EURO COMFORT®

Gencer® ALÜMİNYUM SİSTEMLERİ

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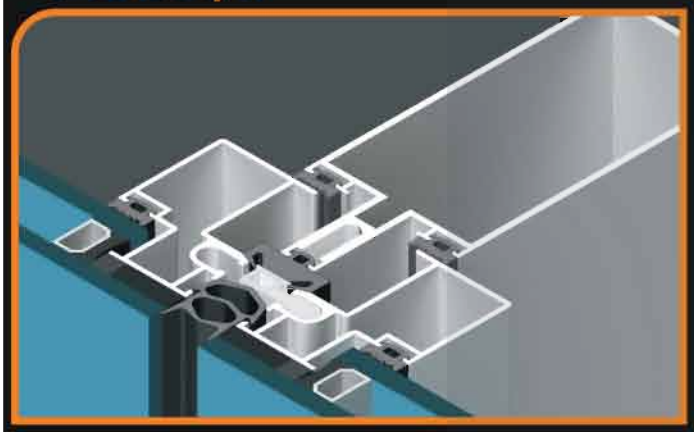
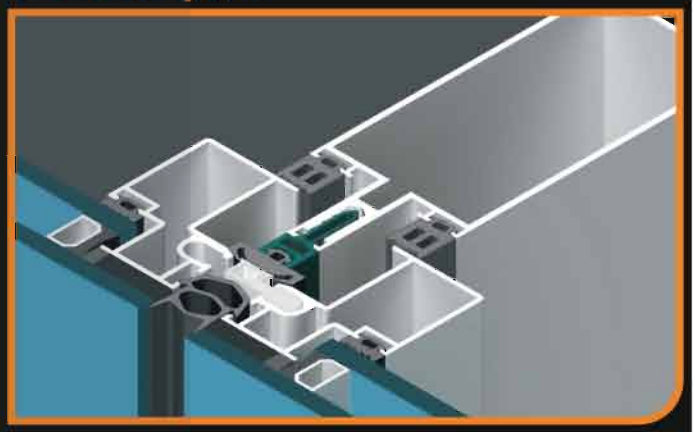
F50S Silikon Cephe

F50S/I



F50S/I+



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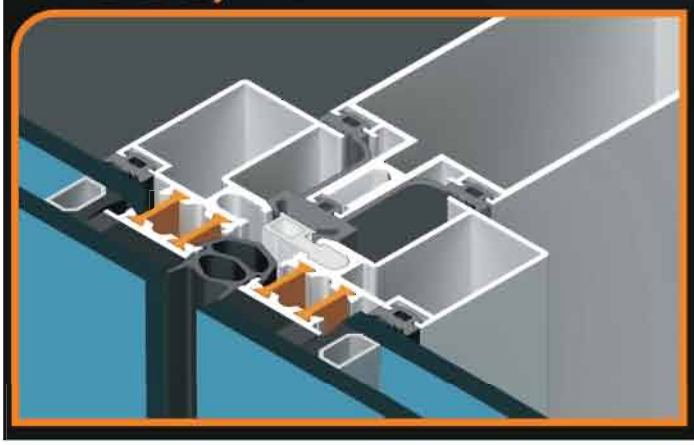
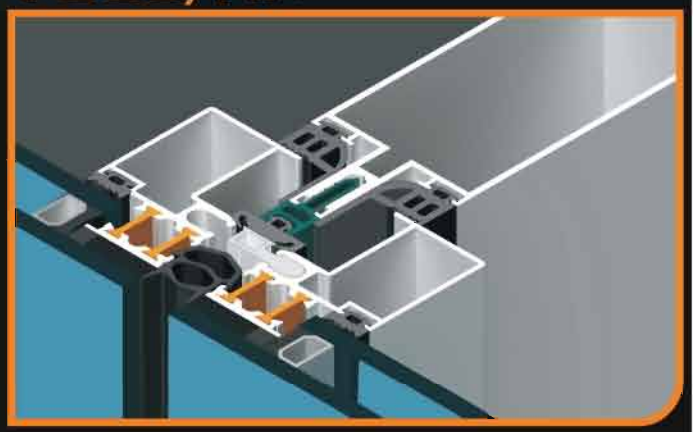
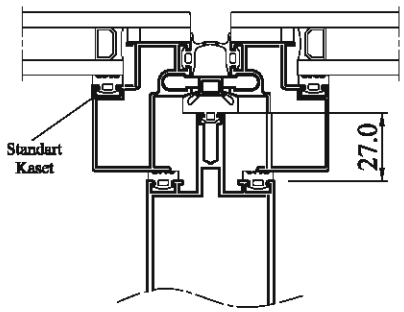


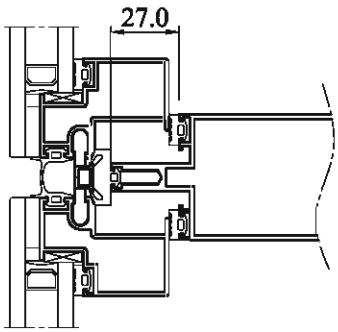
F50S/HI+



F50S/I

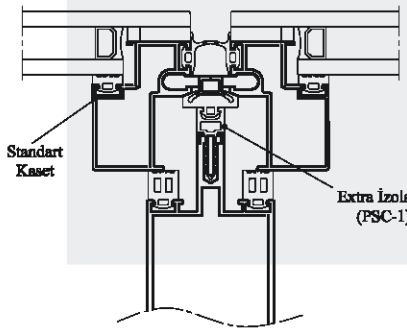


- 27mm uzantılı düşey taşıyıcı

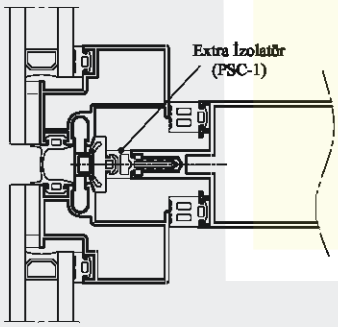


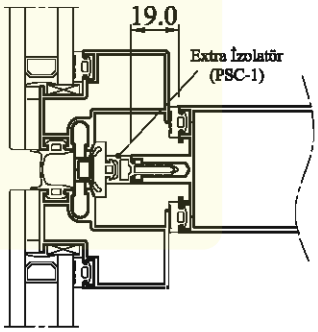
- 27mm uzantılı yatay taşıyıcı
(Bkz. sayfa 12)

F50S/I+



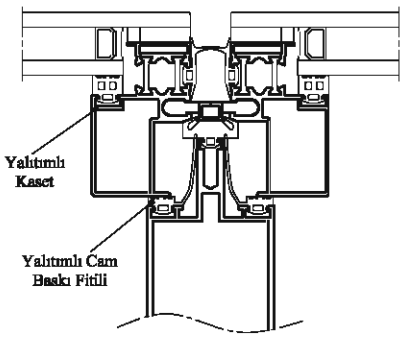
- 27mm uzantılı düşcy taşıyıcı



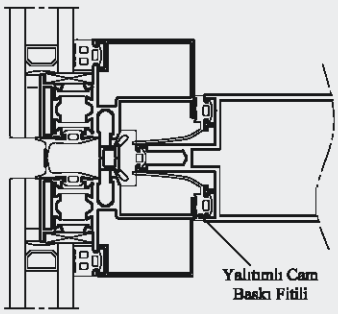


- 27mm uzantılı yatay taşıyıcı veya 19mm uzantılı yatay taşıyıcı
(Bkz. sayfa 11 - 12)

F50S/HI

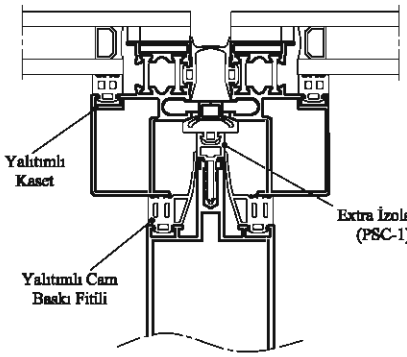


- 27mm uzantılı düşey taşıyıcı

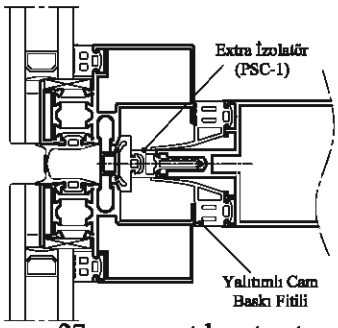


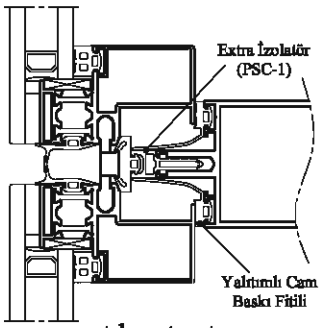
- 27mm uzantılı yatay taşıyıcı
(Bkz. sayfa 12)

F50S/HI+



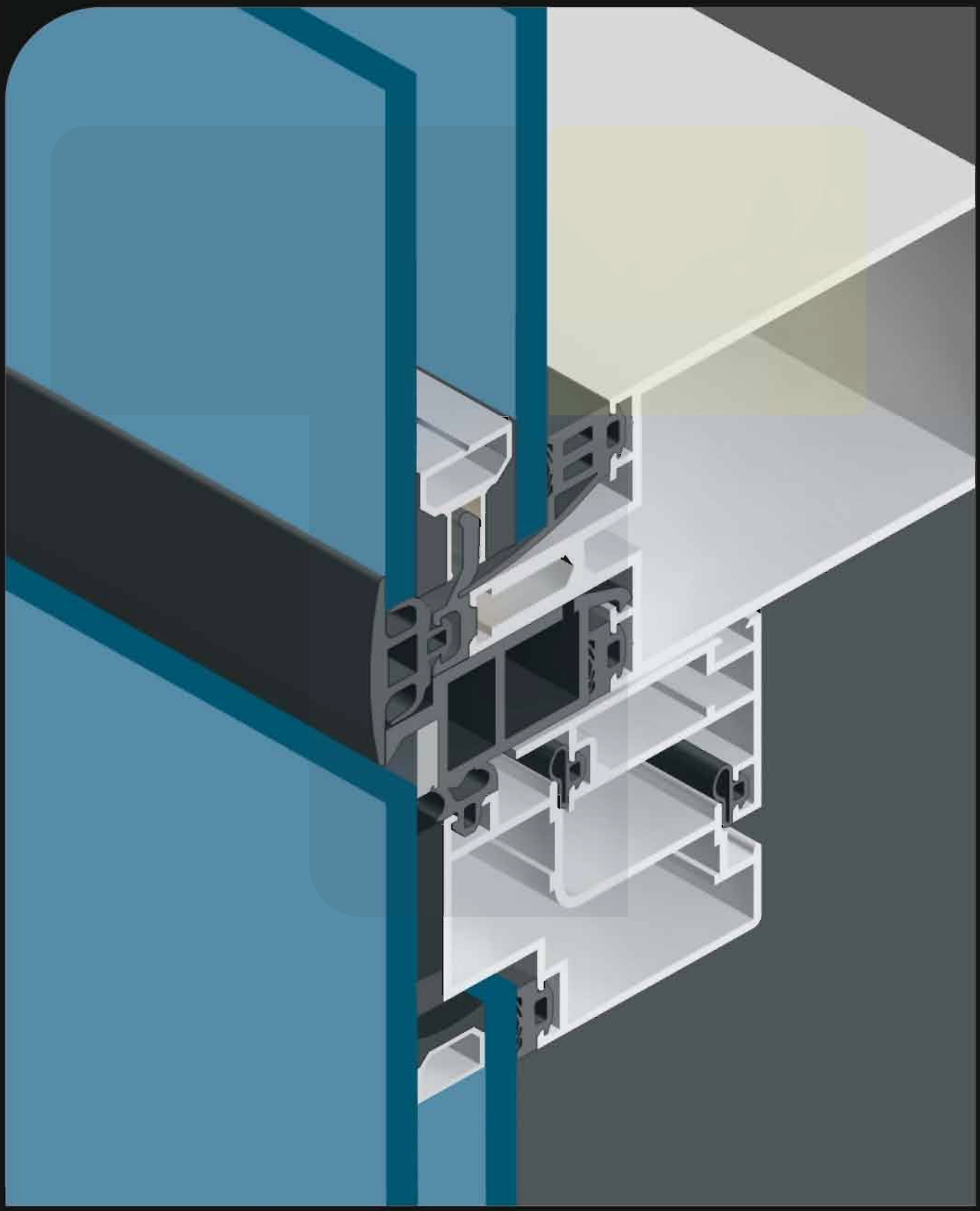
- 27mm uzantılı düşey taşıyıcı





- 27mm uzantılı yatay taşıyıcı veya 19mm uzantılı yatay taşıyıcı
(Bkz. sayfa 11 - 12)

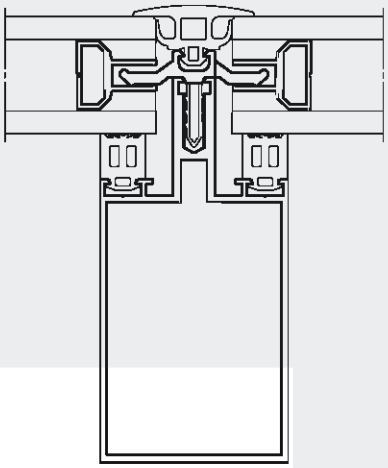
F50KS
Kenetli Silikon Cephe

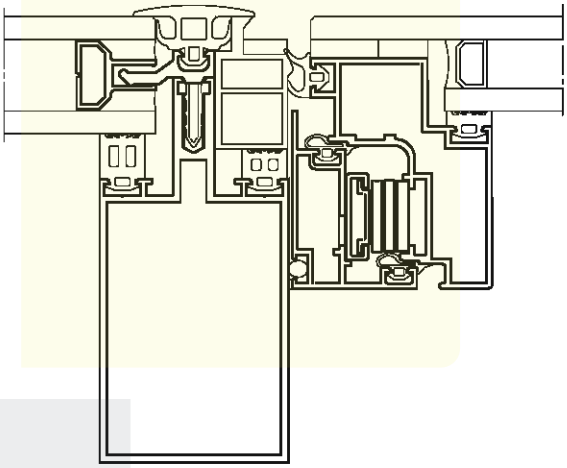


F50KS KENETLİ SİLİKON CEPHE

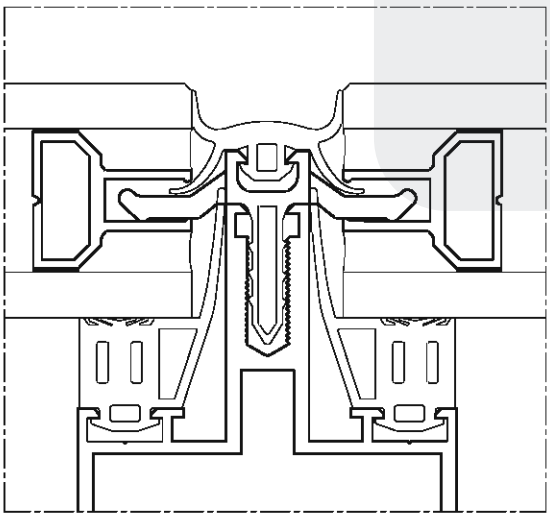
Özel yalıtımlı cam çıtası kullanılan sistemde kenetleme, kaset profili kullanılmadan doğrudan camda gerçekleşir.

"FİTİL ÖRTÜLÜ FUGA" KURU CAMLAMA

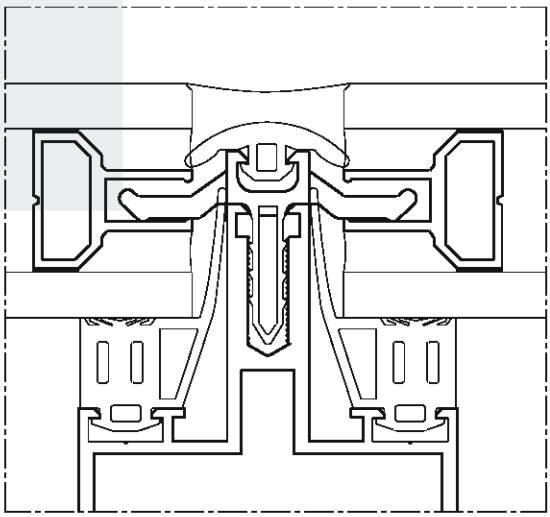




"└┘ FORMLU FUGA" KURU CAMLAMA

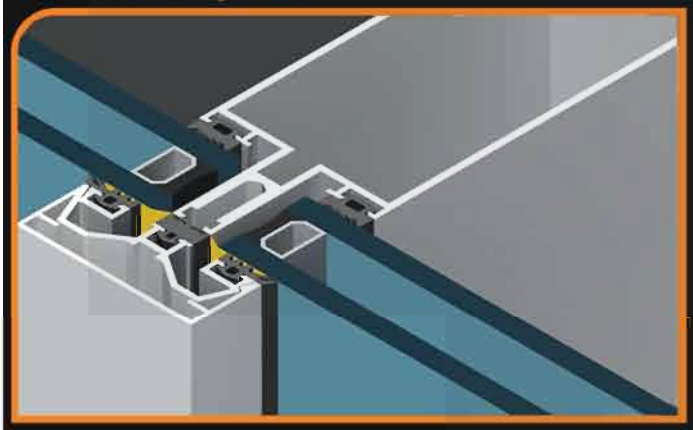


"SİLİKON DOLGULU FUGA" ISLAK CAMLAMA
(Silikon fitil ve Cephe derz dolgu silikonu ile teşkili)

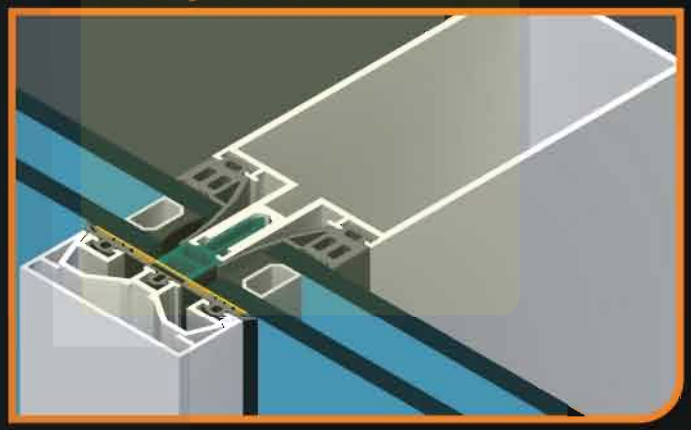


F50K Kapaklı Cephe

F50K/HI

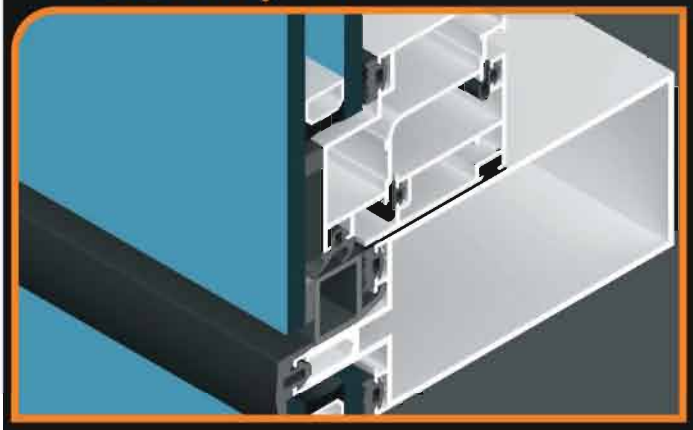


F50K/HI+

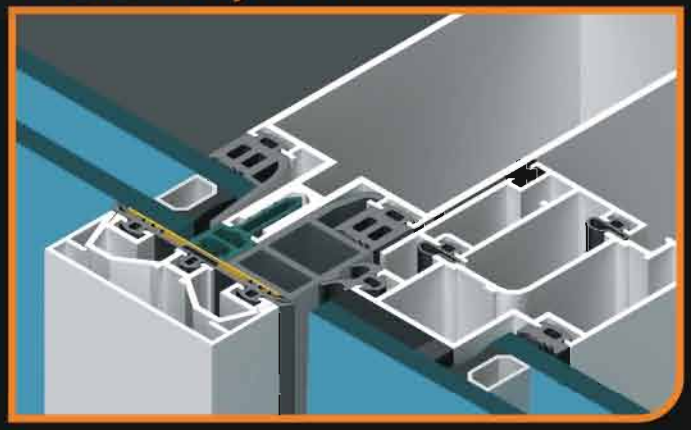


F50YK Yarı Kapaklı Cephe

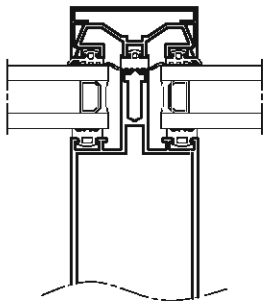
F50YK/HI



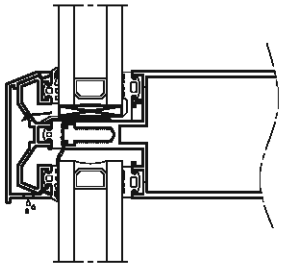
F50YK/HI+



F50K/HI

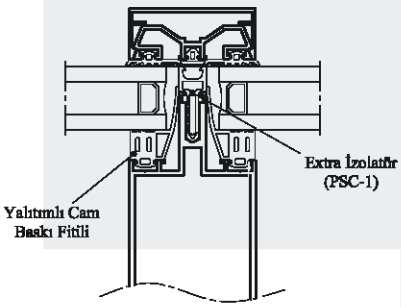


- 27mm uzantılı düşey taşıyıcı

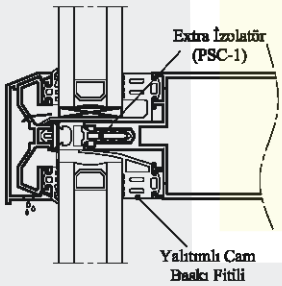


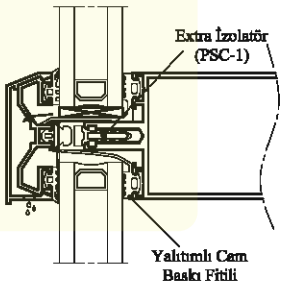
- 27mm uzantılı yatay taşıyıcı
(Bkz. sayfa 12)

F50K/HI+



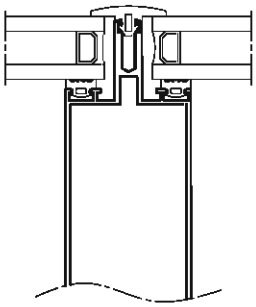
- 27mm uzantılı düşey taşıyıcı



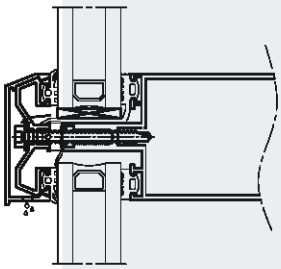


- 27mm uzantılı yatay taşıyıcı veya 19mm uzantılı yatay taşıyıcı
(Bkz. sayfa 11 - 12)

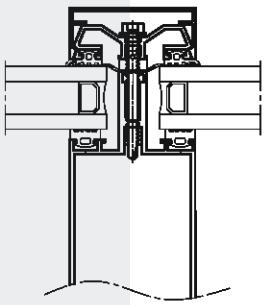
F50YK/HI



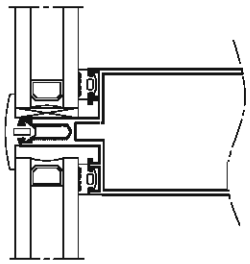
- 27mm uzantılı
düşey taşıyıcı



- 27mm uzantılı
yatay taşıyıcı
(Bkz. sayfa 12)

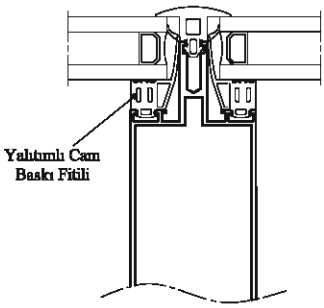


- 27mm uzantılı
düşey taşıyıcı

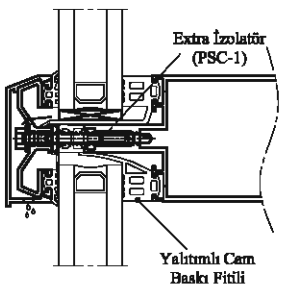


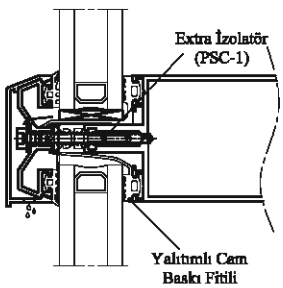
- 27mm uzantılı
yatay taşıyıcı
(Bkz. sayfa 12)

F50YK/HI+



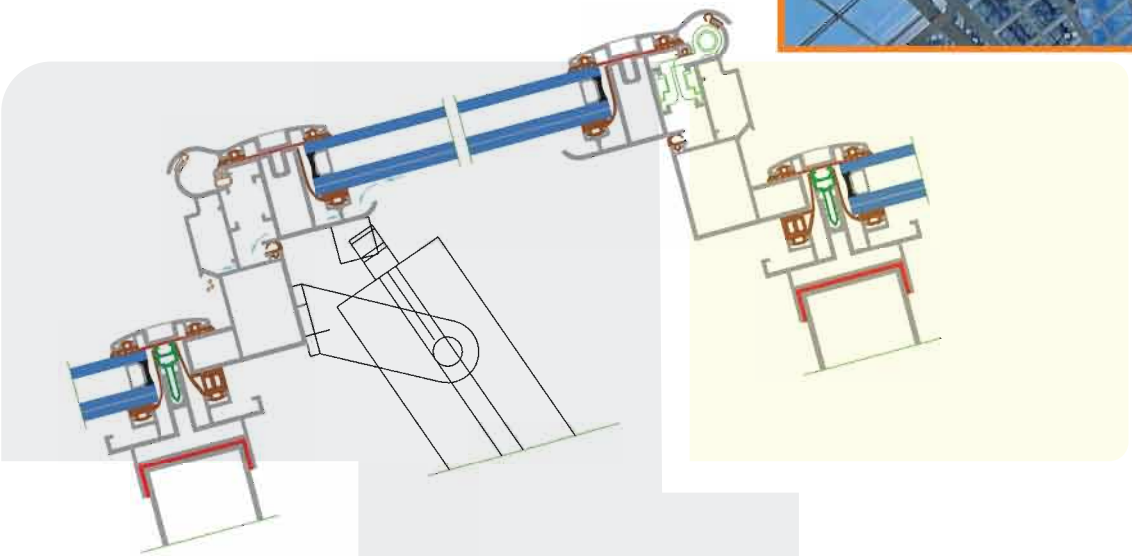
- 27mm uzantılı düşey taşıyıcı

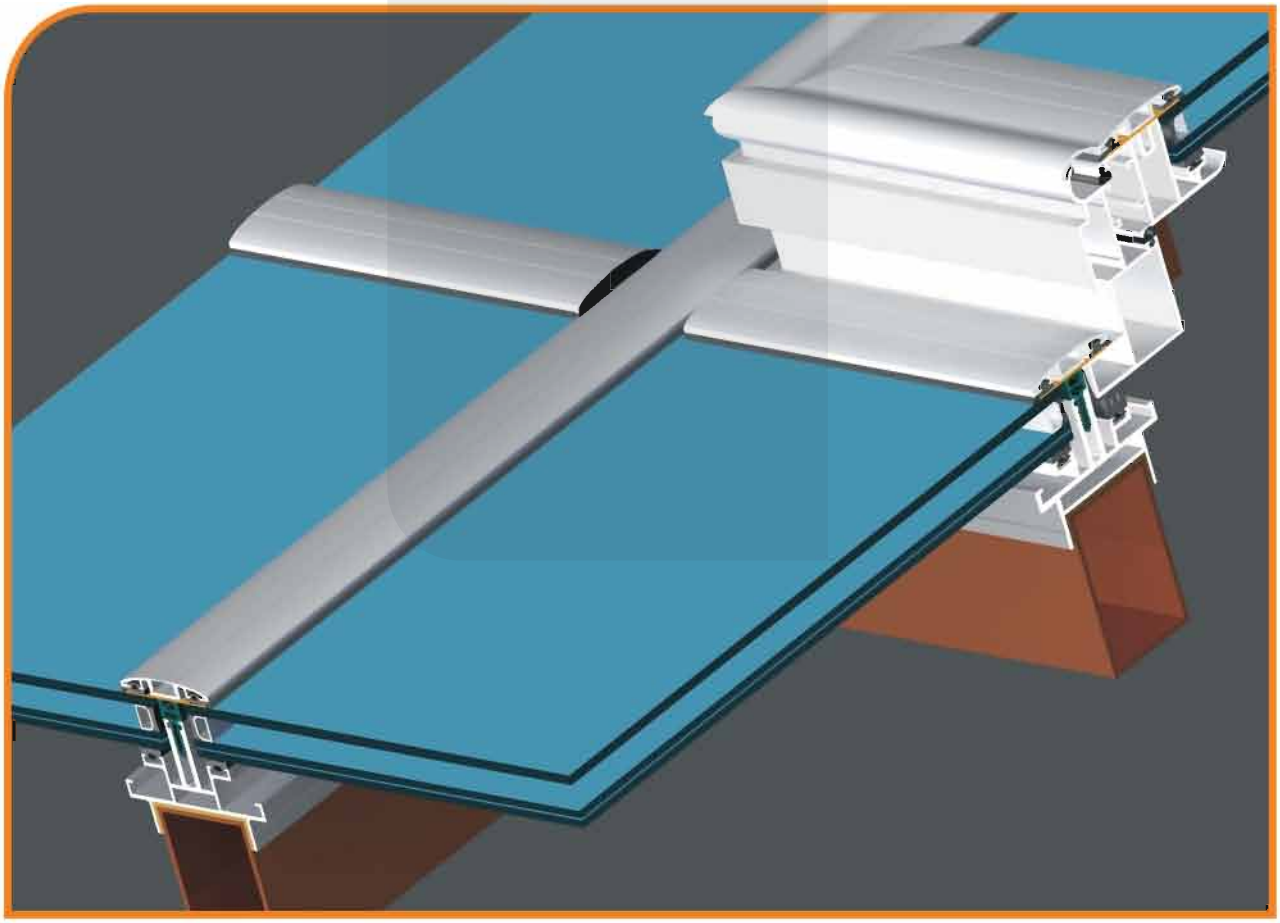




- 27mm uzantılı yatay taşıyıcı veya 19mm uzantılı yatay taşıyıcı
(Bkz. sayfa 11 - 12)

F50SKY
Işıklık Sistemi





Alt Sistem Tanımları / *Subsystem Definitions*

F50S/I ==> Yalıtımlı Silikon Cephe / *Silicone Facade Insulated*
F50S/I+ ==> Yalıtımlı ve Ekstra İzolatörlü Silikon Cephe / *Silicone Facade Insulated Plus*
F50S/HI ==> Yüksek Yalıtımlı Silikon Cephe / *Silicone Facade High Insulated*
F50S/HI+ ==> Yüksek Yalıtımlı ve Ekstra İzolatörlü Silikon Cephe / *Silicone Facade High Insulated Plus*

F50K/HI ==> Yüksek Yalıtımlı Kapaklı Cephe / *Covered Facade High Insulated*
F50K/HI+ ==> Yüksek Yalıtımlı & Ekstra İzolatörlü Kapaklı Cephe / *Covered Facade High Insulated Plus*

F50YK/HI ==> Yüksek Yalıtımlı Yarı Kapaklı Cephe / Semi Covered Facade High Insulated
F50YK/HI+ ==> Yüksek Yalıtımlı & Ekstra İzolatörlü Yarı Kapaklı Cephe / Semi Covered Facade High Insulated Plus

	*Ekstra İzolatör PVC Başlık (PSC-1)	**Yalıtımlı Kasetler	**Yalıtımlı Cam Baskı Fitili (GSF-32I veya GSF-36I)
F50S/I			
F50S/I+	⊕		
F50S/HI		⊕	⊕
F50S/HI+	⊕	⊕	⊕
F50K/HI			
F50K/HI+	⊕		⊕
F50YK/HI			
F50YK/HI+	⊕		⊕

NOTLAR

*Sistemde Ekstra İzolatör (PSC-1) Kullanılması;

Ekstra izolatör (PSC-1), sistemin ısı geçirgenliğini düşürerek daha yüksek bir yalıtım sağlar. PSC-1 kullanılan sistem isimlerinde plus (+) işareti bulunur. PSC-1 kullanılan sistemlerde taşıyıcı profil ve fitil seçeneklerinde farklılıklar vardır. Örneğin bu sistemlerde yatay taşıyıcı düşey taşıyıcı ile bindirmeli bağlanabilir. (19mm uzantılı yatay taşıyıcılar bindirmeli bağlanabilir.) 19 mm ve 27 mm uzantılı taşıyıcıların farkları için Bkz. sayfa 10)

**Sistemde Ekstra Yalıtım Kullanılması;

Ekstra yalıtım malzemeleri sisteme yüksek izolasyon (HI: High Insulation) özelliği kazandırır. Kullanım şartları şu şekilde sıralanır;

Silikon cephede yüksek izolasyon temini için; yüksek ısı yalıtımlı kaset ve yatay-düşey taşıyıcılarda yüksek yalıtımlı cam baskı fitilleri (GSF-32I veya GSF-36I) kullanılmalıdır.

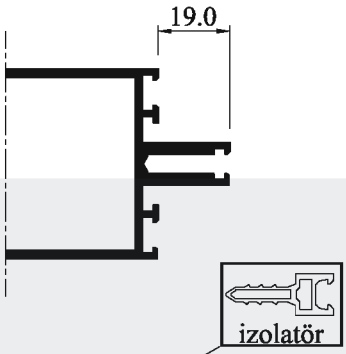
Kapaklı ve yarı kapaklı cephe sisteminde yüksek izolasyon temini için; cam ve taşıyıcı arasında kullanılan cam baskı fitili GSF-36 ise GSF-36I ile, GSF-32 ise GSF-32I ile değiştirilmelidir.

Yatay ve düşey taşıyıcılarda kapak altı profilinde parçalı fitil kullanılması durumunda; cam ile kapak altı profili arasında aluminyum folyolu butil bant kullanılmalıdır. Düşey istikamette bu kullanım GSF-1A fitilinin kullanımı ile ikame edilebilir. GSF-1A fitilinin altında aluminyum folyolu butil bant kullanılması tercihe bağlıdır.

19mm & 27mm Uzantılı Yatay Taşıyıcıların Karşılaştırılması

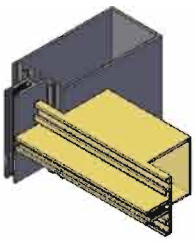
Yatay taşıyıcılarda bu ayrım farklı uygulamaları beraberinde getiririr;

A) 19mm uzantılı yatay taşıyıcı kullanıldığında

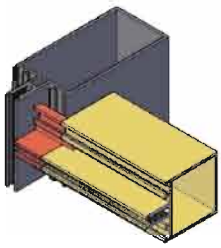


Sadece ekstra izolatör (PSC-1) kullanılan sistemlerde (F50S/I+, F50S/HI+, F50K/HI+, F50YK/HI+ kullanılabilir.

Yatay kayıt kertilerek düşey kayıt üzerine vidalanabilir yada PSC-91 PVC adaptör kullanılarak bağlantı yapılabilir. (Bkz. sayfa 163)

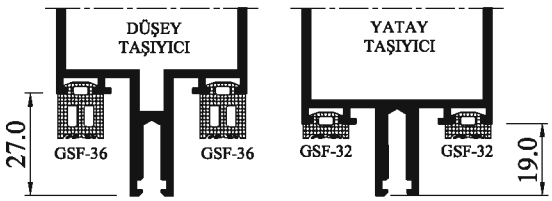


Kertmeli Bağlantı



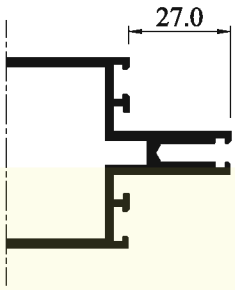
Kertmesiz Adaptörlü Bağlantı

Yatay taşıyıcı, düşey taşıyıcı profilin üstüne bindiğinden dolayı içeriden görünen epdm mesafe fitilleri yatay ve düşeyde farklıdır.



Yatay ve düşey taşıyıcı profiller yukarıda görüldüğü gibi kesinlikle farklı olmak zorundadır. (Bkz. sayfa 11)

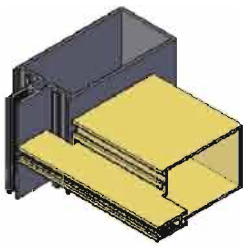
B) 27mm uzantılı yatay taşıyıcı kullanıldığında



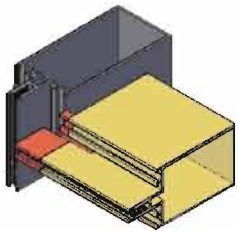
Tüm sistemlerde kullanılabilir.

Yatay kayıt kertilebilir yada PSC-92 PVC adaptör kullanılarak bağlantı yapılabilir. (Bkz. sayfa 166)

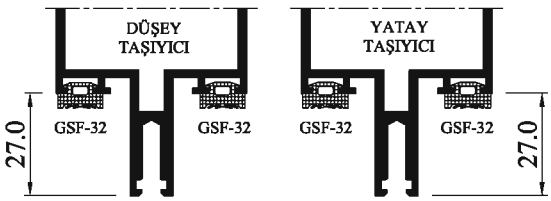
Kertmeli Bağlantı



Kertmesiz Adaptörlü Bağlantı



İçeriden görünen epdm mesafe fitillleri düşey profil ve yatay profilde aynıdır.



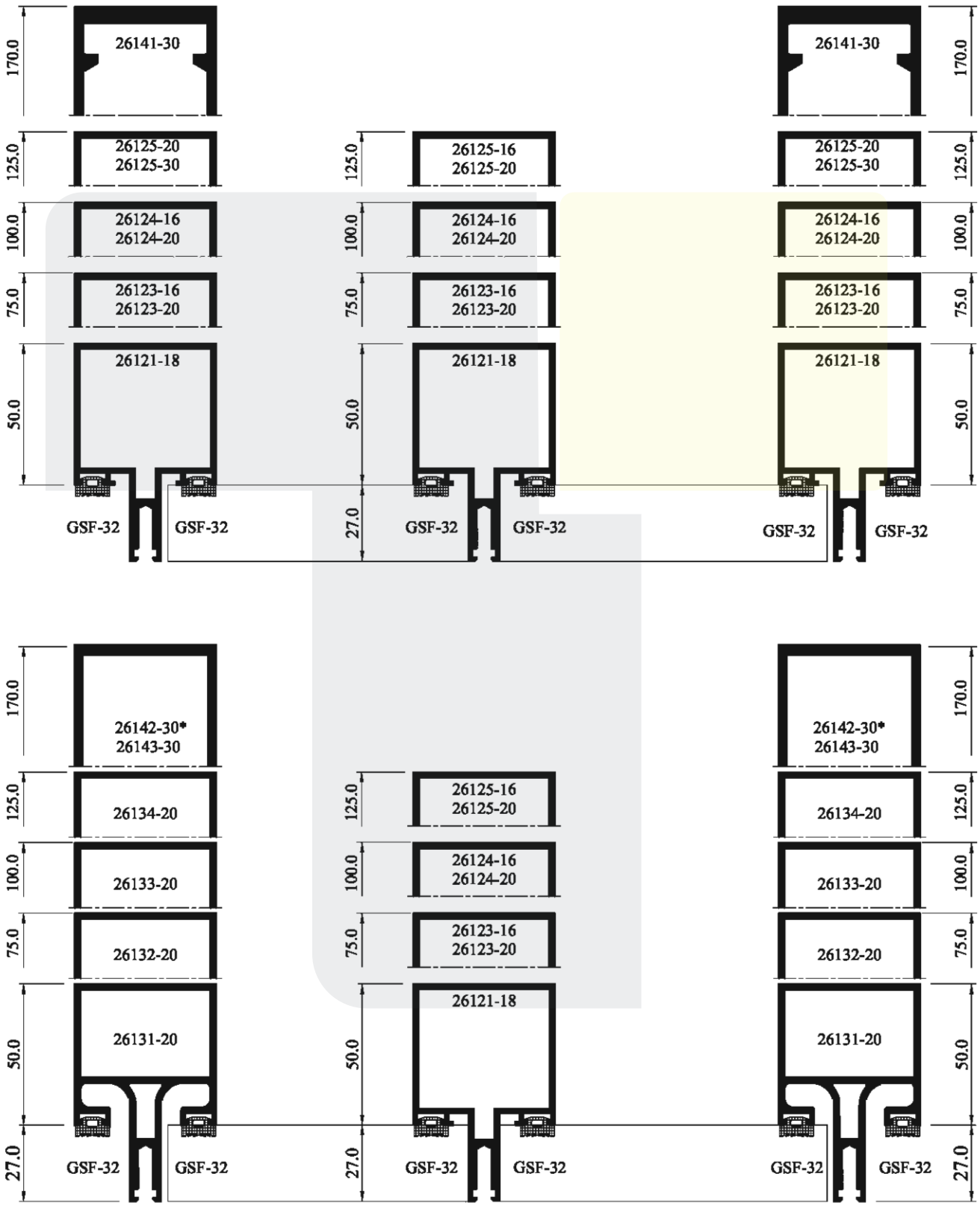
Kondens kanallı düşey taşıyıcı kullanılmadığı durumda yukarıda görüldüğü gibi profiller aynı olabilir. (Bkz. sayfa 12)

19mm UZANTILI YATAY TAŞIYICILARIN DÜŞEY TAŞIYICILAR İLE İLİŞKİSİ

19mm uzantılı yatay taşıyıcıların montaj detayları için bkz. sayfa 163, 164, 165

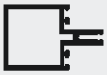
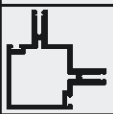
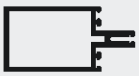
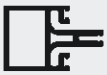
* 26142-30 profilinin resmi için bkz. sayfa 25

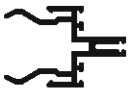
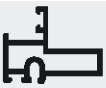
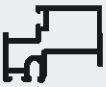
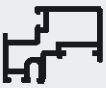
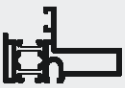
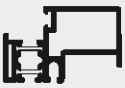
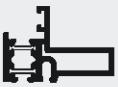
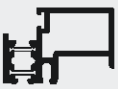
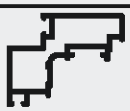
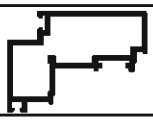
27mm UZANTILI YATAY TAŞIYICILARIN DÜŞEY TAŞIYICILAR İLE İLİŞKİSİ

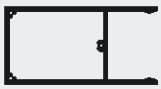
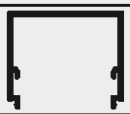
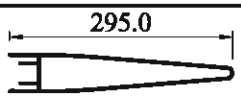
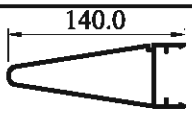


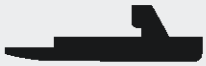
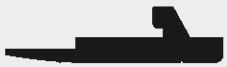
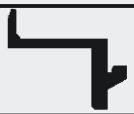
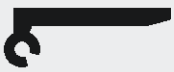
27mm uzantılı yatay taşıyıcıların montaj detayları için bkz. sayfa 166, 167, 168

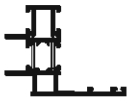
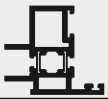
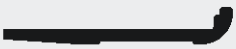
* 26142-30 profilinin resmi için bkz. sayfa 25

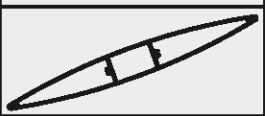
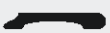
Açıklamalar *Description*	Profil Resmi Profile Pieture	Profil Kodu *Profile Code*	Ağırlık Kg/m *Weight Kg/m*	Ix	Iy	Sayfa No *Page*
Yatay Profil (Derinlik 50mm) *Transom Profile (Width 50mm)*		26111-16 26111-20	1.238 Kg/m 1.389 Kg/m	21.64 23.72	13.16 14.91	20 20
Yatay Profil (Derinlik 83mm) *Transom Profile (Width 83mm)*		26112-16 26112-20	1.524 Kg/m 1.747 Kg/m	64.02 71.24	19.35 22.52	20 20
Yatay Profil (Derinlik 108mm) *Transom Profile (Width 108mm)*		26113-16 26113-20	1.741 Kg/m 2.018 Kg/m	115.93 130.03	24.04 28.28	20 20
Yatay Profil (Derinlik 133mm) *Transom Profile (Width 133mm)*		26114-16 26114-20	1.958 Kg/m 2.289 Kg/m	187.76 211.98	28.72 34.04	20 20
Yatay - Düşey Profil (Derinlik 50mm) *Transom - Mullion Profile (Width 50mm)*		26121-18	1.393 Kg/m	28.64	13.91	21
90° Köşe Dönüş Profili (Derinlik 50mm) *90° Corner Profile (Width 50mm)*		26122-18	1.800 Kg/m	31.25	31.25	21
Yatay - Düşey Profil (Derinlik 75mm) *Transom - Mullion Profile (Width 75mm)*		26123-16 26123-20	1.538 Kg/m 1.783 Kg/m	60.97 67.09	17.91 20.73	22 22
Yatay - Düşey Profil (Derinlik 100mm) *Transom - Mullion Profile (Width 100mm)*		26124-16 26124-20	1.753 Kg/m 2.054 Kg/m	111.57 123.76	22.60 26.50	22 22
Yatay - Düşey Profil (Derinlik 125mm) *Transom - Mullion Profile (Width 125mm)*		26125-16 26125-20	1.969 Kg/m 2.275 Kg/m	182.16 203.41	27.29 32.26	22 22
Yatay - Düşey Profil (Derinlik 125mm) *Transom - Mullion Profile (Width 125mm)*		26125-30	3.027 Kg/m	255.25	44.82	23
Yatay - Düşey Profil (Derinlik 170mm) *Transom - Mullion Profile (Width 170mm)*		26141-30	4.250 Kg/m	651.74	62.81	23
Kondens Kanallı Düşey Profil (Derinlik 50mm) *Mullion Profile+ Condensation (Width 50mm)*		26131-20	1.794 Kg/m	30.10	17.04	24
Kondens Kanallı Düşey Profil (Derinlik 75mm) *Mullion Profile + Condensation (Width 75mm)*		26132-20	2.065 Kg/m	67.97	22.80	24
Kondens Kanallı Düşey Profil (Derinlik 100mm) *Mullion Profile + Condensation (Width 100mm)*		26133-20	2.336 Kg/m	128.42	28.56	24
Kondens Kanallı Düşey Profil (Derinlik 125mm) *Mullion Profile + Condensation (Width 125mm)*		26134-20	2.607 Kg/m	214.96	34.33	24
Kondens Kanallı Düşey Profil (Derinlik 170mm) *Mullion Profile + Condensation (Width 170mm)*		26142-30	5.238 Kg/m	762.91	69.71	25
Kondens Kanallı Düşey Profil (Derinlik 170mm) *Mullion Profile + Condensation (Width 170mm)*		26143-30	4.162 Kg/m	600.89	59.25	25

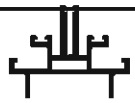
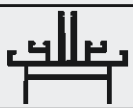
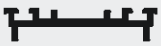
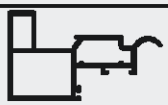
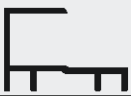
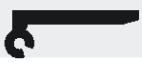
Açıklamalar *Description*	Profil Resmi Profile Pieture	Profil Kodu *Profile Code*	Ağırlık Kg/m *Weight Kg/m*	Ix	Iy	Sayfa No *Page*
Çelik Takviyeli Düşey Taşıyıcı Profil *Mullion Profile for Strengthening By Steel*		26151-20	1.300 Kg/m	14.64	11.58	26
Çelik Takviyeli Düşey Taşıyıcı Profil *Mullion Profile for Strengthening By Steel*		26161-20	1.641 Kg/m	22.22	13.66	26
Çelik Takviyeli Düşey Taşıyıcı Profil *Mullion Profile for Strengthening By Steel*		26401-20	1.158 Kg/m	31.14	20.72	26
Sabit Hemyüz Kaset Profili *Sash Profile For Silicone Facade System*		26301-15	0.769 Kg/m	6.50	2.62	28
Kertmeli Açılabilir Kaset Profili *Sash Profile For Silicone Facade System*		26302-15	0.847 Kg/m	8.41	4.45	28
Kertmesiz Açılabilir Kaset Profili *Sash Profile For Silicone Facade System*		26302A-15	0.880 Kg/m	8.35	4.37	28
Sabit Hemyüz Yalıtımlı Kaset Profili *Insulated Sash Profile For Silicone Facade System*		26311-15	1.106 Kg/m	12.34	3.27	29
Kertmeli Açılabilir Yalıtımlı Kaset Profili *Insulated Sash Profile For Silicone Facade System*		26310-15	1.188 Kg/m	15.65	6.19	29
Kertmesiz Açılabilir Yalıtımlı Kaset Profili *Insulated Sash Profile For Silicone Facade System*		26310A-15	1.219 Kg/m	15.72	6.14	29
Sabit Hemyüz Yalıtımlı Kaset Profili *Insulated Sash Profile For Silicone Facade System*		26318-15	1.071 Kg/m	10.98	3.12	30
Kertmeli Açılabilir Yalıtımlı Kaset Profili *Insulated Sash Profile For Silicone Facade System*		26317-15	1.153 Kg/m	14.04	5.99	30
Kertmesiz Açılabilir Yalıtımlı Kaset Profili *Insulated Sash Profile For Silicone Facade System*		26317A-15	1.160 Kg/m	14.09	5.93	30
Kapaklı Cephe Kaset Profili *Sash Profile For Covered Facade System*		26304-15	0.981 Kg/m	12.88	7.20	31
Kapaklı Cephe Kaset Profili *Frame Profile For Covered Facade System*		26315-15	0.584 Kg/m	4.33	1.75	31
Kapaklı Cephe Kaset Profili *Sash Profile For Covered Facade System*		260304D-18	1.457 Kg/m	15.91	37.78	32
Kapaklı Cephe Kaset Profili *Sash Profile For Covered Facade System*		26315D-18	0.825 Kg/m	12.15	2.11	32
Silikon Cephe Duvar Bitiş Profili *Wall Connection Profile for F50S*		26011-15	0.954 Kg/m	12.85	4.38	32

Açıklamalar *Description*	Profil Resmi Profile Pieture	Profil Kodu *Profile Code*	Ağırlık Kg/m *Weight Kg/m*	Ix	Iy	Sayfa No *Page*
Silikon Cephe Yalıtımlı Duvar Bitiş Profili *Insulated Wall Connection Profile for F50S*		26012-15	1.272 Kg/m	18.92	4.98	32
Kapaklı Cephe Duvar Bitiş Profili *Wall Connection Profile for F50K*		2601-20	0.803 Kg/m	3.16	6.37	32
Kapaklı Cephe Yalıtımlı Duvar Bitiş Profili *Insulated Wall Connection Profile for F50K*		2602-20	1.068 Kg/m	6.88	5.43	32
Kapak Altı Profili *Clamping Profile*		26450-25	0.549 Kg/m	-	-	33
Kapak Altı Profili *Clamping Profile*		26451-25	0.522 Kg/m	-	-	33
Kapak Altı Profili *Clamping Profile*		26452-25	0.450 Kg/m	-	-	33
Kapak Altı Profili *Clamping Profile*		26455-15	0.471 Kg/m	-	-	33
Kapak Altı Profili *Clamping Profile*		26454-20	0.778 Kg/m	-	-	33
Kapak Profili *Cover Profile*		2665-20	1.547 Kg/m	-	-	33
Kapak Altı Profili *Clamping Profile*		9515	0.511 Kg/m	-	-	33
Kapak Profili *Cover Profile*		9514	0.588 Kg/m	-	-	33
Kapak Profili *Cover Profile*		2650-12	0.340 Kg/m	-	-	34
Kapak Profili *Cover Profile*		2659-20	0.584 Kg/m	-	-	34
Kapak Altı Profili *Clamping Profile*		26456-15	0.633 Kg/m	-	-	34
Kapak Profili *Cover Profile*		2660-20	3.712 Kg/m	-	-	35
Kapak Profili *Cover Profile*		2664-15	1.442 Kg/m	-	-	34
Kapak Profili *Cover Profile*		2663-15	0.955 Kg/m	-	-	34

Açıklamalar *Description*	Profil Resmi Profile Pieture	Profil Kodu *Profile Code*	Ağırlık Kg/m *Weight Kg/m*	Ix	Iy	Sayfa No *Page*
Kapak Profili *Cover Profile*		26508-13	0.400 Kg/m	-	-	34
Kapak Profili *Cover Profile*		2662-15	0.347 Kg/m	-	-	34
Kapak Profili *Cover Profile*		2657-15	0.331 Kg/m	-	-	34
Kaset Bağlantı Takozu *Sash Fixation Profile*		26480-00	0.297 Kg/m	-	-	35
Kaset Bağlantı Takozu *Sash Fixation Profile*		26481-00	0.406 Kg/m	-	-	35
Cam Tutucu Profili *Glass Holder Profile*		26483-00	0.178 Kg/m	-	-	35
Cam Tutucu Profili *Glass Holder Profile*		264831-00	0.208 Kg/m	-	-	35
Cam Tutucu Profili *Glass Holder Profile*		26483Z-00	0.217 Kg/m	-	-	35
Cam Tutucu Profili *Glass Holder Profile*		26484-00	0.253 Kg/m	-	-	35
Düşey Profil Açılı Birleşim Adaptörü *Mullion Profile Angular Connection Adapter*		26486D-00	0.621 Kg/m	-	-	35
Düşey Profil Açılı Birleşim Adaptörü *Mullion Profile Angular Connection Adapter*		26486E-00	0.564Kg/m	-	-	35
Tek Cam Adaptör Profili *Glass Space Reducer Profile*		2640-15	0.252 Kg/m	-	-	35
Tek Cam Adaptör Profili *Glass Space Reducer Profile*		26408-15	0.143 Kg/m	-	-	35
Cam Taşıyıcı Profil *Aluminium Glazing Wedge*		26485U-00	0.240 Kg/m	-	-	35
Cam Taşıyıcı Profil *Aluminium Glazing Wedge*		26485K-00	0.196 Kg/m	-	-	35
Ayarlanabilir Açılı Taşıyıcı Profil *Adjustable Angular Mullion - Transom Profile*		26124D-30	2.019 Kg/m	139.44	11.82	37
Ayarlanabilir Açılı Taşıyıcı Profil *Adjustable Angular Mullion - Transom Profile*		26124E-30	2.266 Kg/m	149.57	12.86	37

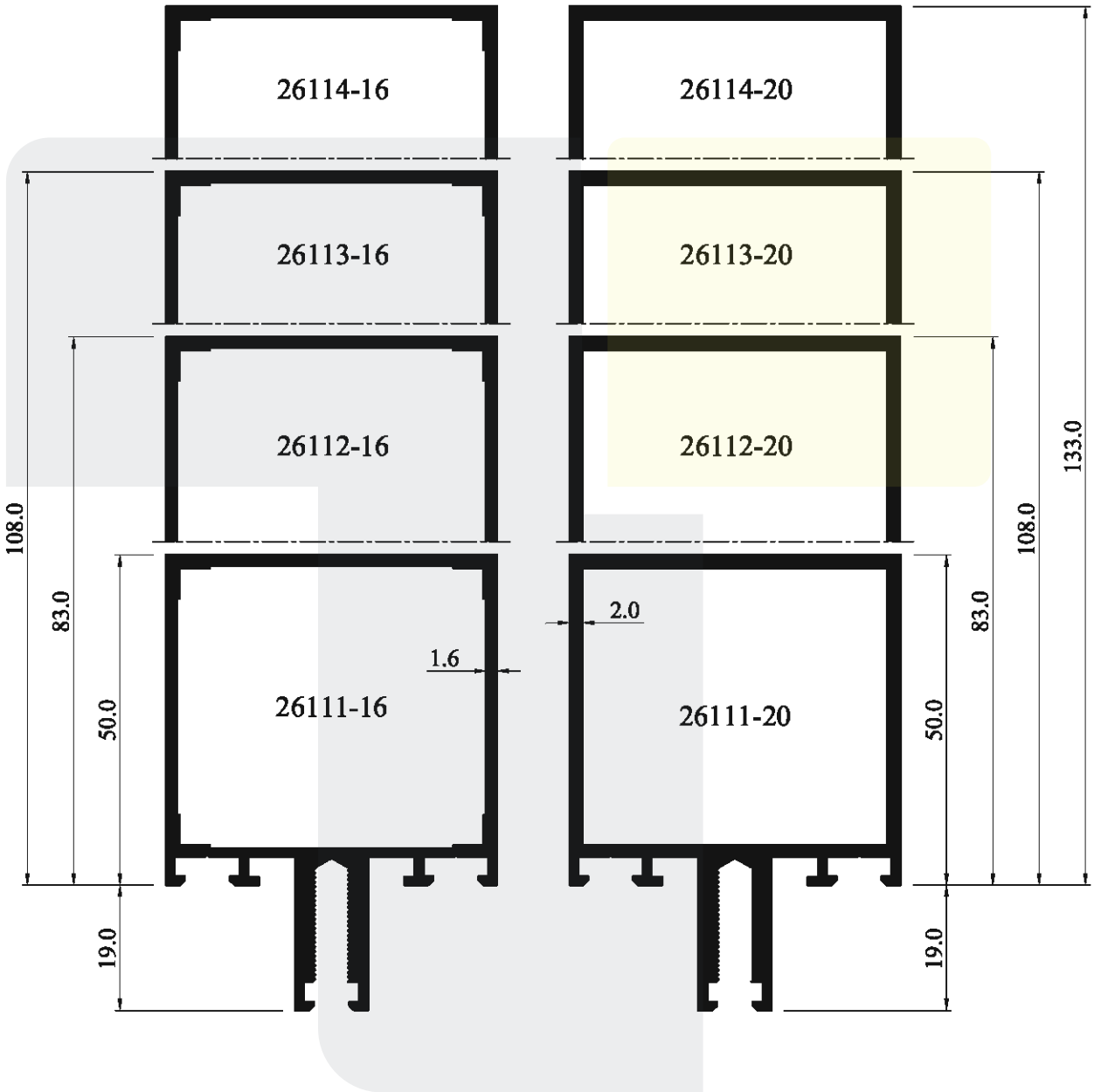
Açıklamalar *Description*	Profil Resmi Profile Pieture	Profil Kodu *Profile Code*	Ağırlık Kg/m *Weight Kg/m*	Ix	Iy	Sayfa No *Page*
Gizli Kanat Kasası *Frame Profile for Hidden Sash*		26370-16	1.675 Kg/m	-	-	38
Gizli Kanat Profili *Hidden Sash Profile*		70316-16	1.473 Kg/m	-	-	38
Gizli Kanat Cam Çıtası *Glazing Bead For Hidden Sash*		70416-15	0.142 Kg/m	-	-	38
Silikon Cephe Kompozit Panel Adaptörü *Composite Panel Adapter For Silicone Facade*		26013-15	0.596 Kg/m	-	-	39
Silikon Cephe Kompozit Panel Adaptörü *Composite Panel Adapter For Silicone Facade*		26014-15	0.661 Kg/m	-	-	39
Kapaklı cephede iç köşe dönüş adaptörü *Inside Corner Adapter For Covered Facade*		2659-00	0.970 Kg/m	-	-	39
Köşe Dönüş Kapak Profili *Cover Profile For Inside Corner Adapter*		2658-12	0.404 Kg/m	-	-	39
Köşe Dönüş Kapak Altı Profili *Clamping Profile For Inside Corner Adapter*		26453-00	0.413 Kg/m	-	-	39
Kapaklı Cepheden S14 Doğramaya Geçiş *Facade to Window Conversion Frame Profile*		2633-18	1.417 Kg/m	-	-	39
Isıcam Çıtası *Spacer*		26499-00	0.245 Kg/m	-	-	40
Kaset Sabitleme Takozu *Sash Fixation Profile*		26479-00	0.247 Kg/m	-	-	40
Cam Taşıyıcı Profil *Aluminium Glazing Wedge*		26487-00	0.272 Kg/m	-	-	40
Cam Tutucu Güvenlik Takozu *Aluminium Glazing Wedge For Extra Safety*		26488-00	0.313Kg/m	-	-	40
Açılır Kanat Cam Tutucu Tırnağı *Glass Holder Profile for Opening Sash*		26489-00	0.216 Kg/m	-	-	40
Kırlangıç Bağlantı Üst Profili *Sliding T Connection Profile*		26472-00	1.605 Kg/m	-	-	41
Kırlangıç Bağlantı Alt Profili *Sliding T Connection Profile*		26473-00	0.287 Kg/m	-	-	41
Klasik Bağlantı Profili *Classic T Connection Profile*		26474-00	1.531 Kg/m	-	-	41

Açıklamalar *Description*	Profil Resmi Profile Pieture	Profil Kodu *Profile Code*	Ağırlık Kg/m *Weight Kg/m*	Ix	Iy	Sayfa No *Page*
Düşey Taşıyıcı Ek Yeri Bağlantı Profili *Splice Connnection Profiles*		26850-00	4.017 Kg/m	-	-	42
Düşey Taşıyıcı Ek Yeri Bağlantı Profili (Açılı) *Splice Connnection Profiles (Angular)*		26851-00	2.607 Kg/m	-	-	42
Güneş Kırıcı Profili *Sun Screen Profile*		26800-30	1.203 Kg/m	-	-	175
Güneş Kırıcı Profili *Sun Screen Profile*		26801-15	1.466 Kg/m	-	-	175
Güneş Kırıcı Tutucu Profili *Sun Screen Holder Profile*		26825-00	1.372 Kg/m	-	-	175
Güneş Kırıcı Tutucu Profili *Sun Screen Holder Profile*		26822-00	1.414Kg/m	-	-	175
Güneş Kırıcı Tutucu Profili *Sun Screen Holder Profile*		26826-00	1.398 Kg/m	-	-	175
Güneş Kırıcı Profili (Uzunluk 200mm) *Sun Screen Profile (Length 200mm)*		26805-20	2.529 Kg/m	-	-	175
Güneş Kırıcı Profili (Uzunluk 220mm) *Sun Screen Profile (Length 220mm)*		26802-22	3.136 Kg/m	-	-	175
Güneş Kırıcı Profili (Uzunluk 300mm) *Sun Screen Profile (Lenght 300mm)*		26806-20	3.931 Kg/m	-	-	175
Güneş Kırıcı Başlık Profili *Sun Screen Carrier Profile*		26803-25	2.236 Kg/m	-	-	176
Güneş Kırıcı Profili (Uzunluk 150mm) *Sun Screen Profile (Length 150mm)*		9007	2.099 Kg/m	-	-	176
Güneş Kırıcı Profili *Sun Screen Profile*		26811-10	0.327 Kg/m	-	-	178
Güneş Kırıcı Profili *Sun Screen Profile*		26810-35	3.420 Kg/m	-	-	178
Güneş Kırıcı Profili *Sun Screen Profile*		26812-15	0.722 Kg/m	-	-	178
Güneş Kırıcı Profili *Sun Screen Profile*		26813-25	1.778 Kg/m	-	-	178
Güneş Kırıcı Profili *Sun Screen Profile*		26814-25	2.109 Kg/m	-	-	178

Açıklamalar *Description*	Profil Resmi Profile Picture	Profil Kodu *Profile Code*	Ağırlık Kg/m *Weight Kg/m*	Ix	Iy	Sayfa No *Page*
Güneş Kırıcı Profili *Sun Screen Profile*		26815-25	2.534 Kg/m	-	-	178
F50SKY için Düşey Taşıyıcı Profil *Mullion Profile for F50SKY*		26900-16	1.417 Kg/m	-	-	181
F50SKY için Düşey Taşıyıcı Profil *Mullion Profile for F50SKY*		26906-16	1.511 Kg/m	-	-	181
F50SKY için Düşey Taşıyıcı Profil *Mullion Profile for F50SKY*		26910-16	1.435 Kg/m	-	-	181
F50SKY için Yatay Taşıyıcı Profil *Transom Profile for F50SKY*		26901-16	1.530 Kg/m	-	-	182
F50SKY için Yatay Taşıyıcı Profil *Transom Profile for F50SKY*		26907-16	1.629 Kg/m	-	-	182
F50SKY için Yatay Taşıyıcı Profil *Transom Profile for F50SKY*		26911-16	1.401 Kg/m	-	-	182
F50SKY için Polikarbon Profili *Polycarbon Profile for F50SKY*		26905-18	0.665 Kg/m	-	-	182
F50SKY için Polikarbon Profili *Polycarbon Profile for F50SKY*		802	0.343 Kg/m	-	-	182
F50SKY için Kasa Profili *Frame Profile for F50SKY*		26915-16	1.734 Kg/m	-	-	183
F50SKY için Kanat Profili *Sash Profile for F50SKY*		26935-20	1.268 Kg/m	-	-	183
F50SKY için Duvar Bitiş Profili *Wall Finish Profile for F50SKY*		26903-12	0.348 Kg/m	-	-	183
Düşey Profil Açılı Birleşim Adaptörü *Mullion Profile Angular Merger Adapter*		26486D-00	0.618 Kg/m	-	-	183
Düşey Profil Açılı Birleşim Adaptörü *Mullion Profile Angular Merger Adapter*		26486E-00	0.564 Kg/m	-	-	183
Kapak Profili *Cover Profile*		26902-12	0.483 Kg/m	-	-	184
Kapak Profili *Cover Profile*		26940-20	0.373 Kg/m	-	-	184
Açılır Kaset Kapak Profili *Cover Profile for F50SKY Opening*		26945-20	0.551 Kg/m	-	-	184
Vida Saklama Çıtası *Screw Camouflage Cover Profile*		26950-00	0.051 Kg/m	-	-	184

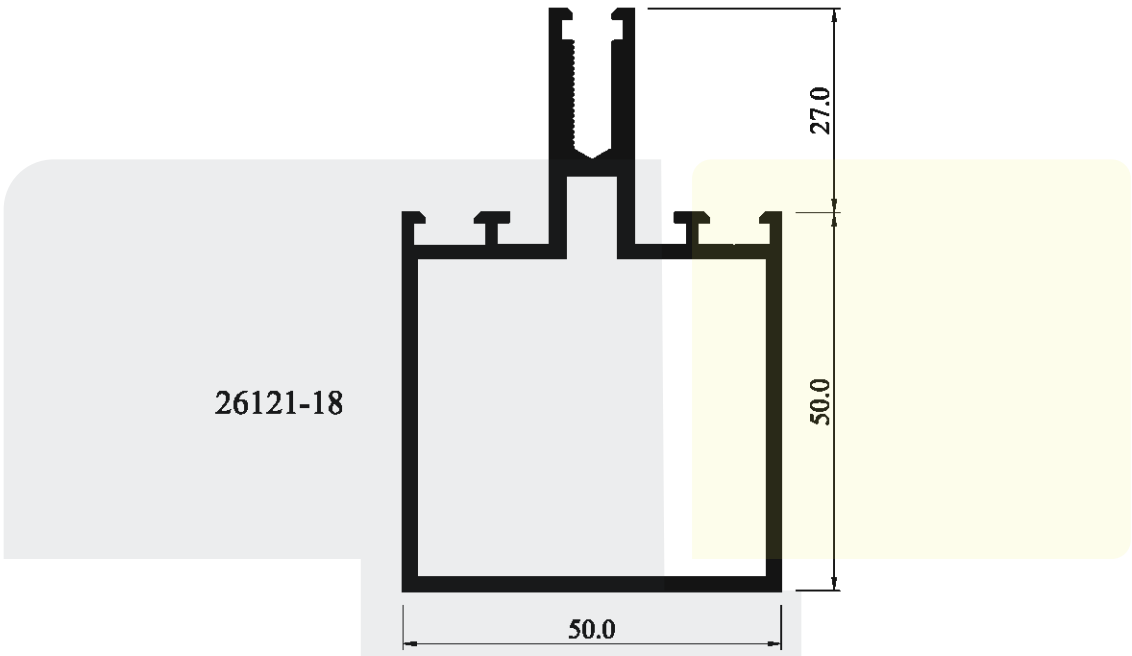
Açıklamalar *Description*	Profil Resmi Profile Picture	Profil Kodu *Profile Code*	Ağırlık Kg/m *Weight Kg/m*	Ix	Iy	Sayfa No *Page*
Açılı Düşey Taşıyıcı Kapak Profili *Cover Profile for Angular Mullion Profile*		26908-20	0.476 Kg/m	-	-	184
Polikarbon Kapak Profili *Cover Profile for Policarbon*		26904-12	0.310 Kg/m	-	-	184
Polikarbon Kapak Profili *Cover Profile for Policarbon*		801	0.374 Kg/m	-	-	184

YATAY KAYIT PROFİLLERİ / *TRANSOM PROFILES*

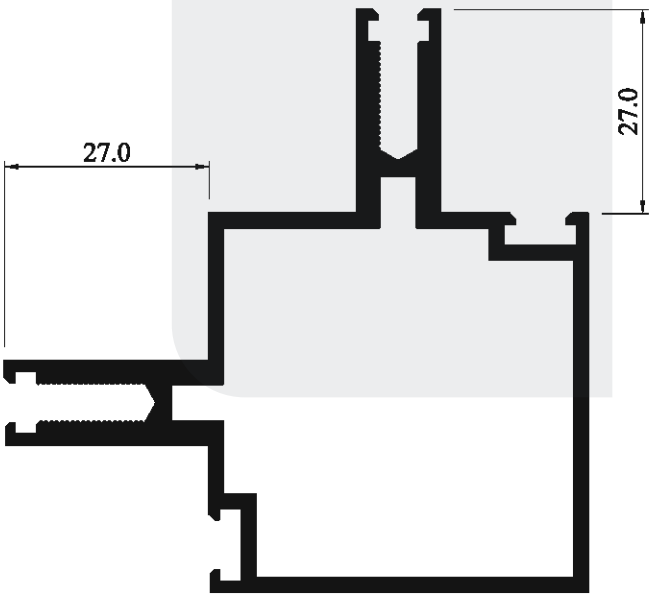


PROFİL KODU	AĞIRLIK (kg/m)	I x	I y	W x	W y
26111-16	1.238	21.64	13.16	6.06	5.26
26112-16	1.524	64.02	19.35	12.83	7.74
26113-16	1.741	115.93	24.04	18.82	9.62
26114-16	1.958	187.76	28.72	25.82	11.49
26111-20	1.389	23.72	14.91	6.43	5.96
26112-20	1.747	71.24	22.52	13.83	9.00
26113-20	2.018	130.03	28.28	20.62	11.31
26114-20	2.289	211.98	34.04	28.32	13.61

YATAY - DÜŞEY KAYIT PROFİLLERİ / *TRANSOM - MULLION PROFILES*



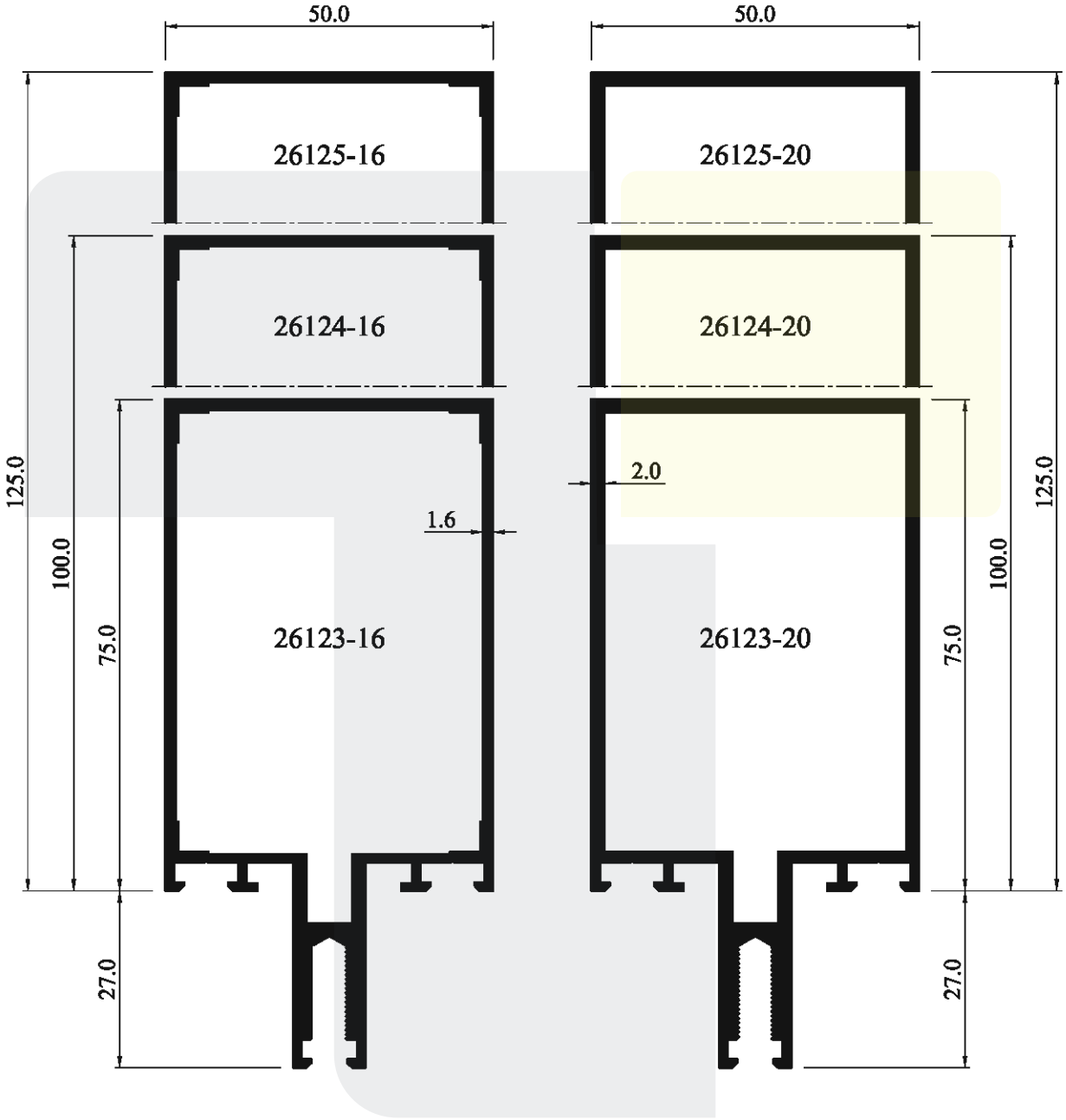
26121-18



26122-18

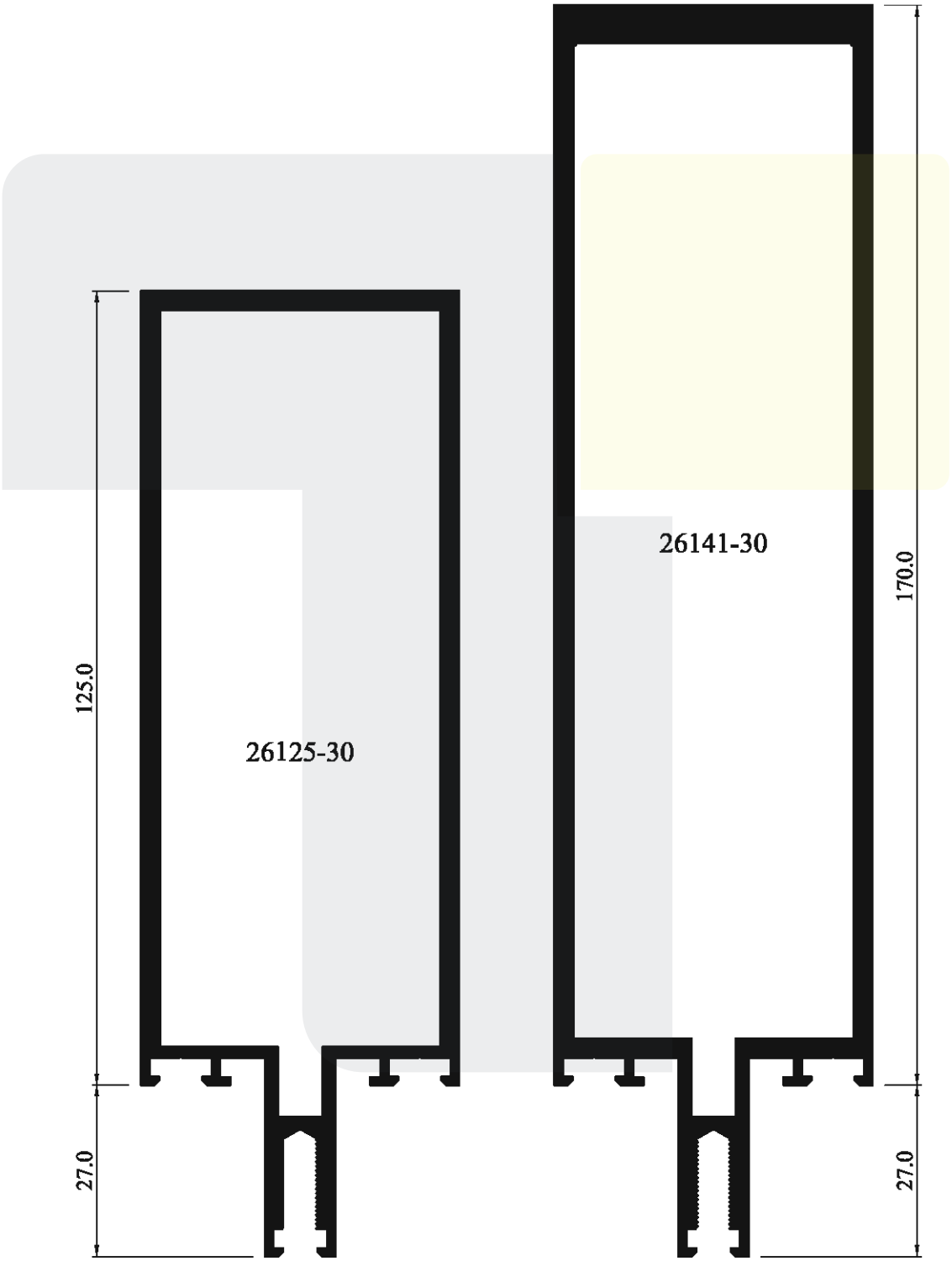
PROFİL KODU	AĞIRLIK (kg/m)	I x	I y	W x	W y
26121-18	1.393	28.64	13.91	7.01	5.56
26122-18	1.800	31.25	31.25	7.20	7.20

YATAY - DÜŞEY KAYIT PROFİLLERİ / *TRANSOM - MULLION PROFILES*



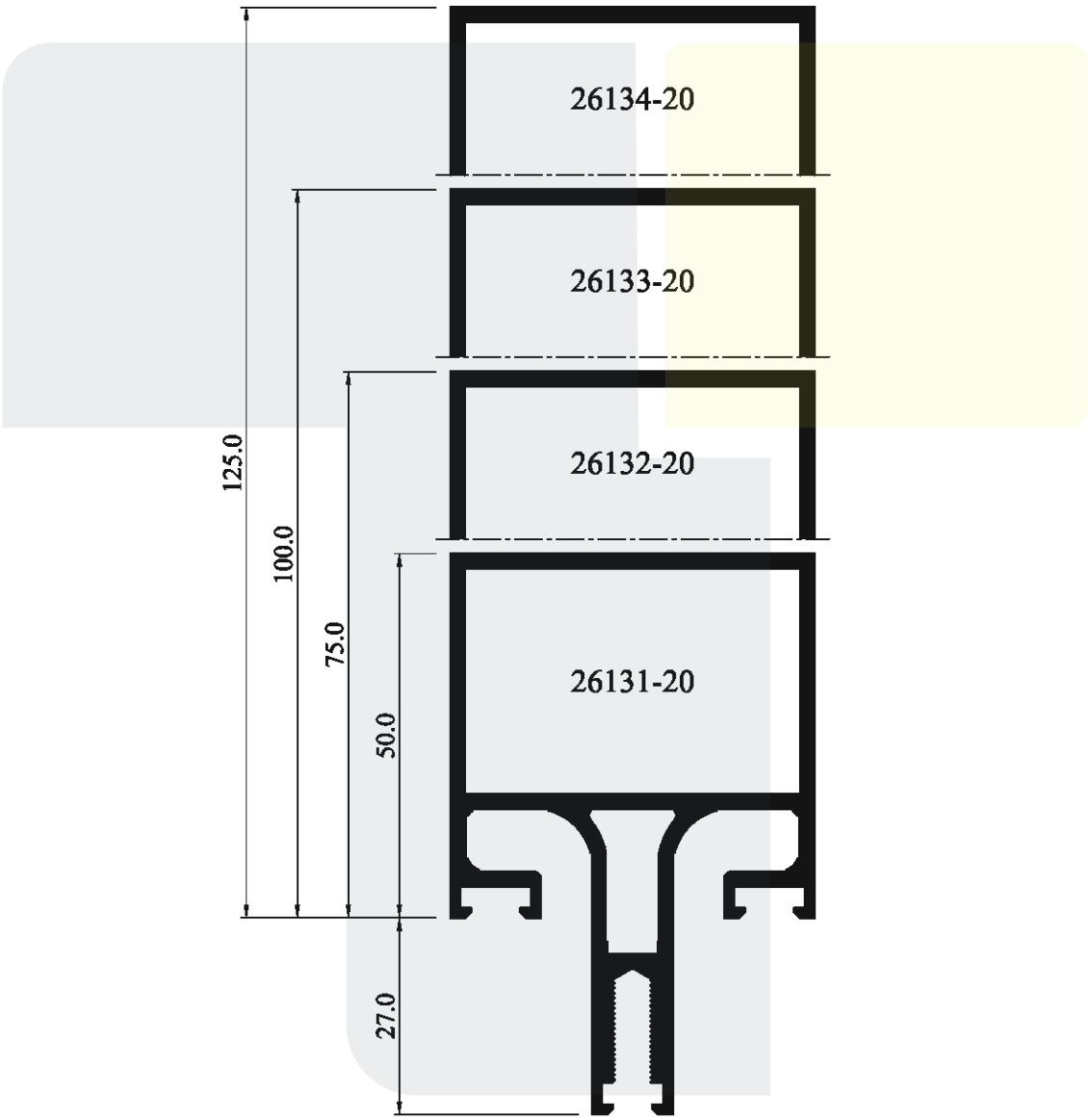
PROFİL KODU	AĞIRLIK (kg/m)	I x	I y	W x	W y
26123-16	1.538	60.97	17.91	11.96	7.16
26124-16	1.753	111.57	22.60	35.95	9.04
26125-16	1.969	182.16	27.29	24.81	10.92
26123-20	1.783	67.09	20.73	12.67	8.29
26124-20	2.054	123.76	26.50	38.44	10.6
26125-20	2.275	203.41	32.26	28.81	12.90

YATAY - DÜŞEY KAYIT PROFİLLERİ / *TRANSOM - MULLION PROFILES*



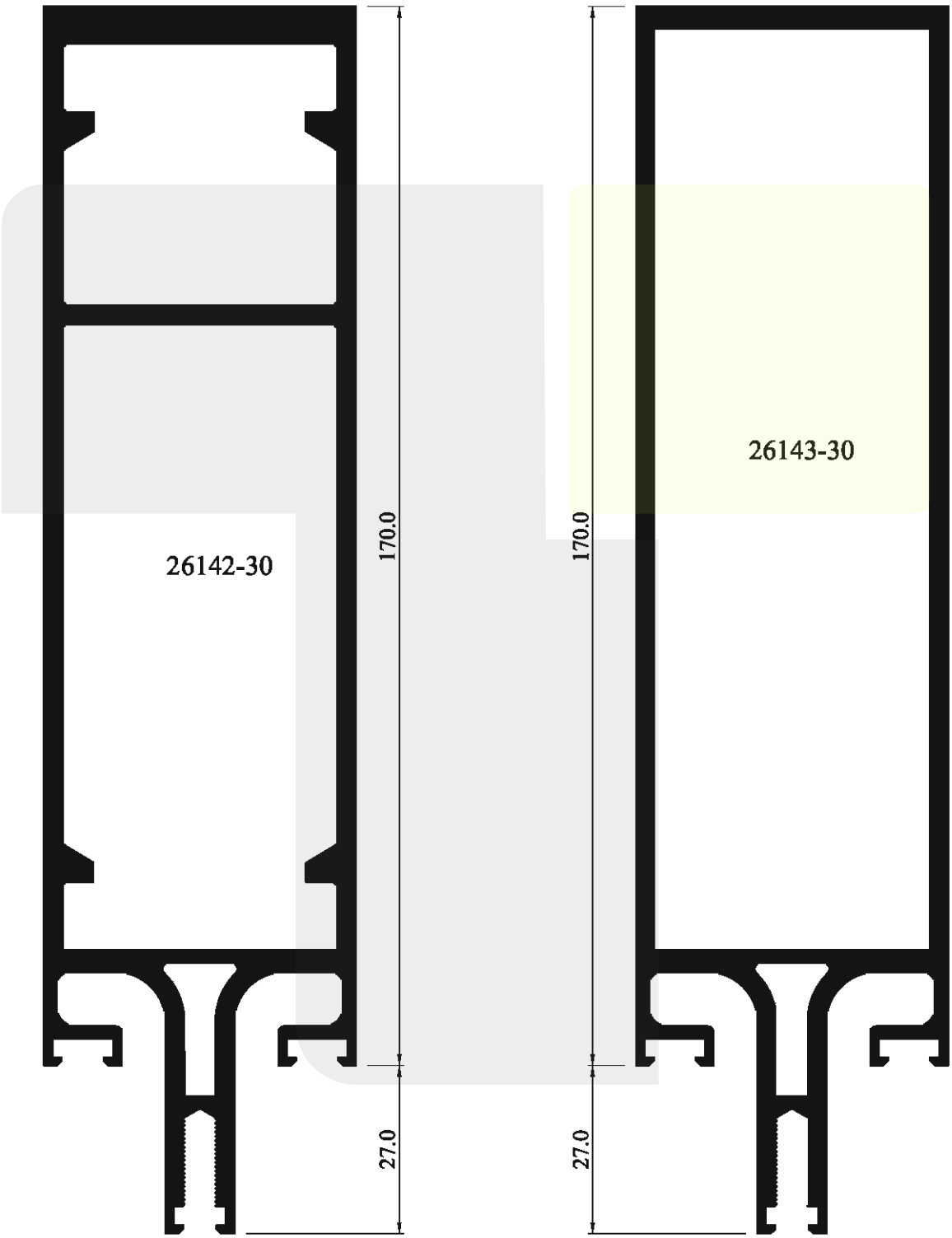
PROFİL KODU	AĞIRLIK (kg/m)	I x	I y	W x	W y
26125-30	3.027	255.25	44.82	31.09	17.92
26141-30	4.250	651.74	62.81	59.42	25.12

KONDENS KANALLI DÜŞEY KAYIT PROFİLLERİ
MULLION PROFILES WITH CONDENSATION CANAL



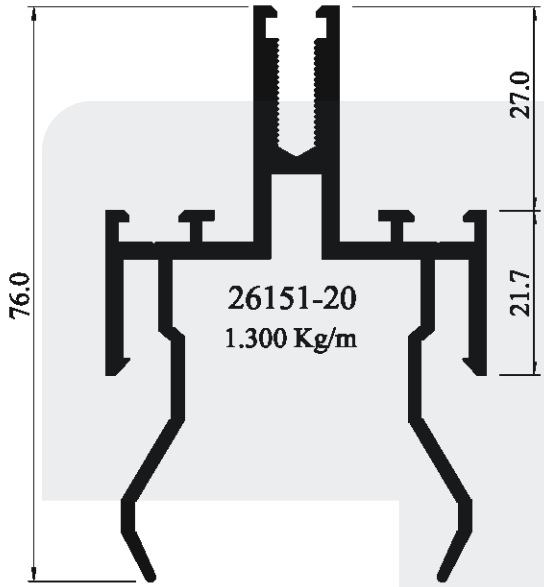
PROFİL KODU	AĞIRLIK (kg/m)	I x	I y	W x	W y
26131-20	1.794	30.10	17.04	7.16	6.82
26132-20	2.065	67.97	22.80	13.19	9.12
26133-20	2.336	128.42	28.56	20.95	11.42
26134-20	2.607	214.96	34.33	29.93	13.73

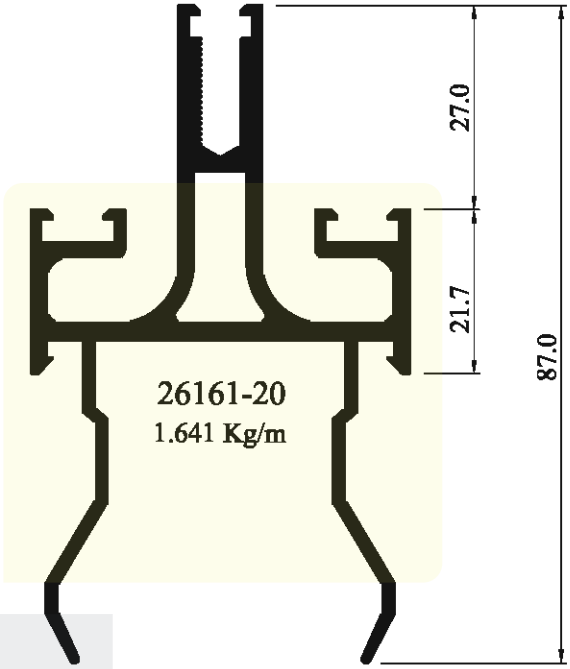
KONDENS KANALLI DÜŞEY KAYIT PROFİLLERİ
MULLION PROFILES WITH CONDENSATION CANAL

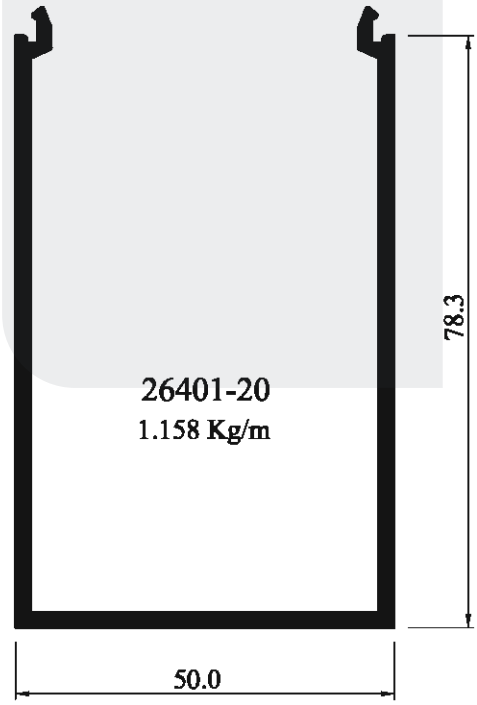


PROFİL KODU	AĞIRLIK (kg/m)	I x	I y	W x	W y
26142-30	5.238	762.91	69.71	70.69	27.89
26143-30	4.162	600.89	59.25	61.62	23.7

ÇELİK TAKVİYELİ DÜŞEY TAŞIYICI PROFİLLER
MULLION PROFILE FOR STRENGTHENING BY STEEL

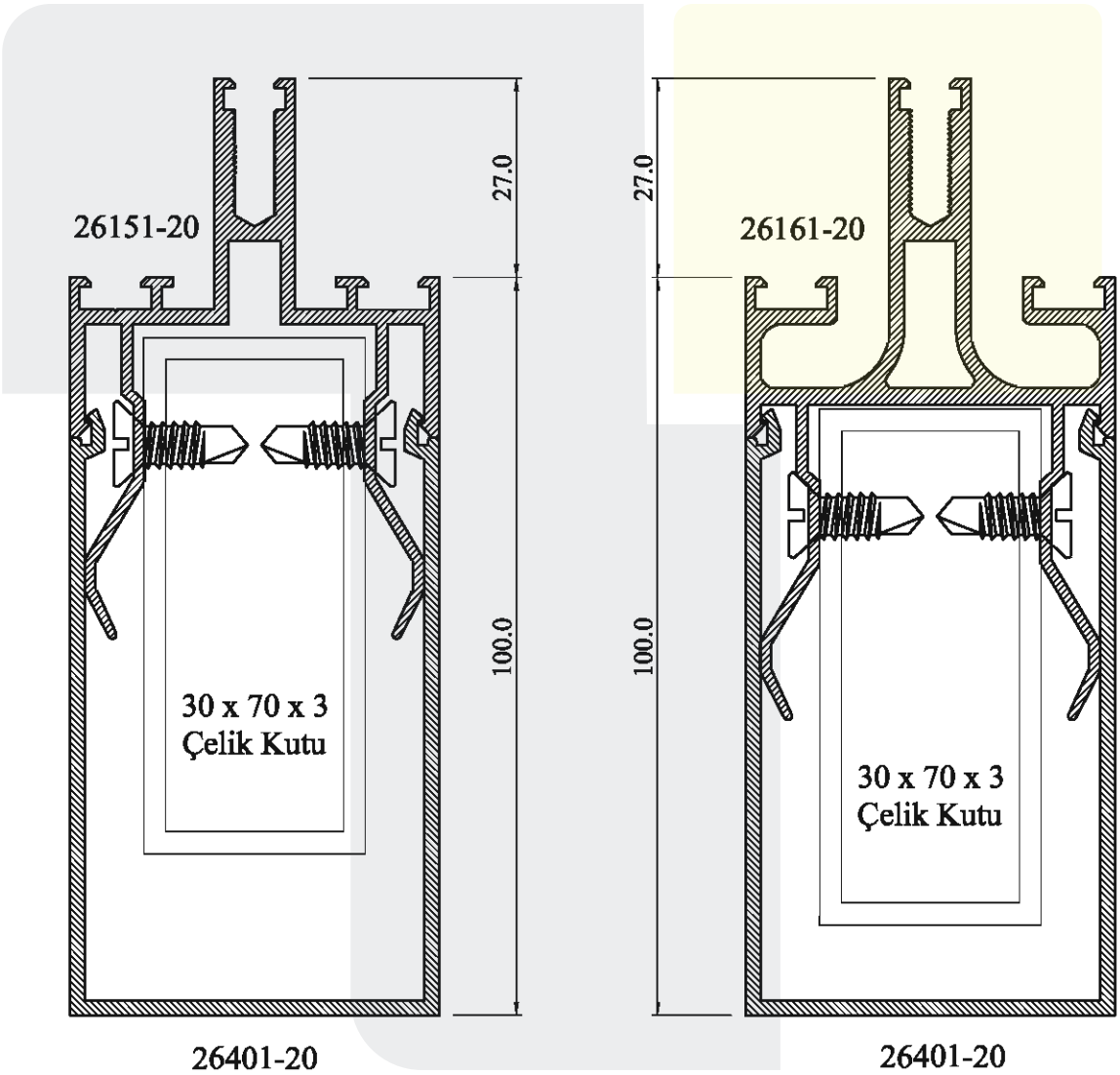






PROFİL KODU	AĞIRLIK (kg/m)	I x	I y
26151-20	1.300	14.64	11.58
26161-20	1.641	22.22	13.66
26401-20	1.158	31.14	20.72

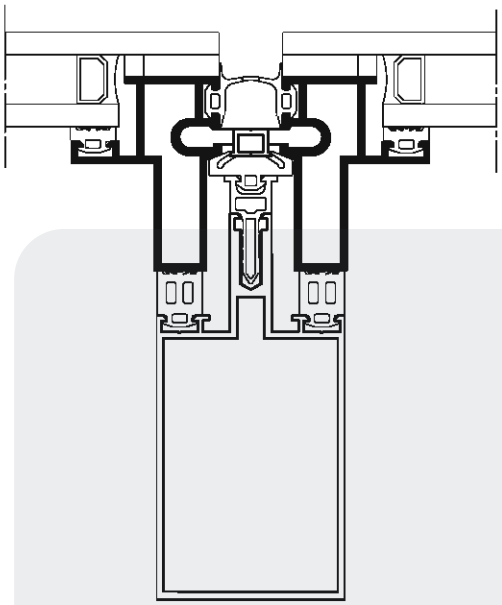
ÇELİK TAKVİYELİ DÜŞEY TAŞIYICI PROFİLLER
MULLION PROFILE FOR STRENGTHENING BY STEEL

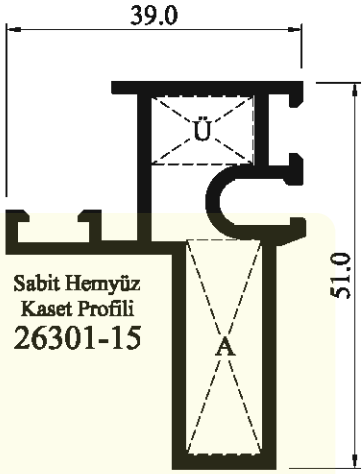


STANDART KASET PROFİLLERİ (SİLİKON CEPHE)

SASH PROFILE FOR SILICONE FACADE SYSTEM

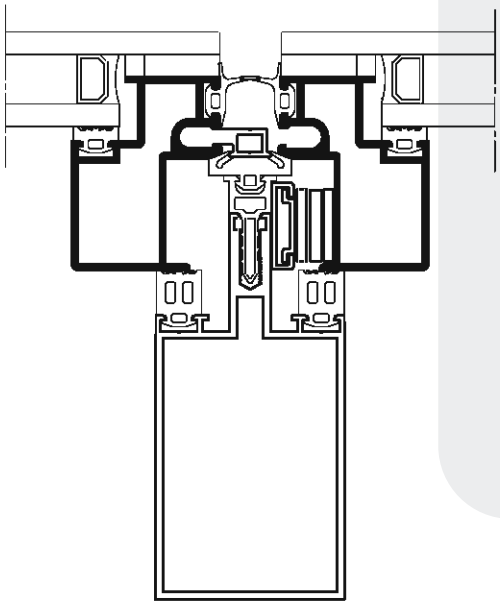
Aynı projede isteğe göre 3 kaset de beraber kullanılabilir

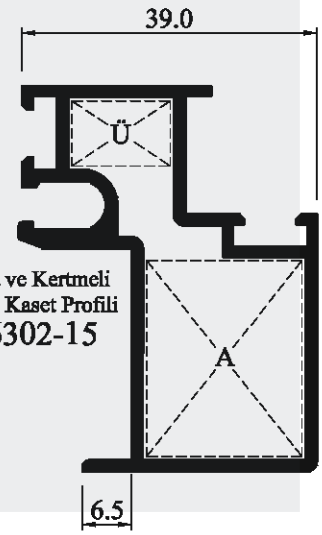




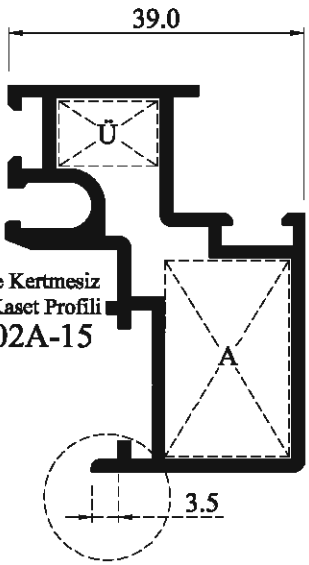
Sabit Hemyüz
Kaset Profili
26301-15

Açılır olmayan kasetlerde, hafifliği ve hemyüz görüntüsü ile tercih edilebilir.





Sabit ve Kertmeli
Açılır Kaset Profili
26302-15



Sabit ve Kertmesiz
Açılır Kaset Profili
26302A-15

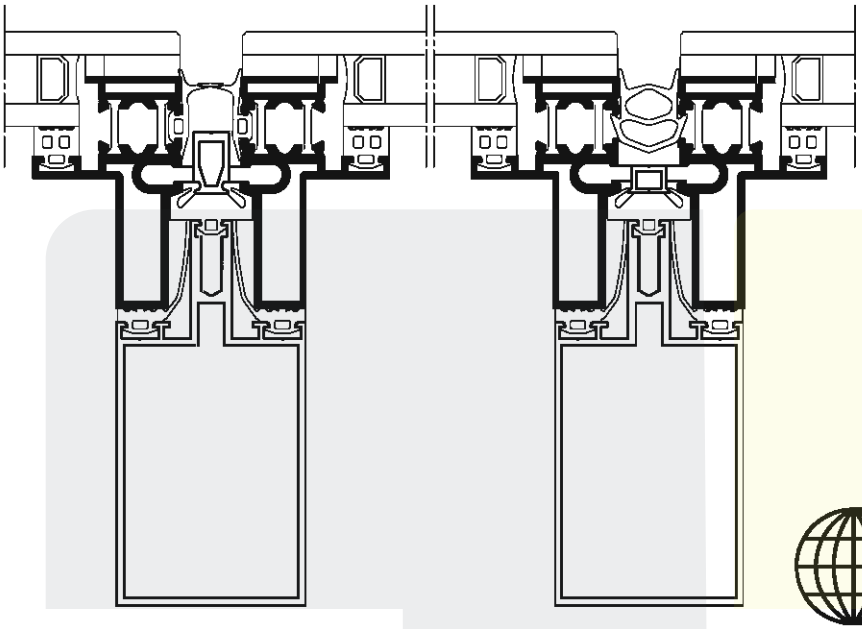
26302-15 profilini makas boyunca kertmek gerekir.
Kertmemek isteniyor ise 26302A-15 kullanılmalıdır.

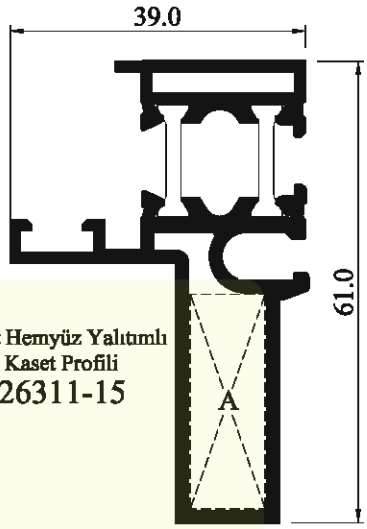
PROFİL KODU	AĞIRLIK (kg/m)	ALT PROFİL İÇİN PRES TAKOZU/ KESİM ÖLÇÜSÜ (mm)	ÜST PROFİL İÇİN PRES TAKOZU/ KESİM ÖLÇÜSÜ (mm)	I x	I y
26301-15	0.769	T851-098 / 28.5	T851-135 / 9.1	6.50	2.62
26302-15	0.847	T851-210 / 26.4	T851-135 / 9.1	8.41	4.45
26302A-15	0.880	T851-165 / 26.4	T851-135 / 9.1	8.35	4.37

ISI YALITIMLI KASET PROFİLLERİ (SİLİKON CEPHE)

INSULATED SASH PROFILE FOR SILICONE FACADE SYSTEM

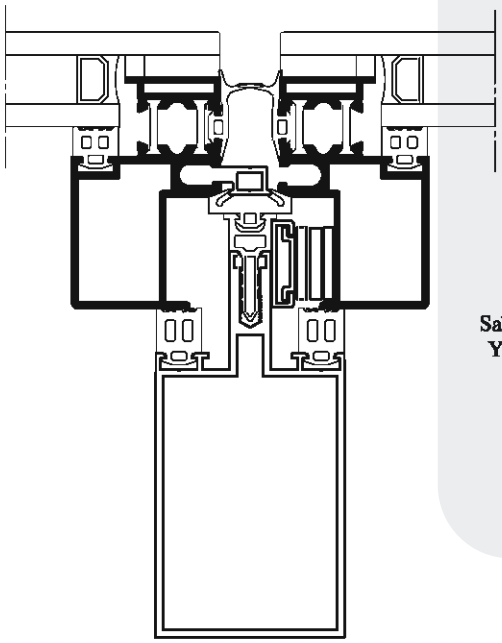
Aynı projede isteğe göre 3 kaset de beraber kullanılabilir

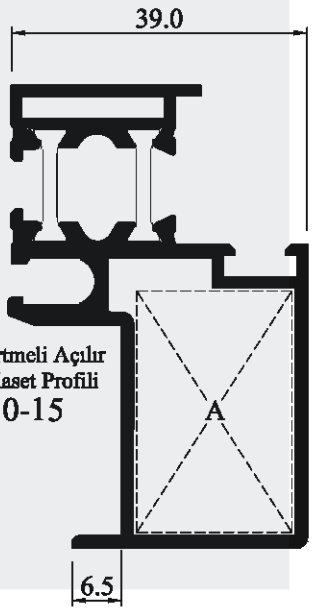




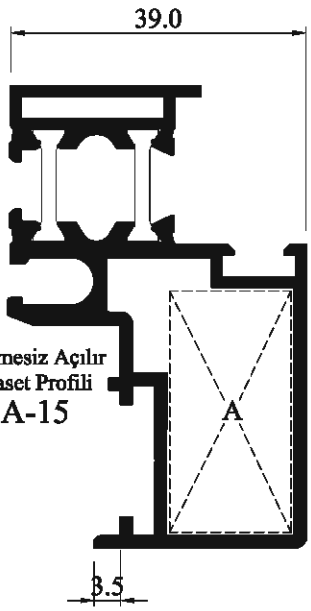
Sabit Hemyüz Yalıtımlı Kaset Profili
26311-15

Açılır olmayan kasetlerde, hafifliği ve hemyüz görüntüsü ile tercih edilebilir.





