

ENVIRONMENTAL PRODUCT DECLARATION

in accordance with ISO 14025, ISO 21930 and EN 15804

Owner of the declaration:

Program operator:

Publisher:

Declaration number:

Registration number:

ECO Platform reference number:

Issue date:

Valid to:

Fora Form AS

The Norwegian EPD Foundation

The Norwegian EPD Foundation

NEPD-2202-1002-EN

NEPD-2202-1002-EN

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26.05.2020

26.05.2025

Knekk table

Fora Form AS

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General information

Product: Knekk table Owner of the declaration:

Fora Form AS

Contact person: Camilla Løseth Phone: +47 700 46 000 e-mail: info@foraform.com

Program operator:

The Norwegian EPD Foundation Pb. 5250 Majorstuen, 0303 Oslo

Phone: +47 97722020

Manufacturer: Fora Form AS

e-mail: post@epd-norge.no

Declaration number: NEPD-2202-1002-EN Place of production:

Mosflatevegen 6154 Ørsta

ECO Platform reference number:

Management system:

NS-EN ISO 14001: 2015 No. 800406. NS-EN ISO 9001: 2015 No. 901268. NS-EN ISO 45001: 2018 No 907167.

This declaration is based on Product Category Rules:

CEN Standard EN 15804:2012+A1:2013 serves as core PCR PCR for furniture NPCR 021, Norwegian EPD Foundation

Organisation no:

986 581 421

Statement of liability:

The owner of the declaration shall be liable for the underlying information and evidence. EPD Norway shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

Issue date: 26.05.2020

Valid to: 26.05.2025

Declared unit:

1 Pcs Knekk table

Year of study:

2020

Declared unit with option:

Comparability:

EPDs from programmes other than the Norwegian EPD Foundation may not be comparable

A1,A2,A3,A4 **Functional unit:**

Author of the Life Cycle Assessment:

The declaration is developed using eEPD v3.0 from LCA.no Approval:

Company specific data are:

Internal verification by:

Collected/registered by: Kåre Sætre

Verification:

Independent verification of data, other environmental information and the declaration according to ISO14025:2010, § 8.1.3 and § 8.1.4

Third party verifier:

Seniorforsker Erik Svanes

(Independent verifier approved by EPD Norway)

Approved:

Sign

Camilla Løseth

Håkon Hauan Managing Director of EPD-Norway

Key environmental indicators	Unit	Cradle to gate A1 - A3
Global warming	kg CO2 eqv	72,73
Total energy use	MJ	1895,69
Amount of recycled materials	%	2,90

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Product

Market:

Worldwide

Product description:

Creative innovation processes require active use of the table. Sticky notes, markers and other tools are active parts of the task and needs a clean work surface and engaged creative people. Jon Fauske has designed a table specifically for innovative design-oriented processes.

The Knekk table offers a clean surface without any disruptions and enables working from all four sides of the table. The slot in the base enables storage for PC's and other tools or diversions that are not required for the specific phase of the process. In addition to the slot the table has four holes perforated in the steel base to integrate electrical sockets.

Product specification

The Knekk table also has the option to attach a retractable paper-roll as an accessory if required by the process.

The worktop is made of MDF and the base is made of steel.

Base is powercoated

Technical data:

Knekk table has standard size 1800x900mm / height 900mm. Furniture fact certificate NS-EN 16139:2013 / R16644

Weight: 32,7 kg (packaging exluded)

Reference service life, product

Reference service life, building

Materials	kg		Recycled share in material (kg)	Recycled share in material (%)
Metal - Steel	17,68	49,91	0,00	0,00
Wood - Medium Density Fibreboard (MDF)	11,50	32,47	0,00	0,00
Plastic - Acrylonitrile butadiene styrene (ABS)	0,10	0,28	0,00	0,00
Plastic - Polyoxymethylene (POM)	0,04	0,11	0,02	50,00
Linoleum	3,40	9,60	0,00	0,00
Cardboard	2,70	7,62	2,06	76,30

LCA: Calculation rules

Declared unit:

1 Pcs Knekk table

Cut-off criteria:

All major raw materials and all the essential energy is included. The production processes for raw materials and energy flows with very small amounts (less than 1%) are not included. These cut-off criteria do not apply for hazardous materials and substances.

Allocation:

The allocation is made in accordance with the provisions of EN 15804. Effects of primary production of recycled materials is allocated to the main product in which the material was used. The recycling process and transportation of the material is allocated to this analysis.

