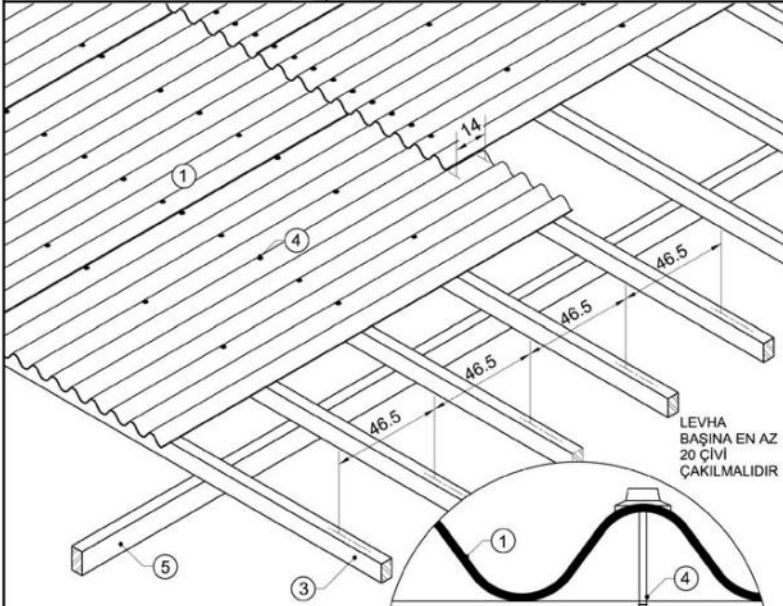


YUKARIDAKİ BİLGİLER TÜM EĞİMLERDE VE ALT YAPI SİSTEMLERİNDE GEÇERLİ OLAN TEMEL UYGULAMA ESASLARINI KAPSAR.

Ondule® HR

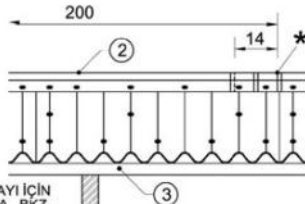
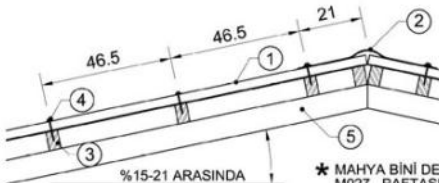
AHŞAP ÇATIDA
ISI YALITIMSIZ UYGULAMA
(EĞİM % 15 -21 ARASINDA)

M002



LEVHA
BAŞINA EN AZ
20 ÇİVİ
ÇAKILMALIDIR

- ① ONDULINE HR 95/200
- ② ONDULINE HR MAHYA 48.5/200
- ③ AHŞAP AŞIK 5/8
- ④ GALVANİZLİ PLASTİK BAŞLIKLİ
MONOBLOK ÇİVİ l=8cm.
- ⑤ AHŞAP MERTEK

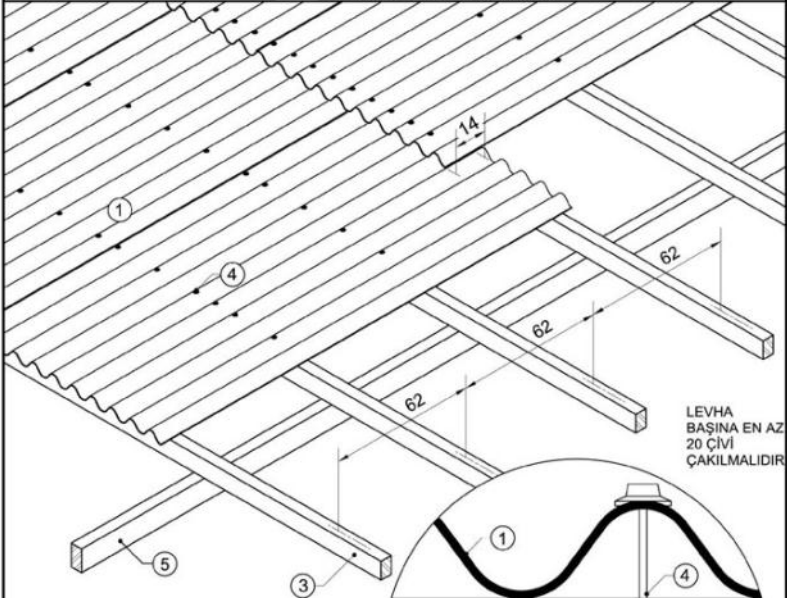


* MAHYA BİNİ DETAYI İÇİN
M027 PAFTASINA BKZ.

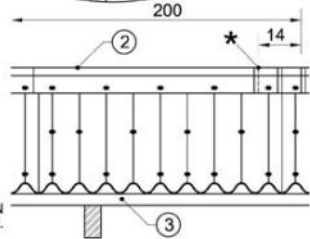
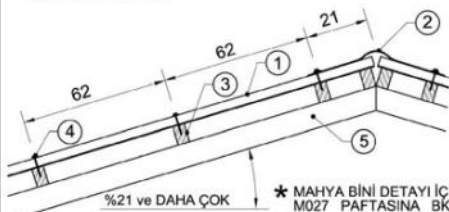
Ondule groupe

Ondule AVRASYA A.Ş.

MERKEZ: Değirmen Sokak Nöbe Kule No 12 Kat 9 34742 Kozyatağı / Kağıthane / İSTANBUL, Tl. : 0216 384 15 00 pbx. Faks: 0216 384 16 10
ANKARA: Turan Güneş Bulvarı S1/3 Körmönül Sit. 1. Blok. D-3 06550 Çankaya / ANKARA Tlx: 0312 441 35 50 - 440 77 69 Faks: 0312 441 39 93
İZMİR: Altıncağ Koltur Mh. Dr. Mustafa Ermer Bey Cd. No: 39 35220 Altıncağ / İZMİR Tlx: 0332 422 20 21 pbx. Faks: 0332 421 22 68

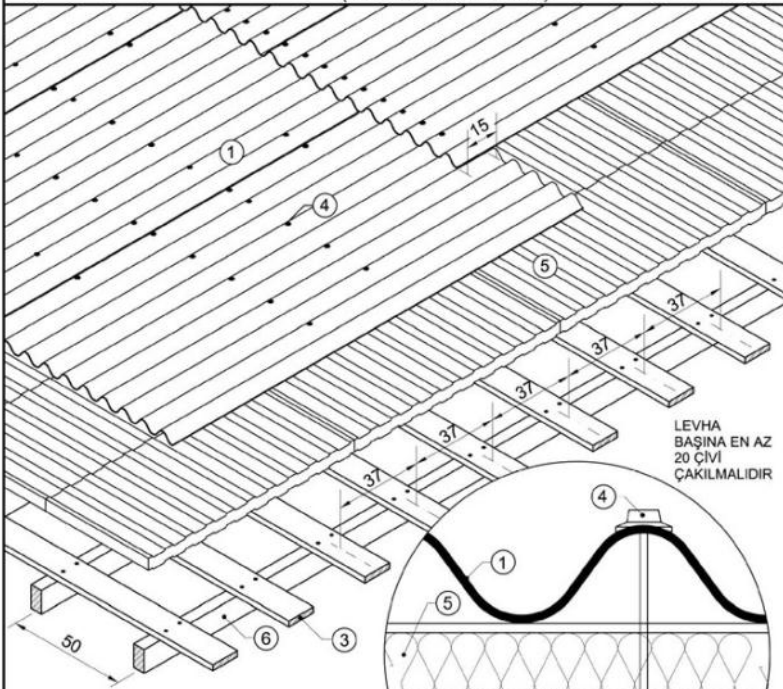
Onduline® HR**AHŞAP ÇATIDA
ISI YALITIMSIZ UYGULAMA
(EĞİM % 21 ve DAHA ÇOK)****M003**

- ① ONDULINE HR 95/200
- ② ONDULINE HR MAHYA 48.5/200
- ③ AHŞAP AŞIK 5/8
- ④ GALVANİZLİ PLASTİK BAŞLIKLI
MONOBLOK ÇİVİ l=8 cm.
- ⑤ AHŞAP MERTEK

**Onduline groupe**

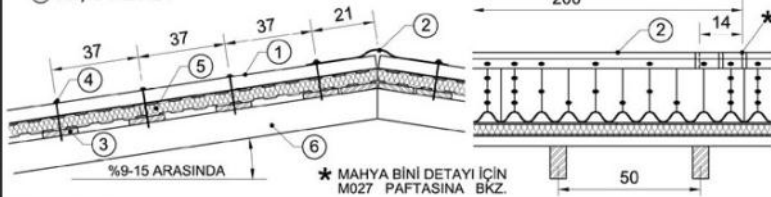
Onduline AVRASYA A.Ş.

MERKEZ: Değirmen Sokak Nida Kule No 12 Kat 8 34742 Köyşahı / Kadıköy / İSTANBUL Tel. : 0216 364 16 00 jbx. Faks: 0216 364 16 10
ANKARA: Turan Gönay Bulvarı 51/3 Karman Sit. 1. Blok. D-3 06550 Çankaya / ANKARA Tel: 0312 441 35 50 - 440 77 69 Faks: 0312 441 99 93
İZMİR: Alsancak Kültür Mh. Dr. Mustafa Erver Bey Cd. No: 35 35220 Alsancak / İZMİR Tel. : 0232 422 20 21 jbx. Faks: 0232 421 22 48



LEVHA
BAŞINA EN AZ
20 ÇİVİ
ÇAKILMALIDIR

- ① ONDULINE HR 95/200
- ② ONDULINE HR MAHYA 48.5/200
- ③ 2/12 KAPLAMA TAHTASI
- ④ GALVANİZLİ PLASTİK BAŞLIKLİ MONOBLOK ÇİVİ
- ⑤ EPS VEYA XPS ISI YALITIM LEVHASI
- ⑥ AHŞAP MERTEK

