





SECOND FIX

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SECOND FIX

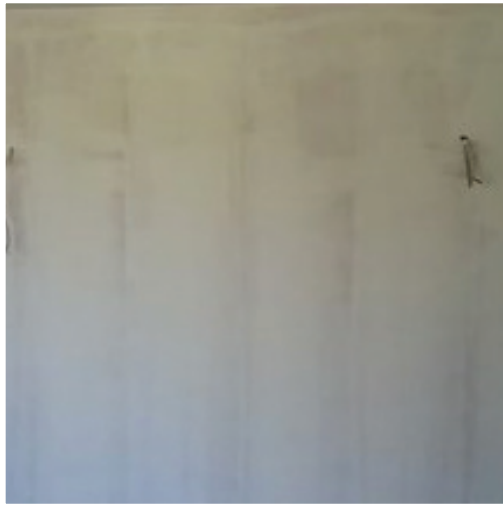
SECOND FIX

- 1 A mist coat of paint should be applied to all walls and ceilings before any Second Fix works commence.
- 2 Ensure all plaster is dry (minimum 24hrs) before application of paint.
- 3 Heating and lighting should be live within plots prior to painting.
- 4 Kitchen sinks must fit into worktop allowing for tolerance in base unit, including accommodation of the half bowl and fixing clips. TW specified fixings must be used as outlined in HSE Manual Guidance.
- 5 Sink base units must be fitted with correct shelf to accommodate waste trap.
- 6 Contractors must use the Adey app to confirm that the system has been cleansed and the water test has passed.
- 7 All plot keys must be labelled and controlled by the SiteM. When keys are issued to subcontractors this must be recorded with plots being inspected to ensure no mess or damage occurs.
- 8 Waste pipe support requirements may vary.
- 9 For fire door installation, please refer to S15 First Fix.

LOFT HATCHES



SECOND FIX



- 1 A mist of paint should be applied to all walls and ceilings before any Second Fix works commence. Ensure all plasterboard is covered by the mist coat. Consideration should be given to around pipes, and inside boiler units. Ensure all plaster is dry (minimum of 24 hours) before application of paint. Difficult to reach areas such as above kitchen units, behind radiators and inside the cylinder cupboard should be fully painted prior to fitment of equipment to achieve a better finish. Heating and lighting should be powered on in the plot.



- 2 Loft hatch to be installed as soon as practically possible to prevent moisture build up in loft space.

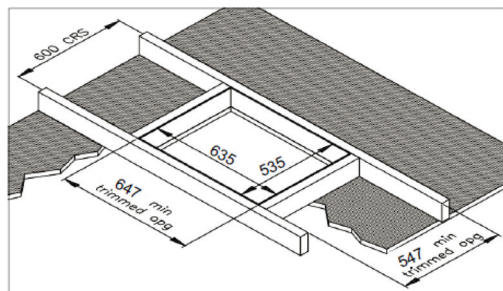


- 3 Depending on location, loft hatches on 2½ storey homes may require a fire rated loft hatch however, the specific drawing should be checked. Manufacturer's installation guide to be provided to site prior to First Fix commencement. Some product types require the opening noggin to have a fire board between the noggin and the hatch. It is also recommended that fire rated hatches fit tight to the ceiling plasterboards and tight around the opening framework in order to minimise the possible passage way of smoke.

