

LEED Saving energy with Copaco sunscreens.



copaco[®]
screenweavers





What is LEED?

LEED Certification stands for **Leadership in Energy and Environmental Design**. It is the accepted benchmark for the design, construction, and operation of high performance green buildings. Certification assures that a building project is environmentally responsible, profitable, and a healthy place to work. The LEED certification process uses a point system to determine the environmental merits of a building; there are different rating systems for homes, commercial buildings, interior renovations, schools, neighborhood developments, and other construction projects. For most projects, there are four levels of LEED certification, depending on how many points the project has earned: certified, silver, gold or platinum.

There are nine key areas measured by LEED:

- Sustainable Sites
- Energy and Atmosphere
- Materials and Resources
- Indoor Environmental Quality
- Water Efficiency
- Innovation in Design
- Regional Priority
- Integrative Process
- Location and Transportation



Copaco® and the environment

At absolutely no time during the production process does Copaco® lose sight of the environment.

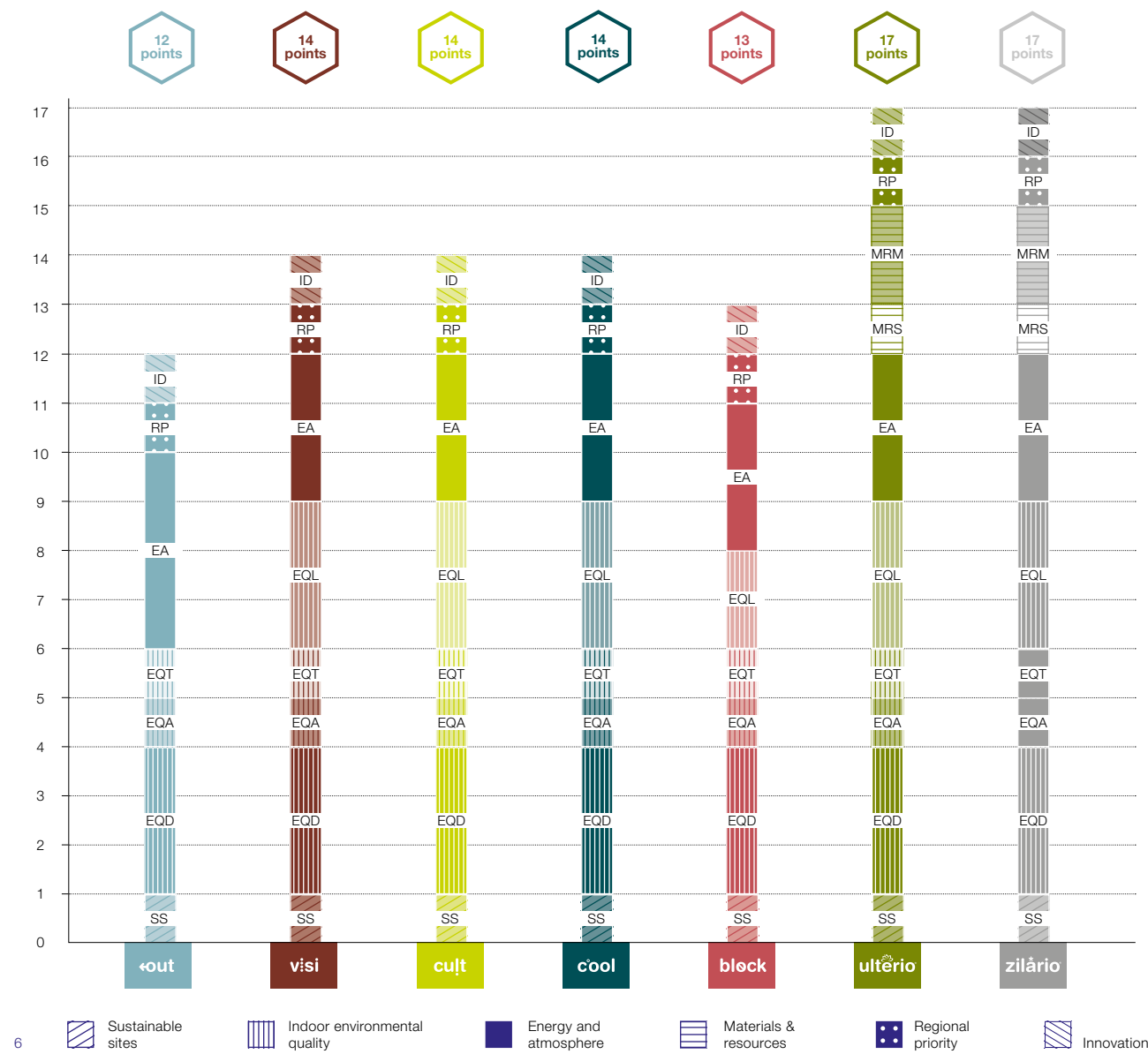
Via **green electricity and ecological installations**, Copaco® contributes to an environmentally-friendly and low- energy production process. But the end products also save energy. Using the sun screen fabric means significant savings on air conditioning, resulting in lower CO₂ emissions and thus a better environment. Copaco® delivers a reliable assurance that the products contain no harmful materials.

