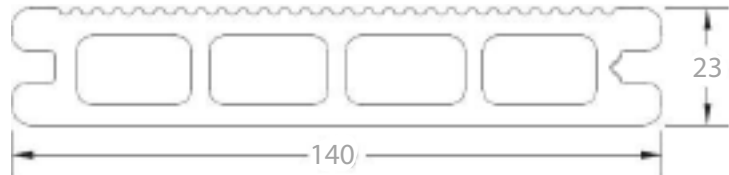


# TECHNICAL FEATURES

TECNODECK® PLUS



TECNODECK® PLUS

DENSITY EN ISO 1183-1 (g/cm <sup>3</sup> )	1,41
WEIGHT (Kg/ml)	2,65 (+/- 5%)
<b>APPEARANCE</b> CLAUSE 6.1 of EN 15534-1:2014 Length of specimen: 1000mm	No visible colour difference
<b>PENDULUM TEST</b> CLAUSE 6.4.2 of EN 15534-1:2014 and CEN/TS 15676:2007 Requirements of EN 15534-4:2014 Pendulum value $\geq$ 36	Pendulum value of face surface:  Length direction: 62 Width direction: 72
<b>FALLING MASS IMPACT RESISTANCE</b> CLAUSE 7.1.2.1 of EN 15534-1:2014 and CEN/TS 15676:2007 Requirements of EN 15534-4:2014 Hollow profiles: None of 10 test specimens shall show a failure with a crack length $\geq$ 10mm or a depth of residual indentation $\geq$ 0,5mm. In case of failure, 10 additional test specimens shall be tested and no failure with a crack length $\geq$ 10mm or a depth of residual indentation $\geq$ 0,5mm shall occur.	None of 10 test specimens showed a crack on face surface. Maximum depth of residual indentation: 0.13mm
SLIP RESISTANCE DIN 51130:2014, SLIP ANGLE 33,9°	R11

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**FLEXURAL PROPERTIES**

CLAUSE 7.3.2 of EN 15534-1:2014  
Requirements of EN 15534-4:2014  
 $F'_{max} \geq 3300$  N  
(arithmetic mean value)  
 $F'_{max} \geq 3000$  N  
(individual values)  
Deflection under a load of 500 N  $\leq$   
2,0mm (arithmetic mean value)  
Deflection under a load of 500 N  $\leq$   
2,5mm (individual values)  
Span: 300mm

Average  $F_{max}$ : 4177N  
Minimum  $F_{max}$ : 4013N  
Average deflection under 500N: 0.52mm  
Maximum deflection under 500N: 0.62mm  
Average bending strength: 28.9MPa  
Average modulus of elasticity: 4120MPa

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**RESISTANCE TO INDENTATION**

CLAUSE 7.5 of EN 15534-1:2014  
Requirements of EN 15534-4:2014  
Load rate: 66 N/S  
Final Load: 2000N

Brinell hardness: 54N/mm<sup>2</sup>  
Rate of elastic recovery: 75%

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**CREEP BEHAVIOR (KNOWN SPAN IN USE)**

CLAUSE 7.4.1 of EN 15534-1:2014  
Requirements of EN 15534-4:2014  
Testing atmosphere: 24+2 °C, 50+5% RH  
Span: 300mm (Manufacture declare)  
Load:1000 N  
Loading duration: 504h  
Recovering duration: 24h  
Requirements of  
EN 15534-4:2014:  
 $\Delta S \leq 10$ mm for arithmetic mean value  
 $\Delta S \leq 13$ mm for individual values  
 $\Delta S_r \leq 5$ mm for arithmetic mean values

$\Delta S$  (arithmetic mean value): 1.24mm  
 $\Delta S$  (Maximum individual value): 1.37mm  
 $\Delta S_r$  (arithmetic mean value): 0.86mm

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**RESISTANCE TO ARTIFICIAL WEATHERING**

CLAUSE 8.1 of EN 15534-1:2014 ,  
Cycle 1 of EN ISO 4892-2:2013  
Duration: 2000h  
Requirements of EN 15534-4:2014:  
 $\Delta L^*$ ,  $\Delta a^*$ ,  $\Delta b^*$  shall be declared.