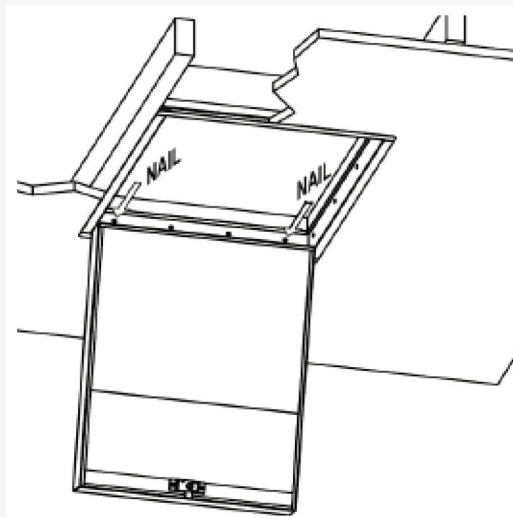


FIRE RATED LOFT HATCHES

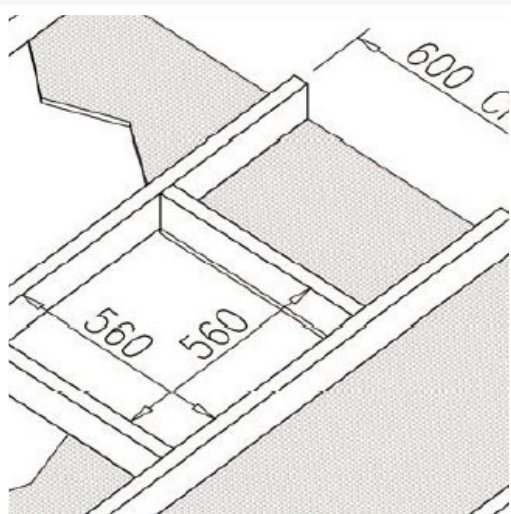
SECOND FIX



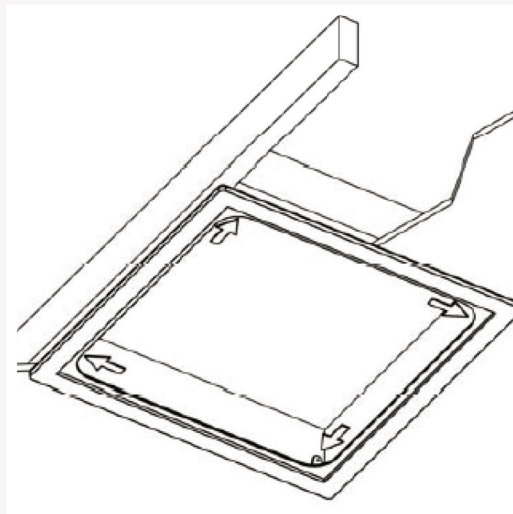
- 1 The AH6 1 hour fire rated loft hatch has a minimum trimmed opening between joists of 647mm x 547mm. If necessary, additional packing pieces must be fitted to ensure that no holes are visible from the underside. After lining the supalux, the finished clear opening size should be 635mm x 535mm. Assembled loft hatch unit should be temporarily nailed to the frame and fitted tight to ceiling compressing the foam seal.



- 2 There is a safety wire secured to the lid. Place the loop of the wire between the frame and the supalux in line with the middle fixing hole and secure with screw supplies. Fix rest of frame to joist using 55mm long steel screws through remaining holes in frame, ensuring that the frame is pushed tight against foam seal. Replace the temporary nails with screws. Ensure that the fixing does not twist the frame as this will ultimately prevent the hatch from closing properly.



- 3 The AH7 1/2 hour fire rated loft hatch should have a trimmed opening between joists at 560mm x 560mm. The assembled hatch unit should be temporarily fixed using 45mm screws. Frame must be fitted tight against the ceiling finish, compressing the foam seal for max airtightness performance.



- 4 Permanently fix the screws to the trimmed opening ensuring that the frame is pushed tight against the ceiling and compress the foam seal. Pass the lid through the frame and into the roof space and lower into position.

SECOND FIX CARPENTRY



- 1** SiteM to encourage nail and fixing pattern for skirting, architraves and door stops. Skirting and architraves are to be glued and nailed using a suitable adhesive to walls.

NEW

Mitres must be bonded, smooth and flush.



- 2** Equal 3mm margins should be maintained to all sides of the door to allow air flow. There should be a 10mm undercut to the finished floor level and 22mm undercut to unfinished floor level in line with building regulations.

Maximum tolerance for fire doors is as per manufacturers' instructions. Where there is no finished flooring installed, a hardwood threshold must be fitted.



- 3** All facings should be neatly cut and mitred with joints glued and sanded. Ensure that an even perimeter is allowed between the edge of the door lining and the architrave allowing room for the door hinge to freely work and adjustment with cranking tool.

Nails must be punched below the surface.

Woodwork should be left ready for painting.



- 4** Where handrails are fitted they must be secure along their length, continuous, unobstructed, with a smooth finish and returned to the wall.

