Environmental Product Declaration

GYPROCK®

Gypsum Plasterboard Products Manufactured by Gyprock

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An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com

This EPD covers multiple products based on a representative Gyprock Standard – 13mm, the list of which can be found on page 11.

EPD® THE INTERNATIONAL EPD® SYSTEM | AUSTRALASIA EPD® ENVIRONMENTAL PRODUCT DECLARATION | ECO PLATFORM EPD VERIFIED

In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021
Program: The International EPD® System — www.environdec.com
Program Operator: EPD International AB
Regional Program: EPD Australasia — www.epd-australasia.com

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Tackling the sustainability challenge in building

As a trusted supplier of building solutions, we are taking on industry challenges to cut carbon emissions and waste, and better manage resources.

The global building industry has a vital role to play in making progress on sustainability goals. With building materials and operations accounting for approximately 37% of greenhouse gas (GHG) emissions globally[1], work to decarbonise products, processes and logistics will be a major factor in moving our sector towards net zero.

Manufacturing building materials and how these are packaged, used and disposed of can have negative impacts on the environment. If our industry is to make progress towards resource efficiency, waste reduction and preserving biodiversity, it's important to understand exactly how our products are having an impact – on our climate and resources, and on nature and communities.

Revealing sustainability opportunities for our industry, business and customers

At CSR, we are committed to leading the much-needed shift to sustainable manufacturing and driving decarbonisation of operations and products. As an innovator for our industry, we believe that finding ways to advance our sustainability agenda supports a better future for our industry, business and customers.

Providing Environmental Product Declarations (EPDs) to our customers enables us to share robust information about the environmental performance of our building materials. This supports them in making informed choices on the solutions that best meet their objectives for quality and sustainability outcomes in building projects.

It also creates an opportunity to establish embodied carbon baselines and identify key material sources of impact at a product level. Knowing where these impacts occur along the value chain will highlight opportunities to maximise material efficiency, reduce embodied carbon and extend product life across our range. This will provide CSR with information we need to innovate in our product design and manufacturing processes with the goal of optimising environmental performance across all our building solutions.

[1] United Nations Environment Program. "Global Status Report for Buildings and Construction", 2022.

Building solutions for a better future

CSR offers a unique portfolio of products to provide complete customer solutions that build sustainable places and communities.

At CSR, our products have been used in buildings for almost a century. Our operations span Australia, New Zealand, parts of Asia and Europe and we have the scale and expertise to innovate for the sustainable solutions our customers and communities need to build for a better future.

As a trusted supplier of building solutions, we are taking on industry challenges to cut carbon emissions and waste, and better manage resources. **To set our ambition and ignite our progress, we are committed to 2030 targets across:**

1

Reducing our emissions, waste and water use

2

Increasing uptake of renewable energy

3

Improving biodiversity outcomes

Towards net zero
in the built environment

We take a strategic approach to investing in solutions that reduce emissions - from increasing the uptake of renewable energy to exploring emerging technologies across our operations. This includes optimising our manufacturing plants, energy and process efficiencies and building collaborative partnerships across our operations.

CSR targets for 2030[2]

50% **of energy from renewables**

20% **energy reduction per tonne of saleable product manufactured**

30% **reduction in greenhouse gas (GHG) emissions per tonne of saleable product manufactured**

As part of an industry that accounts for a high proportion of carbon emissions, we are looking to partner with our peers on the best solutions for a successful net zero transition and reduction of embodied carbon for the built environment.

[2] 2030 targets baseline is 1st July 2019 to 30th June 2020.

Reducing waste and preserving resources to protect our environment

As a major supplier of building solutions, CSR has an important role in becoming a closed loop business to influence a circular economy in the built environment.

We are making it a priority to reduce our use of raw materials, increase regenerative and recycled material and actively seek solutions to reduce waste in the manufacturing, packaging and supply of our products.

Since 2018, our timber pallet recovery program has significantly reduced the amount of timber going to landfill. Being a member of the Australian Packaging Covenant Organisation (APCO) demonstrates our focus on redesigning packaging to minimise plastic use and waste. In collaboration with our suppliers, we are committed to monitoring our progress towards our 2025 sustainable packaging targets, where CSR packaging is closed loop (either 100% reusable, recyclable or compostable) and using an average of 50% recycled content in packaging.

CSR closing the loop goals for 2030[3]

75% **reduction in solid waste to landfill**

30% **reduction of potable water consumed (litre) per tonne of saleable product manufactured**

↑ **enhance biodiversity outcomes on CSR sites and developments**

We continually work to eliminate waste across our business and source the ‘right’ materials to manufacture building products from natural, reused, repurposed and recycled materials. Our approach includes working with our team and suppliers to look beyond energy, water and waste to explore holistic environmental management solutions and influence the wider industry to follow circular principles.

[3] 2030 targets baseline is 1st July 2019 to 30th June 2020.

GYPROCK®

Australia’s leading plaster products manufacturer

Since introducing paper-faced plasterboard into the market in 1947, Gyprock has become a leading manufacturer of Australian made gypsum-based products. Driven by constant innovation, Gyprock has continued to pioneer high-performing solutions throughout the years and influence trends in the home design, commercial and architectural space.

GYPROCK®

CSR

Moving forward towards more sustainable plaster products

Gyprock is part of CSR building products group, the name behind some of Australia's most trusted and recognised brands in the construction industry.

To help CSR reach its ambition of a sustainable future for the built environment, Gyprock strives to deliver more sustainable outcomes across its value chain. By developing holistic environmental solutions for packaging and manufacturing, as well as optimising energy usage in its operations, Gyprock is contributing towards making a sustainable building industry a reality.

Minimising waste through recycling and product innovation

To help close the loop, Gyprock has embedded circularity principles in its approach towards product development and packaging, with a focus on reducing waste. In 2023, Gyprock opened an on-site recycling facility at its Wetherill Park NSW manufacturing plant, which resulted in an 80% reduction in paper waste going to landfill.

In 2008, Gyprock launched EC08™, which was the first range of Australian made plasterboards to be manufactured with recycled materials and certified by Good Environmental Choice Australia (GECA)[4]. The Gyprock Enviro Paper Tape is also made from 100% recycled paper. When it comes to packaging, Gyprock has collaborated with suppliers to develop custom packaging in line with targets set by the Australian Packaging Covenant Organisation (APCO)[5].

Making investments in energy efficiency

Gyprock has ensured that these circularity principles are also reflected in its manufacturing approach to further reduce the impact on the environment. For example, waste heat from production is reused in the drying stage for its products. In 2023, Gyprock invested $23 million at its manufacturing plant to not only accelerate the recycling efforts but reduce greenhouse gas (GHG) emissions from its operations.

[4] The GECA ecolabel is Australia's only independent, non-for-profit, multi-sector sustainability and environmental certification program. They provide solutions for sustainable consumption and production and follow ISO 14024 principles for global best practices in ecolabelling, which are independently assessed by assurance providers.
[5] The APCO is the peak national industry body for the packaging sector. They work with government bodies and businesses to reduce the environmental impact of packaging in Australia.

Unparalleled versatility in plasterboard solutions

Gyprock is the preferred choice for many builders, architects and homeowners with its exceptional flexibility in delivering a wide range of functional properties. From soundproofing and fire protection to moisture and mould resistance, Gyprock offers products that can be shaped and adapted to different types of spaces.

Lightweight without compromising on quality

While Gyprock products offer superior performance, they have been manufactured to be extremely lightweight for easier handling. This enables the installation process to be very efficient, leading to cost savings and faster completion of projects.

A high-performing solution for safe, comfortable and resilient structures

Fire-resistance properties, acoustic performance, thermal insulation capabilities and impact resistance are all critical requirements across residential and commercial constructions. The comprehensive range of Gyprock plasterboard systems have been engineered to deliver strong outcomes across all performance standards and can seamlessly adapt in accordance with the specific needs of each project.

Product descriptions

Gyprock offers a wide variety of solutions designed to improve building performance and ensure that fire-resistance, acoustic and thermal insulation requirements can be met across all applications.

Hundreds of products are made each year in its state-of-the-art manufacturing facilities located across the country.

Residential Plasterboard

Aquachek™ - 10mm

Is a lightweight plasterboard that offers moisture resistance, making it the ideal lining for wet areas.

Thickness: 10mm
Width: 1200, 1350mm
Length: 2.4/2.7/3.0/3.6/4.2/4.8/6.0m

Plus™ - 10mm

Is a durable solution designed for walls and ceilings that features optimised core technology, making it stronger and lighter with improved board handling.

Thickness: 10mm
Width: 1200, 1350mm
Length: 2.4/2.7/3.0/3.6/4.2/4.8/5.4/6.0m

HD - 10mm

Is a premium plasterboard that has been formulated to contain 10% recycled materials and provides enhanced durability, impact resistance and acoustic performance.

Thickness: 10mm
Width: 1200, 1350mm
Length: 2.4/2.7/3.0/3.6/4.2/4.8/6.23m

Soundchek™ - 10mm

Features a high-density core that boosts its sound transmission performance, providing effective insulation from airborne and impact noise.

Thickness: 10mm
Width: 1350mm
Length: 4.8m

Supaceil™ - 10mm

Is specifically designed for ceilings with its optimised core technology and ability to span up to 600mm.

Thickness: 10mm
Width: 900mm / Length: 2.4/3.0/3.6/4.8m
Width: 1200, 1350mm / Length: 2.4/2.7/3.0/3.6/4.2/4.8/6.0m

Commercial Plasterboard

Aquachek™ - 13mm

Is a moisture-resistant plasterboard that makes it an effective lining solution for wet areas.

Thickness: 13mm
Width: 1200, 1350mm
Length: 2.4/2.7/3.0/3.6/4.2/4.8/6.0m

EC08™ Complete - 13mm and 16mm

Provide multifunctional performance with their mould, impact, fire, acoustic and moisture-resistance properties.

Thickness: 13, 16mm
Width: 1200mm
Length: 3.0/3.6m

EC08™ Extreme - 13mm

Delivers the highest level of multifunctional performance for commercial buildings, with a focus on impact resistance.

Thickness: 13mm
Width: 1200mm
Length: 3.6m

Flexible - 6.5mm

Is a plasterboard that enables designers and installers to create curved walls and ceilings to add visual interest to a space.

Thickness: 6.5mm
Width: 1200mm
Length: 3.6m

Fyrchek™ - 13mm and 16mm

Have a glass fibre-reinforced gypsum core that offers fire-resistance, making them ideal for use as part of a fire-rated wall or ceiling system.

Thickness: 13, 16mm
Width: 1200, 1350mm
Length: 2.4/2.7/3.0/3.6/4.2/4.8m

Fyrchek™ MR - 13mm and 16mm

Feature a glass fibre-reinforced gypsum core and are suitable for wall and ceiling linings in wet areas, soffits and external eaves.

Thickness: 13, 16mm
Width: 1200mm
Length: 2.7/3.0/3.6m

Impactchek™ - 13mm

Offers superior impact resistance with its denser core, heavy duty lining paper and glass fibre mesh layer.

Thickness: 13mm
Width: 1200mm
Length: 3.6m

Standard - 13mm

Is used for general internal wall and ceiling linings where no fire, acoustic and moisture-resistance standards are specified.

Thickness: 13mm
Width: 900mm / Length: 3.6m
Width: 1200mm / Length: 2.4/2.7/3.0/3.6/4.2/4.8/6.0m
Width: 1350mm / Length: 3.4/3.6/4.8m
Width: 1400mm / Length: 3.0/3.6m

Shaft Liner MP - 25mm

Is a fire-rated board that features enhanced mould protection and is used extensively in shaft systems, party wall and intertenancy wall applications.

Thickness: 25mm
Width: 600mm
Length: 3.0/3.6m

Soundchek™ - 13mm

Is a high-density gypsum plasterboard with superior noise absorption properties for commercial walls and ceilings.

Thickness: 13mm
Width: 1200mm
Length: 3.0m

Perforated Plasterboard

Standard 6mm Round

Is a cost-effective, perforated plasterboard solution for spaces where improved acoustic performance is required.

Thickness: 13mm
Width: 1200mm
Length: 3.6m

Life cycle assessment information

Program Information

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CEN standard EN 15804+A2:2019/AC:2021 serves as the Core Product Category Rules (PCR)

Product Category Rules (PCR) 2019:14 Construction products (EN 15804+A2), Version 1.3.4

UN CPC Code: 314

PCR review was conducted by:
The Technical Committee of the International EPD® System. A full list of members available on www.environdec.com for a list of members. The review panel may be contacted via info@environdec.com.

Review chair: Claudia A. Peña, University of Concepción, Chile.

Independent third-party verification of the declaration and data, according to ISO 14025:2006:

☐ EPD process certification

☒ EPD verification by individual verifier

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Approved by: EPD Australasia Ltd

Procedure for follow-up of data during EPD validity involves third party verifier:

☐ Yes ☒ No

An Environmental Product Declaration (EPD) is a standardised and verified way of quantifying the environmental impacts of a product based on a consistent set of rules known as a Product Category Rules (PCR). This is a specific EPD. The EPD owner has the sole ownership, liability, and responsibility for this EPD.

EPDs within the same product category but registered in different EPD programmes, or not compliant with EN 15804, may not be comparable. For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/declared units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

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Key Facts

This EPD provides data for 1 m^2 of gypsum plasterboard installed, manufactured in Australia, represented by Gyprock Standard - 13mm. Gyprock Standard – 13mm has been selected as the representative product for this EPD as it is the most common type of plasterboard used in the Australian market.

Published in line with EN 15804 and ISO 14025, providing specific information by walling products and detailed by product mass.

LCA Information

TABLE 1 LCA INFORMATION

	Product Characteristics
Declared Unit	1m² of Gyprock Standard - 13mm product installed
Modules Included	Cradle to gate with options, modules C1–C4, and module D with additional modules (A1-A3 + C + D and additional modules). The additional modules are A4 and A5
Technical lifetime	30 years
Geographical Coverage	Australia
Time Period	01 April 2022 – 31 March 2023

Declared unit:

This EPD provides data for 1m² of Gyprock Standard - 13mm product, with its technical lifetime being 30-years, manufactured in Australia. The estimated typical panel life (TLT) of 30 years is based on best estimates by Gyprock staff.

Life Cycle Assessment (LCA) Methodology

This EPD has been produced in conformance with the requirements of PCR 2019:14, General Program Instructions (GPI) 5.0 and four information modules according to ISO 21930 and EN 15804.

Take care when comparing EPDs

There are a few things to look out for when comparing LCAs within Environmental Product Declarations (EPDs):

- They must be based on the same PCR (including the same version number) or be based on fully aligned PCRs or versions of PCRs.
- The two EPDs have equivalent content declarations (e.g., identical declared/functional units) and are valid at the time of comparison.
- The two EPDs have equivalent system boundaries (e.g., cradle-to-gate, cradle-to-grave or other) and descriptions of data.
- Products have identical functions, technical performance and use.
- The LCA behind the EPDs applies equivalent data quality requirements, methods of data collection, and allocation methods.
- The LCA behind the EPDs applies identical cut-off rules and impact assessment methods (including the same version of characterisation factors).
- When evaluating a product's climate impact (i.e., emissions), use the total Global Warming Potential (GWP-total) measure.

EPDs within the same product category but registered in different EPD programs, or not compliant with EN 15804, may not be comparable. For further information about comparability, see EN 15804 and ISO 14025.

It is discouraged to use the results of modules A1-A3 without considering the results of module C.

The best way to compare products and materiality of differences is to place them into the context of a structure across the whole life cycle.

Background data modelling

The inventory data for the process are entered into the SimaPro (v9.5) LCA software program and linked to the pre-existing data for the upstream feedstocks and services selected in order of preference from:

- For Australia, the Australian Life Cycle Inventory (AusLCI) v1.42 compiled by the Australian Life Cycle Assessment Society ((ALCAS), 2023). The AusLCI database at the time of this report was less than 1 year old.
- Other authoritative sources (e.g., Ecoinvent v3.9.1), where necessary adapted for relevance to Australian conditions (energy sources, transport distances and modes and so on, and documented to show how the data is adapted for national relevance). At the time of reporting, the Ecoinvent v3.9.1 database was less than 1 year old.

Product Information

Product description: Gyprock's gypsum plasterboard products are designed to be suitable for various uses in both residential and commercial settings. This EPD covers both non-specialised and specialised plasterboard.

UN CPC code: 314 (Boards and Panels), according to version 2.1, 2015.

ANZSIC code: 2032 (Plaster product manufacturing) according to version 2, 2013.

UNSPSC code: 30111701 (Gypsum plaster) according to version 26.

