

Appendix for MD-23218-EN Valid to: 21-11-2028



This appendix refers to the EPD MD-23215-EN, developed according to EN15804+A2:2019. Results in the appendix communicates LCA results in the format described in EN15804+A1:2013, in order to accommodate a need in the transition period between the two standard revisions. The appendix cannot stand alone, as the reference EPD describes the basis of the assessment.

	ENVIRONMENTAL IMPACTS PER [The LCI and LCIA results in this EPD relates to 1m <sup>2</sup> of textile covered acoustic panel of a thickness of 40mm]							
Indicator	Unit	A1-3	C2	C4	D			
GWP-total	kg CO <sub>2</sub> eq.	1.20E+01	2.65E-02	3.28E-02	-2.01E-01			
GWP-fossil	kg CO <sub>2</sub> eq.	1.28E+01	2.64E-02	3.25E-02	-5.00E-01			
GWP-biogenic	kg CO <sub>2</sub> eq.	-8.37E-01	2.38E-05	2.61E-04	2.99E-01			
GWP-luluc	kg CO <sub>2</sub> eq.	1.13E-02	1.04E-05	3.29E-05	-5.76E-04			
ODP	kg CFC 11 eq.	8.97E-06	6.11E-09	9.89E-09	-6.14E-08			
AP	mol H <sup>+</sup> eq.	6.42E-02	1.07E-04	2.74E-04	-2.15E-03			
EP-freshwater	kg P eq.	2.89E-03	1.70E-06	9.43E-06	-1.42E-04			
EP-marine	kg N eq.	1.47E-02	3.23E-05	9.45E-05	-5.64E-04			
EP-terrestrial	mol N eq.	1.95E-01	3.53E-04	1.03E-03	-7.16E-03			
POCP	kg NMVOC eq.	4.73E-02	1.08E-04	2.98E-04	-1.72E-03			
ADPm <sup>1</sup>	kg Sb eq.	1.54E-04	9.19E-08	1.06E-07	-4.06E-06			
ADPf <sup>1</sup>	MJ	1.58E+02	3.99E-01	7.64E-01	-6.03E+00			
WDP <sup>1</sup>	m <sup>3</sup> world eq. deprived	6.27E+00	1.20E-03	3.33E-02	-3.09E-01			
	Caption		Image: Constraint of the second structure Image: Constraint of the second structure   GWP-total = Global Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - land use and land use change; GMP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidification;   EP-freshwater = Eutrophication - aquatic freshwater; EP-marine = Eutrophication - aquatic marine; EP-terrestrial = Eutrophication - terrestrial; POCP = Photochemical zone formation; ADPm = Abiotic Depletion Potential - minerals and metals; ADPf = Abiotic Depletion Potential - fossil fuels; WDP = water use					
	Disclaimer		<sup>1</sup> The results of this environmental indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.					

ENVI	ENVIRONMENTAL IMPACTS PER 1m <sup>3</sup> of undried and unplanned Danish Construction Wood									
Parameter	Unit	A1-A3	A4	C2	С3	C4	D			
GWP	[kg CO2-eq.]	-6.43E+03	1.78E+00	4.73E+00	8.00E-02	9.47E+02	2.91E+03			
ODP	[kg CFC11- eq.]	4.58E-06	-1.01E-07	3.88E-08	1.97E-09	-4.40E-05	-2.03E-05			
AP	[kg SO <sub>2</sub> -eq.]	1.75E-01	-2.08E-02	4.75E-04	2.75E-04	-6.72E+00	-3.11E+00			
EP	[kg PO <sub>4</sub> <sup>3-</sup> -eq.]	0.62377	-0.03431	0.00116	0.000856	-11.2291	-5.18819			
POCP	[kg ethene- eq.]	8.63E-02	-7.97E-03	4.05E-04	1.64E-04	-2.65E+00	-1.22E+00			
ADPE	[kg Sb-eq.]	9.91E-05	-1.63E-06	5.93E-07	1.74E-07	-6.98E-04	-3.23E-04			
ADPF	[MJ]	4.48E+02	-2.85E+01	2.54E+00	1.11E+00	-9.81E+03	-4.53E+03			
Caption	GWP = Global warming potential; ODP = Ozone depletion potential; AP = Acidification potential of soil and water; EP = Eutrophication potential; PG = Photochemical ozone creation potential; ADPE = Abiotic depletion potential for non fossil resources; ADPF = Abiotic depletion potential for fos resources									
	The numbers	are declared in scienti	fic notation, fx 1,95E+0	2. This number can als	o be written as: 1,95*	10 <sup>2</sup> or 195, while 1,12	E-11 is the same as			

