



 Owner:
 Kvadrat Really

 No.:
 MD-23096-EN

 Issued:
 23-06-2023

 Issued first time:
 15-06-2023

 Valid to:
 15-06-2028

3rd PARTY **VERIFIED** 

EPD

VERIFIED ENVIRONMENTAL PRODUCT DECLARATION | ISO 14025 & EN 15804





Owner of declaration

Kvadrat Really Lundbergsvej 10, 8400 Ebeltoft CVR: 45998517

### kvadrat really

**Programme** 

EPD Danmark www.epddanmark.dk



☐ Industry EPD

Declared product(s)

Textile Tabletop
Textile Tabletop+

Number of declared datasets/product variations: [2]

**Production site** 

Production site located in Thisted, Denmark

The production is powered by green electricity and biogas, which is used in A3 (production)

Product(s) use

The Kvadrat Really Textile Tabletop is a new upcycled textile product, which is directly applicable with no need for additional surface and edge treatment. The Textile Tabletop is a circular product for environment conscious interiors.

Tabletop+ is a low impact version of the standard Tabletop, pushing the sustainable agenda, minimizing the production impacts, and utilizing more environmentally conscious ways of production.

Declared/ functional unit

1m2 of product

Year of production site data (A3)

2021-2023

**EPD** version

1st version. 23-06-2023. Change of product description

**Issued:** 23-06-2023

Valid to: 15-06-2028

Basis of calculation

This EPD is developed in accordance with the European standard EN 15804+A2.

Comparability

EPDs of construction products may not be comparable if they do not comply with the requirements in EN 15804. EPD data may not be comparable if the datasets used are not developed in accordance with EN 15804 and if the background systems are not based on the same database.

**Validity** 

This EPD has been verified in accordance with ISO 14025 and is valid for 5 years from the date of issue.

Use

The intended use of an EPD is to communicate scientifically based environmental information for construction products, for the purpose of assessing the environmental performance of buildings.

EPD type

□Cradle-to-gate with modules C1-C4 and D

□ Cradle-to-gate with options, modules C1-C4 and D

□Cradle-to-grave and module D

□Cradle-to-gate

□Cradle-to-gate with options

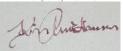
CEN standard EN 15804 serves as the core PCR

Independent verification of the declaration and data, according to EN ISO 14025

□ internal

 $oxed{\boxtimes}$  external

Third party verifier:



Kim Christiansen

Martha Katrine Sørensen EPD Danmark

Life	Life cycle stages and modules (MND = module not declared)															
	Product Construction process				Use							End of life			Beyond the system boundary	
Raw material supply	Transport	Manufacturing	Transport	Installation process	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Re-use, recovery and recycling potential
A1	A2	А3	A4	A5	B1	B2	В3	B4	В5	В6	В7	C1	C2	C3	C4	D
X	X	X	MND	MND	x	x	x	x	x	x	x	X	X	X	X	X



### **Product information**

#### **Product description**

Textile Tabletop and Tabletop<sup>+</sup> is a high-quality engineered circular material made from upcycled end-of-life textiles. It's designed to be reused and is ideal for people and brands actively driving progress towards a no-waste society. Textile Tabletop is a plug-and-play solution for existing and new table frames. It is suitable for multiple horizontal applications where surfaces may be exposed to liquids, heat, and abrasion and comes in standard sizes for workspace tabletops.

Textile Tabletop is made with a combination of a bio-based binder and second-generation production waste sourced binder, finished with a protective melamine layer on top and bottom.

Tabletop<sup>+</sup> is a low impact version of the standard Tabletop, using 100% bio-based binder fiber input. The main product components are shown in the table below.

Material	Weight-% of declared product
Textile fibers	71 %
Polyethylen	17.2 %
Polypropylen	9.2 %
Melamine	2.6 %

#### **Product packaging**

The composition of the sales- and transport packaging of the product is shown in the table below.

Material	Weight-% of packaging
Europallet	70,4%
Foil	2,2%
Cardboard	27,4%

#### Representativity

This declaration, including data collection and the modeled foreground system including results, represents the production of 1 m<sup>2</sup> product on the production site located in Thisted, Denmark. Product specific data (energy and material input) are based on average values collected in the period 2021-2023.