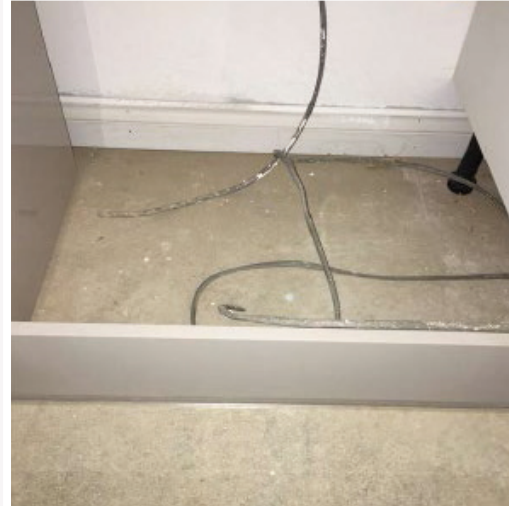


SECOND FIX CARPENTRY

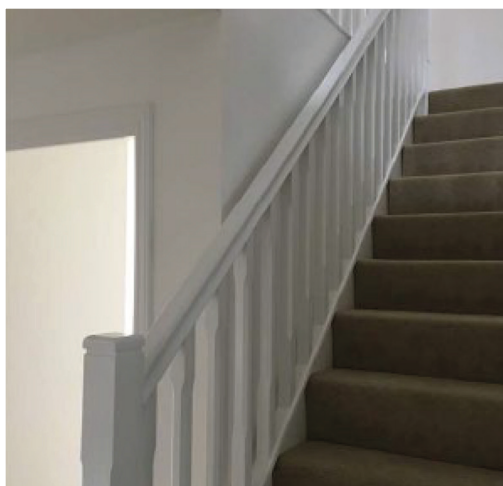
SECOND FIX



- 1 Skirting must be fitted behind the bath and in airing cupboards before any installations. Ensure that debris is removed prior to fitting of the bath panel, plinths to kitchens and shower tray.



- 2 Skirtings should also be fitted behind kitchen units to minimise sound passage and air leakage.



- 3 Newel posts and balustrades must be vertical and screw heads must be countersunk. Where possible, screws should be considered to be concealed for newel posts and handrails. Max gap between spindles should prevent a 100mm sphere passing through. There should be a minimum of 25mm clearance from any surface to allow a secure handhold.

SECOND FIX PLUMBING



- NEW 1** Pipework under the kitchen sink must be neat and tidy. The space must be plumbed to accommodate appliance connection and standard hose supplied. Spare waste connections must be capped off. Pipework brought through kitchen unit back board should not be burnt or damaged. All incoming water main stopcocks should be easily accessible and labelled.



- NEW 2** Instruction and name tabs should be attached to appropriate elements of plumbing to assist customers. Ensure a continuous ventilation space around the boiler housing is maintained.

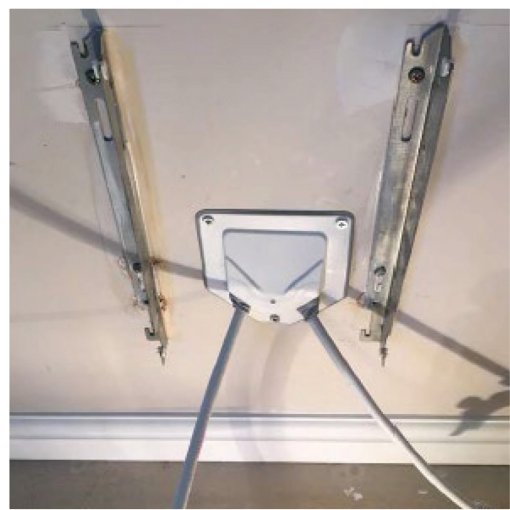
Ensure commissioning label on boiler is complete.

Please see boiler specific instructions.



- NEW 3** All sanitary ware to be fixed with approved fixings and seals as per manufacturer's instructions. Baths to have timber support. Toilets to have white capped base fixings. Wall mounted cistern must have rubber / felt washers.

Mastic should be applied through the entire perimeter of the basin where it meets the wall.



- NEW 4** Radiator tails must be flexible and should be fitted so they are covered by the radiator.

