

This appendix refers to the EPD, MD-24131-EN, developed according to EN15804:2012+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. **NOTE:** Scaling factors for floor thickness can be acquired in the reference EPD.

The following products and supplementary datasets are included:

- **Page 1:** [End Grain Floor, Spruce, 15 mm thickness \(Untreated\)](#)
- **Page 2:** [End Grain Floor, Pine, 15 mm thickness \(Untreated\)](#)
- **Page 3:** [End Grain Floor, Larch, 15 mm thickness \(Untreated\)](#)

End Grain Floor, Spruce, 15 mm thickness (Untreated)

End Grain Floor, Spruce, 15 mm thickness (Untreated) ENVIRONMENTAL IMPACTS PER 1 m ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP	[kg CO ₂ -eq.]	-8.83E+00	0.00E+00	1.27E-01	1.20E+01	0.00E+00	-2.10E+00
ODP	[kg CFC11-eq.]	5.29E-08	0.00E+00	2.27E-09	2.63E-09	0.00E+00	-5.40E-08
AP	[kg SO ₂ -eq.]	1.45E-02	0.00E+00	3.59E-04	1.12E-03	0.00E+00	-7.79E-03
EP	[kg PO ₄ ³⁻ -eq.]	5.04E-03	0.00E+00	7.62E-05	9.33E-04	0.00E+00	-5.21E-03
POCP	[kg ethene-eq.]	1.27E-03	0.00E+00	1.88E-05	3.15E-05	0.00E+00	-4.10E-04
ADPE	[kg Sb-eq.]	5.67E-06	0.00E+00	3.09E-07	3.52E-07	0.00E+00	-1.00E-05
ADPF	[MJ]	3.87E+01	0.00E+00	1.77E+00	1.05E+00	0.00E+00	-2.28E+01
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						

End Grain Floor, Spruce, 15 mm thickness (Untreated) RESOURCE USE PER 1 m ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	6.43E+00	0.00E+00	2.65E-02	5.09E-01	0.00E+00	-3.80E+01
PERM	[MJ]	1.22E+02	0.00E+00	0.00E+00	-1.22E+02	0.00E+00	0.00E+00
PERT	[MJ]	1.28E+02	0.00E+00	2.65E-02	-1.22E+02	0.00E+00	-3.80E+01
PENRE	[MJ]	4.19E+01	0.00E+00	1.81E+00	1.24E+00	0.00E+00	-3.11E+01
PENRM	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	[MJ]	4.19E+01	0.00E+00	1.81E+00	1.24E+00	0.00E+00	-3.11E+01
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 ³]	5.13E-02	0.00E+00	2.41E-04	2.35E-03	0.00E+00	-5.32E-02
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 secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Use of net fresh water						

End Grain Floor, Spruce, 15 mm thickness (Untreated) WASTE CATEGORIES AND OUTPUT FLOWS PER 1 m ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	1.64E-04	0.00E+00	1.15E-05	1.66E-05	0.00E+00	-6.80E-05
NHWD	[kg]	1.72E+00	0.00E+00	9.03E-02	5.07E-02	0.00E+00	-1.70E-01
RWD	[kg]	4.71E-05	0.00E+00	6.04E-07	2.97E-06	0.00E+00	-1.30E-04

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]	5.37E-03	0.00E+00	0.00E+00	1.51E+01	0.00E+00	0.00E+00
EET	[MJ]	7.21E-03	0.00E+00	0.00E+00	5.67E+01	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						

End Grain Floor, Pine, 15 mm thickness (Untreated)

End Grain Floor, Pine, 15 mm thickness (Untreated) ENVIRONMENTAL IMPACTS PER 1 m ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP	[kg CO ₂ -eq.]	-1.03E+01	0.00E+00	1.44E-01	1.36E+01	0.00E+00	-2.39E+00
ODP	[kg CFC11-eq.]	5.59E-08	0.00E+00	2.58E-09	2.99E-09	0.00E+00	-6.10E-08
AP	[kg SO ₂ -eq.]	1.51E-02	0.00E+00	4.08E-04	1.27E-03	0.00E+00	-8.86E-03
EP	[kg PO ₄ ³⁻ -eq.]	5.16E-03	0.00E+00	8.66E-05	1.06E-03	0.00E+00	-5.93E-03
POCP	[kg ethene-eq.]	1.28E-03	0.00E+00	2.14E-05	3.58E-05	0.00E+00	-4.60E-04
ADPE	[kg Sb-eq.]	5.96E-06	0.00E+00	3.52E-07	4.00E-07	0.00E+00	-1.20E-05
ADPF	[MJ]	4.11E+01	0.00E+00	2.01E+00	1.19E+00	0.00E+00	-2.60E+01
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						

