

This appendix refers to the EPD MD-23023-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.

Rectangular ventilation duct

Rectangular ventilation duct 400x300, EN15804+A1

ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP	[kg CO2-eq.]	3,97E+00	0,00E+00	8,28E-03	5,26E-02	1,17E-03	-1,41E+00
ODP	[kg CFC11-eq.]	6,09E-12	0,00E+00	9,89E-16	1,13E-12	2,21E-15	-4,32E-15
AP	[kg SO2-eq.]	7,49E-03	0,00E+00	7,34E-06	4,46E-05	4,79E-06	-2,71E-03
EP	[kg PO43--eq.]	8,54E-04	0,00E+00	1,53E-06	8,93E-06	5,71E-07	-1,87E-04
POCP	[kg ethene-eq.]	1,15E-03	0,00E+00	-2,75E-07	4,01E-06	3,32E-07	-6,84E-04
ADPE	[kg Sb-eq.]	1,83E-05	0,00E+00	8,63E-10	1,95E-08	1,26E-10	-3,69E-06
ADPF	[MJ]	4,13E+01	0,00E+00	1,11E-01	5,74E-01	1,57E-02	-1,39E+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						

Rectangular ventilation duct 400x300, EN15804+A1

RESSOURCE CONSUMPTION PER PRODUKT PER M ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	2,28E+01	0,00E+00	7,78E-03	3,91E-01	1,94E-03	8,57E-01
PERM	[MJ]	4,88E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,32E+01	0,00E+00	7,78E-03	3,91E-01	1,94E-03	8,57E-01
PENRE	[MJ]	4,38E+01	0,00E+00	1,13E-01	7,74E-01	1,61E-02	-1,36E+01
PENRM	[MJ]	2,75E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	4,40E+01	0,00E+00	1,13E-01	7,74E-01	1,61E-02	-1,36E+01
SM	[kg]	8,86E-02	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]	4,12E-02	0,00E+00	8,99E-06	1,77E-04	3,06E-06	-6,22E-03
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 = Net use of fresh water						

Rectangular ventilation duct 400x300, EN15804+A1

WASTE CATEGORIES AND OUTPUT FLOWS PER PRODUKT PER M ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	3,01E-08	0,00E+00	5,96E-13	5,75E-11	5,56E-13	-1,05E-10
NHWD	[kg]	1,35E-01	0,00E+00	1,84E-05	5,04E-04	5,23E-02	2,06E-01
RWD	[kg]	6,39E-04	0,00E+00	2,09E-07	8,02E-05	1,24E-07	1,69E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	4,21E-01	0,00E+00	0,00E+00	9,38E-01	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]	3,93E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	1,28E-01	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						

Rectangular ventilation duct 600x400, EN15804+A1

ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP	[kg CO ₂ -eq.]	4,02E+00	0,00E+00	8,28E-03	5,26E-02	1,17E-03	-1,46E+00
ODP	[kg CFC11-eq.]	6,37E-12	0,00E+00	9,89E-16	1,13E-12	2,21E-15	-4,48E-15
AP	[kg SO ₂ -eq.]	7,78E-03	0,00E+00	7,34E-06	4,46E-05	4,79E-06	-2,81E-03
EP	[kg PO ₄ --eq.]	8,86E-04	0,00E+00	1,53E-06	8,93E-06	5,71E-07	-1,94E-04
POCP	[kg ethene-eq.]	1,14E-03	0,00E+00	-2,75E-07	4,01E-06	3,31E-07	-7,09E-04
ADPE	[kg Sb-eq.]	1,21E-05	0,00E+00	8,63E-10	1,95E-08	1,26E-10	-3,82E-06
ADPF	[MJ]	4,24E+01	0,00E+00	1,11E-01	5,74E-01	1,57E-02	-1,45E+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						

Rectangular ventilation duct 600x400, EN15804+A1

RESSOURCE CONSUMPTION PER PRODUKT PER M ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	2,27E+01	0,00E+00	7,78E-03	3,91E-01	1,94E-03	8,89E-01
PERM	[MJ]	5,08E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,32E+01	0,00E+00	7,78E-03	3,91E-01	1,94E-03	8,89E-01
PENRE	[MJ]	4,38E+01	0,00E+00	1,13E-01	7,74E-01	1,61E-02	-1,41E+01
PENRM	[MJ]	2,58E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	4,40E+01	0,00E+00	1,13E-01	7,74E-01	1,61E-02	-1,41E+01
SM	[kg]	8,86E-02	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]	4,12E-02	0,00E+00	8,99E-06	1,77E-04	3,06E-06	-6,45E-03
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 = Net use of fresh water						

Rectangular ventilation duct 600x400, EN15804+A1

WASTE CATEGORIES AND OUTPUT FLOWS PER PRODUKT PER M ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	3,01E-08	0,00E+00	5,96E-13	5,75E-11	5,56E-13	-1,05E-10
NHWD	[kg]	1,34E-01	0,00E+00	1,84E-05	5,04E-04	5,23E-02	2,06E-01
RWD	[kg]	6,37E-04	0,00E+00	2,09E-07	8,02E-05	1,24E-07	1,69E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	4,21E-01	0,00E+00	0,00E+00	9,38E-01	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]	3,93E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	1,28E-01	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						

