

PROJECT →

# Thursford Barn, Norfolk

**Architect**  
Lynch Architects  
**Location**  
Near Holkham, Norfolk  
**Completed** 2013

**By Hugh Strange**

Since its construction circa 1700, Thursford Barn near Holkham in Norfolk has had many alterations and uses, including operating in the middle of the last century as a bicycle repair shop. Together with a grade II-listed cottage, to which it is linked by a winding brick wall, it has recently been

converted by Lynch Architects and now serves as holiday accommodation for the practice's staff.

All of the barn's internal walls were removed, leaving a perimeter wall of rough brick and flint rubble that in places was up to 600mm thick. This has been repaired using lime mortar, with Helix bars used in the north-west gable.

New windows and doors are made from painted joinery except for two frameless arrow slit windows fixed directly to the inside of the masonry. A new brick threshold and bench redefine the external space adjacent to the garden

in a room-like manner. The barn's existing floor was taken up and a new concrete ground floor slab cast, with insulation, under-floor heating and timber floorboards laid over.

The roof was removed and relaid using reclaimed pantiles to match the existing covering. Internally the ceiling is lined with tongue-and-groove softwood boarding. To accommodate the increased loadings the roof trusses were strengthened with new steel fitch plates either side of the existing timber structure.

The floor and roof insulation

allowed the transformed building to comply with Part L of the building regulations relating to holiday accommodation without insulating the external walls, which were simply coated on the inside with bitumen and painted white.

In order to maintain the barn-like quality of the large living space the other rooms are small in size and formed through a distinct and structurally independent insertion.

Hidden behind a new balloon-frame screen wall at ground floor is a bedroom and double-height bathroom, and at first floor a



Shuttered full-height windows are set into the brick and flint wall.

**Axonometric**

**1 Roof construction**

Reclaimed pantile roof tiles  
25mm battens at 400mm c/c  
Breather membrane  
25mm air gap between rafters  
Existing 75mm timber rafter  
50mm Xtratherm XT/PR rigid insulation between rafters at 400mm c/c  
Existing 100mm timber purlin  
100mm Xtratherm XT/PR rigid insulation between purlins at 1200mm c/c  
Vapour barrier  
25mm battens  
75mm s/wood tongue-and-groove boards fixed with countersunk nails and finished with Class 1 Thermoguard Timbercoat

**2 Fixed etched glass panel**

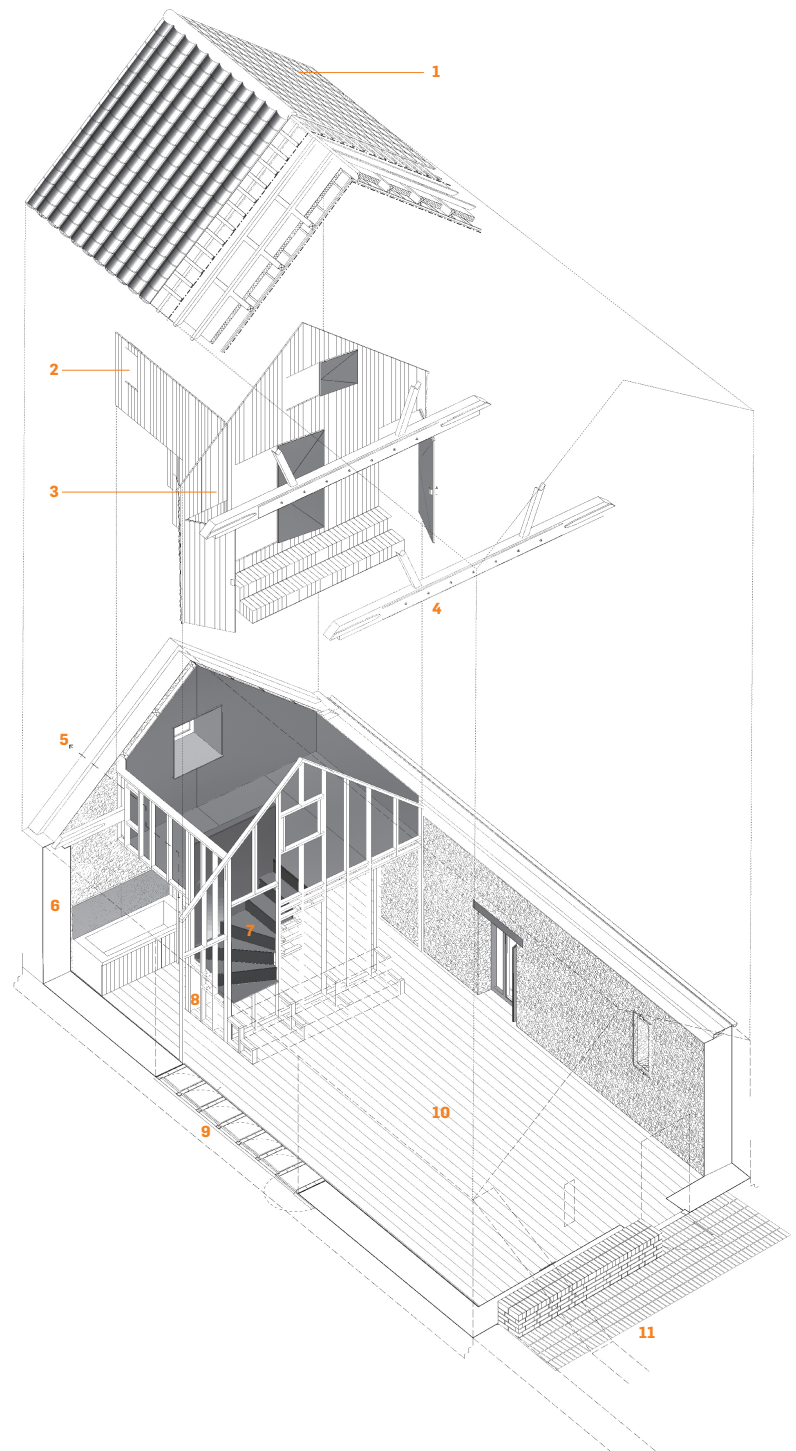
75mm s/wood tongue-and-groove boards set out from apex fixed with countersunk nails and finished with Class 1 Thermoguard Timbercoat  
Existing timber roof trusses with new steel fitch plates on either side and bolted through  
Concealed ventilation fan and ductwork for bathroom  
Existing rough brick and flint rubble walls, internally sealed with liquid damp-proof membrane and painted with white emulsion  
Birch plywood Norfolk Winder stair and vertically cantilevered balustrade