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TABLE 2 PRODUCT APPLICATIONS

Product Type	Product Names
Non-specialised gypsum plasterboard	Gyprock Aquachek™ - 10mm and 13mm, Gyprock Fyrchek™ - 13mm and 16mm, Gyprock Fyrchek™ MR - 13mm and 16mm, Gyprock Impactchek™ - 13mm, Gyprock Standard - 13mm, Gyprock Plus™ - 10mm, Gyprock Supaceil™ - 10mm, Gyprock Soundchek™ - 10mm and 13mm
Specialised gypsum plasterboard	Gyprock EC08™ Complete - 13mm and 16mm, Gyprock EC08™ Extreme - 13mm, Gyprock Shaft Liner MP - 25mm, Gyprock Standard 6mm Round, Gyprock Flexible - 6.5mm, Gyprock HD - 10mm

TABLE 3 PRODUCTS INCLUDED

Product	Thickness (mm)	Width (mm)	Length (m)	Product weight per m^2 (kg/m^2)*
Gyprock Aquachek™ - 10mm	10	1200, 1350	2.4/2.7/3.0/3.6/4.2/4.8/6.0	7.1
Gyprock Aquachek™ - 13mm	13	1200, 1350	2.4/2.7/3.0/3.6/4.2/4.8/6.0	9.8
Gyprock EC08™ Complete - 13mm	13	1200	3.0/3.6	12.4
Gyprock EC08™ Complete - 16mm	16	1200	3.0/3.6	14.8
Gyprock EC08™ Extreme - 13mm	13	1200	3.6	12.5
Gyprock Flexible - 6.5mm	6.5	1200	3.6	4.3
Gyprock Fyrchek™ - 13mm	13	1200, 1350	2.4/2.7/3.0/3.6/4.2/4.8	10.8
Gyprock Fyrchek™ - 16mm	16	1200, 1350	2.4/2.7/3.0/3.6/4.2/4.8	12.9
Gyprock Fyrchek™ MR - 13mm	13	1200	2.7/3.0/3.6	11.1
Gyprock Fyrchek™ MR - 16mm	16	1200	2.7/3.0/3.6	13.3
Gyprock Impactchek™ - 13mm	13	1200	3.6	10.5
Gyprock Plus™ - 10mm	10	1200, 1350	2.4/2.7/3.0/3.6/4.2/4.8/5.4/ 6.0	5.7
Gyprock Shaft Liner MP - 25mm	25	600	3.0/3.6	19.8
Gyprock Soundchek™ - 10mm	10	1350	4.8	9.3
Gyprock Soundchek™ - 13mm	13	1200	3	13
Gyprock Standard - 13mm	13	900	3.6	8.5
Gyprock Standard - 13mm	13	1200	2.4/2.7/3.0/3.6/4.2/4.8/6.0	8.5
Gyprock Standard - 13mm	13	1350	3.4/3.6/4.8	8.5
Gyprock Standard - 13mm	13	1400	3.0/3.6	8.5
Gyprock Supaceil™ - 10mm	10	900	2.4/3.0/3.6/4.8	6.1
Gyprock Supaceil™ - 10mm	10	1200, 1350	2.4/2.7/3.0/3.6/4.2/4.8/6.0	6.1
Gyprock HD - 10mm	10	1200, 1350	2.4/2.7/3.0/3.6/4.2/4.8/6.23	8.5
Gyprock Standard 6mm Round	13	1200	3.6	7.8

* These weights are marketed product weights, aligning with information in product brochures on Gyprock's website. To find more about product details please visit https://www.gyprock.com.au/products

CSR

Life cycle content information

Cradle to Gate (Module A1-A3)

The product is mainly composed of stucco, gypsum accelerator, plasterboard liner, starch, retarder, and various additives.

Gyprock has four manufacturing locations: Wetherill Park in New South Wales, Yarraville in Victoria, Coopers Plains in Queensland, and Welshpool in Western Australia. For most manufacturing inputs, such as diesel, petrol, and water, the allocation was based on the annual energy and water consumption amount and the annual production amounts (in m^2) of different products. The annual data was collected in four production plants from April 2022 – March 2023. For manufacturing outputs, such as waste to landfill, recycling, and wastewater, the annual amount was collected in the manufacturing plant and was allocated to each product based on the annual production volumes (in m^2).

It is discouraged to use the results of modules A1-A3 without considering the results of module C.

Upstream processes

The upstream processes include those involved in Module A1 – Raw material supply. This module includes:

- Extraction, transport, and manufacturing of raw materials.
- Generation of electricity from primary and secondary energy resources, also including their extraction, refining and transport for Module A1.

Core processes

The core processes include those involved in Module A2 and Module A3, including:

- External transportation of materials to the core processes and internal transport.
- Manufacturing of products.
- Packaging material (pallets) for sold product. Packaging material cradle to gate impact has been captured in A1-A3 modules, including raw material, manufacturing, transport to Gyprock.
- Treatment of waste generated from the manufacturing processes.

Regarding the electricity mix in states where manufacturing plants are:

- The primary energy sources of energy in the NSW region are black coal: 62% and natural gas: 20%.
  - 0.72 kg CO_2eq/kWh (GWP-GHG)
- The primary energy sources of energy in the VIC region are natural gas: 44% and brown coal: 41%
  - 0.84 kg CO_2eq/kWh (GWP-GHG)
- The primary energy sources of energy in the WA region are natural gas: 64% and wind: 26%
  - 0.57 kg CO_2eq/kWh (GWP-GHG)
- The primary energy sources of energy in the QLD region are black coal: 71% and natural gas: 12%
  - 0.80 kg CO_2eq/kWh (GWP-GHG)

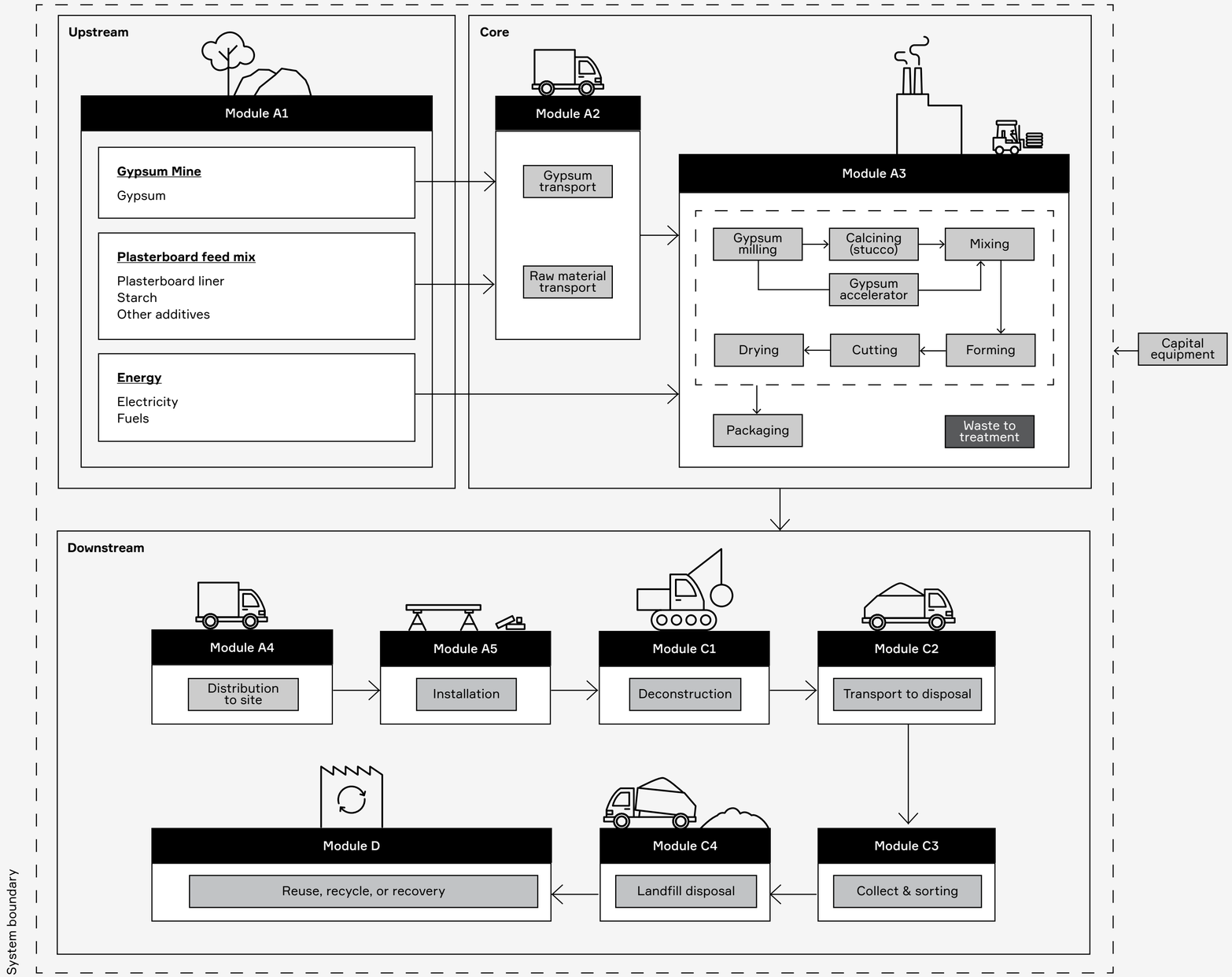

Figure 1: System Diagram*

*The manufacturing plant in Coopers Plains receives stucco directly from the supplier, so the gyprock rock calcinating process doesn't apply to this plant.

TABLE 4 CONTENT DECLARATION

	Representative product: Gyprock Standard – 13mm		Other Gyprock products	
Material Input	**Percent composition for 1m2 of product**	**Post-consumer recycled material, weight, %**	**Percent composition for 1m2 of product**	**Post-consumer recycled material, weight, %**
Stucco	72-96%	0	72-96%	0
Gypsum Accelerator	0-1%	0	0-1%	0
Plasterboard Liner	2-8%	2-8%	2-8%	2-8%
Starch	0-1%	0	0-1%	0
Retarder	0-1%	0	0-1%	0
Additives	0-5%	0	0-5%	0
Each of other ingredients	0-18%	0	0-18%	0

Table 4 lists the main ingredients used to produce the gypsum plasterboard products included in this EPD. The plasterboard liner is 100% post-consumer recycled material. Other raw material doesn't contain post-consumer recycled content. The given % is a rough range as the raw material amount contained in each product stays confidential.

None of the products contain one or more substances that are listed in the “Candidate List of Substances of Very High Concern for authorisation”. According to the PCR 2019:14, if one or more substances of the “Candidate List of Substances of Very High Concern (SVHC) for authorisation” are present in a product and their total content exceeds 0.1% of the weight of the product, they need to be reported. Based on available information and product safety data sheets, Gyprock products and their raw materials are not classified as hazardous according to criteria of Safe Work Australia GHS 7.

Wooden pallet is the only packaging used to deliver products to customers. See table 5 for more information about the weight and biogenic carbon in each m^2 of product.

TABLE 5 INFORMATION ABOUT BIOGENIC CARBON CONTENT IN 1m² OF PRODUCT

Product	Biogenic carbon of sugar (kg C)	Biogenic carbon of starch (kg C)	Biogenic carbon of liner (kg C)
Gyprock Aquachek™ - 10mm	5.75E-04	1.20E-02	3.92E-03
Gyprock Aquachek™ - 13mm	2.97E-04	1.52E-02	4.96E-03
Gyprock EC08™ Complete - 13mm	6.02E-05	1.61E-02	5.24E-03
Gyprock EC08™ Complete - 16mm	0.00E+00	2.58E-02	8.40E-03
Gyprock EC08™ Extreme - 13mm	0.00E+00	1.51E-02	4.90E-03
Gyprock Flexible - 6.5mm	9.29E-05	1.72E-02	5.59E-03
Gyprock Fyrchek™ - 13mm	2.48E-04	1.75E-02	5.69E-03
Gyprock Fyrchek™ - 16mm	2.27E-04	2.39E-02	7.79E-03
Gyprock Fyrchek™ MR - 13mm	2.41E-04	1.76E-02	5.74E-03
Gyprock Fyrchek™ MR - 16mm	2.40E-04	2.34E-02	7.61E-03
Gyprock Impactchek™ - 13mm	1.66E-04	1.83E-02	5.96E-03
Gyprock Plus™ - 10mm	4.95E-04	1.29E-02	4.20E-03
Gyprock Shaft Liner MP - 25mm	1.05E-03	1.46E-02	4.76E-03
Gyprock Soundchek™ - 10mm	0.00E+00	1.72E-02	5.60E-03
Gyprock Soundchek™ - 13mm	0.00E+00	1.72E-02	5.60E-03
Gyprock Standard - 13mm (representative product)	3.04E-04	1.61E-02	5.24E-03
Gyprock Supaceil™ - 10mm	3.23E-04	1.44E-02	4.67E-03
Gyprock HD - 10mm	7.38E-04	1.43E-02	4.65E-03
Gyprock Standard 6mm Round	0.00E+00	1.94E-02	6.30E-03

TABLE 6 PACKAGING INFORMATION PER 1m² OF PRODUCT

Product	Pallet Packaging (kg/m²)	Biogenic carbon of packaging (kg C)
Gyprock Aquachek™ - 10mm	0.04	0.08
Gyprock Aquachek™ - 13mm	0.04	0.10
Gyprock EC08™ Complete - 13mm	0.04	0.10
Gyprock EC08™ Complete - 16mm	0.07	0.16
Gyprock EC08™ Extreme - 13mm	0.04	0.08
Gyprock Flexible - 6.5mm	0.02	0.04
Gyprock Fyrchek™ - 13mm	0.04	0.10
Gyprock Fyrchek™ - 16mm	0.04	0.10
Gyprock Fyrchek™ MR - 13mm	0.04	0.10
Gyprock Fyrchek™ MR - 16mm	0.04	0.10
Gyprock Impactchek™ - 13mm	0.04	0.10
Gyprock Plus™ - 10mm	0.04	0.08
Gyprock Shaft Liner MP - 25mm	0.09	0.18
Gyprock Soundchek™ - 10mm	0.04	0.08
Gyprock Soundchek™ - 13mm	0.04	0.10
Gyprock Standard - 13mm (representative product)	0.04	0.10
Gyprock Supaceil™ - 10mm	0.04	0.08
Gyprock HD - 10mm	0.06	0.13
Gyprock Standard 6mm Round	0.04	0.08

Transport (Module A4)

The total transport distance from the manufacturing gate was collected for each product produced at each manufacturing site. All products are either sold to metro or regional market in one of the four states where manufacturing sites are located: New South Wales, Western Australia, Victoria, and Queensland. The % of product sold to metro and regional markets from each manufacturing site is also used to calculate weighted average distances for each product made in each manufacturing plant. These transport distances are summarized in the table below.

TABLE 7 AVERAGE DISTANCE TRAVELLED TO CUSTOMERS

Product	Average distance by truck (km)	Average distance by rail (km)
Gyprock Aquachek™ - 10mm	267	
Gyprock Aquachek™ - 13mm	291	
Gyprock EC08™ Complete - 13mm	521	
Gyprock EC08™ Complete - 16mm	326	
Gyprock EC08™ Extreme - 13mm	116	
Gyprock Flexible - 6.5mm	240	
Gyprock Fyrchek™ - 13mm	433	11
Gyprock Fyrchek™ - 16mm	358	2
Gyprock Fyrchek™ MR - 13mm	299	
Gyprock Fyrchek™ MR - 16mm	184	
Gyprock Impactchek™ - 13mm	142	
Gyprock Plus™ - 10mm	308	1
Gyprock Shaft Liner MP - 25mm	404	19
Gyprock Soundchek™ - 10mm	104	30
Gyprock Soundchek™ - 13mm	135	
Gyprock Standard - 13mm	276	
Gyprock Supaceil™ - 10mm	136	
Gyprock HD - 10mm	248	16
Gyprock Standard 6mm Round	81	

Installation (Module A5)

All products require water, screws, adhesive, jointing tape, and jointing compound for installation. During the installation process, a 15% offcut is generated. Of these offcuts, 30% are recycled, while the remaining 70% are sent to landfill. The 30% recycling rate is a conservative rate based on data collected by Gyprock from installation sites. The production and transportation of these offcuts are included in this module.

Product packaging is discarded and 100% of it has been modelled for landfilling in this study. However, it can be sent back to Gyprock for reuse or recycling.

