



AW/6261

October 2021

**CONSTRUCTION NOTES RELATING TO PROPOSED  
REPLACEMENT PAVILION,  
MELTON PLAYING FIELD, MELTON ROAD, MELTON, IP12 1NH.  
FOR MELTON PARISH COUNCIL.**

**To be read in conjunction with drawing numbers 6261/2B and 6261/3.**

**FOUNDATIONS**

For foundation plan and details of trench fill foundations refer to drawing number 6243/3.

All foundations to be Gen. 3 grade concrete, all in accordance with B.S. 5328.

All foundations to external walls to be min 600mm wide.

Foundations below partition between Flexible Community Space/WC's and Kitchen to be as above but 450mm wide.

Below posts excavate and cast 900mm wide pad foundations.

Foundations to be founded at a min depth of 750mm increased to 1000mm if found to be clay site all as required by The Building Control Officer.

All foundations in the vicinity of any drains are to be taken down below invert level of drain to ensure no surcharge is transmitted onto drain.

Due to the presence of adjoining trees, all above excavations are to accord to the recommendations of NHBC's 'Building Near Trees' document.

If any steps are to be formed in the foundations, ensure that the lap is greater than the step.

All above excavations, pouring of concrete etc. to the satisfaction and requirements of the The Building Control Officer.

## **D.P.C.**

To new external walls provide and build in Hyload 'Housebuilder' or equal DPC finished 150mm above ground/paving level externally and at top of concrete slab level internally.

Cavity wall insulation to be maintained/continued down to lowest DPC level.

At jambs of external door and window openings in external walls, cavity to be closed using proprietary insulation closers to achieve min. thermal resistance path of  $0.45\text{m}^2 \text{K/W}$ .

Frames to overlap insulated closers by a min. of 30mm.

Cavity to be filled with concrete to within 150mm of outer leaf DPC.

## **FLOOR**

Excavate down to formation level and lay over area min. 100mm thickness of well consolidated hardcore, including taking down as backfill to foundation trenches internally. Hardcore to be well blinded to receive 1200 gauge polythene WPM, well lapped and taped at joints and carried up external walls and built in at DPC level.

Over WPM cast min. 100mm thick Gen. 3 concrete floor slab to receive min. 100mm thickness of Celotex Ltd's 'GA4000' insulation laid with joints closely butted, over insulation lay further layer of 1200 gauge polythene and finish floor with 75mm thickness of cement and sand screed, reinforced with one layer of D49 wire mesh positioned centrally within the screed depth, alternatively reinforce the screed using 20mm reinforcing fibres.

'U' Value of floor  $0.16 \text{W/m}^2\text{K}$ .

At perimeter wall locations provide and install Celotex Ltd's 'T-Break TB 3020' vertical upstand insulation the full height of the screed and insulation to achieve minimum 'R' Value of  $0.75\text{m}^2 \text{K/W}$ .

Store floors are to be constructed all as above but omit the insulation and screed. Finish concrete with a woodfloat laid to a slight outward fall.

## EXTERNAL WALLS

**Below DPC Level** -310mm cavity brickwork walls comprising 105mm common brick or 100mm trench fill block inner leaf up to lowest DPC level, allow for 100mm cavity and construct outer leaf to within 150mm of ground or paving levels using 105mm common brickwork or trenchfill blocks, above this height outer leaf constructed using 105mm facing brickwork.

All cavities to be filled with lean mix concrete to within 225mm of lowest DPC level with every fourth perpend left open as weepholes in outer leaf below ground level.

**Above DPC Level** - 305mm cavity brickwork walls comprising inner leaf of 100mm Thermalite Turbo or equal lightweight aircrete blockwork laid to accord to Manufacturer's recommendations and plastered internally using dense plaster, allow for 100mm cavity, above this height construct outer leaf using 105mm facing bricks continued up to a height of 300mm above dpc level (4 courses) to form plinth. Above this height construct outer leaf using 100mm thick Thermalite 'Shield' or equal blocks (suitable for external wall use) to receive 25x50mm treated vertical battens and finish walls externally using selected manufacturers horizontal mock weatherboarding fixed all to manufacturers recommendations and instructions. Boarding is to be anthracite grey (RAL 7016). At junction of boarding to brickwork below i.e. at plinth level, provide and fix horizontal treated timber batten with boarding extended over to form drip. To all external corners and at reveals of window and door openings provide and fix vertical battens to effectively close ends of boards, all to manufacturers details.

