University of the Arts London
Washroom (Toilet) Design Particulars Document

UAL Estates Department

<table>
<thead>
<tr>
<th>Date</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 2017</td>
<td>1.0</td>
</tr>
<tr>
<td>January 2018</td>
<td>2.0</td>
</tr>
<tr>
<td>February 2019</td>
<td>3.0</td>
</tr>
</tbody>
</table>
## Version & Audit Control Sheet

<table>
<thead>
<tr>
<th>Rev.</th>
<th>Date</th>
<th>Description of amended items</th>
<th>Prepared by</th>
<th>Verified by</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>05/01/18</td>
<td>Added new section - CCTV / Drainage inspections (Section 1.2)</td>
<td>Estates Building Surveyor</td>
<td>Estates Building Surveyor</td>
</tr>
<tr>
<td>3</td>
<td>18/02/19</td>
<td>Section 2.2 Item 13. Added further information regarding WRAS and Chlorination.</td>
<td>Estates Building Surveyor</td>
<td>Estates Building Surveyor</td>
</tr>
</tbody>
</table>

### How to use this document:

The Contractor is to ensure new washroom fit out schemes adhere closely to this document and deviation is approved in writing from the UAL.

The document is content-linked for ease of use when reviewing electronical by clicking each of the contents items.

### PLEASE NOTE:

This guide may not apply to the entire UAL Estate, some buildings within the portfolio have site specific limitations. Each new refurbishment project should be design using this guide as a tool to assist the works.
Contents

1. Introduction
   1.2 Drainage Survey

2. Materials and Specification
   2.1. Toilet Cubicles / Duct Panels and IPS Units – Incl. Layouts and Design
   2.2. Sanitary Fittings – Toilet Pans to Tap Fittings
   2.3. Hand Dryers
   2.4. Vinyl Flooring
   2.5. Lighting
   2.6. Colours – Laminates to Walls
   2.7. M&E – General
   2.8. Miscellaneous – Bins, Signage, Mastic
   2.9. Mirrors
   2.10. Edge Protection

3. Appendix A – BS8300 Diagrams
1.0 Introduction

This design guide was produced as a result of an inconsistency in washroom and sanitary specification across the UAL Estate. The purpose of this guide is to provide a consistent approach to washroom and WC specification to ensure durable, reliable, and hardwearing fixtures and fittings are selected.

Items, Equipment, and Materials within this document were selected for their hardwearing properties and attributes based on performance criteria suitable for high volume areas as seen in the education and commercial sector.

This document will also assist the Facilities Management Department with supply chain management and procurement of consumables and spare parts.

Deviation of this specification is permitted but must be given authority from the UAL Project Lead within the Estates Department.

1.1. Environmental Stewardship

In line with the UAL Sustainability policy, Product and materials selection must comply with the relevant RICS SKA Rating and offer environmentally conscious benefits, such as reduced water consumption, energy efficient fittings and extended lifespan finishes. The items listed within this document have been selected on this basis and the rating information is listed as applicable.

Please Contact UAL Estates Sustainability Team for further information or assistance with future SKA Compliance matters.
1.2 Drainage

It is UAL Policy that Toilet Refurbishment Schemes are to have a Drainage Survey undertaken, where deemed necessary and instructed by the UAL Project Lead, by an experienced drainage specialist prior to any demolition or strip out of existing sanitary services. The survey should include a complete CCTV inspection of the horizontal and vertical stacks to ascertain the condition of existing pipes, joints, couplings, gulley’s and manholes. The Survey should be presented to the UAL Estates Project Lead in electronic format with the footage supplied on DVD or USB Flash Drive.

The Survey should be discussed with the UAL Estates Project Lead and any remedial works undertaken to allow a free flowing drainage system.

As a part of the new installation rodding points in existing drainage systems should be opened up and refitted with new sealant and fixings as appropriate. This is because we have numerous cast metal stacks with aged rodding points that have historically proven difficult to access. All new drainage systems are to have rodding points on bends and at the entry point into the stack and a removable cap at the end of any horizontal run.

The Contractor is to compile a full Photo Schedule of Condition to all of the sanitary system and Washroom area prior to demolition and removal of fixtures and fittings.
2.0 **Materials and Specification**

2.1. **Toilet Cubicles / Duct Panelling / Vanity Units**

To cope with a high use educational environment, the general toilet performance specification mantra is to be **Tough, resilient, and hardwearing** - whilst aesthetically pleasing. Solid Grade Laminate (SGL) is the only material permitted to be used in UAL cubicle systems, MFC must not be used unless in the construction of Vanities and minor duct panels, with prior approval from Estates Project Lead.