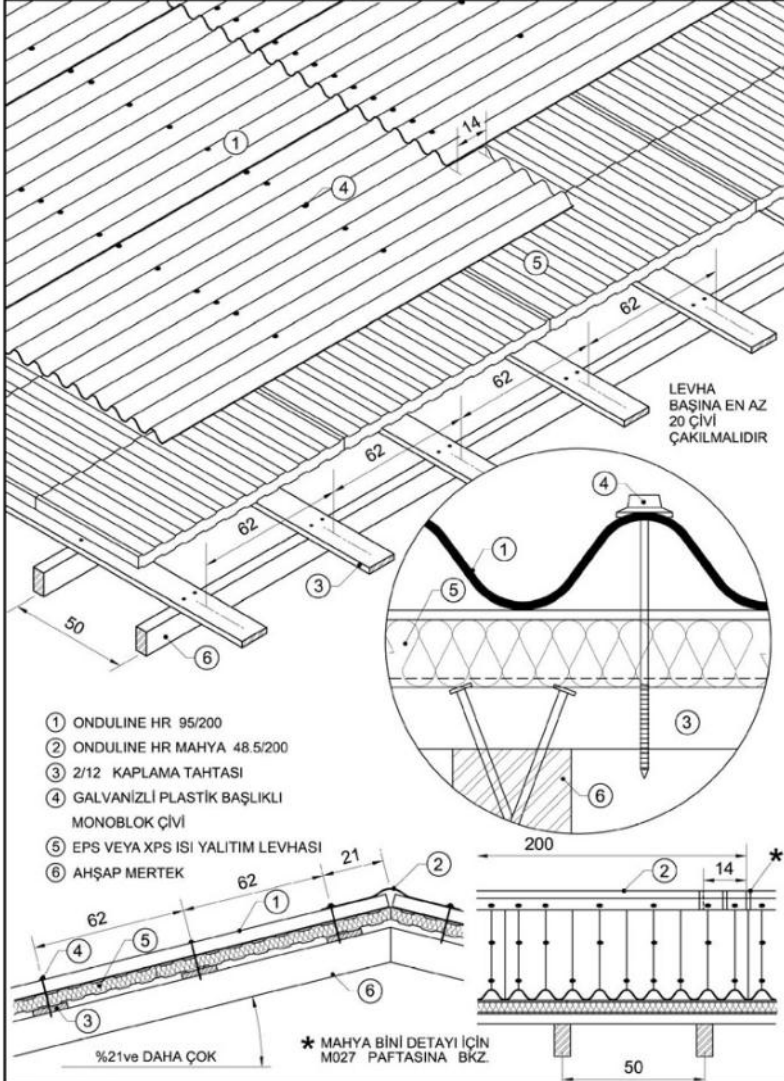


* MAHYA BİNİ DETAYI İÇİN
M027 PAFTASINA BKZ.

Onduline® HR

AHŞAP ÇATIDA
ISI YALITIMLI UYGULAMA
(EGİM %21ve DAHA ÇOK)

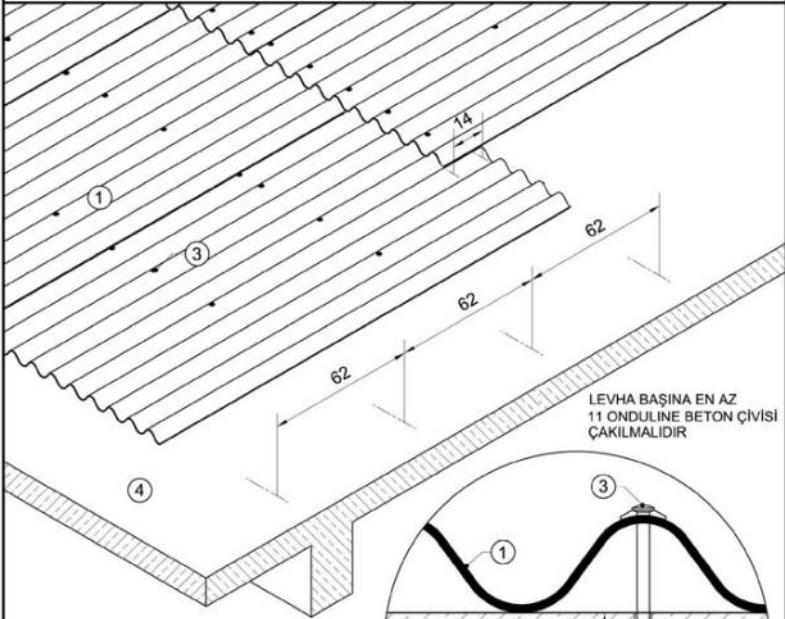
M006



Onduline groupe

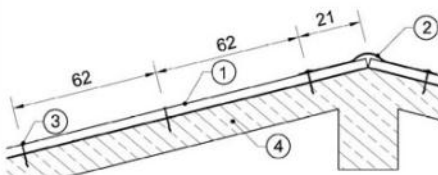
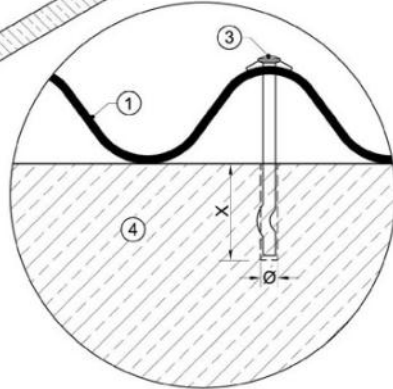
Onduline AVRASYA A.Ş.

MERKEZ: Değirmen Sokak İdaa Kule No 12 Kat: 8 34742 Kızılay/ Beşiktaş/ İSTANBUL, Tl. : 0216 384 18 03 pbx. Faks: 0216 384 18 10
ANKARA: Turan Güneş Bulvarı 513/10 Kat: 8. 06100 Çankaya / ANKARA Tl: 0312 441 35 50 - 440 77 69 Faks: 0312 441 99 03
İZMİR: Alancak Kilitçi Mh. Dr. Mustafa Erver Bey Cd. No: 35 35200 Alancak / İZMİR Tl: 0232 422 20 21 pbx. Faks: 0232 421 23 68

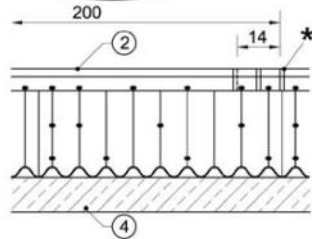
Önduline® HRBETONARME ÇATIDA
İSİ YALITIMSIZ UYGULAMA**M007**LEVHA BAŞINA EN AZ
11 ÖNDULİNE BETON ÇİVİSİ
ÇAKILMALIDIR

- ① ÖNDULİNE HR 95/200
- ② ÖNDULİNE HR MAHYA 48.5/200
- ③ GALVANİZLİ PLASTİK RONDELALI
BETON ÇİVİSİ l=7cm.**
- ④ BETONARME ÇATI

** Ø=DELİK ÇAPİ 5mm.
X=DELİK DERİNLİĞİ 40mm.



* MAHYA BİNİ DETAYI İÇİN
M027 PAFTASINA BKZ.

**Önduline groupe**

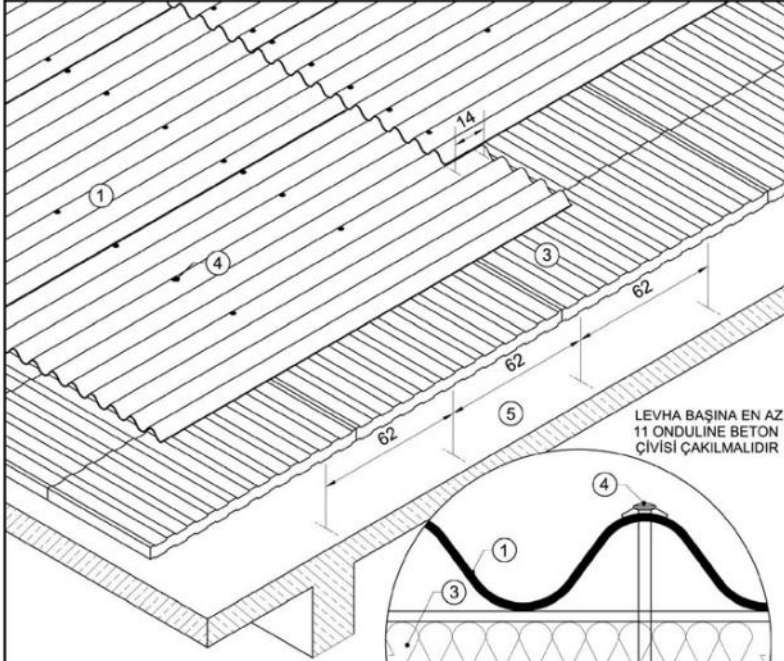
Önduline AVRASYA A.Ş.

MERKEZ: Değirmen Sokak Nida Kule No 12 Kat 8 34742 Kızılay / Kadıköy İSTANBUL Tel : 0216 384 16 00 Faks : 0216 384 16 10
ANKARA: Turan Örsen Bulvarı 513 Kırman Sit. 1. Blok. D.3 06550 Çankaya / ANKARA Tel: 0312 441 35 50 - 440 77 09 Faks: 0312 441 99 93
İZMİR: Alsancak Kültür Mh. Dr. Mustafa Emel Bey Cad. No: 35 35220 Alsancak / İZMİR Tel: 0232 422 20 21 Faks: 0232 421 22 58

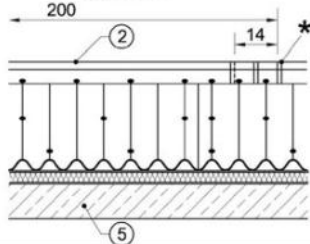
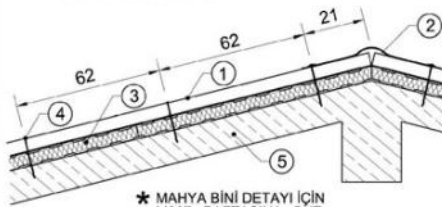
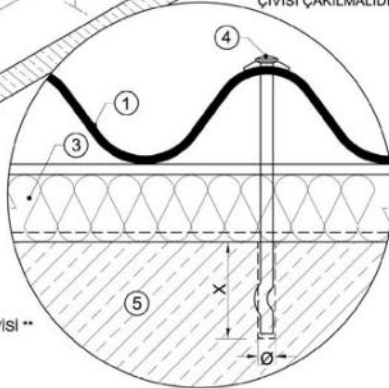
Önduline® HR

BETONARME ÇATIDA
ISI YALITIMLI UYGULAMA

M008



- ① ÖNDULINE HR 95/200
 - ② ÖNDULINE HR MAHYA 48.5/200
 - ③ EPS VEYA XPS ISI YALITIM LEVHASI
 - ④ GALVANİZLİ PLASTİK RONDELALİ BETON ÇİVİSİ **
 - ⑤ BETONARME ÇATI
- **Ø=DELİK ÇAPİ 5mm.
X=DELİK DERİNLİĞİ 40mm.



