

# WHITE PAPER FROM BUILDING TO PRODUCT CERTIFICATION

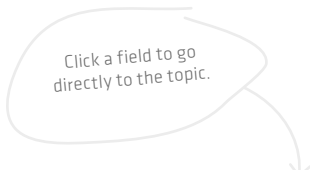
What is Cradle to Cradle® and which criteria does our Sarnafil® AT Silver-certified roofing membrane meet?



# INTRO

Sarnafil® AT, our newest polymeric roofing membrane, was the first in the world to be Cradle to Cradle® certified. We have taken this as an opportunity to highlight all the sustainability aspects, such as building certification, product certification and sustainability strategies. Above all, we clarify the question of what is behind Cradle to Cradle® and which criteria must be met.

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MORE VALUE - LESS IMPACT

# SIKA, SARNAFIL AND SUSTAINABILITY

Sika is a specialty chemicals company, a leader in the development and manufacture of systems and products for bonding, sealing, damping, reinforcing and protecting for the construction and manufacturing industries. We are represented on all five continents in 100 countries with nearly 25,000 employees and we produce in over 300 plants. Sustainability has been one of the Group's most important strategic pillars since early on.

Our sustainability strategy is based on the motto "**More Value - Less Impact**", meaning increased benefits and minimised impact. The aim is to maximise the benefits of our solutions and sustainable contributions for all stakeholders while reducing risks to people and the environment and reducing resource consumption.

**An important part of our strategy is to**

**INTENSIVELY SUPPORT**

**BUILDERS, ARCHITECTS,  
PLANNERS AND CONTRACTORS**

**in making the right choice of products.**

In the following, we discuss building certification systems, the sustainability documentation for Sika products and especially Cradle to Cradle Certified<sup>®1</sup> Product Certification.

In conclusion, we present Sarnafil and specifically our Sarnafil<sup>®</sup> AT roofing membrane made of flexible polyolefins - the first thermoplastic roofing membrane to successfully achieve the rigorous Cradle to Cradle Certified<sup>®</sup> Product Certification.

<sup>1</sup> Cradle to Cradle Certified<sup>®</sup> is a registered trademark of the Cradle to Cradle Products Innovation Institute.



DGNB, BNB, LEED

# BUILDING CERTIFICATION SYSTEMS

Sustainability qualification in the construction industry fundamentally distinguishes between the certification of buildings and of products. In the following chapters, we discuss both forms of certification in detail.

Sustainable construction is increasingly becoming the standard, especially for rental properties. Almost every country has its own building certification system. All systems pursue the common goal of creating more sustainability in the building sector. Nevertheless, they differ enormously in structure and content in some cases. In Germany, the DGNB, BNB and LEED systems are the most widespread.

## DGNB SYSTEM

The building certification system of the German Sustainable Building Council (DGNB) is the most widely used in this country. It is characterised by its comprehensive sustainable approach: Environmental, economic and social aspects are considered in the planning, construction and use of the building. Depending on the degree of fulfilment of the requirements, a newly completed building receives a DGNB certificate in Silver, Gold or Platinum. As a competent consultant for all questions regarding DGNB certification, Sika has trained ten DGNB consultants who will be glad to help you with questions concerning your specific project.

**All Sarnafil roofing membranes meet the requirements of the DGNB System version 2018, as attested by the manufacturer's declaration:**



New products: Lead, tin and SVHC content < 0.1 %<sup>2</sup>  
(SVHC = substances of very high concern).



For products made from recycled plastics, proof of freedom from lead, cadmium and organotin compounds is required in the form of a manufacturer's declaration

Life cycle assessment data for Sarnafil synthetic roofing membranes are available as a product-specific Environmental Product Declaration (EPD).

 [www.dgnb-system.de](http://www.dgnb-system.de)

<sup>2</sup> As of the 8th edition of the DGNB System 2018, evidence regarding lead, tin and SVHC is no longer required for synthetic roofing membranes.



## BNB SYSTEM

The acronym BNB stands for the Sustainable Building Rating System. This certification system is structured similarly to the DGNB framework but applies only to public buildings and not to other industrial, commercial or private buildings. In the same way, however, all three sustainability pillars are taken into account with the consideration of economic, environmental and social aspects. The degree of fulfilment of the requirements determines the level of the certificate, which is awarded in Bronze, Silver and Gold.