Build into cavities Knauf Insulation Ltd's 100mm thick Crown 'Dritherm' cavity insulation slabs strictly in accordance with Manufacturer's printed instructions. 'U' Value of external wall 0.28 W/m<sup>2</sup>K. Cavity wall insulation to be extended the full height of all walls and extended to ensure abutment with roof insulation. In addition ensure wall insulation is extended down below top of floor insulation by a min. of 150mm.

Leaves of cavity walls to be tied together using stainless steel wall ties to B.S. 1243 : 1978 : amended 1981, at 750mm horizontal and 450mm vertical centres and staggered and at 225mm vertical centres at jambs of all window and door openings.

Store walls to be constructed all as above but omit the cavity and tie leaves of walls together using s/s cramps all as above.

## PARTITIONS

Construct all new partitions using 100mm Thermalite Turbo or equal lightweight aircrete blockwork laid to accord to Manufacturer's recommendations and plastered both sides using dense plaster.

Wall between Flexible Meeting Room and Stores is to be constructed as an insulated cavity wall all as described above for external walls but above dpc construct both leaves using 100mm Thermalite Turbo or equal lightweight aircrete blockwork laid to accord to Manufacturer's recommendations and plastered on Flexible Meeting Room side using dense plaster.

## **LINTELS AND BEAMS**

Over external window and door openings provide and install Catnic code CG90/100 or equal manufacturers lintels.

Lintels to conform to BS 5977:Part 2 and to be pre-insulated as in exposed locations to prevent cold bridging occurring.

Lintels to have min. 150mm end bearings.

Soffits of lintels internally as in exposed locations, to be plastered using min. 15mm of lightweight plaster, or alternatively, case in plasterboard and finish with skim coat plaster finish, incorporating solid timber blocks to facilitate fixing of curtain tracks.

## **WINDOWS**

Windows to be selected manufacturers anthracite grey finished pvcu double glazed windows of pattern, configuration etc. all as denoted on drawings.

Windows to be fitted with friction hinges of type to ensure opening part of window will open at least 30° to ensure necessary purge ventilation is achieved.

All windows to be fitted with lockable fasteners.

All windows externally to have gun applied mastic seal between unit and masonry/boarding externally.

All windows to be draught/weather stripped.

Within heads of all windows, provide and fix trickle ventilators of sizes all as per the schedule elsewhere (see Background Ventilation Note).

## **EXTERNAL DOORS**

Flexible Community Space door to comprise selected pvcu unit complete with pair of outward opening doors incorporating glazed sidelights on both sides. Doors to ensure a min. clear width of 775mm is achieved when one leaf of the door is open, in addition unit to incorporate a low threshold seal to facilitate wheelchair access into the building. These access doors to be hung to ensure when being used an opening force not greater than 20 Newtons needs to be applied.

External door to WC is to be selected steel single door of size to ensure a min. clear width of 775mm is achieved, in addition unit to incorporate a low threshold seal to facilitate wheelchair access into the WC. This door is to fitted with push pad etc to facilitate it being able to be operated electrically. This door to be hung to ensure when being used an opening force not greater than 20 Newtons needs to be applied.

Store doors to be selected pvcu pair of doors with doors being rebated together at meeting stiles.

All doors externally to have gun applied mastic seal between joinery and masonry externally.

All external doors to be draught/weather stripped.

Within heads of all external doors, provide and fix trickle ventilators of sizes all as per the schedule described elsewhere (see Background Ventilation Note).

## **INTERNAL DOORS**

All internal doors giving access into respective rooms to be selected doors of min. 838mm width to facilitate wheelchair access into respective rooms. Doors to WC's are to be hung to open outwards.

Door to Internal WC to be hung to ensure a min 10mm air gap is achieved between underside of door and floor finish.