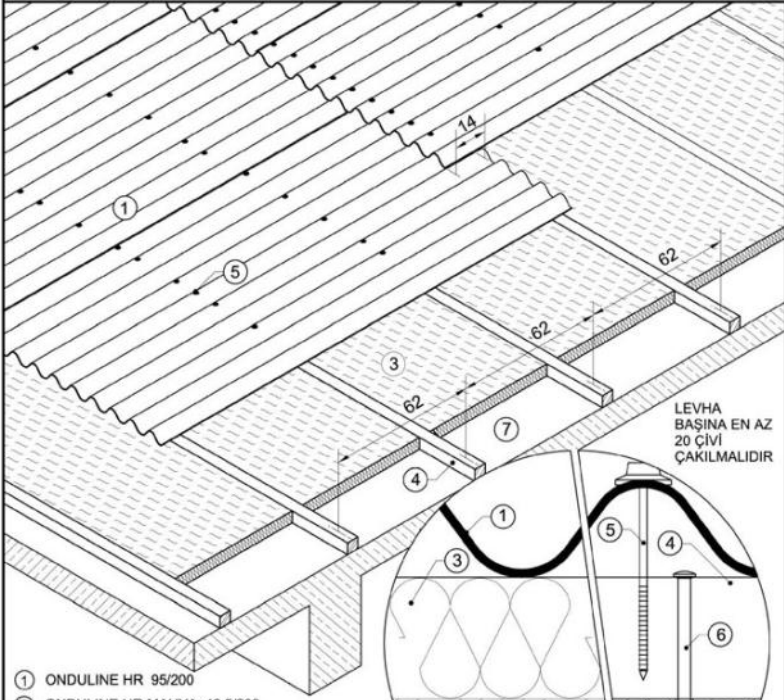
Önduline groupe

Önduline AVRASYA A.Ş.

MERKEZ: Değirmen Sokak Nispetiye Cad. No 12 Kat: 8 34742 Kızılay / Kağıthane / İSTANBUL Tel: 0216 384 16 00 Faks: 0216 384 16 13

ANKARA: Turan Güneş Bulvarı 51/3 Kömür Sk. 1. Blok, D:3 06550 Çankaya / ANKARA Tel: 0312 441 35 50 - 440 77 89 Faks: 0312 441 99 93

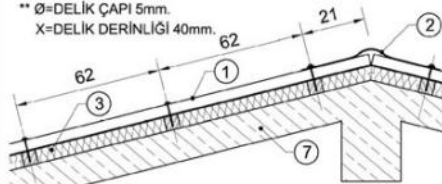
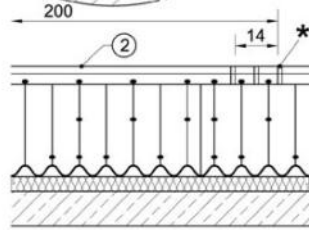
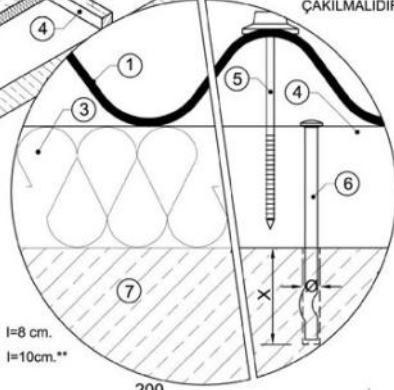
İZMİR: Alancak Kültür Mh. Dr. Mustafa Ermer Bey Cd. No: 35 35230 Alancak / İZMİR Tel: 0232 422 20 21 pbx. Faks: 0232 421 22 69

Önduline® HRBETONARME ÇATIDA
CAMYÜNÜ İLE
ISI YALITIMLI UYGULAMA**M009**

- ① ONDULINE HR 95/200
- ② ONDULINE HR MAHYA 48.5/200
- ③ CAM YÜNÜ d=6cm.
- ④ AĞŞAP AŞIK 5/5
- ⑤ GALVANİZLİ PLASTİK BAŞLIKLİ MONOBLOK ÇİVİ l=8 cm.
- ⑥ GALVANİZLİ PLASTİK RONDELALI BETON ÇİVİSİ l=10cm.**
- ⑦ BETONARME ÇATI

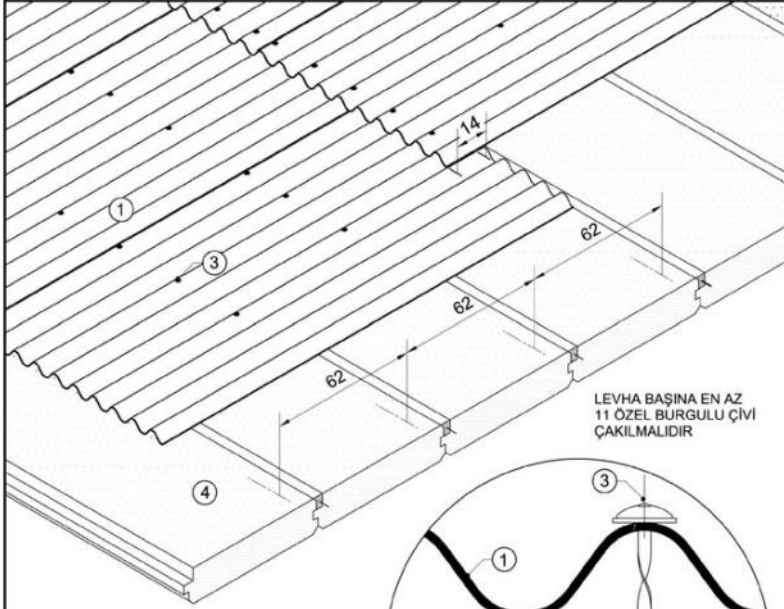
** Ø=DELİK ÇAPİ 5mm.

X=DELİK DERİNLİĞİ 40mm.

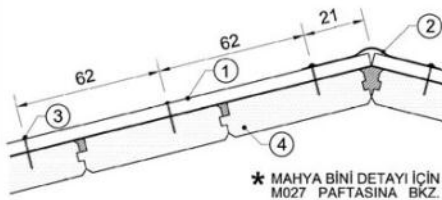
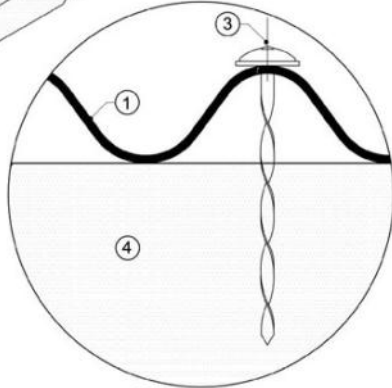
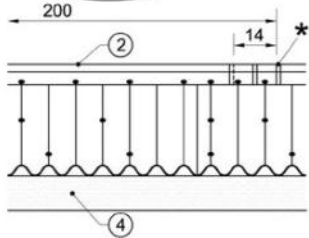
* MAHYA BİNİ DETAYI İÇİN
M027 PAFTASINA BİZ.**Önduline groupe**

Önduline AVRASYA A.Ş.

MERKEZ: Değirmen Sokak Nida Kule No 12 Kat 8 34742 Kozluca / Kadıköy/ İSTANBUL Tel. : 0216 384 16 00 pbx. Faks: 0216 384 16 13
ANKARA: Turan Güneş Bulvarı 51/3 Korman Sit. 1. Blok. D-3 06550 Çankaya / ANKARA Tel: 0312 441 35 50 - 440 77 60 Faks: 0312 441 99 93
İZMİR: Alancak Kültür Mh. Dr. Mustafa Ermer Bey Cđ. No. 35 35220 Alancak / İZMİR Tel: 0232 422 20 21 pbx. Faks: 0232 421 22 69

Onduline® HRHAFİF BETON ÇATI
UYGULAMA**M010**LEVHA BAŞINA EN AZ
11 ÖZEL BURGULU ÇİVİ
ÇAKILMALIDIR

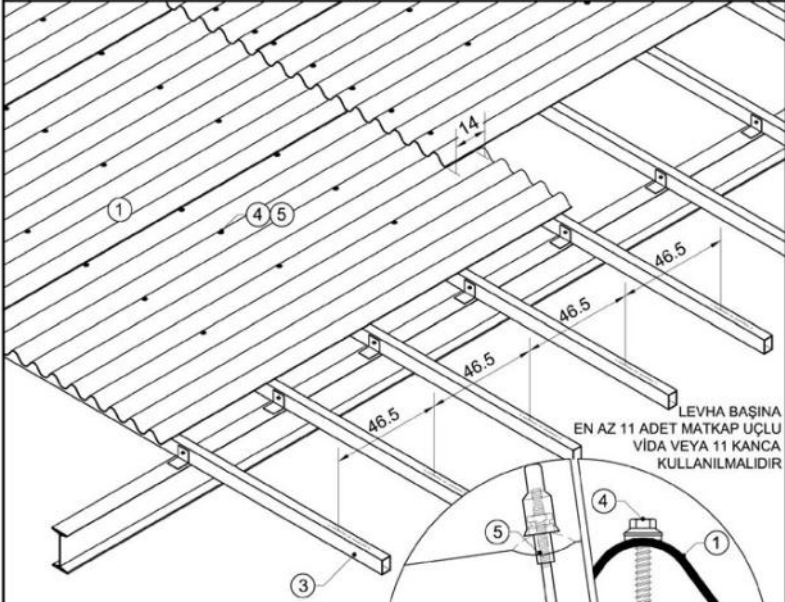
- ① ONDULINE HR 95/200
- ② ONDULINE HR MAHYA 48.5/200
- ③ ÖZEL BURGULU ÇİVİ I=10cm.
- ④ HAFİF BETON ÇATI PANELİ

* MAHYA BİNİ DETAYI İÇİN
M027 PAFTASINA BKZ.**Onduline groupe**
Onduline AVRASYA A.Ş.MERKEZ: Değirmen Sokak Nispetiye Kule No 12 Kat: 8 34742 Kızıyazdağı / Kağıthane / İSTANBUL. Tel.: 0216 384 16 00 pbx. Faks: 0216 384 16 10
ANKARA: Turan Güneş Bulvarı 51/3 Kömürhanesi Sit. 1. Blok, D:3 06550 Çarşıyaka / ANKARA. Tel: 0312 441 35 50 - 440 77 69 Faks: 0312 441 99 93
İZMİR: Altıncağ Kütür Mh. Dr. Mustafa Erzur Bey Cd. No: 35 35220 Altıncağ / İZMİR. Tel.: 0232 422 20 21 pbx. Faks: 0232 421 22 69

Onduline® HR

ÇELİK ÇATIDA
ISI YALITIMSIZ UYGULAMA
(EĞİM % 15-21 ARASINDA)

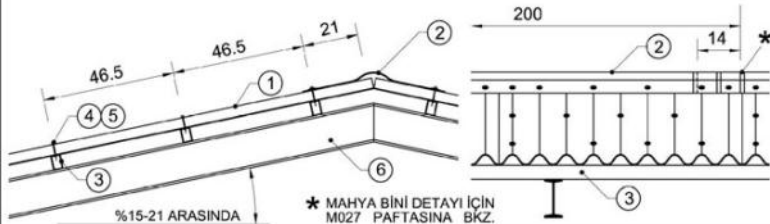
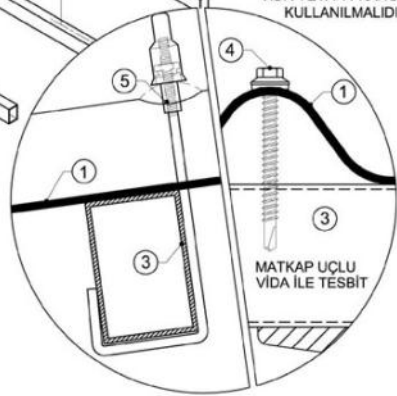
M011



