INFO

**Name**: Smart Build Sustainable Construction

**Location**: eco living

**Summary**: Highly insulated, eco-homes utilising sustainable, locally sourced materials giving warm and comfortable, low maintenance homes with low running costs and low carbon footprints.

**Description**: SMART BUILD homes are generally realised in new-build projects so would require a building plot or a plot with an existing property to be demolished. The properties in this category can be finished internally and externally with materials and architectural features of an area to create the character and appearance of traditional, rustic or modern homes. <BR><BR>

KEY DESIGN FEATURES <BR>

- Low energy build with small carbon footprint. <BR>

- Build materials chosen to give a near 100% recyclable home that conforms to a zero-loss resource philosophy. <BR>

- Super insulated, ultra low energy homes for temperature stable living environment. <BR>

- Large thermal storage an integral part of the design and build to give high temperature change latency. <BR>

- Self build and assisted projects for restorations, rebuilds and new build homes. <BR>

- Warm in winter with carbon neutral heating system, cool in summer. <BR>

- Thermal bridge free construction. <BR>

- Double and triple glazed window options. <BR>

- 'Passive' home performance with heating costs lower than 15kWh/m2 per year and peak heat load less than 10W/m2. <BR>

- This offers the possibility for heating energy bills to be reduced by up to 90%. <BR>

- Since more than 70% of national energy generation is for the supply of electricity to the building industry, and more than 40% of greenhouse gas emissions result from home energy consumption, these homes help significantly to reduce our negative environmental impact. <BR>

- Affordable homes with self-build or 'key in hand, built for you' options. <BR><BR>

KEY BUILD FEATURES <BR>

- Build materials chosen for their low-energy manufacturing overhead. As close to 'raw' materials as is possible. <BR>

- Materials sourced as locally as possible to minimise transportation costs and associated pollution. <BR>

- Build materials chosen to give a near 100% recyclable home, that conform with our zero-loss resource philosophy. <BR>

- Earthquake, storm and lightening resistant. <BR><BR>

BASE LIVING UNIT<BR>

- 60m2 of living space with personalised floor plans on a per project basis. <BR>

- 6m2 of all year round 'cool storage' space for food and wine. <BR>

- 12m2 of storage space for bikes, garden tools and general items. <BR>

- Smaller and larger design options scalable in units of 30m2. <BR>

- Target self build cost for this base living unit is around € 500/m2. <BR><BR>

CONSTRUCTION MATERIALS <BR>

1. Biomass at approximately 30% of the build materials by volume. <BR>

2. Stone at approximately 25% of the build materials by volume. <BR>

3. Wood at approximately 25% of the build materials by volume. <BR>

4. Metal at approximately 10% of the build materials by volume. <BR>

5. Eco-concrete/plaster at approximately 5% of the build materials by volume. <BR>

6. Glass at approximately 5% of the build materials by volume. <BR><BR>

Designs can incorporate virtually any architectural style to create a modern of traditional home in keeping with personal taste and local planning regulations. Properties can be finished internally and externally with stone, brick, wood and glass, or with any combination of these materials. Properties requiring a more rustic appearance can be finished with stone external walls (Rustic in Stone), wood-cladded chalet-style walls (Rustic in Wood), paint-rendered walls (Rustic Rendered), or a mix of stone, wood and paint-rendered walls.

**Details**: PROPERTY OPTIONS<BR>

New-build properties, ranging from 1-bedroomed homes on a single floor to large homes with many rooms on several floors. Your home can be tailored virtually to your wishes depending only on budget and plot. We can even create small communities of properties for groups of people wishing to develop their own living environment, whether for holidays or retirement purposes. <BR><BR>

ECO-FEATURES<BR>
Excellent summer and winter insulating properties | Rainwater harvesting | Solar and Bio-mass burner hot water systems | Gas for cooking and hot water backup | Mains or reed-bed sewage | Solar electricity for low voltage LED lighting | Underfloor heating | Low maintenance external finishes | Low cost, smart-design solutions | Strong and permanent, weather resistant designs | high energy efficiency | sustainable locally sourced materials | reduced use of cement on all stone and brick homes | designs highly resistant to storms and earthquakes | reduced dependence on external energy and service suppliers<BR><BR>

INTERNAL FINISHING OPTIONS<BR>

All properties can be finished with the following features specified by the buyer; <BR>

fitted kitchens | bathrooms with shower or bath | floor finishing’s in wood, terracotta, stone or a combination of these 3 flooring materials | wood or plaster finished ceilings and walls | wood-burning stove for air-space heating | underfloor heating powered by water heating wood-burning stove | domestic hot water powered by solar panels | external shutters and internal black-out shutters | internal and external lighting driven by solar powered, low-voltage LED lighting systems | rainwater harvesting to supplement domestic supplies. <BR><BR>

EXTERNAL FINISHING OPTIONS<BR>

All properties can be finished with the following features specified by the buyer; <BR>

flat terraced roofs or pitched roofs with traditional tiles | external walls can be finished in stone, wood, brick, glass and paint-rendered, or a mix of these materials | covered terrace areas integral to the property | single or double garages with or without utility rooms | detached workshops / potting sheds | landscaped gardens | perimeter walls and fencing | paths and driveways | swimming pools.