**LAYOUT & DESIGN**

Toilet cubicle sizes often vary and are designed to suit the existing space available especially when regarding the refurbishment of existing areas. The diagram below details best practice when considering cubicle size and layout for new installations and refurbishment of existing buildings. For all UAL washroom refurbishments and new installations this must be used as a minimum requirement where reasonably practicable. Deviations must have prior approval from Estates Project Lead.

![Diagram of Toilet Cubicle Sizes](attachment:toilet_cubicles_diagram.png)

**Enlarged WC Cubicles:**

Where there are **4 or more** cubicles in a single washroom, 1 of these must be an **enlarged cubicle**. Enlarged cubicles must be a minimum width of 1200mm and include an outward opening door. A horizontal and vertical grab rail set is required around the WC. This requirement isn’t necessary if the washroom is located next to or near a BS8300 compliant Accessible Toilet.
**Standard Toilet Cubicles:**

All standard WC cubicles, ideally, should be 850mm wide, 1500mm long and have a minimum of 450mm diameter manoeuvring space within the cubicle. Indicator-bolts must be capable of being operated with a closed fist (single action) - and doors must allow for emergency access should the user collapse and become trapped in the cubicle. 850mm wide is preferred, but understood in existing buildings this isn’t always possible. Metal coat hook on rear of door.

**Ambulant Disabled Cubicles:**

Every same-sex washroom must have at least one cubicle that is suitable for the ambulant disabled. If there is only one cubicle in the washroom this must be suitable for an ambulant disabled person. The ambulant disabled cubicle must include an outward opening door and be 800mm wide complete with two horizontal grab rails. See diagram 21 within Appendix A.

**Wheelchair Accessible Toilets**

Where wheelchair accessible toilet provisions are required, it must be designed and installed in compliance to BS8300 and Approved Document M of the Building Regulations 2016 as amended.

Diagrams 18 & 19 within Appendix A illustrate the setting out and dimensions to enable compliance. Above and beyond information stated in this document BS8300 is to be checked for dimensional correctness.

Most manufacturers of sanitary ware offer a ‘Doc M’ Pack, complete with all rails, and fittings required to meet Building Regulation approval. Prior to installation the fixtures and fittings and their final locations should be set-out by the Contractor and checked by the UAL Project Manager prior to installation for client sign off.

**Design Principles:** As per Diagrams 18,19 & 20 in Appendix A.

**Minimum internal size:**

Type 1: 1500mm x 2200mm with outward opening door.  
Type 2: 1500x 2700mm with inward opening door.

The minimum dimensions for an accessible WC are 2200mm x 1500m with a 900mm to 1m outward opening door. In an existing building where structural alterations may be difficult a clear opening width of 850mm may be acceptable. It is crucial that this minimum opening is achieved as it will ensure suitable wheelchair manoeuvrability.

An accessible WC should not be kept locked, RADAR locks are not to be installed on UAL Washroom facilities, unless in specific isolated cases where instructed by the UAL Project Lead.
Accessible WC Location:

Wherever possible, Accessible WCs should be sited in conveniently suitable locations, such as Building entrance areas, lift lobbies and areas of generous circulation space. A wheelchair user shouldn't have to travel excessive distances and pass multiple other washroom provisions for able bodied individuals. In existing buildings this isn't always possible, but this should be reviewed by the Project Manager of each UAL installation for potential to alter/extend and/or retro fit.

Accessible WC Contrasting Colours

All Accessible washrooms should have suitable contrasting colours between wall, floor, fixtures and fittings to assist individuals with visual impairment

Accessible WC Mirror

All Accessible washrooms should have a mirror on the opposite wall to that of the basin as indicated in Diagram 18 in Appendix A. Glass to be 8mm laminated. The size of the mirror should be: minimum 400mm Wide X 1000mm Long.

