

# ROOFING GREEN BUILDING CREDITS

Sarnafil° Sikaplan° Sikalastic° HYDROTECH



## ACHIEVE POINTS WITH SIKA ROOFING

Sika's roofing and waterproofing technologies credit contributions come from reductions in urban heat island effect, building energy consumption during use phase, reduction of building cooling loads, Sika's Roof Recycling Program for vinyl membranes, transparency documentation, low-emitting materials and others. For more information on how Sika's roofing and waterproofing can contribute to green building rating credits, please visit us at usa.sika.com/sarnafil. Here is a list of credits and points Sika's products and systems can help you obtain:

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_		V 4.1
POINTS	INTENT	SIKA ROOFING SOLUTIONS
S (SS)		
1 - 2	To minimize effects on microclimates and human and wildlife habitats by reducing heat islands.	Sarnafil® or Sikaplan® PVC Membranes, Sikalastic® Liquid-Applied Membranes, and Hydrotech® Ultimate Assembly® and Garden Roof® Assemblies qualify as highly reflective solutions or vegetated roofing which help to reduce the heat island effect.
1 - 2	To conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.	Hydrotech® Garden Roof® Assemblies maximize the available habitat for local species.
1	To create exterior open space that encourages interaction with the environment, social interaction, passive recreation, and physical activities.	Hydrotech® Garden Roof® Assemblies maximize green spaces and can help sites meet vegetated space goals, even in urban environments with limited site space.
1 - 3	To reduce runoff volume and improve water quality by replicating the natural hydrology and water balance of the site, based on historical conditions and undeveloped ecosystems in the region.	During heavy rainfall, runoff from impervious surfaces such as pavements and rooftops can cause problems including sewer overflow and water pollution. Hydrotech® Blue Roofs can be designed to retain rainwater and discharge it to the sewer system at a slower rate to alleviate storm surges. Hydrotech® Garden Roof® Assemblies also can retain some rainwater.  Sika® Drainage Mat is a prefabricated drainage composite that can be used to collect and
1	To provide patients, staff, and visitors with the health benefits of the natural environment by creating outdoor places of respite on the healthcare campus.	convey excess water in areas such as plaza decks, split slabs, planters, and garden roofs.  Hydrotech® Garden Roof® Assemblies and Blue Roofs maximize green spaces and can help sites meet vegetated space goals, even in urban environments with limited site space.
1	To provide patients and staff with the health benefits associated with direct access to the natural environment.	Hydrotech® Garden Roof® Assemblies and Blue Roofs maximize outdoor spaces and can be adapted to provide hospital patients and employees with green spaces especially in urban environments.
OSPHERE (	EA)	
Р	To reduce the environmental and economic harms of excessive energy use by achieving a minimum level of energy efficiency for the building and its systems.	Sika's roof insulation products have enhanced thermal capabilities that reduce loading on HVAC systems due to outdoor air infiltration. This results in lower energy use and cost savings associated with building heating and cooling.  Sarnafil® or Sikaplan® PVC membranes and Sikalastic® Liquid-Applied Membranes
		qualify as highly reflective solutions. Hydrotech® Ultimate Assembly® and Carden Roof® Assemblies provide insulating properties to roofing systems. All solutions increase energy efficiency.
1 - 20	To achieve increasing levels of energy performance beyond the prerequisite standard to reduce environmental and economic harms associated with excessive energy use.	Sika's roof insulation products have enhanced thermal capabilities that reduce loading on HVAC systems due to outdoor air infiltration. This results in lower energy use and cost savings associated with building heating and cooling.
		Sarnafil® or Sikaplan® PVC membranes and Sikalastic® Liquid-Applied Membranes qualify as highly reflective solutions. Hydrotech® Ultimate Assembly® and Garden Roof® Assemblies provide insulating properties to roofing systems. All solutions reduce energy load of a building.
1-3	To reduce the environmental and economic harms associated with fossil fuel energy by increasing self-supply of renewable energy.	The Sika® SolaRoof System combines energy efficient roof solutions with photovoltaic panels to generate energy for the building's use.
ESOURCES	(MR)	
1-2	To encourage the use of products and materials for which life-cycle information is available and that have environmentally, economically, and socially preferable life-cycle impacts. To reward project teams for selecting products from manufacturers who have verified improved environmental life-cycle impacts.	Several Sika products have Type III, product-specific EPDs. For a comprehensive list of all Sika® product EPDs, visit the Sika Corporation (USA) website. For American Hydrotech's current EPDs, please visit the American Hydrotech® website.
	1 - 2 1 - 3 1 - 2 1 - 3 1 1 - 20 1 - 3 ESOURCES	POINTS  S (SS)  1 - 2  To minimize effects on microclimates and human and wildlife habitats by reducing heat islands.  1 - 2  To conserve existing natural areas and restore damaged areas to provide habitat and promote biodiversity.  1 To create exterior open space that encourages interaction with the environment, social interaction, passive recreation, and physical activities.  1 - 3  To reduce runoff volume and improve water quality by replicating the natural hydrology and water balance of the site, based on historical conditions and undeveloped ecosystems in the region.  1 To provide patients, staff, and visitors with the health benefits of the natural environment by creating outdoor places of respite on the healthcare campus.  1 To provide patients and staff with the health benefits associated with direct access to the natural environment.  DSPHERE (EA)  7 To reduce the environmental and economic harms of excessive energy use by achieving a minimum level of energy efficiency for the building and its systems.  1 - 20  To achieve increasing levels of energy performance beyond the prerequisite standard to reduce environmental and economic harms associated with excessive energy use.  1 - 3  To reduce the environmental and economic harms associated with fossil fuel energy by increasing self-supply of renewable energy.  ESOURCES (MR)  To encourage the use of products and materials for which life-cycle impacts. To reward project teams for selecting products from manufacturers who have verified improved environmental