LEVHA BAŞINA
EN AZ 11 ADET MATKAP UÇLU
VIDA VEYA 11 KANCA
KULLANILMALIDIR

- ① ONDULINE HR 95/200
- ② ONDULINE HR MAHYA 48.5/200
- ③ ÇELİK AŞIK 40x60 KUTU PROFİLİ
- ④ 6.3x60 MATKAP UÇLU VIDA
- ⑤ KANCA l=18cm

- MAKAS ARALIĞI l=400cm
- KAR YÜKÜ =100kg/m²



Onduline groupe

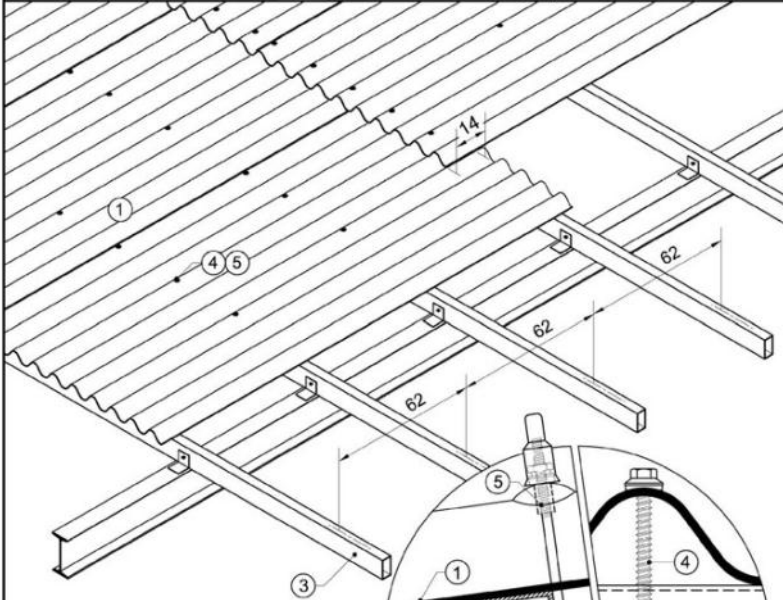
Onduline AVRASYA A.Ş.

MERKEZ: Değirmen Sokak Nispetiye Kule No 12 Kat:8 34742 Kozluca / Kadıköy/ İSTANBUL. Tel. : 0216 384 16 00. Faks: 0216 384 16 10
ANKARA: Turan Güneş Bulvarı 51/3 Korman Sit. 1. Blok. D:3 06550 Çankaya / ANKARA. Tel: 0312 441 35 50 - 440 77 69. Faks: 0312 441 99 93
İZMİR: Alsancak Kültür Mh. Dr. Mustafa Ermer Bey Cd. No. 35 35220 Alsancak / İZMİR. Tel.: 0232 422 20 21. Faks: 0232 421 22 68

Onduline® HR

ÇELİK ÇATIDA
ISI YALITIMSIZ UYGULAMA
(EĞİM % 21 ve DAHA ÇOK)

M012



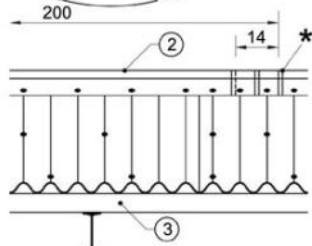
LEVHA BAŞINA EN AZ 11 ADET MATKAP UÇLU
VİDA VEYA 11 KANCA KULLANILMALIDIR

- ① ONDULINE HR 95/200
- ② ONDULINE HR MAHYA 48,5/200
- ③ ÇELİK AŞIK 40x80 KUTU PROFİLİ
- ④ 6,3x60 MATKAP UÇLU VİDA
- ⑤ KANCA l=20cm

- MAKAS ARALIĞI l=400cm
- KAR YÜKÜ =100kg/m²



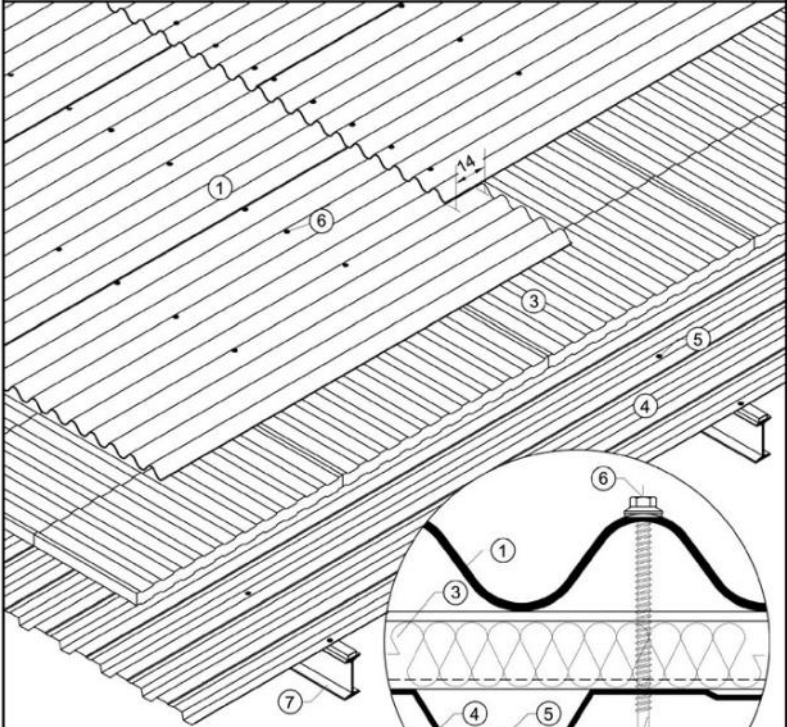
* MAHYA BİNİ DETAYI İÇİN
M027 PAFTASINA BKGZ.



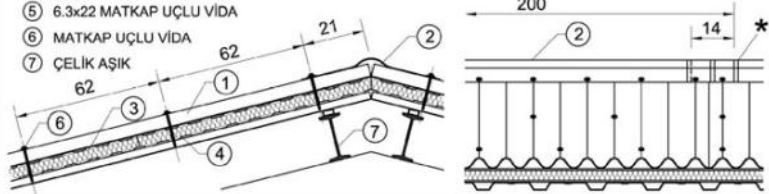
Onduline groupe

Onduline AVRASYA A.Ş.

MERKEZ: Değirmen Sokak Nispetiye Kule No 12 Kat: 8 34742 Kızıltepe / Kağıthane/ İSTANBUL, Tel.: 0216 384 16 00 Faks: 0216 384 16 13
ANKARA: Fıran Dönüş Buharı 51/3 Kömür Sk. 1. Blok, D:3 06550 Çankaya / ANKARA Tel: 0312 441 35 00 - 440 77 89 Faks: 0312 441 99 93
İZMİR: Alıncak Kültür Mh. Dr. Mustafa Ermer Bey Cd. No: 35 35200 Alıncak / İZMİR Tel.: 0232 422 20 21 Faks: 0232 421 22 68

Onduline® HRÇELİK ÇATIDA
ISI YALITIMLI UYGULAMA**M013**LEVHA BAŞINA EN AZ 11 ADET
MATKAP UÇLU VIDA KULLANILMALIDIR

- ① ONDULINE HR 95 / 200
- ② ONDULINE HR MAHYA 48.5 / 200
- ③ EPS VEYA XPS ISI YALITIM LEVHASI
- ④ 0.65mm TRAPEZ SAC 27 / 200
- ⑤ 6.3x22 MATKAP UÇLU VIDA
- ⑥ MATKAP UÇLU VIDA
- ⑦ ÇELİK AŞIK

* MAHYA BİNİ DETAYI İÇİN
M027 PAFTASINA BKZ. **Onduline groupe**

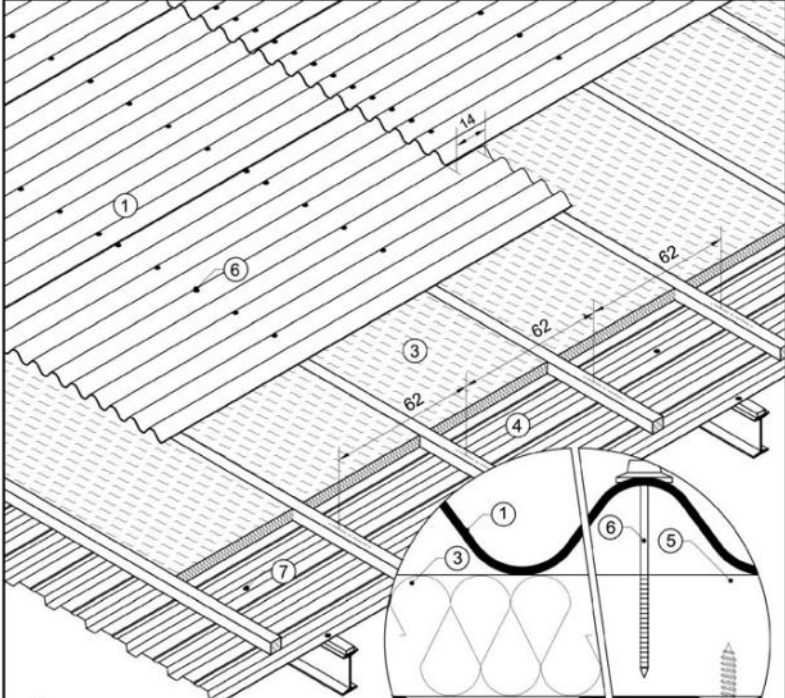
Onduline AVRASYA A.Ş.

