THIR13EN & MAYFAIR
DEVELOPMENTS

“The home…

...that does more!”

196 Eastcote Avenue

West Molesey

Surrey

KT8 2EX

Intelligent Thinking, Smart Homes

FEATURES

- MECHANICAL VENTILATION AND HEAT RECOVERY (MVHR)
- THERMODYNAMIC HOT WATER SYSTEM
- 100MM EXTERNAL INSULATION
- WATER DESCALER
- ZONED UNDERFLOOR HEATING
- ENGINEERED OAK FLOORS AND DOORS
- KITCHEN WITH SOLID OAK TOPS AND BOSCH APPLIANCES
- LOW ENERGY FIRE RATED LED LIGHTING
- DOUBLE GLAZED WINDOWS WITH ARTI-SAN GREY WOOD FINISH AND LOW-E GLASS
- BRUSHED STEEL SOCKETS WITH USB PORTS
- INTERCONNECTED FIRE ALARMS
- L-SHAPE BATH WITH SHOWER TOWER AND WATERFALL TAPS
- COMPOSITE DECKING, SYNTHETIC GRASS AND RIGID CLOSE BOARD FENCING
- DUAL COLOUR RESIN DRIVE
- INSULATED GARDEN OFFICE WITH MVHR, LED LIGHTING AND SOCKETS WITH USB

A lovely home that defeats fuel poverty, this very warm home has been fully refurbished to maximise energy efficiencies while providing an efficient low-carbon solution.

196 Eastcote Avenue is a property where the words ‘extensive refurbishment’ doesn't quite cover it…. The only originals left are the foundations, four walls and intermediate floor that has also been strengthened and improved with the additions of insulation and new plaster boarding.

Fitted with new technologies for a more sustainable home including a heat recovery system and a thermodynamic panel that will produce hot water 365 days a year

The electrical and plumbing systems have all been installed from new - every cable and pipe run has been updated including the addition of smart meters and consumer units.

The ground floor has been extended and opened up from the front to the back with oak kitchen tops and oak flooring leading to a three meter wide French Door unit. The skylight allows natural light to flood in and give you a view of the crisp, clean and maintenance free garden complimented with a garden office / room.

The bathroom suite features an L-shape bath with brushed steel shower tower and waterfall taps with digital radiator.

The master bedroom features a two meter wide window for plenty of natural light with a spacious built in double wardrobe plus shelf space.

The existing roof has been recovered with all new sheathing and liners with a tough and durable GRP resin matching both the extension and porch.

The fashionable driveway is finished with a durable and UV resistant dual colour grain and resin finish with space for two cars.

CAREFUL DESIGN MAKES ANY PROJECT ACHIEVABLE

Thir13en & Mayfair

Sustainable solutions for all projects

There are a number of environmental and health benefits related to the systems and products installed at Eastcote Avenue. Firstly the **Mechanical Ventilation Heat Recovery (MVHR)** – as well as saving you money by 'recycling' the heat that is lost through traditional means of ventilation, it has a continuous extraction and supply that helps reduce the build-up of dust and allergens within the home. This is achieved by constantly removing the damp and polluted air (that create the ideal conditions for such things as dust mites and mould) thereby lowering the risk of dust related allergies and asthma. Other common pollutants can also remain in circulation throughout your home such as paints and more frequently cleaning products that can release harmful compounds... On top of this there are the every day odours from cooking, toilets, tobacco and pets circulating around the home. The MVHR unit exhausts this warmed polluted air through a heat exchanger that then passes the heat into the incoming fresh air. This saves on your energy bills by enabling you to heat your home to the preferred temperature then allowing the heating system to basically work on standby while the MVHR system recovers and recirculates the already heated air at a very high efficiency.

The **Air-tightness** of the building envelope, windows and external doors all enhance the specified thermal performance of the MVHR system that has been complemented by design solutions around apertures, and the special letter box for this purpose is designed to be draught-proof.

