

BASE DRIFT

IN THIS ISSUE, MARK HANSON, CHAIR OF THE GGF'S CONSERVATORY ASSOCIATION AND MARKETING MANAGER AT ULTRAFRAME, OUTLINES HOW TO AVOID FAILING FOUNDATIONS.

Everyone knows that the most important part of any building project is the selection and installation of appropriate foundations. This has never been more true than now, as with constant fluctuation in seasonal climates many buildings – including conservatory bases – which utilised traditional footings, have become subject to large degrees of movement and in some cases complete failure, which has led to very costly repair bills.

Dealing with a remedial situation is quite different to a new installation, and in this article we would like to outline the steps installers can take to ensure they are not caught out with failing bases on any new conservatory builds.

Recognising that conservatory retailers were having problems, Ultraframe has a strategic partnership with Quickbase Foundation Systems - we now offer a fully engineered manufactured base solution to eliminate problems arising from difficult ground conditions comprising of localised deep rooted tree structures, clay soil or loose surface soils.

Let us state straight away that this is NOT to be confused with a number of pre-packed modular light weight systems that are currently available on the market – these may be suitable for certain ground conditions but the concern is that no correct ground condition survey is conducted before they are deployed.

Ultraframe Quickbase consists of 3 distinct elements;

- The driving of helical piles using air compression (no heavy plant)
- A box section framework atop the pile caps is grout filled (ground beams)
- An insulated deck is bonded to the framework

So, what is the process that a retailer has to go through to get the Ultraframe Quickbase conservatory base system?

As the base system is designed specifically to accommodate individual site conditions an initial site survey sheet is completed by the retailer's Surveyor /Installer giving Ultraframe/Quickbase design engineers

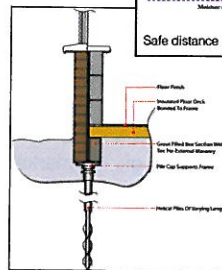
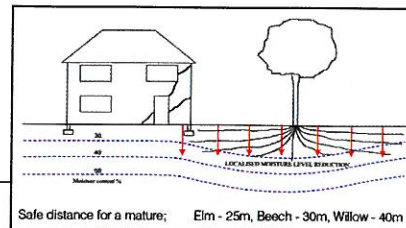
basic details such as required size of base, ground type, distances to any adjacent tree structures, access restrictions and positioning of existing manhole covers etc.

From this, an engineered specific design is created with accurate positioning of the required number of helical piles and ground beams to ensure the structural integrity of the base size proposed. An installation date is agreed and then at this point the only requirement from the installer is to clear away the top soil of the site to a depth of normally 300mm below the proposed finished floor level (this is subject to site survey) – the removal of this smaller amount of spoil saves considerably on landfill tax and of itself can significantly simplify site installation.

Ultraframe Quickbase employs its own installation team to rig the whole base, meaning you can deploy your own base crew elsewhere and take on more projects. The UQ team arrive on site and complete all aspects of the fitment of the base sections leaving the retailer with a perfectly level platform to begin laying the internal and external brickwork. In most cases the Ultraframe Quickbase system is installed from start to finish in a day, meaning that the complete installation time for a conservatory is almost halved. For those retailers operating in regions where for example clay is a major problem encountered every day, they may prefer to become an Ultraframe Quickbase dealer and invest in stock and equipment to undertake their own installations or even offer a sub contract service to other retailers. UQ offer a comprehensive training programme to those retailers who wish to become an accredited dealer.

There are further advantages to the UQ system:

- no need for mass concrete foundations
- reduces site excavation and spoil disposal
- better quality control – everything is pre-prepped offsite which ensures the highest quality and the tightest tolerances
- ideal for houses with limited access- less spoil to barrow out, less concrete and



bricks to barrow in
 • corrosion resistant floor and ground beam construction
 UQ fully complies with Building Regulations and this can be taken care of through private partnering with a UK wide inspection service provider. The

system can also be provided with a 10 year independent warranty (which can also be extended to cover the whole conservatory).

And so – in summary - this strategic partnership between Ultraframe and Quickbase is further evidence of Ultraframe's desire to increase its penetration of the conservatory market through innovation and service excellence.

The Ultraframe structural engineering team comprising Tim Harris and Trevor Watkins are on hand to handle your questions about the UQ system, any particular problems you are having now, or to have a general discussion about ground conditions.

The Quickbase system is constructed in three main areas;

- Helical shaped Piles are used to trap the soil and increase load capacity. These are air driven into the ground at pre-designated points and depths to load bearing strata beneath the problematic zones of roots or moving soils. Thus removing the need for mass concrete foundations and heavy plant machinery
- Pre-formed Pile heads are then attached, which are both vertically and horizontally adjustable to ensure level, then framework constructed of engineered rectangular hollow sections are laid above. Steel reinforcing are placed inside of these and then the whole framework is grout filled to ensure a solid framework for the deck panels to be fitted on to.
- 100mm Moisture resistant insulated panels are bonded to the top of the box section

Framework. This light weight composite construction ensures high load carrying capacities and as level means the internal floor finish can be laid directly on to it thus avoiding expensive levelling screeds.

For more info contact Ultraframe on 01200 443311 or visit: www.ultraframe-conservatories.co.uk

Ultraframe Quickbase Installation Steps

