This appendix refers to the EPD MD-24162-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 1 m² of insulation material with thickness corresponding to R-value = 1m²K/W														
									Scenario 1			Scenario 2		
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**	**C3**	**C4**	**D**
GWP	kg CO2-eq.	1,98E+00	1,19E-01	3,21E-01	2,88E-03	2,58E-02	0,00E+00	9,00E-04	3,86E-04	0,00E+00	-2,04E+00	0,00E+00	3,42E+00	-1,23E+00
ODP	kg CFC11-eq.	4,72E-11	1,82E-14	6,52E-10	4,42E-16	4,50E-15	0,00E+00	1,38E-16	1,78E-14	0,00E+00	-4,62E-12	0,00E+00	1,77E-13	-1,18E-11
AP	kg SO2-eq.	2,48E-03	1,09E-04	3,18E-04	3,01E-06	1,94E-06	0,00E+00	9,47E-07	1,70E-18	0,00E+00	-2,36E-03	0,00E+00	1,80E-04	-1,96E-03
EP	kg PO4(3-)-eq.	3,41E-04	2,31E-05	6,80E-05	6,57E-07	4,25E-07	0,00E+00	2,07E-07	4,01E-10	0,00E+00	-3,33E-04	0,00E+00	4,04E-05	-3,19E-04
POCP	kg ethene-eq	4,83E-04	1,00E-05	2,49E-02	2,42E-07	2,08E-07	0,00E+00	7,58E-08	4,46E-11	0,00E+00	-4,63E-04	0,00E+00	1,90E-05	-1,98E-04
ADPE	kg Sb-eq	7,62E-08	7,85E-09	1,59E-07	1,90E-10	4,36E-11	0,00E+00	5,95E-11	5,38E-14	0,00E+00	-7,76E-08	0,00E+00	1,55E-09	-1,25E-07
ADPF	MJ	7,24E+01	1,59E+00	4,96E+00	3,87E-02	9,27E-03	0,00E+00	1,21E-02	7,68E-11	0,00E+00	-7,21E+01	0,00E+00	3,08E-01	-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													
	The numbers are declared in scientific notation, e.g., 1.95E+02. This number can also be written as: $1.95*10^{2}$ or 195, while 1.12E-11 is the same as $1.12*10^{-11}$ or 0.0000000000112.													

RESOURCE USE PER 1 m² of insulation material with thickness corresponding to R-value = 1m²K/W														
									Scenario 1			Scenario 2		
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**	**C3**	**C4**	**D**
PERE	MJ	1,94E+00	1,18E-01	1,01E-01	2,86E-03	2,23E-03	0,00E+00	8,93E-04	1,34E-03	0,00E+00	-2,11E+00	0,00E+00	9,62E-02	-1,22E+01
PERM	MJ	2,93E-01	0,00E+00	-2,92E-01	0,00E+00	-1,04E-03	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	2,24E+00	1,18E-01	-1,92E-01	2,86E-03	1,19E-03	0,00E+00	8,93E-04	1,34E-03	0,00E+00	-2,11E+00	0,00E+00	9,62E-02	-1,22E+01
PENRE	MJ	7,39E+01	1,63E+00	8,12E+00	3,94E-02	1,03E-02	0,00E+00	1,23E-02	5,00E-03	0,00E+00	-7,36E+01	0,00E+00	3,78E-01	-1,94E+01
PENRM	MJ	3,82E+01	0,00E+00	5,07E-01	0,00E+00	-5,78E-01	0,00E+00	0,00E+00	-3,81E+01	0,00E+00	0,00E+00	0,00E+00	-3,81E+01	0,00E+00
PENRT	MJ	1,12E+02	1,63E+00	8,63E+00	3,94E-02	-5,68E-01	0,00E+00	1,23E-02	-3,81E+01	0,00E+00	-7,36E+01	0,00E+00	-3,77E+01	-1,94E+01
SM	kg	1,49E-02	0,00E+00	5,32E-05	0,00E+00	0,00E+00	0,00E+00	0,00E+00	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	0,00E+00	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	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m3	1,02E-02	1,29E-04	3,05E-03	3,13E-06	5,53E-05	0,00E+00	9,78E-07	0,00E+00	0,00E+00	-1,08E-02	0,00E+00	6,50E-03	-7,42E-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													
	The numbers are declared in scientific notation, e.g., 1.95E+02. This number can also be written as: $1.95*10^{2}$ or 195, while 1.12E-11 is the same as $1.12*10^{-11}$ or 0.0000000000112.													

WASTE CATEGORIES AND OUTPUT FLOWS PER1 m² of insulation material with thickness corresponding to R-value = 1m²K/W														
									Scenario 1			Scenario 2		
Parameter	**Unit**	**A1**	**A2**	**A3**	**A4**	**A5**	**C1**	**C2**	**C3**	**C4**	**D**	**C3**	**C4**	**D**
HWD	kg	4,69E-09	5,03E-12	8,96E-11	1,22E-13	8,75E-14	0,00E+00	3,81E-14	0,00E+00	0,00E+00	-4,98E-09	0,00E+00	8,52E-12	-8,12E-10
NHWD	kg	1,70E-02	2,48E-04	3,31E-03	6,01E-06	1,63E-03	0,00E+00	1,88E-06	1,17E-16	0,00E+00	-1,83E-02	0,00E+00	1,24E-02	-3,70E-02
RWD	kg	2,44E-04	3,04E-06	1,35E-05	7,38E-08	3,39E-07	0,00E+00	2,31E-08	8,62E-09	0,00E+00	-2,72E-04	0,00E+00	2,27E-05	-1,79E-03
CRU	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	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	1,28E-02	0,00E+00	4,77E-03	0,00E+00	0,00E+00	1,02E+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	0,00E+00	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	4,45E-02	0,00E+00	4,66E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	6,15E+00	0,00E+00
EET	MJ	0,00E+00	0,00E+00	8,00E-02	0,00E+00	8,33E-02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	1,10E+01	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 scientific notation, e.g., 1.95E+02. This number can also be written as: $1.95*10^{2}$ or 195, while 1.12E-11 is the same as $1.12*10^{-11}$ or 0.0000000000112.													

Independent verification of the tool on which declaration and data is based, according to EN ISO 14025:2010.
Checked and approved by

David Althoff Palm
Third party verifier of MD-24162-EN

Martha Katrine Sørensen
EPD Danmark