Sabit ve Kertmeli Açılır Yalıtımlı Kaset Profili
26310-15



Sabit ve Kertmesiz Açılır Yalıtımlı Kaset Profili
26310A-15

26310-15 profilini makas boyunca kertmek gerekir.
Kertmemek isteniyor ise 26310A-15 kullanılmalıdır.

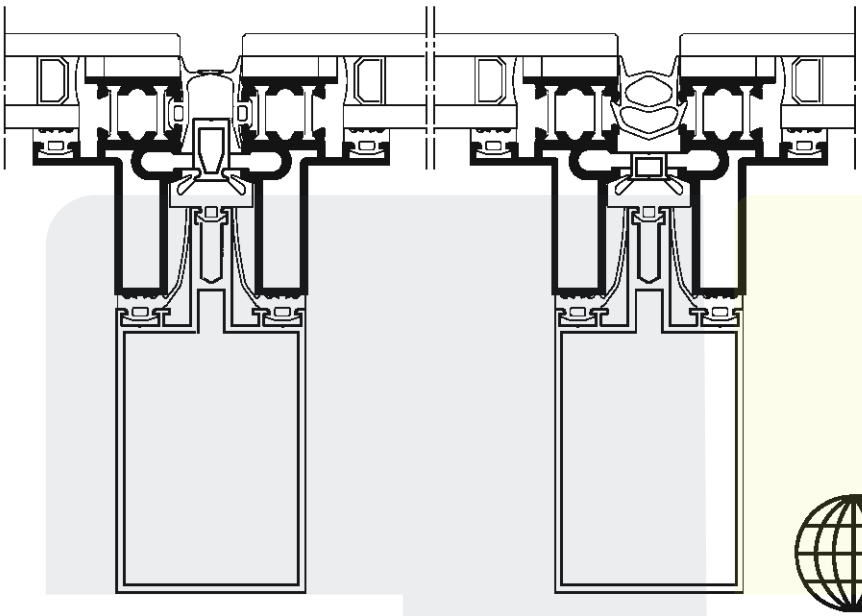
Elektrostatik toz boyalı uygulamalarda kaset profillerinin ısı yalıtımlı ve üst parçalarının eloksallı tercih edilmesi uygundur.

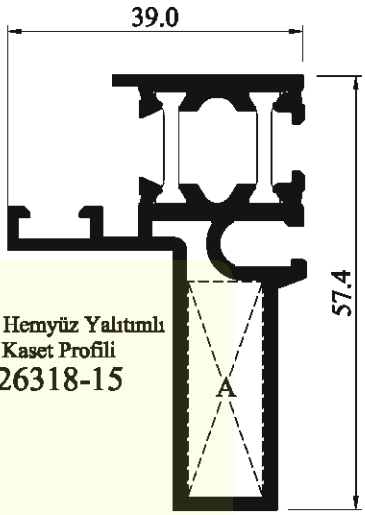
PROFİL KODU	AĞIRLIK (kg/m)	ALT PROFİL İÇİN PRES TAKOZU/ KESİM ÖLÇÜSÜ (mm)	ÜST PROFİL İÇİN PRES TAKOZU/ KESİM ÖLÇÜSÜ (mm)	I x	I y
26311-15	1.106	T851-098 / 28.5	-	12.34	3.27
26310-15	1.188	T851-210 / 32.4	-	15.65	6.19
26310A-15	1.219	T851-165 / 32.4	-	15.72	6.14

ISI YALITIMLI KASET PROFİLLERİ (SİLİKON CEPHE)

INSULATED SASH PROFILE FOR SILICONE FACADE SYSTEM

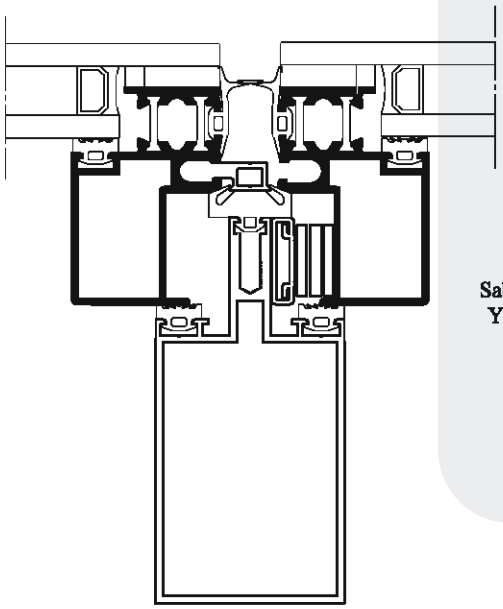
Aynı projede isteğe göre 3 kaset de beraber kullanılabilir

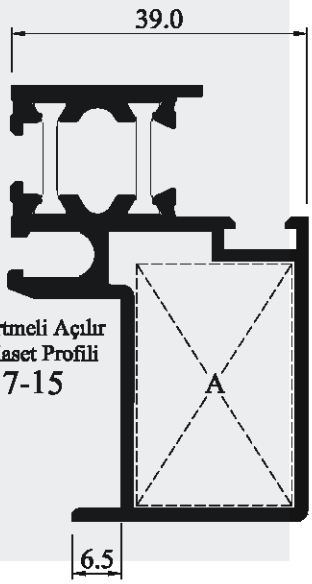




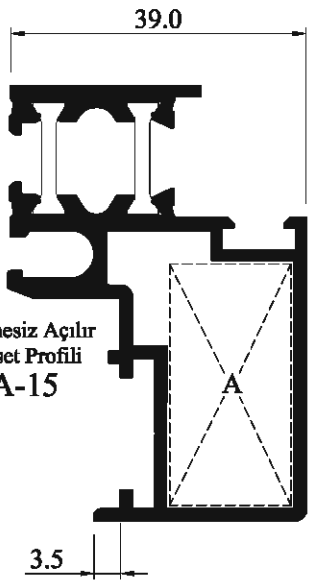
Sabit Hemyüz Yalıtımlı Kaset Profili
26318-15

Açılır olmayan kasetlerde, hafifliği ve hemyüz görüntüsü ile tercih edilebilir.





Sabit ve Kertmeli Açılır Yalıtımlı Kaset Profili
26317-15



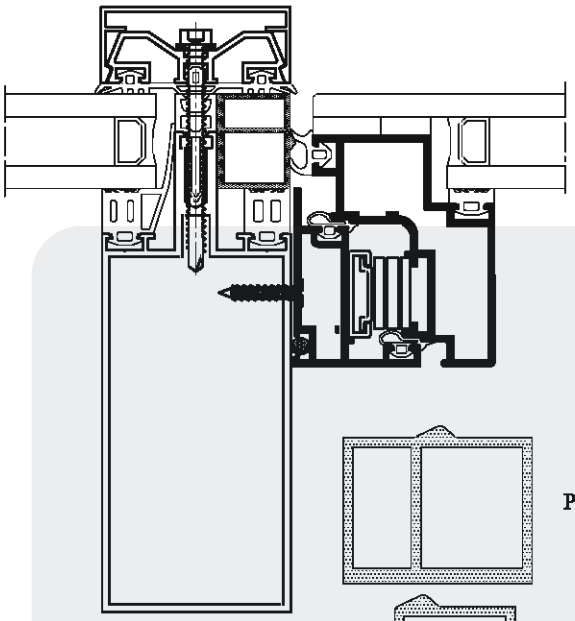
Sabit ve Kertmesiz Açılır Yalıtımlı Kaset Profili
26317A-15

26317-15 profilini makas boyunca kertmek gerekir.
Kertmemek isteniyor ise 26317A-15 kullanılmalıdır.

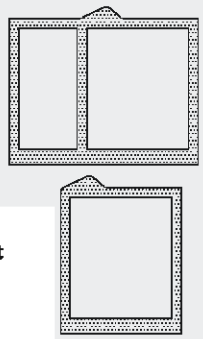
Elektrostatik toz boyalı uygulamalarda kaset profillerinin ısı yalıtımlı ve üst parçalarının eloksallı tercih edilmesi uygundur.

PROFİL KODU	AĞIRLIK (kg/m)	ALT PROFİL İÇİN PRES TAKOZU/ KESİM ÖLÇÜSÜ (mm)	ÜST PROFİL İÇİN PRES TAKOZU/ KESİM ÖLÇÜSÜ (mm)	I x	I y
26318-15	1.071	T851-098 / 28.5	-	10.98	3.12
26317-15	1.153	T851-210 / 32.4	-	14.04	5.99
26317A-15	1.160	T851-165 / 32.4	-	14.09	5.93

STANDART KASET PROFİLLERİ (KAPAKLI CEPHE)
SASH PROFILE FOR COVERED FACADE SYSTEM

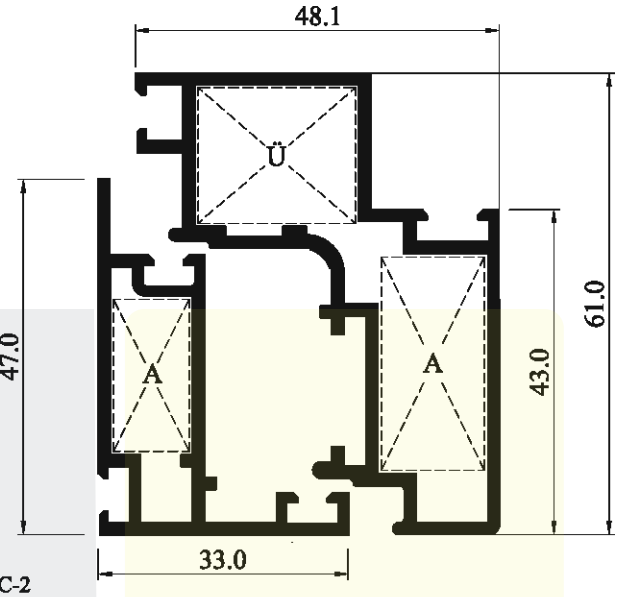


Kapaklı Cephe Açılır Kaset Plastik Parçaları



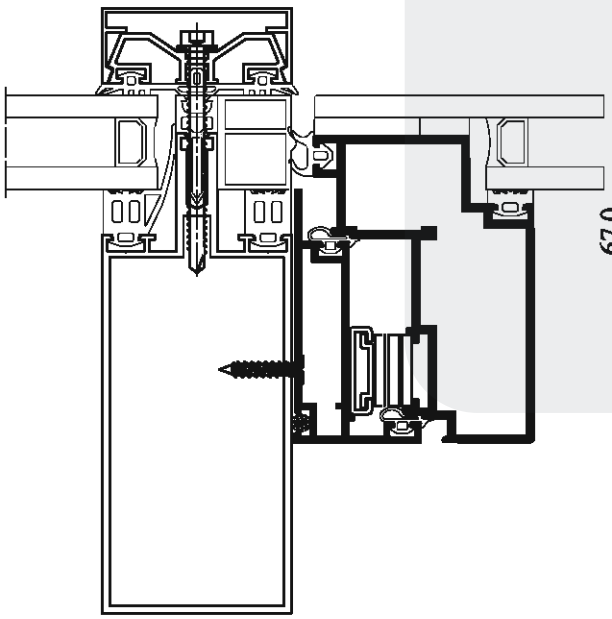
PKC-2

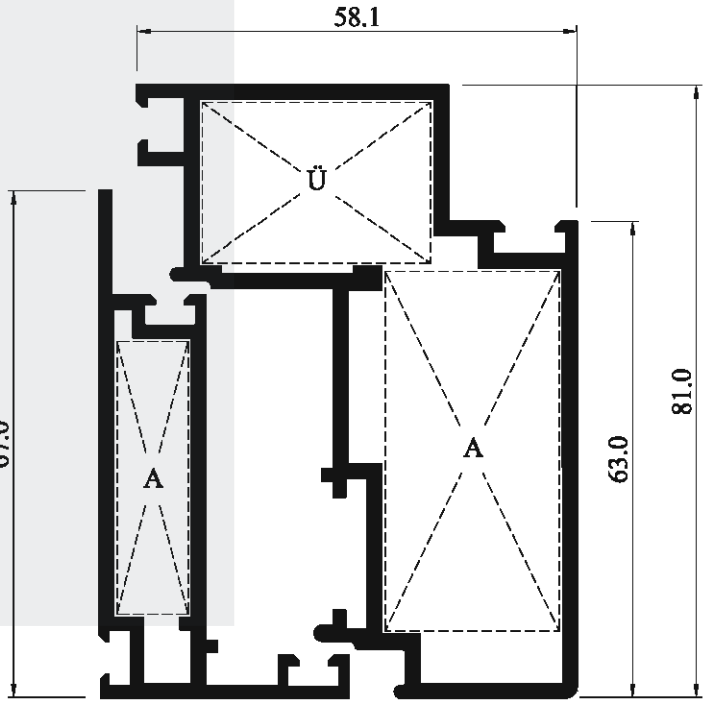
PKC-1



Kapaklı Cephe Kaset Profili
26315-15

Kapaklı Cephe Kaset Profili
26304-15



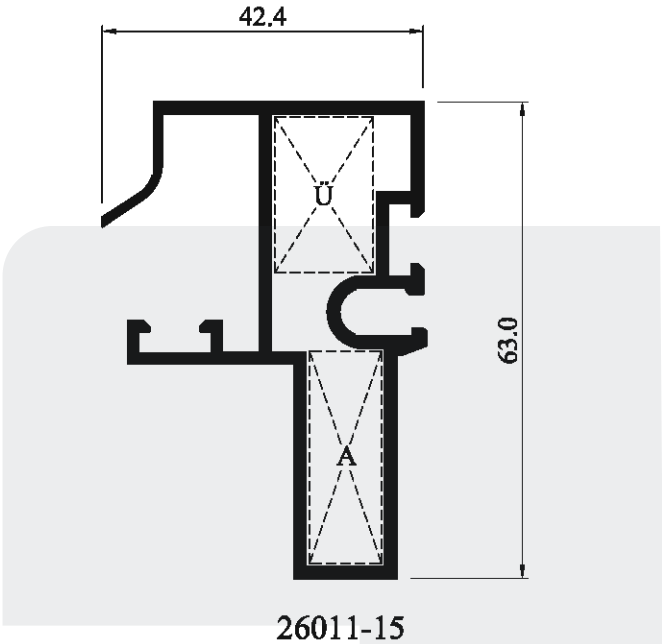


Kapaklı Cephe Kaset Profili
26315D-18

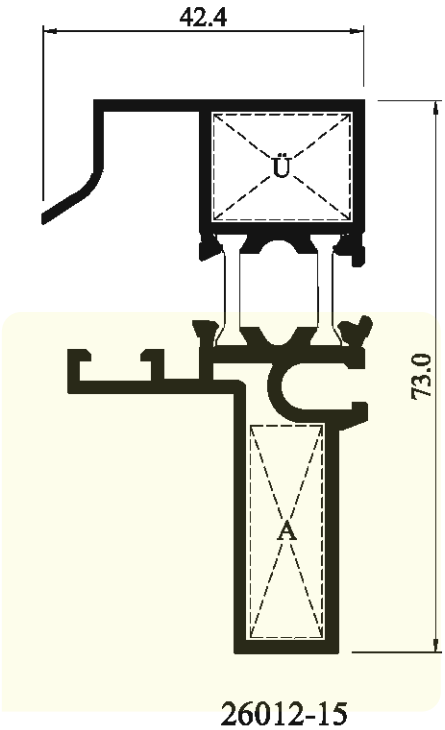
Kapaklı Cephe Kaset Profili
26304D-18

PROFİL KODU	AĞIRLIK (kg/m)	ALT PROFİL İÇİN PRES TAKOZU/ KESİM ÖLÇÜSÜ (mm)	ÜST PROFİL İÇİN PRES TAKOZU/ KESİM ÖLÇÜSÜ (mm)	I x	I y
26304-15	0.927	T851-140/ 28.7	T851-210/ 18.3	12.88	7.20
26315-15	0.582	T851-106 / 20.6	-	4.33	1.75
26304D-18	1.457	T851-236/ 48.1	T851-304/ 19.7	15.91	37.78
26315D-18	0.825	T851-098 / 36.6	-	12.15	2.11

SİLİKON CEPHE DUVAR BİTİŞ PROFİLLERİ
WALL CONNECTION PROFILES FOR SILICONE FACADE SYSTEM

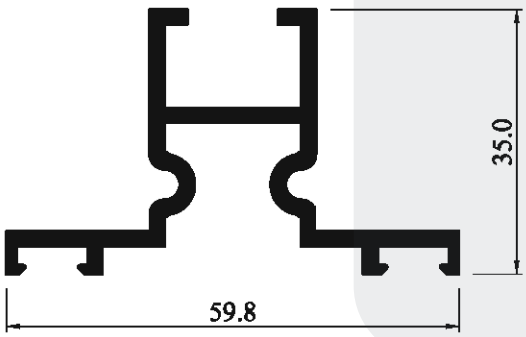


26011-15

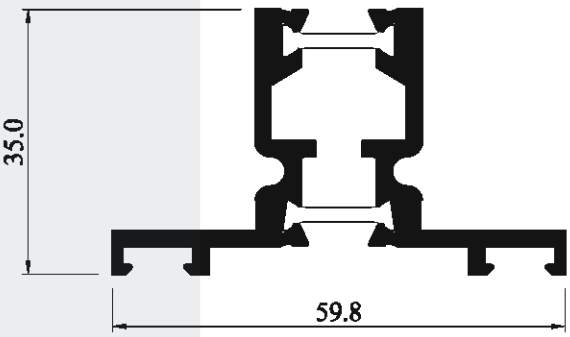


26012-15

KAPAKLI CEPHE DUVAR BİTİŞ PROFİLLERİ
WALL CONNECTION PROFILES FOR COVERED FACADE SYSTEM



2601-20

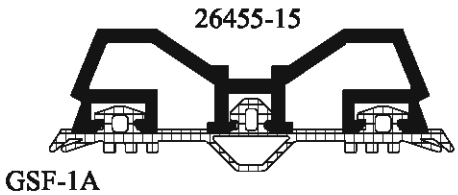


2602-20

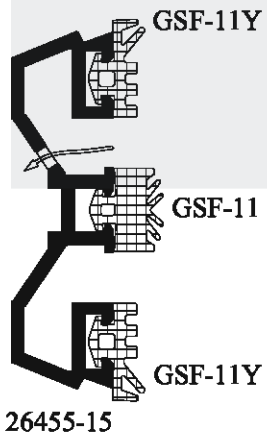
PROFİL KODU	AĞIRLIK (kg/m)	ALT PROFİL İÇİN PRES TAKOZU/ KESİM ÖLÇÜSÜ (mm)	ÜST PROFİL İÇİN PRES TAKOZU/ KESİM ÖLÇÜSÜ (mm)	I x	I y
26011-15	0.954	T851-098 / 28.5	T851-135 / 21.1	12.85	4.38
26012-15	1.272	T851-098 / 28.5	T851-185 / 14.5	18.92	4.98
2601-20	0.803	-	-	3.16	6.37
2602-20	1.068	-	-	6.88	5.43

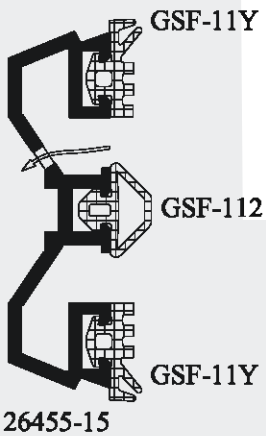
KAPAK ALTI PROFİLLERİ / *CLAMPING PROFILES*

26454-20 ve 9515 dışındaki tüm kapak altları bkz. sayfa 34'de ki tüm kapaklarla birlikte çalışabilir.

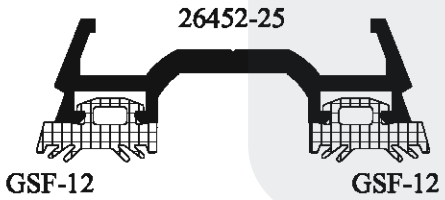


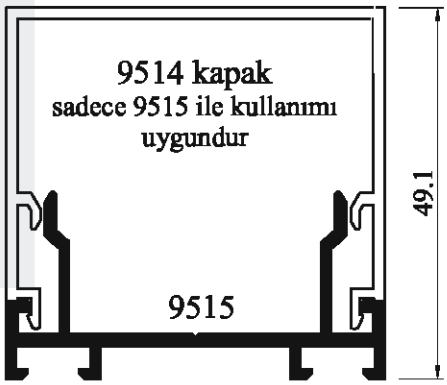
Aşağıdaki 26455-15 kapak altı ve fitil kombinasyonları kapak altına sızabilecek veya terleme ile oluşabilecek suları dışarı atma başarısından dolayı yatay olarak uygulanması kesinlikle önerilir.

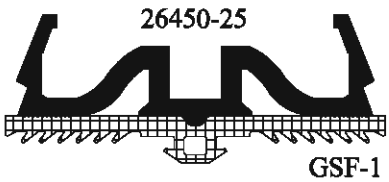




26452-25 kapak altı profili gerektiğinde taşıyıcı profile maksimum yaklaşmaya izin verir

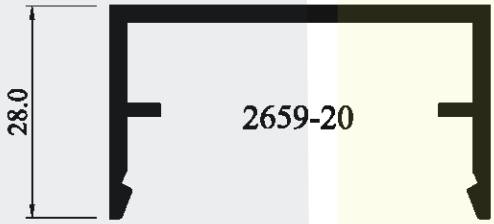


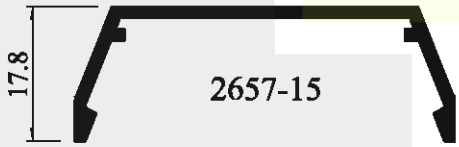


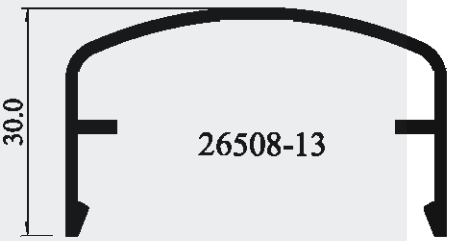


PROFİL KODU	AĞIRLIK (kg/m)
26450-25	0.549
26451-25	0.522
26452-25	0.450
26455-15	0.471
26454-20	0.778
2665-20	1.720
9514	0.588
9515	0.511

KAPAK PROFİLLERİ / *COVER PROFILES*



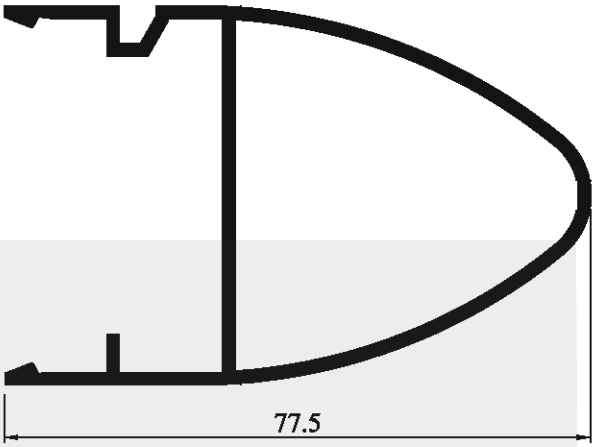




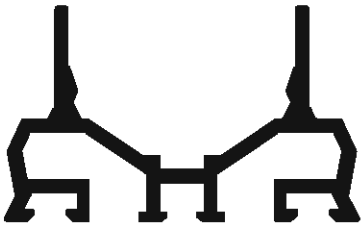
2662-15 kapak profili kesinlikle yatay taşıyıcıda kullanılmalıdır. !

PROFİL KODU	AĞIRLIK (kg/m)
2650-12	0.340
2659-20	0.584
2664-15	1.442
2663-15	0.955
26508-13	0.400
2662-15	0.347
2657-15	0.331

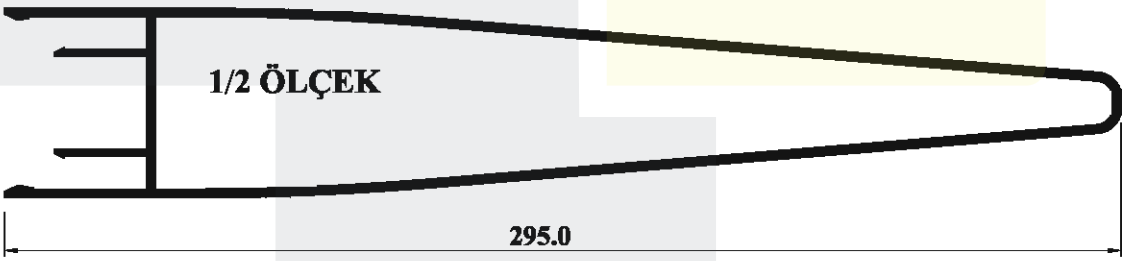
BADEM KAPAK PROFİLLERİ / *COVER PROFILES*



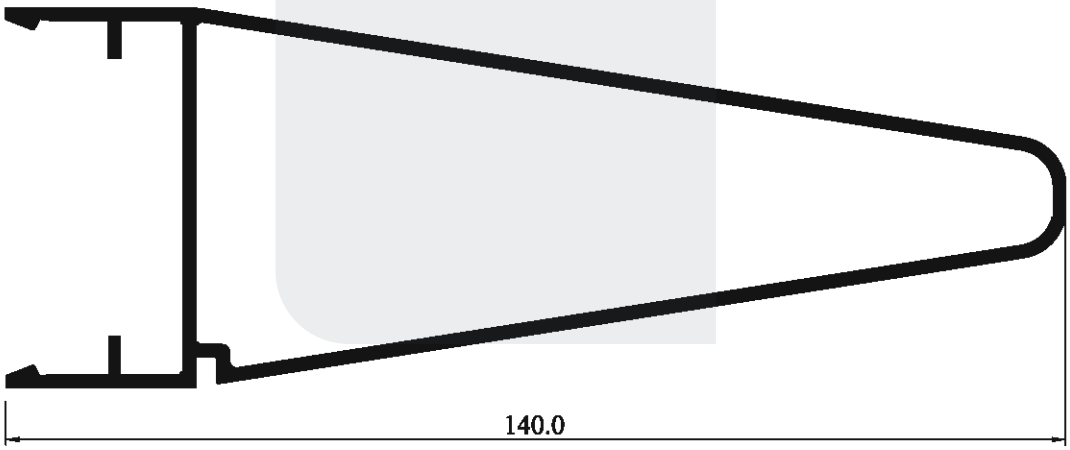
2663-15



26456-15
Bu profil sadece 2660-20 ile Kullanılır.



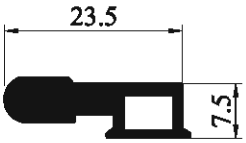
2660-20



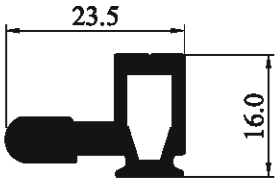
2664-15
Bu profil için PVC kapak mevcuttur
(PK-2664)

BAĞLANTI PROFİLLERİ / *CONNECTION PROFILES*

KASET BAĞLANTI TAKOZU / *SASH FIXATION PROFILE*



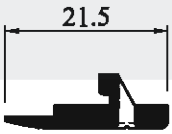
26480-00
0.297 Kg/m



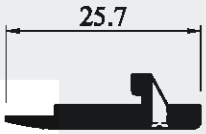
26481-00
0.406 Kg/m

26481-00 kaset bağlantı takozu özellikle yalıtımlı kasetlerde vidalama kolaylığı sağlar.
Sabit kasetlerin açılır kasetlere komşu kenarlarının takozlanmasında görünüm açısından 26480-00 tercih edilmelidir.
26481-00 profili GSF-15 derz fitili ile kullanılamaz.

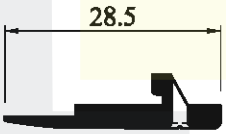
CAM TUTUCU PROFİLLERİ / *GLASS HOLDER PROFILES*



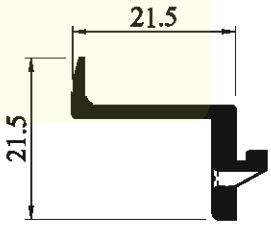
26483-00
0.178 Kg/m



26483I-00
0.208 Kg/m



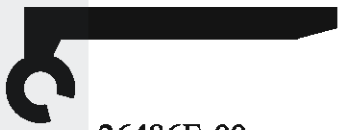
26483Z-00
0.217 Kg/m



26484-00
0.253 Kg/m

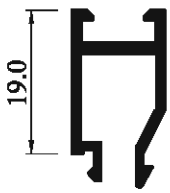
DÜŞEY PROFİL AÇILI BİRLEŞİM ADAPTÖRÜ (30° - 90°)
MULLION PROFILE ANGULAR MERGER ADAPTER (30° - 90°)

26486D-00
0.621 Kg/m



26486E-00
0.564 Kg/m

TEK CAM ADAPTÖR PROFİLLERİ
GLASS SPACE REDUCER PROFILES



2640-15
0.252 Kg/m

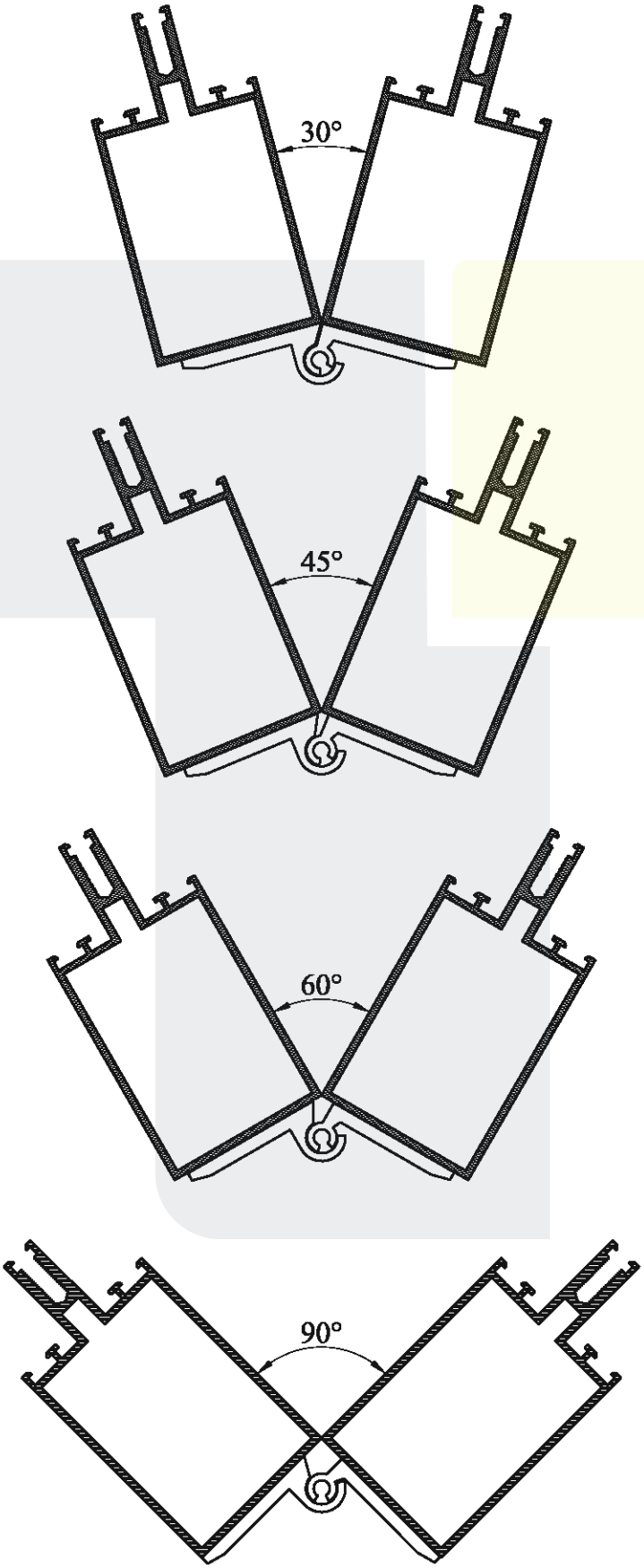
26408-15
0.143 Kg/m

CAM TAŞIYICI PROFİLLERİ
ALUMINIUM GLAZING WEDGE

26485K-00
0.196 Kg/m

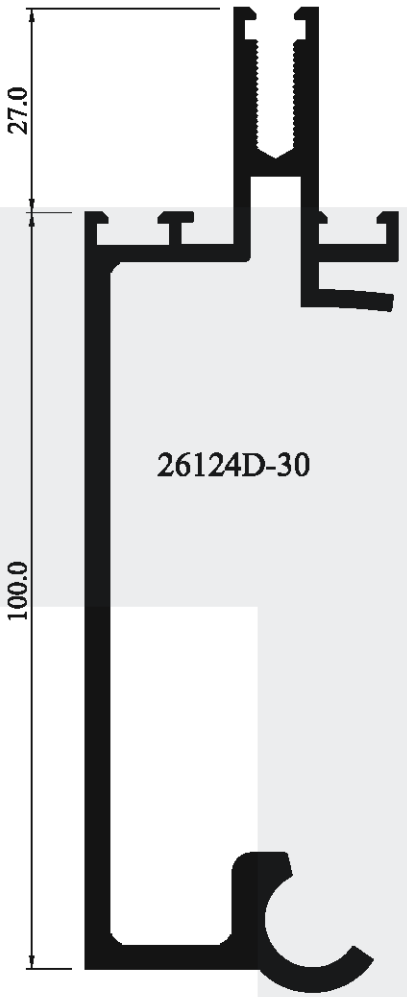
26485U-00
0.240 Kg/m

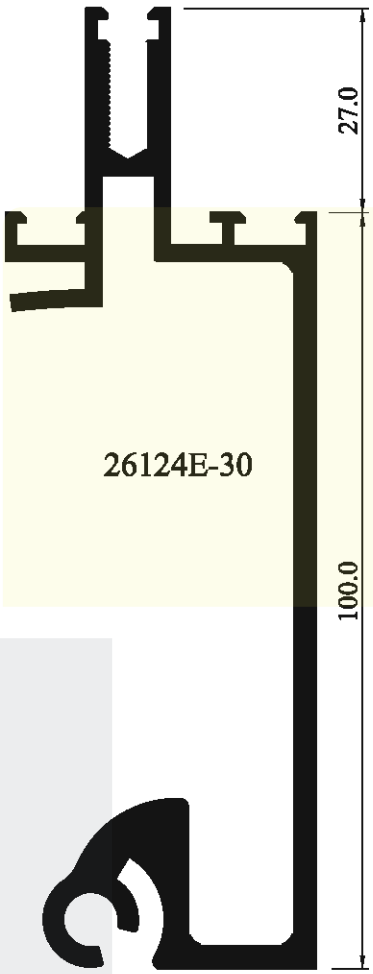
SİLİKON VE KAPAKLI CEPHELERDE DÜŞEY TAŞIYICI PROFİLLERİN AÇILI BİRLEŞİMLERİ



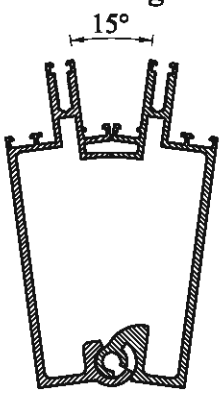
Ölçek 1/2

AÇILI PROFİLLER / *ANGULAR PROFILES*

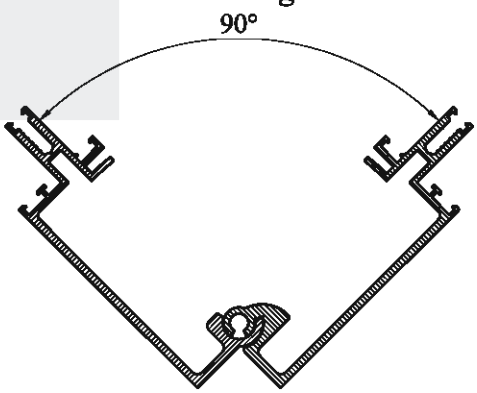




En Küçük Açı 15°
Minimum Angle 15°



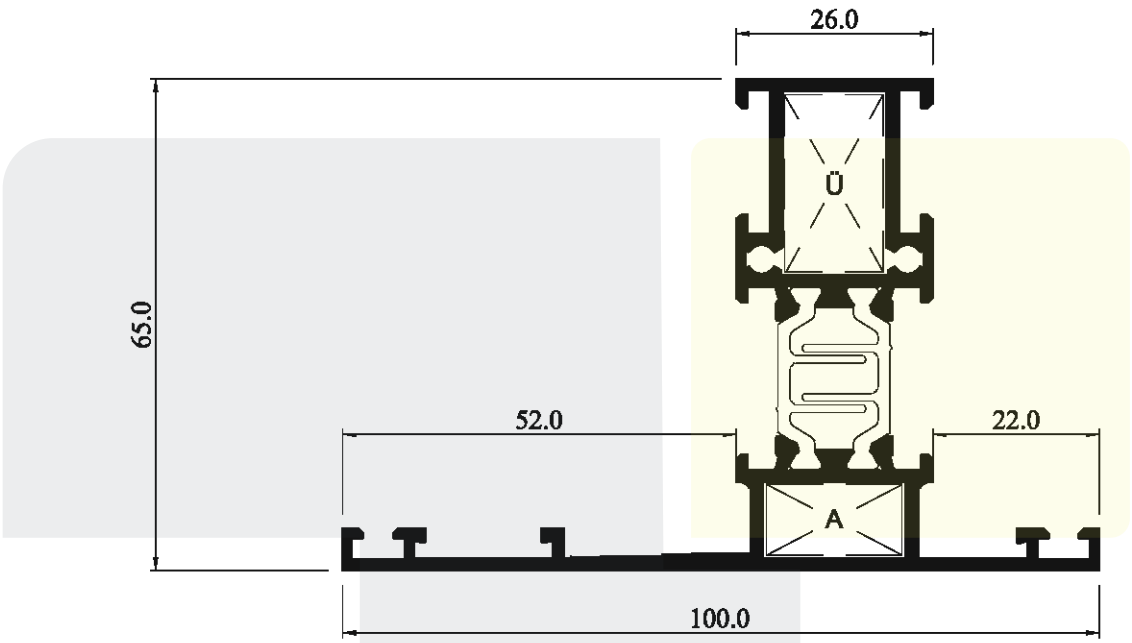
En Büyük Açı 90°
Maximum Angle 90°



PROFİL KODU	AĞIRLIK (kg/m)	Ix	Iy
26124D-30	2.019	139.44	11.82
26124E-30	2.266	149.57	12.86

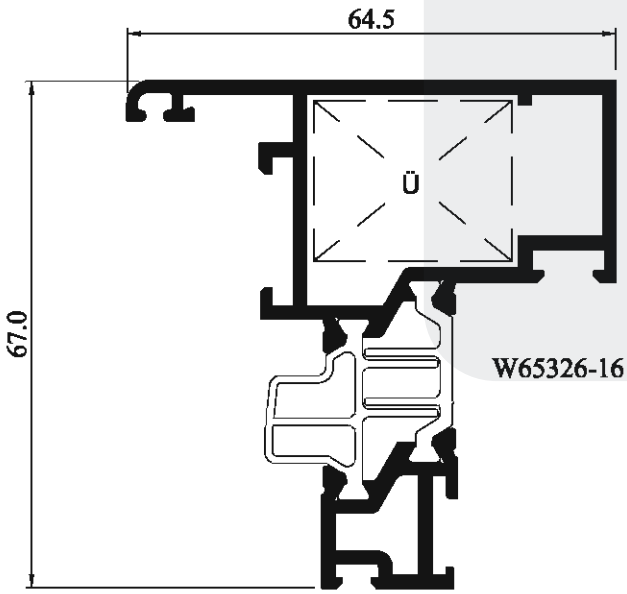
GİZLİ KANAT PROFİLLERİ / *HIDDEN SASH PROFILES*

Gizli Kanat Kasası
Frame Profile For Hidden Sash



W65212-16

Gizli Kanat / *Hidden Sash*



W65326-16

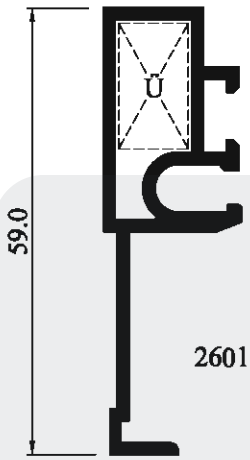
Gizli Kanat Çıtası
Glass Holder For Hidden Sash

W416-15

PROFİL KODU	AĞIRLIK (kg/m)	ALT PROFİL İÇİN PRES TAKOZU/ KESİM ÖLÇÜSÜ (mm)	ÜST PROFİL İÇİN PRES TAKOZU/ KESİM ÖLÇÜSÜ (mm)	I x	I y
W65212-16	1.647	T851-185 / 9.7	T851-135 / 23.9	34.63	26.28
W65326-16	1.475	-	T851-280 / 22.7	-	-
W416-15	0.142	-	-	-	-

ADAPTÖR PROFİLLERİ / *ADAPTER PROFILES*

Silikon cephe kompozit panel profilleri
Composite panel adapter for silicone facade

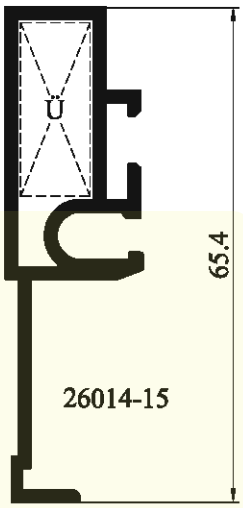


26301-15
26302-15
26302A-15
kaset profilleri
ile kullanılır

26013-15

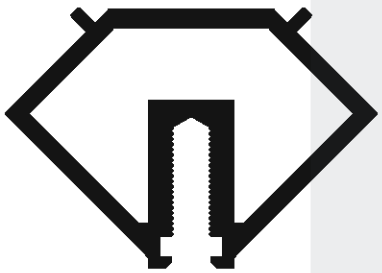
Kapaklı cephede iç köşe dönüş adaptörü
Inside corner adapter for covered facades

26317-15
26317A-15
26318-15
kaset profilleri
ile kullanılır



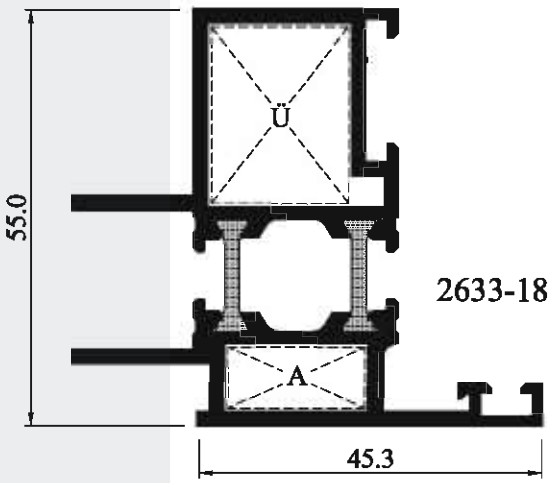
26014-15

Kapaklı cephede S14 sisteme geçiş
Facade to windows conversion frame profile



2659-00

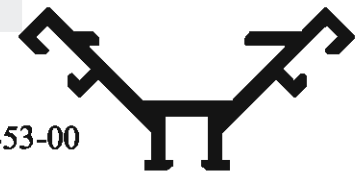
Köşe dönüş kapak profili
Cover profile for inside corner adapter



2633-18

Köşe dönüş kapak altı profili
Cover profile for inside corner adapter

2658-12

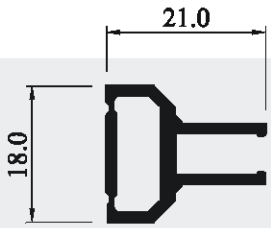


26453-00

PROFİL KODU	AĞIRLIK (kg/m)	ALT PROFİL İÇİN PRES TAKOZU/ KESİM ÖLÇÜSÜ (mm)	ÜST PROFİL İÇİN PRES TAKOZU/ KESİM ÖLÇÜSÜ (mm)
26013-15	0.596	-	T851-098 / 17.1
26014-15	0.661	-	T851-098 / 23.5
2633-18	1.417	T851-185 / 8.6	T851-185 / 8.6
2659-00	0.970	-	-
2658-12	0.404	-	-
26453-00	0.413	-	-

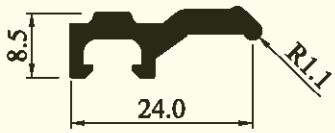
KENETLİ SİLİKON CEPHE PROFİLLER
PROFILES FOR CLAMPED SILICONE FACADE

Isıcam Çıtası
Spacer



26499-00
0.245 Kg/m

Kaset Sabitleme Takozu
Sash Fixation Profile



26479-00
0.247 Kg/m

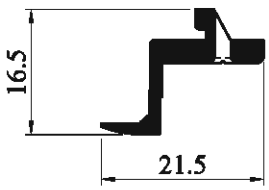
Cam Taşıyıcı Profil
Aluminium Glazing Wedge

26487-00
0.272 Kg/m

Cam Tutucu Güvenlik Takozu
Aluminium Glazing Wedge For Extra Safety

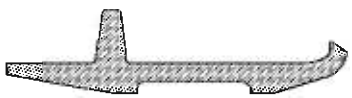
26488-00
0.313 Kg/m

Açılır Kanat Cam Tutucu Tırnağı
Glass Holder Profile for Opening Sash



26489-00
0.216 Kg/m

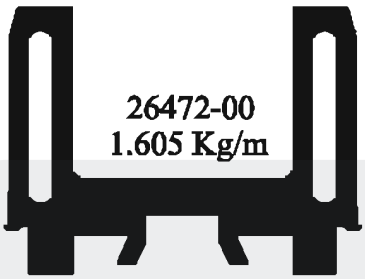
Plastik Cam Taşıyıcı Profil
Plastic Glazing Wedge

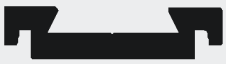


PSC-26487

YATAY-DÜŞEY BAĞLANTI PROFİLLERİ
MULLION-TRANSOM CONNECTION PROFILES

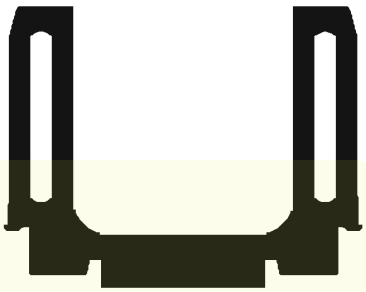
KIRLANGIÇ BAĞLANTI
SLIDING T CONNECTION PROFILE



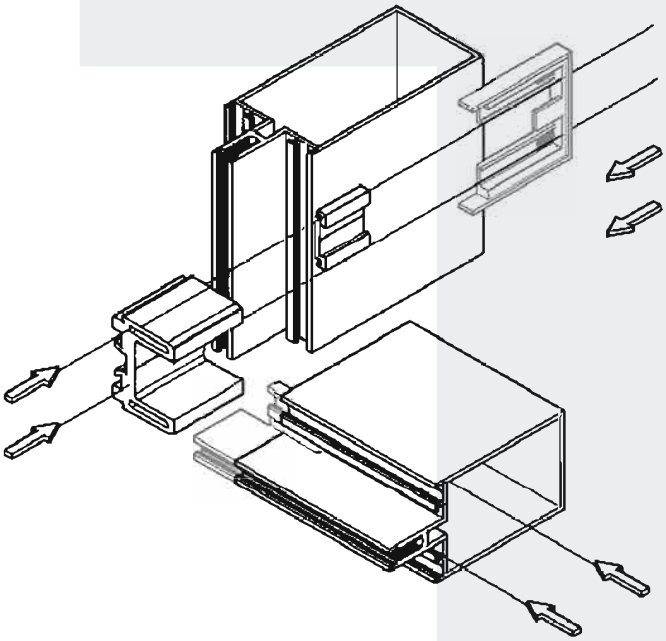


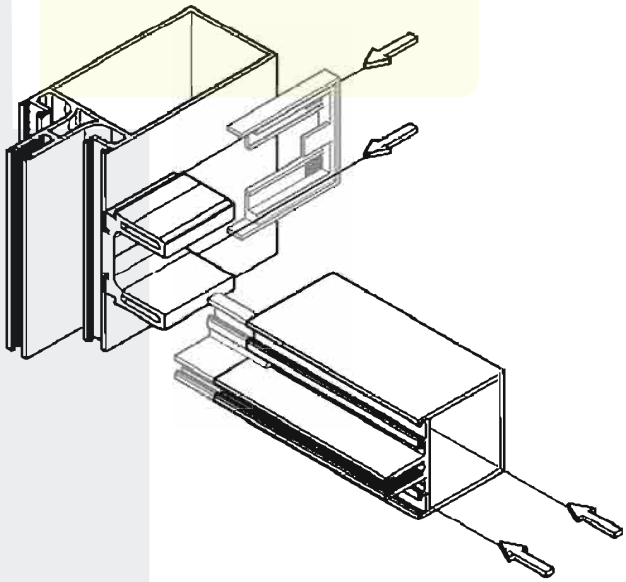
26473-00
0.287 Kg/m

KLASİK (GEÇME) BAĞLANTI
CLASSIC T CONNECTION PROFILE



26474-00
1.531 Kg/m



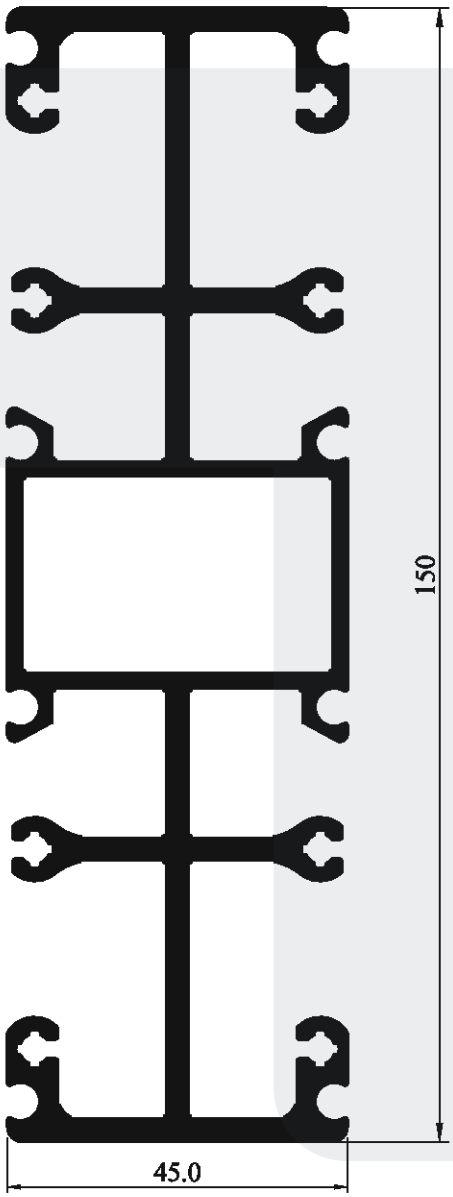


PROFİL KODU	26472-00, 26473-00 VE 26474-00 BOY OLARAK (6m) ALINDIĞINDA KESİM ÖLÇÜSÜ	*HAZIR PARÇA KODLARI			KULLANILAN YAKA FİTİLİ
		KIRLANGIÇ BAĞLANTI		KLASİK BAĞLANTI	
		26472-00	26473-00	26474-00	
26111-**	41.5mm	M72-1	M73-1	M74-1	PSC-81
26112-**	74.5mm	M72-2	M73-2	M74-2	PSC-82
26113-**	99.5mm	M72-3	M73-3	M74-3	PSC-83
26114-**	124.5mm	M72-4	M73-4	M74-4	PSC-84
26121-18	41.7mm	M72-1H	M73-1H	M74-1H	PSC-81H
26123-**	66.5mm	M72-2H	M73-2H	M74-2H	PSC-82H
26124-**	91.5mm	M72-3H	M73-3H	M74-3H	PSC-83H
26125-**	116.5mm	M72-4H	M73-4H	M74-4H	PSC-84H

Bağlantı parçaları (26472-00,26473-00 ve 26474-00) hazır olarak da satılabilmektedir. Yukarıdaki kodlarla sipariş verildiğinde bağlantı profilleri tablodaki ölçülere göre kesilip, uygun bağlantı delikleri açılarak hazır olarak verilecektir.

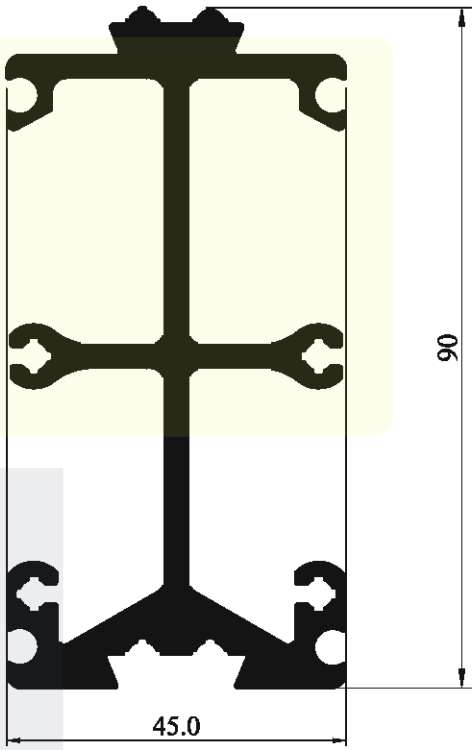
DÜŞEY TAŞIYICI EK YERİ BAĞLANTI PROFİLİ
SPLICE CONNECTION PROFILES

DÜZ BAĞLANTILAR İÇİN

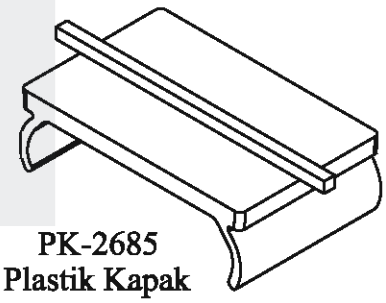


26850-00
4.017 Kg/m

AÇILI BAĞLANTILAR İÇİN
FOR ANGULAR CONNECTION



26851-00
2.607 Kg/m

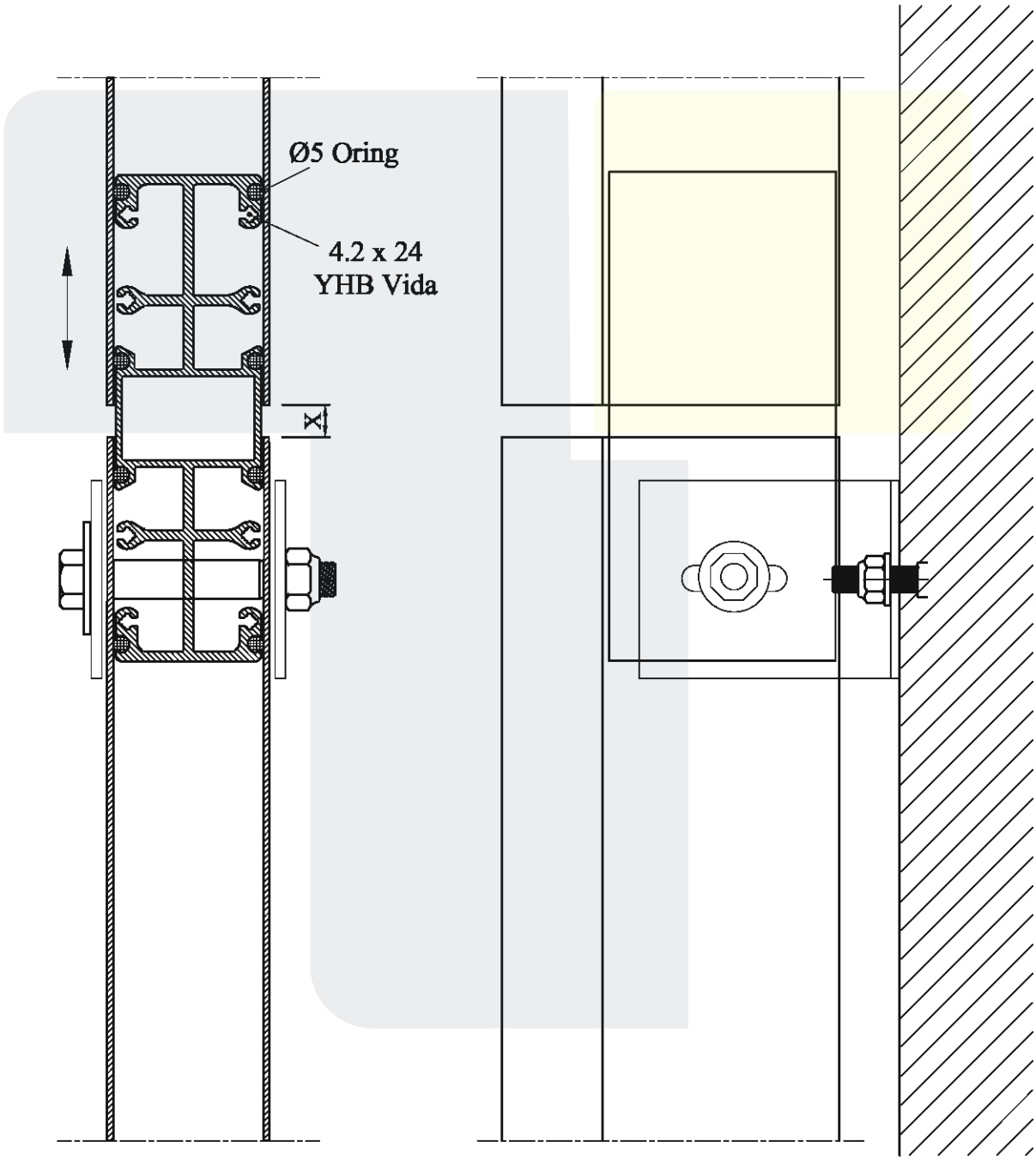


PK-2685
Plastik Kapak

DÜŞEY TAŞIYICI PROFİL KODU	26850-00 ve 26851-00 KESİM ÖLÇÜSÜ
26121-18	41.7mm
26122-18	41.6mm
26123-16	66.5mm
26124-16	91.5mm
26125-16	116.5mm
26123-20	66.5mm

DÜŞEY TAŞIYICI PROFİL KODU	26850-00 ve 26851-00 KESİM ÖLÇÜSÜ
26124-20	91.5mm
26125-20	116.5mm
26131-20	30.5mm
26132-20	55.5mm
26133-20	80.5mm
26134-20	105.5mm

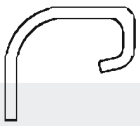
DÜŞEY TAŞIYICI EK YERİ BAĞLANTI PROFİLİ MONTAJI
SPLICE CONNECTION PROFILE ASSEMBLY



X (Dilatasyon) mesafesi: ((Boyu / 1000) x 1.4) + 1 mm

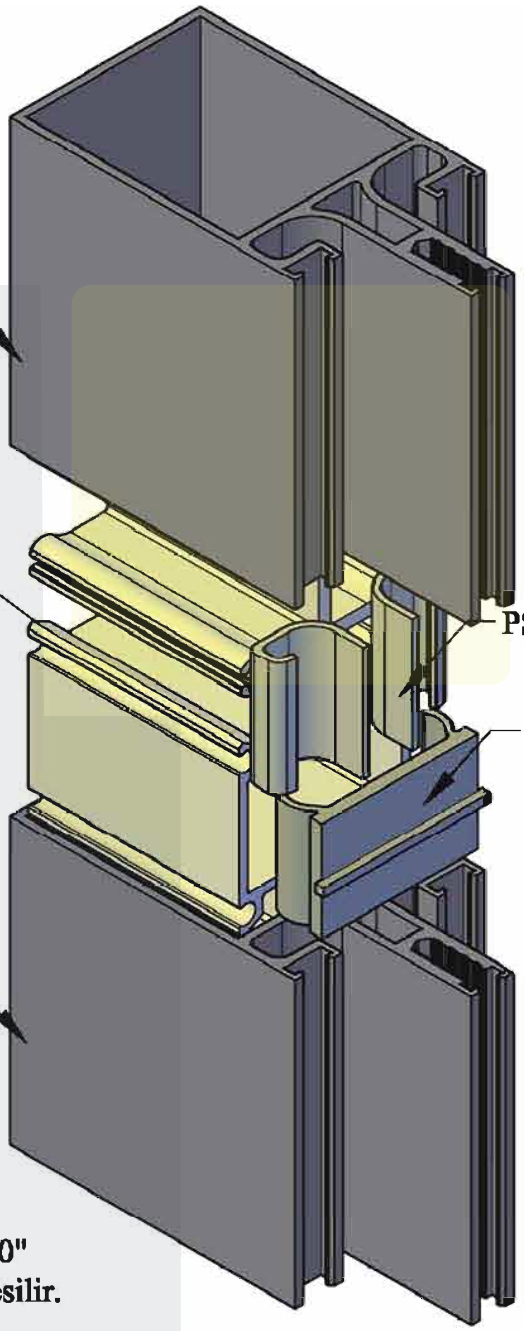
Ölçek 1/2

DÜŞEY TAŞIYICI EK YERİ BAĞLANTI PROFİLİ MONTAJI
SPLICE CONNECTION PROFILE ASSEMBLY



PSC-2613 Profil numarası 2613 ile başlayan düşey profillerde kondens suyunun devamını sağlamak için kullanılır. Her kondens boşluğunda 10cm kesilerek kondens suyunun alt profile aktarılmasını sağlar.

PSC-2612 Profil numarası 2612 ile başlayan düşey profillerde kondens suyunun devamını sağlamak için kullanılır. Her kondens boşluğunda 10cm kesilerek kondens suyunun alt profile aktarılmasını sağlar.



MONTAJ SIRASI

1: Düşey taşıyıcı ek yeri bağlantı profili "26850-00" kullanılacak düşey kayıta göre uygun ölçülerde kesilir. Kesim ölçüleri için bkz. sayfa 42.

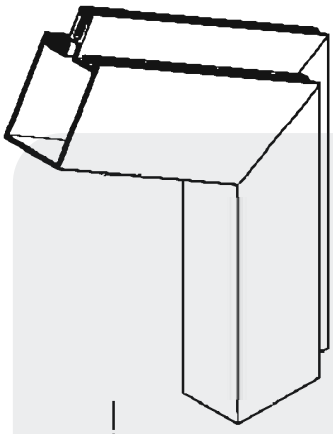
2: Uygun ölçülerde kesilen 26850-00 profilinde bulunan iç boşluğa PK-2685 PVC fitilinin üzerinde ki 2mm lik kanatlara kadar sürülerek takılır.

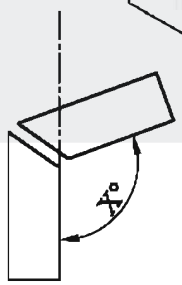
3: PK-2685 PVC parçası takılan 26850-00 profilinin alt yüzeyin içerisine PSC-2685te bulunan kanatla hemyüz olana kadar sürülür

4: PSC-2613 PVC parça üst profilin kondens kanalına yapıştırıcı yardımıyla (silikon vb.) montajlanır.

5: Üst ve alt düşey kayıtlar aralarında ((Boyu / 1000) x 1.4) + 1 mesafe kalacak şekilde vida ve ankrajlar yardımı ile binaya bağlanır.

DÜŞEY TAŞIYICI EK YERİ BAĞLANTI PROFİLİ MONTAJI (AÇILI)
SPLICE CONNECTION PROFILE ASSEMBLY (ANGULAR)

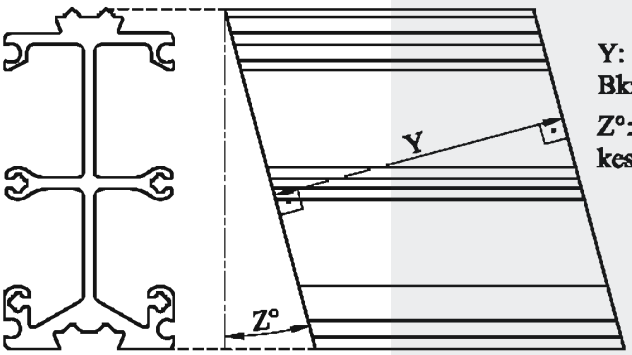




Formül
Profillere vermek istediğimiz açıyı X° kabul edersek.

Kesim Açısı (Z°)= (180°-X°) / 2 olur.

Detay-1

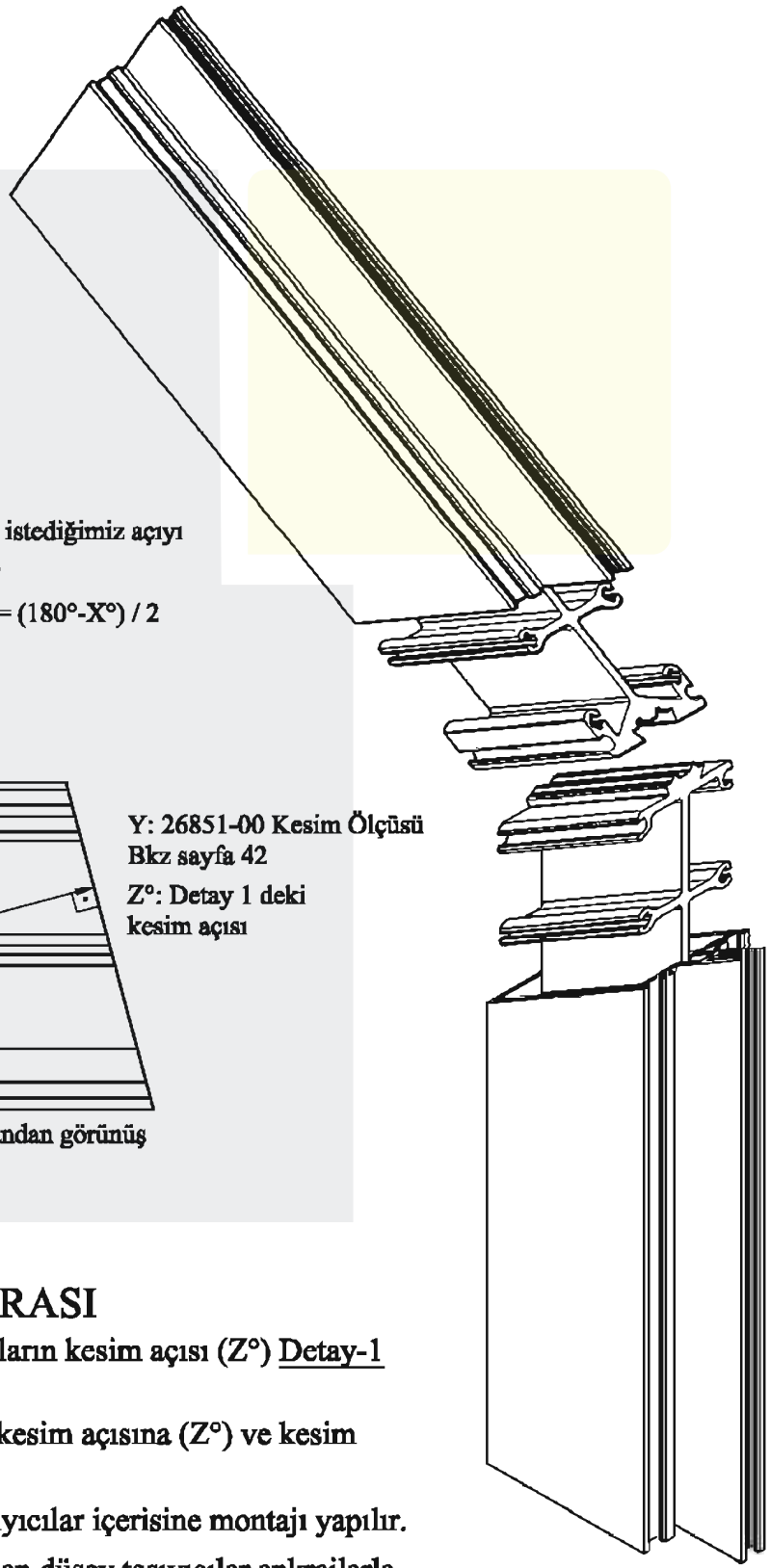


Y: 26851-00 Kesim Ölçüsü
Bkz sayfa 42

Z°: Detay 1 deki kesim açısı

26851-00 yandan görünüş

Detay-2



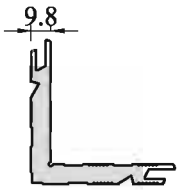
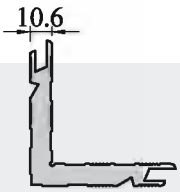
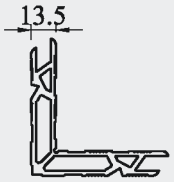
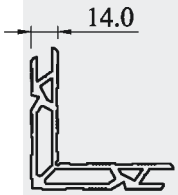
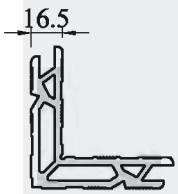
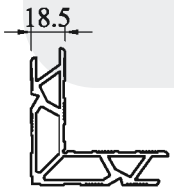
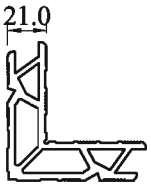
MONTAJ SIRASI

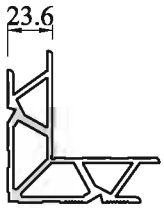
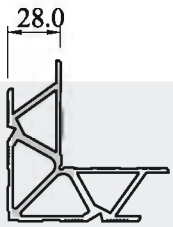
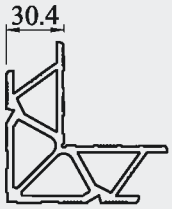
1: X ° açı verilecek düşey taşıyıcıların kesim açısı (Z°) Detay-1 den yardım alınarak belirlenir.

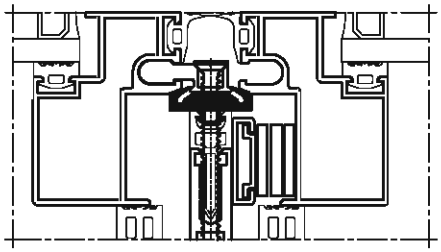
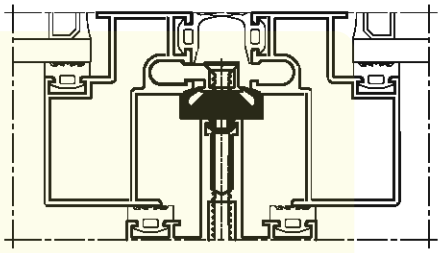
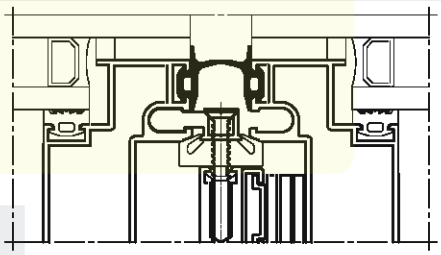
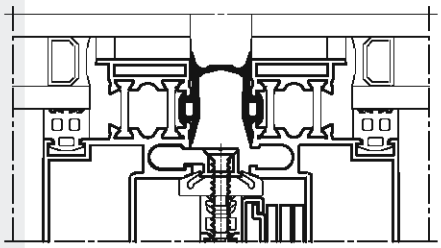
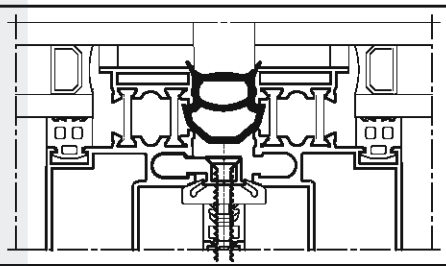
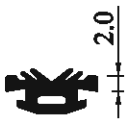
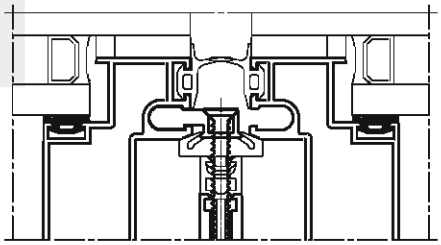
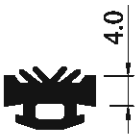
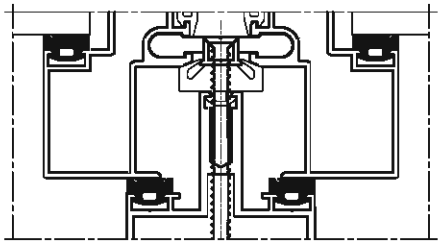
2: 26851-00 profili Detay 2 deki kesim açısına (Z°) ve kesim ölçüsüne (Y) göre kesilir.

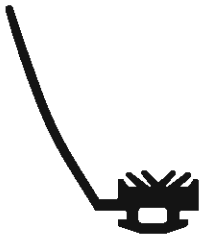
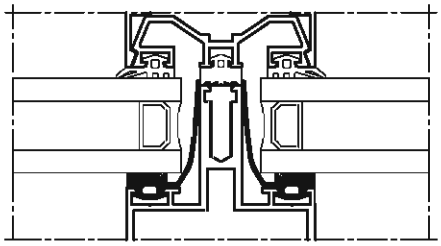
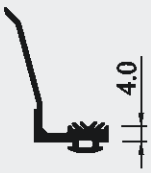
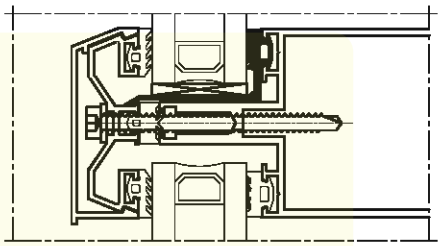
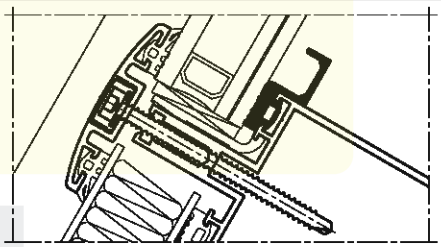
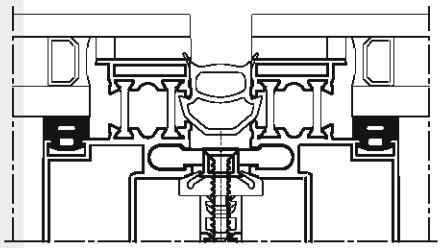
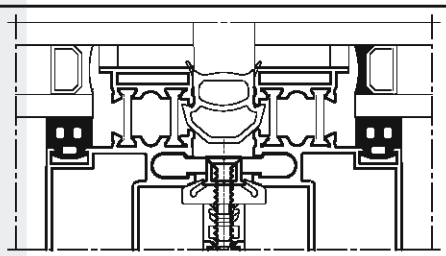
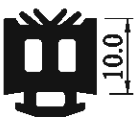
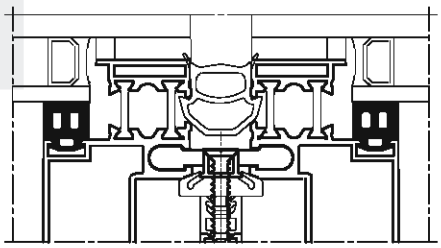
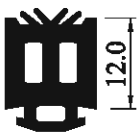
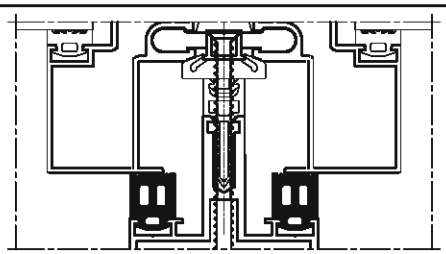
3: Dilatasyon profilleri düşey taşıyıcılar içerisine montajı yapılır.

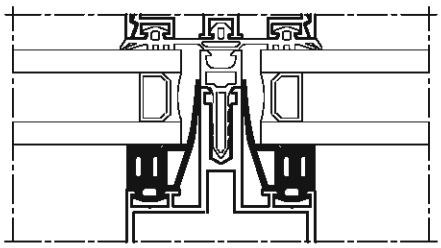
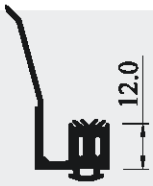
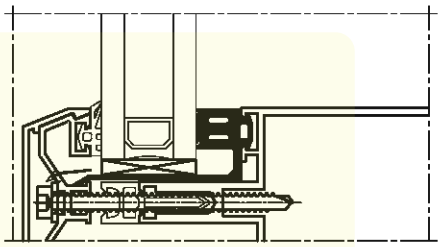
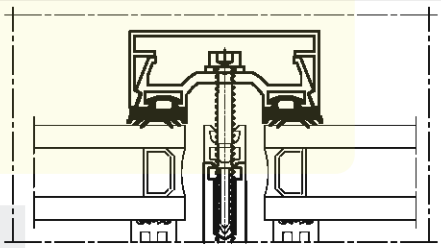
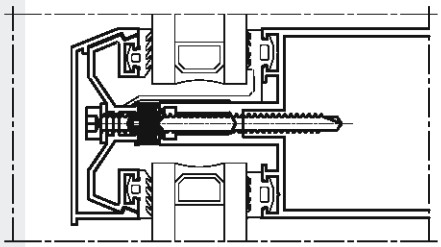
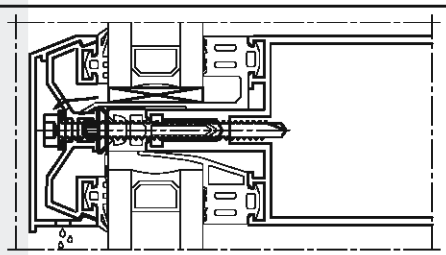
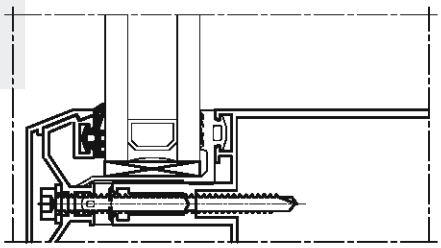
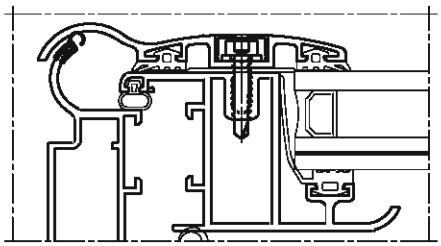
4: Dilatasyon montajı yapılmış olan düşey taşıyıcılar ankrajlarla binaya bağlanır.

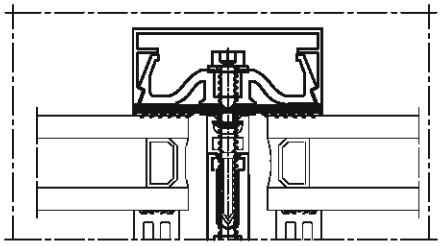
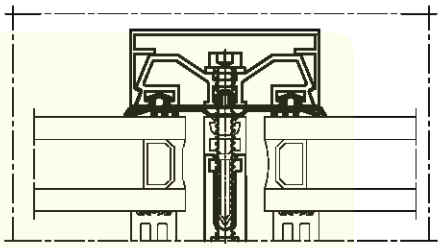
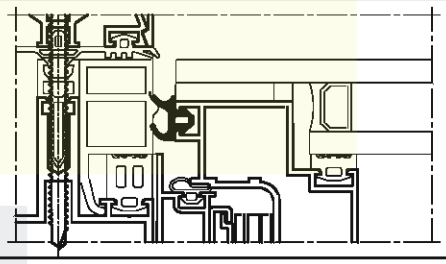
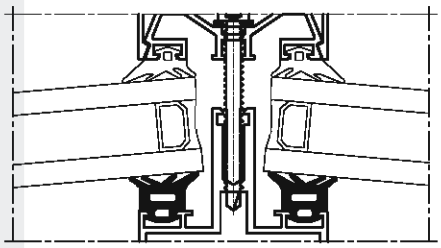
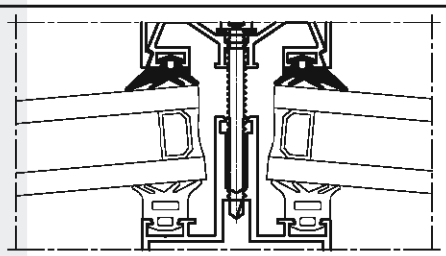
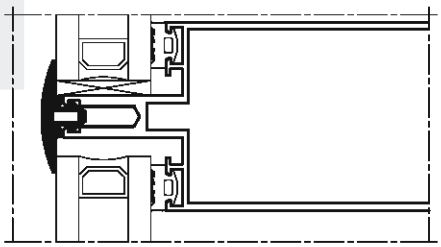
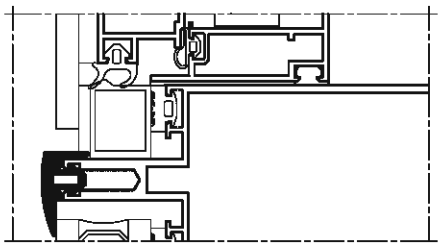
3D Resmi	2D Resmi	Özellikleri	Kullanıldığı Profiller
		T851-098 9.8 mm 2.759 Kg/m	26301-15 Alt 26311-15 Alt 26318-15 Alt 26315D-18 Alt 26011-15 Alt 26012-15 Alt 26013-15 Üst 26014-15 Üst
		T851-106 10.6 mm 2.953 Kg/m	26315-15 Üst
		T851-135 13.5 mm 2.256 Kg/m	26301-15 Üst 26302-15 Üst 26302A-15 Üst 26011-15 Üst W65212-16 Üst
		T851-140 14.0 mm 2.383 Kg/m	26304-15 Alt
		T851-165 16.5 mm 3.261 Kg/m	26302A-15 Alt 26310A-15 Alt 26317A-15 Alt
		T851-185 18.5 mm 2.512 Kg/m	W65212-16 Alt 26012-15 Üst 2633-18 Alt 2633-18 Üst
		T851-210 21.0 mm 3.308 Kg/m	26302-15 Alt 26310-15 Alt 26317-15 Alt 26304-15 Üst

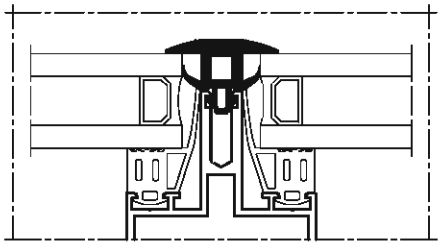
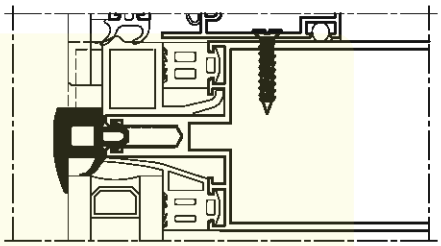
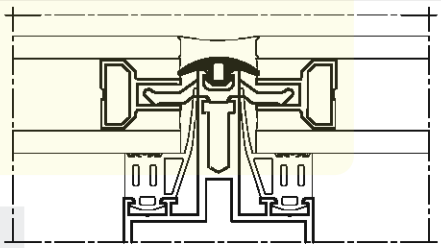
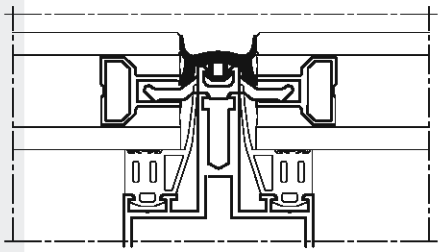
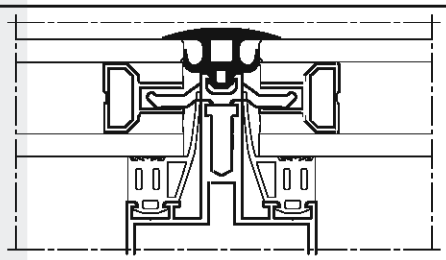
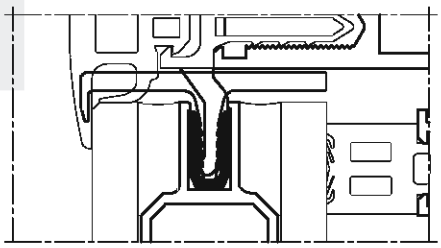
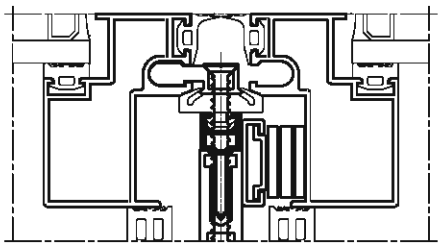
3D Resmi	2D Resmi	Özellikleri	Kullanıldığı Profiller
		T851-236 23.6 mm 2.897 Kg/m	26304D-18 Alt
		T851-280 28.0 mm 3.025 Kg/m	W65326-16 Üst
		T851-304 30.4 mm 3.714 Kg/m	26304D-18 Üst

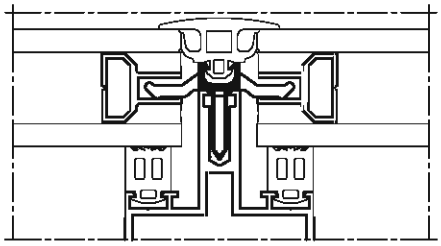
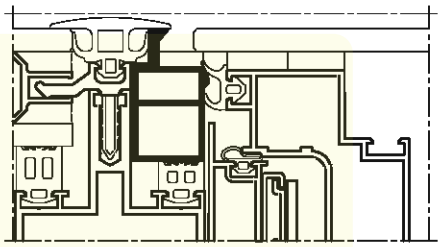
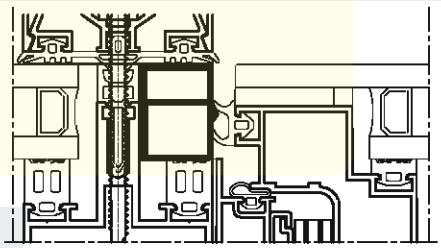
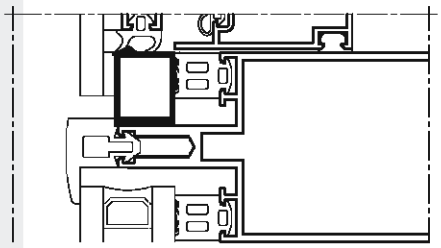
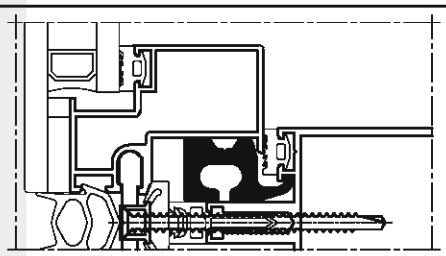
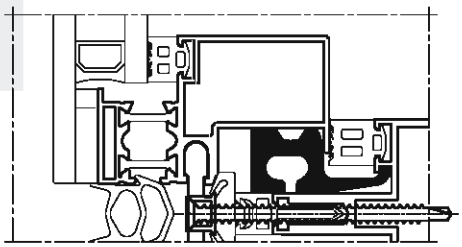
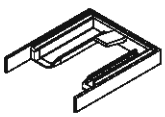
Aksesuar Kodu *Accessories Code*	Aksesuar Resmi *Accessories Drafting*	Kullanılan Alan *Employed Area*	Montaj Çizimi *Assembly Drafting*
GSF-21 1Koli 14.580gr / 90m = 162gr/m		Silikon cephe kaset yastık fitili F50S/I+ ve F50S/HI+ sistemlerinde kullanılır	
GSF-22 1Koli 14.580gr / 90m = 162gr/m		Silikon cephe kaset yastık fitili F50S/I ve F50S/HI sistemlerinde kullanılır	
GSF-8 1Koli 15.000gr / 223m = 67gr/m		Standart kaset için silikon cephe derz fitili (epdm ve silikon fitil olarak mevcuttur.)	
GSF-81 1Koli 14.580gr / 180m = 81gr/m		Yalıtımlı kaset için silikon cephe derz fitili	
GSF-15 1Koli 12.900gr / 60m = 215gr/m		Sabit kasetler arasında silikon cephe derz fitili (bkz. sayfa 169)	
GSF-31 1Koli 14.790gr / 290m = 51gr/m		Cam ve kaset fitili ---------- 19mm yatay taşıyıcının düşey taşıyıcıya montajında 5cm kesilerek düşey taşıyıcı üzerine takılır.	
GSF-32 1Koli 15.000gr / 197m = 76gr/m		Cam ve kaset fitili	

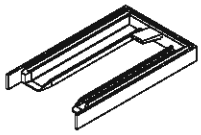
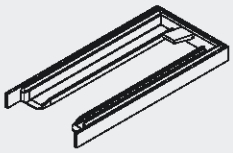
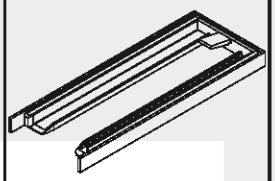
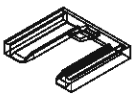
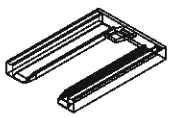
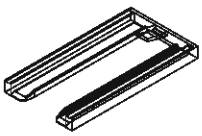
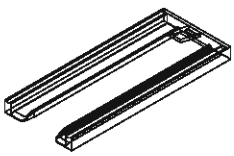
Aksesuar Kodu *Accessories Code*	Aksesuar Resmi *Accessories Drafting*	Kullanılan Alan *Employed Area*	Montaj Çizimi *Assembly Drafting*
GSF-32I 1Koli 15.000gr / 125m = 120gr/m		Yüksek izolasyonlu cephede cam ve kaset baskı fitili	
GSF-32Y 1Koli 15.000gr / 92m = 163gr/m	 Ölçek:1/2	Kapaklı ve yarı kapaklı cephe için yatay taşıyıcı drenaj fitili	
GSF-32S 1Koli 15.000gr / 105m = 140gr/m		Işıklık, veranda, kış bahçesi kondens fitili	
GSF-33 1Koli 14.700gr / 150m = 98gr/m		Cam ve kaset fitili	
GSF-34 1Koli 14.994gr / 126m = 119gr/m		Cam ve kaset fitili	
GSF-35 1Koli 14.100gr / 100m = 141gr/m		Cam ve kaset fitili	
GSF-36 1Koli 13.200gr / 80m = 165gr/m		Cam ve kaset fitili	

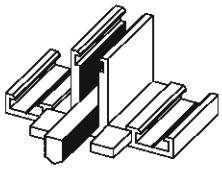
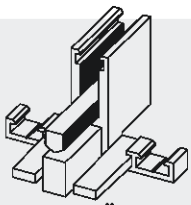
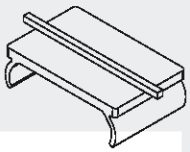
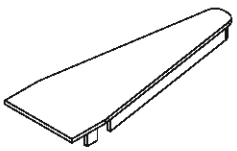
Aksesuar Kodu *Accessories Code*	Aksesuar Resmi *Accessories Drafting*	Kullanılan Alan *Employed Area*	Montaj Çizimi *Assembly Drafting*
GSF-36I 1Koli 15.000gr / 70m = 210gr/m		Yüksek izolasyonlu cephede cam ve kaset baskı fitili	
GSF-36Y 1Koli 15.000gr / 55m = 272gr/m	 Ölçek:1/2	Kapaklı ve yarı kapaklı cephe için yatay taşıyıcı drenaj fitili	
GSF-12 1Koli 15.000gr / 166m = 90gr/m		Kapak altı baskı fitili (26452-25 ile kullanılır)	
GSF-11 1Koli 15.000gr / 180m = 83gr/m		Kapak altı baskı fitili (26455-15 ile kullanılır) (F50K/HI ve F50YK/HI sisteminde kullanılır)	
GSF-112 1 Koli 15.000gr / 270m = 55gr/m		Kapak altı baskı fitili (26455-15 ile kullanılır) (F50K/HI+ ve F50YK/HI+ sisteminde kullanılır)	
GSF-11Y 1 Koli 15.000gr / 278m = 54gr/m		Kapak altı baskı fitili (26455-15 ile kullanılır)	
GSF-26915 1 Koli 10.000gr / 380m = 25gr/m		Işıklık sistemi 26915-16 kanat profilinde menteşe saklama fitili	

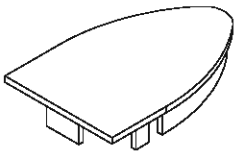
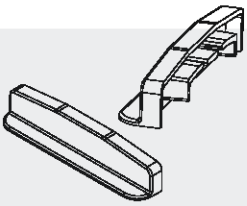
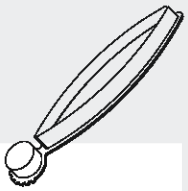
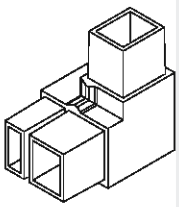
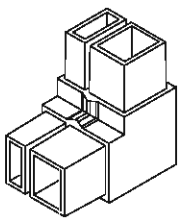
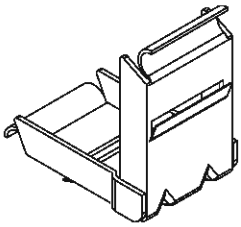
Aksesuar Kodu *Accessories Code*	Aksesuar Resmi *Accessories Drafting*	Kullanılan Alan *Employed Area*	Montaj Çizimi *Assembly Drafting*
GSF-1 1Koli 15.000gr / 80m = 187gr/m	 Ölçek:1/2	Kapak altı baskı fitili	
GSF-1A 1Koli 15.000gr / 90m = 170gr/m	 Ölçek:1/2	Kapak altı baskı fitili (26455-15 ile kullanılır)	
GSF-61 1 Koli 15.000gr / 225m = 67gr/m		Kapaklı ve yarı kapaklı cephede açılır kanat fitili (26304-15 ile kullanılır)	
GSF-3A 1 Koli 15.000gr / 105m = 140gr/m		Kapaklı cephede açılı cam için iç cam fitili.	
GSF-11A 1 Koli 15.000gr / 155m = 95gr/m		Kapaklı cephede açılı cam için kapak altı fitili.	
GSF-41 1 Koli 15.000gr / 87m = 172gr/m		F50YK/HI sisteminde kapaksız istikamette sabit cam fitili (epdm ve silikon fitil olarak mevcuttur.)	
GSF-42 1 Koli 15.000gr / 92m = 164gr/m		F50YK/HI sisteminde kapaksız istikamette açılır cam fitili	

Aksesuar Kodu *Accessories Code*	Aksesuar Resmi *Accessories Drafting*	Kullanılan Alan *Employed Area*	Montaj Çizimi *Assembly Drafting*
GSF-43 1 Koli 15.000gr / 61m = 247gr/m		F50YK/HI+ sisteminde kapaksız istikamette sabit cam fitili	
GSF-44 1 Koli 15.000gr / 63m = 238gr/m		F50YK/HI+ sisteminde kapaksız istikamette açılır cam fitili	
GSF-16 1 Koli = 165m		(Silikon Fitil) F50KS sisteminde ıslak (silikonlu) camlama için fuga fitili	
GSF-17 1 Koli 15.000gr / 110m = 135gr/m		F50KS sisteminde U formlu kuru camlama için fuga fitili	
GSF-18 1 Koli 15.000gr / 68m = 194gr/m		F50KS sisteminde tırnaklı kuru camlama için fuga fitili (epdm ve silikon fitil olarak mevcuttur.)	
GSF-91 1 Koli 15.000gr / 375m = 40gr/m	 Ölçek:2/1	F50KS sisteminde 26488-00 cam tutucu ve taşıyıcı profili için sıkıştırma fitili	
PSC-1 1 Boy / 6m		Ekstra izolatör	

Aksesuar Kodu *Accessories Code*	Aksesuar Resmi *Accessories Drafting*	Kullanılan Alan *Employed Area*	Montaj Çizimi *Assembly Drafting*
PSC-11 1 Boy / 6m		Kenetli silikon cephc için ekstra izolatör	
PSC-2-K 1 Boy / 6m	 Ölçek:1/2	Kenetli silikon cephe için açılır kaset PVC profili	
PKC-2 1 Boy / 6m	 Ölçek:1/2	Kapaklı ve yarı kapaklı cephede kapaklı istikamette açılır kaset PVC profili	
PKC-1 1 Boy / 6m	 Ölçek:1/2	Kapaklı ve yarı kapaklı cephede kapaksız istikamette açılır kaset PVC profili	
PSC-41 1 Paket / 100Adet		Yatay taşıyıcıda GSF-32 yada GSF-32I cam fitili kullanıldığı durumda mesafe belirleme takozu	
PSC-42 1 Paket / 100Adet		Yatay taşıyıcıda GSF-36 yada GSF-36I cam fitili kullanıldığı durumda mesafe belirleme takozu	
PSC-81 1 Paket / 100Adet	 Ölçek:1/4	Yatay bağlantı kızak plastiği 26111-16, 26111-20, 26121-18 için	

Aksesuar Kodu *Accessories Code*	Aksesuar Resmi *Accessories Drafting*	Kullanılan Alan *Employed Area*	Montaj Çizimi *Assembly Drafting*
PSC-82 1 Paket / 100Adet	 Ölçek:1/4	Yatay bağlantı kızak plastiği 26112-16, 26112-20 için	
PSC-83 1 Paket / 100Adet	 Ölçek:1/4	Yatay bağlantı kızak plastiği 26113-16, 26113-20 için	
PSC-84 1 Paket / 100Adet	 Ölçek:1/4	Yatay bağlantı kızak plastiği 26114-16, 26114-20 için	
PSC-81H 1 Paket / 100Adet	 Ölçek:1/4	Yatay bağlantı kızak plastiği 26121-18 için	
PSC-82H 1 Paket / 100Adet	 Ölçek:1/4	Yatay bağlantı kızak plastiği 26123-16, 26123-20 için	
PSC-83H 1 Paket / 100Adet	 Ölçek:1/4	Yatay bağlantı kızak plastiği 26124-16, 26124-20 için	
PSC-84H 1 Paket / 100Adet	 Ölçek:1/4	Yatay bağlantı kızak plastiği 26125-16, 26125-20 için	

Aksesuar Kodu *Accesorries Code*	Aksesuar Resmi *Accesorries Drafting*	Kullanılan Alan *Employed Area*	Montaj Çizimi *Assembly Drafting*
PSC-91 1 Paket / 100Adet	 Ölçek:1/2	Yatay bağlantı 19mm uzantılı kafa plastiği	
PSC-92 1 Paket / 100Adet	 Ölçek:1/2	Yatay bağlantı 27mm uzantılı kafa plastiği	
PK-2685 1 Paket / 100Adet	 Ölçek:1/2	Ek Yeri Bağlantı Profili Kapağı	
PSC-2613 1 Boy / 6m		Kondens kanal köprüsü 26131-20, 26132-20, 26133-20, 26134-20, 26142-30, 26143-30	
PSC-2612 1 Boy / 6m		Kondens kanal köprüsü	
PSC-26487 1 Boy / 6m		Plastik cam taşıyıcı profil	
PK-2664 1 Paket / 100Adet	 Ölçek:1/5	2664-15 profili için PVC kapak	

Aksesuar Kodu *Accessories Code*	Aksesuar Resmi *Accessories Drafting*	Kullanılan Alan *Employed Area*	Montaj Çizimi *Assembly Drafting*
PK-2663 1 Paket / 100Adet	 Ölçek:1/3	2663-15 profili için PVC kapak	
PK-26904 1 Paket / 100Adet	 Ölçek:1/3	26904-12 profili için PVC kapak	
PK-26801 1 Paket / 100Adet		26801-15 profili için PVC kapak	
PK-26805 1 Paket / 100Adet		26805-20 profili için PVC kapak	
PK-21 1 Paket /100Adet		PKC-1 ve PK-22 PVC profilinin köşe birleşiminde kullanılır.	
PK-22 1 Paket / 100Adet		PKC-2 pvc profillerinin köşe birleşiminde kullanılır.	
TS-499 1 Paket / 100Adet		F50KS sisteminde 26499-00 ısıcam çıtası için sac köşe takozu	

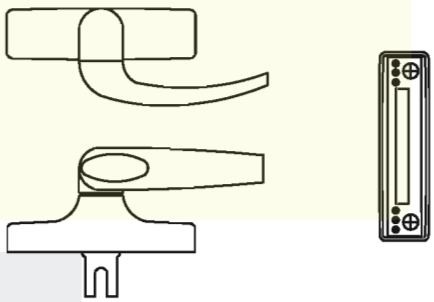
Aksesuar Kodu *Accessories Code*	Aksesuar Resmi *Accessories Drafting*	Kullanılan Alan *Employed Area*	Montaj Çizimi *Assembly Drafting*
TP-499 1 Paket / 100Adet		F50KS sisteminde 26499-00 ısıcam çıtası için plastik köşe takozu	

Yalıtım Bantları / *Insulation Tapes*

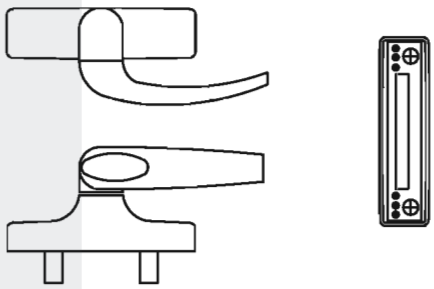
Bant Kodu *Tape Codes*	Bant Cinsi Tape Type	Genel Özellikleri Assembly Drafting	
GB-01 Bant 1 Rulo	Aluminyum folyolu butil bant	• Su ve buhar geçirmez. • UV dayanımı yüksektir. • Primer gerektirmez. • Kendinden yapışkanlıdır.	Kalınlık: 1.5 mm Genişlik: 50 - 100mm
GB-02 Bant 1 Rulo	PVC köpük bant	• Perçinlenebilir ve vidalanabilir. • Min. %30 sıkıştırma ile su yalıtımı sağlar. • UV dayanımı yüksektir. • Tek tarafı yapışkanlıdır.	Kalınlık: 1.5, 3.0, 4.5, 6.0, 8.0, 10.0mm Genişlik: 9.0, 12.0, 15.0, 19.0, 25.0, 30.0mm
GB-03 Bant 1 Rulo	Yalıtım membran	• %100 EPDM'den üretilmiştir. • Su yalıtımı sağlar. • UV dayanımı yüksektir. • Esneme kabiliyetine sahiptir. • Yoğuşmayı engeller.	Kalınlık: 0.8, 1.0, 1.2, 1.5mm Genişlik: Max 1500mm
GB-04 Bant 1 Rulo	Çift tarafı yapışkanlı PVC esaslı bant	• Min. %30 sıkıştırma ile su yalıtımı sağlar. • UV dayanımı yüksektir. • Çift tarafı yapışkanlıdır.	Kalınlık: 1.6, 3.2, 4.8, 6.4mm Genişlik: 9.0, 12.0, 15.0, 19.0, 25.0, 30.0mm

CKR70.08.01 / Cephe Mafsallı Kol

CKR70.08.02 / Cephe Kolu Tek Dilli



CKR70.08.03 / Cephe Kolu Çift Dilli



CKR10.10.05 / Köşe Dönüş

CKR70.09.06 / Cephe Makas Ayar Parçası
CKR70.09.-- / Cephe Makası

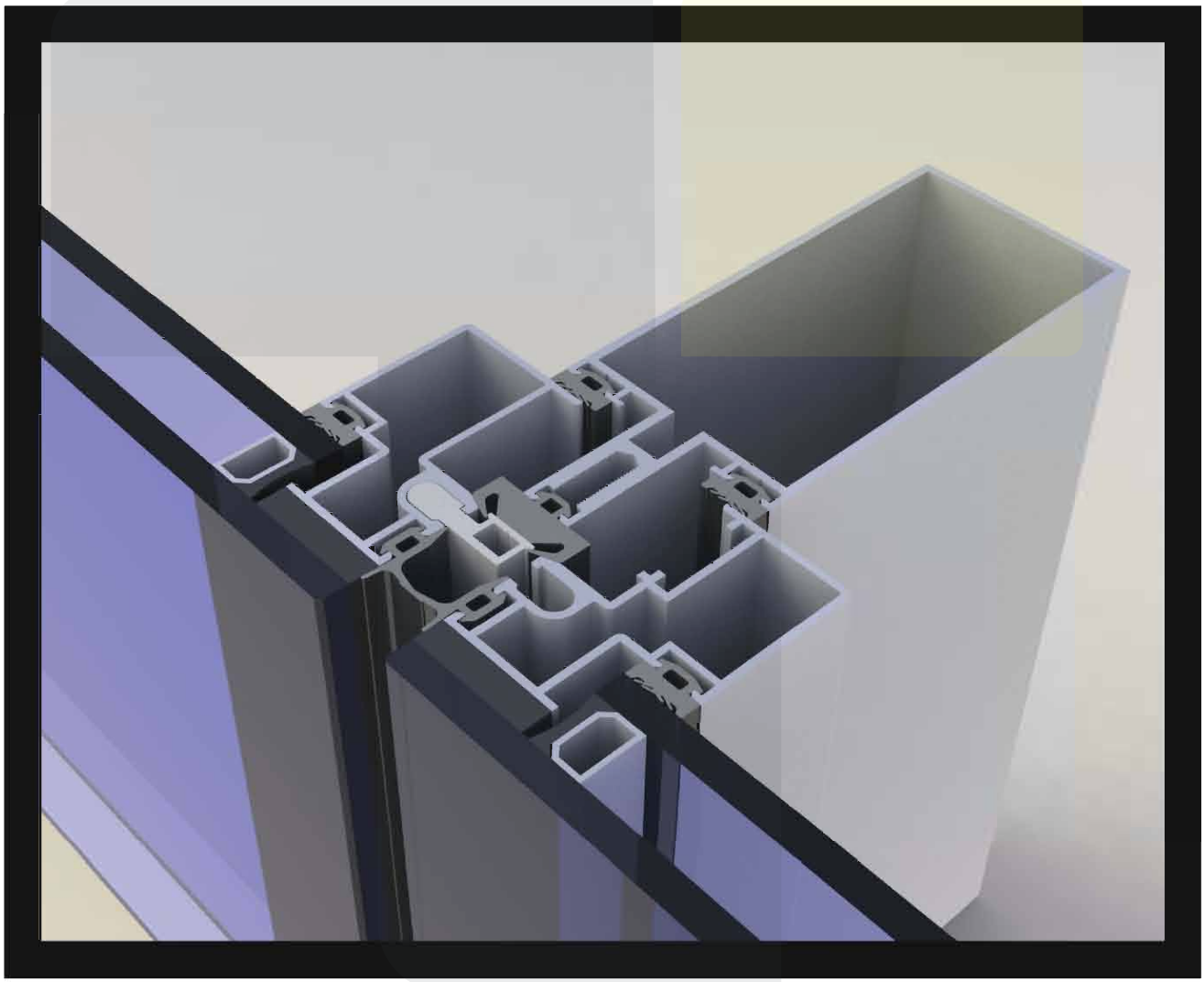
Cephe Makası
Scissor Arm

Cephe Makas Ayar Parçası

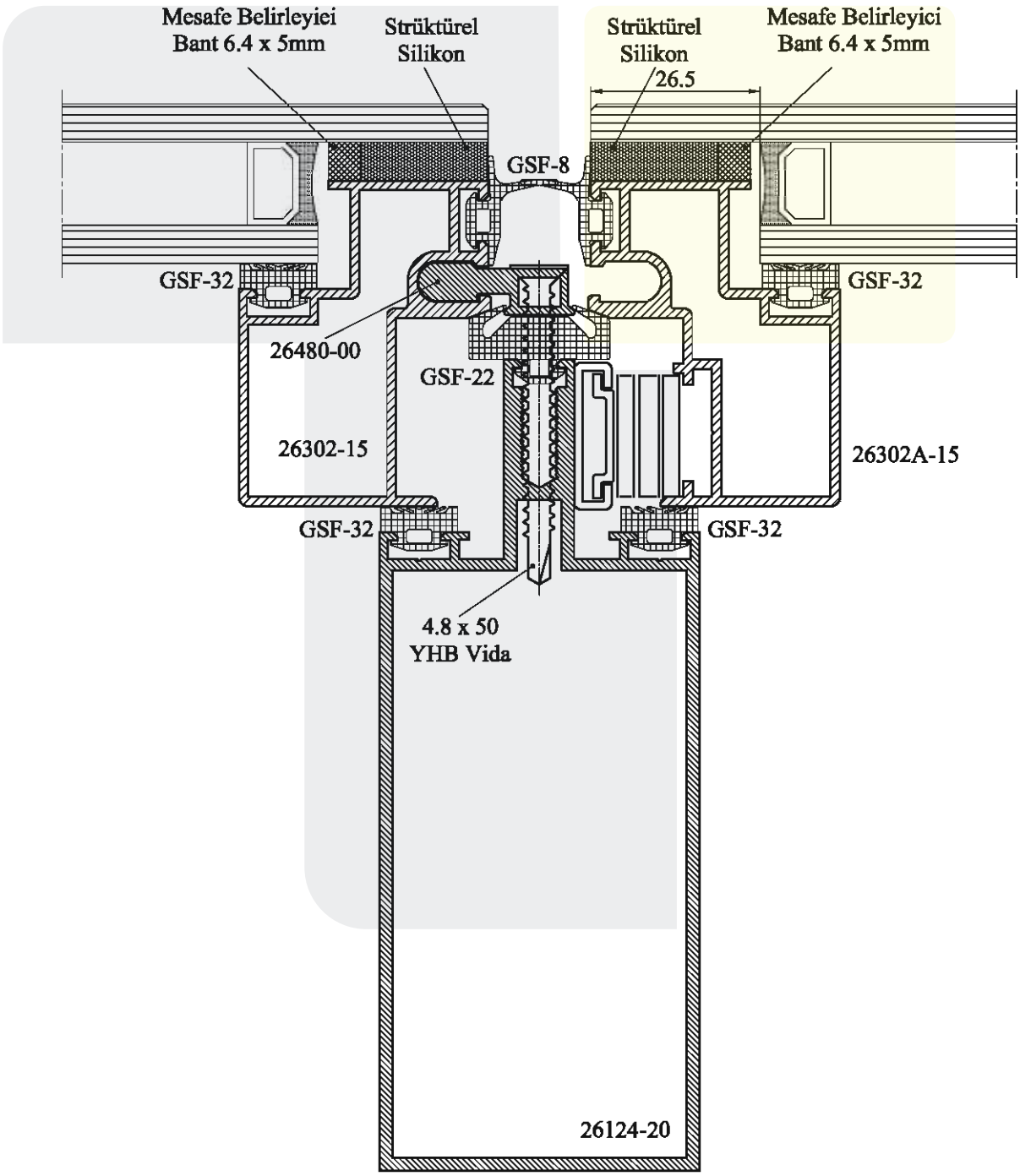
Makas Kodu	Kullanılabilecek Boy	Taşıyabileceği Yük (kg)	Açılma Açısı
CKR70.09.01	8" , 590mm	32 Kg	50°
CKR70.09.02	12" , 780mm	45 Kg	50°
CKR70.09.03	16" , 1090mm	55 Kg	50°
CKR70.09.04	20" , 1400mm	70 Kg	45°
CKR70.09.05	26" , 1900mm	95 Kg	30°
CKR70.09.06	Cephe Makası Ayar Parçası		

SİLİKON CEPHE

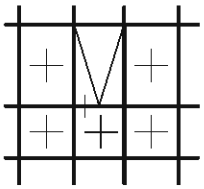
F50S/I



SABİT VE AÇILIR KASET YATAY KESİT

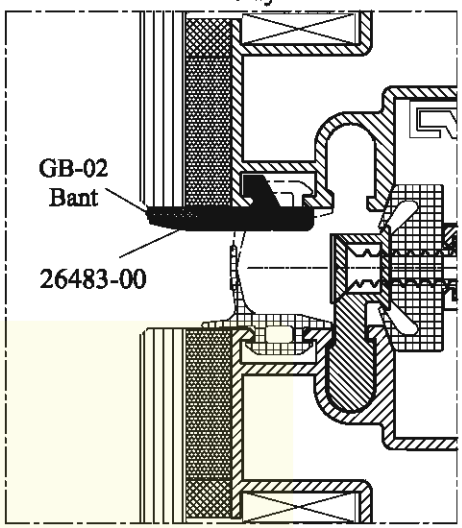


Sabit kasetler arasında GSF-8 derz fitili yerine GSF-15 derz fitili de kullanılabilir. (Bkz. sayfa 169)



SABİT VE AÇILIR KASET DÜŞEY KESİT

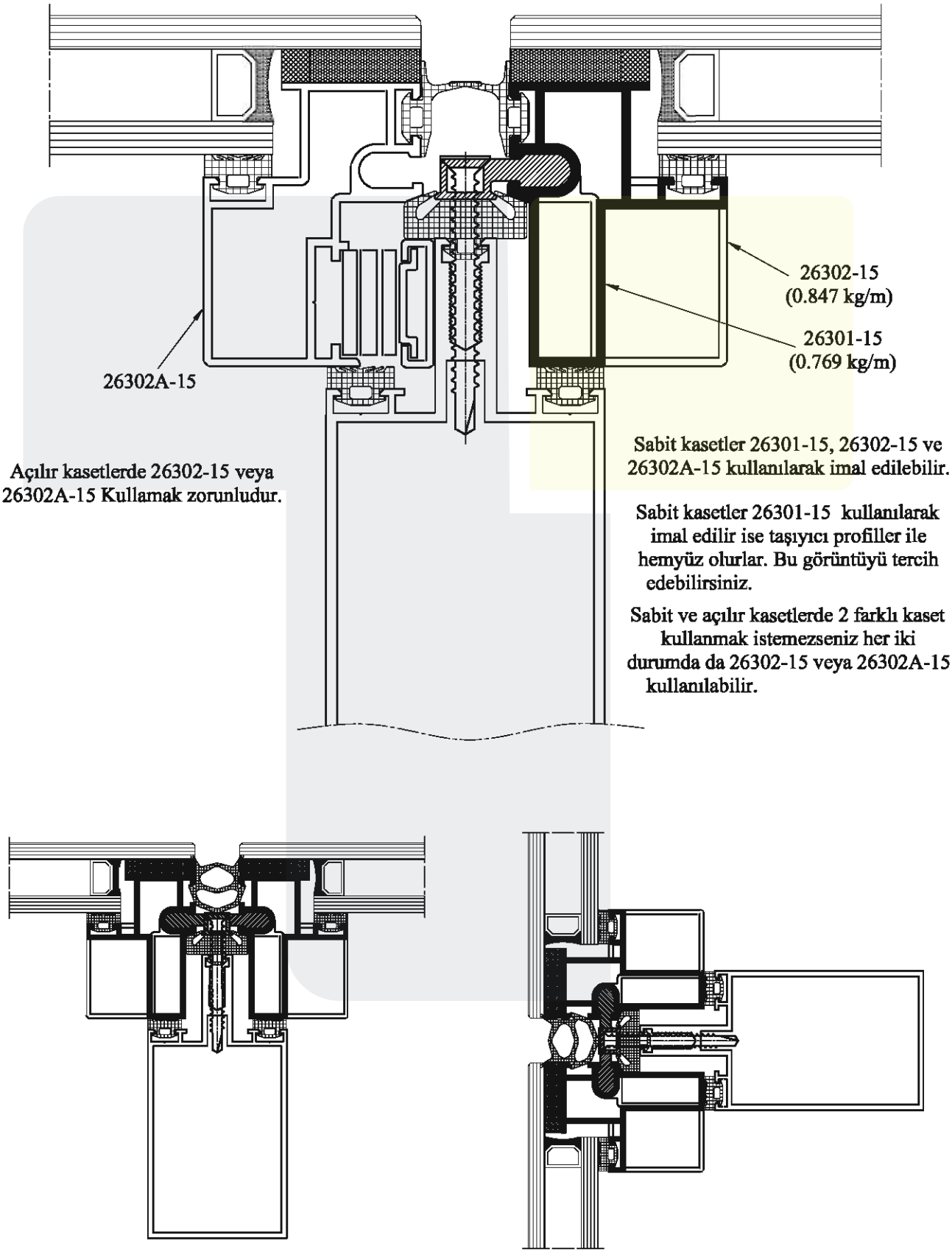
Silikon cephe sistemlerinde, silikon ile tutturulan camlar alt kenarlarından cam tutucu tırnaklar ile desteklenmelidir. Cam tutucu tırnağı (26483-00), max. 50cm aralarla 5cm parçalar halinde en az 2 adet kullanılmalıdır.