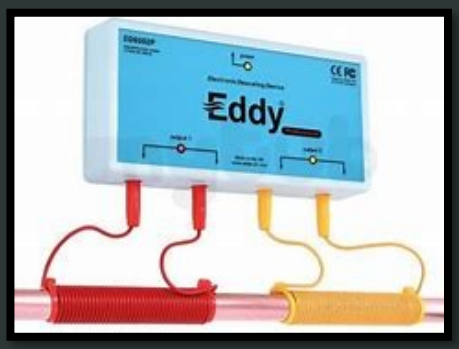
The **Thermodynamic Hot Water System** is a great alternative to a solar panel as the thermodynamic panel does not require direct sunlight and thereby operates all year round even in the rain and snow. The refrigerant used in the system enters the panel at -22C and absorbs the 'heat' from the atmosphere around the panel – this could be a 31C summer day or a -2C winter's night. The refrigerant's boiling point is -16C and it quickly vaporises into a gas which then passes through a compressor and the pressure reverts it back to a liquid. It is this phase-change that creates the heat which then passes through the heating element and into the water itself. The system uses a very small amount of electricity to run the phase change compressor but for every unit of electricity used the system will generate 3-6 units of heat for your water.

The **external insulation** is self-explanatory as are the 'A+' Rated appliances including the kitchen's hob. A common misconception is what the difference is between an electric hob and an *electric induction hob*? Whilst they may look the same they work very differently as the *induction* hob does not lose heat to the atmosphere when heating a pan. Using electromagnets and magnetic based pans, electricity is passed through coils creating an electromagnetic field that induces currents in the pan and generates the heat — essentially it is the pan that has become the heating element. This more direct form of heating is both quicker and much more energy efficient as traditional electric and gas hobs lose heat to the surrounding air and surface area around the pan. It is unavoidable that some heat from the pan and its contents is lost to the atmosphere, however this will now be recovered with your MVHR unit to heat the incoming fresh air.

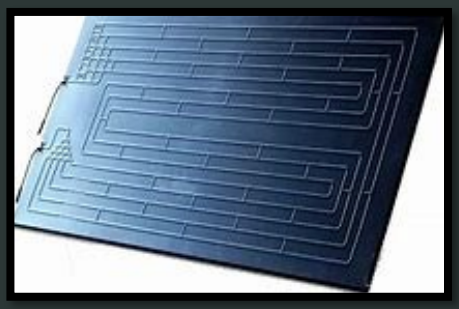
The Garden - is a low-maintenance sun-catch relaxation location with an insulated office/room at its end, allowing families to use the area to suit their personal requirements. A recent comment was made to us 'how are you sustainable if you are using synthetic grass in your garden?' Everybody has their own idea of sustainability or being 'green' but many people believe its just the use of natural materials that qualifies... But we as a planet have a problem — there are billions of tonnes of recyclables out there. If we don't recycle them then they are put into landfills or they may find their way to the oceans where they can leach toxins into the water and subsequently the land and the food-chains. Reusing/recycling is sustainable and many synthetics can be reused again and again. It doesn't require valuable water to maintain it; it also doesn't require chemical fertilisers that leach into the water table. Further, synthetic grass doesn't require cutting which involves making the lawnmovers, consuming electricity or a fossil fuel which pump harmful C02 and sulphur dioxide into the atmosphere. The recycled decking also requires no chemical treatments. Being 'green' isn't just about what the product produces or how its produced, it's also about what it needs throughout it's lifespan… and potential reuse thereafter...

MVHR

WATER DESCALER



THERMODYNAMIC PANEL



THERMODYNAMIC TANK

MVHR

A balanced heat recovery system works by continuously extracting air from the wet rooms within your property (kitchen and bathroom) whilst simultaneously pulling in fresh air from outside which is filtered, introduced and extracted via a network of ducting. The stale warm air is drawn through an air-to-air heat exchanger which warms the incoming fresh air, without mixing the stale air with the fresh air.

THERMODYNAMIC PANEL

A thermodynamic system works by sending a very cold liquid refrigerant to a panel on the outside of the building (the liquid temperature is appx. –22C). As it flows through the veins of the panel it absorbs heat energy from the surrounding air and at –15C it vaporizes into a gas. This is then passed through a compressor and put under pressure to convert it back to a liquid. It is in this phase-change that heat energy is released. After returning to a liquid it is then recirculated through the panel for the process to start again. This system heats water to 55C and once a week an emersion heating element will heat the water to 60C to perform pasteurisation.

