

# HILTI

Green Building



**Hilti, your first partner in  
Green Building.**

**Hilti. Outperform. Outlast.**

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The contents of this information package should only be used as a guide. Please contact our Corporate HSE department with any questions concerning this package. The wide range of Hilti products help in achieving up to 29 points toward your LEED certification, representing more than a quarter of a general green building project.\*

\* This list of potential points is only applicable to the LEED for New Construction program released by the U.S. Green Building Council. Updated versions of the LEED for New Construction program may impact the potential points based on new and additional requirements.

# Green building at a glance

The building sector is one of the major contributors to increasing global CO<sub>2</sub> emissions. Green building is one important means to meet the challenge of climate change while also being highly beneficial for building owners.

Green building is a globally visible trend to increase the resource efficiency of buildings as well as the comfort and well-being for their occupants. Green building is the practice of increasing the efficiency with which buildings use resources – energy, water, and materials – while reducing building impacts on human health and the environment during the building's lifecycle, through better site management, design, construction, operation, maintenance, and removal. Positive effects of green building are related to

- 8–9 % decrease in operating costs
- 7.5 % increase in building values
- 6.6 % improvement in return on investment
- 3.5 % increase in occupancy
- 3 % rent increase
- Healthier and more motivated employees

Hilti is a responsible company and therefore dedicated to reducing the environmental impact of its products and services. As one of the world's largest manufacturers of power tools, high performance consumables (including state-of-the-art fire protection systems) and integrated services, Hilti recognizes the value of designing buildings to meet green building standards. In this information package you will find a detailed breakdown of how Hilti products and services help to comply with certain green building standards around the globe. The reference point for the present green building information is Leadership in Energy and Environmental Design (LEED), the standard developed by the U.S. Green Building Council.

## Hilti in brief



Hilti provides leading-edge technology to the global construction industry. Hilti products, systems and services offer the construction professional innovative solutions with outstanding added value. The headquarters of the Hilti Group are located in Schaan in the Principality of Liechtenstein.

Almost 21,000 employees, in more than 120 countries around the world, enthuse their customers and build a better future. The corporate culture is founded on integrity, courage, teamwork and commitment.

Hilti excels through outstanding innovation, top quality, direct customer relations and effective marketing. Two-thirds of the employees work directly for the customer in sales organizations and in engineering, which means a total of more than 200,000 customer contacts every day. Hilti has its own production plants as well as research and development centers in Europe and Asia.

Founded in 1941, the worldwide Hilti Group evolved from a small family company. Since 2000, the Martin Hilti Family Trust holds all shares and, since January 2008, all participation certificates of Hilti Corporation. This safeguards the long-term subsequent development of company founder Martin Hilti's life's work.

Hilti upholds a clear value orientation and pursues a policy of stakeholder value. Integrating the interests of all the company's partners – customers, suppliers and employees – into its strategy and actively honoring its social and ecological responsibility creates the foundation of trust that makes possible the long-term success of the company.

# Corporate responsibility

Corporate responsibility at Hilti is deeply anchored throughout the Hilti organization, and is a cornerstone of how we do business. Seeing corporate responsibility as an integral part of the Hilti business philosophy, we are committed to ensuring that the direct or indirect impact of all Hilti activities carefully considers aspects related to our team members, our partners, the society and the natural and business environment. We believe that a responsible approach to corporate responsibility is indispensable in order to ensure sustainable long term growth.

Hilti's core purpose to "passionately create enthusiastic customers and build a better future" implies a long term focus and commitment that is also reflected in the way we approach corporate responsibility. Following a long Hilti tradition of taking corporate responsibility seriously, global standards are established and lived – often beyond legally valid standards – within 5 core areas:

- Hilti Team Members
- User Health and Safety
- Society
- Environment
- Business Ethics

## Environment

We have a responsibility toward future generations and are aware of the impact that our business activities, products and services have on the environment. One of our major concerns is the counteraction of climatic changes. In 2007 we decided to sign the "Caring for Climate" convention.

