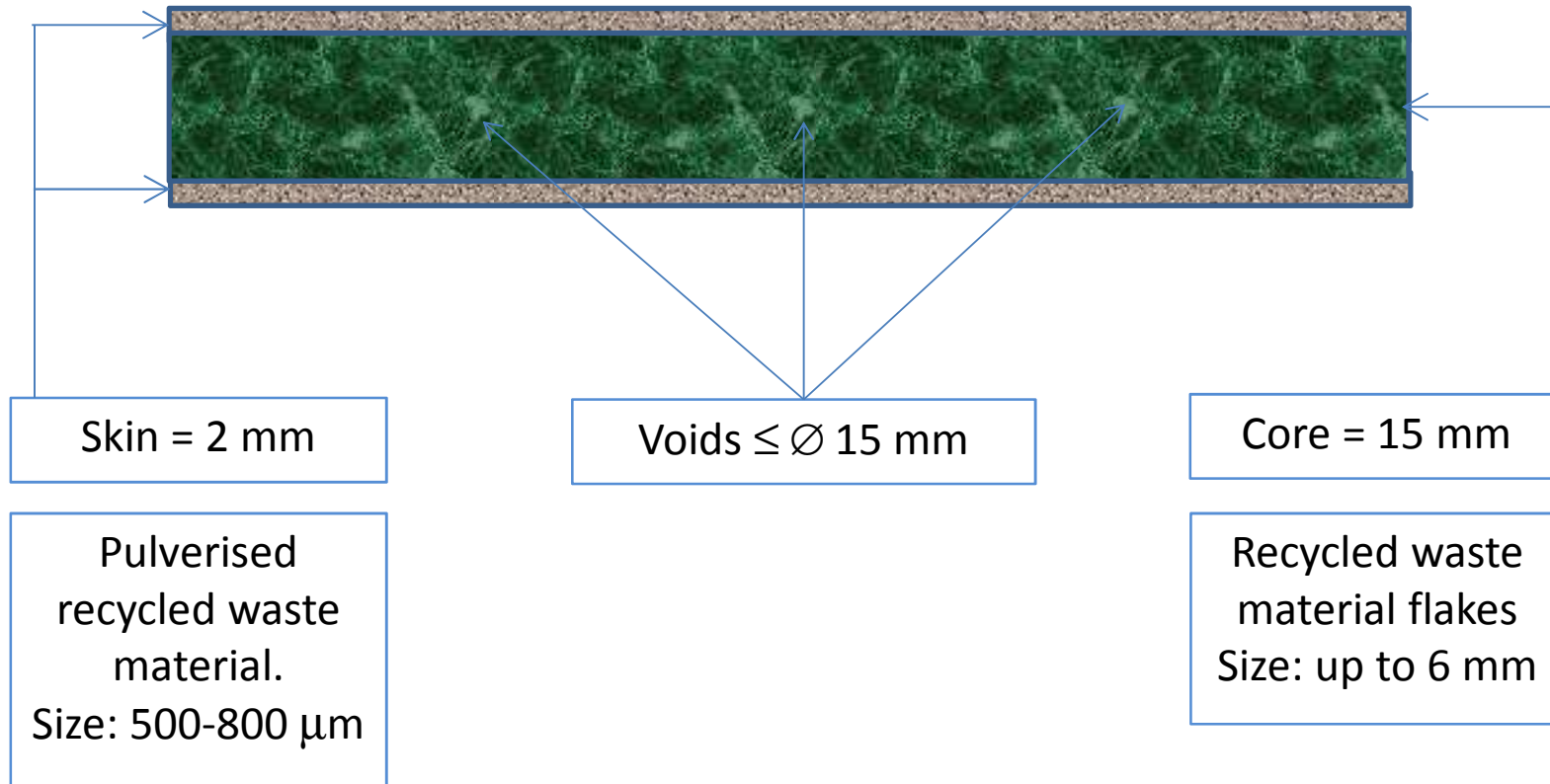


General Technical Information

Eco-plaat

1. Product description

Phase structure: amorphous/crystalline



1. The physical properties:

	Standard (not on stock)		European standard	Tolerances
	[ft]	[mm]	[mm]	[%]
Length	8	2440	2400	0,2
Width	4	1220	1200	0,2
Thickness	0,006	19	19	10
	Standard	European standard		Tolerances
	[kg]	[kg]		[%]
Weight	30	29		15
	Eco-plaat		Plywood	
	[kg/m ³]		[kg/m ³]	
Density	510-590		600-650	
	[dyn/cm]			
Surface tension	26-40			

1. The physical properties cont'd:

T_g	T_p	E	G	K	ν	R_r	ϵ_r	U	U_k
°C	°C	GPa	GPa	GPa		MPa	%	kJ/m ²	kJ/m ²
- 85	133	1,23	0,43	2,3	0,47	23,3	300	b.p.	b.p.

T_g - glassy temperature

T_p - flow temperature

E - coefficient of direct elasticity (Young's modulus)

G - coefficient of rigidity (Kirchhoff's modulus)

K - modulus of volume elasticity (Helmholtz's)

ν - Poisson ratio

R_r - (ultimate) tensile strength

ϵ_r - ultimate elongation

U - impact strength

U_k - notched impact strength

b.p. – no fracture

Note: as the material is heterogeneous properties can vary depending on the location of the pannel

2. Usable information:

- Water absorbability : up to 20% depends on number (size) of voids (no influence on overall dimensions). Water fills voids increasing weight but also improves mechanical properties
- Non resistant for ultraviolet radiation ageing
- Painting: General rule is that paint surface tension must be lower than Eco-plaat surface tension. Painted surface should be cleaned and degreased. We don't recommend painting as Eco-plaat is mostly made from PE material which is not suitable for painting.
- Machining: waterjet, laser or typical machines for wood or metal.
Tools: HSS or cemented carbides (tungsten carbide) with strictly defined tool rake (angle). Cutting , milling and drilling tools parameters see below:

	Saw blade	Milling	Drilling
Tool angle	0-10	0-15	3-5
Clearance angle	10-15	5-15	10-15
Cutting speed	1000-3500 m/min	up to 1000 m/min	50-100 m/min
Number of teeth	24-80		
Feed/tooth		up to 0,5	
Feed/revolution			0,1-0,5
Poin angle			60-90
Helix angle		0-40	12-16