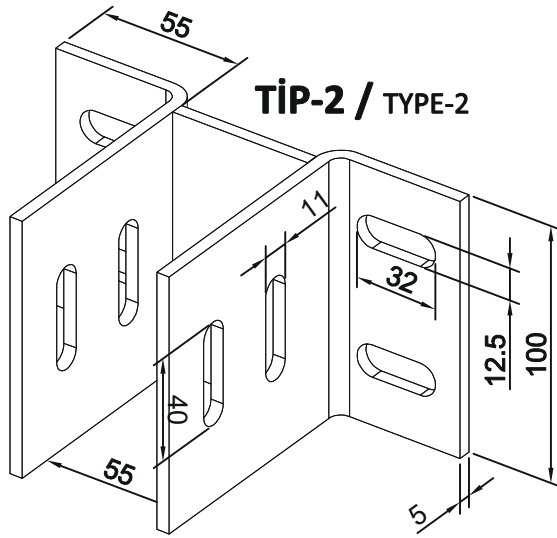
**ÖNEMLİ: ALÜMİNYUM LAMANIN BOYU
STATİK HESAP SONUCUNA
GÖRE BELİRLENMELİDİR.**

**IMPORTANT: LENGTH OF THE ALUMINIUM FLAT BAR
SHOULD BE DETERMINED ACCORDING
TO STATIC CALCULATIONS.**

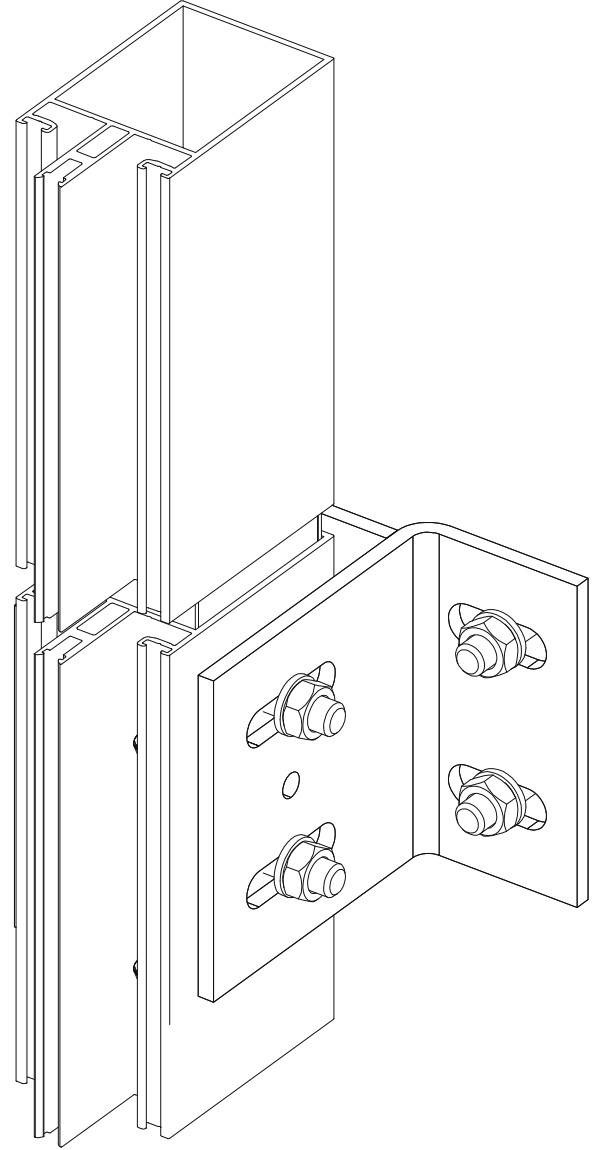
ANKRAJLAR
ANCHORAGES



TİP-1 / TYPE-1



TİP-2 / TYPE-2



YATAY BAKLALI SABİT ANKRAJ
HORIZONTAL MOVABLE FIXED ANCHORAGE

ÜRÜN KODU PRODUCT CODE	BAYRAK UZUNLUĞU (L) EXTENSION LENGTH (L)
36002	80 mm
36003	100 mm
36004	120 mm
36005	150 mm
36006	200 mm

