1.Storage

1. Keep strapped and protected from rain, snow, dirt and direct sunlight and other heat sources.

2. Store horizontally and symmetrically stacked (maximum of 55 units per pallet). Ensure good ventilation.

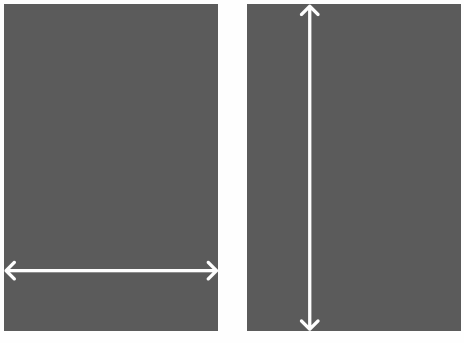
3. Recommended storage conditions:
   - 20-35 degrees Celsius
   - 45% - 65% humidity

4. Use the FIFO method (first in - first out).

5. As the plates can change dimension, depending on the weather, they must be acclimated 72 hours before mounting/processing.

6. Please note the following tolerances for 6 mm facade panels of compact laminate according to the EN 438:

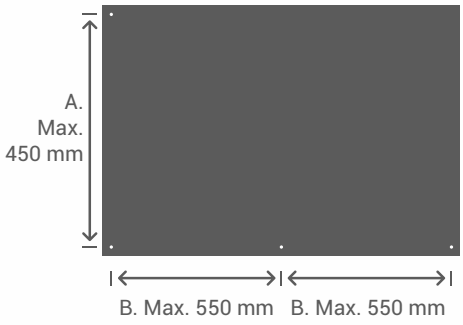
Length / width	+ 10mm / -0mm
Thickness	+/- 0.4mm
Curvature	5.0 mm / m
Right angle	1.5 mm / m



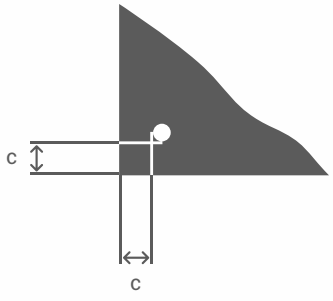
2.Drilling

1. The maximum distance between the screws on plates with plate thickness of 6 mm:

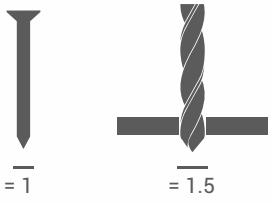
   A) (at 2 fittings): 450 mm
   B) (at 3 or more fittings): 550 mm



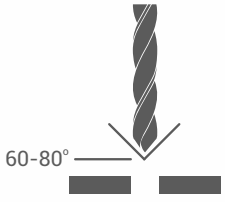
2. The distance between the edge of the plate and the edge of the screw hole shall be minimum 20 mm and maximum 60 mm on plates with plate thickness of 6 mm (C).



3. The drill thickness shall be 1.5 times the diameter of the drill, so that the plates can move.



4. Use metal drill.

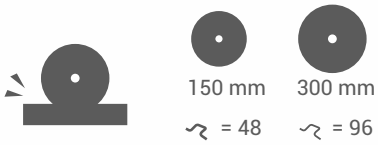


Please Note – About Handling

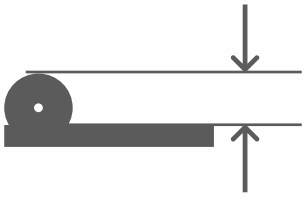
1. It is recommended to wear protective gloves and goggles while handling and processing.
2. Do not remove the protective film from the facade panels' surfaces before or during the processing. Remove the protective film on both sides of the facade panels simultaneously.
3. Lift the panels straight up and do not haul the plates against each other.
4. Panels should be transported, when they are used.

3.Cutting

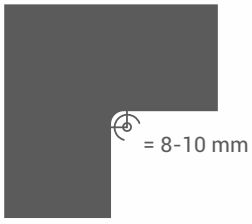
1. Use the saw blade carbide.