Background data are based on specific collected data from own production and supplier information, supplemented with dataset from Ecoinvent 3.8. Generally, the used generic background datasets are of high quality and less than 10 years old. The data were assessed bases on their quality and representativeness.

#### Hazardous substances

Textile Tabletop/Tabletop+ does not contain substances listed on the "Candidate List of Substances of Very High Concern for authorisation"

#### (http://echa.europa.eu/candidate-list-table)

#### **Essential characteristics**

Further technical information can be obtained by contacting the manufacturer or on the manufacturer's website:

#### https://www.kvadrat.dk/en/really

#### Reference Service Life (RSL)

No reference service life (RSL) is declared since the scope of this EPD is cradle-to-gate with modules C1-C4 and D, with the addition of module B1 as the only relevant part of the use phase (B1-B7). The product emits substances during its lifetime, which has been tested and accounted for in the background data.



**Picture of product(s)** 







## LCA background

#### **Declared unit**

The LCI and LCIA results in this EPD relates to 1  $\rm m^2$  of the product.

Name	Value	Unit
Declared unit	1	[m <sup>2</sup> ]
Density	888	kg/m³
Conversion factor to 1 kg.	0,018	-

#### **Functional unit**

The production of 1 m<sup>2</sup> of Textile Tabletop/Tabletop+

#### **PCR**

This EPD is developed according to the core rules for the product category type 3 of construction products in EN15804:2012+A2:2019, which serves as core PCR.

### Foreground system:

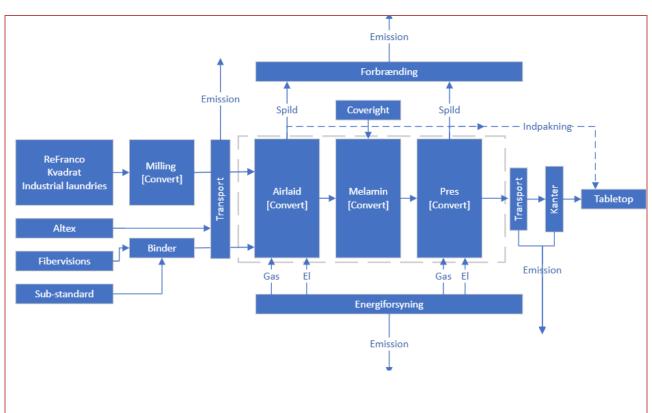
The declared products are produced using certified green energy and biogas in the production site in Thisted, Denmark, covering A3.

**Guarantee of Origin - certificates** 

#### Background system:

The database, ecoinvent 3.8. (Published in 09-2021) is utilized for the background system. As a result, both upstream- and downstream activities are based on average supply mixes for the specific country or region depending on the given dataset.

#### **Flowdiagram**





System boundary

This EPD is cradle-to-gate with options, modules C1-C4 and module 4 and covers the life cycle sub modules A1-A3, B1, C1-4 and D, in which 100% weight-% has been accounted for.

The general rules for the exclusion of inputs and outputs follows the requirements in EN 15804, 6.3.5, where the total of neglected input flows per module shall be a maximum of 5 % of energy usage and mass and 1 % of energy usage and mass for unit processes.

#### Product stage (A1-A3) includes:

A1 - Extraction and processing of raw materials

A2 - Transport to the production site

A3 - Manufacturing processes

The production stage comprises the acquisition of raw materials, products and energy, transport to the production site and the energy use of the production.

The acquisition of fiber comes from waste streams and is not accounted for in this LCA. The waste is delivered from Danish industrial laundries, European recyclers and processed in Denmark.

The acquisition of raw materials as well as the energy use in the production of the binder is included. The binder is delivered to the production site in Thisted, Denmark and transport is accounted for.

The production site mixes the fiber and binder in an airlaid process, where mats are formed under heat and pressure.

In the last step mats from the airlaid is pressed together to form the Textile Tabletop/Tabletop+ under heat and pressure, including a melamine surface on top and bottom.