"Caring for Climate" is a platform for companies who participate in the UN Global Compact and are committed to counteract climatic changes. We see it as our task to improve our energy efficiency and reduce CO<sub>2</sub> emissions. Apart from CO<sub>2</sub> emission reduction, the Hilti Group is dedicated to reduce its waste production & disposal and the usage of critical substances.

Our commitment in the environmental sector pays off not only from an ecological, but also an economical viewpoint. We will apply the knowledge acquired in this field to be even more innovative and develop new business segments. Sustainable growth can only be achieved if we systematically integrate environmental protection into our daily activities.

# Construction industry and climate change



The construction industry provides societies with homes, offices and infrastructure that are increasingly comfortably. However, the growing demand for new buildings and infrastructure projects also results in a burden for our planet – the impact on the environment due to construction sector activities is enormous. The following figures show the scale of the construction industry's impact on our planet:

- Buildings today represent 40% of the world's energy demand, 33% in commercial buildings and 67% in residential.
- Worldwide energy consumption for buildings is expected to grow 45% from 2002 to 2025.
- Scenarios forecast an acute increase in global carbon emissions; 92% increase from 2002 to 2050, if current trends are not altered.

Source: World Business Council for Sustainable Development

## Green Building – a significant trend

Without significant improvements in environmental performance, the building sector will be a major contributor to increasing global CO<sub>2</sub> emissions. The effects will be profound and may include rising sea levels, more frequent floods, droughts, and tropical cyclones. To address the threat of climate change, greenhouse gas emissions must be slowed, stopped, and then reversed. Meeting the challenge will require dramatic advances in technologies and a shift in how the world economy generates and uses energy.

Building green is one of the best strategies for meeting the challenge of climate change because the technology to make substantial reductions in energy and CO<sub>2</sub> emissions already exists. Modest investments in energy-saving and other climate-friendly technologies can yield buildings and communities that are environmentally responsible, profitable and healthier places to live and work, and that contribute to reducing CO<sub>2</sub> emissions. Building green can further reduce CO<sub>2</sub> emissions while improving the bottom line through energy and other savings.

## What is LEED?



LEED is a third-party certification program and an increasingly internationally-accepted benchmark for the design, construction and operation of high-performance green buildings. LEED gives building owners and operators the tools they need to have an immediate and measurable impact on their buildings' performance. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality.

### Can products be certified under LEED?

No. LEED applies to green building projects. Individual products can contribute to points under the certification system; the criteria are performance based. In attempting to meet these requirements, LEED practitioners identify products that have desired attributes. However, some criteria do require specific product data as a part of a successful submittal.

### Hilti assists you in achieving green building standards

Hilti is aware of customer needs with respect to green building and proactively incorporates green building performance criteria in its most valuable products. Therefore, a wide range of Hilti products provide the customer with an additional integrated service. To create enthusiastic customers it is essential to understand the customer needs in the first place. With this brochure Hilti aims to provide the most convenient assistance in achieving LEED and green building credits for our customers in general.

# LEED rating system and Hilti's contribution to LEED certification

**PLATINUM** (80 points and above)

**GOLD** (60 – 79 points)

**SILVER** (50 – 59 points)

**CERTIFIED** (40 – 49 points)



The usage of Hilti products stated in this brochure will raise the potential for gaining possible LEED points for your building project. Due to the fact that the usage of individual products does not directly result in possible LEED points (only the total building project can earn possible LEED credits and be certified), an exact calculation of how many possible LEED points you can earn by using Hilti products is not possible.\*

Criteria	possible LEED points
<b>Sustainable sites</b>	
SS Prerequisite 1: Construction activity pollution prevention	Prerequisite
<b>Water efficiency</b>	
WE Credit 2: Innovative wastewater technologies	2
<b>Energy and atmosphere</b>	
EA Prerequisite 2: Minimum energy performance	Prerequisite
EA Credit 1: Optimize energy performance	1 – 19
<b>Materials and resources</b>	
MR Credit 1.1: Building reuse: maintain existing walls, floors, and roof	1 – 3
MR Credit 1.2: Building reuse – maintain existing interior nonstructural elements	1
MR Credit 2: Construction waste management	1 – 2
MR Credit 4: Recycled content	
<b>Indoor environmental quality</b>	
EQ Credit 4.1: Low-emitting materials: adhesives & sealants	1
EQ Credit 4.2: Low-emitting materials: paints & coatings	1
<b>Overall Hilti contribution toward gaining possible LEED points</b>	<b>Up to 29</b>

\* This list of potential points is only applicable to the LEED for New Construction program released by the U.S. Green Building Council. Updated versions of the LEED for New Construction program may impact the potential points based on new and additional requirements.

