Lighthouse
Camden Child House Design Guide

FINAL ISSUE

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CONTENTS

1 DESIGN APPROACH

CHAPTER 1

1.1 ZONES AND HOW TO USE THEM

Public zone

Public spaces are accessible by general public i.e. guests and staff. This will be the first point of contact that the child, young people and their parent/carers will have with the child house staff and therefore needs to convey a safe and welcoming feeling.

» Meet and greet
» Spontaneous interactions
» Social gatherings

Service users zone

This space is where the exchange between the Child house staff and child / young people - parents / carers is made. These range from interview rooms to the health room.

» Talking room
» Therapy rooms
» Health room
» Activity room

Staff zone

This is the workspace dedicated to the staff of the Child house. This space is only accessed by house staff and is not meant to be used by outside parties.

» Office area
» Manager's room
» Breakout spaces
» Meeting room

Secured area

A secured area is where classified or sensitive work will take place. Access allowed only for child house staff with appropriate level of clearance. IT rooms and storage are also considered secured areas.

» Control room
» IT room
» Storage areas

1.2 PUBLIC ZONE: IDENTITY

WELCOMING. TRANSPARENT. OPEN.

Spaces that allow staff to engage with the public and visitors in a safe and homely manner.

- » Inviting, warm, homely feel.
- » Warm colours, soft finishes, warm and comfortable furniture. Colour palette that works with the natural elements and colours of the building.
- » Balances welcoming feeling with security needs and aspiration for transparency and openness.
- » Promotes a unified identity but allows for local regional and cultural expression through imagery, artwork and artefacts.

1.3 SERVICE USERS ZONE: IDENTITY

SAFE, NEUTRAL, CHILD/YOUNG PEOPLE FRIENDLY ENVIRONMENT.

Spaces for staff to engage with the children, young people and parents/carers. These spaces are designed to ensure the safety, protection and recovery of the child and where appropriate secure an effective criminal investigation and judicial process.

- Personalize rooms with warm colours and graphics on walls. Colour predominantly in furniture, wall treatments, way-finding and manifestations.
- Talking room to provide clear separation from the public area to provide a sense of privacy and safety by robust doors, good acoustic isolation and soft sound absorbing finishes and furniture.
- Premises that are physically safe for children of all ages and fully accessible for children and adults with disabilities
- Furnishings and interior that are child-sized, child-friendly and age appropriate, offering a range of style of rooms from small therapy rooms, family therapy rooms and activity rooms;
- Suitable waiting areas for children and their families, which allow separation and privacy for people waiting;
- Separate common areas for younger children with age appropriate furnishings and resources to suit their needs;
- Providing separate entrances to the ABE (Achieving Best Evidence) interview suite (and forensic suite if provided) and other parts of the building. This is to minimise triggering for children returning to the Child House for long term therapeutic support.

1.4 STAFF ZONE: IDENTITY

ADAPTED TO THE TEAM AND AGILE WORKING.

Spaces where teams will usually work on office-based, daily activities and are treated as a team's default working space.

- » Richly textured materials form a comfortable environment for working, and with a prevalence of neutral colours they provide a quiet backdrop for any activity.
- » Staff zones will be in close vicinity to shared zones, which will provide more colour as well as define the boundaries between the zones.
- » Ensuring access to appropriate facilities for all agencies located in the Child House e.g. IT, desk space, toilets, kitchen facilities.
- » Shared desk space and team meeting rooms to facilitate multi-disciplinary working, staff training and staff well-being activities

1.5 FURNITURE AND DECOR

FURNITURE AND DECOR WILL:

