MITSUBISHI ELECTRIC
Changes for the Better

Quality in Motion™

ENVIRONMENTAL PRODUCT DECLARATION

NEXIEZ-MRL Version2

Program Operator	Stichting MRPI® Kingsfordweg 151, 1043 GR Amsterdam
Registration Number	1.1.00761.2025
Published date	19-12-2024
Valid date	19-12-2029

About Mitsubishi Electric Building Solutions

Our Vision

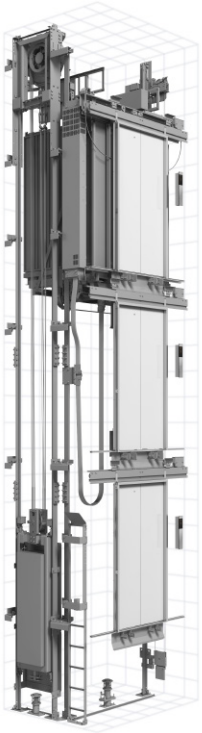
Mitsubishi Electric Building Solutions provides the cutting-edge solutions needed to ensure convenient, comfortable, safe and sustainable building environments. We continue to expand our suite of solutions to make buildings better, and we work closely with you to ensure that our expertise serves to your advantage. We're building solutions and relationships for a brighter tomorrow.

Our Policy

Our aim is to realize both a sustainable global environment and a safe, secure, and comfortable society. To find solutions to environmental problems such as climate change, resource depletion, and the loss of biodiversity, contributing to the protection of the environment is positioned as one of the most important issues that the Mitsubishi Electric Group must address.

NEXIEZ-MRL Version2

NEXIEZ-MRL Version2, is our global flagship model that is environmentally consciously designed with its world-renowned durability and premium quality. NEXIEZ-MRL Version2 is the perfect elevator for supremely comfortable passenger transportation in offices and hotels as well as residential buildings, due to its reliability, precision and silent operation. NEXIEZ-MRL Version2 offers advanced connectivity with other building facilities to enhance the value of the building via mobile phones, automated robots and security devices, but is not limited to these.
The production of the NEXIEZ-MRL Version2 takes place in Thailand and Europe. On the production site in Thailand, the steel, plastic, and electronic components are assembled. Afterwards, packaging is added for transport to Europe. In Europe, some components are installed to finalize the elevator. The production in Europe is based on the production in the Netherlands.
The elevator is as far as possible and ready for installation. All additional materials necessary for operating are included.
Product components: Steel, aluminium, plastics, wood, electronics, motor
Reference service life: 40 years.*



