

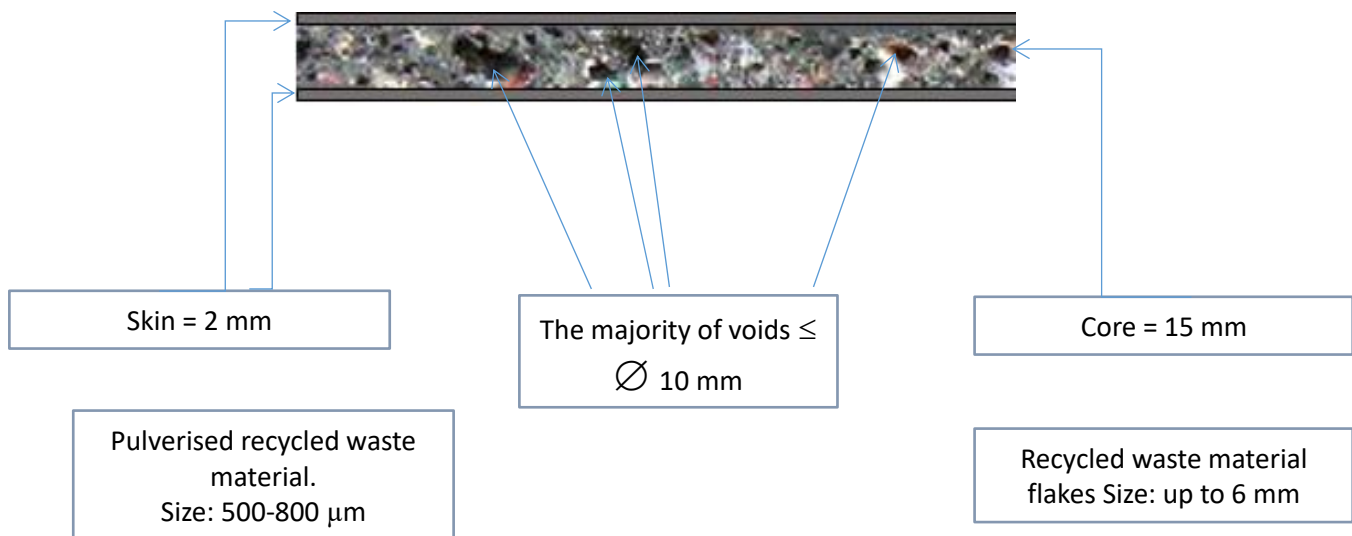
EKOply – Standard

General Technical Information



Product description

Phase structure: amorphous/crystalline



The physical properties:

	UK standard		European standard	Tolerances
	[ft]	[mm]	[mm]	[%]
Length	8	2440	2400	0.2
Width	4	1220	1200	0.2
Thickness	0.006	19	19	10
	[kg]		[kg]	[%]
Weight	33 approx.		29	15

Coefficient of Expansion

Expansion gaps are required according to conditions and we advise oversizing screw holes to allow for expansion

The sheet was warmed from ambient temperature to 57 degrees C. Dimensions have been checked at ambient and higher temperature.

Ambient temperature	L [m]	W[m]
15 °C	2,444	1,223
Temperature 57 °C	2,459	1,230

Calculated Coefficient of Expansion $d = 0,1462 \text{ mm/m}^{\circ}\text{C}$

So expansion for 20 °C increase is:

$$DL=L*DT*d = 2,444*20*0,1462 = 10\text{mm (length wise)}$$
$$DL=L*DT*d = 1,223*20*0,1462= 5\text{mm (width wise)}$$

User Guide

Water absorbability. Water fills voids increasing weight but also improves mechanical properties (see lab test)

Painting: We do not recommend painting EKOpoly as it is manufactured using mainly PE plastics and therefore the sheet is offered as a low or no maintenance product. If painted, this valuable attribute would not be applicable and maintenance would be required.

Should you wish to paint EKOpoly, please see suggestions below:-

As a mainly PE product, the general rule is that paint surface tension must be lower than EKOpoly surface tension with the surface being cleaned, degreased and sanded before painting.

We would suggest using Sikkens.

- Primer Sikkens Redox BL Multiprimer 1 coat
- Depending on the desired degree of gloss, Rubbol BL Satura 2 coats or Alphatex IQ 2 coats
- Contact Sikkens if required on 0333 222 7070

Only satin gloss:

- Wapex 660 (two-component waterborne epoxy paint) 2 coats without primer as it is an independent paint

- 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
Point angle			60-90
Helix angle		0-40	12-16

- Gluing and nailing is not recommended
- Screwing – Self tapping posi-screws take and hold well. For best results resin anchors can be used
 - Welding – limited testing suggests this is successful using PE sticks
 - U Value – approximately 4-5 W/m²k

Information provided is for guidance only; the customer is solely responsible for ensuring that EKOply is fit for purpose