**All Sarnafil roofing membranes meeting the requirements according the current BNB system, as confirmed by the supplier:**



SVHC < 0.1 % (substances of very high concern)



No cadmium and lead stabilisers

Life cycle assessment data for Sarnafil synthetic roofing membranes are available as a product-specific Environmental Product Declaration (EPD).

[www.bnb-nachhaltigesbauen.de](http://www.bnb-nachhaltigesbauen.de)

## LEED SYSTEM

In contrast to the DGNB and BNB building certification systems, both of which originated in Germany, the LEED system was developed in the USA. Today it is used worldwide, and increasingly also in the German market. “Leadership in Energy and Environmental Design” already indicates that the focus here is on the environmental aspects of a building. Depending on the degree of fulfilment of the requirements, certification in the LEED system is also awarded in several levels: Certified, Silver, Gold and Platinum.

**All Sarnafil roofing membranes meet the requirements of the current LEED system, as attested by the manufacturer’s declaration:**



Pre-consumer recycling share of 10 % on average



High reflectance of white membranes → requirements for SRI value (solar reflectance index) met due to high reflectance of white membranes



Compliant with requirements for constituents according to REACH

Life cycle assessment data for Sarnafil synthetic roofing membranes are available as a product-specific Environmental Product Declaration (EPD).

[www.usgbc.org/leed](http://www.usgbc.org/leed)



## References

You can experience a successful practical example of a DGNB-certified building live at the Stuttgart site: the Sika Training Center. Sika products have also contributed to DGNB and LEED certification of numerous other buildings over the years.



You can find more practical examples with building certification on our website.

Search term: **DGNB** or **LEED**

[🌐 References](#)



LIFE CYCLE ASSESSMENT DATA

# SUSTAINABILITY DOCUMENTATION FOR SIKA PRODUCTS

The Sika Sustainability Data Sheets and Environmental Product Declarations contain a wide range of data and provide valuable information in the context of building certifications.

You can find the Sika Sustainability Data Sheets here:

[Sustainability Data Sheets](#)

## Sustainability Data Sheets

Our product-specific Sustainability Data Sheets serve as an important source of information for sustainable construction and provide a quick overview of the relevant properties of the product under consideration. Planners, builders and auditors can find detailed information here on products that are suitable for use in the construction and refurbishment of sustainable buildings.

The Sustainability Data Sheets list, for example, which tests and approvals a product has met and what contributions it makes in building certification systems such as DGNB and LEED. All relevant product information on sustainable building is summarised on a few pages and visible at a glance.

## Environmental Product Declarations

For many Sarnafil synthetic roofing membranes, Sika has product-specific EPDs available for download on the Sika website.

[EPDs](#)

**Environmental Product Declarations**, typically abbreviated as **EPD**, are prepared by manufacturers for individual products or defined product groups according to the specifications of the EN 15804 and ISO 14025 standards. In addition to a product description and technical data, they contain extensive life cycle assessment data on the environmental impacts throughout the entire product life cycle.

An EPD is more than a manufacturer's declaration: To ensure the quality of the declarations, independent third parties check the declaration for completeness, plausibility and consistency. After successful verification, the programme holder – in Germany the Institut Bauen und Umwelt e.V. (IBU) – publishes the Environmental Product Declaration and makes it available to all interested parties.





ON THE WAY TO A CIRCULAR ECONOMY

# Cradle to Cradle Certified® PRODUCT CERTIFICATION

Cradle to Cradle®<sup>3</sup> was developed by the German chemist Prof. Dr Michael Braungart and the American architect William McDonough. The two pioneers introduced a concept for the synergetic combination of design and chemistry (material properties) for the thoughtful design of modern industrial products.

With different meanings, the term was originally seen as a counter-design to “cradle to grave”. Today, Cradle to Cradle® is considered a beneficial design approach that integrates five categories:

- Environmentally harmless, healthy materials (material health)
- Reutilisation of materials, e.g. by recycling or composting
- Use of renewable energy and carbon management
- Water management and water-quality improvement
- Social responsibility strategies

## **Cradle to Cradle® - The basic concept**

Nature does not produce waste. Everything is a nutrient for another organism or system. Materials are reused in safe cycles. There are no substances that are difficult to degrade or that accumulate in other organisms and that can lead to irreversible changes. The earth produces biota (all living organisms in the environment) that have grown from the energy of the sun.