#### Use stage (B1-B7) includes:

Maintenance, repair, replacement, and refurbishment (B2-B5):

The installed products are not intended to need repair, nor maintenance, replacement, or refurbishment over the lifetime of the product. Therefore, the impacts of these modules are assumed to be zero.

Operational energy and water use (B6-B7): There is no energy use or water use involved in the operation of the products i.e., zero.

#### Use(B1):

During the products lifetime, different emissions occur to the indoor environment. These emissions are included as additional information.

#### End of Life (C1-C4) includes:

The end-of-life processes: C1-C4 involves the handling of the products at the end-of-life stage from the end-customer. The end-customer dissembles the product and place it in the residual waste bin. Thereafter, it is handled by the municipal waste system, where it is assumed to be incinerated with heat recovery. The energy recovery will be stated as a benefit to the product life cycle since it will substitute primary energy production.

### Re-use, recovery and recycling potential (D) includes:

It is Kvadrat Really's ambition to implement a well-functioning take-back system, so the products can be remanufacturing and undergo an additional life cycle. Since the analyzed products is still new to the market and have not reached the end-of-life phase yet, the tested remanufacturing and take back scheme is not implemented in scale. Therefore, the end-of-life phase is assessed following a conservative approach.



## LCA results

#### **Tabletop**

			ENVIRO	MENTAL	IMPACT	S PER M <sup>2</sup>	TABLETO	)P				
Indicator	Unit	A1	A2	А3	B1	C1	C2	С3	C4	D		
GWP-total	kg CO₂ eq.	9,54E+00	6,67E-01	3,13E+00	0,00E+00	0,00E+00	1,35E-01	2,11E+01	0,00E+00	-3,28E+00		
GWP-fossil	kg CO₂ eq.	9,45E+00	6,66E-01	2,62E+00	0,00E+00	0,00E+00	1,34E-01	8,51E+00	0,00E+00	-2,84E+00		
GWP- biogenic	kg CO <sub>2</sub> eq.	8,72E-02	1,18E-03	5,09E-01	0,00E+00	0,00E+00	2,39E-04	1,26E+01	0,00E+00	-4,36E-01		
GWP-Iuluc	kg CO₂ eq.	7,31E-03	2,67E-04	3,03E-03	0,00E+00	0,00E+00	5,38E-05	2,47E-04	0,00E+00	-3,68E-03		
ODP	kg CFC 11 eq.	3,35E-07	1,54E-07	1,04E-07	0,00E+00	0,00E+00	3,12E-08	1,01E-07	0,00E+00	-1,10E-07		
AP	mol H <sup>+</sup> eq.	3,80E-02	1,89E-03	1,49E-02	0,00E+00	0,00E+00	3,82E-04	5,75E-03	0,00E+00	-7,07E-03		
EP- freshwater	kg P eq.	2,40E-03	4,39E-05	7,84E-04	0,00E+00	0,00E+00	8,87E-06	6,55E-04	0,00E+00	-1,35E-03		
EP-marine	kg N eq.	7,13E-03	3,85E-04	3,46E-03	0,00E+00	0,00E+00	7,78E-05	3,55E-03	0,00E+00	-1,82E-03		
EP- terrestrial	mol N eq.	7,55E-02	4,18E-03	3,18E-02	0,00E+00	0,00E+00	8,45E-04	2,54E-02	0,00E+00	-2,00E-02		
POCP	kg NMVOC eq.	2,94E-02	1,56E-03	9,96E-03	1,07E-06	0,00E+00	3,16E-04	6,53E-03	0,00E+00	-4,59E-03		
ADPm <sup>1</sup>	kg Sb eq.	6,86E-05	2,27E-06	8,13E-05	0,00E+00	0,00E+00	4,58E-07	2,39E-06	0,00E+00	-7,30E-06		
ADPf <sup>1</sup>	MJ	3,43E+01	7,70E-01	7,92E+00	0,00E+00	0,00E+00	1,55E-01	1,32E+00	0,00E+00	-2,18E+01		
WDP <sup>1</sup>	m³ world eq. deprived	5,21E+00	4,91E-02	8,18E-01	0,00E+00	0,00E+00	9,91E-03	8,13E-01	0,00E+00	-2,98E+00		
Contion					Warming Pote			· fossil fuels; ( ise change; O				
Caption	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 res	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.										