More and more companies are feeling the need to opt for sustainable projects for new builds or renovations. And with a sustainability certificate, they can facilitate this complex process. Over 106.000 buildings have been LEED certified worldwide. LEED is the counterpart of BREEAM in the United States.

Discover what Copaco® can do
for your LEED points.



LEED summary



Overview LEED points

Copaco®'s fabrics can contribute to 17 points for LEED 2014 New Construction & Major Renovations certificate, which increases permanently the value of the building project.

Category	Issue	Max. points	sustainable sites	indoor environmental quality	energy and atmosphere	materials & resources	regional priority	innovation
Sustainable sites	SS - light pollution reduction	1	1	1	1	1	1	1
Indoor Environmental Quality	EQD - EQ daylight	3	3	3	3	3	3	3
	EQA - EQ acoustic performance	1	1	1	1	1	1	1
	EQT - EQ thermal comfort	1	1	1	1	1	1	1
	EQL - EQ low-emitting materials	3	0	3	3	2	3	3
Energy and atmosphere	EA - optimize energy performance	18	4	3	3	3	3	3
Materials and Resources	MRS - MR building disclosure and optimization - sourcing of raw materials	2	0	0	0	0	1	1
	MRM - MR building disclosure and optimization - material ingredients	2	0	0	0	0	2	2
Regional Priority	RP - regional priority	4	1	1	1	1	1	1
Innovation	ID - innovation	5	1	1	1	1	1	1



LEED categories

The purpose of LEED Certification is to identify that the design and construction of a building qualifies using a point system in six areas.



Sustainable sites 10



Indoor environmental quality 11



Energy and atmosphere 15



Materials and resources 16



Regional priority 18



Innovation 19

Sustainable sites – SS light pollution reduction

1

point

AIM

- To minimize light trespass from the building and site, reduce sky-glow to increase night sky access, improve nighttime visibility through glare reduction
- To reduce lighting impact on nocturnal environments

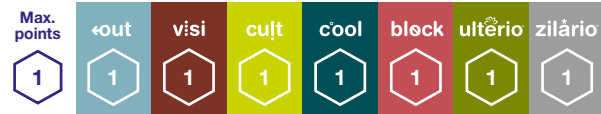
Parameters

- Reduction of interior light levels at night (option 1)
OR
shieldings for openings in building envelope (option 2)

Exterior lighting in compliance with ASHRAE Standard
 - Light simulation study required

Copaco solutions

- Shading automatically closed between 11 p.m. & 5 a.m. (option 2)
- Shading with transmittance less than 10% required: depends on shading color
- Exterior lighting in compliance with ASHRAE also necessary



Indoor environmental quality – EQ Daylight

3

points

AIM

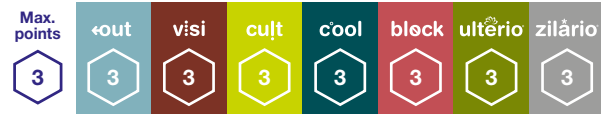
- To connect building occupants with the outdoors, reinforce circadian rhythms, and reduce the use of electrical lighting by introducing daylight into the space.

