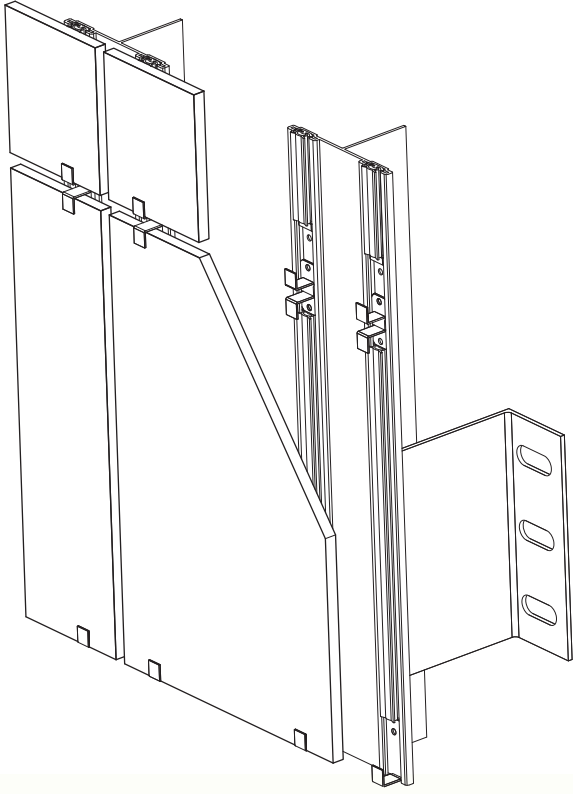


# SARAY® | S554



**SERAMİK CEPHE SİSTEMLERİ**



**SS54 SERAMİK CEPHE**  
**FİHRİST ve MALZEME TANIMLARI**  
**SS54**  
Ceramic Facade Structural System  
İndeks & Description

- Profiller
- Profiles

### Seramik Cephe Sistemi

PROFİL RESMİ PROFILE PICTURE	PROFİL NO PROFILE NO	PROFİLİN İSMİ PROFILE NAME	AĞIRLIK WEIGHT (kg/m)	Jxx (cm <sup>4</sup> )	Jyy (cm <sup>4</sup> )
	4750	T Taşıyıcı Profili T Mullion Profile	0,950	6,62	21,87
	7125	T Taşıyıcı Profili T Mullion Profile	1,040	11,67	29,17
	4957	I Taşıyıcı Profili I Profile	0,485	4,89	0,70
	4956	L Taşıyıcı Profili L Mullion Profile	0,610	5,44	5,96
	4751	Kanal Profili Adapter Profile	0,230	----	----
	4954	Köşe Dönüş Profili 90° Corner Profile 90°	0,960	----	----
	4955	Köşe Dönüş Profili 90° Corner Profile 90°	0,500	----	----
	4764	T Taşıyıcı Profili T Mullion Profile	0,625	4,87	7,67
	7124	T Taşıyıcı Profili T Mullion Profile	1,090	21,44	13,10
	4812	Seramik Altı Konstrüksiyon Profili (Yatay) Ceramic Transom Profile	0,570	9,31	0,15
	4813	Seramik Altı Bağlantı Profili (Yatay) Ceramic Connector Profile	0,520	----	----
	922	40x80 Düşey , Yatay Taşıyıcı Profil Mullion and Transom Profile 40x80	0,900	23,03	9,55
	930	30.5x59.5 Dikme Profili Mullion Profile 40x80	0,940	15,69	5,41
	4747	L Braket Profili 54x80 mm L Bracket Profile (ancorage) 54x80 mm	1,075	----	----
	4748	L Braket Profili 54x120 mm L Bracket Profile (ancorage) 54x120 mm	1,400	----	----
	4749	L Braket Profili 54x160 mm L Bracket Profile (ancorage) 54x160 mm	1,725	----	----



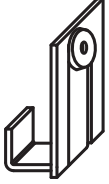
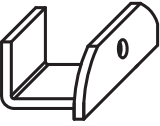

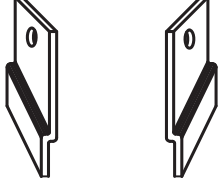
Uyarı: Profil ağırlıklarımız teorik olup; teslim anındaki tartımız geçerlidir.  
Warning: the weights of profile is theoretical, weighting at the time of delivery are valid.

\* İşaretili kalıp minimum 300 kg üretilir.  
\* Minimum order quantity: 300 kg

**SS54 SERAMİK CEPHE**  
**AKSESUAR FİHRİST ve MALZEME TANIMLARI**  
Ceramic Facade Structural System  
Accessories Indeks & Description

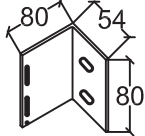
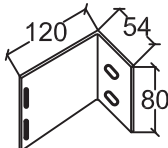
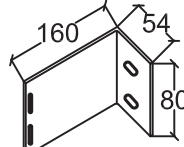
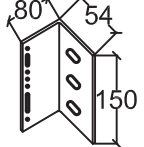
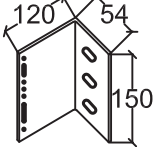
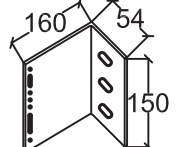
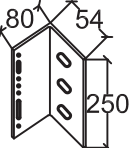
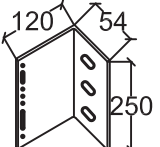
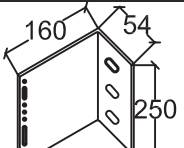
- Aksesuarlar
- Accessories

### Seramik Cephe Sistemi

SİSTEM FİTİLLERİ VE AKSESUARLARI				
RESİM PICTURE	PARÇA NO PIECE NO	MALZEME MATERIAL	AÇIKLAMA DESCRIPTION	PAKET PACKET
	Epil 60	EPDM	Sıkıştırma (titreşim alma ) Fitili Compression Gasket	150 m/Koli
	Epil 1-5	EPDM	Taşıyıcı Fitil Transom Gasket	180 m/Koli
	K1	A2 Paslanmaz	ALT KLİPS Under Clips (taş tutturma - alt başlangıç tırnağı) A4 paslanmaz çelik (316 ti alaşım) İstenilen RAL renginde boyanır.	İstenilen Miktarda (AD)
	K2	A2 Paslanmaz	ARA KLİPS Middle Clips (taş tutturma ara tırnak) A4 paslanmaz çelik (316 ti alaşım) İstenilen RAL renginde boyanır " 8-10 mm taşlar için "	İstenilen Miktarda (AD)
	K3	A2 Paslanmaz	8 MM FUGA ELEMANI 8 mm Spacing Adjustment Part (Derz ayar parçası) A4 paslanmaz çelik (316 ti alaşım) siyah boyalı " 8-4 mm derz için "	İstenilen Miktarda (AD)
	K4	A2 Paslanmaz	45 ° DERZ AYAR PARÇASI 45 ° Spacing Adjustment Part A4 paslanmaz çelik (316 ti alaşım) siyah boyalı " 8 mm derz için "	İstenilen Miktarda (AD)

- Aksesuarlar
- Accessories

### Seramik Cephe Sistemi

L BRAKETLER/ L BRACKET				
RESİM PICTURE	PARÇA NO PIECE NO	MALZEME MATERIAL	AÇIKLAMA DESCRIPTION	PAKET PACKET
 die: 4747	SC-526-80	Alüminyum	L Ara Braket 80/80 L Bracket (anchorage) 80/80	İstenilen Miktarda (AD)
 die: 4748	SC-527-80	Alüminyum	L Ara Braket 120/80 L Bracket (anchorage) 120/80	İstenilen Miktarda (AD)
 die: 4749	SC-528-80	Alüminyum	L Ara Braket 160/80 L Bracket (anchorage) 160/80	İstenilen Miktarda (AD)
 die: 4747	SC-526-150	Alüminyum	L Ana Braket 80/150 L Bracket (anchorage) 80/150	İstenilen Miktarda (AD)
 die: 4748	SC-527-150	Alüminyum	L Ana Braket 120/150 L Bracket (anchorage) 120/150	İstenilen Miktarda (AD)
 die: 4749	SC-528-150	Alüminyum	L Ana Braket 160/150 L Bracket (anchorage) 160/150	İstenilen Miktarda (AD)
 die: 4747	SC-526-250	Alüminyum	L Ana Braket 80/250 L Bracket (anchorage) 80/250	İstenilen Miktarda (AD)
 die: 4748	SC-527-250	Alüminyum	L Ana Braket 120/250 L Bracket (anchorage) 120/250	İstenilen Miktarda (AD)
 die: 4749	SC-528-250	Alüminyum	L Ana Braket 160/250 L Bracket (anchorage) 160/250	İstenilen Miktarda (AD)

