Legrand North America
Middle Atlantic Products
300 Fairfield Road
Fairfield, NJ 07004
1.877.BY.LEGRAND (295.3472)
www.legrand.us

Product Environmental Profile

Middle Atlantic Products® Sectional Wall Mount Cabinet Enclosures

LEGRAND COMPANY OVERVIEW

• Designed to Be Better – Our Commitment to Sustainability
At Legrand®, our sustainability commitment translates into greater benefits and tangible value for our customers, business partners, employees, and the broader community.

• Better Performance
We provide building solutions to meet many building performance goals from sustainability and energy efficiency to productivity and occupant well being. The right choice in network and electrical infrastructure can play a key role in many facets of building performance. Our products help ensure electrical safety. They offer choice and flexibility in space design. They are designed to reduce installation time and material waste on site. Because we know buildings consume a great deal of energy, we offer a range of products and solutions that reduce energy consumption from lighting to plug load to data centers.

• Better Solutions
We offer a wide range of innovative solutions for the building, while constantly evolving our design and development processes to improve the environmental profile of our products. Through active monitoring and research, we serve as an expert resource for market trends and building and product performance standards to keep our customers at the top of their game.

• Better Operations
We focus on operational excellence because we believe optimizing the way we manage energy, water and waste is not only good for the environment, it's good for business. As part of the Department of Energy's Better Building, Better Plants Challenge (BBBP) Legrand has reduced its energy intensity by over 30% across 14 sites in the United States in just three years. Integrating sustainability into the way we run our operations makes us more competitive – and a better business partner.

For information on Legrand PEP's and other sustainability initiatives, scan the QR code to be brought to our Product Sustainability page.

LEGRAND'S ENVIRONMENTAL COMMITMENTS

• Incorporate environmental management into our industrial sites
Of all Legrand sites worldwide, over 85% are ISO 14001 certified (sites belonging to Legrand for more than five years).

• Offer our customers environmentally friendly solutions
Develop innovative solutions to help our customers design more energy efficient, better managed and more environmentally friendly installations.

• Involve the environment in product design
Reduce the environmental impact of products over their whole life cycle.
Provide our customers with all relevant information (composition, consumption, end of life, etc.).

REFERENCE PRODUCT

Function	Protect persons during 20 years against direct contact with live parts and allow grouping monitoring, control and protection devices in a single enclosure or a cabinet having the following dimensions 23.4"x 68.25"x 26.3"
Reference Product	
	Part Number: DWR-35-26
	Wall mount pivot cabinet (Enclosure)

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Reference Flow	- All raw material inputs inclusive of primary packaging and including material that will end up as waste/ recycled during manufacturing - Installation componant - none - All associated processes, transport, and disposal

PRODUCTS CONCERNED

The environmental data is representative of the following products:

Description - Wall mounted pivot cabinet enclosure products within of the following series:

DWR
CWR
EWR
MMR
SR
SWR

CONSTITUENT MATERIALS

This Reference Product contains no substances prohibited by the regulations applicable at the time of its introduction to the market.

It respects the restrictions on use of hazardous substances as defined in the RoHS directive 2011/65/CE.

Total weight of Reference Product (with unit packaging)	183.0 lbs (83.0 kg)

Plastics as % of weight		Metals as % of weight		Other as % of weight	
ABS	<0.1%	Steel	69.6%	Paint	0.9%
				Rubber	<0.1%
				Packaging as % of weight	
				Wood	17.9%
				Cardboard	10.5%
				Polyethylene	1.1%
Total plastics	0%	Total metals	69.6%	Total and other packaging	29.5%

Estimated recycled material content: 21% of weight.

MANUFACTURING

The Reference Product comes from sites that have received ISO 14001 certification.

Specific distances of transport before and after manufacturing were not available, but based on the use of local suppliers and sale within in North America, “Local transport” 621 miles (1,000 km) by heavy truck to the manufacturing site and to local distribution centers was included in the manufacturing stage.

DISTRIBUTION

Products are distributed from logistics centers located to optimize transport efficiency. Information on the distance of distribution is not available so the PCR hypothesis for “Intracontinental transport”, 2,175 miles (3,500 km) by heavy truck, was used. This represents transportation of the Reference Product from our facility to the local point of distribution in the North American market.

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PEP ecopassport®

INSTALLATION

No electricity or a negligible amount is required for installing the reference product.

USE

Servicing and maintenance:
Under normal conditions of use, this type of product requires no servicing or maintenance.

Consumable:
No consumables are necessary to use this type of product.

