

SUSTAINABILITY INFORMATION

Rev. 01/IT - 11/24

WALL
OPUS

WALL

OPUS

Lime plaster in natural hydraulic lime NHL 5

DESCRIPTION: Lime plaster made with the purest natural hydraulic lime and mineral dolomitic aggregates with a constant grading curve of between 0 and 4 mm. The chemical and physical characteristics of lime guarantee excellent adhesion to surfaces, preventing the formation of mould and significantly contributing to regulating humidity in walls and interiors and providing benefits in terms of indoor comfort.



INTENDED USES: OPUS is suitable for use on any brick, masonry, stone or mixed walls or in general on any homogeneous and even internal or external surface. The product allows for the creation or re-integration of period exposed mortar and the creation or re-integration of plaster on vertical walls and ceilings in successive coats of a maximum thickness of 15/20 mm each. OPUS has been optimised to maximise compatibility with period masonry and is particularly suited to restoration works.

100%
NATURAL
LIME

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EPD

ENVIRONMENTAL PRODUCT DECLARATION

An EPD (Environmental Product Declaration) documents the environmental effects of a product throughout its life cycle, from production to disposal and recycling, measuring said effects with standardised LCA (Life-Cycle Assessment) methodology, in accordance with UNI EN ISO 14040 and UNI EN ISO 14044. Prepared in accordance with international standards, the environmental declaration for this product has been prepared by Kiwa - Ecobility Experts on the basis of the LCA developed by the University of Trento.

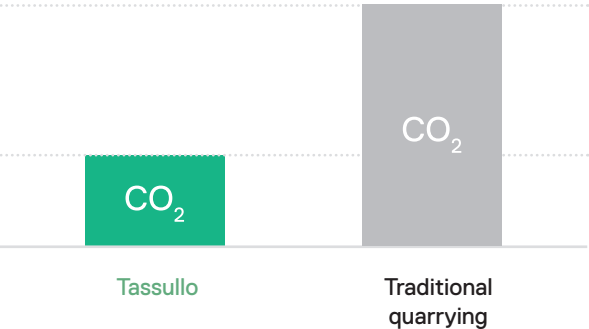
INFORMATION

Name	NHL HEAVY MORTAR
Registration number	EPD-Kiwa-EE-327-EN
Issue date	24/10/2023
Valid to	24/10/2028

PRODUCTION

STAGES: A1 - A3

COMPARISON OF CO₂ EMISSIONS



62% LOWER CO₂ EQUIVALENT EMISSIONS

CO₂ equivalent is calculated by multiplying the emissions of each greenhouse gas by its Global Warming Potential (GWP). The specific manufacturing policies applied by Tassullo allow for a significant reduction in emissions.

Tassullo mines the dolomite for this product from its own quarry, in the heart of the Trentino mountains. Thanks to a special project aimed at reusing the voids resulting from mining, the extraction process has **62% LOWER** CO₂ emissions than traditional quarrying.

WHAT MAKES IT SUSTAINABLE?

NHL 5
Natural binders baked at low temperature

DOLOMIA
Extracted from underground with projects aimed at using the voids created

SHORT DISTANCE
Offices, quarry sites and manufacturing all located within an 8-km range

OPTIMISED PROCESS
Production waste is 0.01%

RENEWABLE ENERGY
Exclusive use of electricity certified as from renewable sources

RECYCLED CONTENT
The product contains by-product material of internal origin

The product has a dolomite aggregate content, identified as a by-product according to UNI Pdr 88:2020 **≥ 80%**