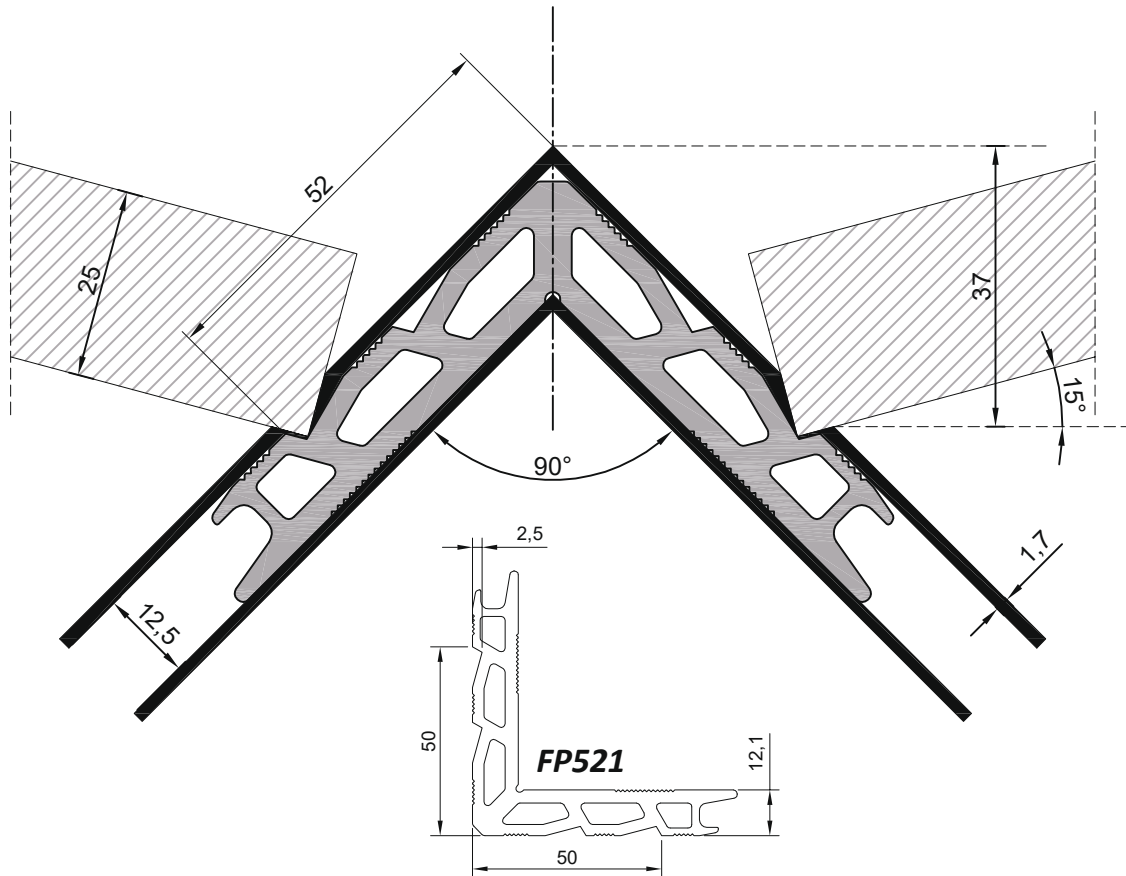
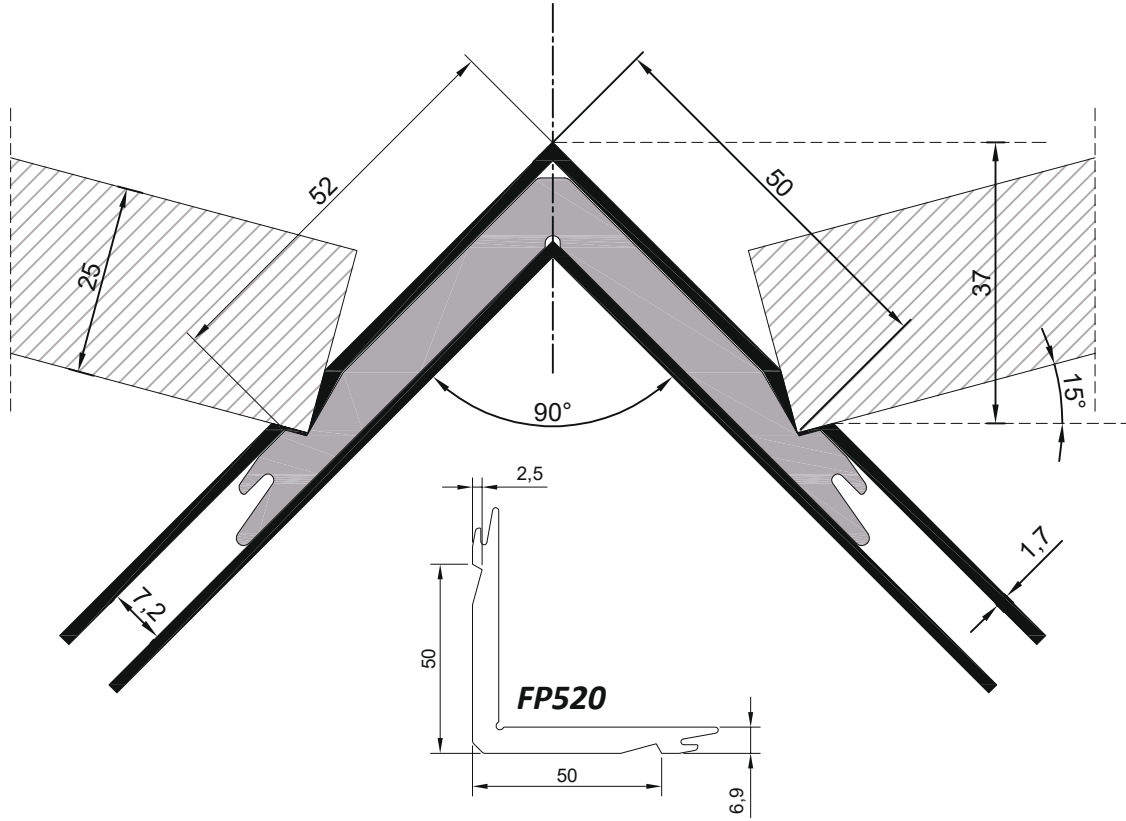
DÜŞEY BAKLALI SABİT ANKRAJ
VERTICAL MOVABLE FIXED ANCHORAGE

ÜRÜN KODU PRODUCT CODE	BAYRAK UZUNLUĞU (L) EXTENSION LENGTH (L)
36007	80 mm
36008	100 mm
36009	120 mm
36010	150 mm
36011	200 mm

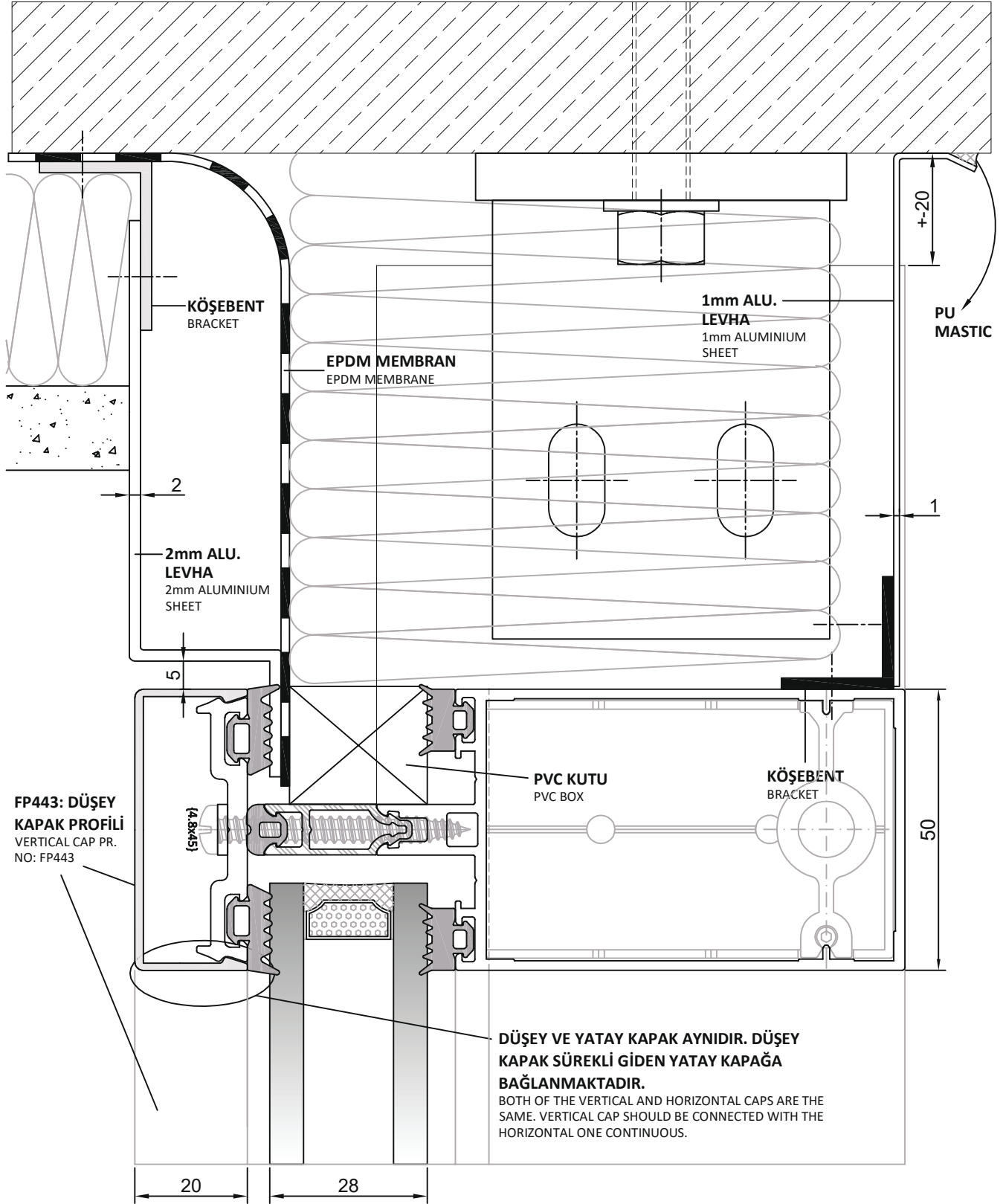
* BAYRAK UZUNLUKLARI TAŞIYICI DİKME DERİNLİKLERİNE VE YAPININ DÖŞEME ALIN HİZA FARKLARINA GÖRE DEĞİŞMEKTEDİR.
EXTENSION LENGTHS CHANGE ACCORDING TO THE MULLION DEPTH AND FRONT LEVEL DIFFERENCES OF THE FLOOR.

