



Longevity
Wellness Resort
Monchique





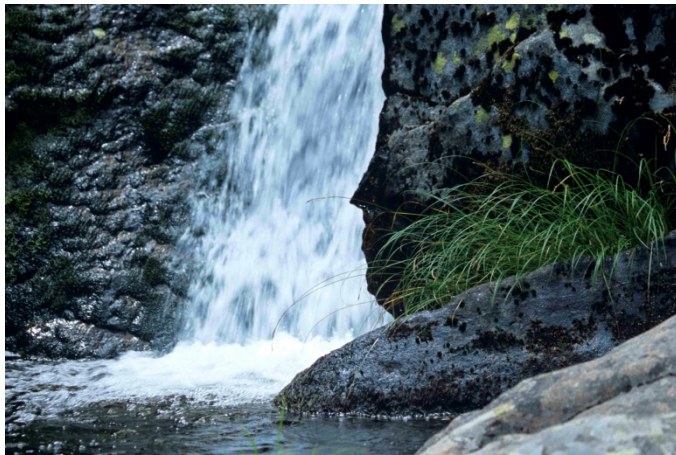
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Nestled in the green hills of Monchique amid very low density development, **Longevity Wellness Resort** is a combination of state-of-the-art engineering and architecture with a strong focus on environmental preservation, perfectly fitted in the exceptional landscape.



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Longevity Wellness Resort is conceived as a Sustainable Project concerning the three main vectors:

- Economical
- Social
- Environmental

Sustainability strategies have been considered in order to improve the positive impacts on local economy and employment levels and to minimize possible negative impacts on the environment, in general terms, and in the local scale, namely in the “built environment”. The selection of Sustainability Indicators for land use, construction materials, mobility, energy, water and waste will be the base for the sustainability follow-up and quantification (Monitoring).



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Longevity Wellness Resort considers Planning, Programming and Project Management during Conception, Construction and Exploitation as tools that will be used to develop strategies for energy, use of water, material selection, indoor air quality and comfort as a whole.



Energy

- Bioclimatic design using passive solar technologies, as construction inertia, solar (direct and indirect) gains control, natural ventilation and free-cooling potential;
- Exploitation of endogenous energy potential through energy conversion technologies based on solar source (solar radiation high values, dominating winds, daily thermal amplitude, etc);
- Demand side reduction strategies for consumption in order to obtain:
 - High solar share for sanitary hot water through solar panels integrated in the roof top;
 - thermal storage;
 - Good transmission and glass solar factors for the envelope;
 - Night purge in public areas;
 - Healthy indoor air quality



Lighting and Comfort

- Systematic providing of daylight both in common and in private areas;
- High quality of indoor and outdoor environments, as far as thermal, lighting, acoustic and ventilation rates are concerned.



Water

- Demand side control measures reaching lower consumption for sanitary purposes;
- Use of rain water for landscape irrigation.



Materials

- Use of local raw materials (like some types of rocks);
- Construction of durable solutions that require low levels of maintenance;
- Use of local human resources and enterprises for the maintenance and conservation of exterior areas;
- Use of local flora in green areas thus reducing irrigation needs and preserving the authenticity of the landscape;
- Use of specified materials with low values of embodied energy, as well as recycled materials;
- Roofs and terraces with ecological system (green roof);
- Respect for the natural conditions of the land and landscape, with the assimilation of the buildings within the local topography and surroundings;
- Balance and compensation of earth movements and incorporation of the extracted raw materials in the buildings construction;
- Measures to reduce waste production and to promote recycling.



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A sustainable monitoring system together with a systematic training and information will ensure the correct implementation of all Environmentally friendly features within **Longevity Wellness Resort** and continuity of these concerns and attitude for the years to come.



**Longevity Wellness Resort, Eco Friendly Features
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