Disposal / Reuse / Recycling (Module C1-C4)

At end-of-life, products are removed, transported to waste processing, and landfilled. All products could be manually uninstalled, and no energy is required. 100% of the product is landfilled in this analysis.

Scope of Declaration

The scope of this declaration is according to the General Program Instructions (GPI) and four information modules according to ISO 21930 and EN 15804 as given in Table 8.

TABLE 8 THE LIFE CYCLE OF PRODUCTS DECLARED

	Upstream			Core					Downstream									Other environmental information
	Raw material supply	Transport	Manufacturing	Transport	Construction installation process	Material emissions from usage	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction and demolition	Transport	Waste processing	Disposal	Reuse, recycle or recovery
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	x	x	x	x	x	ND	ND	ND	ND	ND	ND	ND	x	x	x	x	x
Geography	AU	AU	AU	AU	AU	x	x	x	x	x	x	x	AU	AU	AU	AU	AU
Specific data used	40-65%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation - products	+102%/-69%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation - sites	Please refer to Table 12 for more details			-	-	-	-	-	-	-	-	-	-	-	-	-	-

ND = Not Declared
The following life cycle stages are deemed not applicable for Gyprock: Material emissions from usage (B1), Maintenance (B2), Repair (B3); Replacement (B4); Refurbishment (B5); Operational energy use (B6); Operational water use (B7), and Reuse, recycle, or recovery (D) over the stated RSL. The scenarios included are currently in use and are representative for one of the most likely scenario alternatives

Variation – Products is measured by the difference between the declared GWP-GHG result, and the product with GWP-GHG results furthest away from the declared results, for modules A1-A3.

Cut-off rules

It is common practice in LCA/LCI protocols to propose exclusion limits for inputs and outputs that fall below a threshold % of the total, but with the exception that where the input/output has a “significant” impact it should be included. According to the PCR 2019:14, Life cycle inventory data shall according to EN 15804+A2 include a minimum of 95% of total inflows (mass and energy) per module. Inflows not included in the LCA shall be documented in the EPD. Data gaps in included stages in the downstream modules shall be reported in the EPD, including an evaluation of their significance. In accordance with the PCR 2019:14, the following system boundaries are applied to manufacturing equipment and employees:

- Environmental impact from infrastructure, construction, production equipment, and tools that are not directly consumed in the production process are not accounted for in the LCI. Capital equipment and buildings typically account for less than a few percent of nearly all LCIs and this is usually smaller than the error in the inventory data itself. For this project, it is assumed that capital equipment makes a negligible contribution to the impacts as per Frischknecht et al. (Frischknecht, 2007) with no further investigation.
- Personnel-related impacts, such as transportation to and from work, are also not accounted for in the LCI. The impacts of employees are also excluded from inventory impacts on the basis that if they were not employed for this production or service function, they would be employed for another. It is very hard to decide what proportion of the impacts from their whole lives should count towards their employment. For this project, the impacts of employees are excluded.

Allocation

According to EN 15804+A2, in a process step where more than one type of product is generated, it is necessary to allocate the environmental stressors (inputs and outputs) from the process to the different products (functional outputs) in order to get product-based inventory data instead of process-based data. An allocation problem also occurs for multi-input processes.

In an allocation procedure, the sum of the allocated inputs and outputs to the products shall be equal to the unallocated inputs and outputs of the unit process.

The following stepwise allocation principles shall be applied for multi-input/output allocations:

- The initial allocation step includes dividing up the system sub-processes and collecting the input and output data related to these sub-processes.
- The first (preferably) allocation procedure step for each sub-process is to partition the inputs and outputs of the system into their different products in a way that reflects the underlying physical relationships between them.
- The second (worst case) allocation procedure step is needed when physical relationship alone cannot be established or used as the basis for allocation. In this case, the remaining environmental inputs and outputs from a sub-process must be allocated between the products in a way that reflects other relationships between them, such as the economic value of the products.

Waste values were provided in each manufacturing location in annual amount and were allocated to each product according to the percentage of total product produced in one year.

The recycling waste produced in the manufacturing process (A3) has 0 economic value to Gyprock, thus, no allocation was conducted for these wastes.

Data Quality and Validation

The primary data used for the study is based on direct utility bills or feedstock quantities from Gyprock’s procurement records. Edge considers the data to be of very good quality for primary data used in this study.

Overall, for all background data, the quality was considered good when processes chosen were geographically, temporal, and technologically relevant as shown in Table 9. For data that was based on assumptions, quality was considered fair, unless based on official reports.

TABLE 9 DATA QUALITY ASSESSMENT SCHEME

Quality	Geographical representativeness	Technical representativeness	Time representativeness
Very good	Data from area under study	Data from processes and products under study. Same of technology applied as defined in goal and scope (i.e., identical technology)	Less than 3 years difference between the reference years according to the documentation and the time period for which data are representative.
Good	Average data from larger area in which the area under study is included	Data from processes and products under study with similar technology. Evidence of variations in state of technology, e.g., different by-product.	Less than 6 years difference between the reference year according to the documentation and the time period for which data are representative.
Fair	Data from area with similar production conditions	Data from processes and products under study but from different technology. This score is applied when no technology is specified.	Less than 10 years difference between the reference year according to the documentation and the time period for which data are representative.
Poor	Data from area with slightly similar production conditions	Data on related processes or products.	Less than 15 years difference between the reference year according to the documentation and the time period for which data are representative.
Very poor	Data from unknown or distinctly different area (North America instead of Middle East, OECD-Europe instead of Russia)	Data on related processes or products but with a different scale or from different technology.	Age of data unknown or more than 15 years difference between the reference year according to the documentation and the time period for which data are representative.

Assumptions, Choices, and Limitations

TABLE 10 ASSUMPTIONS OR LIMITATIONS DATA ASSESSMENT SCHEME

Assumption or limitation	Impact on LCA results	Discussion
Water content added during Calcium Sulphate Hemihydrate transition	Minor	During the manufacturing process, Calcium Sulphate Hemihydrate (Stucco) is converted to Calcium Sulphate Dihydrate. During the process, water is absorbed and added to the product. The water content (weight) is assumed to be 18% of the weight of Calcium Sulphate Hemihydrate (Stucco) for majority of products produced. In practice, it's between 14% to 18% due to various production efficiencies in different plants.
Gypsum rock as the raw material	Minor	For plants that receive gypsum rock from the supplier, the A1 raw material input uses "gypsum rock" background processes for LCA calculation, but the input amount is the weight of stucco. This is due to gypsum conversion efficiency not being measured.
Transport of gypsum rock to plants	Minor	For plants that receive gypsum rock from the supplier, the A2 gypsum transport calculation is based on the weight of stucco as proxy for the weight of gypsum, due to gypsum conversion efficiency not being measured.
Distance to local recycling and landfill sites	Minor	In this LCA study, it's assumed that the distance from the manufacturing and installation sites to the local recycling and landfill locations is 25km, which is agreed upon with Gyprock to be a reasonable assumption.
Hazardous waste density	Minor	For the chemical waste sent to treatment plants, a density of 1.5 kg/L is assumed due to the varieties of chemicals in the liquid and the difficulty to determine the specific density.
Pallet disposal	Minor	Pallets are encouraged to be returned to Gyprock for reuse, however, the number of times one pallet is reused is relatively small (10 or lower, based on Gyprock's estimation). Based on the information, this LCA study has modelled all packaging pallet to be landfilled after delivering to customers.
Exclusion of employees, capital good and infrastructure	Minor	Allowed/required as per EPD rules.

Compliance with Standards

The methodology and report format has been modified to comply with:

- ISO 14040:2006 and ISO14044:2006+A1:2018 which describe the principles, framework, requirements and provides guidelines for life cycle assessment (LCA).
- ISO 14025:2006 Environmental labels and declarations – Type III environmental declarations -- Principles and procedures, which establishes the principles and specifies the procedures for developing Type III environmental declaration programmes and Type III environmental declarations.
- ISO 21930:2017 Sustainability in buildings and civil engineering works – Core rules for environmental product declarations of construction products and services
- EN 15804:2012+A2:2019: Sustainability of construction works – Environmental product declarations - Core rules for the product category of construction products – hereafter referred to as EN 15804+A2.
- Product Category Rules (PCR) 2019:14, v1.3.4 – Construction products – Hereafter referred to as PCR 2019:14.
- General Programme Instructions (GPI) for the International EPD System v.5.0 – containing instructions regarding methodology and the content that must be included in EPDs registered under the International EPD System.
- Instructions of EPD Australasia V4.2 – a regional annex to the general programme instructions of the International EPD System.

Environmental Impact Indicators

The potential environmental impacts, use of resources and waste categories included in this EPD were calculated using the SimaPro v9.5 tool and are listed in Table 11.
They are aligned to and adopted from Environmental Footprint 3.1.

TABLE 11 LIFE CYCLE IMPACT, RESOURCE AND WASTE ASSESSMENT CATEGORIES, MEASUREMENTS AND METHODS ACCORDANCE WITH EN 15804+A2

Impact Category	Abbreviation	Measurement Unit	Assessment Method and Implementation
Potential environmental impacts			
Total global warming potential	GWPT	kg CO_2 equivalents (GWP100)	Baseline model of 100 years of the IPCC based on IPCC 2021
Global warming potential (fossil)	GWPF	kg CO_2 equivalents (GWP100)	Baseline model of 100 years of the IPCC based on IPCC 2021
Global warming potential (biogenic)	GWPB	kg CO_2 equivalents (GWP100)	Baseline model of 100 years of the IPCC based on IPCC 2021
Global warming potential (land use and land transformation)	GWPL	kg CO_2 equivalents (GWP100)	Baseline model of 100 years of the IPCC based on IPCC 2021
Acidification potential	AP	mol H^+ eq.	Accumulated Exceedance, Seppälä et al. 2006, Posch et al., 2008
Eutrophication - aquatic freshwater	EP-freshwater	kg P equivalent	EUTREND model, Struijs et al., 2009b, as implemented in ReCiPe
Eutrophication - aquatic marine	EP-marine	kg N equivalent	EUTREND model, Struijs et al., 2009b, as implemented in ReCiPe
Eutrophication - terrestrial	EP-terrestrial	mol N equivalent	Accumulated Exceedance, Seppälä et al. 2006, Posch et al.
Photochemical ozone creation potential	POCP	kg NMVOC equivalents	LOTOS-EUROS, Van Zelm et al., 2008, as applied in ReCiPe
Abiotic depletion potential (elements)*	ADPE	kg Sb equivalents	CML (v4.1)
Abiotic depletion potential (fossil fuels)*	ADPF	MJ net calorific value	CML (v4.1)
Ozone depletion potential	ODP	kg CFC 11 equivalents	Steady-state ODPs, WMO 2014
Water Depletion Potential*	WDP	m^3 equivalent deprived	Available WAter REmaining (AWARE) Boulay et al., 2016 (includes Australia flows calculated using 36 Australian catchments)
Resource use			
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	PERE	MJ, net calorific value	Manual for direct inputs
Use of renewable primary energy resources used as raw materials	PERM	MJ, net calorific value	Manual for direct inputs[6]
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	PERT	MJ, net calorific value	ecoinvent version 3.8 and expanded by PRé Consultants[7]
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	PENRE	MJ, net calorific value	Manual for direct inputs
Use of non-renewable primary energy resources used as raw materials	PENRM	MJ, net calorific value	Manual for direct inputs[8]
Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)	PENRT	MJ, net calorific value	ecoinvent version 3.8 and expanded by PRé Consultants[9]
Use of secondary material	SM	kg	Manual for direct inputs

[6] Calculated based on the lower hearing value of renewable raw materials.
[7] Calculated as sum of renewables, biomass; renewable, wind, solar and geothermal, and renewable, water.
[8] Calculated based on the lower hearing value of non-renewables raw materials.
[9] Calculated as sum of non-renewables, fossil and non-renewable, nuclear.

Impact Category	Abbreviation	Measurement Unit	Assessment Method and Implementation
Use of renewable secondary fuels	RSF	MJ, net calorific value	Manual for direct inputs
Use of non-renewable secondary fuels	NRSF	MJ, net calorific val-ue	Manual for direct inputs
Use of net fresh water	FW	m^3	ReCiPe 2016
Output flow categories			
Components for re-use	CRU	kg	Manual for direct inputs
Material for recycling	MFR	kg	Manual for direct inputs
Materials for energy recovery	MERE	kg	Manual for direct inputs
Exported energy - electricity	EE-e	MJ per energy carrier	Manual for direct inputs
Exported energy - thermal	EE-t	MJ per energy carrier	Manual for direct inputs
Waste categories			
Hazardous waste disposed	HWD	kg	EDIP 2003 (v1.05)
Non-hazardous waste disposed	NHWD	kg	EDIP 2003 (v1.05)[12]
Radioactive waste disposed/stored	RWD	kg	EDIP 2003 (v1.05)

[12] Calculated as sum of Bulk waste and Slags/ash

Impact Category	Abbreviation	Measurement Unit	Assessment Method and Implementation
Additional environmental impact indicators			
Global warming potential, excluding biogenic uptake, emissions and storage	GWP-GHG	kg CO_2 equivalents (GWP100)	Baseline model of 100 years of the IPCC based on IPCC 2021[13]
Particulate matter	Potential incidence of disease due to PM emissions (PM)	Disease incidence	SETAC-UNEP, Fantke et al. 2016
Ionising radiation - human health**	Potential Human exposure efficiency relative to U235 (IRP)	kBq U-235 eq	Human Health Effect model
Eco-toxicity (freshwater)*	Potential Comparative Toxic Unit for ecosystems (ETP-fw)	CTUe	USEtox
Human toxicity potential - cancer effects*	Potential Comparative Toxic Unit for humans (HTP-c)	CTUh	USEtox
Human toxicity potential - non cancer effects*	Potential Comparative Toxic Unit for humans (HTP-nc)	CTUh	USEtox
Soil quality*	Potential soil quality index (SQP)	dimensionless	Soil quality index (LANCA®)
Potential environmental impacts – indicators according to EN 15804+A1			
Global warming (GWP100a) - A1	GWP (A1)	kg CO_2 equivalents	CML (v4.02) based on IPCC AR4
Ozone layer depletion (ODP) - A1	ODP (A1)	kg CFC-11 equivalents	CML (v4.02) based on WMO 1999
Acidification - A1	AP (A1)	kg SO_2 equivalents	CML (v4.02)
Eutrophication - A1	EP (A1)	kg PO_4^{3}- equivalents	CML (v4.02)
Photochemical oxidation - A1	POCP (A1)	kg C_2H_4 equivalents	CML (v4.02)
Abiotic depletion - A1	ADPE (A1)	kg Sb equivalents	CML (v4.02)
Abiotic depletion (fossil fuels) - A1	ADPF (A1)	MJ, net calorific value	CML (v4.02)

* Disclaimer: The results of these environmental impact indicators shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.
** Disclaimer: This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

[13] This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO_2 is set to zero.

Environmental Performance

The following tables provide the environmental information produced using LCA for all products covered in this EPD. For products manufactured in more than one location, the environmental impacts are average values of results from different manufacturing plants.

The variations of GWP-GHG from A1-A3 between sites for the same product are listed in Table 12. Positive values indicate the declared result is larger than the site-specific result.