Radiators should be affixed using the appropriate fixings and in line with HSE Manual Guidance.



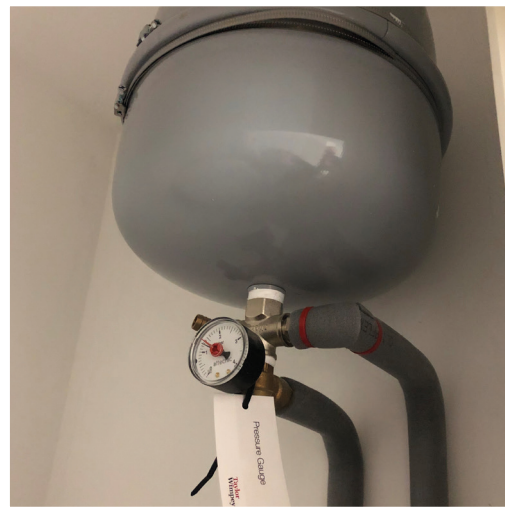
SECOND FIX PLUMBING

SECOND FIX

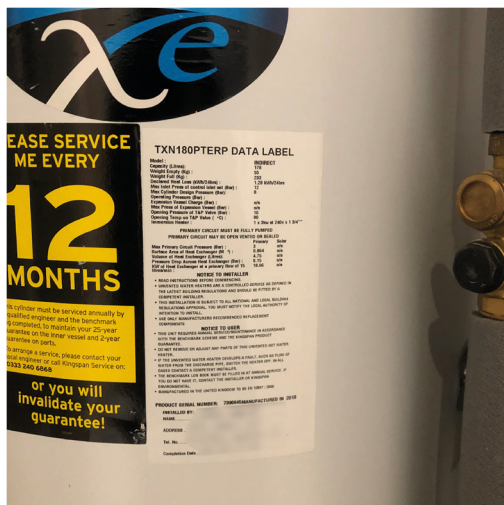
NEW



- 1 All pipes within 1m of the tank, or to concealment should be lagged.
Tundish to have a minimum of 300mm of straight pipe below unless connecting to a hep valve. Tundish should also be a maximum of 600mm from the safety device (e.g. temperature relief valve) and clearly visible.



- 2 Pipework for cylinders to be installed neatly. Pressure gauge on cylinders must have easy access for viewing.



- 3 Make sure when filling the system that checks for leaks are completed throughout the property. The verification label on the cylinder unit should be fully completed by the qualified installer.

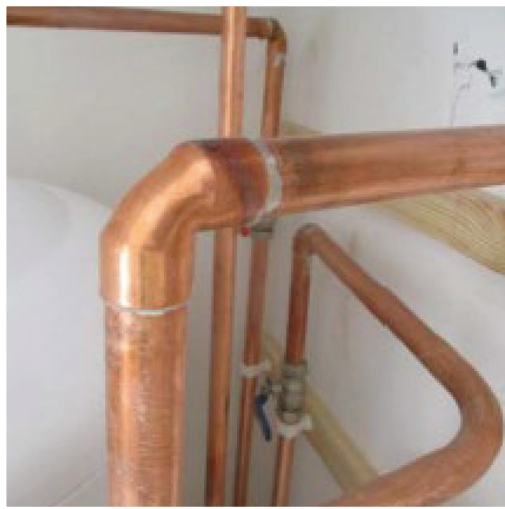


- 4 Fit isolator valves to all tap feeds and toilet feeds. Water service pipe to cistern to be concealed as high as possible.

SECOND FIX PLUMBING



SECOND FIX



- 1 Heat pads must be used when soldering pipes near walls such as when fitting boilers to avoid scorching of walls.

NEW Soldering of copper pipes must be neatly finished with solder and flux cleaned off.



NEW

- 2 Anti-scald valves must be fitted to baths. The valve comes pre-set at the correct temperature and should not be adjusted.



- 3 Pipes to be placed to be aesthetically pleasing and hidden by the pedestal as much as possible. Pipe collars should be fitted to soil and water pipes where required to provide a tidy finish.