Door between Kitchen and Flexible Meeting Room is to incorporate a vision panel.

Ensure selected doors are finished to contrast in colour against the surrounding walls is achieved. Equally ensure the selected door furniture contrasts against the door.

All doors to be hung to ensure when being used an opening force not greater than 20 Newtons needs to be applied.

## **GLAZING**

All windows and glazed elements of all external doors including sidelights to be double glazed using 'K' glass with min. 20mm air gaps to achieve min. 'U' Value of 1.30W/m<sup>2</sup>K or better. External doors to achieve min. 'U' Value of 1.4W/m<sup>2</sup>K or better.

Glazed elements of all windows and external doors including sidelights to be undertaken using laminate/safety glass to conform to B.S. 6206: 1981, and to be effectively 'Kite' marked as such for ease of identification.

External glazing to doors to incorporate manifestation to glazing to an extent to ensure area of glass is apparent, alternatively fit large pull handles to each door.

## **WINDOW AND DOOR LOCKS**

All windows and doors to be manufactured, designed and tested to show security requirements of PAS 24:2012 or Appendix B of Approved Document Part Q.

## **SECURITY SHUTTERS**

To all windows and to Door Units serving The Flexible Community Space and Stores, provide and fit Samson Doors SeceuroShield 75 or equal manufacturers electrically operated roller shutters which are to finished anthracite grey (RAL 7016) to match the windows and doors.

## **BACKGROUND VENTILATION**

To building provide and install to provide background ventilation, trickle ventilators in heads of windows and external doors to the schedule below :-

Total floor area of building = 74.4m<sup>2</sup>.

Background ventilation requirement = 35,000mm<sup>2</sup>.

To windows and external doors in the following rooms provide trickle ventilators of size to achieve min. 5000mm<sup>2</sup> free air supply:

- 2 no. Kitchen window (North Elevation)
- 2 no. Flexible Community Space Door Unit (North Elevation)
- 2 no. Flexible Community Space Door Unit (South Elevation)
- 1 no. WC Window (South Elevation)
- 1 no. WC Window (South Elevation)
- 1 no. WC Door (West Elevation)

Total number of trickle ventilators = 9 no.

Total background ventilation achieved = 9 x 5000mm<sup>2</sup> = 45,000mm<sup>2</sup>.

## **ELECTRICAL INSTALLATION**

All wall mounted switches, TV and BT sockets, outlets etc. to be located between 450mm [to bottom of box] and max 1200mm [to top of switch] above floor level to allow accessibility by the Disabled. Generally light switches to be located at 1200mm above floor level with power outlets at 450mm, rising to 1050mm where above Kitchen work surfaces.

External Disabled WC is to have anti-vandal fittings used.

Consumer unit to be located 1350mm above finished floor level to allow operation by the disabled.

Lighting installation to include fixed lighting with an average efficiency of not less than 45 luminaire - lumens/circuit watt as averaged over the area of the building. Lighting controls are to be installed so to avoid unnecessary lighting of areas when areas are not in use.

External lighting fixed to the building should have sockets that can only be used with lamps having efficiency greater than 45 lumens per circuit watt, or automatically extinguish when there is enough daylight via sensor combining relay and when not required at night.

All electrical work is to be undertaken by a competent Electrician with the design, installation and testing, all to conform to 'Approved Document Part P'.

Electrician to issue an appropriate B.S. 7671 Electrical Installation Certificate and make available for The Building Control Officer.

Consideration is to be given to the choice of colour for switch plates, socket covers etc to ensure a contrast between them and the wall colour is achieved.

## **BROADBAND INSTALLATION**

Building is to have infrastructure built in including network termination point to facilitate future high speed electronic network communication to be connected, all to comply with the requirements of Approved Document Part R.



## **KITCHEN MECHANICAL VENTILATION**

Provide and install wall mounted extract fan to provide min. 60 litres per second extraction rate and to be operated intermittently.

Fan to be fitted with anti-backdraught shutter as an integral part of the fan.

Installation to include isolating switch.

Fan to be ducted through external wall and to be fitted with weathered louvre grille at termination.

Ensure installation is undertaken all in accordance with manufacturer's details and to guidance of 'Appendix E of Approved Document F'.

