

Taylor Wimpey Uk  
Site HSE Manual

Section 7  
Internal Finishing Trades

Document Owner

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## 7.1 - Internal and Finishing Trades



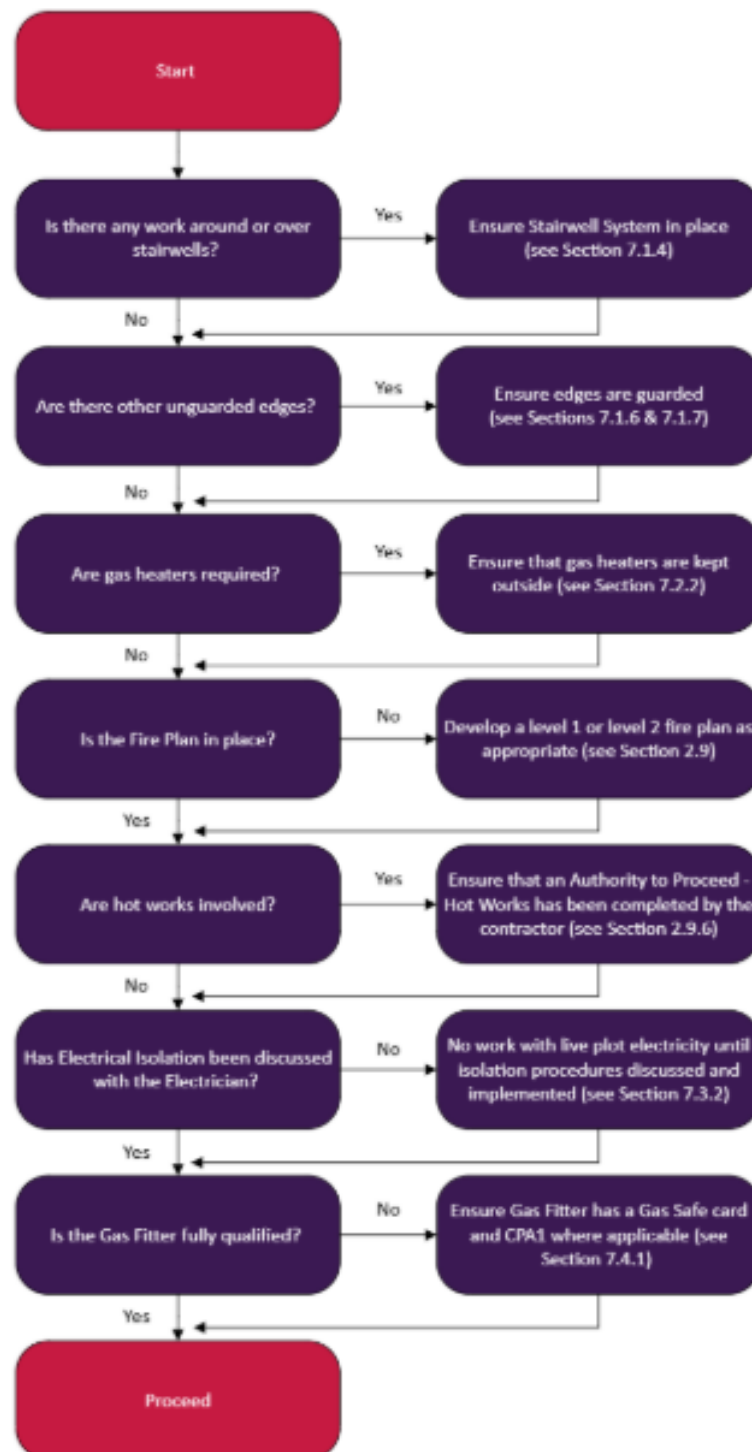
Internal and finishing trades are exposed to various health related risks during construction work. Dust from cutting and sanding activities can cause serious respiratory illnesses. Manual handling activities such as fitting windows, doors and stairs must be carefully planned to reduce the risk of injury. Substances such as adhesives and cleaners must be handled and stored safely in line with the COSHH assessment for the product. Consideration of noise levels must be given when using power tools both for the user and other operatives within the vicinity of the work. Health risks related to vibration also need considering when using power tools.



Internal and finishing trades are exposed to a range of safety risks including work at height, electric and gas, slips, trips and falls, tools and equipment and the stability of materials. Careful sequencing of works must be considered to reduce the overlap of trades to prevent congestion and housekeeping issues. Regular communication must be undertaken to ensure hazards are identified and highlighted between contractors. Fire risks are also present and the storage and handling of tools and materials must be considered to reduce the likelihood of a fire.



The environmental impact of internal and finishing trades such as plastering, painting, electrical, plumbing and joinery can be significant, even though these activities occur later in the construction process. Internal trades have a high resource consumption using materials like gypsum, plastics, copper, adhesives, paints, and timber, many of which have high embodied energy. Offcuts, packaging, and surplus materials contribute to landfill waste. Internal trades rely heavily on powered tools and temporary heating or cooling systems, increasing site energy use and artificial lighting and drying equipment (e.g., for plaster or paint) add to energy demand.



### 7.1.1 Plot Access

Where there is a need to work over or near a stairwell opening, a suitable working platform must be provided e.g., either a propriety system or birdcage scaffold to provide fall protection and access.

**Stairwell Proprietary system (SPS Oxford System illustrated)**

Installers to:

- Be briefed / instructed on installation
- Have system instructions available
- Inspect before use; and
- Site Management and operatives to monitor during use.

Once in position, the frame is designed to easily take the weight of one operative and materials. Ensure stabilisers are positioned correctly. Mat must be closed once access gained.

The SPS safety mat easily slides back to allow access to the stairs for operatives and materials.

**Note:** the mat must not be overloaded with materials. Maximum spread load is 150 Kg.



Oxford Safety Components Ltd, 59 Murdock Road  
Bicester, Oxfordshire OX26 4PP,  
Tel: 01869 3232892

Site Safe Briefing Number 10 - **Safe use of Oxford Safety Platform Systems** must be given to all Operatives working on or using the platform. See Site Safe Briefing folder.

**7.1.5 Vaulted Ceilings (Work Over Stairwell Openings)**

Where there is a need to undertake works over a stairwell with a high-level ceiling e.g., vaulted ceiling, a suitable working platform must be provided. A proprietary system (preferred method) or birdcage scaffold must be provided to provide fall protection and access.

**Vaulted Ceiling Propriety Access platform – Category 1: standard temporary works**

The Propriety access platform allows safe access to the area of the vaulted ceiling over the stairwell and allows access to remain open on a section of the stairs.

Supplier Details:

**George Roberts (North West) Limited**

Unit D, Wakefield Road  
Netherton, Liverpool  
L30 6TZ

Tel: +44 (0) 151 524 2434

Email: [Sales@scaffoldingsales.co.uk](mailto:Sales@scaffoldingsales.co.uk)

Design Number	Description
TW01	Straight Staircase (Straight Flight Landing)
TW02	Kite Winder Staircase (Kite Winder Landing)
TW03	TW Tower Legs (Straight Flight) Product Code Long Stair Leg 1030005S, Product Code Short Stair Leg 103006S
TW04	TW Tower Legs (Kite Winder) Product Code Long Stair Leg 1030011S, Product Code Short Stair Leg 1030012S

A proprietary access system [vaulted ceiling] installation and user guide must be available.