2. The saw settings must be fine cuts.



3. Cut-outs at corners rounded to approximately Ø9.



4. The edges can advantageously be deburred with sandpaper or a file.

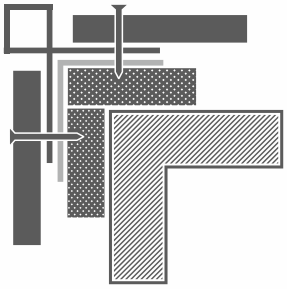
5. Grit Abrasive Paper 100

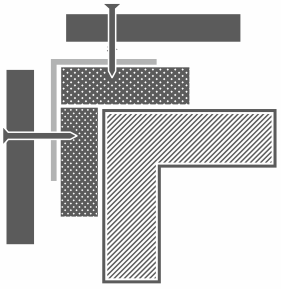
Please Note – About Handling

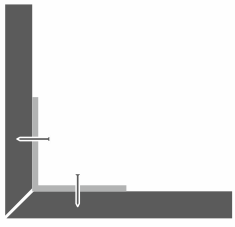
1. It is recommended to wear protective gloves and goggles while handling and processing.
2. Do not remove the protective film from the facade panels' surfaces before or during the processing. Remove the protective film on both sides of the facade panels simultaneously.
3. Lift the panels straight up and do not haul the plates against each other.
4. Panels should be transported, when they are used.