The below information is design criteria required to be met:

- Handle on outside of door 1040mm above floor level
- Spring closer on door, but not too strong, e.g. hydraulic delayed action type exerting no more than 10 Newton
- Lock on inside of door, large and easy to operate, 1040mm above floor. ‘Lift up handle to lock’ type. Satin stainless steel.
- Pull rail [35mm diameter] on inside of door 600mm long, fixed at 30° to horizontal sloping down to doors leading edge.
- Lighting on PIR activation set at max 30 minutes.
- Seat of WC should be correctly fitted. Avoid open-fronted (horseshoe) type
- Flush handle for WC should be on transfer side within reach, no higher than 1000mm
- Toilet paper holder with toilet paper, within reach to side of WC
- Wash basin on side wall, within reach, preferably with no pedestal protruding from wall
- Tap(s) with running water, within reach on side nearer to WC, lever type easy to operate. Blending valve for hot water.
- Soap (or easy to operate soap-dispenser) within reach from WC.
- Mirror above wash basin or on opposite side wall
- Sanitary waste disposal bin
- Coat hook, within reach, 1450mm-1500mm high
- Emergency alarm cord, red/colour distinguished, within reach from floor, large pull handle
- Colour contrast of main features to assist people with impaired vision
- Emergency alarm/light in suitable position(s) outside compartment
- Corridors/approach to compartment level, suitable width to allow wheelchair manoeuvring, including door openings, and free from obstruction

Refer to diagram 18, 19 and 20 in Appendix A for setting out.
**Manufacturer**  
Manufacturer is *Contractors Proposal* providing the following performance specification is followed.  
*Client to be provided with pre-manufacture drawings for approval.*  
Submit to UAL Estates for sign off.

| **Laminate Cubicles** | Performance is to be **heavy duty and tough** by design due to high volume of use and abuse.  
- 13mm SGL (Solid Grade Laminate)  
- Anodised Aluminium or Stainless Steel heavy duty slide bolt lock fitting  
- Anodized Aluminium Headrail, brackets etc or stainless steel.  
- Metal coat hook to door backs. |

| **IPS Panelling** | It is UAL Preference to conceal cisterns and services within IPS panel ducting. This isn’t always possible due to site specific mitigating circumstances.  
**IPS Design to include:**  
- Removable Access panels. Lift off or Hinged and locked – Design may vary due to site conditions. Hinged panels above cisterns.  
- Full / Half height - dependent on installation. Contrasting flash gaps.  
- 13mm SGL (Solid Grade Laminate) |

| **Vanity Unit** | It is UAL Preference to conceal basin waste fittings and services within laminate vanity units. This isn’t always possible due to site specific mitigating circumstances.  
- Laminate top with minimum 100mm upstand for semi recessed basins.  
- Removable front access panels.  
- Contrasting flash gaps.  
- Laminate to be SGL or HPL. |

| **Colours of Laminates** | Colours should be discussed and agreed with the Estates PM and College during the design stages of any potential project. Doors and panels should contrast and provide a sufficient visual difference between floors and walls. The standard UAL Colour Scheme is a white and grey colourway as follows, this can be a local variation if the College so wish but for continuity across the estate deviation is discouraged.  
**Cubicle Doors, Vanity Frames, IPS Frames:** White B070  
**Cubicle Panels, Pilasters**  
**IPS Panels, Vanity Tops, Vanity Panels:** Grey RAL 7015 |
## 2.2. Sanitary Ware Fittings & Accessories

