

Ancient Party Barn by Liddicoat & Goldhill

Location: Folkestone, Kent

Shortlisted for the prestigious Stephen Lawrence National Architecture Award and awarded a 2015 RIBA South East regional award, the Ancient Party Barn is a playful re-working of historic agricultural buildings for residential use. The design inverts the typical barn-conversion type, creating hermetic, introspective spaces set in open countryside.

The clients, digital designer John Sinclair and fashion designer Deborah Harvey are collectors of salvaged architectural artefacts and materials, and previously engaged Liddicoat & Goldhill to remodel their Victorian home in East London. In November 2011, they acquired Staple Farm, a cluster of derelict buildings near Folkestone in Kent.

Rather than demand specific spaces or programmes, their brief focused on materiality and atmosphere, and on creative re-use of the existing volumes. Our task was to combine the quality of the surviving barn fragments with the texture and tone of their found materials.

Set in an Area of Outstanding Natural Beauty, the 18th Century threshing barn, dairy and stables are a prominent feature from the North Downs Way. To maintain the barn's brooding presence - and to provide security and a sense of protection from rolling Channel mists - the barn is usually kept in a closed state. However, industrial-scale kinetic mechanisms create openings that address key views into the countryside.

Massive, insulated shutters recall the original barn doors, and protect a vast rotating window operated by an adapted chain-lift. To the East front, an American aircraft-hangar door allows the exterior to concertina upwards, creating a canopy over the dining terrace and revealing ribbon glazing within. A single rooflight, running the length of the main roof's ridge provides steady ambient light to the living spaces.

The original green oak framing was in a state of near-collapse at the start of the project: it was carefully disassembled and removed from site for repair by the Green Oak Company, specialists in traditional hand-carpentry techniques. While the smaller stable range remains timber-framed, the main barn frame and cladding is largely cosmetic - the oak is supported by a steel exoskeleton clad in a super-insulated industrial SIP system. This structural approach allowed for rapid completion of the building envelope and incorporation of the huge opening mechanisms.

One of the central spatial challenges was insertion of a mezzanine (for sleeping and bathing) into the main volume. A tapering brick chimney supports the corner of the mezzanine, and incorporates a cantilevered, waxed steel staircase and an open fireplace. This hybrid device interrupts the regularity of the three-bayed barn and delineates the different programmes within.

The prevalence of recycled and found materials belie high-tech solutions to the building's operational requirements. A ground-source heat pump harvests warmth from the paddock soil to provide heating & hot water. Reclaimed light fittings were adapted to use long-life, low-energy LED lamps. Integration of heat, light and security systems allow Sinclair (who travels frequently between his studios in London, New York and Malmo) to manage the building and work remotely - the barn is part of the nascent Internet of Things.

Work commenced on site in September 2012 and completed December 2014.

Photos by Keith Collie and Will Scott