#### Additional environmental impact indicators

	ADDITIONAL ENVIRONMENTAL IMPACTS PER M <sup>2</sup> TABLETOP											
Parameter	Unit	A1	A2	А3	B1	C1	C2	С3	C4	D		
PM	[Disease incidence]	2,82E-07	4,22E-08	1,15E-07	0,00E+00	0,00E+00	6,82E-02	4,84E-01	0,00E+00	-1,84E-01		
IRP <sup>2</sup>	[kBq U235 eq.]	8,20E-01	5,20E-02	1,29E-01	0,00E+00	0,00E+00	4,34E-11	1,85E-09	0,00E+00	-7,22E-10		
ETP-fw <sup>1</sup>	[CTUe]	1,08E+00	3,38E-01	1,49E+00	0,00E+00	0,00E+00	2,53E-09	3,94E-07	0,00E+00	-1,03E-07		
HTP-c <sup>1</sup>	[CTUh]	2,68E-09	2,15E-10	8,62E-02	0,00E+00	0,00E+00	1,05E-02	3,27E-02	0,00E+00	-4,51E-01		
HTP-nc <sup>1</sup>	[CTUh]	2,61E-07	1,25E-08	2,38E-07	0,00E+00	0,00E+00	1,73E+00	6,32E+00	0,00E+00	-2,40E+00		
SQP <sup>1</sup>	-	6,67E+00	8,56E+00	8,02E+00	0,00E+00	0,00E+00	8,51E-09	5,79E-08	0,00E+00	-3,80E-08		
Caption	PM = Part				radiation – h nc = Human to				eshwater; HTI Quality	P-c = Human		
	<sup>1</sup> The res	ults of this er	nvironmental		l be used with ed experience			on these resu	lts are high or	as there is		
Disclaimers	cycle. It do	es not consid	er effects due	to possible n	nuclear accide on from the so	nts, occupatio	onal exposure n and from so	nor due to ra	health of the idioactive was ion materials	ste disposal in		

#### Parameters describing resource use

raramete	i s aesci	ibilig reso		COURCE	LICE DED	RESOURCE USE PER M <sup>2</sup> TABLETOP											
			KE	SOURCE	USE PER	M- IABLI	ETOP										
Parameter	Unit	A1	A2	А3	B1	C1	C2	С3	C4	D							
PERE	[MJ]	6,74E+00	1,09E-01	5,25E+01	0,00E+00	2,19E-02	1,53E-01	0,00E+00	-1,41E+01	2,19E-02							
PERM	[MJ]	4,39E+00	3,56E-02	2,39E+01	0,00E+00	7,19E-03	5,38E-02	0,00E+00	-6,87E+00	7,19E-03							
PERT	[MJ]	1,11E+01	1,44E-01	7,63E+01	0,00E+00	2,91E-02	2,07E-01	0,00E+00	-2,10E+01	2,91E-02							
PENRE	[MJ]	5,40E+01	9,83E-01	1,08E+01	0,00E+00	1,99E-01	1,58E+00	0,00E+00	-2,83E+01	1,99E-01							
PENRM	[MJ]	2,64E+02	9,18E+00	3,40E+01	0,00E+00	1,85E+00	6,75E+00	0,00E+00	-2,66E+01	1,85E+00							
PENRT	[MJ]	3,18E+02	1,02E+01	4,47E+01	0,00E+00	2,05E+00	8,33E+00	0,00E+00	-5,50E+01	2,05E+00							
SM	[kg]	8,73E-01	1,03E-02	2,43E+00	0,00E+00	2,09E-03	3,36E-02	0,00E+00	-7,44E-01	2,09E-03							
RSF	[MJ]	3,32E-01	3,08E-03	7,18E+01	0,00E+00	6,22E-04	3,83E-03	0,00E+00	-4,28E-01	6,22E-04							
NRSF	[MJ]	1,86E-01	1,25E-02	4,21E-02	0,00E+00	2,53E-03	9,22E-03	0,00E+00	-7,41E-02	2,53E-03							
FW	[m³]	1,22E-01	1,17E-03	1,99E-02	0,00E+00	2,36E-04	1,90E-02	0,00E+00	-6,95E-02	2,36E-04							
Caption	Use of resources materia	of renewable s; PENRE = U als; PENRM =	primary energy see of non resource of non nergy resource	rgy resources newable prim renewable pr ces; SM = Us	s used as raw nary energy e imary energy	materials; Fexcluding non resources ury material;	PERT = Total renewable p sed as raw n RSF = Use of	use of renew primary energ naterials; PEI f renewable s	raw materia vable primary gy resources NRT = Total u secondary fue	energy used as raw use of non							