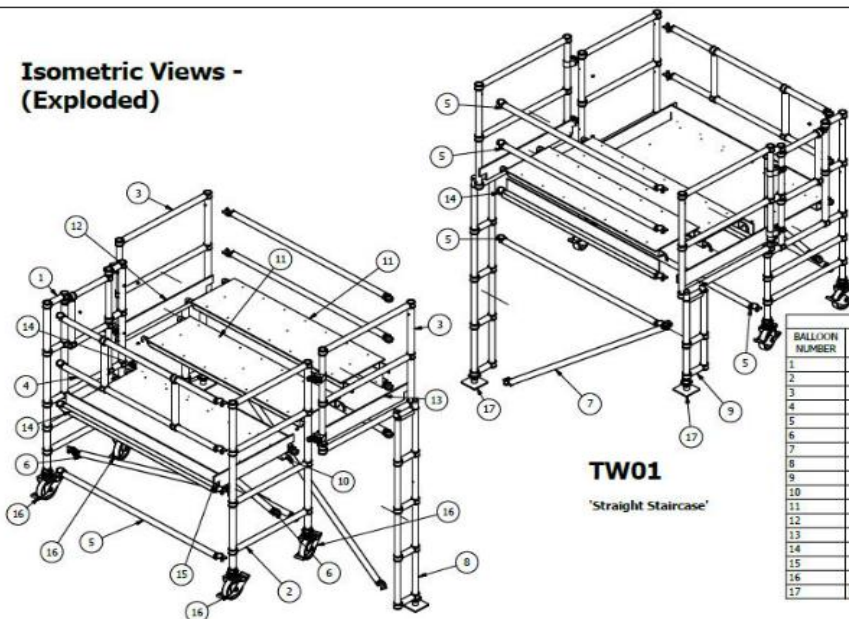
Installer must:

- Be PASMA Trained
- Be briefed / instructed on installation by the manufacturer
- Have system instructions available
- Be Inspected by the trained installer before first use, then every seven days on the Working platform/ Scaffold Inspection Record Sheet, Folder2 F2.06; and
- Site Management and Operatives to monitor during use.

**(Note: Evidence of all training must be made available to the site management team)**



### Isometric Views - (Exploded)



Material Grades Used			
Aluminium		Steel	
Part Number	Part Name	Part Number	Part Name
6082 T6	BS EN 755	S235-JRH	S275JR
6082 T6	BS EN 485		

BALLOON NUMBER	ITEM	PART NAME	LABEL COLOUR
5	Brace	Horizontal Brace	Red
6	Brace	Diagonal Brace (Platform)	Blue
7	Brace	Diagonal Brace (Stabilisers)	Green

PARTS LIST			
BALLOON NUMBER	ITEM	PART NAME	QTY
1	Frame	Gated Frame	1
2	Frame	Standard Frame	1
3	Frame	Cardleiver Frame	2
4	Frame	Guardrail Frame	1
5	Brace	Horizontal Brace	5
6	Brace	Diagonal Brace (Platform)	2
7	Brace	Diagonal Brace (Stabilisers)	1
8	Stabiliser	TW01- Long Stair Leg Frame	1
9	Stabiliser	TW01- Short Stair Leg Frame	1
10	Platform	Main Platform	1
11	Platform	Platform	2
12	Toe Board	Side Toe Board LH	1
13	Toe Board	Side Toe Board RH	1
14	Toe Board	Rear Toe Board	3
15	Toe Board	End Toe Board	1
16	Legs + Castors	Adjustable Leg and Swivel Braking Castor	4
17	Legs + Baseplates	Adjustable Leg and Baseplate Foot	2

	Certificate number 14409 "The design, manufacture, modification and Management of onsite activities including repair and installation of bespoke platforms in aluminium, mild steel and glass fibre reinforced plastic. The sites of outsourced working at height equipment".			Drawn by Michael H Checked by DH Client Approval by Date 14/03/18 Issue Date 14/03/18	95911 For information
				TW01 Platform (Straight Staircase) Client: George Roberts/Taylor Wimpey	Site Working Load 250Kg Drawing Number: GP/GR/5282 (TW01StraightS/Case) Pg2 F.I.

### 7.1.6 Balcony Openings / Windows With Low Cills (Fall Protection)

Where there is a risk of falling from a balcony opening or window opening i.e., window with a low sill, then suitable fall protection must be in place.

Fall protection e.g., scaffolding must be fitted externally to allow the safe installation of the balcony doors i.e., doors / windows fitted before the scaffold is struck.

If the external scaffold is removed prior to the balcony door/window being installed, then suitable fall protection must be in place e.g., scaffolding or tower.



Where balcony doors are fitted and balcony with full (edge protection) not installed:

- Door must be kept locked; and
- Keys must be kept securely by Site Management Team in a small lockable 'key safe' and only issued when fall / edge protection measures in place.



### 7.1.7 Floor Openings (Fall Protection)

Where there is a risk of falling through a floor opening, e.g., lift shaft, smoke or service risers, etc. suitable fall protection must be provided.



Lift shaft protected with proprietary full height safety gates



Service risers: fall protection provided e.g., by a secured cover placed over the opening

### 7.1.8

## Low Level Access Equipment - Category 0: Standard Temporary Works

Where low-level access equipment is required, it must be suitable for the task, e.g.:

- Proprietary hop-up platform/podium steps
- Mobile towers
- Step ladders, or
- Stilts

### Proprietary Hop-up Platforms and Podium Steps

Proprietary hop-up platforms or podium steps can provide a suitable and safe low-level platform for working at height and for short term tasks e.g., electrical and mechanical installations from first fix to testing and commissioning.



Users to:

- Be briefed/instructed on their correct use and assembly
- Use only on stable and level floors or platforms, such as concrete/timber floors
- Carry out a daily pre-use check (including feet, locking devices and gates); and
- Inspect and record the Hop-up in the Work Equipment and Lifting Equipment Folder 2 F2.7 (see [Section 1.5.3](#))

**NOTE:** Hop ups must not be used adjacent to stairwells or other protected leading edge if no integrated handrail fitted as this would place the user at risk of falling over the edge protection



### Mobile Towers

Alloy mobile scaffolding towers can provide a suitable platform for working at a height and for short-term tasks e.g., plaster-boarding or taping ceilings.

Familiarisation briefing / instruction / training must be provided to users on safe installation, use and inspection e.g.:

- Any operative assembling, modifying or dismantling mobile towers must be PASMA trained and have manufacturer's instructions on systems being used. In addition, any operative working on the mobile tower must be briefed on its safe use including:
  - Method of access/egress
  - Locking of wheels when in use
  - Any restrictions on the loading of materials/tools
  - How to move the mobile tower as work progresses



#### User Checks:

- Situated on a stable and level floor or platform i.e., internal floor or external hardstanding
- Before first use and during use; and
- Inspected and recorded in the Working Platform/Scaffold Inspection Record Sheet (Construction HSE Plan – Folder 2 - F2.6) – (see [Section 1.5.3](#)). Note: each tower must have an identification

- mark to assist with inspection records.
- Site Management and operatives to monitor during use

Delta Deck [height adjustable]  
Systems available from:

### Safety Platforms Ltd

Unit V4, Carlinghow Mills  
501 Bradford Road  
Batley,  
WF17 8LN.  
Tel: 01924 420820  
Fax: 01924 420830  
www.safetyplatforms.co.uk