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

KÖŞE TAKOZU BİRLEŞİM DETAYLARI
CORNER CLEAT CONNECTION DETAILS



ÖRNEK CEPHE ÜST BİTİŞ DETAYI
TOP END DETAIL EXAMPLE OF THE CURTAIN WALL

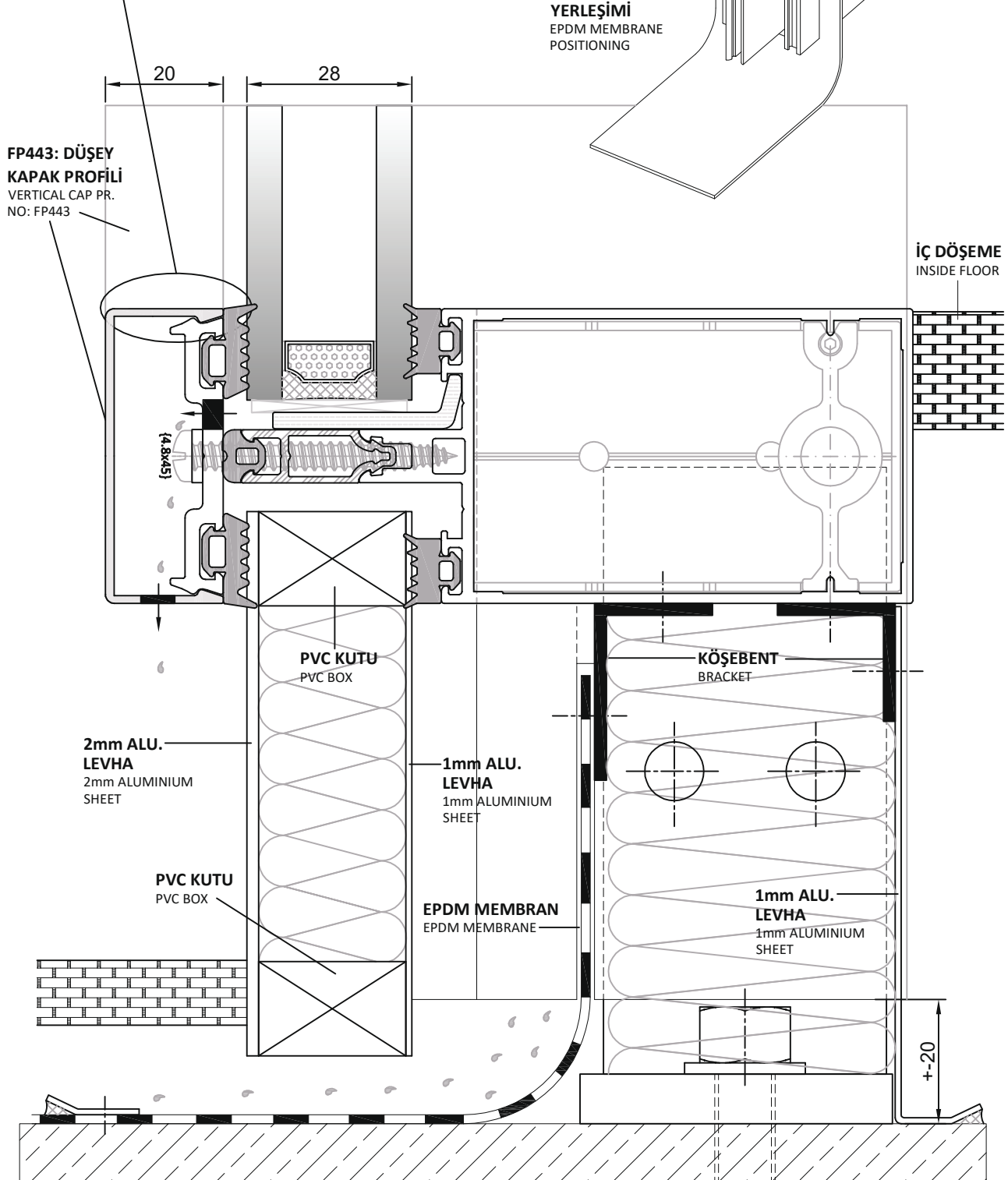


ÖRNEK CEPHE ALT BİTİŞ DETAYI

BOTTOM END DETAIL EXAMPLE OF THE CURTAIN WALL

BU BÖLGEDE DÜŞEY VE YATAY KAPAKLAR AYNIYDIR. 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 kataloğunda belirtilmeyen veya Sistem Alüminyum'un onay vermediği aksesuar ve sarf malzemesi kullanımından doğabilecek her türlü sorumluluk uygulamacı firmaya aittir.

Mimari sistem kataloğunda belirtilen detay ve sistem çözümleri haricindeki uygulamalar için Sistem Alüminyum'un onayı alınmalıdır. Aksi takdirde bu uygulamalardan meydana gelebilecek problem ve aksaklıklardan 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, silconing, 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

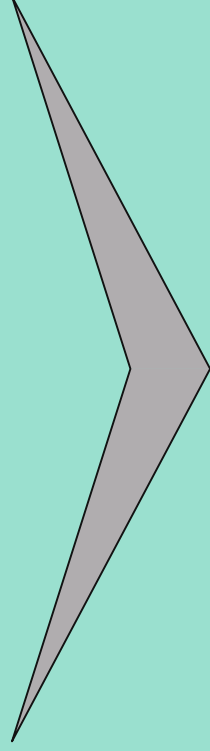
If the profiles was used according to terms of service and they have no mechanical damage or deformation, in any defect situation, our warranty is limited by disassembly, re-product, re-eloxal, re-assembly of faulty pieces. These are subjected to labor law.

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.

SERTIFIKALAR

CERTIFICATES





**AVRASYA CEPHE-DOĞRAMA
TEST VE TEKNOLOJİ MERKEZİ A.Ş.**
Cumhuriyet Mahallesi 1. Cadde 1. Sokak No:1 81600
İl. OSB Beyköy – DÜZCE/TÜRKİYE



Tarih
19.09.2020 13:48
AB-0926-T

AB-0926-T

19-094-PR04

07.2020

**Deney Raporu
Test Report**

Sayfa (Page): 1 / 36

Müşterinin adı/adresi:
Customer name/address

Sistem Alüminyum San. ve Tic. A.Ş.
Akçabağaz Mh. 3055. Sok. No:4 34522
Esenyurt / İSTANBUL
19-094-PR04

İstek Numarası:
Order No.

Numunenin adı ve tanımı:
Name and identity of test item

Alutech F50 Energy Kapaklı Sistem Gıyime Cephe / Çubuk Sistem
Alutech F50 Energy System Capped Curtain Walling / Stick System
27.05.2020

Numunenin kabul tarihi:
The date of receipt of test item

Açıklamalar:
Remarks

EN 12153, EN 12155, EN 12179 deney metotları kullanılmıştır.
EN 12153, EN 12155, EN 12179 testing methods were performed.