#### End-of-life (waste categories and output flows)

	WASTE CATEGORIES AND OUTPUT FLOWS PER M <sup>2</sup> TABLETOP											
Parameter	Unit	A1	A2	А3	B1	C1	C2	С3	C4	D		
HWD	[kg]	1,20E+01	2,26E-01	3,77E+00	0,00E+00	0,00E+00	4,57E-02	7,26E-01	0,00E+00	-6,61E+00		
NHWD	[kg]	4,88E-01	5,24E-01	3,76E+00	0,00E+00	0,00E+00	1,06E-01	1,68E+01	0,00E+00	-1,55E-01		
RWD	[kg]	8,57E-03	2,03E-04	1,30E-03	0,00E+00	0,00E+00	4,09E-05	1,90E-04	0,00E+00	-4,08E-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		
MFR	[kg]	5,66E-01	8,60E-03	2,01E+00	0,00E+00	0,00E+00	1,74E-03	1,91E-01	0,00E+00	-7,10E-01		
MER	[kg]	1,04E-02	2,37E-03	2,54E-02	0,00E+00	0,00E+00	4,78E-04	5,43E-03	0,00E+00	-4,91E-03		
EEE	[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		
EET	[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		
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 = Eksporteret elektrisk energi; EET = Eksporteret termisk energi										



#### Tabletop+

#### **Core environmental impact indicators**

		ı	ENVIRON	MENTAL	IMPACTS	PER M <sup>2</sup>	TABLETO	P+				
Indicator	Unit	A1	A2	А3	B1	C1	C2	С3	C4	D		
GWP-total	kg CO₂ eq.	1,75E+00	6,67E-01	3,13E+00	0,00E+00	0,00E+00	1,35E-01	2,11E+01	0,00E+00	-3,28E+00		
GWP-fossil	kg CO₂ eq.	1,70E+00	6,66E-01	2,62E+00	0,00E+00	0,00E+00	1,34E-01	8,51E+00	0,00E+00	-2,84E+00		
GWP- biogenic	kg CO₂ eq.	5,21E-02	1,18E-03	5,09E-01	0,00E+00	0,00E+00	2,39E-04	1,26E+01	0,00E+00	-4,36E-01		
GWP-luluc	kg CO₂ eq.	4,42E-03	2,67E-04	3,03E-03	0,00E+00	0,00E+00	5,38E-05	2,47E-04	0,00E+00	-3,68E-03		
ODP	kg CFC 11 eq.	1,76E-07	1,54E-07	1,04E-07	0,00E+00	0,00E+00	3,12E-08	1,01E-07	0,00E+00	-1,10E-07		
АР	mol H <sup>+</sup> eq.	9,14E-03	1,89E-03	1,49E-02	0,00E+00	0,00E+00	3,82E-04	5,75E-03	0,00E+00	-7,07E-03		
EP- freshwater	kg P eq.	1,21E-03	4,39E-05	7,84E-04	0,00E+00	0,00E+00	8,87E-06	6,55E-04	0,00E+00	-1,35E-03		
EP-marine	kg N eq.	1,81E-03	3,85E-04	3,46E-03	0,00E+00	0,00E+00	7,78E-05	3,55E-03	0,00E+00	-1,82E-03		
EP- terrestrial	mol N eq.	1,95E-02	4,18E-03	3,18E-02	0,00E+00	0,00E+00	8,45E-04	2,54E-02	0,00E+00	-2,00E-02		
POCP	kg NMVOC eq.	4,26E-03	1,56E-03	9,96E-03	1,07E-06	0,00E+00	3,16E-04	6,53E-03	0,00E+00	-4,59E-03		
ADPm <sup>1</sup>	kg Sb eq.	2,06E-05	2,27E-06	8,13E-05	0,00E+00	0,00E+00	4,58E-07	2,39E-06	0,00E+00	-7,30E-06		
ADPf <sup>1</sup>	MJ	1,24E+01	7,70E-01	7,92E+00	0,00E+00	0,00E+00	1,55E-01	1,32E+00	0,00E+00	-2,18E+01		
WDP <sup>1</sup>	m <sup>3</sup> world eq. deprived	1,60E+00	4,91E-02	8,18E-01	0,00E+00	0,00E+00	9,91E-03	8,13E-01	0,00E+00	-2,98E+00		
Caption	GWP-total = Global Warming Potential - total; GWP-fossil = Global Warming Potential - fossil fuels; GWP-biogenic = Global Warming Potential - biogenic; GWP-luluc = Global Warming Potential - land use and land use change; ODP = Ozone Depletion; AP = Acidifcation;											
	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 res	<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.										