**SS54 SERAMİK CEPHE  
I:1 PROFİL KESİTLERİ**  
Ceramic Facade Structural System  
Full Scale Sections

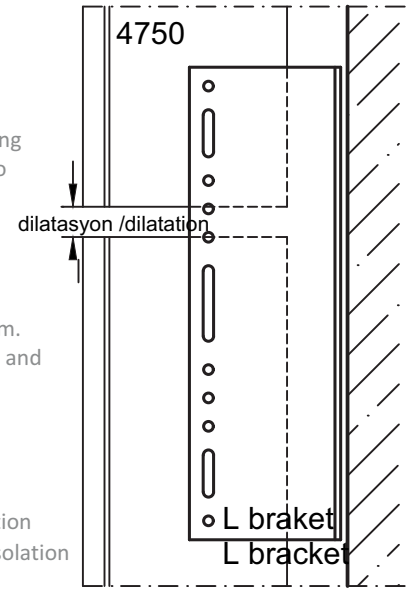


- Teknik Şartname
- Technical Specifications

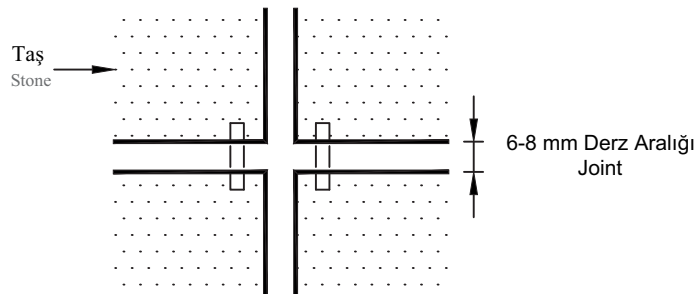
### Seramik Cephe Sistemi

#### TEKNİK ŞARTNAME / TECHNICAL SPECIFICATIONS

1. Klipsler Alman A4, Amerikan 316 Kalite paslanmaz çelikten ısı işlem görmüş olarak imal edilir. Ara ve ana klipsler seramiğe uygun ral kodunda boyanır. Derz ayar parçası siyah boyanır.  
Clips are produced (thermal treatment, hardened) and made of German A-4 or American 316 quality stainless steel. All main and auxiliary (middle) clips are painted according to the ceramic colours.
2. Sistem cold facade (soğuk cephe) prensibine göre çalıştığından atmosfer etkilere açıktır, dolayısıyla kullanılacak tüm elemanlar paslanmaz olmalıdır. Bunlar klips ve profillerin yanısıra kullanılan bağlantı elemanları için de geçerlidir. Perçin çivileri, dübelin saplama kısmı paslanmaz olmalıdır.  
Because all system is designed within the principles of cold facade, all the parts which will be used within the system must be stainless steel. All connection parts besides profiles, and clips must be stainless steel. The nails of the rivet and dowel pins must be stainless steel as well.
3. Profiller seramiklerin arasından gözüktükleri için koyu kahve veya siyah mat eloksallenir.  
Because the profiles appear between ceramics they are anodised dark brown or mat black colour.
4. Profillerin ek yeri döşeme hizasında taşıyıcı braketlere getirilmelidir. Yandaki şekilde görüldüğü gibi profiller üst noktalarından iki veya ; profilin uzunluğuna göre daha çok perçinle sabitlenir. Alt noktaları ise bakla deliğinden bağlanarak aşağı genleşmesi sağlanır. (ŞEKİL 1)  
The connection side of the profiles should be leveled exactly same level with the floor and carrying anchorages. Profiles can be fixed with two or more rivets on the top side, depending on the length of the profile. Bottom sides of the profiles should be fixed within the I canal to absorb the expansion. (See the drawing 1)
5. Taş derzleri, derz ayar parçalarıyla 6 veya 8 mm ayarlanır. Bu derzler açık kalarak bina ile cephe boşluğunun havalanması sağlar, bu sayede kondensasyon engellenecektir. (ŞEKİL 2)  
The joint part of the Stones should be positioned by joint adjustment parts between 6-8 mm. These joints should be kept open position in order to ventilate the the gap between facade and the building to avoid the condensation. (See the drawing 2)
6. Braketler döşendikten sonra bina duvarları taşıyıcı veya styrofoam la kaplanır. Bu malzemenin kalınlığı yapıda istenilen ısı geçiş kat sayısına göre belirlenir.  
After fixation of the brackets, the outside wall of the building is covered by chosen isolation material (rockwool or styrofoam). The thickness of the material is related with the needed isolation standards of the building.
7. Profiller Al Mgsi 0,5 F22 (AA 6063-T5) olmalıdır.  
All Aluminium profiles must be the following standards ALMGSI 0,5, F 22, AA 6063-T5
8. Yatay ve dikey derzlerin binada düzgün olarak devam edebilmesi için braketler çakılmadan ve dikey profiller konmadan önce kotların ölçüm aletleriyle belirlenmesi şarttır.  
The levels must be checked, positioned and marked within certain measurement devices before the installation of the anchorages to continue around the building for a proper application.
9. Pencere açıklıkları olan yerlerde, harpuşta ve bitişlerde yalıtım membranı kullanılmalıdır.  
Isolation membrane should be used on the gaps, ends of the Windows and coping.



ŞEKİL 1  
Drawing 1



ŞEKİL 2  
DRAWING 2

- Profiller
- Profiles

### Seramik Cephe Sistemi

#### DÜŞEY PROFİL

$a = 120 \text{ cm}$   
 $L = 150 \text{ cm}$   
 $q = 0,0096 \text{ kg/cm}^2$   
 $f = L/300 \leq 0,5 \text{ cm}$   
 $E = 700000 \text{ kg/cm}^2$

$$J_x = 0,00521 \frac{q \cdot a \cdot L^4}{E \cdot f}$$

$$J_x = 0,00521 \frac{0,0096 \cdot 150^4 \cdot 120}{700000 \cdot 0,5}$$

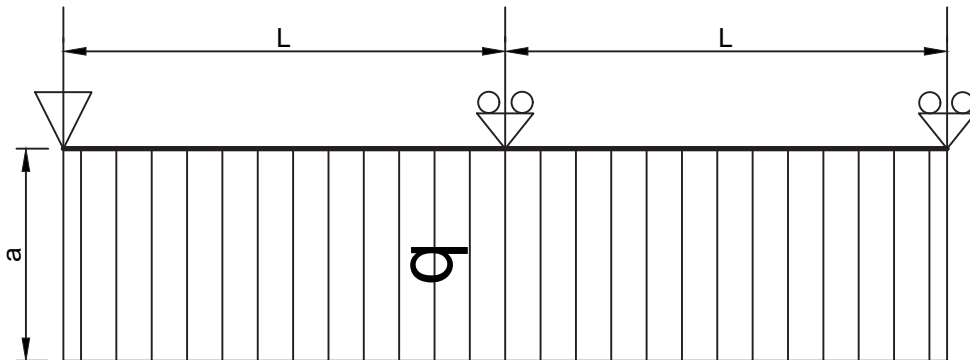
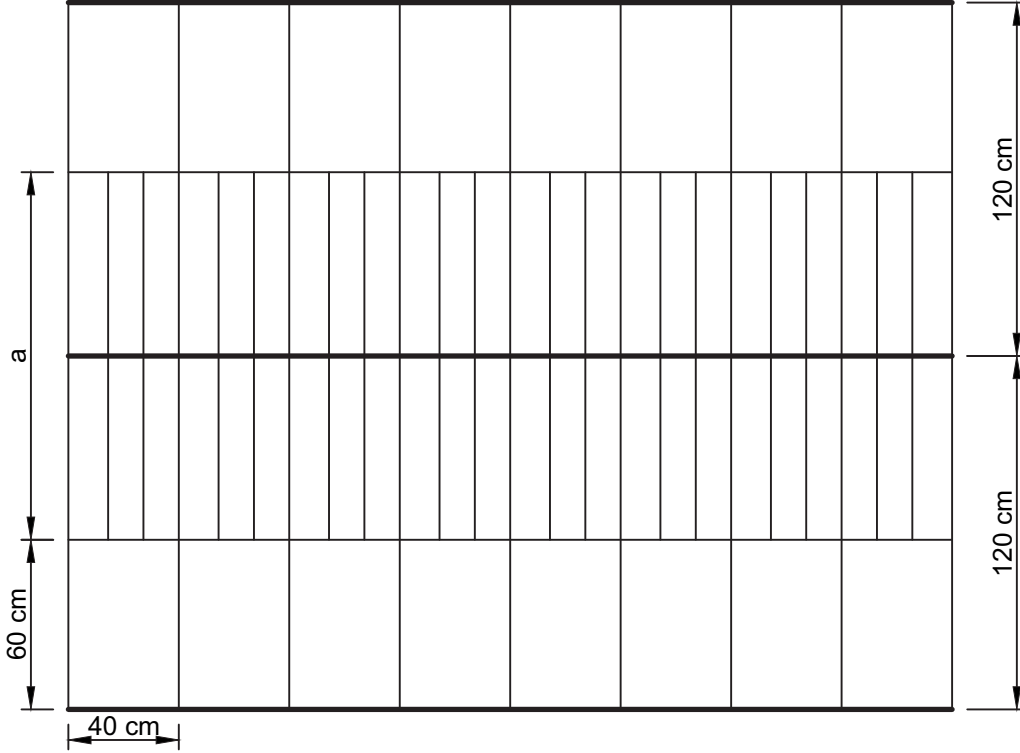
$$J_x = 8,68 \text{ cm}^4$$