EN 12152 - Hava Geçirgenliği	AE	EN 12152 - Air Permeability	AE
EN 12207 - Hava Geçirgenliği	Sınıf 4	EN 12207 - Air Permeability	Class 4
EN 12154 - Su Sızdırmazlık / Statik	RE ₁₅₀₀	EN 12154 - Watertightness / Static	RE ₁₅₀₀
EN 12208 - Su Sızdırmazlık / Statik*	E ₁₅₀₀	EN 12208 - Watertightness / Static *	E ₁₅₀₀
EN 13116 - Rüzgar Yüklerine Dayanım		EN 13116 - Resistance to Wind Load	
Hizmet Verilebilirlik	± 2,00 kN/m ²	Serviceability	± 2,00 kN/m ²
Emniyet	± 3,00 kN/m ²	Safety	± 3,00 kN/m ²

Deneyin yapıldığı tarih:
Date of Test

28/29.05.2020

Deney Raporu Sayfa Sayısı:
Number of pages of the test report

36

Avrasya Cephe-Doğrama Test ve Teknoloji Merkezi A.Ş. TÜRKAK'tan AB-0926-T dosya numarası ile TS EN ISO/IEC 17025:2017 standardına göre akredite edilmiştir.

Avrasya Cephe-Doğrama Test ve Teknoloji Merkezi A.Ş. accredited by TÜRKAK under registration number AB-0926-T for TS EN ISO/IEC 17025:2017 as test laboratory

Türk Akreditasyon Kurumu(TÜRKAK) deney raporlarının tanınırılığı konusunda Avrupa Akreditasyon Birliği(EA) ile Çok Taraflı Anlaşma ve Uluslararası Laboratuvar Akreditasyon Birliği(ILAC) ile karşılıklı tanıma anlaşması imzalamıştır.

Turkish Accreditation Agency (TÜRKAK) is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (MLA) and to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) for the recognition of test reports

Bu deney raporu: Firmamıza ulaşan numunelere deney ve/veya deneyler uygulanarak elde edilmiştir.

Müşteriyeye ait diğer numuneleri kapsamaz.

(This test report was prepared after applying test/tests to the samples that are sent to our company.

(Note that this declaration does not involve other samples of the customer.)

Deney ve /veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deney metotları bu sertifikanın tamamlayıcı kısmı olan takip eden sayfalarda verilmiştir.

The brief test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following pages which are part of this report.



3.07.2020

Kaşe / Seal

Yayımlandığı Tarih
Date

Deney Sorumlusu
Person in charge of test

Onaylayan
Approval

***Pencere su sızdırmazlık testinde EN 1027 de belirtilenden farklı nozül aranjmanı ve su püskürtme değeri ku lanıldığından dolayı deviasyon söz konusudur.**
**In deviation from EN 1027 it is in question because of watertightness of insert window was tested at different water flow rate and nozzle arrangement.*

İPR021/01/09.10.2019

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Imzasız ve mühürlü raporlar geçersizdir.
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Testing reports without signature and seal are not valid



**AVRASYA CEPHE-DOĞRAMA
TEST VE TEKNOLOJİ MERKEZİ A.Ş.**
Cumhuriyet Mahallesi 1. Cadde 1. Sokak No:1 81600
II. OSB Beyköy – DÜZCE/TÜRKİYE



Deney Raporu
Test Report

AB-0926-T

19-094-PR05

07.2020

Sayfa (Page): 1 / 26

Müşterinin adı/adresi:
Customer name/address

Sistem Alüminyum San. ve Tic. A.Ş.
Akçaburgaz Mh. 3055. Sok. No:4 34522
Esenyurt / İSTANBUL
19-094-PR05

İstek Numarası:
Order No.

Namunenin adı ve tanımı:
Name and identity of test item

Alutech F50 Energy Kapaklı Sistem Giydirme Cephe / Çubuk Sistem
Alutech F50 Energy System Capped Curtain Walling / Stick System
27.05.2020

Namunenin kabul tarihi:
The date of receipt of test item

Açıklamalar:
Remarks

EN ISO 10140-2 / Hava ile Yayılan Ses Yalıtımının Ölçülmesi, deney metodu uygulanmıştır.
EN ISO 10140-2 / Measurement of Airborne Sound Insulation, testing method was performed.

Sonuçlar / Results : EN ISO 717-1: $R_w (C; C_{tr}) = 34 (-2; -5)$ dB

Deneyin yapıldığı tarih:
Date of Test

28.05.2020

Deney Raporu Sayfa Sayısı:
Number of pages of the test report

26

Avrasya Cephe-Doğrama Test ve Teknoloji Merkezi A.Ş. TÜRKAK'tan AB-0926-T dosya numarası ile TS EN ISO/IEC 17025:2017 standardına göre akredite edilmiştir.

Avrasya Cephe-Doğrama Test ve Teknoloji Merkezi A.Ş. accredited by TÜRKAK under registration number AB-0926-T for TS EN ISO/IEC 17025:2017 as test laboratory

Türk Akreditasyon Kurumu(TÜRKAK) deney raporlarının tanınabilirliği konusunda Avrupa Akreditasyon Birliği(EA) ile Çok Taraflı Anlaşma ve Uluslararası Laboratuvar Akreditasyon Birliği(ILAC) ile karşılıklı tanıma anlaşması imzalamıştır.
Turkish Accreditation Agency (TÜRKAK) is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (MLA) and to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) for the recognition of test reports

Bu deney raporu: Firmamıza ulaşan numunelere deney ve/veya deneyler uygulanarak elde edilmiştir.

Müşteriyeye ait diğer numuneleri kapsamaz.

(This test report was prepared after applying test/tests to the samples that are sent to our company.
(Note that this declaration does not involve other samples of the customer.)

Deney ve /veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deney metotları bu sertifikanın tamamlayıcı kısmı olan takip eden sayfalarda verilmiştir.

The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following pages which are part of this report.



3.07.2020

Mühür / Seal

Yayımlandığı Tarih
Date

Deney Sorumlusu
Person in charge of test

Onaylayan
Approval

RPR001/01/09.10.2019

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AVRASYA CEPHE-DOĞRAMA TEST VE TEKNOLOJİ MERKEZİ A.Ş.

Cumhuriyet Mahallesi 1. Cadde 1. Sokak No:1 81600
II. OSB Beyköy – DÜZCE/TÜRKİYE



Deney Raporu
Test Report

AB-0926-T

19-094-PR01

02.2020

Sayfa (Page): 1 / 33

Müşterinin adı/adresi: Sistem Alüminyum San. ve Tic. A.Ş.
Customer name/address Akçeburgaz Mh. 3055. Sok. No:4 34522
Esenyurt / İSTANBUL

İstek Numarası: 19-094-PR01
Order No.

Numunenin adı ve tanımı: Alutech F50 Kondans Entegre Sistem Giydirme Cephe / Çubuk Sistem
Name and identity of test item Alutech F50 Condensate Integrated Curtain Walling / Stick System

Numunenin kabul tarihi: 25.12.2019
The date of receipt of test item

Açıklamalar: EN 12153, EN 12155, EN 12179 deney metotları kullanılmıştır.
Remarks EN 12153, EN 12155, EN 12179 testing methods were performed.

