



Technical Data Sheet

G-Skate®

G-Skate® is a high pressure laminate adjusted for the use as a surface for skateboards ramps.

The performance of G-Skate® is achieved by the property of the HPL core that gives a high performance of mechanical properties (tensile strength, flexural strength, low coefficient of thermal expansion and high electrical resistance) together with a special surface treatment for high surface performance (high abrasion, a low slippery effect that is suitable for the use of hard and soft skateboard wheels and high impact resistance).

The laminate is produced from different layers of impregnated paper (phenolic for core and melamine for surface) pressed in a high pressure hydraulic press that exposes the impregnated paper layers to high temperatures (up to 150°C) and high pressures (up to 90 Kg/cm²).

EN Classification		CGS, CGF
EN 438 - 4	Thickness Range	4mm - 12mm
	Dimensions	1220x2440mm



Characteristics	Test Method	Test Value	Required Value ⁽⁴⁾
Thickness	EN 438-2 section 5	4.2 mm 6.1 mm 10.2 mm	$4.0 \leq t < 5.0 \text{ mm} : \pm 0.3 \text{ mm}$ $5.0 \leq t < 8.0 \text{ mm} : \pm 0.4 \text{ mm}$ $8.0 \leq t < 12.0 \text{ mm} : \pm 0.5 \text{ mm}$
Density	ISO 1183 - 1	1.4 gr/cm ³	Min. 1.35 gr/cm ³
Wear Resistance ⁽⁶⁾	EN 438-2 section 10 CGS ⁽²⁾ , CGF ⁽²⁾	IP > 15,000 Rev. Wear Value > 20,000 Rev.	Initial Point $\geq$ 150 Rev. Wear Value $\geq$ 350 Rev.
Scratch Resistance	EN 438-2 section 25 CGS, CGF	3 N	Flat Surface Min. 2 N
Impact Resistance	EN 438-2 Big Ball section 21 CGS, CGF $4.0 \leq t < 6.0 \text{ mm}$ $t \geq 6.0 \text{ mm}$	No Crack, 4.5 mm No Crack, 3.5 mm	1400 mm height: no crack, 10 mm Max. 1800 mm height: no crack, 10 mm Max.
Resistance To Crazing (20 Hours @ 80°C)	EN 438-2 section 24 CGS, CGF	Level 4	Min. level 4
Resistance to Dry Heat at 180°C	EN 438-2 section 16 CGS, CGF Natural Surface Finish	Level 5	Min. level 4
Resistance to Water Vapor	EN 438-2 section 14 CGS, CGF Natural Surface Finish	Level 5	Min. Level 4
Resistance to Boiling Water	EN 438-2 section 12 CGS, CGF $4.0 \leq t < 5.0 \text{ mm}$ $t \geq 5.0 \text{ mm}$ Natural Surface Finish	0.6% 0.7% 0.55% 0.65% Level 5	Max. 5% in weight Max. 6% in thickness Max. 2% in weight Max. 2% in thickness Min. Level 4
Resistance to Climatic Shock	EN 438-2 section 19 CGS, CGF Appearance Flexural Strength Index Ds Flexural Modulus Index Dm	Level 5 0.98 0.97	Min. Level 4 Min. 0.95 Min. 0.95

Characteristics	Test Method	Test Value	Required Value ⁽⁴⁾
Resistance To Climatic Changes	Gentas Internal Test ⁽³⁾ Appearance	Level 5	Min. Level 4
Resistance to Cigarette Burn	EN 438-2 section 30 CGS , CGF	Level 4	Min. Level 3
Resistance to Staining	EN 438-2 section 26 CGS , CGF Group 1 + 2 Group 3	Level 5 Level 5 Level 5	Min. level 5 Min. level 4
Flatness	EN 438-2 section 9 CGS , CGF 4.0 ≤ t < 6.0 mm 6.0 ≤ t < 8.0 mm t ≥ 10.0 mm	 1.23 mm 1.46 mm 1.87 mm	 Max. 8 mm / 1 M length Max. 5 mm / 1 M length Max. 3 mm / 1 M length
Light fastness	EN 438-2 section 27 CGS , CGF Grey Scale	 Level 5	 Min. level 4
High Temp. stability 70°C	EN 438-2 section 17 CGS , CGF 4.0 ≤ t ≤ 5.0 mm t ≥ 5.0 mm	 L : 0.22 mm W : 0.35 mm L : 0.18 mm W : 0.23 mm	 L : Max. 0.4 mm W : Max. 0.8 mm L : Max. 0.3 mm W : Max. 0.6 mm
Reaction to Fire ⁽⁵⁾	CGS 4.0 ≤ t < 10.0 mm EN 13501-1 ASTM E 84 – 10 CGF 4.0 ≤ t < 10.0 mm EN 13501-1 ASTM E 84 – 10	 C s2 d0 Class B B s1 d0 Class A	 --- --- --- —
Available Surfaces ⁽⁷⁾	---	1)PURE 2)NATURAL	---

Characteristics	Test Method	Test Value	Required Value
Tensile Strength	EN ISO 527 – 2 CGS	85 Mpa	Min. 60 Mpa
Flexural Strength	EN ISO 178 CGS	114 Mpa	Min. 80 Mpa
Flexural Modulus	EN ISO 178 CGS	16,522 Mpa	Min. 9000 Mpa
Coefficient Of Linear Thermal Expansion (COTE)	ASTM D696-08 ⁽³⁾	6.0×10^{-6} mm / mm °c	—
Thermal Conductivity	ASTM C 518	0.416 W/mK	—
Total Volatile Organic Compound Emission	ASTM D5116	< 0.010 mg/m ² /hr	< 0.5 mg/m ² /hr

Remarks :

(1)Test Values Based on 438-2

(2)CGS = Compact Grade Standard Laminate

CGF = Compact Grade Flame retardant Laminate (Upon request only)

(3)Gentas Internal test procedure for resistance to climatic changes is available upon Request only .

(4)Required Values Based on 438-4

(5)Reaction to fire obtained on standard product (CGS) and on special requested product (CGF)

(6)Wear value can be adjusted according to customer demand

(7)The 2 different available surfaces (PURE & NATURAL) covers different smoothness value and will be produced according to customer demand