CAM TUTUCU TIRNAK DETAYI

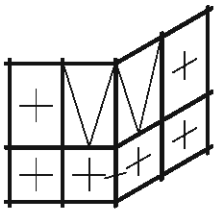
26302A-15
26483-00
GSF-8
GSF-8
GSF-32
26123-20
4.8 x 50
YHB Vida
GSF-22
GSF-32
A Detayı
26302-15
GSF-32

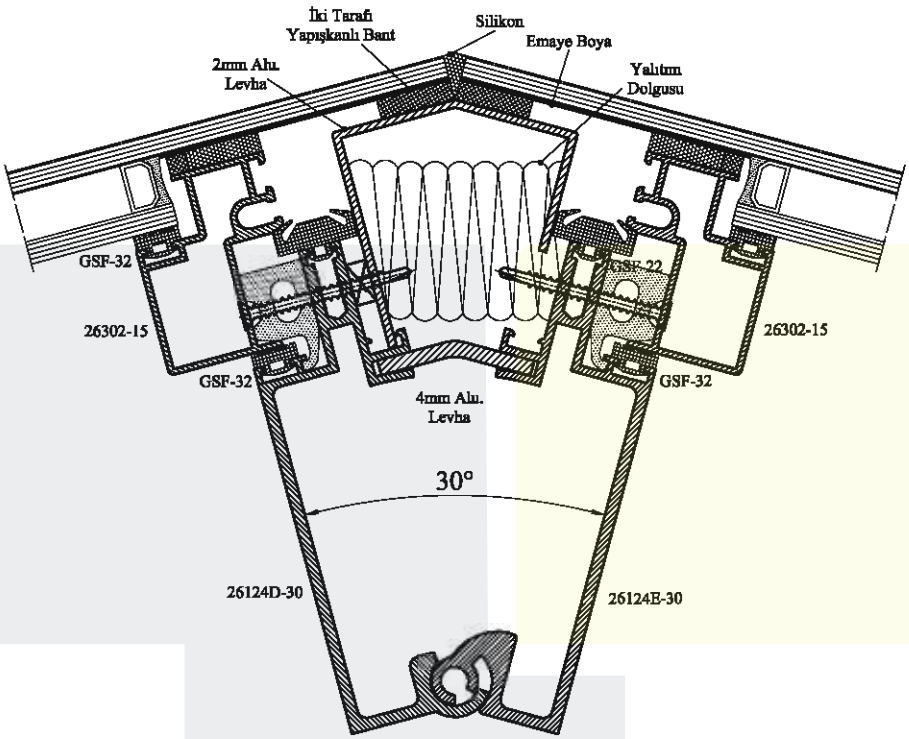
26301-15 Hemyüz Kaset Profili



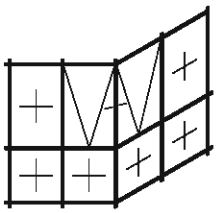
Ölçek 1/2

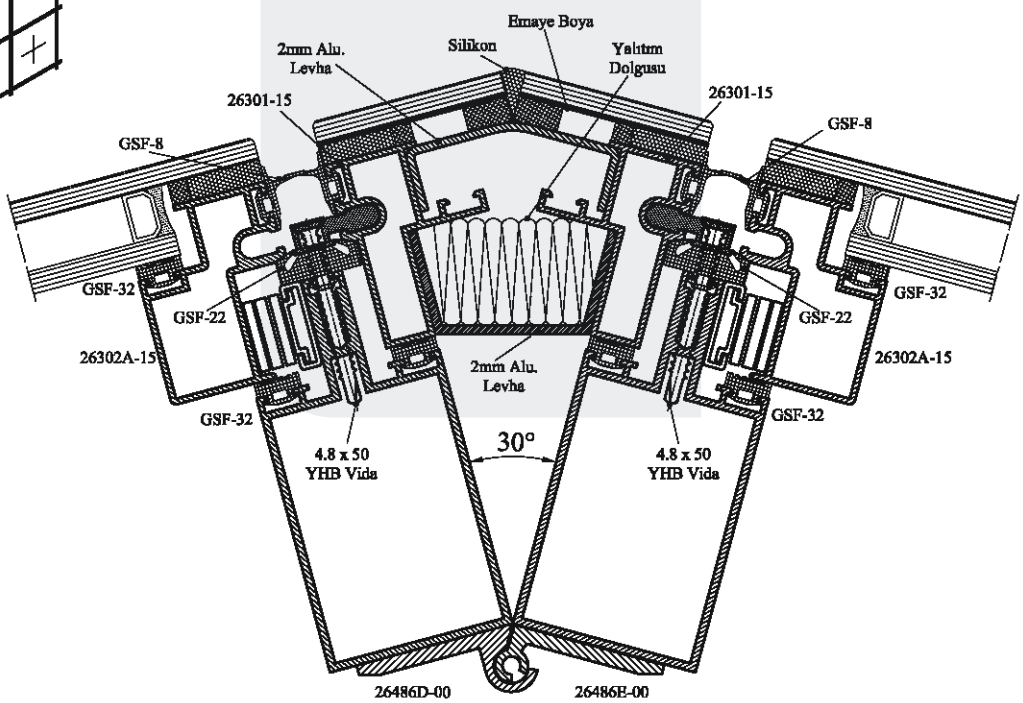
DÜŞEY TAŞIYICI PROFİLLERİN AÇILI BİRLEŞİM DETAYLARI



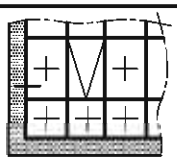


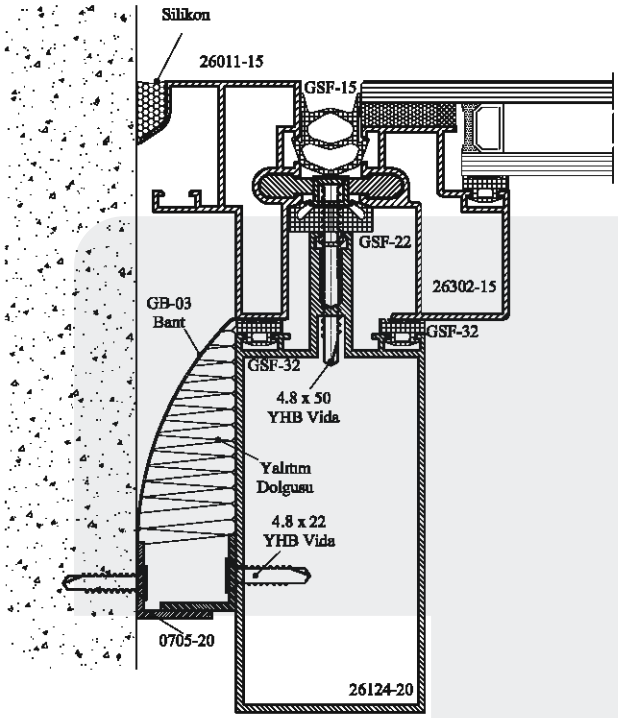
Ölçek 1/2



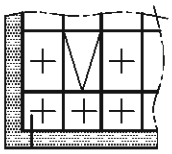


Ölçek 1/2

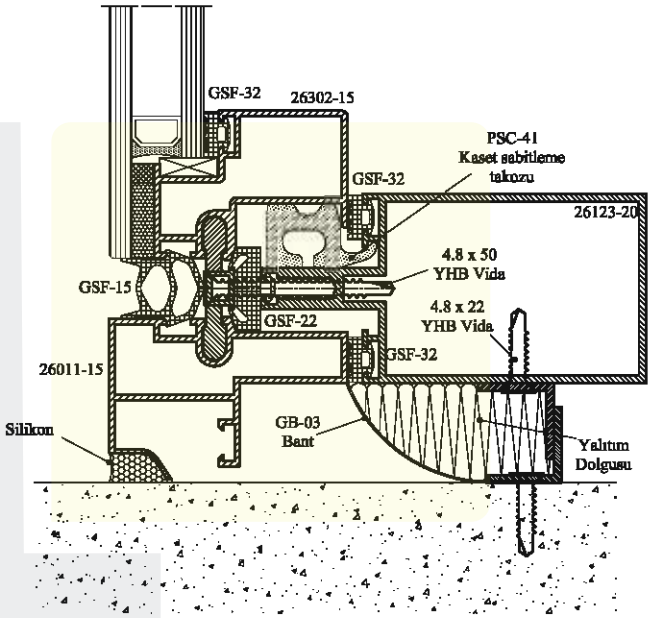




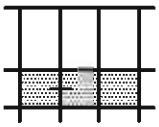
Ölçek 1/2



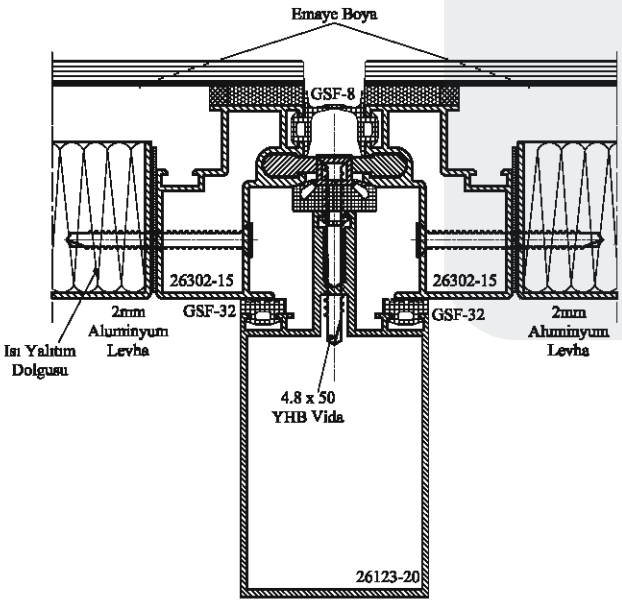
ZEMİNDE BİTİŞ DETAYI



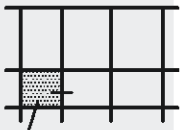
Ölçek 1/2



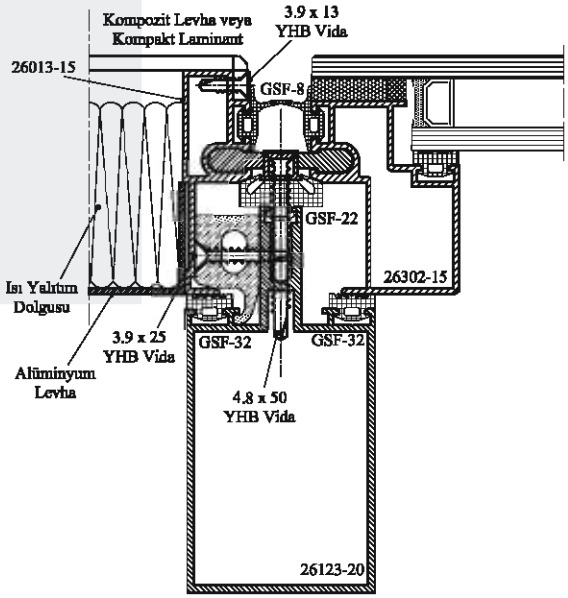
SPANDREL BÖLGE DETAYI
YATAY KESİT



Ölçek 1/2

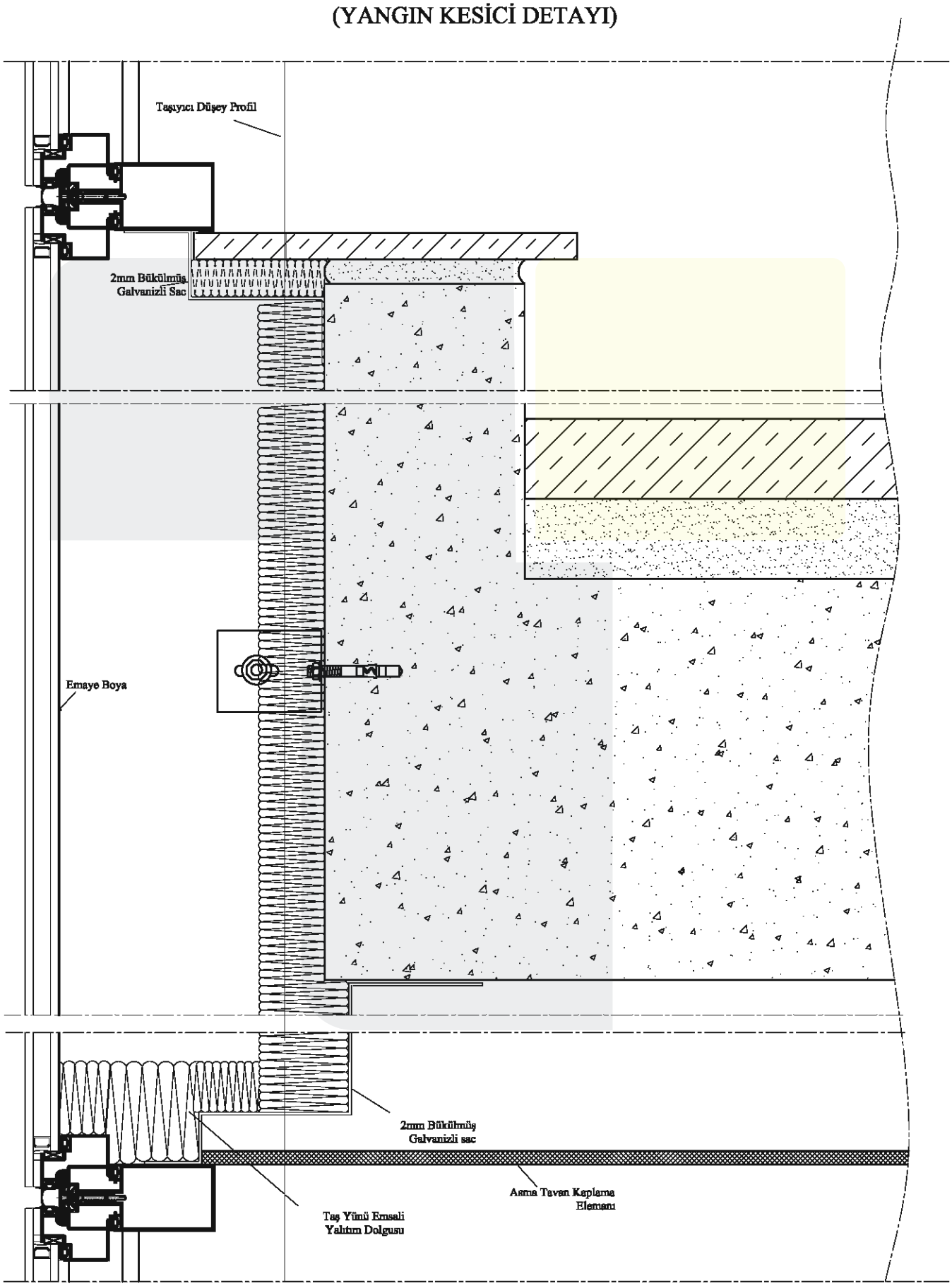


KOMPOZİT PANEL veya
KOMPAKT LAMİNANT DETAYI
YATAY KESİT



Ölçek 1/2

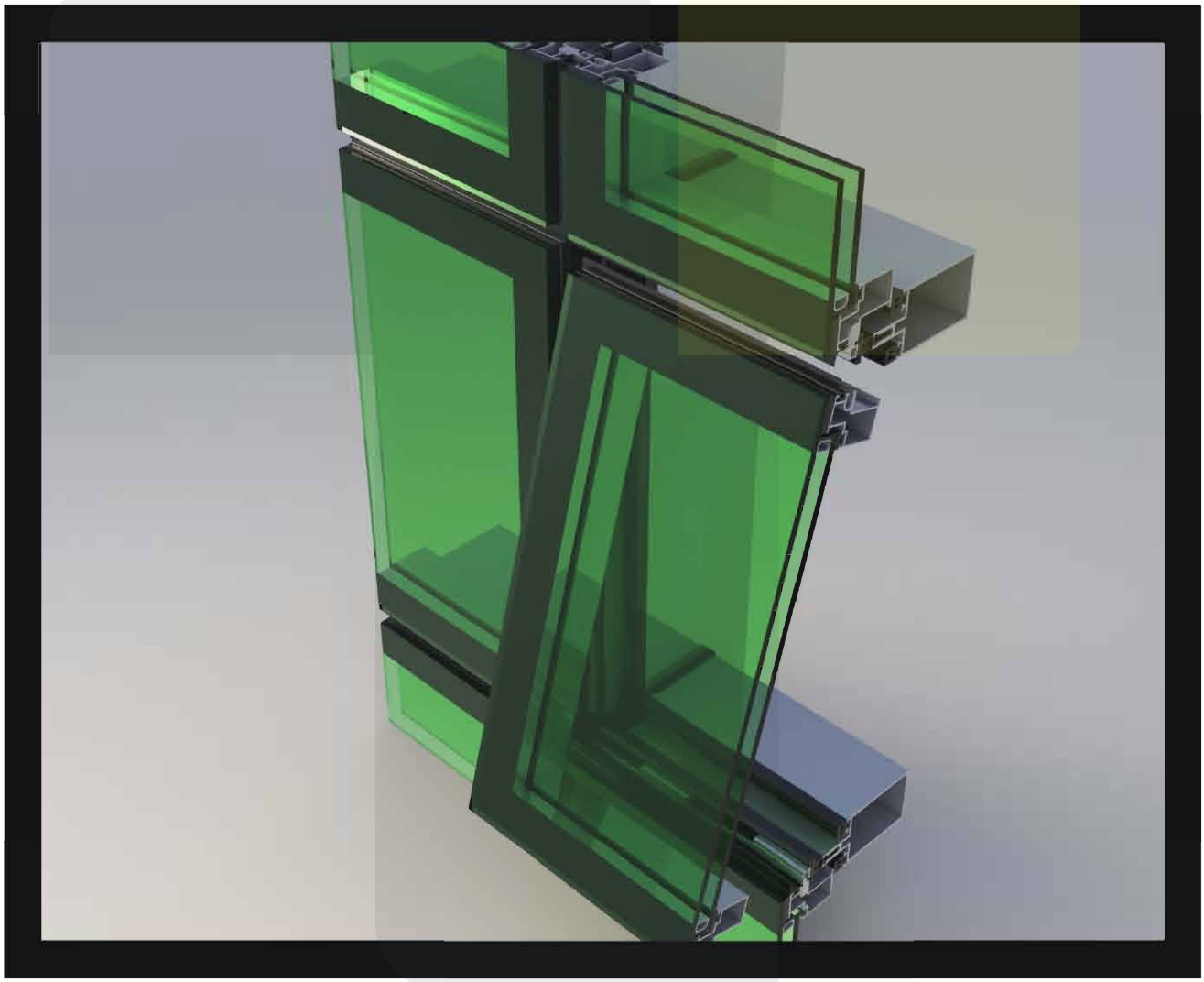
SİLİKON CEPHE DÖŞEME SEVİYESİNDE DETAY DÜŞEY KESİT (YANGIN KESİCİ DETAYI)

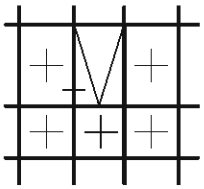


Ölçek 1/4

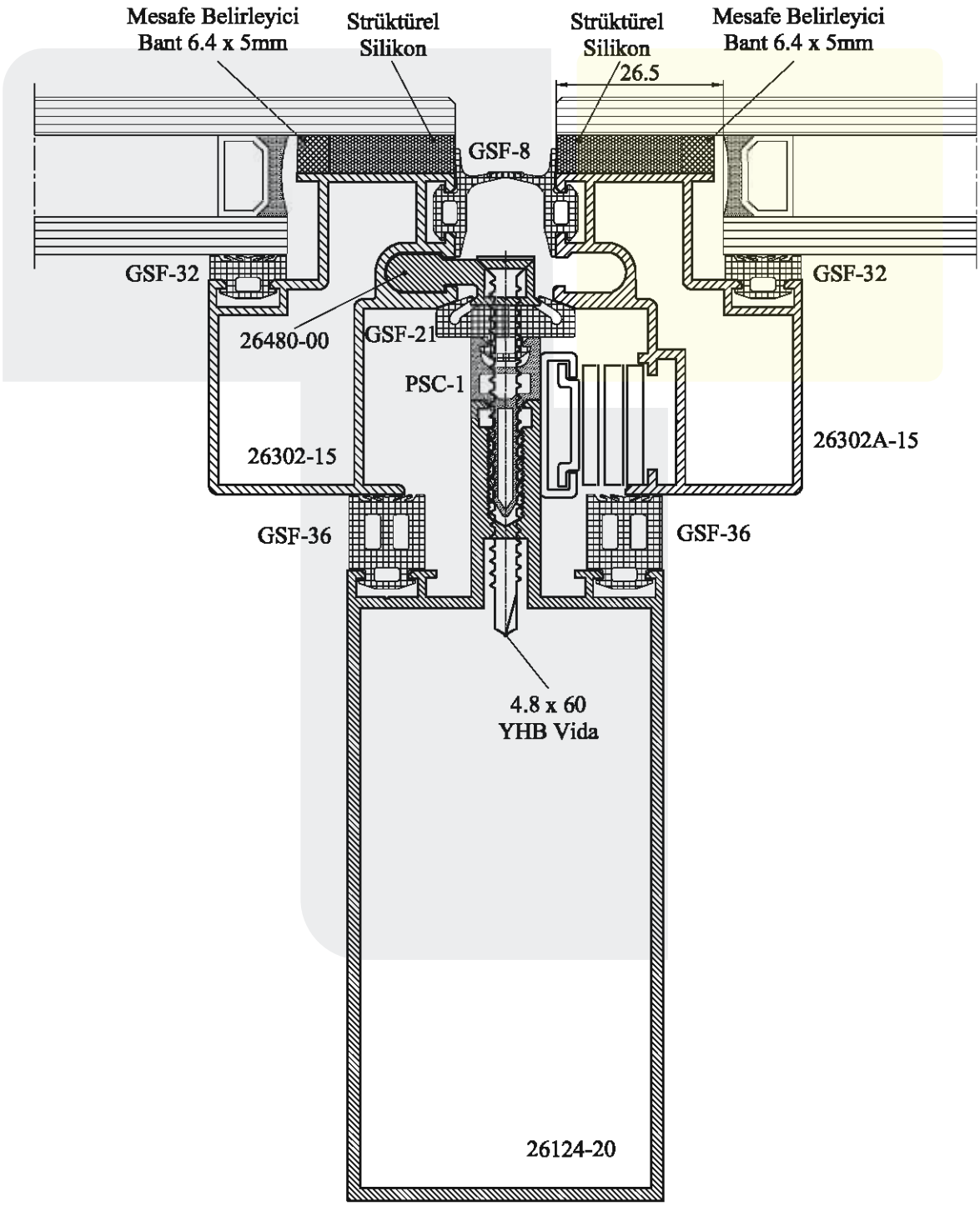
SİLİKON CEPHE

F50S/I+

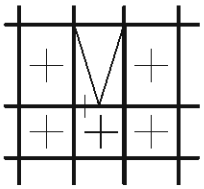




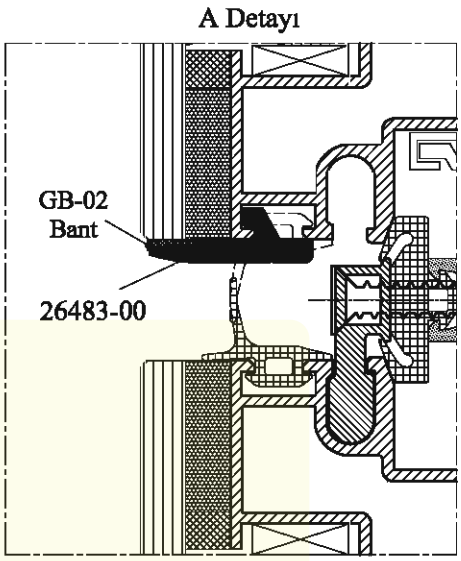
SABİT VE AÇILIR KASET YATAY KESİT



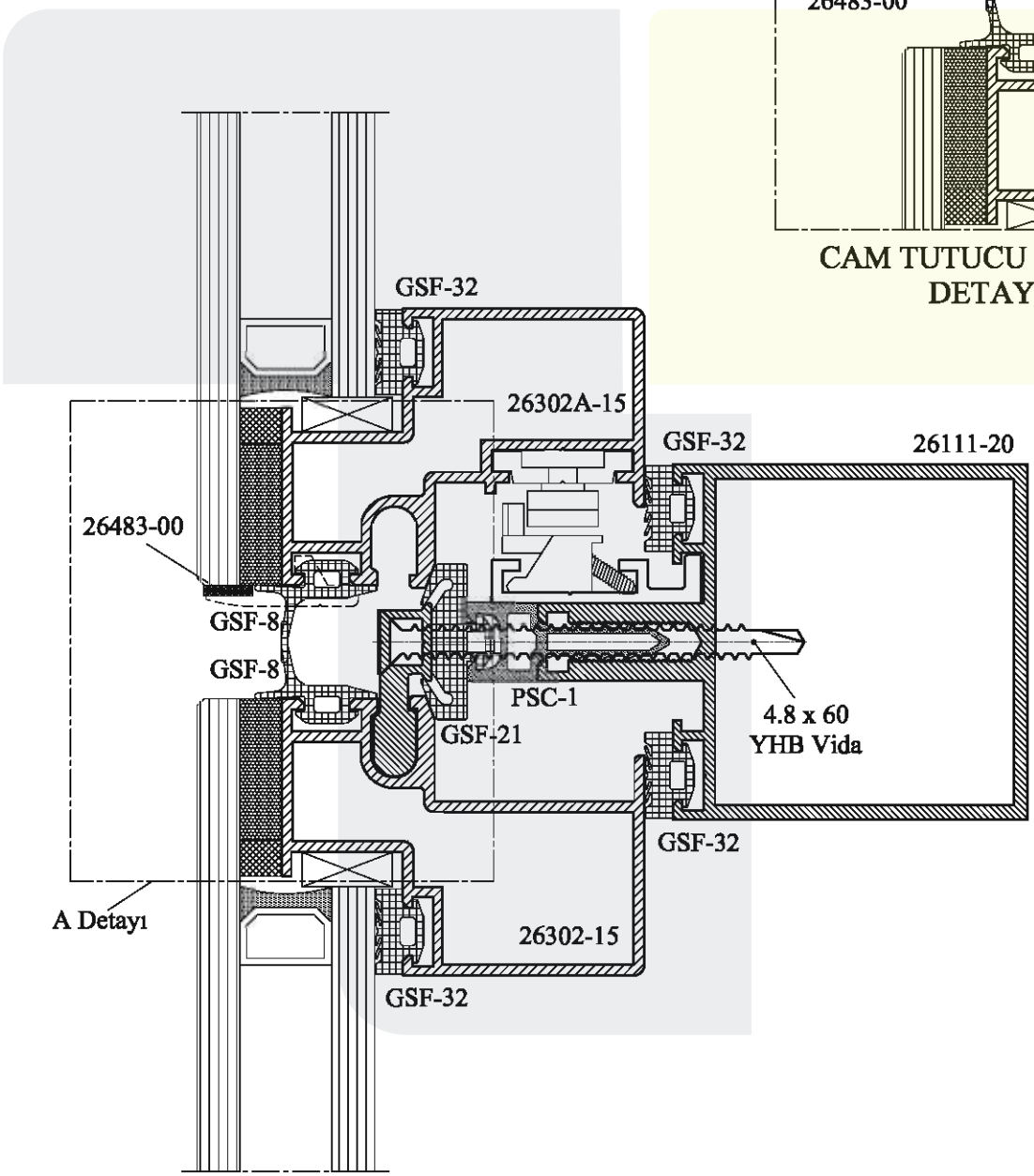
Sabit kasetler arasında GSF-8 derz fitili yerine GSF-15 derz fitili de kullanılabilir. (Bkz. sayfa 169)



SABİT VE AÇILIR KASET DÜŞEY KESİT

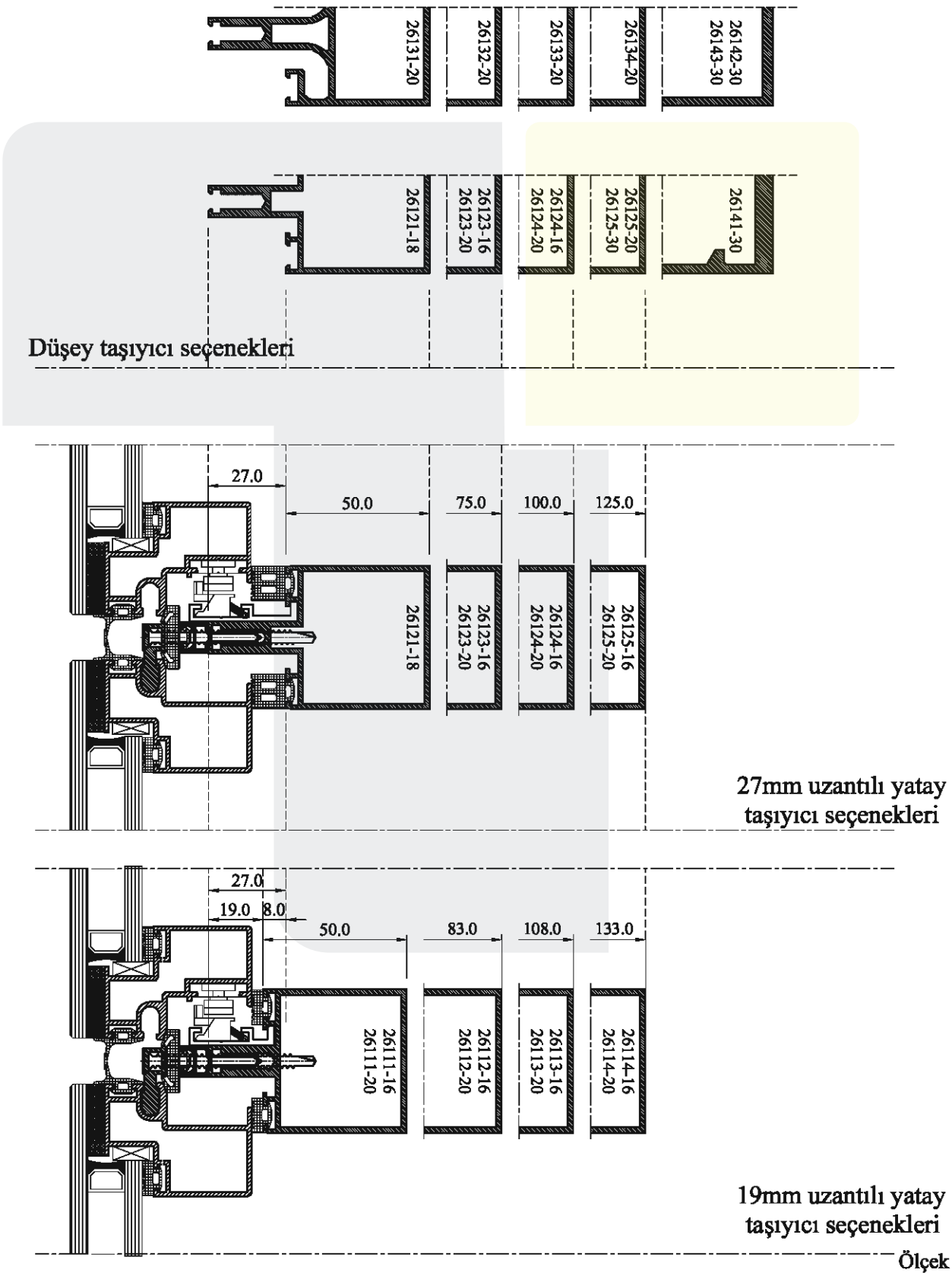


CAM TUTUCU TIRNAK DETAYI



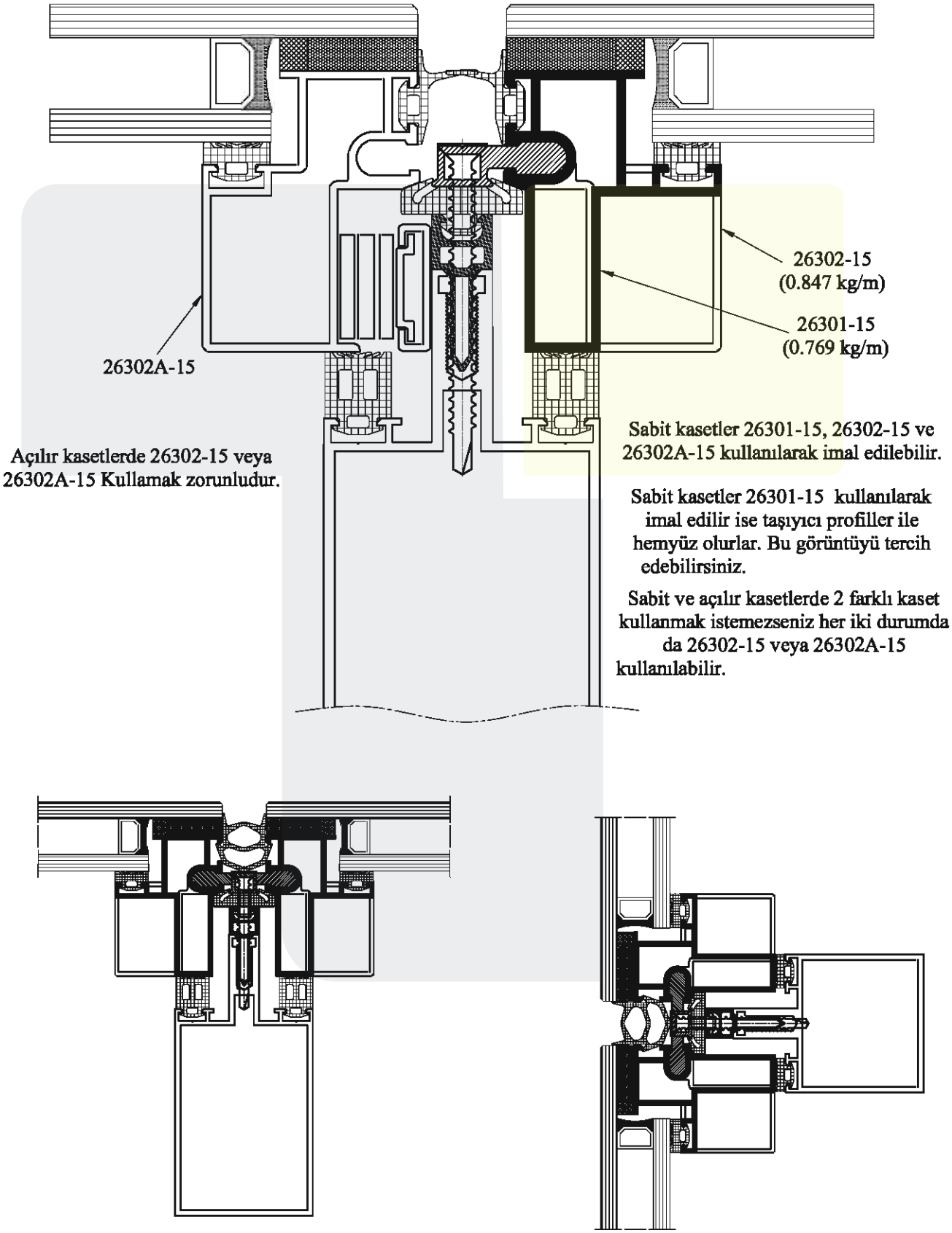
F50S/I+ sisteminde yukarıdaki gibi 19mm uzantılı yatay taşıyıcılar (GSF-32 fitilleri ile) kullanılabildiği gibi, 27mm uzantılı taşıyıcılar da (GSF-36 fitilleri ilc) kullanılabilir. (Bu opsiyon F50S/I+, F50S/HI+, F50K/HI+, F50YK/HI+ sistemlerinde de vardır. Bununla ilgili bakınız; sayfa 10).
Sonraki sayfada F50S/I+ sisteminde kullanılabilecek yatay kayıtlar verilmiştir.

YATAY ve DÜŞEY TAŞIYICI SEÇENEKLERİ



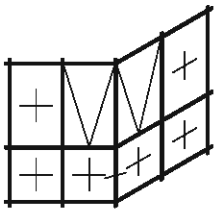
Ölçek 1/2

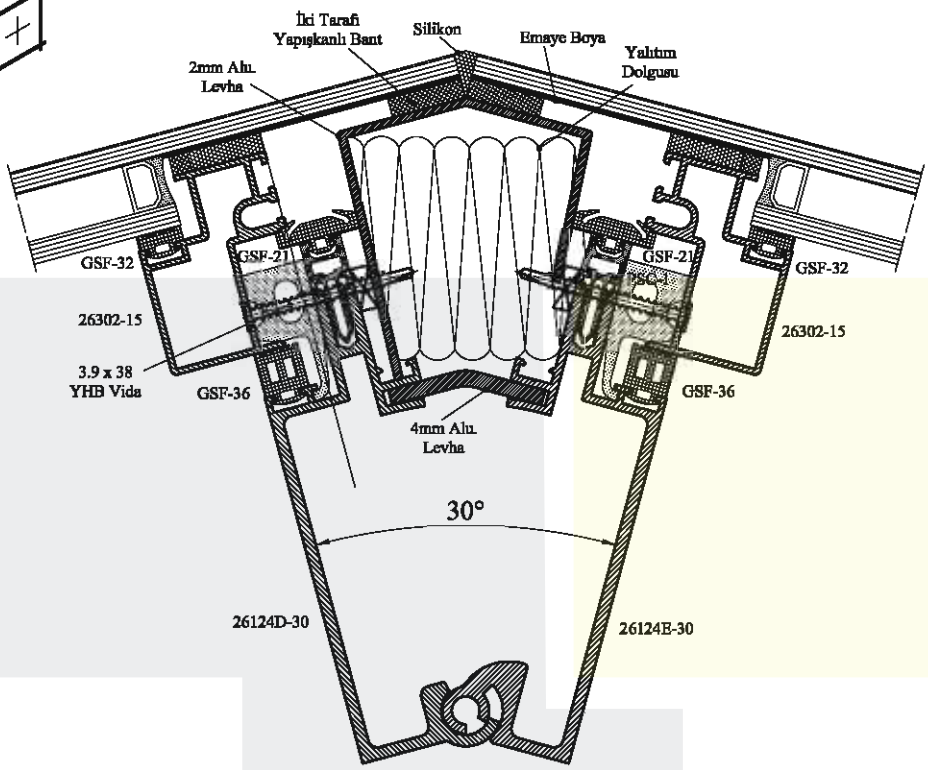
26301-15 Hemyüz Kaset Profili



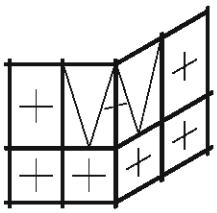
Ölçek 1/2

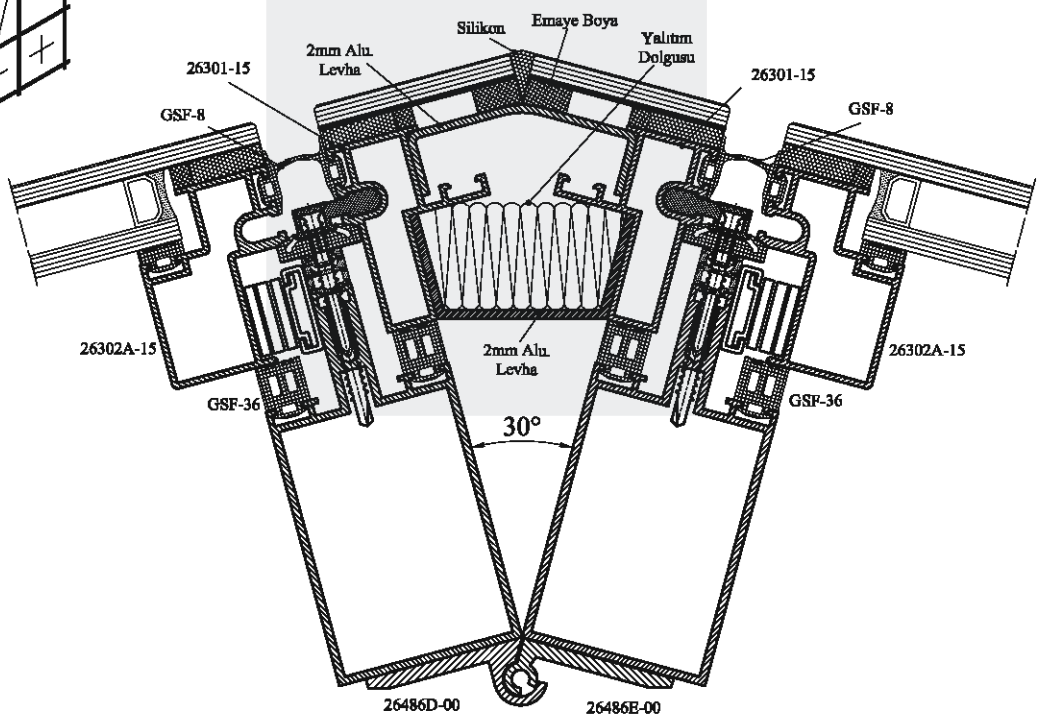
DÜŞEY TAŞIYICI PROFİLLERİN AÇILI BİRLEŞİM DETAYLARI



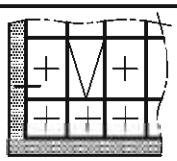


Ölçek 1/2

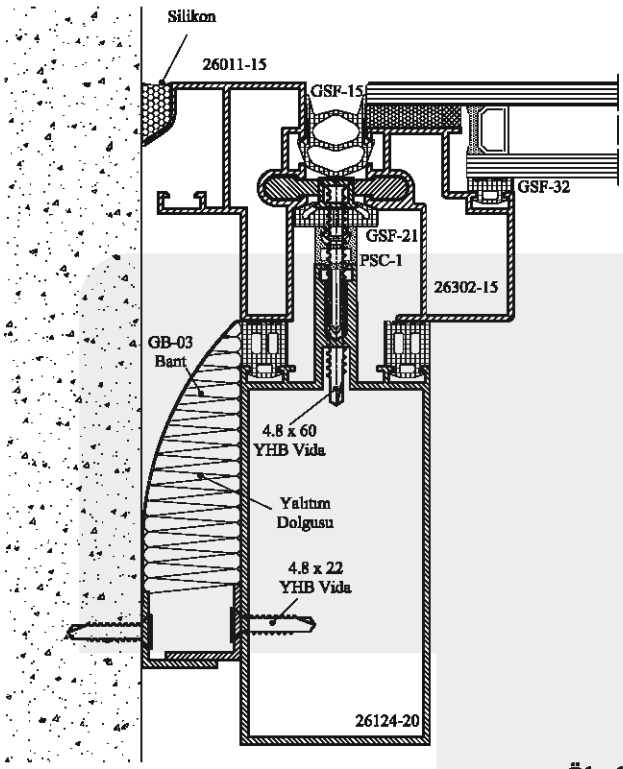




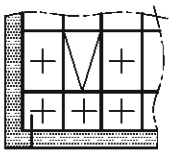
Ölçek 1/2



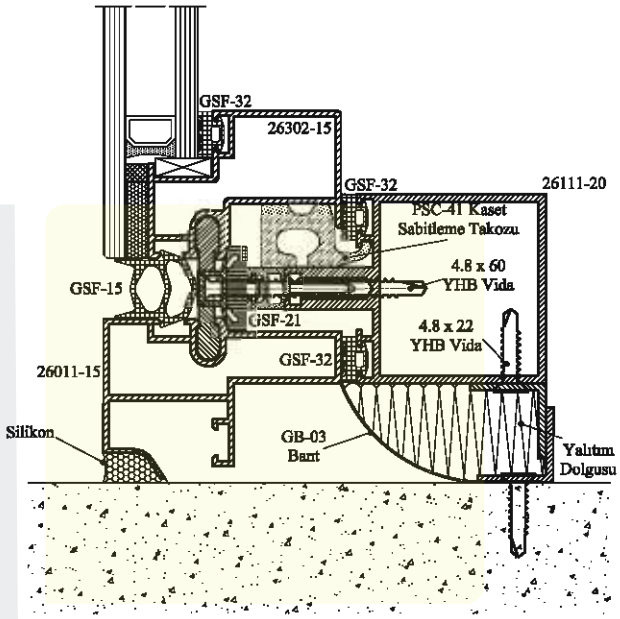
YANDAN DUVAR BİTİŞ DETAYI



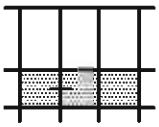
Ölçek 1/2



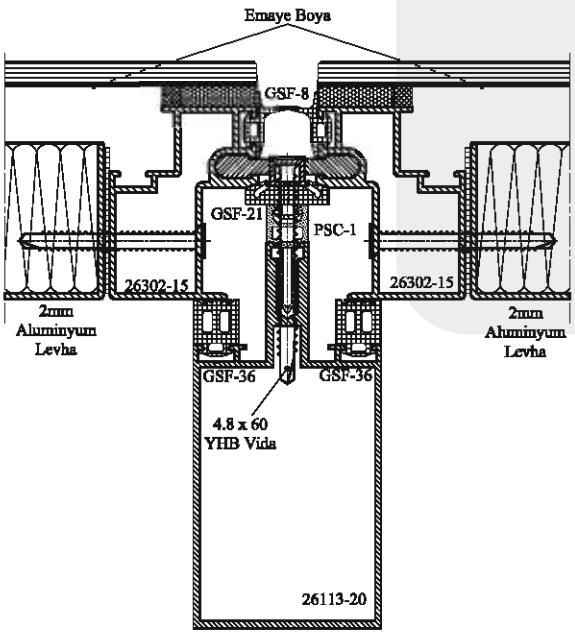
ZEMİNDE BİTİŞ DETAYI



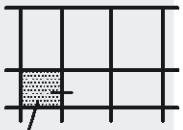
Ölçek 1/2



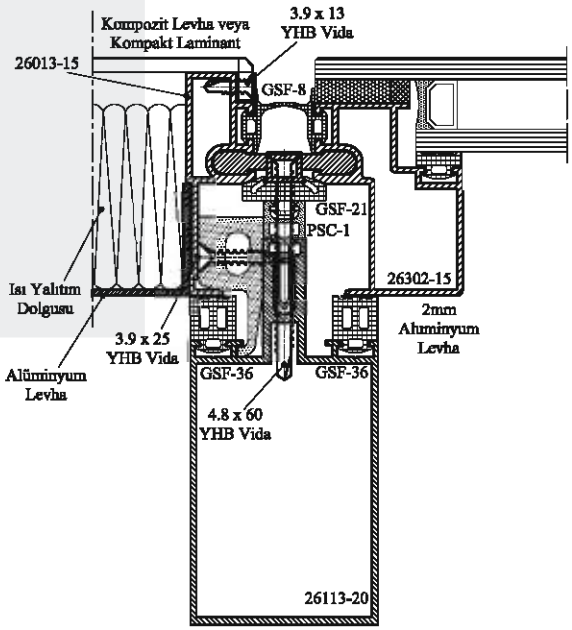
SPANDREL BÖLGE DETAYI
YATAY KESİT



Ölçek 1/2

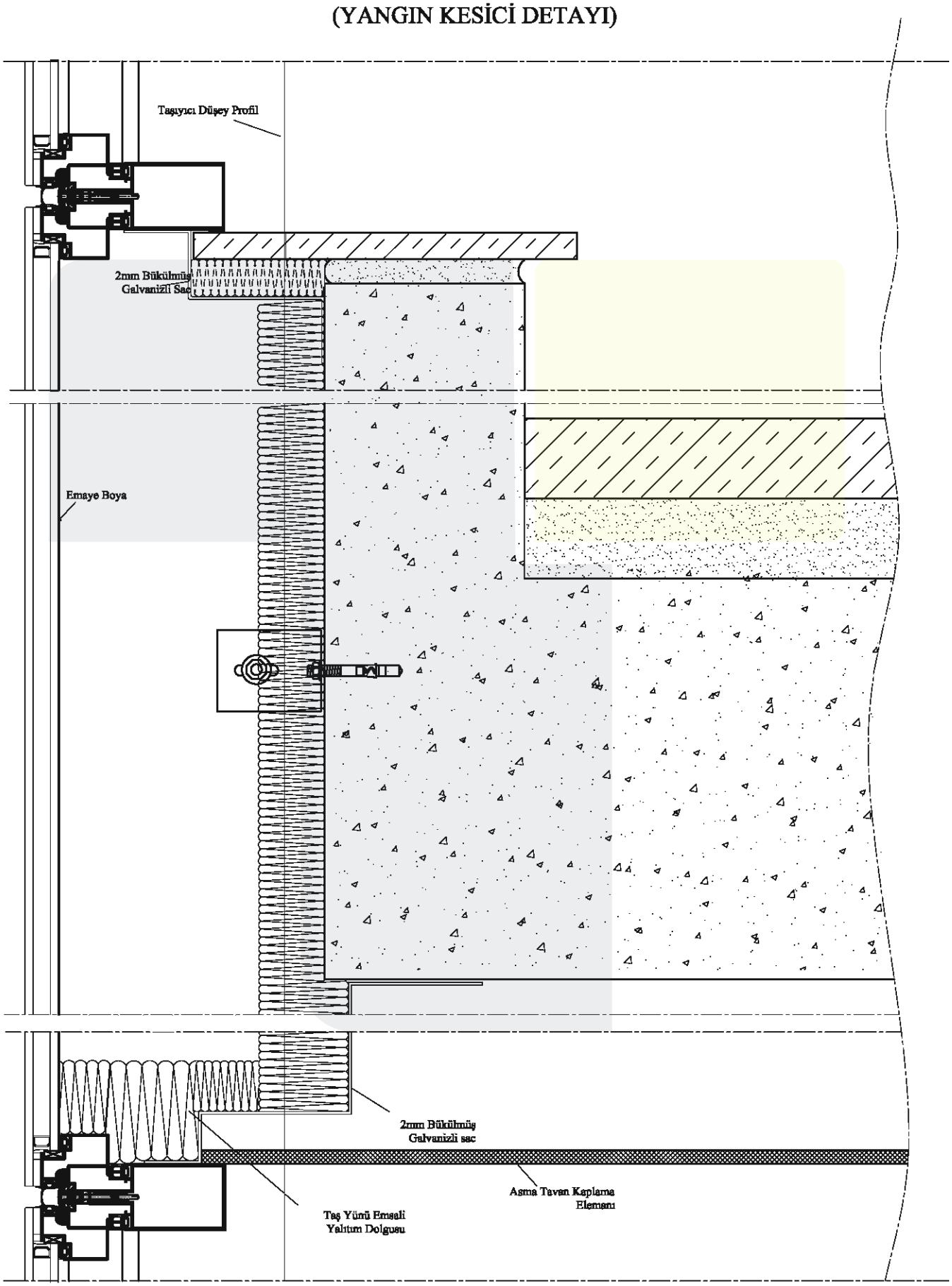


KOMPOZİT PANEL veya
KOMPAKT LAMİNANT DETAYI
YATAY KESİT



Ölçek 1/2

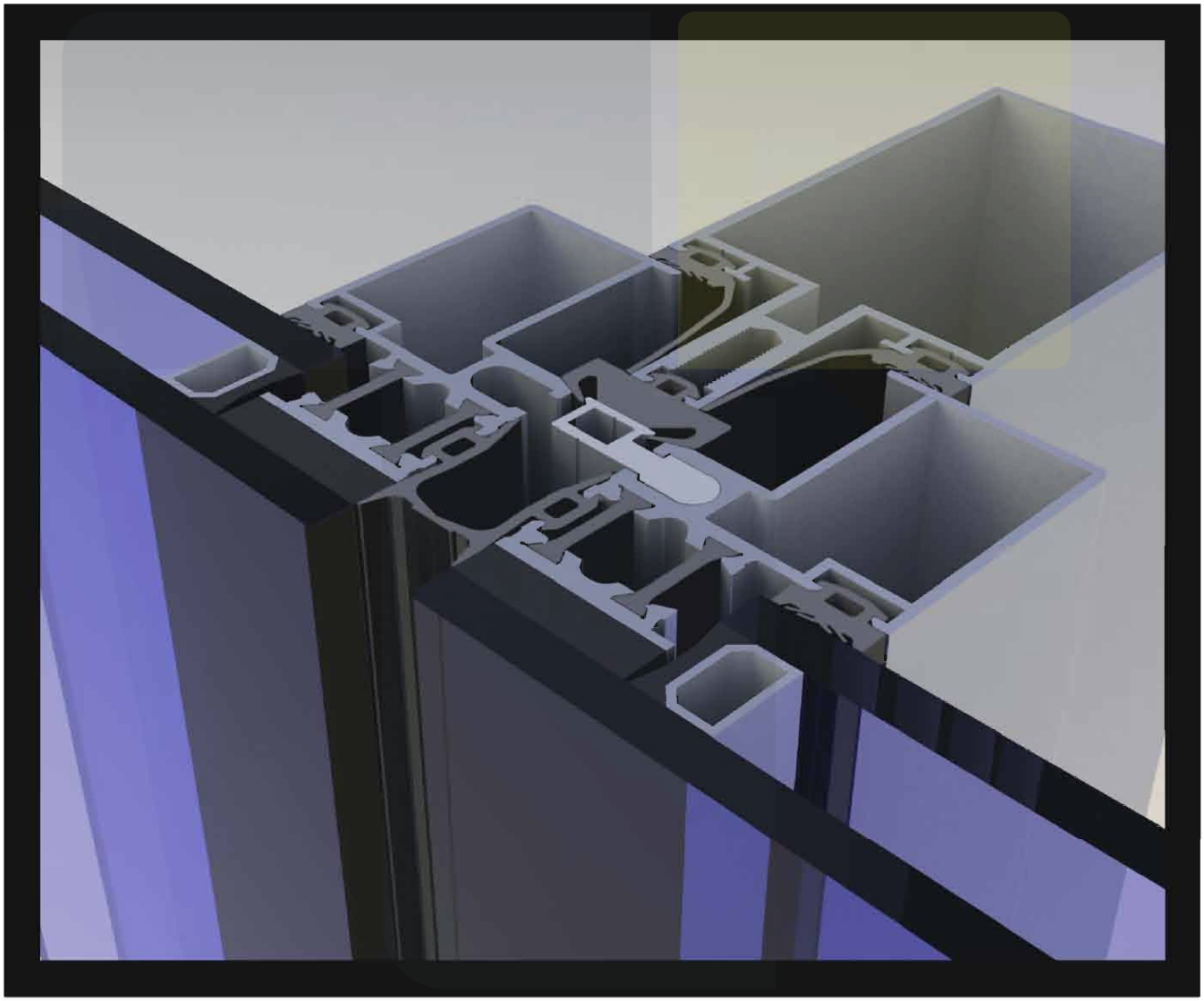
SİLİKON CEPHE DÖŞEME SEVİYESİNDE DETAY DÜŞEY KESİT (YANGIN KESİCİ DETAYI)



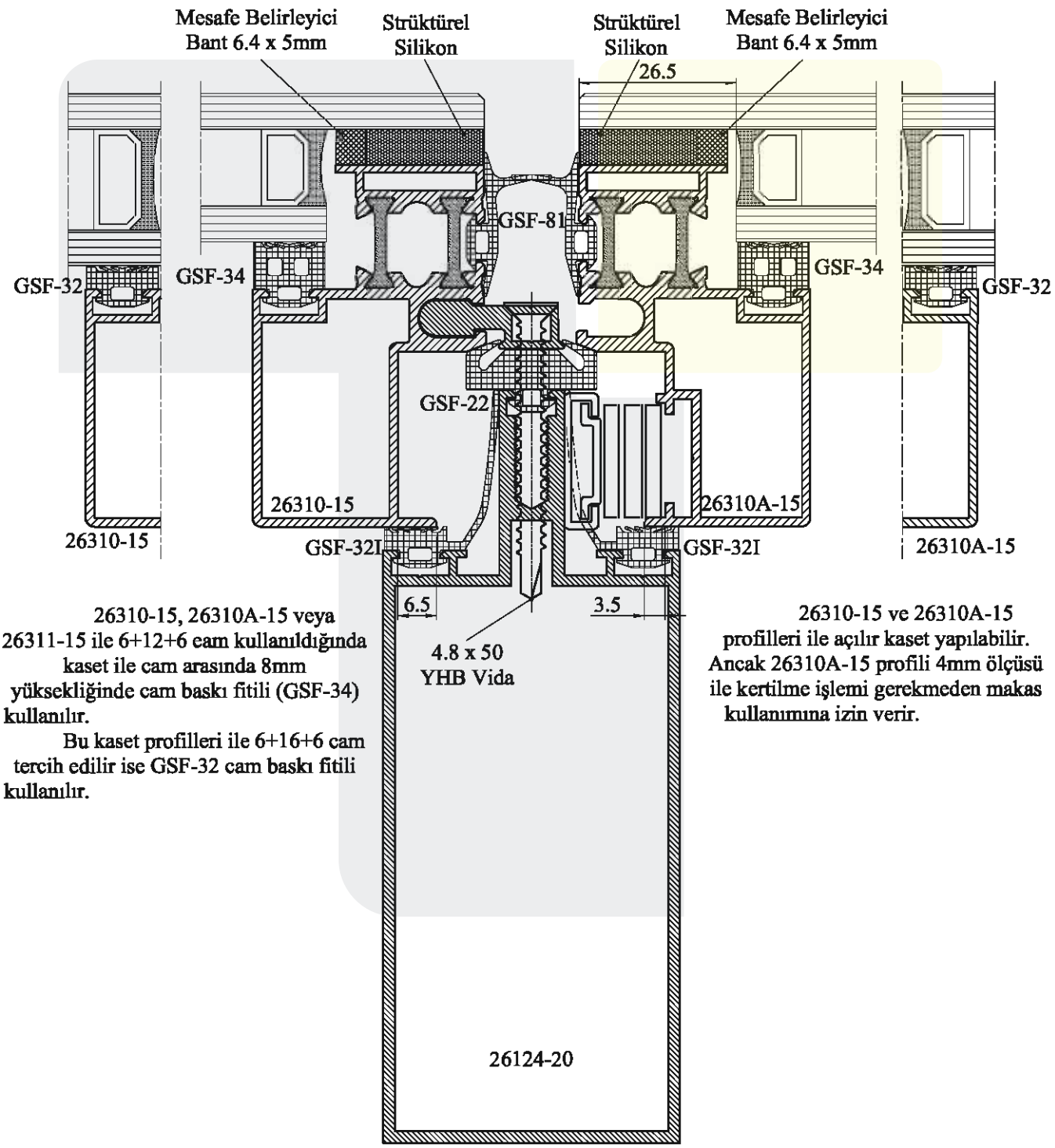
Ölçek 1/4

SİLİKON CEPHE

F50S/HI



SABİT VE AÇILIR KASET YATAY KESİT



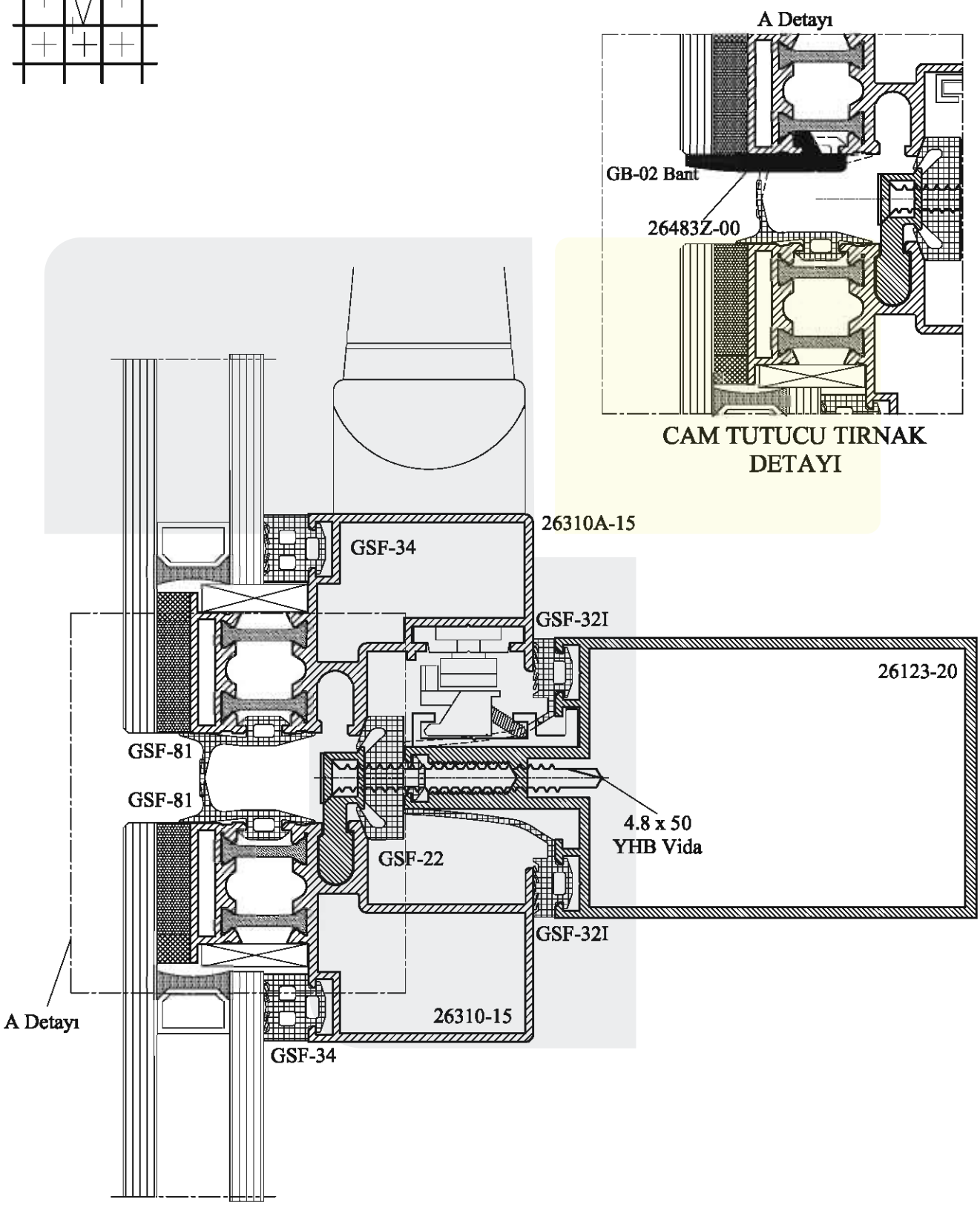
26310-15, 26310A-15 veya 26311-15 ile 6+12+6 cam kullanıldığında kaset ile cam arasında 8mm yüksekliğinde cam baskı fitili (GSF-34) kullanılır.

Bu kaset profilleri ile 6+16+6 cam tercih edilir ise GSF-32 cam baskı fitili kullanılır.

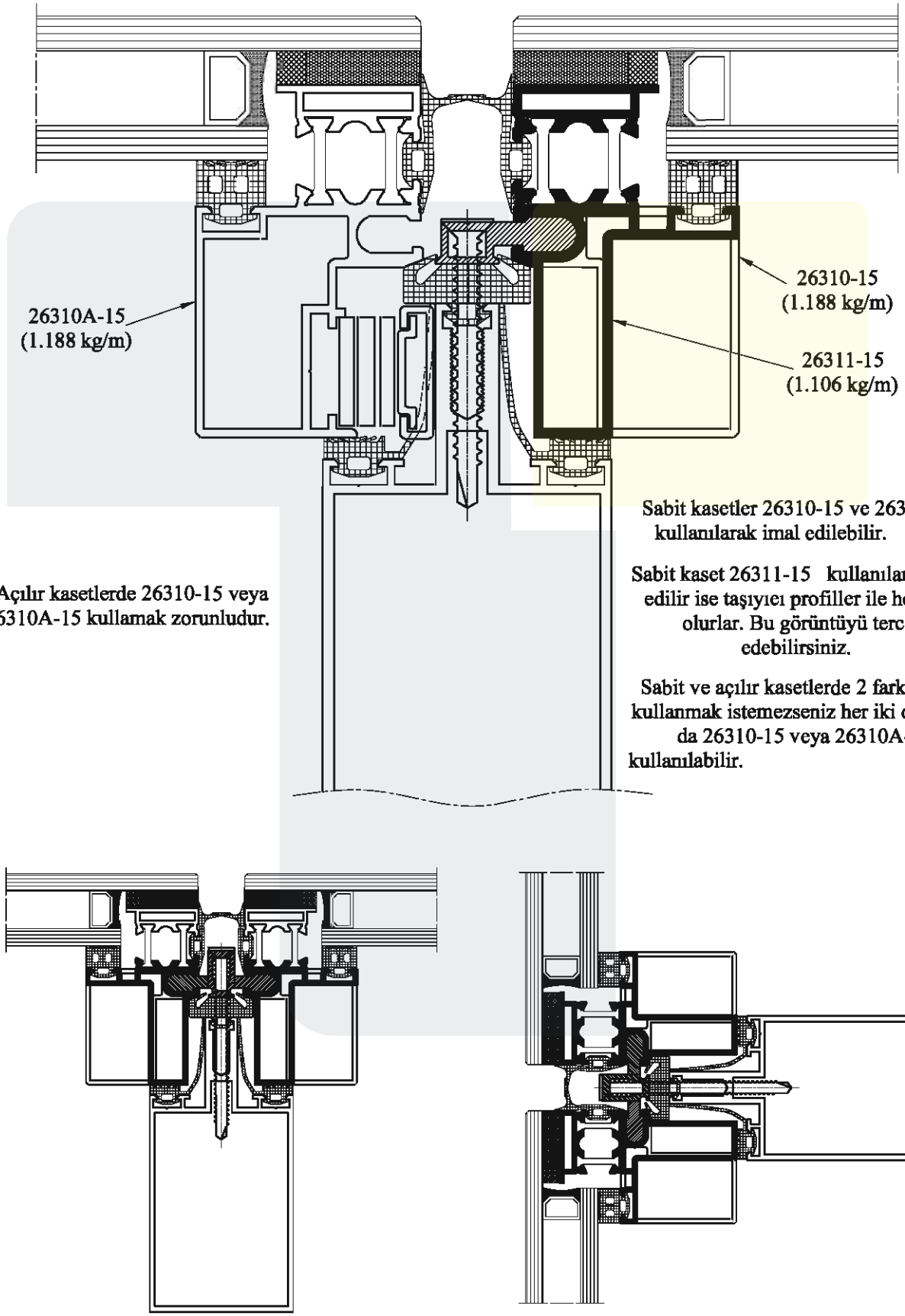
26310-15 ve 26310A-15 profilleri ile açılır kaset yapılabilir. Ancak 26310A-15 profili 4mm ölçüsü ile kertilme işlemi gerekmeden makas kullanımına izin verir.

Sabit kasetler arasında GSF-8 derz fitili yerine GSF-15 derz fitili de kullanılabilir. (Bkz. sayfa 169)

SABİT VE AÇILIR KASET DÜŞEY KESİT



26311-15 Hemyüz Kaset Profili



Sabit kasetler 26310-15 ve 26311-15, kullanılarak imal edilebilir.

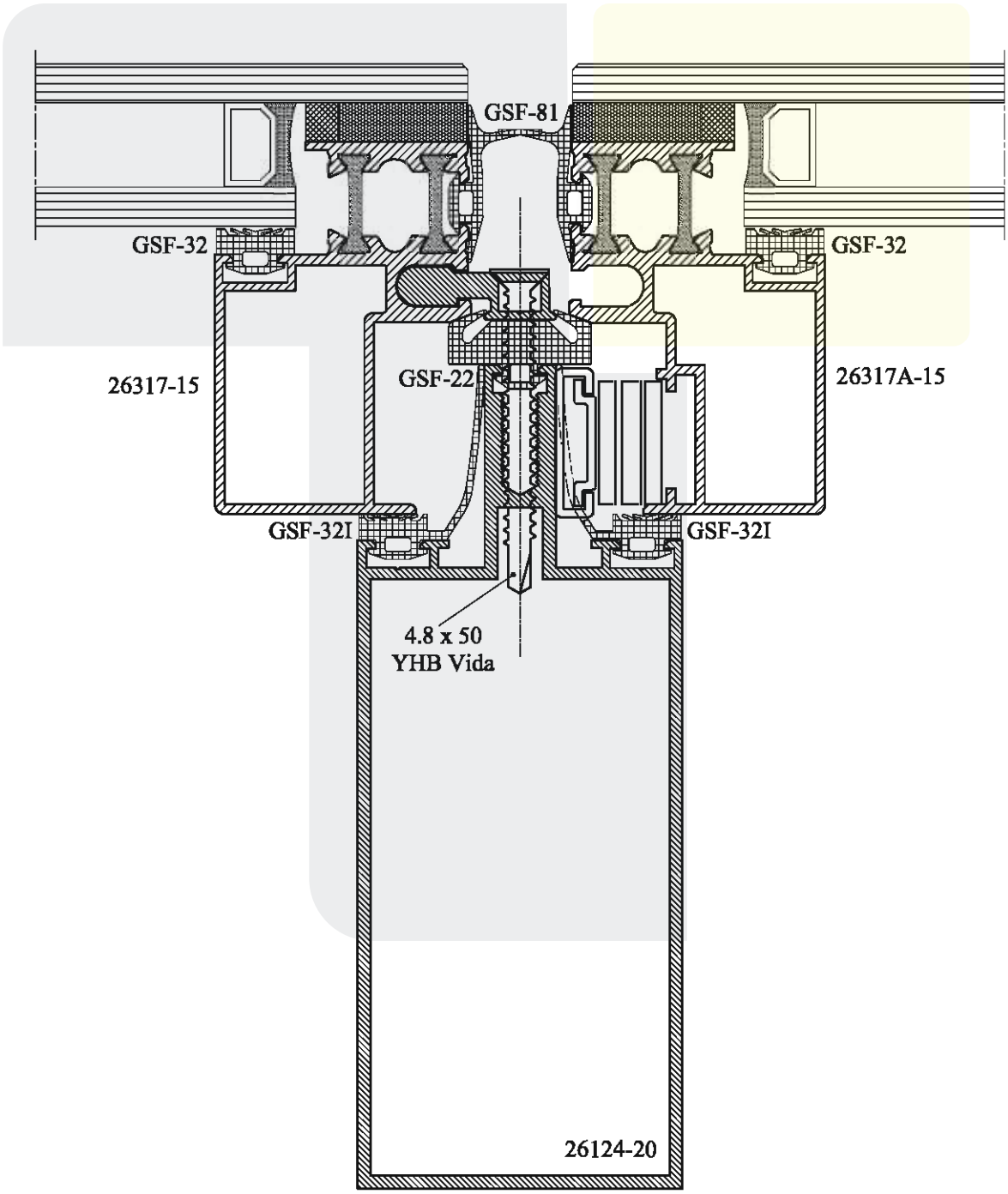
Sabit kaset 26311-15 kullanılarak imal edilir ise taşıyıcı profiller ile hemyüz olurlar. Bu görüntüyü tercih edebilirsiniz.

Sabit ve açılır kasetlerde 2 farklı kaset kullanmak istemezseniz her iki durumda da 26310-15 veya 26310A-15 kullanılabilir.

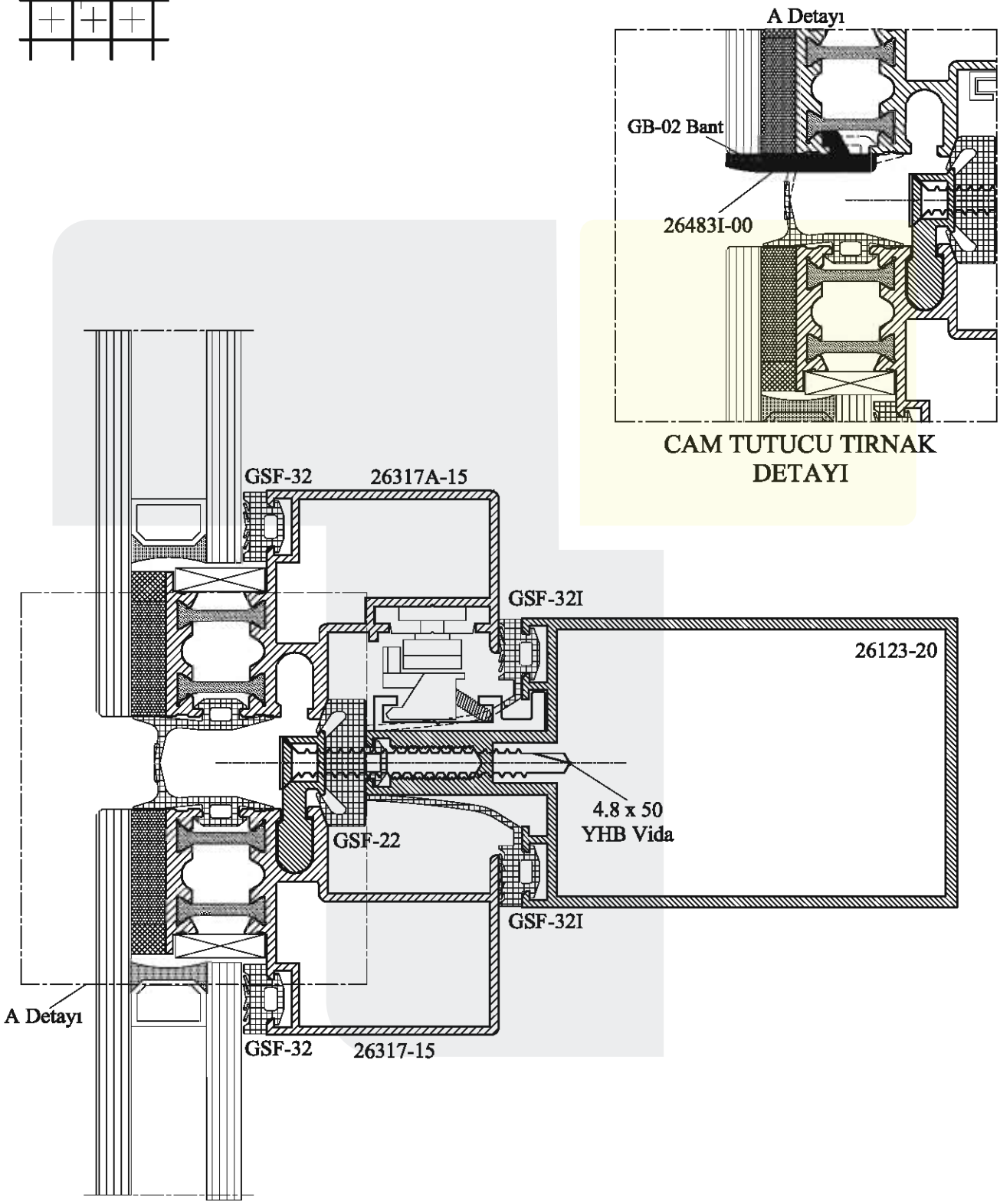
Açılır kasetlerde 26310-15 veya 26310A-15 kullamak zorunludur.

Ölçek 1/2

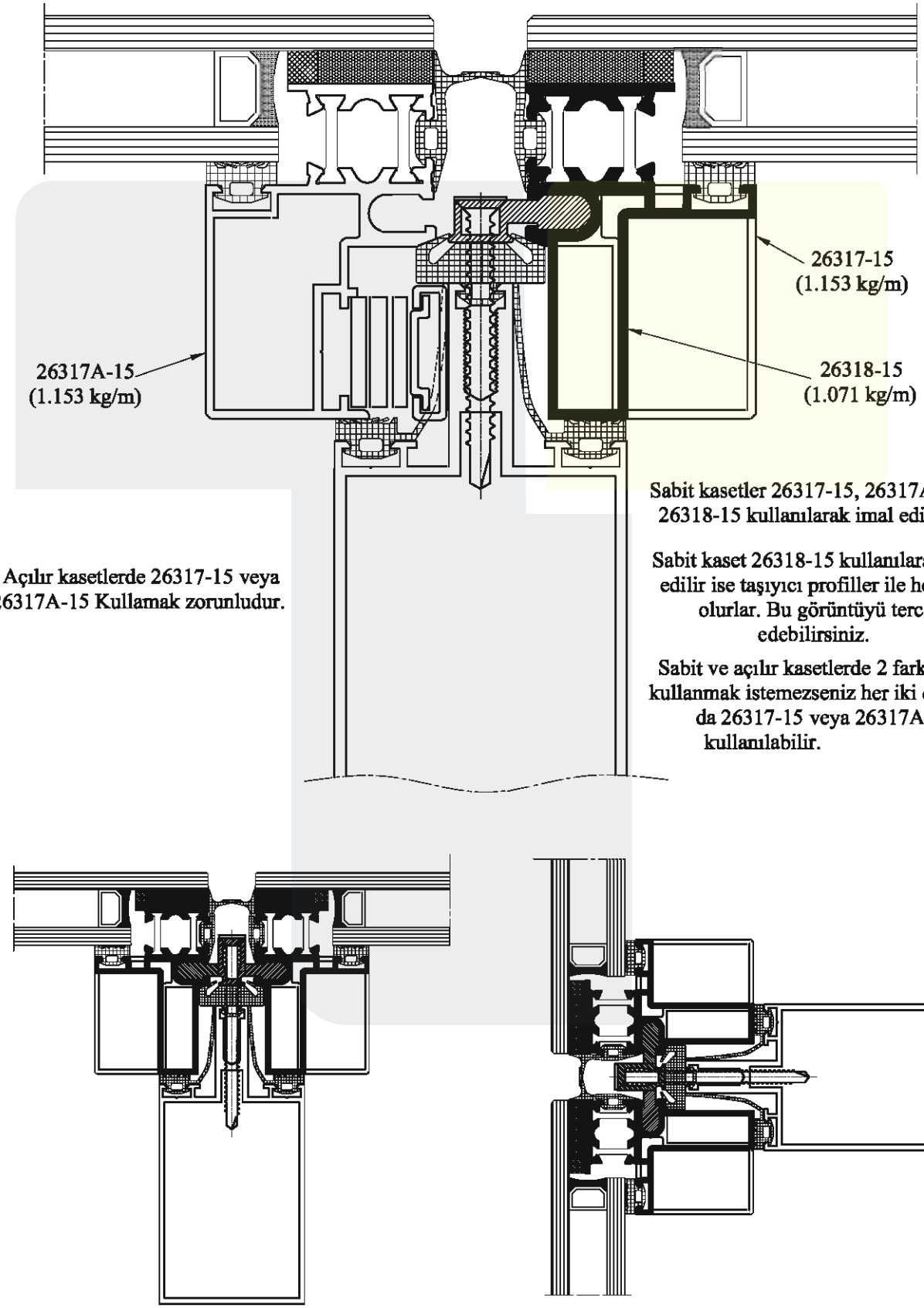
SABİT VE AÇILIR KASET YATAY KESİT



SABİT VE AÇILIR KASET DÜŞEY KESİT



26318-15 Hemyüz Kaset Profili



Sabit kasetler 26317-15, 26317A-15 ve 26318-15 kullanılarak imal edilebilir.

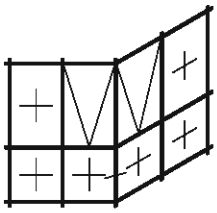
Sabit kaset 26318-15 kullanılarak imal edilir ise taşıyıcı profiller ile hemyüz olurlar. Bu görüntüyü tercih edebilirsiniz.

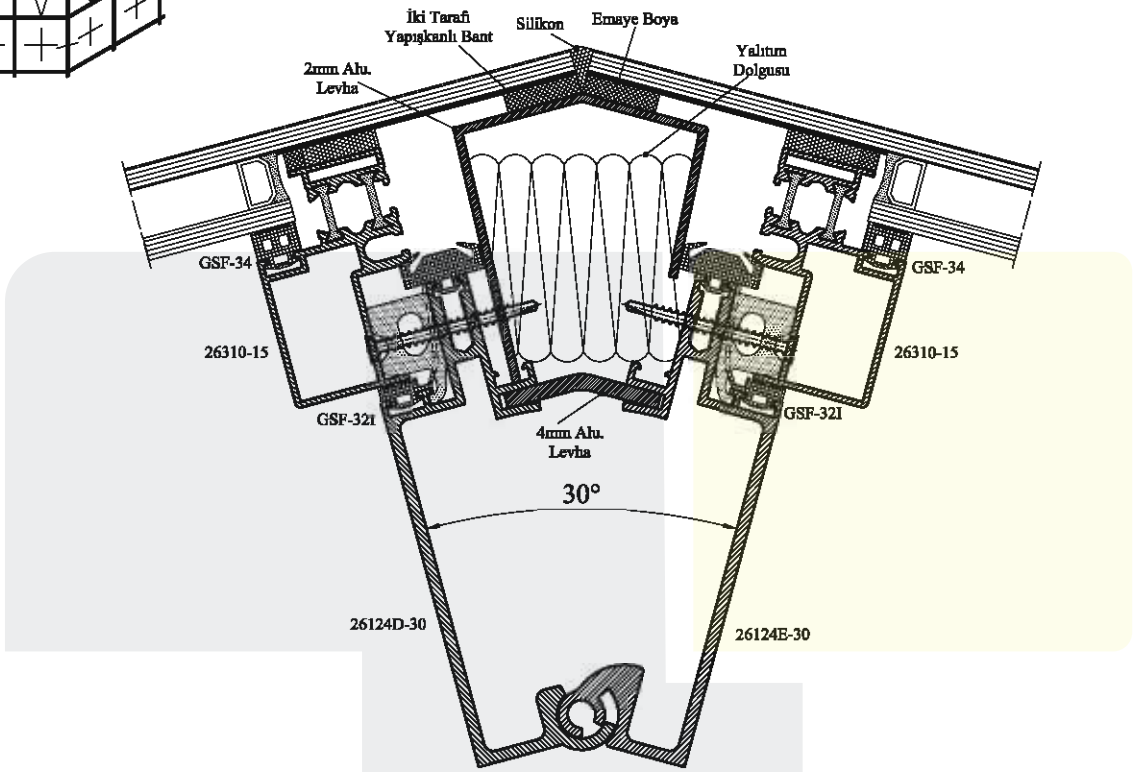
Sabit ve açılır kasetlerde 2 farklı kaset kullanmak istemezseniz her iki durumda da 26317-15 veya 26317A-15 kullanılabilir.

Açılır kasetlerde 26317-15 veya 26317A-15 Kullamak zorunludur.

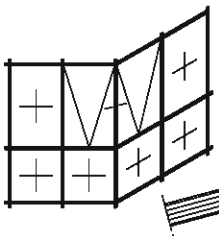
Ölçek 1/2

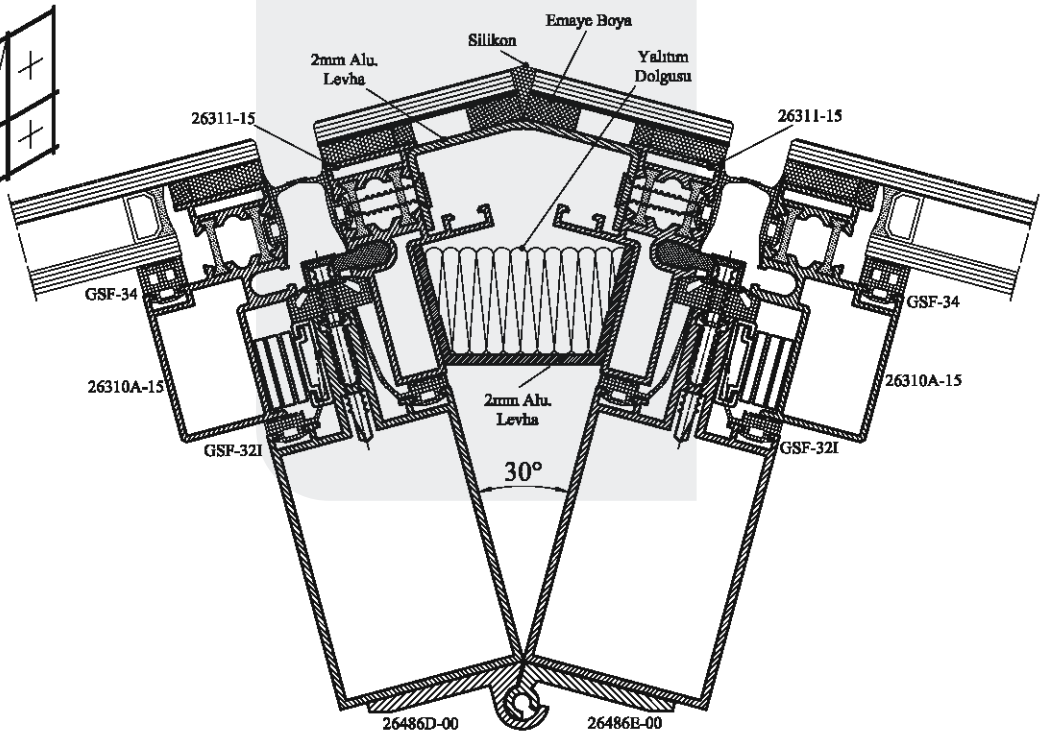
DÜŞEY TAŞIYICI PROFİLLERİN AÇILI BİRLEŞİM DETAYLARI



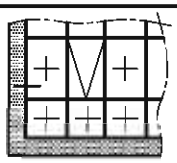


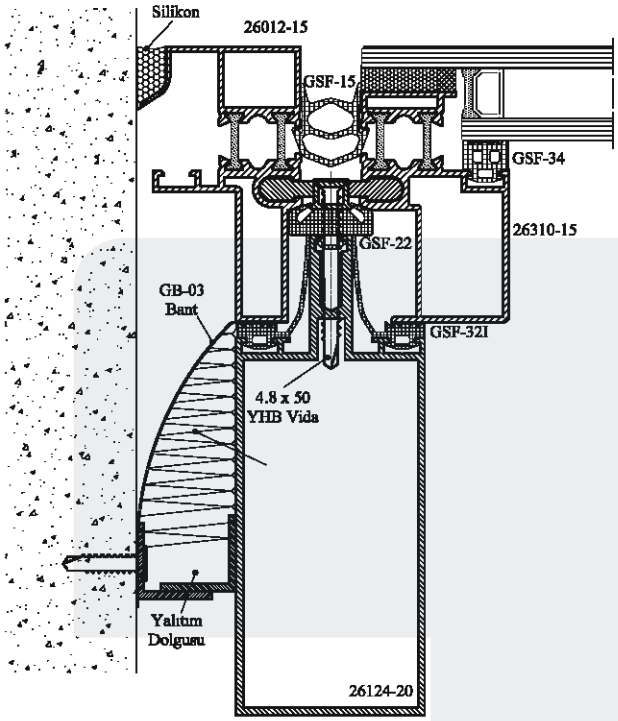
Ölçek 1/2



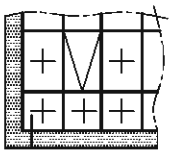


Ölçek 1/2

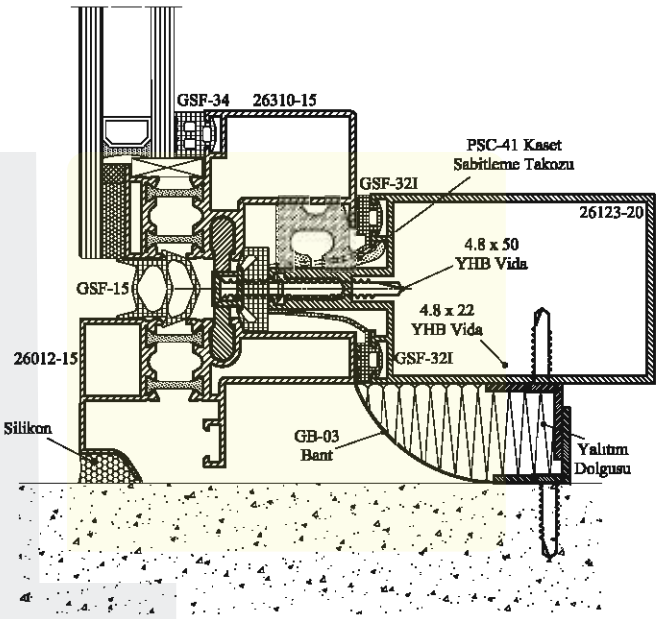




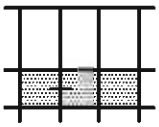
Ölçek 1/2



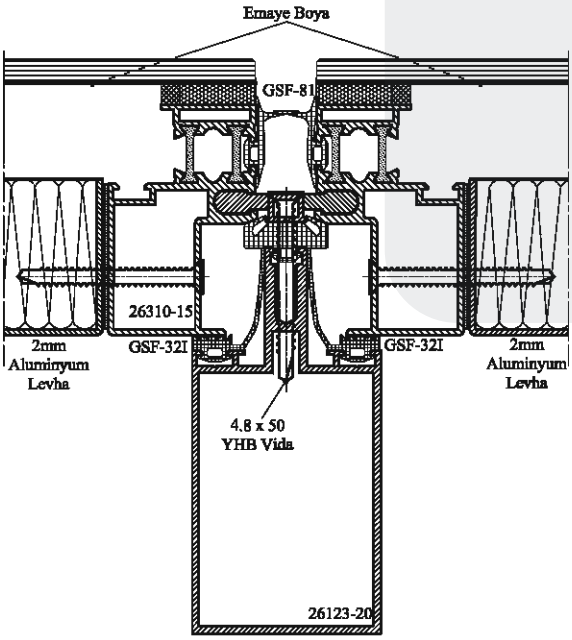
ZEMİNDE BİTİŞ DETAYI



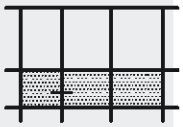
Ölçek 1/2



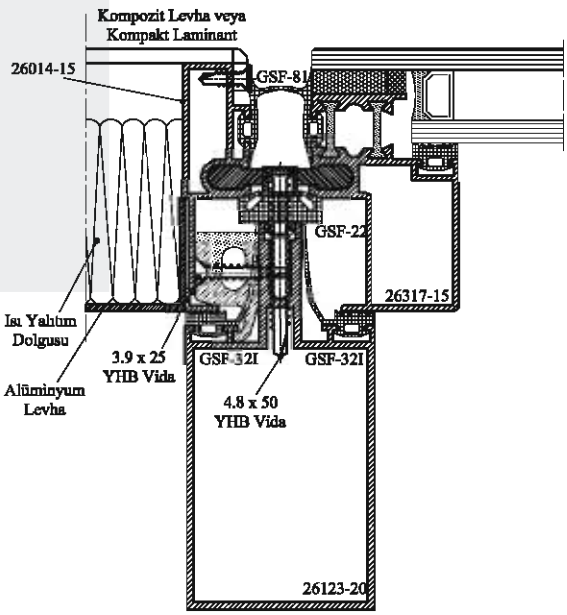
SPANDREL BÖLGE DETAYI
YATAY KESİT



Ölçek 1/2



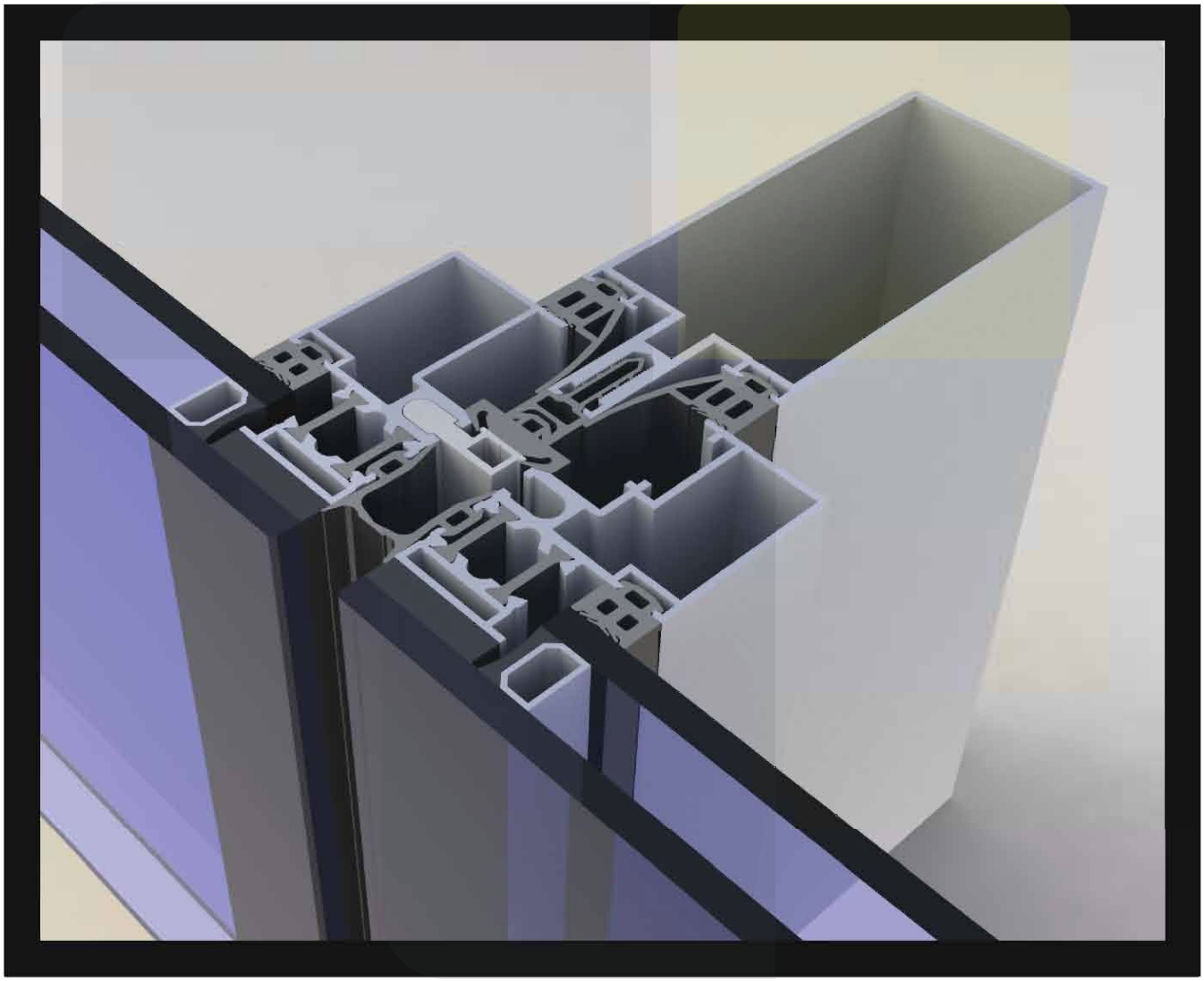
KOMPOZİT PANEL veya
KOMPAKT LAMİNANT DETAYI
YATAY KESİT



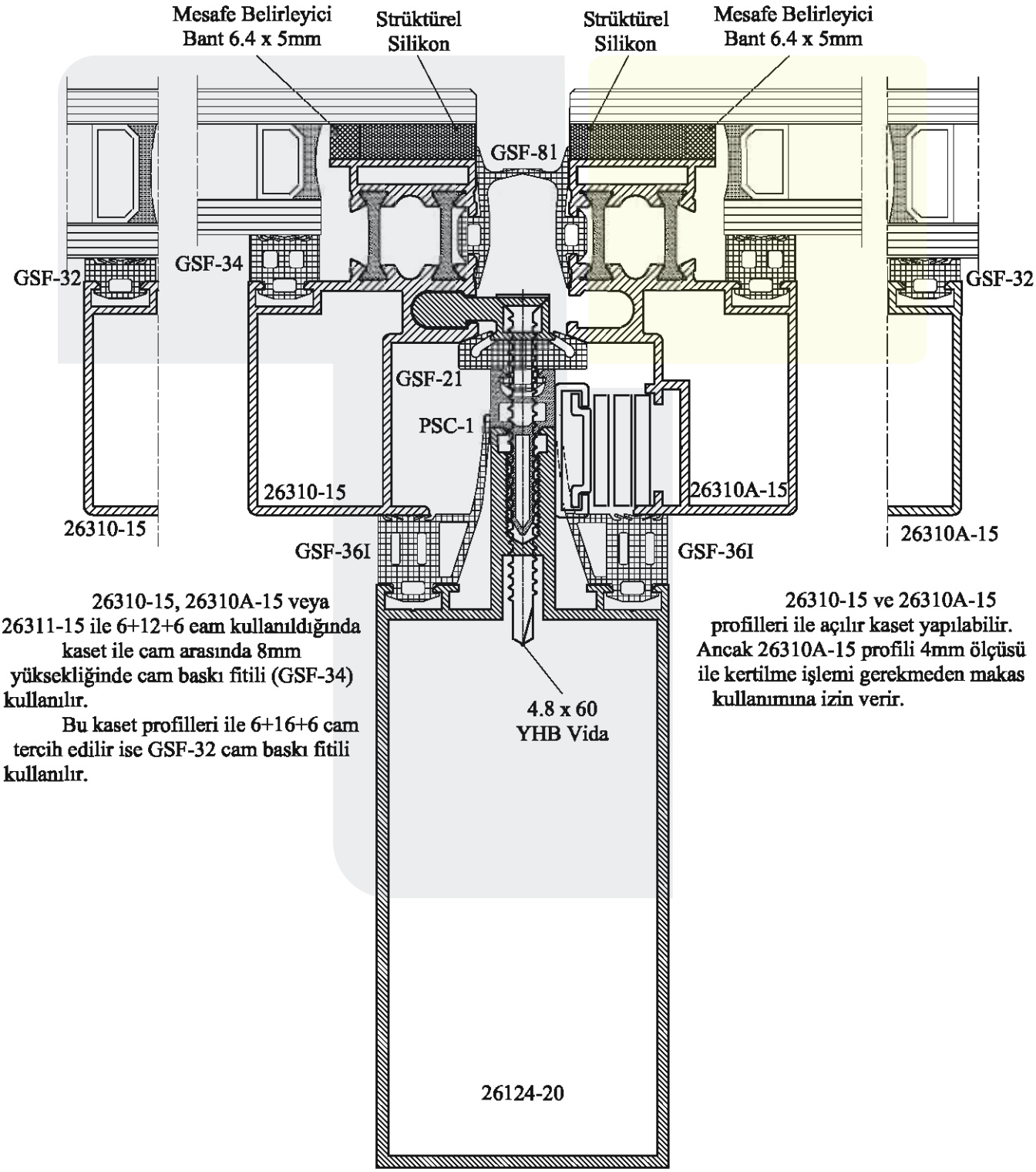
Ölçek 1/2

SİLİKON CEPHE

F50S/HI+



SABİT VE AÇILIR KASET YATAY KESİT



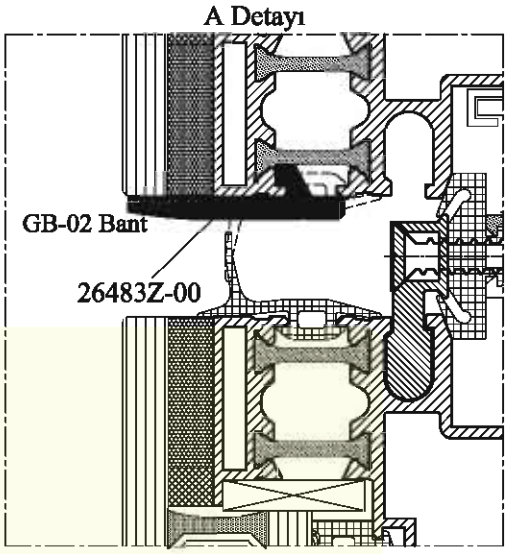
26310-15, 26310A-15 veya 26311-15 ile 6+12+6 cam kullanıldığında kaset ile cam arasında 8mm yüksekliğinde cam baskı fitili (GSF-34) kullanılır.

