**What are Oast Houses?**

The UK has a vibrant history of brewing. Oast houses were primarily used to dry freshly harvested hops for beer brewing from the late 16th Century with construction peaking in the 18th and 19th Centuries but especially during the Victorian era.

Hops are a vital ingredient used to flavour beer. An Oast house typically comprised of a kiln (the 'Oast' part) with a plenum chamber fired by charcoal on the ground floor and drying floor directly above. The steep pitched roof channeled the hot air through the hops to the very top. A barn section was attached called the 'Stowage'. This included a cooling floor, a press at first floor level and storage on the ground floor.

Oast houses can be found across South East England and the West Midlands and are no longer used for agriculture. Many have been beautifully converted into residential homes, holiday cottages, offices and visitor attractions. The only variation to this trend is in Hertfordshire which have a number of 'Kilns' which are similar to Oasts except they were used to dry tobacco. However, there are some major challenges with Oast Houses.

**What is the challenge with an Oast House?**

Apart from the obvious puzzle of living in a circular house, the biggest challenge for modern living is their intended agricultural use and historical construction leading to water problems. A Cowl was fitted to the top of the kiln roof of an Oast house. This pivoted in the wind to allow the hot air from the fired kiln below to be drawn through the hops and out through the top. Perfect for drying hops, but not ideal for a residential dwelling.

The Oast Houses were built without any damp proofing at ground level. In addition, the majority were constructed using handmade bricks. These were smaller than normal to avoid the historical brick tax. To that end, some were constructed using stone to lower levels and brick to roof eaves. As an agricultural building they had no-need of a gutter. Also, in the past only cast-iron straight guttering was available which was very costly and almost impossible to adapt.

To maximise the hop drying, these Oast Houses were built in a conical shape. So any rain from the roof was shed onto the walls at the wider base. The solid wall construction used 'tie' bricks to bond the inner and outer walls together, so by modern standards that was a major problem, because any rain landing on those walls had a direct channel from the outside to the inside.

In addition, damp from the base can typically rise three feet or so and the combination of the damp concave shape allowing rainwater to penetrate the brick and the brick joints. Over colder weather, frost casuses joints to 'blow'. With water penetrating into structural brick itself, this compromises the structural integrity of the building. The prominence of Efflorescence (surface salt) on bricks is a sure sign of damp and water penetration.

There wasn't a solution to this major flaw in Oast Houses converted to residential properties.. **until now.** Roofline PVC bespoke made-to-order curved guttering is a major advance and as the only manufacturer and supplier in the UK and across Europe is a invaluable addition to Oast Houses to massively help protect the walls from damp penetration.

**Contact Rooflines**

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