The design of goods (products) and the provision of services can be described by three principles:

### PRINCIPLE 01

### “EVERYTHING IS A RESOURCE FOR SOMETHING ELSE”

Behind the Cradle to Cradle® approach is the idea that nutrients become nutrients again. All materials are considered potential nutrients in one of two cycles: the technical and the biological cycle.

Founded by the two pioneers in 1995, the McDonough Braungart Design Chemistry (MBDC) Institute promotes the design of materials and products that are effectively “nutrients” for other systems.

<sup>3</sup> Cradle to Cradle® is the registered service trademark of McDonough Braungart Design Chemistry (MBDC).





**This means:** Materials and products are to be designed in such a way that they can be used again and again in both systems. New materials and products are to be developed in such a way that they are safe and their nutrients leave a beneficial legacy in economic, environmental and fairness terms. Because clean water is vital for humans and all organisms, water inflows and outflows are to be managed responsibly. The local impacts of water use must also be considered in order to preserve and promote healthy watersheds and ecosystems.

Carbon dioxide (CO<sub>2</sub>) should be sequestered in the soil. Our current practice, in which carbon dioxide ends up damaging the oceans and atmosphere, is a mismanagement of this material.

## PRINCIPLE 02

### “USE CLEAN AND RENEWABLE ENERGY”

The quality of the energy matters. Energy from renewable sources is of utmost importance for effective product design. Renewable energy sources such as solar, wind, hydropower, biomass (as long as it does not compete with food supply), geothermal and hydrogen fuel cells are suitable.

## PRINCIPLE 03

### “CELEBRATE DIVERSITY”

Social fairness should be a guiding principle for a company's business activities and relationships with its partners. Employees should participate in creative design and research projects to actively promote their company's Cradle to Cradle® approach and initiate optimisations. Because technological diversity is the key to innovation, multiple options are always to be explored in the search for creative solutions. Supporting local biodiversity ensures that local ecosystems can thrive. A positive social, cultural and environmental footprint is to be pursued.

#### **The history**

Prof. Dr Michael Braungart founded the Environmental Protection and Encouragement Agency (EPEA) Internationale Umweltforschung GmbH in 1987. Soon thereafter, he launched the Intelligent Products System (IPS), which defines all materials as nutrients. The unique characterisation states that such materials can be continuously reused in biological and technical cycles.



**1987**

Prof. Dr. Michael Braungart founds the EPEA

**1991**

Braungart and McDonough exchange ideas that later form the basis of the Cradle to Cradle® design framework.

The IPS is based on the European precautionary principle and shows a new perspective: Materials are to be seen as important components of technical and biological metabolic cycles.

As an architect in New York, William McDonough is a pioneer in building design and concept development. The motto “A building like a tree, a city like a forest” became the basis of the green building movement. McDonough was a founding member of the American Institute of Architects Committee on the Environment (COTE) as well as the United States Green Building Council (USGBC).

McDonough and Braungart met in 1991 and began exchanging ideas. Together they combined the view of materials as nutrients in biological and technical cycles with the concept of purpose-driven design. This gave rise to the Cradle to Cradle® design framework as a practical approach to product design in which all materials move within biological and technical cycles.

## CERTIFICATION AND ASSESSMENT

The Cradle to Cradle Products Innovation Institute (C2CPII) develops and administers the Cradle to Cradle Certified® Products Program. The Standards Steering Committee, using the Cradle to Cradle® design concept, is responsible for reviewing and approving revisions and/or amendments to the Cradle to Cradle Certified® Product Standards.