#### YATAY PROFİL

$$J_y = 0,013 \frac{q \cdot a \cdot L^4}{E \cdot f}$$

$$J_y = 0,013 \frac{0,0096 \cdot 120^4 \cdot 40}{700000 \cdot 0,5}$$

$$J_y = 2,96 \text{ cm}^4$$



- Analiz Örneği
- Example of Analysis

### Seramik Cephe Sistemi

#### -30 x 60 cm TAŞ İÇİN ANALİZ

5,05 m<sup>2</sup> için analiz değerleri alınmıştır.

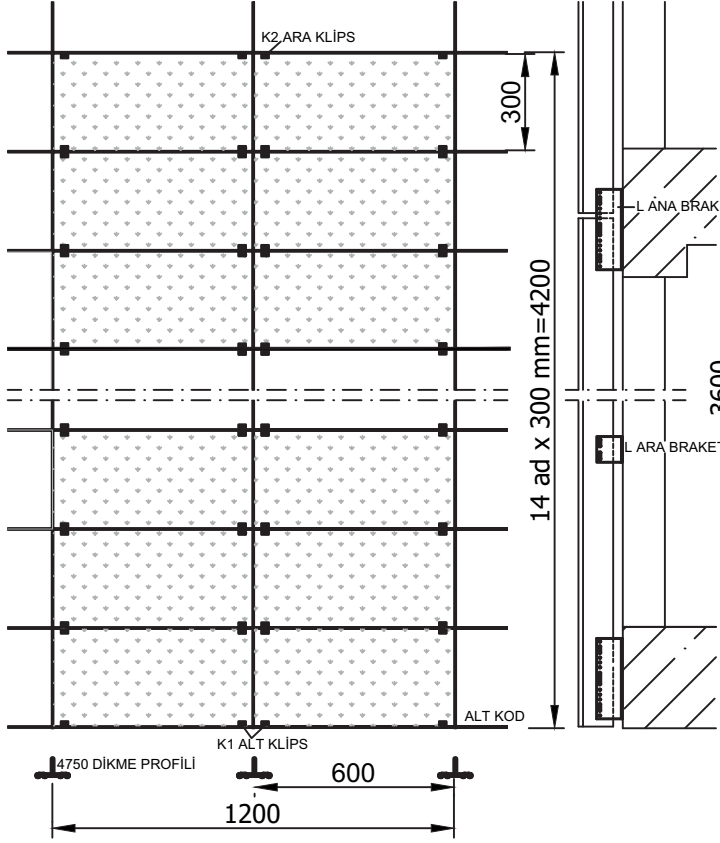
Analysis for 30\*60 mm ceramic  
Analysis are considered for 5,05 M2

#### MONTAJ SIRALAMASI MOUNTING PROCESSING

1. Her kat arasında döşeme hizasına, ana braketler dübellenir. 2 ana braket arasında ara braketler kullanılır. Braketler yapılan statik hesaba göre belirlenir.  
Between every floor with the level of the flooring ,main anchorages are plugged.Auxiliary (middle) anchorages is used between the main ones. Anchorages are selected according to stactical calculation.
2. 4750 veya diğer dikme profili brakete monte edilir.  
4750 or other transom profile is connected with anchorage.
3. Her taş için 4 adet K2 ara klips ve 2 adet K3 fuga elamanı kullanılır. K1 ise alt taşın alt noktasına takılır.  
For every cyramic ,please use 4 pcs auxiliary clips and 2 pcs K3 spacing adjustment part.
4. Taşlar en alttan başlayarak yukarıya öreerek monte edilir.  
Ceramics are fixed starting fro bottom towards up (top) one by one.

NOT : Yapıdaki girinti-çıkıntılar, çeşitli açıklıklar, dönüşler ve yapı cephesindeki mimari hareketler, hesapları etkiler.

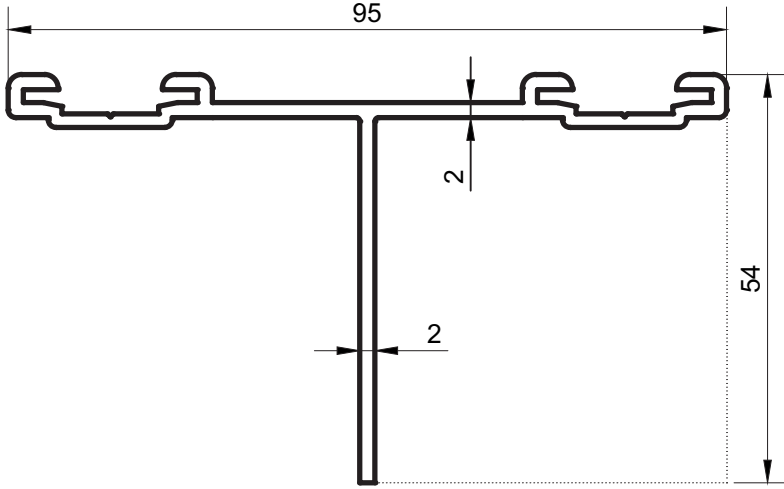
PS:The calculation is affected by architectural design, all concave and convex sides ,gaps nad turns of the building.



Malzemenin Cinsi Description of Materials	Birim Unit	Miktar Quantity	Toplam Total
- 4750 Dikme Profili Mullion	0,950 kg/m	12,6 m (4,2x3)	11,97 kg
-120 x 250 Ana Braket Main Anchorage	3 ad (pcs)	1 ad	3 ad
-120 x80 Ara Braket Auxiliary Anchorage	3 ad (pcs)	1 ad	3 ad
-K1 Alt Klips Under Clips	4 ad (pcs)	1 ad	4 ad
-K2 Ara Klips Auxiliary Clips	4 ad (pcs)	28 taş	112 ad-K1=104 ad
-K3 8 mm Fuga Elemanı Spacing adjusment part	2 ad (pcs)	28 taş	56 ad
-4,8 x15 mm Geniş Kafa Pop Perçin (L Braketlerde kullanılır.) Alu Rivet	L Ana braket 3x3=9 ad L Ara braket 3x1=3 ad	9+3	12 ad
-4,0 x10 mm Alü. Pop Perçin Alu Rivet	K1+K3	4+56	60 ad
-Çelik Dübel (Paslanmaz) Stainless Steel Bolt	L Ana braket 3x3=9 ad L Ara braket 3x1=3 ad	9+3	12 ad
-Epil 60 EPDM Fitol Gasket	12.6 m	2 sıra	25.20 m