### Step Ladders

Only the following may be used on Taylor Wimpey sites

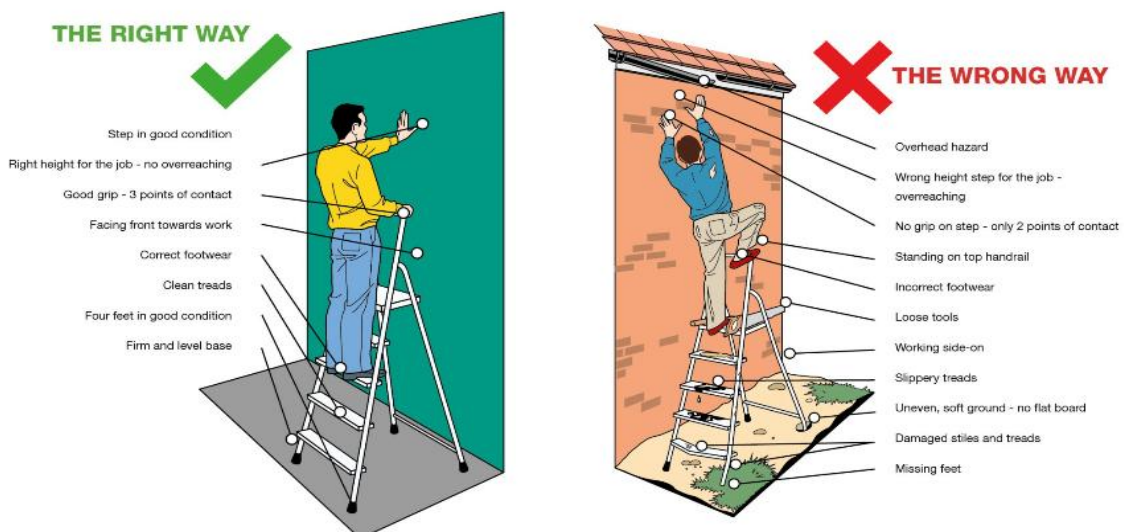
Metal steps	EN 131	(150kg duty)
Wooden steps	EN 131	(150kg duty)
Fibreglass steps	EN 131	(150kg duty)
Non-Professional (i.e., Domestic use) Stepladders are not allowed on Taylor Wimpey sites		

Short term work (up to 30 minutes).

Light work (e.g., materials or tools up to 10kg and of manageable size and length); and

Inspected and recorded in the Work Equipment and Lifting Equipment Folder 2 F2.7 ([Construction HSE Plan – Folder 2 - F2.7](#)) – (see [Section 1.5.3](#))

**Note:** if multiple sets, each set must have an identification mark to assist the inspection records.



**Stilts**

**Users to:**

- Be briefed on their use
- Have a suitable Risk Assessment for their use and maintenance
- Regularly check that the work area is clear of trip hazards and openings
- Check the stilts before use and regularly during use to ensure all straps and moving parts are in good order and the stilts are generally fit for the task (If not, they must be taken out of use immediately); and
- Inspect and record in the Work Equipment and Lifting Equipment Folder 2 F2.7 (Construction HSE Plan – Folder 2 - F2.7) – (see [Section 1.5.3](#)).
- **Note:** if multiple sets, each set must have an identification mark to assist the inspection records.



**Note:** Stilts must only be used on a flat even surface, never on stairs slopes or adjacent to stairs or leading edges.



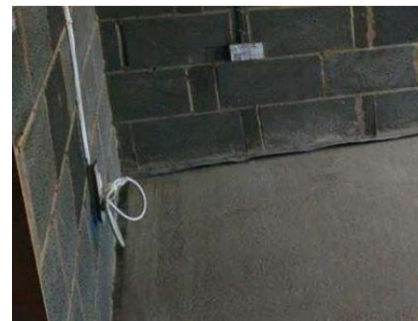
**7.1.9 General Housekeeping - Slips and Trips Prevention**

Work areas must be kept clear of excessive debris and surplus material:

- To prevent slips trips and falls; and
- Minimise the risk of fire Operatives are to:
- Keep access routes clear
- Clear up materials and tools regularly
- Store materials and tools away from access routes; and
- Secure cables, radiator tails and leads to prevent trip hazards.



Site Management teams, as part of their regular site inspections / walkabouts, must check to ensure that trades are leaving their work areas clear of debris and safe for others following. If not, ask the contractors to clean up or alternatively arrange for the General Site Operative to clear the area before other trades follow.



### 7.1.10 Safe Handling and Storage of Plasterboard

To prevent injury from either the manual handling or storage of plasterboard, the following controls are to be adopted:

Packs of plasterboard to be mechanically transported by telehandler to the designated plot and either:

- Placed as close as possible to the entrance on suitable ground, or

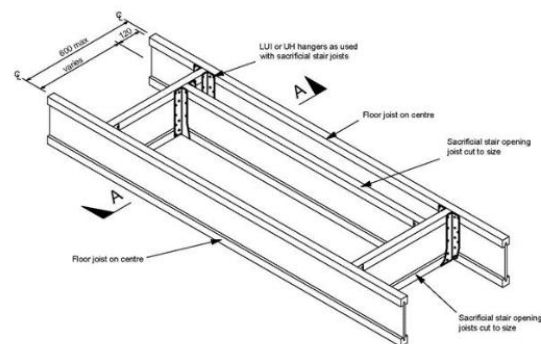
Placed on a load loading bay for apartment buildings or timber frame houses

- When placed external at ground level suitable barriers to be placed around the packs to segregate from any traffic routes
- Individual sheets of plasterboard to be manual carried into the plot and laid flat within the plot
- For traditional houses plasterboard can be manual carried to the upper floors via two methods:
  - Manual carried up the stairs and placed (laid flat) in the required areas, or
  - Manual passing the plasterboard through a designed plasterboard slot and then laid flat in the required areas.



#### PLASTERBOARD SLOTS - Category 1: Standard Temporary Works

- A slot is constructed in the mid-floor utilising the design opposite, this requires one additional temporary joist to support the metal hatch
- A reusable high grade metal box with an 'opening trap hatch' is then inserted into the slot
- Operatives using the plasterboard board slot must be briefed on it's safe use – keep closed when not in use



Reusable plasterboard slots can be provided by:

**Protec International Ltd** - [sales@protection.co.uk](mailto:sales@protection.co.uk)

**Leachs** - [sales@leachs.co.uk](mailto:sales@leachs.co.uk)

**Note:** The use of plasterboard slots must be considered on all plots, where the layout makes it difficult to manually handle the boards.



### 7.1.11 Safe Handling and Storage of Doors

To prevent injury from either the manual handling or storage of doors, the following controls are to be adopted:)

- All doors delivered to site must have the required 'weight warning sticker' attached
- No 'weight warning sticker' – delivery of items/s not to be accepted
- Maximise use of mechanical lifting (telehandler) when off-loading and transporting doors around site
- Manual handling to be restricted to:
  - Placing doors in storage containers
  - 'Loading out' into houses and apartments
- Ensure adequate number of operatives available to safely handle the doors; and
- Doors to be stored safely by laying flat, or if stored vertically, be placed at correct angle. Do not store on smooth surfaces..



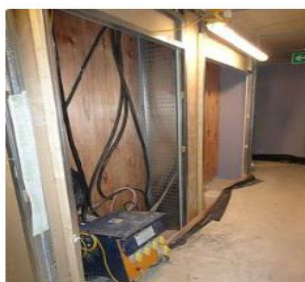
### 7.1.12 Temporary Access and Task Lighting e.g. Apartment Blocks

#### Access and Emergency Lighting

Taylor Wimpey is responsible for providing temporary access and emergency escape lighting in all communal areas of apartment buildings, e.g., corridors, stairwells, lobbies, and basements, etc.