EN 12152 - Hava Geçirgenliği	AE	EN 12152 - Air Permeability	AE
EN 12207 - Hava Geçirgenliği	Sanif 4	EN 12207 - Air Permeability	Class 4
EN 12154 - Su Sızdırmazlık / Statik	RE1200	EN 12154 - Watertightness / Static	RE1200
EN 12200 - Su Sızdırmazlık / Statik	E1200	EN 12200 - Watertightness / Static	E1200
EN 13116 - Rüzgar Yüklerine Dayanım		EN 13116 - Resistance to Wind Load	
Hizmet Verebilirlik	± 2,00 kN/m ²	Serviceability	± 2,00 kN/m ²
Emniyet	± 3,00 kN/m ²	Safety	± 3,00 kN/m ²

Deneyin yapıldığı tarih: 26.12.2019

Date of Test

Deney Raporu Sayfa Sayısı: 33

Number of pages of the test report

Avrasya Cephe-Doğrama Test ve Teknoloji Merkezi A.Ş. TÜRKAK'tan AB-0926-T dosya numarası ile TS EN ISO/IEC 17025:2017 standardına göre akredite edilmiştir.

Avrasya Cephe-Doğrama Test ve Teknoloji Merkezi A.Ş. accredited by TÜRKAK under registration number AB-0926-T for TS EN ISO/IEC 17025:2017 as test laboratory

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Bu deney raporu: Firmamıza ulaşan numunelere deney ve/veya deneyler uygulanarak elde edilmiştir.

Müşteriye ait diğer numuneleri kapsamaz.

(This test report was prepared after applying test/tests to the samples that are sent to our company.

(Note that this declaration does not involve other samples of the customer.)

Deney ve /veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deney metotları bu sertifikanın tamamlayıcı kısmı olan takip eden sayfalarda verilmiştir.

The brief test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following pages which are part of this report.



Kaşe / Seal

11.02.2020

Yayımlandığı Tarih

Date

Deney Sorumlusu

Person in charge of test

Onaylayan

Approval

RPR001/01/09.10.2019

Bu rapor, laboratuvarın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz.

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Testing reports without signature and seal are not valid.



AVRASYA CEPHE-DOĞRAMA TEST VE TEKNOLOJİ MERKEZİ A.Ş.

Cumhuriyet Mahallesi 1. Cadde 1. Sokak No:1 81600
II. OSB Beyköy – DÜZCE/TÜRKİYE



Deney Raporu
Test Report

AB-0926-T
19-094-PRO2
02.2020

Sayfa (Page): 1 / 24

Müşterinin adı/adresi: Customer name/address	Sistem Alüminyum San. ve Tic. A.Ş. Akçaburgaz Mh. 3055. Sok. No:4 34522 Esenyurt / İSTANBUL
İstek Numarası: Order No.	19-094-PRO2
Numunenin adı ve tanımı: Name and identity of test item	Alutech F50 Kondens Entegre Sistem Giydirmeye Cephe / Çubuk Sistem Alutech F50 Condensate Integrated Curtain Walling / Stick System
Numunenin kabul tarihi: The date of receipt of test item	25.12.2019
Açıklamalar: Remarks	EN ISO 10140-2 / Hava ile Yayılan Ses Yalıtımının Ölçülmesi, deney metodu uygulanmıştır. EN ISO 10140-2 / Measurement of Airborne Sound Insulation, testing method was performed.

Sonuçlar / Results : EN ISO 717-1: $R_w (C,C_2) = 33 (-1 ; -3) \text{ dB}$

Deneyin yapıldığı tarih:
Date of Test

28.12.2019

Deney Raporu Sayfa Sayısı:
Number of pages of the test report

24

Avrasya Cephe-Doğrama Test ve Teknoloji Merkezi A.Ş. TÜRKAK'tan AB-0926-T dosya numarası ile TS EN ISO/IEC 17025:2012 standardına göre akredite edilmiştir.

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The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following pages which are part of this report.



11.02.2020

Mühür / Kaşe
Seal

Yayımlandığı Tarih
Date

Deney Sorumlusu
Person in charge of test

Onaylayan
Approval

RPR001/01/09.10.2019

Bu rapor, laboratuvarın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz.

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**Authorization
to use the quality sign**



This is to certify that
Sistem Alüminyum Sanayi ve Ticaret A.Ş.

Ergene 1 OSB, Vakıflar OSB Mahallesi İstanbul
Caddesi No: 23/A
TR - 59900 Ergene/Tekirdağ

Licence number: 1640

It is authorized to use the quality sign which is shown above. According to the regulations for the use of the quality label for ARCHITECTURE, AMQP/2000 as described in the current edition of the specifications for the QUALAND quality label for surface zinc-based anodizing of aluminum (Edition 01/01/2020). Architectural anodizing is one of the four types of anodizing covered by the specifications.

Date of issue of the license: 22.01.2018
Period of validity of the license: until 21.12.2020

Zarh, 15 November 2012

QUALAND

CERTIFICATION BODY

[Signature]
Rozica Dostkova
President

[Signature]
Mathias Lutz
General Secretary



CERTIFICATE

For a COATING APPLICATOR



is hereby authorized

Sistem Alüminyum Sanayi ve Ticaret A.Ş.
Ergene 1 OSB, Vakıflar OSB Mahallesi İstanbul
Caddesi No: 23/A
59900 Ergene/Tekirdağ
Turkey

to use the quality label in conformity with the
12th edition of the QUALAND specifications valid from 1 July 2011

Licence No.: 1640

Date of Granting: 26.04.2015

Valid until: 21.12.2020

Zarh, 1 January 2020

QUALAND

[Signature]
Mohammed C. Fouze
President

[Signature]
Sae C. Hamed
Managing Director

QUALAND | TÜRKİYE İZMİR İZMİR ZARH | www.qualand.com



Certificate

**Certificate of conformity
of the factory
production control**



Form: 000-CPO-000210 / Revizyon: 000-CPO-000210
Date: 2014-08-07 / Issued date: 2014-08-07
Issued date: 2015-06-12

In compliance with Regulation (EC) 2011/181 of the European Parliament and of the Council of 9 March 2011 (the Construction Products Regulation or CPR), this certificate applies to the certificate product:

**STRUCTURAL ALUMINIUM and ALUMINIUM
ALLOY SECTIONS / PROFILES**

identifies the scope of production product as defined on page 7 of this certificate of conformity.

issued by:
SİSTEM ALÜMİNYUM SAN. VE TİC. A.Ş.
and produced in its manufacturing plant:
İSTANBUL / TURKEY

This certificate states that all provisions concerning the assessment and verification of conformity of performance in Annex ZA of EN 1008:2005

apply system 2+ for the performances set out in this certificate and applied and that the factory production control fulfils all the associated requirements for these performances.

This certificate was first issued on 2014-08-07 and subsequent amendments are listed on the last certificate and factory production control requirements included in the technical product, used to assess the performance of the finished construction products, or for example, use the construction product and the manufacturing conditions in the plant as not certified separately, unless suspended or withdrawn by the factory production control body.

[Signature]
B. Mehan

Boşu İsmail
Deziner İsmail İsmail (B.V.)