4.Corners

1. Corner shall be completed with a corner profile of aluminum.







Corner with 45° angle

Open Corner

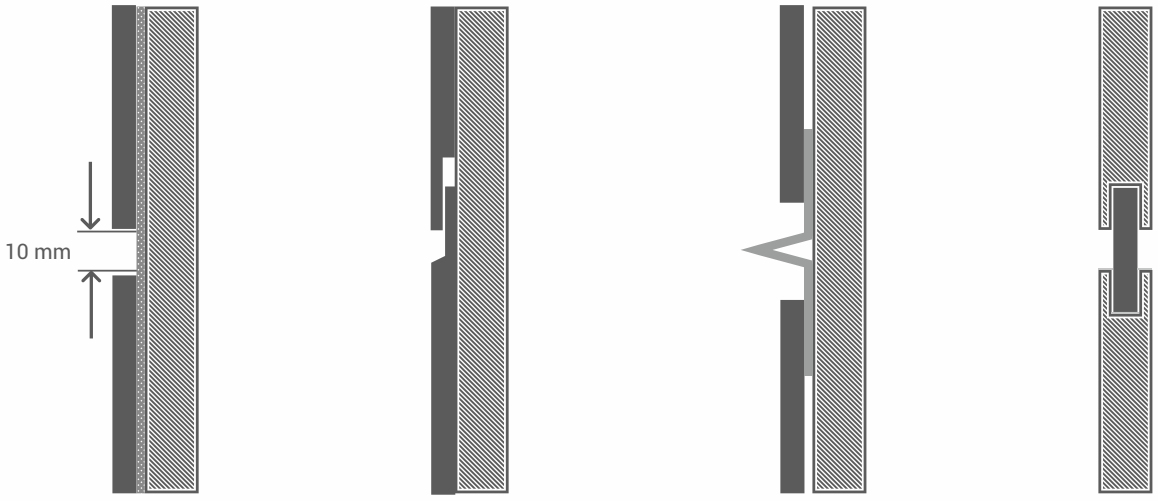
Open Corner

Corner Profile

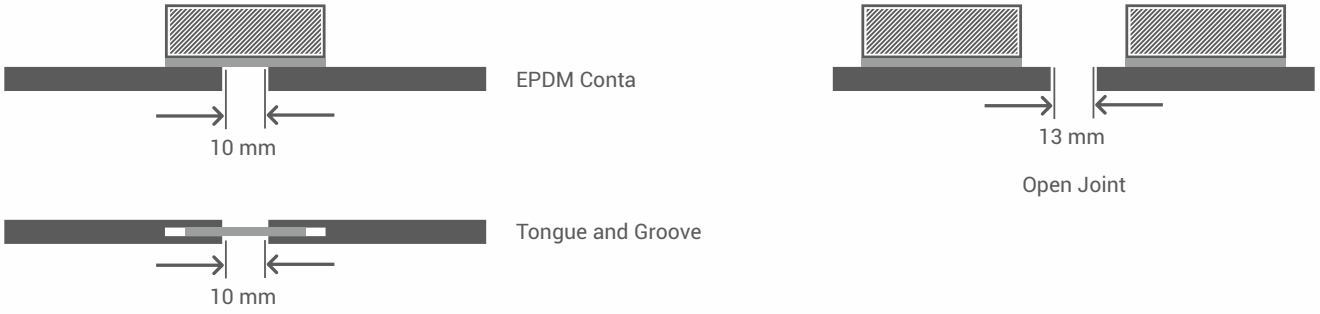
Corner Profile

3. Panel connections at the corners of the structures can be made as both open and closed joints.
The panels are 8mm thick, sufficient to secure metal corner profiles with screws or rivets in corner connections. Projects where the corner profile is used are projects where the smooth surface is desired.

5.Finish Details



1. JOINTS; Panels should be assembled in a way that they can move 2.5 mm at 1 meter both longitudinally and longitudinally. By this means, an appropriate space is provided so that panels can move around each other. The minimum width of the joints should be at least half of the panel thickness. In addition joints must be capable of providing the necessary ventilation and drainage to prevent the damage to be caused by the retention of moisture. In joints wider than 10 mm, a thin grid system should be applied behind the joint in order to prevent the flies and pests that can pass to the behind the flooring.



2. OPEN JOINTS; Panel connections may be open or filled. A Particular attention should be paid against the possibility of infiltrating rain and moisture to vertical and horizontal joints used in open joint systems. When the insulation material is moistened, insulating value drops down below the required standards. Therefore, waterproof insulating material and accordingly the sub-construction is required.

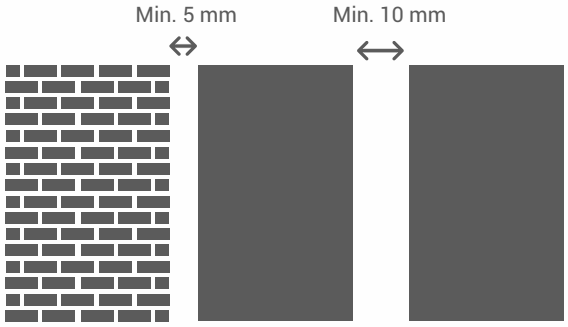
   CLOSED JOINTS; Tongue-and-groove and halved joints are closed joints.

   JOINT PROFILES; joints can be closed with fixed metal, plastic or rubber profiles. Profile must be assembled in a way that will not avoid the movement of the panels and will work by sliding.

   MASTIC JOINTS; Mastic joints avoid the movement of the panels and cause too much dirt on panel edges. These are definitely not recommended after such joint filling applications.

6.Mounting

1. If the panel thickness is 10 mm it is suitable for a distance of 10 mm between 2 panels. This distance depends on the panel thickness.



Please Note – About Handling

1. It is recommended to wear protective gloves and goggles while handling and processing.
2. Do not remove the protective film from the facade panels' surfaces before or during the processing. Remove the protective film on both sides of the facade panels simultaneously.
3. Lift the panels straight up and do not haul the plates against each other.
4. Panels should be transported, when they are used.

7.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) / 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 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 clot

7. Should not be used for cleaning the 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)

8.Technical Data Sheet

G-Ext® EXTERIOR DECORATIVE PANELS

G-Ext® shows superior endurance against strong weather conditions; direct sun light, rain, acid rain, wind and friction. The special coating and curing technology ensures the UV resistance and provides colour stabilization.
G-Ext® always one step ahead from equivalent products of the competitors.