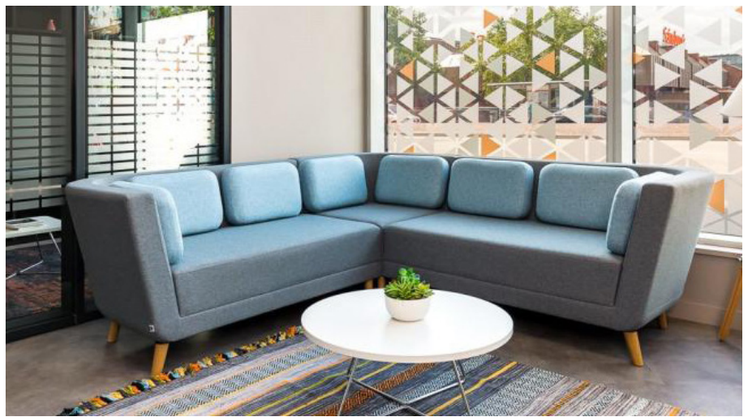
Support Well-being and Inclusivity

- A proportion of height adjustable desks should be used wherever possible.
- A high standard of furniture will be used to significantly reduce the number of workplace adjustments required.
- Complement the colour scheme of the space, adding warmth and/or vibrancy where possible, without causing visual distraction.
- Support hot-desk environment.
- Be suited to a variety of different activities.
- Directly through the manufacturing and supply chain process, and indirectly through product longevity.
- Allows for local expression through imagery, messaging, artwork to provide the child-friendly sought out space.

RECEPTION

CHILD FRIENDLY AREA

SEATING



1.5 FURNITURE AND DECOR

FURNITURE AND DECOR WILL:

Follow different themes for different purposes on consultation rooms

- Garden theme
- Sky theme
- Natural theme
- Sunshine theme

GARDEN

SKY

NATURAL

SUNSHINE

1.6 CHILDREN, YOUNG PEOPLE AND ADULT SURVIVOR ENGAGEMENT

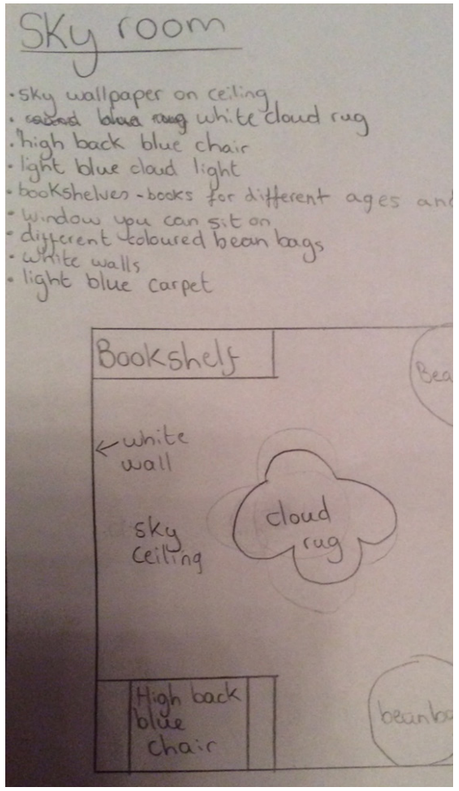
ENGAGEMENT WITH YOUNG PEOPLE

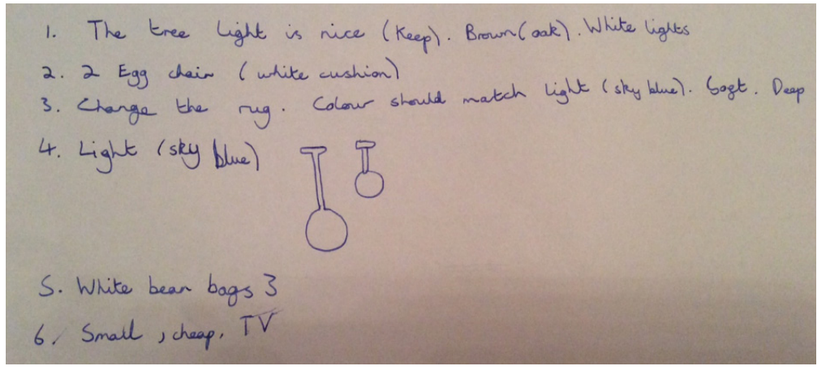
The Lighthouse implementation team engaged with 168 children and young people ranging from nine to 17 years old, including some young people who had been through a therapeutic service. The children were consulted in facilitated groups ranging from three young people to a primary school class of 30. They were shown mood boards with a selection of furniture and fittings to choose from.

