

8. Building of Block Wall

Method of works

Preparation Works

- Assess pre-works information. Including Asbestos information and report.
- Cordon off area to avoid damage or injury from debris.
- PPE to be worn (gloves/eye protection/ long sleeves and trousers). Wear face fitted FFP3 mask, where dust may arise. Regular breaks, undertake maintenance of tools.
- Ensure tools and equipment are not acting as a trip hazard.
- Competent and trained operatives to carry out CAT & Genny scan to identify services below ground and mark accordingly. Permit to dig to be opened, submitted to H&S Dept and closed on completion of works
- Position blocks/Stones work near work area using **mechanical machinery where possible to avoid manual handling**. Blocks shall be delivered to site palletised, off loaded as near to the point of use as practicable on a clean hard surface free from contamination by mud or surface water.
- Store metal ties and straps under cover and protect them from damage and distortion.
- Lay mixer in mixing area on plywood to protect the floor on a level surface.
- Clear area of new wall from obstructions. If an existing wall is to be demolished and carted away first, do this safely clearing the space ready for new footings/ wall construction.

Method

- Firstly form the footings for the wall to be built on. The footings are to be a minimum of 100mm deep and twice the width of the block size. So if the blocks are being lay 8inch wide, a 16inch width footing is required. (This however depends on the wall height and if the wall is retaining)
- Excavate trench for footings, to required depth 100mm+. Form shuttering/ framework if necessary using 4x2 timber ready for concrete footings to be formed.
- Lay hard-core if necessary, spread evenly and compact.
- Mix up concrete for footings at the ratio: 1 part cement : 2 parts sand : 4 parts coarse aggregate
- Pour concrete into formed trench, spread evenly using shovel and allow adequate drying time prior to forming block wall.
- Set out base course, laying blocks dry, and mark out running a string line ready for laying first course.
- Mortar for blockwork shall be mixed by machine except for small quantities only. Hand mixing (if permitted) may be done on a watertight platform.
- Lay first course of blockwork by laying a generous amount of mixed mortar on footing and position first few blocks tapping in to place. Filling perp joints as works progress.
- Once first course is lay and as works progress use plumb bob to check blockwork is plumb. If necessary adjust by tapping with trowel while mortar is still wet.
- Set out blockwork to adequate bonding i.e. stretcher, stack bond, English bond. Blocks will need to be cut as works progress using masonry chisel or disc cutter (wear goggles, gloves and RPE along with dust extractions/suppression techniques)
- Continue to build walls up to required height & width, using a string line to each course and level l to check alignment of blocks. Ensure all settings are level and plumb.
- Finish joints to blockwork as works progress.
- If blockwork is part of a cavity wall then, install wall ties in accordance with manufactures requirements/ clients specification.
- Once complete, dispose of all debris and leave site in a clean and tidy condition.

If works are to be carried out at height:

- Please ensure any debris cannot fall onto those beneath by cordoning off the area
- If scaffolding is required the scaffold is to be erected by an approved competent subcontractor scaffolding company in accordance with TG20:21.
- Please follow Working At Height

- If a scaffold tower is used it must be erected by a PASMA trained operative (including alterations to the tower).

See additional docs

COSHH Statement.
Working At Height
Regulation 8 form
Manual Handling
Permit To Dig
CAT and Genny Procedure

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
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.
Falls from height	See Working At Height
REG 8	Care is to be taken when working near any flues. WMS and subcontractors are to ensure that no flues/ventilation points are blocked (i.e. taped off/netted etc), and that Reg 8 Gas Safety is adhered to at all times. Any damage at the time of working to any flue/air duct –terminal or debris entering the flue/air duct, condensate pipework, gas installation pipework, gas meter & housings or any part of the heating installation must be reported: Turn off the effected appliance / installation /energy supplies and make safe. After all work is completed re-inspect all flue terminals / installations for damage.
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). Pallets are to be lifted suing mechanical lifting equipment and positioned close to working area where they can be separated and handled easily.
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.
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 blocks, dust extraction/ suppression techniques are 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.
Vulnerable persons	Appropriate signage must be used to segregate area from unwanted visitor's vulnerable persons. WMS shall temporarily cordon off the area of work using cones and barrier tape.
Electrical	Only battery operated or 110v tools to be used All electrical equipment is to be PAT tested. The equipment is to be inspected prior to use to check for defaults or any other issues that could cause harm when the item is used.
Inclement Weather	Regular checks of the weather forecast are to be carried out by the contracts supervisor. No works to be undertaken in wet conditions as this will weaken cement mix and also possible risk of environmental waste issues. No works are to be undertaken from scaffolding, towers or ladders in high winds. In times of high UV radiation workers are obliged to use sun screen protection. Workers are not permitted to 'strip off'. Minimum dress code is to wear a T-shirt. Anything less and the person/s must be ordered to cover up, or, on refusal to do so, removed from site. WMS are to check wind protection to ensure resident's possessions are not damaged.
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. Site manager to monitor noise levels and make building users aware if any high levels are planned.

PPE



If there are works being undertaken above you please also wear a Hard hat.