END OF LIFE

Development teams integrate product end-of-life factors in the design phase.

• Hazardous waste* contained in the product: no hazardous waste
(*) Hazardous waste as defined by European Commission decision 2000/532/EC.

• Recycling rate:
Calculated using the method described in the IEC/TR 62635 technical report, the recyclability rate of the product without packaging is estimated as 95%. This value is based on data collected from a technological channel using industrial procedures. It does not pre-validate the effective use of this channel for end-of-life electrical and electronic products.

Separated into:		(% of product without packaging)
	- plastic materials (excluding packaging):	0%
	- metal materials (excluding packaging):	95%
Recyclability of packaging (separately):		21% (% mass of Primary packaging)

ENVIRONMENTAL IMPACTS

The evaluation of environmental impacts examines the stages of the Reference Product life cycle: manufacturing, distribution, installation, use, and end of life. It is representative of products marketed and used in North America.

The following modelling elements were taken into account:

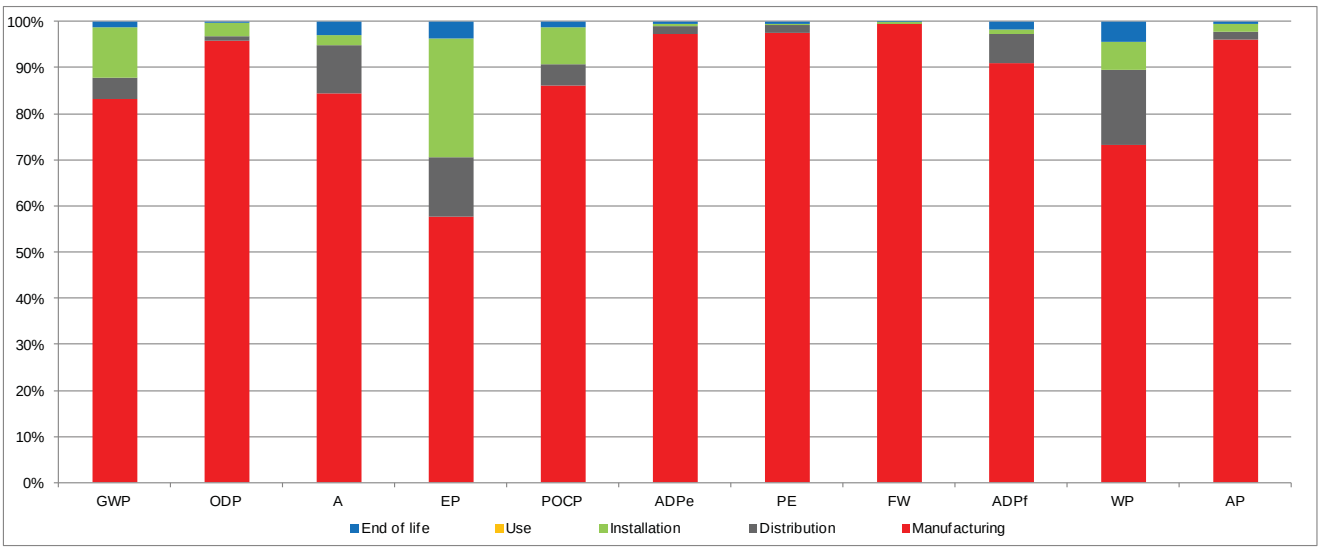
Manufacturing	All transport for the manufacturing of the Reference Product, including materials and components, has been taken into account. Production of raw materials and packing, as well as the product manufacturing is accounted for. The waste generated during manufacturing phase has been included for non packaging materials. Manufacturing process have been accounted for using electricity, fuel and water use for the steel manufacturing portion of the facility.
Distribution	Transport between the last distribution center and an average delivery to the sales area.
Installation	The end-of-life of the packaging is taken into account at this phase.
Use	• Under normal conditions of use, this type of product requires no servicing or maintenance. • No consumables are necessary to use this type of product. • Product category: Enclosure. • Use scenario: Continuous operation for 20 years. • Energy model: This product does not use electricity
End of life	According to the PEP Ecopassport program rules, the end of life of the product is modelled by a transport of 621 miles (1000 km) by truck and landfilling of non-recycled materials (non-metals) the constituent materials.
Software used	EIME V5 and its database "CODDE-2015-04" and the indicators defined in the PCR ed 3 in alignment with the EN15804 standard

ENVIRONMENTAL IMPACTS (continued)

