

Case Study: Luxury House



Details

Location: UK

Sector: Residential

Installation of 12W LED lamps and profile fixture in luxury villa

Combined with Helvar dimming system and home automation

Powered using photovoltaic system



Project Brief

This smart home is one of the most energy efficient ever built. It combines photovoltaics, solar thermal, ground source heat pumps and occupancy sensors along with Truelux LED lighting. The end result is a home which required very little external energy input. Truelux LED lighting was chosen for a variety of reasons, but mainly because it was able to replicate the common 50W halogen lamp so well. Dimming is smooth and uniformed using Helvar dimming racks and operates down to 15%. Every light in the house is now LED with IP54 rated fixtures used in the bathrooms as well as externally in the soffits and low glare recessed fixtures in all other rooms. Maintenance of lighting even in the high ceilings is no concern.

Benefits

- Instant 76% energy reduction
- 1,250 lifetime lamp changes saved
- Payback in less than 3 years
- High lux levels and easy dimming
- Powered using photovoltaics
- Ongoing maintenance eliminated

Project executed by: Truelux Solutions UK