MERKEZ: Değirmen Sokak Nispetiye Kule No 12 Kat 6 34742 Kızılay / Kadıköy / İSTANBUL Tel. : 0216 384 16 00 Faks: 0216 384 16 10
ANKARA: Turan Güneş Bulvarı 51/3 Korman Sit. 1. Blok, D/3 06550 Çankaya / ANKARA Tel: 0312 441 35 50 - 440 77 89 Faks: 0312 441 99 81
İZMİR: Alsancak Kültür Mh. Dr. Mustafa Emrî Bey Cd. No: 30 35220 Alsancak / İZMİR Tel: 0232 422 20 21 pbx. Faks: 0232 421 22 85

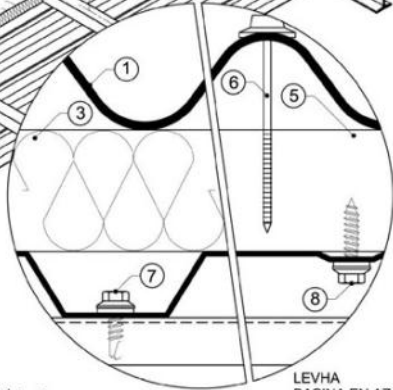
Önduline® HR

ÇELİK ÇATIDA
CAMYÜNÜ İLE
İSİ YALITIMLI UYGULAMA

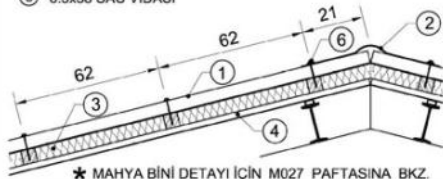
M014



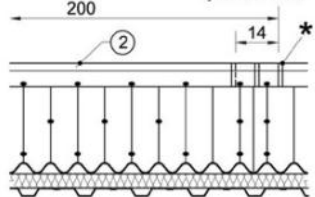
- ① ONDULINE HR 95 / 200
- ② ONDULINE HR MAHYA 48.5 / 200
- ③ CAM YÜNÜ d=6cm
- ④ 0.65mm TRAPEZ SAC 27 / 200
- ⑤ AHŞAP AŞIK 5 / 5
- ⑥ GALVANİZLİ PLASTİK BAŞLIKLILI MONOBLOK ÇİVİ l = 8cm.
- ⑦ 6.3x25 MATKAP UÇLU VİDA
- ⑧ 6.3x38 SAC VİDASI



LEVHA
BAŞINA EN AZ
20 ÇİVİ
ÇAKILMALIDIR



* MAHYA BİNI DETAYI İÇİN M027 PAFTASINA BKG.



Önduline groupe

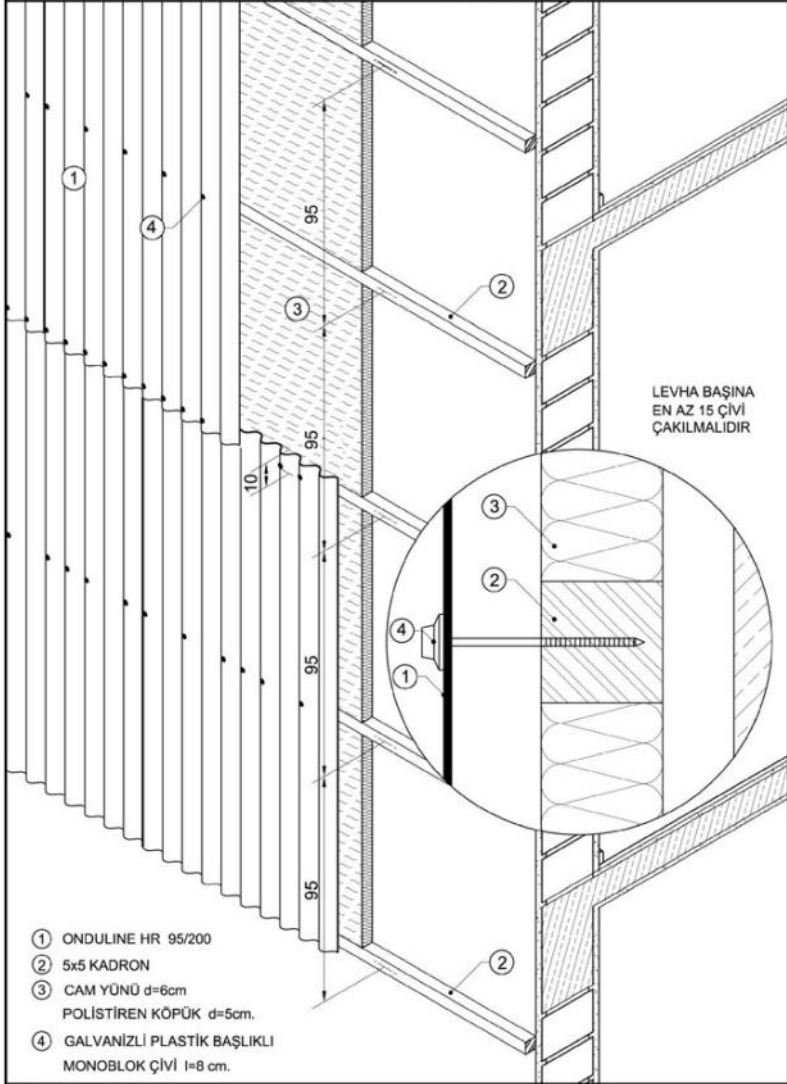
Önduline AVRASYA A.Ş.

MERKEZ: Değirmen Sokak Nispetiye Kule No 12 Kat 6 34742 Kızılay / Kadıköy / İSTANBUL Tel. : 0216 384 16 00 pbx. Faks: 0216 384 16 10
ANKARA: Turan Güneş Bulvarı 51/9 Korman SE. 1. Blok, D-3 06550 Çankaya / ANKARA Tel: 0312 441 35 50 - 440 77 69 Faks: 0312 441 99 83
İZMİR: Alsancak Kilitli Mh. Dr. Mustafa Erver Bey Cd. No: 35 35220 Alsancak / İZMİR Tel.: 0232 422 20 21 pbx. Faks: 0232 421 22 66

Önduline® HR

CEPHEDE
ISI YALITIMLI UYGULAMA
(AÖŞAP KONSTRÜKSİYON)

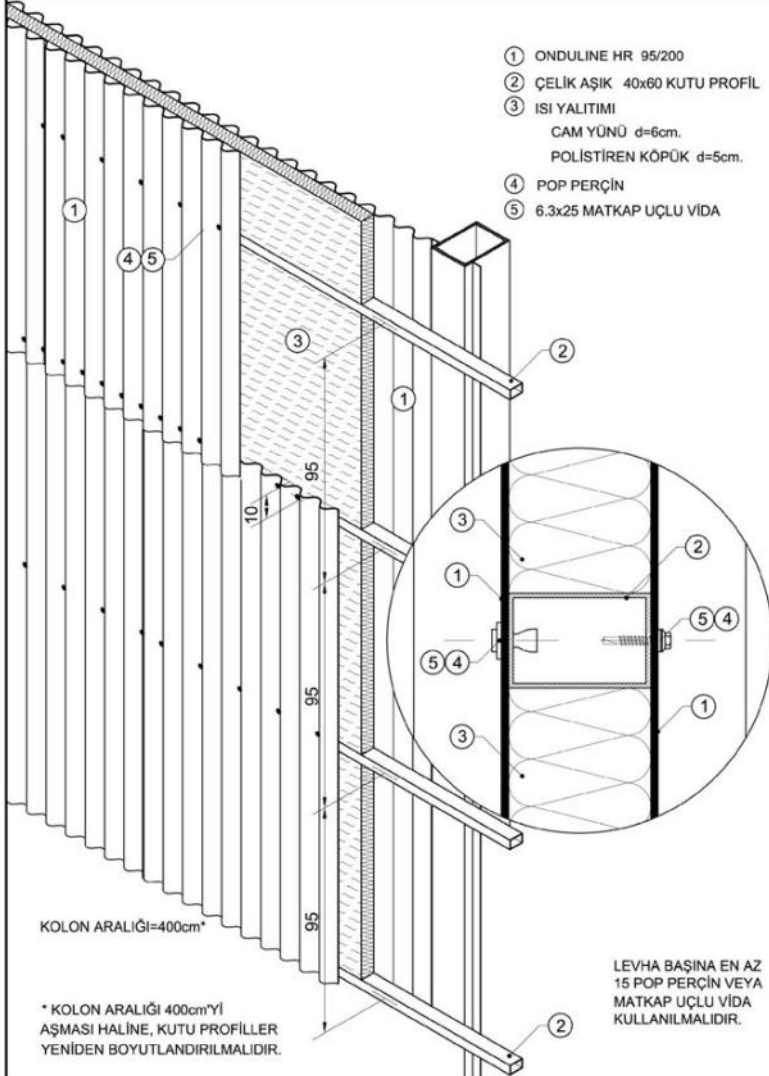
M015

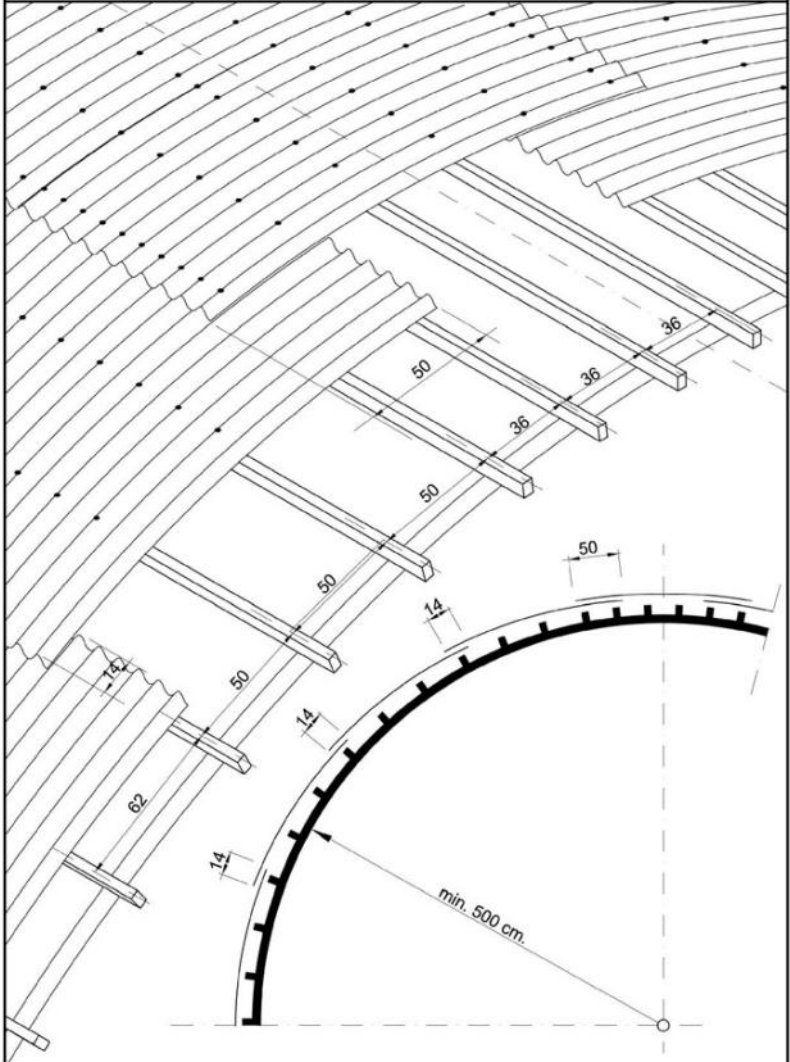


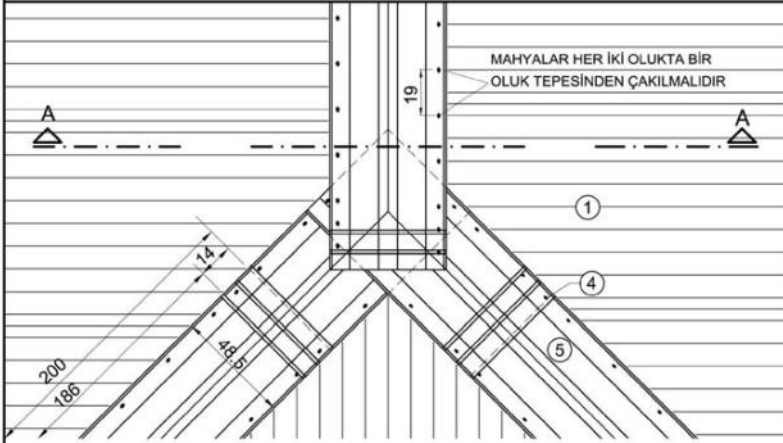
Önduline groupe

Önduline AVRASYA A.Ö.

