

Bosinver Farm Cottages – Lowen



Lowen stands for low energy and means 'happy' in Cornish

Lowen: Key Facts

Lowen has been designed and built to have the lowest environmental footprint possible, this has required commitment and attention to detail from start to finish.

Main Features

1. The main building materials are reclaimed timber (from an old hospital in Bodmin) and straw (from Indian Queens), rendered inside and out with lime. Building with these materials has been welcomed by both local planning and building regulations departments.
2. The building is orientated due south to maximise the natural heat, light and power from the sun.
3. The electrical demand of the building and the two adjacent cottages is provided by 10Kw of solar panels on the southern pitch of the roof.
4. The heating and hot water is provided by ground source heating (4 x more efficient than standard heating) and solar hot water panels on the southern roof.
5. The building is super-insulated; the straw walls are very good heat and sound insulation, the loft space is carpeted in recycled plastic bottle insulation.
6. The windows, doors and atrium are made from FSC hardwood and have high insulation value. There windows on the north face of the building have been kept small to minimise heat losses.
7. All of the electrical fittings and white goods are very low energy and A+ rated.
8. All of the water fittings and white goods are very water efficient. The toilets, dishwasher and washing machine are fed with rainwater harvested from the roof.
9. The Delabole slate on the roof is reclaimed.
10. The paint used inside and out is natural and breathable with no nasty chemicals.
11. All new timber, stone, concrete, gravel, sand etc. used in the building has been ethically and locally sourced. We are committed to investing in Cornish businesses wherever possible.
12. The building is set to achieve Code for Sustainable Homes level 5

Costs & Payback

The cost of the building work is approximately £200k, this includes the following key information for anyone wishing to complete a similar project.

1. Design, Planning etc.: £10k, equivalent to a standard 4 bed build
2. Reclaimed Timber, Straw & Lime Rendering: £20k, cheaper than a standard 4 bed build
3. Solar PV (electric) Panels: £35k, with an average income from the Government's 'Feed in Tariff' of £4k/yr, 9 years payback or 11% annual return. Panels guaranteed for 25 years.
4. Ground Source Heating & Hot water system: £13k, 15yr payback
5. Solar Hot Water system: £9k, 15yr payback
6. Water harvesting system: £3k, 10yr payback based on current water rates & 8 people
7. Ethically sourced materials: More expensive than standard alternatives, will increase the cost compared to a standard development.

Suppliers for Lowen

Wherever possible, we've used environmentally-friendly and recycled/reclaimed materials, fittings and furnishing throughout Lowen. We've also used local suppliers and labour, including sourcing furniture and artwork from artists/craftspeople in Cornwall.

Design, Project Management & Construction

Mark Smith, Sustainabuild UK, Penryn: 07768 454840, sustainabuilduk@yahoo.co.uk

Architectural Design & Planning

Architects

CSA Architects, Truro: 01872 265310, www.csa-architects.co.uk. Susan Kinver and Helen worked with us on the Code for Sustainable Homes.

Sally Jones Architect: 01637 830180

Purl Design, St Blazey: 01726 212212, www.purl-design.com

Building regulations

Dave Alcock Planning: 01726 843038

Nigel Winn, Jhai: 01308 488656, www.jhai.co.uk

Environment Agency: 03708 506 506

Construction: Builders, Building Suppliers, and Tradesmen

Builders

Paul Rogers: 01208 831718

Colin Houlst: 01726 851431

Phil Dymond (digger): 01726 883273

Carpentry (Timber frame and internal work)

John & George Edyvean: 01726 850803

Renewables

Supplied and fitted by Microgeneration, Torpoint: 01752 823600, www.microgeneration.com

Lime rendering

Natural Building Solutions, Topsham, Devon. Contact Courtney Farmer, 01392 202 133.

www.naturalbuildingsolutions.co.uk

Electrician

Dave Wright, Trethurgy local plumber: 07876 524475

Plumbing & underfloor heating

Dean Hancock, St Austell: 07977 937957

Decorating

Keith Bishop, Newquay: 07850 626294

Paint – eco breathable from the Cornish Lime Company, Bodmin: 01208 79779

Electricity supplier

Eco Tricity: 08000 302 302, www.ecotricity.co.uk

Gardening/landscaping

Chris Bonney: 07761 824885

Builders' merchants & building related

Travis Perkins, St Blazey: 01726 817171(*ethically sourced materials*)