When providing temporary lighting, consider the following:

- Include an emergency back-up system where power failure would present a hazard, i.e., poor visibility
- Avoid trailing cables (trip hazards).
- Avoid obstructions from equipment e.g., transformer boxes.
- Installed by a trained and certified electrical contractor; and
- Tested and checked weekly with records held on site by the Site Manager



Good positioning of transformer to avoid obstruction in access route.



No trailing cables in the stair core.



Cables suspended using proprietary hooks to prevent trailing cables on floor area.

## Task Lighting

Contractors are responsible for providing task lighting to enable them to carry out their tasks/activities

Taylor Wimpey is responsible for providing suitable power outlets adjacent to apartments for the Contractors to use

Power outlets to be located to avoid trailing cables/leads in the corridors, etc.



### 7.2.1 Fire Arrangements



Fires on construction sites pose serious risks to human health, exposing workers and nearby communities to hazardous smoke, toxic fumes, and airborne particulates. Inhalation of these substances can lead to respiratory issues, eye and skin irritation, and exacerbate existing health conditions. Prolonged exposure may result in long-term complications, including cardiovascular and pulmonary diseases. Additionally, burns and injuries from direct contact with flames are common, underscoring the importance of prompt emergency response and robust safety protocols on construction sites.



Internal and finishing trades are exposed to numerous fire safety risks due to the combination of combustible materials, and high-paced construction activity. Ignition sources such as power tools and temporary heating can easily spark fires amidst materials, poor housekeeping and flammable liquids. The potential for rapid fire spread puts workers, property, and nearby homes at risk. Recognising these hazards and implementing robust safety measures, clear emergency procedures, and regular training is essential for minimising fire incidents and protecting both lives and property throughout the construction process.



A fire on a construction site can have serious environmental consequences, releasing hazardous materials into the air and contaminating soil and water sources. The combustion of building materials often produces toxic fumes and particulate matter, threatening air quality for both workers and nearby communities. Additionally, runoff from firefighting efforts may carry pollutants such as heavy metals and chemicals into local waterways, harming aquatic life. The destruction of vegetation and disruption of wildlife habitats further amplify the ecological impact, highlighting the need for effective fire prevention measures.

The potential for an accidental fire for traditional construction is greatest during the fit-out and finishing stages (for Timber Frame see Section 11.5). The following controls must be in place:

Fire Safety Plan and Checklist (Construction HSE Plan – Folder 2, F2.12):

- The fire plan outlines what you need and where
- Is completed before work starts; and
- Reviewed to include changes on site e.g., new build phase or apartment block.
- **Notes:**
- Level 1: traditional detached, semi-detached, and terraced housing, plus small traditional apartment buildings.
- Level 2: Traditional apartments and timber frame house
- Level 3: All timber frame apartments



**Information and Fire Fighting Equipment to be provided that includes:**

- Site layout / escape plan (where necessary).
- Fire Action Notice
- Means of raising the alarm
- Level 1: manual push button fire alarms
- Levels 2 & 3: manual push button interlinked alarms
- Water and Powder extinguishers; and
- If equipment located outdoors, a weatherproof cabinet, 500mm raised off the ground.



**Control of Hot Works**

See Section 2.9.5 - Authority to Proceed – Hot Works (Construction HSE Plan – Folder 2, F2.13).

**7.2.2 Portable Heaters**

Use of portable heaters, for drying out properties during construction, must be:

- Used in accordance with the manufacturer’s instructions.
- Used in areas free of debris and flammable material.
- Checked before use.
- Inspected once per week, e.g., gas valve connections, etc ., and recorded in the [Work Equipment and Lifting Equipment Folder 2 F2.7 \(Construction HSE Plan – Folder 2 - F2.7\)](#)



**Torpedo:** Powered by LPG or electricity.

- Requires good ventilation to prevent carbon monoxide build up.
- High heat output - contact risk to be controlled by segregation from equipment.



**Bin Heater:** Powered by LPG.

- Requires good ventilation to prevent carbon monoxide build up.
- High heat output - contact risk to be controlled by segregation..



**Red Rad:** Powered by 110-volt electricity.



**Radiant Cabinet:** Powered by LPG.

Must have an integrated oxygen depletion sensor which triggers shutdown before carbon monoxide can build up.



**Catalytic Cabinet:** Powered by LPG but no naked flame.

- Must have an integrated oxygen depletion sensor which triggers shutdown before carbon monoxide can build up.



**Note:** If an appliance is fuelled by LPG via a tube i.e., not an integrated part of the appliance such as a radiant cabinet, the gas cylinder must be kept outside as any damage to the cylinder, hose or regulator valve could cause a leak and build-up of gas. Long feed pipes are to be specified with the heater order.



### 7.3 Electricity in Plots



Live electricity on construction sites presents significant occupational health hazards. Workers face the risk of electric shock, burns, and cardiac arrest from accidental contact with energized circuits or equipment. These injuries can lead to long-term health issues, including nerve damage and chronic pain. High-voltage exposure may also cause secondary accidents, such as falls from height due to sudden shock.

Poorly maintained tools, wet conditions, and inadequate training amplify these dangers. Implementing strict isolation procedures, regular inspections, and competency-based training is essential to safeguard worker health and prevent life-threatening incidents.



Internal trades such as joinery, plumbing, and drylining face significant safety risks from electricity on plots. Live circuits, temporary power supplies, and incomplete installations can expose workers to electric shocks, burns, or even arc flashes. These risks are heightened in confined spaces, damp conditions, and when tools or materials come into contact with live components. Without proper isolation, signage, and coordination between trades, the potential for accidents increases. Ensuring

electrical safety through clear communication, regular inspections, and adherence to protocols is essential to protect everyone working inside the build



Electricity presents significant environmental risks on a housebuilding site if not properly managed. Temporary power supplies, generators and distribution boards can cause pollution through fuel spills, oil leaks and improper waste handling. Poorly installed or damaged cables increase the risk of fires, which can release toxic smoke and contaminate land and water. Inadequate isolation and protection can also lead to uncontrolled discharges during flooding or heavy rain. Effective planning, competent installation, routine inspection and emergency controls are essential to

prevent environmental harm and protect surrounding habitats and neighbouring communities effectively.

The mains power supply to a plot should not be energised and commissioned until all the related 'final fix' work has been completed. However, it may be required to energise specific circuits before final fix e.g., for heating and lighting (wet/dark weather conditions).

### 7.3.1 Partial Energisation Procedure

Where early energisation of heating and / or lighting is required, the Site Manager requests the electrical contractor to energise the specific circuits using the Energise a Circuit Request Form ([Construction HSE Plan - Folder 2, F2.28](#)).



**Part A:** - request completed by the Site Manager.

**Part B:** - initial verification and confirmation completed by the Electrical Contractor

**Note:** Only the circuit(s) requested to be energised is to be switched on and the consumer unit must be 'locked-out' during the work.

### 7.3.2 Isolation Procedure

The two situations where the consumer unit must be locked and tagged to prevent unauthorised access are:

- Where the unit is partially energised for heating and lighting and all other circuits isolated; and
- For remedial work e.g., replacing tiles adjacent to a power socket which must be isolated at the consumer unit.



