Case Study
Cornish Sea Salt

Cornwall Sustainable Building Guide

Scale of development
Medium

Type of development
Food Manufacturing Plant

Sustainability features

Design

Energy

Biodiversity

Water Conservation

Water treatment & discharge

Materials

Features

❖ Fully integrated into the surrounding environment

❖ Despite harsh position, building materials have been carefully chosen for sustainability

Introduction

Set in a sea side quarry site on the Lizard Peninsula, this development is a sea salt production facility for the Cornish Sea Salt company. The facility incorporates a range of energy saving features and where possible, materials have been chosen for their green credentials.

Construction and Materials

Despite the harsh environment in the position of the factory, and the industrial nature of the work, the factory design attempts to be sustainable in build. There is a minimal use of concrete, and the building is constructed of a glulam frame, with soft stud walls and *Warmcell* insulation to create a warm roof.

Energy Efficient Design and Technology

The equipment used to produce the sea salt from the salt water utilises an innovative pre-concentration process, using 40% less energy than the second nearest competitor. Despite this, the equipment produces a large amount of heat and thus doubles as space heating when combined with the high level of insulation within the construction.

There is to be a future inclusion of a rainwater harvesting system to the design which will further enhance the building's green profile, the extra water can be used in the grey water system of the building.

Site Considerations & Environmental Integration

One of the biggest features of the Sea Salt factory is its distinctive finish; through using fibre cement profile sheet cladding in the colour of the surrounding quarry rock, the factory blends almost seamlessly into the landscape.

The site, being a former quarry, required specialist mineral planning permission as well as marine conservation surveys due to it being a Site of Specific Scientific Interest (SSSI).

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