Bu kaset profilleri ile 6+16+6 cam tercih edilir ise GSF-32 cam baskı fitili kullanılır.

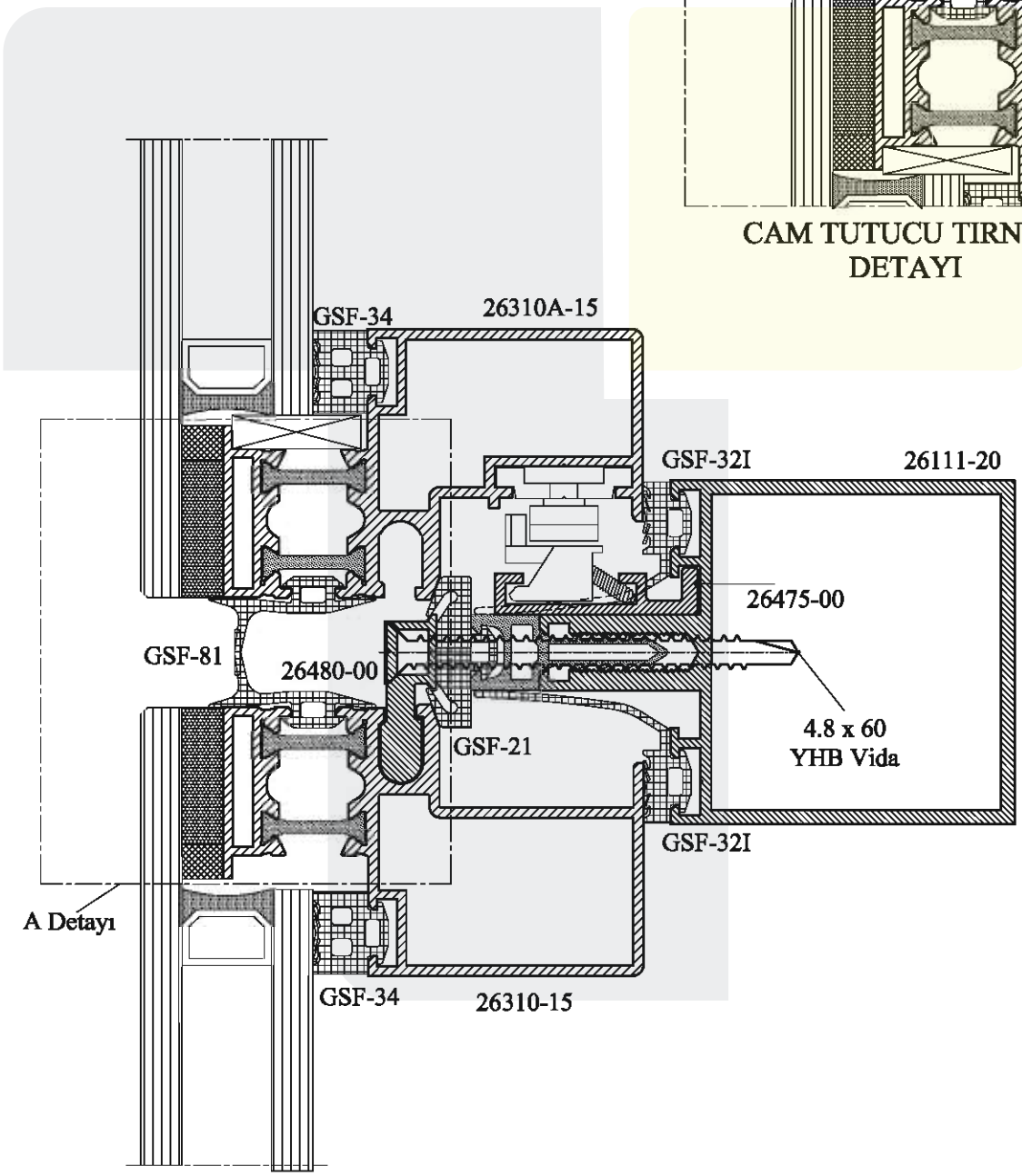
26310-15 ve 26310A-15 profilleri ile açılır kaset yapılabilir. Ancak 26310A-15 profili 4mm ölçüsü ile kertilme işlemi gerekmeden makas kullanımına izin verir.

Sabit kasetler arasında GSF-8 derz fitili yerine GSF-15 derz fitili de kullanılabilir. (Bkz. sayfa 169)

SABİT VE AÇILIR KASET DÜŞEY KESİT



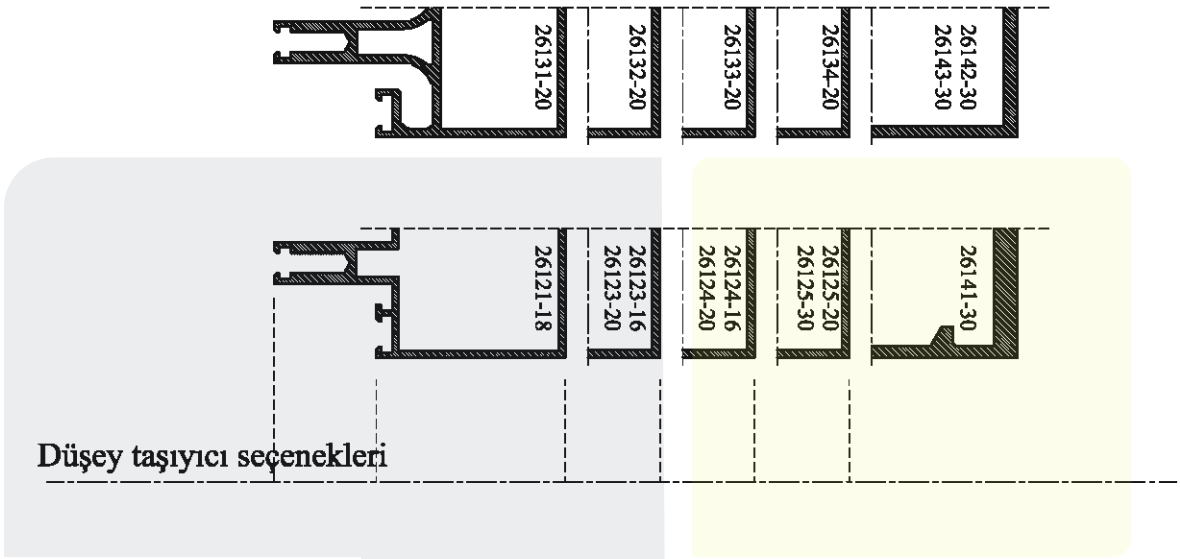
CAM TUTUCU TIRNAK DETAYI

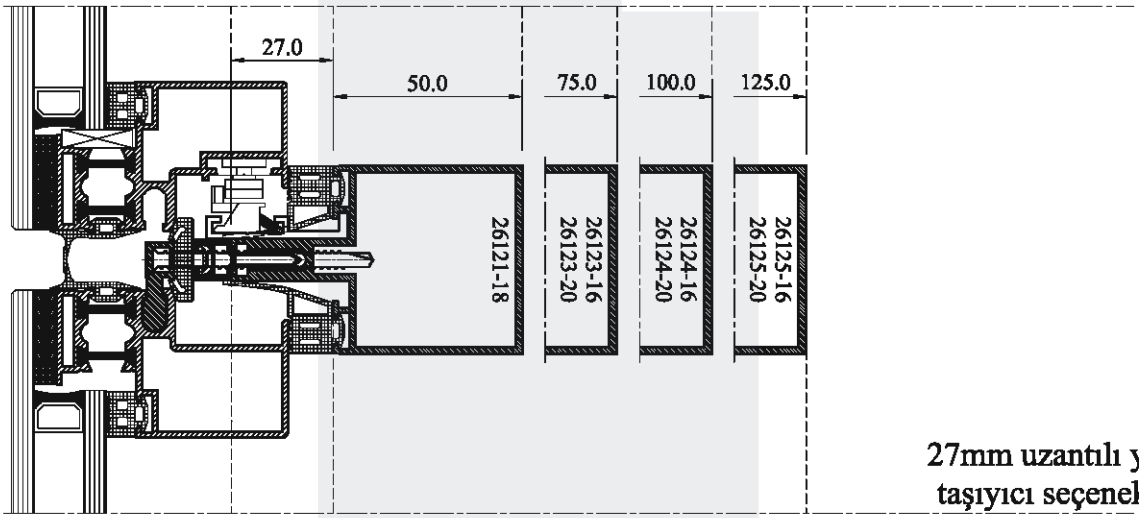


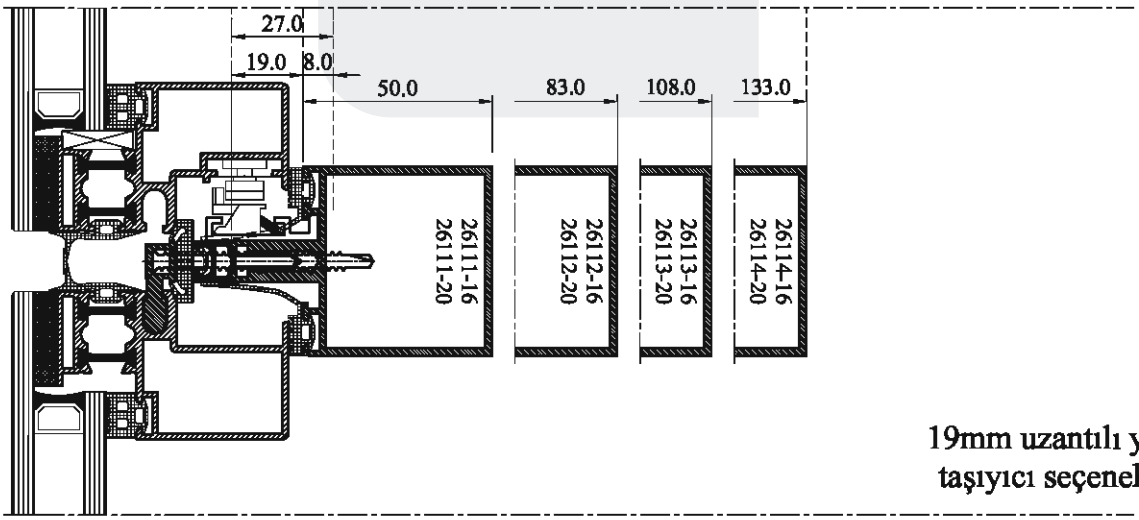
F50S/HI+ sisteminde yukarıdaki gibi 19mm uzantılı yatay taşıyıcılar (GSF-32 fitilleri ile) kullanılabildiği gibi, 27mm uzantılı taşıyıcılar da (GSF-36 fitilleri ile) kullanılabilir. (Bu opsiyon F50S/I+, F50S/HI+, F50K/HI+, F50YK/HI+ sistemlerinde de vardır. Bununla ilgili bakınız; sayfa 10).

Sonraki sayfada F50S/HI+ sisteminde kullanılabilecek yatay kayıtlar verilmiştir.

YATAY ve DÜŞEY TAŞIYICI SEÇENEKLERİ

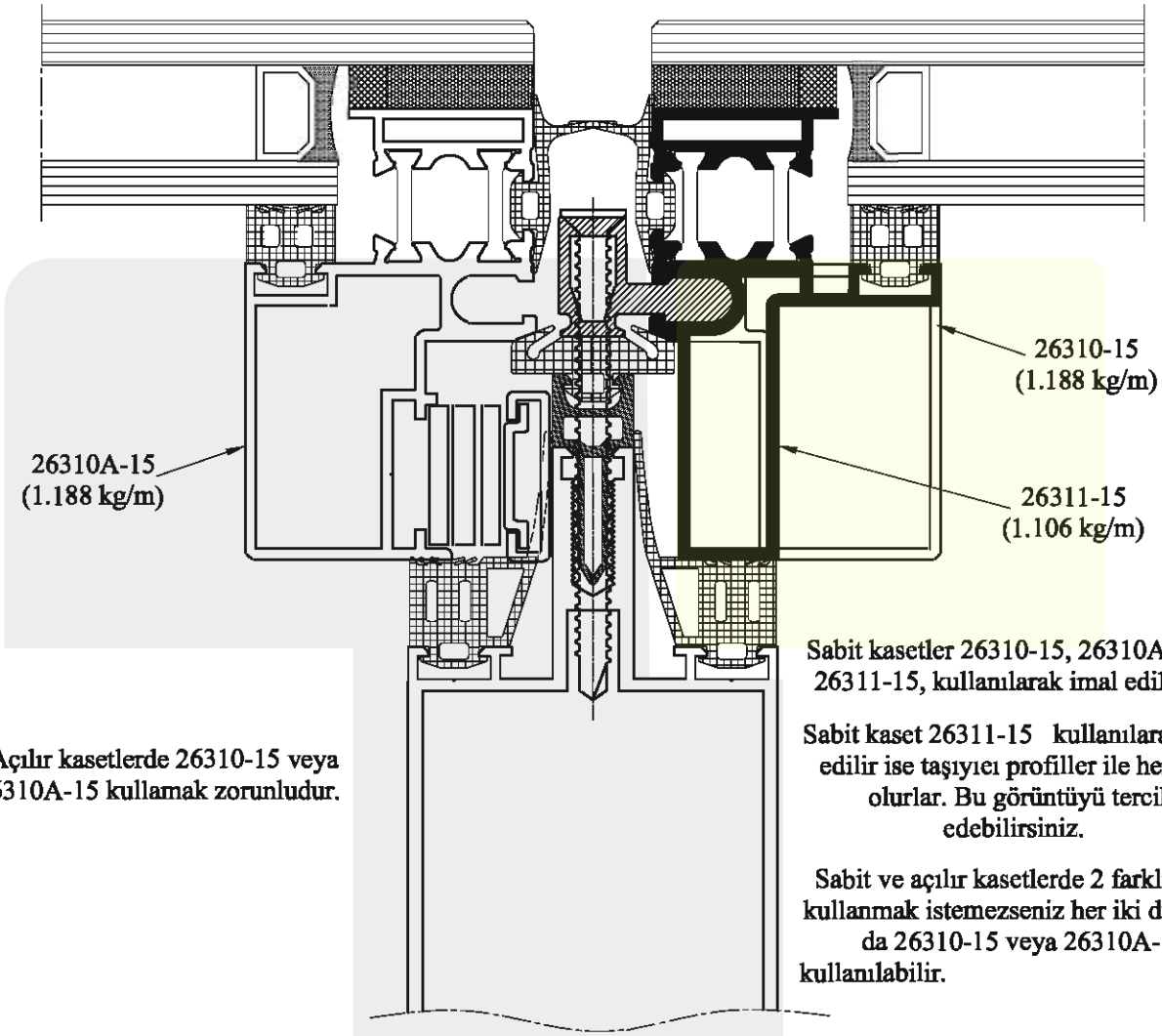






Ölçek 1/2

26311-15 Hemyüz Kaset Profili

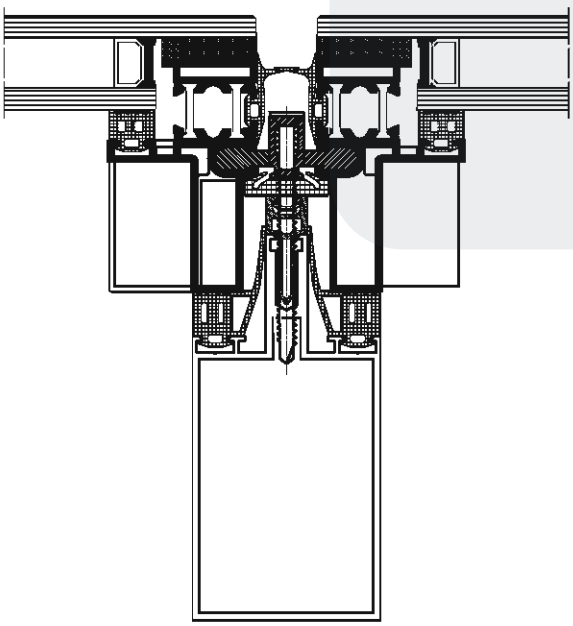


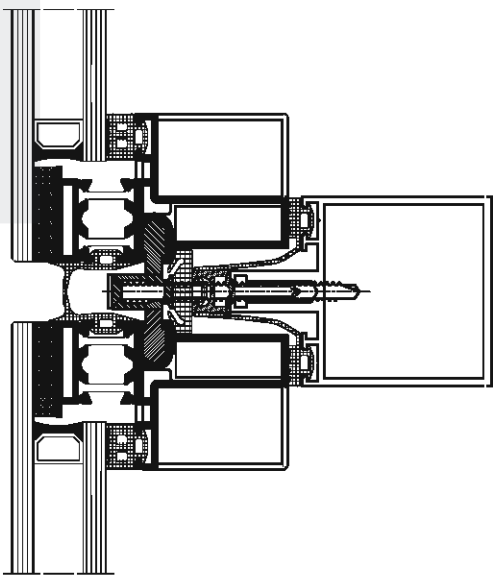
Sabit kasetler 26310-15, 26310A-15 ve 26311-15, kullanılarak imal edilebilir.

Sabit kaset 26311-15 kullanılarak imal edilir ise taşıyıcı profiller ile hemyüz olurlar. Bu görüntüyü tercih edebilirsiniz.

Sabit ve açılır kasetlerde 2 farklı kaset kullanmak istemezseniz her iki durumda da 26310-15 veya 26310A-15 kullanılabilir.

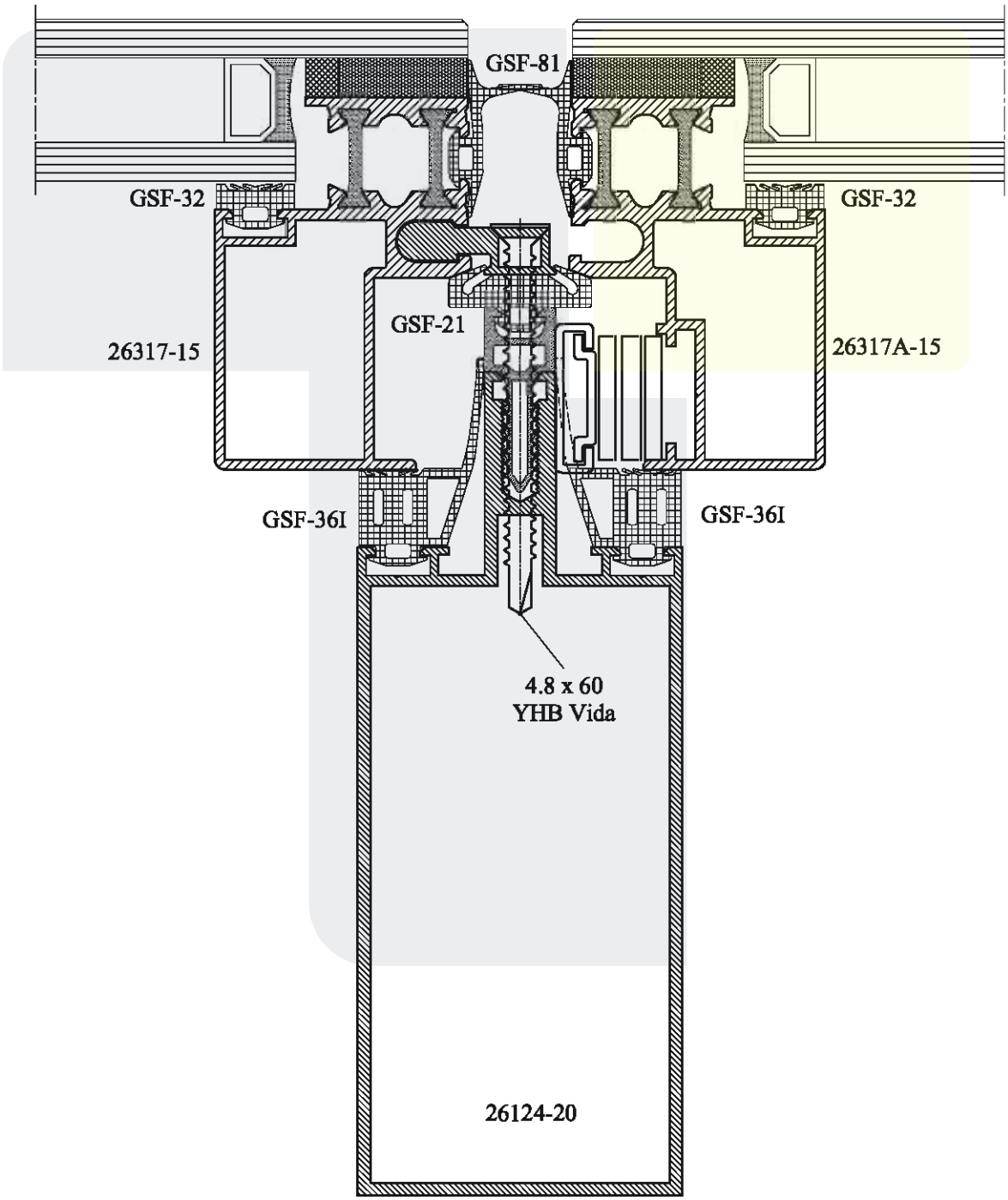
Açılır kasetlerde 26310-15 veya 26310A-15 kullamak zorunludur.



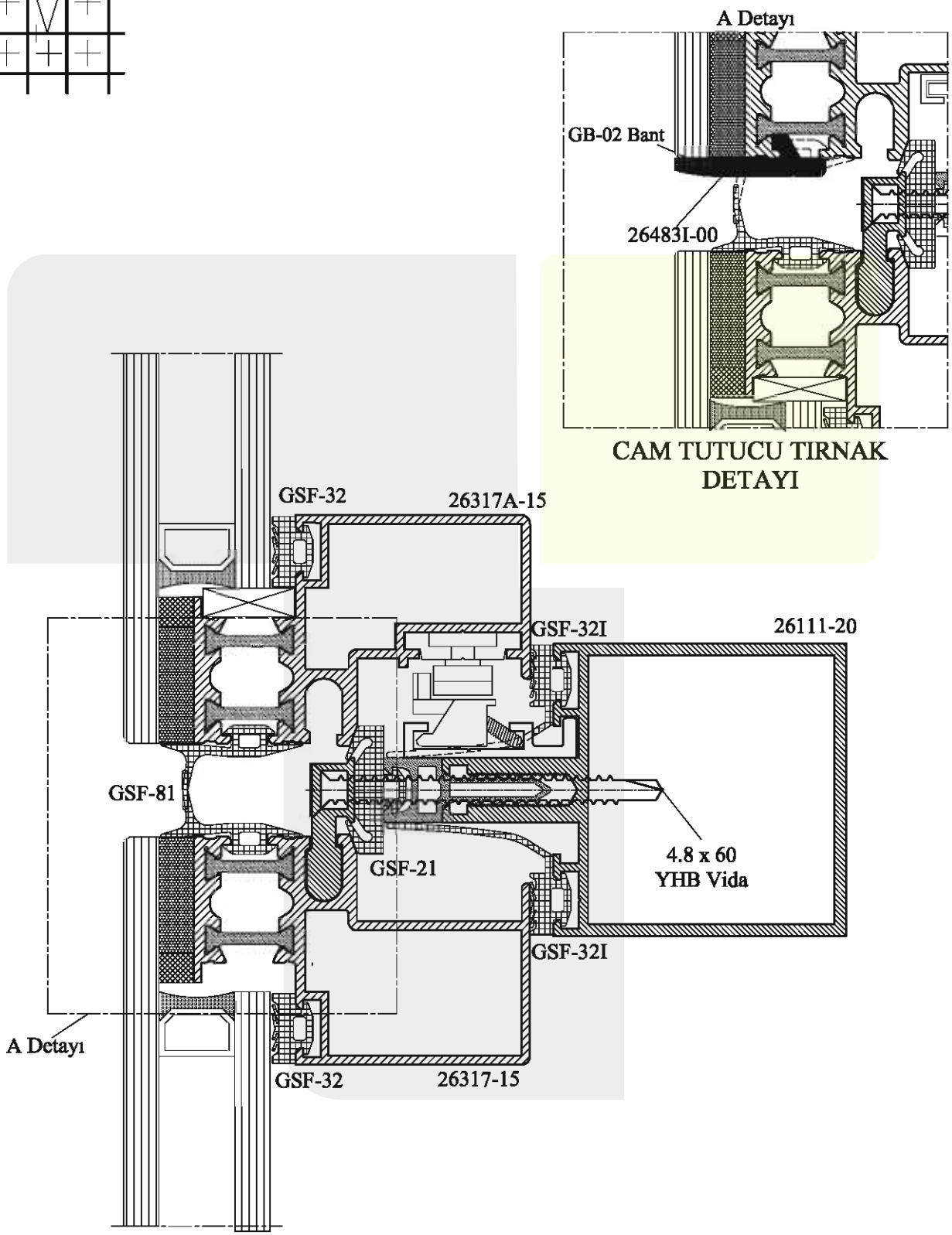


Ölçek 1/2

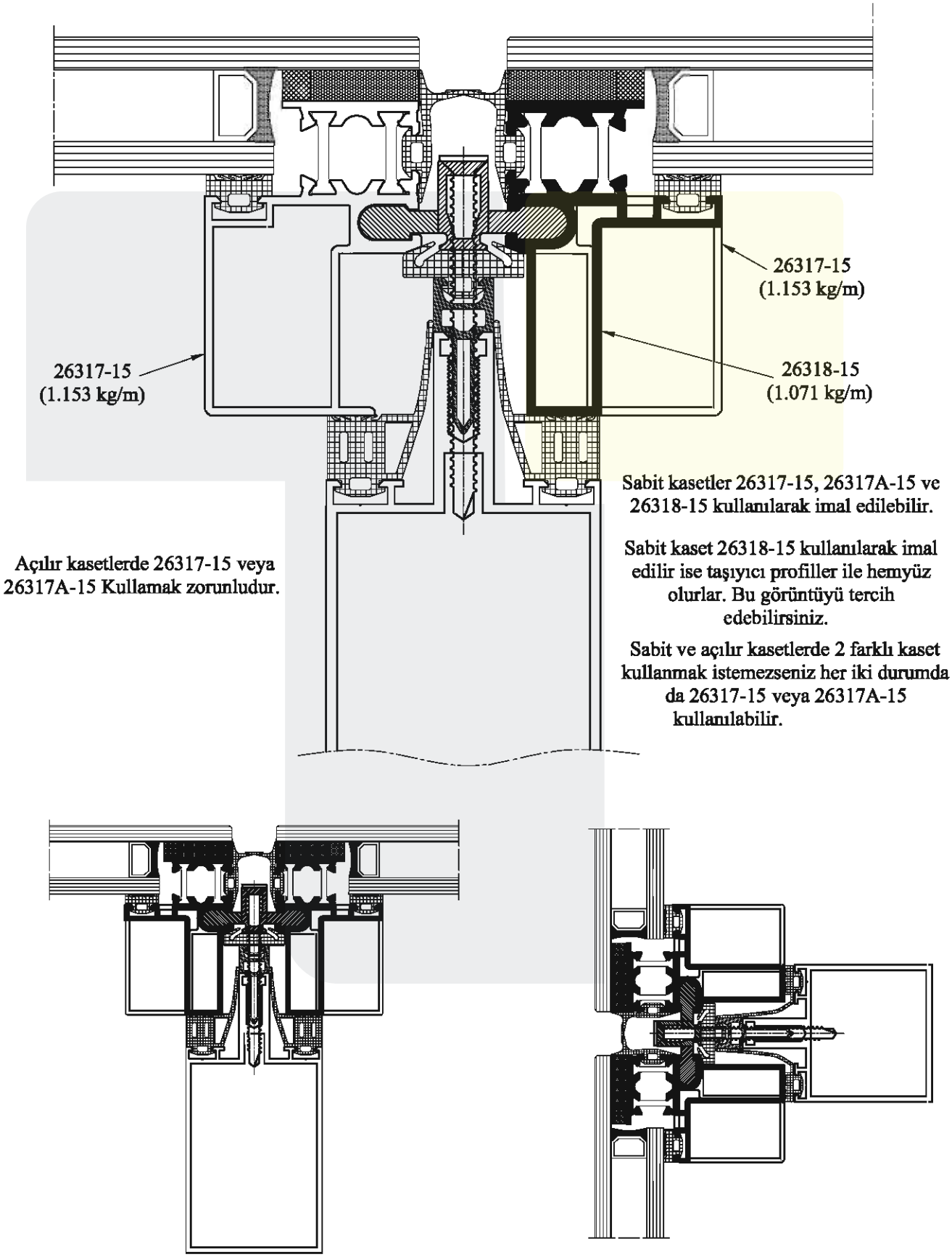
SABİT VE AÇILIR KASET YATAY KESİT



SABİT VE AÇILIR KASET DÜŞEY KESİT

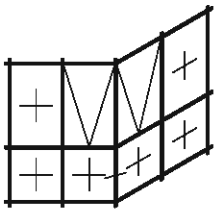


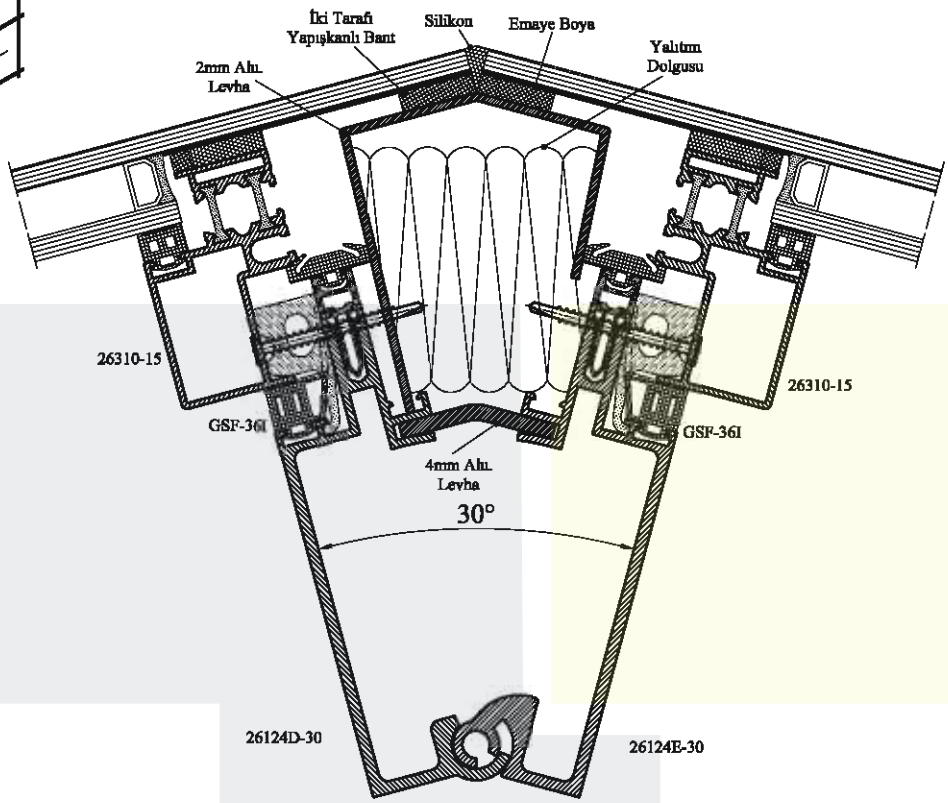
26318-15 Hemyüz Kaset Profili



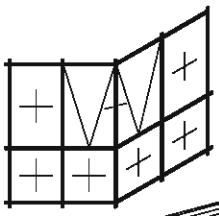
Ölçek 1/2

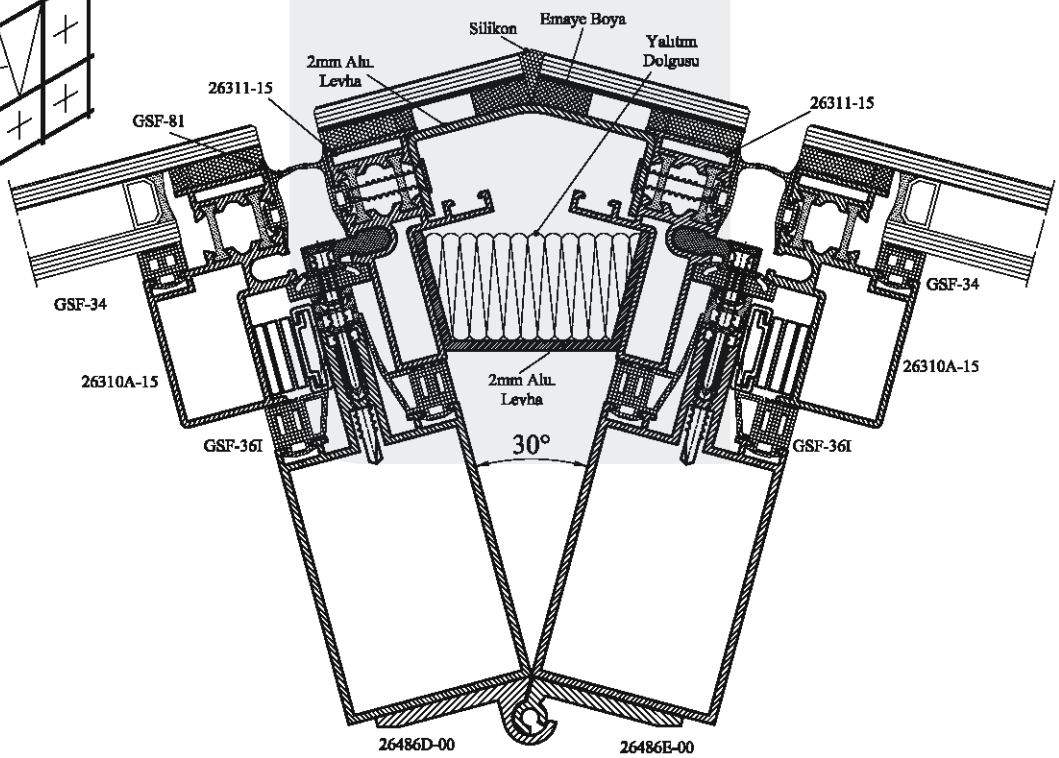
DÜŞEY TAŞIYICI PROFİLLERİN AÇILI BİRLEŞİM DETAYLARI



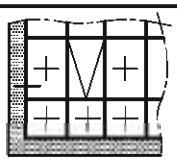


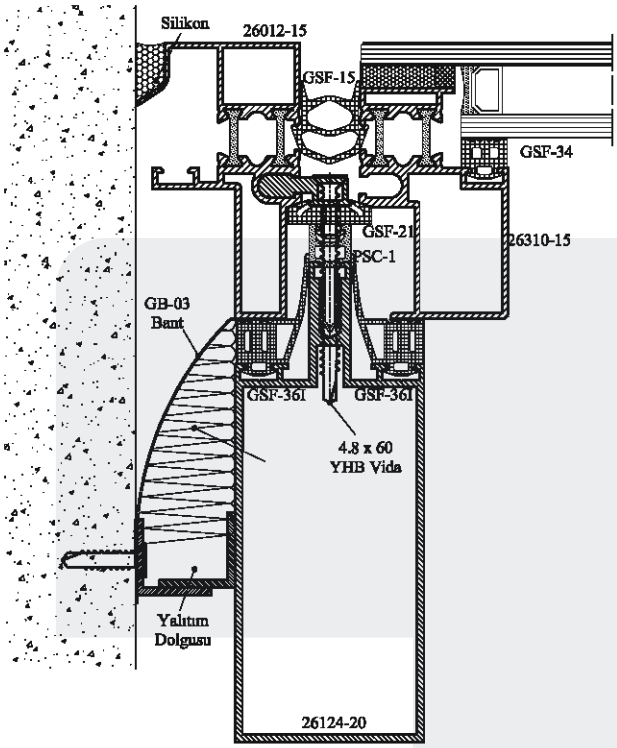
Ölçek 1/2



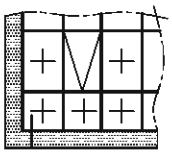


Ölçek 1/2

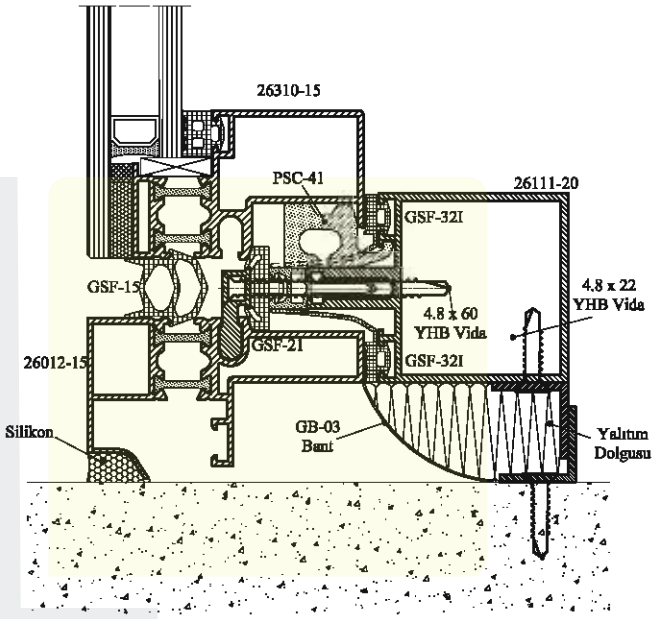




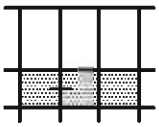
Ölçek 1/2



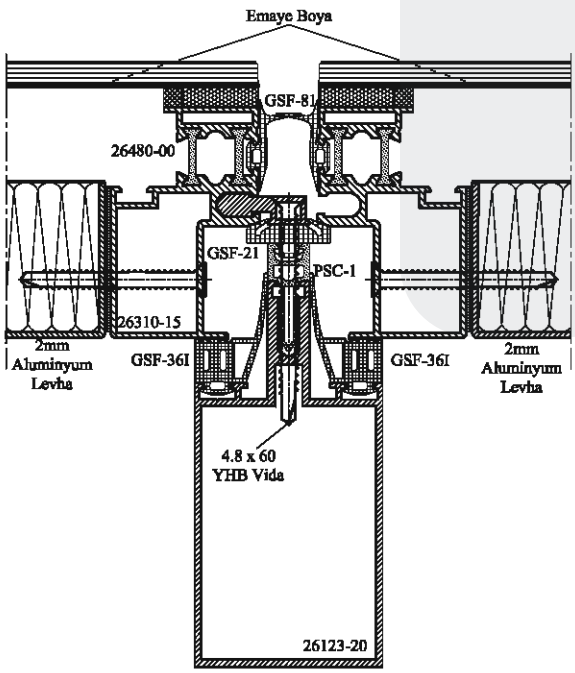
ZEMİNDE BİTİŞ DETAYI



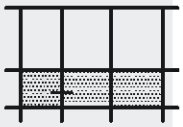
Ölçek 1/2



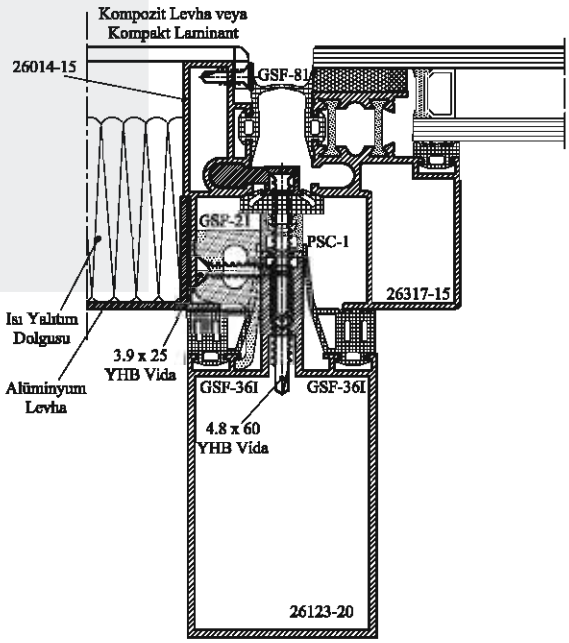
SPANDREL BÖLGE DETAYI
YATAY KESİT



Ölçek 1/2



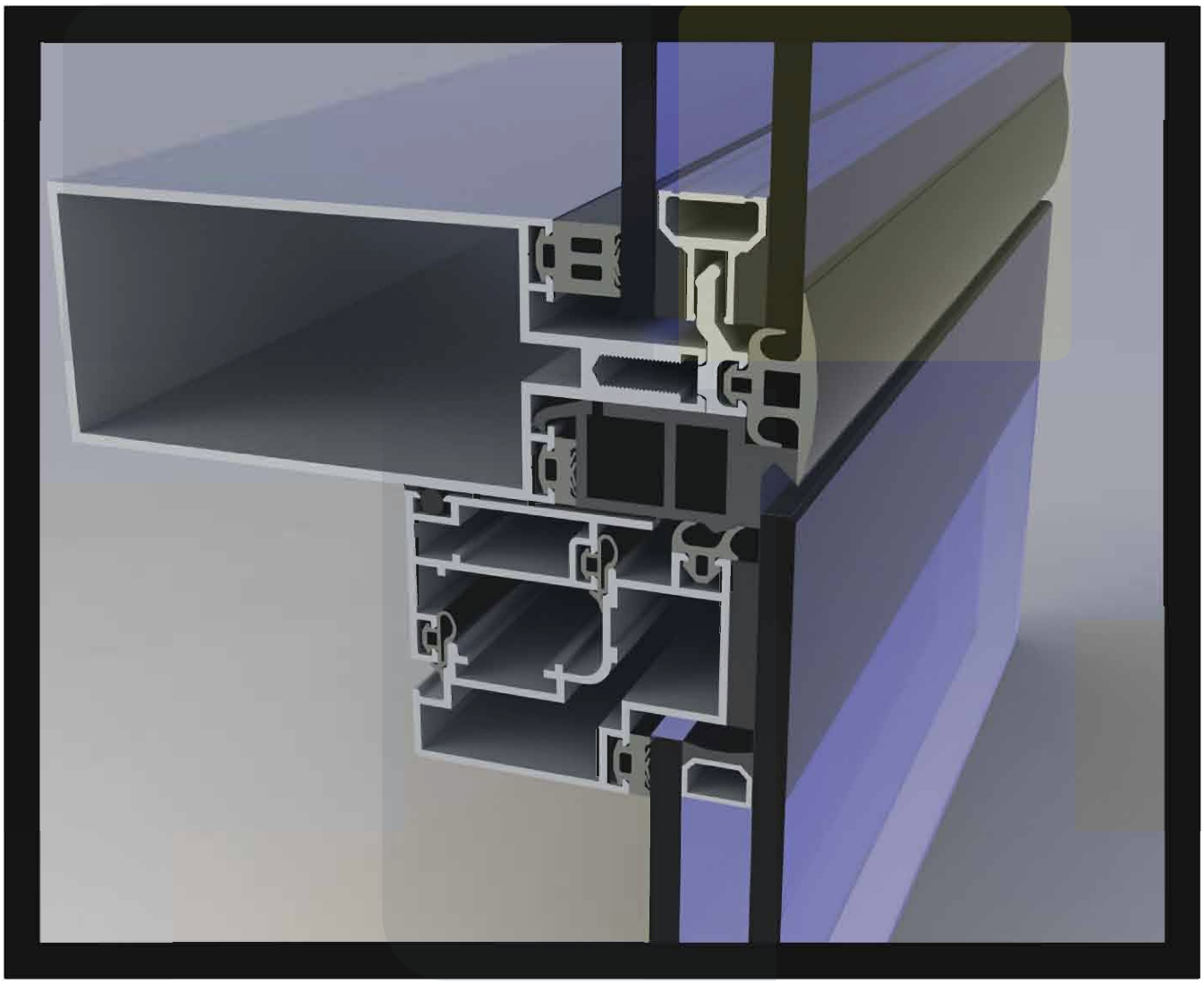
KOMPOZİT PANEL veya
KOMPAKT LAMİNANT DETAYI
YATAY KESİT



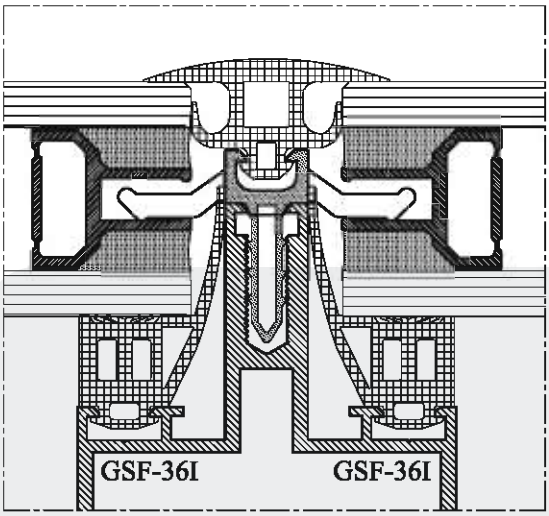
Ölçek 1/2

KENETLİ SİLİKON CEPHE

F50KS

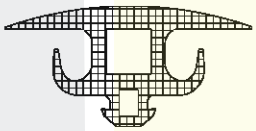


"FİTİL ÖRTÜLÜ FUGA" KURU CAMLAMA



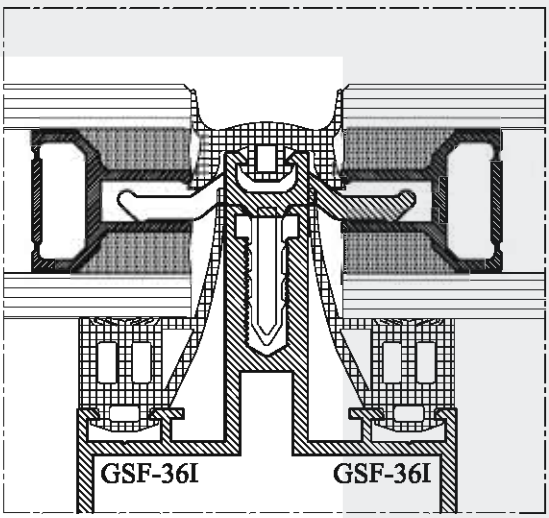
26479-00
Kaset Tesbit Takozu

PSC-11
PVC Başlık İzolatör
(Fuga fitil taşıyıcısı)



GSF-18 kuyruklu fuga fitili ile fuga boşluğu örtülür. Isı değeri yaklaşık 2.1-1.7 arasındadır.

"⊔ FORMLU FUGA" KURU CAMLAMA

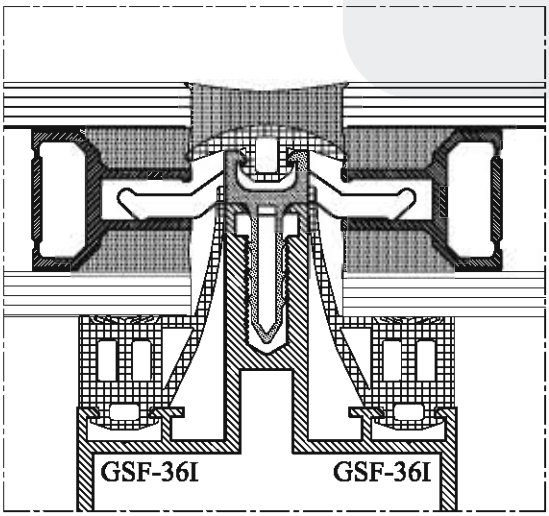


26479-00
Kaset Tesbit Takozu

PSC-11
PVC Başlık İzolatör
(Fuga fitil taşıyıcısı)

GSF-17 U formlu EPDM esaslı fuga fitilidir. Fitil uygulandığında fuga U şeklinde gözükür. Isı değeri yaklaşık 2.6-1.3 arasındadır.

"SİLİKON DOLGULU FUGA" ISLAK CAMLAMA
(Silikon fitil ve Cephe derz dolgu silikonu ile teşkili)

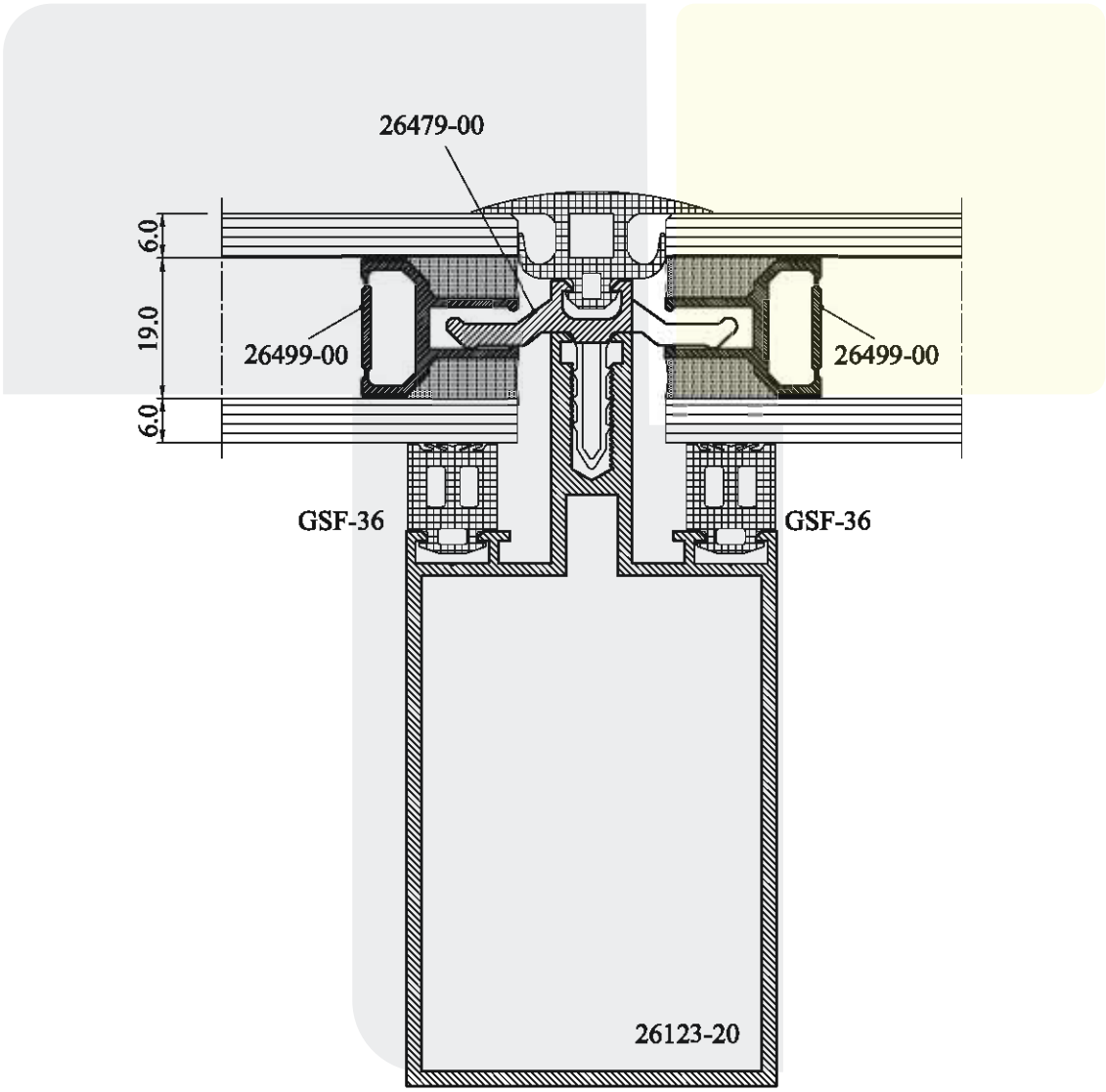


26479-00
Kaset Tesbit Takozu

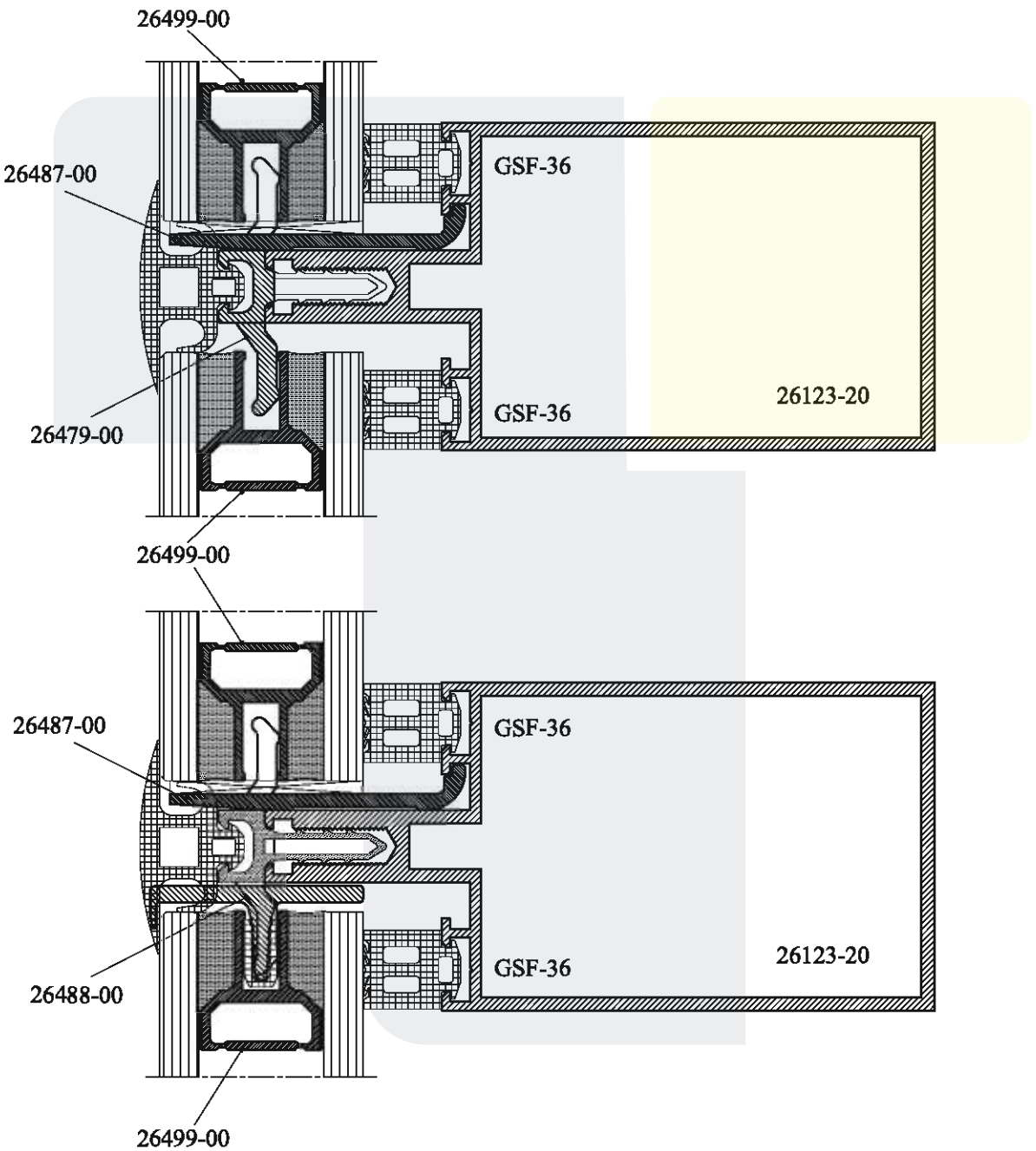
PSC-11
PVC Başlık İzolatör
(Fuga fitil taşıyıcısı)

GSF-16 silikon esaslı fuga fitilidir. Üzerine silikon doldurularak fuga teşkil edilir. Isı değeri yaklaşık 2.0-1.6 arasındadır.

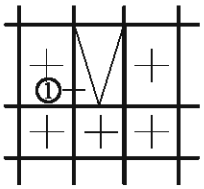
SABİT CAM YATAY KESİT



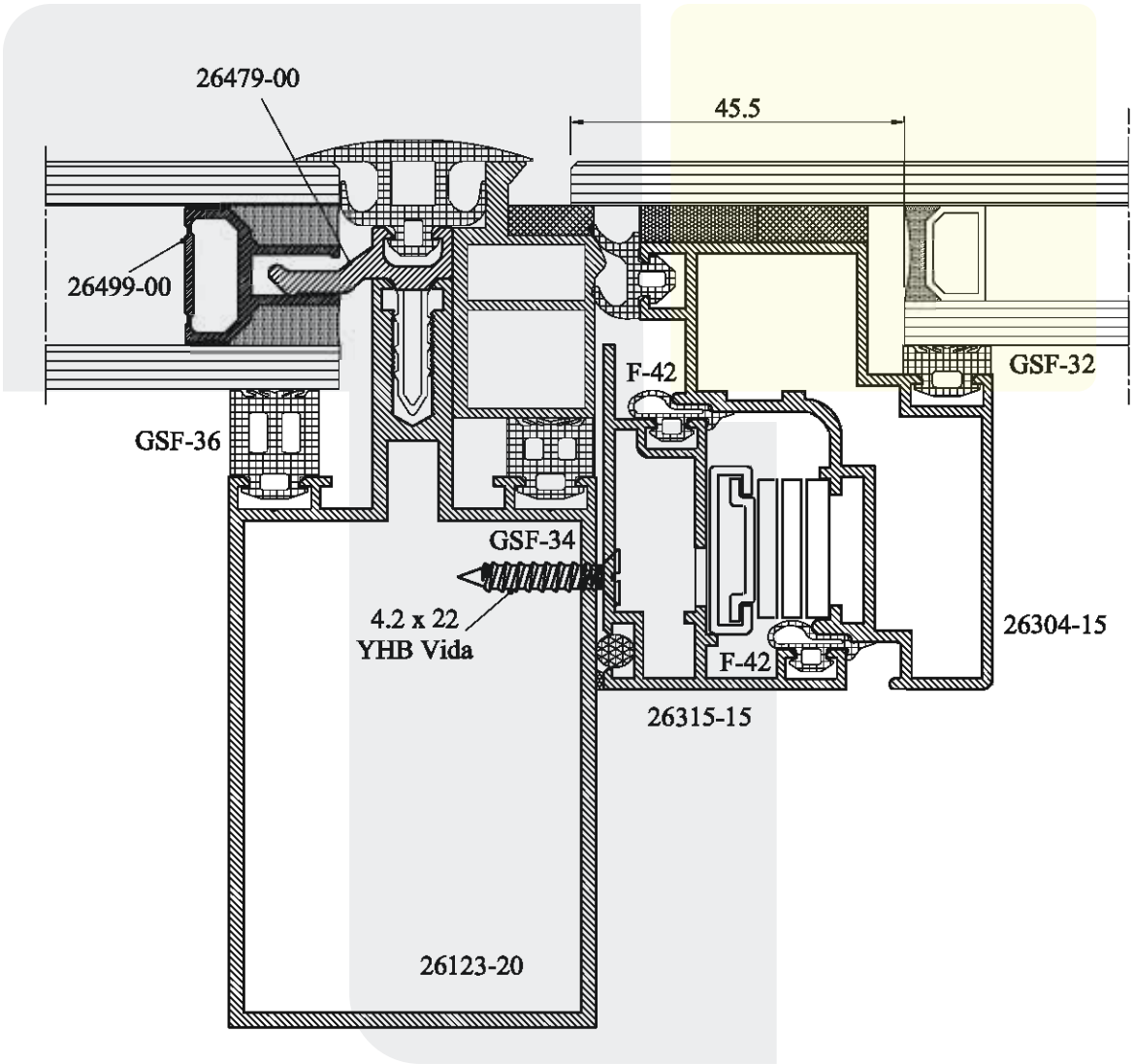
SABİT CAM DÜŞEY KESİT

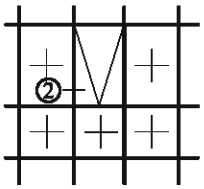


A ve B (26487-00 ve 26488-00) kullanım alternatifleri için bkz. sayfa 100

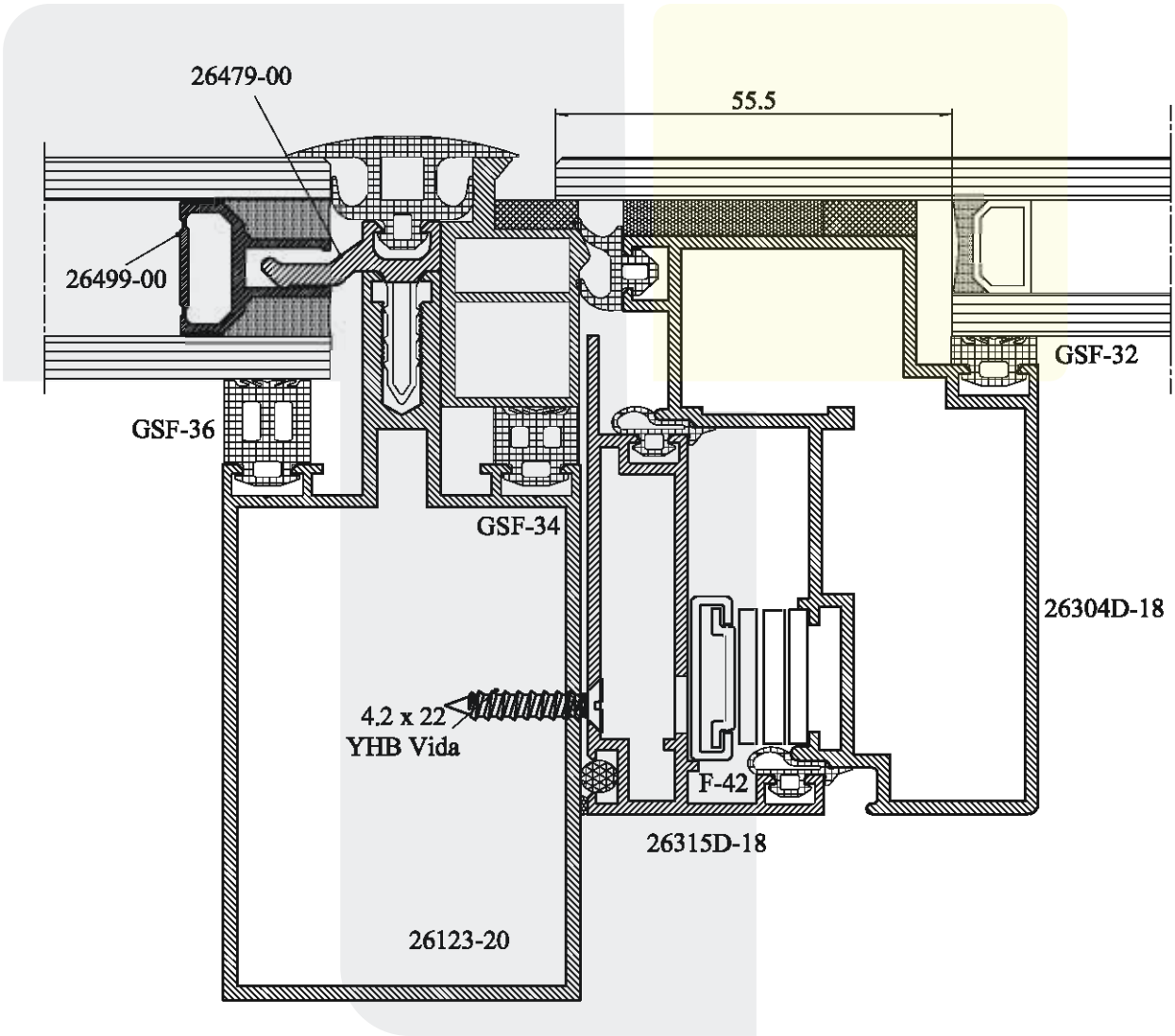


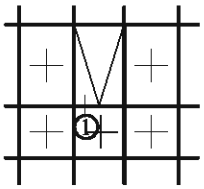
AÇILIR CAM YATAY KESİT
(1. DETAY)



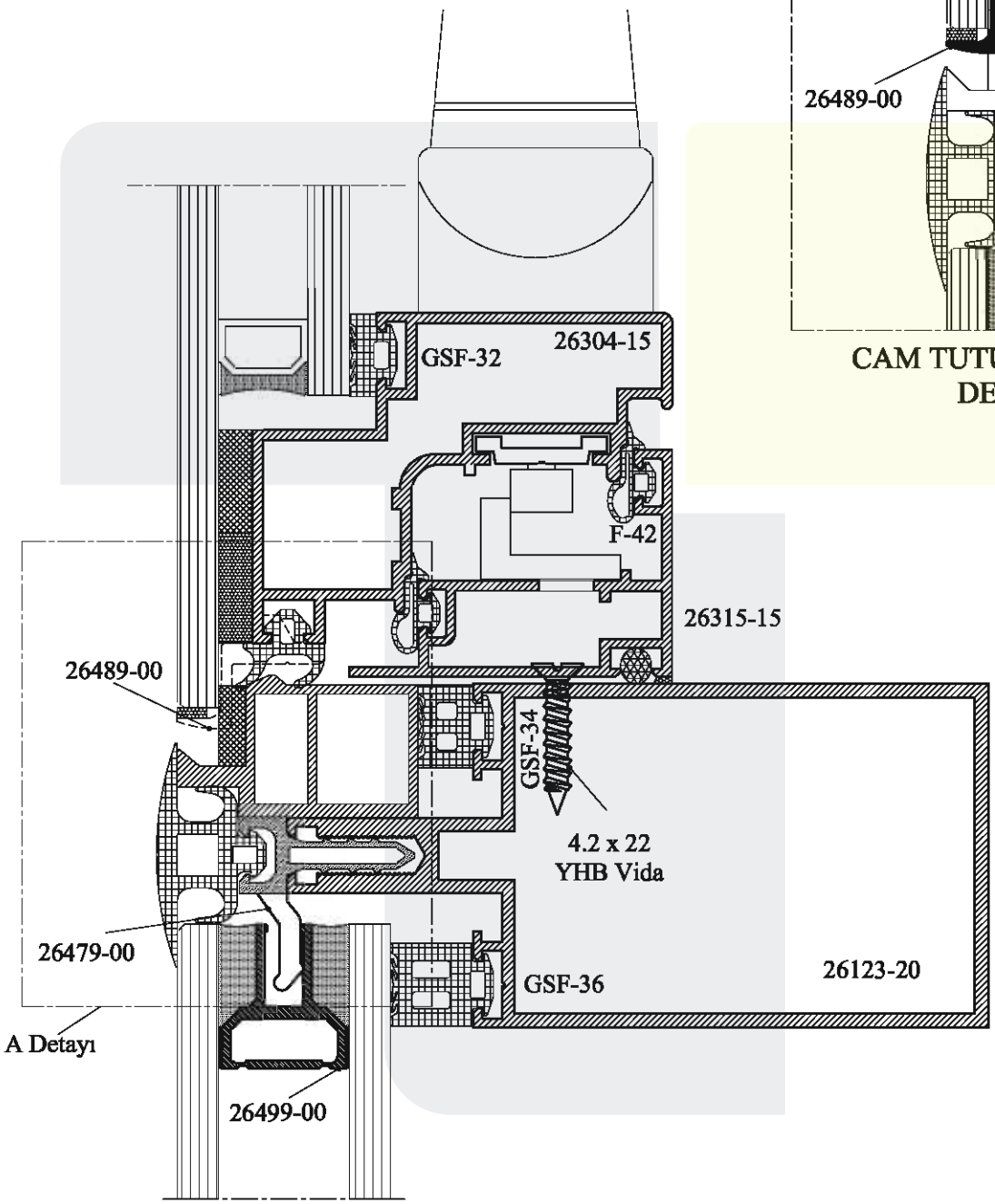


AÇILIR CAM YATAY KESİT
(2. DETAY)

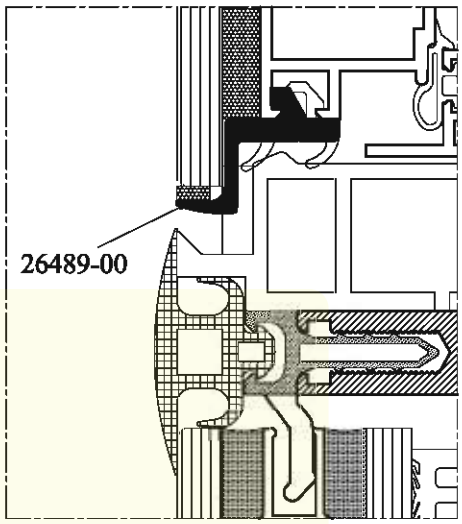




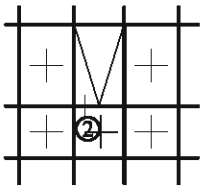
AÇILIR CAM DÜŞEY KESİT
(1. DETAY)



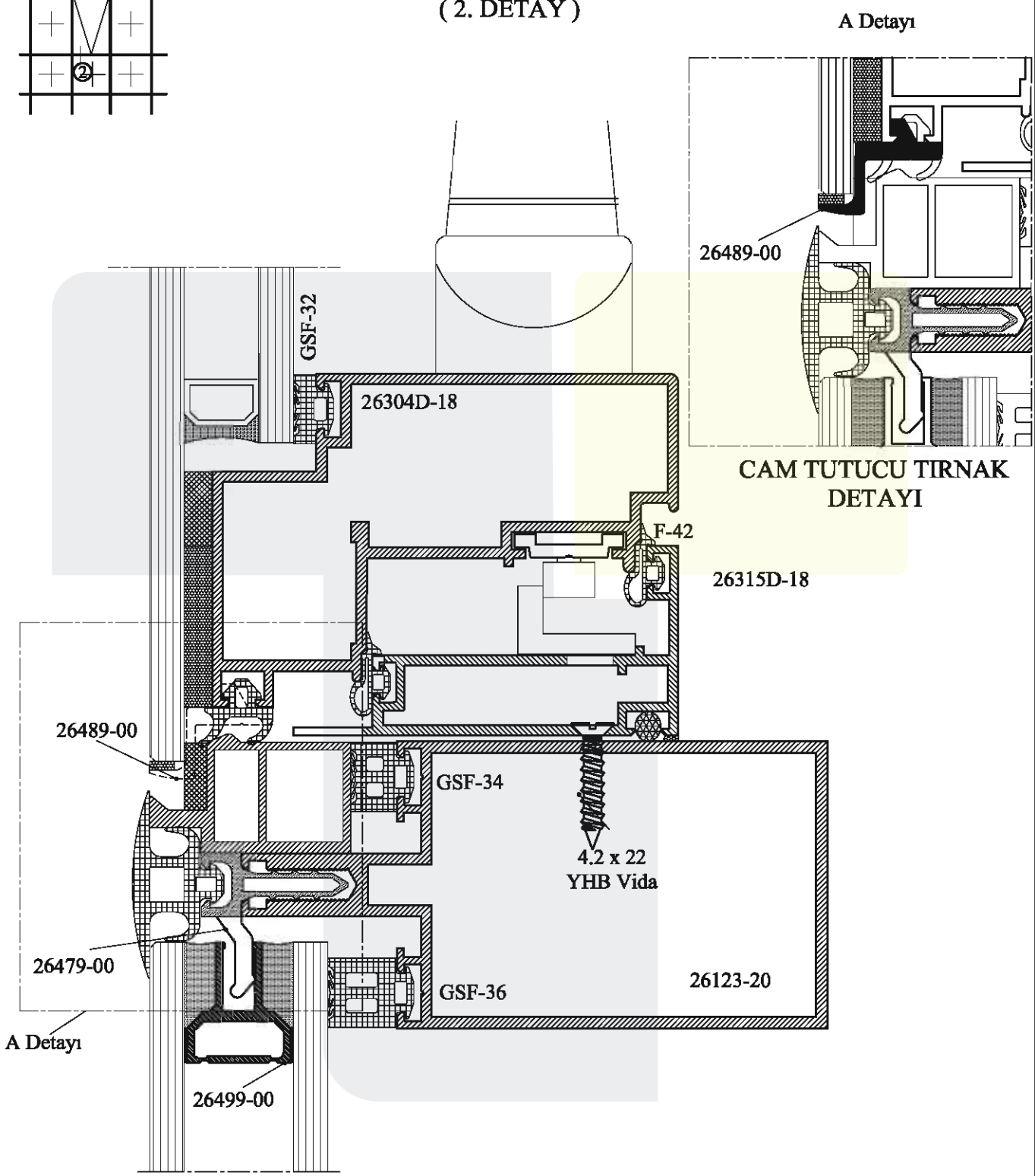
A Detayı



CAM TUTUCU TIRNAK DETAYI

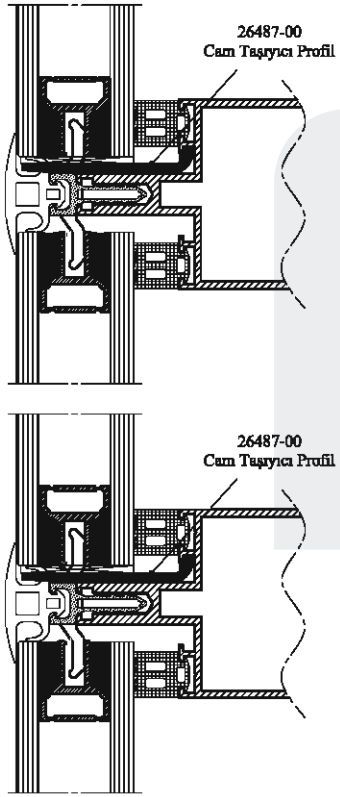


AÇILIR CAM DÜŞEY KESİT
(2. DETAY)



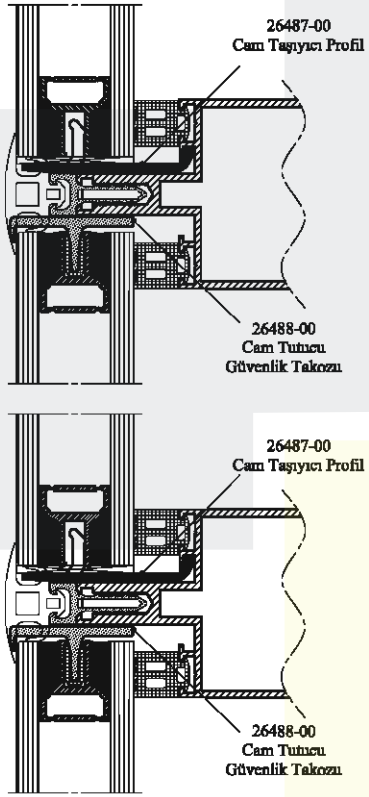
CAM TUTUCU ve TAŞIYICI ALTERNATİFLERİ

1. Alternatif



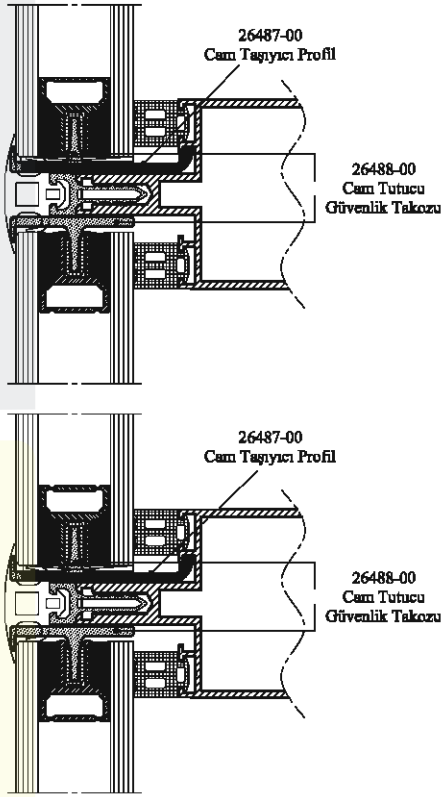
* 26487-00 cam taşıyıcı profili cam kasetin alt kenarında 100mm'lik parçalar halinde 2 adet taşıyıcı olarak kullanılır (Bkz. sayfa 101).

2. Alternatif



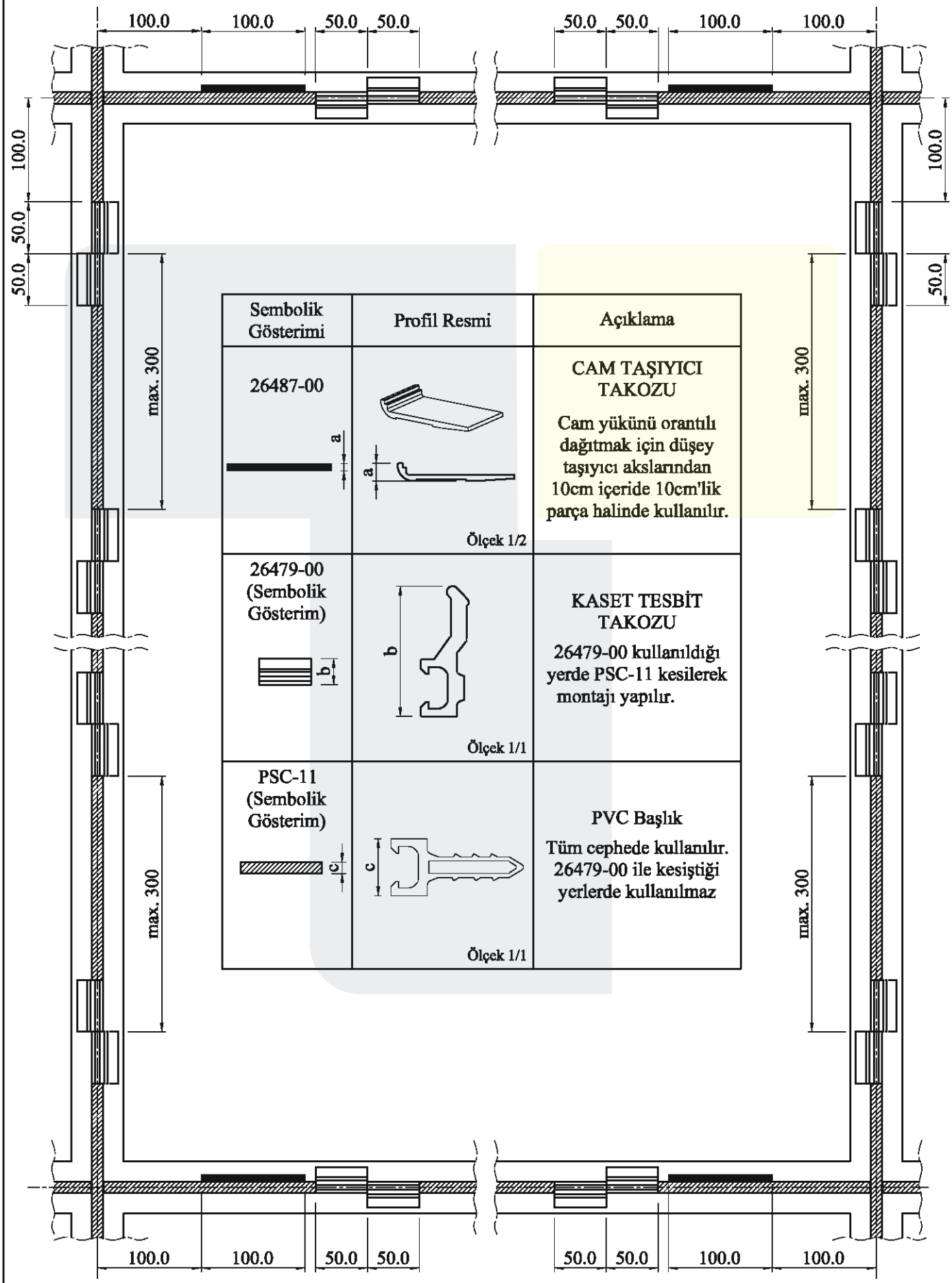
* 26487-00 cam taşıyıcı profile ilave olarak...
* Kaset üst kenarında 50cm ara ile (asgari 2 adet) cam tutucu güvenlik takozu kullanılabilir.

3. Alternatif



*26487-00 cam taşıyıcı profile ilave olarak...
*Cam kasetin hem alt hem üst kenarında 26488-00 cam tutucu güvenlik takozu 50cm ara ile (asgari 2adet) kullanılarak yüksek güvenlik temin edilir.

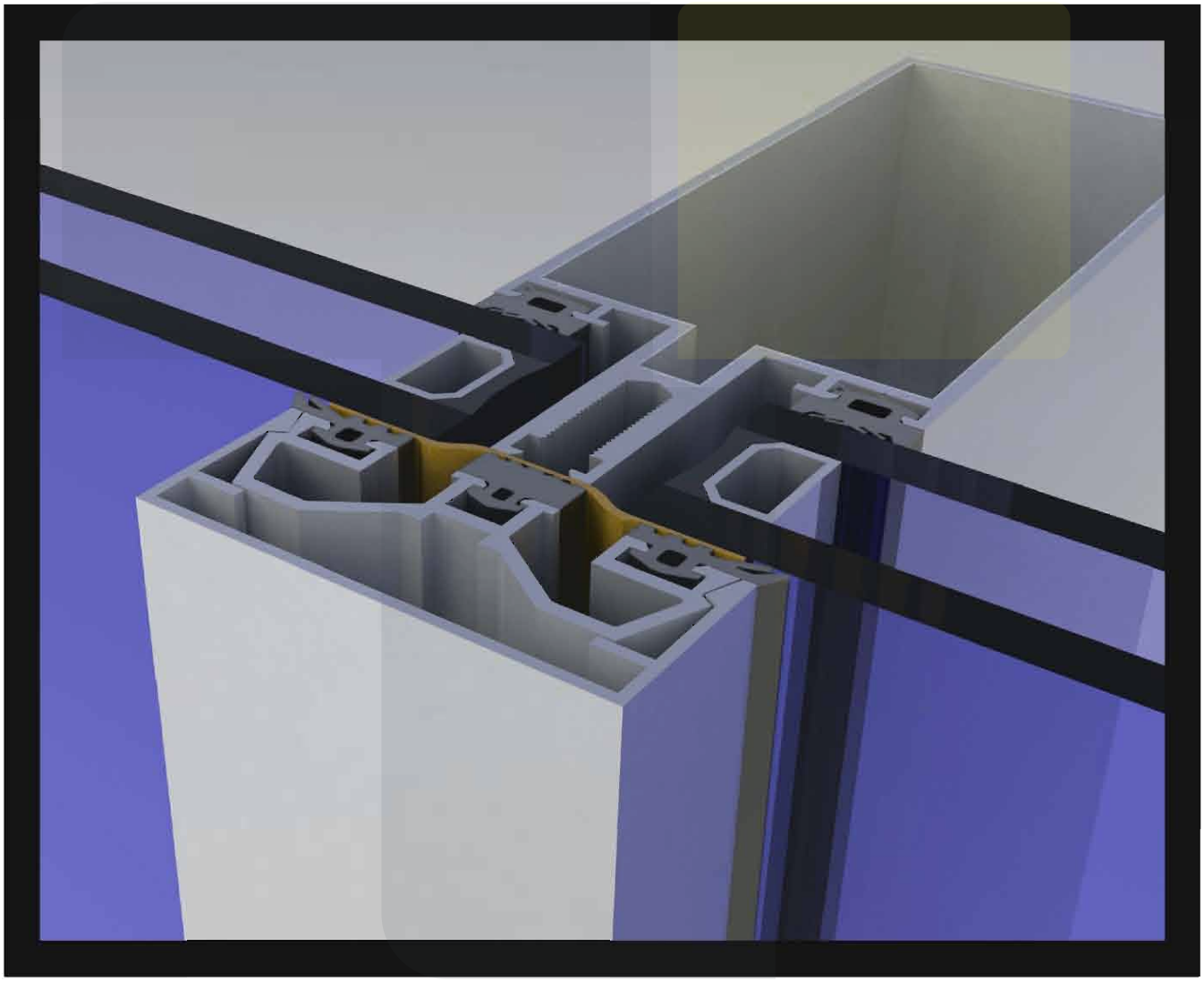
MONTAJ ÇİZİMİ

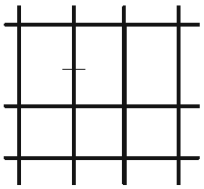


Sembolik Gösterimi	Profil Resmi	Açıklama
26487-00	Ölçek 1/2	CAM TAŞIYICI TAKOZU Cam yükünü orantılı dağıtmak için düşey taşıyıcı akslarından 10cm içeride 10cm'lik parça halinde kullanılır.
26479-00 (Sembolik Gösterim)	Ölçek 1/1	KASET TESBİT TAKOZU 26479-00 kullanıldığı yerde PSC-11 kesilerek montajı yapılır.
PSC-11 (Sembolik Gösterim)	Ölçek 1/1	PVC Başlık Tüm cephede kullanılır. 26479-00 ile kesiştiği yerlerde kullanılmaz

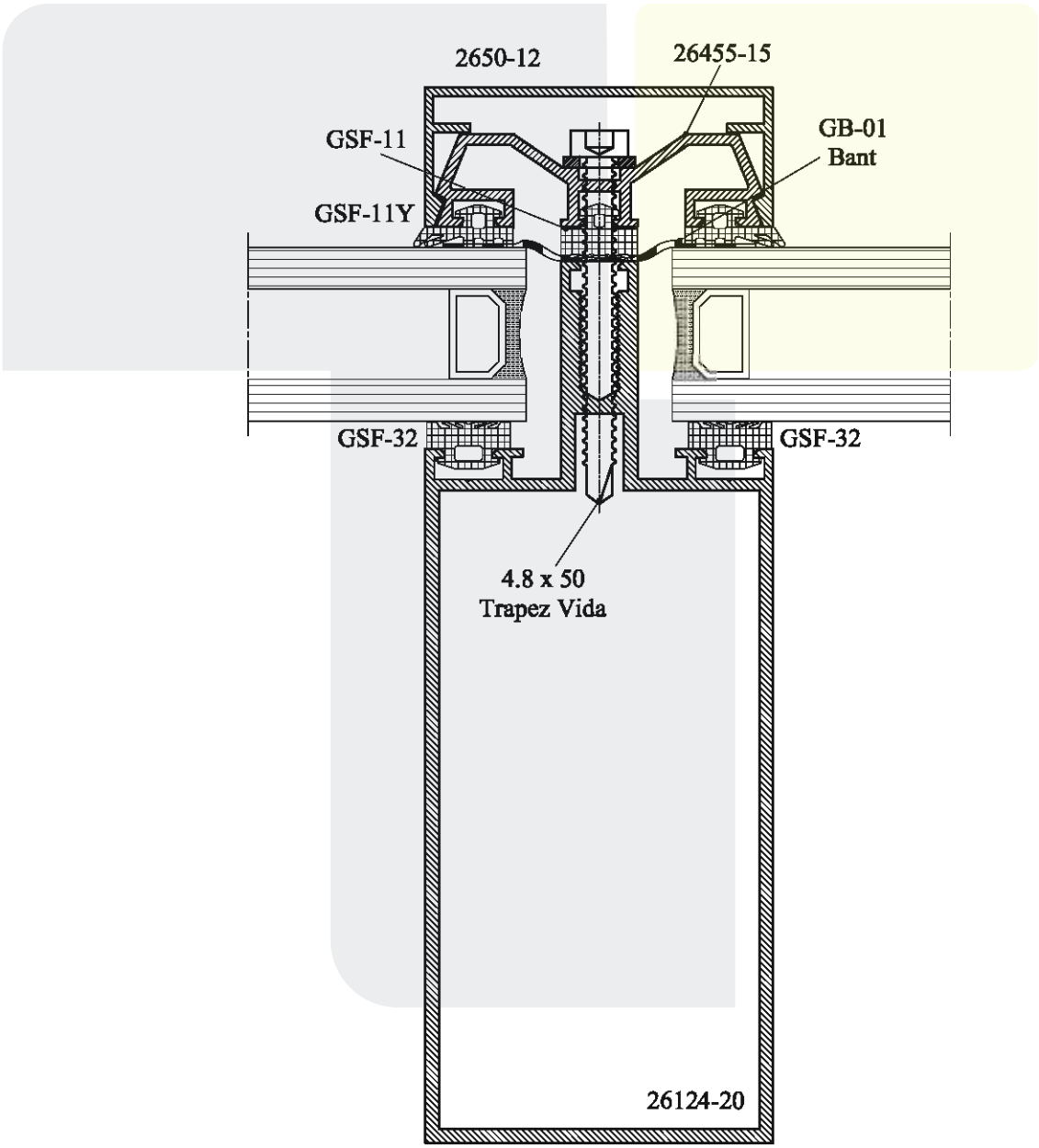
KAPAKLI CEPHE

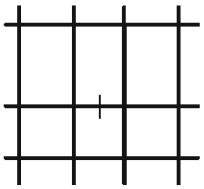
F50K/HI



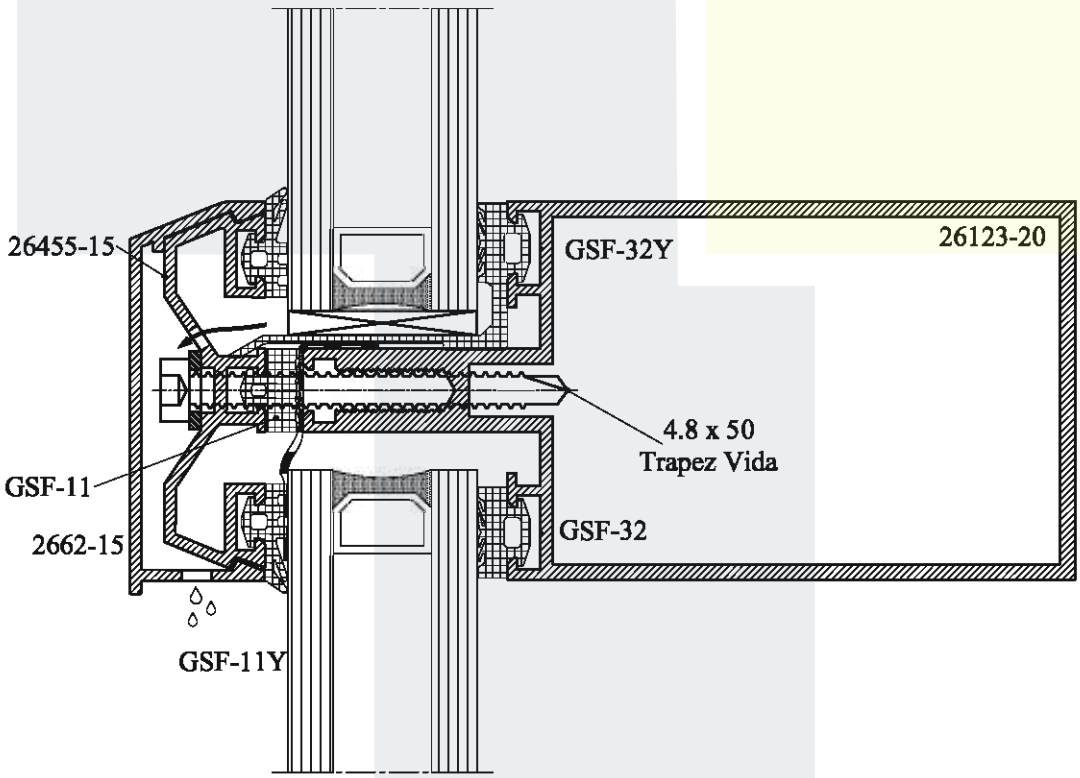


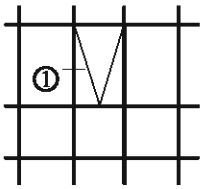
AÇILIR OLMAYAN YATAY KESİT



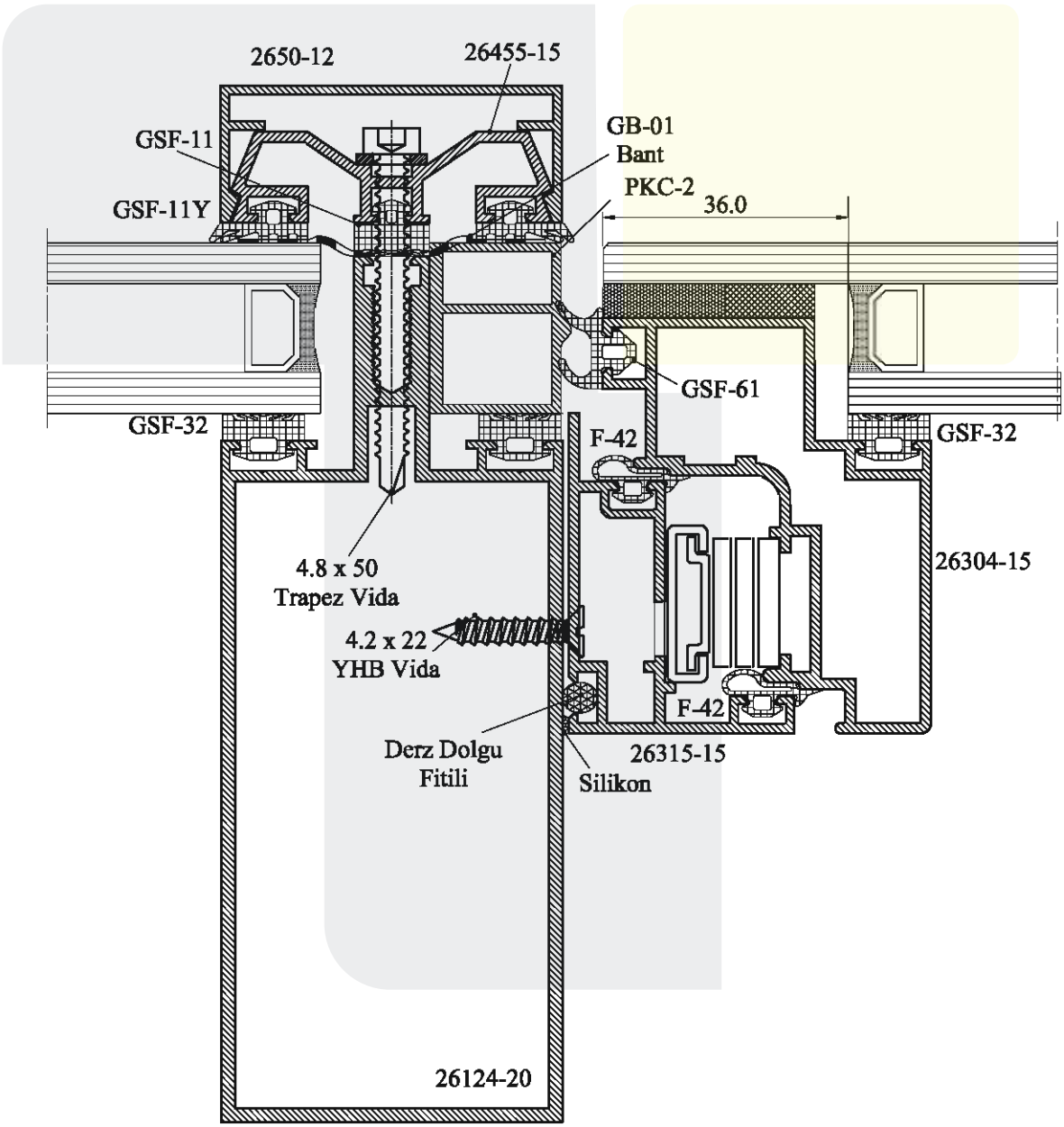


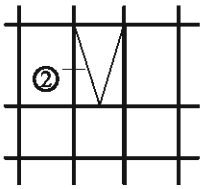
AÇILIR OLMAYAN DÜŞEY KESİT



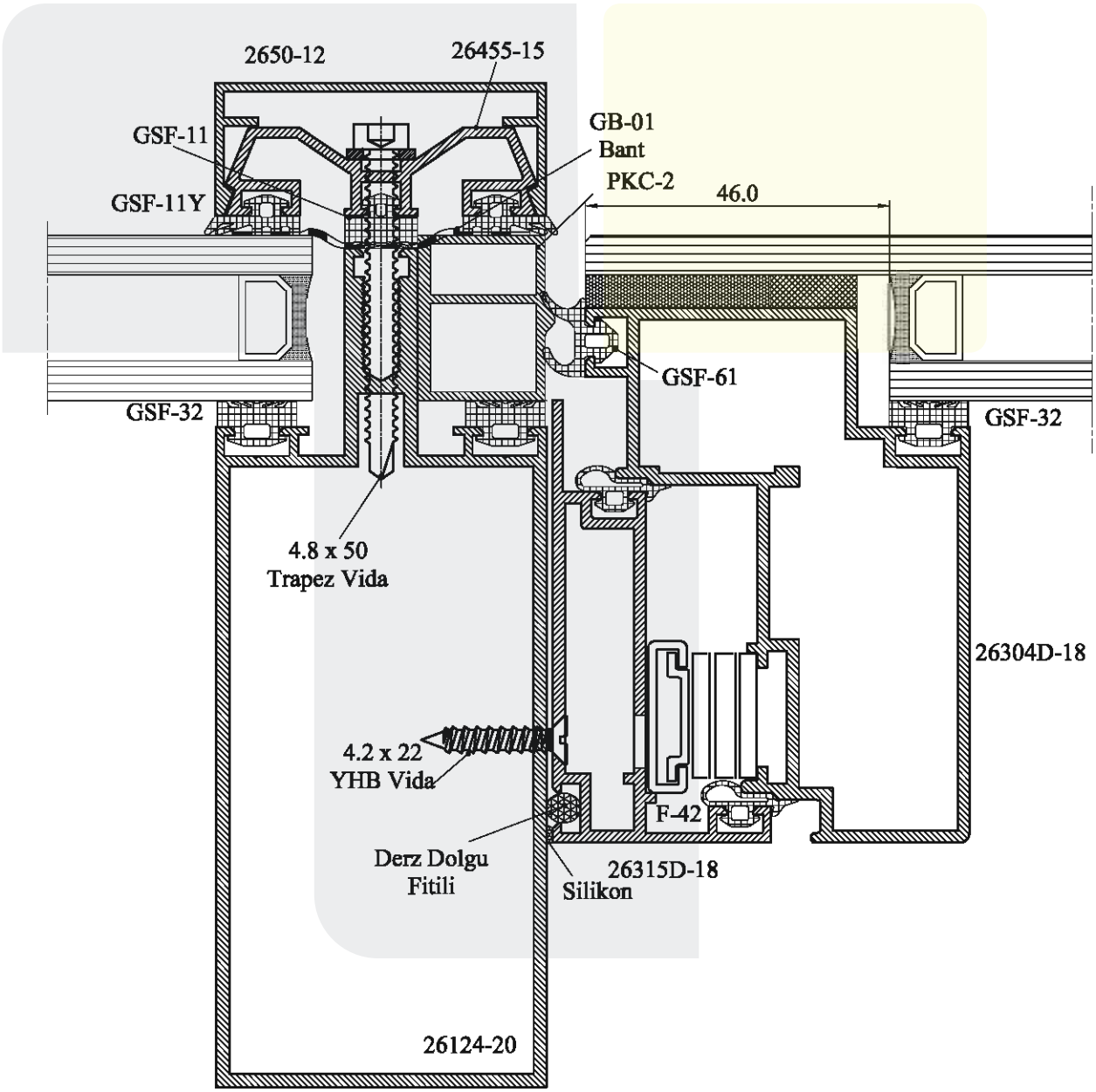


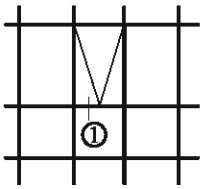
AÇILIR CAM YATAY KESİT
(1. DETAY)



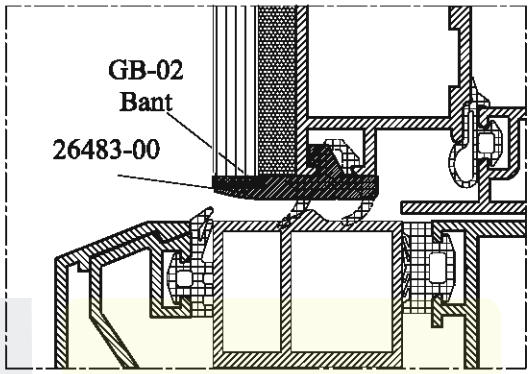


AÇILIR CAM YATAY KESİT
(2. DETAY)

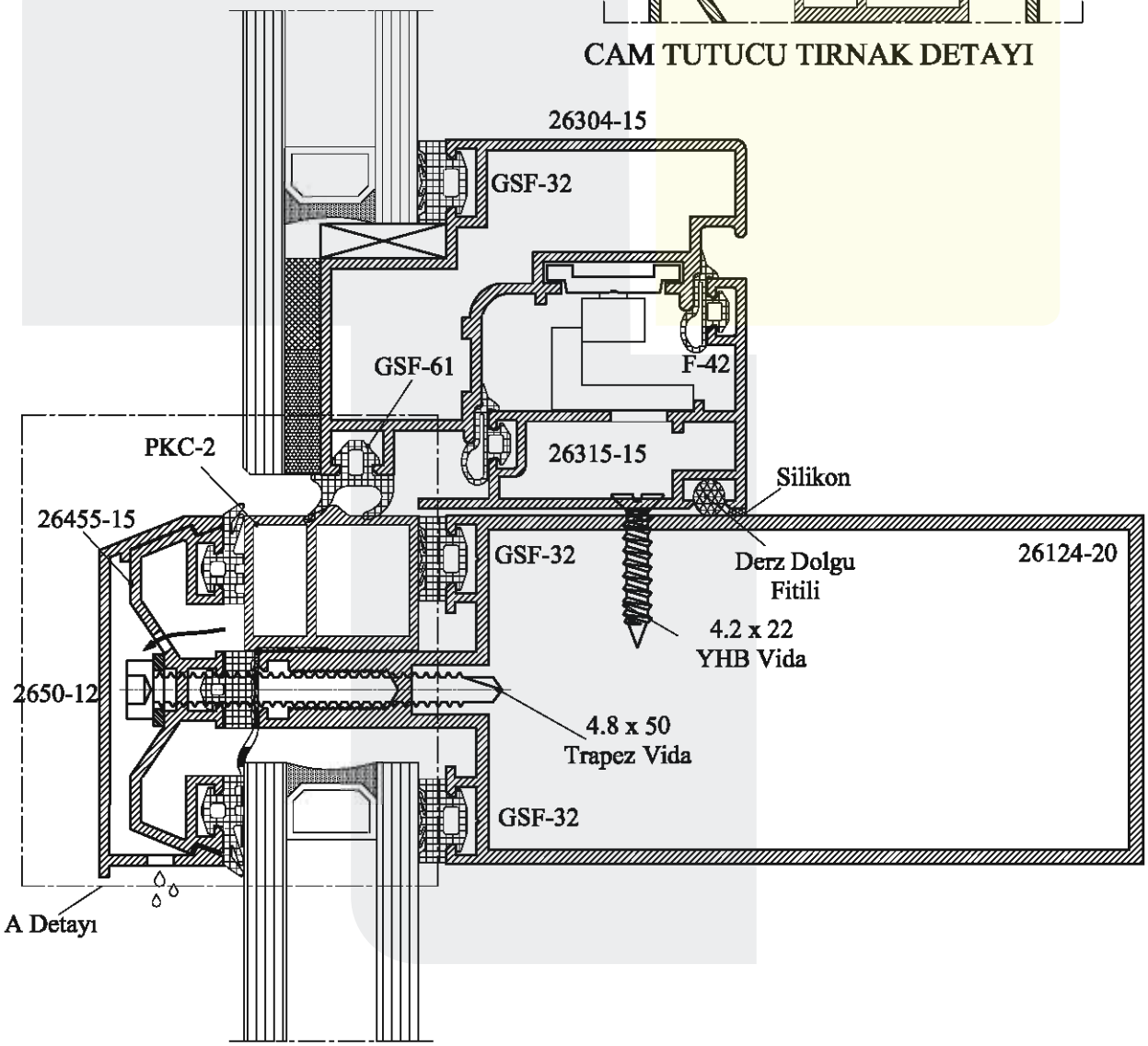




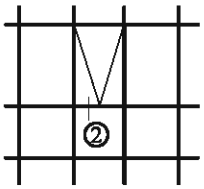
KAPAKLI AÇILIR KANATLI DÜŞEY KESİT
(1.DETAY)

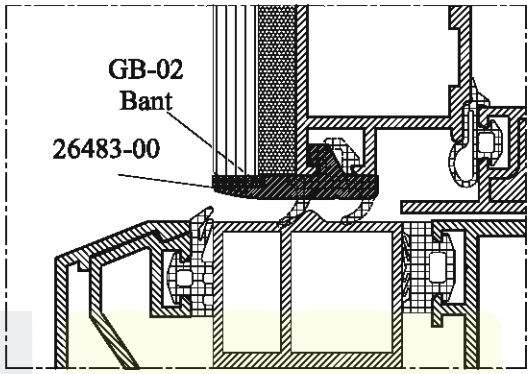


CAM TUTUCU TIRNAK DETAYI



KAPAKLI AÇILIR KANATLI DÜŞEY KESİT
(2.DETAY)

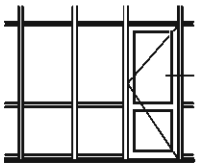


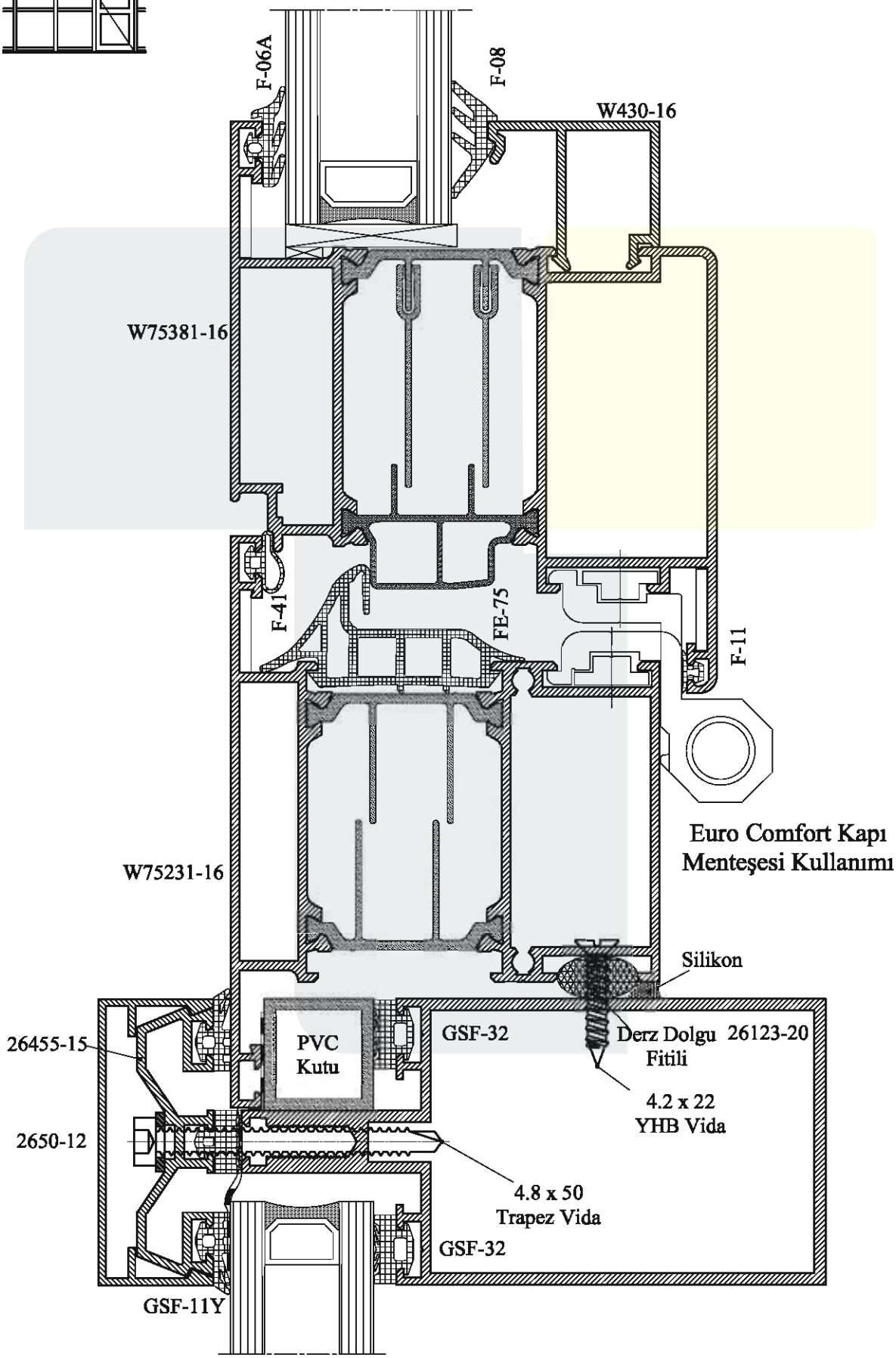


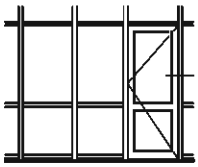
CAM TUTUCU TIRNAK DETAYI

GSF-32
26304D-18
GSF-61
PKC-2
26315D-18
Silikon
26455-15
Derz Dolgu
Fitili
26124-20
4.2 x 22
YHB Vida
2662-15
4.8 x 50
Trapez Vida
GSF-32
A Detayı

KAPAKLI CEPHEDEN EURO COMFORT (W75) DOĞRAMAYA GEÇİŞ

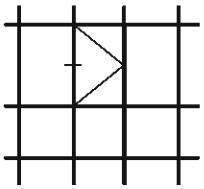




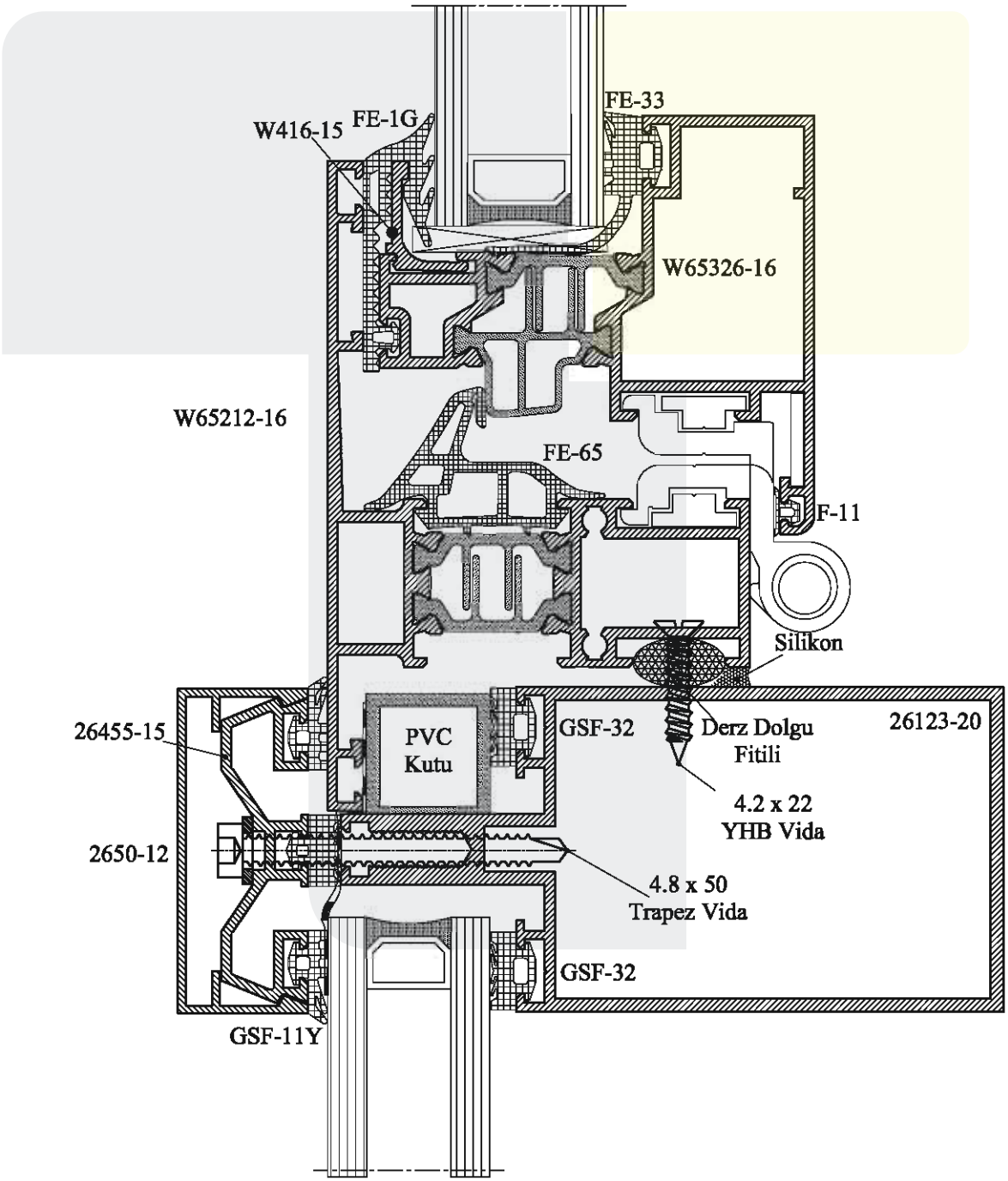


KAPAKLI CEPHEDEN YALITIMLI SİSTEM SERİ (S14) DOĞRAMAYA GEÇİŞ

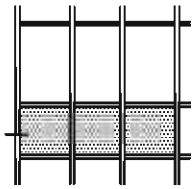
F-06
F-07
1441-15
14381-20
F-41
F-21
F-12
2633-18
GB-02 Bant
26455-15
GSF-32
Silikon
26123-20
2650-12
4.8 x 50
Trapez Vida
GSF-32
GSF-11Y



KAPAKLI CEPHEDE GİZLİ KANAT

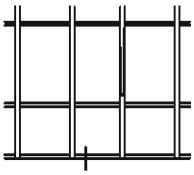


Gizli kanat doğrama geçişinde farklı profil alternatifleri için W65 kataloğunu inceleyiniz.