	Total for Life cycle		Raw material and manufacturing		Distribution		Installation		Use		End of life	
Global warming (GWP)	3.17E+02	kg CO2 eq.	2.64E+02	83.25%	1.45E+01	4.57%	3.47E+01	10.97%	0.00E+00	0%	3.84E+00	1.21%
Ozone depletion (ODP)	2.78E-06	kg CFC-11 eq.	2.66E-06	95.79%	2.93E-08	1.05%	8.00E-08	2.88%	0.00E+00	0%	7.77E-09	0.28%
Acidification of soils and water (A)	6.18E-01	kg SO2 eq.	5.21E-01	84.45%	6.50E-02	10.52%	1.29E-02	2.09%	0.00E+00	0%	1.82E-02	2.94%
Water eutrophication (EP)	1.16E-01	kg PO43- eq.	6.67E-02	57.72%	1.49E-02	12.92%	2.97E-02	25.73%	0.00E+00	0%	4.20E-03	3.64%
Photochemical ozone formation (POCP)	1.01E-01	kg C2H4 eq.	8.69E-02	86.09%	4.62E-03	4.57%	8.13E-03	8.05%	0.00E+00	0%	1.31E-03	1.30%
Depletion of abiotic resources - elements (ADPe)	3.27E-05	kg Sb eq.	3.18E-05	97.32%	5.79E-07	1.77%	1.43E-07	0.44%	0.00E+00	0%	1.54E-07	0.47%
Total use of primary energy (PE)	1.24E+04	MJ	1.21E+04	97.60%	2.04E+02	1.65%	3.79E+01	0.31%	0.00E+00	0%	5.43E+01	0.44%
Net use of fresh water (FW)	1.56E+00	m3	1.55E+00	99.49%	1.29E-03	0.083%	6.38E-03	0.41%	0.00E+00	0%	3.43E-04	0.02%
Depletion of abiotic resources – fossil fuels (ADPf)	3.24E+03	MJ	2.94E+03	90.97%	2.03E+02	6.28%	3.50E+01	1.08%	0.00E+00	0%	5.39E+01	1.67%
Water pollution (WP)	1.47E+04	m3	1.07E+04	73.19%	2.38E+03	16.23%	9.20E+02	6.28%	0.00E+00	0%	6.31E+02	4.31%
Air pollution	3.35E+04	m3	3.21E+04	95.96%	5.93E+02	1.77%	5.85E+02	1.75%	0.00E+00	0%	1.77E+02	0.53%

*represents less than 0.01% of the total life cycle of the reference flow.
The values of the 27 impacts defined in the PCR-ed3-EN-2015 04 02 are available in the digital database of pep-ecopassport.org website. The environmental impacts of the Reference Product are representative of the products covered by the PEP, which therefore constitute a homogeneous environmental family.

% Environmental Impact per Life Cycle Stage of Reference Product



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ENVIRONMENTAL IMPACTS (continued)

For products other than the reference product, the environmental impacts can be determined via extrapolation from the reference product impacts, based on the rules listed below. The impacts of the products within the series listed above can reasonably be determined for a given impact category and life cycle phase, by multiplying the corresponding impact value for the reference product by the conversion factor provided below. Factors are generally consistent within a lifecycle phase for each product.

Products	Factor by life cycle phase				
	Manufacturing	Distribution	Installation	Use	End of life
For all covered products listed above, impacts are proportional to:	Mass of product without packaging over mass of reference product without packaging	Total mass of product with packaging over total mass of reference product with packaging	Mass of product packaging over mass of reference product packaging	Impacts are the same as reference product	Mass of product without packaging over mass of reference product without packaging

Registration number: LGRP-00268-V01.01-EN	Drafting rules: "PCR-ed3-EN-2015 04" Supplemented by "PSR-0005-ed2-EN-2016 03 29"
Verifier's accreditation number: VH08	Information and reference documents: www.pep-ecopassport.org
Date of issue: 10-2016	Validity period: 5 years
Independent verification of the declaration and data, in compliance with ISO 14025:2010 Internal ☒ External ☐	
The PCR Review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN).	
The elements of the present PEP cannot be compared with elements from another program.	
Documents in compliance with ISO 14025:2010: "Environmental labels and declarations - Type III environmental declarations"	
In compliance with ISO 14040:2006: "Environmental management – LCA – Principles and framework" In compliance with ISO 14044:2006: "Environmental management – LCA – Requirements and guidelines" In alignment with EN 15804:2012+A1:2013: "Sustainability of construction works - EPD's - Core rules for the product category of construction products"	