The following reflects the essential content of the Cradle to Cradle Certified® Product Standard Version 3.1 (controlled document/effective December 10, 2014/approved by C2CPII Certification Standards).<sup>4</sup>

In this context, continuous improvement of the products is to be ensured on the basis of five categories:

1. Material health
2. Material reutilization
3. Renewable energy and carbon management
4. Water stewardship
5. Social fairness

Products that meet the criteria of this evaluation system receive the Cradle to Cradle Certified® Certificate for one of five levels (Version 3.1), namely: Basic, Bronze, Silver, Gold and Platinum.<sup>5</sup>

 [c2ccertified.org](https://c2ccertified.org)

<sup>4</sup> The previous version of the standard was Version 3.1 – Sarnafil® AT was certified according to that version. More on this in the comments [on page 24](#)

<sup>5</sup> The Basic level is omitted in V4.0.



**Accredited assessment bodies for material health in the Cradle to Cradle Certified® Products Program are:**

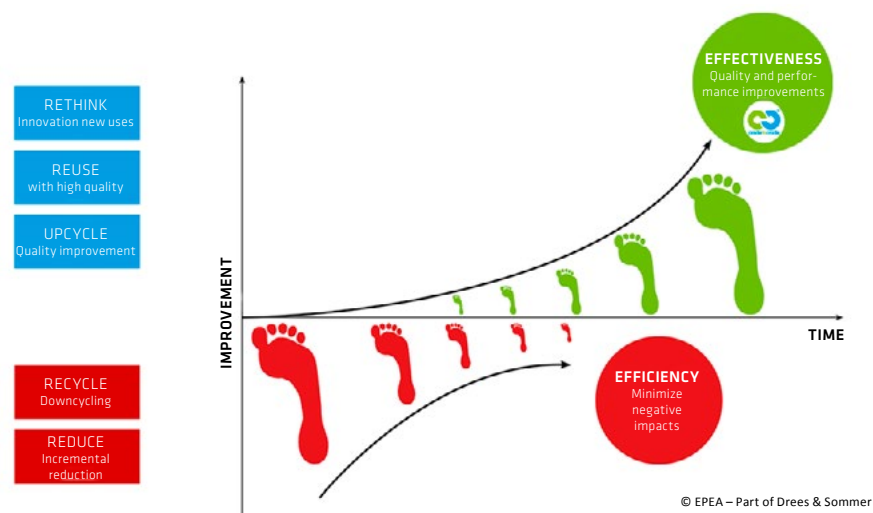
- [MBDC, LCC \(mbdc.com\)](https://www.mbdcc.com), USA
- [EPEA GmbH \(epea.com\)](https://www.epea.com), Germany/Netherlands  
(a Drees & Sommer company since 2019)
- [Arche \(arche-consulting.be\)](https://www.arche-consulting.be), Belgium
- [ToxServices \(toxservices.com\)](https://www.toxservices.com), USA

### Cradle to Cradle® in practice

The Cradle to Cradle® design principles are about continuous optimisation and innovation concerning the economic, environmental and social aspects of human design and the use of products and services. The product certification programme is intended to improve the way we make, use and reuse things. The aim of all the measures is to leave a good footprint for human society and the environment.

Cradle to Cradle® design reflects the healthy, regenerative productivity of nature and views materials as active rather than passive components. According to management theorist Peter Drucker, companies have mostly focused on becoming more efficient by reducing their inadequate ecological footprint by optimising existing, but potentially incorrectly designed, systems. The Cradle to Cradle® principle is about first doing the right thing and in the next step doing it the right way to achieve genuinely good results. In other words, becoming “better” instead of just “less bad”.

Cradle to Cradle® is a tool for designing a continuous improvement process that starts with the beneficial outcome as the target and works efficiently towards achieving it. An example: It is useful (but not sufficient as an end goal) to slow down the use of fossil fuels. The Cradle to Cradle® goal is to switch to renewable energy sources.





## BUILDING MATERIALS AND RAW MATERIALS

# WHAT DOES Cradle to Cradle® MEAN FOR THE CONSTRUCTION INDUSTRY?

Concerning the construction industry, EPEA describes the following situation: Construction in Europe accounts for almost 50 % of raw material consumption. Many of the products used in buildings today contain substances that are hazardous to health and prevent the materials from being recycled. Moreover, these substances can significantly deteriorate the air quality in buildings, where we spend almost 90 % of our time.