**ENVIRONMENTAL IMPACTS PER 1m<sup>3</sup> of dried and planned Danish Construction Wood** 

## LCA Results acc. EN15804+A1:2013

Appendix for MD-23218-EN Valid to: 21-11-2028

TYST



Parameter	Unit	A1-A3	A4	C2	С3	C4	D				
GWP	[kg CO2-eq.]	-7.07E+03	1.78E+00	4.73E+00	8.00E-02	1.04E+03	3.20E+03				
ODP	[kg CFC11- eq.]	4.66E-06	-1.01E-07	3.88E-08	1.97E-09	-4.83E-05	-2.23E-05				
AP	[kg SO <sub>2</sub> -eq.]	1.85E-01	-2.08E-02	4.75E-04	2.75E-04	-7.39E+00	-3.42E+00				
EP	[kg PO <sub>4</sub> <sup>3-</sup> -eq.]	0.654801	-0.03431	0.00116	0.000856	-12.3521	-5.70701				
POCP	[kg ethene- eq.]	9.22E-02	-7.97E-03	4.05E-04	1.64E-04	-2.91E+00	-1.35E+00				
ADPE	[kg Sb-eq.]	1.05E-04	-1.63E-06	5.93E-07	1.74E-07	-7.68E-04	-3.55E-04				
ADPF	[MJ]	4.88E+02	-2.85E+01	2.54E+00	1.11E+00	-1.08E+04	-4.99E+03				
Caption	GWP = Global warming potential; ODP = Ozone depletion potential; AP = Acidification potential of soil and water; EP = Eutrophication potential; POCP = Photochemical ozone creation potential; ADPE = Abiotic depletion potential for non fossil resources; ADPF = Abiotic depletion potential for fossil resources										
	The numbers	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as 1.12*10 <sup>-11</sup> or 0.000000000112.									

## LCA Results acc. EN15804+A1:2013

Appendix for MD-23218-EN Valid to: 21-11-2028

TYST



<b>RESOURCE USE PER 1m<sup>3</sup> of undried and unplanned Danish Construction Wood</b>									
Parameter	Unit	A1-A3	A4	C2	C3	C4	D		
PERE	[MJ]	-6.04E+01	5.66E+00	-2.71E-02	-6.13E-01	1.80E+03	8.32E+02		
PERM	[MJ]	6.13E+02	-1.22E+01	3.63E-02	9.12E-01	-3.89E+03	-1.80E+03		
PERT	[MJ]	5.52E+02	-6.58E+00	9.16E-03	2.98E-01	-2.09E+03	-9.65E+02		
PENRE	[MJ]	-4.47E-02	6.20E-04	-1.07E-04	-3.49E-05	2.29E-01	1.06E-01		
PENRM	[MJ]	4.48E+02	-2.85E+01	2.54E+00	1.11E+00	-9.81E+03	-4.53E+03		
PENRT	[MJ]	4.48E+02	-2.85E+01	2.54E+00	1.11E+00	-9.81E+03	-4.53E+03		
SM	[kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		
RSF	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		
NRSF	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		
FW	[m <sup>3</sup> ]	4.17E-01	-4.13E-02	2.87E-04	2.92E-03	-1.32E+01	-6.09E+00		
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy Caption resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Use of net fresh water								

The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95\*10<sup>2</sup> or 195, while 1,12E-11 is the same as 1,12\*10<sup>-11</sup> or 0,0000000000112.