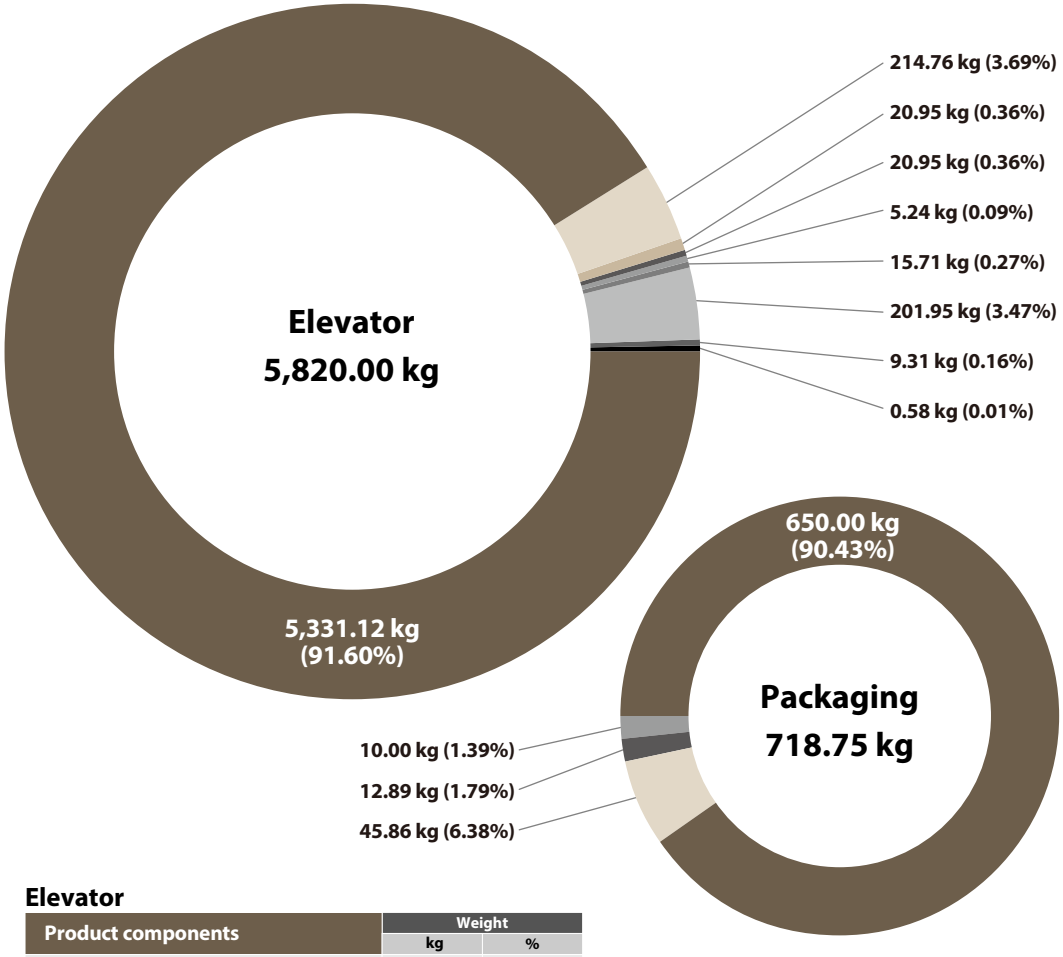
Technical specifications

Index	Value	Range
Type of installation	New generic machine roomless elevator	
Product name	NEXIEZ-MRL Version2	
Usage	Passenger lift	
Type of elevator	Electric	
Type of drive system	Gearless traction	
Geographic region of intended installation	Europe	
Rated load	1000 kg	450 - 1800 kg
Rated speed	1.0 m/s	1.0 - 2.5 m/s
Number of stops	5 stops	2 - 30 stops
Travel	15 m	3 - 80 m
Operating days a year	365 days	260 - 365 days
Applied usage category(UC) according to ISO 25745-2	UC4	
Reference service life	40 years*	

*This applies to an elevator with proper maintenance and parts replacement.
*For the detail conditions of simulation, please refer to following EPD certification.
https://www.mrpi.nl/epd/nexiez-mrl-version2-elevator/

Raw materials of the product

Material balance of assessed elevator (excl. spare parts)