The development and use of healthy and recyclable materials is therefore increasingly becoming the focus of industry and the construction sector. Interdisciplinary research teams are increasingly concerned with material cycles, and manufacturers and producers are working on the development of fully recyclable and compostable building materials. Cradle to Cradle® forms the scientific basis for the implementation of a circular economy in the construction and real estate industry.

In contrast to conventional building products, Cradle to Cradle® quality stands for the quasi-infinite circulation of healthy materials within closed cycles: Buildings and real estate can thus function as raw-material repositories. This makes it possible to decouple gross value creation from resource consumption. On this basis, a substantial improvement in climate and environmental protection can be achieved.

Cradle to Cradle Certified® building products are broken down into single-variety raw materials after use and fed into a technical cycle. The material quality is thus preserved and downcycling with loss of quality is avoided. In this way, waste is no longer produced.

For manufacturers, it is an issue of their market positioning and future business orientation to design their own products in such a way that they also function in a circular-economy system. Not an easy task – but one that is associated with huge opportunities with the emergence of a value-added circular economy.

In Europe, the construction industry accounts for nearly

**50 %**

of raw material consumption.

Cradle to Cradle® quality stands for quasi-infinite circulation of healthy materials within closed cycles



### Added values of Cradle to Cradle®-inspired building products

The optimised products not only improve the indoor climate and are recyclable but they are also produced in the best possible way with renewable energies and under fair social conditions. This protects the climate and the environment, creates added social value and makes each of us part of the solution when we buy these products.

#### TOGETHER WE ACHIEVE ...

HIGHEST ENVIRONMENTAL **QUALITY**

THE USE OF C2C AS AN  
**INNOVATION DRIVER**

KNOWLEDGE ABOUT THE  
**CONSTITUENTS** OF A PRODUCT

GAINING **NEW MARKET SEGMENTS**  
AND BUSINESS MODELS

TRANSPARENT AND **FAIR**  
SUPPLY CHAINS

THE MOST **POSITIVE CO<sub>2</sub> FOOTPRINT**  
POSSIBLE

RECYCLABLE AND **SUSTAINABLE**  
PRODUCTS

SECURING HIGH-QUALITY RAW  
MATERIALS AT **PREDICTABLE PRICES**

## OVERVIEW




# CRITERIA FOR Cradle to Cradle Certified® PRODUCT CERTIFICATION

Sika is the first manufacturer in the world to receive a Cradle to Cradle Certified® certificate for its synthetic waterproofing membrane. Sarnafil® AT (brand name in Switzerland: SikaRoof® AT) is a new, revolutionary technology for thermoplastic roofing membranes and the first synthetic roofing membrane to successfully pass the rigorous certification. The Cradle to Cradle Certified® project for Sarnafil® AT started in autumn 2019.

In this process, the entire use cycle of the product is considered and assessed in the five categories mentioned. Sika achieved an overall Silver certification with its first attempt. The certification must be reviewed and renewed every two years as part of a recertification process.

With this certification, we meet a globally recognised benchmark for safer, more sustainable products manufactured for the circular economy. In the following, we explain in detail the individual assessment criteria and the requirements that Sarnafil® AT has met.

As mentioned on [page 8](#), the Cradle to Cradle Certified® Product Program distinguishes five evaluation criteria. The following explanations follow the Cradle to Cradle Certified® Product Standard Version 3.1.<sup>6</sup>



The certification  
must be reviewed and  
renewed every

**2 years.**

<sup>6</sup> The previous version of the standard was Version 3.1 – Sarnafil® AT was certified according to that version. More on this in the comments [on page 24](#)



## MATERIAL HEALTH

In this category, it is assessed whether and how products are manufactured using chemicals that are as safe as possible for people and the environment. This is tracked through a self-contained process of inventorying, evaluating and optimising the material chemistry. The ultimate goal is for all products to be made only from materials that have been optimised, with no poorly rated materials. Such products can achieve higher and higher levels of certification as the proportion of optimised materials in the finished product increases.

