















## Additional 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
Electricity, Turkey (kWh)	ecoinvent 3.3 Alloc Rec	696,97	g CO2-ekv/kWh

### Dangerous substances

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

### Indoor environment

Jotun powder coatings do not emit volatile organic substances (VOC) after application.

## 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.

IBU PCR Part B: Requirements on the EPD for Coatings with organic binders. v1.4, September 2016.

Vold et al (2017). EPD and LCA tool for Jotun - Technical description and background information, OR 01.17, Ostfold Research, Fredrikstad 2017.

CEPE v3.0 Raw materials LCI database for the European coatings and printing ink industries, May 2016.

ecoinvent v3.2 Alloc Rec, Swiss Centre of Life Cycle Inventories.





AAMA 2604: The American Architectural Manufacturers Association, Specifications for Paint and Architectural Powder Coat, 2604 - "Intermediate" specification

BREEAM® International (2016): BREEAM International New Construction Technical Manual. SD233-2.0:2017

LEED® v4: LEED® v4 for Building design and construction, U.S. Green Building Council®, 2013

Qualicoat Class 2 standard: Specifications for a Quality Label for Liquid and Powder Organic Coatings on Aluminium for Architectural Applications, 15th Edition, 2017

REACH (2006): Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006. REACH Authorization list – Annex XIV, the Restriction list – Annex XVII and the SVHC candidate list

 <b>epd-norge.no</b> The Norwegian EPD Foundation	<b>Program operator and publisher</b> The Norwegian EPD Foundation Post Box 5250 Majorstuen, 0303 Oslo 0303 Oslo Norway	Phone: +47  e-mail: post@epd-norge.no web: www.epd-norge.no
	<b>Owner of the declaration</b> Jotun A/S Hystadveien 167 3209 Sandefjord	Phone: +47 33 45 70 00 Fax: e-mail: anne.lill.gade@jotun.no web: www.jotun.no
	<b>Author of the Life Cycle Assessment</b> Østfoldforskning AS Stadion 4 1671 Kråkerøy	Phone: +47 69 35 11 00 Fax: +47 69 34 24 94 e-mail: web: www.ostfoldforskning.no
	<b>Developer of EPD generator</b> LCA.no AS Dokka 1C 1671 Kråkerøy	Phone: +47 916 50 916  e-mail: post@lca.no web: www.lca.no