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Specifications</th>
</tr>
</thead>
</table>
| 1   | Toilet Pan - *Duct Panel Installation* | Back to Wall fitment with easy access to toilet seat bottom fixings. Top fixed seats are not permitted due to maintenance.  
*Armitage Shanks ALTO*  
*Or equal approved.* |
| 2   | Toilet Cistern | Concealed Cistern 9/6 litre Dudley or Armitage Shanks. In refurbishment of existing toilets, the outgoing Cisterns are to have capacities checked, this is to understand flush volume selection for new cisterns.  
In new build installations 4-6 litres is desirable, however in existing building refurbishments cistern flush volume is to be equalled. |
| 3   | Flush Handle | Chrome Plated Lever handle. |
| 4   | Toilet Seat | For fit outs: The Contractor must order a spare WC Seat for every 2 cubicles installed and passed to site UAL Facilities Manager for stock.  
*Armitage Shanks*  
Product: Contour 21 Seat with locating clips (No cover)  
Hinge: Stainless Steel bar hinge with bottom fixings.  
Seat Colour: Grey S4066LJ |
| 5   | Toilet Pan - *Non duct panel installation* | It is UAL preference to replace standalone toilets with IPS duct panelling if possible.  
If this isn’t possible, use a well-known manufacturer such as Armitage Shanks or approved equivalent such as Dudley.  
Vitreous China/Ceramic, avoid PVC cisterns. Cistern lid to be secured by bolt so lift off removal isn’t allowed. |
| 6   | Urinal | *Armitage Shanks or equal approved.*  
White Vitreous China/Ceramic with occupant sensor linked to cistern flush valve for water saving purposes. If void space etc. in IPS system is restricted, cisterns solenoid valve can be used for mains water flush action. |
<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Brand/Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td><strong>Ambulant Toilet</strong></td>
<td>Armitage Shanks or equal approved.</td>
</tr>
<tr>
<td></td>
<td>Product: Doc M Rimless Ambulant BTW pack with grey Contour 21 seat and stainless rails to meet BS8300 and AD-M.</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td><strong>Accessible Toilet (Formerly Disabled)</strong></td>
<td>Armitage Shanks</td>
</tr>
<tr>
<td>9</td>
<td><strong>Basin - Vanity Unit</strong></td>
<td>Armitage Shanks or equal approved.</td>
</tr>
<tr>
<td></td>
<td>Product: Profile 21 Basin. Tap hole: 1 Misc.: No Plug. Chrome slotted waste only.</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td><strong>Basin - Wall Mounted if Vanity cannot be used.</strong></td>
<td>Twyford Bathrooms</td>
</tr>
<tr>
<td></td>
<td>Product: Sola Ref: SA4212WH Tap hole: 1 Misc.: No Plug. Chrome slotted waste only.</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td><strong>Mixer Tap (Single)</strong></td>
<td>Hans Grohe</td>
</tr>
<tr>
<td></td>
<td>Product: Talis E2 Single Basin Lever Mixer Ref: 31624000</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td><strong>Water Saving Device for Taps</strong></td>
<td>Cistermiser or equal approved valve manufacturer.</td>
</tr>
<tr>
<td></td>
<td>Install solenoid valve to incoming water supplies to basins linked to lighting PIR switching.</td>
<td></td>
</tr>
</tbody>
</table>
| 13 | Chlorination and water Hygiene. WRAS WIAPS | All potable water supply pipework to taps and cisterns etc. are to be chlorinated post installation and certificates provided upon completion of the works.

Chlorination work to potable supplies is mandatory and should be undertaken to meet or exceed BS PD 855486:2015.

All fittings and materials must be WRAS approved. The WRAS website allows easy checks to be undertaken if a product or part is acceptable.

Where possible it is the UAL preference to engage the services of WIAPS accredited plumbing professionals. However, the minimum requirement for all plumbing tradesmen working on UAL sites is to hold NVQ Level 2 qualification in Plumbing.

For ease of maintenance, where TMVs are fitted these are to be easily accessible to allow for future service, cleaning and testing by our incumbent maintenance provider. |
|---|---|---|
| 14 | Coat Hook on back of Door | Metal Coat hoot screw fixed to back of door. Product is free choice but hook must not have sharp edges, contrast for the door laminate colour and have an integrated rubber door bump stop.

*Example only.* |
| 15 | **Door Slide Bolt** | The door lock to toilet cubicles is to be a sliding mechanism. Made of resilient and tough materials. The bolt should be easy to operate and have a knob that can be used with a closed fist. Metal construction and screw fastened to the cubicle door. |
| 16 | **Access Panel Labels** | All access panels concealing locations of Isolating Valves, TMV’s, Solenoids, etc. are to have Traffolyte engraved labels fixed in plain sight indicating such concealment. Wording to be agreed with UAL Project Surveyor, however, wording should be clear and concise, such as "Isolation Point” or “Iso Valve". |
### 2.3. Hand Dryers