**Note:** Where the consumer unit is 'final fixed' and the electrical installation is fully tested and certificated and all remedial work is complete and home ready for the final inspection, there is no requirement to lock the consumer unit. (The lock must be removed before the home is passed over to the customer.)

Whether the Consumer Unit is single stacked, or double stacked (see photo opposite) the same control measures must be applied in terms of any locking off and isolation



### 7.3.3 Electrical Cupboards and Risers in Apartment Buildings

#### Cupboard/Riser Security

Cupboard/Riser to be secured with a temporary or permanent access door that is kept locked when electrical operatives are not working in these areas

A suitable warning sign must be displayed  
Keys are retained by the Electrical Contractor



#### Electrical Security

Once energised the main distribution board must be locked-off as well as the supplies to individual apartments, with the keys retained by the Electrical Contractor

For partial energisation, see Section 7.3.1



#### Isolation Procedure

The appropriate circuits/apartments must be isolated prior to working on or near these services, such as to remove face plates or hardwiring electrical appliances.

The Electrical Contractor must detail in their safe system of work of how they manage and control any electrical isolation



### 7.3.4 Lighting

#### ACCESS TO LIGHTING (Changing Bulbs)

To reduce the risk of customers slipping or falling during routine bulb replacement, light fittings are not generally installed above 2.8m from finished floor level. This includes:

- Pendant lights
- Recessed downlights; and
- Surface mounted lights.

If the floor to ceiling height exceeds 2.8m, an assessment of lighting (and replacing bulbs, etc.) must be made by the Technical Team (with input from a Technical Manager / Production Director / Manager if necessary) and recorded in the design risk reviews.

**Downlighters**

May only be installed to a design provided by Technical. This must show location to avoid downlighters being placed adjacent to floor timbers.



**Recessed Downlighters**

In all cases a 'Recessed Downlighter Layout Design and Specification' for the plot must be available to the installer and the Site Management team.

**Note:** insulation separator in TW specified recessed downlighter (Deta 4.5 W Lamp) must be used.



**Uplighters on a vaulted ceiling**

To avoid customer access issues, uplighters to vaulted ceilings must be fixed at low level.

**Long pendant from vaulted ceiling**

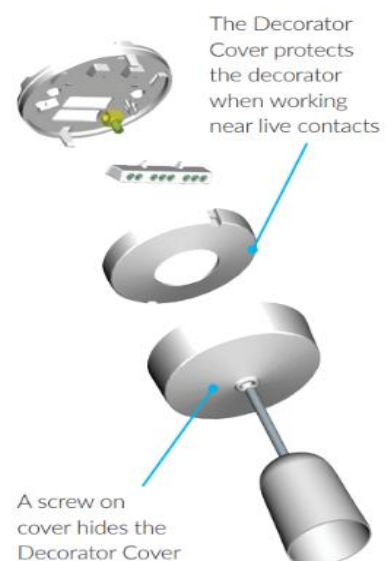
Ensure suitable access is provided for the electrician to install e.g., podium step or mobile towers (not step ladders).

**7.3.5 The DETA Ceiling Pendant**

The DETA Ceiling Pendant, incorporating an additional 'paint cover' over the live terminals, must be used. The light switches must have been fitted before painting and the painters are to cut in the paintwork around them without loosening the fittings from the wall surface.



An additional 'paint cover' hides live terminals to allow safe painting whilst light is on



### 7.3.6 Electrical Inspections and Testing

For temporary electrical systems (e.g., show area, compound, and apartments) the test certificates must be retained in Folder 3 Section 10 including:

- The initial inspection / commissioning certificate; and
- The periodic inspection certificates (12 months).

For the temporary electrical supply to apartment buildings, the electrical contractor must maintain a plan showing the temporary cable routes.

The required electrical testing and inspection programme is set out in the following table.

#### Testing of Electrical Equipment

**Note – only 110v equipment to be used on a TW site.**

Equipment/Application	User Check	Formal Visual Check	Combined inspection and test
RCDs and cables to Site cabins	Weekly check and RCD test	Every 3 months	Before first use on site and then every 12 months
RCDs and cables to Silo	Weekly check and RCD test		Before first use on site and then every 3 months
Equipment in site offices	Monthly		Before first use on site and then every 12 months
Show area. Main installation and all electrical equipment within	Monthly		Before first use on site and then every 12 months
Information technology, desktop computers, VDU screens	No	Yes, 2 – 4 years	No if double insulated – otherwise up to 5 years
Photocopiers, fax machines	No	Yes, 2 – 4 years	No
Double insulated equipment: NOT handheld, moved occasionally, fans, table lamps, slide projectors	No	Yes, 2 – 4 years	No
Double insulated equipment: HAND-HELD some floor cleaners	Yes	Yes, 6 months to 1 year	No
Earthed equipment (class 1) electric kettles, some floor cleaners	Yes	Yes, 6 months to 1 year	Yes, 1 – 2 years
Cables (leads) and plugs connected to the above, extension leads (mains voltage)	Yes	Yes, 6 months – 4 years depending on the type of equipment it is connected to	Yes, 1 – 5 years depending on the type of equipment it is connected to

**General Guidance on Electrical Installations**

Fixed Installations	<p>Correct supply rating          Correct rating of fuses, switchgear, earthing          Suitable cabinets to protect from weather, moisture etc.          Correctly labelled          Tested before use &amp; at appropriate intervals  <b>FIXED WIRING OR INSTALLATIONS SHOULD ONLY BE WORKED ON BY A SUITABLY COMPETENT ELECTRICIAN</b></p>
Generators	<p>Package (&gt;10kVA)          Supply offices, compounds, sales areas          Supplied/maintained on contract basis          Connect to tested fixed installations and earth/bond properly          Small Portable (&lt;5kVA)          Use outdoors <b>ONLY</b> to power 110v/double insulated equipment</p>
Protective Devices	<p>Fixed installations should have individual isolators (e.g., suitable plugs/sockets)          Protection via RCDs (residual current devices)          Use 30mA RCDs for personnel protection          Fuses/MCBs <b>NOT</b> considered adequate protection against electric shock</p>
Portable Tools	<p>Normal site requirement = 110v / battery operated tools          Install a 110v building supply in communal areas of apartment blocks          Minimise trailing cables and route safely          Make a formal visual check at least once a month</p>
Temporary Lighting	<p>Should be 110v          Fit flood/spotlights with glass covers          Festoon lighting not recommended (but fit protective covers if using)          Temporary strip lights in communal areas of apartment blocks          Minimise trailing cables and route safely</p>
Consumer Units/Supplies	<p>Only electricians should turn on power after 2nd fix electrics completed          No exposed cables to be left          Completed test certificates, copies to Site Manager          Isolate power to fittings/sockets prior to tiling</p>

**Note:** Adequate lighting must be provided throughout the work area, including where specific tasks require additional or emergency lighting.

## 7.4 Working With Gas



Occupational health considerations are critical when working with gas, due to the potential for both acute and chronic health effects. Exposure to hazardous gases—such as carbon monoxide, hydrogen sulphide, or volatile organic compounds—can result in respiratory issues, neurological damage, or long-term illness. Occupational health considerations are critical when working with gas, due to the potential for both acute and chronic health effects. Exposure to hazardous gases—such as carbon monoxide, hydrogen sulphide, or volatile organic compounds—can result in respiratory issues, neurological damage, or long-term illness.