CREDITS	POINTS	INTENT	SIKA ROOFING SOLUTIONS		
MATERIALS AND I	RESOURCE	ES (MR)			
Building Product and Disclosure Optimization - Material Ingredients NC   CS   S   R   DC   W+D   HS   H	1-2	To encourage the use of products and materials for which life-cycle information is available and that have environmentally, economically, and socially preferable life-cycle impacts. To reward project teams for selecting products for which the chemical ingredients in the product are inventoried using an accepted methodology and for selecting products verified to minimize the use and generation of harmful substances. To reward raw material manufacturers who produce products verified to have improved life-cycle impacts.	Sarnafil® G 410 and Sarnafil® S 327 have third party verified Material Ingredient Reports (MIR). Monolithic Membrane 6125®, MM6125® Surface Conditioner, Flex Flash-F, and Hydroflex 30 have a Health Product Declaration (HPD) which is compliant with the Health Product Declaration Open Standard.		
Building Product Disclosure and Optimization – Sourcing of Raw Materials  NC   CS   S   R   DC   W+D   HS   H	1-2	To encourage the use of products and materials for which life cycle information is available and that have environmentally, economically, and socially preferable life cycle impacts. To reward project teams for selecting products verified to have been extracted or sourced in a responsible manner.	10-foot wide Sarnafil® and Sikaplan® PVC roofing membranes as well as a few other membrane products all contain an average of 10 percent recycled vinyl content from pre- and post-consumer sources. Hydrotech® MM6125® contains pre- and post-consumer recycled content with up to 40% post-consumer content. Sika's polyester fleece reinforcement used in Sikalastic® RoofPro systems contains 98% recycled content.		
PBT Source Reduction – Lead, Cadmium, and Copper H	2	To reduce the release of persistent, bioaccumulative, and toxic (PBT) chemicals associated with the life-cycle of building materials.	Several Sika® Roofing products are lead and cadmium free. Please contact us for more information on this credit.		
Construction and Demolition Waste Management NC   CS   S   R   DC   W+D   HS   H	1 - 2	To reduce construction and demolition waste disposed of in landfills and incineration facilities by recovering, reusing, and recycling materials.	Sika® Roofing offers an old roof recycling program for PVC membranes that has accepted and recycled more than 90,000,000 pounds of materials. Participating in this program reduces the project's carbon footprint, reduces waste, and saves customers money.		
V4.1 Pilot Credit: Certified Multi-attribute Products and Materials NC   CS   S   R   DC   W+D   HS   H	1	To encourage the use of products and materials for which life-cycle information is available and that have environmentally, economically, and socially preferable life-cycle impacts.	Sarnafil® G 410 and Sarnafil® S 327 membranes are certified Platinum under NSF/ANSI 347-2012: A Sustainability Assessment for Single Ply Roofing Membranes.		
INDOOR ENVIRONMENTAL QUALITY (EQ)					
Low-Emitting Materials S   H	1 - 3	To reduce concentrations of chemical contaminants that can damage air quality, human health, productivity, and the environment.	Several Sika® Roofing products have undergone volatile organic compound (VOC) emissions testing. This testing is done in accordance with the California Department of Public Health (CPHD) Method v1.2-2017. Please contact us for more information on this credit.		
Minimum Acoustic Performance S	Р	To provide classrooms that facilitate teacher-to- student and student-to-student communication through effective acoustic design.	Sarnafil® and Sikaplan® PVC Membranes, and Sikalastic Liquid-Applied Membanes both with insulation or Hydrotech® Garden Roof® Assemblies offer roofing solutions that help dampen outdoor noises and enhance acoustic performance.		
Thermal Comfort  NC   S   R   DC    W+D   HS   H	1	To promote occupants' productivity, comfort, and well-being by providing quality thermal comfort.	Sarnatherm® Roof Insulation products provide superior thermal performance. Unlike other insulating solutions, Polyiso is compatible with a wide variety of roofing systems including both single-ply PVC and liquid-applied membranes (LAM). The result is a versatile thermal roofing system that provides an enhanced building envelope, leading to a comfortable indoor environment with reduced heating and cooling loads.		
<b>Quality Views</b> NC   CS   S   R    DC   W+D    HS   H	1-2	To give building occupants a connection to the natural outdoor environment by providing quality views.	Hydrotech® Garden Roof® Assemblies are visually stimulating and can maximize views of green spaces in urban areas.		