Jewson, St Austell: 01726 73333 (*ethically sourced materials*)

Kernow Fixings, St Austell: 01726 624600

PD Hire, St Austell: 01726 69104

Fahey Concrete, St Austell: 01726 850086 (*ethically sourced materials*)

Bardons Concrete, St.Austell: 01726 73261 (*ethically sourced materials*)

Forrester Roofing (window sills): 01726 64142

Colin Marshall Scaffolding: 01726 61221

Roofing slate – reclaimed delabole

Truro Reclamation: 01872 510807

Window sill slate

Allen Valley Reclamation St Teath: 01208 851100

Wood (for frame)

DRS Reclamation St Austell: 0777 3367484

The huge timber beams used for Lowen's frame originally came from St Lawrence's Hospital, Bodmin.

Lowen sign

Kerrow Memorials: 01726 852348

Walling stone

Trearne Quarry: 01840 770579

Eden Reclamation

Reclaimed slate for entrance porch and windowsill wood.

Contact: 01726 852700, www.edenreclamation.co.uk

Kitchen

Appliances

F&K Electrical & Refrigeration, St Austell (sourcing and installation). Contact 01726 822575

All appliances installed in the kitchen are rated A+ energy and water.

Kitchen units

Classic Kitchen from Creative Home Interiors, Padstow. Contact: 01841 533676.

Made from FSC certified timber.

Cooking utensils

IKEA

Comprehensive environmental policy:

http://www.ikea.com/ms/en_GB/the_ikea_story/people_and_the_environment/index.html

Floor tiles

Nicobond, Plymouth. Contact: 01752 339724

Part of the Nicholls & Clarke Group of Companies - good eco-credentials:

http://www.ncdirect.co.uk/pdf/Group_Environmental_Policy.pdf

Wall tiles

Fired Earth/Original Style

See http://www.firedearth.com/green_issues for the environmental policy.

Curtains

Cotton Mills, Truro. Contact: 01872 278545

Fabric

Designers Guild: 020 7893 7400, www.designersguild.com

Saucepans

Marks and Spencer

M&S have a detailed environmental policy called 'Plan A'. See

<http://plana.marksandspencer.com/about> for more details.

Clock

Driftwood Mirrors, based on the Lizard. Contact Dom Harvey T: 07815 541859,

www.cornwallhoney.com/cornishdriftwood.html

Table

George Edyvean, FSC Oak & reclaimed slate. Contact: 01726 850803

Lounge

Fire

Cosy Home Stoves – Mitchell, nr Truro: 07775 595827, www.cosyhome-stoves.co.uk

Sofa

Supplied by Richard Cook, Falmouth: 01326 312422

Sideboard

Lucy Turner, Penryn. Local designer/maker who works with reused and recycled furniture. Contact:

07916 136087, www.lucyturner.co

Curtains

Designers Guild fabric made up by local firm Cotton Mills (both as before)

Flooring

Karndean flooring. Eco policy: http://www.karndean-commercial.co.uk/site/environmental_statement.cfm

Laid by local firm Bodmin Flooring: 01208 76859

Paintings

Caroline Walker, local artist who paints portraits of real cows. Contact: 07760267421

Windows

David Salisbury, Somerset. Good eco credentials: <http://www.dscons.com/environmental.htm>
Contact: 01278 764444, www.dscons.com

Shelves & dining table

Made by local carpenter George Edyvean from FSC oak. Contact: 01726 850803

Cow hides

Ikea (as before)

Other chairs

Julian Foye (local company with several shops in Cornwall). Contact 01872 222226

Lighting

Cadisch GIGB, now London but ex Penryn- eco LED throughout. Contact: 020 84927633
David Village Lighting - Kartell fly lights and big coloured ones. Contact: 0114 2634266

Dining chairs

Marks & Spencer, as before. Made from FSC certified timber

Doors & timber frame construction

Made by George Edyvean and John Edyvean – local carpenters and craftsmen (as before)

Latches

County Hardwoods, Taunton. Contact: 01823 443760
All FSC hardwood

Bedroom 1 (downstairs)

Bed & bedside cabinets

Marks & Spencer (as before)