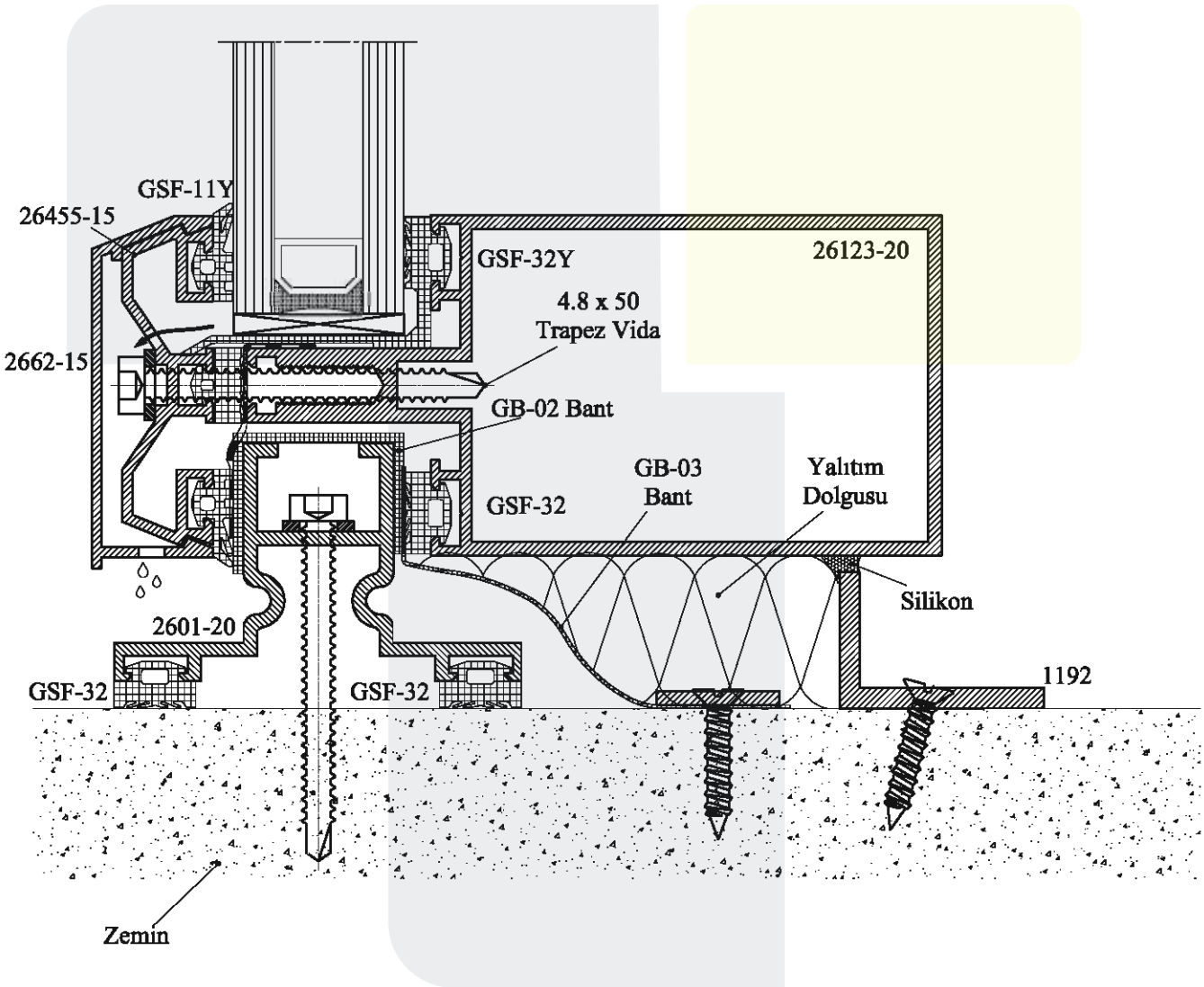


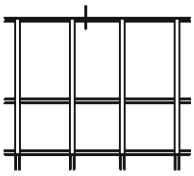
DÜŞEY TAŞIYICI PROFİL ANKRAJ DETAYI
YATAY KESİT

2650-12
26455-15
GSF-32
2601-20
GSF-11Y
GSF-32
Emaye Boya
GSF-32
GB-02
Bant
4.8 x 50
Trapez Vida
GB-03
Bant
0161-02
Yalıtım
Dolgusu
26124-20
Duvar

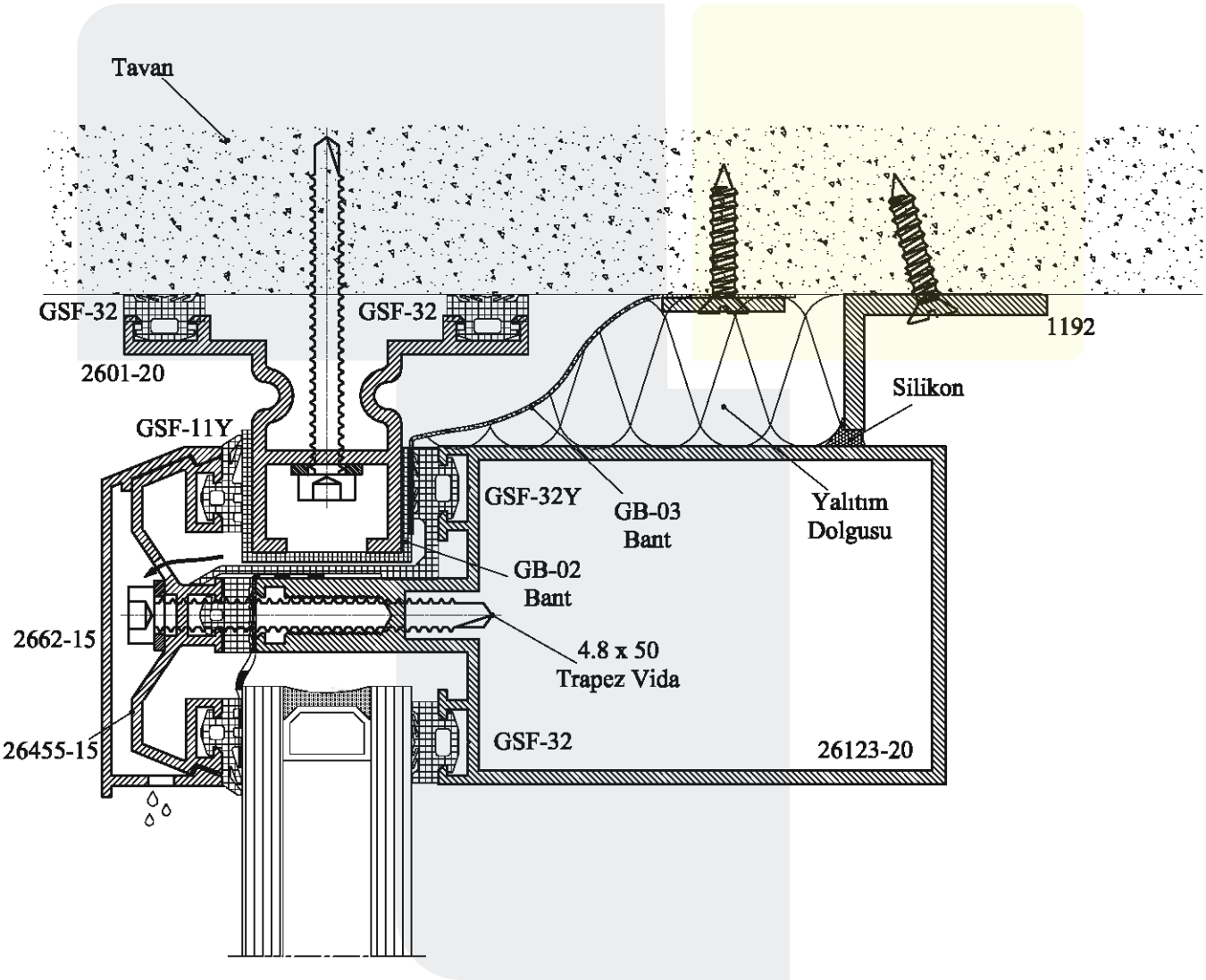


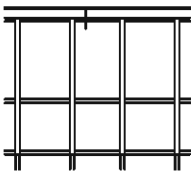
ALT BİTİŞ DETAYI
DÜŞEY KESİT



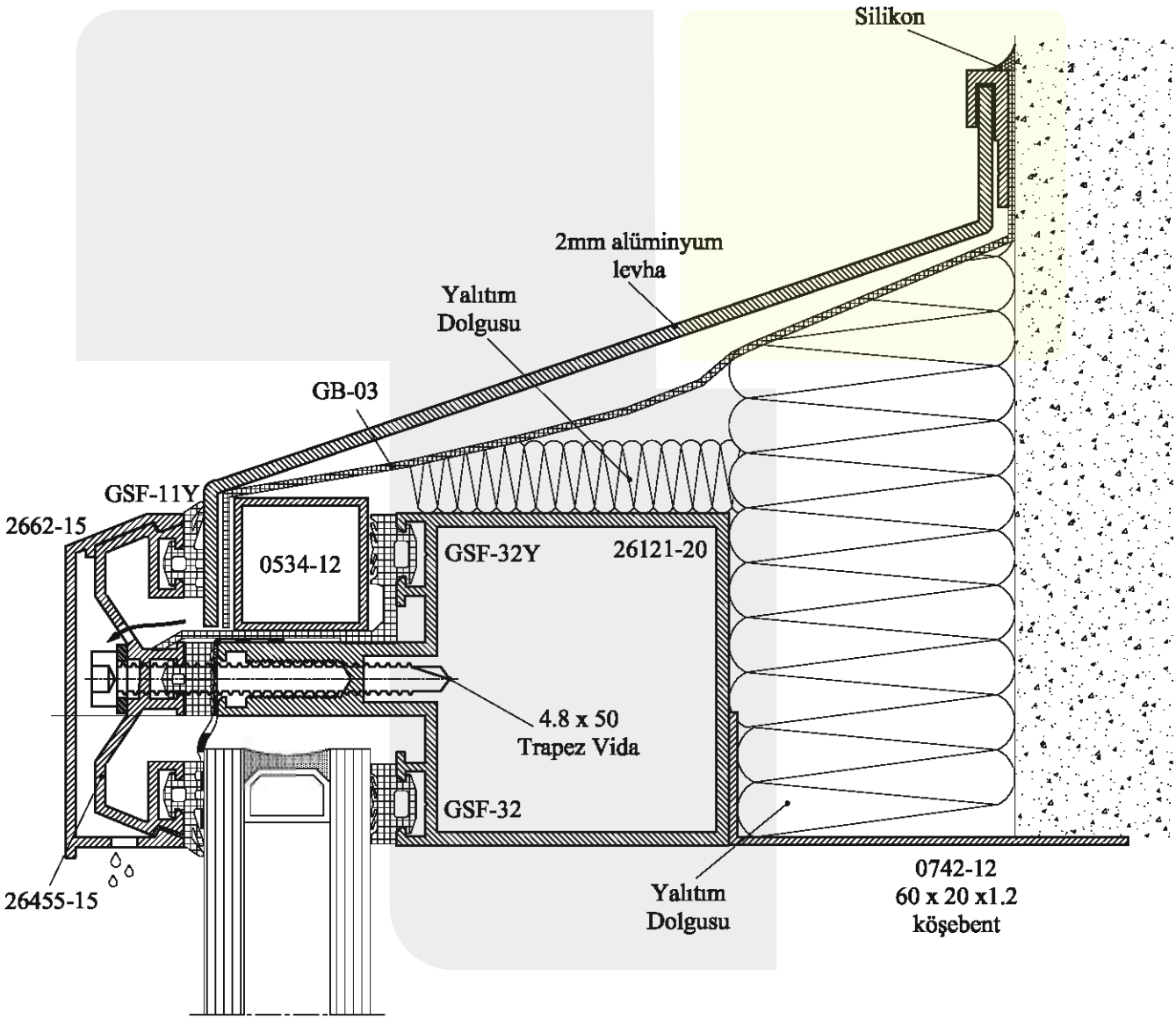


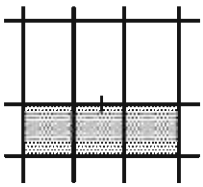
ÜST BİTİŞ DETAYI
DÜŞEY KESİT



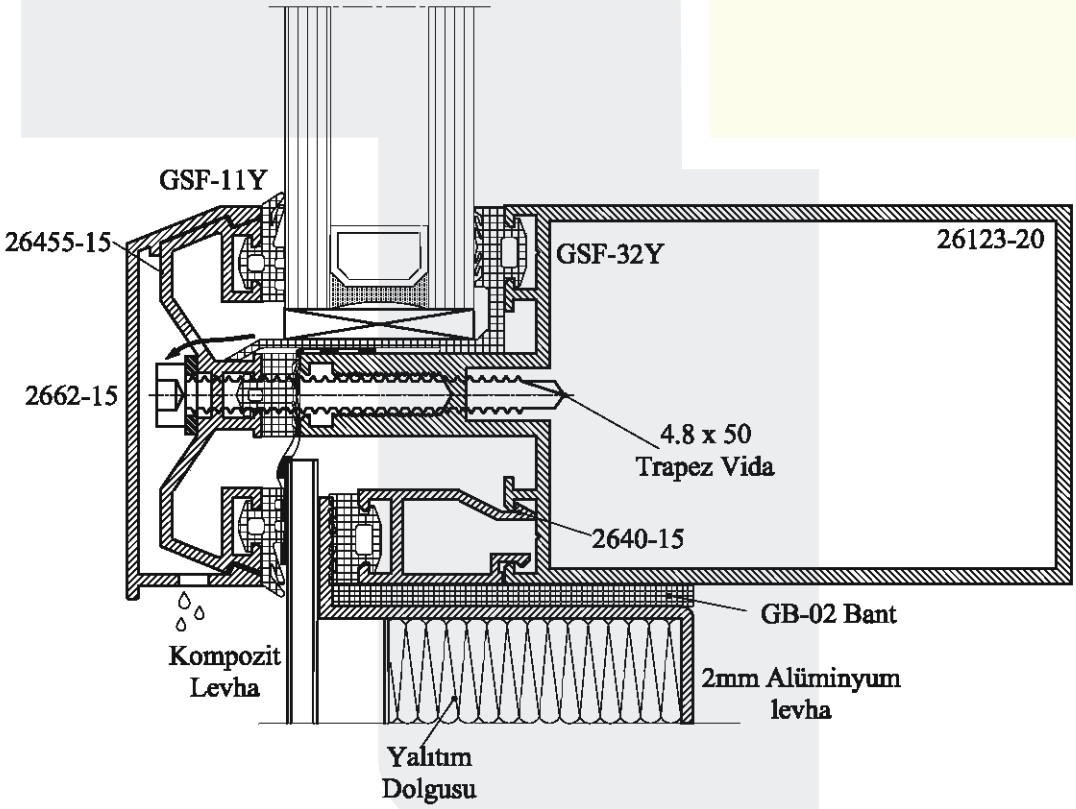


ÜST BİTİŞ DETAYI
DÜŞEY KESİT

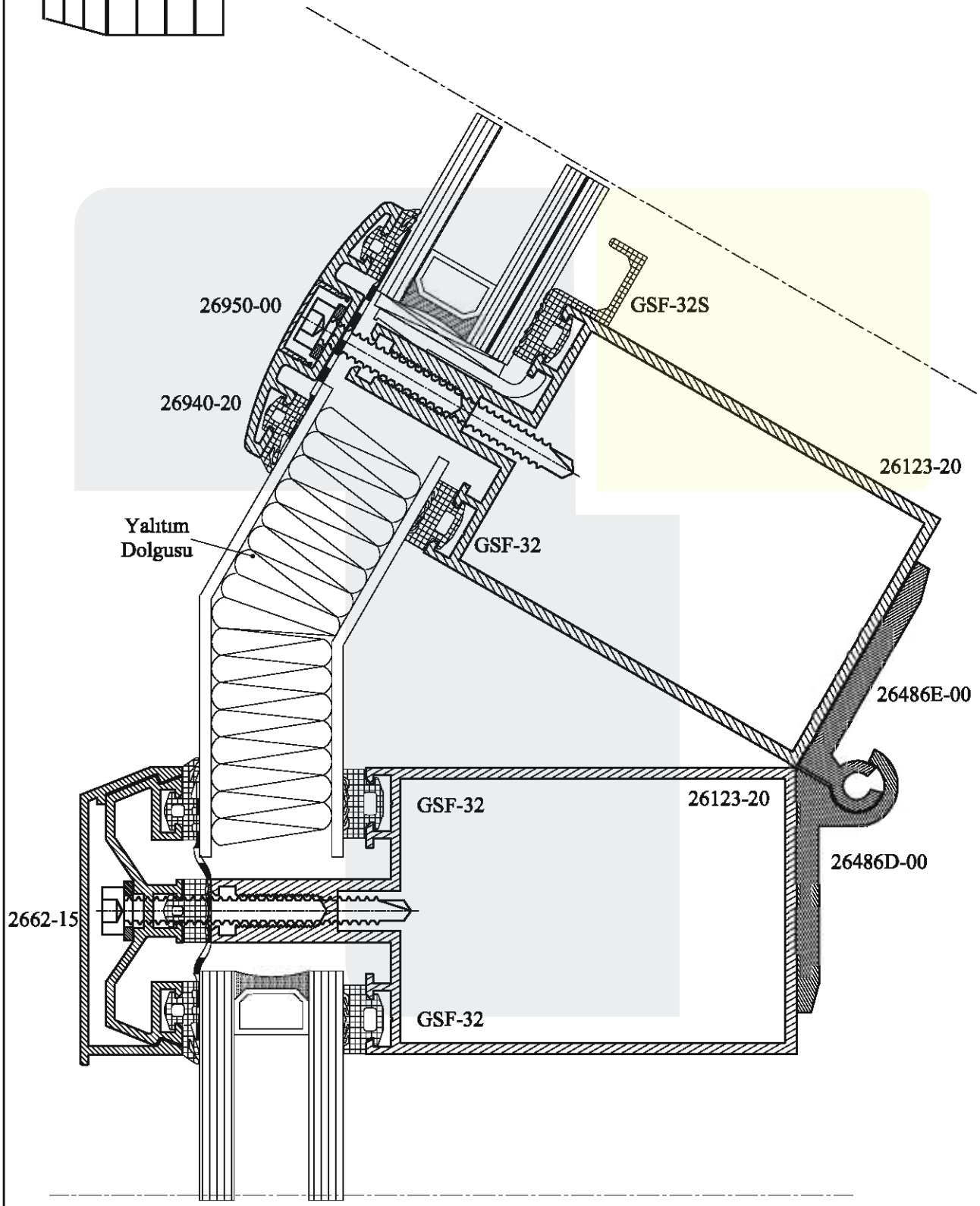




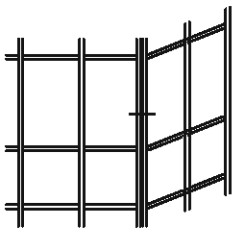
SPANDREL BÖLGE DETAYI

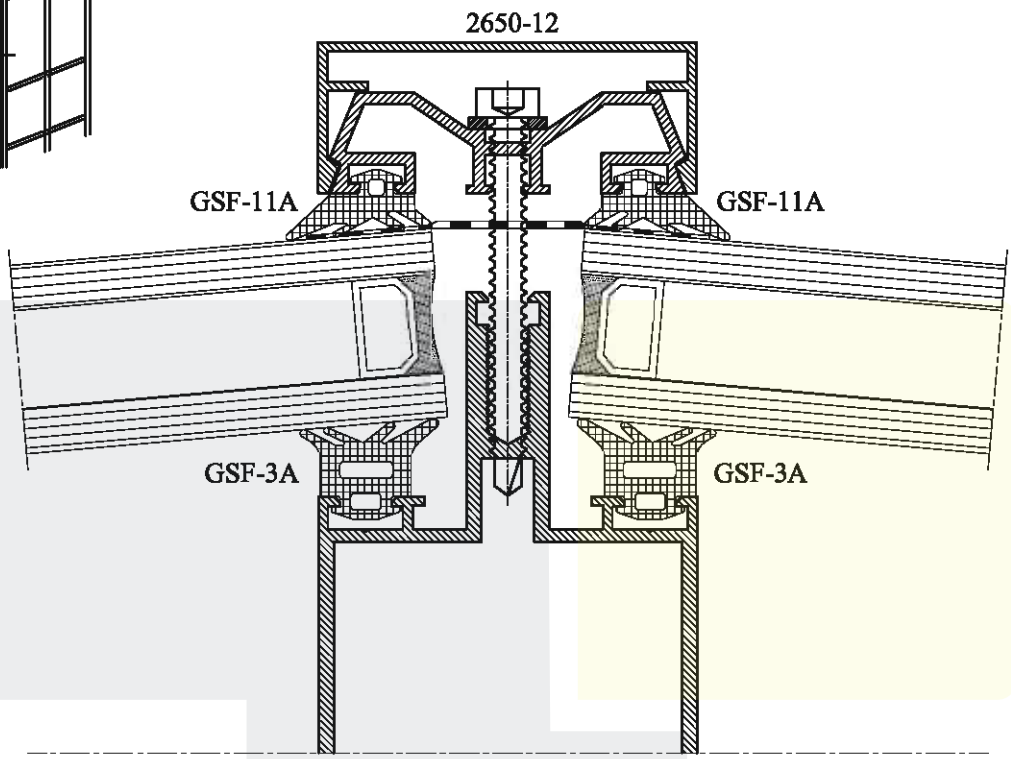


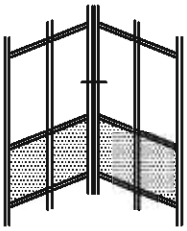
KAPAKLI CEPHE VERANDA DETAYI

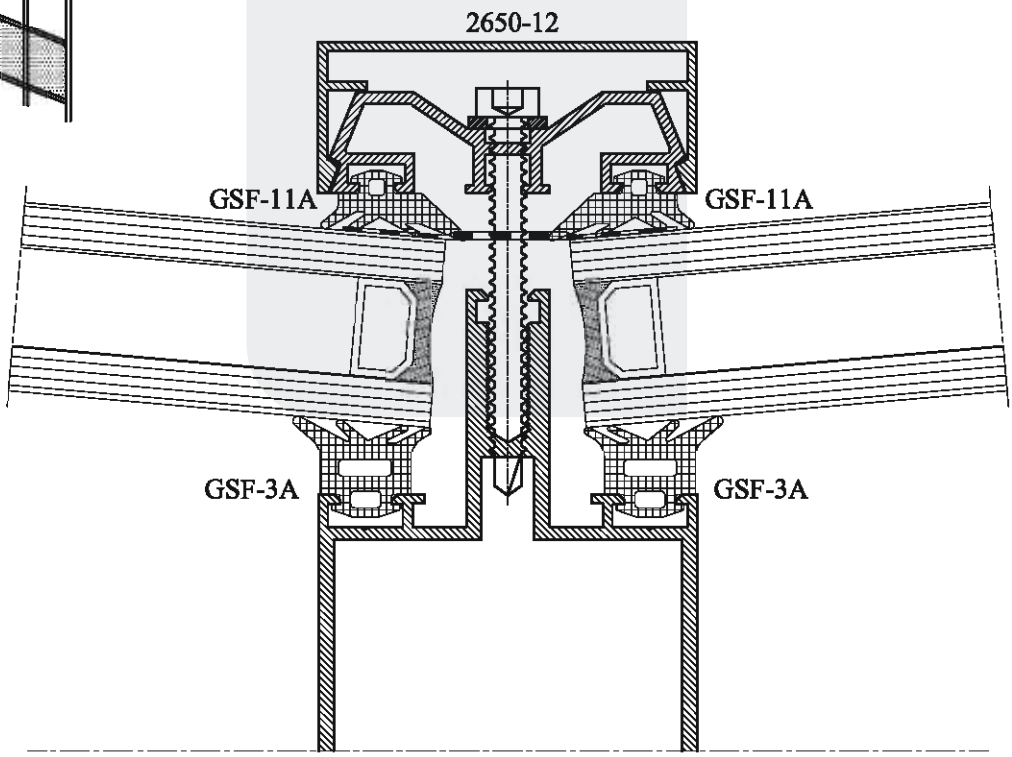


AÇILI CEPHEDE FİTİL KULLANIMI (Max. 12°)

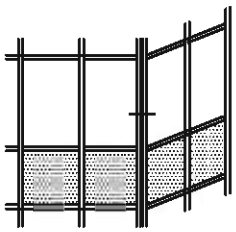


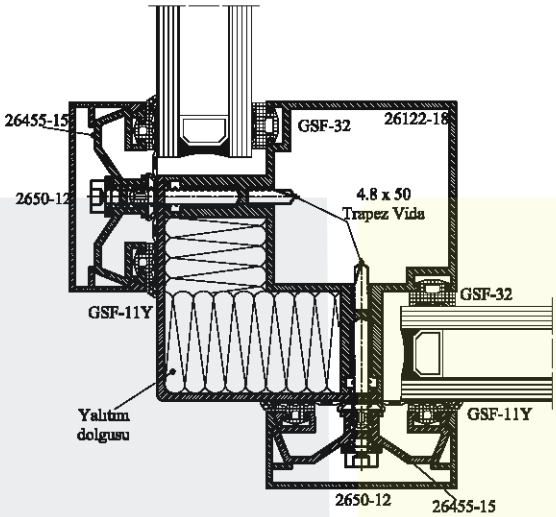






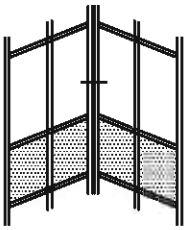
90° İÇTE KÖŞE DETAYI

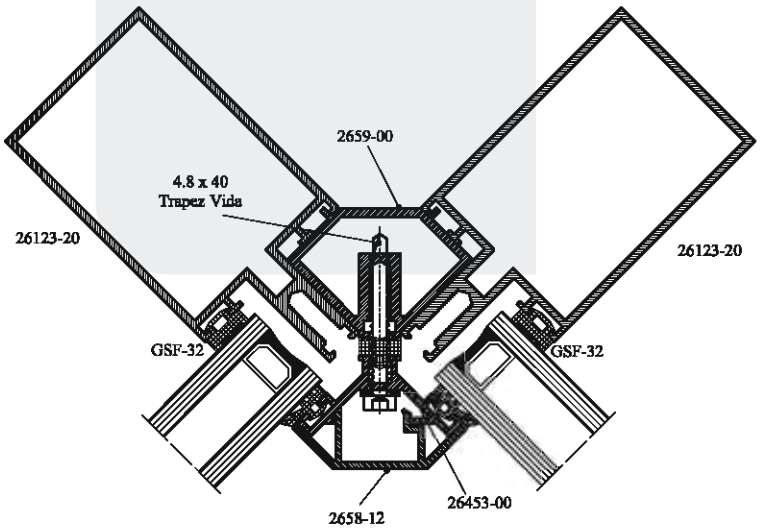




Ölçek 1/2

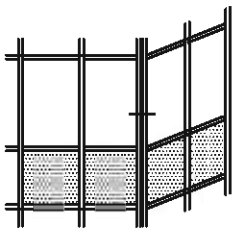
90° DIŞTA KÖŞE DETAYI

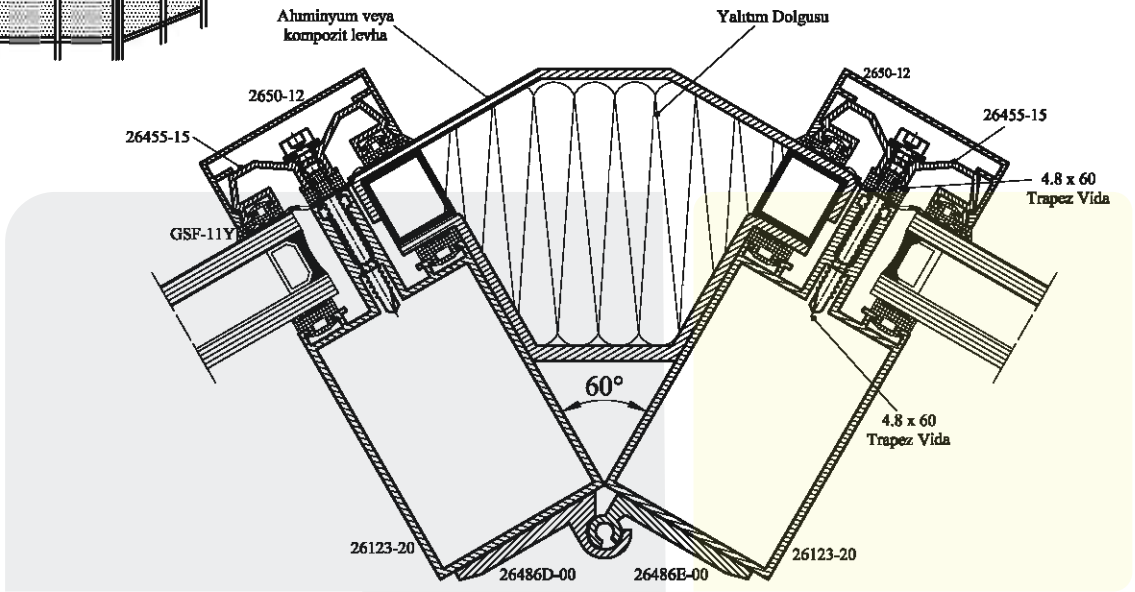




Ölçek 1/2

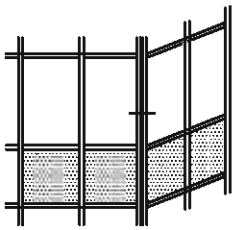
DÜŞEY PROFİL AÇILI BİRLEŞİM DETAYI
(Min. 15° - Max. 90°)

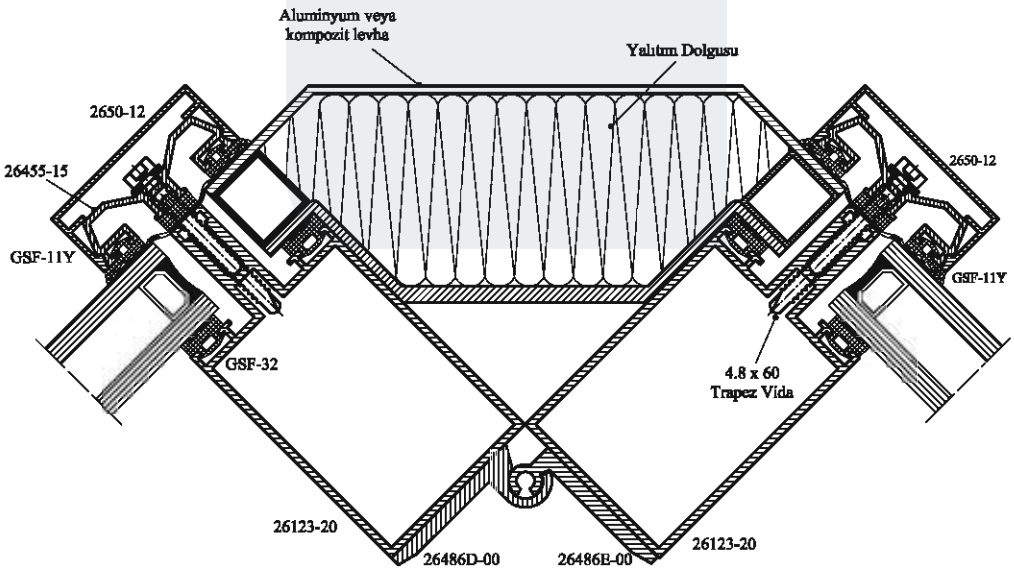




Ölçek 1/2

DÜŞEY PROFİL AÇILI BİRLEŞİM DETAYI
(Min. 30° - Max. 90°)

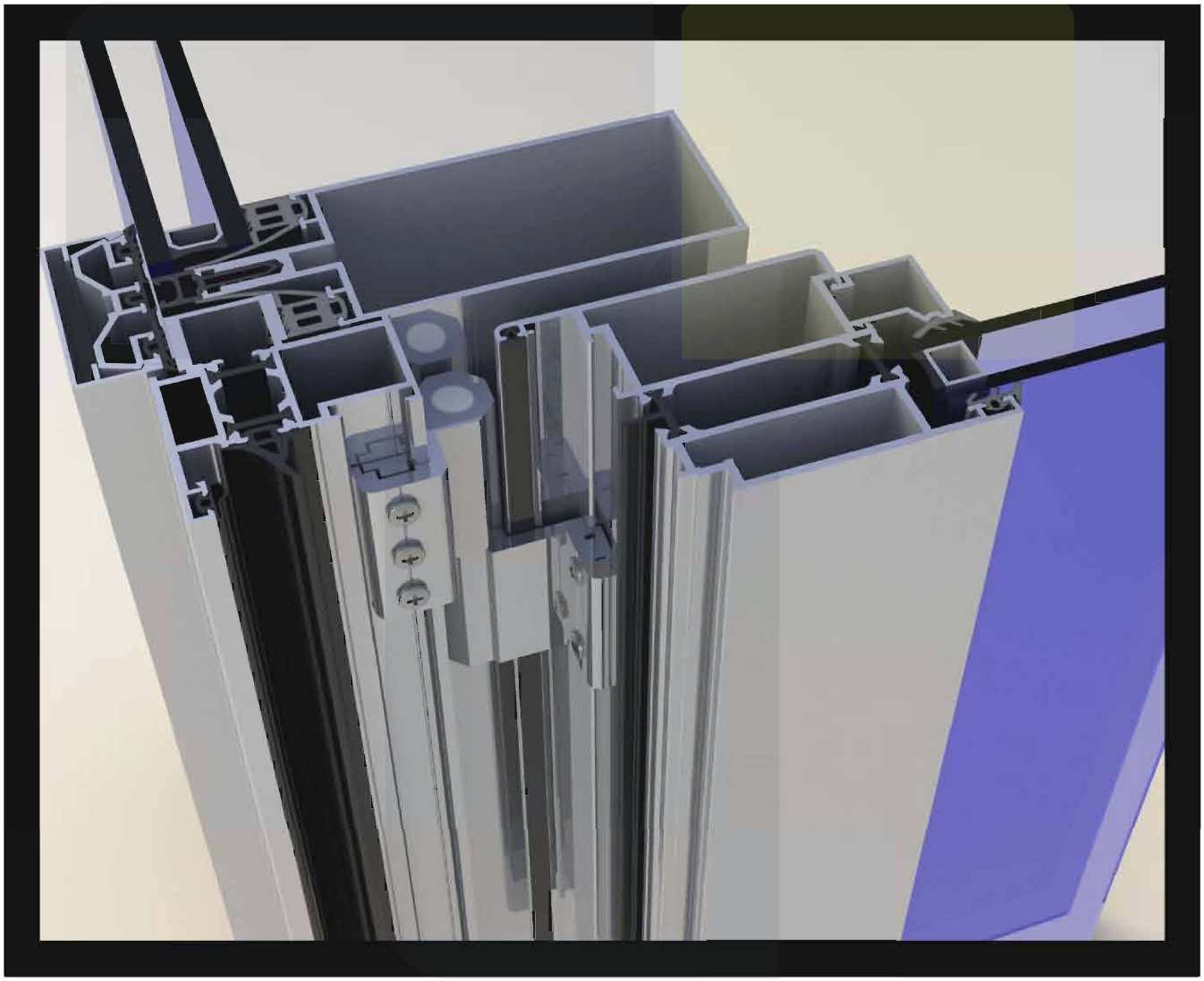


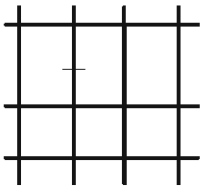


Ölçek 1/2

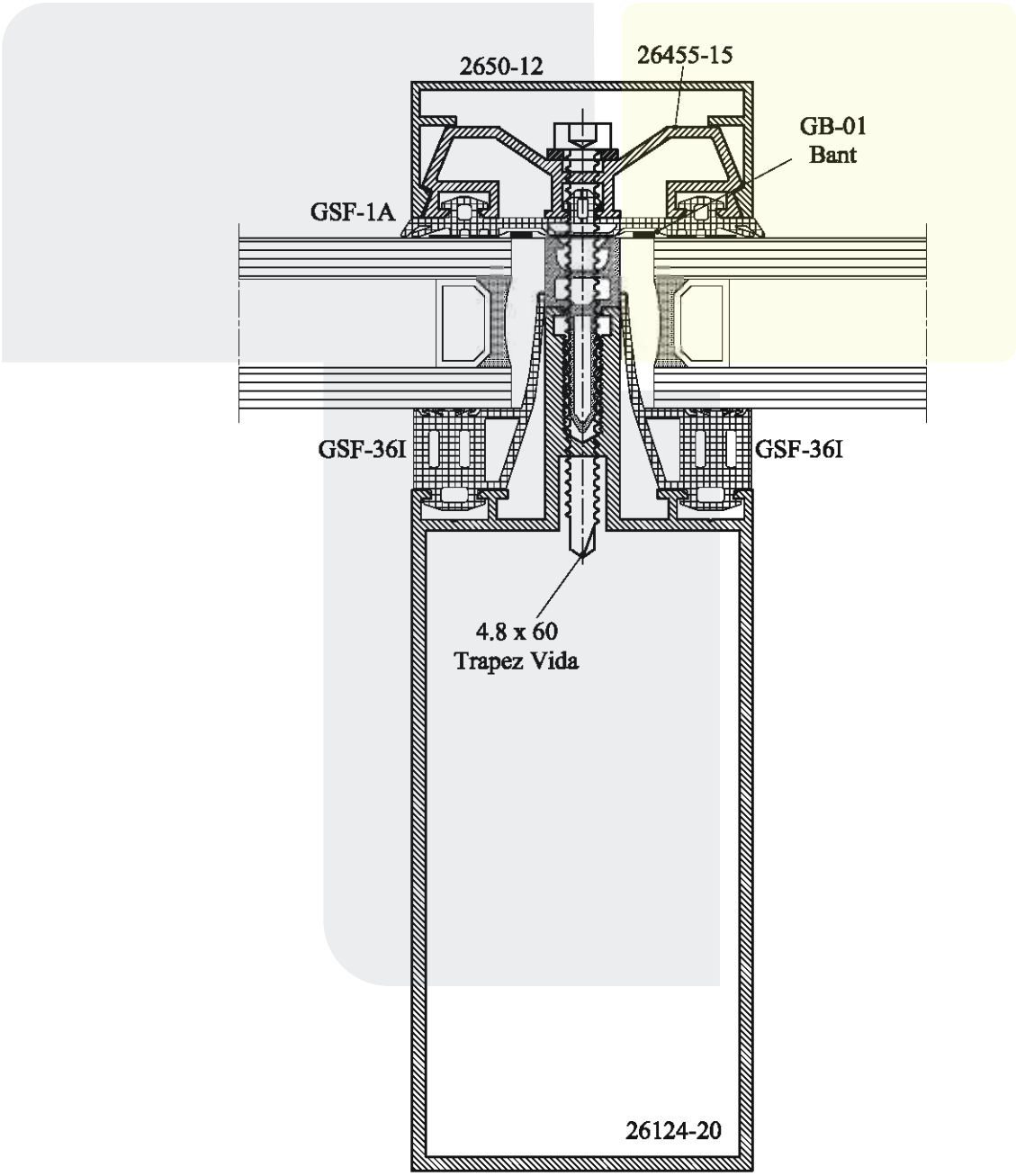
KAPAKLI CEPHE

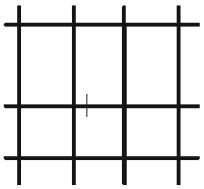
F50K/HI+



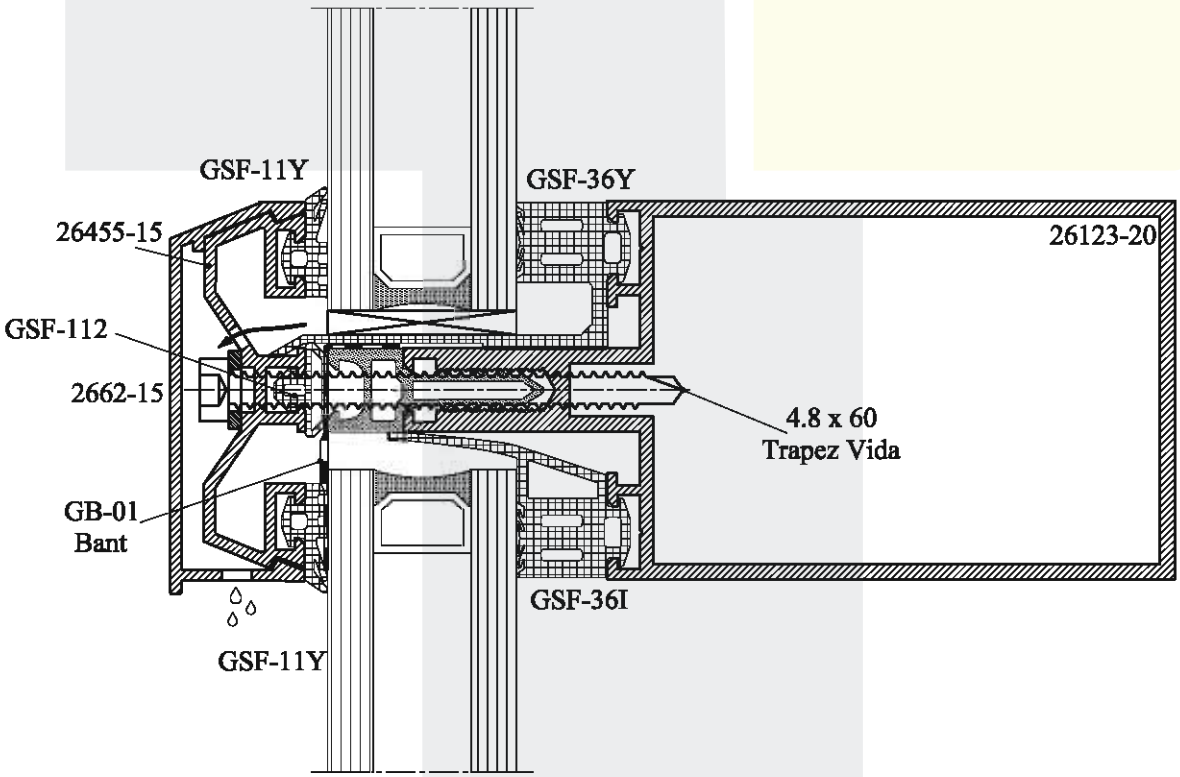


AÇILIR OLMAYAN YATAY KESİT

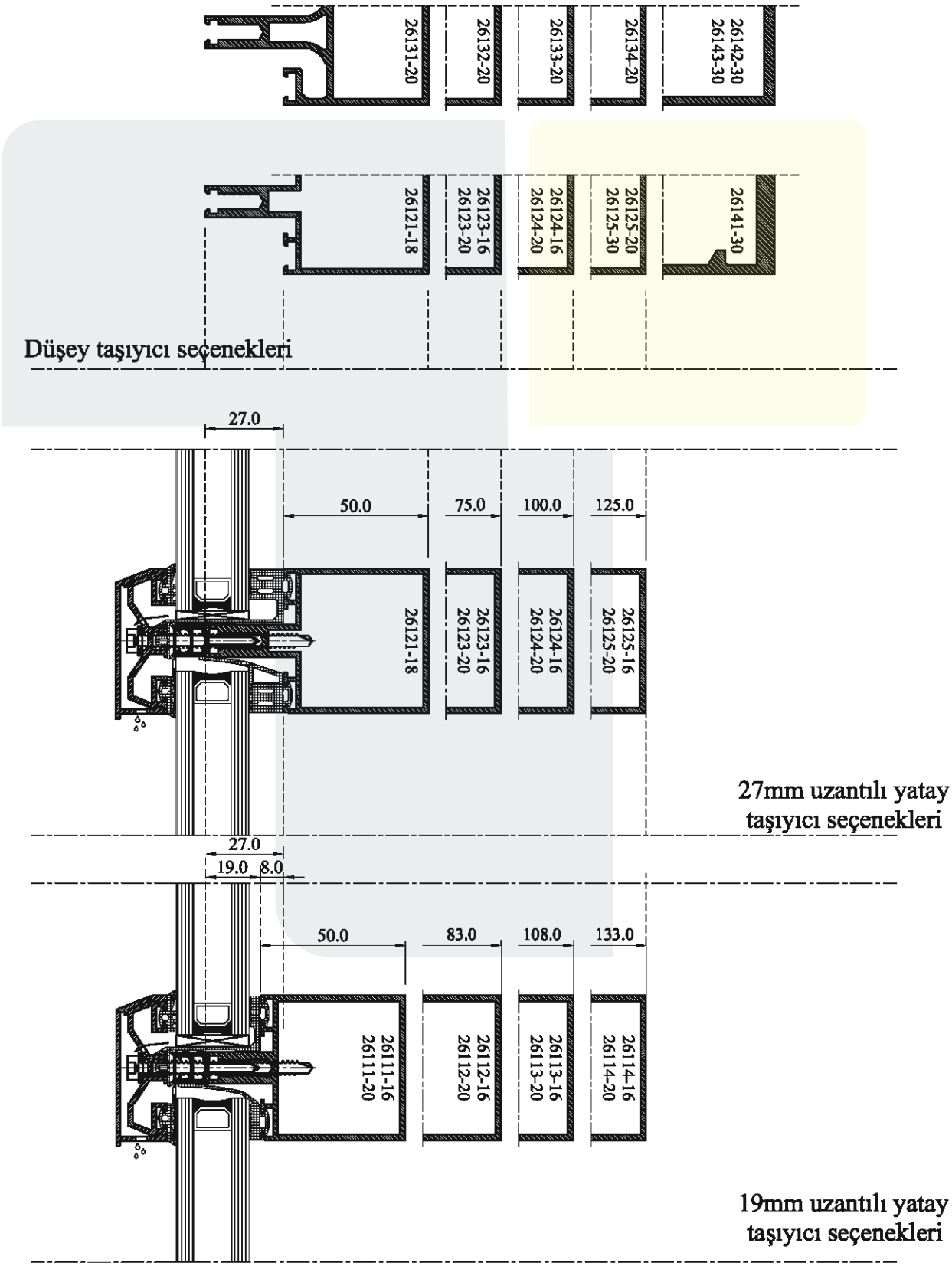




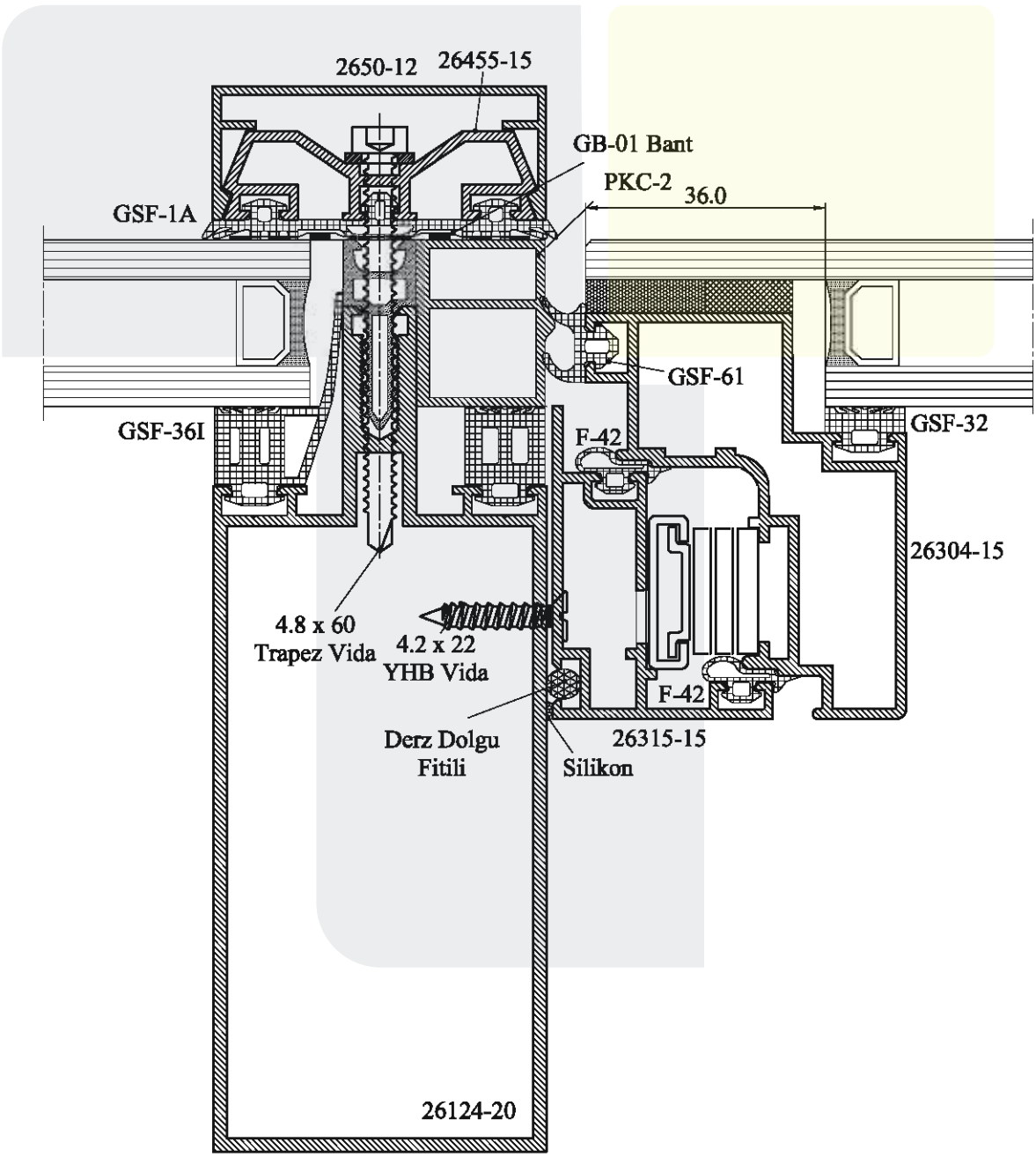
AÇILIR OLMAYAN DÜŞEY KESİT

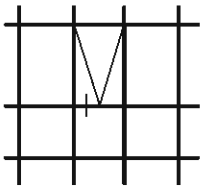


YATAY ve DÜŞEY TAŞIYICI SEÇENEKLERİ

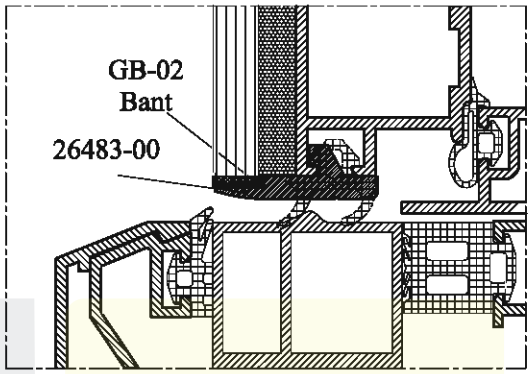


AÇILIR CAM YATAY KESİT

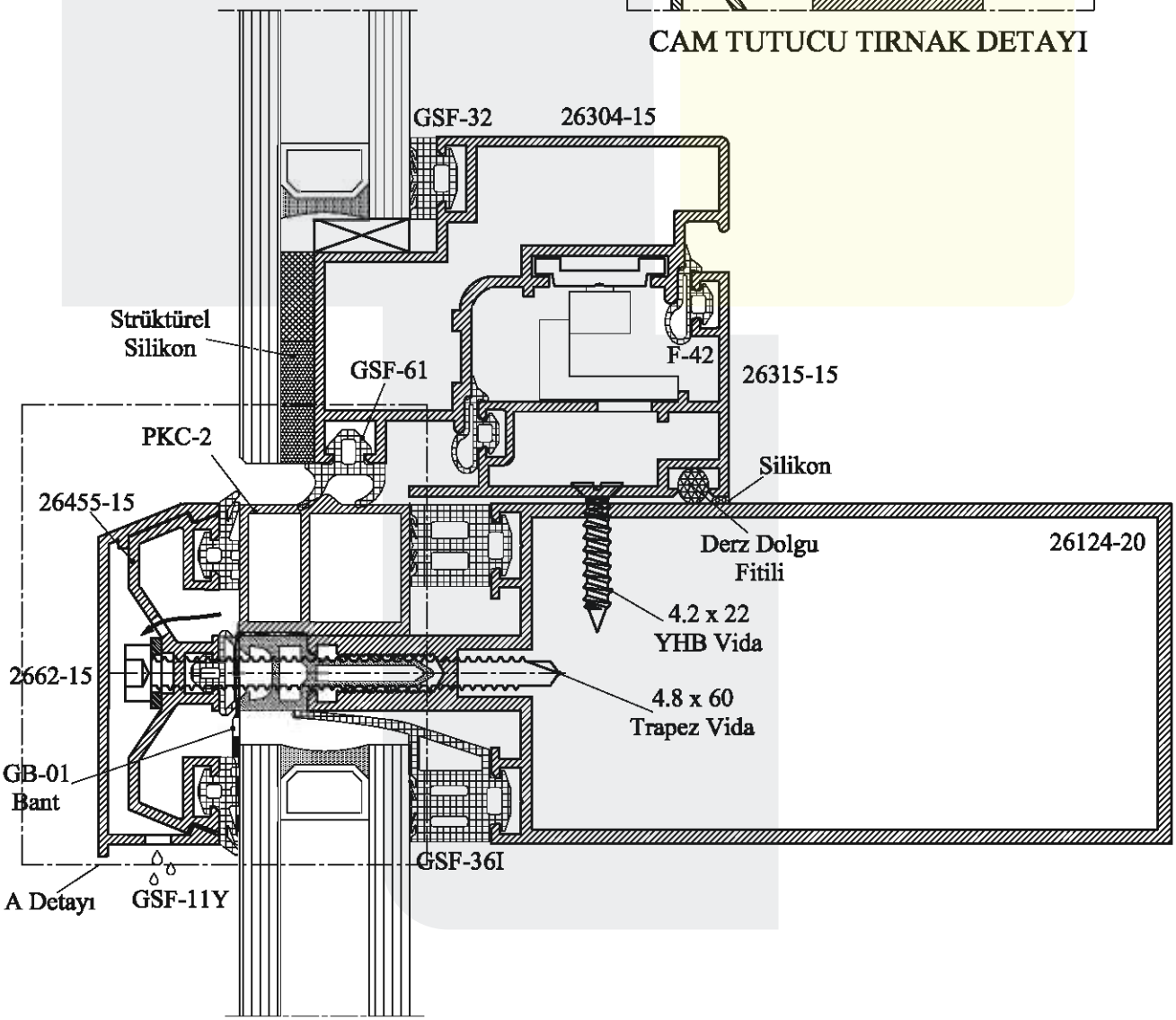




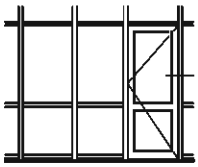
AÇILIR KANATLI DÜŞEY KESİT

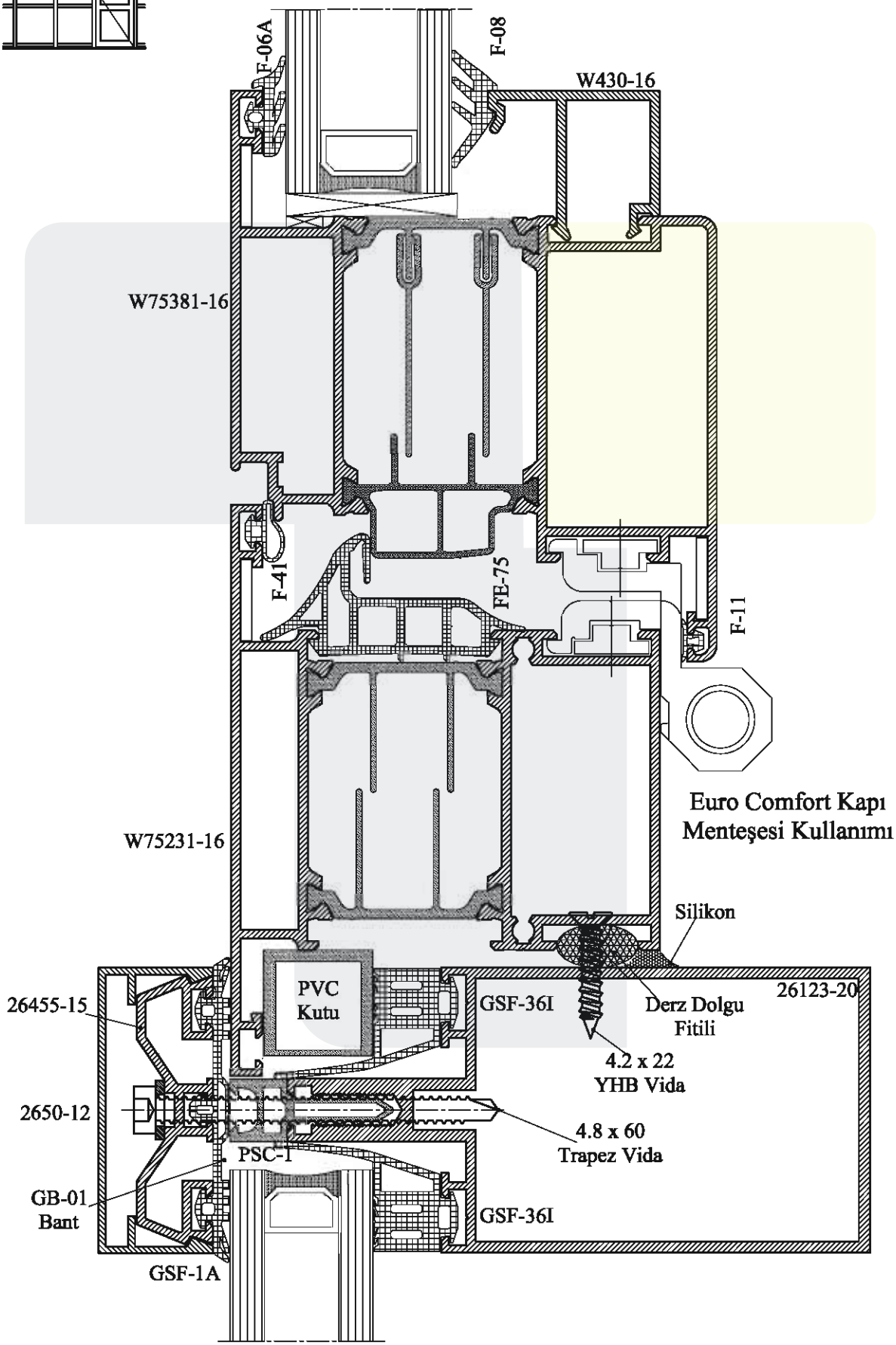


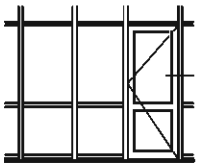
CAM TUTUCU TIRNAK DETAYI



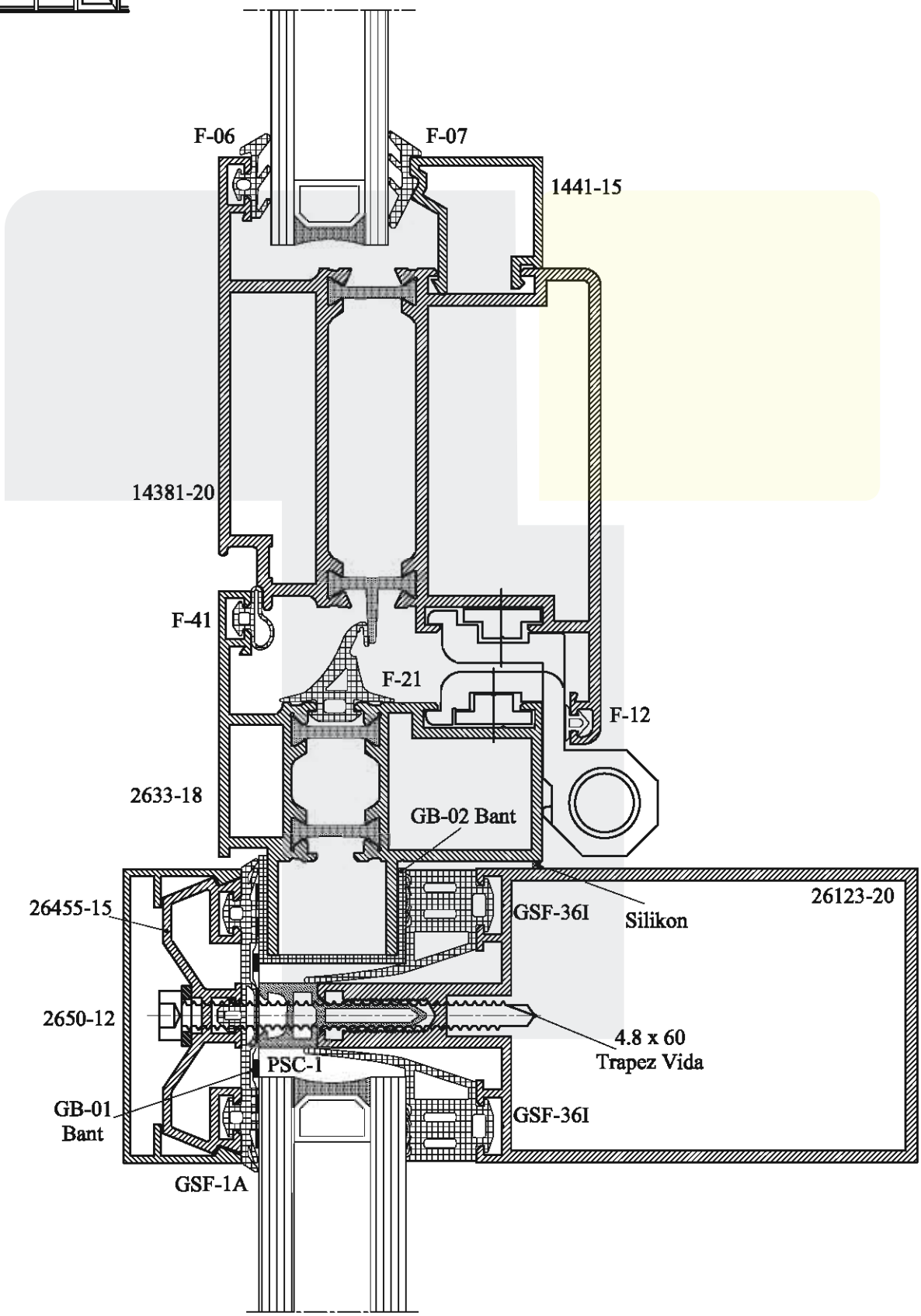
KAPALI CEPHEDEN EURO COMFORT (W75 veya W65)DOĞRAMAYA GEÇİŞ

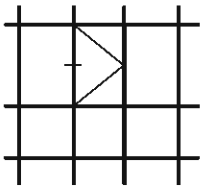




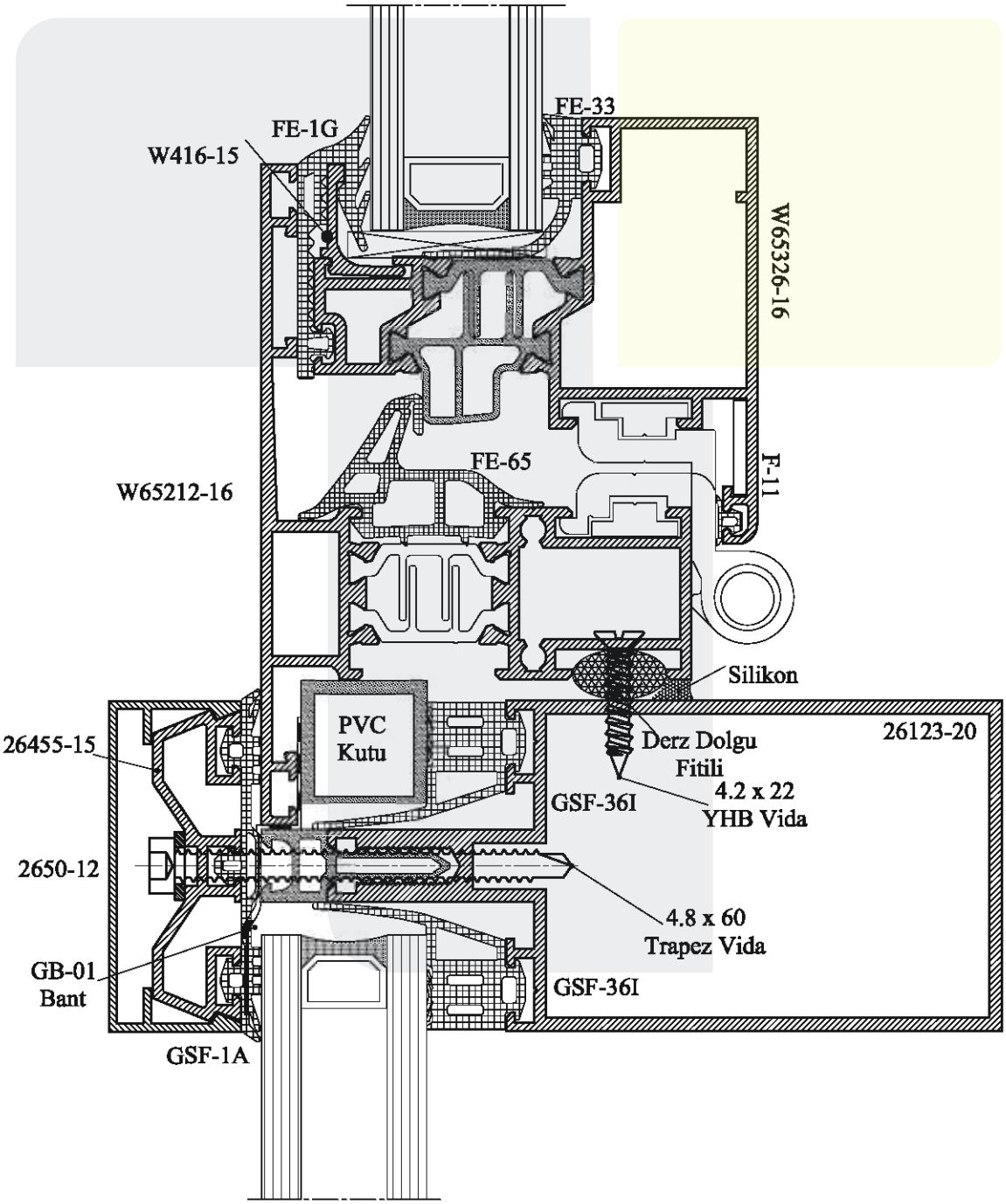


KAPAKLI CEPHEDEN YALITIMLI SİSTEM SERİ (S14) DOĞRAMAYA GEÇİŞ

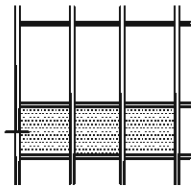




KAPAKLI CEPHEDE GİZLİ KANAT

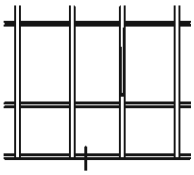


Gizli kanat doğrama geçişinde farklı profil alternatifleri için W65 kataloğunu inceleyiniz.

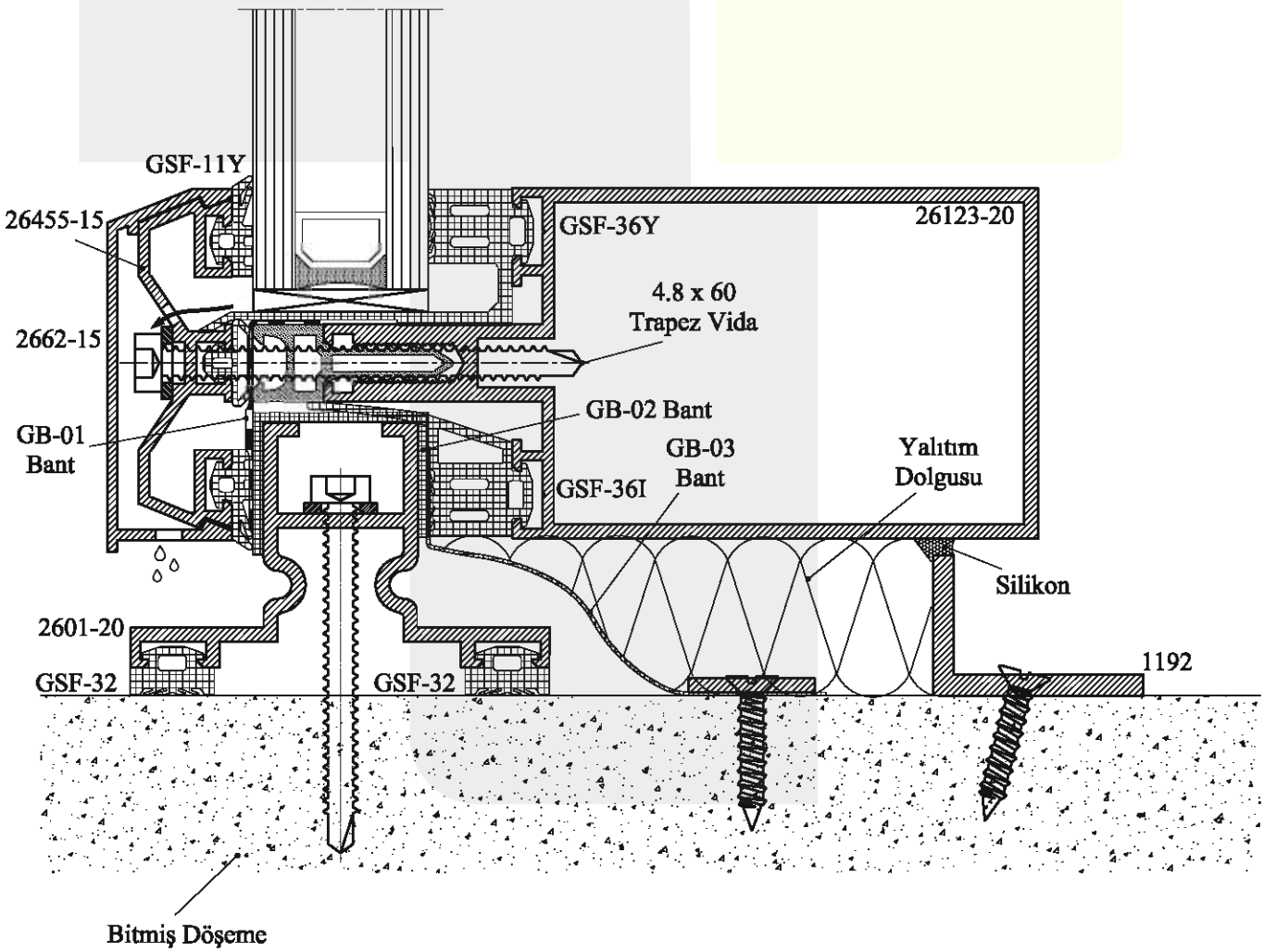


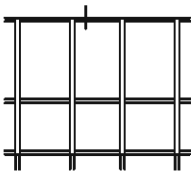
DÜŞEY TAŞIYICI PROFİL YAN BİTİŞ & ANKRAJ DETAYI
YATAY KESİT

2650-12
26455-15
2601-20
GB-01 Bant
GB-02
GSF-1A
Emaye Boya
GSF-32
GSF-36I
GSF-36I
4.8 x 60 Trapez Vida
GB-03 Bant
0161-02
Yalıtım Dolgusu
26124-20
Duvar

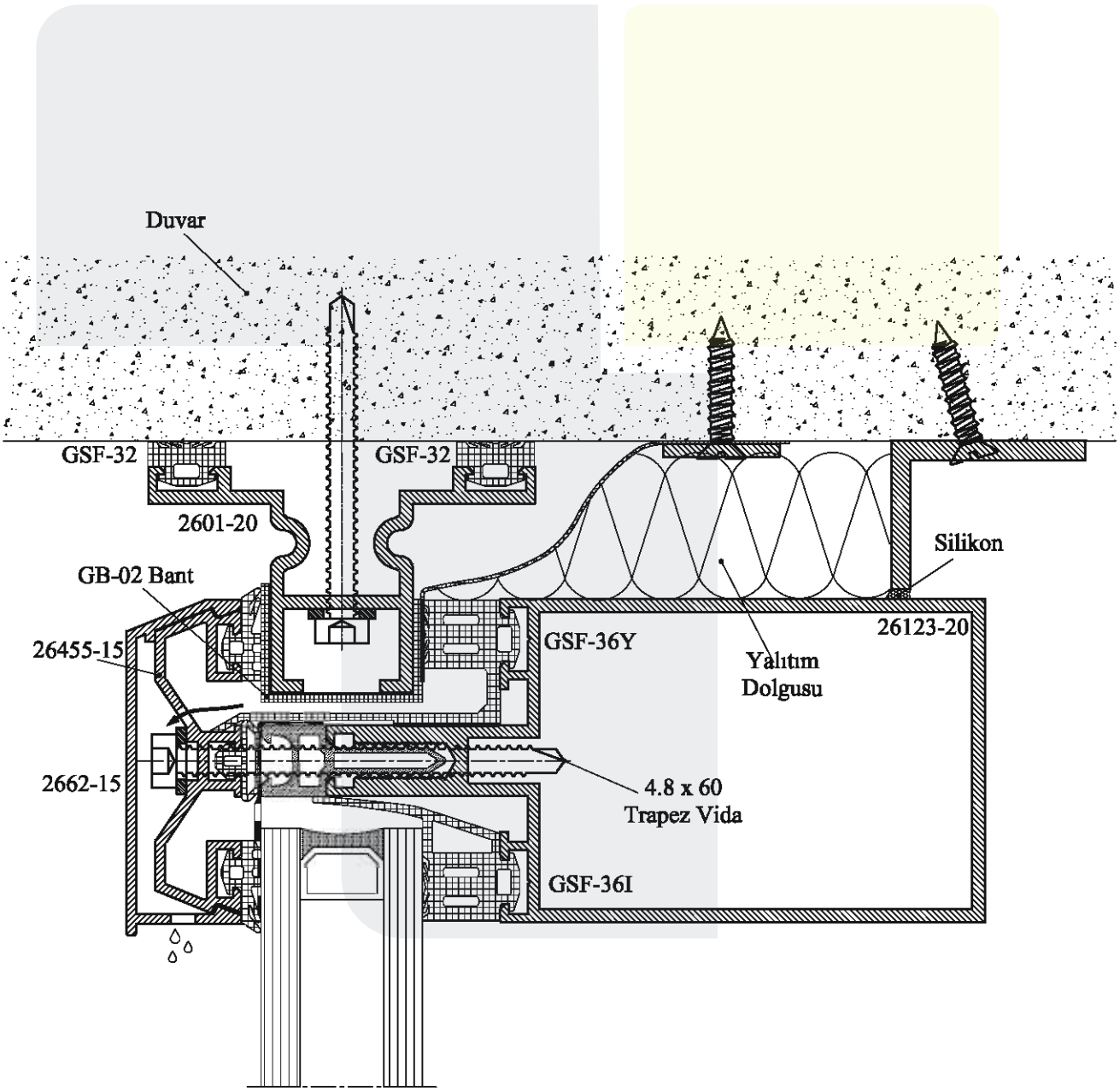


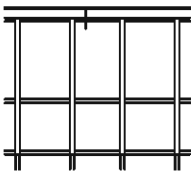
ALT BİTİŞ DETAYI
DÜŞEY KESİT



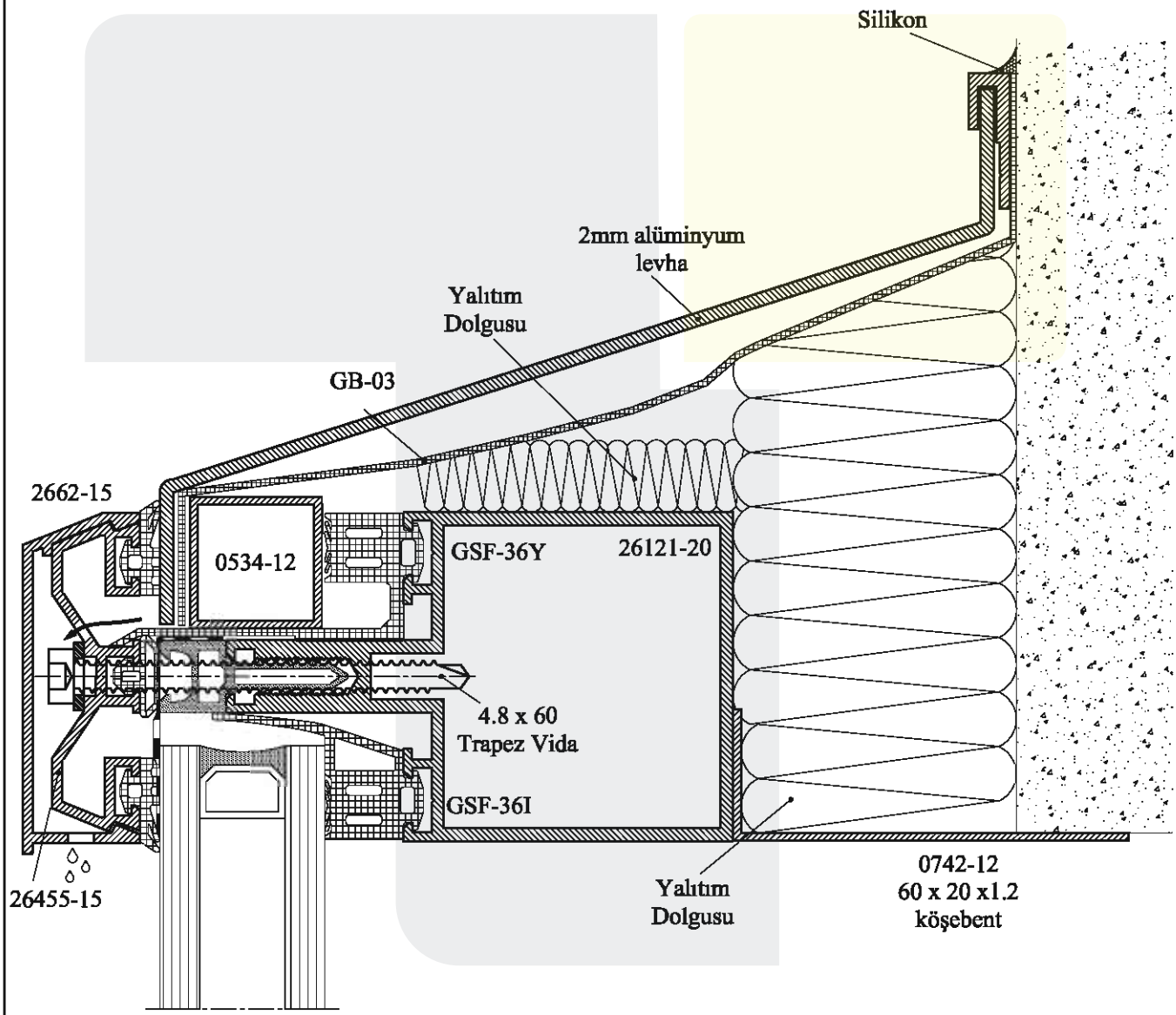


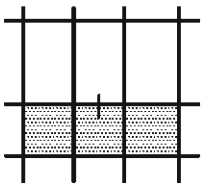
ÜST BİTİŞ DETAYI
DÜŞEY KESİT



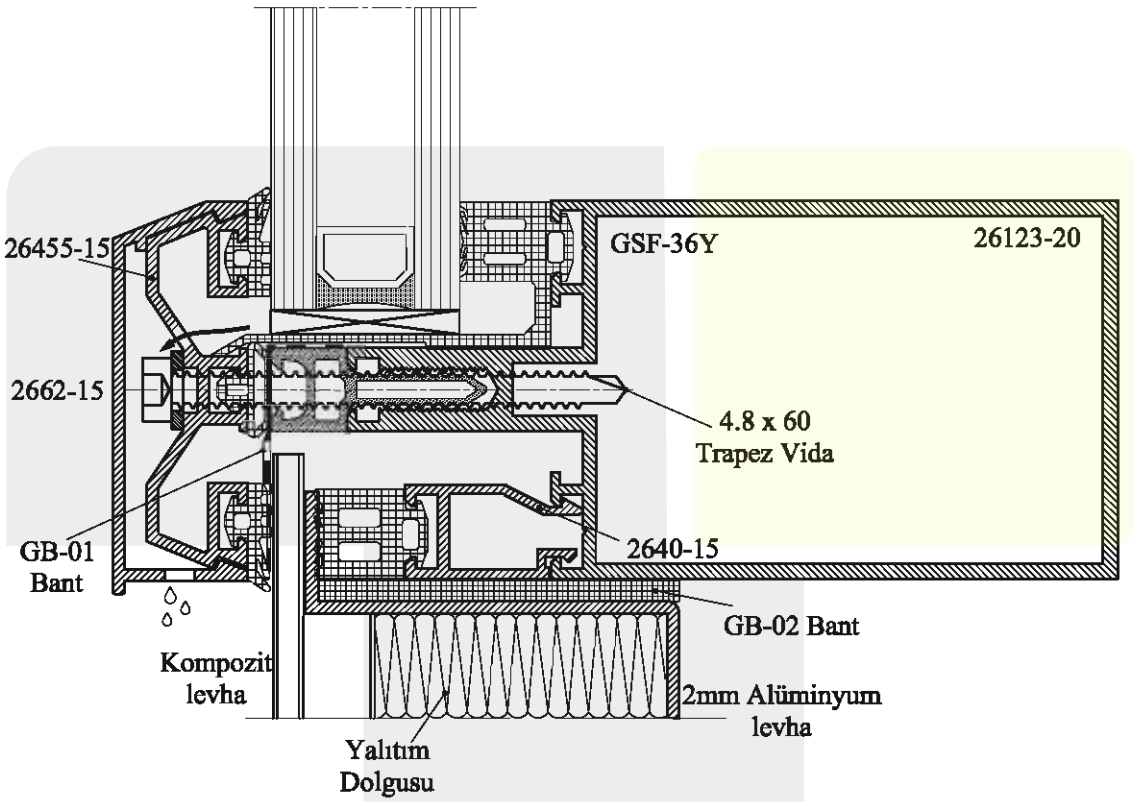


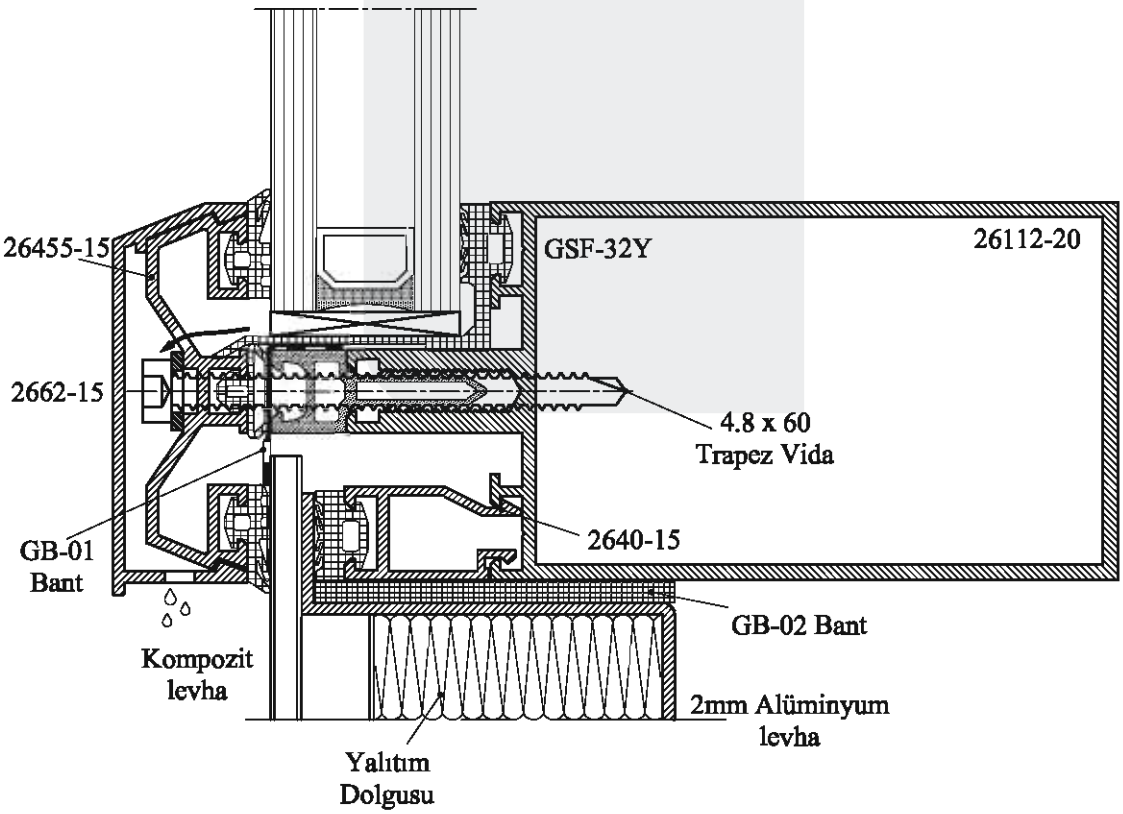
ÜST BİTİŞ DETAYI
DÜŞEY KESİT



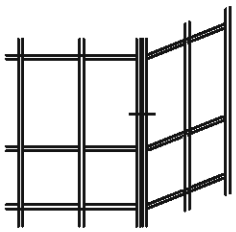


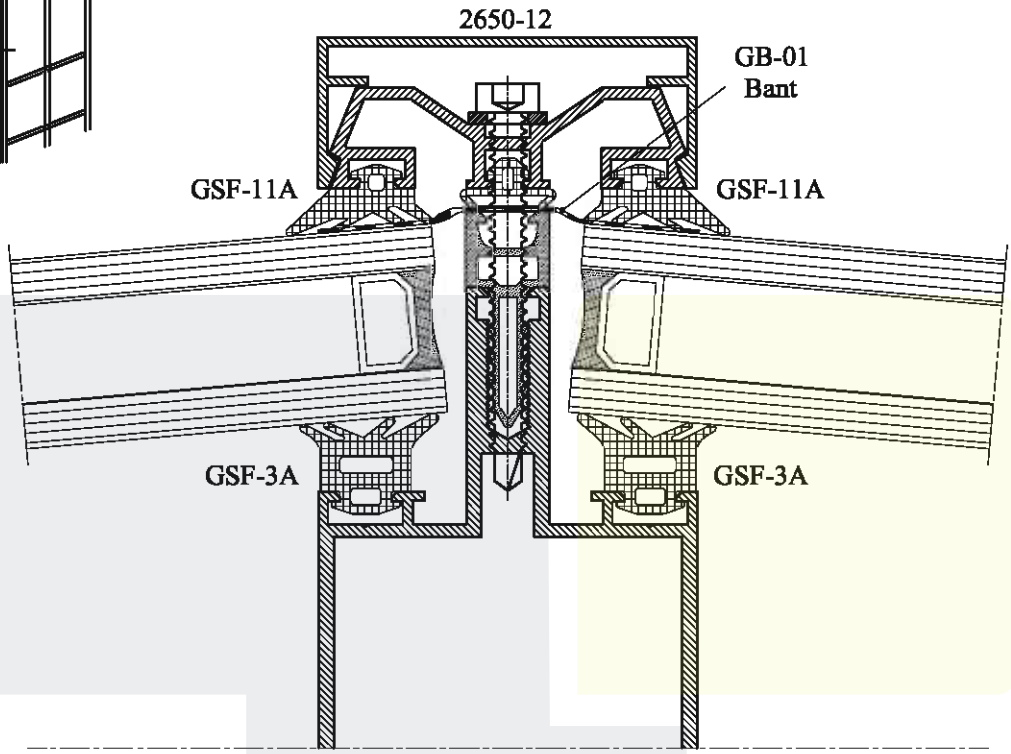
SPANDREL BÖLGE DETAYLARI

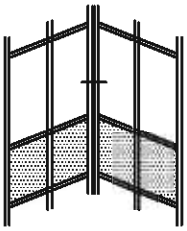


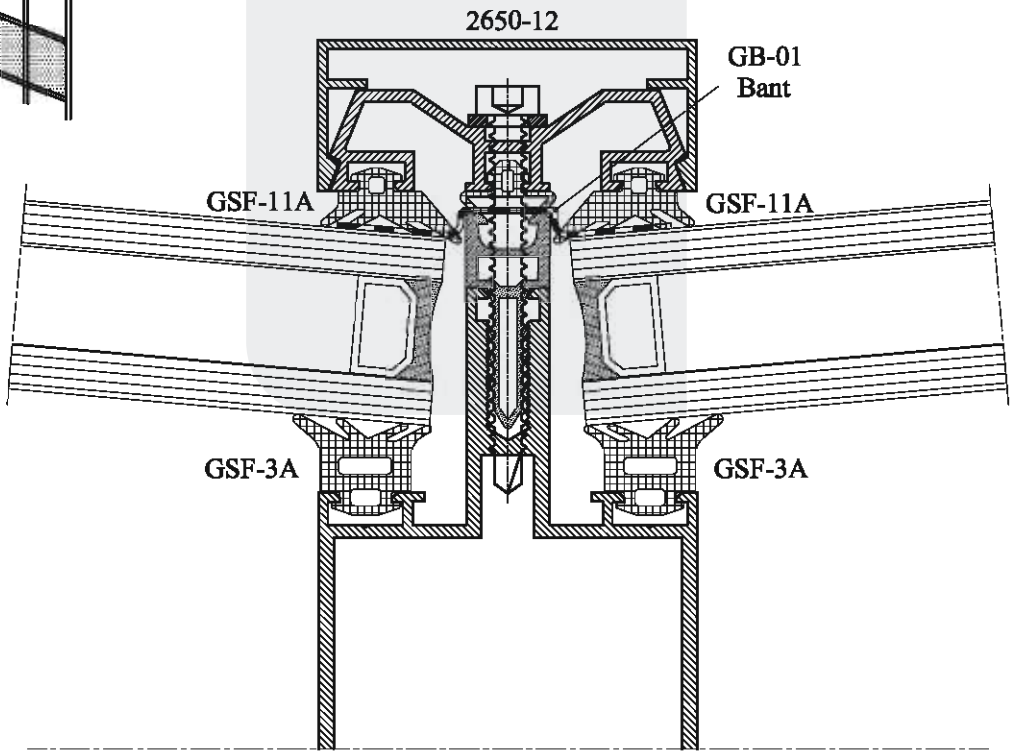


AÇILI FİTİL İLE CAM TAYİNİ (Max. 12°)