	<b>RESOURCE USE PER 1m<sup>3</sup> of dried and planned Danish Construction Wood</b>									
Parameter	Unit	A1-A3	A4	C2	С3	C4	D			
PERE	[MJ]	-8.27E+01	5.66E+00	-2.71E-02	-6.13E-01	1.98E+03	9.16E+02			
PERM	[M]	6.46E+02	-1.22E+01	3.63E-02	9.12E-01	-4.28E+03	-1.98E+03			
PERT	[MJ]	5.63E+02	-6.58E+00	9.16E-03	2.98E-01	-2.30E+03	-1.06E+03			
PENRE	[MJ]	-4.60E-02	6.20E-04	-1.07E-04	-3.49E-05	2.52E-01	1.17E-01			
PENRM	[MJ]	4.88E+02	-2.85E+01	2.54E+00	1.11E+00	-1.08E+04	-4.99E+03			
PENRT	[MJ]	4.88E+02	-2.85E+01	2.54E+00	1.11E+00	-1.08E+04	-4.99E+03			
SM	[kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
RSF	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
NRSF	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00			
FW	[m <sup>3</sup> ]	5.23E-01	-4.13E-02	2.87E-04	2.92E-03	-1.45E+01	-6.70E+00			
Caption	PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM = Use of non renewable primary energy resources used as raw materials; PENRT = Total use of non renewable primary energy resources; SM = Use of non renewable primary energy Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Use of net fresh water									
	ine		i Solor funo Hotation,	1 12*10 <sup>-11</sup> or	0 00000000000112	as. 1,00 10 01 100, while				

## LCA Results acc. EN15804+A1:2013

Appendix for MD-23218-EN Valid to: 21-11-2028

TYS1



WASTE CATECODIES AND OUTDUT FLOWS DED 1m3 of undried and unrelevant Darish									
WASTE CATEGORIES AND OUTPOT FLOWS PER IM <sup>3</sup> of undried and unplanned Danish Construction Wood									
Parameter	Unit	A1-A3	A4	C2	C3	C4	D		
HWD	[kg]	8.34E-04	-5.15E-06	6.62E-06	5.46E-07	-3.67E-03	-1.70E-03		
NHWD	[kg]	8.32E+00	-3.98E-03	1.33E-01	6.97E-03	-4.22E+01	-1.95E+01		
RWD	[kg]	2.37E-03	-8.23E-05	1.71E-05	4.89E-06	-3.14E-02	-1.45E-02		
			•		•		•		
CRU	[kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		
MFR	[kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		
MER	[kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		
EEE	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		
EET	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy								
	The	numbers are declared in	n scientific notation, fx 1,95	E+02. This number can also t	oe written as: 1,95*10	<sup>2</sup> or 195, while 1,12E	-11 is the same as		

WASTE CATEGORIES AND OUTPUT FLOWS PER 1m <sup>3</sup> of dried and planned Danish Construction Wood									
Parameter	Unit	A1-A3	A4	C2	С3	C4	D		
HWD	[kg]	8.53E-04	-5.15E-06	6.62E-06	5.46E-07	-4.04E-03	-1.87E-03		
NHWD	[kg]	8.57E+00	-3.98E-03	1.33E-01	6.97E-03	-4.64E+01	-2.14E+01		
RWD	[kg]	2.55E-03	-8.23E-05	1.71E-05	4.89E-06	-3.45E-02	-1.59E-02		

CRU	[kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		
MFR	[kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		
MER	[kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		
EEE	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		
EET	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00		
Caption	HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported								
Сарцон	The r	The numbers are declared in scientific notation, fx 1,95E+02. This number can also be written as: 1,95*10 <sup>2</sup> or 195, while 1,12E-11 is the same as							

Checked and approved by

histianen Um

*Kim Christiansen* Third party verifier of MD-23128-EN

prenser late

Martha Katrine Sørensen EPD Danmark