#### Additional environmental impact indicators

	ADDITIONAL ENVIRONMENTAL IMPACTS PER M <sup>2</sup> TABLETOP <sup>+</sup>											
Parameter	Unit	A1	A2	А3	B1	C1	C2	С3	C4	D		
PM	[Disease incidence]	3,92E-08	4,22E-08	1,42E-07	0,00E+00	0,00E+00	6,82E-02	4,84E-01	0,00E+00	-1,84E-01		
IRP <sup>2</sup>	[kBq U235 eq.]	4,30E-01	5,20E-02	1,33E-01	0,00E+00	0,00E+00	4,34E-11	1,85E-09	0,00E+00	-7,22E-10		
ETP-fw <sup>1</sup>	[CTUe]	4,14E-01	3,38E-01	1,57E+00	0,00E+00	0,00E+00	2,53E-09	3,94E-07	0,00E+00	-1,03E-07		
HTP-c <sup>1</sup>	[CTUh]	8,67E-10	2,15E-10	4,16E-09	0,00E+00	0,00E+00	1,05E-02	3,27E-02	0,00E+00	-4,51E-01		
HTP-nc <sup>1</sup>	[CTUh]	9,32E-08	1,25E-08	2,43E-07	0,00E+00	0,00E+00	1,73E+00	6,32E+00	0,00E+00	-2,40E+00		
SQP <sup>1</sup>	-	2,27E+00	8,56E+00	8,28E+00	0,00E+00	0,00E+00	8,51E-09	5,79E-08	0,00E+00	-3,80E-08		
Caption	PM = Parti						ETP-fw = Eco cancer effects		eshwater; HTI Quality	P-c = Human		
	<sup>1</sup> The res	ults of this er	nvironmental		be used with			on these resul	lts are high or	as there is		
Disclaimers	cycle. It do	es not consid	er effects due	to possible n	uclear accide on from the so	nts, occupatio	onal exposure n and from so	nor due to ra	health of the adioactive was ion materials	ste disposal in		