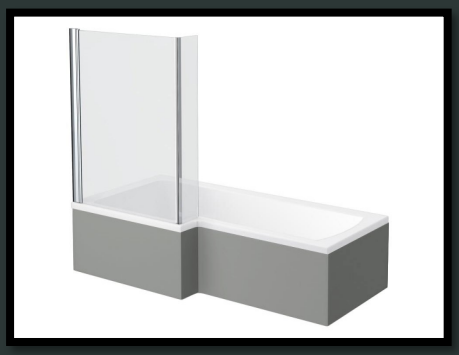
WATER DESCALER

The water descaler uses electromagnetic waves to highly efficiently reduce effects of calcium, magnesium and manganese salts in hard water, otherwise known as 'limescale'. It alters the form of the calcium and magnesium crystals in water to a softer, less harsh and less corrosive type which is much less likely to adhere to taps, basins, toilets and pipework.

By reducing the metal ions (calcium is a metal) which react with soap you are less likely to experience things such as the 'bathtub ring' or 'spots' on tiles/glass and find less hindrance when cleaning combined with 'friendly' detergents. This also protects your pipework and keeps the water flowing smoothly. Most people find that they don't need to use as much detergents/soap as previously...

DIGITAL RADIATOR

L-SHAPE BATH



WATERFALL TAPS

SHOWER TOWER

DIGITAL RADIATOR

Meeting the new EU 2018 Regulations these electric heaters are fitted with a 24 Hour 7 Day timer, digital temperature control and an electronic thermostat for accurate room temperature measurement. Perfect for bathrooms thanks to their IP24 rating meaning this electric radiator is suitable to be used safely in bathrooms. The digital panel heater warms up to a comfortable pre-set temperature that in turn provides a low level radiant heating effect for a more even heat distribution, while adding heat distribution through the MVHR system.

BATHROOM SUITE

The bathroom features an 1700mm L-shape bath with shower screen. The shower is a contemporary brushed steel tower that also comes with a hand held shower attachment.

Both the bath and hand basin are fitted with waterfall mixer taps manufactured from solid brass and chrome plated. They also feature ceramic disc technology that ensure smooth handle operation and drip free performance for many years.

The toilet and basin are manufactured from high quality white vitreous china and finished in a gloss glaze. The toilet seat is soft close and has a top mounted fitting for an easily changeable seat.

MICRO-CLIMATE

This home has been designed to have a thermostat governed micro-climate, leading to energy efficiencies and a healthier way of life. All appliances and supporting systems leads a family to enjoy the comforts of elegant living, while seriously reducing their carbon footprint.

DISHWASHER

FRIDGE

INDUCTION HOB

ELECTRIC OVEN

KITCHEN

The spacious kitchen is a slab style light grey backstop with a 40mm solid oak worktop and border. Featuring plenty of cupboard space, a tower unit and wide drawers all with soft closing hinges and sliders.

The appliances are by **BOSCH** and include:

Induction Hob: Features four zones with powerful and responsive heating. Electromagnets under the surface use automatic pan recognition to heat the base of the pan instead of the whole zone. This gives you full heat control and very little energy is wasted while leaving the hob cooler to the touch.

Electric Oven: The 3D hot air function delivers heat evenly over three levels making it ideal for preparing multiple dishes at the same time.

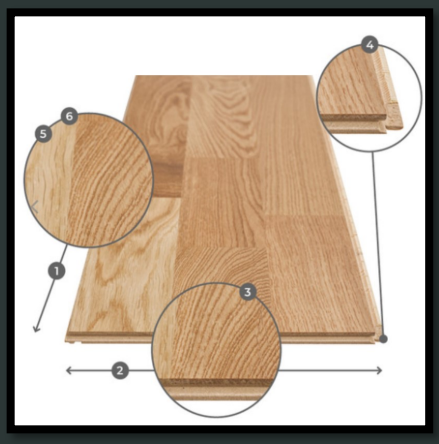
Dishwasher: Choose the Eco50 to save energy or the VarioSpeed to get powerful cleaning in half the time. This unit also features ActiveWater technology saving the amount of water used.

