



Scale of development

Small - Medium

Type of development

Commercial (Hotel)

Sustainability features

-  Design
-  Energy
-  Water Conservation
-  Water treatment & discharge
-  Waste
-  Community

Features

- ❖ Natural swimming pool through reed bed filtration
- ❖ Processing on site of organic waste
- ❖ Full consideration of design related to natural light and heat gains

Introduction

A responsibly designed hotel in Mawgan Porth overlooking the bay. The building incorporates a green roof with local vegetation as well as a range of sustainable technology and recycled materials, the owners gave priority to “green” suppliers in all areas.

Materials & Design considerations

First of all, the hotel is designed with high levels of insulation and draught proofing to reduce energy lost through walls, as well as by cold bridging. The designer has made maximum use of solar gains and natural light; this not only reduces the need for space heating and lighting but also improves the atmosphere inside the building.

Energy Efficient Design and Technology

The hotel is powered using a 300kW *Binder* woodchip burner, the kitchen and heating are electric and have a gas supply for backup only. There is a Mechanical Ventilation Heat Recovery System installed to recover heat whilst circulating air; this complements the high level of air tightness in the building, allowing strict control over the level of air circulated and reducing the need for heating.

The kitchen being fully electric eliminates the need for extra services (gas) and the entire hotel is fitted with low energy specification lightbulbs.

Waste and water recovery

A natural swimming pool has been created using reed bed filtration and treatment. Both rainwater and grey water are harvested on site, reducing the water demand of the building.

Organic waste passes through an accelerated composting system and where possible, materials used in cooking etc are all recycled through the usual streams.