Elevator

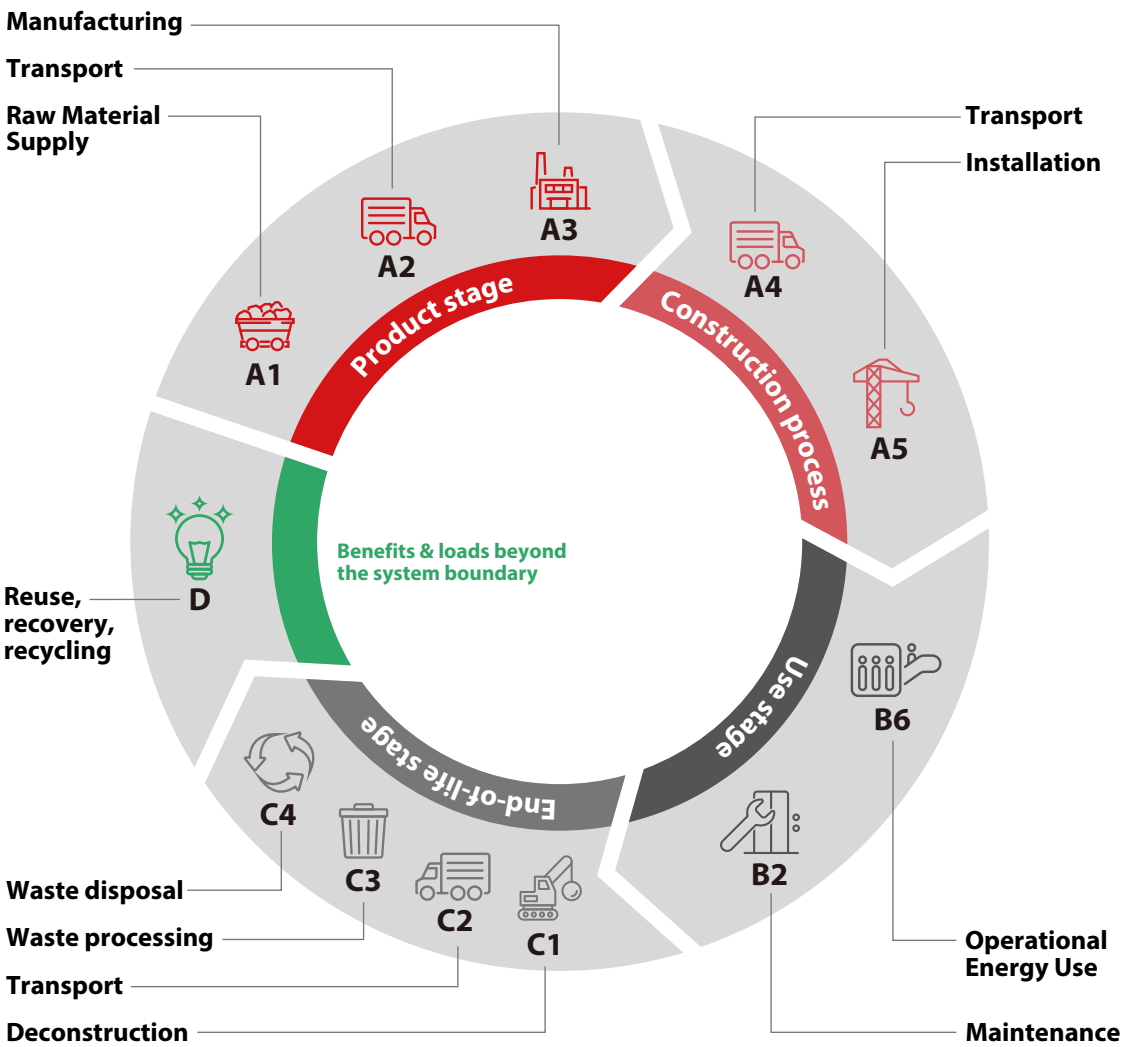
Product components	Weight	
	kg	%
Ferrous metals	5331.12	91.60
Non-ferrous metals	214.76	3.69
Plastics and rubbers	20.95	0.36
Inorganic materials	20.95	0.36
Organic materials	5.24	0.09
Lubricants	15.71	0.27
Electric and electronic equipment	201.95	3.47
Batteries and accumulators	9.31	0.16
Other materials	0.58	0.01

Packaging

Product components	Weight	
	kg	%
Wood	650.00	90.43
Cardboard	45.86	6.38
Plastic	12.89	1.79
Steel	10.00	1.39

Life cycle assessment

All the modules covered in the EPD shown below. This declaration covers “cradle to grave”.