Parameters

- Sufficient daylight provision in the regularly occupied spaces of the building (300-3,000 lux for 75% of occupied spaces)
- Provide manual or automatic glare-control devices for all regularly occupied spaces
- Daylight simulation study required

Copaco solutions

- Excellent Copaco characteristics for ‘glare control’
- Glare control requirements are achievable with all Copaco products in scope
- Credit depends on result daylight simulation



AIM

- To provide (work)spaces that promote occupants wellbeing, productivity, and communications through effective acoustic design.

Parameters

- Minimize the effect on building occupants of site **exterior noise** produced by road traffic, aircraft flyovers, railroads, etc.
- **Interior noise** – Acoustical finishes
- Meet local applicable codes or 2010 FGI Guidelines and 2010 SV Guidelines

Copaco solutions

Max. points

1

out

1

visi

1

cult

1

c'ool

1

block

1

ultério

1

zilário

1

- No indoor sound absorption with outdoor sun shading
- Analysis results based on Encon experience: acoustic measurement tests for the Copaco products will give more detailed results
- Importance of acoustic value of other building materials

AIM

- To promote occupants' productivity, comfort, and wellbeing by providing quality thermal comfort

Parameters

- Thermal Comfort Design
 - Option 1: ASHRAE STANDARD 55-2010
 - Option 2: ISO AND CEN STANDARDS
- Thermal Comfort Control
 - Thermal comfort controls allow occupants, to adjust one of the following in their local environment: temperature, air speed, and humidity.

Copaco solutions

Max. points

1

out

1

visi

1

cult

1

c'ool

1

block

1

ultério

1

zilário

1

- Serge 600, Serge 1%, Blockout Serge 600 Lunar/Solar and Ecrano are the most suitable > outdoor use
- Dynamic building simulation required

AIM

- To reduce concentrations of chemical contaminants that can damage air quality, human health, productivity, and the environment

Parameters

- List all specified interior as applicable to the project’s scope of work
 - Collect the VOC values
 - Stay under the LEED VOC Baseline

Copaco solutions

Max. points

3

out

0

visi

3

cult

3

c’ool

3

block

2

ultério

3

zilarío

3

- Importance of other finishing materials (floor, wall, ceiling)
- No VOC test available for Zilarío (negligible VOC on polyester fabrics is assumed)
- No credits for outdoor sun shading

AIM

- To establish the minimum level of energy efficiency for the proposed building and systems (5% > baseline)
- To reduce environmental & economic impacts associated with excessive energy use

Parameters

- Option 1

 - Defining energy performance using Dynamic Simulation Modelling (Similar with BREEAM ENE1, option 1)
- Option 2

Energy modelling study required

 - Complying with the ASHRAE Advanced Energy Design Guide requirements (Option 1 preferable to option 2)

Copaco solutions

Max. points

18

out

4

visi

3

cult

3

c’ool

3

block

3

ultério

3

zilarío

3

- Best performance of Serge 600, Serge 1%, Blockout Serge 600 Lunar/Solar and Ecrano outdoor sunscreen
- Project specific analysis required

AIM

- 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.