Fridge: The large side by side fridge/freezer boasts 522 liters of storage. Special features include multi-flow air cooling, humidity controlled 'FreshProtect' box, water, ice cube and crushed ice dispenser, digital temperature and settings display and LED lighting.

BOSCH

HEATING FOIL

ENGINEERED WOOD FLOORING



SOCKETS WITH USB PORTS

OTHER FEATURES

The property has many other features throughout including:

Underfloor Heating: The underwood heating foil provides efficient evenly distributed heat. Controlled with digital thermostats the ground floor has two heating zones. It is made from fluoropolymer insulated heating cable sandwiched between laminated reinforced foil.

Oak Flooring: The ground floor is a delightful European Rustic Oak engineered from three layers. It is 10mm thick with a 2mm oak top layer with vibrant color and grains with mineral streaks finished with a matt lacquer.

LED Lighting: The lighting is made of energy-efficient LED's made of brushed steel bezel with a fully open design; while efficient they operate at 10 degrees cooler than standard downlights which assists with controlling the micro-climate of the building... Fire rated to 30,60 and 90 minutes and compliant with Part C, Part E and Part L of the Building Regulations.

Electrics: The power outlets are brushed steel screwless plates with some sockets featuring double USB sockets for convenient charging and an all new consumer unit with the latest safety features.

Fire Alarms: The fire alarms are interconnected and mains powered with a battery back up. The thermistor (located in the kitchen) triggers the alarm when a temperature of 58C is reached and reacts to heat instead of smoke to avoid false alarms. The upstairs alarms use ionization technology and react to smoke.

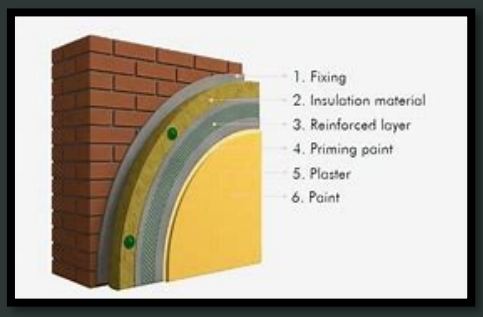
Oak Internal Doors: Oak veneer finished with a durable lacquer and the latest stylish chrome/brushed chrome curved handles.

RENDER AND THERMO PANEL

COMPOSITE DECK

SYNTHETIC GRASS

RENDER SYSTEM



EXTERNALS AND GARDEN

Features include:

Garden Office/Recreation Room: The garden office features 12m2 of internal floor space wrapped with insulated walls and roof, properly rated double glazed windows and sliding door with grey frames matching the house. Inside it has been finished with a laminate wood floor complete with brushed steel sockets with USB, LED lights, flat panel heater and a heat recovery fan. Its an ideal space suitable for many uses.

Decks and Lawn: The decks and lawn are maintenance free. The deck is constructed from composite decking and never needs treating. Constructed from recycled polymers and wood fibres in a deep walnut color. The grass is synthetic, it has a 30mm pile height giving it softness and a vibrant all year round color with a crisp finish around the edges and joint with the decking.

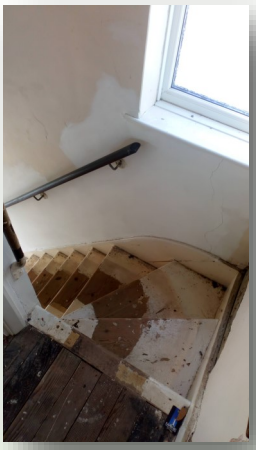
Fencing: The fencing is similar to feather edge fencing but all held in place with heavy duty framework making it very rigid. It is also fixed to concrete posts which of course will not rot and will remain in place.

Driveway: The driveway is finished with a tough UV resistant resin with fine grain aggregates in Celtic Plum and Silver colours framed with edging stones and gully drainage to a soakaway and space for two cars. The side path is finished with a beautiful light grey natural stone and runs all the way through to the end of the garden.