#### Parameters describing resource use

			RE	SOURCE	USE PER	M <sup>2</sup> TABLE	TOP+			
Parameter	Unit	A1	A2	А3	B1	C1	C2	С3	C4	D
PERE	[MJ]	4,00E+00	1,09E-01	5,25E+01	0,00E+00	0,00E+00	2,19E-02	1,53E-01	0,00E+00	-1,41E+01
PERM	[MJ]	3,19E+00	3,56E-02	2,39E+01	0,00E+00	0,00E+00	7,19E-03	5,38E-02	0,00E+00	-6,87E+00
PERT	[MJ]	7,19E+00	1,44E-01	7,63E+01	0,00E+00	0,00E+00	2,91E-02	2,07E-01	0,00E+00	-2,10E+01
PENRE	[MJ]	1,98E+01	9,83E-01	1,08E+01	0,00E+00	0,00E+00	1,99E-01	1,58E+00	0,00E+00	-2,83E+01
PENRM	[MJ]	2,06E+01	9,18E+00	3,40E+01	0,00E+00	0,00E+00	1,85E+00	6,75E+00	0,00E+00	-2,66E+01
PENRT	[MJ]	4,04E+01	1,02E+01	4,47E+01	0,00E+00	0,00E+00	2,05E+00	8,33E+00	0,00E+00	-5,50E+01
SM	[kg]	6,58E-01	1,03E-02	2,43E+00	0,00E+00	0,00E+00	2,09E-03	3,36E-02	0,00E+00	-7,44E-01
RSF	[MJ]	2,41E-01	3,08E-03	7,18E+01	0,00E+00	0,00E+00	6,22E-04	3,83E-03	0,00E+00	-4,28E-01
NRSF	[MJ]	9,71E-02	1,25E-02	4,21E-02	0,00E+00	0,00E+00	2,53E-03	9,22E-03	0,00E+00	-7,41E-02
FW	[m³]	3,76E-02	1,17E-03	1,99E-02	0,00E+00	0,00E+00	2,36E-04	1,90E-02	0,00E+00	-6,95E-02
Caption	Use resources materia	Use of renew of renewable s; PENRE = U als; PENRM = ble primary er	primary energy see of non results of non nergy resource.	rgy resources newable prim renewable pr ces; SM = Us	s used as raw nary energy e imary energy	materials; F excluding nor resources ury ry material;	PERT = Total renewable p sed as raw n RSF = Use of	use of renew orimary energenaterials; PEI f renewable s	able primary gy resources NRT = Total (	energy used as raw use of non



#### End-of-life (waste categories and output flows)

	WASTE CATEGORIES AND OUTPUT FLOWS PER M <sup>2</sup> TABLETOP+											
Parameter	Unit	A1	A2	А3	B1	C1	C2	С3	C4	D		
HWD	[kg]	5,82E+00	2,26E-01	3,77E+00	0,00E+00	0,00E+00	4,57E-02	7,26E-01	0,00E+00	-6,61E+00		
NHWD	[kg]	2,32E-01	5,24E-01	3,76E+00	0,00E+00	0,00E+00	1,06E-01	1,68E+01	0,00E+00	-1,55E-01		
RWD	[kg]	4,61E-03	2,03E-04	1,30E-03	0,00E+00	0,00E+00	4,09E-05	1,90E-04	0,00E+00	-4,08E-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
1450	F1 7	4 005 04	0.605.00	2.045 . 00	0.005.00	0.005 - 00	1 745 00	1 01 5 01	0.005.00	7.405.04
MFR	[kg]	4,03E-01	8,60E-03	2,01E+00	0,00E+00	0,00E+00	1,74E-03	1,91E-01	0,00E+00	-7,10E-01
MER	[kg]	3,41E-03	2,37E-03	2,54E-02	0,00E+00	0,00E+00	4,78E-04	5,43E-03	0,00E+00	-4,91E-03
EEE	[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
EET	[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
										-
HWD = Hazardous waste disposed; NHWD = Non hazardous waste disposed; RWD = Radioactive waste disposed; CRU =										

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 = Eksporteret elektrisk energi; EET = Eksporteret termisk energi

#### Biogenic carbon content at factory gate

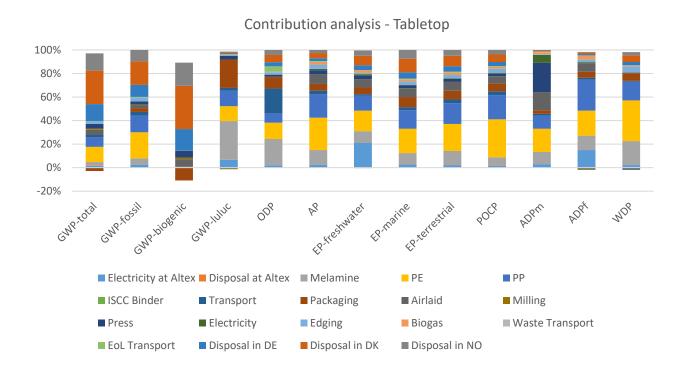
BIOGENIC CARBON CONTENT TABLETOP/TABLETOP+ PER M <sup>2</sup>				
Parameter	Unit	At the factory gate		
Biogenic carbon content in product	[kg C]	0		
Biogenic carbon content in accompanying packaging	[kg C]	0.0779		
Note	1 kg biogenic carbon is equivalent to 44/12 kg of CO₂			