TABLE 12 % VARIATIONS OF GWP-GHG (KG CO_2e) PER m² OF IDENTICAL PRODUCT PRODUCED BETWEEN SITES

Products	Declared GWP-GHG results (kg CO_2e)	% variation between declared result and Wetherill Park	% variation between declared result and Yarraville	% variation between declared result and Coopers Plains	% variation between declared result and Welshpool
Gyprock Aquachek™ - 10mm	2.59E+00	3.4%	-8.7%	-9.9%	65.8%
Gyprock Aquachek™ - 13mm	3.40E+00	2.5%	-12.0%	-9.8%	46.5%
Gyprock EC08™ Complete - 13mm	3.88E+00	NA	-4.7%	-5.0%	54.8%
Gyprock EC08™ Complete - 16mm	5.44E+00	NA	NA	-16.6%	20.1%
Gyprock EC08™ Extreme - 13mm	3.90E+00	NA	NA	NA	NA
Gyprock Flexible - 6.5mm	2.02E+00	-6.4%	NA	-22.5%	69.5%
Gyprock Fyrchek™ - 13mm	3.75E+00	10.9%	-14.3%	-7.0%	37.9%
Gyprock Fyrchek™ - 16mm	4.33E+00	12.1%	-14.3%	-3.5%	42.2%
Gyprock Fyrchek™ MR - 13mm	3.76E+00	10.0%	-12.4%	-13.4%	36.9%
Gyprock Fyrchek™ MR - 16mm	4.49E+00	8.4%	-6.0%	-7.0%	32.1%
Gyprock Impactchek™ - 13mm	4.62E+00	-4.5%	NA	NA	16.9%
Gyprock Plus™ - 10mm	1.92E+00	13.7%	-6.7%	-1.5%	NA
Gyprock Shaft Liner MP - 25mm	5.69E+00	NA	NA	NA	NA
Gyprock Soundchek™ - 10mm	3.07E+00	NA	NA	NA	NA
Gyprock Soundchek™ - 13mm	3.85E+00	NA	NA	NA	NA
Gyprock Standard - 13mm	2.81E+00	4.0%	-13.2%	-11.0%	53.2%
Gyprock Supaceil™ - 10mm	2.55E+00	-11.2%	-25.5%	-23.1%	47.8%
Gyprock HD - 10mm	2.91E+00	9.6%	-6.6%	5.2%	NA
Gyprock Standard 6mm Round	2.80E+00	NA	NA	NA	NA

Environment Performance Indicators per m² of installed Gyprock Standard – 13mm

Indicator	Unit	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Potential environmental impact									
GWP-total	kg CO_2 eq.	2.06E+00	3.06E-01	1.04E+00	0.00E+00	2.96E-02	0.00E+00	3.26E-01	1.89E-04
GWP-fossil	kg CO_2 eq.	2.54E+00	3.06E-01	6.50E-01	0.00E+00	2.96E-02	0.00E+00	7.05E-02	1.90E-04
GWP-biogenic	kg CO_2 eq.	-4.89E-01	2.21E-05	3.87E-01	0.00E+00	2.14E-06	0.00E+00	2.56E-01	-6.25E-07
GWP-luluc	kg CO_2 eq.	1.09E-02	1.03E-05	1.90E-03	0.00E+00	9.95E-07	0.00E+00	4.98E-05	-3.99E-07
ODP	kg CFC 11 eq.	3.69E-08	4.09E-09	2.13E-08	0.00E+00	3.95E-10	0.00E+00	6.77E-10	5.05E-12
AP	mol H+ eq.	1.05E-02	8.75E-04	2.71E-02	0.00E+00	8.47E-05	0.00E+00	2.41E-01	-5.44E-06
EP-freshwater	kg P eq.	1.43E-04	5.90E-06	7.88E-05	0.00E+00	5.71E-07	0.00E+00	1.60E-05	-6.98E-08
EP-marine	kg N eq.	3.04E-03	3.22E-04	8.23E-04	0.00E+00	3.11E-05	0.00E+00	2.25E-04	-9.58E-07
EP-terrestrial	mol N eq	3.24E-02	3.41E-03	7.86E-03	0.00E+00	3.30E-04	0.00E+00	2.02E-03	-2.55E-05
POCP	kg NMVOC eq.	8.51E-03	1.23E-03	3.87E-03	0.00E+00	1.19E-04	0.00E+00	1.55E-02	-2.34E-06
ADP-minerals & metals	kg Sb eq.	9.29E-07	1.78E-08	6.85E-07	0.00E+00	1.72E-09	0.00E+00	4.59E-09	-8.80E-11
ADP-fossil	MJ	3.69E+01	3.99E+00	9.53E+00	0.00E+00	3.86E-01	0.00E+00	8.20E-01	2.92E-03
WDP	m^3	8.67E-01	5.68E-03	2.06E-01	0.00E+00	5.50E-04	0.00E+00	5.42E-03	-4.60E-05
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;								

Environment Performance Indicators per m² of installed Gyprock Standard – 13mm (Cont.)

Indicator	Unit	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Use of resources									
PERE	MJ	4.00E+00	5.85E-03	1.25E+00	0.00E+00	5.66E-04	0.00E+00	3.62E-01	-2.90E-04
PERM	MJ	8.24E-01	0.00E+00	-4.73E-01	0.00E+00	0.00E+00	0.00E+00	-3.51E-01	0.00E+00
PERT	MJ	4.83E+00	5.85E-03	1.09E+00	0.00E+00	5.66E-04	0.00E+00	4.25E-02	-2.90E-04
PENRE	MJ	4.83E+00	5.85E-03	1.09E+00	0.00E+00	5.66E-04	0.00E+00	4.25E-02	-2.90E-04
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
PENRT	MJ	3.69E+01	3.99E+00	9.53E+00	0.00E+00	3.86E-01	0.00E+00	8.20E-01	2.92E-03
SM	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
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
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
FW	m^3	1.73E-02	2.04E-04	4.56E-03	0.00E+00	1.98E-05	0.00E+00	1.95E-04	-1.52E-06
Waste production									
Hazardous waste disposed	kg	3.35E-03	2.67E-05	5.14E-04	0.00E+00	2.59E-06	0.00E+00	3.46E-06	3.02E-08
Non-hazardous waste disposed	kg	9.62E-02	6.76E-04	6.73E-01	0.00E+00	8.22E-05	0.00E+00	6.10E+00	-9.69E-06
Radioactive waste disposed	kg	2.88E-06	9.21E-08	2.75E-06	0.00E+00	1.12E-08	0.00E+00	5.34E-07	-4.74E-09
Output flows									
Components for re-use	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
Material for recycling	kg	3.59E-01	0.00E+00	3.52E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for energy recovery	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
Exported energy, electricity	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
Exported energy, thermal	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
Acronyms	PERE = Renewable primary energy resources used as raw materials; PERM = Renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = 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								

Environment Performance Indicators per m² of installed Gyprock Standard – 13mm (Cont.)

Indicator	Unit	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Additional environmental impact indicators									
GWP-GHG	kg CO_2 eq	2.59E+00	3.06E-01	7.39E-01	0.00E+00	2.96E-02	0.00E+00	9.54E-02	1.89E-04
Particulate matter	disease incidence	1.05E-07	2.00E-08	5.29E-08	0.00E+00	1.94E-09	0.00E+00	1.93E-07	1.82E-09
Ionising radiation - human health	kBq U-235 eq	1.36E-02	7.19E-04	1.35E-02	0.00E+00	6.96E-05	0.00E+00	2.73E-03	-2.39E-05
Eco-toxicity (fresh-water)	CTUe	2.93E+01	1.78E+00	1.38E+01	0.00E+00	1.72E-01	0.00E+00	4.81E+01	9.49E-04
Human toxicity potential - cancer effects	CTUh	4.95E-10	1.17E-11	2.16E-10	0.00E+00	1.13E-12	0.00E+00	2.53E-11	-1.68E-14
Human toxicity potential - non cancer effects	CTUh	6.74E-09	9.61E-10	2.86E-09	0.00E+00	9.30E-11	0.00E+00	2.02E-09	-3.91E-13
Soil quality	Pt	2.62E+01	1.54E-02	5.18E+00	0.00E+00	1.49E-03	0.00E+00	1.39E+00	7.37E-03
Potential Environmental Impacts – Indicators According to EN 15804+A1									
Global warming (GWP100a) - A1	kg CO_2 eq	2.54E+00	2.99E-01	6.97E-01	0.00E+00	2.90E-02	0.00E+00	8.53E-02	1.90E-04
Ozone layer depletion (ODP) - A1	kg CFC-11 eq	3.08E-08	3.24E-09	2.03E-08	0.00E+00	3.14E-10	0.00E+00	5.49E-10	3.83E-12
Acidification - A1	kg SO_2 eq	6.26E-03	6.57E-04	2.42E-02	0.00E+00	6.36E-05	0.00E+00	2.21E-01	-3.19E-06
Eutrophication - A1	kg PO_4^{3-} eq	1.58E-03	1.31E-04	5.49E-04	0.00E+00	1.27E-05	0.00E+00	1.29E-04	-9.37E-07
Photochemical oxidation - A1	kg C_2H_4 eq	2.69E-04	3.67E-05	1.01E-03	0.00E+00	3.55E-06	0.00E+00	8.84E-03	-6.88E-09
Abiotic depletion - A1	kg Sb eq	1.02E-06	1.78E-08	7.00E-07	0.00E+00	1.72E-09	0.00E+00	4.71E-09	-9.08E-11
Abiotic depletion (fossil fuels) - A1	MJ	3.95E+01	3.93E+00	1.01E+01	0.00E+00	3.80E-01	0.00E+00	8.88E-01	2.52E-03
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage								

Additional Environmental Information

This EPD is declared as 1m² of installed gypsum plasterboard product. The environmental impacts provided are for Gyprock Standard with a thickness of 13mm. As per section 5.4.6.1 of PCR, the following conversion factors can be applied to the results of the declared modules above to calculate the impacts of other product variants (e.g. Aquachek 13mm or Soundchek 10mm) of Gyprock gypsum plasterboard products.

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Aquachek™ – 10mm

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	0.92	0.79	0.91	0.00	0.82	0.00	0.94	0.78
GWP-fossil	0.92	0.79	0.93	0.00	0.82	0.00	0.82	0.78
GWP-biogenic	0.91	0.79	0.88	0.00	0.82	0.00	0.98	0.78
GWP-luluc	0.98	0.79	0.98	0.00	0.82	0.00	0.82	0.78
ODP	1.25	0.79	1.04	0.00	0.82	0.00	0.82	0.78
AP	0.86	0.79	0.82	0.00	0.82	0.00	0.82	0.78
EP-freshwater	1.10	0.79	1.02	0.00	0.82	0.00	0.81	0.78
EP-marine	0.84	0.79	0.89	0.00	0.82	0.00	0.81	0.78
EP-terrestrial	0.83	0.79	0.87	0.00	0.82	0.00	0.82	0.78
POCP	0.85	0.79	0.86	0.00	0.82	0.00	0.82	0.78
ADP-minerals & metals	1.22	0.79	1.04	0.00	0.82	0.00	0.82	0.78
ADP-fossil	0.96	0.79	0.96	0.00	0.82	0.00	0.82	0.78
WDP	0.96	0.79	0.97	0.00	0.82	0.00	0.82	0.78
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Aquachek™ – 10mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	0.89	0.79	0.91	0.00	0.82	0.00	0.78	0.78
PERM	0.81	0.00	0.86	0.00	0.00	0.00	0.75	0.00
PERT	0.87	0.79	0.91	0.00	0.82	0.00	0.82	0.78
PENRE	0.87	0.79	0.91	0.00	0.82	0.00	0.82	0.78
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	0.96	0.79	0.96	0.00	0.82	0.00	0.82	0.78
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	0.99	0.79	0.99	0.00	0.82	0.00	0.82	0.78
Conversion factors of waste production								
Hazardous waste disposed	1.34	0.79	1.33	0.00	0.82	0.00	0.82	0.78
Non-hazardous waste disposed	0.79	0.51	0.67	0.00	0.67	0.00	0.67	0.63
Radioactive waste disposed	0.98	0.51	0.83	0.00	0.67	0.00	0.67	0.63
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	1.53	0.00	0.88	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Aquachek™ – 10mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	0.92	0.79	0.94	0.00	0.82	0.00	0.81	0.78
Particulate matter	0.97	0.79	0.89	0.00	0.82	0.00	0.82	0.78
Ionising radiation - human health	1.11	0.79	1.01	0.00	0.82	0.00	0.82	0.78
Eco-toxicity (fresh-water)	1.29	0.79	0.99	0.00	0.82	0.00	0.82	0.78
Human toxicity potential - cancer effects	1.09	0.79	1.03	0.00	0.82	0.00	0.82	0.78
Human toxicity potential - non cancer effects	1.02	0.79	0.97	0.00	0.82	0.00	0.82	0.78
Soil quality	0.87	0.79	0.89	0.00	0.82	0.00	0.82	0.78
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	0.92	0.79	0.94	0.00	0.82	0.00	0.81	0.78
Ozone layer depletion (ODP) - A1	1.28	0.79	1.04	0.00	0.82	0.00	0.82	0.78
Acidification - A1	0.84	0.79	0.82	0.00	0.82	0.00	0.82	0.78
Eutrophication - A1	0.90	0.79	0.94	0.00	0.82	0.00	0.81	0.78
Photochemical oxidation - A1	0.96	0.79	0.83	0.00	0.82	0.00	0.82	0.78
Abiotic depletion - A1	1.20	0.79	1.04	0.00	0.82	0.00	0.82	0.78
Abiotic depletion (fossil fuels) - A1	0.98	0.79	0.97	0.00	0.82	0.00	0.82	0.78
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Aquachek™ – 13mm

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	1.21	1.23	1.15	0.00	1.16	0.00	1.16	1.14
GWP-fossil	1.01	1.23	1.01	0.00	1.16	0.00	1.04	1.14
GWP-biogenic	1.02	1.23	1.02	0.00	1.16	0.00	1.16	1.14
GWP-luluc	1.26	1.23	1.09	0.00	1.16	0.00	1.07	1.14
ODP	1.42	1.23	1.10	0.00	1.16	0.00	1.16	1.14
AP	1.14	1.23	1.16	0.00	1.16	0.00	1.16	1.14
EP-freshwater	1.25	1.23	1.07	0.00	1.16	0.00	1.12	1.14
EP-marine	1.13	1.23	1.11	0.00	1.16	0.00	1.12	1.14
EP-terrestrial	1.14	1.23	1.11	0.00	1.16	0.00	1.16	1.14
POCP	1.16	1.23	1.13	0.00	1.16	0.00	1.16	1.14
ADP-minerals & metals	1.29	1.23	1.05	0.00	1.16	0.00	1.16	1.14
ADP-fossil	1.25	1.23	1.17	0.00	1.16	0.00	1.16	1.14
WDP	1.21	1.23	1.14	0.00	1.16	0.00	1.16	1.14
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Aquachek™ – 13mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	1.04	1.23	1.02	0.00	1.16	0.00	0.97	1.14
PERM	0.98	0.00	1.00	0.00	0.00	0.00	0.95	0.00
PERT	1.03	1.23	1.02	0.00	1.16	0.00	1.16	1.14
PENRE	1.03	1.23	1.02	0.00	1.16	0.00	1.16	1.14
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	1.25	1.23	1.17	0.00	1.16	0.00	1.16	1.14
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	1.20	1.23	1.12	0.00	1.16	0.00	1.16	1.14
Conversion factors of waste production								
Hazardous waste disposed	1.30	1.23	1.30	0.00	1.16	0.00	1.16	1.14
Non-hazardous waste disposed	1.20	1.23	1.15	0.00	1.16	0.00	1.16	1.14
Radioactive waste disposed	1.41	1.23	1.06	0.00	1.16	0.00	1.16	1.14
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	3.03	0.00	1.16	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Aquachek™ – 13mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	1.21	1.23	1.14	0.00	1.16	0.00	1.10	1.14
Particulate matter	1.21	1.23	1.15	0.00	1.16	0.00	1.16	1.14
Ionising radiation - human health	1.40	1.23	1.06	0.00	1.16	0.00	1.16	1.14
Eco-toxicity (fresh-water)	1.32	1.23	1.15	0.00	1.16	0.00	1.16	1.14
Human toxicity potential - cancer effects	1.22	1.23	1.08	0.00	1.16	0.00	1.16	1.14
Human toxicity potential - non cancer effects	1.20	1.23	1.10	0.00	1.16	0.00	1.15	1.14
Soil quality	1.02	1.23	1.02	0.00	1.16	0.00	1.15	1.14
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	1.21	1.23	1.14	0.00	1.16	0.00	1.11	1.14
Ozone layer depletion (ODP) - A1	1.45	1.23	1.09	0.00	1.16	0.00	1.16	1.14
Acidification - A1	1.14	1.23	1.16	0.00	1.16	0.00	1.16	1.14
Eutrophication - A1	1.15	1.23	1.09	0.00	1.16	0.00	1.12	1.14
Photochemical oxidation - A1	1.21	1.23	1.15	0.00	1.16	0.00	1.16	1.14
Abiotic depletion - A1	1.26	1.23	1.05	0.00	1.16	0.00	1.16	1.14
Abiotic depletion (fossil fuels) - A1	1.26	1.23	1.17	0.00	1.16	0.00	1.16	1.14
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock EC08™ Complete – 13mm