Wardrobe doors

Made by John Edyvean, local carpenter (as before) using FSC wood supplied by local firm Griggs:
01726 65656

Hinges

Made by Dartington Steel Design, Dartington, Totnes. Contact 01803 868671

Floor

Antico from leftovers supplied by Bodmin Flooring (as before)

Lampshades

Made by Orange Wonder, local artist and craftsperson. Contact Tim: 07779 269136, www.orangewonder.com

Bedding

Marks & Spencer (as before). Duvets made from recycled plastic bottles.
Duvet covers from the White Company (contact: 08456 788150) & Designers Guild (as before)

Chest of drawers

Reused, from Janie & Mike Cooksley, Lower Barn www.bosue.co.uk

Mattress

Sourced from Bodmin Flooring (as before)

Bedroom 2 (downstairs)

Twin beds

Sourced from Julian Foye (as before)

Bedside cabinets

Found at a flea market, reused and painted

Bedding

Marks and Spencer and Designers Guild (as before)

Wardrobe

Reused, supplied by Tristan Hay, Grampound (local antique shop). Contact: 01726 883117

Wetroom/Bathroom

Low flow water and eco fittings

Supplied by local company T&I Design, Penryn. Contact: 01326 377045, www.tilesandinteriors.com

Tiles

Fired Earth & Original Style supplied by Nicobond, Plymouth (as before)

Mirror – LED.

Cadisch GIGB (as before)

Altro wetroom floor

Supplied by Bodmin Flooring (as before)

Entrance Hall

Stairs

Handmade from FSC wood by local company. Contact: Justin on 01726 890554

Energy monitoring equipment

Enigin, St Austell. Contact: 01726 871040, www.enigin.com

Balcony

Carpet

Simply Natural from Axminster Carpets, Devon. See <http://www.axminster-carpets.co.uk/environment/> for eco policy.

Supplied and fitted by Bodmin Flooring (as before)

Driftwood table

By Driftwood Mirrors (as before)

Bedroom 3

Bed

Reused, from Janie & Mike Cooksley, Lower Barn www.bosue.co.uk

Wardrobes

Made of reclaimed bits of leftover wood by John Edyvean, local carpenter (as before)

Chest of drawers

Reused - sourced from a flea market in Brighton

Bedside cabinets

Reused, found in Bosinver's shed.

Wardrobe

Made from spare wood by John Edyvean (as before)

Wood Venetian blinds

Made by Timberlux, using FSC certified Smartwood. Supplied and fitted by Bliss Blinds, St Austell: 01726 67321

Decorative plates

Made by Ulrika Jarl, local artist/ceramicist: 07773 328919, www.ulrikajarl.com

Bedroom 3 - Ensuite

Low flow water and eco fittings

Supplied by local company T&I Design, Penryn. Contact: 01326 377045

Tiles

Fired Earth & Original Style supplied by Nicobond, Plymouth (as before)

Bedroom 4

Wardrobe doors

Reused, sourced from St Columb Reclamation Yard: 01726 861119

Headboard

Designers Guild fabric, made by Tristan Kimber (local upholsterer based in Blackwater, Truro): 01872 561555 and Eve Hughes Interior Design: 01872 275734

Bedding

Designers Guild & White Company
Marks & Spencer (as before)

Bedside cabinets

Reused from Tristan Hay, Grampound, St Austell (as before)

Bed

Supplied by Bodmin Flooring (as before)

Papier mache fish

Created by Sue Baker, Dorchester: 01305 267746
Supplied by Hudson Art, St Ives: 01736 793147

Bedroom 4 - Ensuite

Mirror

St Austell Glass: 01726 338028

Sculpture

Made by Jo from the Wooden Fish Company from driftwood from Falmouth beaches. Contact: 01326 210252

Driftwood mirror

Made by Dom Harvey (as before)

Low flow water and eco fittings

Supplied by local company T&I Design, Penryn (as before)

Tiles

Fired Earth & Original Style supplied by Nicobond, Plymouth (as before)

Thanks

A big thank you to all the people who have helped with Lowen at various stages in the build:

George Smith, Mike Cooksley, Mat Ker, Ken Radford (People & Gardens, contact: 07816 230630),
Jamie, Sean, Darren, Clive Tummey, Paul Smith, Jim Burke, Mark Elliot.