Insulation: The whole house has been wrapped in graphite infused 100mm thick EPS, mechanically fixed to the masonry wall. This is finished with a reinforcement mesh and then a coat of grained elastomeric render — resulting in a strong, impact and crack resistant surface whist providing the extra protection against the cold and heat losses associated with a solid masonry wall.

196 EASTCOTE AVENUE—THE STORY IN PICTURES









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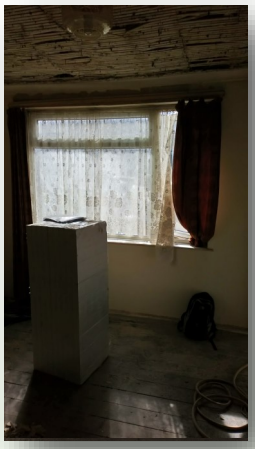


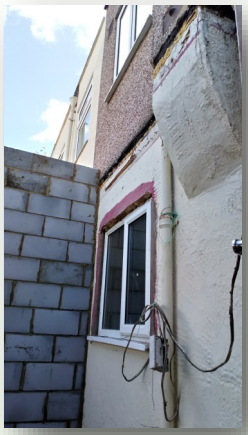







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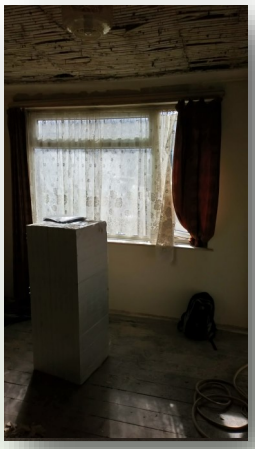

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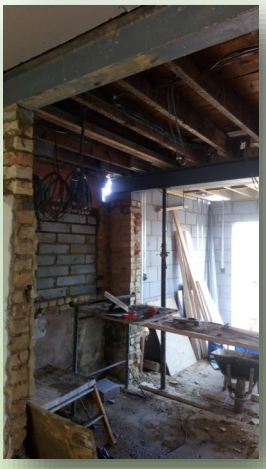




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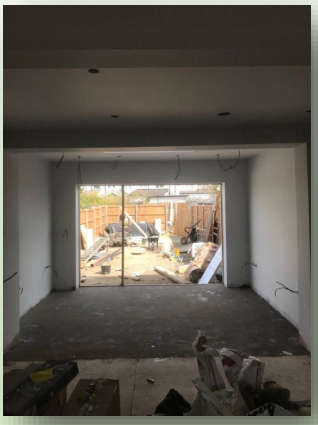
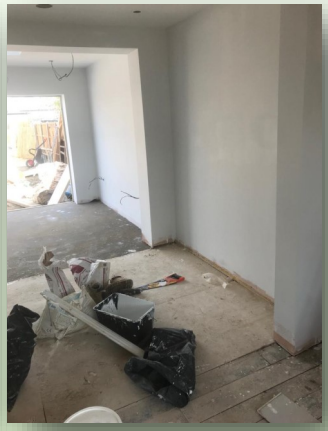




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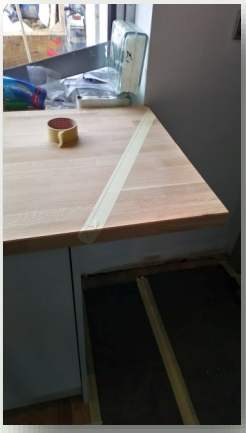


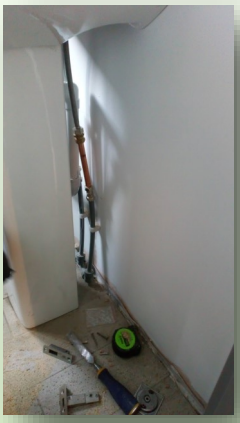




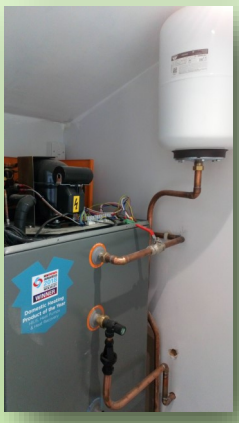
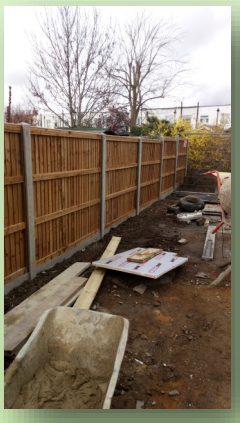