<table>
<thead>
<tr>
<th>Hand dryer Manufacturer</th>
<th>World Dryer – Airforce Dyson – Airblade</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>This is project specific and will be instructed by the UAL Project Lead. Generally speaking, there are 2 approved units: A Dyson Air blade or standard wall mounted Airforce turbo dryer.</em></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product/s</th>
<th>Hand Dryers are either Warner Howard Airforce or Dyson Airblade. Choice is free to design team and project budget.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Connection</th>
<th>Wall mounted switched fuse spur above appliance to conform to wiring regulations and UAL M&amp;E Design Particulars. Location TBA on site.</th>
</tr>
</thead>
</table>

| Spec | Warner Howard Airforce
Electrical rating
1.1kW, 4.8 amps, 230V/50Hz
Dimensions
Width: 230mm
Height: 270mm
Depth: 156mm
IP Rating
IP24
Colour: Chrome | Dyson Airblade db
Electrical rating
1.6kW
Dimensions
Width: 303mm
Height: 661mm |
|-------|-----------------------------------------------------------------------------------|---------------------------------|

| Splash Back Panels (Solid Grade Laminate) | Install solid grade laminate splash back panels behind hand dryers to protect wall finish from dispersed water. Size: Can be agreed on site but typically should be minimum 600mm (W) x 1500mm (L) Screw fixed to wall with countersunk mirror screws 6ba thread and satin stainless steel threaded flat caps. Panel to extend down to top of vinyl floor upstand. See overleaf; |

Available from TC Fixings and other similar retailers.
Hand Dryer Splash Back Panels
(Solid Grade Laminate)

All wall mounted hand dryers are to have a splashback panel made of solid grade laminate. Colour should be dark to match the cubicle system installed, typically Grey as pictured.

Size is not dictated but the concept is to avoid staining to the wall surface and to allow an easier cleaning regime. Panel to extend from floor skirting up to a height of circa 1500mm. Hand dryer is to be fixed on top of laminate panel. Minimum 600mm wide.
## 2.4. Vinyl Flooring

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Polyflor Ltd or equal approved. Contractors can provide a Tech-Sub for estates PM to authorize, providing the below performance specification is used.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product</td>
<td>If Polyflor is selected, the typical product specification is: Polysafe Verona PUR.</td>
</tr>
<tr>
<td>Type</td>
<td>Vinyl Sheet, Cap and Coved.</td>
</tr>
<tr>
<td>Installation</td>
<td>- Cove formed skirting with black rubber capping. - Welded joints.</td>
</tr>
<tr>
<td></td>
<td>Flooring to be installed in strict accordance with the manufacturers recommendations and installation guide.</td>
</tr>
<tr>
<td>Colour</td>
<td>Colour choice to be discussed with College &amp; Local FM dept. The principle to be used is a mid/dark colour. Light floor finishes suffer from dirt build up and grime. A floor with ‘flecks’ in it helps to maintain a better every day aesthetic.</td>
</tr>
<tr>
<td></td>
<td>If Polyflor Verona is selected, Nightfall is deemed suitable.</td>
</tr>
<tr>
<td></td>
<td>Ref: Nightfall 5207</td>
</tr>
<tr>
<td></td>
<td>Contractor to confirm colour and flooring type with UAL before ordering or installation.</td>
</tr>
<tr>
<td>Slip Resistance</td>
<td>All vinyl flooring within washrooms are to be a safety floor with a rating of: 36+ RRL Pendulum Wet Test.</td>
</tr>
</tbody>
</table>
## 2.5. Ceiling and Lighting

<table>
<thead>
<tr>
<th>General</th>
<th>Lighting will be largely dependent on the ceiling system chosen. A suspended moisture resistant 600 x 600 plasterboard ceiling tile system is preferred or a Painted plaster finish, if deemed suitable. Ceilings will be specified on a project by project basis. <em>For lighting the following performance specification should be followed:</em></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product/Performance Spec</strong></td>
<td><strong>Performance Specification for New Installations</strong></td>
</tr>
<tr>
<td></td>
<td>LED Lighting for general lighting. Some fittings should have emergency functionality to meet UK Building Regulations.</td>
</tr>
<tr>
<td></td>
<td>LED luminaire fittings of good quality manufactured by a reputable company good reorder capacity (please refer to Energy Technology List in the first instance)</td>
</tr>
<tr>
<td></td>
<td>PIR Switching (occupancy detection with timer). Wall mounted test fish key switch adjacent entrance door.</td>
</tr>
<tr>
<td></td>
<td>150 Lux average at floor level.</td>
</tr>
<tr>
<td>Typical Fittings:</td>
<td>Thorn Omega 600 x 600 LED <em>or equivalent.</em></td>
</tr>
<tr>
<td></td>
<td>Thorn Chalice Pro 150mm Dia Circular Down lighters <em>or equivalent.</em></td>
</tr>
<tr>
<td></td>
<td>Distribution and wiring to be by way of Klik 4 pin 'plug and play' system to allow ease of maintenance and changing fittings.</td>
</tr>
<tr>
<td>Existing Lighting upgrade</td>
<td><strong>Upgrading existing fittings</strong></td>
</tr>
<tr>
<td></td>
<td>- LED fittings to be used when replacing the existing fittings in an existing lighting circuit. If the existing switching arrangement is manual this is to be replaced by way of PIR (occupancy detection with timer) with a wall mounted test fish key switch adjacent entrance door.</td>
</tr>
</tbody>
</table>
2.6. **Colours**