THE LIFE CYCLE

STAGES: C1-C4, D

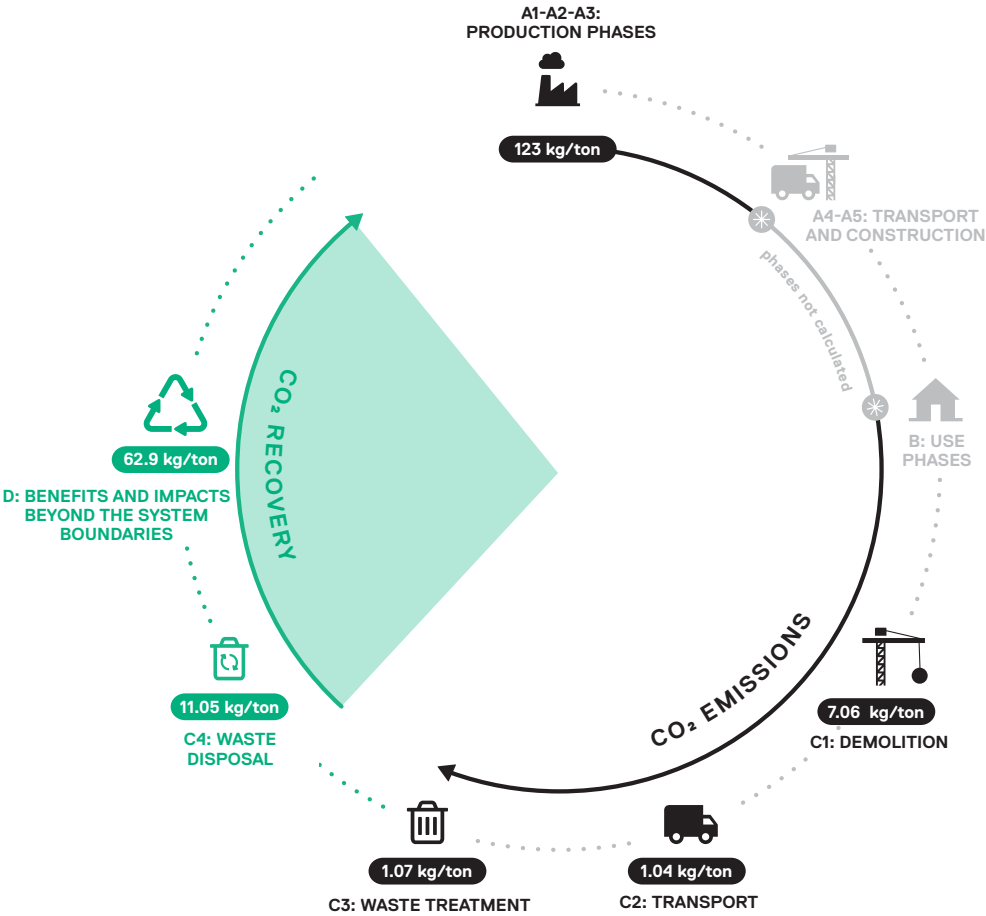
CO₂ RECOVERY AT THE END OF THE PRODUCT LIFE CYCLE



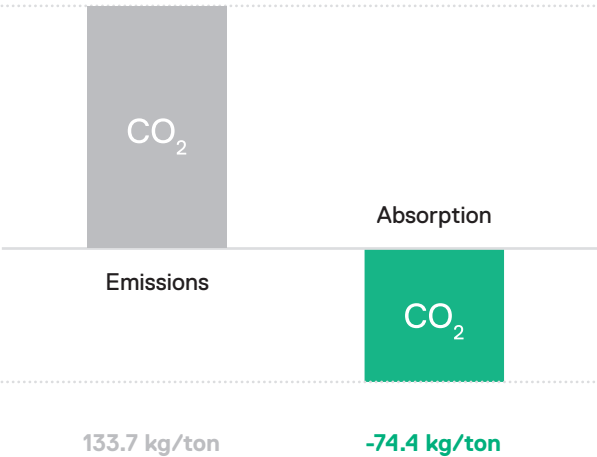
THE PRODUCT IS 100% RECYCLABLE



CARBONISATION OF THE BINDER ABSORBS CO₂ OVER THE LIFESPAN OF THE PRODUCT



EMISSIONS vs ABSORPTION OF CO₂



56% OF CO₂ EQUIVALENT EMISSIONS REABSORBED

Analysis of the end phases of the product life cycle, in addition to production phases, allows the weight of CO₂ reabsorbed by the environment to be quantified.