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	1.38	2.68	1.37	0.00	1.41	0.00	1.41	1.08
GWP-fossil	1.08	2.68	1.03	0.00	1.41	0.00	1.21	1.08
GWP-biogenic	1.15	2.68	1.13	0.00	1.41	0.00	1.41	1.08
GWP-luluc	1.45	2.68	1.24	0.00	1.41	0.00	1.26	1.08
ODP	4.56	2.68	1.84	0.00	1.41	0.00	1.41	1.08
AP	1.31	2.68	1.41	0.00	1.41	0.00	1.41	1.08
EP-freshwater	2.12	2.68	1.34	0.00	1.41	0.00	1.34	1.08
EP-marine	1.31	2.68	1.33	0.00	1.41	0.00	1.34	1.08
EP-terrestrial	1.31	2.68	1.34	0.00	1.41	0.00	1.41	1.08
POCP	1.39	2.68	1.40	0.00	1.41	0.00	1.41	1.08
ADP-minerals & metals	17.90	2.68	3.93	0.00	1.41	0.00	1.41	1.08
ADP-fossil	1.37	2.68	1.35	0.00	1.41	0.00	1.41	1.08
WDP	1.48	2.68	1.32	0.00	1.41	0.00	1.41	1.08
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock EC08™ Complete – 13mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	1.10	2.68	1.05	0.00	1.41	0.00	1.03	1.08
PERM	1.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00
PERT	1.08	2.68	1.06	0.00	1.41	0.00	1.41	1.08
PENRE	1.08	2.68	1.06	0.00	1.41	0.00	1.41	1.08
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	1.37	2.68	1.35	0.00	1.41	0.00	1.41	1.08
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	1.49	2.68	1.30	0.00	1.41	0.00	1.41	1.08
Conversion factors of waste production								
Hazardous waste disposed	1.19	2.68	1.21	0.00	1.41	0.00	1.41	1.08
Non-hazardous waste disposed	0.87	2.68	1.39	0.00	1.41	0.00	1.41	1.08
Radioactive waste disposed	3.05	2.68	1.30	0.00	1.41	0.00	1.41	1.08
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	3.52	0.00	1.43	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock EC08™ Complete – 13mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	1.38	2.68	1.35	0.00	1.41	0.00	1.30	1.08
Particulate matter	48.55	2.68	14.31	0.00	1.41	0.00	1.41	1.08
Ionising radiation - human health	3.02	2.68	1.31	0.00	1.41	0.00	1.41	1.08
Eco-toxicity (fresh-water)	0.59	2.68	1.13	0.00	1.41	0.00	1.41	1.08
Human toxicity potential - cancer effects	138.71	2.68	45.30	0.00	1.41	0.00	1.41	1.08
Human toxicity potential - non cancer effects	50.79	2.68	17.98	0.00	1.41	0.00	1.41	1.08
Soil quality	1.06	2.68	1.06	0.00	1.41	0.00	1.41	1.08
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	1.38	2.68	1.36	0.00	1.41	0.00	1.33	1.08
Ozone layer depletion (ODP) - A1	1.54	2.68	1.16	0.00	1.41	0.00	1.41	1.08
Acidification - A1	1.42	2.68	1.42	0.00	1.41	0.00	1.41	1.08
Eutrophication - A1	1.48	2.68	1.33	0.00	1.41	0.00	1.33	1.08
Photochemical oxidation - A1	1.56	2.68	1.41	0.00	1.41	0.00	1.41	1.08
Abiotic depletion - A1	16.22	2.68	3.87	0.00	1.41	0.00	1.41	1.08
Abiotic depletion (fossil fuels) - A1	1.43	2.68	1.38	0.00	1.41	0.00	1.41	1.08
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock EC08™ Complete – 16mm

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	2.03	2.04	1.65	0.00	1.73	0.00	1.49	1.35
GWP-fossil	1.95	2.04	1.66	0.00	1.73	0.00	1.73	1.35
GWP-biogenic	1.57	2.04	1.62	0.00	1.73	0.00	1.42	1.35
GWP-luluc	1.35	2.04	1.30	0.00	1.73	0.00	1.73	1.35
ODP	6.44	2.04	2.23	0.00	1.73	0.00	1.73	1.35
AP	1.63	2.04	1.72	0.00	1.73	0.00	1.73	1.35
EP-freshwater	2.17	2.04	1.35	0.00	1.73	0.00	1.70	1.35
EP-marine	1.74	2.04	1.56	0.00	1.73	0.00	1.70	1.35
EP-terrestrial	1.73	2.04	1.58	0.00	1.73	0.00	1.73	1.35
POCP	1.80	2.04	1.65	0.00	1.73	0.00	1.73	1.35
ADP-minerals & metals	23.72	2.04	4.94	0.00	1.73	0.00	1.73	1.35
ADP-fossil	2.02	2.04	1.68	0.00	1.73	0.00	1.73	1.35
WDP	1.77	2.04	1.50	0.00	1.73	0.00	1.73	1.35
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock EC08™ Complete – 16mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	1.84	2.04	1.58	0.00	1.73	0.00	1.59	1.35
PERM	1.64	0.00	1.66	0.00	0.00	0.00	1.60	0.00
PERT	1.81	2.04	1.56	0.00	1.73	0.00	1.73	1.35
PENRE	1.81	2.04	1.56	0.00	1.73	0.00	1.73	1.35
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	2.02	2.04	1.68	0.00	1.73	0.00	1.73	1.35
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	1.77	2.04	1.45	0.00	1.73	0.00	1.73	1.35
Conversion factors of waste production								
Hazardous waste disposed	0.69	2.04	0.72	0.00	1.73	0.00	1.73	1.35
Non-hazardous waste disposed	0.90	2.04	1.71	0.00	1.73	0.00	1.73	1.35
Radioactive waste disposed	3.08	2.04	1.31	0.00	1.73	0.00	1.73	1.35
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	5.95	0.00	1.75	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock EC08™ Complete – 16mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	1.93	2.04	1.64	0.00	1.73	0.00	1.69	1.35
Particulate matter	58.44	2.04	17.13	0.00	1.73	0.00	1.73	1.35
Ionising radiation - human health	3.07	2.04	1.32	0.00	1.73	0.00	1.73	1.35
Eco-toxicity (fresh-water)	0.79	2.04	1.30	0.00	1.73	0.00	1.73	1.35
Human toxicity potential - cancer effects	166.90	2.04	54.37	0.00	1.73	0.00	1.73	1.35
Human toxicity potential - non cancer effects	61.23	2.04	21.52	0.00	1.73	0.00	1.72	1.35
Soil quality	1.72	2.04	1.58	0.00	1.73	0.00	1.72	1.35
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	1.94	2.04	1.65	0.00	1.73	0.00	1.70	1.35
Ozone layer depletion (ODP) - A1	2.76	2.04	1.37	0.00	1.73	0.00	1.73	1.35
Acidification - A1	1.80	2.04	1.73	0.00	1.73	0.00	1.73	1.35
Eutrophication - A1	1.82	2.04	1.47	0.00	1.73	0.00	1.70	1.35
Photochemical oxidation - A1	2.02	2.04	1.72	0.00	1.73	0.00	1.73	1.35
Abiotic depletion - A1	21.48	2.04	4.86	0.00	1.73	0.00	1.73	1.35
Abiotic depletion (fossil fuels) - A1	2.04	2.04	1.69	0.00	1.73	0.00	1.73	1.35
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock EC08™ Extreme – 13mm

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	1.49	0.60	1.09	0.00	1.41	0.00	1.24	1.07
GWP-fossil	1.39	0.60	1.21	0.00	1.41	0.00	1.42	1.07
GWP-biogenic	0.97	0.60	0.89	0.00	1.41	0.00	1.19	1.07
GWP-luluc	1.15	0.60	1.13	0.00	1.41	0.00	1.42	1.07
ODP	4.41	0.60	1.73	0.00	1.41	0.00	1.42	1.07
AP	1.37	0.60	1.41	0.00	1.41	0.00	1.42	1.07
EP-freshwater	2.69	0.60	1.45	0.00	1.41	0.00	1.33	1.07
EP-marine	1.36	0.60	1.22	0.00	1.41	0.00	1.33	1.07
EP-terrestrial	1.35	0.60	1.21	0.00	1.41	0.00	1.42	1.07
POCP	1.46	0.60	1.32	0.00	1.41	0.00	1.42	1.07
ADP-minerals & metals	49.00	0.60	9.30	0.00	1.41	0.00	1.42	1.07
ADP-fossil	1.35	0.60	1.18	0.00	1.41	0.00	1.42	1.07
WDP	1.53	0.60	1.34	0.00	1.41	0.00	1.42	1.07
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock EC08™ Extreme – 13mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	0.98	0.60	0.95	0.00	1.41	0.00	0.97	1.07
PERM	0.88	0.00	0.84	0.00	0.00	0.00	0.94	0.00
PERT	0.96	0.60	0.98	0.00	1.41	0.00	1.42	1.07
PENRE	0.96	0.60	0.98	0.00	1.41	0.00	1.42	1.07
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	1.35	0.60	1.18	0.00	1.41	0.00	1.42	1.07
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	1.56	0.60	1.32	0.00	1.41	0.00	1.42	1.07
Conversion factors of waste production								
Hazardous waste disposed	0.91	0.60	0.91	0.00	1.41	0.00	1.42	1.07
Non-hazardous waste disposed	1.05	0.60	1.40	0.00	1.41	0.00	1.42	1.07
Radioactive waste disposed	4.33	0.60	1.45	0.00	1.41	0.00	1.42	1.07
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	10.11	0.00	1.43	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock EC08™ Extreme – 13mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	1.39	0.60	1.20	0.00	1.41	0.00	1.28	1.07
Particulate matter	49.13	0.60	14.34	0.00	1.41	0.00	1.42	1.07
Ionising radiation - human health	4.29	0.60	1.46	0.00	1.41	0.00	1.42	1.07
Eco-toxicity (fresh-water)	0.89	0.60	1.15	0.00	1.41	0.00	1.42	1.07
Human toxicity potential - cancer effects	140.29	0.60	45.79	0.00	1.41	0.00	1.42	1.07
Human toxicity potential - non cancer effects	52.00	0.60	18.26	0.00	1.41	0.00	1.41	1.07
Soil quality	0.92	0.60	0.95	0.00	1.41	0.00	1.41	1.07
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	1.39	0.60	1.20	0.00	1.41	0.00	1.32	1.07
Ozone layer depletion (ODP) - A1	1.37	0.60	1.06	0.00	1.41	0.00	1.42	1.07
Acidification - A1	1.57	0.60	1.42	0.00	1.41	0.00	1.42	1.07
Eutrophication - A1	1.64	0.60	1.31	0.00	1.41	0.00	1.32	1.07
Photochemical oxidation - A1	1.69	0.60	1.41	0.00	1.41	0.00	1.42	1.07
Abiotic depletion - A1	44.20	0.60	9.12	0.00	1.41	0.00	1.42	1.07
Abiotic depletion (fossil fuels) - A1	1.41	0.60	1.22	0.00	1.41	0.00	1.42	1.07
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Flexible - 6.5mm

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	0.73	0.46	0.67	0.00	0.54	0.00	0.96	0.49
GWP-fossil	0.71	0.46	0.78	0.00	0.54	0.00	0.54	0.49
GWP-biogenic	0.66	0.46	0.50	0.00	0.54	0.00	1.10	0.49
GWP-luluc	1.04	0.46	1.03	0.00	0.54	0.00	0.54	0.49
ODP	1.58	0.46	1.10	0.00	0.54	0.00	0.54	0.49
AP	0.66	0.46	0.54	0.00	0.54	0.00	0.54	0.49
EP-freshwater	0.97	0.46	0.98	0.00	0.54	0.00	0.63	0.49
EP-marine	0.66	0.46	0.75	0.00	0.54	0.00	0.63	0.49
EP-terrestrial	0.65	0.46	0.71	0.00	0.54	0.00	0.54	0.49
POCP	0.65	0.46	0.64	0.00	0.54	0.00	0.54	0.49
ADP-minerals & metals	1.32	0.46	1.05	0.00	0.54	0.00	0.54	0.49
ADP-fossil	0.70	0.46	0.78	0.00	0.54	0.00	0.54	0.49
WDP	0.73	0.46	0.83	0.00	0.54	0.00	0.54	0.49
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Flexible - 6.5mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	0.59	0.46	0.67	0.00	0.54	0.00	1.00	0.49
PERM	0.72	0.00	0.43	0.00	0.00	0.00	1.07	0.00
PERT	0.62	0.46	0.73	0.00	0.54	0.00	0.54	0.49
PENRE	0.62	0.46	0.73	0.00	0.54	0.00	0.54	0.49
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	0.70	0.46	0.78	0.00	0.54	0.00	0.54	0.49
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	0.82	0.46	0.89	0.00	0.54	0.00	0.54	0.49
Conversion factors of waste production								
Hazardous waste disposed	0.47	0.46	0.48	0.00	0.54	0.00	0.54	0.49
Non-hazardous waste disposed	1.36	0.46	0.55	0.00	0.54	0.00	0.54	0.49
Radioactive waste disposed	0.80	0.46	0.96	0.00	0.54	0.00	0.54	0.49
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	1.54	0.00	0.52	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Flexible - 6.5mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	0.72	0.46	0.78	0.00	0.54	0.00	0.67	0.49
Particulate matter	0.70	0.46	0.66	0.00	0.54	0.00	0.54	0.49
Ionising radiation - human health	0.80	0.46	0.95	0.00	0.54	0.00	0.54	0.49
Eco-toxicity (fresh-water)	1.71	0.46	0.96	0.00	0.54	0.00	0.54	0.49
Human toxicity potential - cancer effects	0.57	0.46	0.85	0.00	0.54	0.00	0.54	0.49
Human toxicity potential - non cancer effects	0.83	0.46	0.85	0.00	0.54	0.00	0.54	0.49
Soil quality	0.49	0.46	0.59	0.00	0.54	0.00	0.54	0.49
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	0.72	0.46	0.78	0.00	0.54	0.00	0.64	0.49
Ozone layer depletion (ODP) - A1	1.55	0.46	1.08	0.00	0.54	0.00	0.54	0.49
Acidification - A1	0.66	0.46	0.54	0.00	0.54	0.00	0.54	0.49
Eutrophication - A1	0.76	0.46	0.86	0.00	0.54	0.00	0.64	0.49
Photochemical oxidation - A1	0.71	0.46	0.56	0.00	0.54	0.00	0.54	0.49
Abiotic depletion - A1	1.29	0.46	1.05	0.00	0.54	0.00	0.54	0.49
Abiotic depletion (fossil fuels) - A1	0.69	0.46	0.78	0.00	0.54	0.00	0.54	0.49
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Flexible - 6.5mm

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	0.73	0.46	0.67	0.00	0.54	0.00	0.96	0.49
GWP-fossil	0.71	0.46	0.78	0.00	0.54	0.00	0.54	0.49
GWP-biogenic	0.66	0.46	0.50	0.00	0.54	0.00	1.10	0.49
GWP-luluc	1.04	0.46	1.03	0.00	0.54	0.00	0.54	0.49
ODP	1.58	0.46	1.10	0.00	0.54	0.00	0.54	0.49
AP	0.66	0.46	0.54	0.00	0.54	0.00	0.54	0.49
EP-freshwater	0.97	0.46	0.98	0.00	0.54	0.00	0.63	0.49
EP-marine	0.66	0.46	0.75	0.00	0.54	0.00	0.63	0.49
EP-terrestrial	0.65	0.46	0.71	0.00	0.54	0.00	0.54	0.49
POCP	0.65	0.46	0.64	0.00	0.54	0.00	0.54	0.49
ADP-minerals & metals	1.32	0.46	1.05	0.00	0.54	0.00	0.54	0.49
ADP-fossil	0.70	0.46	0.78	0.00	0.54	0.00	0.54	0.49
WDP	0.73	0.46	0.83	0.00	0.54	0.00	0.54	0.49
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Flexible - 6.5mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	0.59	0.46	0.67	0.00	0.54	0.00	1.00	0.49
PERM	0.72	0.00	0.43	0.00	0.00	0.00	1.07	0.00
PERT	0.62	0.46	0.73	0.00	0.54	0.00	0.54	0.49
PENRE	0.62	0.46	0.73	0.00	0.54	0.00	0.54	0.49
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	0.70	0.46	0.78	0.00	0.54	0.00	0.54	0.49
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	0.82	0.46	0.89	0.00	0.54	0.00	0.54	0.49
Conversion factors of waste production								
Hazardous waste disposed	0.47	0.46	0.48	0.00	0.54	0.00	0.54	0.49
Non-hazardous waste disposed	1.36	0.46	0.55	0.00	0.54	0.00	0.54	0.49
Radioactive waste disposed	0.80	0.46	0.96	0.00	0.54	0.00	0.54	0.49
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	1.54	0.00	0.52	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Flexible - 6.5mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	0.72	0.46	0.78	0.00	0.54	0.00	0.67	0.49
Particulate matter	0.70	0.46	0.66	0.00	0.54	0.00	0.54	0.49
Ionising radiation - human health	0.80	0.46	0.95	0.00	0.54	0.00	0.54	0.49
Eco-toxicity (fresh-water)	1.71	0.46	0.96	0.00	0.54	0.00	0.54	0.49
Human toxicity potential - cancer effects	0.57	0.46	0.85	0.00	0.54	0.00	0.54	0.49
Human toxicity potential - non cancer effects	0.83	0.46	0.85	0.00	0.54	0.00	0.54	0.49
Soil quality	0.49	0.46	0.59	0.00	0.54	0.00	0.54	0.49
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	0.72	0.46	0.78	0.00	0.54	0.00	0.64	0.49
Ozone layer depletion (ODP) - A1	1.55	0.46	1.08	0.00	0.54	0.00	0.54	0.49
Acidification - A1	0.66	0.46	0.54	0.00	0.54	0.00	0.54	0.49
Eutrophication - A1	0.76	0.46	0.86	0.00	0.54	0.00	0.64	0.49
Photochemical oxidation - A1	0.71	0.46	0.56	0.00	0.54	0.00	0.54	0.49
Abiotic depletion - A1	1.29	0.46	1.05	0.00	0.54	0.00	0.54	0.49
Abiotic depletion (fossil fuels) - A1	0.69	0.46	0.78	0.00	0.54	0.00	0.54	0.49
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Fyrchek™ – 13mm