Environmental indicators

Core environmental impact indicators UC4 per TKM

	A1	A2	A3	A4	A5	B6	B2	C1	C2	C3	C4	D
GWP - total [kg CO2 eq.]	9.13E+00	3.17E-01	1.54E-01	3.59E-02	5.00E-02	7.45E+00	5.48E+00	-	1.27E-02	4.41E-02	1.20E-01	-2.10E+00
GWP - fossil [kg CO2 eq.]	9.11E+00	3.17E-01	1.69E-01	3.58E-02	3.41E-02	7.43E+00	5.47E+00	-	1.27E-02	4.40E-02	1.18E-01	-2.10E+00
GWP - biogenic [kg CO2 eq.]	-1.76E-03	0.00E+00	-1.55E-02	0.00E+00	1.58E-02	0.00E+00	-1.80E-06	-	0.00E+00	0.00E+00	1.77E-03	0.00E+00
GWP - luluc [kg CO2 eq.]	1.78E-02	4.03E-04	5.44E-04	1.28E-04	1.61E-04	1.86E-02	1.04E-02	-	4.51E-05	5.97E-05	9.23E-07	-2.89E-03
ODP [kg CFC-11 eq.]	3.95E-07	4.94E-09	4.04E-09	6.37E-10	7.76E-10	1.41E-07	3.28E-07	-	2.25E-10	6.43E-10	7.91E-11	-4.26E-08
AP [Mole of H+ eq.]	7.78E-02	8.02E-03	7.08E-04	1.71E-04	2.61E-04	4.26E-02	3.87E-02	-	6.06E-05	4.26E-04	2.20E-05	-3.75E-02
EP - freshwater [kg P eq.]	1.30E-03	1.59E-06	1.25E-05	3.56E-07	3.20E-06	7.35E-04	1.08E-03	-	1.26E-07	1.82E-06	2.90E-08	-2.27E-04
EP - marine [kg N eq.]	1.40E-02	2.04E-03	1.40E-04	6.51E-05	8.75E-05	5.35E-03	7.21E-03	-	2.30E-05	9.79E-05	1.05E-05	-3.06E-03
EP - terrestrial [Mole of N eq.]	1.37E-01	2.25E-02	1.67E-03	6.94E-04	9.88E-04	6.23E-02	8.31E-02	-	2.46E-04	1.12E-03	1.07E-04	-4.26E-02
POCP [kg NMVOC eq.]	4.35E-02	6.16E-03	5.01E-04	2.37E-04	3.01E-04	2.00E-02	2.45E-02	-	8.39E-05	3.38E-04	2.87E-05	-1.48E-02
ADPE [kg Sb eq.]	2.09E-03	4.29E-07	1.35E-06	1.12E-07	2.09E-07	8.88E-05	1.92E-03	-	3.97E-08	2.24E-06	4.67E-09	-9.26E-04
ADPF [MJ]	1.09E+02	4.00E+00	2.26E+00	5.12E-01	6.11E-01	1.68E+02	7.01E+01	-	1.81E-01	5.70E-01	2.82E-02	-2.23E+01
WDP [m^3 world equiv.]	2.66E+00	1.16E-02	3.71E-02	2.80E-03	3.97E-02	1.90E+00	9.55E-01	-	9.90E-04	6.98E-03	2.31E-03	-1.55E+00

Indicators describing resource use UC4 per TKM

	A1	A2	A3	A4	A5	B6	B2	C1	C2	C3	C4	D
PERE [MJ]	1.17E+01	3.40E-02	2.85E-01	7.25E-03	1.47E+00	3.68E+01	7.77E+00	-	2.56E-03	8.09E-02	8.52E-04	-2.93E+00
PERM [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
PERT [MJ]	1.17E+01	3.40E-02	2.85E-01	7.25E-03	1.47E+00	3.68E+01	7.77E+00	-	2.56E-03	8.09E-02	8.52E-04	-2.93E+00
PENRE [MJ]	1.09E+02	4.00E+00	2.26E+00	5.13E-01	6.11E-01	1.68E+02	7.01E+01	-	1.82E-01	5.70E-01	2.82E-02	-2.23E+01
PENRM [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
PENRT [MJ]	1.09E+02	4.00E+00	2.26E+00	5.13E-01	6.11E-01	1.68E+02	7.01E+01	-	1.82E-01	5.70E-01	2.82E-02	-2.23E+01
SM [KG]	4.38E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.62E-02	-	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
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
FW [m3]	8.72E-02	4.53E-04	1.09E-03	1.24E-04	1.17E-03	1.33E-01	4.25E-02	-	4.38E-05	2.76E-04	8.33E-05	-3.66E-02

Environmental information describing waste categories and output flows

	A1	A2	A3	A4	A5	B6	B2	C1	C2	C3	C4	D
HWD [KG]	1.18E-03	2.10E-05	8.72E-06	3.27E-06	1.89E-06	2.96E-04	3.35E-04	-	1.16E-06	2.96E-06	2.33E-07	-1.47E-04
NHWD [KG]	1.72E+00	6.17E-02	2.17E-02	3.39E-02	8.20E-03	6.74E-01	4.69E-01	-	1.20E-02	1.83E-02	7.22E-02	-2.28E-01
RWD [KG]	2.95E-04	5.35E-07	7.99E-07	1.17E-07	2.60E-06	1.21E-03	1.59E-04	-	4.15E-08	1.09E-06	1.17E-08	-2.37E-05
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
MFR [KG]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.31E-03	0.00E+00	0.00E+00	-	0.00E+00	1.50E+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
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	0.00E+00	1.63E-01
ETE [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	2.81E-01