**Sika meets the following criteria with Sarnafil® AT and thus achieved Silver:**

MATERIAL HEALTH	BASIC	BRONZE	SILVER	GOLD	PLATINUM
Does not contain substances on the "Banned List" - List of prohibited chemicals	✓	✓	✓	×	×
Materials defined as biological or technical nutrients	✓	✓	✓	×	×
100 % of the generic materials are characterised	✓	✓	✓	×	×
More than 75 % of the product's constituents are accepted based on the C2C chemical assessment		✓	✓	×	×
Optimisation strategy for material health developed		✓	✓	×	×
More than 95 % of the product's constituents are accepted based on the C2C chemical assessment			✓	×	×
The product does not contain any substances known or suspected to be carcinogenic, mutagenic, toxic to fertility according to the C2C chemical assessment			✓	×	×
100 % of the product's constituents are accepted based on the C2C chemical assessment				×	×
Meets Cradle to Cradle VOC emission standards				×	×
The product does not contain any substances rated "X" according to the ABC-X assessment methodology					×

[More information](#)



## MATERIAL REUTILIZATION

The Material Reutilization category targets product cycles from production to use to reuse that do not generate waste. This category provides a quantitative measure of a product's recyclability and/or compostability. The greater the percentage of a product and/or its components that remain in a technical and/or biological metabolism, the better the rating in this category. In addition, the origin (fossil or bio-based) of the materials used is also taken into account when calculating the circularity index.

**Sika meets the following criteria with Sarnafil® AT and thus achieved Gold:**

MATERIAL REUTILIZATION	BASIC	BRONZE	SILVER	GOLD	PLATINUM
Materials have been defined for biological or technical circulation	✓	✓	✓	✓	✗
Circularity index ≥ 35		✓	✓	✓	✗
Circularity index ≥ 50			✓	✓	✗
Circularity index ≥ 65				✓	✗
Nutrient management strategy completed				✓	✗
Circularity index 100					✗
The product is actively recovered and introduced into the cycle					✗





## RENEWABLE ENERGY AND CARBON MANAGEMENT

Cradle to Cradle Certified® products are manufactured in such a way that they have a positive impact on our energy supply, ecosystem balance and community. Ultimately, it is about keeping carbon in the soil and earth's vegetation, where it belongs. The intention behind this category is to increase the percentage of renewable energy used in product manufacturing. Depending on the certification level, this takes into account purchased electricity and direct on-site emissions that occur in the final manufacturing phase of the product as well as the real energy associated with the product from raw material extraction to manufacturing.

**Sika meets the following criteria with Sarnafil® AT and achieved Silver:**

RENEWABLE ENERGIES AND CARBON MANAGEMENT	BASIC	BRONZE	SILVER	GOLD	PLATINUM
Quantification of purchased electricity and on-site emissions	✓	✓	✓	×	×
Strategy for renewable energies and carbon management		✓	✓	×	×
5 % of purchased electricity is renewable or offset			✓	×	×
5 % of direct on-site emissions are offset			✓	×	×
50 % of purchased electricity is renewable or offset				×	×
50 % of direct on-site emissions are offset				×	×
100 % of purchased electricity is renewable or offset					×
100 % of direct on-site emissions are offset					×
5 % of the grey energy from "cradle to gate" is covered by offsets or a targeted optimisation strategy					×



## WATER STEWARDSHIP

The “Water Stewardship” category helps to ensure that water is recognised as a valuable resource, watersheds are protected and clean water is available for people as well as all other life forms. Every product manufacturer is responsible for this and should effectively manage vital water resources.

The programme raises awareness and responsibility for water extraction, consumption and discharge within local ecosystems and evaluates innovations in conservation, quality and social fairness.

**Sika meets the following criteria with Sarnafil® AT and achieved Silver:**

WATER STEWARDSHIP	BASIC	BRONZE	SILVER	GOLD	PLATINUM
No violation of a wastewater discharge permit in the past two years	✓	✓	✓	✗	✗
Local and business-specific water problems are defined	✓	✓	✓	✗	✗
Declared intention to mitigate identified problems	✓	✓	✓	✗	✗
A plant-wide water audit is completed		✓	✓	✗	✗
Strategy for optimising > 20 % of water issues in the supply chain			✓	✗	✗
Product-related process chemicals in wastewater are optimised				✗	✗
Water discharged from the production plant is of drinking water quality					✗



## SOCIAL FAIRNESS

The Social Fairness category aims for the design of sustainable business operations, respecting and protecting all people and natural systems affected by the production of a product.