NEW



SECOND FIX PLUMBING

SECOND FIX



- 1 The bath legs should be secured to the floor using the fixings supplied with a timber support to stabilise (minimum 90mm x 22mm softwood). It is best practice once water is on to fill the bath and assess any adjustments that may be required due to movement.

The bath should, like all sanitary fixtures, be stable and securely fitted. A watertight and flexible sealant should be used on all joints and seals around baths and showers. Ensure all debris is removed before fitting bath panel.



- 2 Basins must be fitted with the appropriate pedestal in correct alignment between the bowl and the waste outlet. The perimeter of the basin should be fully sealed with no gaps using the TW recommended sealant.

Toilet seats must be of the correct size for the pan and when fitted must be secure and must remain stable when in the open position.

Accessories such as plugs and taps should be fitted as per manufacturers specification.

SMT should be aware of any upgrade options in bathrooms and allow for additional fitting / lead times these choices can include upgrade taps, heated towel rail, or on some sites over bath showers.

SECOND FIX PLUMBING

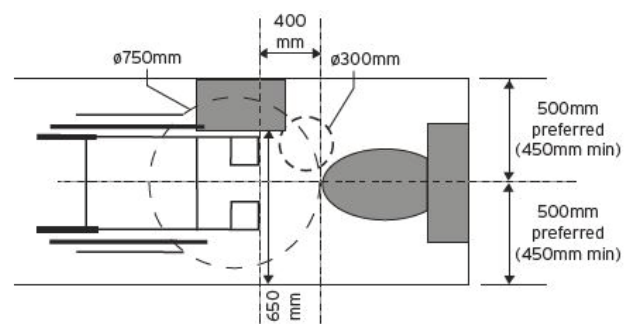


PART M - ACCESS TO AND USE OF BUILDINGS DWELLINGS

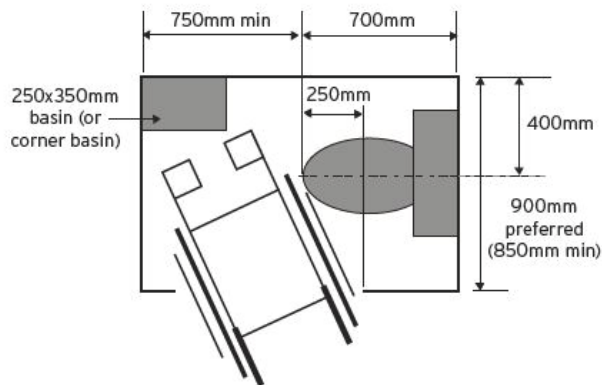
WC Provision

Reasonable provision for sanitary conveniences should be made on the level where daytime living occurs. Accessible WCs (including bathrooms where they only contain the only WC, i.e. flats) must be provided with an outward opening door. The Approved Document recommends a wheelchair should be able to approach to within 400mm of the WC pan and that the enclosure should provide sufficient space to manoeuvre.

The door to the WC should be wide enough to allow people with disabilities to enter and exit the compartment.



Where the WC can be approached from the front, the space necessary for the transfer is illustrated at 750mm diameter. The basin should not project too far out so that it obstructs the person rising out of the chair. The 650mm dimension provides a minimum width for a disabled approach without the need to twist. It is vital that this space is not further reduced by obstructions such as radiators. The tolerances on the diagram should be considered as minimum dimensions and a minimum compartment width of 1000mm is preferred.

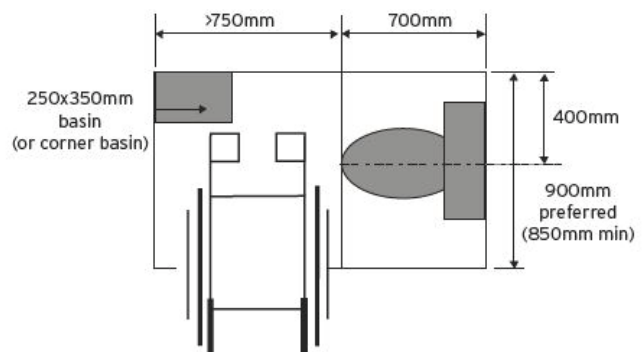


Lateral approach

The alternative of a lateral approach suggests a preferred 250mm dimension from the door edge to the front of the WC pan. This dimension enables a lateral transfer from chair to pan, usually by the removal of the arm and foot rest of the chair.