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	1.41	2.09	1.18	0.00	1.29	0.00	1.11	1.06
GWP-fossil	1.34	2.09	1.30	0.00	1.29	0.00	1.29	1.06
GWP-biogenic	1.01	2.18	1.00	0.00	1.29	0.00	1.05	1.06
GWP-luluc	1.05	2.08	1.05	0.00	1.29	0.00	1.29	1.06
ODP	2.23	2.15	1.32	0.00	1.29	0.00	1.29	1.06
AP	1.43	2.11	1.30	0.00	1.29	0.00	1.29	1.06
EP-freshwater	1.35	2.08	1.11	0.00	1.29	0.00	1.25	1.06
EP-marine	1.38	2.11	1.31	0.00	1.29	0.00	1.25	1.06
EP-terrestrial	1.38	2.11	1.34	0.00	1.29	0.00	1.29	1.06
POCP	1.41	2.10	1.33	0.00	1.29	0.00	1.29	1.06
ADP-minerals & metals	16.89	2.08	3.76	0.00	1.29	0.00	1.29	1.06
ADP-fossil	1.36	2.09	1.29	0.00	1.29	0.00	1.29	1.06
WDP	1.28	2.12	1.19	0.00	1.29	0.00	1.29	1.06
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Fyrchek™ – 13mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	1.07	2.18	1.04	0.00	1.29	0.00	1.10	1.06
PERM	1.04	0.00	1.00	0.00	0.00	0.00	1.09	0.00
PERT	1.06	2.18	1.05	0.00	1.29	0.00	1.29	1.06
PENRE	1.06	2.18	1.05	0.00	1.29	0.00	1.29	1.06
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	1.36	2.09	1.29	0.00	1.29	0.00	1.29	1.06
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	1.26	2.10	1.16	0.00	1.29	0.00	1.29	1.06
Conversion factors of waste production								
Hazardous waste disposed	1.62	2.08	1.62	0.00	1.29	0.00	1.29	1.06
Non-hazardous waste disposed	0.77	2.09	1.27	0.00	1.29	0.00	1.29	1.06
Radioactive waste disposed	1.74	2.08	1.11	0.00	1.29	0.00	1.29	1.06
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	2.86	0.00	1.30	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Fyrchek™ – 13mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	1.33	2.09	1.26	0.00	1.29	0.00	1.24	1.06
Particulate matter	15.18	2.11	5.09	0.00	1.29	0.00	1.29	1.06
Ionising radiation - human health	1.73	2.08	1.12	0.00	1.29	0.00	1.29	1.06
Eco-toxicity (fresh-water)	0.54	2.08	1.04	0.00	1.29	0.00	1.29	1.06
Human toxicity potential - cancer effects	41.66	2.08	14.09	0.00	1.29	0.00	1.29	1.06
Human toxicity potential - non cancer effects	16.00	2.09	6.17	0.00	1.29	0.00	1.29	1.06
Soil quality	1.03	6.46	1.03	0.00	1.29	0.00	1.29	1.06
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	1.33	2.09	1.28	0.00	1.29	0.00	1.25	1.06
Ozone layer depletion (ODP) - A1	1.36	2.15	1.10	0.00	1.29	0.00	1.29	1.06
Acidification - A1	1.47	2.10	1.30	0.00	1.29	0.00	1.29	1.06
Eutrophication - A1	1.35	2.11	1.22	0.00	1.29	0.00	1.25	1.06
Photochemical oxidation - A1	1.45	2.09	1.29	0.00	1.29	0.00	1.29	1.06
Abiotic depletion - A1	15.30	2.08	3.69	0.00	1.29	0.00	1.29	1.06
Abiotic depletion (fossil fuels) - A1	1.37	2.09	1.30	0.00	1.29	0.00	1.29	1.06
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Fyrchek™ – 16mm

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	1.55	2.04	1.42	0.00	1.53	0.00	1.53	1.38
GWP-fossil	1.05	2.04	1.01	0.00	1.53	0.00	1.19	1.38
GWP-biogenic	1.19	2.04	1.16	0.00	1.53	0.00	1.53	1.38
GWP-luluc	1.66	2.04	1.26	0.00	1.53	0.00	1.27	1.38
ODP	2.41	2.04	1.35	0.00	1.53	0.00	1.53	1.38
AP	1.68	2.04	1.54	0.00	1.53	0.00	1.53	1.38
EP-freshwater	1.54	2.04	1.17	0.00	1.53	0.00	1.52	1.38
EP-marine	1.61	2.04	1.45	0.00	1.53	0.00	1.52	1.38
EP-terrestrial	1.62	2.04	1.50	0.00	1.53	0.00	1.53	1.38
POCP	1.65	2.04	1.51	0.00	1.53	0.00	1.53	1.38
ADP-minerals & metals	18.68	2.04	4.06	0.00	1.53	0.00	1.53	1.38
ADP-fossil	1.55	2.04	1.41	0.00	1.53	0.00	1.53	1.38
WDP	1.54	2.04	1.35	0.00	1.53	0.00	1.53	1.38
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Fyrchek™ – 16mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	1.12	2.04	1.07	0.00	1.53	0.00	1.48	1.38
PERM	1.23	0.00	1.01	0.00	0.00	0.00	1.49	0.00
PERT	1.14	2.04	1.10	0.00	1.53	0.00	1.53	1.38
PENRE	1.14	2.04	1.10	0.00	1.53	0.00	1.53	1.38
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	1.55	2.04	1.41	0.00	1.53	0.00	1.53	1.38
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	1.51	2.04	1.31	0.00	1.53	0.00	1.53	1.38
Conversion factors of waste production								
Hazardous waste disposed	2.59	2.04	2.55	0.00	1.53	0.00	1.53	1.38
Non-hazardous waste disposed	0.86	2.04	1.51	0.00	1.53	0.00	1.53	1.38
Radioactive waste disposed	2.09	2.04	1.17	0.00	1.53	0.00	1.53	1.38
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	3.98	0.00	1.55	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Fyrchek™ – 16mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	1.54	2.04	1.38	0.00	1.53	0.00	1.52	1.38
Particulate matter	18.85	2.04	6.20	0.00	1.53	0.00	1.53	1.38
Ionising radiation - human health	2.08	2.04	1.17	0.00	1.53	0.00	1.53	1.38
Eco-toxicity (fresh-water)	0.62	2.04	1.17	0.00	1.53	0.00	1.53	1.38
Human toxicity potential - cancer effects	51.77	2.04	17.34	0.00	1.53	0.00	1.53	1.38
Human toxicity potential - non cancer effects	19.80	2.04	7.47	0.00	1.53	0.00	1.53	1.38
Soil quality	1.06	2.04	1.06	0.00	1.53	0.00	1.53	1.38
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	1.54	2.04	1.39	0.00	1.53	0.00	1.52	1.38
Ozone layer depletion (ODP) - A1	1.32	2.04	1.10	0.00	1.53	0.00	1.53	1.38
Acidification - A1	1.71	2.04	1.54	0.00	1.53	0.00	1.53	1.38
Eutrophication - A1	1.57	2.04	1.33	0.00	1.53	0.00	1.52	1.38
Photochemical oxidation - A1	1.66	2.04	1.52	0.00	1.53	0.00	1.53	1.38
Abiotic depletion - A1	16.92	2.04	4.00	0.00	1.53	0.00	1.53	1.38
Abiotic depletion (fossil fuels) - A1	1.58	2.04	1.42	0.00	1.53	0.00	1.53	1.38
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Fyrchek™ MR – 13mm

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	1.34	1.42	1.24	0.00	1.28	0.00	1.28	1.14
GWP-fossil	1.01	1.43	1.00	0.00	1.28	0.00	1.05	1.14
GWP-biogenic	1.05	1.42	1.05	0.00	1.28	0.00	1.28	1.14
GWP-luluc	1.42	1.42	1.15	0.00	1.28	0.00	1.11	1.14
ODP	2.56	1.43	1.36	0.00	1.28	0.00	1.28	1.14
AP	1.37	1.43	1.28	0.00	1.28	0.00	1.28	1.14
EP-freshwater	1.36	1.42	1.11	0.00	1.28	0.00	1.24	1.14
EP-marine	1.33	1.43	1.23	0.00	1.28	0.00	1.25	1.14
EP-terrestrial	1.33	1.43	1.26	0.00	1.28	0.00	1.28	1.14
POCP	1.36	1.43	1.27	0.00	1.28	0.00	1.28	1.14
ADP-minerals & metals	16.46	1.42	3.68	0.00	1.28	0.00	1.28	1.14
ADP-fossil	1.37	1.42	1.25	0.00	1.28	0.00	1.28	1.14
WDP	1.31	1.43	1.20	0.00	1.28	0.00	1.28	1.14
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Fyrchek™ MR – 13mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	1.08	1.43	1.04	0.00	1.28	0.00	1.11	1.14
PERM	1.04	0.00	1.00	0.00	0.00	0.00	1.10	0.00
PERT	1.07	1.43	1.05	0.00	1.28	0.00	1.28	1.14
PENRE	1.07	1.43	1.05	0.00	1.28	0.00	1.28	1.14
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	1.37	1.42	1.25	0.00	1.28	0.00	1.28	1.14
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	1.29	1.43	1.17	0.00	1.28	0.00	1.28	1.14
Conversion factors of waste production								
Hazardous waste disposed	1.74	1.42	1.72	0.00	1.28	0.00	1.28	1.14
Non-hazardous waste disposed	0.71	1.42	1.26	0.00	1.28	0.00	1.28	1.14
Radioactive waste disposed	1.74	1.42	1.11	0.00	1.28	0.00	1.28	1.14
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	3.41	0.00	1.29	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Fyrchek™ MR – 13mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	1.34	1.42	1.22	0.00	1.28	0.00	1.23	1.14
Particulate matter	15.22	1.43	5.05	0.00	1.28	0.00	1.28	1.14
Ionising radiation - human health	1.74	1.42	1.11	0.00	1.28	0.00	1.28	1.14
Eco-toxicity (fresh-water)	0.54	1.42	1.02	0.00	1.28	0.00	1.28	1.14
Human toxicity potential - cancer effects	41.73	1.42	14.10	0.00	1.28	0.00	1.28	1.14
Human toxicity potential - non cancer effects	16.02	1.42	6.13	0.00	1.28	0.00	1.27	1.14
Soil quality	1.03	1.92	1.03	0.00	1.28	0.00	1.28	1.14
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	1.34	1.42	1.23	0.00	1.28	0.00	1.24	1.14
Ozone layer depletion (ODP) - A1	1.68	1.43	1.14	0.00	1.28	0.00	1.28	1.14
Acidification - A1	1.41	1.43	1.28	0.00	1.28	0.00	1.28	1.14
Eutrophication - A1	1.32	1.43	1.17	0.00	1.28	0.00	1.24	1.14
Photochemical oxidation - A1	1.43	1.42	1.27	0.00	1.28	0.00	1.28	1.14
Abiotic depletion - A1	14.91	1.42	3.62	0.00	1.28	0.00	1.28	1.14
Abiotic depletion (fossil fuels) - A1	1.39	1.42	1.26	0.00	1.28	0.00	1.28	1.14
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Fyrchek™ MR – 16mm

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	1.74	1.04	1.23	0.00	1.54	0.00	1.27	1.39
GWP-fossil	1.61	1.04	1.38	0.00	1.54	0.00	1.54	1.39
GWP-biogenic	1.05	1.04	1.01	0.00	1.54	0.00	1.18	1.39
GWP-luluc	1.18	1.04	1.16	0.00	1.54	0.00	1.54	1.39
ODP	2.51	1.04	1.33	0.00	1.54	0.00	1.54	1.39
AP	1.72	1.04	1.55	0.00	1.54	0.00	1.54	1.39
EP-freshwater	1.58	1.04	1.17	0.00	1.54	0.00	1.53	1.39
EP-marine	1.62	1.04	1.40	0.00	1.54	0.00	1.53	1.39
EP-terrestrial	1.63	1.04	1.43	0.00	1.54	0.00	1.54	1.39
POCP	1.67	1.04	1.47	0.00	1.54	0.00	1.54	1.39
ADP-minerals & metals	19.90	1.04	4.27	0.00	1.54	0.00	1.54	1.39
ADP-fossil	1.60	1.04	1.36	0.00	1.54	0.00	1.54	1.39
WDP	1.58	1.04	1.38	0.00	1.54	0.00	1.54	1.39
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Fyrchek™ MR – 16mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	1.14	1.04	1.07	0.00	1.54	0.00	1.45	1.39
PERM	1.21	0.00	1.01	0.00	0.00	0.00	1.45	0.00
PERT	1.15	1.04	1.11	0.00	1.54	0.00	1.54	1.39
PENRE	1.15	1.04	1.11	0.00	1.54	0.00	1.54	1.39
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	1.60	1.04	1.36	0.00	1.54	0.00	1.54	1.39
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	1.55	1.04	1.32	0.00	1.54	0.00	1.54	1.39
Conversion factors of waste production								
Hazardous waste disposed	2.52	1.04	2.47	0.00	1.54	0.00	1.54	1.39
Non-hazardous waste disposed	0.85	1.04	1.52	0.00	1.54	0.00	1.54	1.39
Radioactive waste disposed	2.19	1.04	1.17	0.00	1.54	0.00	1.54	1.39
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	3.55	0.00	1.56	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Fyrchek™ MR – 16mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	1.60	1.04	1.34	0.00	1.54	0.00	1.52	1.39
Particulate matter	19.03	1.04	6.19	0.00	1.54	0.00	1.54	1.39
Ionising radiation - human health	2.18	1.04	1.18	0.00	1.54	0.00	1.54	1.39
Eco-toxicity (fresh-water)	0.63	1.04	1.15	0.00	1.54	0.00	1.54	1.39
Human toxicity potential - cancer effects	52.05	1.04	17.42	0.00	1.54	0.00	1.54	1.39
Human toxicity potential - non cancer effects	19.98	1.04	7.47	0.00	1.54	0.00	1.54	1.39
Soil quality	1.07	1.04	1.07	0.00	1.54	0.00	1.54	1.39
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	1.60	1.04	1.35	0.00	1.54	0.00	1.52	1.39
Ozone layer depletion (ODP) - A1	1.41	1.04	1.08	0.00	1.54	0.00	1.54	1.39
Acidification - A1	1.72	1.04	1.55	0.00	1.54	0.00	1.54	1.39
Eutrophication - A1	1.59	1.04	1.29	0.00	1.54	0.00	1.52	1.39
Photochemical oxidation - A1	1.69	1.04	1.53	0.00	1.54	0.00	1.54	1.39
Abiotic depletion - A1	18.01	1.04	4.20	0.00	1.54	0.00	1.54	1.39
Abiotic depletion (fossil fuels) - A1	1.65	1.04	1.39	0.00	1.54	0.00	1.54	1.39
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Impactchek™ – 13mm