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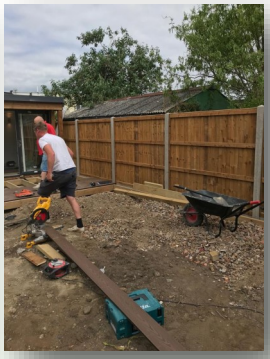

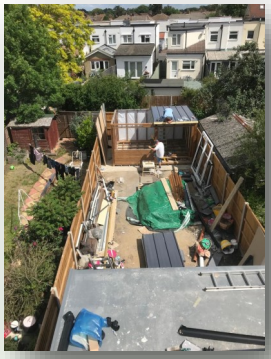

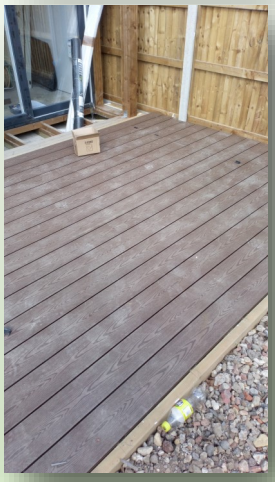

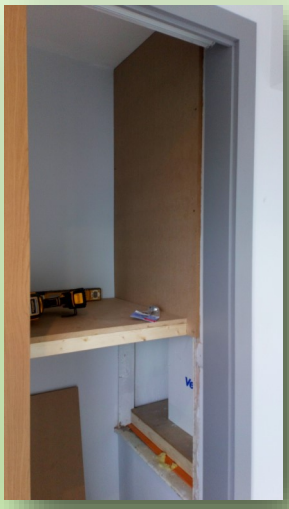

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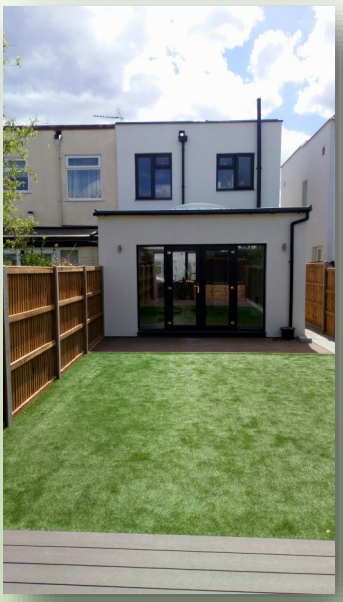

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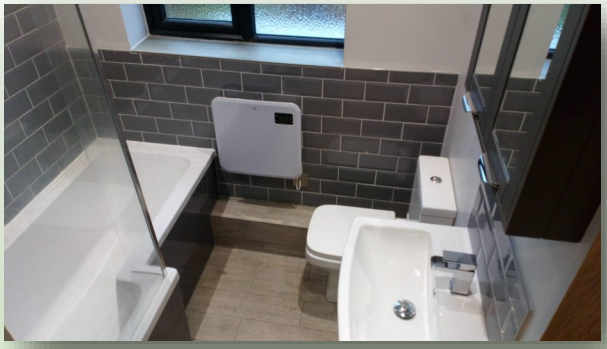