MEC

MINIMUM ENVIRONMENTAL CRITERIA

The Minimum Environmental Criteria (MEC) are environmental requirements defined by the Ministry of the Environment and aimed at promoting a rationalisation of procurement and consumption by providing guidelines for the identification of design, product or service solutions that are superior from an environmental point of view.

MEC refer to specific product categories and, in the case of construction, are aimed at identifying the design solutions best suited to reducing the environmental impact of works throughout their life cycle (construction, demolition, recovery, urban and building refurbishment, restoration and maintenance).

The product responds to the requirements set by the Minimum Environmental Criteria for construction (Italian Ministerial Decree 256 dated 23 June 2022) as follows:

COMPLIANCE WITH MEC CREDITS

Criteria	Definition	Description	Application and compliance
2.5.1	Emissions in enclosed spaces (indoor pollution)	The categories of materials listed below respect the requirements regarding emission limits shown in the following table: [see Italian Ministerial Decree 256 dated 23 June 2022]	This product is not subject to application of emissions limits required as its application is not included in the list provided for by Italian Ministerial Decree of 23 June 2022, point 2.5.1
2.5.2	Pre-prepared concrete and concrete prepared on site	Pre-prepared concretes and concretes prepared on site contain recycled or recovered material or by-products making up at least 5% of the product weight, understood to be the sum of the three portions.	This requirement cannot be applied to this product as it does not constitute a concrete, but rather a plaster mortar as per regulation UNI EN 998-1.
2.6.2	Selective demolition, recovery and recycling	In the event of restructuring, maintenance and demolition, the project requires that at least 70% in weight of the non-hazardous waste generated on a work site is prepared for reuse, recycling or other recovery operations.	On completion of demolition operations, the product can be sent as-is for reuse, recovery or recycling.

GREEN BUILDING RATING

MAPPING OF INTERNATIONAL SYSTEMS FOR THE CERTIFICATION OF SUSTAINABLE BUILDINGS

LEED, BREEAM, WELL and ARCA are international rating systems whose common goal is to provide an objective assessment of the sustainability of an individual construction intervention. The tables below show the credits provided by each protocol to which Tassullo products can contribute. The green tick indicates that the product to which this sustainability information relates is compliant. For further information, the tassullo.it website provides the complete contribution matrix, which indicates all the contributing products for each credit.

LEED

LEED (Leadership in Energy and Environmental Design) is a certification system for healthy, highly efficient buildings that offer environmental, social and governance advantages.

Credit	Compliance
Integrative process	
Enhanced commissioning	
Optimize energy performance	
Building life cycle impact reduction	
Environmental product declaration	
Material ingredients	
Construction and demolition waste management	

BREEAM

BREEAM (Building Research Establishment Environmental Assessment Methodology) is a certification system for sustainable buildings whose main aim is to mitigate environmental impact in a tangible and economic manner.

Category	Credit	Compliance
Man 04	Commissioning and handover	
Man 05	Aftercare	
Hea 02	Indoor air quality: avoidance of asbestos	
Hea 02	Indoor air quality: indoor air quality plan	
Hea 04	Thermal comfort	
Ene 01	Reduction of energy use and carbon	
Ene 04	Passive design	
Mat 01	Life cycle impacts	
Mat 03	Responsible sourcing of construction	
Mat 05	Designing for durability and resilience	
Wst 01	Construction waste management	

WELL

WELL Building Standard™ is a certification system that allows buildings and organisations to offer spaces that improve human health and well-being.

Category	Credit	Compliance
A09.2	Perform envelope commissioning	
T01	Provide acceptable thermal environment	
X01.1	Restrict asbestos	
X01.3	Restrict lead	
X05.2	Select compliant architectural and interior products	
X08	Select materials with enhanced chemical restrictions	

ARCA

ARCA is the first certification system for constructions in wood. Its protocol guarantees the durability, the resistance to earthquakes and fire, the energy saving capabilities, the sustainability, the materials and the healthiness of a building.

Credit	Compliance
Energy efficiency of a building	
Rising damp and condensation	
Building maintenance plan	
Healthiness and LCA: indoor air quality measured with level B	
Healthiness and LCA: use of "LCA-ARCA" software	