



modcell<sup>®</sup>  
straw technology

balehaus<sup>®</sup>

# balehaus<sup>®</sup>

BaleHaus<sup>®</sup> is an entirely renewable way to construct homes, made from natural materials that are beautiful, affordable and sustainable.

balehaus<sup>®</sup>





## Clients

Using only natural renewable and breathable materials the BaleHaus® provides a comfortable, healthy environment for living and working.

BaleHaus® uses a system of ModCell® prefabricated straw bale cladding panels, triple glazing and airtight construction to deliver homes with insulation levels three times higher than current UK Building Regulation require. With heating demand 80% less than a conventional house and an A+ rating for energy consumption BaleHaus® offers a contemporary, stylish way of living within our environmental means. BaleHaus® delivers an

entirely renewable way to construct homes, made from natural materials that are beautiful, affordable and sustainable.

BaleHaus® is a living, breathing home that is cool in summer and warm in winter, effectively helping people reduce their CO<sub>2</sub> emissions without compromising how they choose to live their lives.

For some people, "Less is a Bore", BaleHaus® ensures that "Less is truly More" by delivering homes and communities that are safe, secure, vibrant, environmentally friendly and enhance our health, well being and happiness.



## Architects and Contractors

The BaleHaus® uses the ModCell® system of prefabricated straw bale or hemp panels, made from sustainable timber and can be rendered in lime, to provide a super-insulated home, made from locally available materials which are designed to be dismantled, re-used and recycled at the end of a typical 100+ year life if required.

The panels are prefabricated within 20 miles of your site reducing the travel distance for materials and maximising the carbon negative benefits of the system.

The system fits neatly and simply together and with precision timber cutting and airtight seals between each panel we can achieve PassivHaus standards with ease.

The panels arrive on site with internal and external finishes complete except for the final skim coat. Conduit for services can be prefabricated into the system. From base plate, a typical 4 bedroom house could be structurally complete and substantially weatherproof within a working week.

We can provide a level of service to suit your needs - from panel supply only to turnkey solutions.



## Technical

### u-Values

ModCell® Core, non-rendered	0.13 - 0.14
ModCell® Core+, rendered	0.10 - 0.11
ModCell® Traditional rendered	0.18 - 0.19

### Sequestered carbon (PAS 2050 methodology)

3m x 3.2m panel	1400kg of CO <sub>2</sub>
-----------------	---------------------------

### Fire rating (TRADA - Chiltern International Fire Ltd)

ModCell® Traditional	2hrs 15mins
ModCell® Core and Core+	Please call

### Acoustics Iso and reduction (BRE)

ModCell® Traditional	50db
ModCell® Core and Core+	Please call

### Panel sizes

visit [www.modcell.com](http://www.modcell.com) for information

Achieving the Passivhaus airtightness standard, the BaleHaus® is a living, breathing home that is cool in summer and warm in winter. Effectively helping people reduce their CO<sub>2</sub> emissions without compromising how they live their lives.

## Contact

ModCell®  
The Proving House  
21 Sevier Street  
Bristol BS2 9LB  
United Kingdom

e [enquiries@modcell.com](mailto:enquiries@modcell.com)  
t +44 (0)117 955 6731  
f +44 (0)117 304 1738  
w [www.modcell.com](http://www.modcell.com)



**RECYCLED**  
Paper made from  
recycled material  
**FSC® C015170**

Printed on FSC certified paper  
made from 100% post consumer  
waste. Printed using soya inks on  
a waterless press.