#### CREDITS POINTS INTENT SIKA ROOFING SOLUTIONS SITE (S) Sarnafil® or Sikaplan® PVC Membranes, Sikalastic® Liquid-Applied Membranes, and Hydrotech® Ultimate Assembly® and Garden Roof® Assemblies qualify as highly reflective solutions or vegetated roofing which help to reduce the heat island effect. 2.3.4.1 Mitigating Heat Island Effect Does the building have a vegetated roof, is shaded during summer months, AND/OR has a roof with a high Solar Reflectance Index (SRI) 1 - 6 During heavy rainfall, runoff from impervious surfaces such as pavements and rooftops The site must retain at least the 95th percentile can cause problems including sewer overflow and water pollution. Hydrotech® Blue Roofs storm volume as per a site water balance assessment, to be included in the stormwater can be designed to retain rainwater and discharge it to the sewer system at a slower rate to alleviate storm surges. Hydrotech® Garden Roof® Assemblies also can retain Stormwater 1 - 17 Management management report. some rainwater.

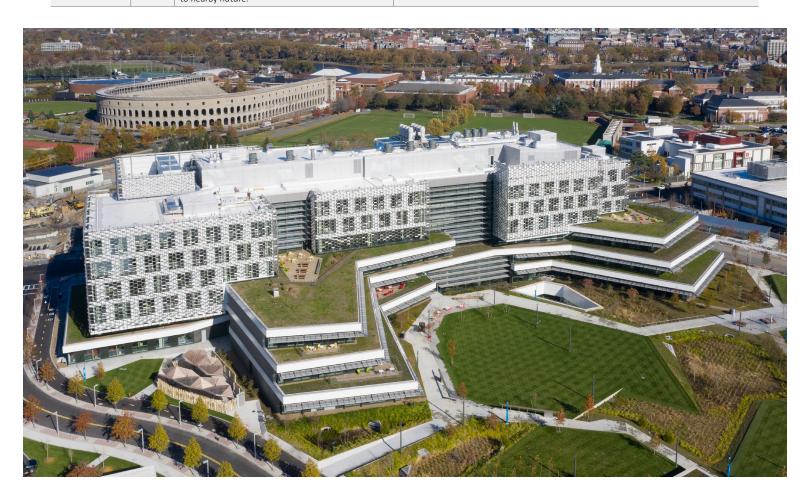
**GREEN GLOBES FOR NEW CONSTRUCTION** 

CREDITS	POINTS	INTENT	SIKA ROOFING SOLUTIONS		
SITE (S)					
2.4.1.1 Stormwater Management	1 - 17	The site must retain at least the 95th percentile storm volume as per a site water balance assessment, to be included in the stormwater management report.	Sika® Drainage Mat is a prefabricated drainage composite that can be used to collect and convey excess water in areas such as plaza decks, split slabs, planters, and garden roofs.		
ENERGY (EN)					
3.1.1 Energy Performance	1 - 180	Five paths are provided for assessing energy performance. Path A, Path B, Path D, and Path E provide a maximum of 180 points out of 180, and Path C provides a maximum of 111 points out of 180.	Sika's roof insulation products have enhanced thermal capabilities that reduce loading on HVAC systems due to outdoor air infiltration. This results in lower energy use and cost savings associated with building heating and cooling.		
3.1.1 Energy Performance	1 - 180	Five paths are provided for assessing energy performance. Path A, Path B, Path D, and Path E provide a maximum of 180 points out of 180, and Path C provides a maximum of 111 points out of 180.	Sarnafil® or Sikaplan® PVC membranes and Sikalastic® Liquid-Applied Membranes qualify as highly reflective solutions. Hydrotech® Ultimate Assembly® and Garden Roof® Assemblies provide insulating properties to roofing systems. All solutions increase energy efficiency.		
3.4.1.1 Energy Performance	1 - 5	Has a study been conducted determining the technical feasibility and life cycle cost effectiveness of on-site renewable energy providing at least 2% of the total building annual energy cost?	The Sika® SolaRoof System combines energy efficient roof solutions with photovoltaic panels to generate energy for the building's use.		
MONITORING AND	REPORTIN	IG (MR)			
5.2.1.1 Product Life Cycle	1 - 40	How many products include third-party verifications/certifications that evaluate the cradle-to-gate product life cycle?	Several Sika products have Type III, product-specific EPDs. For a comprehensive list of all Sika® product EPDs, visit the Sika Corporation (USA) website. For American Hydrotech's current EPDs, please visit the American Hydrotech® website.		
