

Volumetric Building Construction

Location: LB of Hammersmith & Fulham, London W12



HA Marks are working in partnership with Powerwall (www.powerwall.co.uk) to install off site manufactured modular units to the roof space of 5 existing blocks and infill between two pairs of blocks. The additional storey and infill will provide 44 new dwellings which have been designed to achieve code for sustainable homes level 3 and the client is aiming to achieve BREEAM 'Very Good' rating.

As can be seen in the photos the Volumetric Modular units arrive to site fully fitted out and in weather tight condition. The tyvek layer has been removed from the modular unit in photo 3 for the purposes of photographs as the installation day was dry.

Running through the install process using the photographs as reference.

1. - The volumetric unit arrived to site and our operatives prepare for the lifting operation. The balcony units gets bolted to the modular units towards the Ducane Road elevation.
2. - The roof gets a clean down prior to lift and all drainage and holding down bolts are rechecked.
3. - The first lift in progress – Note the kitchen installed to the right of the unit.
- 4&5 - The volumetric modular unit is lowered over the hold down rod & support pads previously installed.
6. – The lifting chains are slackened and the first of eight units planned for install on this occasion is complete.
7. - The lifting process complies to pre-agreed local authority approvals under full supervision of the experienced site management team.



8,9,10 – Some Further photos to demonstrate more key aspect of Powerwall volumetric unique design. The steel rods connect the buildings together, the drainage fits nicely into preformed floor voids and note the insulation values of the floor and indeed the modular building as a whole.

11. – We purposely removed the weather proof layer of photo 10 to demonstrate when the modular unit being lowered in picture 11 is in position, a one bedroom apartment unit is virtually within weeks of handover.

12. – The tie rods are being inserted to the bolts and secure the units. Note the overhanging balcony which will form the new entrance to the apartments. The entire roof space is taken up with living space by designing the entrance walkways in this way. Please note the fire proofing of the void space under the units.

13. – A view of the roof surfaces which arrives to site in weather tight condition this allowing full fit out of the volumetric unit off site this reducing on site construction time.

With all the units delivered and installed in phases plus one working day. It leaves the balance of the week to complete the interface finishes within the apartment, second fix the services, complete roof finishes and clad the volumetric modular buildings which in this case is finished insulated render.



For more detailed information on the volumetric modular building and specification, please visit www.powerwall.co.uk

Key contacts on this Ducane Road projects are.

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