End Grain Floor, Pine, 15 mm thickness (Untreated) RESOURCE USE PER 1 m ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	6.48E+00	0.00E+00	3.02E-02	5.79E-01	0.00E+00	-4.32E+01
PERM	[MJ]	1.39E+02	0.00E+00	0.00E+00	-1.39E+02	0.00E+00	0.00E+00
PERT	[MJ]	1.45E+02	0.00E+00	3.02E-02	-1.38E+02	0.00E+00	-4.32E+01
PENRE	[MJ]	4.44E+01	0.00E+00	2.06E+00	1.41E+00	0.00E+00	-3.53E+01
PENRM	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	[MJ]	4.44E+01	0.00E+00	2.06E+00	1.41E+00	0.00E+00	-3.53E+01
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 ³]	5.19E-02	0.00E+00	2.75E-04	2.68E-03	0.00E+00	-6.06E-02
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 secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Use of net fresh water						

End Grain Floor, Pine, 15 mm thickness (Untreated) WASTE CATEGORIES AND OUTPUT FLOWS PER 1 m ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	1.80E-04	0.00E+00	1.31E-05	1.89E-05	0.00E+00	-7.70E-05
NHWD	[kg]	1.91E+00	0.00E+00	1.03E-01	5.77E-02	0.00E+00	-1.93E-01
RWD	[kg]	4.84E-05	0.00E+00	6.87E-07	3.38E-06	0.00E+00	-1.50E-04

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]	5.37E-03	0.00E+00	0.00E+00	1.72E+01	0.00E+00	0.00E+00
EET	[MJ]	7.21E-03	0.00E+00	0.00E+00	6.45E+01	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						

End Grain Floor, Larch, 15 mm thickness (Untreated)

End Grain Floor, Larch, 15 mm thickness (Untreated) ENVIRONMENTAL IMPACTS PER 1 m ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP	[kg CO ₂ -eq.]	-1.28E+01	0.00E+00	1.73E-01	1.64E+01	0.00E+00	-2.88E+00
ODP	[kg CFC11-eq.]	6.02E-08	0.00E+00	3.11E-09	3.60E-09	0.00E+00	-7.40E-08
AP	[kg SO ₂ -eq.]	1.58E-02	0.00E+00	4.91E-04	1.53E-03	0.00E+00	-1.07E-02
EP	[kg PO ₄ ³⁻ -eq.]	5.31E-03	0.00E+00	1.04E-04	1.28E-03	0.00E+00	-7.14E-03
POCP	[kg ethene-eq.]	1.32E-03	0.00E+00	2.58E-05	4.31E-05	0.00E+00	-5.60E-04
ADPE	[kg Sb-eq.]	6.35E-06	0.00E+00	4.23E-07	4.82E-07	0.00E+00	-1.40E-05
ADPF	[MJ]	4.46E+01	0.00E+00	2.42E+00	1.43E+00	0.00E+00	-3.13E+01
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						

End Grain Floor, Larch, 15 mm thickness (Untreated) RESOURCE USE PER 1 m ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	6.51E+00	0.00E+00	3.63E-02	6.97E-01	0.00E+00	-5.20E+01
PERM	[MJ]	1.67E+02	0.00E+00	0.00E+00	-1.67E+02	0.00E+00	0.00E+00
PERT	[MJ]	1.74E+02	0.00E+00	3.63E-02	-1.67E+02	0.00E+00	-5.20E+01
PENRE	[MJ]	4.80E+01	0.00E+00	2.48E+00	1.70E+00	0.00E+00	-4.26E+01
PENRM	[MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	[MJ]	4.80E+01	0.00E+00	2.48E+00	1.70E+00	0.00E+00	-4.26E+01
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 ³]	5.24E-02	0.00E+00	3.31E-04	3.23E-03	0.00E+00	-7.29E-02
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 secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non renewable secondary fuels; FW = Use of net fresh water						

End Grain Floor, Larch, 15 mm thickness (Untreated) WASTE CATEGORIES AND OUTPUT FLOWS PER 1 m ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	2.02E-04	0.00E+00	1.57E-05	2.27E-05	0.00E+00	-9.30E-05
NHWD	[kg]	2.24E+00	0.00E+00	1.24E-01	6.95E-02	0.00E+00	-2.32E-01
RWD	[kg]	4.95E-05	0.00E+00	8.28E-07	4.07E-06	0.00E+00	-1.77E-04

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]	5.37E-03	0.00E+00	0.00E+00	2.07E+01	0.00E+00	0.00E+00
EET	[MJ]	7.21E-03	0.00E+00	0.00E+00	7.77E+01	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						

Checked and approved by



Linda Hoiby
Third party verifier of MD-24131-EN



Martha Katrine Sorensen
EPD Danmark