These potential points are suggestions only and need to be verified by the Green Building Certification Institute (GBCI). The GBCI has the final authority to resolve any discrepancies regarding points. Not all products listed in this document are available in all areas. Check with your local Hilti sales representative or distributor to determine available products in your area. Please consult technical support or your local sales representative if you have questions about whether a particular product can help earn LEED points.



## Hilti products and services contributing to Green Building (LEED)



- Sustainable Sites
- Water Efficiency
- Energy and Atmosphere
- Materials and Resources
- Indoor Environmental Quality

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## Sustainable Sites



Criteria	Hilti contribution
<p>SS Prerequisite 1: Construction activity pollution prevention</p>	<p>Dust is produced by many of the processes carried out in the construction industry (drilling, slitting, sanding). Many of the materials used in the construction industry contain quartz (such as concrete and masonry) or wood. Some of these materials are suspected of causing cancer. Almost all EU member states have adopted national laws and exposure limits for different types of dust.</p>
<p><b>Required</b></p>	<p><b>How Hilti solutions contribute:</b>            Unlike other suppliers, Hilti offers alternative solutions for many common applications, resulting in greatly reduced exposure to dust. A comparison of rotary hammers and breakers, direct fastening and diamond coring techniques highlights the advantages. Hilti offers a range of power tools, vacuum cleaners, insert tools and accessories which allow significant reduction of dust emissions.</p>
<p><b>Intent</b>            To reduce pollution from construction activities by controlling soil erosion, waterway sedimentation and airborne dust generation.</p>	<p>Hilti DRS dust removal systems make countless jobs virtually dust-free. All system components, including power tools, drill bits, discs, blades, or other accessories as well as fully integrated systems, are perfectly matched to maximize the amount of dust removed at its source and collected efficiently by the vacuum removal system (VC 20-U/M, VC 40-U/M, VC 60-U).</p>
	<p>The Hilti DX and GX direct fastening systems are based on a range of powder- or gas-actuated fastening tools that use a self-contained energy source to drive fasteners into concrete or steel in an easy, virtually dust-free operation. Furthermore, most foams and firestop products are dust-free applications. So using Hilti tools and accessories further improves the potential for LEED credits.</p>
	<p>The sustainability of sites is improved with Hilti products by supporting the following important characteristics of a building: movement capability, firestop and water tightness. Movement capability allows the tracing of building movement. Firestop properties are tested to various worldwide standards to reduce damage due to fire, even during the building phase. Water tightness aids in avoiding jobsite damages due to water penetration, either through rain or during a fire.</p>

## Water Efficiency



### Hilti contribution

#### Hilti products help to reduce or entirely abandon the use of water

Fast, efficient drilling and sawing in concrete – virtually dust-free thanks to the Hilti slurry removal system which provides exceptional operating comfort. The core bit or blade is cooled by the water and, as a consequence, the drilling or sawing process is more accurate and faster, the core bit or blade lasts longer and the operator’s exposure to dust is reduced to a minimum.

Hilti offers a water recycling unit (Hilti DD-REC 1) with a built-in drilling slurry extraction system that allows unrestricted use – with complete independence from external water supplies for maximum mobility. Use is possible even in sensitive surroundings where special precautions would otherwise have to be taken.

If water is not used during an application there is generally no water pollution. A wide range of Hilti products support the LEED “Water Efficiency” criteria: Especially the CF FW D or N formwork foams are two products specifically designed to lower the pollution of the environment through water running out of concrete form works.

Additionally, Hilti developed solutions to improve the water efficiency of building sites while using tools. The following products are examples for Hilti products that help to improve the water efficiency of construction sites and support LEED “Water Efficiency” criterion: Diamond drills DD-REC 1, DD EC-1, DD 130 + rig and DD 200 + rig.