MERKEZ: Değirmen Sokak Nispetiye Kule No 12 Kat: B 34742 Kızıyabı / Kadıköy / İSTANBUL, Tel. : 0216 384 16 00 pbx. Faks: 0216 384 13 13
ANKARA: Turan Güneş Bulvarı 51/3 Korman Sk. 1. Blok, D-3 06550 Çankaya / ANKARA Tel: 0312 441 35 50 - 440 77 69 Faks: 0312 441 99 93
İZMİR: Alancak Kültür Mh. Dr. Mustafa Emver Bey Cd. No. 35 35220 Alancak / İZMİR Tel.: 0232 422 20 21 pbx. Faks: 0232 421 22 88

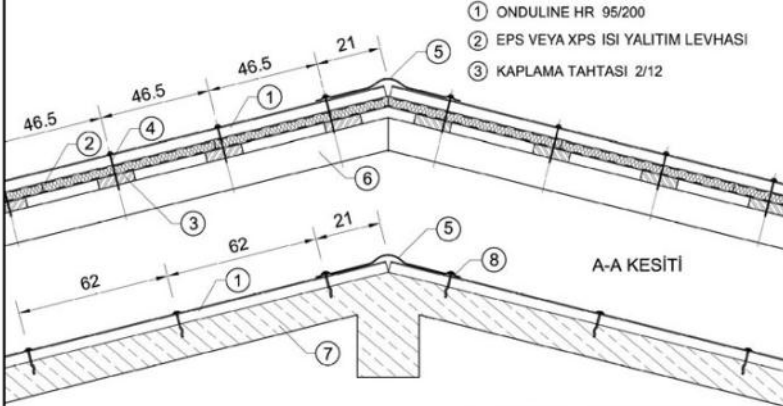
Onduline® HRCEPHEDE
ISI YALITIMLI UYGULAMA
(ÇELİK KONSTRÜKSİYON)**M016****Onduline groupe**
Onduline AVRASYA A.Ş.MERKEZ: Değirmen Sokak Nispetiye Kule No 12 Kat: 8 34742 Kızıyazığı / Kadıköy / İSTANBUL, Tel. : 0216 384 16 00 pbx. Faks: 0216 384 15 13
ANKARA: Turan Özüyay Bulvarı 51/3 Kormanlık 1. Blok, D-3 06550 Çankaya / ANKARA Tel: 0312 441 35 50 - 440 77 69 Faks: 0312 441 99 93
İZMİR: Alıncak Kirişir Mh. Dr. Mustafa Emver Bey Cd. No: 35 35220 Alıncak / İZMİR Tel: 0232 422 20 21 pbx. Faks: 0232 421 22 68

Onduline® HREĞRİSEL YÜZEYLİ
ÇATIDA UYGULAMA**M017****Onduline groupe**
Onduline AVRASYA A.Ş.MERKEZ: Değirmen Sokak Nispetiye Kule No 12 Kat 8 34742 Kızılay / Kağıthane / İSTANBUL. Tel. : 0216 384 16 00 faks. : 0216 384 15 13
ANKARA: Turan Güneş Bulvarı 51/3 Körmönk Sk. 1. Blok, D.3 06550 Çankaya / ANKARA Tel: 0312 441 35 50 - 440 77 69 Faks: 0312 441 99 93
İZMİR: Alsancak Kültür Mh. Dr. Mustafa Erver Bey Cd. No: 35 35220 Alsancak / İZMİR Tel.: 0232 422 20 21 faks. : 0232 421 22 68



MAHYALAR HER İKİ OLUKTA BİR
OLUK TEPEŚİNDEN ÇAKILMALIDIR

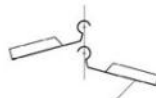
- ① ONDULINE HR 95/200
- ② EPS VEYA XPS ISI YALITIM LEVHASI
- ③ KAPLAMA TAHTASI 2/12



A-A KESİTİ

*İSTENDİĞİNDE CTP MAHYA
ELEMANI KULLANILABİLİR

*CTP ELEMANLAR SİPARİŞ
ÜZERİNE ÜRETİLİRLER

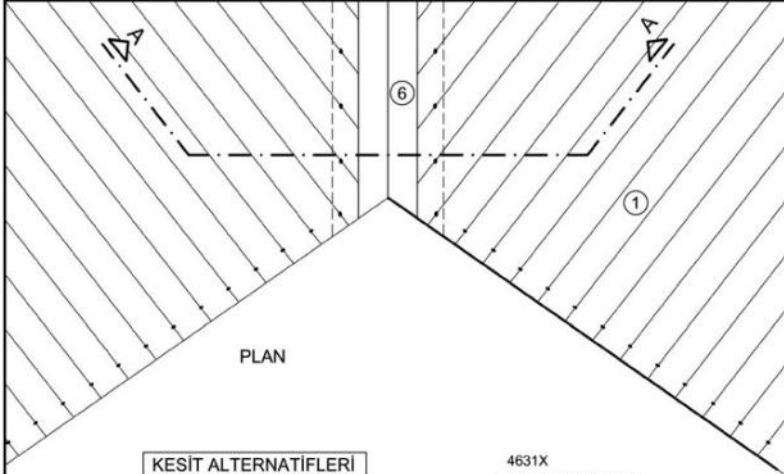


CTP MAHYA (4631X)

- ④ GALVANİZLİ PLASTİK BAŞLIKLIL
MONOBLOK ÇİVİ
- ⑤ ONDULINE HR MAHYA 48.5/200
- ⑥ AHŞAP MERTEK
- ⑦ BETONARME ÇATI
- ⑧ ONDULINE BETON ÇİVİSİ
İ=10cm

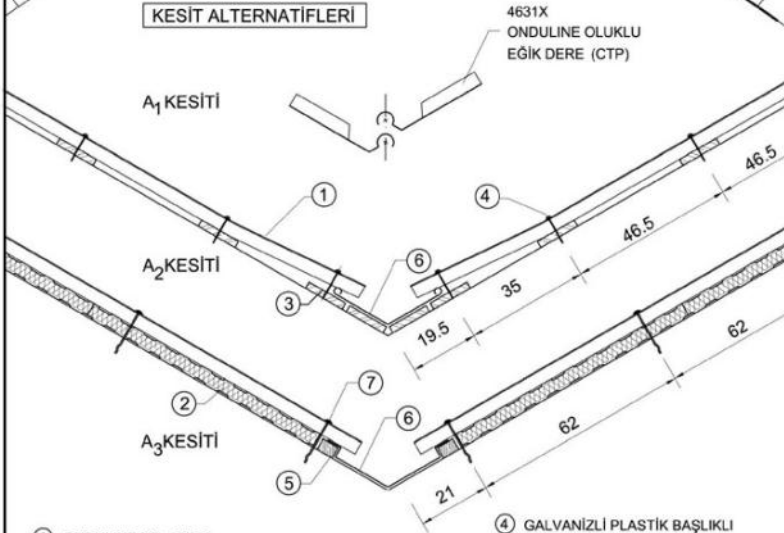
Onduline® HR

EĞİK DERE

M019

PLAN

KESİT ALTERNATİFLERİ

4631X
ONDULINE OLUKLU
EĞİK DERE (CTP)A₁ KESİTİA₂ KESİTİA₃ KESİTİ

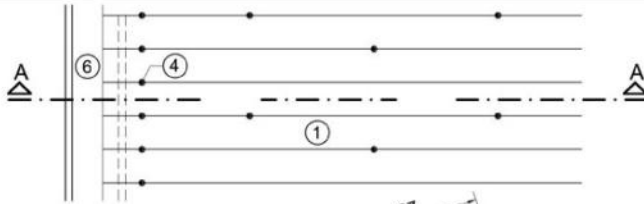
- ① ONDULINE HR 95/200
- ② EPS VEYA XPS ISI YALITIM LEVHASI
- ③ KAPLAMA TAHTASI 2/12

- ④ GALVANİZLİ PLASTİK BAŞLIKLİ
MONBLOK ÇİVİ
- ⑤ AHŞAP AŞIK 3/5
- ⑥ ÇİNKO DERE
- ⑦ ONDULINE BETON ÇİVİSİ

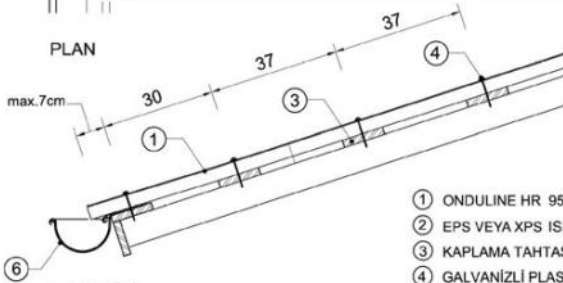
Onduline groupe

Onduline AVRASYA A.Ş.

