



### **FINCIBEC FOR LEED (Leadership in Energy and Environmental Design)**

LEED is a rating system for the building environmental performance promoting an integrated and sustainable planning regarding the whole building in its life cycle, finally defining the standards featuring a building with low environmental impact in its project, building and maintenance.

The system is based on rating credits for each of the requirements featuring the sustainability of the building.

The sum of credits gives the obtained certification level. Criteria are grouped in six categories, specifying the mandatory pre-requisites and a certain number of environmental performance, defining the total score of the building:

SS - Sustainable sites (1 pre-requisite – 26 points): the LEED certified buildings must be built according to a disposal plan reducing the production of wastes and using recycled or locally produced material.

WE - Water efficiency (1 pre-requisite – 10 points): the presence of systems for recovering rain water or of taps with flow adjusters must ensure the highest efficiency in water consumption.

EA - Energy and atmosphere (3 pre-requisites, 35 point): using energy from renewable and local sources in the best way it is possible to cut dramatically building energy bills (in the United States, every year LEED buildings release in the atmosphere 350 metric tons of carbon dioxide less than other buildings, thus saving electricity by about 32%).

M.R. - Materials and resources (1 pre-requisite, 14 points): buildings built with natural and renewable materials are awarded a higher score in the LEED assessment system.

I.E.Q. - Indoor Environmental Quality (2 pre-requisites, 15 points): the building inner spaces must be designed so as to ensure basically an energy balance and to aid the top residential comfort for the final user.

I.D. - Innovation and design process (6 points): the use of improved building technologies vs. the best practice is an added value element as for the LEED certification.

Summing up the credits obtained within each of the six categories a specific certification level is obtained certifying the performance achieved by the building as for environmental sustainability. The LEED certification can be: - Basic certification (Certified, 26 – 32 points) - Silver certification (Silver / 33-38 points) - Gold certification (Gold / 39-51 points) - Platinum certification (Platinum / 52 and 69 points)

Fincibec Group is a member of Green Building Council Italia, association mainly aimed at consolidating and spreading the LEED rating system.

The Fincibec (Monocibec - Century and Naxos) series aid to obtain the following LEED credits:

**Credit MR 4.2 - Recycled content (according to the standard UNI EN ISO 14021:2002):** all Fincibec series are manufactured using recycled material. For several series in porcelain stoneware by all 3 Fincibec brands (Monocibec, Century and Naxos), **as certified by BUREAU VERITAS**, the percentage content of recycled material is > 40% (“pre-consumption material”). (2 LEED points)

**Credit SS 7.1 - Heat Island Effect:** all light colours of the Fincibec series do not increase the temperature of city areas compared to country areas (No heat island effect), as the solar reflectance index SRI is  $\geq 29$ . Fincibec products are thus particularly suitable for outdoor roofed and non-roofed installations. (1 LEED point)

**Credit EA 1 - Optimize energy performance:** heat conductivity  $\lambda$  of all Fincibec products ranges between 1 and 1.3 Watt/(m·K). Therefore, all Fincibec products feature excellent insulating capacity. (1-19 LEED points)

**Credit IEQ 4.2 - VOC content:** all Fincibec products do not emit VOC (Volatile Organic Compounds), as certified by qualified external laboratories. (1 LEED point)

**Credit MR 1.2 - Building re-use:** all Fincibec products can contribute to this credit by coating existing floors and walls, renovating surfaces and structures avoiding their demolition and re-building. (1 LEED point)

**Credit MR 2.1-2.2 - Management of building wastes:** all Fincibec products can contribute to this credit, as all ceramic tiles can be totally considered as recovered materials to be used as aggregates for different filling operations (substrates, embankments, etc.) (2 LEED points)

**Credit MR 5.1-5.2 – Regional materials:** 65% of the materials used to produce all Fincibec products come from quarries located within 500 miles from its production headquarters. (2 LEED points)

**Credits ID 1 - Innovation in Design:** (1-5 LEED points)

- Referred to credit MR 4.2: the percentage content of recycled material in many Fincibec series in porcelain stoneware is > 40% (“pre-consumption material”) according to the BUREAU VERITAS certification

- Most of the series belonging to all 3 Fincibec brands (Monocibec, Century and Naxos) are ANAB/ICEA certified and this is an innovative performance as for the environmental benefits offered by the product.

The series containing a recycled material content > 40% are the following:

| <b>Monocibec</b> | <b>Century</b>   | <b>Naxos</b>                          |
|------------------|------------------|---------------------------------------|
| ALTA MODA        | DISCOVERY        | PIETRA SACRA                          |
|                  |                  | MARBLE HILL (FLOOR TILES IN PORCELAIN |
| IN & OUT         | INTERIORS        | STONEWARE)                            |
| GEOTECH          | LAREDO           | GREENWAY                              |
| FULL METAL       | MARMI ITALIANI 2 |                                       |
| PRIMO PIANO      | CROSS OVER       |                                       |
| GRAAL            | DARWIN           |                                       |
| DOMUS AUREA      | ACROPOLIS        |                                       |
| CLASS            |                  |                                       |
| ETHNOS           |                  |                                       |
| HABITAT          |                  |                                       |
| STILE ITALIANO   |                  |                                       |

### **Carbon Offset**

| <b>Monocibec</b> | <b>Century</b> | <b>Naxos</b> |
|------------------|----------------|--------------|
| Geotech          | Darwin         | Greenway     |
| Ethnos           | Cross Over     |              |