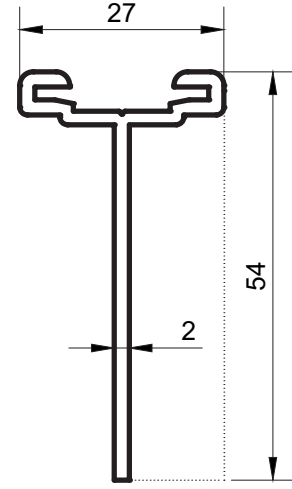
- Profiller
- Profiles

## Seramik Cephe Sistemi



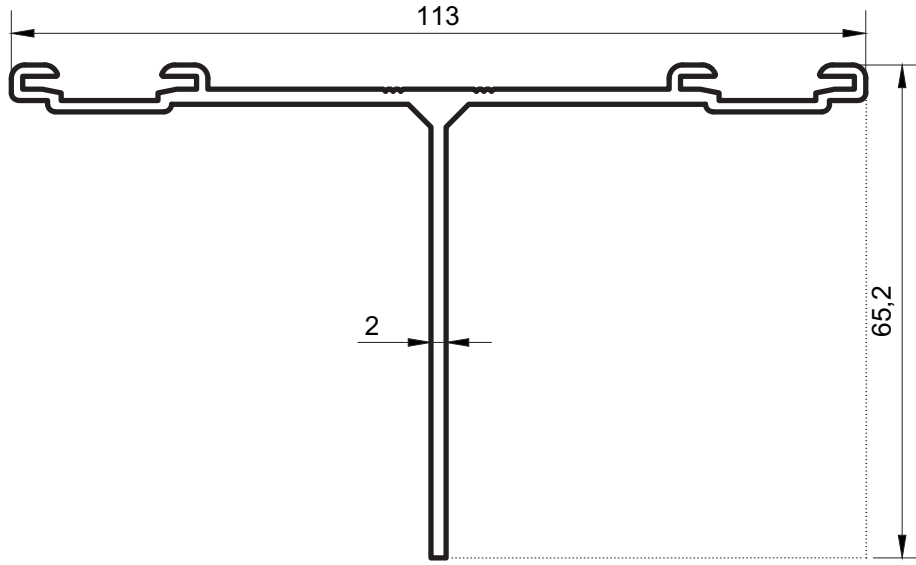
No : 4750

T Taşıyıcı  $Jx = 6,62 \text{ cm}^4$   
 0,950 kg/m  $Jy = 21,87 \text{ cm}^4$



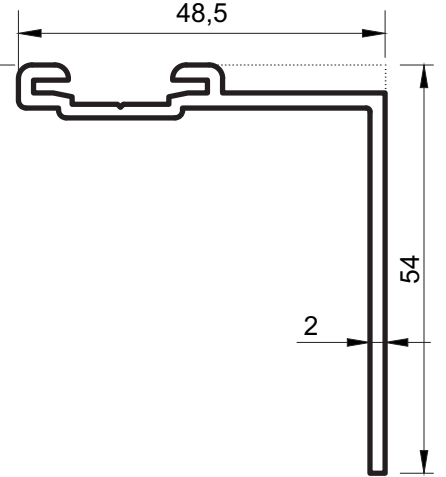
No : 4957

I Taşıyıcı  $Jx = 4,89 \text{ cm}^4$   
 0,485 kg/m  $Jy = 0,70 \text{ cm}^4$



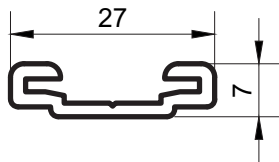
No : 7125

T Taşıyıcı  $Jx = 11,67 \text{ cm}^4$   
 1,040 kg/m  $Jy = 29,17 \text{ cm}^4$



No : 4956

L Taşıyıcı  $Jx = 5,44 \text{ cm}^4$   
 0,610 kg/m  $Jy = 5,96 \text{ cm}^4$



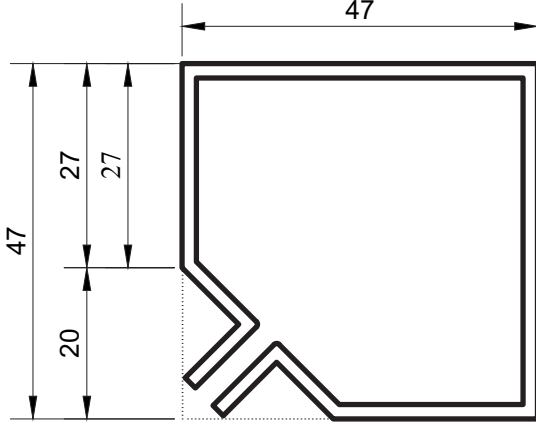
No : 4751

Kanal Profili  
 0,230 kg/m

Uyarı: Profil ağırlıklarımız teorik olup; teslim anındaki tartımız geçerlidir.  
 Warning: the weights of profile is theoretical, weighting at the time of delivery are valid.