**8 New timber stud wall**

72 x 38mm timber C16 studs at approx 400mm c/c with acoustic insulation between  
12mm & 8mm birch plywood glued and screwed either side to timber studs  
New full-height window joinery: six fixed double-glazed units with internal privacy shutters and one openable timber shutter for ventilation  
150mm engineered oak floorboards finished with a Danish oil atop underfloor heating and a new sealed and insulated concrete slab to tie the existing walls together  
New brick threshold and brick bench



The lowest steps of the hidden stair extend into the living space, providing storage and a focal point.



second bedroom. The wall is lined in 75 x 18mm tongue-and-groove softwood boarding that is fixed back to a plywood lining on stud wall, treated with fire retardant and painted white.

The upstairs room is reached by a hidden stair constructed in birch plywood and concealed behind a door that has been lined in painted softwood boarding to match the timber wall. The first two steps of the stair, however, are on the "outside" of the wall and run the full width of it to the far doors.

Vertically clad in tongue-and-

groove boarding, they extend the internal wall into the room, providing both storage beneath their piano-hinged treads and a focal point to the room. Above, a hidden high-level timber shutter suggests an impromptu performance might transform the barn into a children's theatre.

#### PROJECT TEAM

**Architect** Lynch Architects

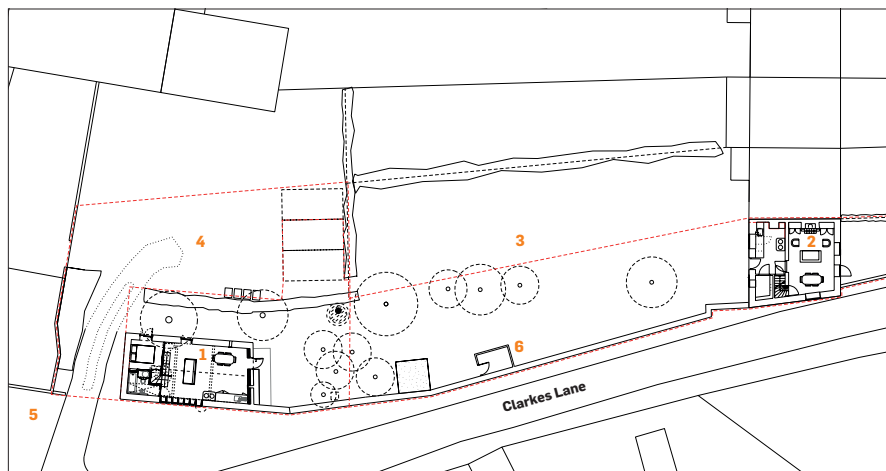
**Client** The Lynch Barn Ltd

**Structural engineer**

Rodrigues Associates

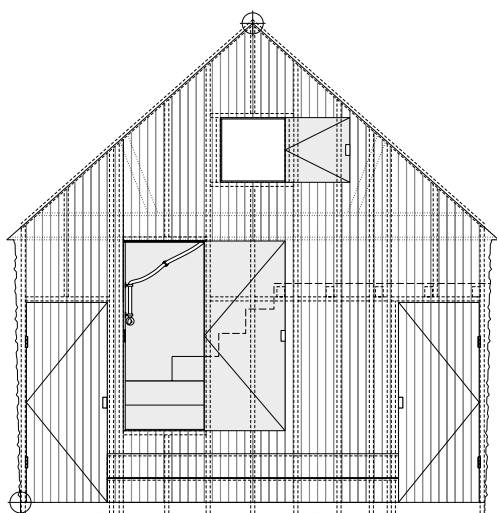
**Windows and doors supplier**

Riverside Joinery Norwich



#### Site plan

- 1 Barn
- 2 Cottage
- 3 Shared garden
- 4 Car park & access
- 5 Village green
- 6 Privy



Internal wall elevation



PHOTOS: PATRICK LYNCH

A new threshold with a brick bench defines the garden entrance.

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