Business ethics should go beyond company boundaries and permeate the supply chain. It should oblige responsible production, fair treatment of workers and reinvestment in natural capital.

**Sika meets the following criteria with Sarnafil® AT and thus achieved Gold:**

SOCIAL FAIRNESS	BASIC	BRONZE	SILVER	GOLD	PLATINUM
Implementation of a streamlined self-audit	✓	✓	✓	✓	✗
Strategy to rectify identified problems	✓	✓	✓	✓	✗
Full self-audit on social responsibility and strategy improvements established		✓	✓	✓	✗
Investigation of problems in the supply chain and development of an improvement strategy			✓	✓	✗
Implementation of the innovative social project "Sika Cares"				✓	✗
The plant is audited according to an independent and recognised social standard					✗



PATENTED HYBRID HIGH-PERFORMANCE TECHNOLOGY

# Sarnafil® AT – SAFE, UNIVERSAL, COMPATIBLE AND SUSTAINABLE

The new product Sarnafil® AT by Sika is a further development of the proven Sarnafil FPO roofing membranes into an even higher-performance product generation with a convincing service life. Designed for forward-thinking architects, discerning builders and innovative contractors, the patented hybrid high-performance technology is relevant for anyone who sets particularly high standards for building products.



During development, the primary focus was on safety and sustainability, among other things documented by the Cradle to Cradle Certified® Product Certification described above.

In addition, Sarnafil® AT has a smaller CO<sub>2</sub> footprint than bitumen: When comparing the FPO roofing membrane with a two-layer bitumen waterproofing of 3 and 5 millimetres thickness on a roof surface of one square metre, the CO<sub>2</sub> saving is 20–30 kg CO<sub>2</sub> equivalents, depending on the chosen roofing system.

## First-class product properties

Due to its higher flexibility, Sarnafil® AT is easy to work with, especially in cold conditions. Compared with other technologies, Sarnafil® AT shows a significantly larger welding window, and this makes seam joining much safer. Construction site-specific relevant characteristics such as resistance to hail and physical impact have also been significantly improved.

Sarnafil® AT is particularly distinguished by its long service life: According to the results of the Rieche Study, Sarnafil® TS and Sarnafil® TG roofs have a service life of over 55 years. Sarnafil® AT builds on this formulation and optimises its properties.

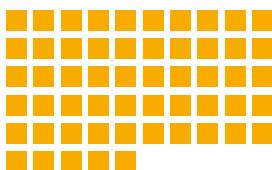
Compatibility with the entire range of Sarnafil accessories is guaranteed. In addition, Sarnafil® AT can be used universally – whether mechanically fastened, with ballast or beneath photovoltaic systems. This simplifies planning.

## 55 YEARS

### SERVICE LIFE

for Sarnafil® TS/TG  
type roofs

🌐 [Rieche-Study](#)



<sup>7</sup> Source: [KBOB](#)



MORE VALUE - LESS IMPACT

# SIKA'S APPROACH TO SUSTAINABILITY

For Sika, a company with social responsibility, environmental awareness and a strong practical orientation, sustainability is one of the most important strategic pillars used for the benefit of all stakeholders.

We have placed our sustainability strategy under the motto **More Value - Less Impact**, meaning increased benefits and minimised drawbacks. The aim is to maximise the benefits of our solutions and sustainable contributions for all stakeholders while reducing risks to people and the environment and reducing resource consumption.

**With economy, ecology and social issues, we keep all three pillars of sustainability in mind and focus on six strategic goals:**

1. SUSTAINABLE SOLUTIONS

4. ENERGY

2. CLIMATE PERFORMANCE

5. WASTE/WATER

3. COMMUNITY ENGAGEMENT

6. OCCUPATIONAL SAFETY

We have set concrete targets for each of these target areas, which we intend to achieve by 2023.



**SUSTAINABLE SOLUTIONS**

We are leading the industry by pioneering a comprehensive portfolio of customer-focused solutions, combining both higher performance and improved sustainability.

**TARGET**

- All new product developments with “Sustainable Solutions” until 2023

**CLIMATE PERFORMANCE**

We run our business in a responsible way and mitigate climate change and its impacts.