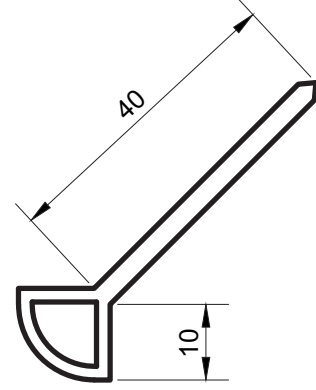
- Profiller
- Profiles

## Seramik Cephe Sistemi



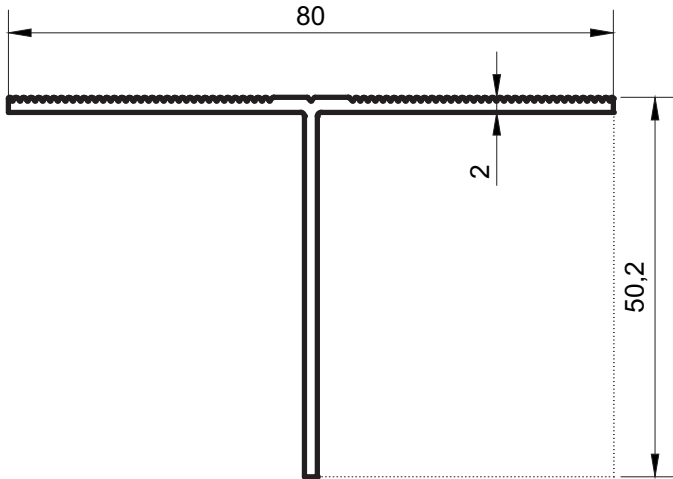
No : 4954

90° Köşe Profili (İç)  
0,960 kg/m



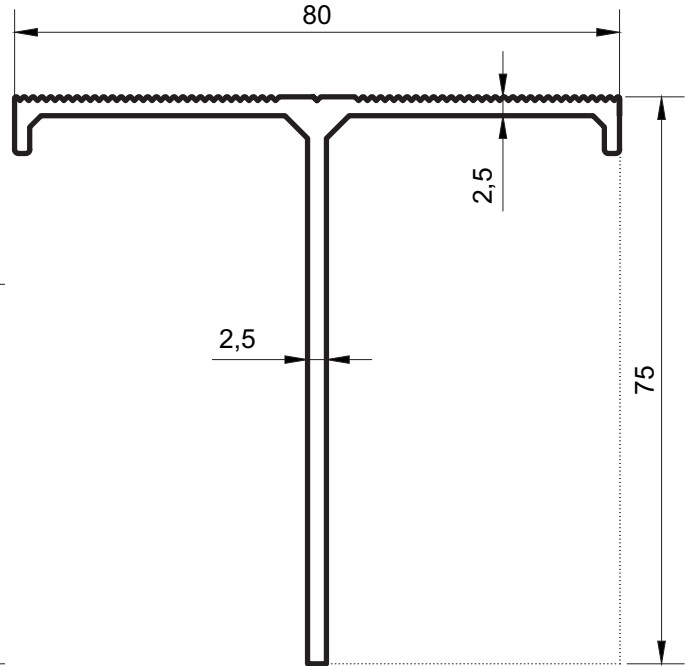
No : 4955

90° Köşe Profili (Dış)  
0,500 kg/m



No : 4764

T Taşıyıcı  $J_x = 4,87 \text{ cm}^4$   
0,625 kg/m  $J_y = 7,67 \text{ cm}^4$



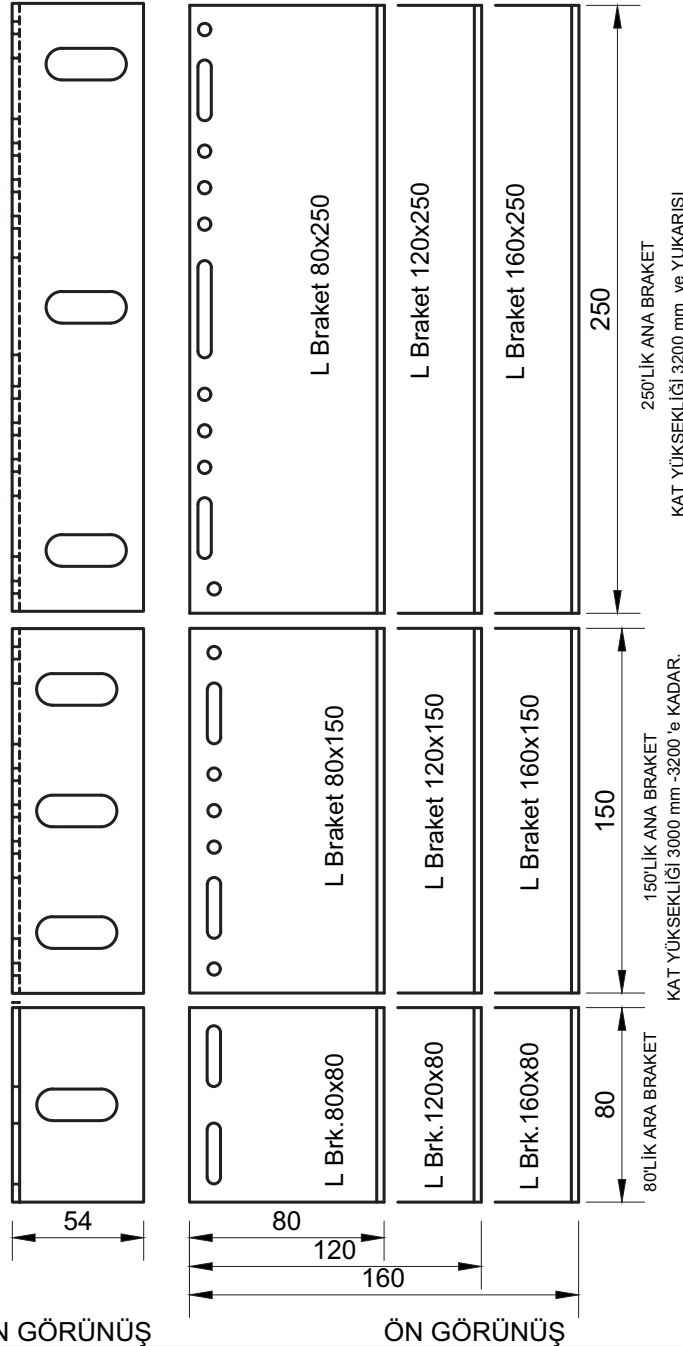
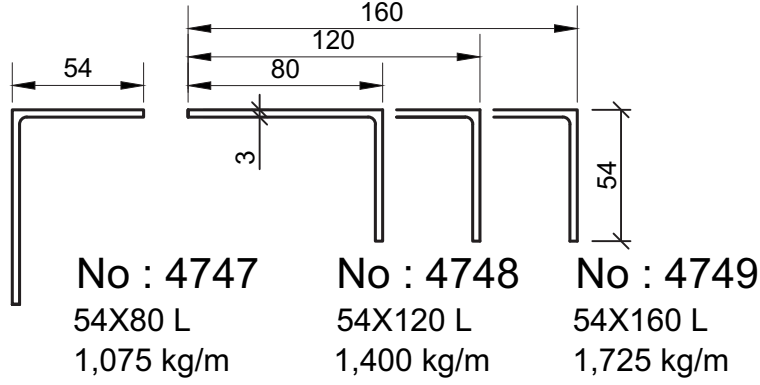
No : 7124

T Taşıyıcı  $J_x = 21,44 \text{ cm}^4$   
1,090 kg/m  $J_y = 13,10 \text{ cm}^4$

Uyarı: Profil ağırlıklarımız teorik olup; teslim anındaki tartımız geçerlidir.  
Warning: the weights of profile is theoretical, weighting at the time of delivery are valid.

- Aksesuarlar
- Accessories

## L BRAKETLER



YAN GÖRÜNÜŞ

ÖN GÖRÜNÜŞ

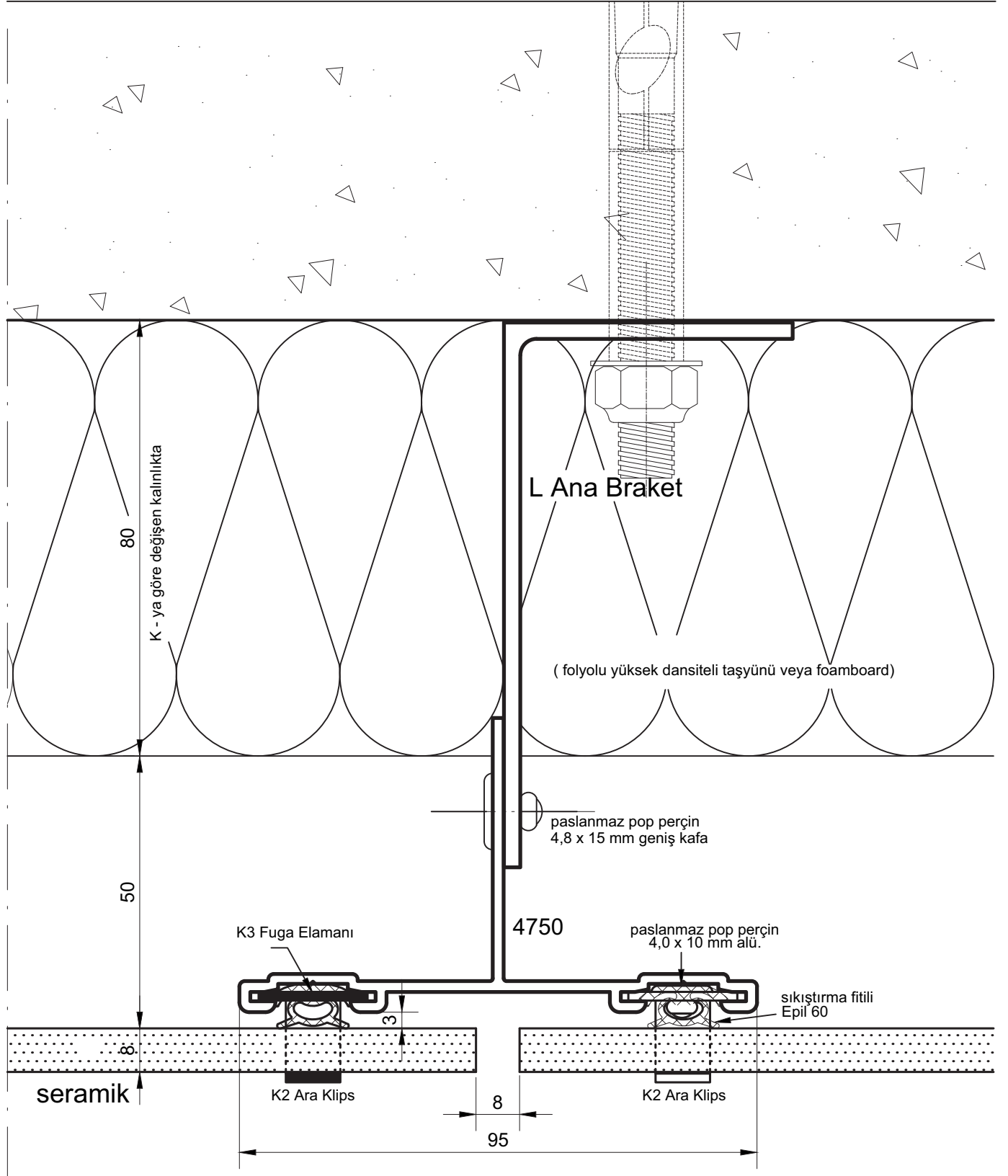
ÖLÇEKSİZ

Uyarı: Profil ağırlıklarımız teorik olup; teslim anındaki tartımız geçerlidir.  
Warning: the weights of profile is theoretical, weighting at the time of delivery are valid.