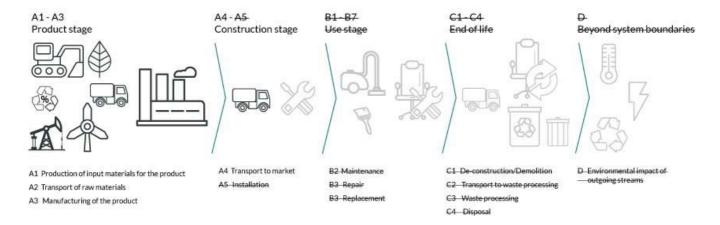
Data quality:

Specific data for the product composition are provided by the manufacturer. They represent the production of the declared product and were collected for EPD development in the year of study. Background data is based on registered EPDs according to EN 15804, Ostfold Research databases, ecoinvent and other LCA databases. The data quality of the raw materials in A1 is presented in the table below.

Materials	Source	Data quality	Year
Plastic - Polyoxymethylene (POM)	ecoinvent 3.4	Database	2015
Plastic - Acrylonitrile butadiene styrene (ABS)	PlasticsEurope	EPD	2015
Cardboard	ecoinvent 3.4	Database	2017
Linoleum	ecoinvent 3.4	Database	2017
Metal - Steel	ecoinvent 3.4	Database	2017
Metal coating - Powder coating on steel	ecoinvent 3.4	Database	2017
Wood - Medium Density Fibreboard (MDF)	ecoinvent 3.4	Database	2017

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System boundary:



Additional technical information:

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The following information describe the scenarios in the different modules of the EPD.

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Transport from production place to user (A4)

Туре	Capacity utilisation (incl. return) %	Type of vehicle	Distance km	Fuel/Energy consumption	Unit	Value (I/t)
Truck	38,8 %	Truck, 16-32 tonnes, EURO 5	500	0,044606	l/tkm	22,30
Railway					l/tkm	
Boat					l/tkm	
Other Transportation					l/tkm	

Assembly (A5)			Use (B1)				
	Unit	Value			U	Init	Value
Auxiliary	kg						
Water consumption	m ³		<u> </u>				
Electricity consumption	kWh						
Other energy carriers	MJ						
Material loss	kg						
Output materials fr ste treatment	kg						
Dust in the air	kg						
VOC emissions	kg						
Maintenance (B2)/Repair (B3)			Replacement (B4)/Ref	urbishment (B5)			
	Unit	Value				Unit	Valu
Maintenance cycle*	O'CO.		Replacement cycle*				
Auxiliary	char.		Electricity consumptio	n		kWh	
Other resources	4/10		Replacement of worn	parts			
Water consumption	m ³	26	* Described above if re	levant			
Electricity consumption	kWh	116					
Other energy carriers	MJ		41				
Material loss	kg		"Aa				
VOC emissions	kg		are.				
Operational energy (B6) and water consu	mption (B7)		Replacement (B4)/Ref . Replacement cycle* Electricity consumptio Replacement of worn * Described above if ref 47.44 Per End of Life (C1, C) . Hazardous waste disposed to the consumption of the consumpti	704			
	Unit	Value		ina		Unit	Valu
Water consumption	m ³		Hazardous waste dispo	sed C/U~		kg	
Electricity consumption	kWh		Collected as mixed co	nstruction was	Me	kg	
Other energy carriers	MJ		Reuse		4	kg	
Power output of equipment	k/V		Recycling				
			Energy recovery				
			To landfill			kg	
Transport to waste processing (C2)							
Туре	Capacity utilisation (incl. return) %	Type of ve	ehicle Distance km	Fuel/Energy consumption	Unit	V	alue (I/t
Truck					I/tkm		
Railway					I/tkm		
Boat			17:		I/tkm		
Dogs		0	4.		.,		

11001			II LIGHT	1
Railway			I/tkm	
Boat			I/tkm	
Other Transportation			I/tkm	
				50

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LCA: Results

System boundaries (X=included, MND=module not declared, MNR=module not relevant)

Product stage			instal	ruction llation age		User stage				End of I	ife stage	9	Beyond the system bondaries			
Raw materials	Transport	Manufacturing	Transport	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De- construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery- Recycling- potential
A1	A2	А3	A4	A5	B1	B2	В3	B4	B5	В6	В7	C1	C2	C3	C4	. D
Х	Х	Х	Х	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	. MND

Environmental impact

Parameter	Unit	A1	A2	А3	A4
GWP	kg CO ₂ -eq	7,27E+01	8,49E+00	6,25E-02	2,88E+00
ODP	kg CFC11 -eq	5,19E-06	1,57E-06	3,21E-09	5,31E-07
POCP	kg C ₂ H ₄ -eq	2,10E-02	1,38E-03	1,21E-05	4,70E-04
АР	kg SO ₂ -eq	4,13E-01	2,71E-02	3,00E-04	9,19E-03
EP	kg PO ₄ ³⁻ -eq	1,57E-01	4,49E-03	4,09E-05	1,52E-03
ADPM	kg Sb -eq	2,15E-04	2,59E-05	1,43E-07	8,78E-06
ADPE	MJ	7,94E+02	1,28E+02	6,93E-01	4,34E+01