Parameters

Leadership extraction practices1

- Meet for at least 25%, by cost, of the total value of building products: Recycled content

Option 21

- Use 20 different installed products from at least five different manufacturers that have released a report from their raw material suppliers

Copaco solutions

- Importance of other recycled building materials
- Recycled value of frame usually negligible compared to recycled value of Ulterio or Zilario

Max. points	←out	visi	cult	c'ool	block	ultério	zilário
0	0	0	0	0	0	1	1

AIM

- 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

Parameters

Material Ingredient Reporting2

- Cradle to Cradle: The end use product has been certified at the Cradle to Cradle v2 Basic level or Cradle to Cradle v3 Bronze level

Copaco solutions

- Cradle-to-Cradle® Bronze certification for Ulterio & Zilario

Max. points	←out	visi	cult	c'ool	block	ultério	zilário
2	0	0	0	0	0	2	2

Regional priority

4 points

AIM

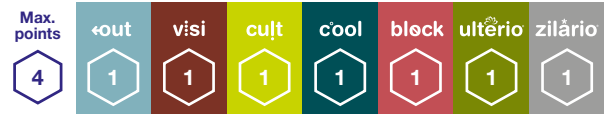
- To provide an incentive for achievement of credits that address geographically-specific environmental priorities

Parameters

- LEED 2009: RP credit zones were identified by ZIP code
 - LEED v4: RP credit zones were created using a geographic information systems (GIS)-based program
- Bonus points for existing credits
 - Applicable credits depend on project country

Copaco solutions

- Sufficiently high energy savings by Copaco products in scope
- This RP analysis result = applicable for Belgium
- Other countries: bonus points for other credits



Innovation

5 points

AIM

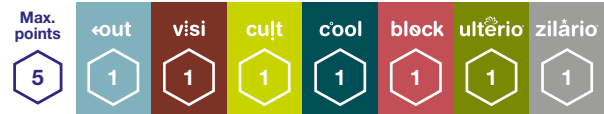
- To provide design teams the opportunity to achieve exceptional performance above the LEED requirements
- Innovative performance in Green Building categories not specifically addressed by LEED

Parameters

- Exemplary performance in existing LEED credits
- and / or
- Innovation submission(s)
- For each submission: assessment of USGBC required
 - (Dis)approved by USGBC (project-by-project)

Copaco solutions

- Credit not automatically awarded, but approved on a project-by-project basis
- Maximum one innovation credit achievable for the same product types





LEED requirements

The new version of the Leed sustainable building standards is more demanding. This will impact all companies and stakeholders that must align their green building standards to the requirements of leading certification authorities. Knowledge gained during previous certifications will be very useful for any parties involved in the design and implementation processes of buildings applying for new certificates.

Let's share our knowledge.



What can Copaco do for your LEED points?

LEED is a popular GREEN BUILDING certification system for building projects.

Copaco® is dedicated to producing enduring, energy-efficient screenfabrics in ways that will support a greener future.

At Copaco®, we believe constructing buildings in ways that protect the environment and safeguard the health of those that use them is not just good business sense, it's common sense.

Copaco®'s long-lasting and energy-efficient fabrics can be an integral part of your project's **LEED** certification. **Copaco® products can contribute to 17 points.**

The feasibility to obtain these points were analyzed and confirmed by an independent and qualified expert engineering company, ENCON, specialized in optimizing energy consumption. We invite you to contact us if you would like more information pertaining to your specific project or for details on certification in LEED programs.

- Copaco® references:**
- Campus Skejby - Denmark
 - NRGi - Denmark
 - Park House - London
 - ETDE - Paris
 - The Shard - London
 - Central St-Giles - London
 - Infinity Building - Bilzen



Copaco screens that fit you

As a producer of sun and insect screen fabrics, Copaco® offers long-lasting and decorative solutions throughout the world. Thanks to its many years of experience, in-depth product knowledge, an up-to-date production system and an extensive product line, Copaco® today stands at the top of the global market for sun and insect screen fabrics.

Copaco® constantly invests in new top-quality products, an excellent service and the inexhaustible enthusiasm of its employees, with its greatest objective being: a satisfied end customer. To be a worldwide trendsetter with regard to long-lasting and decorative sun screens and high-quality insect screens.





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