Working with gas involves significant safety risks that must be carefully managed to prevent harm. Flammable, explosive, or toxic properties of various gases pose serious hazards in both industrial and domestic settings. Leaks, equipment failure, and inadequate ventilation can result in fires or explosions. Therefore, strict adherence to safety protocols, are essential. Comprehensive training and awareness are critical to ensuring that all personnel understand the dangers and respond effectively to potential incidents involving gas.



Working with gas has notable environmental implications that must be carefully considered and managed. Gas transportation and usage can contribute to air pollution, greenhouse gas emissions, and potential soil or water contamination. Methane, a common component of natural gas, is a potent greenhouse gas with significant climate impact if released into the atmosphere. Effective containment, leak detection, and sustainable practices are essential to minimise environmental harm. Regulatory compliance and environmental monitoring play a critical role in ensuring that gas-related operations are conducted responsibly and with minimal ecological disruption.

### 7.4.1 Working with Gas - Gas Engineers

Before permitting any gas work on site, the Site Manager must see evidence of the gas engineer's Gas Safe Register ID card and check that it covers the work to be carried out and take a copy of both sides of the card (Record).

Includes tasks such as:

- First fix works, for example the installation of pipework for boilers, kitchen appliances (cookers and hobs) and gas fires; and
- Installation, testing and commissioning of central heating boilers, gas fires, etc. The Gas Engineer must hold a Combustion Performance Analysis CPA 1 Qualification on their card.

Gas Engineer's Gas Safe Register ID card



The front of the Card

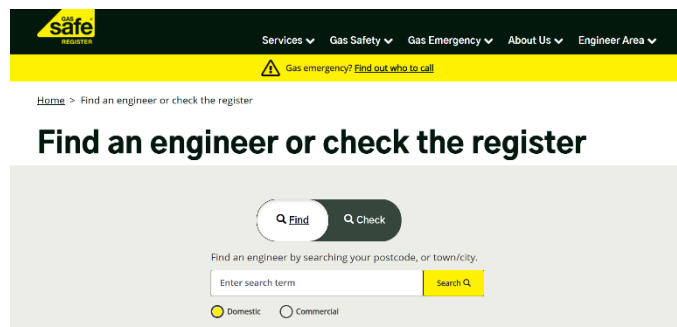
- The photo
- The start date and expiry date
- The licence numbers
- The security hologram

The back of the Card

- The Gas Engineer is qualified to do the required gas work, i.e., pipework, central heating boilers, cookers, gas fires, commissioning a system, etc.

Important notes:

- For any commissioning work on central heating boilers, fires or space heaters, the gas engineer's card must indicate they hold a Combustion Performance Analysis CPA 1 qualification - normally marked on the card as 'Comb Analysis'.
- If there is no confirmation that there is a current appropriate qualification, the Gas Engineer must not be permitted to start (or continue) work on site. Contact your Regional HSE Advisor immediately.



7.4.2 Gas Appliances

All Stock Homes / Apartments must have an annual inspection/service of all gas appliances, including any boilers and their associated flues systems, gas hobs and ovens and gas decorative fires.

- **Gas Appliances to be serviced:**
- When first commissioned.
- Before handover to a client if more than 3 months since last service.
- Annually if still not handed over; and
- Boiler sticker (regarding date of next service) to be affixed to boiler cabinet.



### 7.4.3 Carbon Monoxide (CO) Alarms

All properties with gas fittings must be fitted with a CO Alarm(s) in accordance with the latest manufacturer's instructions. Each room with a gas fitting e.g., boiler, cooker or fire, must be fitted with its own alarm in the room the appliance is located. CO Alarms can be either battery powered or hard wired. Where battery powered units are being used, these must be the Honeywell XC100.



Honeywell R200



DETA 1121



Fire Angel CW1-PF-T

Alarm Located	Alarm NOT Located
Wall mounted Above any door or window opening At least 150mm below the ceiling; and Within 1 to 3m horizontal distance of the appliance.	In a store/cupboard Directly above a sink/cooker Next to a door/window or anywhere that could be affected by draughts

Note: it is the gas safe engineer's responsibility to determine the correct location for CO alarms. The Site Manager must ensure that the gas engineer has been consulted re location.

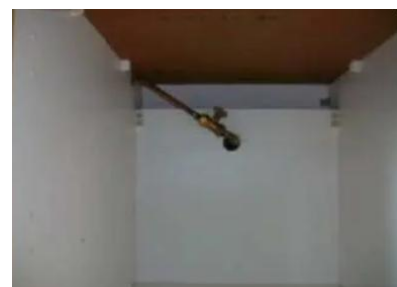
During 'familiarisation' the Site Manager will demonstrate to the customer how the alarm is tested and emphasise the importance of regular testing.

### 7.4.4 Gas Hob and Oven Pipework in Kitchen Units

During first fixing of gas installations, consideration must be given to:

- The positioning of the pipe work; and
- Access to the gas isolation valve.

An example of good practice – the pipe work and isolation valve placed at high level, clear of interference from drawers, stored items, etc.



The pipe work must be located to prevent interference / impact from items being stored in the unit.

Where the gas feed for the hob runs through the oven housing, care must be taken with regards to the location of the pipe and adequate space left for housing the oven.

Only once all appliances (Gas or Electric) have been installed in the house can the final Gas Soundness / Safety test (and issuing of the Gas Safe Certificate) be carried out.



## 7.5 Fixtures and Fittings



Fixtures and fittings can present hidden health hazards if neglected or poorly maintained. Dust accumulation on high surfaces, mold growth behind panels, and chemical emissions from certain materials can affect indoor air quality, triggering allergies or respiratory issues. Sharp edges or broken components may cause cuts and infections, while unstable fixtures increase the risk of physical strain or injury during use. Regular cleaning, proper installation, and choosing non-toxic materials are essential to minimize these risks and maintain a healthy environment for occupants



Fixtures and fittings, while essential for functionality and aesthetics, can pose significant safety risks if not properly installed or maintained. Loose shelving, unstable furniture, and poorly secured light fittings can lead to falls, injuries, or even structural damage. Sharp edges, protruding components, and inadequate load-bearing capacity increase hazards in both workplaces and homes. Regular inspections, correct installation, and adherence to safety standards are critical to prevent accidents. Awareness and proactive management of these risks help create safer environments for employees, visitors, and residents alike.



Fixtures and fittings can contribute to environmental harm throughout their lifecycle. Manufacturing processes often involve high energy consumption and the use of non-renewable resources, while certain materials release volatile organic compounds (VOCs) into the atmosphere. Poorly chosen or low-quality fittings may require frequent replacement, increasing waste and landfill impact. Additionally, improper disposal of components containing plastics, metals, or hazardous chemicals can pollute soil and water. Opting for sustainable materials, energy-efficient designs, and responsible recycling practices helps reduce these environmental risks significantly

### 7.5.1 Stability of Fixtures and Fittings

All heavy fixtures and fittings must be securely fixed to the wall using details specified in the manufacturer's instructions (see [Section 10.1.10](#) & [10.1.11](#)).

Modular, stone, or artificial stone fireplaces are an example of where individual components can exceed 50kg in weight. Toppling of the unit, if not secured adequately, could potentially be caused by the passive weight of heavy items placed on projecting mantels or by a person, such as a child, pulling on or hanging from the mantel.