G-Ext® decorative panels has compliance certificate in accordance with European Standards. Therefore; they comply with entire product and environmental regulations. Besides its superior endurance, it does not contain hazardous materials and it is environment friendly.

G-Ext® decorative panels can be produced in B1 class which has extra fire-resistance feature if requested. G-Ext® decorative panels have 10 years of guarantee and an extensive life span, provided that conditions specified in general specification are followed.

G-Ext® is used for all types of exterior cladding on buildings and structures such as residents, workplaces, business centers, banks, public buildings, sport halls, stadiums, airports and hospitals as well as balcony coatings.

EN Classification		EDS, EDF
EN 438 6/7	Thickness Range	4 mm - 20 mm
	Dimensions	1300x2800 mm / 1300x3050 mm Please contact the customer representative for your different size requests.

Surface of G-Ext® panels is enhanced by using electron beam curing (EBC) technology which is used by limited number of companies around the world.

Characteristics	Test Method	Tested Value	Required Value
Thickness	EN 438-2 Section 5 4 mm Normal 6 mm Normal 8 mm Normal 10 mm Normal 13 mm Normal 18 mm Normal 22 mm Normal	According to Required Thickness 4.1 mm 6.2 mm 8.1 mm 10.2 mm 13.4 mm 18.3 mm 22.3 mm	 3.0 ≤ t < 5.0 mm : ± 0.3 mm 5.0 ≤ t < 8.0 mm : ± 0.4 mm 8.0 ≤ t < 12.0 mm : ± 0.5 mm 8.0 ≤ t < 12.0 mm : ± 0.5 mm 12.0 ≤ t < 16.0 mm : ± 0.6 mm 16.0 ≤ t < 20.0 mm : ± 0.7 mm 20.0 ≤ t < 25.0 mm : ± 0.8 mm 25.0 ≤ t : contract, Customer / By manufacturer
Surface Quality	EN 438-2 Section 4 Dirt, Punctures and Similar Surface Defects Fiber, Feather and Scratches	 ≤ 2 mm^2/m^2 ≤ 20 mm/m^2	 ≤ 2 mm^2/m^2 ≤ 20 mm/m^2
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.	İlk Nokta ≥ 150 Rev. Wear Value ≥ 350 Rev.
Scratch Resistance	EN 438-2 Section 25 EDS/EDF	> 6 N	Textured Surface Min. 3 N
Impact Resistance	EN 438-2 Big Ball Section 21 EDS/EDF t ≥ 6.0 mm	 No Crack, 3.5 mm	 1800 mm Height: No Crack, 10 mm Maks.
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 Textured Surface Finish	 Level 5	 Min. Level 4
Resistance to Water Vapor	EN 438-2 Section14 EDS/EDF Textured Surface Finish	 Level 5	 Min. Level 4

Characteristics	Test Method	Tested Value	Required Value
Resistance to Boiling Water	EN 438-2 Section 12 EDS/EDF t ≥ 5.0 mm Textured Surface Finish	 ΔW = 0.5% ΔT = 0.4% Level 5	 Maks. %2 Weight Maks. %2 Thickness Min. Level 4
Resistance To Wet Condition (Immersion in water 65°c; 48 Hours)	EN 438-2 Section 15 EDS/EDF t ≥ 5.0 mm	 ΔW = 1.0% Level 5	 Max. 5% in Weight Color Change Min. Level 4
Resistance to Staining	EN 438-2 26 EDS/EDF Group 1 + 2 Group 3	 Level 5 Level 5	 Min. Level 5 Min. Level 4
Flatness	EN 438-2 Section 9 EDS/EDF 6.0 ≤ t ≤ 10.0 mm	 1.87 mm	 Max. 3 mm / 1 M Length
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