GWP Global warming potential; ODP Depletion potential of the stratospheric ozone layer; POCP Formation potential of tropospheric photochemical oxidants; AP Acidification potential of land and water; EP Eutrophication potential; ADPM Abiotic depletion potential for non fossil resources; ADPE Abiotic depletion potential for fossil resources

Reading example: 9,0 E-03 = 9,0*10-3 = 0,009

*INA Indicator Not Assessed

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Resource use

Parameter	Unit	A1	A2	А3	A4
RPEE	MJ	9,76E+02	1,86E+00	4,87E-01	6,33E-01
RPEM	MJ	1,23E+02	0,00E+00	0,00E+00	0,00E+00
TPE	MJ	1,10E+03	1,86E+00	4,87E-01	6,33E-01
NRPE	MJ	9,20E+02	1,31E+02	1,19E+00	4,44E+01
NRPM	MJ	5,01E+00	0,00E+00	0,00E+00	0,00E+00
TRPE	MJ	9,25E+02	1,31E+02	1,19E+00	4,44E+01
SM	kg	2,08E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	7,10E-05	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00
W	m ³	9,17E+00	2,45E-02	5,67E-04	8,32E-03

RPEE Renewable primary energy resources used as energy carrier; RPEM Renewable primary energy resources used as raw materials; TPE Total use of renewable primary energy resources; NRPE Non renewable primary energy resources used as energy carrier; NRPM Non renewable primary energy resources used as materials; TRPE Total use of non renewable primary energy resources; SM Use of secondary materials; RSF Use of renewable secondary fuels; NRSF Use of non renewable secondary fuels; W Use of net fresh water

Reading example: 9,0 E-03 = 9,0*10-3 = 0,009

*INA Indicator Not Assessed

End of life - Waste

Parameter	Unit	A1	A2	А3	A4
HW	kg	5,43E-03	7,64E-05	1,44E-06	2,59E-05
NHW	kg	4,08E+01	6,89E+00	1,79E-02	2,34E+00
RW	kg	INA*	INA*	INA*	INA*

HW Hazardous waste disposed; NHW Non hazardous waste disposed; RW Radioactive waste disposed

Reading example: 9,0 E-03 = 9,0*10-3 = 0,009

*INA Indicator Not Assessed

End of life - Output flow

Parameter	Unit	A1	A2	А3	A4
CR	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00
MR	kg	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
EEE	MJ	INA*	INA*	INA*	INA*
ETE	MJ	INA*	INA*	INA*	INA*

CR Components for reuse; MR Materials for recycling; MER Materials for energy recovery; EEE Exported electric energy; ETE Exported thermal energy

Reading example: 9.0 E-03 = 9.0*10-3 = 0.009

*INA Indicator Not Assessed

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Additional Norwegian requirements

Greenhouse gas emissions from the use of electricity in the manufacturing phase

National production mix from import, low voltage (production of transmission lines, in addition to direct emissions and losses in grid) of applied electricity for the manufacturing process (A3).

Electricity mix	Data source	Amount	Unit	
El-mix, Norway (kWh)	ecoinvent 3.4	31,04	g CO2-ekv/kWh	

Dangerous substances

The product contains no substances given by the REACH Candidate list or the Norwegian priority list.

Indoor environment

Our furniture doesn't contain any substanses that effect inndoor environment

Additional environmental information

Bibliography

ISO 14025:2010 Environmental labels and declarations - Type III environmental declarations - Principles and procedures.

ISO 14044:2006 Environmental management - Life cycle assessment - Requirements and guidelines.

EN 15804:2012+A1:2013 Environmental product declaration - Core rules for the product category of construction products.

ISO 21930:2017 Sustainability in buildings and civil engineering works - Core rules for environmental product declarations of construction products. ecoinvent v3, Allocation, cut-off by classification, Swiss Centre of Life Cycle Inventories.

Iversen et al., (2018) eEPD v3.0 - Background information for EPD generator system. LCA.no report number 04.18

Vold et al., (2019) EPD generator for Norsk Industri, Background information for industry application and LCA data, LCA.no report number 06.19.

NPCR Part A: Construction products and services. Ver. 1.0. April 2017, EPD-Norge.

NPCR 026 Part B for Furniture. Ver. 2.0 October 2018, EPD-Norge.

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