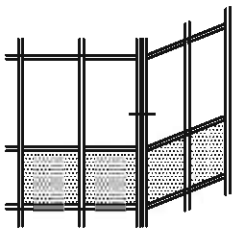


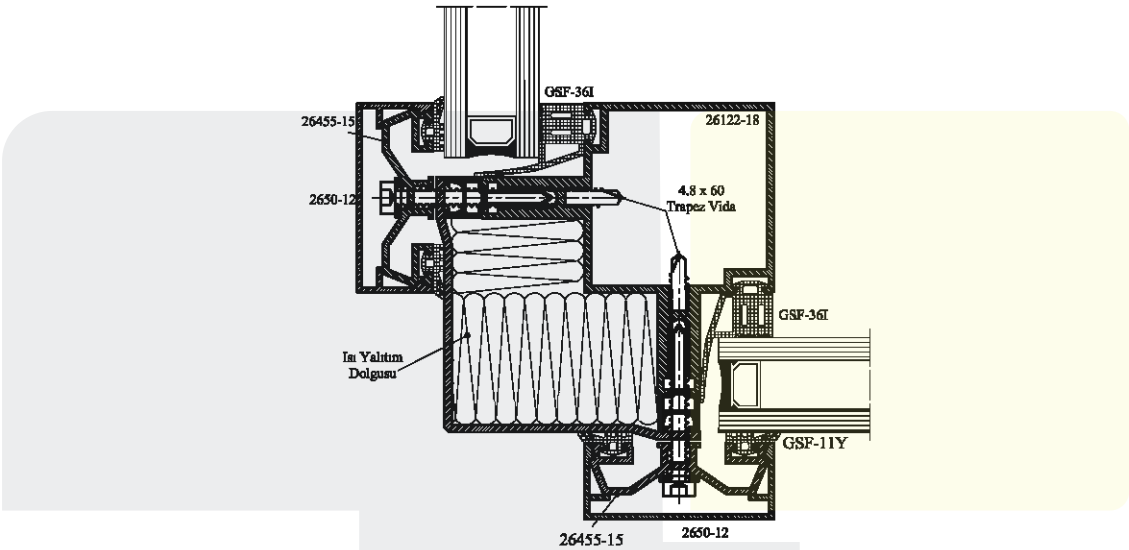






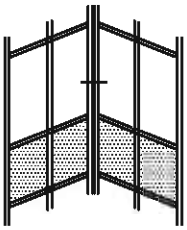
90° İÇTE KÖŞE DETAYI

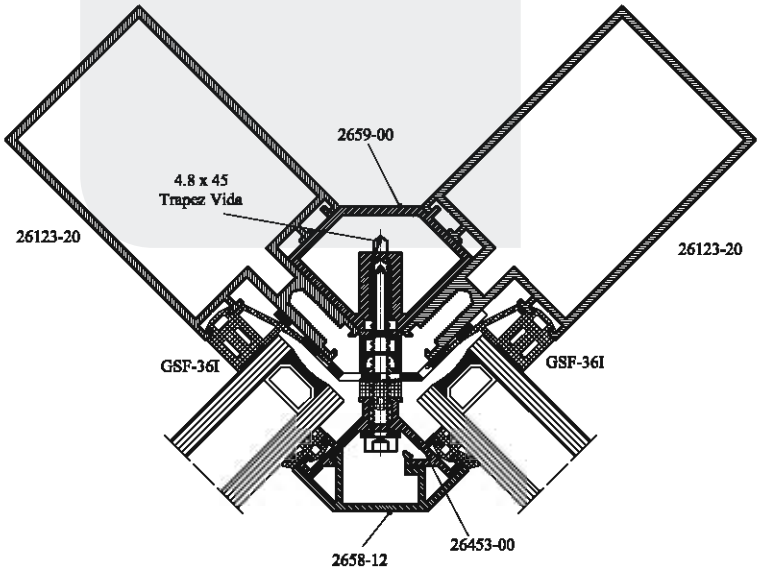




Ölçek 1/2

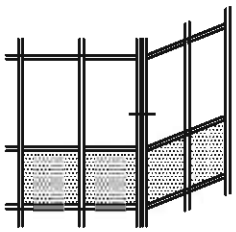
90° DIŞTA KÖŞE DETAYI

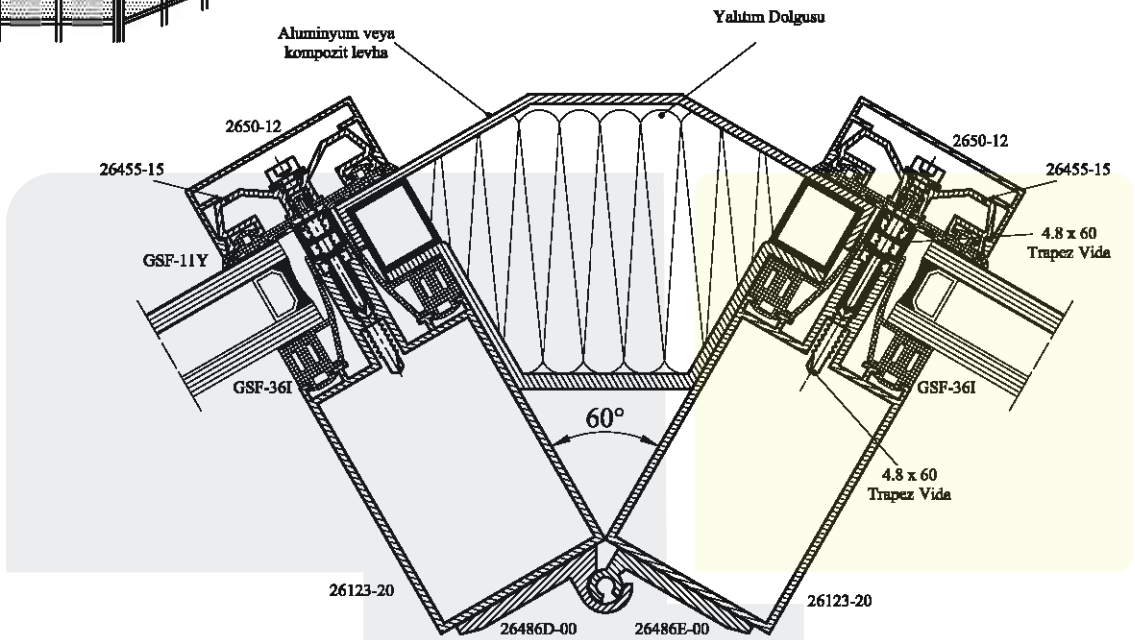




Ölçek 1/2

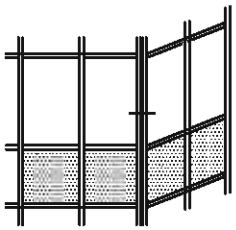
DÜŞEY PROFİL AÇILI BİRLEŞİM DETAYI
(Min. 15° - Max. 90°)

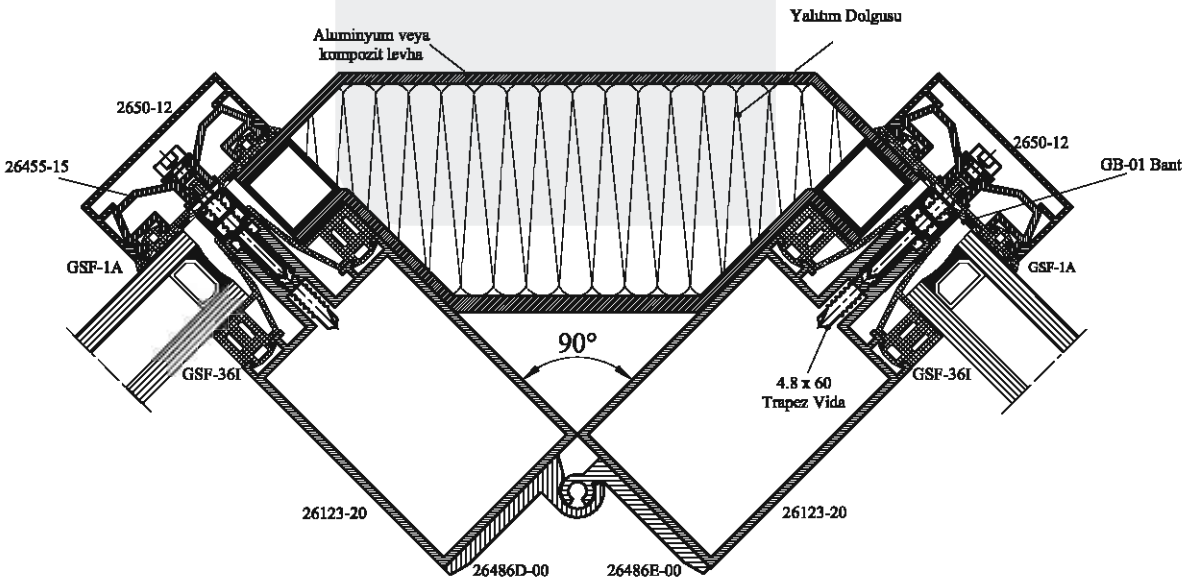




Ölçek 1/2

DÜŞEY PROFİL AÇILI BİRLEŞİM DETAYI
(Min. 30° - Max. 90°)

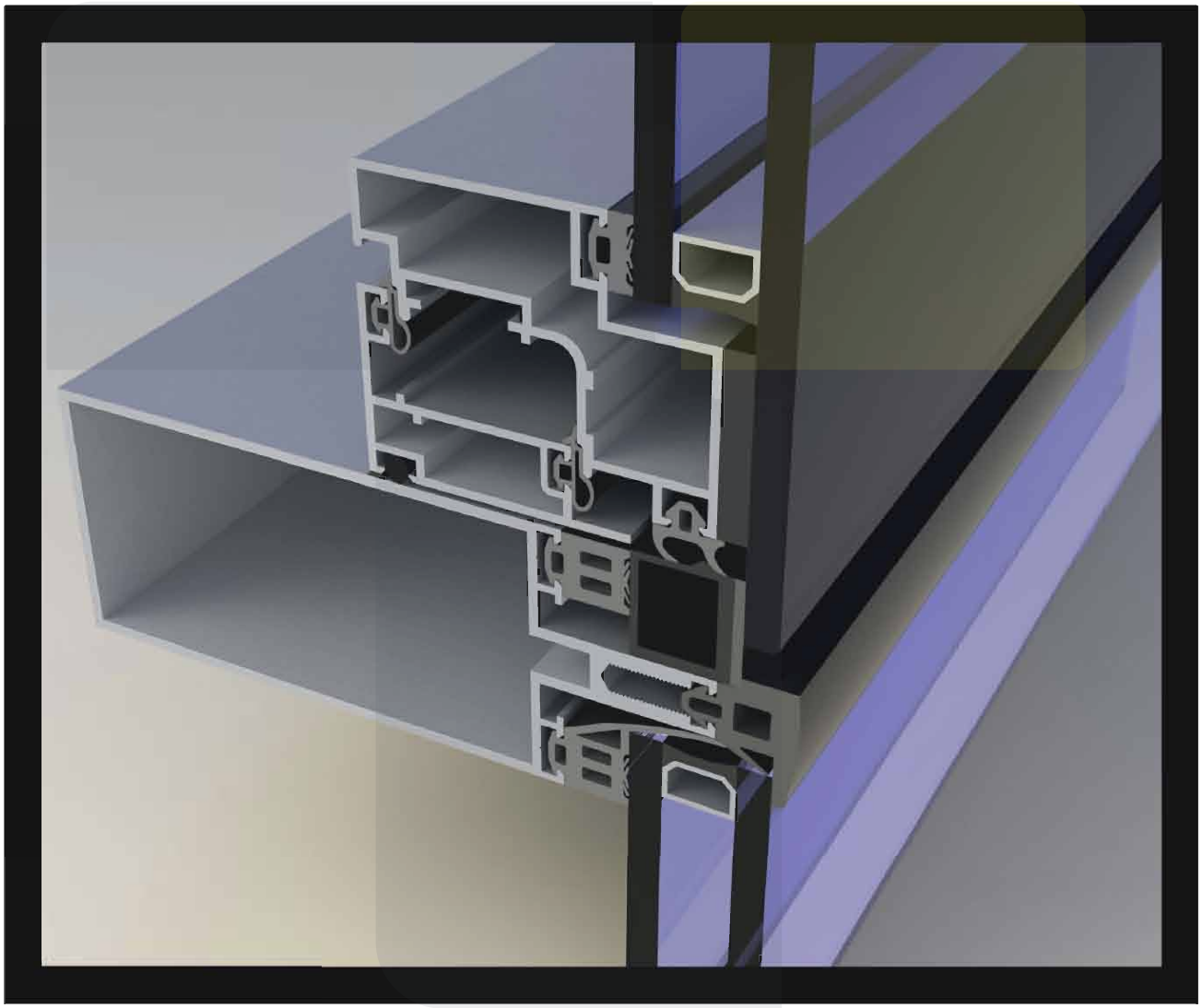


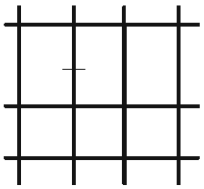


Ölçek 1/2

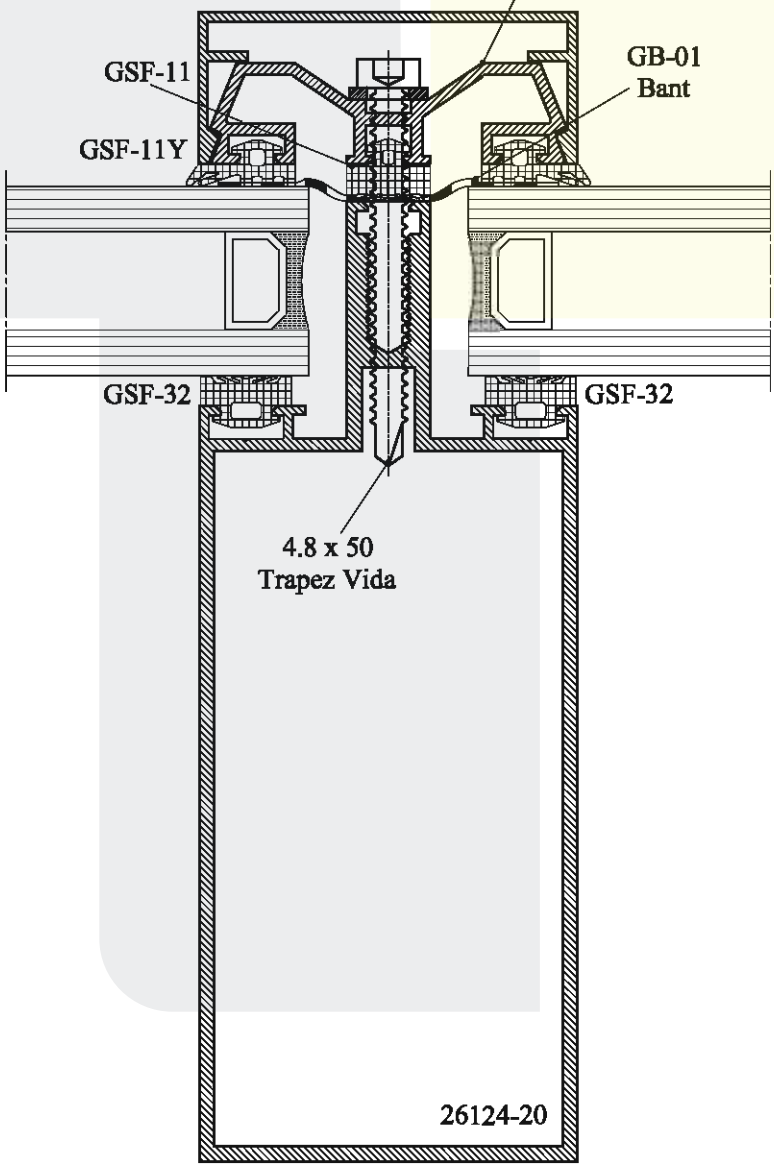
YARI KAPAKLI CEPHE

F50YK/HI

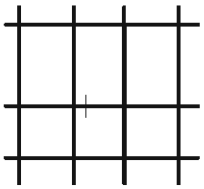




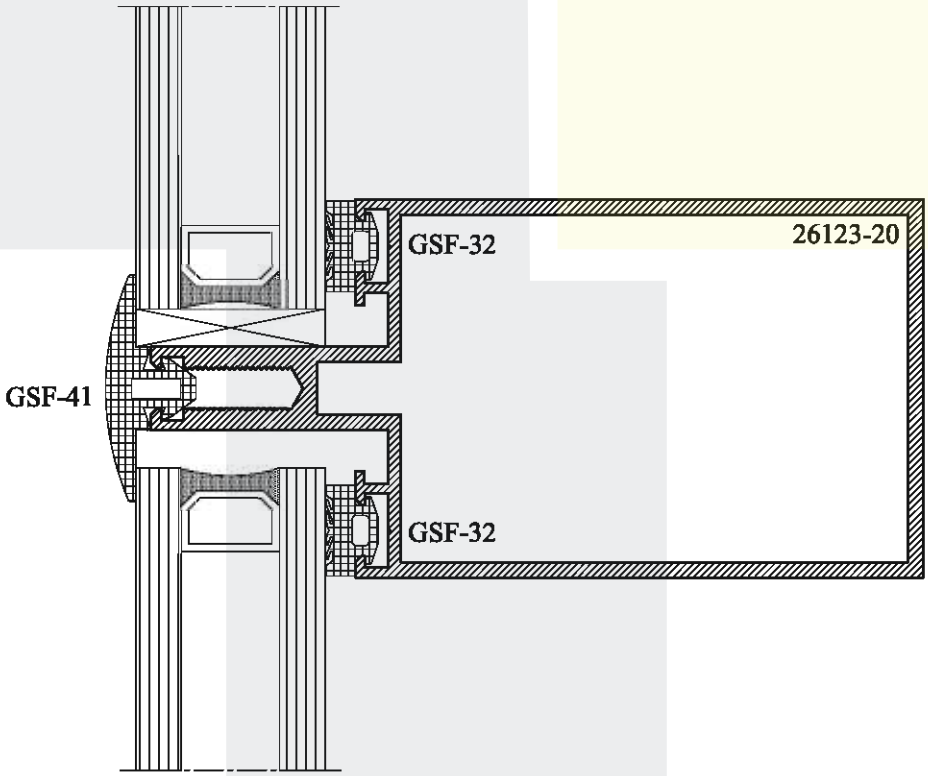
DÜŞEY DOĞRULTUDA KAPAKLI CEPHE AÇILIRI OLMAYAN YATAY KESİT

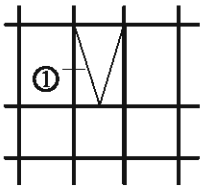


F50K/HI sistemi için 107 - 118 sayfalarındaki detaylar da örnek alınabilir.

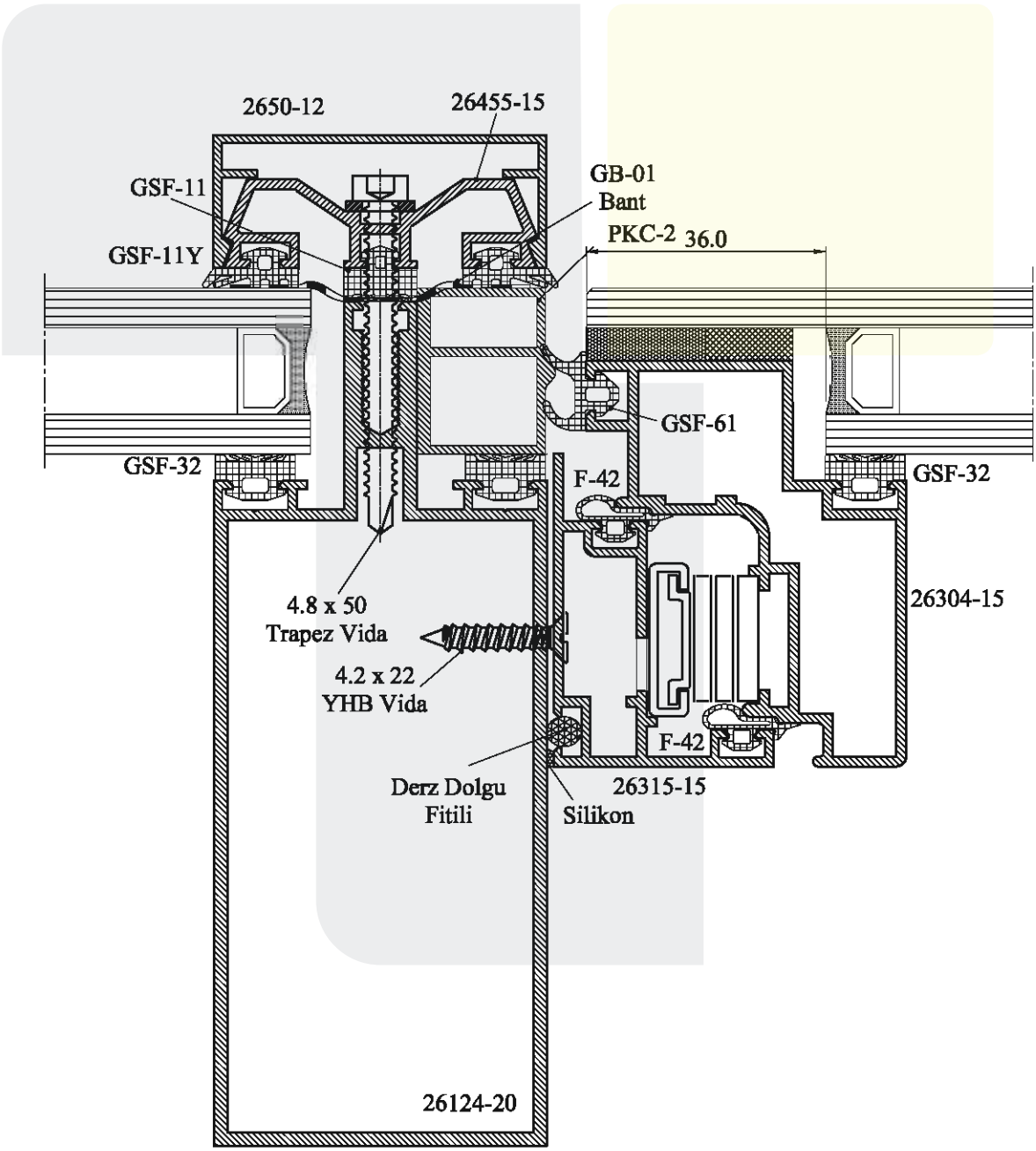


DÜŞEY DOĞRULTUDA KAPAKLI CEPHE AÇILIRI OLMAYAN DÜŞEY KESİT





DÜŞEY DOĞRULTUDA KAPAKLI CEPHE AÇILIRI OLAN YATAY KESİT (1.DETAY)



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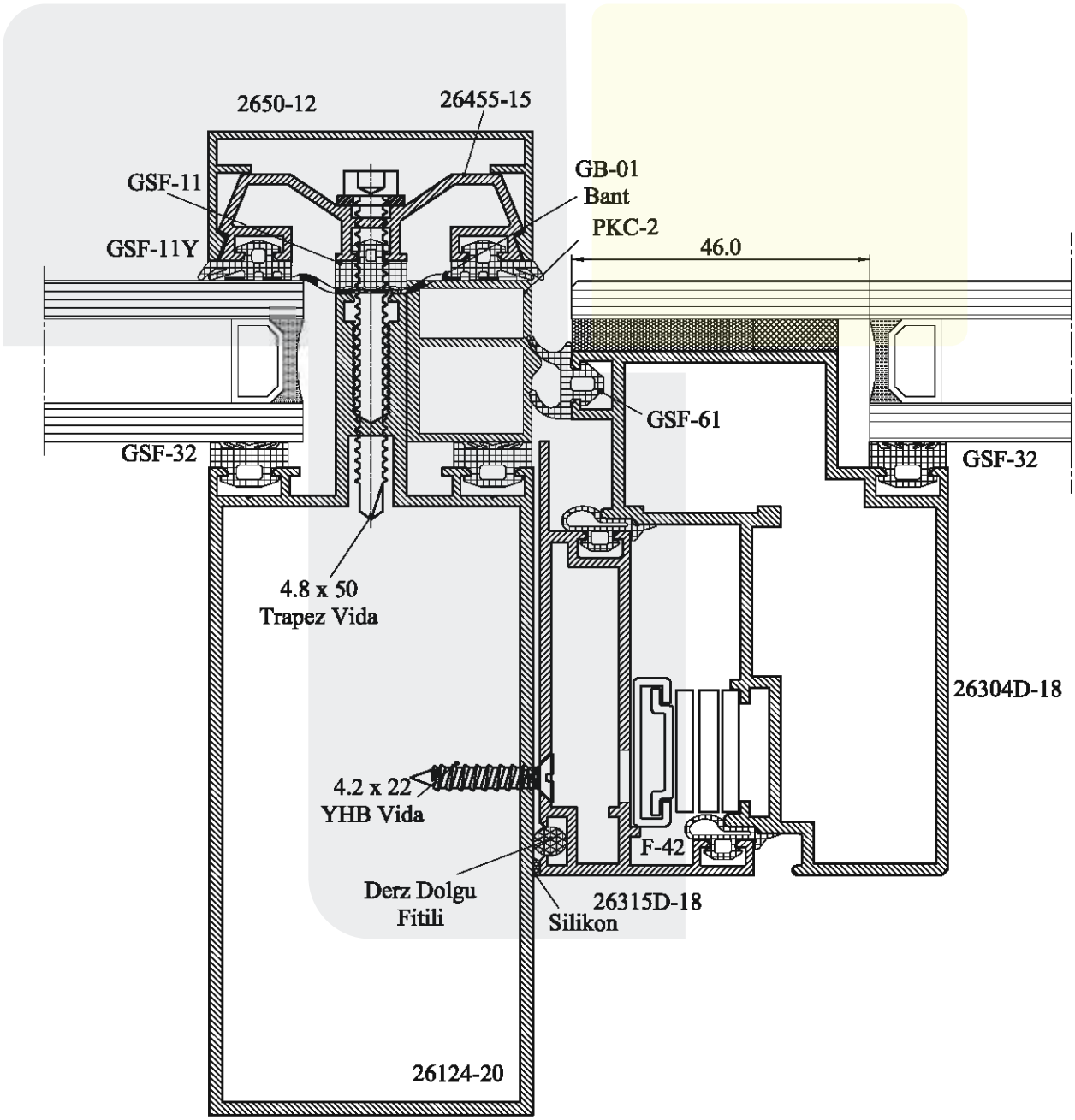
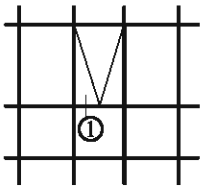
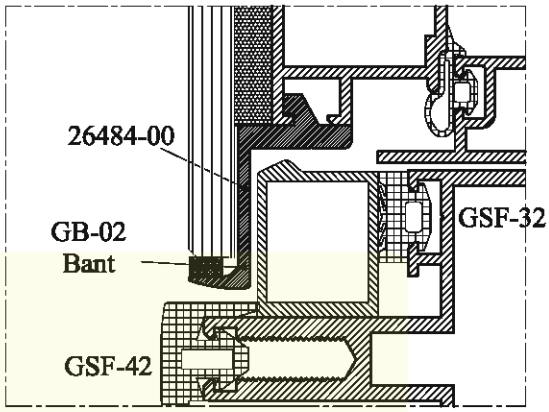
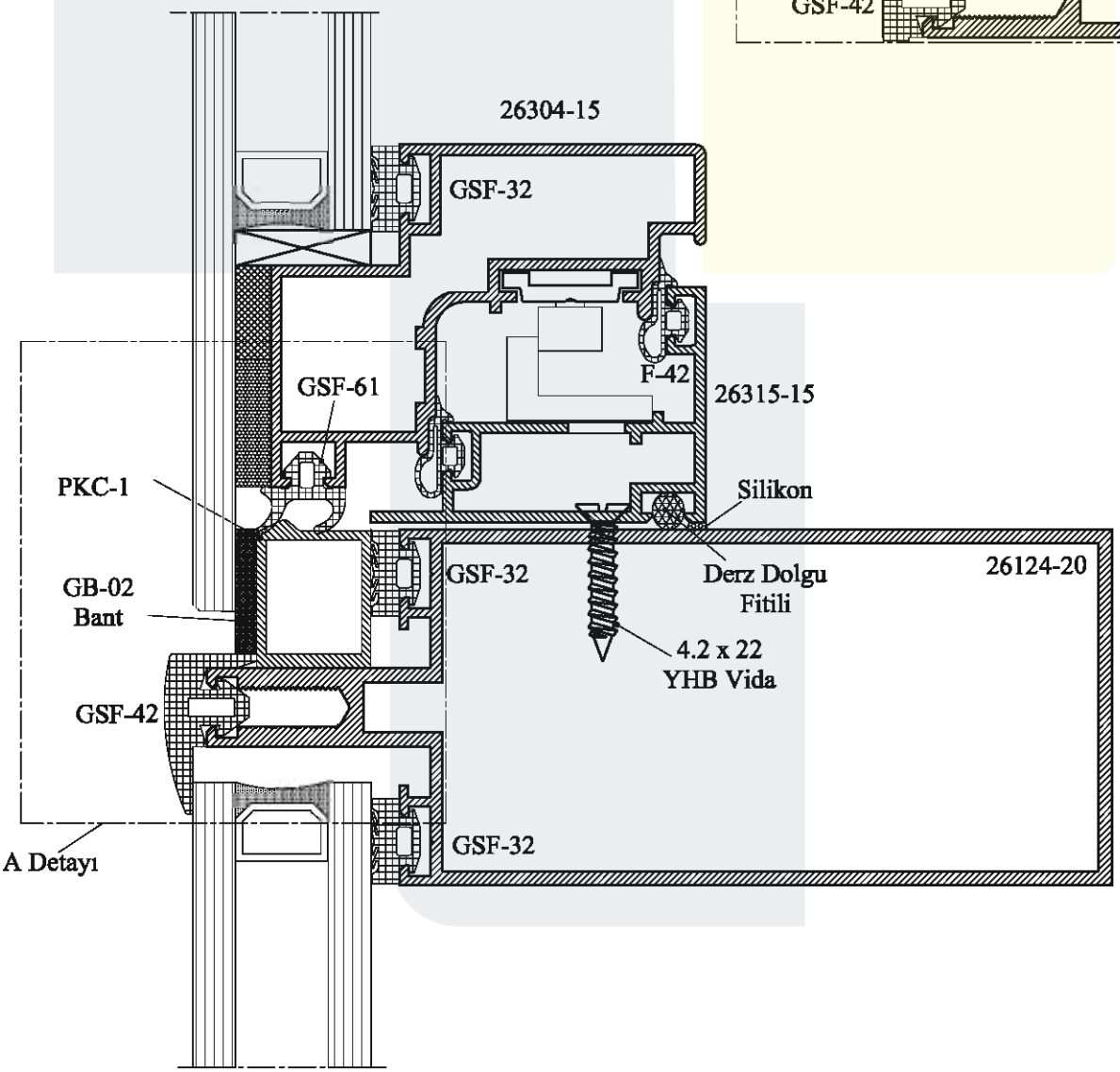
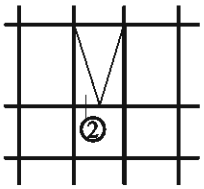




DÜŞEY DOĞRULTUDA KAPAKLI CEPHE AÇILIRI OLAN DÜŞEY KESİT (1.DETAY)

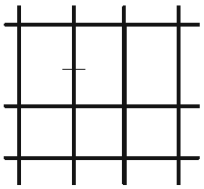




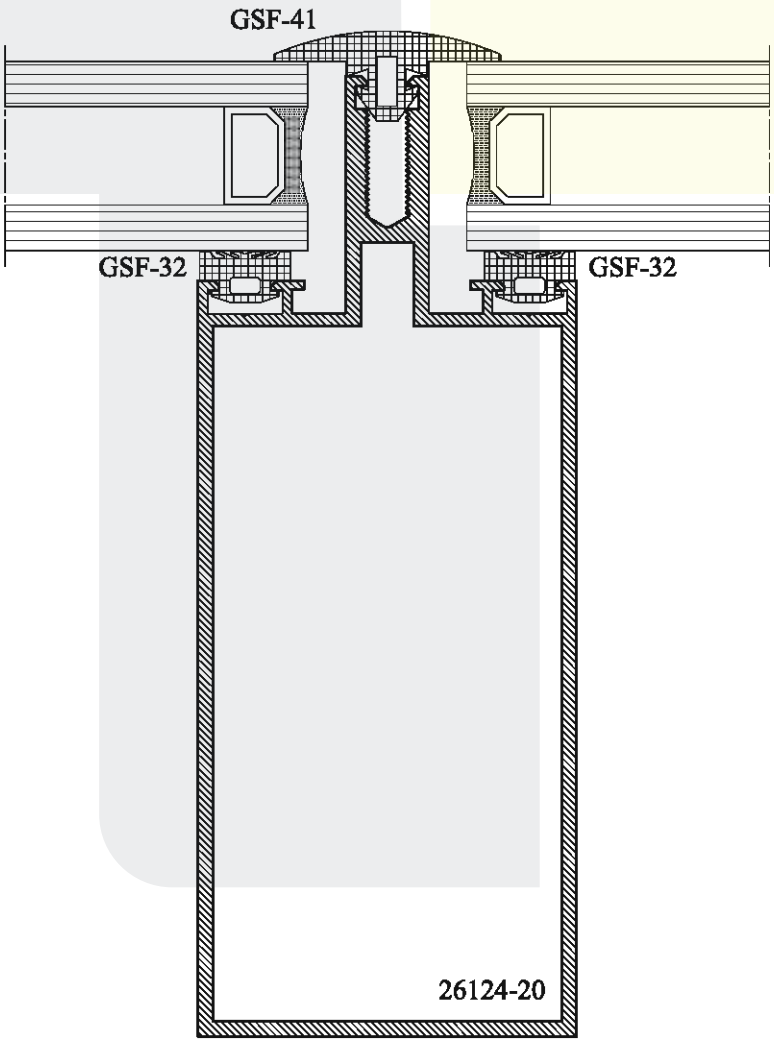


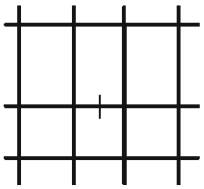
DÜŞEY DOĞRULTUDA KAPAKLI CEPHE AÇILIRI OLAN DÜŞEY KESİT (2.DETAY)

26484-00
GB-02 Bant
GSF-32
GSF-42
GSF-32
26304D-18
Strüktürel Silikon
GSF-61
PKC-1
Silikon
GB-02 Bant
GSF-32
Derz Dolgu Fitili
26124-20
4.2 x 22 YHB Vida
GSF-42
GSF-32
A Detayı



YATAY DOĞRULTUDA KAPAKLI CEPHE AÇILIRI OLMAYAN YATAY KESİT





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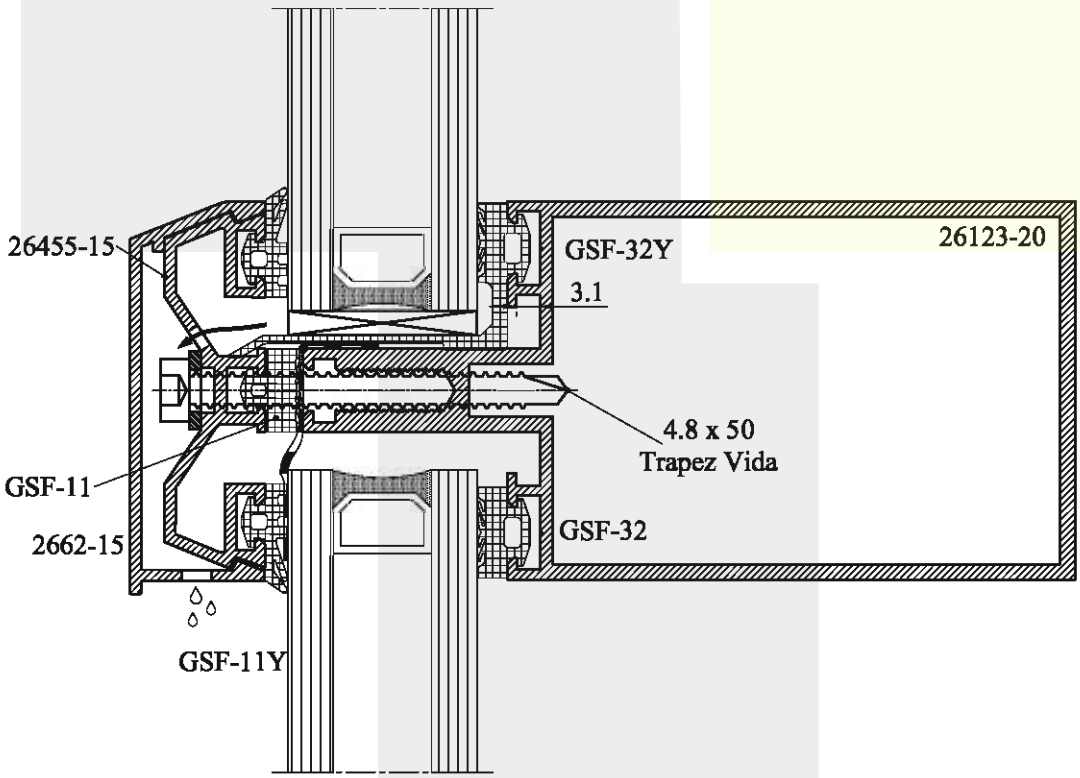
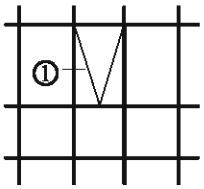
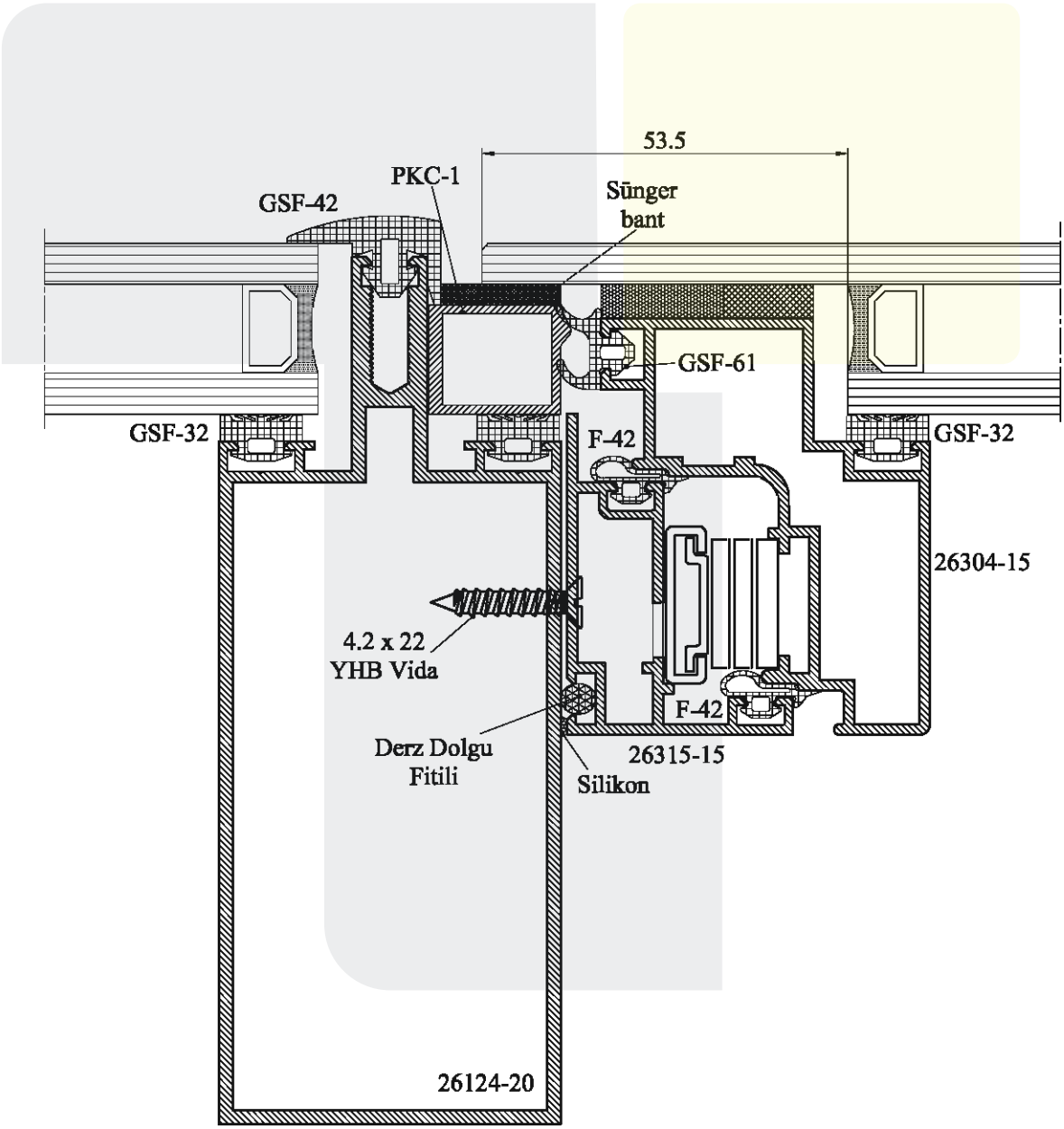
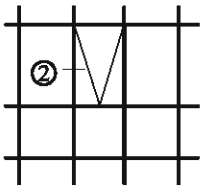




YATAY DOĞRULTUDA KAPAKLI CEPHE AÇILIRI OLAN YATAY KESİT (1.DETAY)





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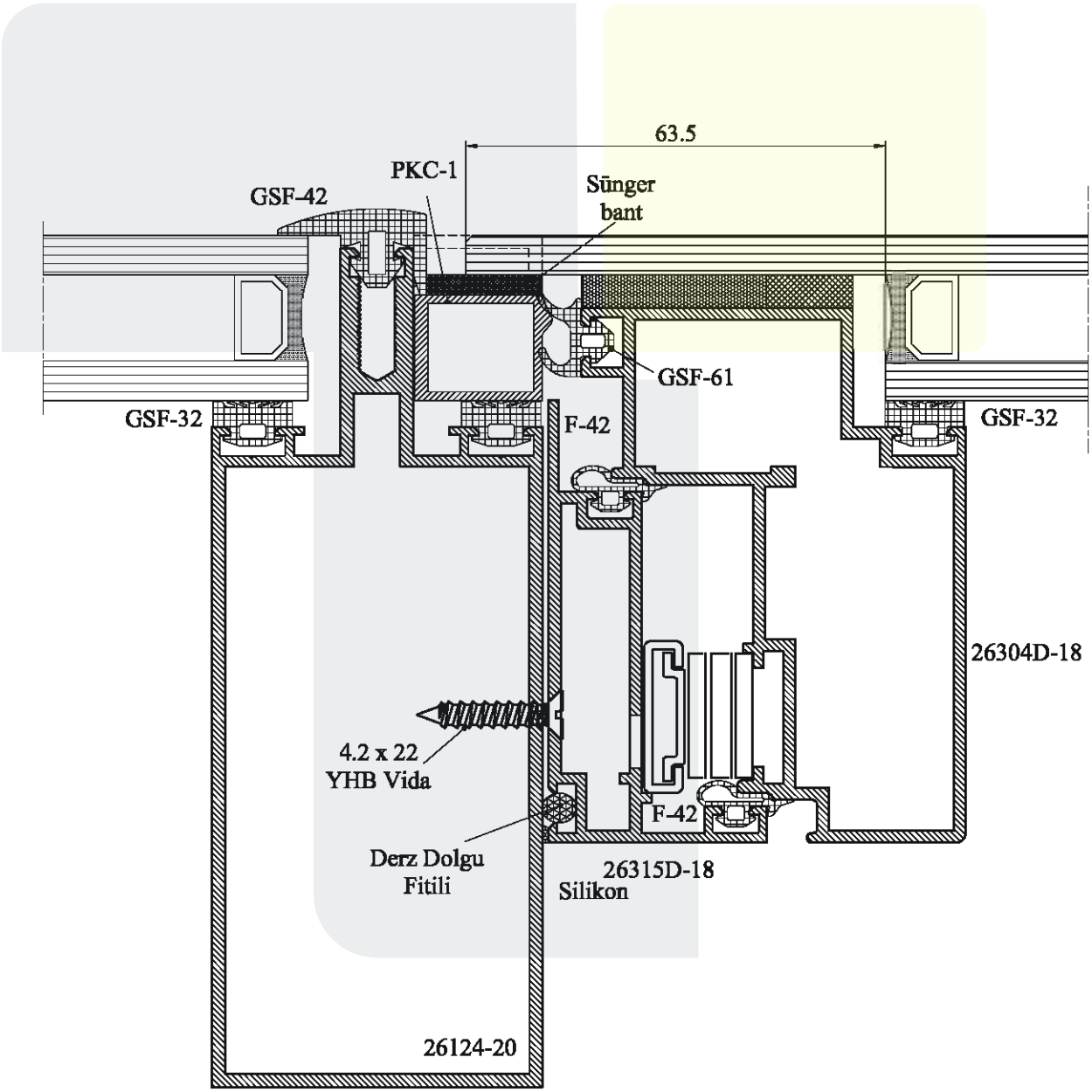

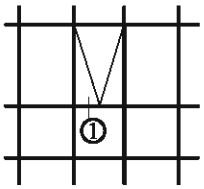

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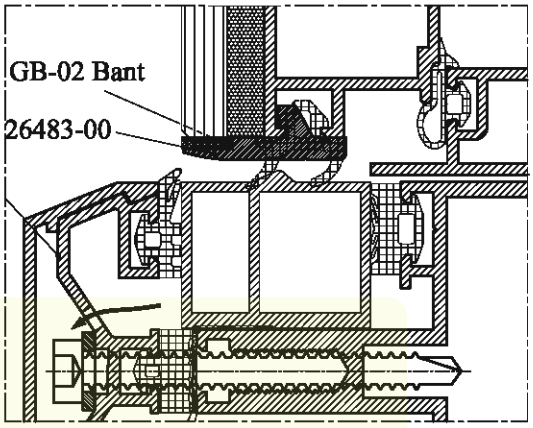
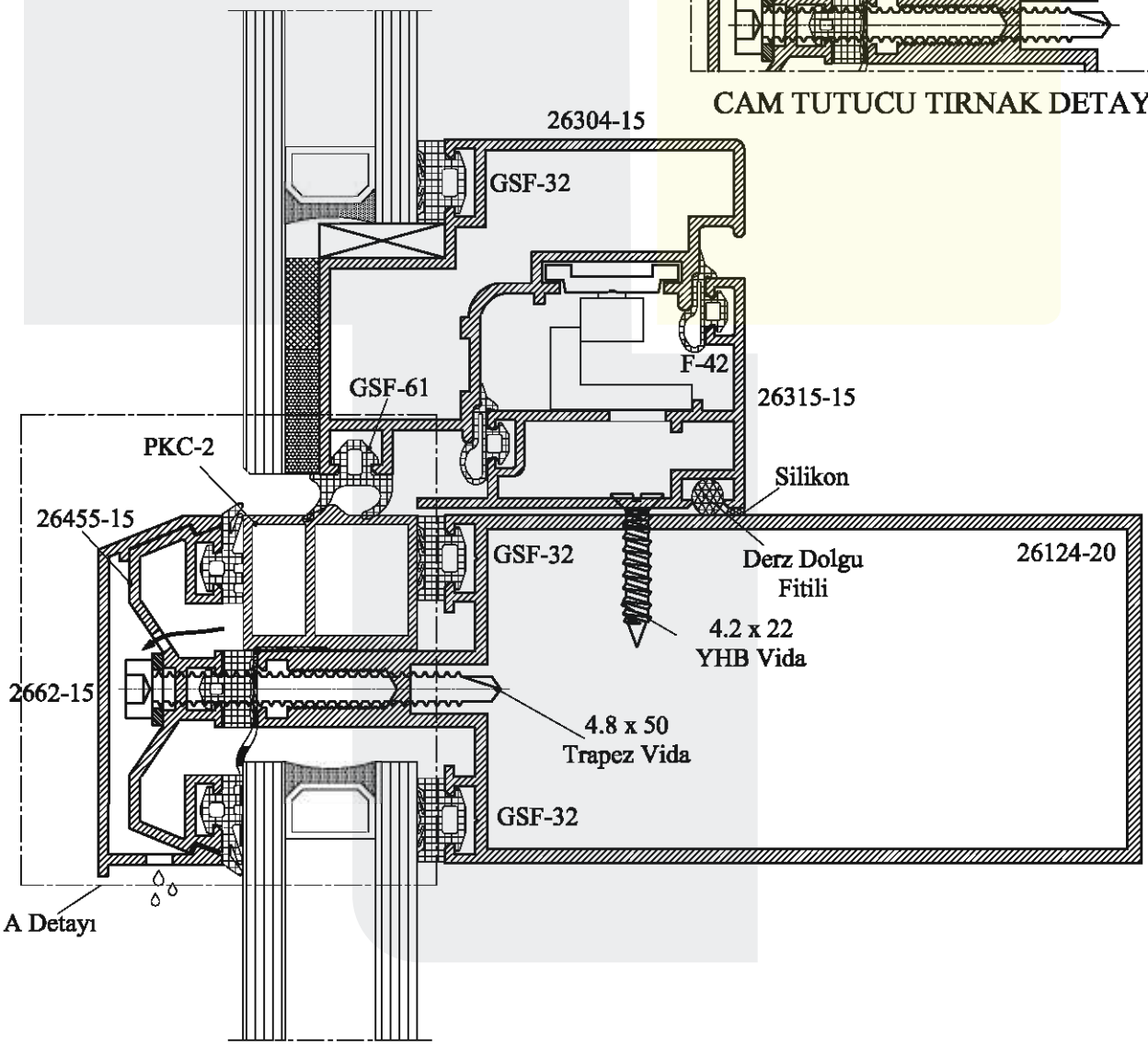
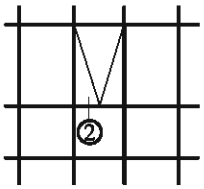


CAM TUTUCU TIRNAK DETAYI





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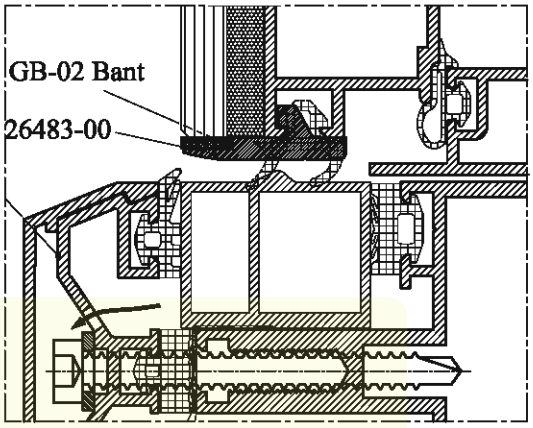
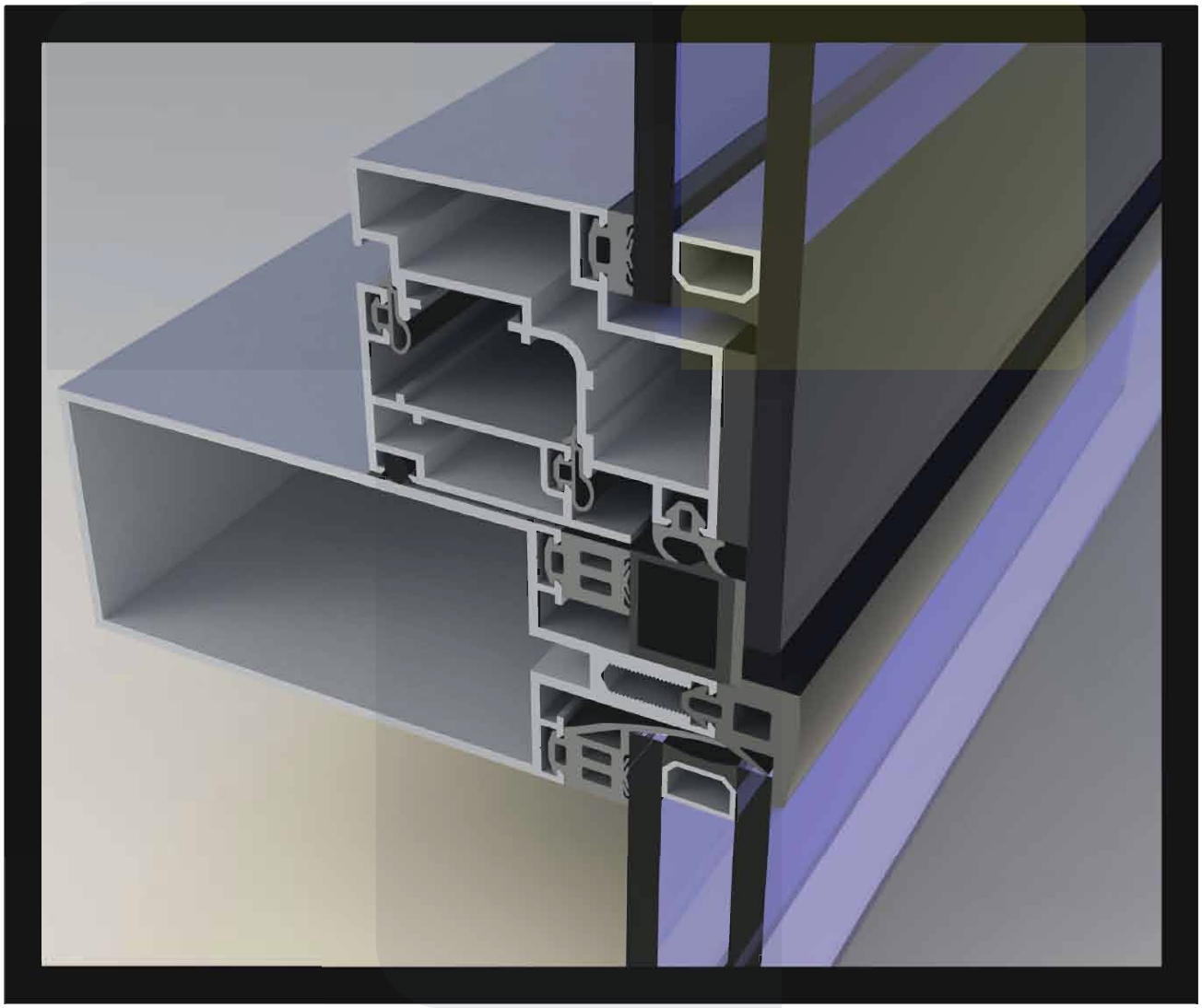


CAM TUTUCU TIRNAK DETAYI

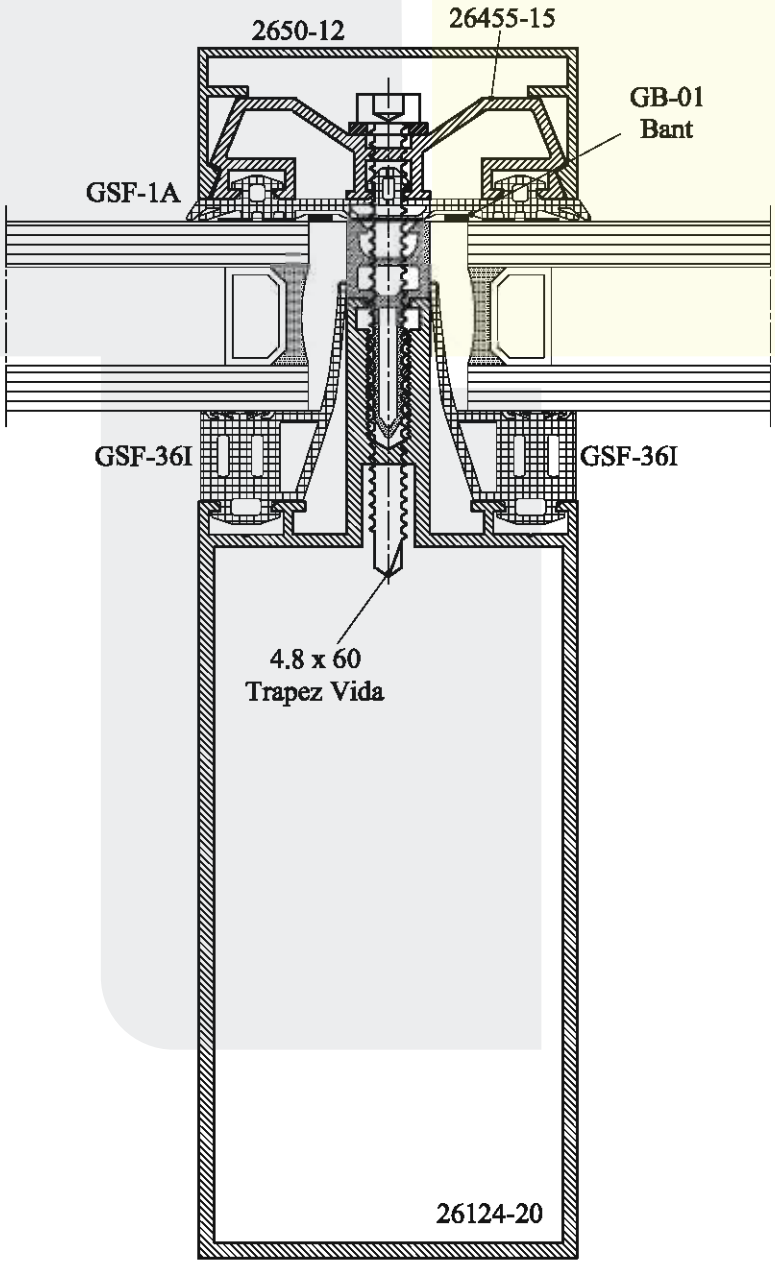
26304D-18
GSF-32
26315D-18
F-42
GSF-61
PKC-2
F-42
Silikon
26455-15
GSF-32
26124-20
Derz Dolgu Fitili
4.2 x 22 YHB Vida
2662-15
4.8 x 50 Trapez Vida
GSF-32
A Detayı

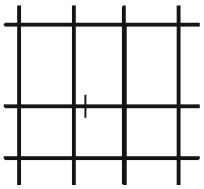
YARI KAPAKLI CEPHE

F50YK/HI+

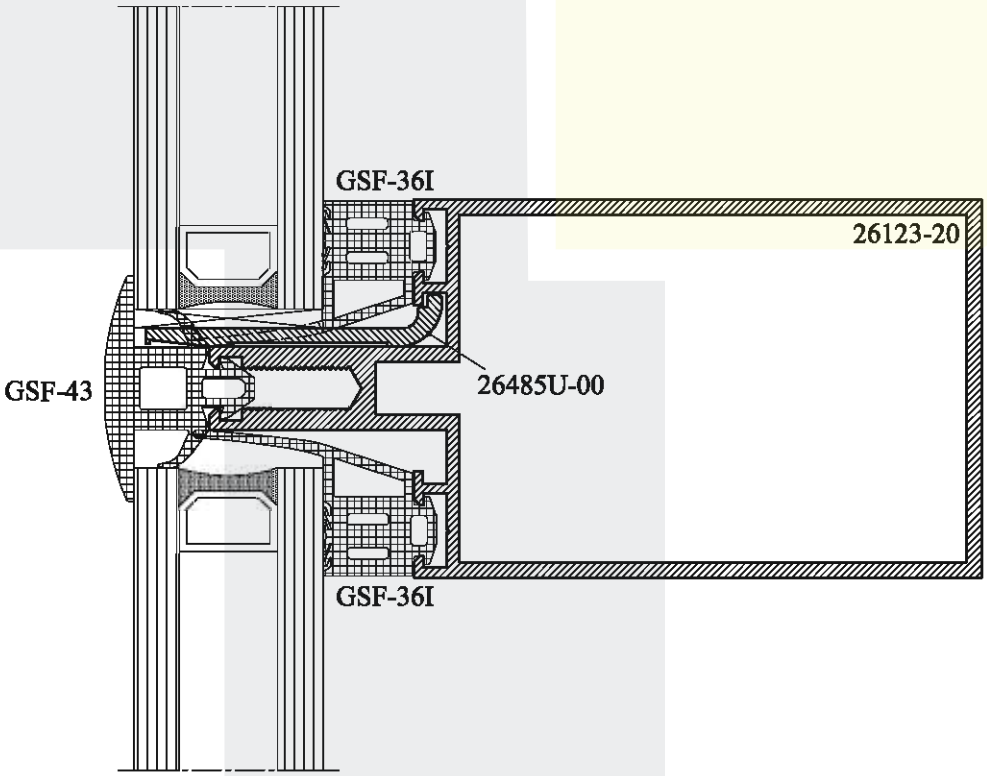


DÜŞEY DOĞRULTUDA KAPAKLI CEPHE AÇILIRI OLMAYAN YATAY KESİT

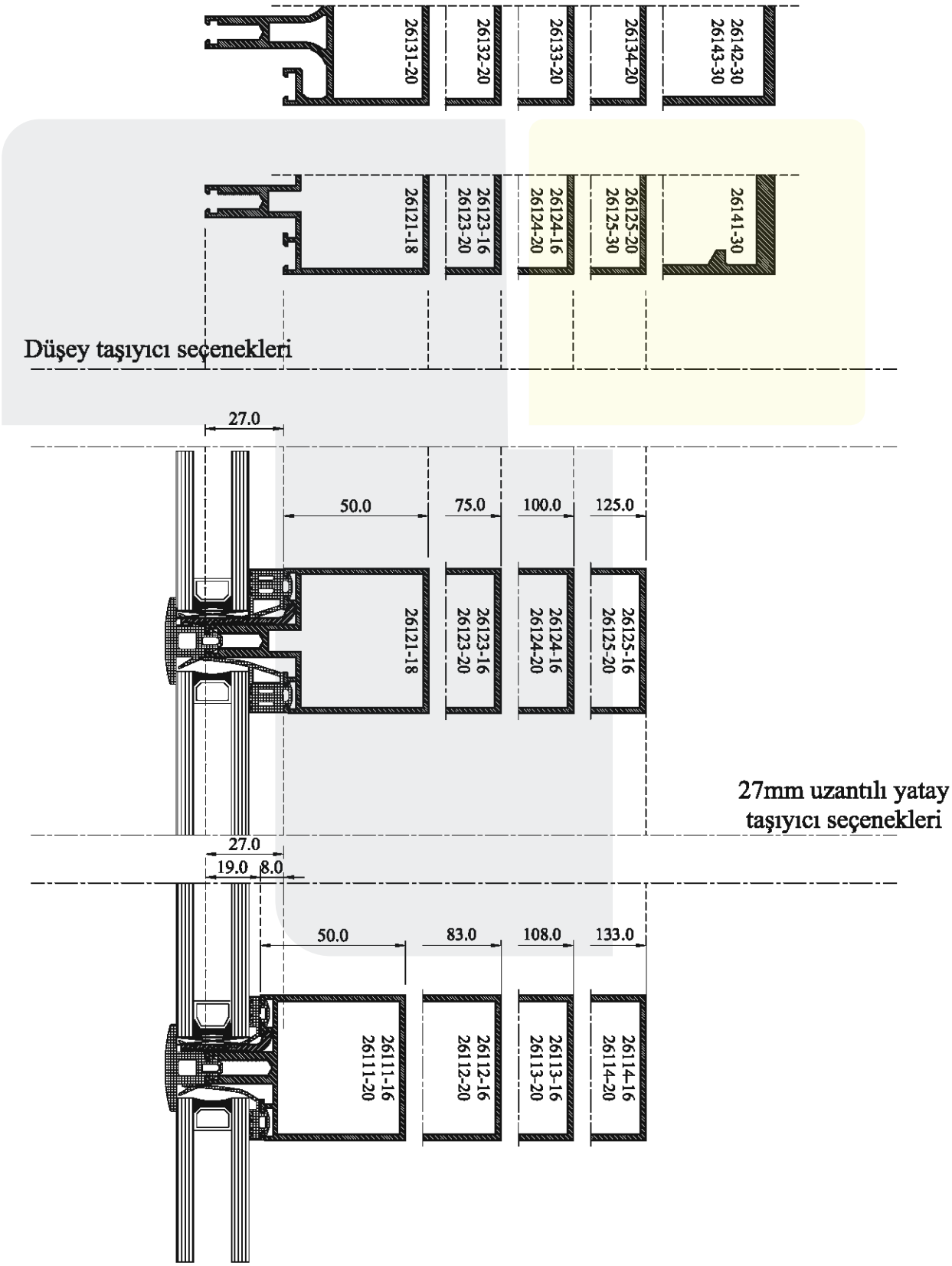




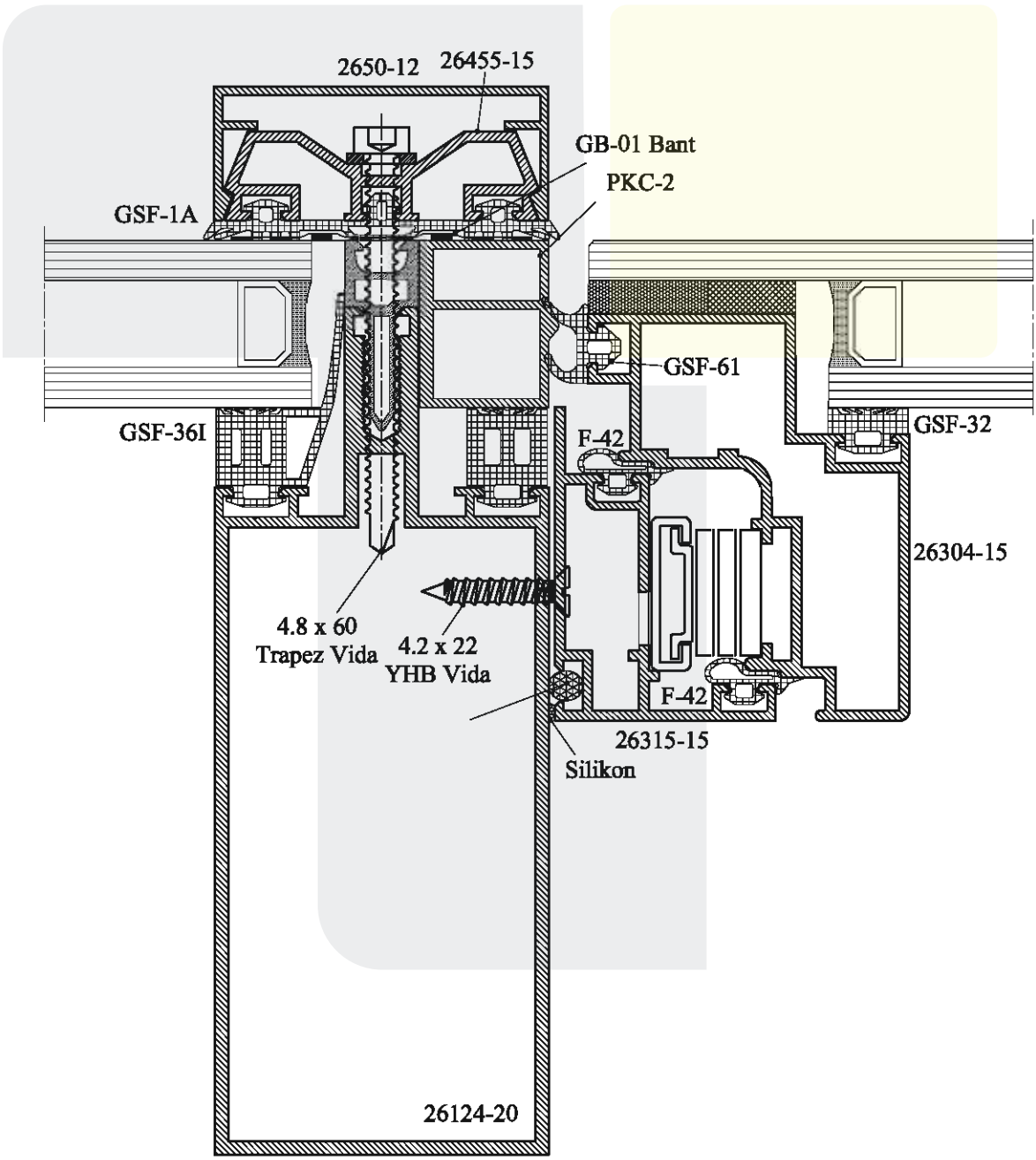
DÜŞEY DOĞRULTUDA KAPAKLI CEPHE AÇILIRI OLMAYAN DÜŞEY KESİT

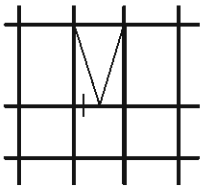


DÜŞEY DOĞRULTUDA KAPAKLI CEPHE YATAY ve DÜŞEY TAŞIYICI SEÇENEKLERİ

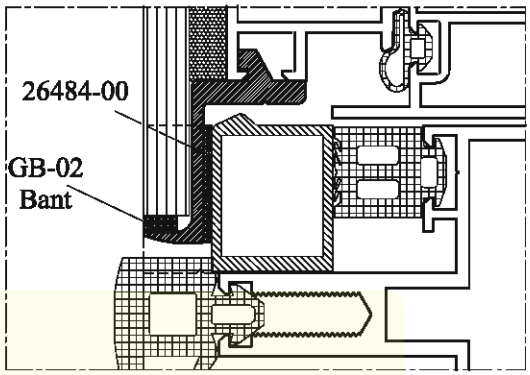


DÜŞEY DOĞRULTUDA KAPAKLI CEPHE AÇILIRI OLAN YATAY KESİT

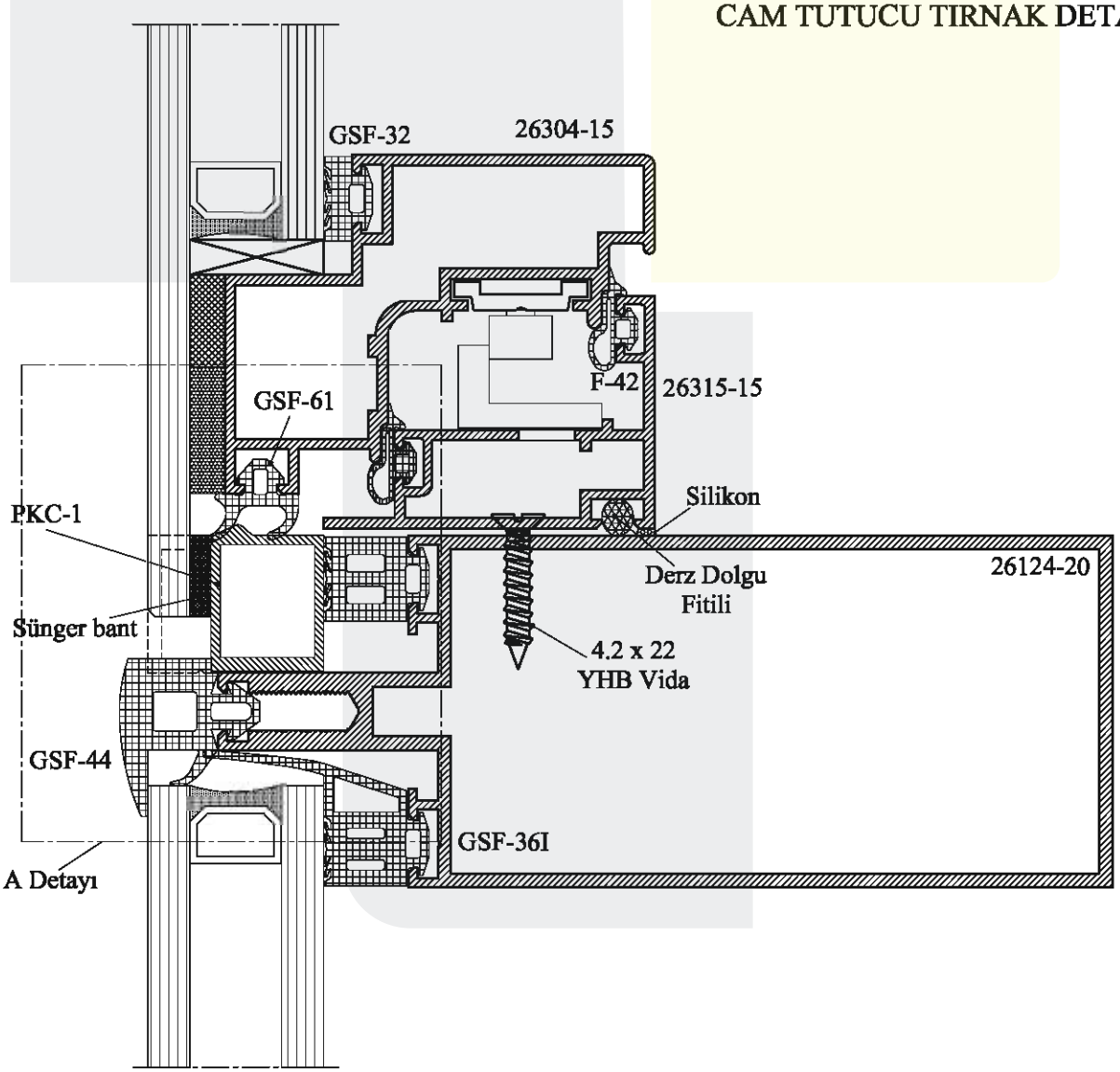




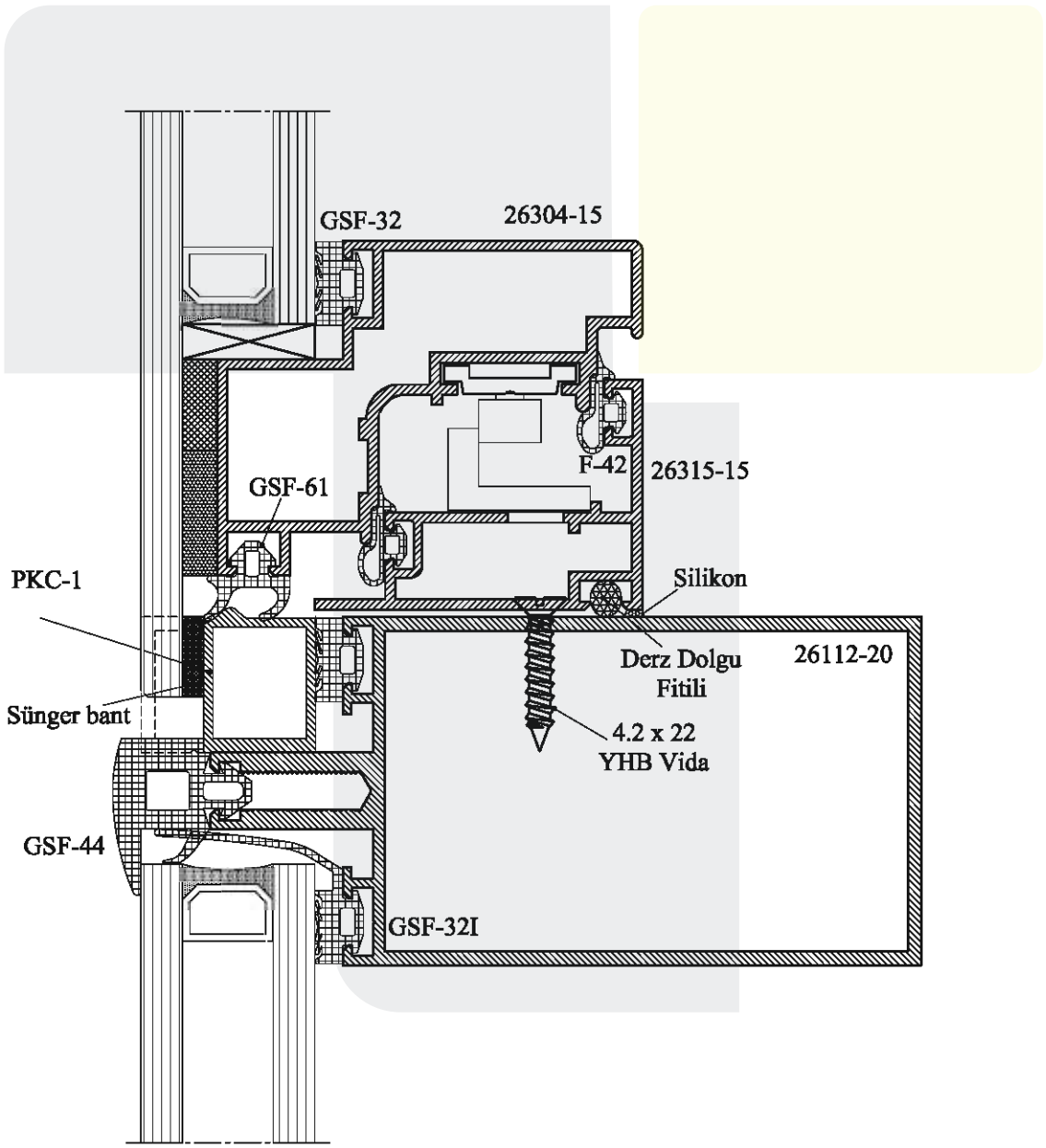
DÜŞEY DOĞRULTUDA KAPAKLI CEPHE AÇILIRI OLAN DÜŞEY KESİT (27mm Uzantılı Yatay)



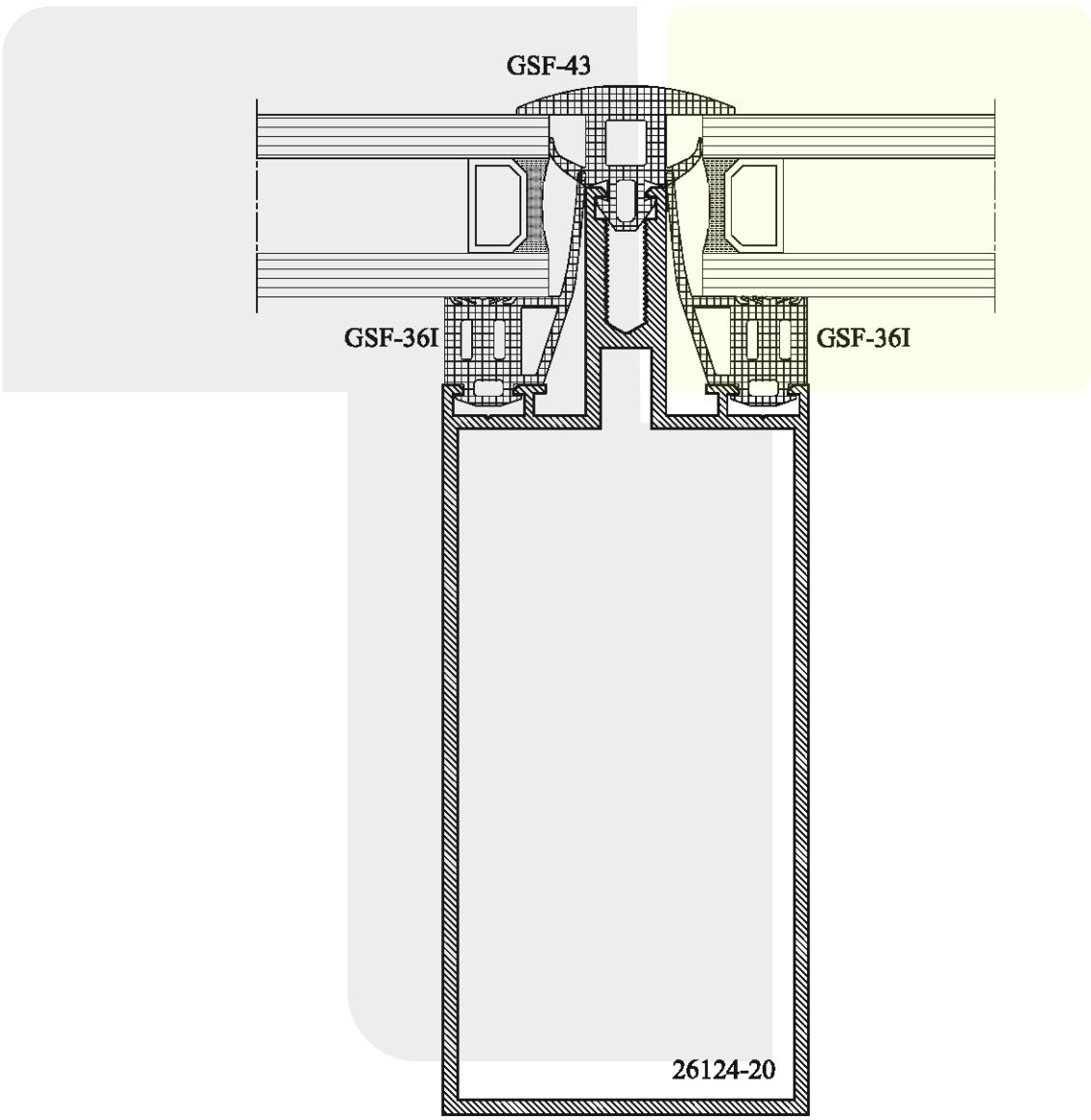
CAM TUTUCU TIRNAK DETAYI

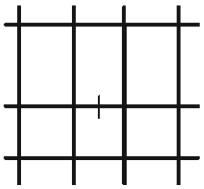


DÜŞEY DOĞRULTUDA KAPAKLI CEPHE AÇILIRI OLAN DÜŞEY KESİT (19mm Uzantılı Yatay)

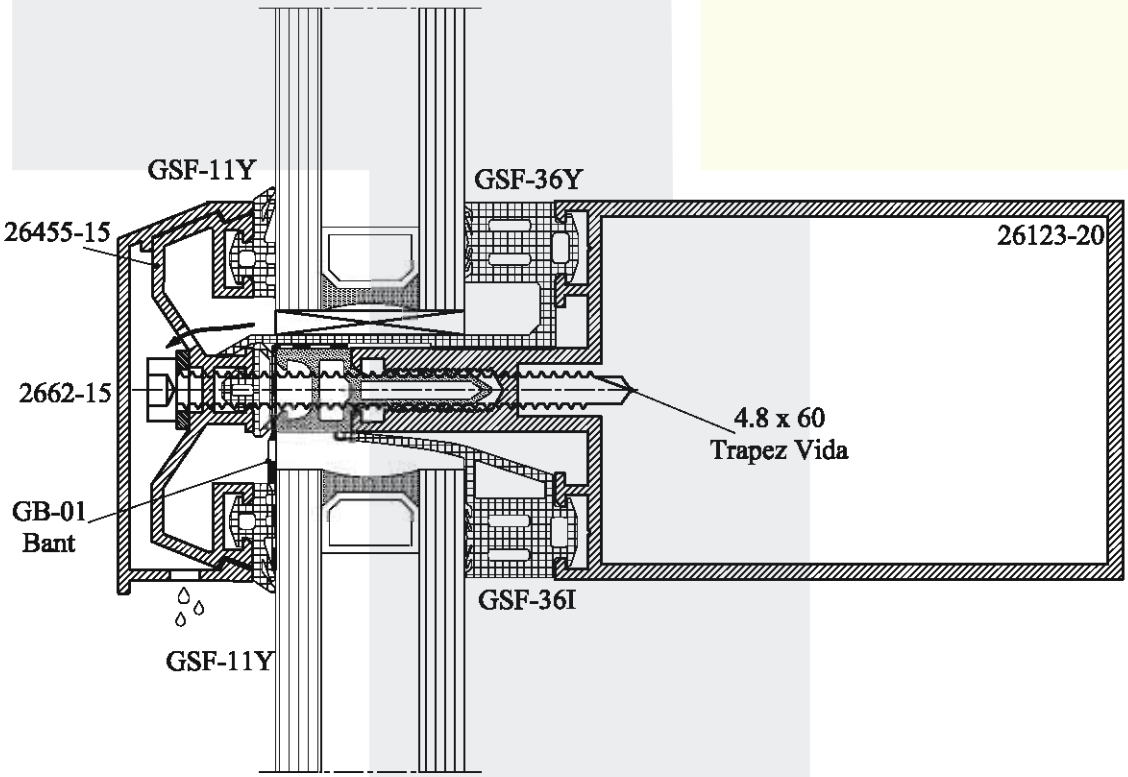


YATAY DOĞRULTUDA KAPAKLI CEPHE AÇILIRI OLMAYAN YATAY KESİT

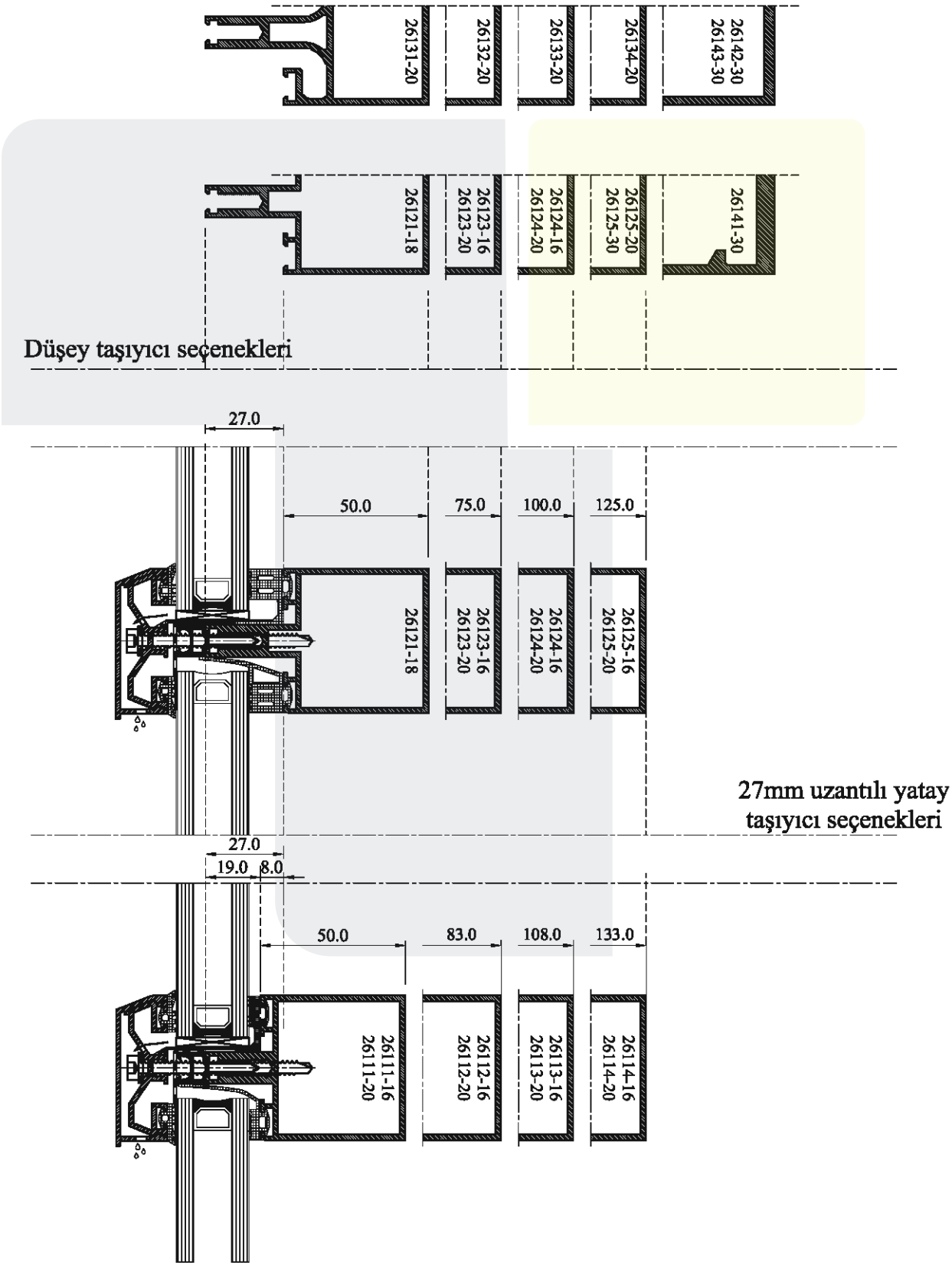




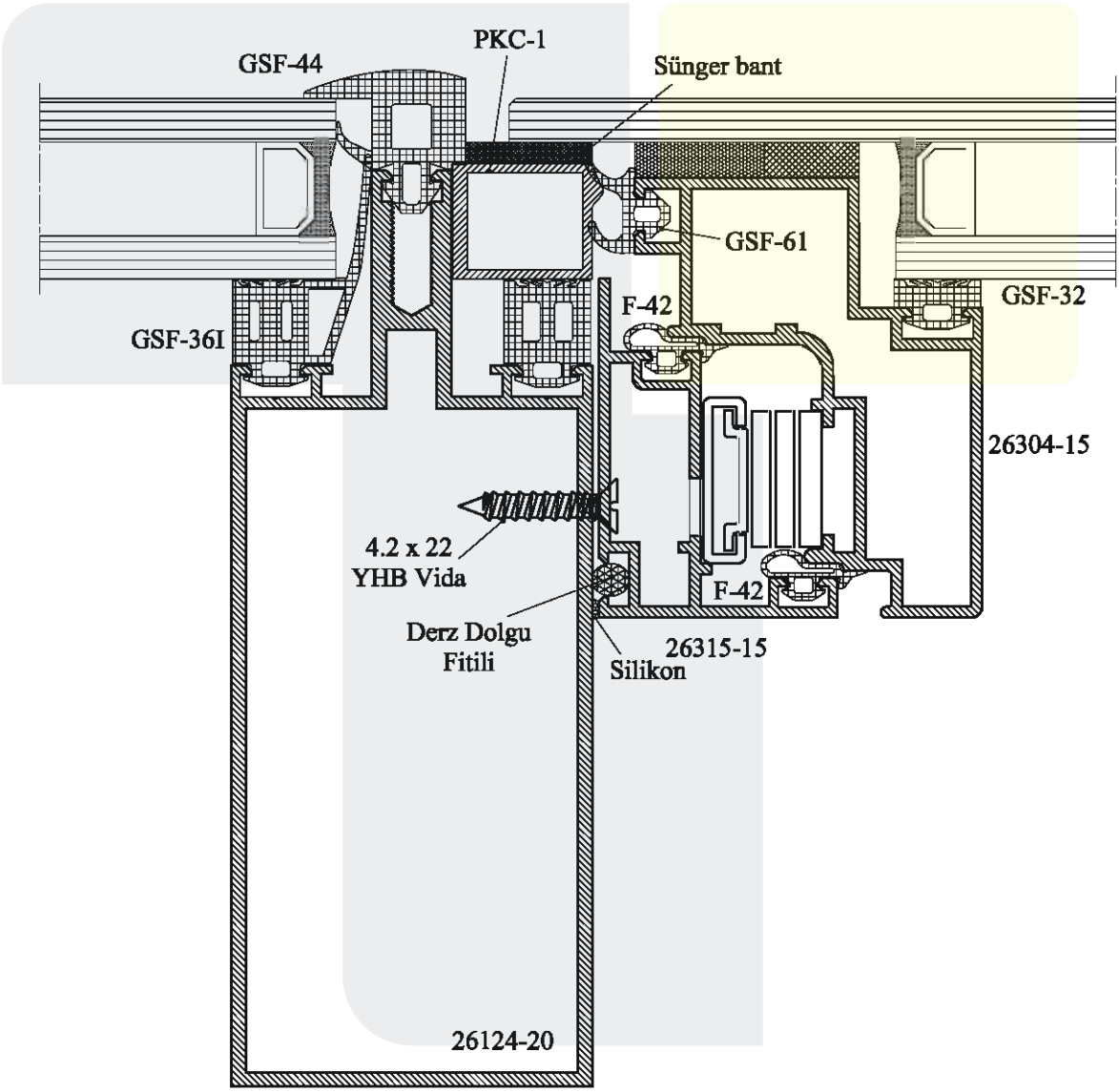
YATAY DOĞRULTUDA KAPAKLI CEPHE AÇILIRI OLMAYAN DÜŞEY KESİT

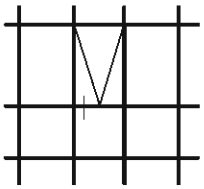


YATAY DOĞRULTUDA KAPAKLI CEPHE
YATAY ve DÜŞEY TAŞIYICI SEÇENEKLERİ

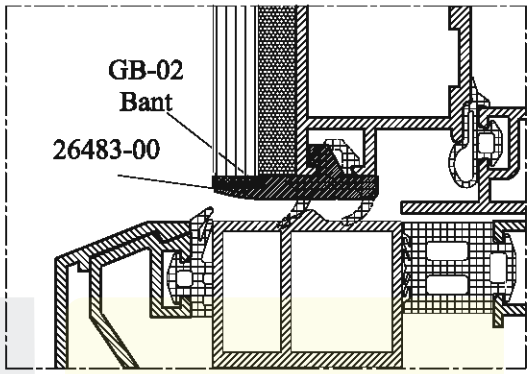


YATAY DOĞRULTUDA KAPAKLI CEPHE AÇILIRI OLAN YATAY KESİT

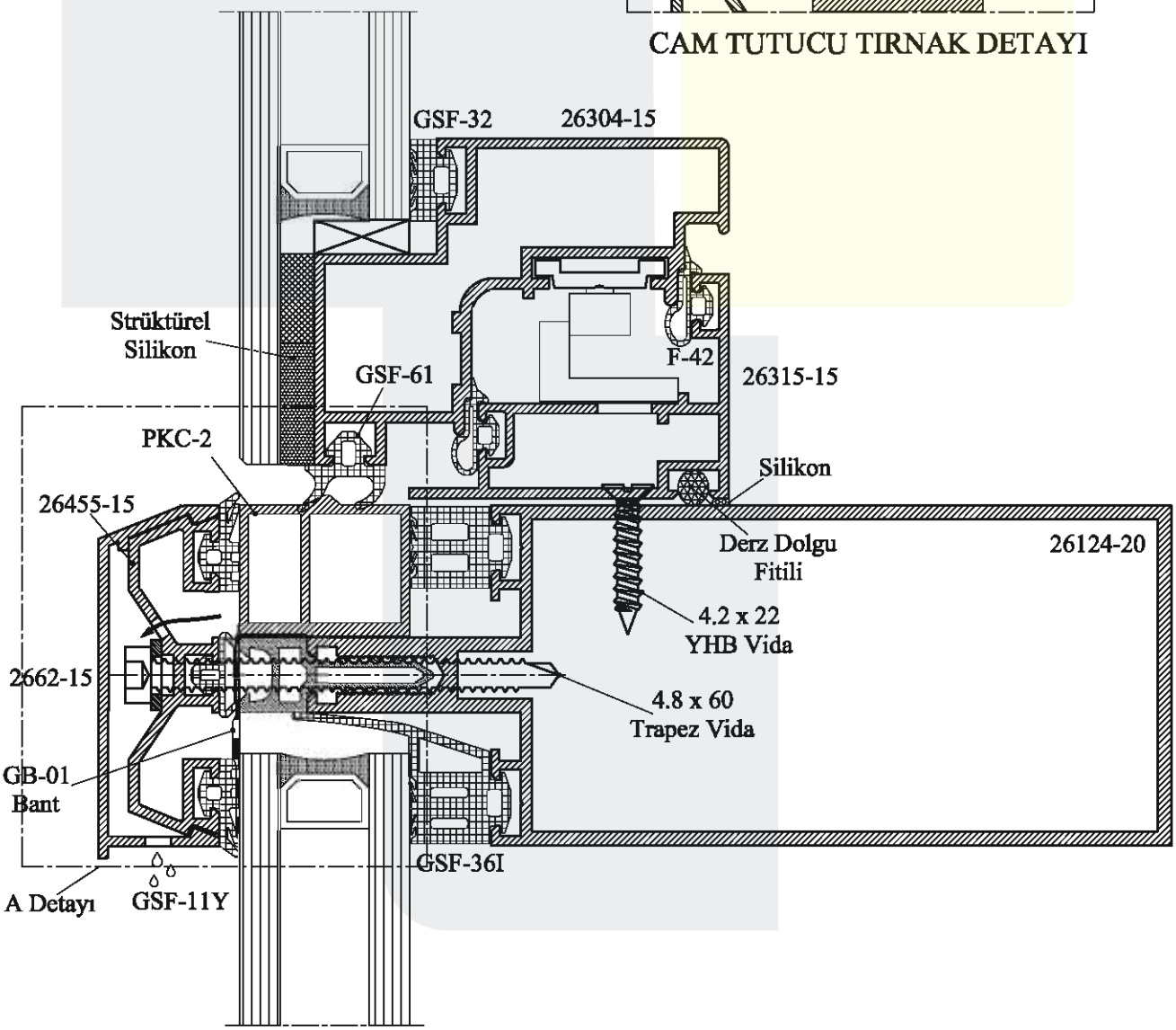




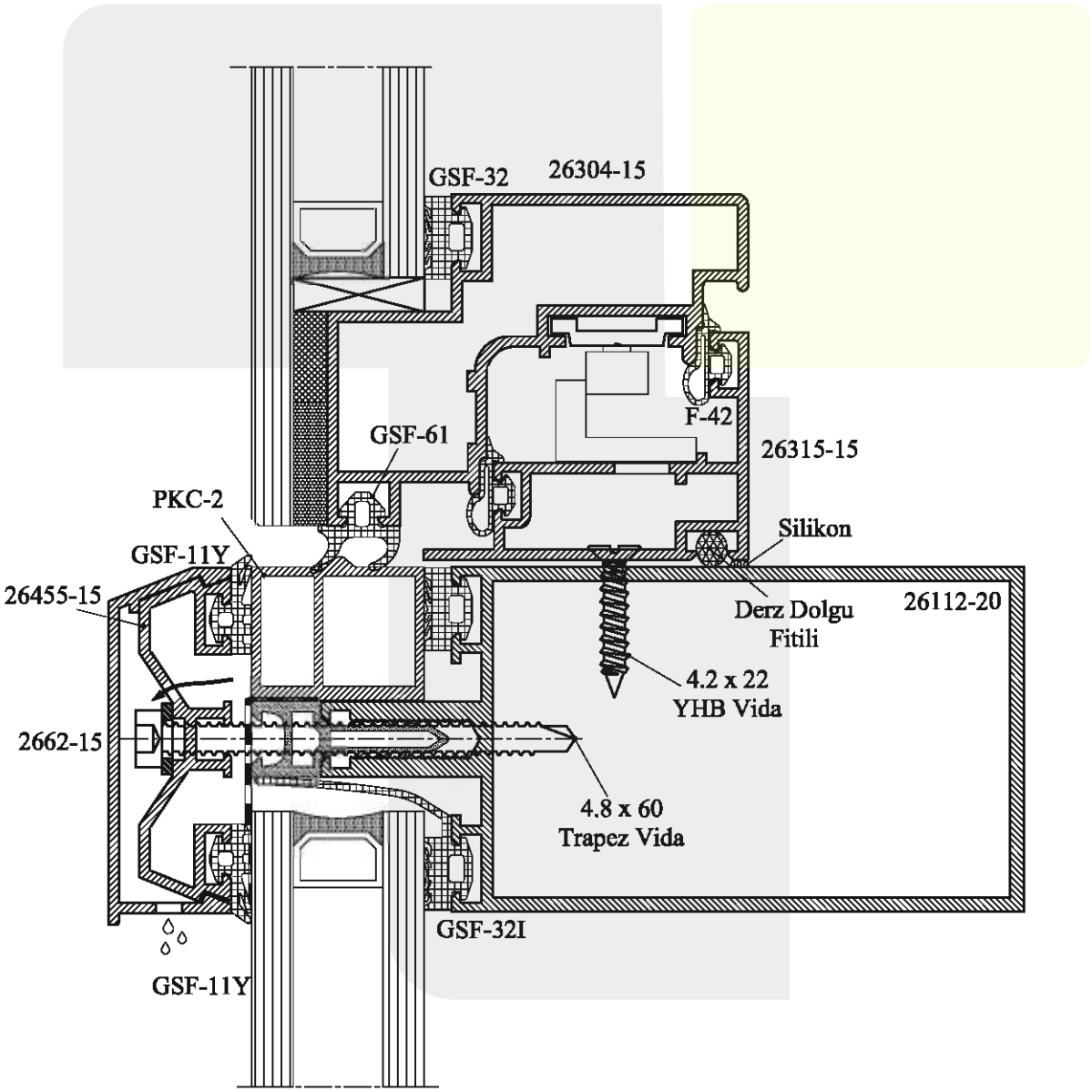
YATAY DOĞRULTUDA KAPAKLI CEPHE AÇILIRI OLAN DÜŞEY KESİT (27mm Uzantılı Yatay)



CAM TUTUCU TIRNAK DETAYI

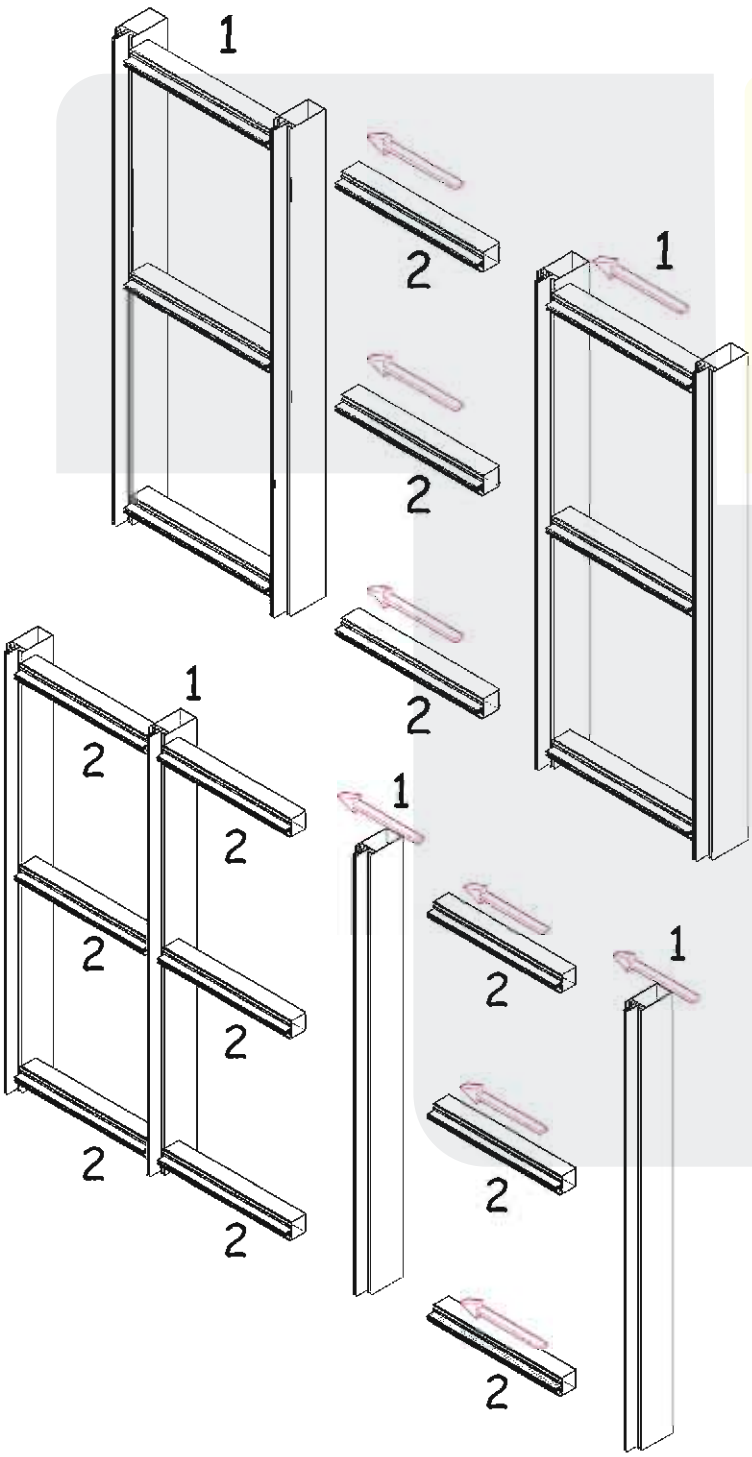


YATAY DOĞRULTUDA KAPAKLI CEPHE AÇILIRI OLAN DÜŞEY KESİT (19mm Uzantılı Yatay)



BİNA MONTAJ YÖNTEMLERİ / *BUILDING ASSEMBLY METHODS*
(KLASİK GEÇME)

Klasik bağlantı detaylı anlatımı için;
19mm uzantılı yatay profillerde sayfa 164
27mm uzantılı yatay profillerde sayfa 167



1 Modüller atölyede önceden hazırlanır üzerlerine klasik geçme bağlantı elemanı monte edilir (26474-00). İlk modül ankrajlarla binaya bağlanır.