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	1.80	0.69	1.23	0.00	1.32	0.00	1.14	1.17
GWP-fossil	1.65	0.69	1.37	0.00	1.32	0.00	1.32	1.17
GWP-biogenic	1.02	0.69	1.01	0.00	1.32	0.00	1.08	1.17
GWP-luluc	1.08	0.69	1.07	0.00	1.32	0.00	1.32	1.17
ODP	3.01	0.69	1.43	0.00	1.32	0.00	1.32	1.17
AP	1.78	0.69	1.34	0.00	1.32	0.00	1.32	1.17
EP-freshwater	1.65	0.69	1.17	0.00	1.32	0.00	1.28	1.17
EP-marine	1.71	0.69	1.41	0.00	1.32	0.00	1.28	1.17
EP-terrestrial	1.72	0.69	1.46	0.00	1.32	0.00	1.32	1.17
POCP	1.77	0.69	1.38	0.00	1.32	0.00	1.32	1.17
ADP-minerals & metals	48.49	0.69	9.22	0.00	1.32	0.00	1.32	1.17
ADP-fossil	1.70	0.69	1.39	0.00	1.32	0.00	1.32	1.17
WDP	1.27	0.69	1.17	0.00	1.32	0.00	1.32	1.17
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Impactchek™ – 13mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	1.19	0.69	1.09	0.00	1.32	0.00	1.15	1.17
PERM	1.06	0.00	1.00	0.00	0.00	0.00	1.14	0.00
PERT	1.16	0.69	1.11	0.00	1.32	0.00	1.32	1.17
PENRE	1.16	0.69	1.11	0.00	1.32	0.00	1.32	1.17
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	1.70	0.69	1.39	0.00	1.32	0.00	1.32	1.17
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	1.29	0.69	1.17	0.00	1.32	0.00	1.32	1.17
Conversion factors of waste production								
Hazardous waste disposed	0.84	0.69	0.84	0.00	1.32	0.00	1.32	1.17
Non-hazardous waste disposed	1.11	0.69	1.31	0.00	1.32	0.00	1.32	1.17
Radioactive waste disposed	2.37	0.69	1.19	0.00	1.32	0.00	1.32	1.17
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	4.18	0.00	1.33	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Impactchek™ – 13mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	1.64	0.69	1.33	0.00	1.32	0.00	1.27	1.17
Particulate matter	15.20	0.69	5.02	0.00	1.32	0.00	1.32	1.17
Ionising radiation - human health	2.37	0.69	1.19	0.00	1.32	0.00	1.32	1.17
Eco-toxicity (fresh-water)	0.91	0.69	1.11	0.00	1.32	0.00	1.32	1.17
Human toxicity potential - cancer effects	41.51	0.69	14.03	0.00	1.32	0.00	1.32	1.17
Human toxicity potential - non cancer effects	16.75	0.69	6.34	0.00	1.32	0.00	1.31	1.17
Soil quality	1.04	0.69	1.04	0.00	1.32	0.00	1.32	1.17
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	1.64	0.69	1.34	0.00	1.32	0.00	1.28	1.17
Ozone layer depletion (ODP) - A1	2.13	0.69	1.20	0.00	1.32	0.00	1.32	1.17
Acidification - A1	1.88	0.69	1.34	0.00	1.32	0.00	1.32	1.17
Eutrophication - A1	1.67	0.69	1.31	0.00	1.32	0.00	1.28	1.17
Photochemical oxidation - A1	1.83	0.69	1.32	0.00	1.32	0.00	1.32	1.17
Abiotic depletion - A1	43.73	0.69	9.03	0.00	1.32	0.00	1.32	1.17
Abiotic depletion (fossil fuels) - A1	1.65	0.69	1.36	0.00	1.32	0.00	1.32	1.17
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Plus - 10mm

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	0.62	0.75	0.81	0.00	0.68	0.00	0.94	0.64
GWP-fossil	0.68	0.75	0.78	0.00	0.68	0.00	0.68	0.64
GWP-biogenic	0.91	0.75	0.87	0.00	0.68	0.00	1.02	0.64
GWP-luluc	1.00	0.75	1.00	0.00	0.68	0.00	0.68	0.64
ODP	0.55	0.75	0.89	0.00	0.68	0.00	0.68	0.64
AP	0.69	0.75	0.68	0.00	0.68	0.00	0.68	0.64
EP-freshwater	1.00	0.75	1.00	0.00	0.68	0.00	0.70	0.64
EP-marine	0.67	0.75	0.79	0.00	0.68	0.00	0.70	0.64
EP-terrestrial	0.66	0.75	0.75	0.00	0.68	0.00	0.68	0.64
POCP	0.67	0.75	0.73	0.00	0.68	0.00	0.68	0.64
ADP-minerals & metals	1.07	0.75	1.01	0.00	0.68	0.00	0.68	0.64
ADP-fossil	0.66	0.75	0.78	0.00	0.68	0.00	0.68	0.64
WDP	0.79	0.75	0.87	0.00	0.68	0.00	0.68	0.64
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Plus - 10mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	0.84	0.75	0.88	0.00	0.68	0.00	0.80	0.64
PERM	0.82	0.00	0.83	0.00	0.00	0.00	0.80	0.00
PERT	0.84	0.75	0.88	0.00	0.68	0.00	0.68	0.64
PENRE	0.84	0.75	0.88	0.00	0.68	0.00	0.68	0.64
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	0.66	0.75	0.78	0.00	0.68	0.00	0.68	0.64
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	0.83	0.75	0.90	0.00	0.68	0.00	0.68	0.64
Conversion factors of waste production								
Hazardous waste disposed	1.00	0.75	1.00	0.00	0.68	0.00	0.68	0.64
Non-hazardous waste disposed	1.03	0.75	0.69	0.00	0.68	0.00	0.68	0.64
Radioactive waste disposed	0.90	0.75	0.98	0.00	0.68	0.00	0.68	0.64
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	0.77	0.00	0.67	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Plus - 10mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	0.68	0.75	0.80	0.00	0.68	0.00	0.72	0.64
Particulate matter	0.76	0.75	0.76	0.00	0.68	0.00	0.68	0.64
Ionising radiation - human health	0.90	0.75	0.97	0.00	0.68	0.00	0.68	0.64
Eco-toxicity (fresh-water)	1.15	0.75	0.89	0.00	0.68	0.00	0.68	0.64
Human toxicity potential - cancer effects	0.86	0.75	0.95	0.00	0.68	0.00	0.68	0.64
Human toxicity potential - non cancer effects	0.80	0.75	0.88	0.00	0.68	0.00	0.68	0.64
Soil quality	0.84	0.81	0.87	0.00	0.68	0.00	0.68	0.64
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	0.68	0.75	0.80	0.00	0.68	0.00	0.71	0.64
Ozone layer depletion (ODP) - A1	0.56	0.75	0.91	0.00	0.68	0.00	0.68	0.64
Acidification - A1	0.67	0.75	0.68	0.00	0.68	0.00	0.68	0.64
Eutrophication - A1	0.76	0.75	0.88	0.00	0.68	0.00	0.71	0.64
Photochemical oxidation - A1	0.72	0.75	0.69	0.00	0.68	0.00	0.68	0.64
Abiotic depletion - A1	1.07	0.75	1.01	0.00	0.68	0.00	0.68	0.64
Abiotic depletion (fossil fuels) - A1	0.68	0.75	0.79	0.00	0.68	0.00	0.68	0.64
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Shaft Liner MP – 25mm

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	2.12	3.41	1.81	0.00	2.27	0.00	1.47	2.11
GWP-fossil	2.03	3.41	1.79	0.00	2.27	0.00	2.27	2.11
GWP-biogenic	1.66	3.69	1.84	0.00	2.27	0.00	1.20	2.11
GWP-luluc	1.19	3.38	1.12	0.00	2.27	0.00	2.27	2.11
ODP	2.91	3.60	1.50	0.00	2.27	0.00	2.27	2.11
AP	2.30	3.48	2.27	0.00	2.27	0.00	2.27	2.11
EP-freshwater	1.43	3.38	1.10	0.00	2.27	0.00	2.04	2.11
EP-marine	2.02	3.49	1.78	0.00	2.27	0.00	2.04	2.11
EP-terrestrial	2.04	3.50	1.85	0.00	2.27	0.00	2.27	2.11
POCP	2.07	3.46	2.02	0.00	2.27	0.00	2.27	2.11
ADP-minerals & metals	23.46	3.38	4.88	0.00	2.27	0.00	2.27	2.11
ADP-fossil	1.99	3.41	1.74	0.00	2.27	0.00	2.27	2.11
WDP	2.02	3.50	1.58	0.00	2.27	0.00	2.27	2.11
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Shaft Liner MP – 25mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	1.79	3.69	1.46	0.00	2.27	0.00	1.10	2.11
PERM	1.45	0.00	1.90	0.00	0.00	0.00	0.91	0.00
PERT	1.73	3.69	1.34	0.00	2.27	0.00	2.27	2.11
PENRE	1.73	3.69	1.34	0.00	2.27	0.00	2.27	2.11
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	1.99	3.41	1.74	0.00	2.27	0.00	2.27	2.11
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	1.79	3.46	1.39	0.00	2.27	0.00	2.27	2.11
Conversion factors of waste production								
Hazardous waste disposed	6.08	3.39	5.94	0.00	2.27	0.00	2.27	2.11
Non-hazardous waste disposed	0.79	3.43	2.24	0.00	2.27	0.00	2.27	2.11
Radioactive waste disposed	1.67	3.38	1.04	0.00	2.27	0.00	2.27	2.11
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	9.78	0.00	2.31	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Shaft Liner MP – 25mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	31.70	3.50	10.12	0.00	2.27	0.00	2.27	2.11
Particulate matter	1.67	3.38	1.05	0.00	2.27	0.00	2.27	2.11
Ionising radiation - human health	0.67	3.40	1.53	0.00	2.27	0.00	2.27	2.11
Eco-toxicity (fresh-water)	87.86	3.40	28.93	0.00	2.27	0.00	2.27	2.11
Human toxicity potential - cancer effects	33.15	3.42	12.12	0.00	2.27	0.00	2.25	2.11
Human toxicity potential - non cancer effects	1.89	16.93	1.59	0.00	2.27	0.00	2.26	2.11
Soil quality	31.70	3.50	10.12	0.00	2.27	0.00	2.27	2.11
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	2.04	3.41	1.78	0.00	2.27	0.00	2.01	2.11
Ozone layer depletion (ODP) - A1	1.02	3.60	1.07	0.00	2.27	0.00	2.27	2.11
Acidification - A1	2.10	3.47	2.27	0.00	2.27	0.00	2.27	2.11
Eutrophication - A1	1.83	3.48	1.47	0.00	2.27	0.00	2.02	2.11
Photochemical oxidation - A1	2.01	3.42	2.23	0.00	2.27	0.00	2.27	2.11
Abiotic depletion - A1	21.24	3.38	4.80	0.00	2.27	0.00	2.27	2.11
Abiotic depletion (fossil fuels) - A1	2.15	3.41	1.82	0.00	2.27	0.00	2.27	2.11
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Soundchek™ – 10mm

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	1.13	0.43	0.96	0.00	1.09	0.00	1.11	0.99
GWP-fossil	1.09	0.43	1.01	0.00	1.09	0.00	1.09	0.99
GWP-biogenic	0.94	0.64	0.87	0.00	1.09	0.00	1.12	0.99
GWP-luluc	1.10	0.41	1.08	0.00	1.09	0.00	1.09	0.99
ODP	1.96	0.58	1.20	0.00	1.09	0.00	1.09	0.99
AP	0.96	0.48	1.08	0.00	1.09	0.00	1.09	0.99
EP-freshwater	1.98	0.41	1.25	0.00	1.09	0.00	1.09	0.99
EP-marine	0.99	0.49	0.97	0.00	1.09	0.00	1.09	0.99
EP-terrestrial	0.98	0.50	0.95	0.00	1.09	0.00	1.09	0.99
POCP	1.02	0.47	1.02	0.00	1.09	0.00	1.09	0.99
ADP-minerals & metals	18.38	0.41	4.00	0.00	1.09	0.00	1.09	0.99
ADP-fossil	1.02	0.43	0.97	0.00	1.09	0.00	1.09	0.99
WDP	1.28	0.50	1.18	0.00	1.09	0.00	1.09	0.99
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Soundchek™ – 10mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	0.93	0.65	0.93	0.00	1.09	0.00	1.05	0.99
PERM	0.94	0.00	0.84	0.00	0.00	0.00	1.07	0.00
PERT	0.93	0.65	0.95	0.00	1.09	0.00	1.09	0.99
PENRE	0.93	0.65	0.95	0.00	1.09	0.00	1.09	0.99
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	1.02	0.43	0.97	0.00	1.09	0.00	1.09	0.99
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	1.32	0.47	1.18	0.00	1.09	0.00	1.09	0.99
Conversion factors of waste production								
Hazardous waste disposed	1.04	0.41	1.03	0.00	1.09	0.00	1.09	0.99
Non-hazardous waste disposed	0.82	0.45	1.08	0.00	1.09	0.00	1.09	0.99
Radioactive waste disposed	3.04	0.41	1.27	0.00	1.09	0.00	1.09	0.99
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	3.29	0.00	1.10	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Soundchek™ – 10mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	1.09	0.43	1.01	0.00	1.09	0.00	1.08	0.99
Particulate matter	15.86	0.50	5.08	0.00	1.09	0.00	1.09	0.99
Ionising radiation - human health	3.01	0.41	1.27	0.00	1.09	0.00	1.09	0.99
Eco-toxicity (fresh-water)	0.52	0.42	0.91	0.00	1.09	0.00	1.09	0.99
Human toxicity potential - cancer effects	43.86	0.43	14.78	0.00	1.09	0.00	1.09	0.99
Human toxicity potential - non cancer effects	16.72	0.44	6.29	0.00	1.09	0.00	1.09	0.99
Soil quality	0.91	10.64	0.93	0.00	1.09	0.00	1.09	0.99
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	1.09	0.43	1.01	0.00	1.09	0.00	1.09	0.99
Ozone layer depletion (ODP) - A1	1.04	0.58	1.00	0.00	1.09	0.00	1.09	0.99
Acidification - A1	1.01	0.47	1.09	0.00	1.09	0.00	1.09	0.99
Eutrophication - A1	1.22	0.48	1.09	0.00	1.09	0.00	1.09	0.99
Photochemical oxidation - A1	1.13	0.44	1.09	0.00	1.09	0.00	1.09	0.99
Abiotic depletion - A1	16.65	0.41	3.94	0.00	1.09	0.00	1.09	0.99
Abiotic depletion (fossil fuels) - A1	1.10	0.43	1.02	0.00	1.09	0.00	1.09	0.99
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Soundchek™ – 13mm

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	1.45	0.73	1.14	0.00	1.48	0.00	1.21	1.36
GWP-fossil	1.37	0.73	1.21	0.00	1.48	0.00	1.48	1.36
GWP-biogenic	1.04	0.73	1.02	0.00	1.48	0.00	1.12	1.36
GWP-luluc	1.12	0.73	1.10	0.00	1.48	0.00	1.48	1.36
ODP	2.53	0.73	1.33	0.00	1.48	0.00	1.48	1.36
AP	1.17	0.73	1.46	0.00	1.48	0.00	1.48	1.36
EP-freshwater	2.32	0.73	1.35	0.00	1.48	0.00	1.40	1.36
EP-marine	1.21	0.73	1.14	0.00	1.48	0.00	1.40	1.36
EP-terrestrial	1.21	0.73	1.13	0.00	1.48	0.00	1.48	1.36
POCP	1.27	0.73	1.29	0.00	1.48	0.00	1.48	1.36
ADP-minerals & metals	20.86	0.73	4.44	0.00	1.48	0.00	1.48	1.36
ADP-fossil	1.30	0.73	1.16	0.00	1.48	0.00	1.48	1.36
WDP	1.54	0.73	1.35	0.00	1.48	0.00	1.48	1.36
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Soundchek™ – 13mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	1.08	0.73	1.04	0.00	1.48	0.00	1.10	1.36
PERM	1.03	0.00	1.00	0.00	0.00	0.00	1.07	0.00
PERT	1.07	0.73	1.05	0.00	1.48	0.00	1.48	1.36
PENRE	1.07	0.73	1.05	0.00	1.48	0.00	1.48	1.36
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	1.30	0.73	1.16	0.00	1.48	0.00	1.48	1.36
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	1.54	0.73	1.31	0.00	1.48	0.00	1.48	1.36
Conversion factors of waste production								
Hazardous waste disposed	1.22	0.73	1.21	0.00	1.48	0.00	1.48	1.36
Non-hazardous waste disposed	0.89	0.73	1.45	0.00	1.48	0.00	1.48	1.36
Radioactive waste disposed	3.80	0.73	1.38	0.00	1.48	0.00	1.48	1.36
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	4.69	0.00	1.49	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Soundchek™ – 13mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	1.37	0.73	1.20	0.00	1.48	0.00	1.36	1.36
Particulate matter	22.42	0.73	7.07	0.00	1.48	0.00	1.48	1.36
Ionising radiation - human health	3.76	0.73	1.39	0.00	1.48	0.00	1.48	1.36
Eco-toxicity (fresh-water)	0.58	0.73	1.10	0.00	1.48	0.00	1.48	1.36
Human toxicity potential - cancer effects	62.35	0.73	20.73	0.00	1.48	0.00	1.48	1.36
Human toxicity potential - non cancer effects	23.52	0.73	8.65	0.00	1.48	0.00	1.47	1.36
Soil quality	1.08	0.73	1.08	0.00	1.48	0.00	1.47	1.36
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	1.37	0.73	1.20	0.00	1.48	0.00	1.39	1.36
Ozone layer depletion (ODP) - A1	1.20	0.73	1.03	0.00	1.48	0.00	1.48	1.36
Acidification - A1	1.23	0.73	1.47	0.00	1.48	0.00	1.48	1.36
Eutrophication - A1	1.46	0.73	1.22	0.00	1.48	0.00	1.39	1.36
Photochemical oxidation - A1	1.37	0.73	1.45	0.00	1.48	0.00	1.48	1.36
Abiotic depletion - A1	18.88	0.73	4.36	0.00	1.48	0.00	1.48	1.36
Abiotic depletion (fossil fuels) - A1	1.39	0.73	1.22	0.00	1.48	0.00	1.48	1.36
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Supaceil™ – 10mm