Perpendicular approach

A perpendicular or even oblique approach would also be acceptable. The space to manoeuvre should be achieved using the guidance for frontal approach. If the WC is located beneath the stairs a practical headroom height will also need to be considered and 2m at the front of the pan is considered reasonable.





SECOND FIX PLUMBING

SECOND FIX

NEW



- 1** Under sink pipework should be neat and clearly labelled for customer information.

Supplies to external taps should be turned off during winter months to mitigate the risk of frozen pipes bursting.



- 2** All radiators must be level and securely fixed with pipework concealed behind the radiator. Radiators should be secured in line with HSE Manual Guidance.

Thermostatic Radiator Valve (TRV) should be installed on all radiators with the exception of rooms with wall mounted thermostats and as per the heating design.



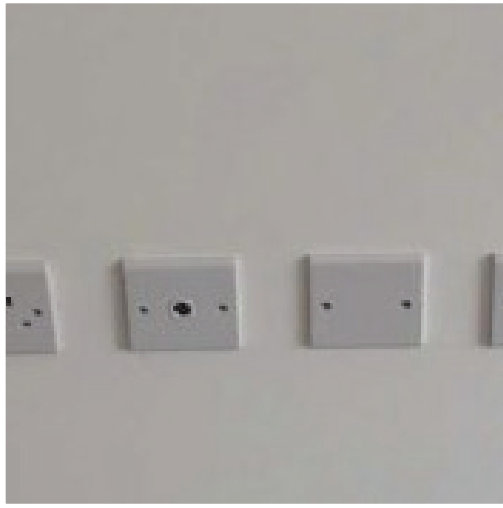
- 3** Boilers and radiators should be filled with cleansers, inhibitors added and tested at this stage and all pipework checked for leaks.

Boiler types are house type specific, with some plots fitted with hot water cylinders. Where cylinders are present these should be tested and the pressure adjusted accordingly. The verification label should be fully completed by the qualified installer.

SECOND FIX ELECTRICAL



SECOND FIX



- 1 All outlet boxes must be cleared of plaster and debris and when more than one are fitted together at a distance of 75mm (one box width) between and each box must be fitted plumb.



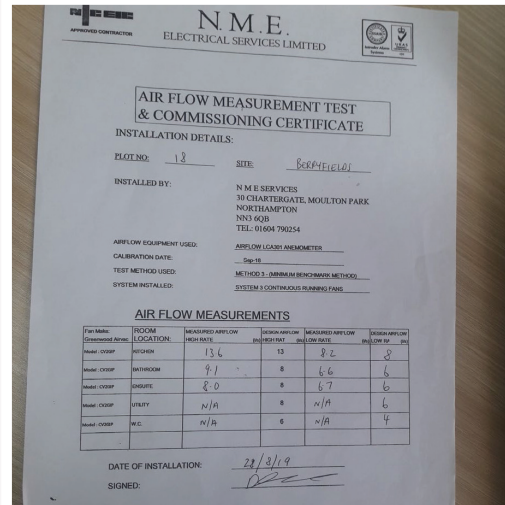
- 2 Extract fans should be commissioned so that design air flow rates are being achieved.



- 3 Consumer unit circuits should be labelled so each isolator can be identified and include commissioning label (dated and signed).

NEW

Height of consumer unit must be 1350 - 1450mm (Eng).



- 4 Commissioning must be completed to test the flow rate of the extractor fans to ensure compliance with building regulations. Once all paintwork is complete the covers can be fitted to these units.

This certificate should be passed to the SiteM and made available for NHBC and Building Control.