### Criteria

WE Credit 2: Innovative wastewater technologies

2 points

#### Intent

To reduce wastewater generation and potable water demand while increasing the local aquifer recharge.

## Energy and Atmosphere



### Criteria

EA Prerequisite 2: Minimum energy performance

#### Required

##### Intent

To establish the minimum level of energy efficiency for the proposed building and systems; to reduce environmental and economic impacts associated with excessive energy use.

EA Credit 1: Optimize energy performance

#### 1–19 points

##### Intent

To achieve increasing levels of energy performance beyond the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use.

### Hilti contribution

#### Hilti products help improve the energy efficiency of buildings

Buildings account for about 40 percent of energy use and represent a significant potential for reducing energy consumption and greenhouse gas emissions.

Uncontrolled air leakage in buildings affects both the heating and cooling of buildings. The weak points in buildings are doors and windows, penetrations of cables and pipes and the structural joints. These weak points in buildings can be effectively closed and filled with Hilti foam and firestop products. Both product ranges show excellent adhesion to the surface and tightness against air and in case of a fire against toxic gases.

Hilti firestop systems provide thermal resistance, reducing the amount of energy needed for climate control and any added materials needed for soundproofing. This credit only applies to Hilti materials when used within the building envelope. Several Hilti firestop products are designed to provide a maximum in air tightness and thermal insulation and support the LEED “Energy and Atmosphere” criteria.

Especially Hilti foam systems show good thermal insulation properties and therefore reduce heat loss which results in lower heating and cooling costs. Hilti foams provide equal or better thermal insulation than standard mineral wool and insulation boards. Several Hilti foam products are designed to provide a maximum in air tightness and thermal insulation which contributes to support the LEED criterion as well.

## Materials and Resources



### Hilti contribution

#### How Hilti solutions contribute:

Reuse of buildings or building parts reduces the environmental impact. Not only the structures in a building, like floors and walls, but pipes and cables can also be reused. Also interior elements can be reused, also with pipe and cable penetrations. The question is if these penetrations need to be rebuilt or if they could be used again, i.e. if cables or pipes could be changed or removed without changing the firestop penetrations.

#### Reusable Hilti products

Several Hilti products are designed for reuse. Some cable penetrations do not need to be replaced and new cables can be run through. Existing cables can also be removed and the resulting holes could be closed with minimum effort. If we take a closer look at the CP 651N firestop cushion, we see that no material waste is created as cushions can be reused, no waste and dust is generated at all during installation and during repenetration.

Also many other Hilti firestop products support the LEED “Materials & Resources” criterion.

### Criteria

MR Credit 1.1: Building reuse: maintain existing walls, floors, and roof

1–3 point

MR Credit 1.2: Building reuse – maintain existing interior nonstructural elements

1 point

#### Intent

To extend the lifecycle of existing building stock, conserve resources, retain cultural resources, reduce waste and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport.

Criteria	Hilti contribution
<p>MR Credit 2: Construction waste management</p> <p><b>1–2 points</b></p> <p><b>Intent</b> To divert construction and demolition debris from disposal in landfills and incineration facilities. Redirect recyclable recovered resources back to the manufacturing process and reusable materials to appropriate sites.</p>	<p>Hilti solves the issue of construction waste management with a four-layered approach consisting of reuse, recycling, incineration with energy recovery, and landfill disposal. Hilti tries to reuse and recycle as many products and product parts as possible to reduce the environmental impact of building activities.</p> <p><b>Hilti products that can be recycled:</b></p> <p>Hilti packaging is generally recyclable. The recycling symbol and the green dot symbol are generally applicable to all Hilti packaging. The green dot scheme is captured under the European “Packaging and Packaging Waste Directive – 94/62/EC”, binding for all companies if their products use packaging. Hilti is in line with green dot requirements, which include a well established European network of industry-funded systems for recycling the packaging materials of consumer goods.</p> <p>To minimize waste, a recycling system exists whereby empty PU-foam cans are returned. Known as PDR, the recycling system is run by the leading PU-foam manufacturers in Europe.</p> <p>The Hilti Group wants to demonstrate that the recycling of used packaging is an important step on the path towards the sustainable development necessary to safeguard our planet for future generations. In some cases Hilti managed to provide products that do not generate any waste at all at the construction site (HVU, HVU-HWB, HVU-TZ, HVU-G/EA).</p> <p><b>Hilti Products that can be incinerated with energy recovery:</b> Incineration with energy recovery (energetic usage) of most built-in Hilti products is generally possible.</p> <p><b>Disposal:</b> For disposal, local regulations issued by authorities must be observed. After curing, hardened foam can be disposed of with household waste. Chemical anchors of Hilti usually do not get diverted from normal demolition debris because of insignificant volumes.</p>

