



BERBEN

**Working
With**



Modular Build
Construction

19 Pike Drive
Chelmsley Wood
Solihull
West Midlands
B37 7US





- Berben working with Solihull Community Housing have jointly delivered a project to erect an accessible Wet room as part of their initiatives to demonstrate continual improvement within the existing Partnership of working on where their fast build system with limited access meets their cost effective criteria's.
- Berben are a local company based in Kitts Green and are the company responsible for constructing many Extensions, Adaptations and Alterations for the provision of level access facilities for the Private & Public Sector on a term contract for the past 4/5 years.
- It is hoped that they will help improve turn around time for extensions thus providing a more efficient service for Solihull, Customer's, Tenants and Residents alike in a cost effective way.

- **Site Preparation**

- Remove all shrubs, plants and turf. Replant where possible to other locations as agreed with Customer. Treat Area with approved weed killer and lay geo-tex membrane to inhibit further growth.



- **Site Preparation Cont'd**

- Due to restricted access, all labour, plant & Materials had to be directed through the Converted Garage. The proposed new doorway into the new modular building was formed to improve movement. Adequate protection was installed to the room to allow transfer of Products and Resources



- **Services & Drainage**

- Owing to the unknown routes of existing pipe works, water & electric supplies drainage inspection was delayed by 1 day.



- **Mini-piling ~ Mini Rig**

- Mini-piling with our mini-rig is a skilled method of piling to support a structure in poor ground conditions.
- Our steel tubes come in lengths as small as 1.5 meters' which we weld together to produce varying depths of pile to suit the existing ground conditions, and again with hardly any waste.
- We install 150mm dia cased driven piles for this kind of steel based structure to support our modular building that meets all Building Control Requirements.
- Our driven piles ranging from 150mm Ø up to 323mm Ø, with loadings from 100kN up to 580kN





Installation of Steel Base

- Berben design and install Modular Steel Bases to be the easiest, fastest, strongest and best steel base for modular wall system
- Berben steel bases are the modern way to quickly and easily construct any modular or Conservatory base. The system stands on a just a few easily constructed concrete pads or foundation blocks and simply bolts to the house wall. In areas where poor soil stability is evident, mini piling can be installed to meet Building Control Requirements simply and easily.
- Berben steel bases are constructed from strong galvanised steel box sections and delivered to site in sections to ease the burden of manual handling and is quick and easy to assemble on site.



• Erection of Extension

- Building components delivered with windows, doors, services and floors ready installed.
- Floor sections are installed and fastened to the sub frame and the wall units are bolted together around the base.
- Walls are tied together with ceiling panels of the same construction as the walls and the Flat or pitched roof sections are added. The whole building is secure and water tight in 1 day.



- **Erection of Extension
(Con't)**

- The modular wall sections are constructed of a timber construction to provide an internal plaster board finish and an external construction of vapour barriers, cementitious cladding board, incorporating all insulation and membranes to achieve the following U Values:
 - **Walls – 0.27W/m²**
 - **Floors – 0.22W/m²k.**



- **Erection of Extension
(Con't)**

- The installation of Vapour barriers, and fibre cement cementitious boarding to the external meets 30 minute Fire Rating where the modular build abuts a boundary.
- A 3mm polymeric render is applied over the external boarding to a decorative finish to appease the Clients or Customer's requirements. Varying Colours are available for selection to suit existing structures



- **External Finishing's**

- PVCu Rainwater gutters and downpipes installed to correct falls onto new PVCu Fascia Boards and discharged into new or existing Rainwater Gullies.
- Brick Slips installed above and below window to match existing fabric
- Gravel Border and paving reinstated to around new modular build and all areas of existing areas made good and cleaned





- **Internal Finishes**

- Fully tiled accessible shower area with Thermostatic Shower with curtains. Shower screen if preferred.
- Accessible Wash Hand Basin & Close Coupled W/C
- Slip resistant Flooring with Coved Skirting.
- Decorated Walls, Ceilings & Woodwork.
- Specific Grab Rails and aids to meet all Occupational Therapist's & Customer's Requirements

