

17. Installation of Handrails

Method of work

- WMS operatives to arrive on site and introduce themselves to the client representative/ resident, showing them their allocated WMS ID cards if necessary.
- The pre –works information and if applicable asbestos survey are to be read and understood. Ensure there are no ACM's present within the area.
- WMS will erect warning signage or barriers to segregate the working area from access by other building users. WMS to ensure the welfare is available as described in CPP.
- WMS to ensure there are no trip hazards and that residents are not put at any risk.
- WMS operative's/ representatives are to wear PPE at all times i.e. safety boots and steel toe cap boots, gloves also to be worn for safety/ hygiene reasons and safety glasses.
- Lay dustsheets in the house to keep the inside of the house clean (if indoors/only access through the house).
- Ensure tools and equipment are not acting as a trip hazard.

Internal Handrail to Stairs:

- Measure up and mark out handrail height/position to wall at required height (usually 900mm from ground level)
- Run a string line if necessary to help, mark out fixing bracket locations to wall.
- Check wall for electrical cables/ pipework using cable/ pipe/ stud detector before drilling.
- Use small level to check the fixing brackets are straight.
- Fix brackets to wall using masonry fixings/ adequate sized wall plug and screw fixings.
- Once brackets are fixed in position the handrail can be fixed to brackets as per manufactures instructions or if the handrail and brackets are pre-fabricated the handrail can be fixed as one.
- The handrail can then be decorated if required.

Kee Clamp Handrails (External) :

- Refer to contract manager's design/ client's specification for the layout of new handrail system.
- If the handrails are being fixed to existing concrete base/ steps/ walls then these will be fixed in place using appropriate base/ wall fixing brackets.
- If the works include the excavation and forming of concrete base to take new handrail system then refer to **Excavations and CAT & Genny Procedure. Also see procedure for fencing for fixing posts into concrete.**
- Measure up and mark out fixing holes & position for wall/ base fixings and pre-drill with sds drill and masonry drill piece ready for securing fixings to existing concrete/ brick substrate.
- Suitably sized concrete fixings will be used to fix brackets into place. Check that these are fixed securely before assembling handrail.
- Cut sections of handrail to size using grinder. When cutting the handrail please do in a safe location, use the appropriate PPE and half face FFP3 filter mask and follow the manufactures guide for safety when cutting.
- Firstly install uprights, then going on to cross sections. Fix together using appropriate fixings/ components, tightening grub screws to secure in place, assembling as per manufacturer's instructions.
- If installation of handrail is into a structure please look for any services/stability of structure before fixing.
- Make good all areas affected by the installation or any other works, dispose of all debris and leave site in a clean and tidy condition.

See additional docs

Manual Handling
Rotary Disc Cutter
PPE

Risk Assessment

Hazard	Control Measures
COSHH	When using any chemicals, the COSHH safety data sheet will be followed to ensure that the safe working practice is followed. This includes storage and use, including the correct use of PPE. Common material sheets are within this document. Additional MSDS may be required for extra chemicals/substances ie Flux.
Hygiene	Good personal hygiene is a necessity washing of hands prior to any breaks (food – ingestion).
Asbestos	All operatives are to be Asbestos awareness trained. HSG264 R+D Asbestos survey is to be referred to before any works commence. Ensure asbestos are not disturbed during works. Tradesmen are to remain vigilant at all times when onsite and if any additional suspect materials are identified, site manager is to be informed immediately.
Slips Trips and Falls	The site will remain tidy at all practicable times. All designated access/egress routes shall be kept free of slip and trip hazards, and obstructions. All equipment is switched off and/or isolated when unattended. All material that could potentially cause injury is either secured behind barriers or removed from site.
Manual Handling	Correct lifting techniques are to be used at all times when moving equipment, materials or any heavy loads. Paying particular attention when lifting (stable stance, good grip, keep load close to your waist and do not flex your back).
Vibration	If there are any tasks with expected high levels of vibration. WMS shall use vibration calculator to work out if operatives are likely to exceed action levels. WMS have assessed these site and there are no excessive vibrating works that are likely have trigger times that will exceed the HSE 100 points. Subcontractors will also assess in their RAMS. Regular breaks between works involving high levels of vibration shall be taken.
Noise	If high levels of noise are expected, ear defenders and control measures are to be introduced if lower noise action value is expected to be exceeded (80dB weekly average or 135dB peak). If there are concerns that noise levels are above this, further investigation will be carried out.
Respirable Dust	Control measures are to be implemented when any operations are being undertaken that could give rise to respirable dust. Particular attention is to be made to silica dust. When cutting tiles, dust extraction is to be used to ensure operatives are not working above the 8hr control limit (0.1mg/m ³) and FFP3 masks that have been face fitted to the individual are to be worn.

PPE