SECOND FIX ELECTRICAL

SECOND FIX

NEW

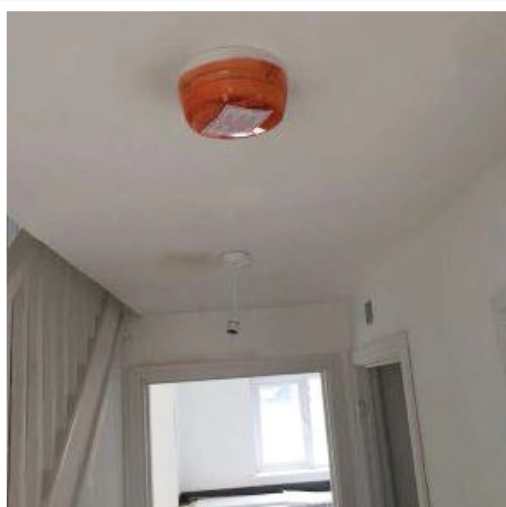


- 1 Consumer unit manufacturers state torque settings for their terminals including main switches, Miniature Circuit Breakers (MCB) and Residual Current Circuit Breakers (RCCB). Installing contractors must ensure they are being installed in accordance with these requirements by using a torque screwdriver. Ensure there are no gaps between MCBs and Residual Current Devices (RCD). All consumer units must have their connections checked at the time of installation.

Earth bonding must be installed (where deemed necessary by contractor).



- 2 Thermostats should be fitted as per the heating design to provide zone controlled heating.

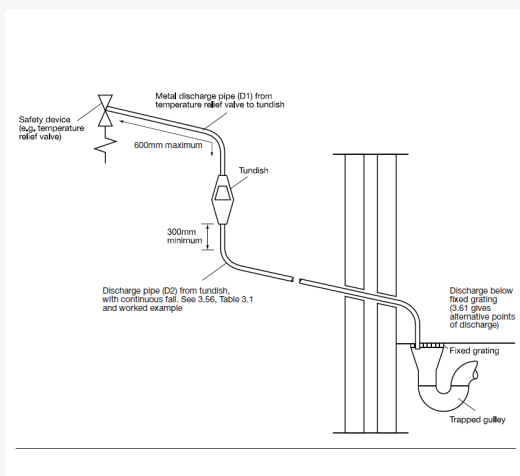


- 3 Smoke detector should be installed as per drawings and the dust cover should be left in place until the customer moves in. Customer should be advised that the detector should be protected where there is ongoing work which could generate dust.

SECOND FIX ELECTRICAL



SECOND FIX

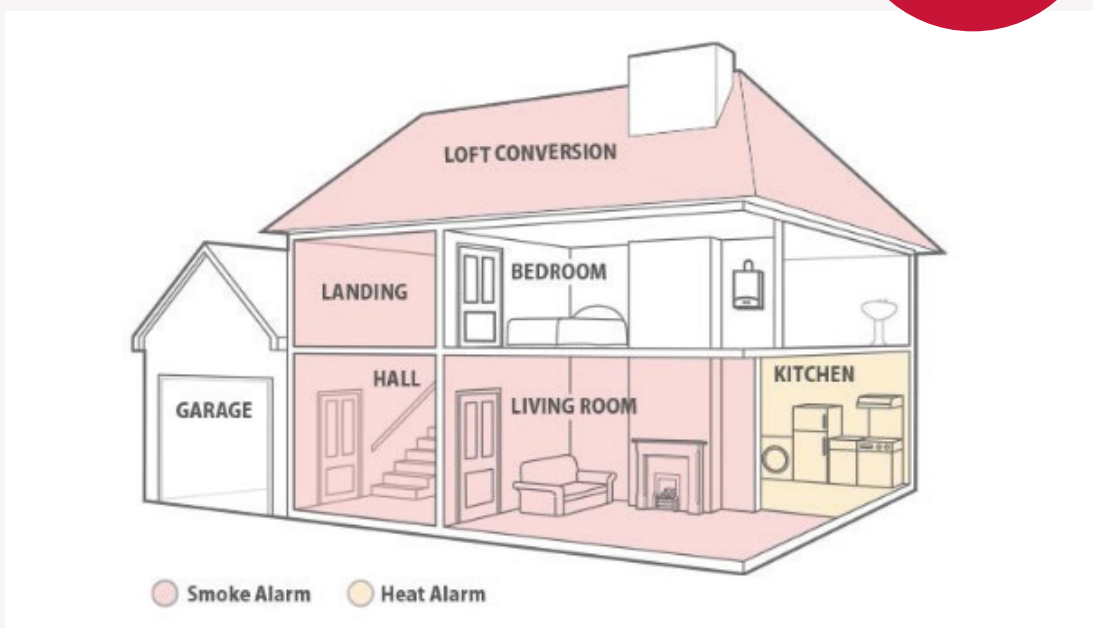


- 1 Airing cupboard cables must be clipped neat and tidy to walls.