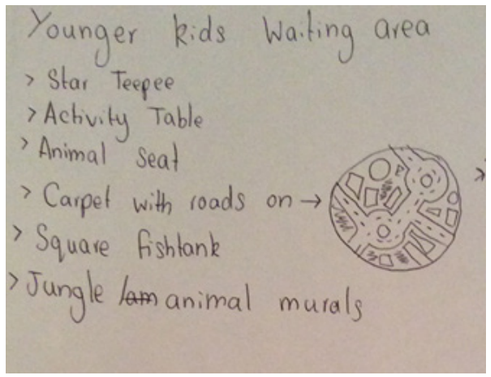
The young people liked:

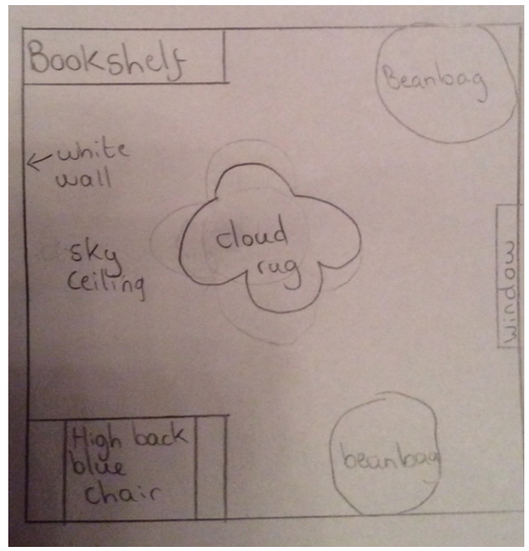
- Themes and having different styles for different ages
- Texture and patterns - tassels you can play with for example on blankets or deep rugs so you can push your feet in
- Sofas with curvy edges, pillows and throws
- Blues and purples
- Swivel chairs, the hanging chair and beanbags
- The wooden tree with lights
- Quotes on the wall - about strength and that everything is going to be ok
- Helping yourself to tea/coffee and drinks in reception
- Welcome in as many different languages as possible
- Music in the reception area
- Low coffee tables
- Calm and creative spaces

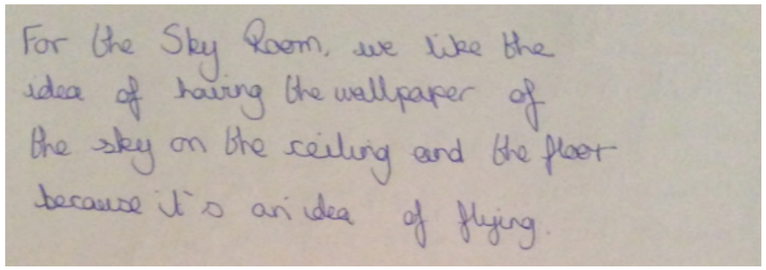
They did not like the red, dark green or loud colours; or boxy sofas.