Colours can vary building to building but a consistent theme is the preference of the UAL. The following is a guide but can be altered at the request of the College.

<table>
<thead>
<tr>
<th>Element</th>
<th>Colour</th>
<th>Finish</th>
<th>Paint</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Walls</td>
<td>Ashen White (Note: This is a light grey not white)</td>
<td>Eggshell</td>
<td>Dulux Trade Silk Emulsion</td>
</tr>
<tr>
<td>Colour choice to be one of the specified shades. White is discouraged as it suffers easily from marks and/or vandalism.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Ceilings</td>
<td>White</td>
<td>Matt</td>
<td>Dulux Trade Diamond Matt Emulsion</td>
</tr>
<tr>
<td>3 Doors</td>
<td>TBA - To replicate door colour scheme on site.</td>
<td>Gloss, unless site wide joinery is Satin.</td>
<td>Dulux Trade Full Gloss or Satinwood.</td>
</tr>
<tr>
<td>4 Joinery - Skirting, Frames, Windows etc.</td>
<td>White</td>
<td>Gloss, unless site wide joinery is Satin.</td>
<td>Dulux Trade Full Gloss or Satinwood.</td>
</tr>
</tbody>
</table>
### 2.7. M & E

<table>
<thead>
<tr>
<th>Element</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong></td>
<td><strong>Hot/Cold Water Supplies, Fixings and waste pipe.</strong></td>
</tr>
<tr>
<td><strong>2</strong></td>
<td><strong>Small Power</strong></td>
</tr>
<tr>
<td><strong>3</strong></td>
<td><strong>Existing Soil Waste</strong></td>
</tr>
<tr>
<td><strong>4</strong></td>
<td><strong>Ventilation</strong></td>
</tr>
</tbody>
</table>

**Handover Procedures:** Please refer to UAL MEP Building Particulars document.

**Electrical Works** – All works must comply with the UAL Electrical Procedures, M&E Design Particulars, and Wiring Regulations – 19th Edition and be certified and test sheets passed to client upon completion.
### 2.8. Miscellaneous – Bins, Signage, Mastic

<table>
<thead>
<tr>
<th>Element</th>
<th>Specification</th>
</tr>
</thead>
</table>
| **1. Bins** | 1 No. sanitary bin required in each Female cubicle and 1 No. required in Disabled toilets. Bin is to be provided by UAL FM Dept.  
1 No. Waste bin required in each male, female and disabled WC. Bin to be provided by UAL FM Dept. |
| **2. Signage** | Toilet Door Signage to meet DDA specifications for visual impairment, therefore needs to be colour contrasting, tactile and braille.  
*Example only.*  
UAL to provide door signage. |
| **3. Mastic Sealant** | All joints, abutments, seals etc. shall be sealed using good quality sealant products in line with the manufacturer’s instruction.  
All sealant joints in plain sight and finishing beads are to be professionally applied by a Silicone/Mastic Specialist to achieve a well bonded seal and aesthetically pleasing ‘bead’. |
2.9. **Mirrors**

For ease of cleaning there should Ideally be 1x large wall mounted mirror above basins, extending from Vanity unit up wall approx. 1m. Mirror then acts as splashback to wall. This can be varied from project to project based on individual circumstances.

**Fixing:** Bonded to wall using specialist resin/mastic mirror bonding compounds.  
**Glass:** Frameless laminated safety mirror glass minimum 8mm.

2.10. **Edge Protection**

If deemed necessary by the UAL Project Lead and instructed thereto, all exposed corner edges of plastered walls within toilet facilities are to have metal edge corners protection bash strips fitted. Satin or brushed stainless steel. Circa 1500mm, 40mmx40mm.
For compliance with Approved Document M of the Building Regulations, Wheelchair Accessible Toilet provisions and toilets for the Ambulant Disabled must be installed correctly and fittings set out to meet the criteria detailed within BS8300.