MERKEZ: Doğrmen Sokak Nida Kule No 12 Kat B 34742 Kızılay / Kadıköy / İSTANBUL, TEL : 0216 384 16 00 pbx. Faks: 0216 384 15 13
ANKARA: Turan Güneş Bulvarı 51/3 Korman Sk. 1. Blok, D-9 06500 Çankaya / ANKARA Tel: 0312 441 35 00 - 440 77 69 Faks: 0312 441 99 93
İZMİR: Alsancak Kültür Mh. Dr. Mustafa Emre Bey Cd. No: 35 35220 Alsancak / İZMİR Tel: 0332 422 20 21 pbx. Faks: 0332 421 22 68

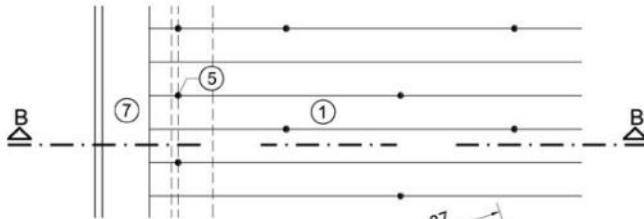


PLAN

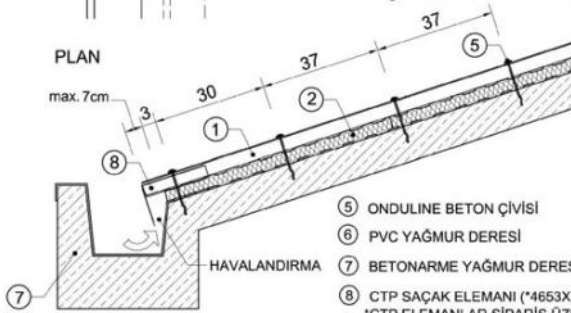


A-A KESİTİ

- ① ONDULINE HR 95/200
- ② EPS VEYA XPS ISI YALITIM LEVHASI
- ③ KAPLAMA TAHTASI 2/12
- ④ GALVANİZLİ PLASTİK BAŞLIKLİ MONOBLOK ÇİVLİ İ=8cm.

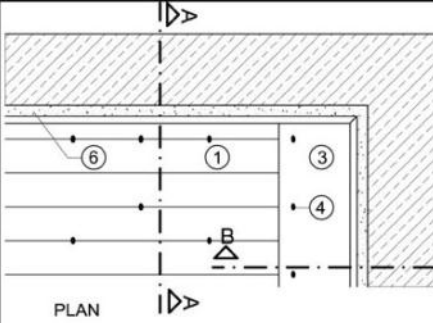


PLAN



B-B KESİTİ

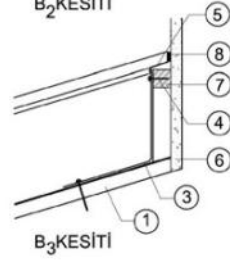
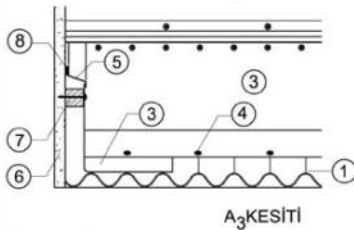
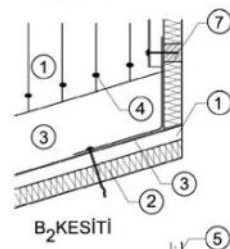
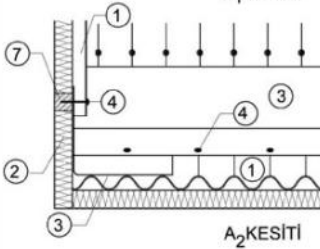
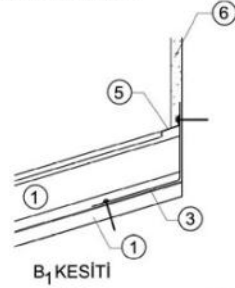
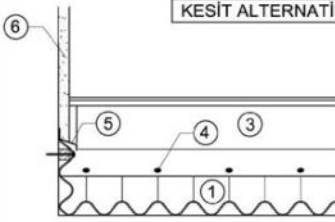
- ⑤ ONDULINE BETON ÇİVİSİ
- ⑥ PVC YAĞMUR DERESİ
- ⑦ BETONARME YAĞMUR DERESİ
- ⑧ CTP SAÇAK ELEMANI (*4653X)
*CTP ELEMANLAR SİPARİŞ ÜZERİNE ÜRETİLİRLER

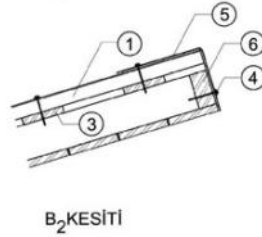
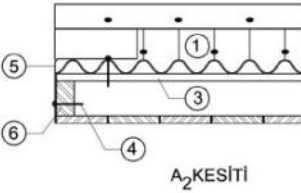
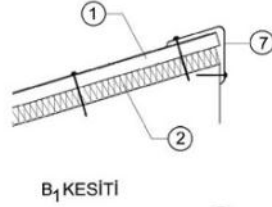
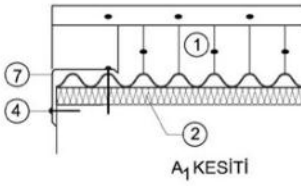
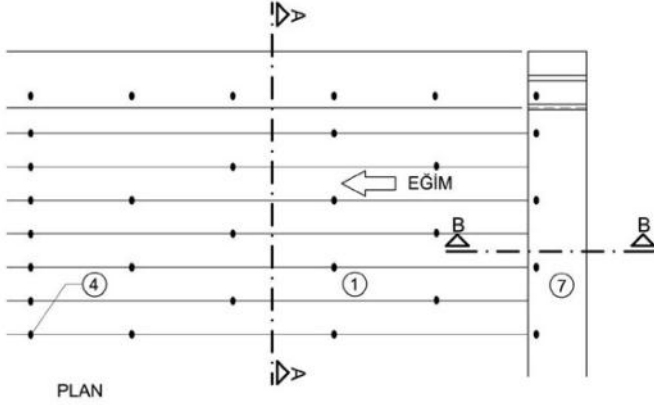


- ① ÖNDULINE HR 95/200
- ② İSİ YALITIMI
- ③ ÖNDULINE MAHYA 48.5/200
- ④ GALVANİZLİ PLASTİK BAŞLIKLİ MONOBLOK ÇİVİ
- ⑤ CTP DUVAR DİBİ Z PROFİLİ(4644X)*
- ⑥ SİVA
- ⑦ AĖŞAP KADRON 5/5
- ⑧ MASTİK

*CTP ELEMANLAR SİPARİŞ ÜZERİNE ÖRETİRLİRLER

KESİT ALTERNATİFLERİ



Onduline® HRÜST BİTİM VE
KALKAN DUVARI KENARI**M022**

① ONDULINE HR 95/200

② ISI YALITIMI

③ KAPLAMA TAHTASI 2/12

④ GALVANİZLİ PLASTİK BAŞLIKLİ
MONOBLOK ÇİVİ

⑤ ONDULINE HR MAHYA 48.5/200

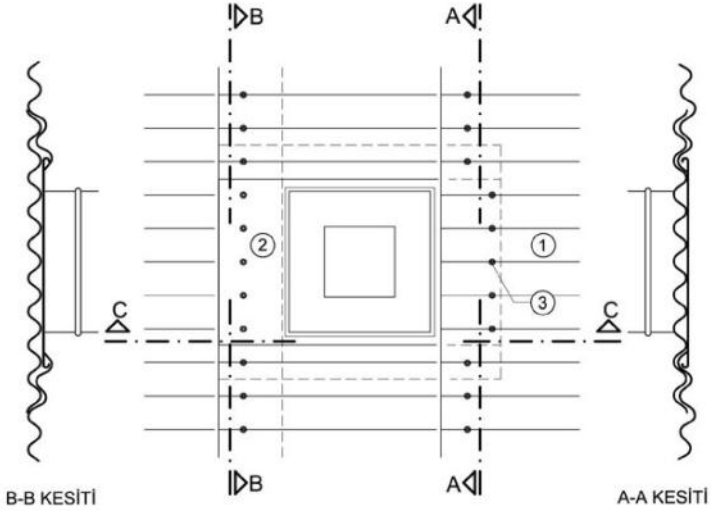
⑥ AHŞAP MERTEK

⑦ KALKAN DUVARI KENARI (4671X)

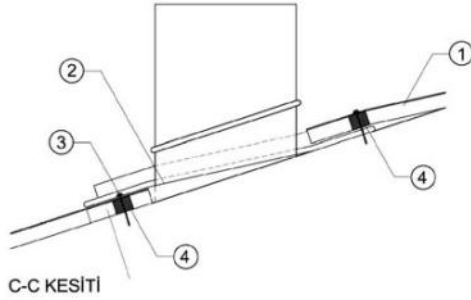
Onduline groupe

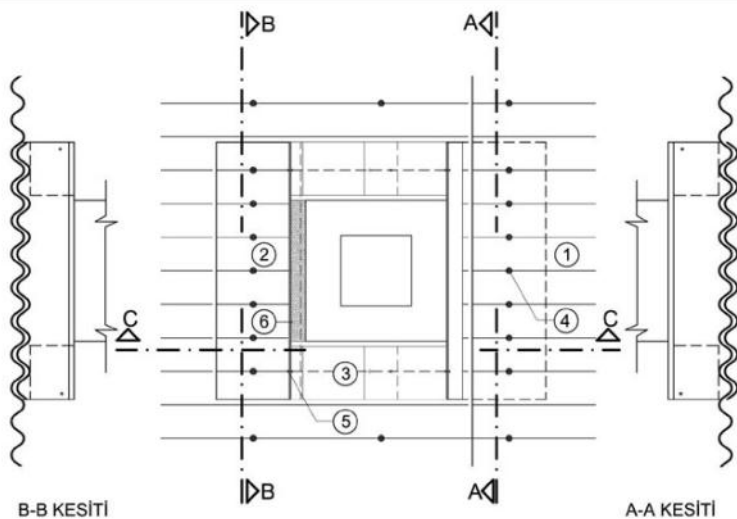
Onduline AVRASYA A.Ş.