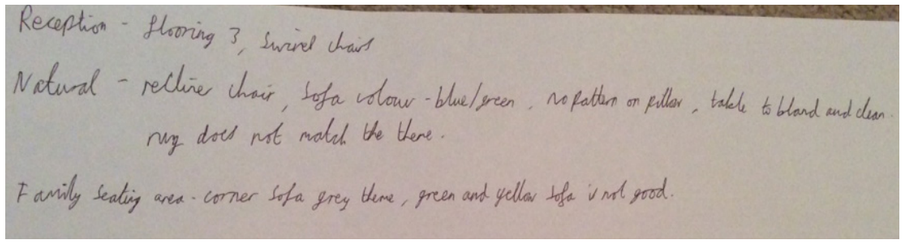


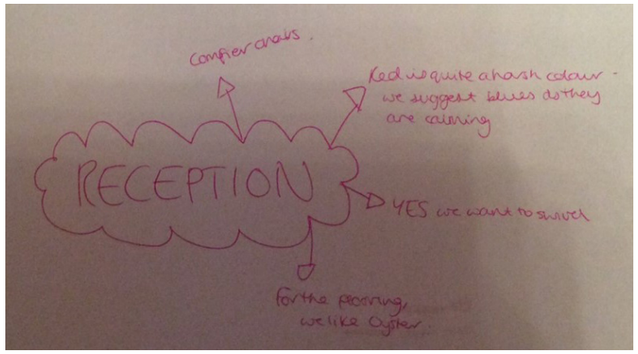












1.6 CHILDREN, YOUNG PEOPLE AND ADULT SURVIVOR ENGAGEMENT

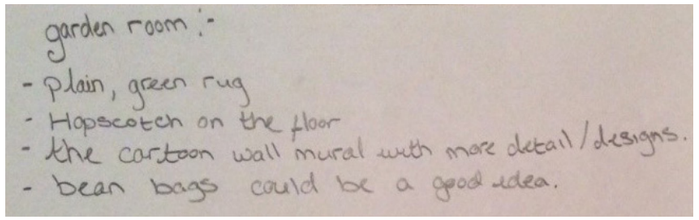
ENGAGEMENT WITH YOUNG PEOPLE

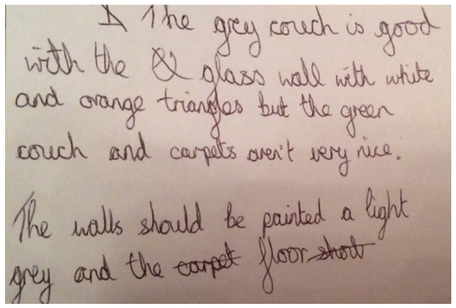
The children (9-10 years) liked:

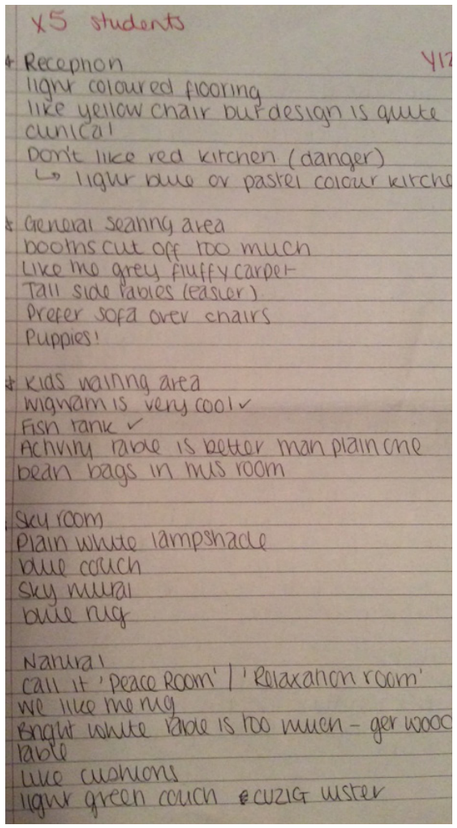
- A fish tank
- Bean bags
- Big family sized or corner sofa
- Blue as the colour of most of the furniture
- Warm red kitchen
- Teepee
- Cloud rugs and mini elephant seats
- The wall murals e.g. the forest, sky and clouds

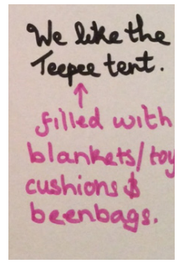
They did not like the childish or novelty ideas e.g. hopscotch on the floor, cartoon themed characters.

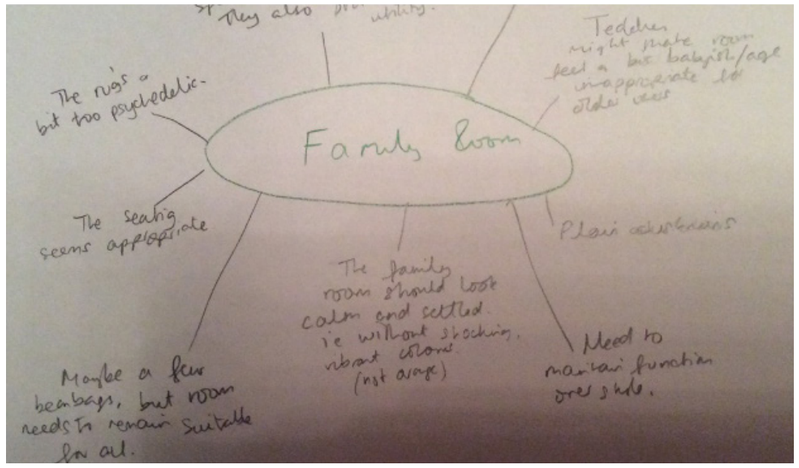
The furniture, colour schemes and accessories were chosen following this feedback and where possible the requests of the children and young people were met. The exception being an outside space/garden due to the constraints of the building and safety on the 4th floor.

