



TÜRK STANDARDLARI ENSTİTÜSÜ
TÜRK STANDARDLARINA UYGUNLUK BELGESİ
TURKISH STANDARDS INSTITUTION
CERTIFICATE OF CONFORMITY TO TURKISH STANDARDS

Markanın Tanımı Description of the Mark
TSE veya/or  veya/or **T S E**

BELGE NUMARASI

REFERENCE NUMBER OF LICENCE

022438-TSE-05/04

BELGENİN İLK VERİLİŞ TARİHİ

DATE OF FIRST ISSUE OF LICENCE

05.04.2017

BELGENİN SON GEÇERLİLİK TARİHİ

LICENCE VALID UNTIL

05.04.2025

BELGE SAHİBİ KURULUŞUN ADI

NAME OF THE LICENCE HOLDER

TEKNOPANEL ÇATI VE CEPHE PANELLERİ ÜRETİM
SANAYİ VE TİCARET ANONİM ŞİRKETİ

BELGE SAHİBİ KURULUŞUN ADRESİ

ADRESS OF THE LICENCE HOLDER

ORGANİZE SAN.BÖLGE 7.CADDE NO:10 AKDENİZ
MERSİN/TÜRKİYE

ÜRETİM YERİ ADI

NAME OF THE MANUFACTURING PLACE

TEKNOPANEL ÇATI VE CEPHE PANELLERİ ÜRETİM SAN. VE TİC.
A.Ş. SAKARYA ŞUBESİ

ÜRETİM YERİ ADRESİ

ADRESS OF THE MANUFACTURING PLACE

2. ORGANİZE SANAYİ BÖLGESİ 1. CADDE NO: 1 KARGALIHANBABA
KÖYÜ 54300 HENDEK/SAKARYA SAKARYA / TÜRKİYE

İPTAL EDİLEN BELGE NUMARASI (Varsa)

INDICATION OF SUPERSEDED LICENCE (if any)

022438-TSE-05/03

TESCİLLİ TİCARİ MARKASI

REGISTERED TRADE MARK

teknopanel

İLGİLİ TÜRK STANDARDI

RELATED TURKISH STANDARD

TS EN 14509 / 02.04.2014

BELGE KAPSAMI

SCOPE OF LICENCE

SELF-SUPPORTING DOUBLE SKIN METAL FACED INSULATING PANELS

1) Mineral wool insulated roof and wall panels,

THICKNESS: min. 50 mm, max. 150 mm

Mechanical properties for covering metals:

Steel Surfaces: Thickness Tolerance (TS EN 10143): Nominal

– Yield Stress: min. 220 N/mm²

Specification Of Core Material: Mineral Wool (MW)

– Thermal Conductivity (λ) : max 0,042 W/mK

– Density: 100±10 (Kg/m³)

– Dimensional Stability (TS EN 13162) length < %1.0, width < %1.0, thickness < %1.0, Properties of Panels:

– Shear Strength of Core Material (fcv): min 0,05 MPa

– Shear Modulus of Core Material (G): min 2,50 MPa

– Creep Coefficient (φ t , t=100.000 hour)

e-imzalı/e-signed

03.04.2024

On Behalf Of The Head Of Certification Center
ŞİMA AKKAYA

DIRECTOR OF CONSTRUCTION MATERIALS
SECTOR

*This certificate also shows that the production place of the certified product meets the requirements of Institute.

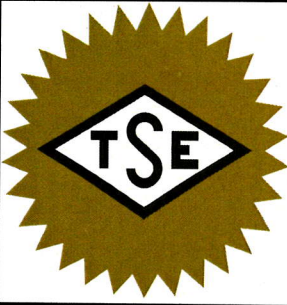
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*TSE CONSTRUCTION MATERIALS SECTOR DIRECTORATE * Address: Necatibey Cad.No:112 06100 Bakanlıklar/ANKARA * Telephone: 0312 416 63 79* Fax: 0312-416 66 17

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(022438-TSE-05/04 nolu belge devamı) : **TEKNOPANEL ÇATI VE CEPHE PANELLERİ ÜRETİM SANAYİ VE TİCARET ANONİM ŞİRKETİ**
İLGİLİ TÜRK STANDARDI (RELATED TURKISH STANDARD) TS EN 14509 / 02.04.2014

- Dead Load (for roofs): max 1,1, Creep Coefficient (Φ_t , $t=2.000$ hour)
- Snow Load (for roofs): max 0,95
- Compressive Stress (σ_{10}): min 0,045 MPa
- Shear strength after long-term loading (fcv long term): $t: 1.000$ hour, min 0,025 MPa $t: 2.000$ hour, min 0,022 MPa $t: 100.000$ hour, min 0,020 MPa
- Cross panel tensile strength (fct) min 0,050 MPa
- Cross panel tensile modulus at elevated temperature: min 0,040 MPa
- Bending Moment Capacity (M_u): Positive Bending min 2,30 kNm/m Negative Bending: min 2,30 kNm/m
- Wrinkling Stress (σ_w) Positive Bending: min 95 MPa Negative Bending: min 95 MPa
- Bending Moment Capacity Stress Over A Central Support: Positive Bending: min 3,0 kNm/m Negative Bending: min 2,75 kNm/m
- Bending moment wrinkling stress over a central support (σ_w) Positive Bending: min 105 MPa Negative Bending: min 115 MPa
- Reaction to Fire Class: A2-s1-d0

2) Polyurethane insulated roof and wall panels,

THICKNESS: min. 40 mm, max. 200 mm

Mechanical properties for covering metals:

Steel Surfaces Steel Faces: Thickness Tolerance (TS EN 10143): Nominal

- Yield Stress: min 220 N/mm².

Specification Of Core Material: Polyurethane Foam (PUR)

- Self adhesive, Thermal Conductivity (λ): max 0,023 W/mK

- Density: 40 $\pm$ 2 (Kg/m³)

- Dimensional Stability (TS EN 13165) Level DS(TH):9,

Properties of Panels:

- Shear Strength of Core Material (fcv): min 0,11 MPa

- Shear Modulus of Core Material (G): min 2,00 MPa

- Creep Coefficient (Φ_t , $t=100.000$ hour) - Dead Load (for roofs): max 1,8, Creep Coefficient (Φ_t , $t=2.000$ hour)

- Snow Load (for roofs): max 1,2

- Compressive Stress (σ_{10}): min 0,085 MPa

- Shear strength after long-term loading (fcv long term): $t: 1.000$ hour, min 0,070 MPa $t: 2.000$ hour, min 0,065 MPa $t: 100.000$ hour, min 0,040 MPa

- Cross panel tensile strength (fct) min 0,020 MPa

- Cross panel tensile modulus at elevated temperature: min 0,080 MPa

- Bending Moment Capacity (M_u) Positive Bending: min 3,0 kNm/m Negative Bending: min 2,0 kNm/m

- Wrinkling Stress (σ_w) Positive Bending: min 140 MPa Negative Bending: min 95 MPa

- Bending Moment Capacity Stress Over A Central Support: Positive Bending: min 3,0 kNm/m Negative Bending: min 1,95 kNm/m

- Bending moment wrinkling stress over a central support (σ_w) Positive Bending: min 140 MPa Negative Bending: min 120 MPa

- Reaction to Fire Class: B-s2-d0 (S.C. 23.05.2023)

e-imzalı/e-signed

03.04.2024

On Behalf Of The Head Of Certification Center
ŞİMA AKKAYA

DIRECTOR OF CONSTRUCTION MATERIALS
SECTOR

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