What Max Exterior Can Do

Max Exterior panels are duromer high-pressure laminates (HPL) in accordance with EN 438-6 Type EDF that are produced in lamination presses under great pressure and high temperature. Double-hardened acrylic PUR resins provide extremely effective weather protection that is particularly suitable for longlasting balconies and facade claddings.

PROPERTIES*:

- Weather resistant to EN ISO 4892-2
- lightfast acc. to EN ISO 4892-3
- Double hardened
- Scratch resistant
- Solvent resistant
- Hail resistant
- Easy to clean
- Impact resistant EN ISO 178
- Suitable for all exterior applications
- Decorative
- Self-supporting
- Bending resistant EN ISO 178
- Frost resistant -80°C to 180°C
- Heat resistant -80°C to 180°C
- Easy to install

*STANDARD- AND ACTUAL-VALUES YOU WILL FIND ON OUR WEBSITE WWW.FUNDERMAX.AT.

EXTREMELY WEATHER RESISTANT

OPTIMAL LIGHT-FASTNESS

DOUBLE HARDENED

SCRATCH RESISTANT

SOLVENT RESISTANT

EASY TO CLEAN

IMPACT RESISTANT

EASY TO INSTALL

STRUCTURE MAX EXTERIOR PANEL

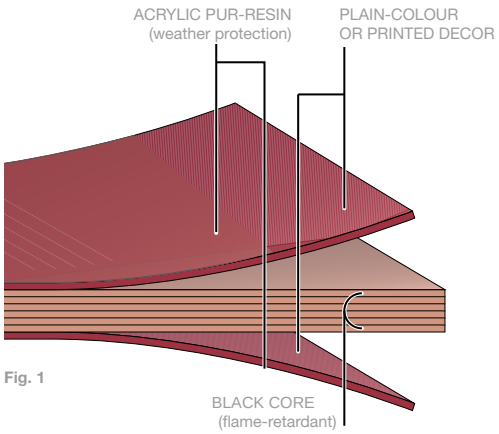

Fig. 1

PHYSICAL DATA

PROPERTIES	TEST METHOD	ASSESSMENT	STANDARD VALUE	ACTUAL VALUE
LIGHT-FASTNESS AND WEATHER RESISTANCE (SURFACE NT)				
Artificial weathering*	EN ISO 4892-2 3000 h	EN 20105-A02 greyscale	≥ 3	4-5

PROPERTIES	TEST METHOD	UNIT OF MEASUREMENT	STANDARD VALUE	ACTUAL VALUE
MECHANICAL PROPERTIES				
Apparent density	EN ISO 1183-1	g/cm³	≥ 1.35	≥ 1.35
Flexural strength	EN ISO 178	MPa	≥ 80	≥ 80
Modulus of elasticity	EN ISO 178	MPa	≥ 9.000	≥ 9.000
Coefficient of thermal expansion	DIN 52328	1/K		18 x 10 $^{-6}$
Thermal conductivity		W/mK		0.3
Water vapour diffusion resistance				ca. 17.200 µ
FIRE BEHAVIOUR				
Europe	EN 13501-1	MA39-VFA Vienna	Euroclass B-s2, d0 for 6 - 13 mm**	
Switzerland		EMPA Dübendorf	Fire classification 5.3 for 6 - 13 mm	
France	NFP 92501	LNE	M1 for 2 - 10 mm	
Spain	UNE 23727-90	LICOF	M1 for 6 - 10 mm	
PERMITS				
Facade permit Germany		Institut für Bautechnik Berlin	6, 8, 10 mm, Approval-No. Z-10.3-712	
ETB guidelines for building components which safeguard against falls, June 1985. Balcony railings.		TU Hannover	Passed (depending on building regulation and railing construction 6, 8 or 10 mm panel thickness)	
Avis technique Frankreich		CSTB	6, 8, 10 and 13 mm, wood- and metal subconstruction Avis Technique n° 2/14-1623 Avis Technique n° 2/16-1753 Avis Technique n° 2/12-1505* V1 Avis Technique n° 2/16-1749 Avis Technique n° 2/13-1565* V1 Avis Technique n° 2/16-1716	
BBA		British Board of Agreement	12/4927	

Table 1

FOR THE SURFACE NT APPLIES A GLOSS DEGREE TOLERANCE OF +/- 5 GE MEASURED AT 60°

*DECOR AUTN: ARTIFICIAL WEATHERING EN ISO 4892-2: 1500H; ASSESSMENT ACCORDING GREYSCALE EN 20105-A02: 2
*DECOR INDIVIDUALDECOR: ARTIFICIAL WEATHERING EN ISO 4892-2: 3000H; ASSESSMENT ACCORDING GREYSCALE EN 20105-A02: 3
ALL THE RESPECTIVE CURRENT CERTIFICATES AND APPROVALS ARE AVAILABLE IN THE DOWNLOAD SECTION AT WWW.FUNDERMAX.AT.
PLEASE OBSERVE ALL VALID BUILDING REGULATIONS. WE WILL ASSUME NO RESPONSIBILITY IN THIS REGARD.

**EXCEPTION IS PODIO-BALCONY FLOOR PANEL; EUROCLASS B-s2,d0 FOR 6 - 20 MM

Resource and Environmentally Friendly Facade Panels

We are specialists in the processing of renewable raw materia als – and have been for over 100 years. Our production cycles are closed, production waste is either recycled back into the production process or used to generate energy in our green energy district heating plants. This works so well, that today as a private company we provide district heating to over 3,000 households.