## **INTERNAL WC MECHANICAL VENTILATION**

Provide and install ceiling mounted extract fan to provide min. 15 litres per second extraction rate and to achieve a min of 3 air changes per hour and to be wired into lighting circuit and fitted with variable time delay device with minimum 15 minute overrun facility.

Fan to be fitted with anti-backdraught shutter as an integral part of the fan.

Installation to include isolating switch and pull cord for intermittent operation.

Fan to be ducted within roof void and then through roof terminating at Redland or equal patent vent tile accessory to suit roof finish. Ducting is to be fully insulated and if flexible ducting is used ensure this is pulled tight to prevent any peaks or troughs. Ductwork to incorporate a condensation trap all in accordance with fan manufacturers recommendations.

Ensure installation is undertaken all in accordance with manufacturer's details and to guidance of 'Appendix E of Approved Document F'.

## **EXTERNAL WC MECHANICAL VENTILATION**

Provide and install wall mounted extract fan to provide min. 15 litres per second extraction rate and to be operated intermittently.

Fan to be fitted with anti-backdraught shutter as an integral part of the fan.

Installation to include isolating switch.

Fan to be ducted through external wall and to be fitted with weathered louvre grille at termination.

Ensure installation is undertaken all in accordance with manufacturer's details and to guidance of 'Appendix E of Approved Document F'.

## **INTERNAL DISABLED WC MECHANICAL VENTILATION**

Provide and install wall mounted extract fan to provide min. 15 litres per second extraction rate.

Fan to be fitted with anti-backdraught shutter as an integral part of the fan.

Installation to include isolating switch and pull cord for intermittent operation.

Fan to be ducted through external wall and to be fitted with weathered louvre grille at termination.

Ensure installation is undertaken all in accordance with manufacturer's details and to guidance of 'Appendix E of Approved Document F'.

## **FIRE PROTECTION [SHOWN 'SD' AND 'HD' ON PLANS]**

Provide and install at approx. locations shown on plan self-contained smoke detectors, installed to the requirements of B.S. 5839: 6: 2004, to be mains operated and fitted with trickle charge batteries to ensure operation in the event of mains failure. In addition within Kitchen provide and install heat detector linked into smoke detection system.

All detectors to be interlinked and separately fused on distribution board.

## **FIRE RISK ASSESSMENT**

Building owners are to prepare and to maintain their own fire risk assessment document all in accordance with and to accord to The Regulatory Reform (Fire Safety) Order 2005.

## **FIRE EXTINGUISHERS**

Provide at locations as recommended by County Fire Officer, fire extinguishers of type and capacity as directed and complying with BS EN3.

## **FIRE SAFETY NOTICES**

Provide at locations as recommended by County Fire Officer, fire notices of type and wording etc. as directed and to comply with B.S. 5449-1 : 2002.

## **EXTERNAL AND INTERNAL DISABLED WC'S**

Within each facility provide a 'Doc M' package comprising of WC pan and low level cistern, wall mounted handwash basin and fixed and hinged support grab rails etc. all as indicated and set out dimensionally in diagrams 18 and 19 of 'Part M' of The Approved Documents. External Disabled WC is to have anti-vandal appliances and fittings used. Note consideration should be given to ensure a contrast between the wall and fittings is also achieved.

Provide and install within each room an emergency assistance alarm system which is to be of type to confirm to user an emergency call has been received and the audible sound emitted is different to that of the fire alarm system. Ensure a reset facility is provided and located at a position which is reachable from a wheelchair and the WC.

Ensure selected flooring is of a non-slip type and contrasts with wall and fittings.

## **INTERNAL FINISHES**

Consideration is to be given to the choice of wall finishes, floor finishes and fittings to ensure a contrast between them is achieved.

External Disabled WC is to have all walls finished using white wall tiles.

## **SPACE AND WATER HEATING**

Central heating and water heating throughout the building is to be undertaken using electric heating system to ensure the building is used as efficiently as possible.

Installation to be undertaken by a competent Electrician/Plumber or suitably qualified person, who is to complete the checklist and submit to The Building Control Officer.