Criteria	Hilti contribution
<p>MR Credit 4: Recycled content</p> <p><b>Intent</b> To increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.</p>	<p>The use of recycled materials is always critical as a uniform and constant product quality of these recycled materials cannot always be guaranteed. Deviations in product quality of those recycled raw materials would have a direct impact on the final product properties. However, deviations in the product properties would not be accepted by third-party inspections.</p> <p>For that reason Hilti could not use recycled materials in the firestop product range. However, Hilti offers a series of products that can be entirely reused.</p>

## Indoor Environmental Quality



### Hilti contribution

Feeling good in our homes or offices isn't just a matter of having a beautiful space. A poorly designed indoor environment can literally make you sick. Building green means considering not only the environmental impact of materials and construction, but also the physical and psychological health of the occupants. Companies that make the move to green buildings have employees with lower turnover rates, fewer sick days and higher productivity. Schools demonstrate higher test scores, lower absenteeism and heightened academic enthusiasm.

Low levels of volatile organic compounds (VOC) and noise are key factors in providing maximum comfort for building occupants.

#### How Hilti products contribute:

The Hilti foam and firestop systems as well as the full range of chemical anchors are VOC compliant and meet standards set forth by South Coast Air Quality Management District Rule 1168.

Coating and paints are applied on large areas where, in a short time massive quantities of organic compounds could be released in the workplaces and living rooms. Requirements must be set higher to minimize the quantities of VOCs inside buildings. Studies have proved that mostly poor indoor air quality is the reason for the so-called "sick-building-syndrome" (SBS) which may cause illness or headache to the building occupants in new or remodeled buildings. To avoid further contribution to organic compounds Hilti has formulated their paints and coatings with water-based polymers.

In case, you need a specific VOC value for a Hilti product for your Green Building project, please do not hesitate and contact your local sales representative or consult our technical support. We are happy to provide you with VOC values compliant with LEED (USA) and the Green Star (Australia).

### Criteria

EQ Credit 4.1: Low-emitting materials: adhesives & sealants

1 point

#### Intent

To reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants.

EQ Credit 4.2: Low-emitting materials: paints & coatings

1 point

#### Intent

To reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants.

# Hilti products contributing to Green Building (LEED) at a glance

## Joint and cable protection systems

LEED criteria	Application	Sustainable sites				Water efficiency	Energy efficiency and atmosphere		Material and resources				Indoor environmental quality: noise, light, air					
		Movement capability	Firestop	Temporary water tightness	No drilling during installation (dust free)		No drilling for additional element	Air tightness	Thermal insulation	Recycling of packaging	Reuse of materials	Repenetration in existing opening (no waste)	No need of power tools for installation	Noise reduction	No ozone depletion potential (ODP)	Low global warming potential (GWP)	Low VOC* (air quality)	Smoke and gas tightness
<b>Products</b>																		
<b>Joints</b>																		
CP 601S	Elastomeric sealant	✓	✓	✓	✓	N.a.	✓	✓	✓	✓	✓	X	N.a.	✓	✓	✓	✓	✓
CP 604	Self leveling elastomeric sealant	✓	✓	✓	✓	N.a.	✓	✓	✓	✓	✓	X	N.a.	✓	✓	✓	✓	✓
CP 606	Elastomeric sealant	✓	✓	✓	✓	N.a.	✓	✓	✓	✓	X	N.a.	✓	✓	✓	✓	✓	✓
CP 672	Sprayable joint sealant	✓	✓	✓	✓	N.a.	✓	✓	✓	✓	X	N.a.	X	✓	✓	✓	✓	✓
<b>Cable protection</b>																		
CP 678	Firestop cable coating	N.a.	✓	N.a.	✓	N.a.	✓	N.a.	N.a.	✓	X	N.a.	✓	N.a.	✓	✓	✓	N.a.
CP 679A	Firestop cable coating	N.a.	✓	N.a.	✓	N.a.	✓	N.a.	N.a.	✓	X	N.a.	✓	N.a.	✓	✓	✓	N.a.
CP 695	Fire protection cable bandage – outdoor	N.a.	✓	N.a.	✓	N.a.	✓	N.a.	N.a.	✓	X	N.a.	✓	N.a.	✓	✓	✓	N.a.
CP 690	Fire protection cable bandage – indoor	N.a.	✓	N.a.	✓	N.a.	✓	N.a.	N.a.	✓	X	N.a.	✓	N.a.	✓	✓	✓	N.a.