- 2 In the event, a pendant light clashes with an opening door the flex should be reduced or a batten holder used.

SMOKE & HEAT ALARMS

SAFETY
CRITICAL



- 1 In Scotland, England and Wales, the minimum requirements for smoke and heat alarms:

Smoke alarms must be installed a minimum of 300mm from a light fitting and wall/ceiling junction. Also in all circulation areas/escape route and high risk areas. There must be at least one smoke alarm in every circulation space on each storey (such as hallways and landings). Note that a smoke alarm in the loft is only required when PV panels are installed. A smoke alarm can be no more than 3m from a bedroom.



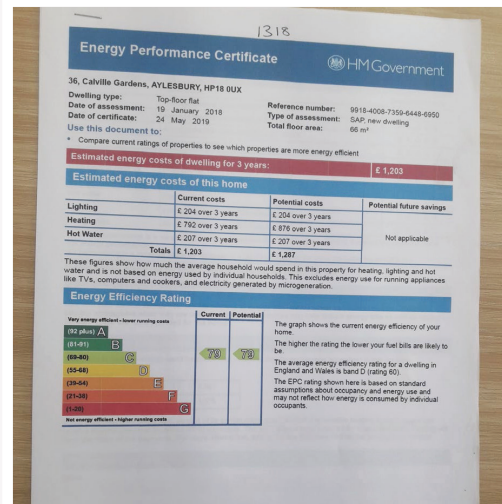
COMMISSIONING

SECOND FIX

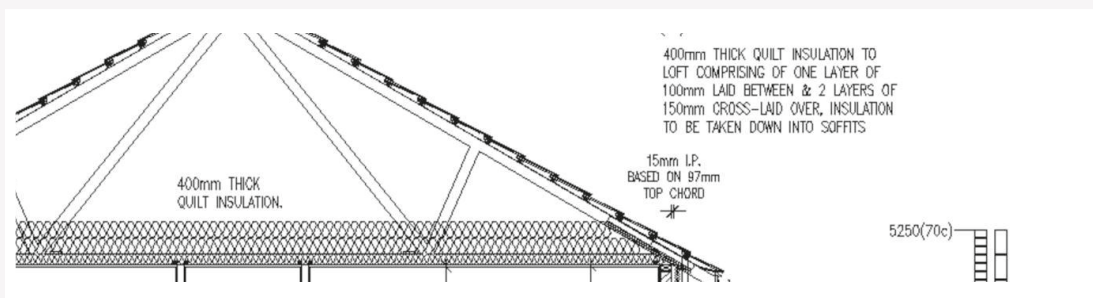
NEW



- 1 Operation manuals, warranty forms and certificates must be handed to site management prior to Council of Mortgage Lenders (CML) inspection, to be added to handover pack for Home Demo. Label both gas and water main stopcocks. The photo above shows the Energy Performance Certificate that should be included in the handover pack.



- 2 All bathrooms, en-suites, WCs and kitchen / utility rooms should have extractor fans fitted in accordance to the working drawings.



- 1 Prior to loft insulation being installed, the SMT must ensure that any penetrations into the loft are adequately sealed to ensure a successful air test and to reduce moist air entering the loft space.
- 2 Any cables that will need to be accessed should be lifted and temporarily fixed to beams so they are not hidden under insulation. Insulation should be installed before painting starts.
- 3 Rolls of insulation to be laid uniform between trusses by 100mm and then two layers of 150mm and then cross laid over in loft space, covering entire surface area at the required depth, typically 400mm, specified on the working drawings and specification. This is part of the drying out process and installing the loft hatch and insulation will prevent moist air and heat entering the loft space causing condensation.
- 4 Cut insulation tight to any services passing through the ceiling space for a neat, tidy finish.
- 5 Check that loft insulation doesn't foul the top of the ARC eaves ventilator, but should be installed to adequately insulate the full ceiling above room perimeters.
- 6 Moist air entering the loft should be controlled by sealing gaps where services pass through the ceiling.