**SS54 SERAMİK CEPHE**  
**TİP DETAYLARI**  
Ceramic Facade Structural System  
Full Scale Sections

- Detaylar
- Details

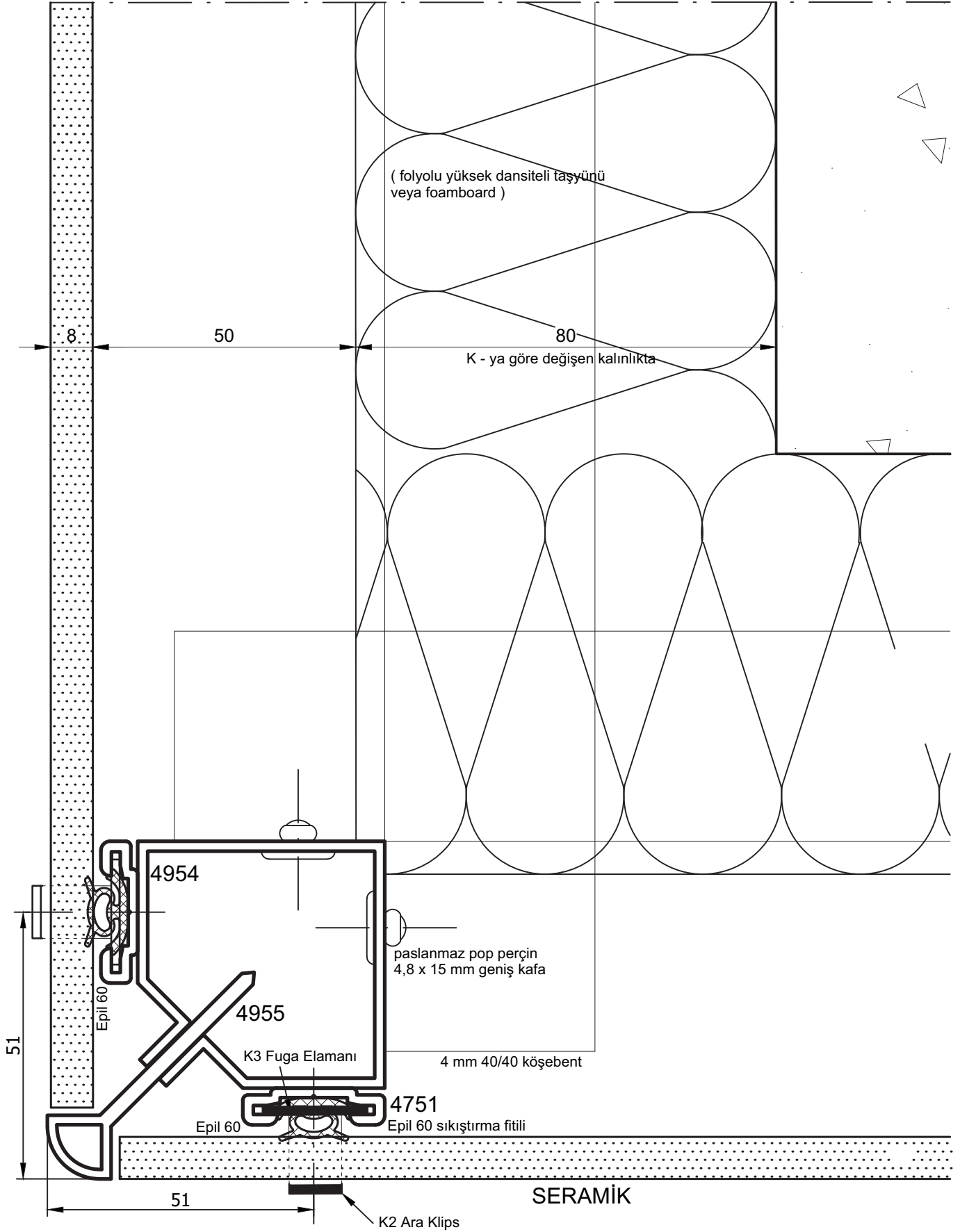
## Seramik Cephe Sistemi





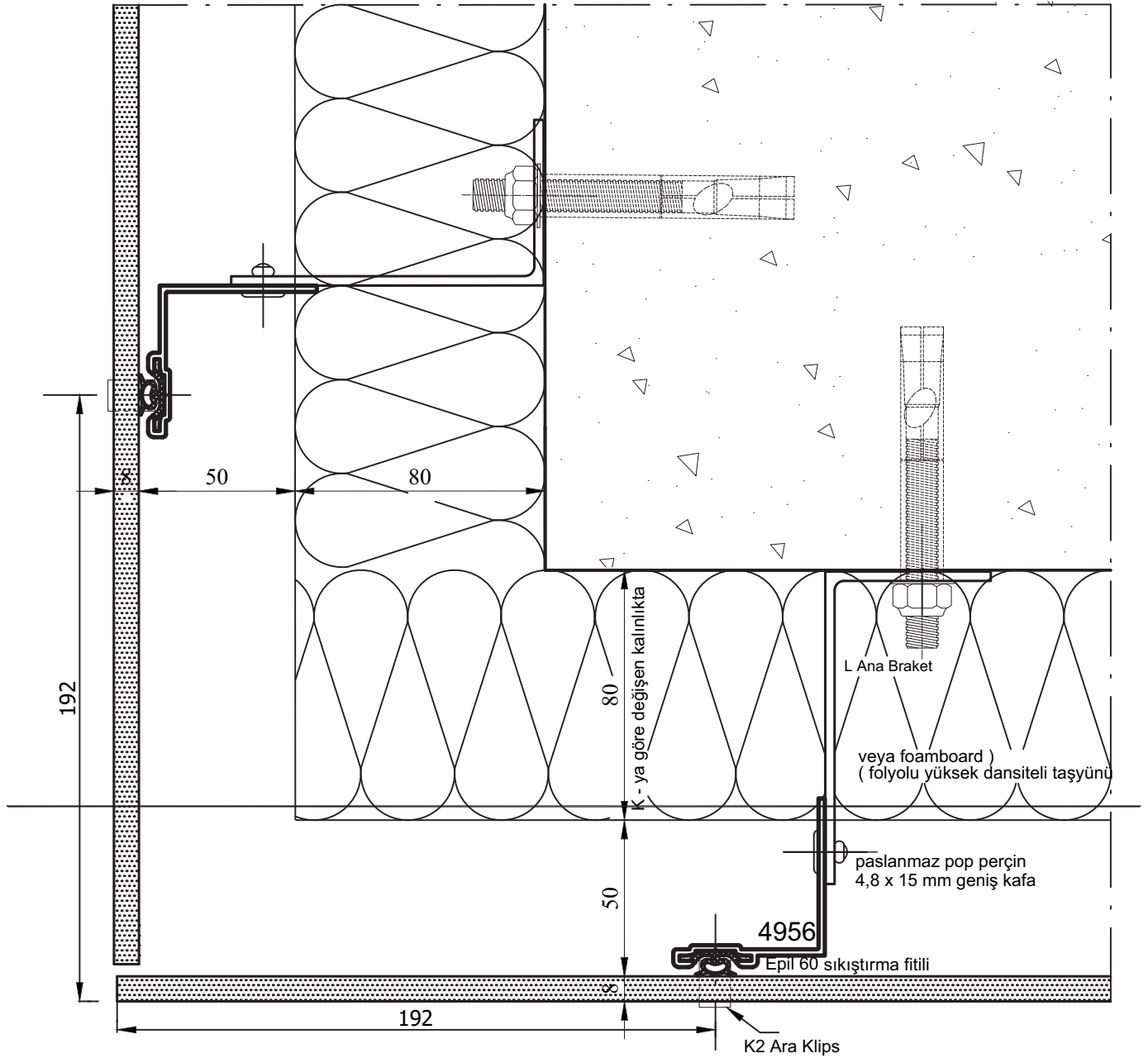
- Detaylar
- Details

## Seramik Cephe Sistemi



- Detaylar
- Details

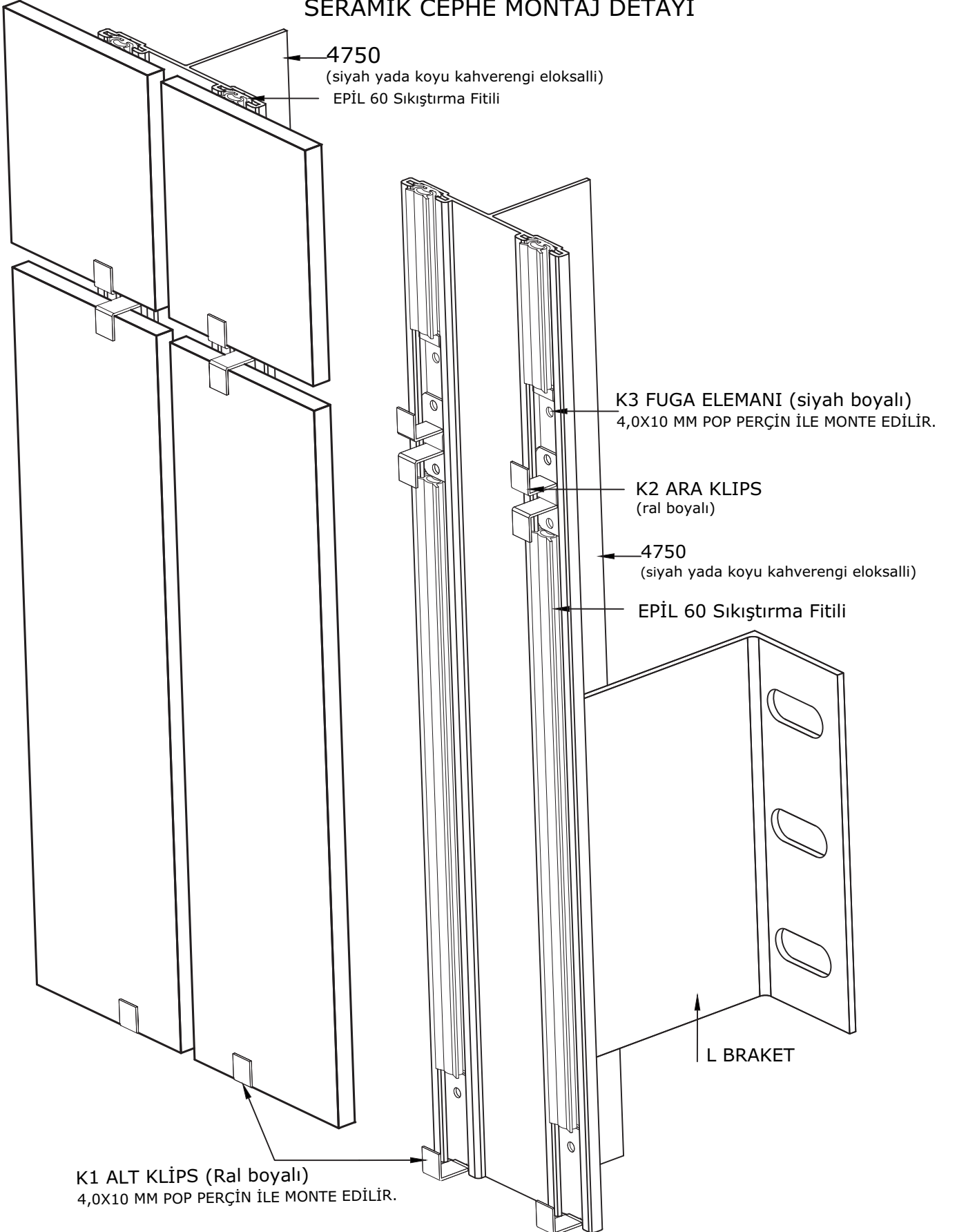
### Seramik Cephe Sistemi



- Detaylar
- Details

## Seramik Cephe Sistemi

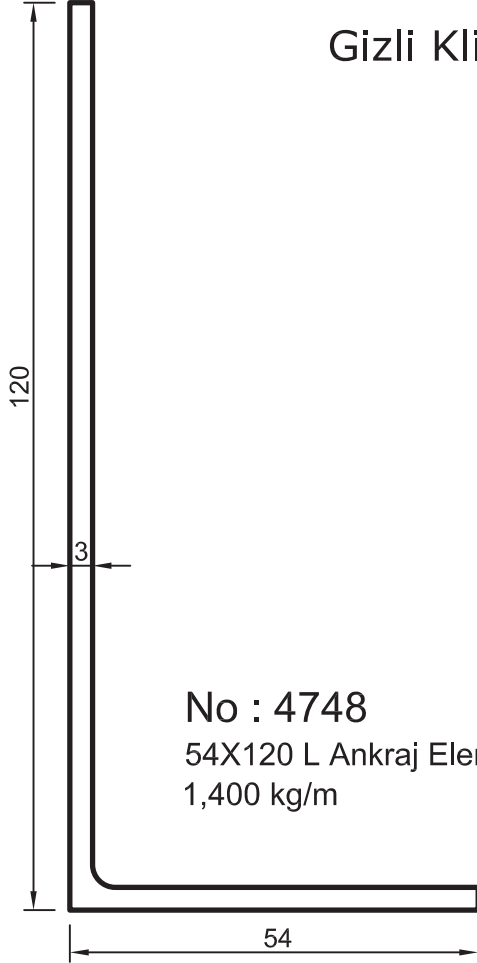
### SERAMİK CEPHE MONTAJ DETAYI



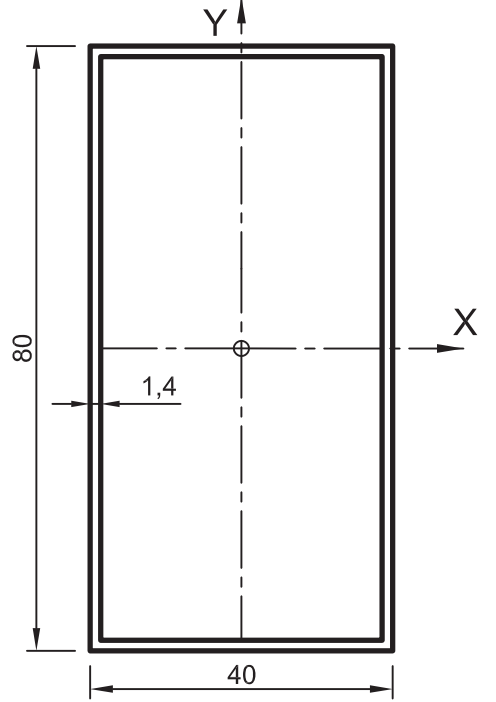