Attention: contact kiwa.com.tr to check whether the certificate is valid.

Responsible for:
Sistem Alüminyum Sanayi ve Ticaret A.Ş.
Cennet Mah. Akşar Mah. 3055. Sokak No: 4
Esenyurt - İstanbul / Turkey
T: +90 212 594 4400
E: info@sistemaluminum.com.tr
T: +90 212 594 4400

Responsible for:
Sistem Alüminyum Sanayi ve Ticaret A.Ş.
Ergene 1 OSB E1 / Kızılkaya Mah. 21
Ergene / Tekirdağ



**Enclosure to
Certificate-Nr TIC 15 121 17073**



SİSTEM ALÜMİNYUM SANAYİ VE TİCARET A.Ş.
Akşar Mah. 3055. Sokak No: 4
Esenyurt - İstanbul / Turkey

Following local branches are part of the certificate:

Central office

SİSTEM ALÜMİNYUM SANAYİ VE TİCARET A.Ş.
Akşar Mah. 3055. Sokak No: 4
Esenyurt - İstanbul / Turkey

Scope: Information security aimed to protect information properties related to extruded aluminum profiles, aluminum composite panels, related products raw material purchases, sales, import, export, customs operations, transit trade and all related activity including logistics, storage, accounting, finance and information technologies.

Certificate-Nr TIC 15 121 17073

Locations

SİSTEM ALÜMİNYUM SANAYİ VE TİCARET A.Ş.
Ergene 1 OSB, Vakıflar OSB Mah. (1109 Caddesi No: 131)
Ergene - Tekirdağ / Turkey

Scope: Information security aimed to protect information properties related to extruded aluminum profiles, aluminum composite panels, related products raw material purchases, sales, import, export, customs operations, transit trade and all related activity including logistics, storage, accounting, finance and information technologies.

Certificate-Nr TIC 15 121 17073

[Signature]
TUV Tübingen e.V.
Certification body for
systems and personnel



MAY 2017-10-13



This document is intended to be used in conjunction with the certificate TIC 15 121 17073

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CERTIFICATE



for the management system according
to ISO 9001:2015 and ISO 14001:2015
and ISO 45001:2018

The proof of the conforming application with the regulation was
furnished and in accordance with certification procedure it is certified for
the company



**SISTEM ALÜMİNYUM SANAYİ
VE TİCARET A.Ş.**
Akçaburgaz Mah. 3055. Sokak No:4
Esenyurt – İstanbul / Turkey
with branch (see enclosure)

Scope

Sales, import, export, foreign trade, customs clearance, management and
administrative organization activities of the manufacturing of aluminum
profiles with extrusion method, anodic oxidation and electrostatic coating
processes, transfer coating and aluminum composite panel manufacturing.
The operations related to these activities and related services.

Certificate Registration No.: TIC 15 100 64050 Valid until: 2021-05-09
TIC 15 104 191738 Valid from: 2019-10-22
TIC 15 118 19052

Audit Report No.: 3330 29AWN 00

This certification was conducted in accordance with the TIC auditing and certification procedures and
is subject to regular surveillance audits.

TÜV Thüringen e.V.
Certification body for
systems and personnel



Jana, 2019-05-25



The scope of activities is described in the certificate and enclosure. The certificate is valid in conjunction with the main certificate.

CERTIFICATE



for the information security management system
ISO/IEC 27001:2013

The proof of the conforming application with the regulation was
furnished and in accordance with certification procedure it is certified for
the company



SISTEM ALÜMİNYUM SANAYİ VE TİCARET A.Ş.
Ergene-1 OSB, Vakıflar OSB Mah. D100 Caddesi No: 13/1
Ergene – Tekirdağ / Turkey

Scope

Information security aimed to protect information properties related to
extruded aluminum profiles, aluminum composite panel, related
product's raw material purchases, sales, import, export, customs
operations, transit trade and all related activity including legislative,
storage, accounting, finance and information technologies.

Statement of applicability: Revision: 2017-07-19

Certificate Registration No.: TIC 15 121 170791 Valid until: 2020-10-11
Valid from: 2017-10-12

Audit Report No.: 3330 21J2Z A0

This certification was conducted in accordance with the TIC auditing and certification procedures and
is subject to regular surveillance audits. The certificate is valid in conjunction with the main certificate.

TÜV Thüringen e.V.
Certification body for
systems and personnel



Jana, 2017-10-12



The scope of activities is described in the certificate and enclosure. The certificate is valid in conjunction with the main certificate.

Enclosure to Certificate-No TIC 15 104 151364



**SISTEM ALÜMİNYUM SANAYİ VE
TİCARET A.Ş.**

Akçaburgaz Mah. 3055.Sokak No:4
34625 Esenyurt – İstanbul / Turkey

Following local branches are part of the certificate:

Central office

SISTEM ALÜMİNYUM SANAYİ VE TİCARET A.Ş.
Akçaburgaz Mah. 3055. Sokak No:4
Esenyurt – İstanbul / Turkey

Scope: Sales of Aluminum profiles, anodizing and electrostatic powder coating of aluminum
profiles, transfer coating and sales of aluminum composite panel

Certificate-No TIC 15 104 151364

Locations

SISTEM ALÜMİNYUM SANAYİ VE TİCARET A.Ş.
Ergene-1 OSB, Vakıflar OSB Mah. D100 Caddesi No:13/1
Ergene – Tekirdağ / Turkey

Scope: Aluminum profiles production, anodizing and electrostatic powder coating of
aluminum profiles, transfer coating and aluminum composite panel production

Certificate-No TIC 15 104 151364

TÜV Thüringen e.V.
Certification body for
systems and personnel



Jana, 2019-06-26



The scope of activities is described in the certificate and enclosure. The certificate is valid in conjunction with the main certificate.

Enclosure to Certificate-No TIC 15 100 64050



**SISTEM ALÜMİNYUM SANAYİ VE
TİCARET A.Ş.**

Akçaburgaz Mah. 3055. Sokak No: 4
Esenyurt – İstanbul / Turkey

Following local branches are part of the certificate:

Central office

SISTEM ALÜMİNYUM SANAYİ VE TİCARET A.Ş.
Akçaburgaz Mah. 3055. Sokak No: 4
Esenyurt – İstanbul / Turkey

Scope: Sales, import, export, foreign trade, customs clearance, management and
administrative organization activities of the aluminum profiles and aluminum composite
panels manufactured. The operations related to these activities and related services.

Certificate-No TIC 15 100 64050

Locations

SISTEM ALÜMİNYUM SANAYİ VE TİCARET A.Ş.
Ergene-1 OSB, Vakıflar OSB Mah. D100 Caddesi No: 13/1
Ergene – Tekirdağ / Turkey

Scope: Production of aluminum profiles by the extrusion process, anodizing and electrostatic
color coating processes, transfer coating and production of aluminum composite panels
Sales, import, export, foreign trade, customs, administration, administrative organization and
activities related to these activities and related services.

Certificate-No TIC 15 100 64050

TÜV Thüringen e.V.
Certification body for
systems and personnel



Jana, 2016-05-07



The scope of activities is described in the certificate and enclosure. The certificate is valid in conjunction with the main certificate.