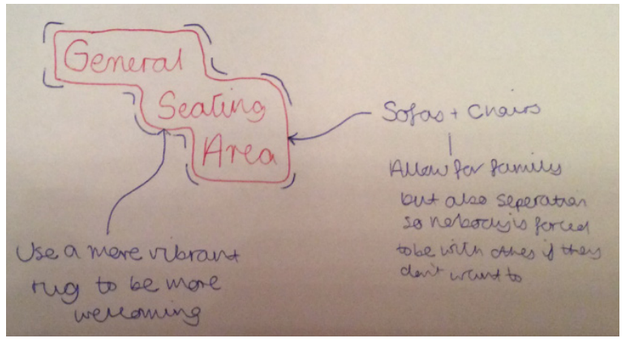


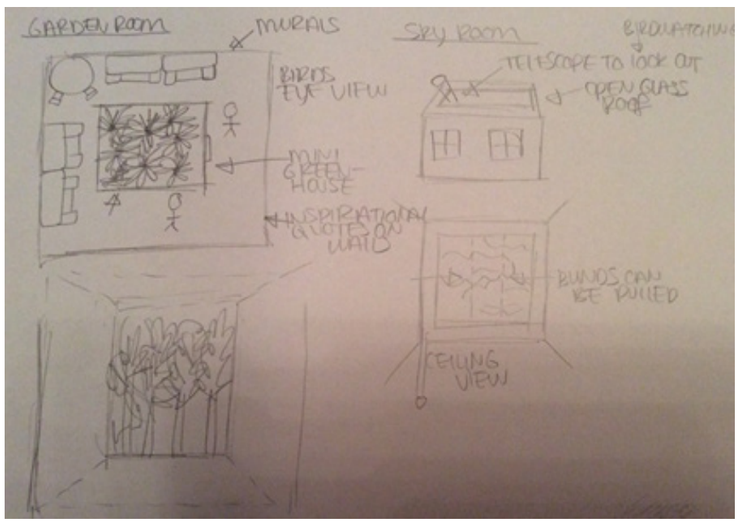












2 SPACE TYPES

CHAPTER 2

ROOM DATA SHEETS

2.1 MAPPING ZONES TO SPACE TYPES

How do the work settings map to zones?