- Profiller
- Profiles

## Seramik Cephe Sistemi

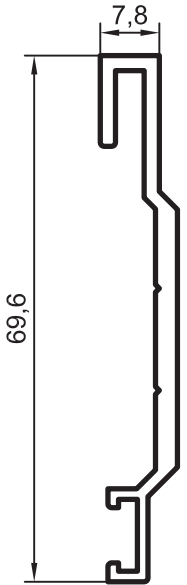
### Gizli Klipsli Sistem



No : 4748  
54X120 L Ankraj Elemanı  
1,400 kg/m

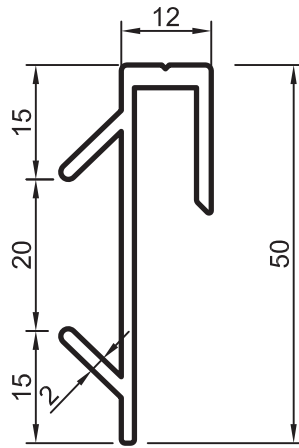


No : 922  
Dikme Profili  
0,890 kg/m  
 $J_x = 28,03 \text{ cm}^4$   
 $J_y = 9,55 \text{ cm}^4$



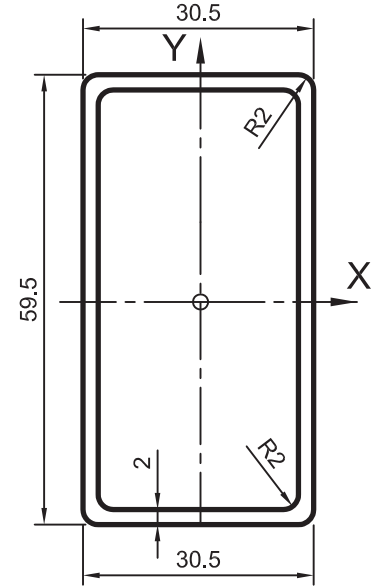
No : 4812

Seramik Altı Konstrüksiyon  
Profili (yatay)  $J_x = 9,31 \text{ cm}^4$   
0,570 kg/m  $J_y = 0,15 \text{ cm}^4$