2 Atölyede hazırlanan yatay profiller 1 numaralı modüle klasik geçme ile bağlanır.

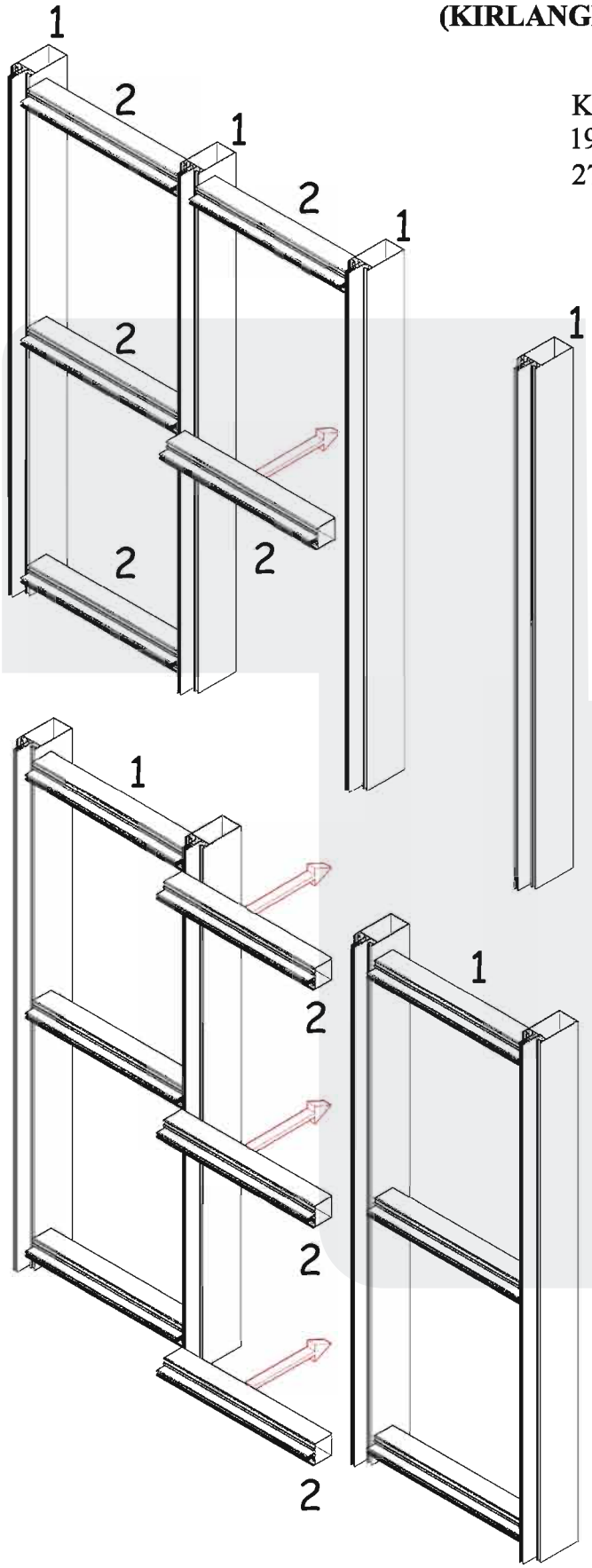
1 Modül hem 2 numaralı yatay kayıta hem de ankrajlarla binaya bağlanır. Cephe montajı bu sıra ile devam eder.

1 Düşey profil ankrajla binaya bağlanır. 26474-00 (klasik geçme bağlantı elemanı) yatay kayıtların geleceği yere monte edilir.

2 Yatay kayıt; düşey kayıt üzerinde klasik geçme bağlantı elemanının bulunduğu alanlara sürülür.

1 Bağlantı elemanın monte edildiği düşey profil hem yatay kayıta bağlanır hem de ankraj ile binaya bağlanır. Cephe montajı bu sıra ile devam eder.

BİNA MONTAJ YÖNTEMLERİ / *BUILDING ASSEMBLY METHODS*
(KIRLANGIÇ GEÇME)



Kırlangıç bağlantı detaylı anlatımı için;
19mm uzantılı yatay profillerde Bkz. sayfa 165
27mm uzantılı yatay profillerde Bkz. sayfa 168

1 Düşey profiller ankrajla binaya bağlanır. 26473-00 Kırlangıç alt profili sayfa 178 Detay 3 veya sayfa 181 Detay 3deki gibi düşey profil üzerine vidalanır.

2 Atölyede kesilen ve kırlangıç geçme üst profilleri (26472-00) montajlanan yatay kayıtlar düşey profillerin aralarına sürülür.

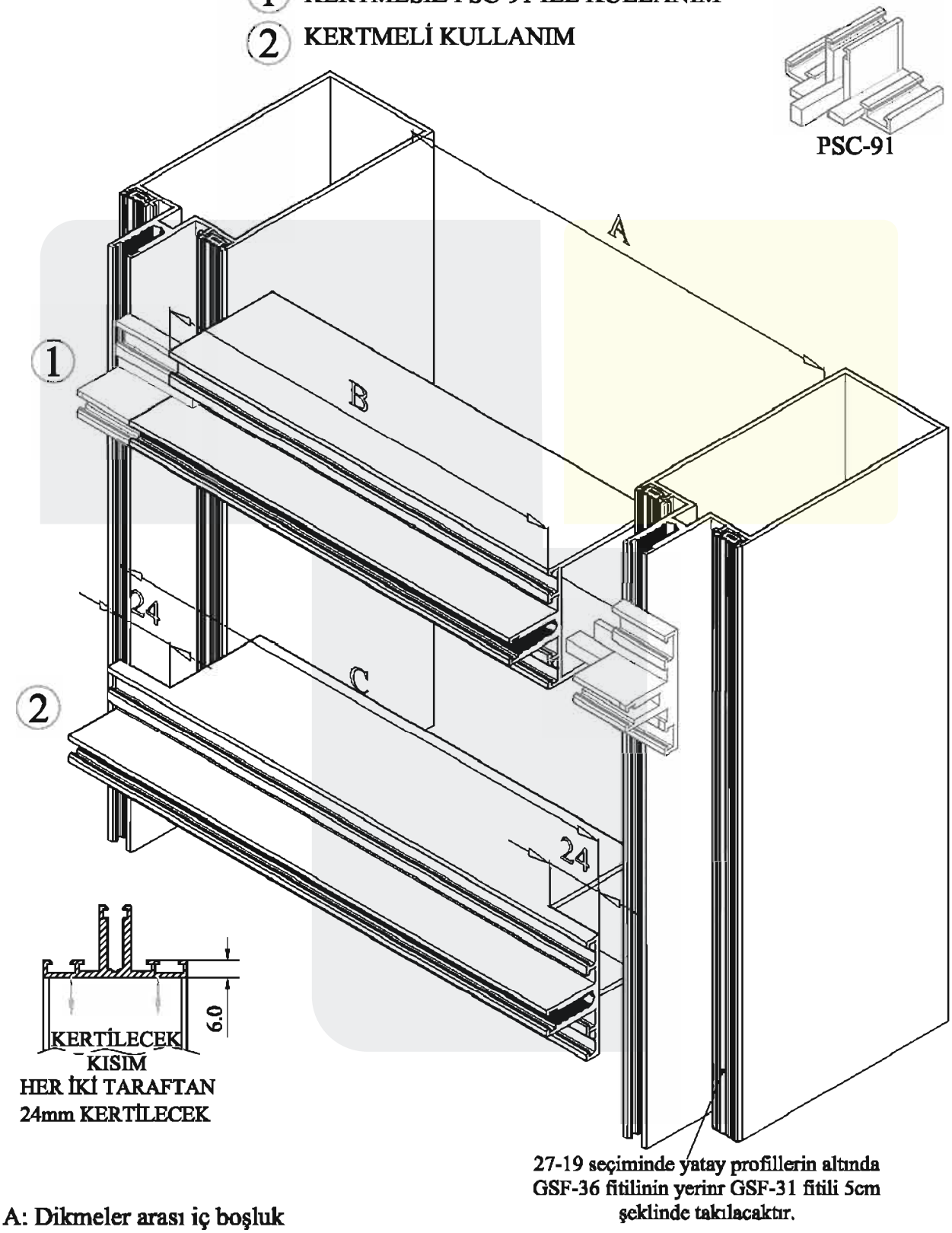
1 Düşey profiller ankrajla binaya bağlanır. 26473-00 Kırlangıç alt profili sayfa 178 Detay 3 veya sayfa 181 Detay 3deki gibi düşey profil üzerine vidalanır.

2 Atölyede kesilen ve kırlangıç geçme üst profilleri (26472-00) montajlanan yatay kayıtlar düşey profillerin aralarına sürülür.

Karşılaştırmalı Yatay Taşıyıcı Seçimi Anlatımı / *Comparative Definition for Transom Selection*
19mm Uzantılı / *19mm Nozzle*

1 KERTMESİZ PSC-91 İLE KULLANIM

2 KERTMELİ KULLANIM



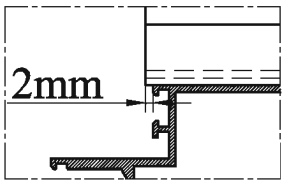
A: Dikmeler arası iç boşluk

B: Kertmesiz kullanımda yatay profil kesim ölçüsü (B= A - 16)

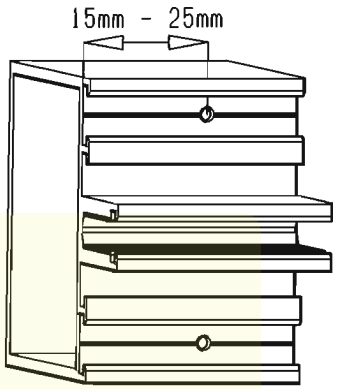
C: Kertmeli kullanımda yatay profil kesim ölçüsü (C= A + 32)

19mm UZANTILI YATAY TAŞIYICI İLE YATAY-DÜŞEY PROFİLLERİN MONTAJI
1)- KLASİK GEÇME YÖNTEMİ (U Bağlantı)

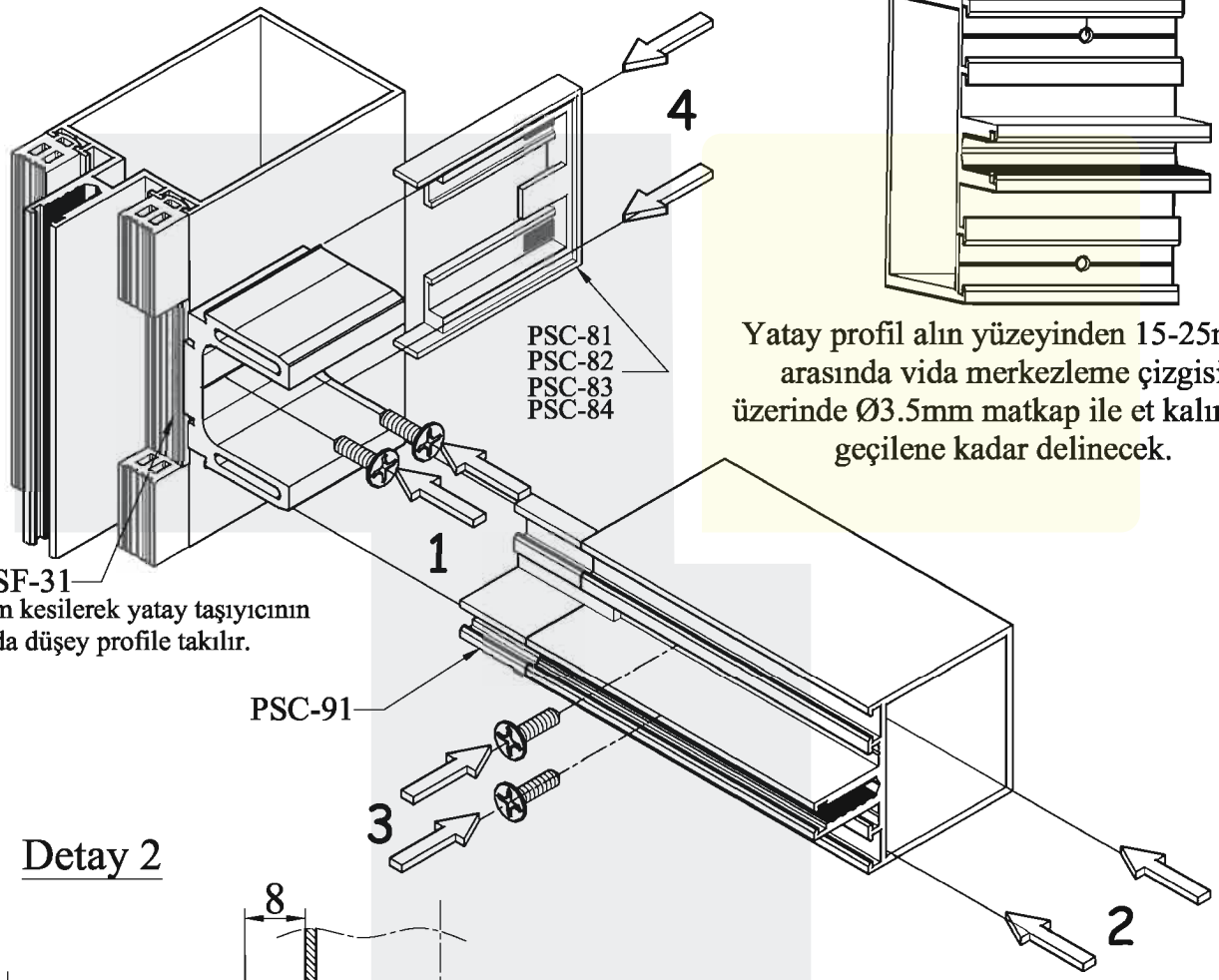
Detay 3



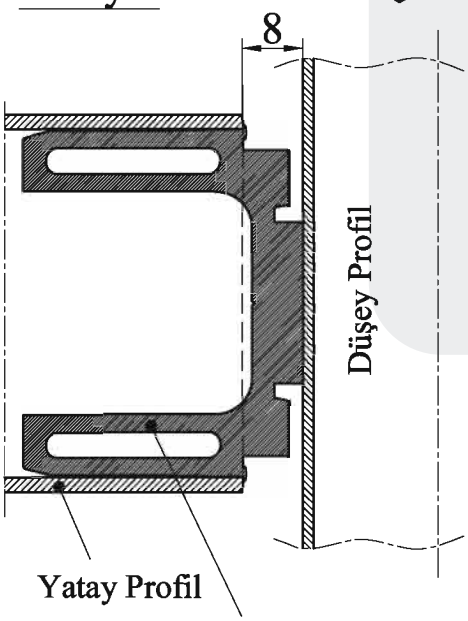
Detay 1



Yatay profil alın yüzeyinden 15-25mm arasında vida merkezleme çizgisi üzerinde Ø3.5mm matkap ile et kalınlığı geçilene kadar delinecek.



Detay 2



26474-00'ın kesim ölçüleri 43. sayfada verilmiştir.

MONTAJ SIRASI

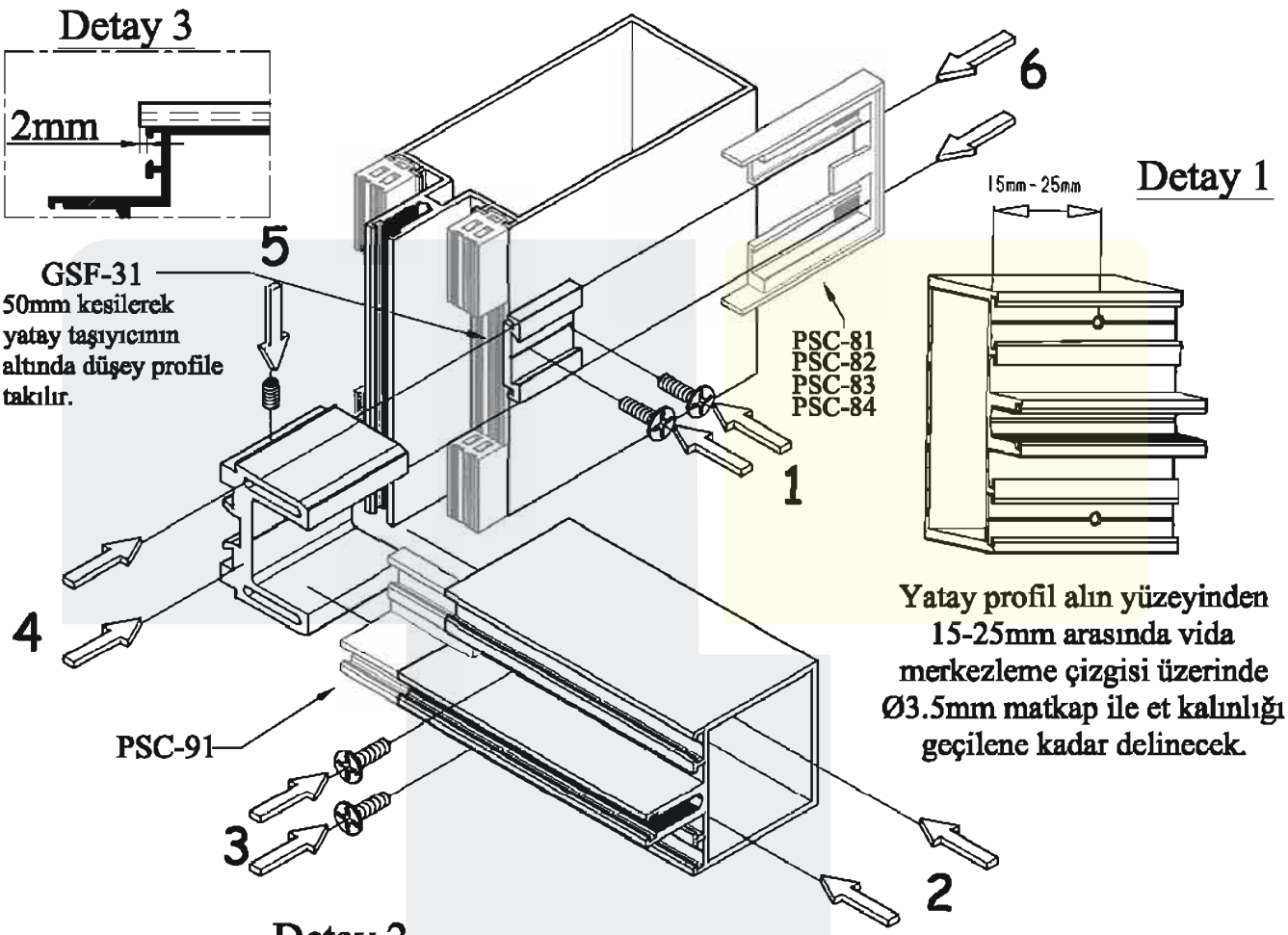
1: 26474-00 klasik bağlantı profili üst yüzeyi, düşey profil üst yüzeyinden 2mm dışarıda(Bkz. Detay 3) olacak şekilde 2 adet Ø4.2x15YHB akıllı vida ile bağlanır.

2: Yatay profil; Düşey profile bağlantısı yapılan 26474-00 klasik bağlantı elemanına kılavuz tırnaklara değene kadar sürülür (Bkz. Detay 2).

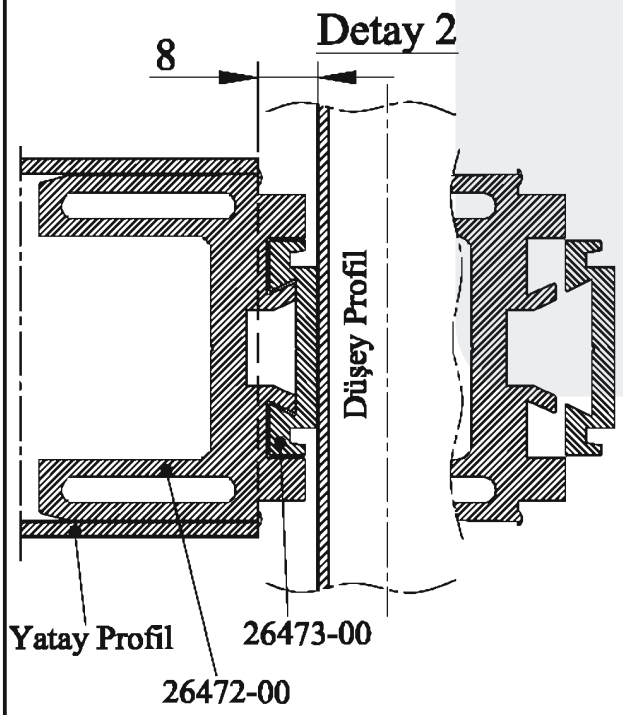
3: Yatay profil alın yüzeyinden 15-25mm arasında deldiğimiz 2 deliğe (Bkz. Detay 1) Ø4.2x15YHB akıllı vida bağlantısı yapılır.

4: PSC-81, PSC-82, PSC-83, PSC-84 pvc fitil; yatay profil ile düşey profil arasında kalan 8mm'lik boşluğa sürülür(Bkz. Detay 2).

19mm UZANTILI YATAY TAŞIYICI İLE YATAY-DÜŞEY PROFİLLERİN MONTAJI
2)- KIRLANGIÇ GEÇME YÖNTEMİ



Yatay profil alın yüzeyinden 15-25mm arasında vida merkezleme çizgisi üzerinde Ø3.5mm matkap ile et kalınlığı geçilene kadar delinecek.



26472-00 ve 26473-00'ın kesim ölçüleri 43. sayfada verilmiştir.

MONTAJ SIRASI

1: 26473-00 kırlangıç profili üst yüzeyi, düşey profil üst yüzeyinden 2mm yukarıda (Bkz. Detay 3) olacak şekilde 2 adet Ø4.2x15YHB akıllı vida ile bağlanır.

2: 26472-00 kırlangıç profili yatay profile kılavuz tırnaklar değene kadar sürülür (Bkz. Detay 2)

3: Detay-1'de belirtilen yatay taşıyıcı üzerindeki 2 adet delikten Ø4.2x15YHB akıllı vida yardımı ile 26472-00 bağlantısı yapılır.

4: Montajı tamamlanmış olan yatay profil, düşey profilin üzerine montajını yaptığımız 26473-00 kırlangıç profiline sürülür.

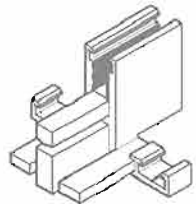
5: 26472-00 üzerindeki delikten M4x6 setskur civata ile 26473-00 kırlangıç profiline bağlantı yapılır.

6: PSC-81, PSC-82, PSC-83, PSC-84 pvc fitil; yatay profil ile düşey profil arasında kalan 8mm'lik boşluğa sürülür(Bkz. Detay 2).

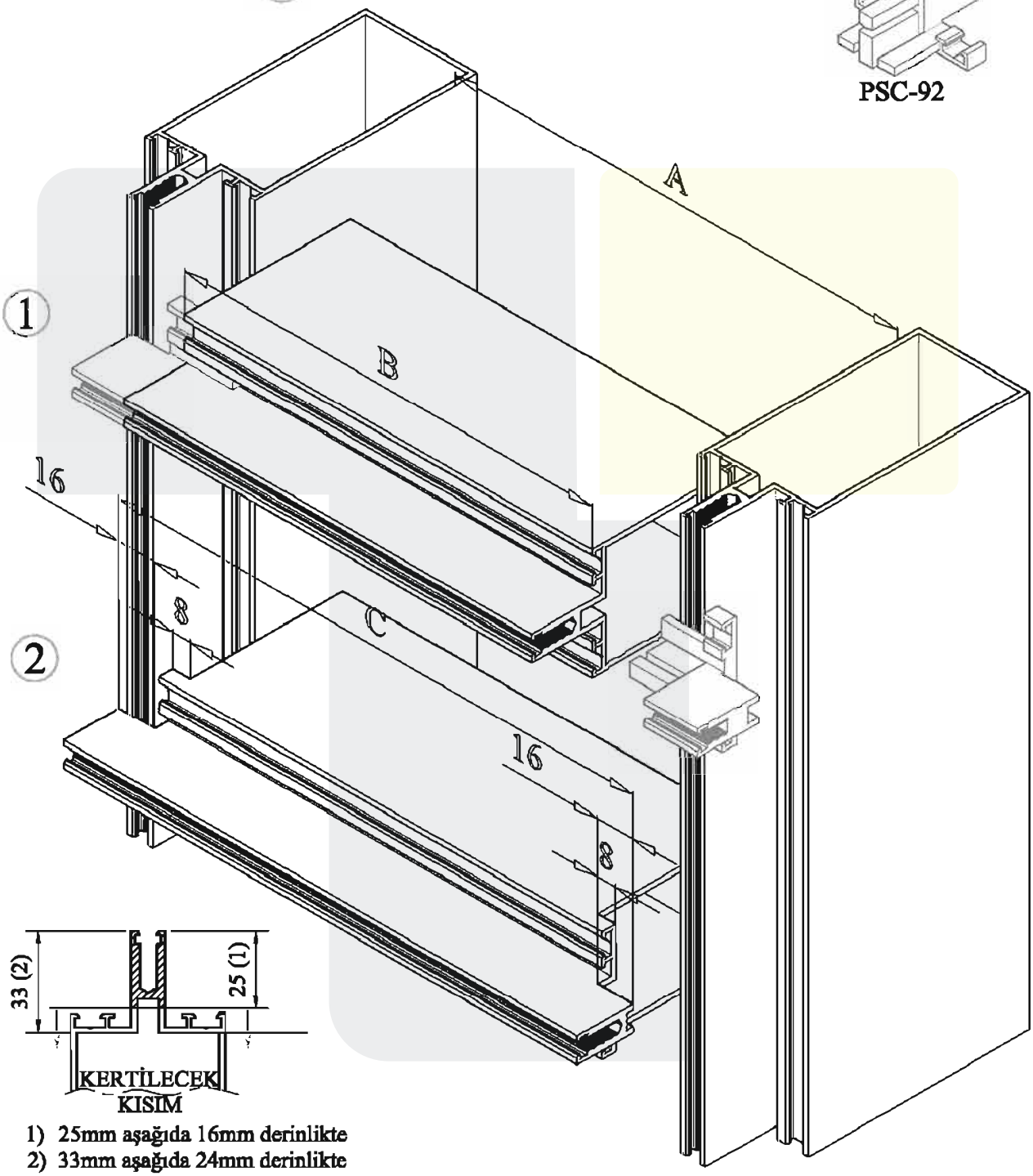
Karşılaştırmalı Yatay Taşıyıcı Seçimi Anlatımı / *Comparative Definition for Transom Selection*
27mm Uzantılı / *27mm Nozzle*

1 KERTMESİZ PSC-92 İLE KULLANIM

2 KERTMELİ KULLANIM



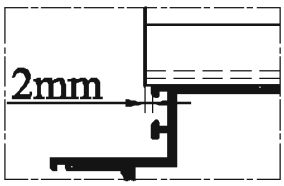
PSC-92



1) 25mm aşağıda 16mm derinlikte
2) 33mm aşağıda 24mm derinlikte

A: Dikmeler arası iç boşluk
B: Kertmesiz kullanımda yatay profil kesim ölçüsü (B= A - 16)
C: Kertmeli kullanımda yatay profil kesim ölçüsü (C= A + 32)

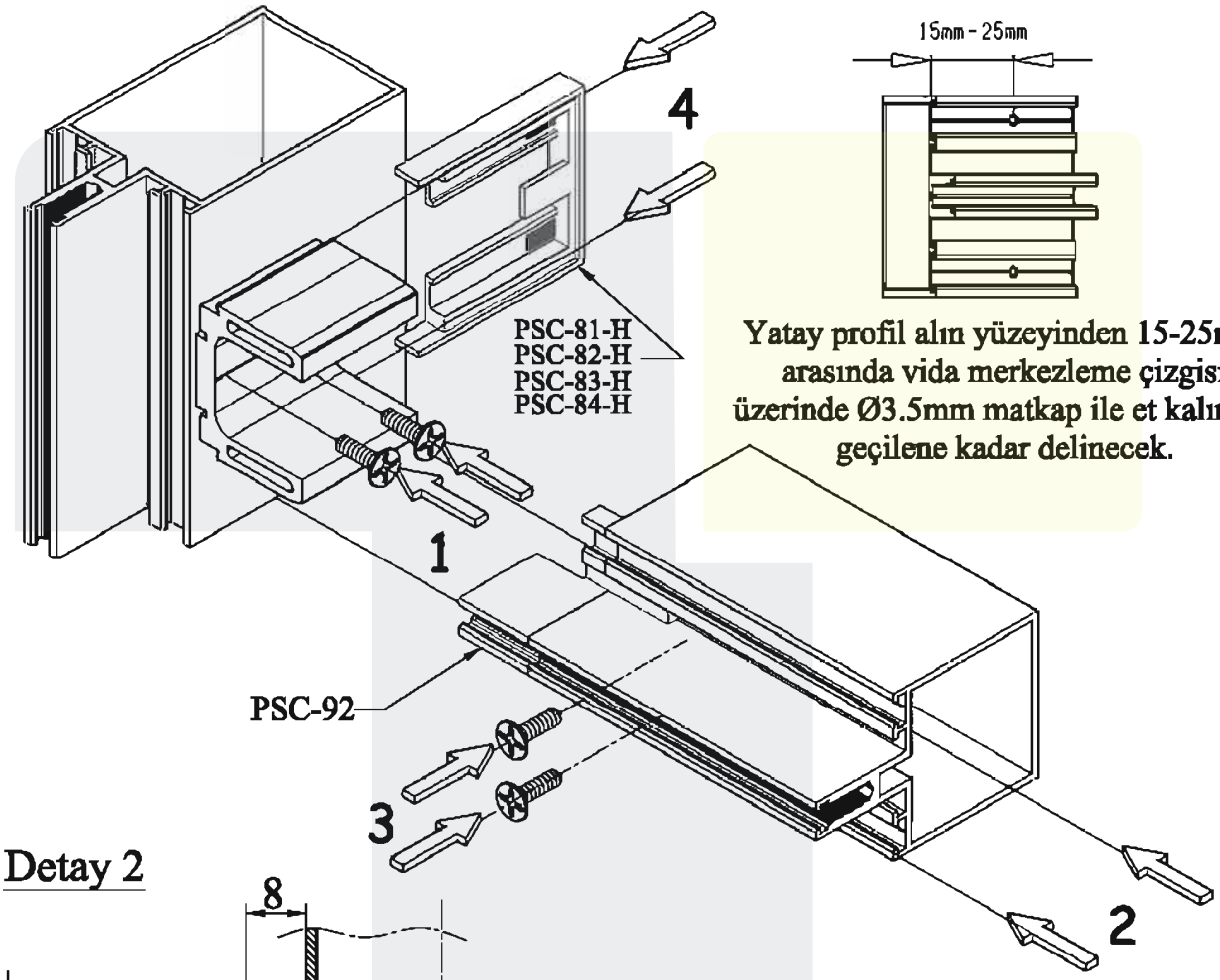
Detay 3



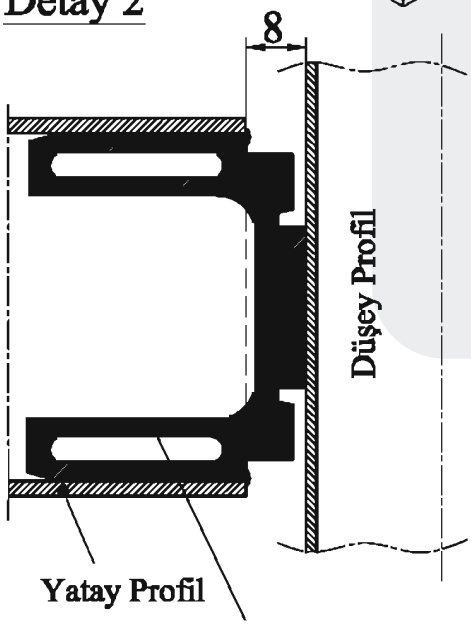
27mm UZANTILI YATAY TAŞIYICI İLE YATAY-DÜŞEY PROFİLLERİN MONTAJI
1)- KLASİK GEÇME YÖNTEMİ (U Bağlantı)

Detay 1

Yatay profil alın yüzeyinden 15-25mm arasında vida merkezleme çizgisi üzerinde Ø3.5mm matkap ile et kalınlığı geçilene kadar delinecek.



Detay 2



26474-00'ın kesim ölçüleri 43. sayfada verilmiştir.

MONTAJ SIRASI

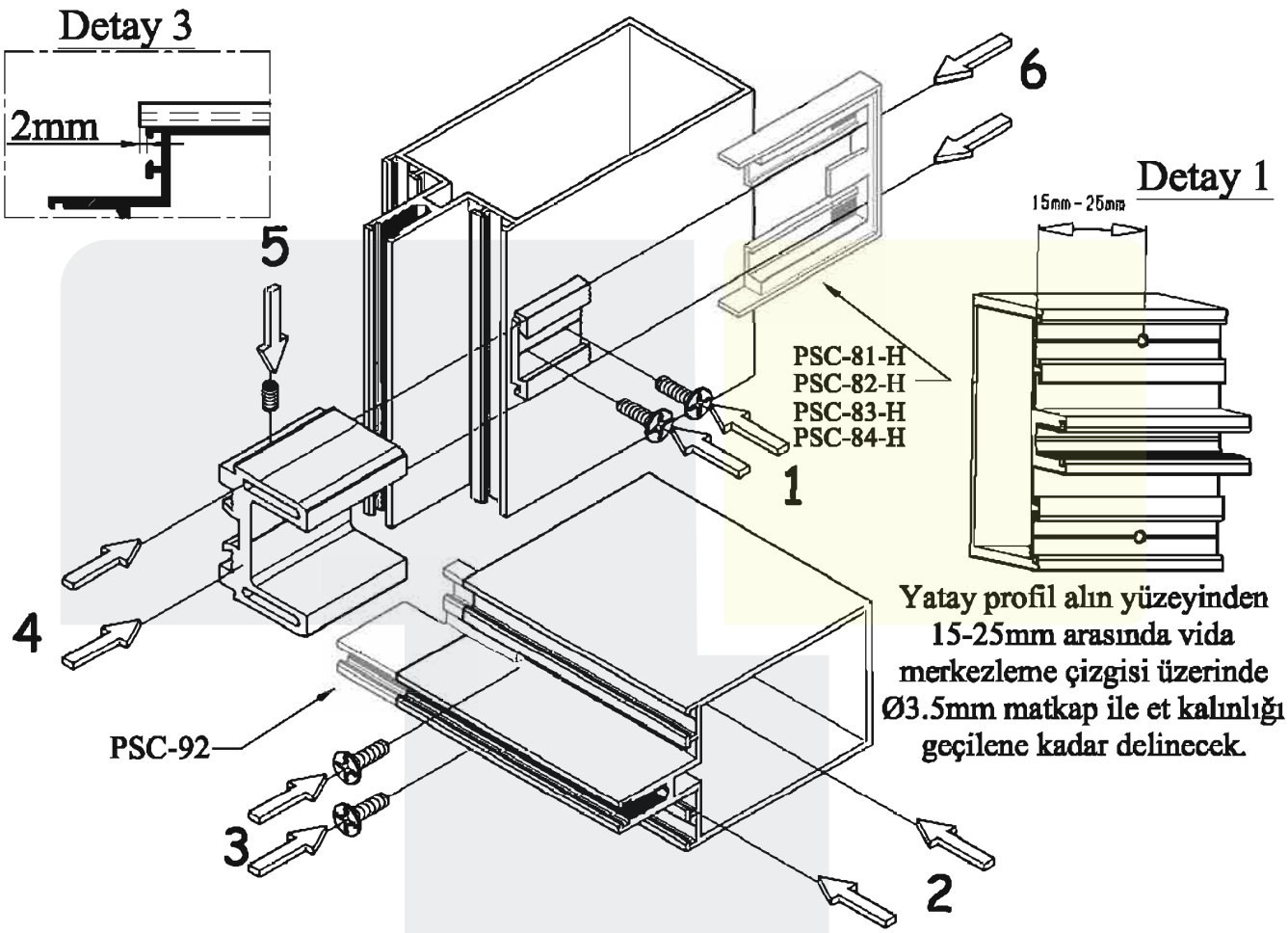
1: 26474-00 klasik bağlantı profili üst yüzeyi, düşey profil üst yüzeyinden 2mm içeride (Bkz. Detay 3) olacak şekilde 2 adet Ø4.2x15YHB akıllı vida ile bağlanır.

2: Yatay profil; Düşey profile bağlantısı yapılan 26474-00 klasik bağlantı elemanına kılavuz tırnaklara değene kadar sürülür (Bkz. Detay 2).

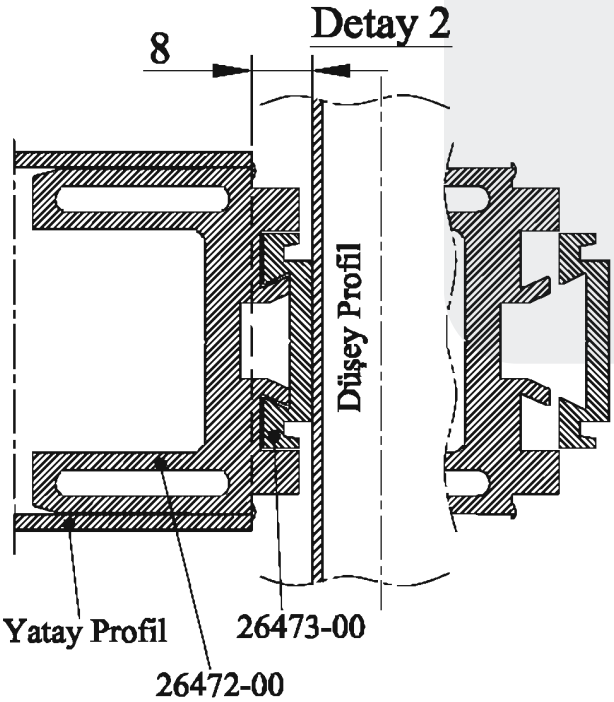
3: Yatay profil alın yüzeyinden 15-25mm arasında deldiğimiz 2 deliğe (Bkz. Detay 1) Ø4.2x15YHB akıllı vida bağlantısı yapılır.

4: PSC-81H, PSC-82H, PSC-83H, PSC-84H pvc fitil; yatay profil ile düşey profil arasında kalan 8mm'lik boşluğa sürülür(Bkz. Detay 2).

27mm UZANTILI YATAY TAŞIYICI İLE YATAY-DÜŞEY PROFİLLERİN MONTAJI
2)- KIRLANGIÇ GEÇME YÖNTEMİ



Yatay profil alın yüzeyinden 15-25mm arasında vida merkezleme çizgisi üzerinde Ø3.5mm matkap ile et kalınlığı geçilene kadar delinecek.



26472-00 ve 26473-00'ın kesim ölçüleri 43. sayfada verilmiştir.

MONTAJ SIRASI

1: 26473-00 kırlangıç profili üst yüzeyi, düşey profil üst yüzeyinden 2mm aşağıda (Bkz. Detay 3) olacak şekilde 2 adet Ø4.2x15YHB akıllı vida ile bağlanır.

2: 26472-00 kırlangıç profili yatay profile kılavuz tırnaklar değene kadar sürülür (Bkz. Detay 2)

3: Detay-1'de belirtilen yatay taşıyıcı üzerindeki 2 adet delikten Ø4.2x15YHB akıllı vida yardımı ile 26472-00 bağlantısı yapılır.

4: Montajı tamamlanmış olan yatay profil, düşey profilin üzerine montajını yaptığımız 26473-00 kırlangıç profiline sürülür.

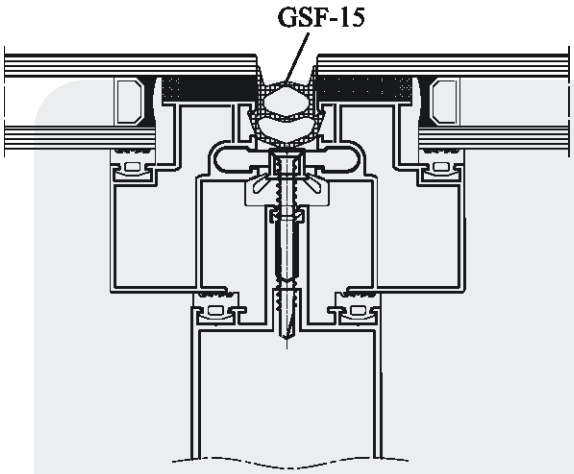
5: 26472-00 üzerindeki delikten M4x6 setskur civata ile 26473-00 kırlangıç profiline bağlantı yapılır.

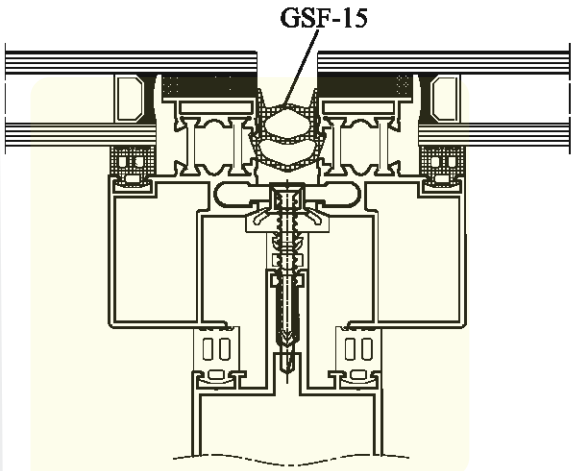
6: PSC-81H, PSC-82H, PSC-83H pvc fitil; yatay profil ile düşey profil arasında kalan 8mm'lik boşluğa sürülür(Bkz. Detay 2).

SİLİKON CEPHE İÇİN DERZ FİTİLİ ve KASET SABİTLEME TAKOZU KULLANIMLARI (GSF-8, GSF-81, GSF-15) ve (26480-00, 26481-00)

Sabit kasetler arası derzlerde; kolay vidalama yapılabilmesi, bozulan derz fitillerinin kolay değiştirebilmesi ve kaset sabitlenmesi sonrasında takılabilmesi avantajı ile, GSF-15 derz fitilleri tercih edilebilir.

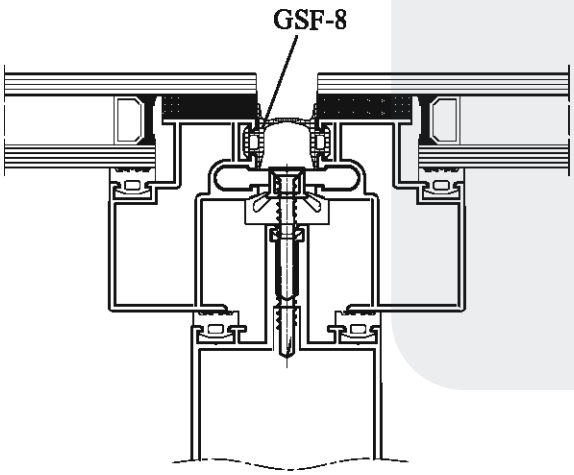
26481-00 kaset sabitleme takozu kullanıldığında GSF-15 derz fitili kullanılamaz.



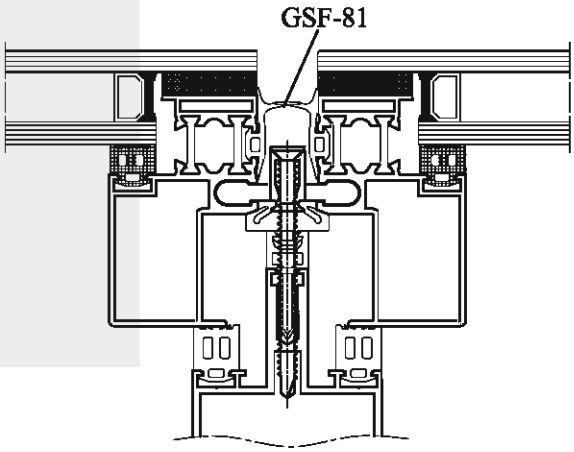


Sabit kasetler arasında GSF-15 tercih edilmediği durumlarda ve açılır kasetlerde;

Standart Kasetlerde GSF-8 derz fitili ile birlikte 26480-00 veya 26481-00 sabitleme takozu kullanılmalıdır;



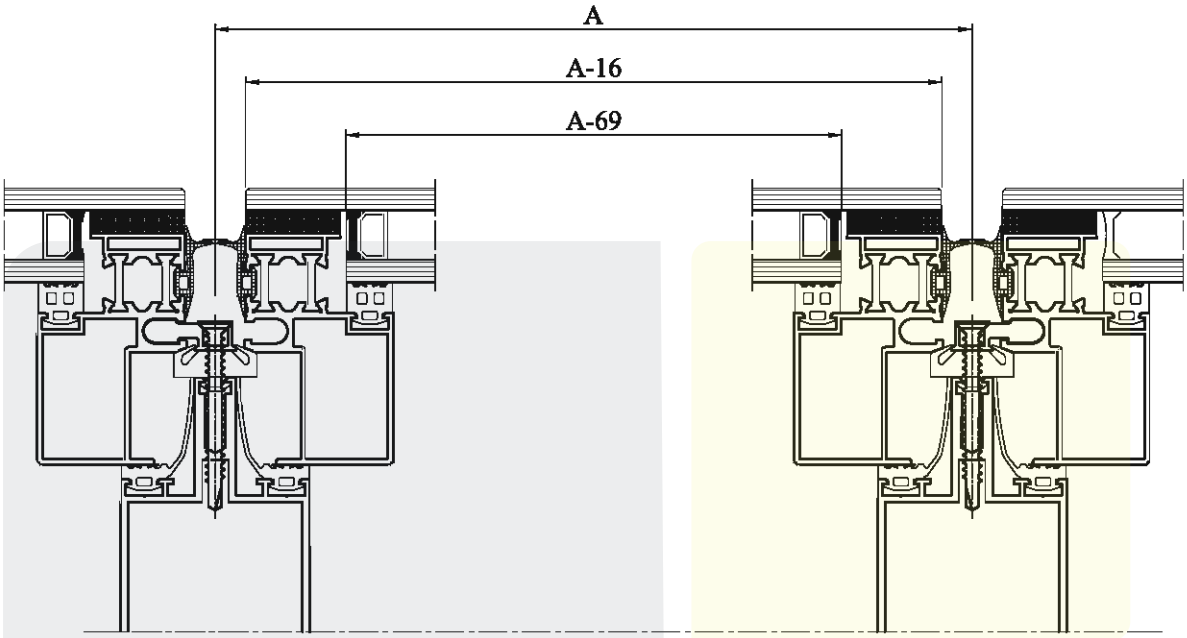
Yalıtımlı Kasetlerde GSF-81 derz fitili ile birlikte vidalama kolaylığı açısından tercihen 26481-00 sabitleme takozu kullanılmalıdır;



Açılır kasetlere komşu sabit kasetlerin kenarlarının sabitlenmesinde görüntü itibarı ile 26480-00 sabitleme takozu tercih edilmelidir.

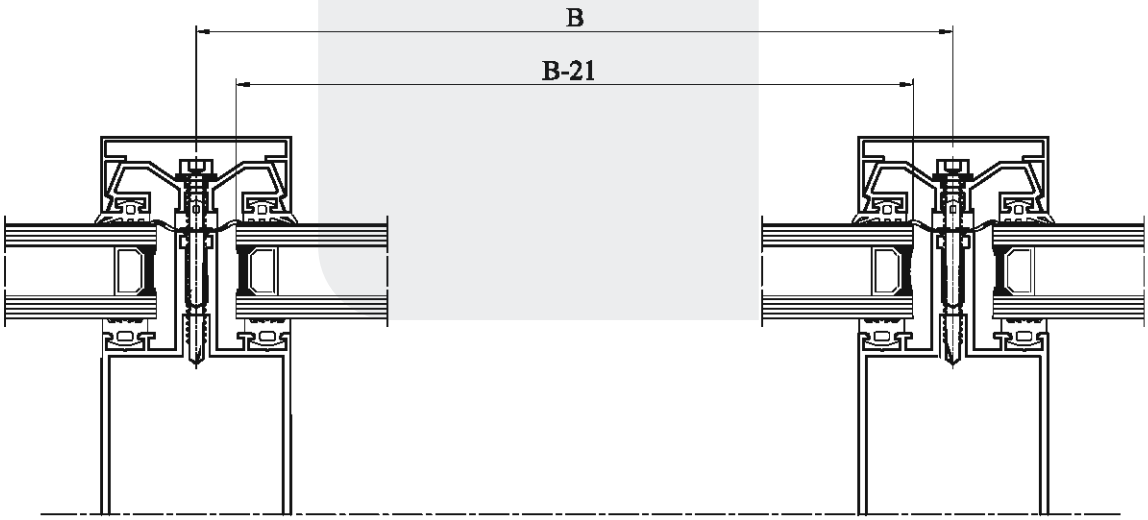
MONTAJ KESİM ÖLÇÜLERİ BELİRLEME / *ASSEMBLY CUTTING DIMENSIONS*

SİLİKON CEPHE



A..... : Aks Aralığı
A-16..: Dış Cam ve Kaset Kesim Ölçüsü
A-69..: İç Cam Kesim Ölçüsü

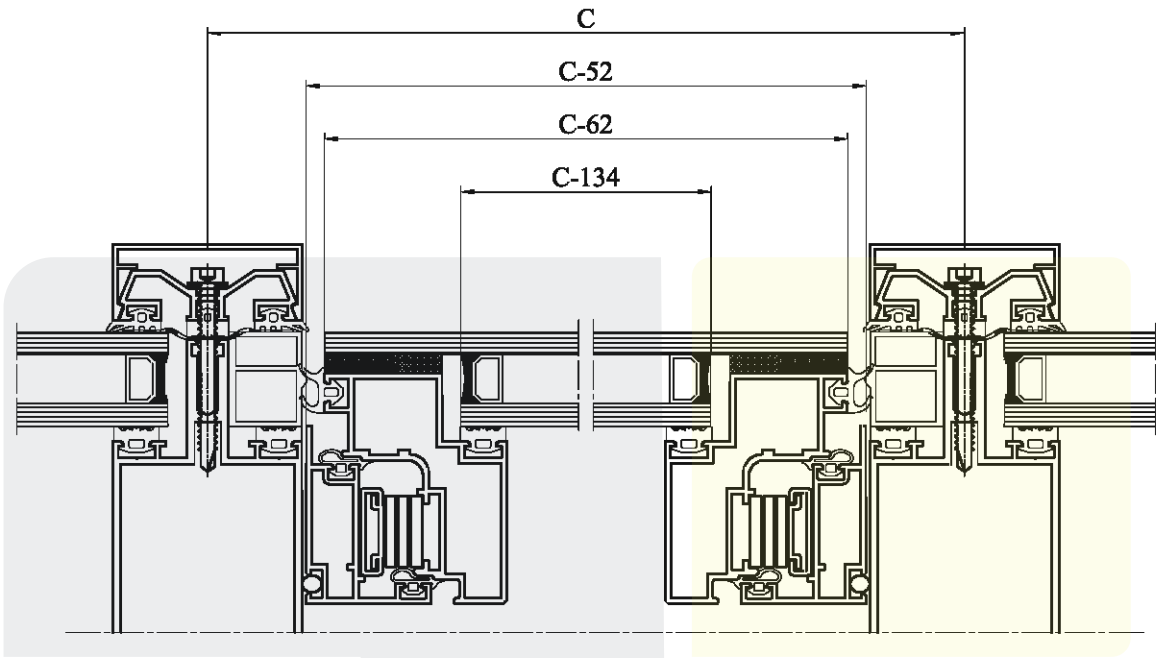
KAPAKLI CEPHE & YARI KAPAKLI CEPHE



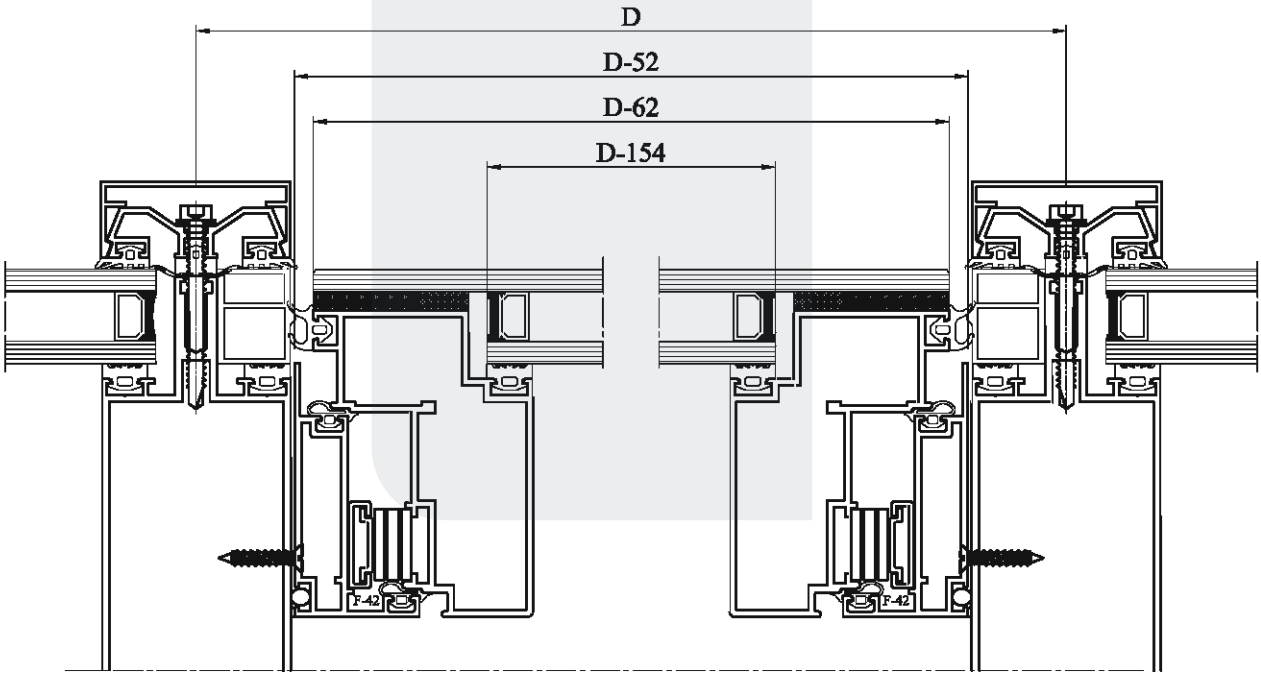
B..... : Aks Aralığı
B-21.. : Cam Kesim Ölçüsü

MONTAJ KESİM ÖLÇÜLERİ BELİRLEME / *ASSEMBLY CUTTING DIMENSIONS*

KAPAKLI CEPHE



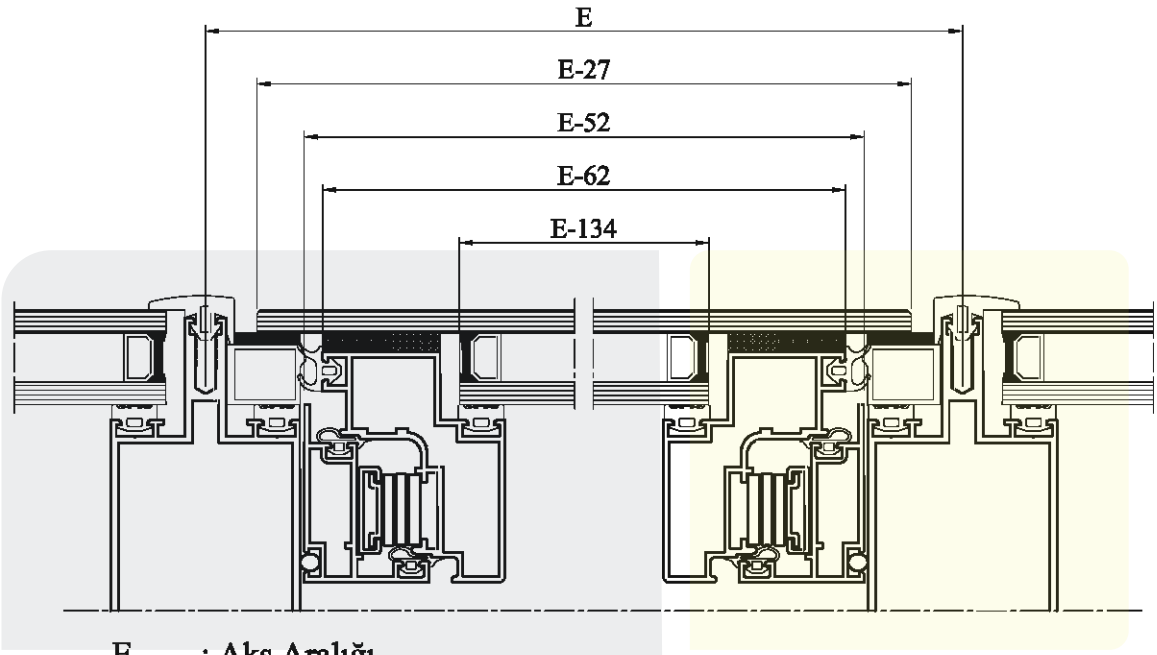
C..... : Aks Aralığı
C-52.. : Açılır Kaset Kasası Kesim Ölçüsü
C-62.. : Dış Cam Kesim Ölçüsü ve Kanat Kesim Ölçüsü
C-134 : İç Cam Kesim Ölçüsü



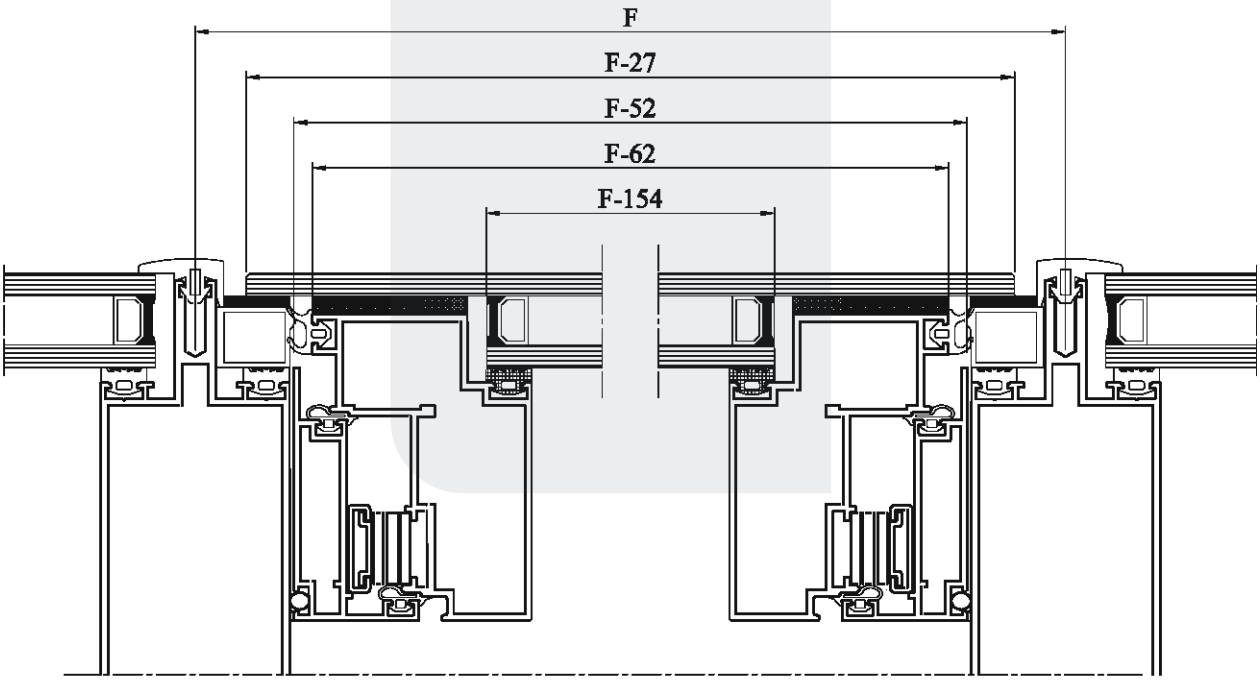
D..... : Aks Aralığı
D-52..: Açılır Kaset Kasası Kesim Ölçüsü
D-62..: Dış Cam Kesim Ölçüsü ve Kanat Kesim Ölçüsü
D-154: İç Cam Kesim Ölçüsü

MONTAJ KESİM ÖLÇÜLERİ BELİRLEME / *ASSEMBLY CUTTING DIMENSIONS*

YARI KAPAKLI CEPHE



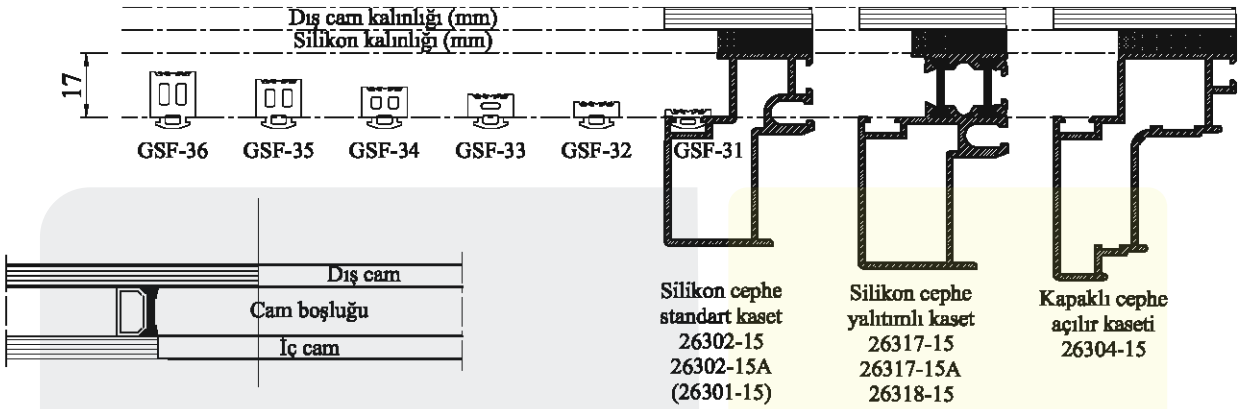
E..... : Aks Aralığı
E-27 : Dış Cam Kesim Ölçüsü
E-52.. : Açılır Kaset Kasası Kesim Ölçüsü
E-62.. : Kanat Kesim Ölçüsü
E-134 : İç Cam Kesim Ölçüsü



F..... : Aks Aralığı
F-27 : Dış Cam Kesim Ölçüsü
F-52.. : Açılır Kaset Kasası Kesim Ölçüsü
F-62.. : Kanat Kesim Ölçüsü
F-154 : İç Cam Kesim Ölçüsü

CAM KALINLIĞI SEÇENEKLERİ / *GLAZING THICKNESS OPTIONS*

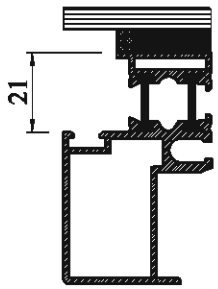
CAM FİTİLLERİ, KULLANIM YERLERİ ve CAM SEÇİM ÖLÇÜLERİ



Cam fitili yüksekliği

GSF-31 = 2mm
GSF-32 = 4mm
GSF-33 = 6mm
GSF-34 = 8mm
GSF-35 = 10mm
GSF-36 = 12mm

17mm + Silikon kalınlığı = Cam Boşluğu + İç cam Kalınlığı + Cam fitili yüksekliği



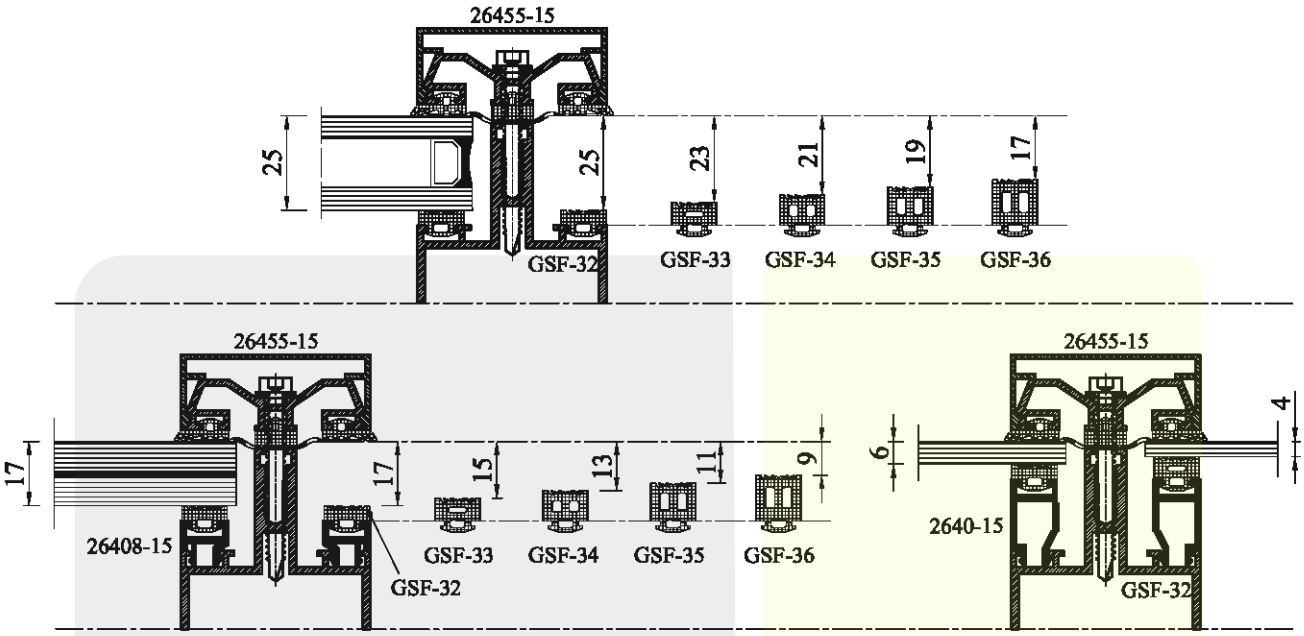
Silikon cephe yalıtımlı kaset

Yukarıdaki kaset profillerinde 17mm olarak gösterilen ölçü 26310-15, 26310-15A ve 26311-15 profillerinde 21mm'dir. Bundan dolayı formül aşağıdaki gibi olur. !

21mm + Silikon kalınlığı = Cam Boşluğu + İç cam Kalınlığı + Cam fitili yüksekliği

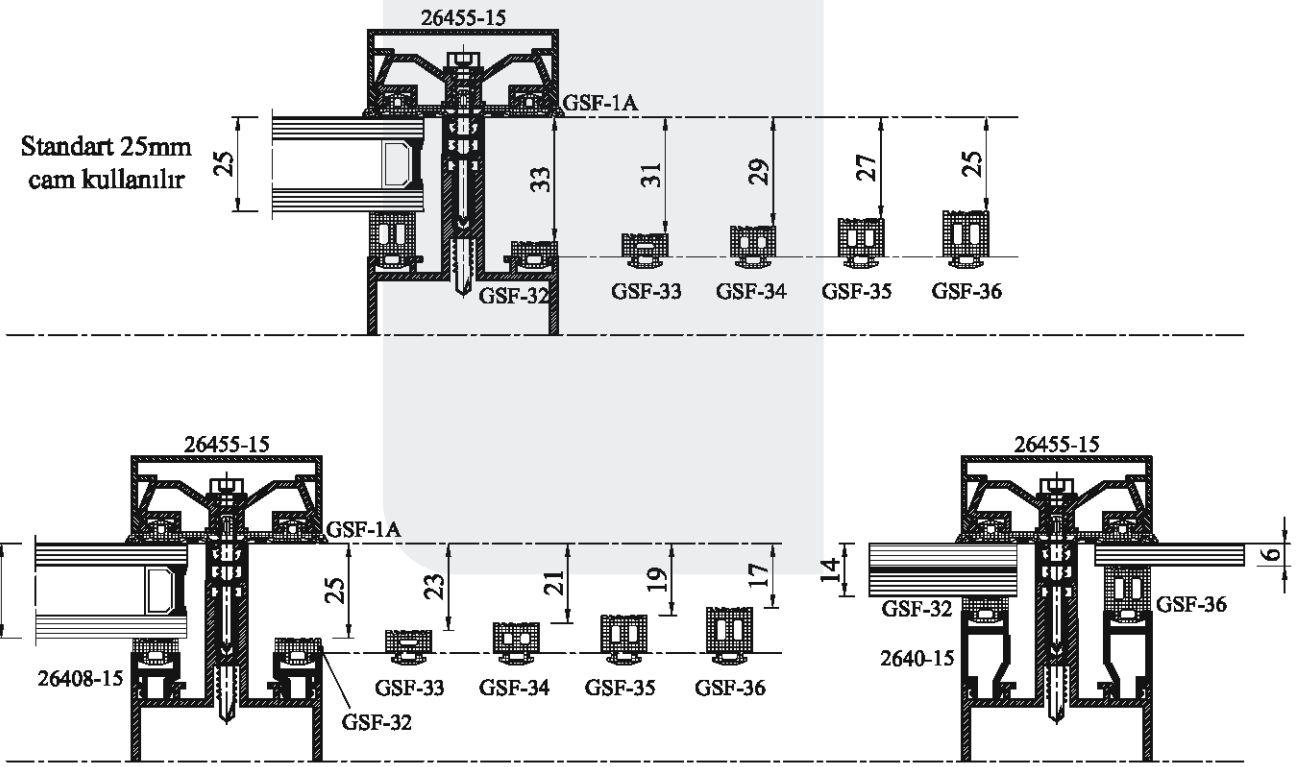
KAPAKLI CEPHEDE CAM KALINLIĞI SEÇENEKLERİ
GLAZING THICKNESS OPTIONS FOR COVERED FACADE

F50K/HI ve F50YK/HI İÇİN



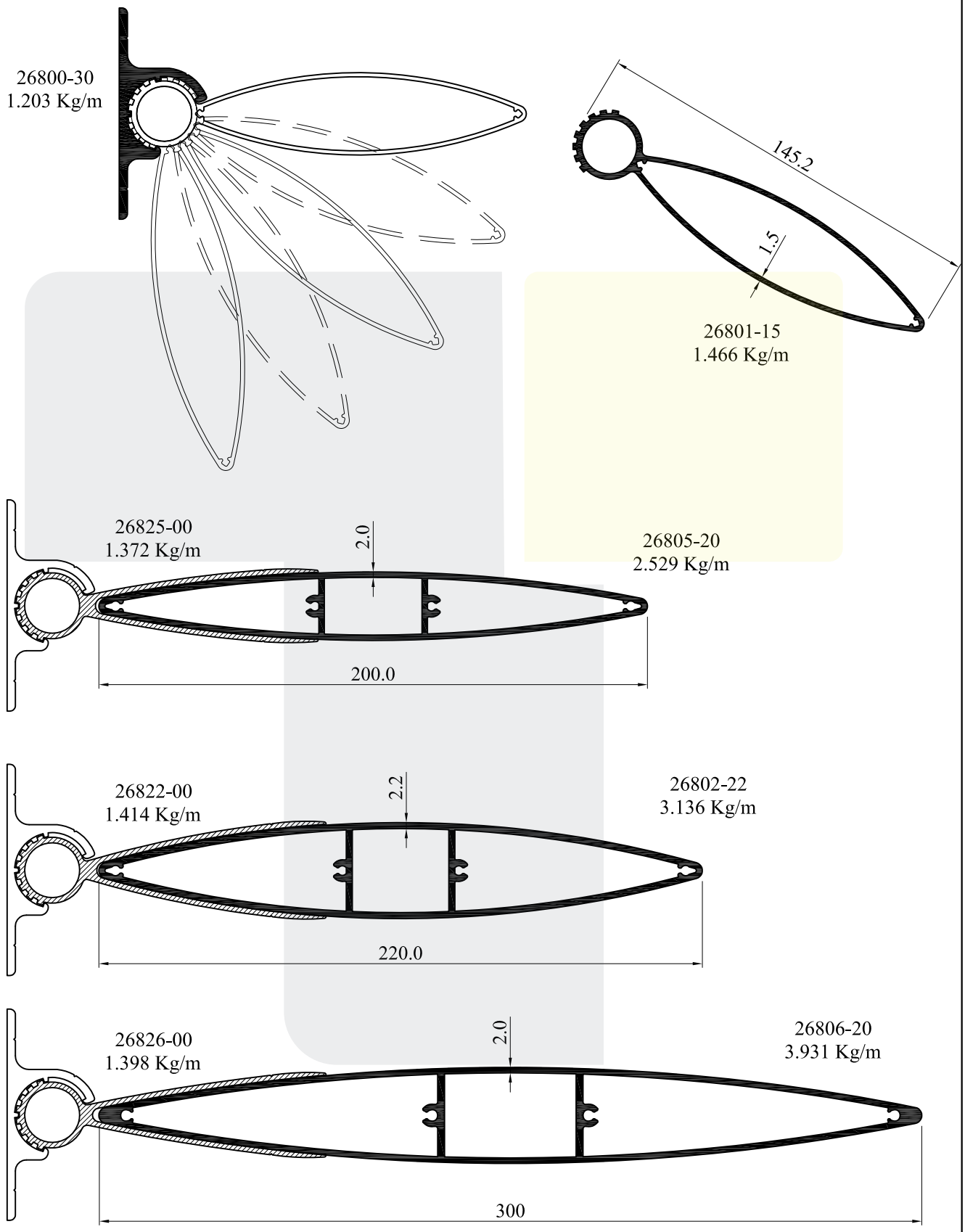
Bu sistemde düşey ve yatayda 27mm uzantılı profiller kullanıldığından cam baskı fitilleri aynıdır.

F50K/HI+ ve F50YK/HI+ İÇİN



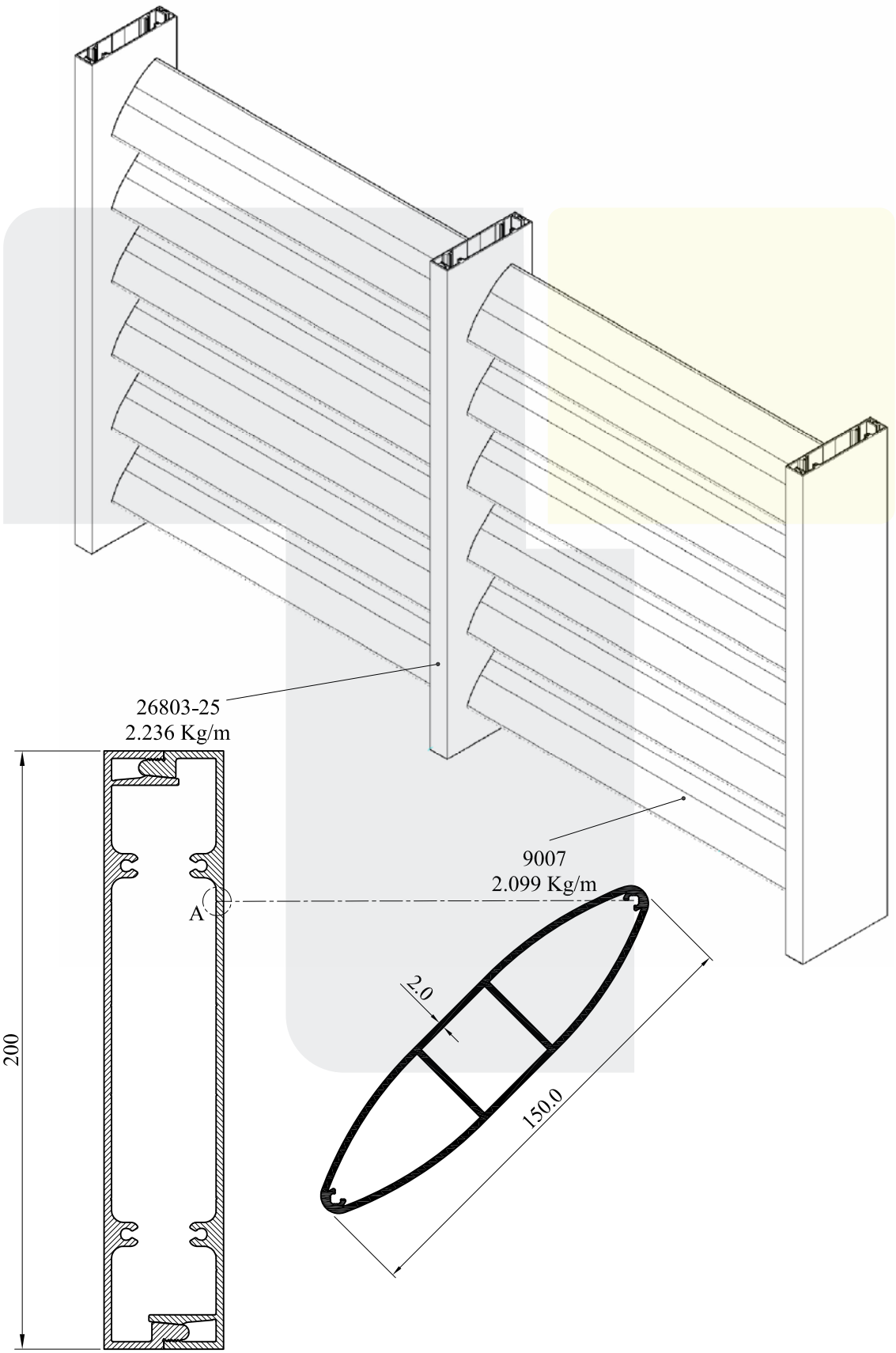
Bu sistemlerde düşeyde 27mm yatayda 19mm uzantılı profil kullanıldığı zaman düşey taşıyıcıda GSF-36 yatay taşıyıcıda GSF-32 fitili kullanılır. Başka fitillerin kullanılması söz konusu olamaz.

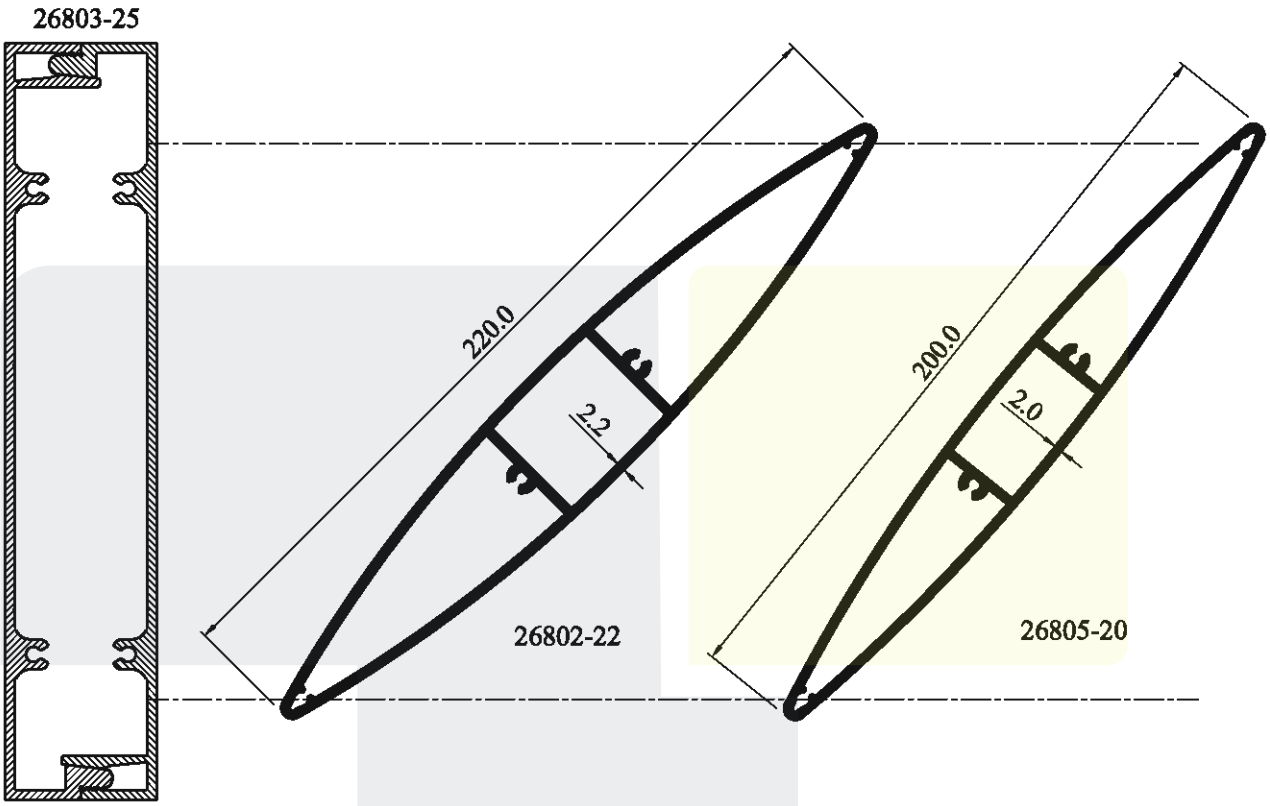
Düşeyde ve Yatayda 27mm uzantılı profiller kullanıldığında ise cam baskı fitilleri 2 istikamette de aynıdır.

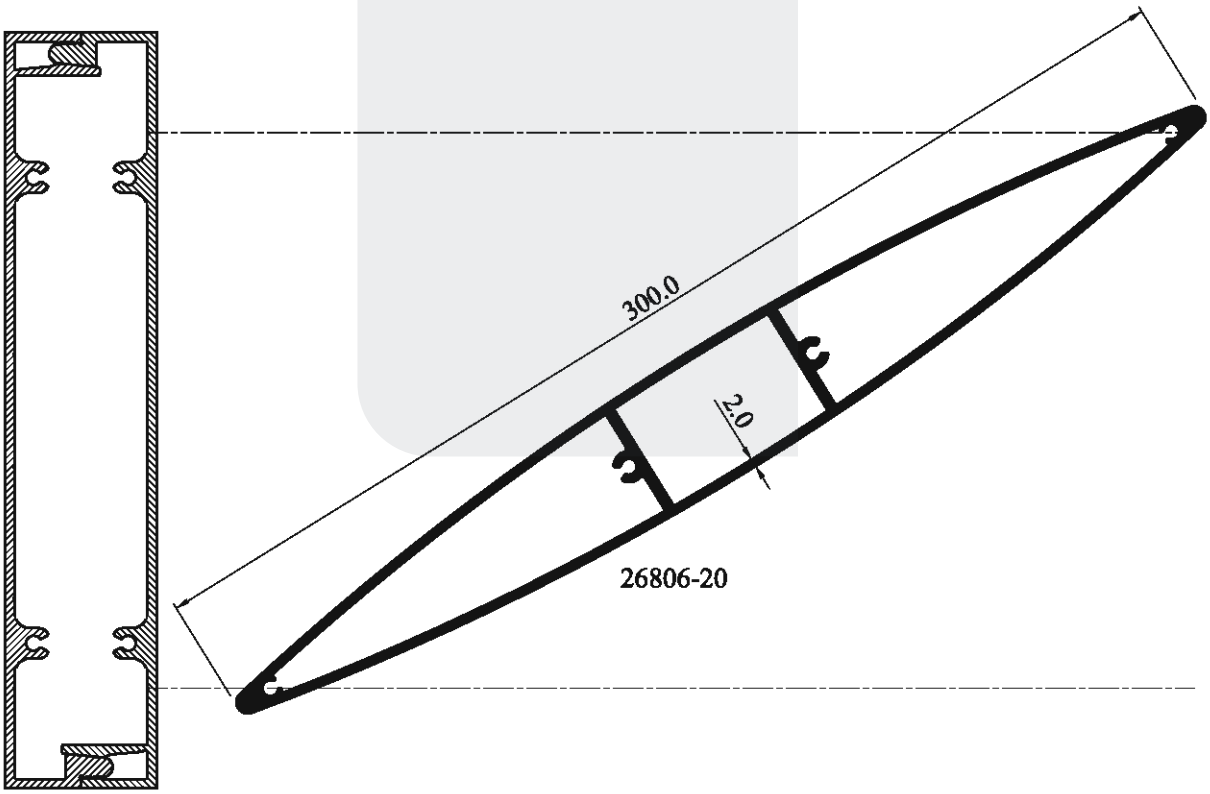

26800-30
1.203 Kg/m
145.2
1.5
26801-15
1.466 Kg/m
26825-00
1.372 Kg/m
2.0
26805-20
2.529 Kg/m
200.0
26822-00
1.414 Kg/m
2.2
26802-22
3.136 Kg/m
220.0
26826-00
1.398 Kg/m
2.0
26806-20
3.931 Kg/m
300

Ölçek 1/2

9007 GÜNEŞ KIRICI PROFİLİ İLE 26803-25 GÜNEŞ KIRICI BAŞLIĞI MONTAJI




26803-25
220.0
2.2
26802-22
200.0
2.0
26805-20


300.0
2.0
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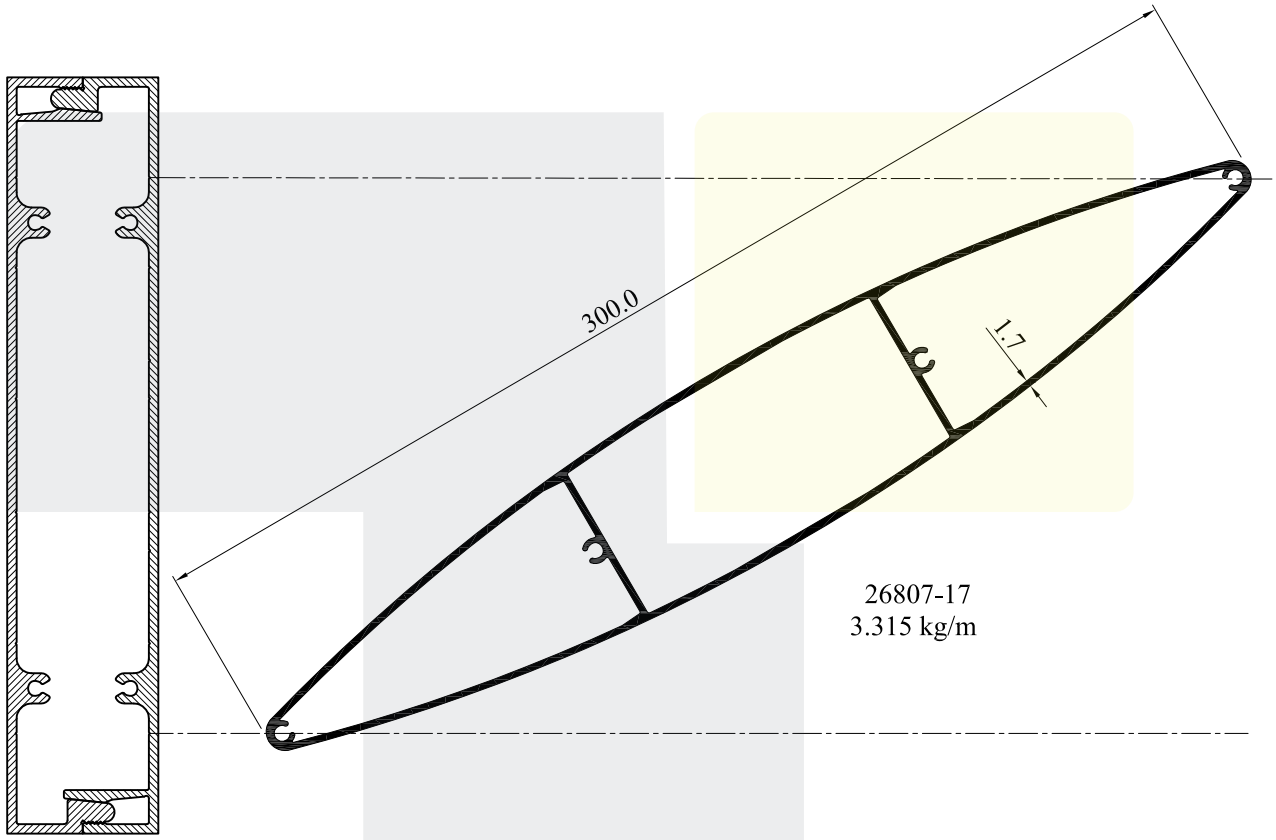
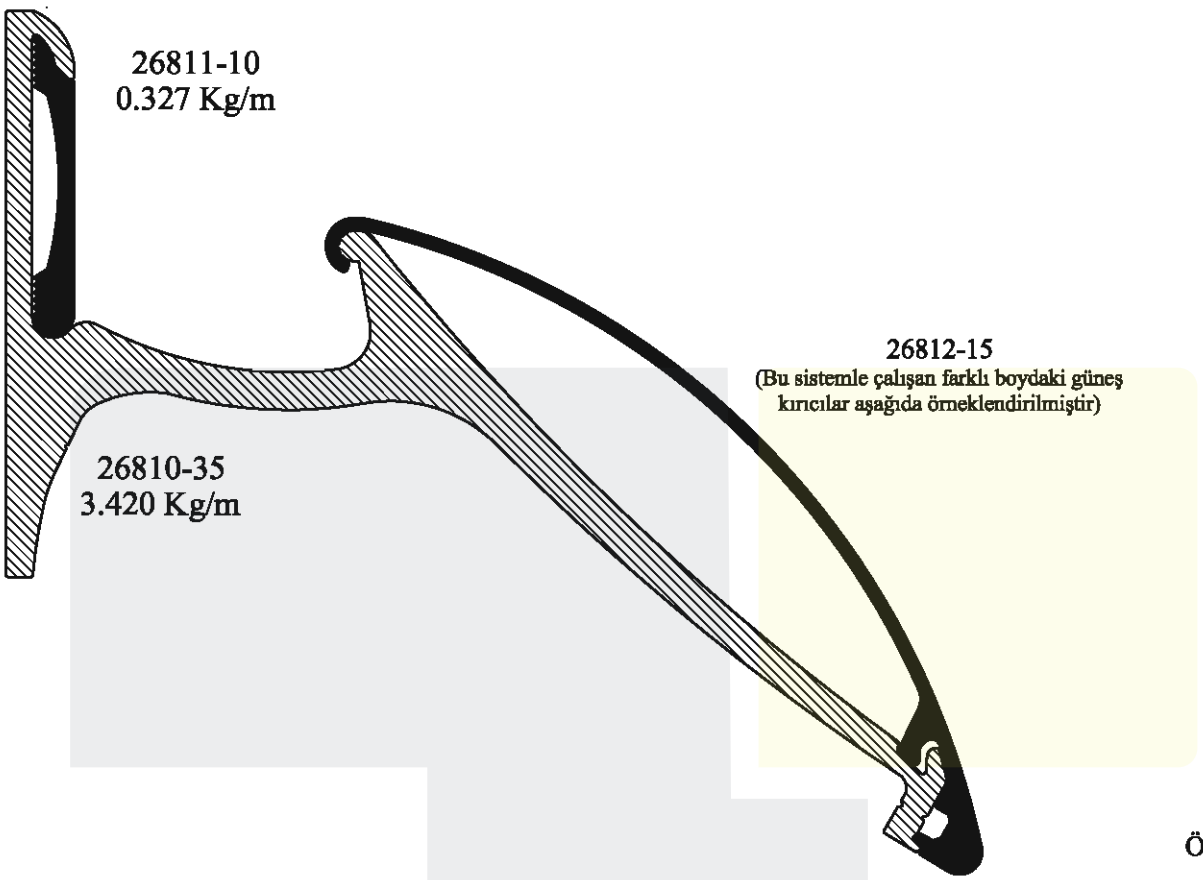
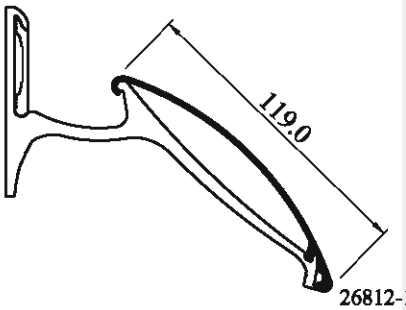


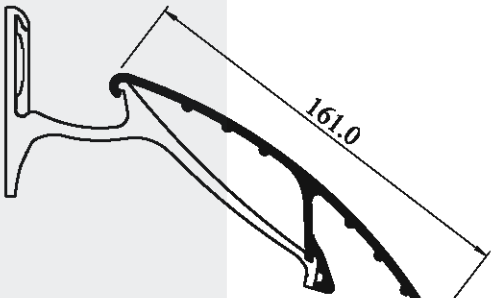
26807-17
3.315 kg/m



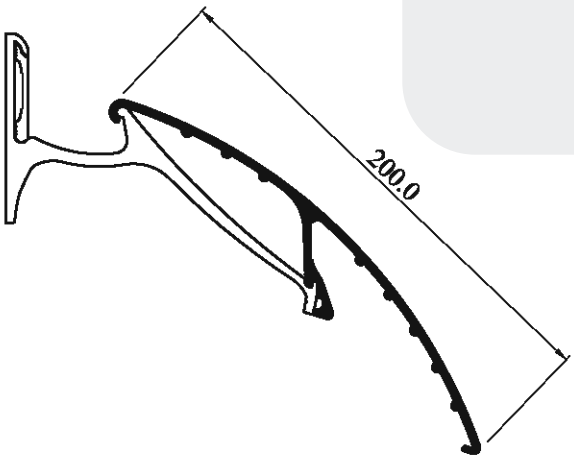
Ölçek 1/1

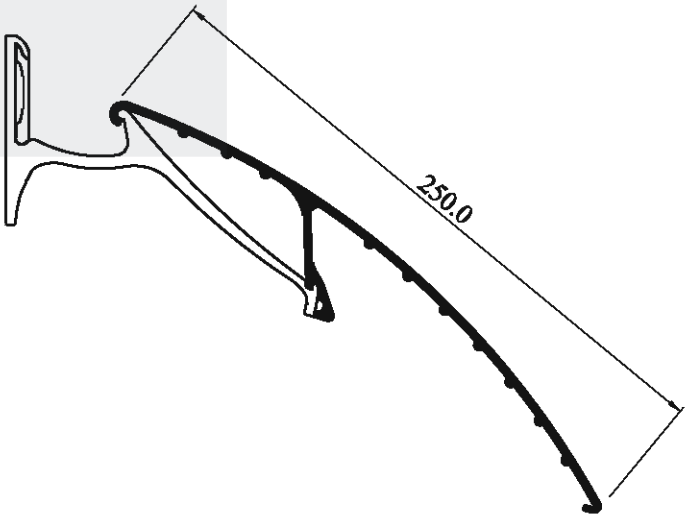


26812-15
0.722 Kg/m



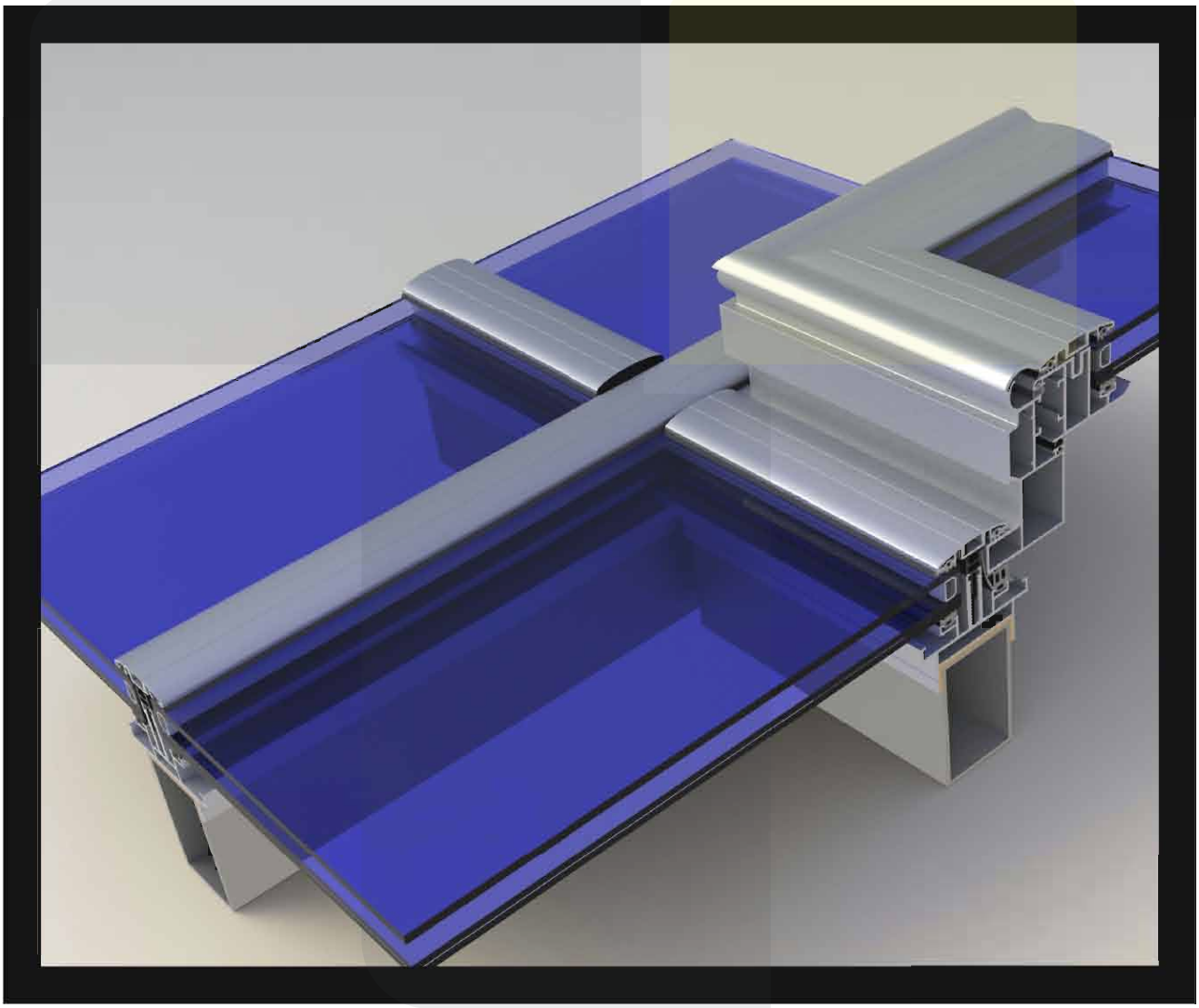
26813-25
1.778 Kg/m



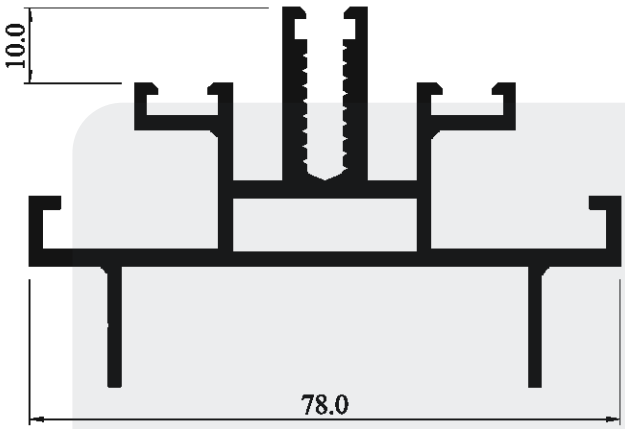


IŞIKLIK SİSTEMİ

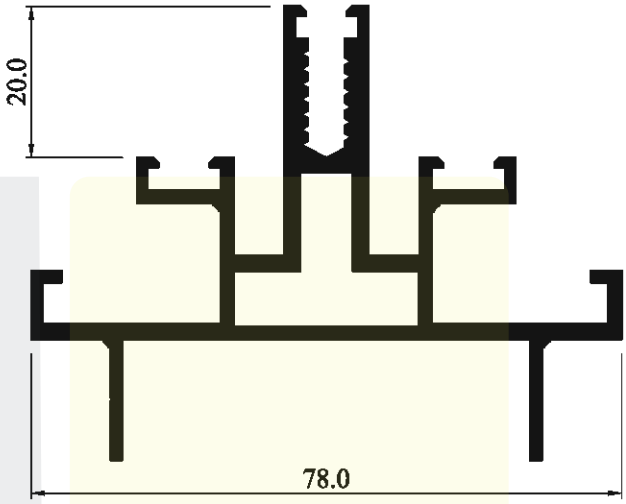
F50SKY



DÜŞEY PROFİL / *MULLION PROFILE*



26900-16
1.417 Kg/m



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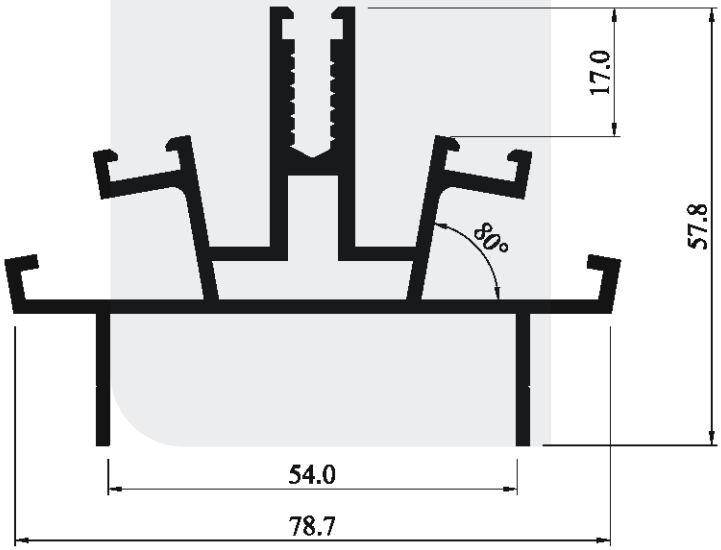
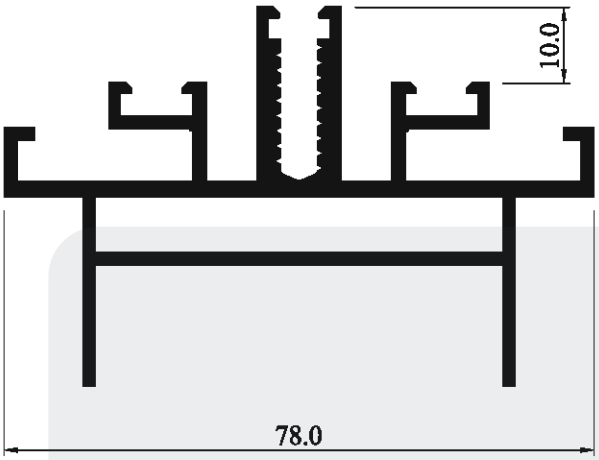
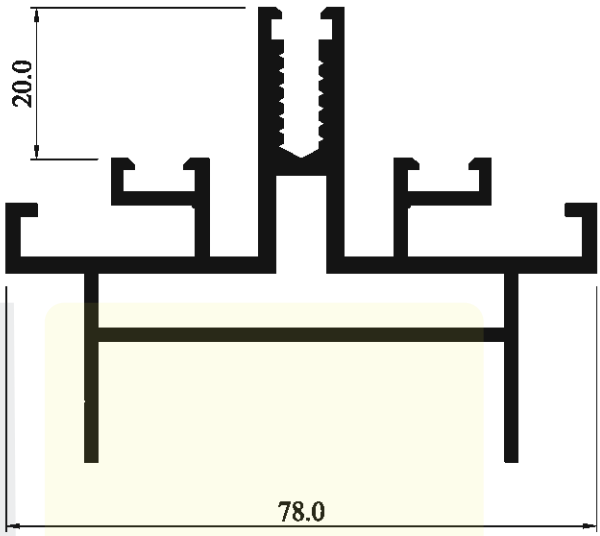


