

## Sustainability calculator Background information

### Renovation with floor remake instead of new floor

CONSUMPTION	New ground	PU Sealer	Anticolor	UV seal	PU		
					Color+Si		
CO2/m <sup>2</sup>	7.271kg	0.815kg	0.888kg	0.846kg		2,533kg	
Energy/m <sup>2</sup>	166.89MJ	10,179MJ	11.774MJ	10.807MJ		31.171MJ	
Waste	3.000g	15,26g	15,26g	12,86g		30,86g	
<b>Savings</b>		<b>absolutely</b>	<b>in %</b>	<b>absolutely</b>	<b>in %</b>	<b>absolutely</b>	<b>in %</b>
CO2/m <sup>2</sup>		6,456kg	88,80%	6,383kg	87,80%	6,425kg	88,40%
Energy/m <sup>2</sup>		156.71MJ	93,80%	155.12MJ	92,90%	156.08MJ	93,50%
Waste		2,985kg	99,50%	2,985kg	99,50%	2,985kg	99,50%

### Basis for the calculation

CO2/m <sup>2</sup>	EPD Tarkett IQ Vinyl	EPD PU Si	EPD AC	EPD UV Si	EPD Color+PU Si
Energy/m <sup>2</sup>	EPD Tarkett IQ Vinyl	EPD PU Si	EPD AC	EPD UV Si	EPD Color+PU Si
Waste /m <sup>2</sup>	3kg old floor	Empty container	Empty container	Empty container	Empty container

### Relevance of CO2 savings through floor remake through everyday comparisons

one-off saving through 100m<sup>2</sup> floor remake **645.6kg**

Annual savings through 100m<sup>2</sup> PU instead of dispersion

	CO2 load	Savings over 5 years = 6,600.6kg
Air Trip Mallorca	722kg	9.14 Air travel
Car (15.000km)	3,360kg	29,467 car-km

## Floor Plus

WE system based on...	Polymer dispersion	Floor plus (2K PU)	annual savings/m <sup>2</sup> in	
	Annual CONSUMPTION per m <sup>2</sup>	Annual CONSUMPTION per m <sup>2</sup>	annual saving/m <sup>2</sup>	%
Emissions/Consumption				
CO2 (in kg)	14.63kg	2,72kg	11,91kg	81,40%
Primary energy in MJ	213.39MJ	33.88MJ	179.4 MJ	84,10%
Drinking water in ltr	0,6ltr	0,1ltr	0,5ltr	83%
Chemicals in ltr	0,1ltr	0,025ltr	0,075ltr	75%
Waste in g	206g	2,54g	203,46g	99%
Microplastics in g	10g	0g	10g	100%

### Basis for the calculation

WE system based on...	Polymer dispersion	Floor plus (2K PU)
Ground plan/refurbishment intervals	yearly GR+Introduction (FIGR)	Every 6 years Rehabilitation (FRT/WFK)
Maintenance cleaning	is left out (advantages of the UR on PU are not taken into account).	
CO2 (in kg)	LCA	LCA
Primary energy in MJ	LCA	LCA
Drinking water in ltr	0,1ltr for basic cleaning 0,5ltr for neutralisation	0,1ltr for basic cleaning 0,5ltr for neutralisation
Chemicals in ltr	50ml Base + 50ml Disp.	50ml Primer+100ml PU Si
Waste in g	every 15 years 3kg old floor Empty container	Empty container
Microplastics in g	chem. Removable (FK 20%)	not chemically removable

### Relevance of CO2 savings through floor plus through everyday comparisons

	CO2 load	annual saving through 100m <sup>2</sup> floor plus = 1,191kg
Air Trip Mallorca	722kg	1.65 Air travel
Car (15.000km)	3,360kg	5,317 car-km

**Redevelopment with 484 instead of new floor**

<b>CONSUMPTION</b>	<b>eucula 484</b>	<b>Oak 8,5mm</b>	<b>Oak 16mm</b>		
CO2/m <sup>2</sup>	1,268kg	4,93kg	3,58kg		
Energy/m <sup>2</sup>	16.174MJ	404,516MJ	972,394MJ		
Waste	18,18g	3.000g	3.000g		
<b>Savings</b>		<b>absolutely</b>	<b>in %</b>	<b>absolutely</b>	<b>in %</b>
CO2/m <sup>2</sup>		3.662kg	74,30%	2,312kg	64,60%
Energy/m <sup>2</sup>		388,342MJ	82,40%	956.22MJ	98,30%
Waste /m <sup>2</sup>		2.982kg	99,40%	2.982kg	99,40%

**Basis for the calculation**

CO2/m <sup>2</sup>	EPD 484	EPD Tarkett Oak 8.5	Tarkett Oak 16mm
Energy/m <sup>2</sup>	EPD 484	EPD Tarkett Oak 8.5	Tarkett Oak 16mm
Waste /m <sup>2</sup>	Empty container	3kg old floor	3kg old floor