



Technical Data Sheet

G-UV+[®]

UV+ compact panels are distinguished from the alternative products by its resistance to UV and weather conditions for exterior applications.

It is treated with a special top layer to strengthen its surface characteristics. With its wide color and size alternatives G-UV+[®] is one step ahead in comparison to the alternative products of the competitors.

EN Classification		EDS, EDF
EN 438-6	Thickness Range	4mm - 20mm
	Dimensions	1300x2800mm / 1300x3050mm other sizes upon request



Characteristics	Test method	Tested Value	Required Value
Thickness	EN 438-2 section 5 4 mm Nominal 6 mm Nominal 8 mm Nominal 10 mm Nominal 13 mm Nominal 18 mm Nominal 22 mm Nominal	4.1 mm 6.2 mm 8.1 mm 10.2 mm 13,4 mm 18,3 mm 22,3 mm	$3.0 \leq t < 5.0 \text{ mm} : \pm 0.3 \text{ mm}$ $5.0 \leq t < 8.0 \text{ mm} : \pm 0.4 \text{ mm}$ $8.0 \leq t < 12.0 \text{ mm} : \pm 0.5 \text{ mm}$ $8.0 \leq t < 12.0 \text{ mm} : \pm 0.5 \text{ mm}$ $12.0 \leq t < 16.0 \text{ mm} : \pm 0.6 \text{ mm}$ $16.0 \leq t < 20.0 \text{ mm} : \pm 0.7 \text{ mm}$ $20.0 \leq t < 25.0 \text{ mm} : \pm 0.8 \text{ mm}$ $25.0 \leq t$: According To Agreement customer / producer
Density	ISO 1183 - 1	1,43	Min. 1.35 gr/cm ³
Wear Resistance	EN 438-2 section 10 EDS / EDF	IP = 235 Rev. Wear Value = 400 Rev.	Initial Point $\geq$ 150 Rev. Wear Value $\geq$ 350 Rev.
Scratch Resistance	EN 438-2 section 25 EDS / EDF	> 3 N	Textured Surface Min. 3 N
Impact Resistance	EN 438-2 Big Ball section 21 EDS / EDF $t \geq 6,0 \text{ mm}$	No Crack, 3,5 mm	1800 mm height : no crack , 10 mm Max.
Surface Crack @ 80°C 20 Hours	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 Dokulu Yüzey Bitirme	Level 5	Min. level 4
Resistance to Water Vapor	EN 438-2 bölüm 14 EDS / EDF Textured Surface Finish	Level 5	Min. Level 4
Resistance to Boiling Water	EN 438-2 section 12 EDS / EDF $t \geq 5,0 \text{ mm}$ Textured Surface Finish	$\Delta W = \%0,5$ $\Delta T = \%0,4$ Level 5	Max. 2% in weight Max. 2% in thickness Min. Level 4
Resistance To Wet Condition (Immersion in water 65°C ; 48 Hours)	EN 438-2 section 15 EDS , EDF $t \geq 5,0 \text{ mm}$	$\Delta W = \%1,0$ Level 5	Max. 5% in weight Color change Min. level 4
Resistance to Staining	EN 438-2 section 26 EDS, EDF Grup 1 + 2 Grup 3	Level 5 Level 5	Min. level 5 Min. level 4

Characteristics	Test method	Tested Value	Required Value
Flatness	EN 438-2 section 9 EDS , EDF $6.0 \leq t \leq 10.0$ mm	1.87 mm	Max. 3 mm / 1 M lenght
Light fastness	EN 438-2 section 27 ⁽¹⁾ EDS , EDF Grey Scale ⁽⁴⁾	Level 5	Min. Level 4
Resistance To UV Light 3000 Hour	EN 438-2 section 28 ⁽²⁾ EDS , EDF Grey Scale ⁽⁴⁾ Contrast Appearance	Level 4 Level 5	Min. Level 3 Min. Level 4
Resistance To Artificial Weathering 3000 Hour	EN 438-2 section 29 ⁽¹⁾ EDS , EDF Grey Scale ⁽⁴⁾ Contrast Appearance	Level 4 Level 5	Min. Level 3 Min. Level 4
Dimensional stability at elevated temperature (70°C ; 90% RH)	EN 438-2 section 17 EDS , EDF $t \geq 5.0$ mm	L = 0.18% W = 0.36%	Boy: Max. %0,3 En: Max. %0,6
Resistance to Climatic Shock	EN 438-2 section 19 EDS , EDF Appearance Flexural Strength Index Ds Flexural Modulus Index Dm	Level 5 0.98 0.97	Min. Level 4 Min. 0,95 Min. 0,95
Resistance To Climatic Changes	Gentas Internal Test ⁽⁵⁾ Appearance	Level 5	Min. Level 4
Flexural Strength	EN ISO 178 EDS , EDF	110.7 Mpa	Min. 80 Mpa
Flexural Modulus	EN ISO 178 EDS , EDF	9834 MPa	Min. 9000 Mpa
Tensile Strength	EN ISO 527 – 2 EDS , EDF	85 Mpa	Min. 60 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 ⁽⁶⁾	ASTM D5116	< 0.010 mg/m ² /hr	< 0,5 mg/m ² /saat