Açılı Düşey Profil
26910-16
1.435 Kg/m

YATAY PROFİLLER / *TRANSOM PROFILES*



26901-16
1.530 Kg/m



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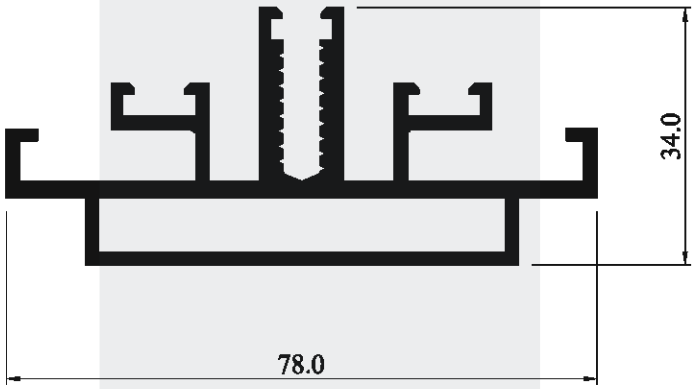
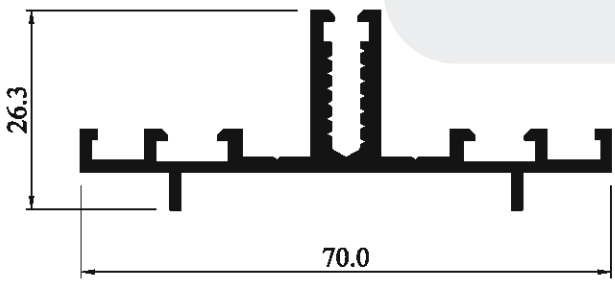
1.629 Kg/m

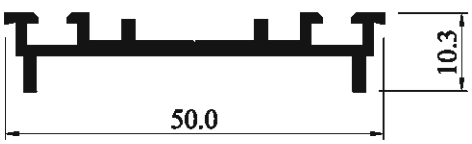


26911-16
1.401 Kg/m

POLİKARBON PROFİLLERİ / *POLYCARBON PROFILES*



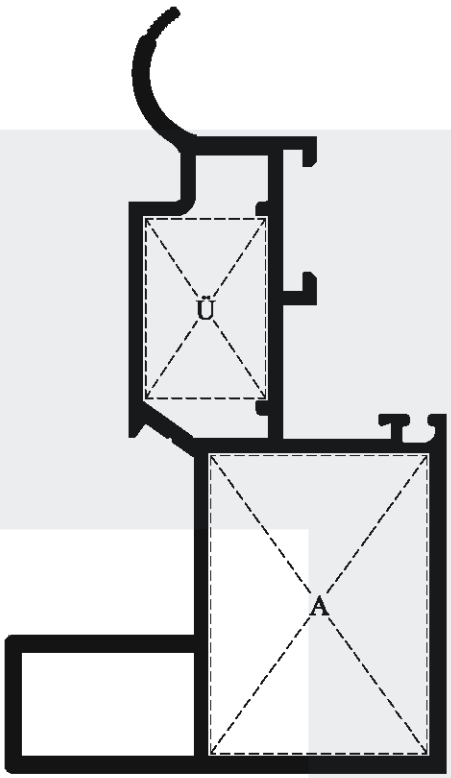
26905-18
0.665 Kg/m



802
0.343 Kg/m

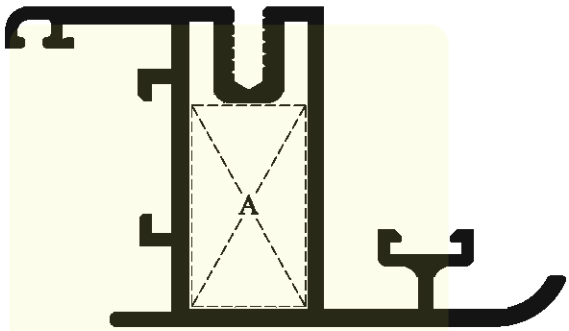
STANDART KASET PROFİLLERİ / *SASH PROFILES*

KASA PROFİLİ / *FRAME PROFILE*



26915-16
1.734 Kg/m

KANAT PROFİLİ / *SASH PROFILE*



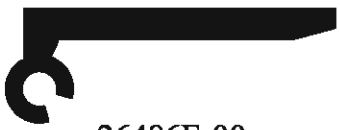
26935-20
1.268 Kg/m

DUVAR BİTİŞ PROFİLİ
WALL FINISH PROFILE

26903-12
0.348 Kg/m

DÜŞEY PROFİL AÇILI BİRLEŞİM ADAPTÖRÜ
MULLION PROFILE ANGULAR MERGER ADAPTER

26486D-00
0.618 Kg/m

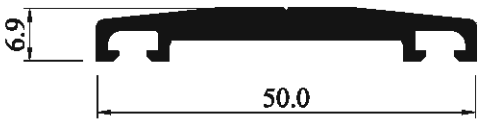


26486E-00
0.564 Kg/m

PROFİL KODU	AĞIRLIK (kg/m)	ALT PROFİL İÇİN PRES TAKOZU/ KESİM ÖLÇÜSÜ (mm)	ÜST PROFİL İÇİN PRES TAKOZU/ KESİM ÖLÇÜSÜ (mm)
26915-16	1.734	T851-290 / 39.9	T851-165 / 24.2
26935-20	1.268	T851-154 / 27.1	-

KAPAK PROFİLLERİ / *COVERED PROFILES*

KAPAK PROFİLİ / *COVER PROFILE*



26902-12
0.483 Kg/m

KAPAK PROFİLİ / *COVER PROFILE*

26940-20
0.373 Kg/m

AÇILIR KASET KAPAK PROFİLİ
COVER PROFILE FOR F50SKY OPENING

26945-20
0.551 Kg/m

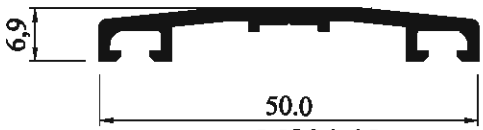
VİDA SAKLAMA ÇITASI
SCREW CAMOUFLAGE COVER PROFILE

26950-00
0.051 Kg/m

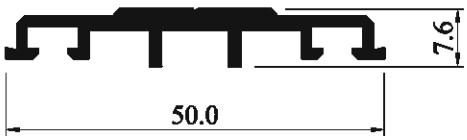
AÇILI DÜŞEY TAŞIYICI KAPAK PROFİLİ
COVER PROFILE FOR ANGULAR MULLION PROFILE

26908-20
0.476 Kg/m

POLİKARBON KAPAK PROFİLİ / *COVER PROFILE*

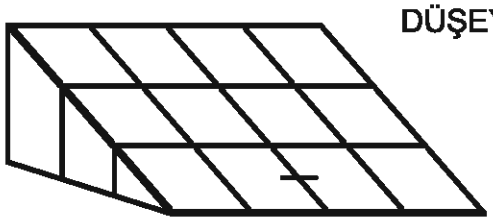


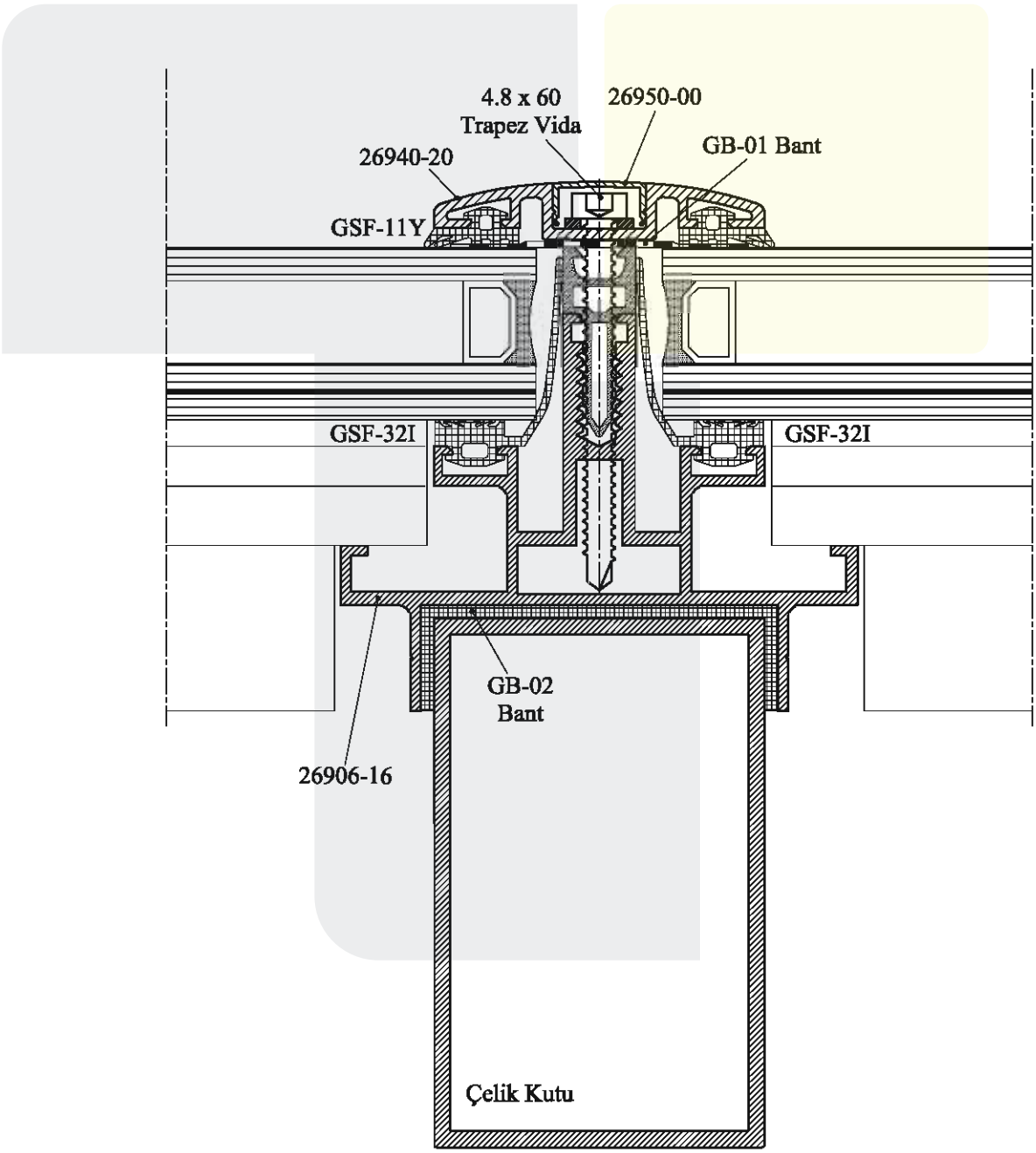
26904-12
0.310 Kg/m

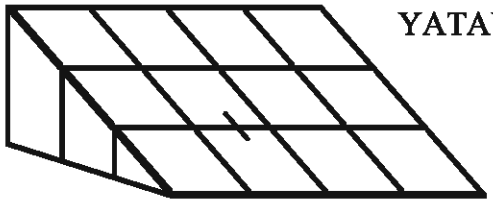


801
0.374 Kg/m

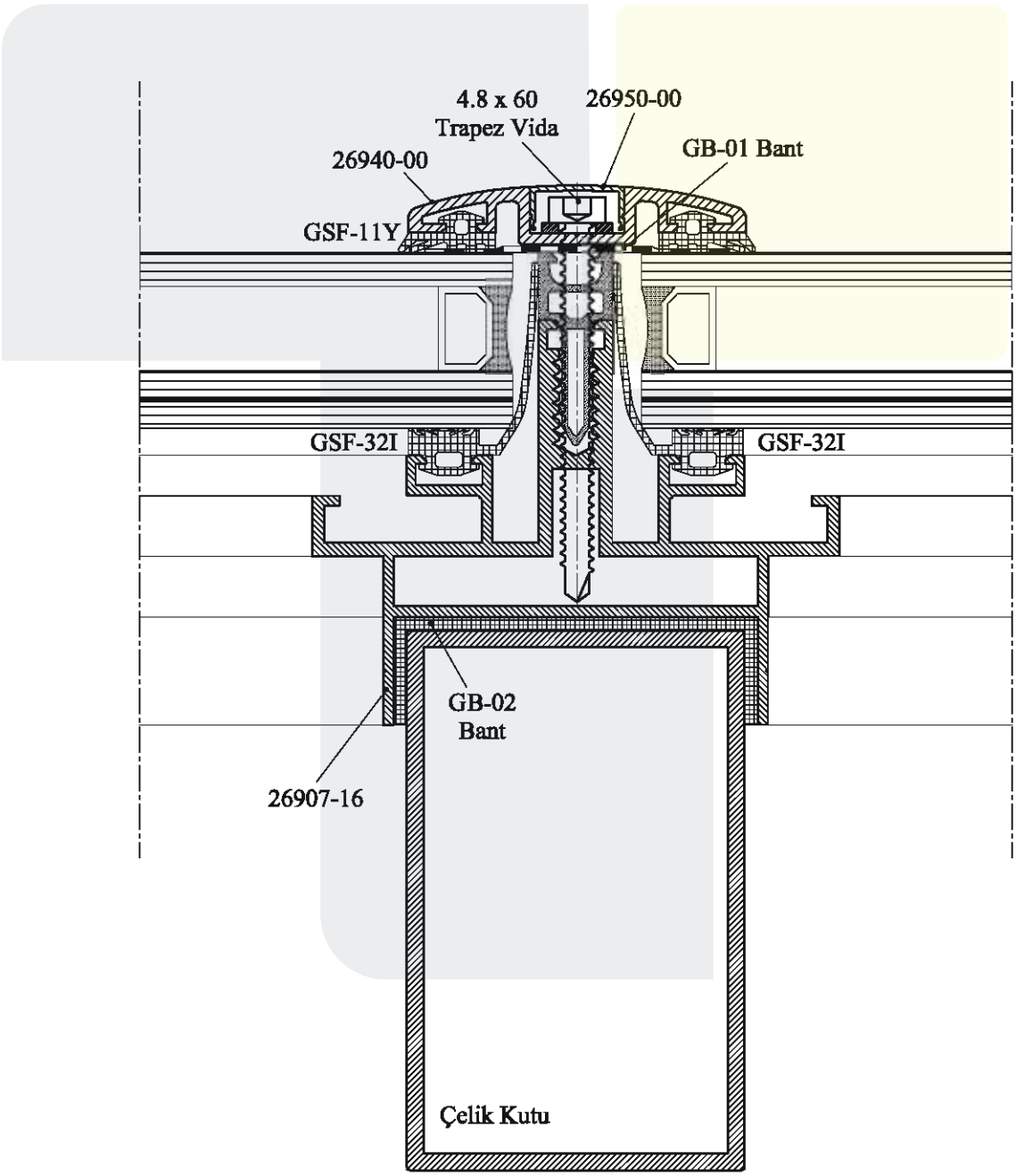
DÜŞEY BİRLEŞİM DETAYI





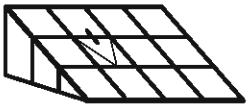


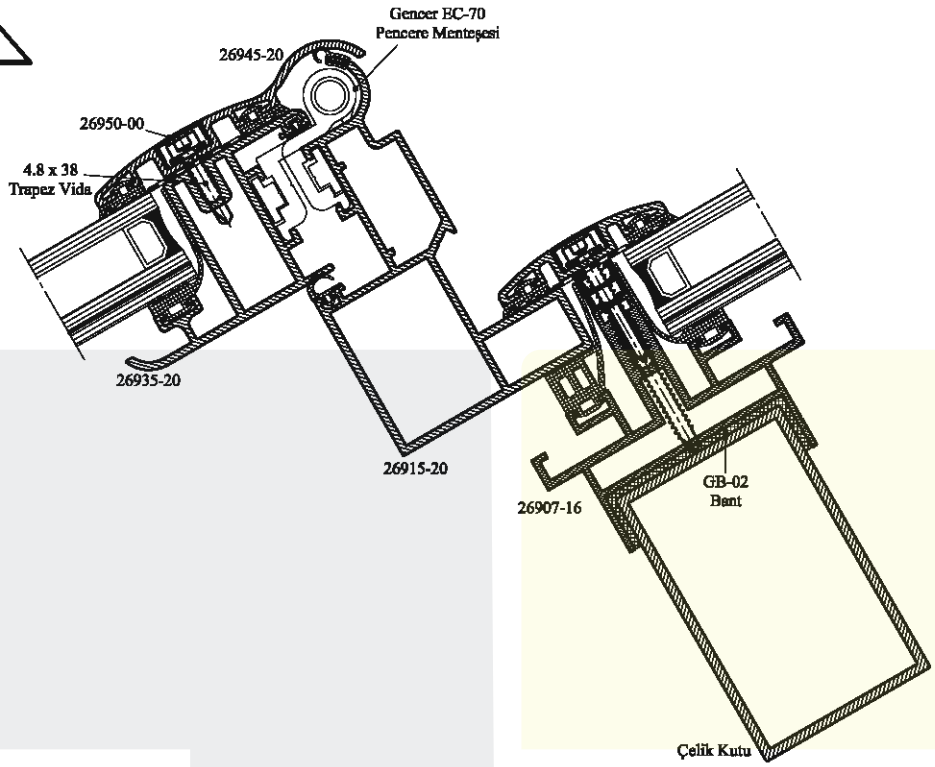
YATAY BİRLEŞİM DETAYI



NOT:
Yatay taşıyıcı; Aks Aralığı - 52mm kesilir. 14mm kertilerek düşey taşıyıcı üzerine bindirilir.

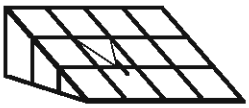
AÇILIR KASET DÜŞEY KESİT (Yüksek Kenar)

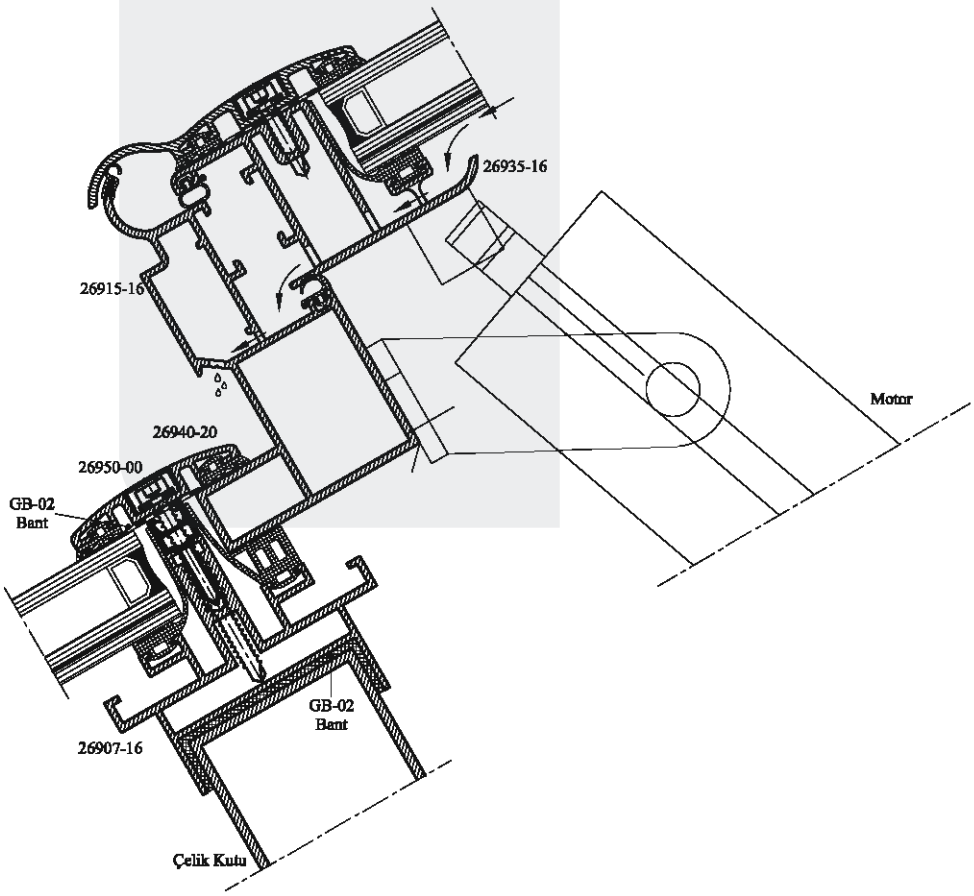




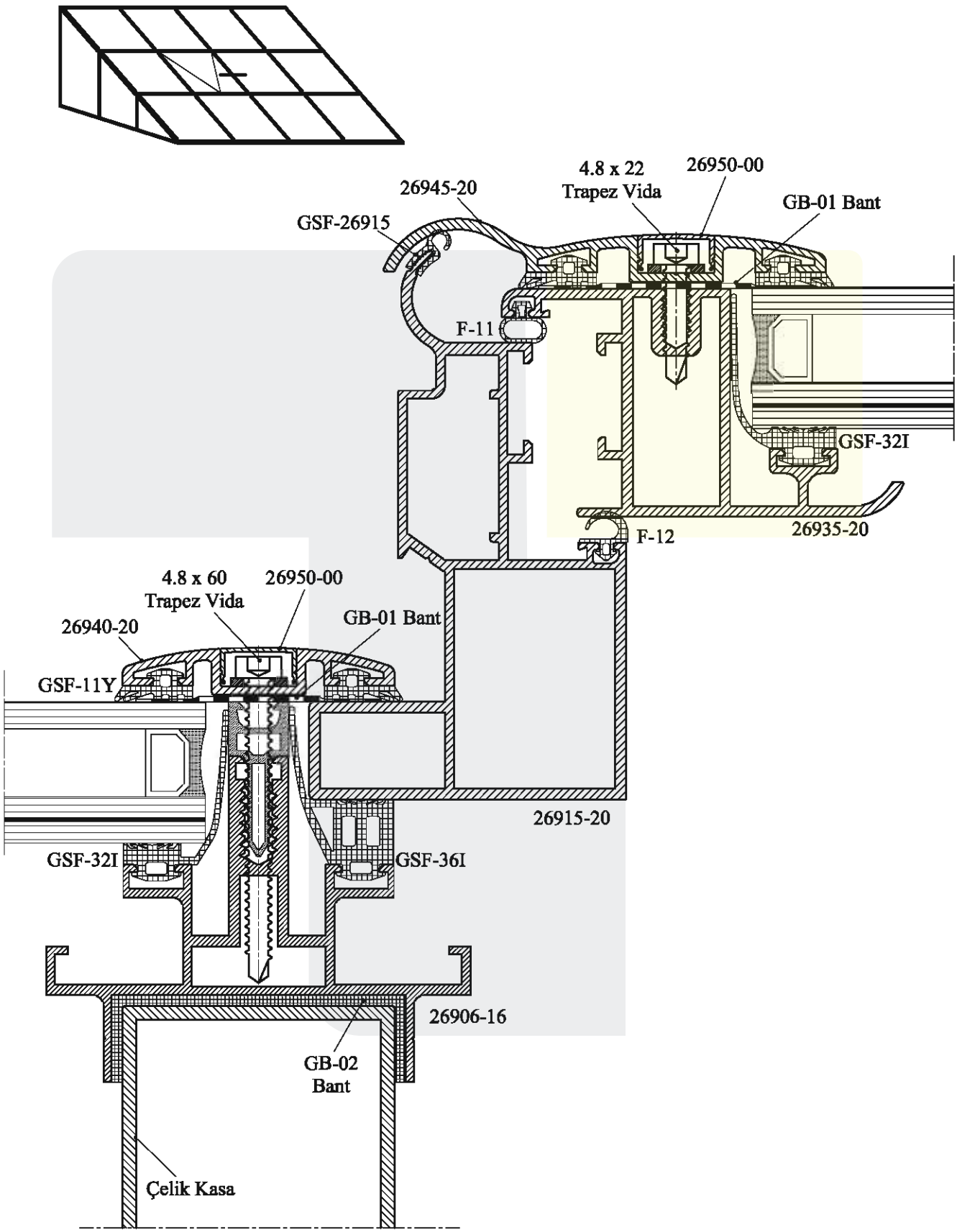
Ölçek 1/2

AÇILIR KASET DÜŞEY KESİT (Alçak Kenar)





Ölçek 1/2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Trapez Vida
26950-00
26945-20
GB-01 Bant
GSF-26915
F-11
GSF-32I
F-12
26935-20
4.8 x 60
Trapez Vida
26950-00
26940-20
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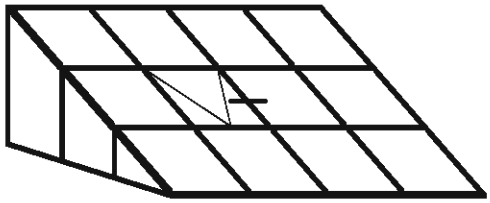
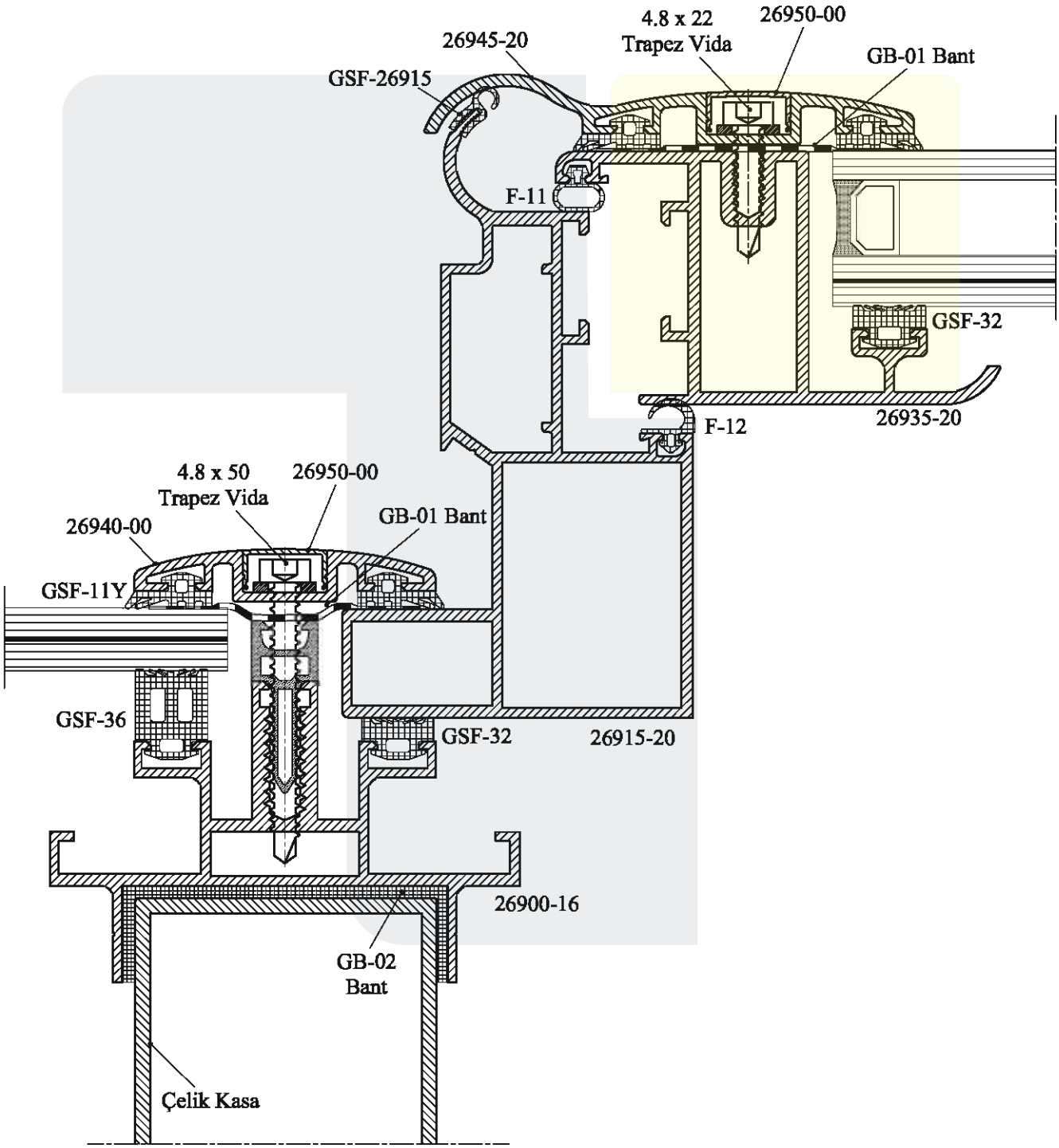
GSF-32I
GSF-36I
26906-16
GB-02
Bant
Çelik Kasa




4.8 x 22
Trapez Vida
26950-00
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GSF-26915
F-11
GSF-32
F-12
26935-20
4.8 x 50
Trapez Vida
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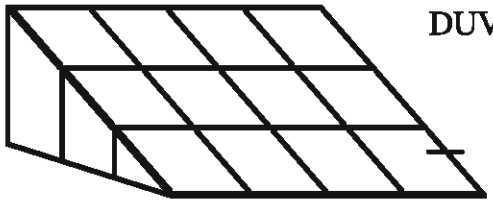
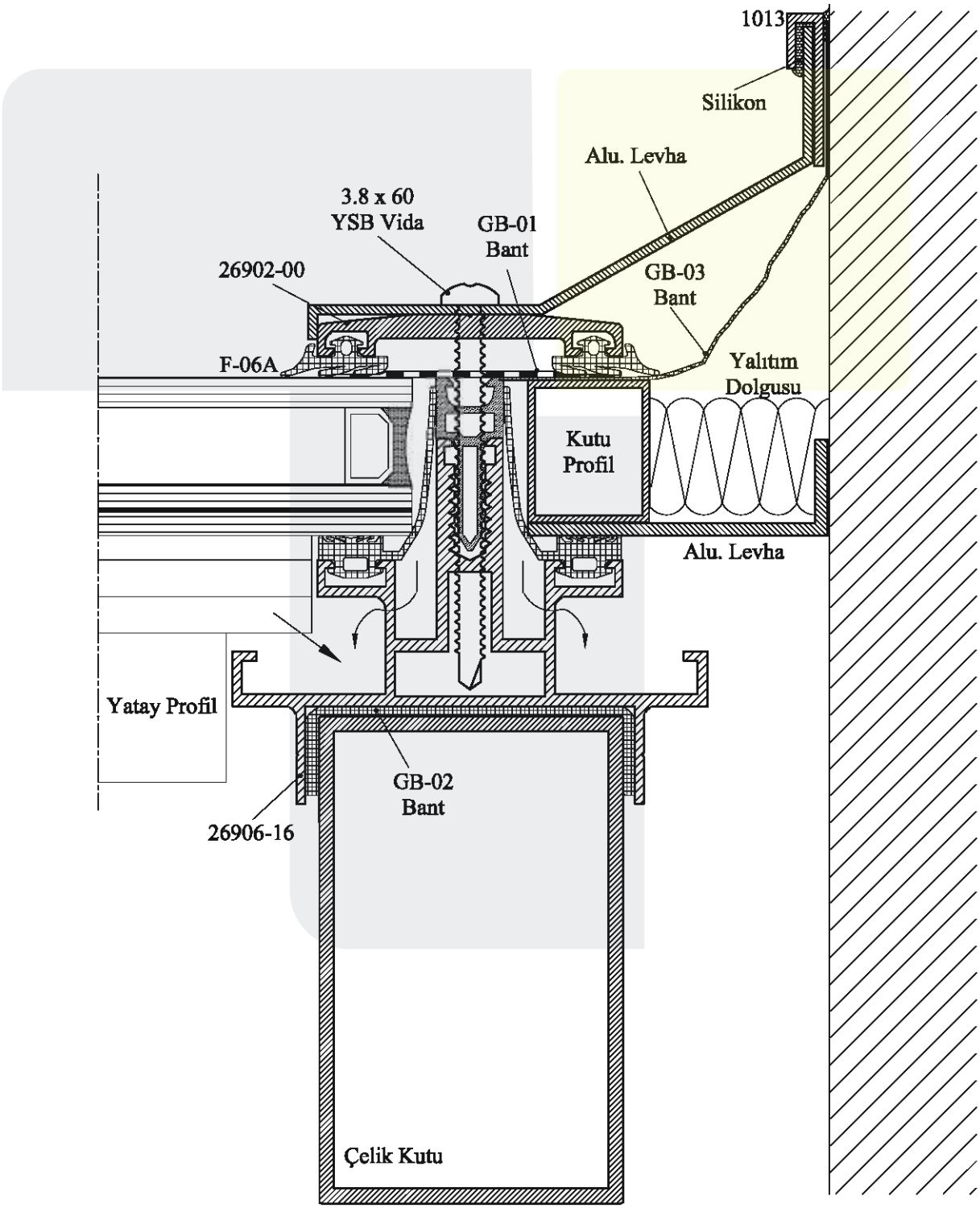
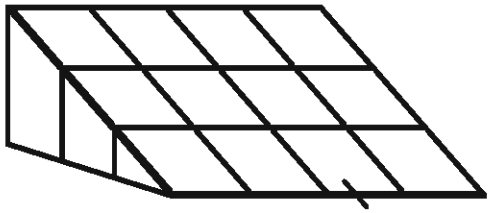
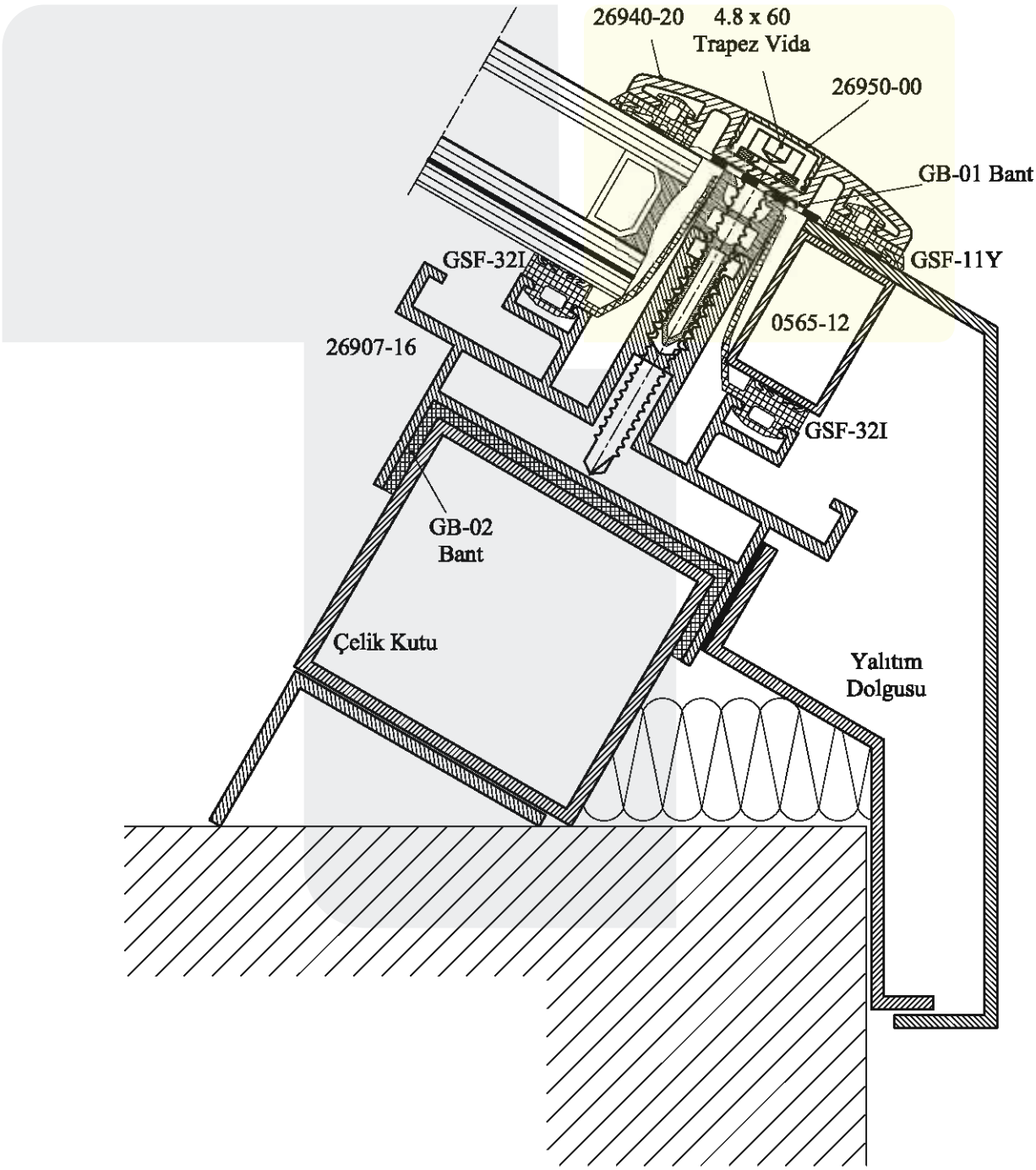
Bant
Çelik Kasa

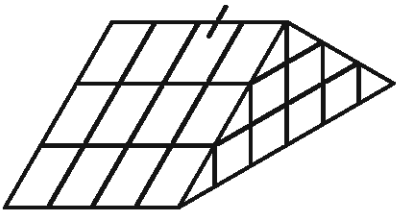


DUVAR BİTİŞ DETAYI

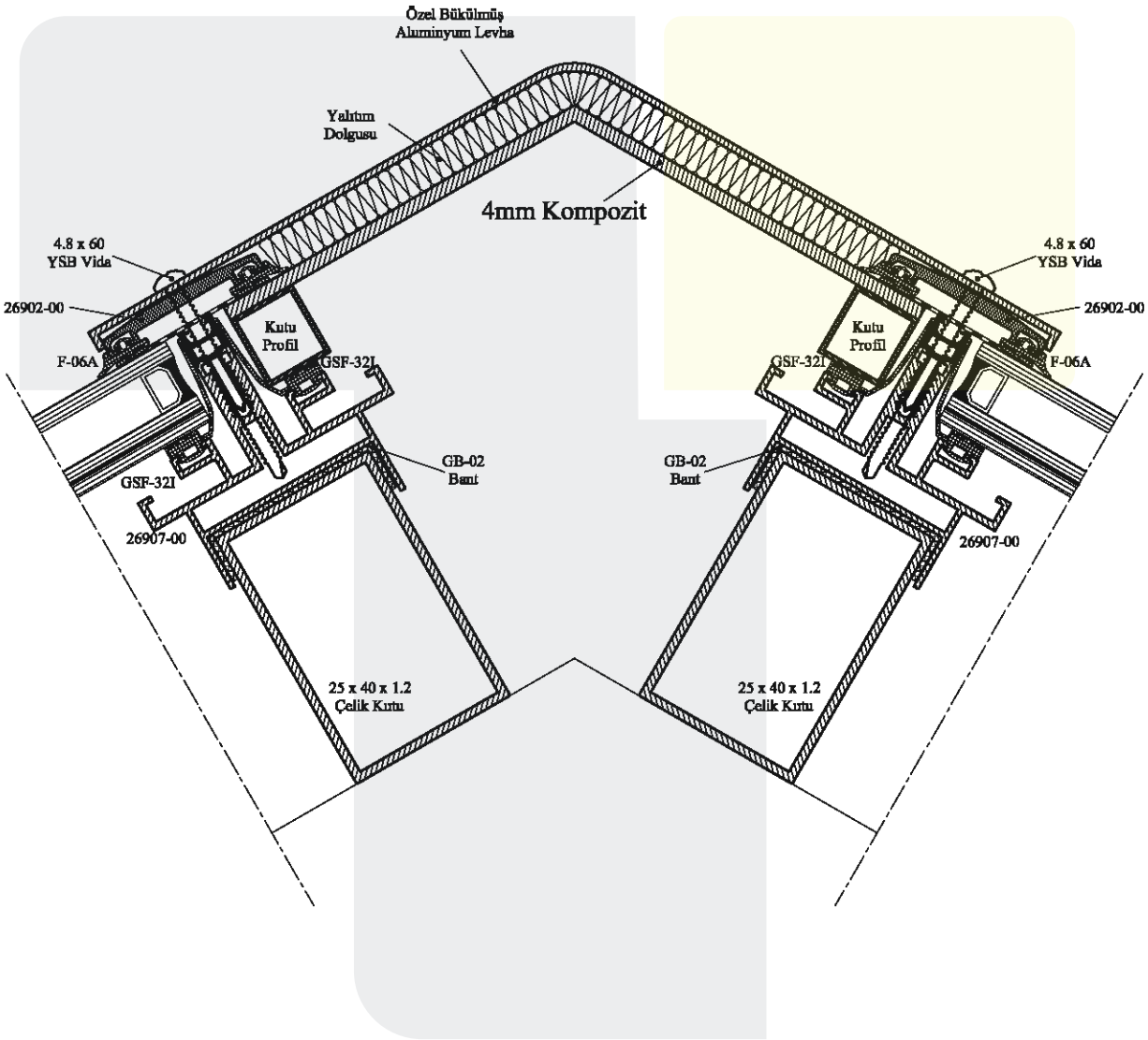




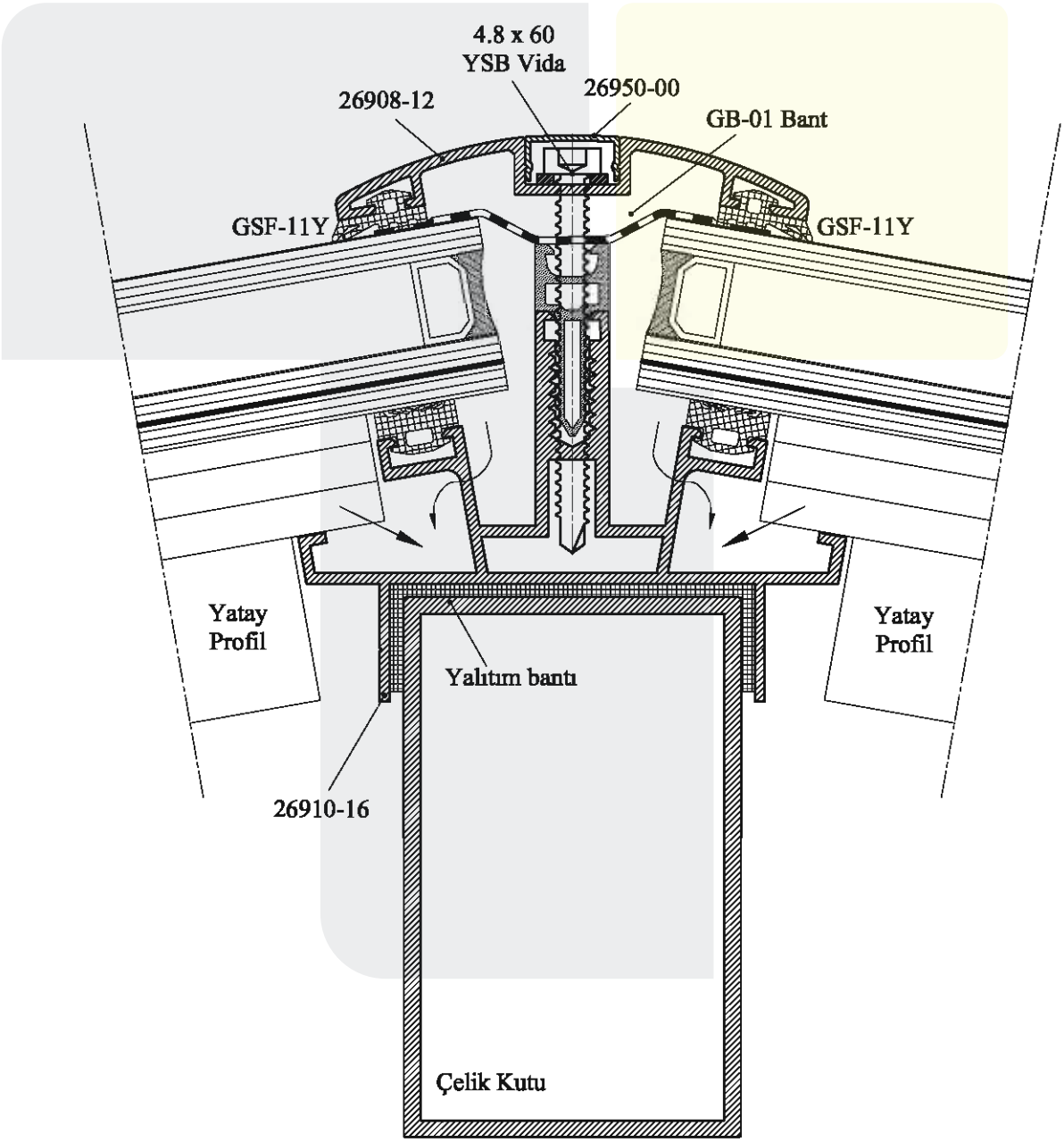

26940-20
4.8 x 60
Trapez Vida
26950-00
GB-01 Bant
GSF-11Y
GSF-32I
0565-12
26907-16
GSF-32I
GB-02
Bant
Çelik Kutu
Yalıtım
Dolgusu



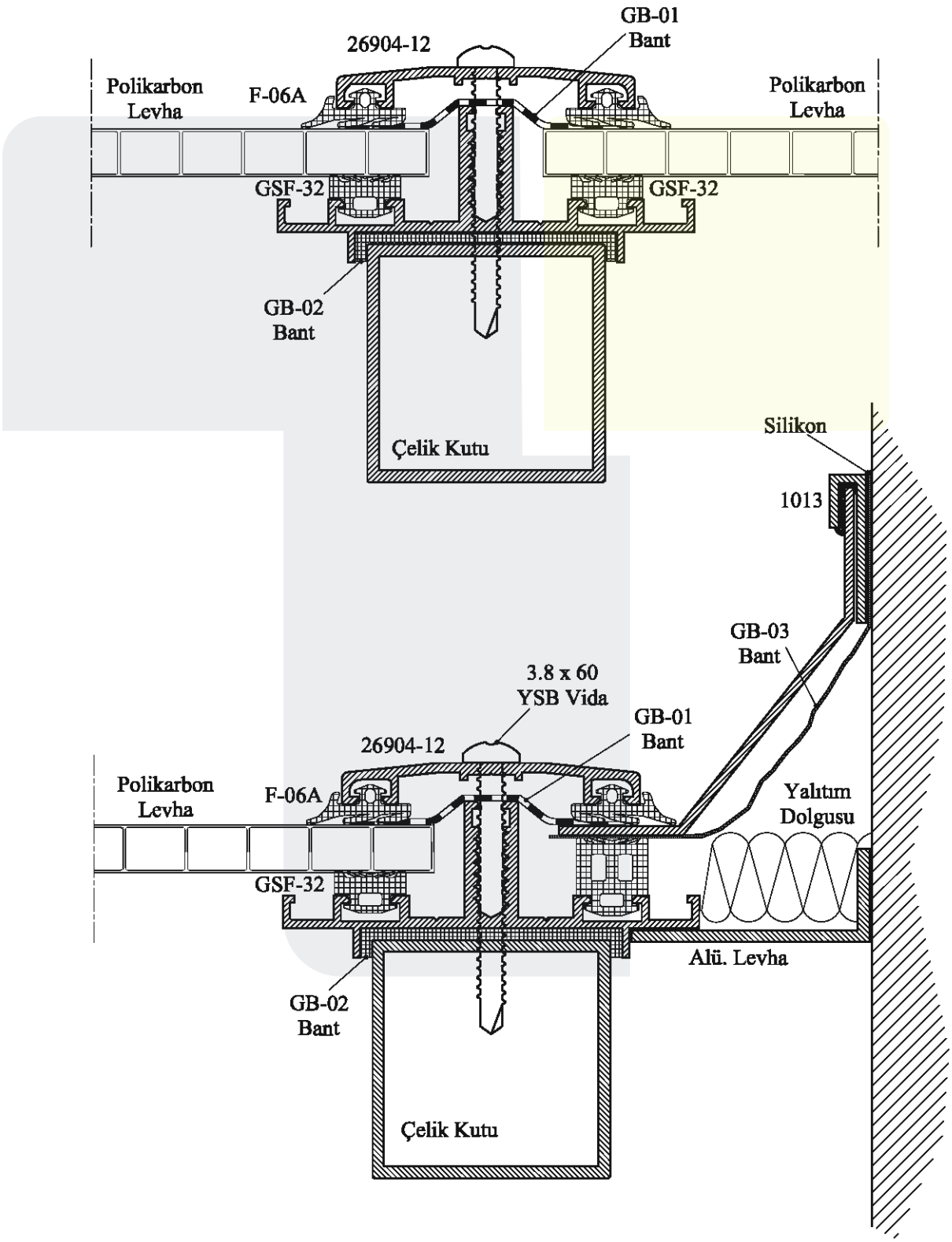
MAHYA DETAYI



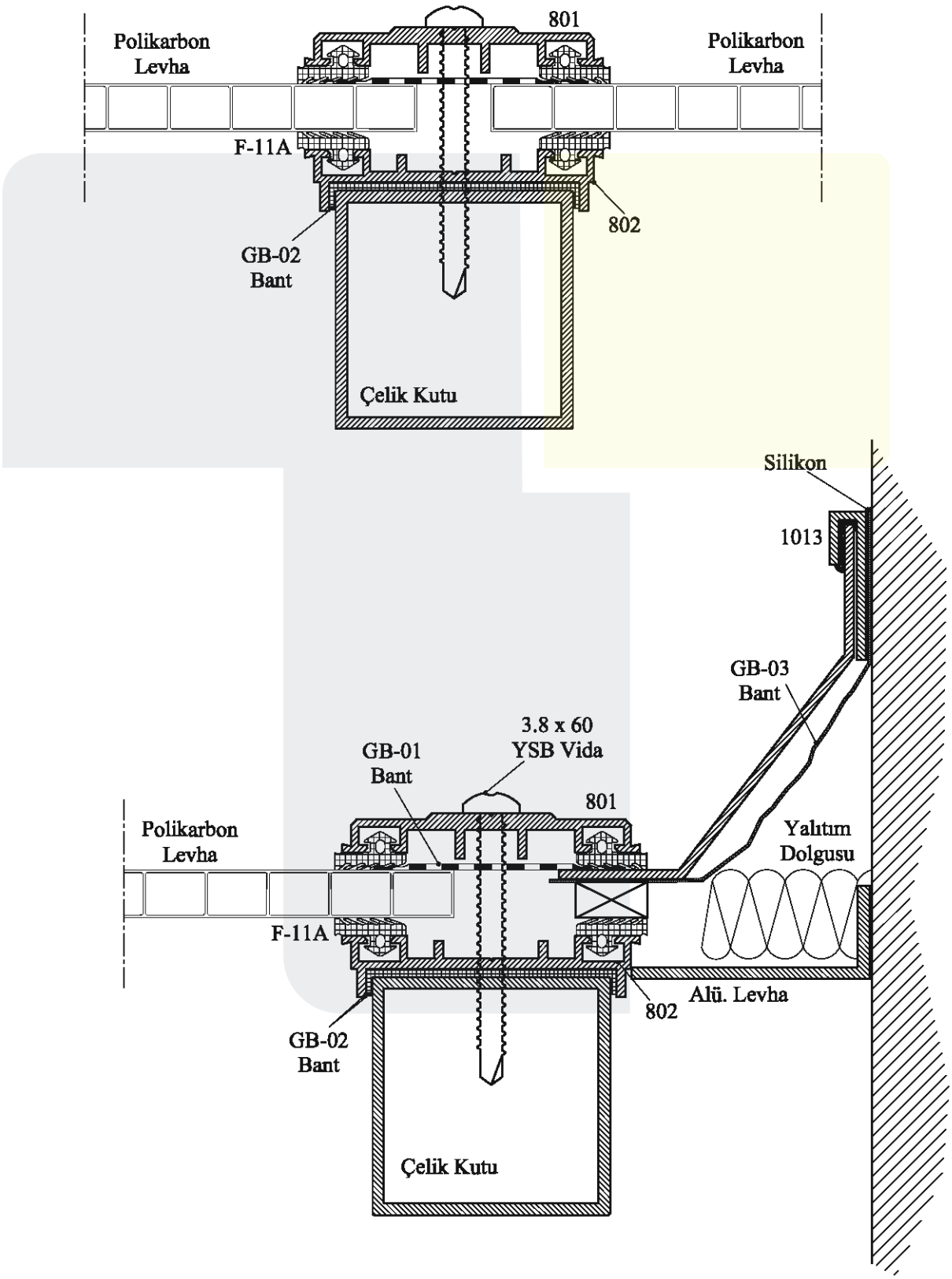
DÜŞEYDE AÇILI BİRLEŞİM



POLİKARBON DETAYLARI



POLİKARBON DETAYLARI



YÜK HESAPLAMALARI ve İLGİLİ TEKNİK BİLGİLER

Binaların cephelerinin örtülmesinde çeşitli cephe kaplama malzemeleri yanında giydirme cephe sistemleri de kullanılmaktadır.

Sistemlerde kullanılan taşıyıcı aluminyum profillerin dinamik rüzgar yükleri ile cam ağırlıklarını taşıyabilme yeterliliğine sahip olmaları zorunludur. Bu yeterliliğin tahkik edilebilmesi için öncelikle sistemdeki taşıyıcı elemanları etkileyen yüklerin tesbiti ve bu yükler altında elemanlarda oluşan tesirlerin hesaplanması gerekmektedir. Profillerde oluşan max. yükler ve kritik sehimler tesbit edildiğinde kullanılabilecek profillerin minumum atalet momentleri (Imin) hesaplanır ve atalet momenti, gerekli olan minimum atalet momentinden büyük olan profillerin seçimi yapılır.

Giydirme cephe projelendirmesinde tahkiki yapılması gerekli görülen yüklemeler ve hesaplamalar şu şekildedir;

1. Rüzgar Yüklemesi
2. Düşey Cam Yüklemesi
3. Deprem Yüklemesi
4. Kar Yüklemesi

1. RÜZGAR YÜKLEMESİ

Cephe sistemleri rüzgar yüklerine maruz kalırlar. Rüzgar, cam yüzeyi aracılığı ile taşıyıcı kayıtlar üzerine belirli bir kuvvet iletir. Mesnetlenmiş olan taşıyıcı profil bu kuvvet etkisinde sehim yapar. Taşıyıcı profillerin sahip oldukları atalet momenti (Ix) arttıkça oluşan sehim de azalır. Bu sehimlerin kabul gören sehim şartlarını (şartnamelere yada ülkelerin standartlarına göre değişebilir) aşmaması için profillerin sahip olmaları gereken minimum atalet momenti (Imin) hesaplanması profil seçiminde uygun bir yol olacaktır.

RÜZGAR YÜKÜ (W) TAYİNİ;

Yapının etkilenen yüzeyinin birim alanına tesir eden rüzgar yükü $W = e \times q \times \sin\alpha$ olarak hesaplanır. Burada;

q = Rüzgar Yüklemesi
α = Rüzgar Yönünün Yapıya Açısı
e = Rüzgar Yükü Katsayısı

Tahkik edileeek yapının yüksekliği, geometrisi ve bulunduğu bölge şartları rüzgar yükü değerini etkiler. Rüzgar yükünün (W) hesaplanmasına ilişkin veriler TS-498 dikkate alınarak aşağıda verilmiştir. Ancak şartnamelerde farklı rüzgar yüklerinin tahkiki de istenebilir.

TABLO 1 - RÜZGAR YÜKÜNÜN (W) HESAPLANMASINA İLİŞKİN VERİLER

Zeminden Yükseklik m	*Rüzgar Hızı km/h	*Rüzgar Yüklemesi (q) kN/m²	Rüzgar Yükü (W) kN/m² **(Genel Yapılarda) 1.2 x q	Rüzgar Yükü (W) kN/m² **(Kule Tipi Yapılarda) 1.6 x q
0 - 8	100.8	0.5	0.6	0.8
9 - 20	129.6	0.8	0.96	1.28
21 - 100	151.2	1.1	1.32	1.76
> 100	165.6	1.3	1.56	2.08

Şartnemelerde farklı bir rüzgar hızı için tahkik yapılması istendiğinde rüzgar yüklemesi aşağıdaki formül ile hesaplanır.

$$* \text{ Rüzgar Yüklemesi (q) kN/m}^2 = \left(\frac{\text{Rüzgar Hızı km/h}}{3.6}\right)^2 / 1600 = (\text{Rüzgar Hızı m/sn})^2 / 1600$$

** Rüzgar yükü katsayısı (c);

Genel Yapılarda (Binanın boyu / Binanın eni < 5 ise) c = 1.20 alınmalıdır
Kule Tipi Yapılarda (Binanın boyu / Binanın eni > 5 ise) c = 1.60 alınmalıdır

İZİN VERİLEN MAKSİMUM SEHİMİN TAYİNİ

Taşıyıcı profillerin, üzerlerinde bulunan camlar da dikkate alınarak maruz kalabilecekleri maksimum sehimlerin tayininde öncelikle ilgili şartname ve ülke standartları dikkate alınmalıdır. Mart 2005 TS EN 13830 standardı madde 4.1 uyarınca "Giydirme cephelerin taşıyıcı elemanlarının ön yüzlerinde meydana gelen en büyük sehim L/200 veya 15mm'den hangisi küçükse o değeri aşmamalıdır. Bu sehim EN 13116 ya uygun olarak giydirme cephe taşıyıcı elemanlarının binanın taşıyıcı sistemine mesnetlendiği veya ankrajlandığı noktalar arasında (L) ölçülür."

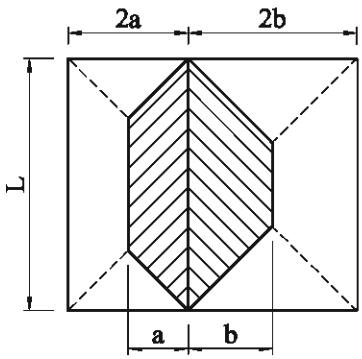
MİNİMUM ATALET MOMENTİ (Imin) HESABI

Mesnetleme durumu da göz önünde tutularak tek ve çift açıklıklarda Imin hesaplama formülleri bu başlıkta verilmiştir. Formül kullanmak yerine tablo yardımı ile Imin hesaplanmak için sayfa 200 - 201'e bakınız.Hesaplanan Imin değerleri ile profil seçmek için kataloğun B.PROFİLLER bölümünden faydalanmalıdır. Aşağıdaki tablo tüm taşıyıcı profillerin özelliklerinin özetini içerir.

(TABLO 2) TAŞIYICI PROFİLLERİN ÖZELLİKLERİ

Profil Numarası	Ağırlık (Kg/m)	Ix Değeri (cm^4)	Iy Değeri (cm^4)	Profil Numarası	Ağırlık (Kg/m)	Ix Değeri (cm^4)	Iy Değeri (cm^4)
26121-18	1.393	28.64	13.91	26133-20	2.336	128.42	28.56
26122-18	1.800	31.25	31.25	26134-20	2.607	214.96	34.33
26123-16	1.538	60.97	17.91	26143-30	4.162	600.89	59.25
26123-20	1.783	67.09	20.73	26142-30	5.238	762.91	69.71
26124-16	1.753	111.57	22.60	26111-16	1.238	21.64	13.16
26124-20	2.054	123.76	26.50	26111-20	1.389	23.72	14.91
26125-16	1.969	182.16	27.29	26112-16	1.524	64.02	19.35
26125-20	2.275	203.41	32.26	26112-20	1.747	71.24	22.52
26125-30	3.027	255.25	44.82	26113-16	1.741	115.93	24.04
26141-30	5.216	723.34	70.75	26113-20	2.018	130.03	28.28
26131-20	1.794	30.10	17.04	26114-16	1.958	187.76	28.72
26132-20	2.065	67.97	22.80	26114-20	2.289	211.98	34.04

TRAPEZ YÜK ESASINA GÖRE Imin HESABI



$$Imin = (Ia + Ib)$$

$$Ia = \frac{W \times a \times L^4}{1920 \times 10^4 \times E \times f} \left[5 - 4 \times \left(\frac{a}{L}\right)^2\right]^2$$

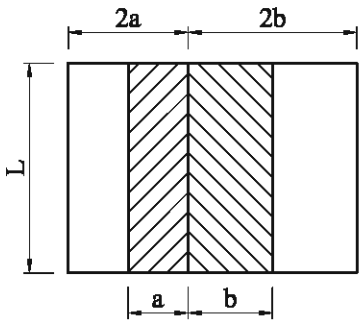
$$Ib = \frac{W \times b \times L^4}{1920 \times 10^4 \times E \times f} \left[5 - 4 \times \left(\frac{b}{L}\right)^2\right]^2$$

f	=(cm)	İzin Verilen max. Sehim
W	=(kN/m²)	Rüzgar Yükü
a	=(cm)	Aks Aralığı / 2
b	=(cm)	Aks Aralığı / 2
E	=(kN/cm²)	Elastisite Modülü
I	=(cm⁴)	Atalet Momenti
L1	=(cm)	Max. Cam Kenarı Boyu
L	=(cm)	Mesnet Mesafesi

(L mesnetler arasmdaki mesafedir, düşey taşıyıcı boyu olarak algılanmamalıdır)

Esas olarak camın her noktasına eşit rüzgar yükü geldiği varsayılır ise çerçevenin 4 tarafında paylaşılacak rüzgar yükü trapez yük esasına göre bulunur. Ancak yatay kayıtlara etki edecek olan rüzgar yükünün düşey kayıtlara aktarılacağından dolayı cephe sistemlerinde yayılı yük esasını kullanmak yanıltıcı olmayacaktır.

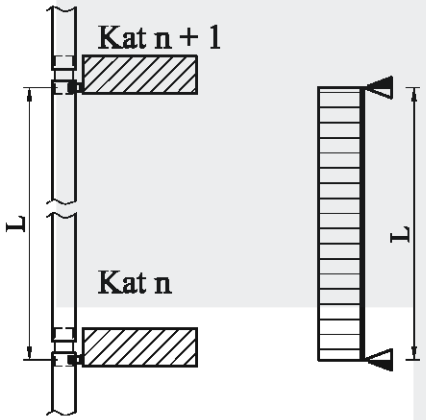
YAYILI YÜK ESASINA GÖRE Imin HESABI



f	=(cm)	Sehim
W	=(kN/m²)	Rüzgar Yükü
a	=(cm)	Aks Aralığı / 2
b	=(cm)	Aks Aralığı / 2
L	=(cm)	Mesnet Mesafesi
E	=(kN/cm²)	Elastisite Modülü
I	=(cm⁴)	Atalet Momenti

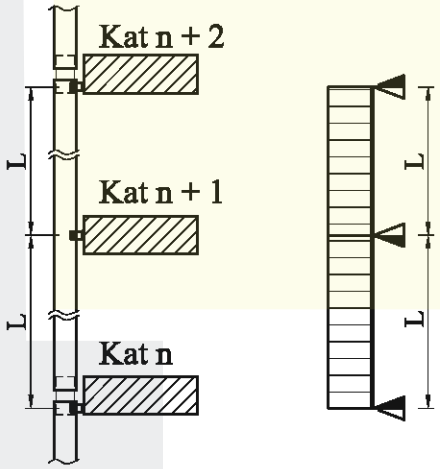
$E_{alüminyum} = 7000\ kN/cm^2 = 700000 Kg/cm^2$

YAYILI YÜKTE TEK AÇIKLIK İÇİN



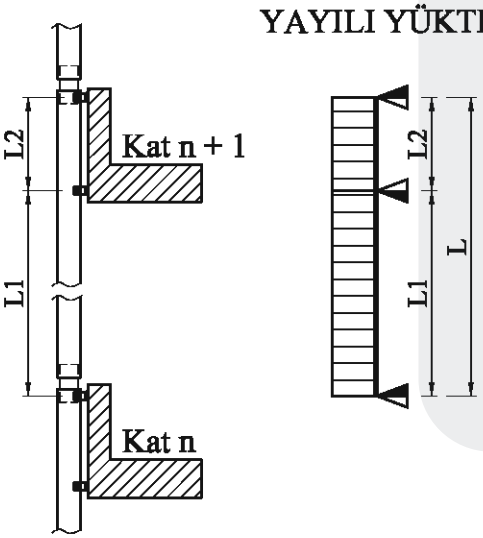
$$Imin = \frac{5 \times W \times (a+b) \times L^4}{384 \times 10^4 \times E \times f}$$

YAYILI YÜKTE EŞİT ÇİFT AÇIKLIK İÇİN



$$Imin = \frac{5 \times W \times (a+b) \times L^4}{922 \times 10^4 \times E \times f}$$

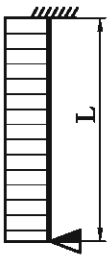
YAYILI YÜKTE EŞİT OLMAYAN ÇİFT AÇIKLIK İÇİN



$\frac{L2}{L1} \geq 0.2$ $\quad Imin = \frac{W \times (a+b) \times L1^2}{384 \times 10^4 \times E \times f} \times (9 \times L \times L1 - 3L^2 - 4L1^2)$

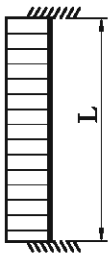
$\frac{L2}{L1} < 0.2$ $\quad$ Tek mesnedi ankastre formülüne göre hesaplanacaktır.

TEK MESNEDİ ANKASTRE



$$Imin = \frac{W \times (a+b) \times L^4}{185 \times 10^4 \times E \times f}$$

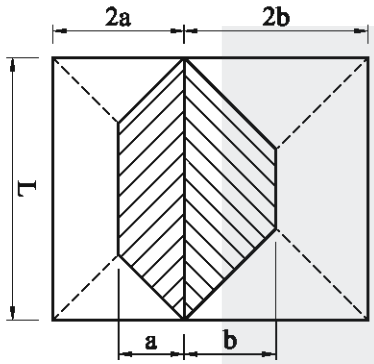
İKİ MESNEDİ ANKASTRE



$$Imin = \frac{W \times (a+b) \times L^4}{384 \times 10^4 \times E \times f}$$

(TABLO 3) TRAPEZ YÜK ESASINA GÖRE MİNİMUM ATALET MOMENTİ HESAPLAMA TABLOSU

L \ a,b	20	30	40	50	60	70	80	90	100	110	120	130	140	150
100	0.7	1.0	1.1	1.2										
110	0.9	1.3	1.6	1.7										
120	1.2	1.7	2.1	2.4	2.5									
130	1.6	2.2	2.8	3.2	3.4									
140	2.0	2.8	3.6	4.1	4.5	4.6								
150	2.4	3.5	4.5	5.2	5.7	6.0								
160	3.0	4.3	5.5	6.5	7.2	7.7	7.8							
170	3.6	5.2	6.7	7.9	8.9	9.6	9.9							
180	4.3	6.2	8.0	9.6	10.8	11.7	12.3	12.5						
190	5.0	7.4	9.5	11.4	13.0	14.2	15.0	15.5						
200	5.9	8.6	11.2	13.4	15.4	17.0	18.1	18.8	19.0					
210	6.8	10.0	13.0	15.7	18.1	20.0	21.5	22.6	23.1					
220	7.8	11.5	15.0	18.2	21.0	23.4	25.3	26.7	27.6	27.9				
230	8.9	13.2	17.2	21.0	24.3	27.2	29.5	31.4	32.6	33.2				
240	10.2	15.0	19.7	24.0	27.8	31.3	34.2	36.5	38.1	39.2	39.5			
250	11.5	17.0	22.3	27.2	31.7	35.7	39.2	42.0	44.2	45.7	46.4			
260	13.0	19.2	25.2	30.8	36.0	40.6	44.7	48.1	50.8	52.8	54.0	54.4		
270	14.5	21.5	28.3	34.6	40.5	45.9	50.6	54.7	58.0	60.6	62.3	63.2		
280	16.2	24.1	31.6	38.8	45.5	51.6	57.1	61.9	65.9	69.0	71.3	72.7	73.2	
290	18.0	26.8	35.2	43.2	50.8	57.7	64.0	69.6	74.3	78.2	81.1	83.1	84.1	
300	19.9	29.7	39.0	48.0	56.5	64.3	71.5	77.9	83.4	88.0	91.7	94.3	95.9	96.4
310	22.8	33.8	44.6	54.9	64.7	73.8	82.1	89.6	96.3	101.9	106.5	100.9	112.3	113.5
320	25.8	38.5	50.7	62.5	73.7	84.2	93.9	102.7	110.5	117.3	122.9	127.4	130.6	132.5
330	29.2	43.5	57.5	70.9	83.6	95.7	106.8	117.1	126.3	134.3	141.1	146.7	150.9	153.7
340	33.0	49.1	64.8	80.0	94.5	108.3	121.1	132.9	143.6	153.0	161.2	168.0	173.3	177.2
350	37.0	55.2	72.9	90.0	106.5	122.1	136.7	150.2	162.6	173.6	183.3	191.5	198.1	203.1
360	41.5	61.8	81.7	101.0	119.5	137.1	153.7	169.2	183.4	196.2	207.5	217.2	225.3	231.7
370	46.3	69.0	91.2	112.8	133.6	153.5	172.3	189.8	206.0	220.8	233.9	245.4	255.1	263.0
380	51.5	76.8	101.6	125.7	149.0	171.3	192.4	212.3	230.7	247.6	262.8	276.1	287.7	297.2
390	57.1	85.3	112.8	139.7	165.7	190.6	214.3	236.7	257.5	276.7	294.1	309.6	323.1	334.5
400	63.2	94.4	125.0	154.8	183.7	211.5	238.0	263.0	286.5	308.2	328.1	345.9	361.6	375.1
450	101.4	151.5	200.8	249.3	296.5	342.3	386.5	428.8	469.1	507.2	542.8	575.7	605.9	633.2
500	154.6	231.2	306.9	381.3	454.4	525.7	594.9	661.9	726.2	787.8	846.3	901.5	953.2	1001.2
550	226.5	338.8	450.1	559.9	667.9	773.9	877.3	978.0	1075.5	1169.6	1260.0	1346.3	1428.2	1505.6
600	320.9	480.2	638.3	794.7	948.9	1100.6	1249.4	1394.8	1536.5	1674.1	1807.1	1935.3	2058.3	2175.7
650	442.1	661.8	880.1	1096.4	1310.1	1520.9	1728.2	1931.6	2130.6	2324.7	2513.5	2696.5	2873.3	3045.5
700	594.7	890.6	1184.8	1476.6	1765.5	2051.0	2332.4	2609.3	2881.0	3147.0	3406.9	3660.0	3905.9	4144.0
750	783.8	1174.1	1562.3	1947.9	2330.2	2708.4	3082.1	3450.4	3812.9	4168.8	4517.5	4858.5	5191.2	5514.9
800	1014.9	1520.4	2023.6	2523.8	3020.3	3512.1	3998.7	4479.3	4953.2	5419.6	5877.8	6327.1	6766.9	7196.5



TABLONUN DÜZENLENMESİNDE ESAS ALINAN KABULLER

$f \leq L/200$ max 15mm
E Alüminyum: 7000 kN/cm² (700000kg/cm²)
Rüzgar Yükü: W_0 =1kN/m² (100kg/m²)

AÇIKLAMA

Seçilen bir W_1 rüzgar yükü L mesnet açıklığı ile 2a ve 2b eksen aralıklarında düşey taşıyıcı seçiminde gerekli olan minumum atalet momenti (Imin) bulunmak istendiğinde;

Imin = (Ia + Ib) x fw olarak hesaplanmalıdır.

Ia ve Ib tabloda a,b / L matriksinde bulunan değerlerdir. Bu matrikste;

Ia bulunurken a ve L değerleri için, Ib bulunurken de b ve L değerleri için matriks okunur.

fw rüzgar yükü düzeltme faktörüdür ve

$fw = \frac{W_1}{W_0}$ alınır.

Örnekleme: W= 1.5 kN/m² (150kg/m²) ise;

$fw = \frac{W_1}{W_0} = \frac{1.5\ (150)}{1\ (100)} = 1.5$ alınmalı.

Bina yüksekliklerine göre rüzgar yükünün ve düzeltme faktörünün alacağı değerler aşağıdadır;

Zeminden Yükseklik	0 - 8	9 - 20	21 - 100	>100
$fw = W_1 / W_0$	0.6 / 1	0.96 / 1	1.32 / 1	1.56 / 1

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(TABLO 4) YAYILI YÜK ESASINA GÖRE MİNİMUM ATALET MOMENTİ HESAPLAMA TABLOSU

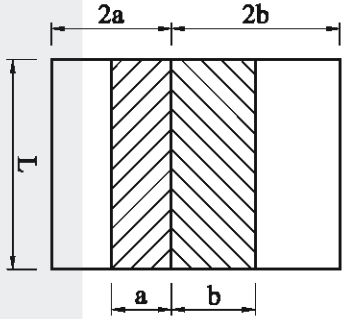
L \ a,b	20	30	40	50	60	70	80	90	100	110	120	130	140	150
100	0.7	1.1	1.5	1.9	2.2	2.6	3.0	3.3	3.7	4.1	4.5	4.8	5.2	5.6
110	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.4	5.9	6.4	6.9	7.4
120	1.3	1.9	2.6	3.2	3.9	4.5	5.1	5.8	6.4	7.1	7.7	8.4	9.0	9.6
130	1.6	2.5	3.3	4.1	4.9	5.7	6.5	7.4	8.2	9.0	9.8	10.6	11.4	12.3
140	2.0	3.1	4.1	5.1	6.1	7.1	8.2	9.2	10.2	11.2	12.3	13.3	14.3	15.3
150	2.5	3.8	5.0	6.3	7.5	8.8	10.0	11.3	12.6	13.8	15.1	16.3	17.6	18.8
160	3.0	4.6	6.1	7.6	9.1	10.7	12.2	13.7	15.2	16.8	18.3	19.8	21.3	22.9
170	3.7	5.5	7.3	9.1	11.0	12.8	14.6	16.4	18.3	20.1	21.9	23.8	25.6	27.4
180	4.3	6.5	8.7	10.8	13.0	15.2	17.4	19.5	21.7	23.9	26.0	28.2	30.4	32.5
190	5.1	7.7	10.2	12.8	15.3	17.9	20.4	23.0	25.5	28.1	30.6	33.2	35.7	38.3
200	6.0	8.9	11.9	14.9	17.9	20.8	23.8	26.8	29.8	32.7	35.7	38.7	41.7	44.6
210	6.9	10.3	13.8	17.2	20.7	24.1	27.6	31.0	34.5	37.9	41.3	44.8	48.2	51.7
220	7.9	11.9	15.8	19.8	23.8	27.7	31.7	35.7	39.6	43.6	47.5	51.5	55.5	59.4
230	9.1	13.6	18.1	22.6	27.2	31.7	36.2	40.7	45.3	49.8	54.3	58.8	63.4	67.9
240	10.3	15.4	20.6	25.7	30.9	36.0	41.1	46.3	51.4	56.6	61.7	66.9	72.0	77.1
250	11.6	17.4	23.3	29.1	34.9	40.7	46.5	52.3	58.1	63.9	69.8	75.6	81.4	87.2
260	13.1	19.6	26.2	32.7	39.2	45.8	52.3	58.8	65.4	71.9	78.5	85.0	91.5	98.1
270	14.6	22.0	29.3	36.6	43.9	51.3	58.6	65.9	73.2	80.5	87.9	95.2	102.5	109.8
280	16.3	24.5	32.7	40.8	49.0	57.2	65.3	73.5	81.7	89.8	98.0	106.2	114.3	122.5
290	18.1	27.2	36.3	45.4	54.4	63.5	72.6	81.7	90.7	99.8	108.9	118.0	127.0	136.1
300	20.1	30.1	40.2	50.2	60.3	70.3	80.4	90.4	100.4	110.5	120.5	130.6	140.6	150.7
310	22.9	34.4	45.8	57.3	68.7	80.2	91.6	103.1	114.5	126.0	137.4	148.9	160.3	171.8
320	26.0	39.0	52.0	65.0	78.0	91.0	104.0	117.0	130.0	143.0	156.0	169.0	182.0	195.0
330	29.4	44.1	58.8	73.5	88.2	102.9	117.7	132.4	147.1	161.8	176.5	191.2	205.9	220.6
340	33.1	49.7	66.3	82.9	99.4	116.0	132.6	149.1	165.7	182.3	198.9	215.4	232.0	248.6
350	37.2	55.8	74.4	93.0	111.7	130.3	148.9	167.5	186.1	204.7	223.3	241.9	260.5	279.1
360	41.7	62.5	83.3	104.1	125.0	145.8	166.6	187.5	208.3	229.1	249.9	270.8	291.6	312.4
370	46.5	69.7	93.0	116.2	139.4	162.7	185.9	209.2	232.4	255.7	278.9	302.1	325.4	348.6
380	51.7	77.6	103.4	129.3	155.1	181.0	206.9	232.7	258.6	284.4	310.3	336.1	362.0	387.9
390	57.4	86.1	114.8	143.4	172.1	200.8	229.5	258.2	286.9	315.6	344.3	373.0	401.6	430.3
400	63.5	95.2	127.0	158.7	190.5	222.2	254.0	285.7	317.5	349.2	381.0	412.7	444.4	476.2
450	101.7	152.6	203.4	254.3	305.1	356.0	406.8	457.7	508.5	559.4	610.2	661.1	711.9	762.8
500	155.0	232.5	310.0	387.5	465.0	542.5	620.0	697.5	775.0	852.6	930.1	1007.6	1085.1	1162.6
550	227.0	340.4	453.9	567.4	680.9	794.3	907.8	1021.3	1134.8	1248.2	1361.7	1475.2	1588.7	1702.1
600	321.4	482.1	642.9	803.6	964.3	1125.0	1285.7	1446.4	1607.1	1767.9	1928.6	2089.3	2250.0	2410.7
650	442.7	664.1	885.4	1106.8	1328.2	1549.5	1770.9	1992.3	2213.6	2435.0	2656.3	2877.7	3099.1	3320.4
700	595.5	893.2	1191.0	1488.7	1786.5	2084.2	2381.9	2679.7	2977.4	3275.2	3572.9	3870.7	4168.4	4466.1
750	784.7	1177.1	1569.5	1961.8	2354.2	2746.6	3139.0	3531.3	3923.7	4316.1	4708.4	5100.8	5493.2	5885.5
800	1015.9	1523.8	2031.7	2539.7	3047.6	3555.6	4063.5	4571.4	5079.4	5587.3	6095.2	6603.2	7111.1	7619.0

TABLONUN DÜZENLENMESİNDE ESAS ALINAN KABULLER

$f \leq L/200$ max 15mm

E Alüminyum: 7000 kN/cm² (700000kg/cm²)

Rüzgar Yükü: W_0 =1kN/m² (100kg/m²)



AÇIKLAMA

Seçilen bir W_1 rüzgar yükü L mesnet açıklığı ile 2a ve 2b eksen aralıklarında düşey taşıyıcı seçiminde gerekli olan minumum atalet momenti (Imin) bulunmak istendiğinde;

Imin = (Ia + Ib) x fw olarak hesaplanmalıdır.

Ia ve Ib tabloda a,b / L matriksinde bulunan değerlerdir. Bu matrikste;

Ia bulunurken a ve L değerleri için, Ib bulunurken de b ve L değerleri için matriks okunur.

fw rüzgar yükü düzeltme faktörüdür ve

$fw = \frac{W}{W_1}$ alınır.

Örnekleme: W_0= 1.5 kN/m² (150kg/m²) ise;

$fw = \frac{W}{W} = \frac{1.5\ (150)}{1\ (100)}$ =1.5 alınmalı.

Bina yüksekliklerine göre rüzgar yükünün ve düzeltme faktörünün alacağı değerler aşağıdadır;

Zeminden Yükseklik	0 - 8	9 - 20	21 - 100	>100
$fw = W_1 / W_0$	0.6 / 1	0.96 / 1	1.32 / 1	1.56 / 1

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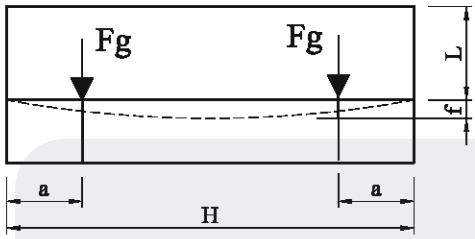
2. DÜŞEY CAM YÜKLEMESİ

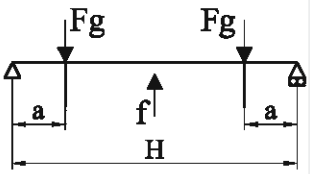
Giydirme cephelerde camların özağırlıklarından dolayı yatay kayıtlar üzerinde de statik tetkikler yapılması gereklidir. Camlar yatay kayıtların üzerine iki noktadan takozlarla oturtulur. Bu durumda yatay kayıtlar üzerinde düşey cam yükleri (Fg) oluşur. Kritik sehim değerleri formülde yerine koyularak öngörülen kritik sehim değerleri için yatay kayıdın sahip olması gereken min atalet momenti (Iy) hesaplanır.



$$Fg = \frac{H \times L}{2} \times Qg \times d$$

$$1kN = 1000N \cong 100kg$$

Fg =	(Kg)	Cam takozlarından birinin camın ağırlığı ile uyguladığı düşey kuvvet
H =	(cm)	Yatay kayıt uzunluğu
L =	(cm)	Cam yüksekliği
Qg =	(Kg/cm³)	Camın yoğunluğu
d =	(cm)	Cam kalınlığı



$$Iy = \frac{Fg \times a}{24 \times E \times f} \times (3 \times H^2 - 4 \times a^2)$$

$$E_{alüminyum} = 700000\ Kg/cm^2$$

Iy =	(cm⁴)	Yatay taşıyıcı için gerekli atalet momenti
a =	(cm)	Yatay kaydın kenarı ile cam takozunun merkezi arasındaki mesafe
E =	(Kg/cm²)	Alüminyumun elastisite modülü
f =	(cm)	Yatay kayıtta izin verilen (güvenli) sehim (EN-13830; $f \leq L/500$, max 3mm)

Bu formülde değerler yerine konduğunda bulunan değer, izin verilen en düşük Iy değeridir.
Iy'nin bilinmesi ve L, h, a 'dan herhangi 2si için değerlerin verilmesi durumunda bulunacak L, h yada a değeri izin verilen en yüksek değerdir.

Düşey cam yüklemesi hesabında cam takozlarını kenarlara yaklaştırmak pozitif etki yapmaktadır. Ancak takozlar arası mesafenin maksimum genişliğine cam takozlama kuralları dikkate alınarak ve cam üreticisi ile görüşerek karar verilmelidir.

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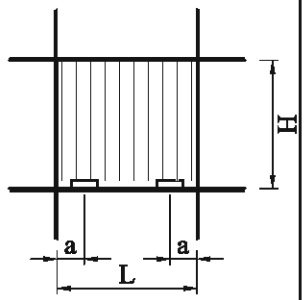
(Tablo 5-A) DÜŞEY CAM YÜKÜ TAŞIYAN YATAY KAYIT İÇİN GEREKLİ MİN. ATALET MOMENTİ HESAPLAMA TABLOSU

H \ L	60	70	80	90	100	110	120	130	140	150	160	170	180	190	200	210
100	0.7	1.0	1.3	1.7	2.1	2.6	3.1	3.6	4.2	4.8	5.9	7.0	8.4	9.8	11.5	13.3
110	0.8	1.1	1.5	1.9	2.3	2.8	3.4	4.0	4.6	5.3	6.4	7.7	9.2	10.8	12.6	14.6
120	0.9	1.2	1.6	2.0	2.5	3.1	3.7	4.3	5.0	5.8	7.0	8.4	10.0	11.8	13.8	16.0
130	0.9	1.3	1.7	2.2	2.7	3.3	4.0	4.7	5.4	6.3	7.6	9.1	10.9	12.8	14.9	17.3
140	1.0	1.4	1.9	2.4	2.9	3.6	4.3	5.0	5.9	6.7	8.2	9.8	11.7	13.8	16.1	18.6
150	1.1	1.5	2.0	2.5	3.2	3.8	4.6	5.4	6.3	7.2	8.8	10.5	12.5	14.8	17.2	20.0
160	1.1	1.6	2.1	2.7	3.4	4.1	4.9	5.8	6.7	7.7	9.4	11.3	13.4	15.7	18.4	21.3
170	1.2	1.7	2.2	2.9	3.6	4.4	5.2	6.1	7.1	8.2	10.0	12.0	14.2	16.7	19.5	22.6
180	1.3	1.8	2.4	3.0	3.8	4.6	5.5	6.5	7.5	8.7	10.5	12.7	15.0	17.7	20.7	23.9
190	1.4	1.9	2.5	3.2	4.0	4.9	5.8	6.8	8.0	9.2	11.1	13.4	15.9	18.7	21.8	25.3
200	1.4	2.0	2.6	3.4	4.2	5.1	6.1	7.2	8.4	9.6	11.7	14.1	16.7	19.7	23.0	26.6
210	1.5	2.1	2.8	3.6	4.4	5.4	6.4	7.6	8.8	10.1	12.3	14.8	17.6	20.7	24.1	27.9
220	1.6	2.2	2.9	3.7	4.6	5.6	6.7	7.9	9.2	10.6	12.9	15.5	18.4	21.6	25.3	29.3
230	1.6	2.3	3.0	3.9	4.8	5.9	7.0	8.3	9.6	11.1	13.5	16.2	19.2	22.6	26.4	30.6
240	1.7	2.4	3.2	4.1	5.1	6.1	7.3	8.6	10.0	11.6	14.1	16.9	20.1	23.6	27.6	31.9
250	1.8	2.5	3.3	4.2	5.3	6.4	7.6	9.0	10.5	12.0	14.6	17.6	20.9	24.6	28.7	33.3
260	1.9	2.6	3.4	4.4	5.5	6.7	8.0	9.4	10.9	12.5	15.2	18.3	21.7	25.6	29.9	34.6
270	1.9	2.7	3.6	4.6	5.7	6.9	8.3	9.7	11.3	13.0	15.8	19.0	22.6	26.6	31.0	35.9
280	2.0	2.8	3.7	4.7	5.9	7.2	8.6	10.1	11.7	13.5	16.4	19.7	23.4	27.5	32.2	37.3
290	2.1	2.9	3.8	4.9	6.1	7.4	8.9	10.4	12.1	14.0	17.0	20.4	24.2	28.5	33.3	38.6
300	2.1	3.0	4.0	5.1	6.3	7.7	9.2	10.8	12.6	14.4	17.6	21.1	25.1	29.5	34.5	39.9
310	2.2	3.1	4.1	5.2	6.5	7.9	9.5	11.2	13.0	14.9	18.2	21.8	25.9	30.5	35.6	41.2
320	2.3	3.2	4.2	5.4	6.7	8.2	9.8	11.5	13.4	15.4	18.7	22.5	26.7	31.5	36.8	42.6
330	2.4	3.3	4.4	5.6	6.9	8.4	10.1	11.9	13.8	15.9	19.3	23.2	27.6	32.5	37.9	43.9
340	2.4	3.4	4.5	5.8	7.2	8.7	10.4	12.2	14.2	16.4	19.9	23.9	28.4	33.5	39.0	45.2
350	2.5	3.5	4.6	5.9	7.4	9.0	10.7	12.6	14.7	16.9	20.5	24.6	29.3	34.4	40.2	46.6
360	2.6	3.6	4.8	6.1	7.6	9.2	11.0	13.0	15.1	17.3	21.1	25.3	30.1	35.4	41.3	47.9
370	2.6	3.7	4.9	6.3	7.8	9.5	11.3	13.3	15.5	17.8	21.7	26.0	30.9	36.4	42.5	49.2
380	2.7	3.8	5.0	6.4	8.0	9.7	11.6	13.7	15.9	18.3	22.2	26.7	31.8	37.4	43.6	50.6
390	2.8	3.9	5.2	6.6	8.2	10.0	11.9	14.0	16.3	18.8	22.8	27.4	32.6	38.4	44.8	51.9
400	2.9	4.0	5.3	6.8	8.4	10.2	12.2	14.4	16.7	19.3	23.4	28.1	33.4	39.4	45.9	53.2
410	2.9	4.1	5.4	6.9	8.6	10.5	12.5	14.8	17.2	19.7	24.0	28.8	34.3	40.3	47.1	54.5
420	3.0	4.2	5.6	7.1	8.8	10.8	12.8	15.1	17.6	20.2	24.6	29.5	35.1	41.3	48.2	55.9
430	3.1	4.3	5.7	7.3	9.0	11.0	13.2	15.5	18.0	20.7	25.2	30.2	35.9	42.3	49.4	57.2
440	3.2	4.4	5.8	7.4	9.3	11.3	13.5	15.8	18.4	21.2	25.8	30.9	36.8	43.3	50.5	58.5
450	3.2	4.5	6.0	7.6	9.5	11.5	13.8	16.2	18.8	21.7	26.3	31.6	37.6	44.3	51.7	59.9
460	3.3	4.6	6.1	7.8	9.7	11.8	14.1	16.6	19.3	22.2	26.9	32.3	38.4	45.3	52.8	61.2
470	3.4	4.7	6.2	8.0	9.9	12.0	14.4	16.9	19.7	22.6	27.5	33.1	39.3	46.2	54.0	62.5
480	3.4	4.8	6.4	8.1	10.1	12.3	14.7	17.3	20.1	23.1	28.1	33.8	40.1	47.2	55.1	63.9
490	3.5	4.9	6.5	8.3	10.3	12.5	15.0	17.6	20.5	23.6	28.7	34.5	41.0	48.2	56.3	65.2
500	3.6	5.0	6.6	8.5	10.5	12.8	15.3	18.0	20.9	24.1	29.3	35.2	41.8	49.2	57.4	66.5
510	3.7	5.1	6.7	8.6	10.7	13.1	15.6	18.4	21.4	24.6	29.9	35.9	42.6	50.2	58.6	67.9
520	3.7	5.2	6.9	8.8	10.9	13.3	15.9	18.7	21.8	25.0	30.4	36.6	43.5	51.2	59.7	69.2
530	3.8	5.3	7.0	9.0	11.2	13.6	16.2	19.1	22.2	25.5	31.0	37.3	44.3	52.1	60.9	70.5
540	3.9	5.4	7.1	9.1	11.4	13.8	16.5	19.4	22.6	26.0	31.6	38.0	45.1	53.1	62.0	71.8
550	3.9	5.5	7.3	9.3	11.6	14.1	16.8	19.8	23.0	26.5	32.2	38.7	46.0	54.1	63.2	73.2
600	4.3	6.0	7.9	10.2	12.6	15.4	18.4	21.6	25.1	28.9	35.1	42.2	50.1	59.0	68.9	79.8



TABLODAKİ KABULLER

$f \leq L/500$, max 3mm (EN 13830)
E Alüminyum: 7000 kN/cm²
12mm cam kalınlığı (6-12-6)
a: 15cm (Cam Takoz Mesafesi)
Camın Yoğunluğu: 2700 Kg/m³

AÇIKLAMALAR

Iy min. = Iy x Fk

Iy = Gerekli Atalet Momenti (Tablo 1-A)

Fk = Cam Kalınlığı Düzeltme Faktörü (Tablo 1-B)

(Tablo 5-B) Cam Kalınlığı Düzeltme Faktörü Tablosu (Fk)

Cam Kalınlığı	Fk
6	0.50
8	0.67
10	0.80
12	1.00
14	1.16
16	1.33
18	1.50
20	1.67
22	1.83
24	2.00

DEPREM YÜKLEMESİ

Dünyanın oluşumundan beri, sismik yönden aktif bulunan bölgelerde depremlerin ardışıklı olarak oluştuğu ve sonucundan da milyonlarca insanın ve barınakların yok olduğu bilinmektedir. Deprem Bölgeleri Haritası'na göre, yurdumuzun %92'sinin deprem bölgeleri içerisinde olduğu, nüfusumuzun %95'inin deprem tehlikesi altında yaşadığı ve ayrıca büyük sanayi merkezlerinin %98'i ve barajlarımızın %93'ünün deprem bölgesinde bulunduğu gerçektir.

Duran veya sabit bir hızla hareket eden her cisim hızını değiştirecek herhangi bir dış kuvvete karşı, tesir eden kuvvete aksi yönde ağırlığından dolayı bir direnme gösterir. Buna atalet kuvveti denir. Depremde yapılarda zeminin hareket etmesi ve buna karşı yapının ağırlığı ile bu kuvvete dayanması atalet kuvveti oluşmasına örnektir.

Bu oluşan atalet kuvveti aşşağıdaki formül ile hesaplanır.

$Vt = A(T) \times W$

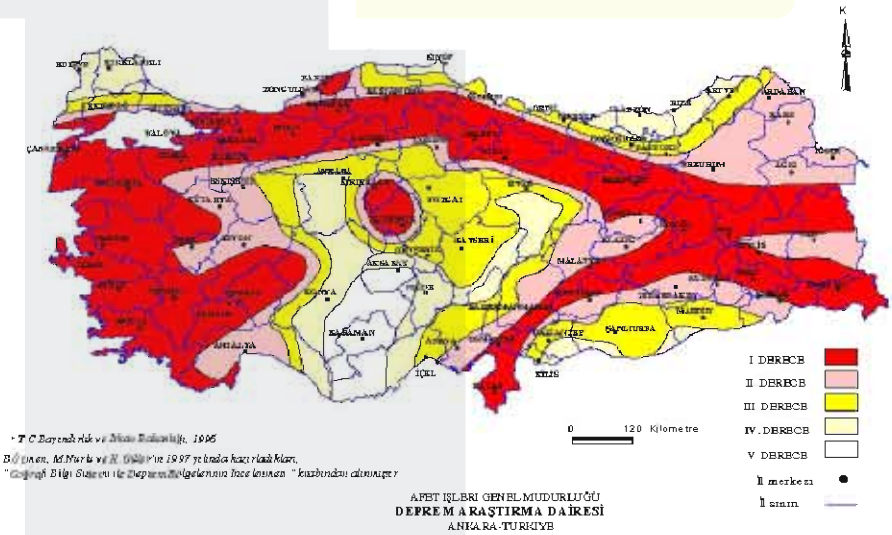
- Vt = Toplam Eşdeğer Deprem Yükü
- A(T) = Spektral İvme Katsayısı
- W = Toplam Yapı Ağırlığı

$A(T) = A_0 \times I \times S(T)$

- A_0 = Etkin Yer İvmesi Katsayısı
- I = Yapı Önem Katsayısı
- S(T) = Spektrum Katsayısı

A_0
(Etkin Yer İvmesi Katsayısı)

Deprem Bölgesi	A_0
1. Derece	0.40
2. Derece	0.30
3. Derece	0.20
4. Derece	0.10



Türkiye Deprem Haritası

S(T) (Spektrum Katsayısı)

01.01.1998 Tarihinde yürürlüğe giren deprem yönetmeliğinin 6.11.1 maddesine göre;

Binalarda balkon, parapet, baca, vb konsol olarak binanın taşıyıcı sistemine bağlı, ancak bağımsız çalışan yapısal çıkıntılara ve cephe, ara bölme panoları, vb yapısal olmayan tüm mimari elemanlara etkiyen eşdeğer deprem yükleri, S(T) = 1.0 alınır.

BİNA ÖNEM KATSAYISI (I) DEĞERİNİN BELİRLENMESİ

Bina önem katsayısı (I)= 1.5 alınması gereken 1. derece önemli yapılar;

Deprem sonrası kullanımı gereken binalar ve tehlikeli madde içeren binalar

1. Deprem sonrasında hemen kullanılması gerekli binalar (Hastaneler,dispanserler, sağlık oeakları, itfaiye bina ve tesisleri, PTT ve diğer haberleşme tesisleri, ulaşım istasyonları ve terminalleri, enerji üretim ve dağıtım tesisleri; vilayet, kaymakamlık ve belediye yönetim binaları, ilk yardım ve afet planlama istasyonları).
2. Toksik, patlayıcı, parlayıcı, vb özellikleri olan maddelerin bulunduğu veya depolandığı binalar.

Bina önem katsayısı (I)= 1.4 alınması gereken 2. derece önemli yapılar;

İnsanların uzun süreli ve yoğun olarak bulunduğu ve değerli eşyanın saklandığı binalar

1. Okullar, diğer eğitim bina ve tesisleri, yurt ve yatakhaneler, askeri kışlalar, cezaevleri, vb.
2. Müzeler.

Bina önem katsayısı (I)= 1.2 alınması gereken 3. derece önemli yapılar;

İnsanların kısa süreli ve yoğun olarak bulunduğu binalar

1. Spor tesisleri, sinema, tiyatro ve konser salonları, vb.

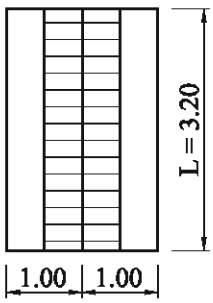
Bina önem katsayısı (I)= 1.0 alınması gereken 4. derece önemli yapılar;

Yukarıdaki tanımlara girmeyen diğer binalar

1. Konutlar, işyerleri, oteller, bina türü endüstri yapıları, vb

Örnek:

Kocaeli ilinde bulunan hastaneye aluminyum dış cephe kaplaması yapılacaktır. 1 dikme boyu 3.20metre 2 dikme arasındaki aks aralığı 1 metredir. Bu veriler ışığında Toplam eşdeğer deprem yükünü hesaplayalım.



$Vt = A(T) \times W$

Alüminyum dikmeye gelen düşey yükler;

Cam...: 40kg/m²
+ Alüm.: 10kg/m²
50kg/m²

$W = 50 \times 3.20 \times 1.00$

$W = 160Kg$

Kocaeli 1. Dep. Böl. ==> A0=0.40
Hastane ==> I =1.5

$A(T) = A_0 \times I \times S(T)$

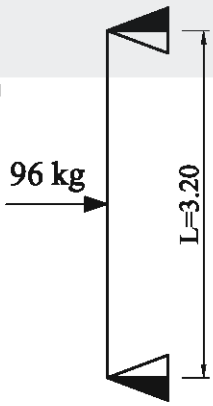
$A(T) = 0.40 \times 1.5 \times 1.0$

$A(T) = 0.6$

$Vt = A(T) \times W$

$Vt = 0.6 \times 160$

$Vt = 96Kg$



Hesaplanan deprem yükü, yatay veya düşey doğrultuda, en elverişsiz iç kuvvetleri verecek yönde ilgili elemanın ucuna etki ettirilecektir.

KAR YÜKLEMESİ

Kar yükü hesap değeri $P_k = m \times P_{k0}$

Burada m (azaltma değeri) kar kaymasının engellenmediği ve yatayla α açısı kadar eğim yapan çatılar için aşağıdaki formüle göre hesaplanır.

$0 \leq m \leq 1$ olmak şartıyla $m = 1 - \frac{\alpha - 30°}{40°} \times P_k$ formülü ile hesaplanan m değerleri tablosu aşşağıda verilmiştir.

α	0°	1°	2°	3°	4°	5°	6°	7°	8°	9°
0° - 30°	1.0									
30°	1.00	0.97	0.95	0.92	0.90	0.87	0.85	0.82	0.80	0.77
40°	0.75	0.72	0.70	0.67	0.65	0.62	0.60	0.57	0.55	0.52
50°	0.50	0.47	0.45	0.42	0.40	0.37	0.35	0.32	0.30	0.27
60°	0.25	0.22	0.20	0.17	0.15	0.12	0.10	0.07	0.05	0.02
70° - 90°	0									

Kar yükü (P_{k0}) hareketli yük sınıfına girer ve coğrafi ve meterolojik şartlara bağlı olarak değişikenlik gösterir.

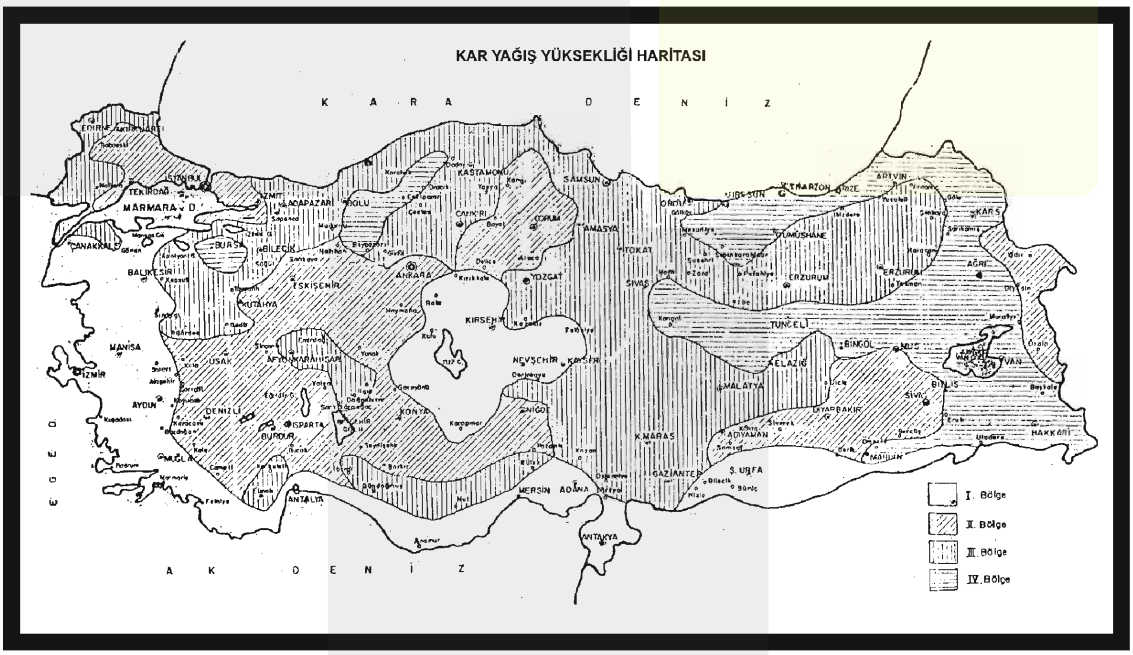
Sayfa 207'de bulunan il ve ilçelere göre zatî kar yükü bölgeleri tablosu ve haritası yardımı ile bulunan Bölge Numaraları (I, II, III yada IV) ve yapı yerinin denizden yükseklik bilgileri aşağıdaki tablo matrikste yerine koyularak Zatî karyükü (P_{k0} kN/m²) değeri bulunur.

Yapı yerinin denizden yükseliği	BÖLGELER			
m	I	II	III	IV
≤ 200	0.75	0.75	0.75	0.75
300	0.75	0.75	0.75	0.80
400	0.75	0.75	0.75	0.80
500	0.75	0.75	0.75	0.85
600	0.75	0.75	0.80	0.90
700	0.75	0.75	0.85	0.95
800	0.80	0.85	1.25	1.40
900	0.80	0.95	1.30	1.50
1000	0.80	1.05	1.35	1.60
> 1000	1000 m'ye tekabül eden değerler, 1500 m'ye kadar %10, 1500 m'den yukarı yüksekliklerde %15 artırılır.			

İL ve İLÇELERE GÖRE ZATÎ KAR YÜKÜ BÖLGELERİ

İL / İLÇE	BÖLGE NO	İL / İLÇE	BÖLGE NO	İL / İLÇE	BÖLGE NO
ADANA	I - III	ANTALYA	I	İZMİR	I
ADAPAZARI	III	Alanya	I	KONYA	I - II
ANKARA	II	Kaş	I	RİZE	III-IV
Altındağ	I	BALIKESİR	I	SAMSUN	III
Çankaya	II	BOLU	III - IV	TEKİRDAĞ	II - III
Elmadağ	IV	BURSA	III - IV	TRABZON	III - IV
Etimesgut	I	DENİZLİ	II	TUNCELİ	IV
Polatlı	II	İSTANBUL	II	YALOVA	II

Ayrıntılı tabloya TS-498 (1997)'den ulaşılabilir.



KAR YÜKÜ ve RÜZGAR YÜKÜNÜN AYNI ANDA DÜŞÜNÜLMESİ DURUMUNDA

45° ye kadar eğimli yüzeylerde karyükü (Pk) ve rüzgar yükünün (W) aynı anda etkilemesi halinde hesap kolaylığı olarak ve yeterli yaklaşımla;

$$P_k + \frac{W}{2} \quad \text{veya} \quad W + \frac{P_k}{2}$$

dır. Burada en gayri müsait durum dikkate alınır.

45° den fazla eğimli yüzeylerde ise, aynı anda etkiyen kar ve rüzgarın etkisinden yukarıdaki formüllere göre hesaplanabilmesi için, kar birikintileri meydana gelen tipteki eğimli yüzeyler (mesela çatı tipi değişik olan fabrika çatılarında v.b.) veya yoğun kar yağışlı bölgeler olması gereklidir.

NOT: Statik hesap sayfalarında yer alan kriterlerin seçiminde uygulama yapılan ülkelerin kanun ve şartnamelerinin esas alınması gerekir. Gençer Alüminyum, burada yer alan bilgilerin kullanımından ve hesaplamalardan doğabilecek hiçbir sorumluluk kabul etmez.