Biogenic carbon content of product and packaging

	A1	A2	A3	A4	A5	B6	B2	C1	C2	C3	C4	D
BCCpr [KG]	2.07E+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
BCCpa [KG]	0.00E+00	0.00E+00	8.49E+01	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

Graphic results for GWP and ADPF indicators

Recognitions

1. ISO 14001 | **2. SBT** (Science based targets) | **3. CDP** (Carbon Disclosure Project) | **4. Energy Conservation Act in Japan**

Rated as a company with excellent energy-saving performance (S class)

Declaration of SVHC

As part of their ongoing compliance commitments, Mitsubishi Electric Building Solutions aims to identify which, if any, substances of very high concern (SVHCs), are contained within the product they supply to their customers and in what concentrations. Currently we are not aware of any SVHC present in the elevators or their subcomponents, which fall under the scope of this LCA, exceeding the weight threshold of 0.1% as laid down in Article 33 of the EU REACH regulation.

References

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- Nationale Milieudatabase, "NMD-Toetsingsprotocol opname data in de nationale milieudatabase", versie 1.1 mei 2022
- EN 15804 (incl. A1:2013 and A2:2019), "Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products"
- ISO 14040, "Environmental management - Environmental management -- Life cycle assessment - Principles and framework", ISO14040:2006
- ISO 14044, "Environmental management - Life cycle assessment - Requirements and guidelines", ISO14044:2006
- International Organization for Standardization, ISO/DIS 21930, "Sustainability in building construction – Environmental declaration of building products", ISO/DIS 21930:2007
- International Organization for Standardization, ISO/TR 14025, "Environmental labels and declarations – Type III environmental declarations", ISO/TR 14025:2000
- Environdec PCR: PCR 2019:14-c-PCR-008 Lifts (elevators) (2024-08-27)
- ISO, 2023 "Energy performance of lifts, escalators and moving walks — Part 1: Energy measurement and verification" (ISO 25745- 1:2023)
- ISO, 2015 "Energy performance of lifts, escalators and moving walks - Part 2: Energy calculation and classification for lifts (elevators) (ISO 25745-2:2015, Corrected version 2015-12-15)

Glossary

LCA – Life Cycle Assessment: Assessment methodology of the environmental impact of all relevant material and energy flows throughout the entire life cycle of a product, according to ISO 14040.

EPD – Environmental Product Declaration: A declaration that provides quantified environmental data using predetermined parameters defined in a Product Category Rule according to ISO 14025.

PCR – Product Category Rule: A set of specific rules, requirements, and guidelines for developing environmental declarations for one or more product categories.

REACH – Registration, Evaluation, Authorization and Restriction of Chemicals: EU regulation (EC 1907/2006) that addresses the production and use of chemical substances, and their potential impacts on both human health and the environment.

RSL – Reference Service Life: The reference service life considered for the LCA corresponds to the designed lifetime of the product.

UC – Usage Category: Defines the intensity of the lift usage by categories, based on average number of trips per day according to ISO 25745-2.

ADPE – Abiotic depletion potential for non-fossil resources
ADPF – Abiotic depletion potential for fossil resources
GWP – Global warming potential
ODP – Depletion potential of the stratospheric ozone layer
POCP – Formation potential of tropospheric ozone photochemical oxidants
AP – Acidification potential of land and water
EP – Eutrophication potential
HTP – Human Toxicity Potential
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
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
ETE – Exported thermal energy
TKM – Tonne-kilometer
BCCpr – Biogenic carbon content in product
BCCpa – Biogenic carbon content in packaging

Our elevators, escalators and building management systems are always evolving, helping achieve our goal of being the No.1 brand in quality. In order to satisfy customers in all aspects of comfort, efficiency and safety while realizing a sustainable society, quality must be of the highest level in all products and business activities, while priority is place on consideration for the environment. As the times change, we promise to utilize the collective strengths of its advanced and environmental technologies to offer its customers safe and reliable products while contributing to society.

* Quality in Motion is a trademark of Mitsubishi Electric Corporation.

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⚠ **Safety Tips:** Be sure to read the instruction manual fully before using this product.

New publication effective Sep. 2025.
Specifications are subject to change without notice.

GC004-A INA-2509 Printed in Japan (MEE)