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	0.90	0.35	0.88	0.00	0.72	0.00	0.72	0.68
GWP-fossil	0.91	0.35	0.87	0.00	0.72	0.00	1.04	0.68
GWP-biogenic	1.01	0.35	1.01	0.00	0.72	0.00	0.72	0.68
GWP-luluc	0.90	0.35	0.88	0.00	0.72	0.00	0.96	0.68
ODP	2.65	0.35	1.33	0.00	0.72	0.00	0.72	0.68
AP	0.75	0.35	0.72	0.00	0.72	0.00	0.72	0.68
EP-freshwater	1.04	0.35	1.00	0.00	0.72	0.00	0.75	0.68
EP-marine	0.76	0.35	0.81	0.00	0.72	0.00	0.75	0.68
EP-terrestrial	0.75	0.35	0.78	0.00	0.72	0.00	0.72	0.68
POCP	0.76	0.35	0.76	0.00	0.72	0.00	0.72	0.68
ADP-minerals & metals	3.84	0.35	1.49	0.00	0.72	0.00	0.72	0.68
ADP-fossil	0.92	0.35	0.90	0.00	0.72	0.00	0.72	0.68
WDP	0.87	0.35	0.91	0.00	0.72	0.00	0.72	0.68
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Supaceil™ – 10mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	0.88	0.35	0.90	0.00	0.72	0.00	0.88	0.68
PERM	0.86	0.00	0.83	0.00	0.00	0.00	0.89	0.00
PERT	0.88	0.35	0.92	0.00	0.72	0.00	0.72	0.68
PENRE	0.88	0.35	0.92	0.00	0.72	0.00	0.72	0.68
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	0.92	0.35	0.90	0.00	0.72	0.00	0.72	0.68
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	0.91	0.35	0.94	0.00	0.72	0.00	0.72	0.68
Conversion factors of waste production								
Hazardous waste disposed	0.70	0.35	0.70	0.00	0.72	0.00	0.72	0.68
Non-hazardous waste disposed	1.24	0.35	0.73	0.00	0.72	0.00	0.72	0.68
Radioactive waste disposed	0.94	0.35	0.98	0.00	0.72	0.00	0.72	0.68
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	1.07	0.00	0.71	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Supaceil™ – 10mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	0.91	0.35	0.90	0.00	0.72	0.00	0.76	0.68
Particulate matter	0.88	0.35	0.79	0.00	0.72	0.00	0.72	0.68
Ionising radiation - human health	0.94	0.35	0.98	0.00	0.72	0.00	0.72	0.68
Eco-toxicity (fresh-water)	1.67	0.35	1.02	0.00	0.72	0.00	0.72	0.68
Human toxicity potential - cancer effects	0.91	0.35	0.96	0.00	0.72	0.00	0.72	0.68
Human toxicity potential - non cancer effects	1.09	0.35	0.96	0.00	0.72	0.00	0.72	0.68
Soil quality	0.85	0.35	0.87	0.00	0.72	0.00	0.72	0.68
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	0.91	0.35	0.89	0.00	0.72	0.00	0.75	0.68
Ozone layer depletion (ODP) - A1	2.60	0.35	1.27	0.00	0.72	0.00	0.72	0.68
Acidification - A1	0.77	0.35	0.72	0.00	0.72	0.00	0.72	0.68
Eutrophication - A1	0.85	0.35	0.90	0.00	0.72	0.00	0.75	0.68
Photochemical oxidation - A1	0.89	0.35	0.73	0.00	0.72	0.00	0.72	0.68
Abiotic depletion - A1	3.56	0.35	1.48	0.00	0.72	0.00	0.72	0.68
Abiotic depletion (fossil fuels) - A1	0.92	0.35	0.90	0.00	0.72	0.00	0.72	0.68
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock HD – 10mm

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	0.96	0.91	1.15	0.00	1.02	0.00	1.15	0.93
GWP-fossil	1.03	0.91	1.01	0.00	1.02	0.00	1.02	0.93
GWP-biogenic	1.32	1.02	1.37	0.00	1.02	0.00	1.19	0.93
GWP-luluc	1.14	0.91	1.12	0.00	1.02	0.00	1.02	0.93
ODP	1.49	0.99	1.11	0.00	1.02	0.00	1.02	0.93
AP	1.08	0.94	1.02	0.00	1.02	0.00	1.02	0.93
EP-freshwater	1.21	0.91	1.07	0.00	1.02	0.00	1.00	0.93
EP-marine	1.05	0.95	1.05	0.00	1.02	0.00	1.00	0.93
EP-terrestrial	1.04	0.95	1.03	0.00	1.02	0.00	1.02	0.93
POCP	1.05	0.93	1.03	0.00	1.02	0.00	1.02	0.93
ADP-minerals & metals	11.65	0.91	2.84	0.00	1.02	0.00	1.02	0.93
ADP-fossil	1.02	0.91	1.00	0.00	1.02	0.00	1.02	0.93
WDP	1.00	0.95	1.00	0.00	1.02	0.00	1.02	0.93
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock HD – 10mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	1.29	1.02	1.23	0.00	1.02	0.00	0.93	0.93
PERM	1.15	0.00	1.38	0.00	0.00	0.00	0.89	0.00
PERT	1.26	1.02	1.18	0.00	1.02	0.00	1.02	0.93
PENRE	1.26	1.02	1.18	0.00	1.02	0.00	1.02	0.93
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	1.02	0.91	1.00	0.00	1.02	0.00	1.02	0.93
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	1.02	0.93	1.01	0.00	1.02	0.00	1.02	0.93
Conversion factors of waste production								
Hazardous waste disposed	1.66	0.91	1.64	0.00	1.02	0.00	1.02	0.93
Non-hazardous waste disposed	0.73	0.92	1.02	0.00	1.02	0.00	1.02	0.93
Radioactive waste disposed	1.19	0.90	1.03	0.00	1.02	0.00	1.02	0.93
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	1.55	0.00	1.02	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock HD – 10mm (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	1.03	0.91	1.04	0.00	1.02	0.00	0.99	0.93
Particulate matter	13.61	0.95	4.45	0.00	1.02	0.00	1.02	0.93
Ionising radiation - human health	1.19	0.91	1.03	0.00	1.02	0.00	1.02	0.93
Eco-toxicity (fresh-water)	0.45	0.91	0.87	0.00	1.02	0.00	1.02	0.93
Human toxicity potential - cancer effects	37.90	0.91	12.86	0.00	1.02	0.00	1.02	0.93
Human toxicity potential - non cancer effects	14.36	0.92	5.53	0.00	1.02	0.00	1.02	0.93
Soil quality	1.35	6.01	1.27	0.00	1.02	0.00	1.02	0.93
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	1.03	0.91	1.04	0.00	1.02	0.00	1.00	0.93
Ozone layer depletion (ODP) - A1	0.69	0.99	0.94	0.00	1.02	0.00	1.02	0.93
Acidification - A1	1.06	0.94	1.02	0.00	1.02	0.00	1.02	0.93
Eutrophication - A1	1.08	0.94	1.06	0.00	1.02	0.00	1.00	0.93
Photochemical oxidation - A1	1.08	0.92	1.02	0.00	1.02	0.00	1.02	0.93
Abiotic depletion - A1	10.61	0.91	2.81	0.00	1.02	0.00	1.02	0.93
Abiotic depletion (fossil fuels) - A1	1.04	0.91	1.02	0.00	1.02	0.00	1.02	0.93
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Standard 6mm Round

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of potential environmental impact								
GWP-total	1.02	0.32	0.91	0.00	2.17	0.00	1.07	1.09
GWP-fossil	1.00	0.32	0.94	0.00	2.17	0.00	1.08	1.09
GWP-biogenic	0.91	0.32	0.86	0.00	2.17	0.00	1.06	1.09
GWP-luluc	1.08	0.32	1.06	0.00	2.17	0.00	1.08	1.09
ODP	0.90	0.32	0.95	0.00	2.17	0.00	1.08	1.09
AP	0.86	0.32	1.07	0.00	2.17	0.00	1.08	1.09
EP-freshwater	1.76	0.32	1.18	0.00	2.17	0.00	1.10	1.09
EP-marine	0.89	0.32	0.89	0.00	2.17	0.00	1.10	1.09
EP-terrestrial	0.88	0.32	0.88	0.00	2.17	0.00	1.08	1.09
POCP	0.91	0.32	0.97	0.00	2.17	0.00	1.08	1.09
ADP-minerals & metals	1.50	0.32	1.08	0.00	2.17	0.00	1.08	1.09
ADP-fossil	0.92	0.32	0.91	0.00	2.17	0.00	1.08	1.09
WDP	1.23	0.32	1.15	0.00	2.17	0.00	1.08	1.09
Acronyms	GWP-fossil = Global Warming Potential fossil fuels; GWP-biogenic = Global Warming Potential biogenic; GWP-luluc = Global Warming Potential land use and land use change; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential, Accumulated Exceedance; EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment; EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment; EP-terrestrial = Eutrophication potential, Accumulated Exceedance; POCP = Formation potential of tropospheric ozone; ADP-minerals&metals = Abiotic depletion potential for non-fossil resources; ADP-fossil = Abiotic depletion for fossil resources potential; WDP = Water (user) deprivation potential, deprivation-weighted water consumption;							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Standard 6mm Round (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of use of resources								
PERE	0.90	0.32	0.92	0.00	2.17	0.00	1.17	1.09
PERM	1.01	0.00	0.84	0.00	0.00	0.00	1.20	0.00
PERT	0.92	0.32	0.95	0.00	2.17	0.00	1.08	1.09
PENRE	0.92	0.32	0.95	0.00	2.17	0.00	1.08	1.09
PENRM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PENRT	0.92	0.32	0.91	0.00	2.17	0.00	1.08	1.09
SM	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
NRSF	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW	1.27	0.32	1.15	0.00	2.17	0.00	1.08	1.09
Conversion factors of waste production								
Hazardous waste disposed	0.99	0.32	0.98	0.00	2.17	0.00	1.08	1.09
Non-hazardous waste disposed	1.34	0.32	1.08	0.00	2.17	0.00	1.08	1.09
Radioactive waste disposed	2.62	0.32	1.21	0.00	2.17	0.00	1.08	1.09
Conversion factors of output flows								
Components for re-use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material for recycling	7.03	0.00	1.09	0.00	0.00	0.00	0.00	0.00
Materials for energy recovery	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Exported energy - thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Acronyms	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 (primary energy and primary energy resources used as raw materials); 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 (primary energy and primary energy resources used as raw materials); SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water							

Conversion factors of Environmental Performance Indicators per m² of installed Gyprock Standard 6mm Round (Cont.)

Indicator	Total A1-A3	A4	A5	C1	C2	C3	C4	D
Conversion factors of additional environmental impact indicators								
GWP-GHG	1.00	0.32	0.94	0.00	2.17	0.00	1.11	1.09
Particulate matter	1.17	0.32	1.04	0.00	2.17	0.00	1.08	1.09
Ionising radiation - human health	2.59	0.32	1.21	0.00	2.17	0.00	1.08	1.09
Eco-toxicity (fresh-water)	1.58	0.32	1.16	0.00	2.17	0.00	1.08	1.09
Human toxicity potential - cancer effects	1.05	0.32	1.01	0.00	2.17	0.00	1.08	1.09
Human toxicity potential - non cancer effects	1.10	0.32	0.99	0.00	2.17	0.00	1.08	1.09
Soil quality	0.91	0.32	0.93	0.00	2.17	0.00	1.08	1.09
Conversion factors of potential environmental impacts – indicators according to EN 15804+A1								
Global warming (GWP100a) - A1	1.00	0.32	0.94	0.00	2.17	0.00	1.10	1.09
Ozone layer depletion (ODP) - A1	0.92	0.32	0.96	0.00	2.17	0.00	1.08	1.09
Acidification - A1	0.89	0.32	1.07	0.00	2.17	0.00	1.08	1.09
Eutrophication - A1	1.10	0.32	1.02	0.00	2.17	0.00	1.10	1.09
Photochemical oxidation - A1	0.99	0.32	1.07	0.00	2.17	0.00	1.08	1.09
Abiotic depletion - A1	1.45	0.32	1.08	0.00	2.17	0.00	1.08	1.09
Abiotic depletion (fossil fuels) - A1	1.00	0.32	0.95	0.00	2.17	0.00	1.08	1.09
Acronyms	GWP-GHG = Global warming potential, excluding biogenic uptake, emissions and storage							

References

AEPDP Technical Advisory Group. (2018). GUIDANCE ON THE USE OF BACKGROUND LCI DATA.

Australian Life Cycle Inventory Database Initiative (AusLCI). (2023). Guidelines for Data Development for an Australian Life Cycle Inventory Database, Data Standard.

Blue Environment pty ltd, The Department of Climate Change, Energy, the Environment and Water. (2022). National Waste Report 2022.

Department of the Environment. (2021). National Greenhouse Accounts Factors - Australian National Greenhouse Accounts. Australian Government. Retrieved from www.environment.gov.au

Ecoinvent v3.9.1. (2023). Retrieved from Ecoinvent: https://ecoinvent.org/the-ecoinvent-database/data-releases/ecoinvent-3-9-1/

EPD Australasia. (2024). Instructions of the Australasian EPD Program v4.2 - a Regional Annex to the General Program Instructions of the International EPD®System. EPD Australasia.

EPD Australasia Technical Advisory Group. (2020). GUIDANCE ON THE REVISED CONSTRUCTION PRODUCTS PCR.

EPD International . (2024). General Program Instructions for the International EPD® System. Version 5.0. EPD International.

EPD International. (2024). Product Category Rules (PCR) 2019:14, Version 1.3.4.

Frischknecht, R. (2007). The Environmental Relevance of Capital Goods in Life Cycle Assessments of Products and Services. Int. J LCA.

Institution, T. B. (2020). EN 15804:2012+A2:2019; Sustainability of construction works — Environmental product declarations — Core rules for the product category of construction products.

ISO. (2006). ISO 14025:2006 - Environmental labels and declarations - Type III environmental declarations - Principles and procedures. Geneva: International Organization for Standardization (ISO).

ISO. (2006). ISO 14040:2006. Environmental management – Life cycle assessment – Principles and framework. Geneva: International Organization for Standardization.

ISO. (2006). ISO 14044:2006. Environmental management – Life cycle assessment – Requirements and guidelines. Geneva: International Organization for Standardization.

ISO. (2017). ISO 21930:2017 - Sustainability in buildings and civil engineering works - Core rules for environmental product declarations of construction products and services. Geneva: International Organization for Standardization (ISO).

Environmental Product Declaration

In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021

Gypsum Plasterboard Products Manufactured by Gyprock

Program: The International EPD® System — www.environdec.com
Program Operator: EPD International AB
Regional Program: EPD Australasia — www.epd-australasia.com
EPD Registration No. EPD-IES-0015425

Publication Date: 2024-11-22
Expiration Date: 2029-11-22
Geographical Scope: Australia
Version: 001

An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com

This EPD covers multiple products based on a representative Gyprock Standard – 13mm, the list of which can be found on page 11.