**Note:** mortar bonding is not sufficient. Mechanical fixings to manufacturer's instructions must be provided:

Ensure that there are fixing instructions provided with any such fixtures and fittings appropriate to the wall type e.g., large / heavy fireplace surround

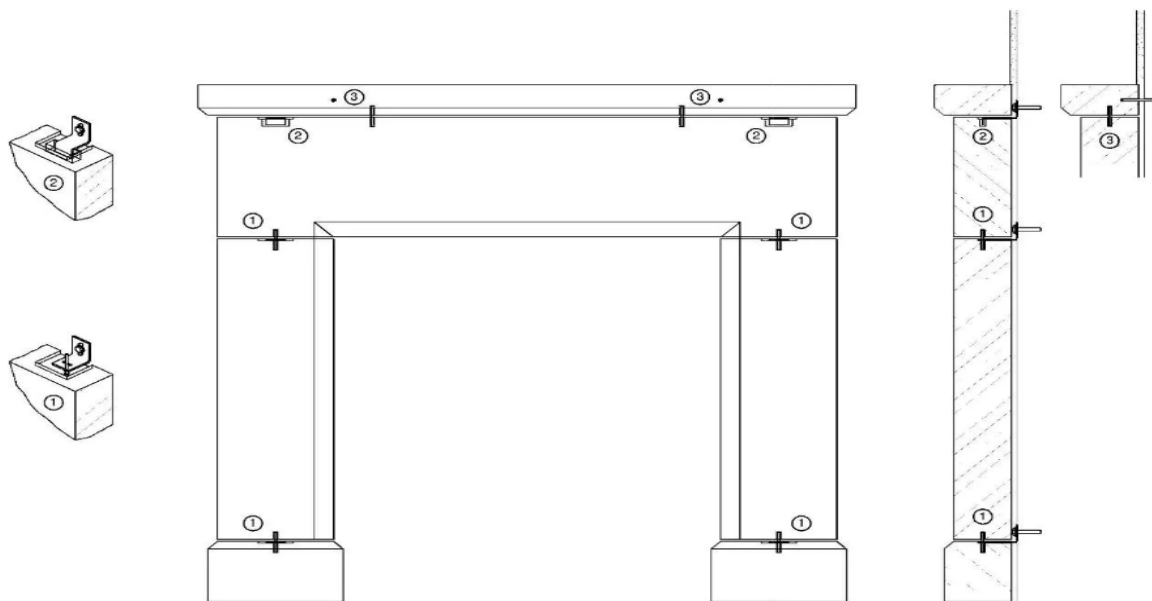
Ensure that they are followed by the installer; and

Obtain confirmation of this from the installer for each such installation. This must be as a minimum, photographs of the fixings in-situ securing the surround and the photographs placed in the plot-file as evidence of mechanical fixings being used.



#### Typical Fixing detail for a Modular Stone Fireplace Surround

See fixtures and fittings guide 'fireplace Surrounds' available on InHouse



### 7.5.2 Radiator Fixings

When fixing radiators to plasterboard walls, consideration must be given to the type of fixings used to secure the radiator brackets.

The installer must be able to provide evidence that fixings being used have been assessed and verified as suitable for the radiator (wet weight), brackets and the fixing background.

Guidance available that gives details of:

- The various fixing backgrounds encountered in our standard house types.
- The recommended fixing to be used and the load carried; and
- Table of radiators weights (wet weight Kg) for our standard Stelrad radiator range.

**Note:** most of our standard radiators have a wet weight below 40kg. If radiators above 40kg are being installed, an additional fixing must be used at the top of the radiator bracket (i.e., three fixings per bracket).

**Under no circumstances can lightweight plaster fixings such as, Rawl 'self-drive' or Screwfix Rayfix fixings be used to mount radiators**

**Radiator Fixing Guidance**

*Note: Any radiator over 40KG must have an additional fixing near the top of the fixing bracket (i.e. three fixings per bracket)*

Fixing Background	Recommended fixing <i>(Two fixings per bracket as per manufacturer's guidance and two brackets per radiator)</i>	Shear and tension value	✓ / X
<p>Block detail</p>	<p>Frame fixings Hilti HRD-H 10x80 / Fischer SXRFUS10x80 or equal</p>	Frame fixing to Lightweight block minimum 50mm in to blockwork: <b>14 kg</b> shear/tension load per fixing Frame fixing to Dense Concrete block minimum 50mm in to blockwork: <b>40 kg</b> shear/tension load per fixing	✓
	<p>Rawl plug Uno or equal with 80mm number 10 wood screw</p>	Screw and rawl plug Uno to Lightweight block minimum 50mm in to the blockwork: <b>17 kg</b> shear/tension load per fixing Screw and rawl plug Uno to Dense Concrete block minimum 50mm into the blockwork: <b>49 kg</b> shear/tension load per fixing	✓
<p>12.5mm Plasterboard Timber Frame internal 12.5mm Plasterboard internal partitions</p>	<p>Cavity anchor/ cavity toggle</p>	Hilti HHDS cavity anchor/toggle or equal <b>20 kg</b> tension load per fixing and <b>50 kg</b> shear load per fixing for 12.5mm plasterboard	✓
	<p>10GA x 50mm roundhead wood screw on to timber baton</p>	10GA x 50mm woodscrew in to 50mm timber baton – Tension load <b>62.8 kg</b> per fixing, <b>79.23kg</b> shear load per fixing 10GA x 35mm woodscrew in to 25mm thick timber baton – Tension load of <b>32.93kg</b> per fixing, <b>29.26kg</b> shear load per fixing 8GA x 35mm wood screw in to 25mm thick timber baton – Tension load of <b>26.3kg</b> per fixing, <b>29.26kg</b> shear load per fixing	✓
<p>Rawl self drive fixings Screwfix Rayfix</p>	<p>Lightweight plasterboard fixings such as Rawl DRA 'self-drive' fixings, 'tap-in' driven fixings (plastic or metal) or Rayfix plasterboard fixings <b>must not</b> be used under any circumstances.</p>		X

Version 1 – 26<sup>th</sup> August 2016

PTO for Radiator Weights

### 7.5.3 Mounted Kitchen Unit Fixings

When fixing wall-mounted kitchen units, consideration must be given to the type of fixings used to secure the units.

Prior to authorising kitchen fit out, the kitchen unit installer must provide to the site manager:

- Details of the specific wall-mounted unit fixing detail, which must include.
- Method of installation and specific fixing system for securing the units to specific backgrounds.
- Details of the fixings

Our current suppliers have provided details below with regards to their specific fixing system (see table below). Note: if the detail in the table does not match the fixing / background and a suitable alternative

detail / fixing has been provided or no fixing detail is provided by the installer, or the installer does not have the prescribed fixings - the kitchen fit-out must not proceed.