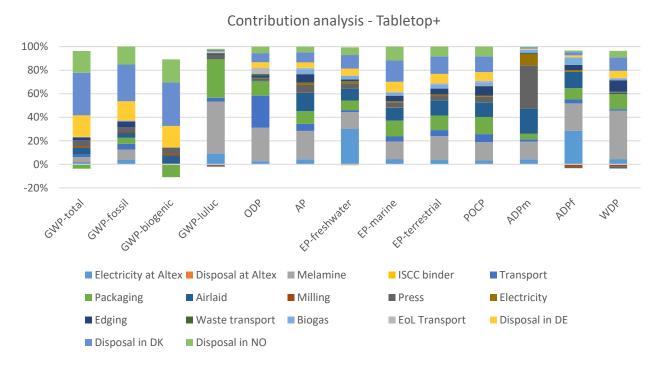


### Additional information

#### **LCA** interpretation

The following figures displays a contribution analysis for Textile Tabletop and Tabletop<sup>+</sup>. The different colors represent distinctive life cycle processes and the size of certain color in a bar expresses the impact on the environmental impact category from that process. The figures are 100 % stacked diagram and does not reveal the size of impact on each environmental impact category, but only the percentage of which each process is responsible for the impact.







#### **Technical information on scenarios**

End of life (C1-C4)

Scenario information	Value	Unit
Collected separately	100	%
Collected with mixed waste	0	%
For reuse	0	%
For recycling	0	%
For energy recovery	0	%
For final disposal	0	%
Assumptions for scenario development	N/A	As appropriate

Re-use, recovery and recycling potential (D)

Scenario information/Materiel	Value	Unit
Displaced electricity, modelled as the Danish electrical grid.	-1.39 MJ	Per kg
Displaced heating energy, modelled as natural gas.	-2.85 MJ	Per kg

#### **Indoor** air

The EPD does not give information on release of dangerous substances to indoor air because the horizontal standards on the relevant measurements are not available.

Relevant information on material emissions is available on https://www.kvadrat.dk/en/really

Supporting documentation is available on request.

#### Soil and water

The EPD does not give information on release of dangerous substances to soil and water because the horizontal standards on the relevant measurements are not available. Read more in EN15804+A1 chapter 7.4.2.



### References

Publisher	www.epddanmark.dk Template version 2022.2
Programme operator	Danish Technological Institute Buildings & Environment Gregersensvej DK-2630 Taastrup www.teknologisk.dk
LCA-practitioner	The LCA has been conducted by an internal LCA practitioner, Oskar Lasse Lilleøre, Troels Theilby and supported by external LCA practitioner Tomas Sander Poulsen, and Matias Lund Pedersen, Provice.
LCA software /background data	The LCA has been in continuous development since June 2021 and was completed and verified during the spring of 2023. All energy data is calculated from Ecoinvent 3.8 and OpenLCA 1.11.0.
3 <sup>rd</sup> party verifier	Kim Christiansen

#### **General programme instructions**

General Programme Instructions, version 2.0, spring 2020 www.epddanmark.dk

#### EN 15804

DS/EN 15804 + A2:2019 - "Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products"

#### EN 15942

DS/EN 15942:2011 – " Sustainability of construction works – Environmental product declarations – Communication format business-to-business"

#### ISO 14025

DS/EN ISO 14025:2010 – " Environmental labels and declarations – Type III environmental declarations – Principles and procedures"

#### ISO 14040

DS/EN ISO 14040:2008 – " Environmental management – Life cycle assessment – Principles and framework"

#### ISO 14044

DS/EN ISO 14044:2008 – " Environmental management – Life cycle assessment – Requirements and guidelines"