$\Delta E^*$ : 0.99  
Grey scale: 4-5  
(No declared value)

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**TENSILE STRENGTH PERPENDICULAR TO THE  
PANEL AFTER ARTIFICIAL WEATHERING**

EN 319:1993 and Cycle 1 of EN ISO 4892-  
-2:2013 and client's requirements  
Duration: 2000h  
Test speed: 0.5mm/min

Average value: 1.63MPa  
Failure mode: Adhesive failure  
(See note)

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**MOISTURE RESISTANCE - BOILING TEST**

Clause 8.3.3 of EN 15534-1:2014, EN  
319:1993 and client's requirements  
Requirements of EN 15534-4:2014  
Mean water absorption  $\leq 7\%$   
Individual water absorption  $\leq 9\%$

Water absorption:  
Average value: 0.67%  
Maximum value: 1.03%  
Length change: 0.22%  
Width change: 0.16%  
Thickness change: 1.60%

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**FIRE BEHAVIOUR**

Not tested

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**TENSILE STRENGTH PERPENDICULAR TO THE PANEL AFTER BOILING TEST**

EN 319:1993, clause 8.3.3 of EN 15534-1:2014 and client's requirements  
Test speed: 0.5mm/min

Average value: 1.54MPa  
Failure mode: Adhesive failure  
(See note)

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**MOISTURE RESISTANCE - UNDER CYCLIC CONDITIONS**

Clause 8.3.2 of EN 15534-1:2014  
Requirements of EN 15534-4:2014  
Mean of decrease of bending strength  $\leq$  20%  
Individual decrease of bending strength  $\leq$  30%

Average bending strength: 25.6MPa  
Average modulus of elasticity: 3293MPa  
Mean of decrease of bending strength: 11.4%  
Maximum individual decrease of bending: 15.3%

Average value:  
Water absorption: 0.19%  
Length change: 0.01%  
Width change: 0.11%  
Thickness change: 0.22%

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**TENSILE STRENGTH PERPENDICULAR TO THE PANEL UNDER CYCLIC CONDITIONS**

EN 319:1993, clause 8.3.2 of EN 15534-1:2014 and client's requirements  
Test speed: 0.5mm/min

Average value: 0.69MPa  
Failure mode: Core material

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**\*LINEAR THERMAL EXPANSION**

Clause 9.2 of EN 15534-1:2014  
Temperature range: -20°C to 80°C  
Requirements of EN 15534-4:2014:  
Linear thermal expansion coefficient  $\leq$   $50 \times 10^{-6} \text{K}^{-1}$

Average value of the coefficient of linear thermal expansion:  $36 \times 10^{-6} \text{K}^{-1}$   
(length direction)

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**HEAT REVERSION**

Clause 9.3 of EN 15534-1:2014  
Specimen: 250x137x22mm  
Heating: 100°C, 60min

Average length change: 0.20%

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**\*RESISTANCE AGAINST DISCOLOURING MICRO-FUNGI**

Clause 9.3 of EN 15534-1:2014  
Specimen: 250x137x22mm  
Heating: 100°C, 60min

Rate: 0  
No covering or discoloration visible

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**DEGREE OF CHALKING (APPLICABLE TO COATED PRODUCTS, ONLY)**

Clause 10.1 of EN 15534-1:2014 and ISO 16869:2008(E)

The product is uncoated

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**TENSILE STRENGTH PERPENDICULAR TO THE PANEL**

Clause 10.1 of EN 15534-1:2014 EN 319:1993  
Test speed: 0.5mm/min

Average value: 1.59MPa  
Failure mode: Adhesive failure  
(See note)

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**ABRASION RESISTANCE**

ASTM D4060-14  
Wheel; CS-17  
Load: 1Kg/wheel  
Revolution: 1000r

Wear Index: 31mg/1000r

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**NOTE:**

The Tecnodeck® profiles dimensions have a tolerance of  $\pm$  1mm. These features are only for information purposes, and the manufacturer may change them without previous notice.