5.4.1.1 Product Sustainable Material Attributes	1 - 15	Points are earned based on the Sustainable Materials Index (SMI), the percentage of the total value of the building materials that have sustainable materials attributes. The sustainable materials attributes considered in calculating the SMI are preconsumer recycled content, postconsumer recycled content, third-party sustainable forestry certification content and materials or that meet the requirements of the Eco-Certified Composite sustainability standard.	10-foot wide Sarnafil® and Sikaplan® PVC roofing membranes as well as a few other membrane products all contain an average of 10 percent recycled vinyl content from pre- and post-consumer sources. Hydrotech® MM6125® contains pre- and post-consumer recycled content with up to 40% post-consumer content. Sika's polyester fleece reinforcement used in Sikalastic® RoofPro systems contains 98% recycled content.		
5.6.1.1 Construction Waste	1 - 2	Was a preconstruction waste management plan created prior to any construction or demolition activities? The plan describes the project team's strategy for reducing construction waste and diverting materials from landfilling via reuse or recycling.	Sika® Roofing offers an old roof recycling program for PVC membranes that has accepted and recycled more than 90,000,000 pounds of materials. Participating in this program reduces the project's carbon footprint, reduces waste, and saves customers money.		
INDOOR ENVIRONMENT (IE)					
6.2.1.1 Volatile Organic Compounds	1 - 6	Do adhesives and sealants (not including carpet adhesives) that are applied on site within, or part of, the building envelope's continuous plane of air tightness comply with the following?	Several Sika® Roofing products have undergone volatile organic compound (VOC) emissions testing. This testing is done in accordance with the California Department of Public Health (CPHD) Method v1.2-2017. Please contact us for more information on this credit.		

#### **WELL BUILDING STANDARD CREDITS POINTS** INTENT **SIKA ROOFING SOLUTIONS** AIR Sarnatherm Polylso Insulation products are manufactured with a closed-foam cell structure, which has a low water absorption capacity and is resistant to fungal growth. Reduce mold and bacteria growth through A14 Microbe and 1 - 7 condensation management and reduce levels of Sarnafil® or Sikaplan® PVC Membranes and Sikalastic® Liquid-Applied Membranes Mold Control microbes within occupied spaces. offer roofing and waterproofing solutions that are highly resistant to bacterial growth and ponding water. WATER Sarnatherm Polylso Insulation products are manufactured with a closed-foam cell structure, which has a low water absorption capacity and is resistant to fungal growth. Limit the potential for bacteria and mold W07 Moisture Sarnafil® or Sikaplan® PVC Membranes and Sikalastic® Liquid-Applied Membranes offer growth within buildings from water infiltration 1 - 3 Management roofing solutions that are highly resistant to bacterial growth, ponding water, and water and condensation. infiltration. Hydrotech® offers waterproofing membranes such as MM6125® that reduce water infiltration. NUTRITION Hydrotech® Garden Roof® Assemblies can support a variety of garden plants and herbs. N12 Food Provide opportunities for on-site food production 2 They are ideally suited to green roof systems due to their full surface adhesion and root Production and increase food access. and micro-organism resistance. THERMAL COMFORT Sarnatherm® Polyiso Insulation provides superior thermal performance. Unlike other insulating solutions, Polyiso is compatible with a wide variety of roofing systems T01 Thermal Ensure that the majority of building users find the Р including both single-ply PVC and liquid-applied membranes (LAM). The result is a Performance thermal environment acceptable. versatile thermal roofing system that provides an enhanced building envelope, leading to

a comfortable indoor environment with reduced heating and cooling loads.

