



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-04/03
BELGENİN İLK VERİLİŞ TARİHİ DATE OF FIRST ISSUE OF LICENCE	13.01.2017
BELGENİN SON GEÇERLİLİK TARİHİ LICENCE VALID UNTIL	13.01.2024
BELGE SAHİBİ KURULUŞUN ADI NAME OF THE LICENCE HOLDER	TEKNOPANEL ÇATI VE CEPHE PANELLERİ ÜRETİM SANAYİ VE TİCARET ANONİM ŞİRKETİ
BELGE SAHİBİ KURULUŞUN ADRESİ ADDRESS 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 SANAYİ VE TİCARET ANONİM ŞİRKETİ
ÜRETİM YERİ ADRESİ ADDRESS OF THE MANUFACTURING PLACE	ORGANİZE SAN.BÖLGE 7.CADDE NO:10 AKDENİZ MERSİN / TÜRKİYE
İPTAL EDİLEN BELGE NUMARASI (Varsa) INDICATION OF SUPERSEDED LICENCE (if any)	022438-TSE-04/02
TESCİLLİ TİCARİ MARKASI REGISTERED TRADE MARK	teknopanel
İLGİLİ TÜRK STANDARDI RELATED TURKISH STANDARD	TS EN 14509 / 02.04.2014
BELGE KAPSAMI SCOPE OF LICENCE	

EN 14509/02.04.2014 SELF-SUPPORTING DOUBLE SKIN METAL FACED INSULATING PANELS-FACTORY
MADE PRODUCTS-SPECIFICATIONS

1. Mineral wool insulated roof and wall panels, Mechanical properties for covering metals : Steel Surfaces: -
Thickness Tolerance (EN 10143) : Nominal- Yield strength: Min. 220 N/mm². Core materials specifications: Mineral
Wool (MW) – Thermal Conductivity (λ) Max. 0,042 W/mK – Density : 100 \pm 10 (Kg/m³) – Dimensional Stability (EN
13162) Length < %1.0 , Width<%1.0, Panels Specifications: -Shear Strength of Core Material (fcv) : Min. 0.06 MPa-
Shear Modulus of Core Material (G) : Min. 4.6 MPa- Creep Coefficient (Φ_t , t=100 000 hours) - for Roofs (Self
Weight): Max. 0.9, Creep Coefficient (Φ_t , t=2000 hours) - for Roofs (Snow Weight): Max. 0.6 –
Compressive Strength (σ_{10}) : Min. 0.045 MPa.- Shear Stress-Long Term Loading (fcv long term): t=1000 hours ,
Min. 0.050 MPa. t= 2000 hours Min. 0.045 MPa, t=100 000 hours, Min. 0.040 MPa- Cross Panel Tensile Strength(fct)

e-imzalı/e-signed

12.01.2023

On Behalf Of The Head Of Certification Center
FATİH KURT

TSE ADANA CERTIFICATION DIRECTOR

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

*This certificate under any circumstances cannot be changed, duplicated partially or in a way that makes it difficult to read and erasure cannot be done.

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BELGE KAPSAMI (022438-TSE-04/03nolu 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

Min. 0.060 MPa.- Cross Panel Tensile Strength at Elevated Temperatures: Min. 0.050 MPa. Bending Moment Capacity and Stiffness (Mu) Positive Bending: Min. 2.30 kNm/m Negative Bending: Min. 2.30 kNm/m- Wrinkling Strength (σ_w): Positive: Min. 95 MPa, Negative Min. 100 MPa- Bending Moment Capacity Over a Central Support: Positive: Min. 3 kNm/m, Negative: Min. 3 kNm/m- Wrinkling Stress Over a Central Support(σ_w): Positive: Min. 120 MPa, Negative: Min. 130 MPa- Reaction to Fire: A2.S1.d0

2. Polyurethane insulated roof and wall panels, Mechanical properties for covering metals : Steel Surfaces: - Thickness Tolerance (EN 10143) : Nominal- Yield strength: Min. 220 N/mm². Core materials specifications: Polyurethane (PUR)- Self adhesive, Thermal Conductivity (λ) Max. 0,022 W/mK – Density : 40 \pm 2 (Kg/m³) – Dimensional Stability (EN 13162) Level DS(TH):9, Panels Specifications: -Shear Strength of Core Material (fcv) : Min. 0.11 MPa- Shear Modulus of Core Material (G) : Min. 2,00 MPa- Compressive Strength(σ_{10}) : Min. 0.095 MPa.- Shear Stress-Long Term Loading (fcv long term): t=1000 hours , Min. 0.070 MPa. t= 2000 hours Min. 0.065 MPa, t=100 000 hours, Min. 0.040 MPa- Cross Panel Tensile Strength(fct) Min. 0.080 MPa.- Cross Panel Tensile Strength at Elevated Temperatures: Min. 0.080 MPa. Bending Moment Capacity and Stiffness (Mu) Positive Bending: Min. 3,50 kNm/m Negative Bending: Min. 2.30 kNm/m- Wrinkling Strength(σ_w) Positive: Min. 140 MPa, Negative Min. 95 MPa- Bending Moment Capacity Over a Central Support: Positive: Min. 4,00 kNm/m, Negative: Min. 3,20 kNm/m- Wrinkling Stress Over a Central Support Positive: Min. 140 MPa, Negative: Min. 130 MPa- Reaction to Fire: B.S2.d0

3. Expanded polystyrene insulated roof and wall panels, Mechanical properties for covering metals : Steel Surfaces: - Thickness Tolerance (EN 10143) : Nominal- Yield strength: Min. 220 N/mm². Core materials specifications: EPS, Thermal Conductivity (λ) Max. 0,038 W/mK – Density : 16 \pm 1 (Kg/m³) – Dimensional Stability (EN 13163-Table 2) DS(70,90)1, Panels Specifications: -Shear Strength of Core Material (fcv) : Min. 0.050 MPa- Shear Modulus of Core Material (G) : Min. 3,00 MPa- Compressive Strength(σ_{10}) : Min. 0.080 MPa.- Shear Stress-Long Term Loading (fcv long term): t=1000 hours , Min. 0.050 MPa. t= 2000 hours Min. 0.045 MPa, t=100 000 hours, Min. 0.040 MPa- Cross Panel Tensile Strength(fct) Min. 0.060 MPa.- Cross Panel Tensile Strength at Elevated Temperatures: Min. 0.050 MPa. Bending Moment Capacity and Stiffness (Mu) (for Roofs) Positive Bending: Min. 3,70 kNm/m Negative Bending: Min. 2.30 kNm/m- Wrinkling Strength: Positive: Min. 150 MPa, Negative Min. 100 MPa- Bending Moment Capacity and Stiffness (Mu) (for Walls) Positive Bending: Min. 4.40 kNm/m Negative Bending: Min. 4.40 kNm/m- Wrinkling Strength(σ_w): Positive: Min. 185 MPa, Negative Min. 185 MPa- Bending Moment Capacity Over a Central Support (for Roofs): Positive: Min. 4,30 kNm/m, Negative: Min. 2,40 kNm/m- Wrinkling Stress Over a Central Support (σ_w) Positive: Min. 170 MPa, Negative: Min. 110 MPa- Bending Moment Capacity Over a Central Support (for Walls): Positive: Min. 3,30 kNm/m, Negative: Min. 3,30 kNm/m- Wrinkling Stress Over a Central Support(σ_w) Positive: Min. 140 MPa, Negative: Min. 140 MPa- Reaction to Fire: E

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