Characteristics	Test method	Tested Value	Required Value
Fire Classification ⁽⁷⁾	EN 13501-1		---
	4,0 ≤ t < 5,9 mm	B S2 d0	---
	6,0 ≤ t < 10,0 mm	B S1 d0 ERA – 14 – 095 22/10/2014	---
	ASTM E 84 – 10	Class A	
	BS 476 Part 7 : 1997	Class 1	
	DIN 5510-2:2009-05		
	0,8 mm	S4 ; SR2 ; ST2	
	1,2 mm	S2 ; SR2 ; St2	
Color Difference ⁽⁸⁾	ISO 7724	Uni Colors : ΔE ≤ 1,0	---
	Gentas Internal Standard ⁽⁹⁾	Printed Designs : No Visual Difference	---

@ EGS = Exterior Use Grade Standard Laminate

@ EDS = Exterior Use Heavy Duty Or Severe Use Grade Standard Laminate

@ Required Values Based on 438-6

Remarks :

(1)Based on test method EN ISO 4892-1 and 4892-2 .

(2)Based on test method EN ISO 4892-3 .

(3)COTE test is conducted between +30°C To -30°C .

(4)Grey Scale assessment according to EN 20105-A02 .

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

(6)Test report available upon request

(7)Upon Customer request .

(8)The Color Difference refers to the color deviation from the master sample as agreed between Gentas and the customer per batch size (Refer to project batch size) .

(9)Gentas internal test method for evaluation of color difference in printed designs (Wood Grain / Abstract) .

Cleaning Instructions :

- 1) The following cleaning instruction is suitable for periodic cleaning / maintaining and for cleaning after installation (Adhesive residue ets.) .
- 2) Use Non abrasive cloth (Cotton Based / Vileda® Microclean Cloth) soaked with water / regular cleaning soap 5% solution (any household soap is suitable for this purpose) / Antistatic Cleaning + Care Agent for Plastics (AKU) from Burnus® . All mechanical cleaning system , e.g. rotating brushes / wiper blades etc. , are unsuitable for the surface and may cause a permanent damage to the decorative surface .
- 3) Clean the surface with Non abrasive clothe soaked with regular water and leave the wet surface for 5 minutes in order to dry .
- 4) After 5 minutes soak the wet cloth with the soap solution / Cleaning + Care Agent for Plastics (AKU) from Burnus® and clean the surface without damaging the surface .
- 5) Leave the cleaned surface for 5 minutes in order to dry .
- 6) Clean the surface again with wet cloth .
- 7) The following chemicals Should Not Be Used for Cleaning the G-Com UV+ Surface :
 - 7.1 Hard base solutions : Ammonium Hydroxide , Sodium Hydroxide , Sodium Hypochlorite , Sodium Chloride .
 - 7.2 Hard acidic solutions : Hydrochloric Acid , Sulphuric Acid , Nitric Acid , Phosphoric Acid , Acetic Acid , Hydrofluoric Acid , Chromic Acid , Formaldehyde , Formic Acid , Phenol .
 - 7.3 Reagents : Silver Nitrate , Potassium Permanganate , Ferric (III) Chloride , Copper Sulphate , Iodine Tincture .
 - 7.4 Organic solvents : Furfural , Acetone , Ethyl alcohol , Methyl Ethyl Ketone , Dichloromethane , Ethylacetate , n – Butyl Acetate , n – Hexane , Methyl Alcohol , Methyl Isobutyl Ketone , TetraHydroFurane (THF) , Toluene , Tri Chloro Ethylene , Xylene , Methyl Violet 2B .
 - 7.5 Organic compounds : Mono Ethylene Glycol (MEG) , Di Ethylene Glycol (DEG)



WATER
REPELLANT



DRY HEAT
RESISTANCE



SCRATCH &
ABRASION
RESISTANCE



LOW LIGHT
REFLECTIVITY



HEAT & COLD
RESISTANCE



ULTRA COLOR
INTENSITY



IMPACT
RESISTANCE