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TÜRK STANDARLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS



BELGE NUMARASI
CERTIFICATE NUMBER OF AGENCY 00077 TSE 0100

BELGENİN KİMLİK TARİHİ
DATE OF FIRST ISSUE OF AGENCY 19.04.2019

BELGENİN GEÇERLİLİK TARİHİ
VALIDITY PERIOD DATE 11.04.2020

BELGE SAHİBİ KURULUŞUN ADI
NAME OF THE LICENSE HOLDER SİSTEM ALUMYUM SANAYİ VE TİCARET ANONİM ŞİRKETİ

BELGE SAHİBİ KURULUŞUN ADRESİ
ADDRESS OF THE LICENSE HOLDER Akatlarlar Mah. 3005. Sokak No:4 Çarşıoğlu İSTANBUL/TURKEY

ÜRETİM YERİ ADI
NAME OF THE MANUFACTURING PLACE SİSTEM ALUMYUM SANAYİ VE TİCARET A.Ş.

ÜRETİM YERİ ADRESİ
ADDRESS OF THE MANUFACTURING PLACE Egeyolu OSB, Vakıflar OSB Blok. OSB Çarşısı No:151 Egeyolu/TEKİRGÖZ OSB/İSTANBUL /TÜRKİYE

İFTAL EDİLEN BELGE NUMARASI (YERİNE)
REPLACEMENT OF SUPPLEMENTED LICENSE (IF ANY) 00077 TSE 0100

TEKİLLİ TİCARİ MARKA
REGISTERED TRADE MARK SİSTEM ALUMYUM SANAYİ VE TİCARET A.Ş.

ULUSAL TÜRK STANDARDI
NATIONAL TURKISH STANDARD TS EN 12663-1:2012

BELGE SAHİBİ
OWNER OF AGENCY

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AKADENK PROJELER
EN ISO 9001 ve EN ISO 14001 akreditasyon başvurusu için İstanbul ve İstanbul dışındaki iller için

01.04.2019 tarihinde
11.04.2020
Belgeleştirme Merkezi Başkan Adına
AHMET NURİCİ KURTAL
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TÜRK STANDARLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS



BELGE NUMARASI
CERTIFICATE NUMBER OF AGENCY 00077 TSE 0100

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DATE OF FIRST ISSUE OF AGENCY 19.04.2019

BELGENİN GEÇERLİLİK TARİHİ
VALIDITY PERIOD DATE 11.04.2020

BELGE SAHİBİ KURULUŞUN ADI
NAME OF THE LICENSE HOLDER SİSTEM ALUMYUM SANAYİ VE TİCARET ANONİM ŞİRKETİ

BELGE SAHİBİ KURULUŞUN ADRESİ
ADDRESS OF THE LICENSE HOLDER Akatlarlar Mah. 3005. Sokak No:4 Çarşıoğlu İSTANBUL/TURKEY

ÜRETİM YERİ ADI
NAME OF THE MANUFACTURING PLACE SİSTEM ALUMYUM SANAYİ VE TİCARET A.Ş.

ÜRETİM YERİ ADRESİ
ADDRESS OF THE MANUFACTURING PLACE Egeyolu OSB, Vakıflar OSB Blok. OSB Çarşısı No:151 Egeyolu/TEKİRGÖZ OSB/İSTANBUL /TÜRKİYE

İFTAL EDİLEN BELGE NUMARASI (YERİNE)
REPLACEMENT OF SUPPLEMENTED LICENSE (IF ANY) 00077 TSE 0100

TEKİLLİ TİCARİ MARKA
REGISTERED TRADE MARK SİSTEM ALUMYUM SANAYİ VE TİCARET A.Ş.

ULUSAL TÜRK STANDARDI
NATIONAL TURKISH STANDARD TS EN 12663-1:2012

BELGE SAHİBİ
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AKADENK PROJELER
EN ISO 9001 ve EN ISO 14001 akreditasyon başvurusu için İstanbul ve İstanbul dışındaki iller için

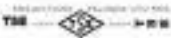
01.04.2019 tarihinde
11.04.2020
Belgeleştirme Merkezi Başkan Adına
AHMET NURİCİ KURTAL
TSE İSTANBUL BELGELENDİRME MÜDÜRÜ

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TÜRK STANDARLARI ENSTİTÜSÜ
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TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS



BELGE NUMARASI
CERTIFICATE NUMBER OF AGENCY 00077 TSE 0100

BELGENİN KİMLİK TARİHİ
DATE OF FIRST ISSUE OF AGENCY 19.04.2019

BELGENİN GEÇERLİLİK TARİHİ
VALIDITY PERIOD DATE 11.04.2020

BELGE SAHİBİ KURULUŞUN ADI
NAME OF THE LICENSE HOLDER SİSTEM ALUMYUM SANAYİ VE TİCARET ANONİM ŞİRKETİ

BELGE SAHİBİ KURULUŞUN ADRESİ
ADDRESS OF THE LICENSE HOLDER Akatlarlar Mah. 3005. Sokak No:4 Çarşıoğlu İSTANBUL/TURKEY

ÜRETİM YERİ ADI
NAME OF THE MANUFACTURING PLACE SİSTEM ALUMYUM SANAYİ VE TİCARET A.Ş.

ÜRETİM YERİ ADRESİ
ADDRESS OF THE MANUFACTURING PLACE Egeyolu OSB, Vakıflar OSB Blok. OSB Çarşısı No:151 Egeyolu/TEKİRGÖZ OSB/İSTANBUL /TÜRKİYE

İFTAL EDİLEN BELGE NUMARASI (YERİNE)
REPLACEMENT OF SUPPLEMENTED LICENSE (IF ANY) 00077 TSE 0100

TEKİLLİ TİCARİ MARKA
REGISTERED TRADE MARK SİSTEM ALUMYUM SANAYİ VE TİCARET A.Ş.

ULUSAL TÜRK STANDARDI
NATIONAL TURKISH STANDARD TS EN 12663-1:2012

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OWNER OF AGENCY

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AKADENK PROJELER
EN ISO 9001 ve EN ISO 14001 akreditasyon başvurusu için İstanbul ve İstanbul dışındaki iller için

01.04.2019 tarihinde
11.04.2020
Belgeleştirme Merkezi Başkan Adına
AHMET NURİCİ KURTAL
TSE İSTANBUL BELGELENDİRME MÜDÜRÜ

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Belgeleştirme Merkezi, tüm belge sahiplerinin kişisel verilerini saklar ve korur.
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TSE İSTANBUL BELGELENDİRME MÜDÜRLÜĞÜ, tüm belge sahiplerinin kişisel verilerini saklar ve korur. Her belge sahibi, kişisel verilerinin saklanması için yazılı onayını verir.



TÜRK STANDARLARI ENSTİTÜSÜ
TÜRK STANDARLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS



BELGE NUMARASI
CERTIFICATE NUMBER OF AGENCY 00077 TSE 0100

BELGENİN KİMLİK TARİHİ
DATE OF FIRST ISSUE OF AGENCY 19.04.2019

BELGENİN GEÇERLİLİK TARİHİ
VALIDITY PERIOD DATE 11.04.2020

BELGE SAHİBİ KURULUŞUN ADI
NAME OF THE LICENSE HOLDER SİSTEM ALUMYUM SANAYİ VE TİCARET ANONİM ŞİRKETİ

BELGE SAHİBİ KURULUŞUN ADRESİ
ADDRESS OF THE LICENSE HOLDER Akatlarlar Mah. 3005. Sokak No:4 Çarşıoğlu İSTANBUL/TURKEY

ÜRETİM YERİ ADI
NAME OF THE MANUFACTURING PLACE SİSTEM ALUMYUM SANAYİ VE TİCARET A.Ş.