QUALITY MANAGEMENT SYSTEMS

FunderMax has oriented its production facilities and processes on internationally recognized standards such as ISO 9001, ISO 14001, OHSAS 18001 and EN 16001. This fact gives all customers the assurance that they have in their hands a high-quality construction product. And in its procurement of raw materials and intermediate products, FunderMax orients itself on up-to-date standards such as FSC® and PEFC*.

SUSTAINABLE PRODUCTION

Max Exterior is made from natural fibre panels — around 65%, by weight — consisting largely of wood that has been processed into “kraft papers”. This wood is a by-product of sawn lumber production or of sawmills. We source these raw materials from vendors certified according to the standards FSC® or PEFC. These standards ensure that the wood is produced in compliance with internationally applicable rules for sustainable forestry.

The kraft papers are impregnated with synthetic resins in impregnation facilities, dried, and pressed into durable, moisture-resistant panels under high pressure and heat. These panels do not contain organic halogen (or chlorine, fluorine, bromine, etc.) compounds such as are found in greenhouse gases or PVC. They contain neither asbestos nor wood protection agents (fungicides, pesticides, etc.) and are free of sulphur, mercury and cadmium.

The exhaust air removed from the drying process is treated using a process of regenerative thermal oxidation, with the resulting heat being fed back into said drying process. For its installation of this efficient exhaust air treatment, FunderMax was awarded the “Klima:aktiv” award for best practices by the Austrian Energy Agency and the Austrian Federal Ministry of the Environment. This avoids CO_2 emissions of ca. 10,000 tons annually at the production site.

*PLEASE FIND FURTHER INFORMATION AT WWW.FUNDERMAX.AT.

Recommondations for producing outdoor-furniture

APPLICATION
Max Exterior panels are often used as table tops, benches or furniture in outdoor applications.

RESISTANCE
Due to their pore-free surfaces and excellent chemical resistance, Max Exterior panels are very easy to clean. Further advantages of these panels include their high scratch, tear and impact resistance.

STORAGE
Neither tables nor table panels should be stacked as the heavy stack weight can lead to damage. Further the outdoor-furniture should not be exposed to standing water.

PANEL THICKNESS
The thickness of Max Exterior (table) panels should either be 12 mm, or at least 10 mm, in order to allow enough depth for screwing. Both panel thickness and mounting distances as well as expected load platforms, are directly linked and must be measured correspondingly.

FASTENING
The fastening of Max Exterior F-quality panels can be carried out in a number of different ways, however, due to the material characteristics, a linear free expansion must be considered during the mounting process. The panels can be mounted mechanically using screws or using glues. The screws can either be directly screwed into the panels or inserted using sleeve screws with internal and external threads (e.g. Rampa inserts). For this, the panels must be pre-drilled for to establish a thread. Fastening the panels using screws takes place from the underside of the material. Therefore, metric thread and flat-head screws are suitable. Washers can be used if required.

Due to Max Exterior panels material characteristics, the fixing points must be sliding points.

SLIDING POINT
The drill diameter in the substructure must be bigger than that of the mounting material depending on the corresponding Compact expansion room. The screw head should always cover the borehole. The mounting material will be attached in such a way that the panels are free to move. Screws should not be too tightly fastened. The middle point of the drilling in the substructure should correspond with the middle point of the drilling in the Max Exterior F-quality panel.

Drill with centering sleeve! The fastening material should be attached from the middle of the panel outwards.

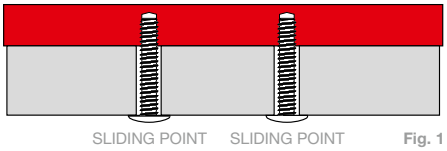

Fig. 1

Cleaning order for Max Exterior

FIRST CLEANING STEP
Clean the surface just with pure hot water and use a soft sponge – (DO NOT use the abrasive „green“ side of the sponge), use a soft cloth or a soft brush (e.g. nylon brush).

SECOND CLEANING STEP
If stains cannot be removed common household cleaners without abrasives e.g. dish detergent (Palmolive, Fairy), window cleaner (Ajax, Frosch) may be used. Subsequently do the final cleaning.

THIRD CLEANING STEP
If the contamination is not removable, you can use a solution of soft soap - water (1:3). Depending on the degree of pollution leave it on the surface for a couple of minutes. Subsequently do the final cleaning.

FOURTH CLEANING STEP
Same as cleaning step 1, but additionally you may use organic solvents (e.g. acetone, alcohol, turpentine, thinner). For persistent stains, try to clean mechanically Caution: Avoid scratching, use plastic or wooden spatula. Subsequently do the final cleaning.

FIFTH CLEANING STEP
(for adhesives, varnish, sealants, silicone residues) Rub off the surface with a soft cloth or a soft sponge dry. If contaminants cannot be removed, use sili-cone remover (for example from Molto) or ask the adhesive manufacturer for the ideal cleaning agents.
Caution: Cured 2K adhesives, coatings, foams and ealing means **cannot** be removed.

SIXTH CLEANING STEP
Same as cleaning step 1, but additionally liquid cleaner with polishing chalk (Cif, ATA) may be used. Do this procedure only occasionally! For persistant limescale acidic cleaning agents may be used (for example, 10% acetic acid or citric acid). Subsequently do the final cleaning.

FINAL CLEANING
Remove all traces of detergent to avoid streaking. Finally, wash with pure water. Wipe the surface dry with an absorbent cloth or paper towel.
When cleaning with solvent: Observe the accident prevention regulations! Open windows! No open flame!

Fig. 3