Provide and fit to all basin taps and to sink unit tap a valve to ensure the temperature of the flowing water does not exceed 48o and to be located close to the final outlet to prevent the colonisation of waterbourne pathogens.

A durable notice shall be affixed in a suitable place in the building which is to contain the information on the performance capabilities of the appliance.

All above to ensure compliance with the requirements of 'Part J for Combustion Installations'.

On completion of the dwelling, provide and undertake SAP 2009 and "As Built" SBEM rating calculations and forward to Building Control Officer.

All installation documents, instructions, test reports etc. to be provided and handed over to the buildings owner.

On completion of the dwelling an 'air permeability' pressure test is to be undertaken by a Specialist Sub-Contractor and results forwarded to The Building Control Officer. Test is to achieve a min. of 6.00m<sup>3</sup> [h.m<sup>2</sup>] @ 50Pa.

Any pipework not providing a useful heat source to be thoroughly lagged using Armaflex or equal sectional lagging, wired in position. Pipework within External Disabled WC is to be boxed in to effectively hide it.

Existing mains wholesome water provided by Anglian Water Services Ltd is to be adapted/ extended with supply terminating within the Kitchen.

## **ROOFS**

Undertake fabrication of roofs using standard pre-treated trusses to conform to B.S. 5268: Part 3: 1985, to be manufactured by a Specialist Supplier with a current Agreement Certificate who is to provide design calculation sheets/drawings which are to be issued to the Building Control Officer prior to roof work commencing on site. Trusses to be fixed down to 50 x 100mm C16 grade horizontal timber wall plates using BAT or equal truss clips.

Horizontal wall plates to be strapped down to masonry using 30 x 5mm galvanised m.s. straps at 1200mm centres, carried down face of blockwork internally and plugged and screwed to same and plastered over.

All roof timbers to be braced by fixing diagonally in position to top of rafters PIIY or equal, multipurpose fixing band, fixed in both directions. Bracing to comply with the requirements and recommendations of B.S. 5268: 1985, and to the Truss Manufacturer's recommendations.

Cover roofs using Klobber 'Perma Air' or equal vapour permeable membrane complete with eaves carrier dressed into rainwater gutters at eaves level, fixed strictly in accordance with Manufacturer's instructions/recommendations. Fix 12mm counter battens [if required] and 25 x 50mm treated s.w. battens, nailed to B.S. 5534, and finish roofs with Sandtoft Shire Rustic Red pantiles fixed all in accordance with Manufacturer's instructions, Codes of Practice and British Standard Specifications. Tiles are to be nailed with ridge and hip tiles being mechanically fixed, all to accord to B.S. 5534:2014. Note if an alternative membrane to the above is installed and is not fully breathable then ensure eaves ventilation within the soffit is provided.

Undertake insulation of level sections of roofs (Kitchen and WC's) by laying between ceiling joist members, 1 layer of Knauf Insulation Ltd's 200mm thickness of 'Crown Loft Roll Insulation' and a further 2 layers of 100mm thick Knauf Insulation Ltd's 'Crown Loft Roll Insulation' with layers at right angles to layer below. 'U' Value of roof 0.11 W/m<sup>2</sup>K. Finish ceiling with 12mm foil-backed plasterboard with skim coat plaster finish.

Undertake insulation to sloping sections of ceilings (Flexible Community Space) by fixing between the rafters, 100mm thickness of Celotex Ltd's 'GA 4000' insulation with underside of insulation finishing flush with underside of the rafters. Underline insulation/rafters with additional layer of 50mm thickness of Celotex Ltd's 'GA 4000' insulation and finish ceiling with 12.5mm thick plasterboard with joints taped and finish with skim coat plaster finish. 'U' Value 0.16 W/m<sup>2</sup>K. Note: It may be necessary to batten down the underside of rafters to achieve min. 25mm air gap between top of insulation and membrane, all in accordance with Manufacturer's recommendations/instructions.

Where applicable, ensure roof insulation is extended as necessary to abut with wall insulation to prevent cold bridging occurring.