CREDITS	POINTS	INTENT	SIKA ROOFING SOLUTIONS
THERMAL COMFO	RT		
T02 Verified Thermal Comfort	1 - 3	Enhance thermal comfort and promote human productivity by ensuring that a substantial majority of building users (above 80%) perceive their environment as thermally acceptable.	Sarnatherm® Polyiso Insulation provides superior thermal performance. Unlike other insulating solutions, Polyiso is compatible with a wide variety of roofing systems including both single-ply PVC and liquid-applied membranes (LAM). The result is a versatile thermal roofing system that provides an enhanced building envelope, leading to a comfortable indoor environment with reduced heating and cooling loads.
SOUND			
S02 Maximum Noise Levels	1 - 3	Establish background noise level criteria for enclosed spaces to promote best-practice HVAC and façade design techniques and ultimately bolster acoustical comfort within.	Sarnafil® and Sikaplan® PVC Roofing Membranes, Sikalastic Liquid-Applied Membanes, and Hydrotech® Garden Roof® Assemblies offer roofing solutions that help dampen outdoor noises and enhance acoustic performance, including single ply PVC membranes with insulation and vegetated roofing systems.
MATERIALS			
X01 Material Restrictions	Р	Reduce or eliminate human exposure to building materials known to be hazardous.	Several Sika® Roofing products do not contain any intentionally added asbestos, mercury, or lead in concentrations greater than 0.1% (1000 ppm) by weight. Please contact us for more information on this credit.
X05 Enhanced Material Restrictions	1	Minimize the exposure to certain chemicals by limiting their presence in products.	Several Sika® Roofing products do not contain halogenated flame retardants (HFR), Per- and polyfluoroalkyl substances (PFAS), and Orthophthalates. Please contact us for more information on this credit.
X06 VOC Restrictions	2	Minimize the impact of volatile organic compounds (VOCs) emitted by products on indoor air quality.	Several Sika® Roofing products have undergone volatile organic compound (VOC) emissions testing. This testing is done in accordance with the California Department of Public Health (CPHD) Method v1.2-2017. Please contact us for more information on this credit.
X07 Materials Transparency	2	Promote material transparency across building material and product supply chain.	Sarnafil® G 410 and Sarnafil® S 327 have third party verified Material Ingredient Reports (MIR). Monolithic Membrane 6125®, MM6125® Surface Conditioner, Flex Flash-F, and Hydroflex 30 have a Health Product Declaration (HPD) which is compliant with the Health Product Declaration Open Standard.
MIND			
M02 Nature and Place	Р	Support occupant well-being by incorporating the natural environment throughout the project and integrating design strategies that celebrate the project's unique identity.	Hydrotech® Garden Roof® Assemblies can provide building occupants with easy access to nature and improve mental well-being. Hydrotech MM6125® is ideally suited to green roof systems due to their full surface adhesion and root resistance.
M07 Restorative Spaces	1	Support access to spaces that promote restoration and relief from mental fatigue or stress.	Hydrotech® Garden Roof® Assemblies can provide building occupants with easy access to nature and improve mental well-being. Hydrotech MM6125® is ideally suited to green roof systems due to its full surface adhesion and root resistance.
M09 Enhanced Access to Nature	1	Support access to nature beyond M02: Access to Nature and Beauty, by further incorporating nature through interior design, exterior design and access to nearby nature.	Hydrotech® Garden Roof® Assemblies can provide building occupants with easy access to nature and improve mental well-being. Hydrotech MM6125® is ideally suited to green roof systems due to their full surface adhesion and root resistance.



# GLOBAL BUT LOCAL PARTNERSHIP



### **WE ARE SIKA**

With more than 100 years of experience, Sika is a worldwide innovation and sustainability leader in the development and production of systems and products for commercial and residential construction, as well as the transportation, marine, automotive, and renewable energy manufacturing industries.

Sika has offices in 103 countries with over 400 manufacturing facilities and more than 33,000 employees worldwide. With annual sales of CHF 11.24 billion in 2023, our commitment to quality, innovation, and the environment as well as putting our customer's needs first, encompasses why Sika is the global leader in our industries.

Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.







LEED® is a trademark of the U.S. Green Building Council.

Green Globes® is a trademark of the Green Building Initiative.



SCAN TO LEARN MORE

### **SIKA CORPORATION • ROOFING**

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