No : 4813

Seramik Altı Bağlantı  
Profili  
0,520 kg/m



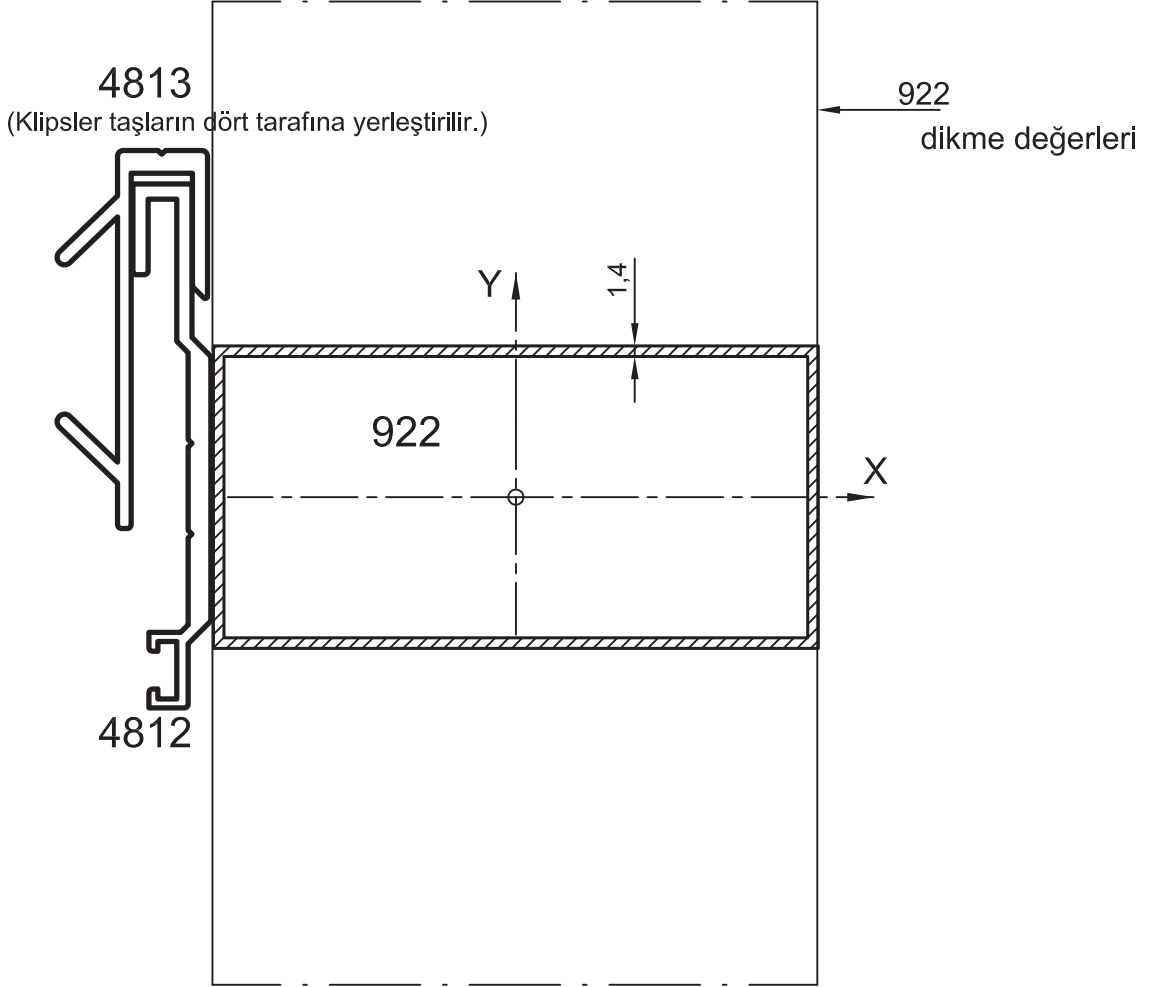
NO:930

seramik altı düşey  
taşıyıcı kutu profil  
0,940 kg/m  
 $J_x = 15,69 \text{ cm}^4$   
 $J_y = 5,41 \text{ cm}^4$

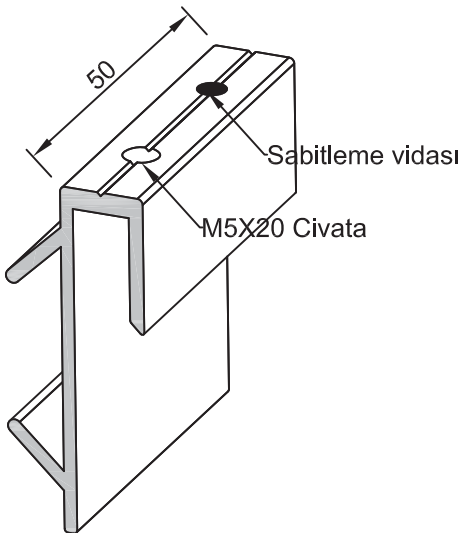
Uyarı: Profil ağırlıklarımız teorik olup; teslim anındaki tartımız geçerlidir.  
Warning: the weights of profile is theoretical, weighting at the time of delivery are valid.

- Detaylar
- Details

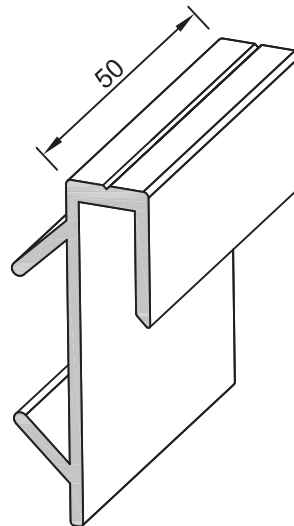
## Gizli Klipsli Sistem



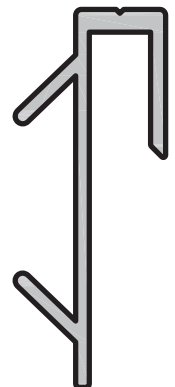
Üst Klips



Alt Klips

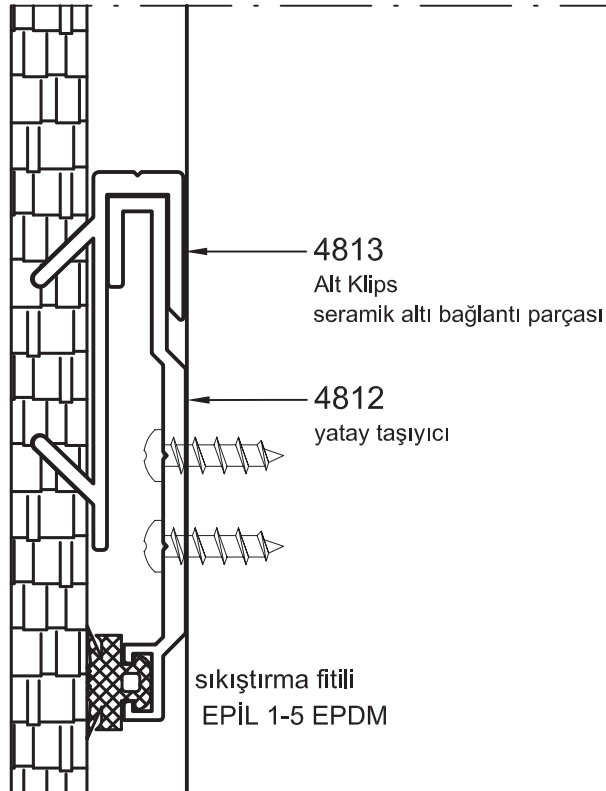
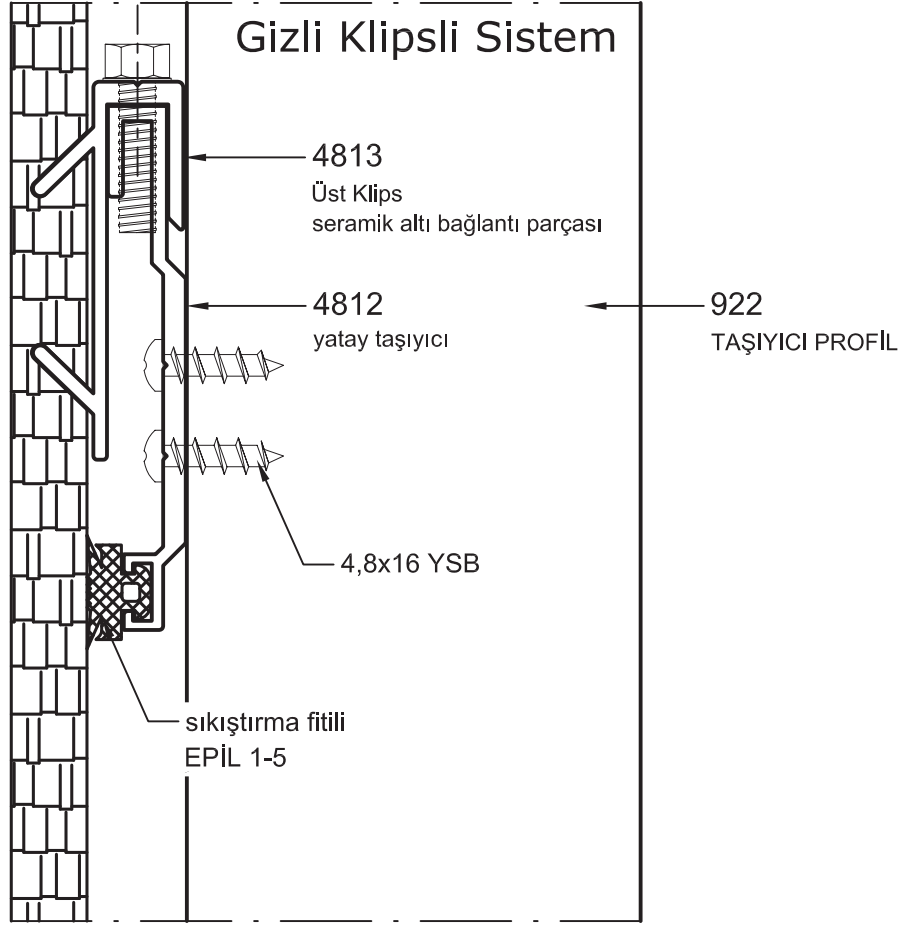


4813



- Detaylar
- Details

## Seramik Cephe Sistemi



- Detaylar
- Details

### Seramik Cephe Sistemi

#### Gizli Klipsli Sistem

Seramikler, arka yüzeylerine dört noktadan açılan kırılmalı kanallara takılan alüminyum klipsler yardımıyla taşıyıcı yatay konstrüksiyona monte edilir. Genellikle 60x60 cm, 60x120 cm, 50x100 cm ebatlarındaki malzemelere uygulanır.