<b>KITCHEN SUPPLIER WALL UNIT FIXING SPECIFICATION</b>		
<b>SUPPLIER</b>	<b>SUBSTRATE</b>	
	<b>TIMBER/METAL PARTITIONS</b> Fitted with noggins/pattresses as instructed	<b>BLOCK AND BRICK</b> Dot/dab
<b>MOORES</b>	(Bracket system)	(Bracket system)
	50mm No. 10 screws Minimum <u>two</u> fixings per bracket	75mm No.10 screws Minimum <u>two</u> fixings per bracket  Rawl plug uno or equivalent Minimum 45mm plug and screw contact within block/brick
	(Fixed through cabinet rail)	(Fixed through cabinet rail)
	75mm No.10 screws	90mm No.10 screws  Rawl plug uno or equivalent Minimum 45mm plug screw contact within block/brick
	When fixing through rail units up to 600mm wide Two fixings top rail/two bottom rail. Units over 600mm three fixings to top rail/two bottom rail	
<b>MANHATTAN/PAULA ROSA</b>	(Bracket system)	(Bracket system)
	50mm No..10 screws Minimum two fixings per bracket	75mm No.10 screws Minimum two fixings per bracket Rawl plug uno or equivalent Minimum 60mm plug and screw contact within block/brick
<b>SYMPHONY</b>	(Bracket system)	(Bracket system)
	75mm No.10 screws Minimum two fixings per bracket	100mm No.10 screw Minimum two fixings per bracket Rawl plug uno or equivalent Minimum 50mm plug and screw contact within block/brick
Plasterboard fixings or cavity anchors <b>must not</b> be used under any circumstances		

#### 7.5.4 Fitting Stainless Steel Sinks

When fitting stainless steel sinks, there may be sharp edges around the waste outlet. To control the risk of cuts:

All stainless-steel sinks are supplied with a protective rubber grommet fitted round the waste outlet (those provided without the protective grommet in place to be returned to supplier); and

After removing the protective grommet e.g., when fitting the sink waste, cut resistant gloves must be worn when working with the sink unit.



#### 7.5.5 Drop Down Loft Hatches

All drop down loft hatch are delivered with two green 'blockers' that must be fitted as the final part of the hatch installation, (each Drop down Loft Hatch comes with fitting instructions attached). Once the blockers are fitted, the loft hatch door cannot be removed - except by removing the two 'blocker' retaining screws and releasing both blockers.



#### 7.5.6 Free Standing Wall Hung Basins

When fixing wall hung basins consideration must be given to the type of fixings used to secure the units. Prior to the site manager authorising the installation of these units the installer must provide a fixing detail that includes details of the fixings to be used including number, location and details of any specific backgrounds (pattresses).



## 7.6 External Finishing Trades



External finishing trades, including cladding, rendering, and painting, can expose workers to various health hazards. Prolonged contact with dust, cement particles, and silica during surface preparation may lead to respiratory issues such as silicosis or chronic bronchitis. Chemical exposure from paints, sealants, and adhesives can cause skin irritation, allergic reactions, or long-term toxicity. Noise from cutting tools and vibration from power equipment may contribute to hearing loss and musculoskeletal disorders. Implementing proper PPE, ventilation, and safe handling practices is essential to protect worker health.



External finishing trades, such as cladding, rendering, and roofing, carry significant safety risks during installation and maintenance. Working at height is a primary hazard, increasing the likelihood of falls without proper edge protection or harness systems. Manual handling of heavy panels and tools can lead to musculoskeletal injuries, while exposure to dust and chemicals poses respiratory risks. Poorly secured materials may fall, endangering workers and the public. Strict adherence to safety protocols, PPE use, and regular site inspections are essential to mitigate these dangers.



External finishing trades, such as cladding, rendering, and painting, can significantly impact the environment if not managed responsibly. The use of solvent-based paints and sealants releases volatile organic compounds (VOCs), contributing to air pollution and climate change. Waste materials like packaging, offcuts, and chemical residues often end up in landfills, while improper disposal of hazardous substances can contaminate soil and water. Energy-intensive processes and transportation further increase carbon emissions. Sustainable practices, waste reduction, and eco-friendly materials are essential to minimize these environmental risks.

### 7.6.1 Progressive Scaffold Strip

Wherever possible, finishing of external works at height must be carried out from the main scaffold. This will necessitate progressive stripping of the scaffold and must be considered when planning the works. Typical tasks that could be carried out from the main scaffold include:

- Installing balconies.
- Vertical tile hanging.
- Rainwater downpipes.
- Mastix pointing to windows.
- Cleaning, painting, snagging.
- Installing roof and high-level aerials.
- Core Drilling.
- Pointing putlog holes; and
- Installing vents, alarm boxes, outside lights, etc.



Where unavoidable, alternatives such as mobile towers (see [Section 5.24](#) & [7.1.8](#)), MEWPS (see [Section 8.4](#)), or ladders (see [Section 5.25](#)) can be used.

### 7.6.2 Core Drilling

Where core drilling cannot be undertaken from the external scaffold, a proprietary Scaffold Tower or Podium steps must be used.

**NOTE:** core drilling must not be carried out from a standard ladder or step ladder.

Where aluminium scaffold towers are being used to carry out external works consideration must be given to the ground conditions.

These towers can only be used on a prepared hard standing i.e., a tarmac driveway, paved area, level-compacted stoned area etc.

Working platform must be erected by a trained and authorised person, either Scaffold Operatives or PASMA Trained Operative(s)



### 7.6.3 Chemical Cleaning of Brickwork & Stone

Where chemical cleaning of external brickwork or stone is required, this is carried out by the application of a dilute solution of hydrochloric acid (8-10%) applied by brush or sprayed on. The acid breaks down the cement base and the residue is then removed by power washing with clean water.

The application must only be for the severely stained areas (i.e., spot application). Full areas must not be randomly covered.

The acid must not be brought to site if more than 10% concentration and must be stored in clearly labelled containers. The contractor must provide COSHH Assessments and detailed Product Data Sheets to the Site Manager before any chemical cleaning work commences.

**Controls (must be noted in the Contractor's Safe System of Work)**

#### Exclusion zone

- Establish a suitable exclusion zone.
- Display appropriate signs; and
- Inform other operatives (and homeowners where applicable) of the exclusion zone.



#### Suitable equipment and controls:

- Work from the ground or scaffold (no work to be carried out from ladders); and
- Extended lances must be used to reach high spots.

#### Personal Protective Equipment

- Waterproof gloves.
- Eye protection (face mask); and
- Waterproof overalls.



## 7.6.4 Gates

### Powered Gates (electric)

Powered gates, particularly those operated remotely, can present a significant risk to pedestrians – especially children.

They may only be used on a TW site if:

- A full Design Risk Assessment has been carried out by the Technical Team assisted by Production and the Regional HSE Advisor, considering any trapping and/or crushing zones and the controls necessary to avoid entrapment.
- Details provided of the 'designed-in' safety features to prevent entrapment, etc.
- CE marked with a Declaration of Conformity issued by the manufacturer/supplier; and
- Confirmation of the agreed maintenance is available.

For further details see

- The DHF Powered Gate Group's [Code of Practice for the Design, Manufacture, Installation and Maintenance of Powered Gates and Traffic Barriers](#); and
- TW's Technical Bulletin on Designing for Gates.

### Mechanical Gates

Only gates with specially designed hinges (prevent entrapment) must be used. Adequate safeguards, such as space between the gate post and pillar via hinge type, must be incorporated within the gate design and fitted to prevent entrapment.

See TW's Technical Bulletin on Designing for Gates for further details, available on InHouse



Potential for child to trap and injure fingers between gatepost and pillar



Note the modified hinge with adequate space between gatepost and pillar

The Site Manager must check that any gates being installed on the site have hinges that have been designed to prevent entrapment.

Before installation, the Site Manager must have received, in writing, from the Technical or Commercial Departments, as appropriate, confirmation that the design and installation instructions are in compliance with the safeguards and guidance document listed above.

If you have any concerns relating to gates on your site (electrical or mechanical) – stop work immediately and contact your Regional HSE Advisor for advice.