\* All stated Hilti products are compliant and well below the LEED VOC requirements.

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## Penetration systems

LEED criteria	Application	Sustainable sites					Water efficiency	Energy efficiency and atmosphere		Material and resources				Indoor environmental quality: noise, light, air			
		Movement capability	Firestop	Temporary water tightness	No drilling during installation (dust free)	No drilling for additional element		Air tightness	Thermal insulation	Recycling of packaging	Reuse of materials	Repenetration in existing opening (no waste)	No need of power tools for installation	Noise reduction	No ozone depletion potential (ODP)	Low global warming potential (GWP)	Low VOC (air quality)
<b>Products</b>																	
<b>Electrical penetrations</b>																	
CP 611A	Intumescent firestop sealant	X	✓	✓	✓	X	✓	✓	✓	✓	X	N.a.	✓	✓	✓	✓	✓
FS-One	Intumescent firestop sealant	X	✓	✓	✓	X	✓	✓	✓	✓	X	N.a.	✓	✓	✓	✓	✓
CP 620	Firestop foam	X	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CP 660	Flexible firestop foam	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CP 617/ CP 618 / CP 619T	Firestop putty	✓	✓	N.a.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CP 657	Firestop brick	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CP 658	Firestop plug	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CP 636	Firestop mortar	X	✓	✓	✓	X	X	✓	✓	✓	X	✓	X	✓	✓	✓	✓
CP 637 / CP 638	Firestop mortar	X	✓	✓	✓	X	X	✓	✓	✓	X	✓	X	✓	✓	✓	✓
CP 670 / CP 673	Firestop coating and board	✓	✓	✓	✓	N.a.	✓	✓	✓	✓	X	N.a.	X	✓	✓	✓	✓
CP 651N	Firestop cushions	✓	✓	X	✓	✓	✓	N.a.	✓	✓	✓	✓	✓	✓	✓	✓	✓
CP 653	Firestop sleeve	✓	✓	N.a.	✓	✓	✓	N.a.	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Mechanical penetrations</b>																	
CP 643N / CP 644	Firestop jacket	X	✓	✓	X	N.a.	✓	✓	N.a.	✓	✓	N.a.	X	✓	✓	✓	✓
CP 648	Firestop wrap	✓	✓	✓	✓	N.a.	✓	✓	N.a.	✓	✓	N.a.	✓	✓	✓	✓	✓
CP 646	Firestop bandage	✓	✓	✓	✓	N.a.	✓	✓	N.a.	✓	✓	N.a.	✓	✓	✓	✓	✓
CP 680 P / CP 680M	Firestop cast-in device	✓	✓	✓	✓	N.a.	✓	✓	N.a.	✓	✓	N.a.	✓	✓	✓	✓	✓