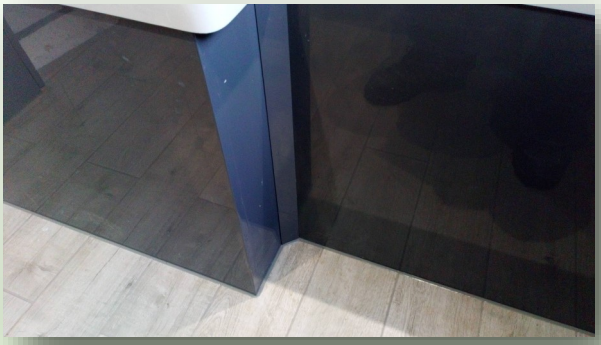

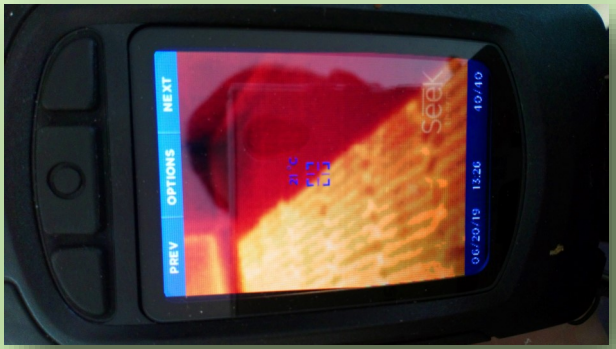

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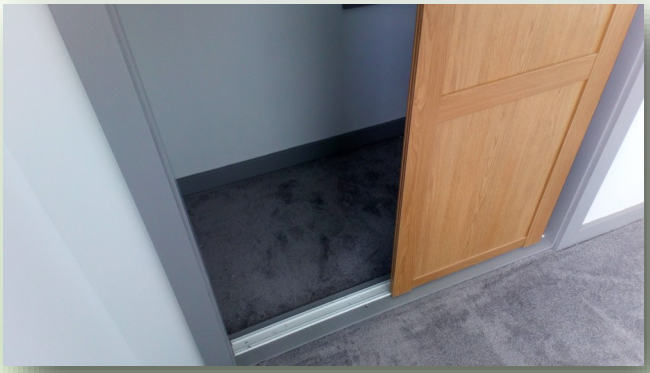
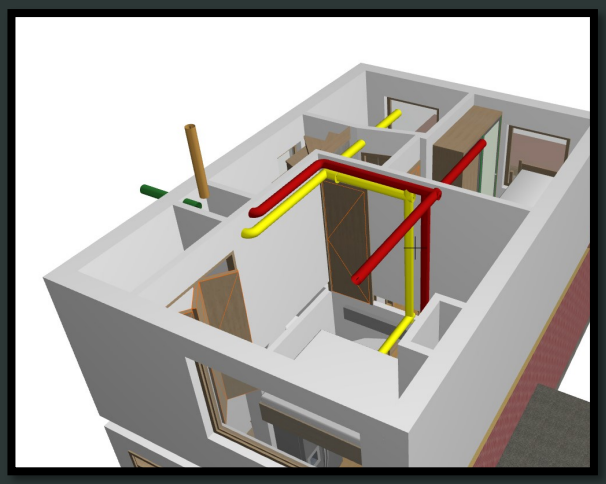
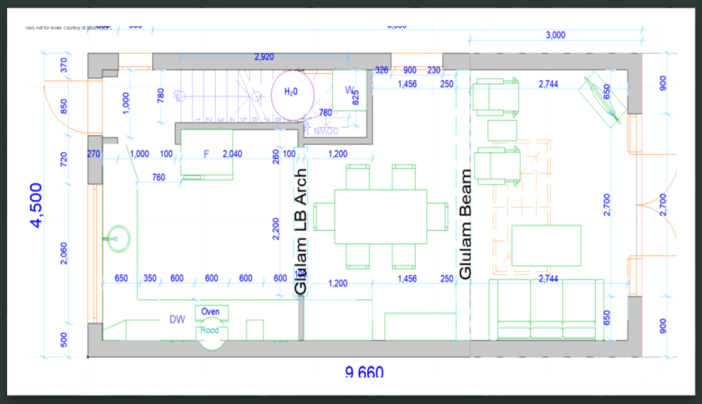


THIR13EN & MAYFAIR
DEVELOPMENTS

We are a SAP compliant, energy efficient and low-carbon building solution development company constructing 'energy efficient' Sustainable Homes combating fuel poverty in all instances. We have over 35 years in the construction industry; knowledge gained not only within the UK but from around the world. The best practice design principles and processes we employ have helped us participate in building many buildings around the world including the US and the UK. We are experts in lightweight low carbon building systems – we take a 'fabric first' approach which reduces energy demands considerably whilst minimising carbon emissions and consequently the carbon footprint.





Intelligent Thinking, Smart Homes

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