ÜRETİM YERİ ADRESİ
ADDRESS OF THE MANUFACTURING PLACE Egeyolu OSB, Vakıflar OSB Blok. OSB Çarşısı No:151 Egeyolu/TEKİRGÖZ OSB/İSTANBUL /TÜRKİYE

İFTAL EDİLEN BELGE NUMARASI (YERİNE)
REPLACEMENT OF SUPPLEMENTED LICENSE (IF ANY) 00077 TSE 0100

TEKİLLİ TİCARİ MARKA
REGISTERED TRADE MARK SİSTEM ALUMYUM SANAYİ VE TİCARET A.Ş.

ULUSAL TÜRK STANDARDI
NATIONAL TURKISH STANDARD TS EN 12663-1:2012

BELGE SAHİBİ
OWNER OF AGENCY

Açıklama için başvuru adresleri: - EN ISO 9001 ve EN ISO 14001 akreditasyon başvurusu için İstanbul
AKADENK PROJELER
EN ISO 9001 ve EN ISO 14001 akreditasyon başvurusu için İstanbul ve İstanbul dışındaki iller için

01.04.2019 tarihinde
11.04.2020
Belgeleştirme Merkezi Başkan Adına
AHMET NURİCİ KURTAL
TSE İSTANBUL BELGELENDİRME MÜDÜRÜ

Belgeleştirme Merkezi, tüm belge sahiplerinin kişisel verilerini saklar ve korur.
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warringtonfire Warrington Fire & Safety Ltd. 01928 541114
www.warringtonfire.com

ULAS 3048

Yapı : Betonarme
Yapı No : 101/1010
Yapı Tarihi : 2014 Ocak 2014

Yapı Adı : ...
Yapı No : ...
Yapı Tarihi : ...

Fire Behaviour	Smoke Production	Flaming Droplets
A2	-	1

iv. A2 - s1, d0

4.3 Field of application

The classification is valid for the following end use applications:

- Construction applications- External facade
- Construction applications applied over dry substrate with a minimum density of 870kg/m³, having a minimum thickness of 10mm and a fire performance of A2-s1,d0

The classification is also valid for the following product parameters:

Core type, thickness and density	Joint	Adhesive quantity and type	Surface coating colour	Product composition	Product construction	Mounting and fixing details	Air gap details
No variation allowed	No joints allowed in end-use construction	No variation allowed	RAL9006 - Silver only	No variation allowed	No variation allowed	No variation allowed	≤40mm allowed

İMZELER : [Signature]
APPROVED : [Signature]

Alan Sembol : Alan Sembol
Alan Sembol : Alan Sembol

Warrington Fire Testing and Certification Limited
Registered Office: 11 Laurel Industrial Park, London, SE18 3PL, UK
Company Registration No: 1111111

Efectis EFFECTIS ERA AVIASYON TEST VE DEĞERLENDİRME A.Ş.

Yangın Test Laboratuvarı

Alınışta Kuruluş : No: AB-0004-T
Oraylanış Kuruluş : NO:10104

YANGINA KARŞI TEPKİSİNİN
TS EN 13501-1:2013 STANDARTINA GÖRE
SINIFLANDIRILMASI

Müşaat eden : SİSTEM ALUMİNYUM SAN. VE TİC. A.Ş.
Ergene-1.068 Yolu No: 10104 Mah. No:13/1
Ergene, T10104/10104/T10104

Hazırlayan : EFFECTIS ERA AVIASYON TEST VE DEĞERLENDİRME A.Ş.
T10104 T10104/10104/10104 Mah. No: 13/1
25. Sol No: 1 Çekirgeci - Çayirova
300011, TÜRKİYE

Ürün adı : ALUTEC BOND AJ

Sertifika raporu no. : ERA - 17 - 004

Yayın numarası : 1/07

Yayınlanma tarihi : 22.03.2017

Bu sertifikasyon raporu, 5 sayılıdır. Bu pekkatde ve sadece 50000 adetlik olarak kullanılabilir ve bu yeniden kullanılabılır.

Adres: 09060 Çayirova Çayirova Mah. No: 13/1, 34790 Çayirova - Çayirova
Kocaeli/TÜRKİYE
Tel: 0090 332 800 0000 Fax: 0090 332 800 0000 E-posta: info@effectis.com.tr
Web: www.effectis.com.tr

ERA ERA LABORATUVARLARI A.Ş.

ERA Yangın Test Laboratuvarı

Alınışta Kuruluş : No: AB-0004-T

YANGINA KARŞI TEPKİSİNİN
EN 13501-1:2013 STANDARTINA GÖRE
SINIFLANDIRILMASI

Müşaat eden : SİSTEM ALUMİNYUM SAN. VE TİC. A.Ş.
Çekirgeci Mahallesi Akçay Mah. No: 13/1, 34790 Çayirova - Çayirova
Kocaeli/TÜRKİYE

Hazırlayan : ERA LABORATUVARLARI A.Ş.
T10104 T10104/10104/10104 Mah. No: 13/1
25. Sol No: 1 Çekirgeci - Çayirova
300011, TÜRKİYE

Ürün adı : ALUTEC BOND - Çayirova Mahallesi

Sertifika raporu no. : ERA - 17 - 004

Yayın numarası : 1/07

Yayınlanma tarihi : 22.03.2017

Bu sertifikasyon raporu, 5 sayılıdır. Bu pekkatde ve sadece 50000 adetlik olarak kullanılabilir ve bu yeniden kullanılabılır.

Adres: T10104 T10104/10104/10104 Mah. No: 13/1, 25. Sol No: 1 Çekirgeci - Çayirova Mahallesi, 300011, Kocaeli/TÜRKİYE
Tel: 0090 332 800 0000 Fax: 0090 332 800 0000 E-posta: info@effectis.com.tr
Web: www.effectis.com.tr

kiwa

CERTIFICATE

Quality Management System Certificate
IATF 16949:2016

We certify that the Quality Management System of the Organization
SİSTEM ALUMİNYUM SAN. VE TİC. A.Ş.
is in compliance with the standard IATF 16949:2016 for the following product/service:

Manufacturing of aluminum parts and profiles by laser cutting, extrusion, machining, anodizing and painting.

Chief Operating Officer
Denizhan Ergonen

Exclusion 1.2 is not in the product scope

The certificate is issued in compliance with IATF 16949:2016. The certificate is issued in compliance with IATF 16949:2016. The certificate is issued in compliance with IATF 16949:2016.

SİSTEM ALUMİNYUM SAN. VE TİC. A.Ş.
Çekirgeci Mahallesi Akçay Mah. No: 13/1, 34790 Çayirova - Çayirova
Kocaeli/TÜRKİYE

Denizhan Ergonen
SİSTEM ALUMİNYUM SAN. VE TİC. A.Ş.
Çekirgeci Mahallesi Akçay Mah. No: 13/1, 34790 Çayirova - Çayirova
Kocaeli/TÜRKİYE