MERKEZ: Değirmen Sokak Nispetiye Kule No 12 Kat 8 34742 Kozystađı / Kadıköy/ İSTANBUL Tel. : 0216 384 16 00 pbx. Faks: 0216 384 16 10
ANKARA: Turan Güneş Bulvarı 51/3 Korman Dk. 1 Blok D-3 06550 Çankaya / ANKARA Tel: 0312 441 35 50 - 440 77 69 Faks: 0312 441 99 83
İZMİR: Alsancak Kültür Mh. Dr. Mustafa Ermer Bey Cd. No: 35 35220 Alsancak / İZMİR Tel: 0232 421 20 21 pbx. Faks: 0232 421 22 66

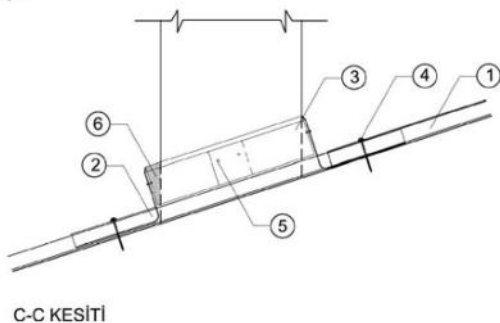


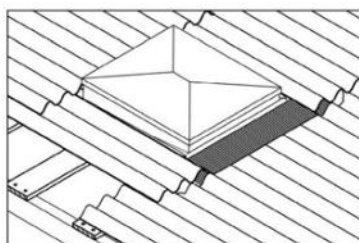
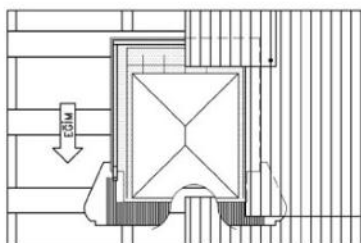
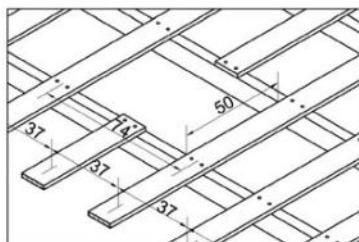
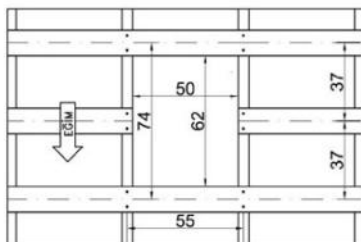
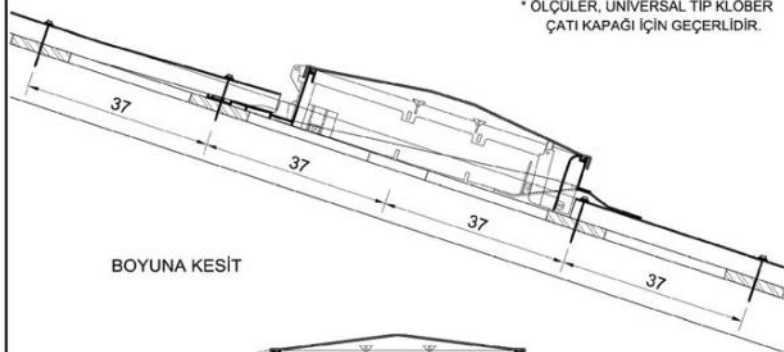
- ① ONDULINE HR 95/200
- ② ÇİNKO BACA DİBİ ELEMANI
- ③ GALVANİZLİ PLASTİK BAŞLIKLI
MONOBLOK ÇİVİ l=8 cm.
- ④ ONDULINE HR OLUKLU BİTÜMLÜ SÖNGER



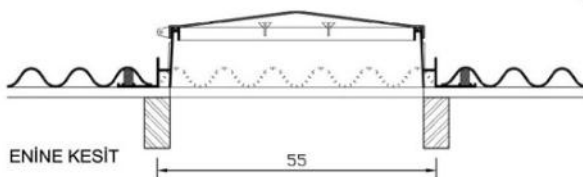


- ① ONDULINE HR 95/200
- ② OLUKLU BACA DİBİ ELEMANI(4641X)
- ③ OLUKSUZ BACA DİBİ ELEMANI(4663X)
- ④ GALVANİZLİ PLASTİK BAŞLIKLİ
MONBLOK ÇİVİ l=8 cm.
- ⑤ POP PERÇİN
- ⑥ HARÇ



Onduline® HRHAZIR ÇATI KAPAĞI (*)
DETAYLARI**M026*** ÖLÇÜLER, UNIVERSAL TİP KLÖBER
ÇATI KAPAĞI İÇİN GEÇERLİDİR.

BOYUNA KESİT

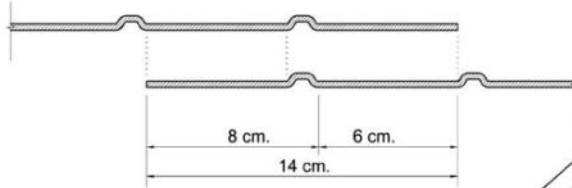
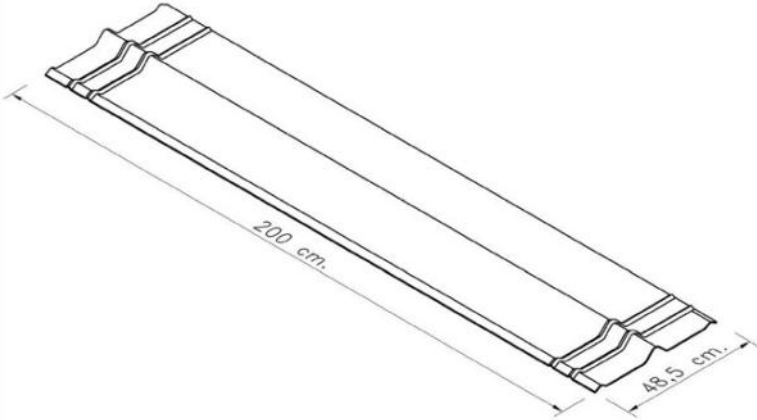


ENİNE KESİT

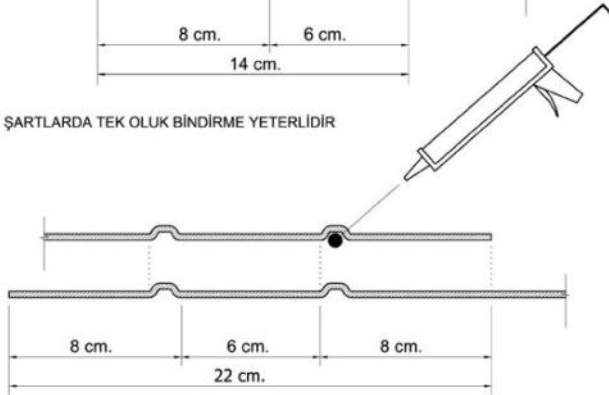
 Onduline groupe

Onduline AVRASYA A.Ş.

MERKEZ: Değirmen Sokak Niis Kule No 12 Kat: 8 34743 Kızıltepe / Kâhkiy (SAMSUN), Tel. : 0318 384 18 00 pbx. Faks: 0318 384 18 10
ANKARA: Turan Ödemiş Bulvarı 51/3 Kömür Sk. 1. Blok. D:3 06533 Çankaya / ANKARA Tel: 0312 441 28 90 - 440 77 89 Faks: 0312 441 98 93
İZMİR: Alınacak Kilitör Mh. Dr. Mustafa Emre Bey Cad. No: 35 35220 Alınacak / İZMİR Tel: 0332 422 20 21 pbx. Faks: 0332 421 22 60



NORMAL ŞARTLARDA TEK OLUK BİNDİRME YETERLİDİR

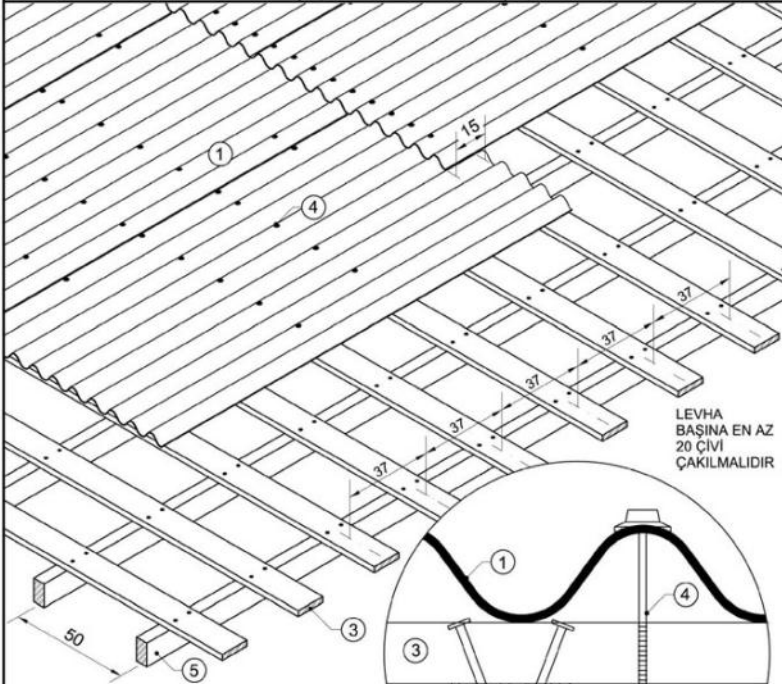


OLAĞANÜSTÜ YAĞIŞLI VE RÜZGARLI BÖLGELERDE AYRICA ÇATI EĞİMİNİN % 15 TEN AZ OLDUĞU ÇATILARDA ÇİFT OLUK BİNDİRME VE BARDOSTICK UYGULANIR

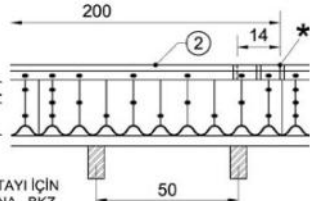
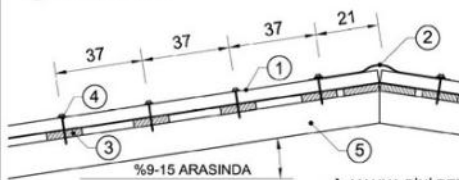
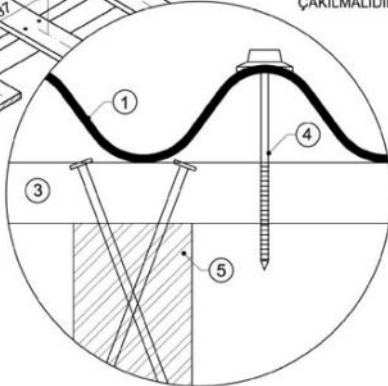
Önduline® HR

AHŞAP ÇATIDA
ISI YALITIMSIZ UYGULAMA
(EĞİM % 9-15 ARASINDA)

M001



- ① ONDULINE HR 95/200
- ② ONDULINE HR MAHYA 48.5/200
- ③ KAPLAMA TAHTASI 2/12
- ④ GALVANİZLİ PLASTİK BAŞLIKLİ MONOBLOK ÇİVİ l=8 cm.
- ⑤ AHŞAP MERTEK



Önduline groupe

Önduline AVRASYA A.Ş.

MERKEZ: Değirmen Sokak Nida Kule No 12 Kat 8 34742 Kozyatağı / Kadıköy/ İSTANBUL Tel: 0216 384 15 00 pbx. Faks: 0216 384 16 10
ANKARA: Turan Güneş Bulvarı 51/3 Karman St. 1. Blok. D:3 06550 Çankaya / ANKARA Tel: 0312 441 35 50 - 440 77 99 Faks: 0312 441 99 93
İZMİR: Altıncağ Kültür Mh. Dr. Mustafa Erver Bey Cd. No: 35 35220 Altıncağ / İZMİR Tel: 0232 422 20 21 pbx. Faks: 0232 421 22 68