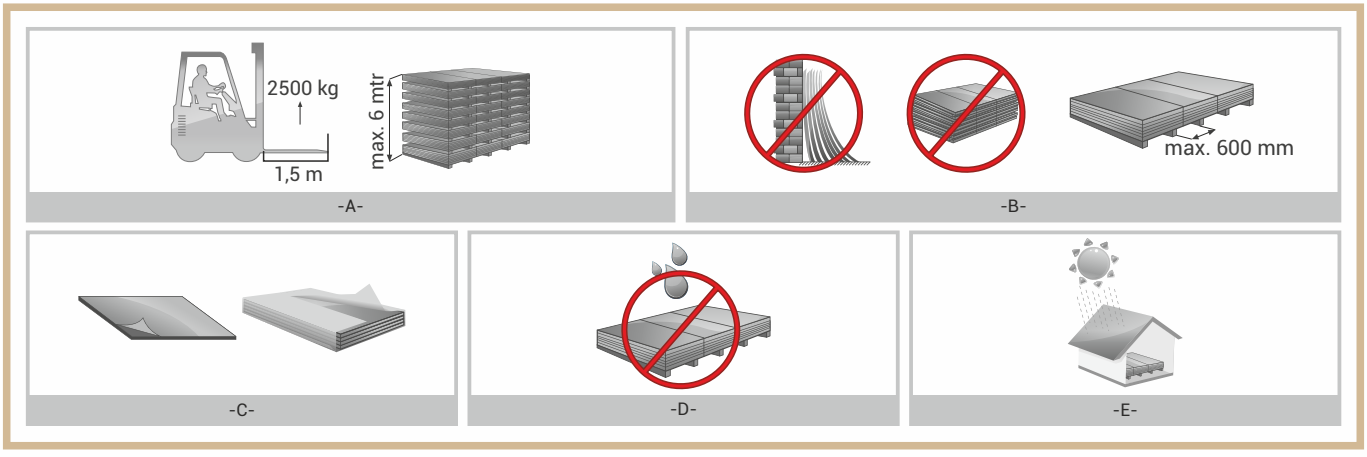
Characteristics	Test Method	Tested Value	Required Value
Dimensional Stability at Elevated Temperature (70°c; 90% RH)	EN 438-2 Section 17 EDS/EDF t ≥ 5.0 mm	 L = 0.18% W = 0.36%	 L : Maks %0.3 W : Maks. %0.6
Resistance to Climatic Shock	EN 438-2 Section 19 EDS/EDF Appearance Flexural Strength Index Ds 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 x 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

Characteristics	Test Method	Tested Value	Required Value
Fire Classification[7]	EN 13501-1 4.0 ≤ t < 5.9 mm 6.0 ≤ t < 10.0 mm ASTM E 84 – 10 06 mm - 10 mm BS 476 Part 7 : 1997 DIN 5510-2:2009-05 0.8 mm 1.2 mm	 B S2 d0 B S1 d0 ERA - 14 - 095 22.10.2014 Class A Class 1 S4 ; SR2 ; ST2 S2 ; SR2 ; St2	– – –
Color Difference[8]	ISO 7724 Gentas Internal Standard[9]	Uni Colors: ΔE ≤ 1.0 Printed Designs: No Visual Difference	– –
Resistance to SO_2[6]	DIN 50018 50 Cycles	4 – 5 Grey Scale	–

Instructions:

(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) "Acid Rain" damp heat alternating atmosphere , 50 Cycles (Test Report 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).

9.Shipping and Storage Conditions for Compact Panels



Handling and Storage Conditions

A. Mind the weight and the height whilst handling.
B. During storage the sheets must be parallel to the ground and aligned with each other. Do not store vertically.
C. Remove the metal strip from the pallets which are taken to a flat surface. Do not remove the protection film from the panels before installing them. Take out the foil maximum within 24 hours after installation.
D. Store the panels in dry and clean conditions. Keep off the humid environments.
E. Protect the panels from the sun and UV rays. Store them in closed areas. It is definitely not enough to store them in open air by streching a tarp on.

Please Be Careful About the Following Topics

a. Mind there is no water or dust between them whilst handling. // **b.** Be careful not to scrape each other or another substance while handling. // **c.** After the pallets are opened, reverse the panel which is on the top and put a heavy and flat substance on it.