



modcell<sup>®</sup>  
straw technology

modcell<sup>®</sup>

KNOWLE WEST MEDIA CENTRE

# modcell<sup>®</sup>

ModCell<sup>®</sup> is a sustainable, prefabricated straw bale cladding panel. It can act as a structural or non-structural unit.

Designed for use in offices, retail units, residential, educational and commercial buildings.

# modcell<sup>®</sup>





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7	8	9

- 1 A local quality source of straw is identified.
- 2 Either a local “flying factory” is set up within 20 miles of site, where we train a local fabrication team to assemble the panels or we use a centralised manufacturing base that offers a lower price point.
- 3 Precision-engineered sustainable FSC and PEFC timber is supplied in flat pack form and made into frames.
- 4 The straw is packed into the frames and pre-compressed to a specified density.
- 5 The panels can be supplied either rendered or non rendered.
- 6 The weathertight panels are delivered to site...
- 7 For simple and rapid installation
- 8 The finish render or cladding materials and weathering details are applied on site to suit the main contractor’s programme.
- 9 Creating a beautiful finished building.

Off-site manufacturing in this way has many benefits, including zero-waste construction and low embodied energy, with reduced time and costs on site. It also makes a valuable contribution to the local economy.



ModCell® frames are made from sustainable FSC and PEFC wood, infilled with locally sourced straw and can be finished with a number of different internal and external finishes. The super-insulated panels, combined with airtight details, mean buildings using ModCell® can meet the demanding PassivHaus specification. This results in zero heat requirements, reduced energy bills and lower CO<sub>2</sub> emissions.

ModCell® offers developers and contractors a range of support packages from supply only to complete design and fit.





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

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

### Acoustics – sound reduction (BRE)

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

### Panel sizes

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

This innovative system  
creates buildings with thermal  
performance up to three times  
higher than the current UK  
Building Regulations requirement.

## 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)



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