## Foam systems

LEED criteria	Application	Sustainable sites				Water efficiency	Energy efficiency and atmosphere		Material and resources			Indoor environmental quality: noise, light, air			
		Movement capability	Firestop for building material	Temporary water tightness	No drilling during installation (dust free)		Saves water during application, no water pollution	Air tightness	Thermal insulation	Recycling of packaging	Reuse of materials	No need of power tools for installation	Noise reduction	No ozone depletion potential (ODP)	Low global warming potential (GWP)
<b>Products</b>															
<b>Joints</b>															
CF 812 window and door foam	Elastic window foam	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓
CF 810 crack and joint foam	Sealing gaps and cracks	N.a.	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓
CF 512 cold weather foam	All purpose foam especially for cold applications	✗	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓
CF 116 filling foam	All purpose foam	✗	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
CF125-5W50 B2 insulating foam	Window foam	✗	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
CF 126 B2 insulating foam	Window foam	✗	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
CF-I B2 insulating foam	Window foam	✗	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
CF-I B3 insulating foam	Window foam	✗	✗	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
CF-F B2 filling foam	Sealing gaps and cracks	✗	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
CF-F B3 filling foam	Sealing gaps and cracks	✗	✗	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
CF 710 cold weather	Window foam esp. for cold applications	✗	✗	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓
CF 162 fixing foam	All purpose fixing foam	N.a.	✓	N.a.	✓	✓	N.a.	N.a.	✓	✗	✓	N.a.	✓	✓	✓
CF 101 fixing foam	Door frame fixing foam	N.a.	✓	N.a.	✓	✓	N.a.	N.a.	✓	✗	✓	N.a.	✓	✓	✓
CF 102 fixing foam	Special fixing foam	N.a.	✓	N.a.	✓	✓	N.a.	N.a.	✓	✗	✓	N.a.	✓	✓	✓
CF FW D formwork foam	Sealing of form work elements	N.a.	✓	✓	✓	✓	N.a.	N.a.	✓	✗	✓	N.a.	✓	✓	✓
CF FW N formwork foam	Sealing of form work elements	N.a.	✓	✓	✓	✓	N.a.	N.a.	✓	✗	✓	N.a.	✓	✓	✓

**Anchor products**

Product	Material and resources				Compounds					Indoor environmental quality
	Minimized waste re. weight and volume (foil packs or capsule)	Non-hazardous waste after curing	Packaging waste is processed (recycling or thermal use)	Dispenser with refill system (cassette & foil pack)	Free of styrene (no strong odor)	Free of phthalates	Free of restricted substances	Free of MDI	Free of ozone depleting substances	
HIT-HY 10	Yes (foil pack)	✓	✓	✓	✓	✓	✓	✓	✓	✓
HIT-HY 20	Yes (foil pack)	✓	✓	✓	✓	✓	✓	✓	✓	✓
HIT-HY 50	Yes (foil pack)	✓	✓	✓	✓	✓	✓	✓	✓	✓
HIT-HY 70	Yes (foil pack)	✓	✓	✓	✓	✓	✓	✓	✓	✓
HIT-HY 150	Yes (foil pack)	✓	✓	✓	✓	✓	✓	✓	✓	✓
HIT-HY 150 MAX	Yes (foil pack)	✓	✓	✓	✓	✓	✓	✓	✓	✓
HIT-MM	Yes (foil pack)	✓	✓	✓	✓	✓	✓	✓	✓	✓
HIT-ICE	No (cartridge)	✓	✓	X	✓	X	✓	✓	✓	✓
HIT-RE 500	Yes (foil pack)	✓	✓	✓	✓	✓	✓	✓	✓	✓
HIT-RE 500 SD	Yes (foil pack)	✓	✓	✓	✓	✓	✓	✓	✓	✓
HFX	No (cartridge)	✓	✓	X	✓	✓	✓	✓	✓	✓
HVU	No waste (capsule)	✓	No waste	N.a.	✓	X	✓	✓	✓	✓
HVU-HWB	No waste (capsule)	✓	No waste	N.a.	✓	X	✓	✓	✓	✓
HVU-TZ	No waste (capsule)	✓	No waste	N.a.	✓	X	✓	✓	✓	✓
HVU-G/EA	No waste (capsule)	✓	No waste	N.a.	X	X	✓	✓	✓	✓

✓ = supports relevant LEED criteria  
 X = does not fulfill relevant LEED criteria  
 N.a. = not applicable

**Hilti. Outperform. Outlast.**

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