Rectangular ventilation duct 1200x800, EN15804+A1

ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP	[kg CO ₂ -eq.]	3,96E+00	0,00E+00	8,28E-03	5,26E-02	1,17E-03	-1,41E+00
ODP	[kg CFC11-eq.]	6,09E-12	0,00E+00	9,89E-16	1,13E-12	2,21E-15	-4,32E-15
AP	[kg SO ₂ -eq.]	7,47E-03	0,00E+00	7,34E-06	4,46E-05	4,79E-06	-2,71E-03
EP	[kg PO ₄₃ -eq.]	8,51E-04	0,00E+00	1,53E-06	8,93E-06	5,71E-07	-1,87E-04
POCP	[kg ethene-eq.]	1,15E-03	0,00E+00	-2,75E-07	4,01E-06	3,32E-07	-6,84E-04
ADPE	[kg Sb-eq.]	1,77E-05	0,00E+00	8,63E-10	1,95E-08	1,26E-10	-3,69E-06
ADPF	[MJ]	4,11E+01	0,00E+00	1,11E-01	5,74E-01	1,57E-02	-1,39E+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						

Rectangular ventilation duct 1200x800, EN15804+A1

RESSOURCE CONSUMPTION PER PRODUKT PER M ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	2,27E+01	0,00E+00	7,78E-03	3,91E-01	1,94E-03	8,57E-01
PERM	[MJ]	4,87E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,32E+01	0,00E+00	7,78E-03	3,91E-01	1,94E-03	8,57E-01
PENRE	[MJ]	4,36E+01	0,00E+00	1,13E-01	7,74E-01	1,61E-02	-1,36E+01
PENRM	[MJ]	2,19E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	4,38E+01	0,00E+00	1,13E-01	7,74E-01	1,61E-02	-1,36E+01
SM	[kg]	9,11E-02	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]	4,04E-02	0,00E+00	8,99E-06	1,77E-04	3,06E-06	-6,22E-03
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 = Net use of fresh water						

Rectangular ventilation duct 1200x800, EN15804+A1

WASTE CATEGORIES AND OUTPUT FLOWS PER PRODUKT PER M ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	2,97E-08	0,00E+00	5,96E-13	5,75E-11	5,56E-13	-1,05E-10
NHWD	[kg]	1,35E-01	0,00E+00	1,84E-05	5,04E-04	5,23E-02	2,06E-01
RWD	[kg]	6,36E-04	0,00E+00	2,09E-07	8,02E-05	1,24E-07	1,69E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	4,21E-01	0,00E+00	0,00E+00	9,38E-01	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]	3,93E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	1,28E-01	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						

Rectangular ventilation duct 1600x1200, EN15804+A1

ENVIRONMENTAL EFFECTS PER PRODUKT PER M ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
GWP	[kg CO2-eq.]	3,95E+00	0,00E+00	8,28E-03	5,26E-02	1,17E-03	-1,41E+00
ODP	[kg CFC11-eq.]	6,10E-12	0,00E+00	9,89E-16	1,13E-12	2,21E-15	-4,32E-15
AP	[kg SO2-eq.]	7,41E-03	0,00E+00	7,34E-06	4,46E-05	4,79E-06	-2,71E-03
EP	[kg PO43--eq.]	8,40E-04	0,00E+00	1,53E-06	8,93E-06	5,71E-07	-1,87E-04
POCP	[kg ethene-eq.]	1,14E-03	0,00E+00	-2,75E-07	4,01E-06	3,32E-07	-6,84E-04
ADPE	[kg Sb-eq.]	1,86E-05	0,00E+00	8,63E-10	1,95E-08	1,26E-10	-3,69E-06
ADPF	[MJ]	4,08E+01	0,00E+00	1,11E-01	5,74E-01	1,57E-02	-1,39E+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						

Rectangular ventilation duct 1600x1200, EN15804+A1

RESSOURCE CONSUMPTION PER PRODUKT PER M ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
PERE	[MJ]	2,26E+01	0,00E+00	7,78E-03	3,91E-01	1,94E-03	8,57E-01
PERM	[MJ]	5,05E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	[MJ]	2,31E+01	0,00E+00	7,78E-03	3,91E-01	1,94E-03	8,57E-01
PENRE	[MJ]	4,33E+01	0,00E+00	1,13E-01	7,74E-01	1,61E-02	-1,36E+01
PENRM	[MJ]	2,25E-01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	[MJ]	4,36E+01	0,00E+00	1,13E-01	7,74E-01	1,61E-02	-1,36E+01
SM	[kg]	9,13E-02	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]	4,05E-02	0,00E+00	8,99E-06	1,77E-04	3,06E-06	-6,22E-03
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 = Net use of fresh water						

Rectangular ventilation duct 1600x1200, EN15804+A1

WASTE CATEGORIES AND OUTPUT FLOWS PER PRODUKT PER M ²							
Parameter	Unit	A1-A3	C1	C2	C3	C4	D
HWD	[kg]	2,95E-08	0,00E+00	5,96E-13	5,75E-11	5,56E-13	-1,05E-10
NHWD	[kg]	1,35E-01	0,00E+00	1,84E-05	5,04E-04	5,23E-02	2,06E-01
RWD	[kg]	6,34E-04	0,00E+00	2,09E-07	8,02E-05	1,24E-07	1,69E-06
CRU	[kg]	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MFR	[kg]	4,25E-01	0,00E+00	0,00E+00	9,38E-01	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]	4,01E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
EET	[MJ]	1,31E-01	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						

Checked and approved by

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