Between roof voids between Flexible Community Space and WC's/Kitchen insulate partition on WC's/Kitchen side by applying 100mm of Celotex GA4000 insulations fixed in position with all joints taped.

Note no insulation is to be provided in the roof of the Stores.

## **LOFT ACCESS DOORS**

Within Kitchen between ceiling joists, provide and install Glidevale or equal Manufacturers pre-finished Code LA2, phenolic foam, insulated, hinged trap door, complete with draught stripping, fixed all in accordance with Manufacturers' instructions and embracing trimmer each end between ceiling joist members.

To Store between ceiling joists provide and fit similar trapdoor but do not insulate.

## **NOTCHES AND HOLES IN ROOF JOISTS**

As standard pre fabricated trusses are being used under no circumstances are these to be drilled or notched.

## **ABOVE GROUND DRAINAGE [TO B.S. 5572]**

External WC - At approx. location indicated on drawing provide and install 110mm dia. soil, waste and vent pipe to receive 110mm WC branch connection and 36mm dia basin waste. SW&VP to be fitted with 'Durgo' or equal air admittance valve positioned min 300mm above flood level of highest appliance. 'Durgo' to be accommodated within casing with grille inserted into casing to ensure efficient operation of 'Durgo' valve. Note all waste pipes are to be contained within boxings/casings so they are hidden.

Internal WC's - At approx. location indicated on drawing provide and install 110mm dia. soil, waste and vent pipe to receive 2no 110mm WC branch connections 2no 42mm dia basin wastes. SW&VP to be extended vertically and to terminate through roof min. 900mm above window head level at Redland or equal patent vent tile accessory to suit roof finish.

Kitchen - At approx. location indicated on drawing provide and install 82mm dia. waste and vent pipe to receive 42mm dia sink unit waste. W&VP to be fitted with 'Durgo' or equal air admittance valve positioned min 300mm above flood level of highest appliance. 'Durgo' to be accommodated within casing with grille inserted into casing to ensure efficient operation of 'Durgo' valve.

To sw&vp's ensure no waste connections are made within restricted zone of WC entry unless collar boss fitting is used.

All wastes to be fitted with 75mm deep seal 'P' traps.

All waste pipes to all fittings/appliances to be fitted with cleaning eyes/access points at all changes of direction.

## **FOUL DRAINS [TO B.S. 8301:1985]**

Refer to drawings for details of drain runs, location of manholes etc.

New drains to comprise 100mm dia. flexibly jointed pipes, laid to a fall of approx. 1 in 60 and to be surrounded with 150mm of 9mm pea shingle and to have a min. 50mm lean mix concrete protection provided over and are to terminate at existing ic leading to existing foul sewer.

Any drain passing through wall, wall to be reinforced over using pre-stressed concrete lintels to each brick leaf with 50mm space left all round pipe and mask both sides with rigid sheet material.

Drainage runs indicated on plans are assumed only, prior to implementing any excavations etc contractor is establish the proposed system and any variations to the drainage proposals are to be agreed on site with The Building Control Officer.

## **RAINWATER**

To serve new building provide and fix selected gutters with matching downpipes, discharging into easy bends or alternatively into back inlet hopper/gully. All fixings to be made using rustproof fixings.

For details of drain runs etc refer to drawings. Drainage runs indicated on plans are assumed only, prior to implementing any excavations etc contractor is establish the proposed system and any variations to the drainage proposals are to be agreed on site with The Building Control Officer.

Drains to comprise 100mm dia. flexibly jointed pipes, laid on a 75mm bed of 9mm pea shingle and to a fall of approx 1 in 60 and are to terminate into existing ditch at rear of the site. In open end of the pipe fit wire guard to prevent ingress of vermin.

Any drain within 900mm of building or less than 600mm below ground level to be surrounded with 150mm of 9mm pea shingle and to have a min. 50mm lean mix concrete protection provided over.

Catchpits to comprise 450mm Marley or equal, universal PVCu inspection chamber, bedded on and surrounded with 150mm concrete. All inlet and outlet pipes into respective catchpits to incorporate flexible joints within 300mm of manhole.

At approx location indicated on drawing provide and install yard gully fitted with removable grille/cover and removable mud bucket.