**Diagram 21 – Ambulant Disabled**

Diagram 21 WC cubicle for ambulant disabled people

- 600mm long additional grab rail if required
- 600mm grab rail set at 15° or horizontal as required
- Height of toilet seat
- 480mm*
- 1400mm
- 800mm
- 680mm
- Clothes hook set at 1400mm above floor level
- 500mm min.
- 100mm
- 800mm min.
- 800mm min.
- 200mm min.
- 750mm activity space clear of door swings

*Height subject to manufacturing tolerance of WC pan*
Diagram 18 – Wheelchair Accessible WC
Diagram 19 **Heights and arrangement of fittings in a unisex wheelchair-accessible toilet** (looking towards wall A in diagram 18)

- **Sanitary dispenser with coin slot between 750mm and 1000mm above the floor**
- **Alarm pull cord with two red bangles**
  - One at 100mm, the other at 850mm to 1000mm above floor level
- **Location of shelf at 950mm above floor level**
- **Grab rails**
- **HD:** Possible position for automatic hand dryer (see also Diagram 20)
- **SD:** Soap dispenser
- **PT:** Paper towel dispenser
- **AR:** Alarm reset button
- **TP:** Toilet paper dispenser

*Height subject to manufacturing tolerance of WC pan*

Height of drop-down rails to be the same as the other horizontal grab rails
Diagram 20 – Wheelchair Accessible WC - Elevational

Height of independent washbasin and location of associated fittings, for wheelchair users and standing people

A. For people standing
B. For use from WC

Mirror located away from washbasin suitable for seated and standing people (mirror and associated fittings used within a WC compartment or serving a range of compartments)
Accessible WC Design principles to meet BS8300.

- Handle on outside of door 1040mm above floor level
- Spring closer on door, but not too strong, e.g. hydraulic delayed action type exerting no more than 10 Newton
- Lock on inside of door, large and easy to operate, 1040mm above floor
- Pull rail [35mm diameter] on inside of door 600mm long, fixed at 30° to horizontal sloping down to doors leading edge
- Light cord/switch, within reach 1040mm above floor level
- Wheelchair turning room/floorspace, minimum floor area 1800mm x 2000mm [minimum floor area 1500mm x 2000mm]
- Area should not be used for storage, should be free from obstructions
- Floor surface level, smooth and skid-resistant
- WC height [450mm to 475mm to top of seat]
- WC distance from side wall [centre-line 500mm from side wall]
- WC distance from back wall [front 750mm from back wall]
- Seat of WC should be correctly fitted. Avoid open-fronted (horseshoe) type
- Flush handle for WC should be on transfer side within reach, no higher than 1000mm
- Twin hinged support rail [35mm dia.] next to WC [150mm from side of WC]
- Hinged support rail - [height 750mm to top rail]
- Horizontal support rail [35mm diameter, 600mm long] at side of WC [350mm from back wall]
- Horizontal support rail - [height 700mm to top of rail]
- Toilet paper holder with toilet paper, within reach to side of WC
- Wash basin on side wall, within reach, preferably with no pedestal protruding from wall [250mm from WC, 750mm height to top]
- Tap(s) with running water, within reach on side nearer to WC, levertype easy to operate (not pressure taps)
- Soap (or single-handed easy to operate soap-dispenser) within reach from WC
- Hand-drier or towel, within reach from WC
- Vertical support rail [35mm diameter, 600mm long] on back wall [300mm from side of WC, height 800mm from bottom of rail]
- Vertical support rail [35mm diameter, 600mm long] on side wall [950mm from back wall, height 800mm from bottom of rail]
- Mirror above wash basin or on opposite side wall 500mm x 900mm [400mm wide x 900mm], fixed 1040mm above floor top wedged by 100mm downside [fixed 900mm above floor]
- Sanitary waste disposal bin
- Coat hook, within reach, 1450mm-1500mm high
- Shelves for bags etc. within reach
- Emergency alarm cord, red/colour distinguished, within reach from floor, large pull handle
- Colour contrast of main features to assist people with impaired vision
- Emergency alarm/light in suitable position(s) outside compartment
- Corridors/approach to compartment level, suitable width to allow wheelchair manoeuvring, including door openings, and free from obstruction
- Adequate lighting and signing to approach