**TARGET**

- 12 % reduction of CO<sub>2</sub> emissions per ton sold until 2023

**COMMUNITY ENGAGEMENT**

We build trust and create value – with customers, communities, and with society.

**TARGETS**

- 10,000 working days of volunteering work p.a.
- 50 % more projects
- 50 % more direct beneficiaries

**MORE VALUE****LESS IMPACT****ENERGY**

We manage resources and costs carefully.

**TARGETS**

- 15 % less energy consumption per ton sold
- 50 % renewable electricity rate

**WASTE/WATER**

We increase material and water efficiency.

**TARGETS**

- 15 % less waste generation per ton sold
- 25 % higher recycling rate of total waste
- 15 % less water consumption per ton sold

**OCCUPATIONAL SAFETY**

Sika employees leave the workplace healthy.

**TARGETS**

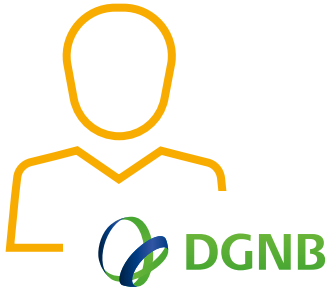
- 50 % less accidents
- 0 fatalities

Detailed explanations of the individual target fields are available here:

[🌐 Nachhaltigkeitsstrategie | Sika Deutschland](#)

As a manufacturer of building products and systems as well as solutions for industrial production, we have long been committed to greater sustainability. With the formulated goal of “**Sustainable Solutions**”, we promote targeted new and further development as well as the reduction of adverse environmental effects of our products. This also applies, for example, in the area of industrial manufacturing, where Sika makes important contributions to the avoidance of emissions with, among other things, lightweight construction solutions for the automotive industry or with products for systems for generating renewable energy.





**Our trained DGNB consultants support customers and partners with all questions regarding DGNB certifications.**

At the same time, sustainable construction is a high priority for us. A large part of the Sika product portfolio meets the strict requirements of recognised building certification systems. As mentioned [on page 6](#), we mastered the practical test in 2014 with our own building, which was planned, built and successfully certified according to the specifications of the German Sustainable Building Council (DGNB). Since then, Sika products have been used in many certified buildings. Our trained DGNB consultants support customers and partners with all questions regarding DGNB certifications. With their detailed knowledge and experience of the DGNB system, they are competent contacts for sustainable construction.

[On page 7](#) we described that Sika began providing sustainability documentation for its products at a relatively early stage. This is because when buildings are constructed according to sustainability criteria, extensive information about the products used must be confirmed. The product-specific Sustainability Data Sheets present these details clearly and concisely. Many Sika products have a product-specific EPD or are covered under a model EPD. Social life is also part of sustainable action. That is why Sika specifically supports sports clubs and their events as well as cultural events at company locations. Instead of Christmas gifts for customers and suppliers, food banks receive an annual donation.

### GLOBAL REPORTING INITIATIVE

With a sustainability report in conformance with the requirements of the Global Reporting Initiative (GRI), we report annually on our progress towards greater sustainability. Taking into account economic, environmental and social aspects, we conduct a comprehensive review of sustainable development. But as multifaceted as Sika's commitment to more sustainability is, the focus is always on people and the environment.

 [GRI Report](#)



Sustainable construction is the challenge of the next decades for all of us, whether building owners, architects, planners, contractors or building-product manufacturers. Let's take this journey together.



## COMMENTS

In 2021 the C2CPII published the latest version of the standard: V4.0. This latest iteration of the standard brought new changes to the 5 categories (some of the category names have also been changed). The transition period to the new standard is 3 years – all product certifications must be changed from V3.1 to V4.0 by July 2024. The Sarnafil® AT certificate is valid until July 2022 – part of the recertification will focus on initiating the transition to V4.0 of the standard in order to be in accordance with the new version by 2024.

This white paper is based on the Cradle to Cradle Certified® Product Standard Version 3.1 (controlled document/effective December 10, 2014/approved by C2CPII Certification Standards).



THE Cradle to Cradle®-PRINCIPLE:

**“DO THE RIGHT THING  
AND IN THE NEXT  
STEP DO IT IN THE  
RIGHT WAY.”**

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