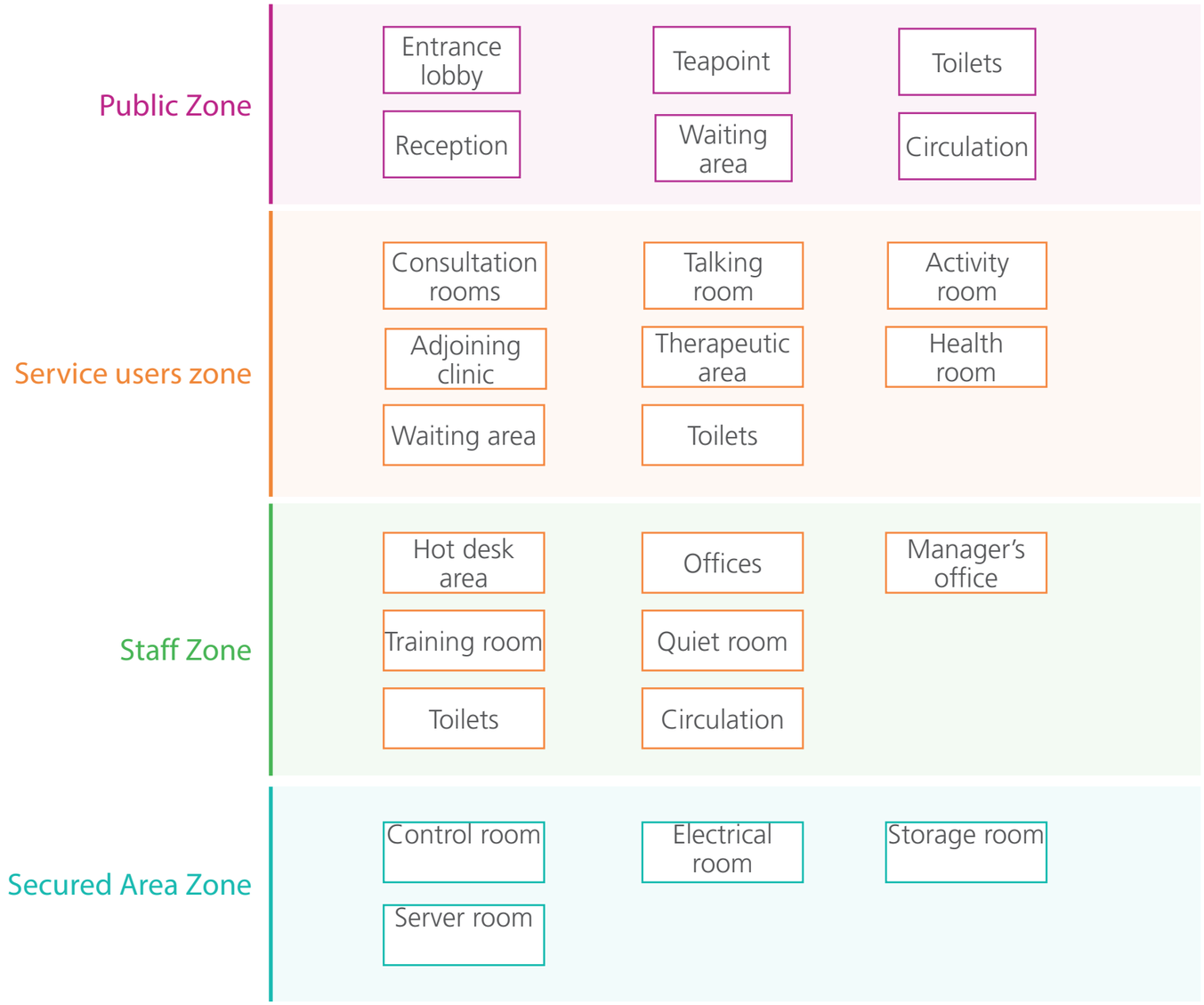
This diagram shows a generic layout of the different work settings that may typically be found across the space zones (Public, Service users, Staff and Secured area zone).

Reception and waiting areas would tend to be located in the public zone, while consultations/ interviews/ etc. will be located within the service users zones.

Service user zone will house the interview, consultation and therapy rooms, as well as the medical examination room. Amenities such as breakout spaces and teapoint are also provided.

The Staff zone is the 'heart' of the Child house workplace space and where teams are located. Amenities such as breakout spaces and teapoint are also provided.

Secured areas will house the security clearance required areas of the child house such as control rooms for the ABE interview room but also the server room, technical cupboards, storage areas etc.



2.2 SPACES IDENTIFIED ON PLANS - GROUND FLOOR

Public Zone
0.01 Entrance lobby
0.02 Reception lobby
0.03, 0.04, 0.05 Waiting areas
0.06 Tea point
0.07 Circulation
0.09, 0.10 Toilets

Service users zone
0.12, 0.16 Consultation rooms
0.15 Waiting room
0.11 Circulation

Staff Zone
Reception front desk

Secured Area Zone
0.08 Electrical room
0.13 Control room
0.14 Talking room
Storage areas

2.3 SPACES IDENTIFIED ON PLANS - FIRST FLOOR

Public Zone

Service users zone

Staff Zone

1.01 Manager's office
1.02 Hot desk area
1.04 Toilet lobby
1.05, 1.06, 1.07 Toilets
1.08 Cleaner's cupboard
1.09 Circulation
1.10 Training - meeting room
1.11, 1.12, 1.13 Office rooms
1.17 Quiet room

Secured Area Zone

1.14 Server room
Storage areas

2.4 SPACES IDENTIFIED ON PLANS - FOURTH FLOOR

Public Zone

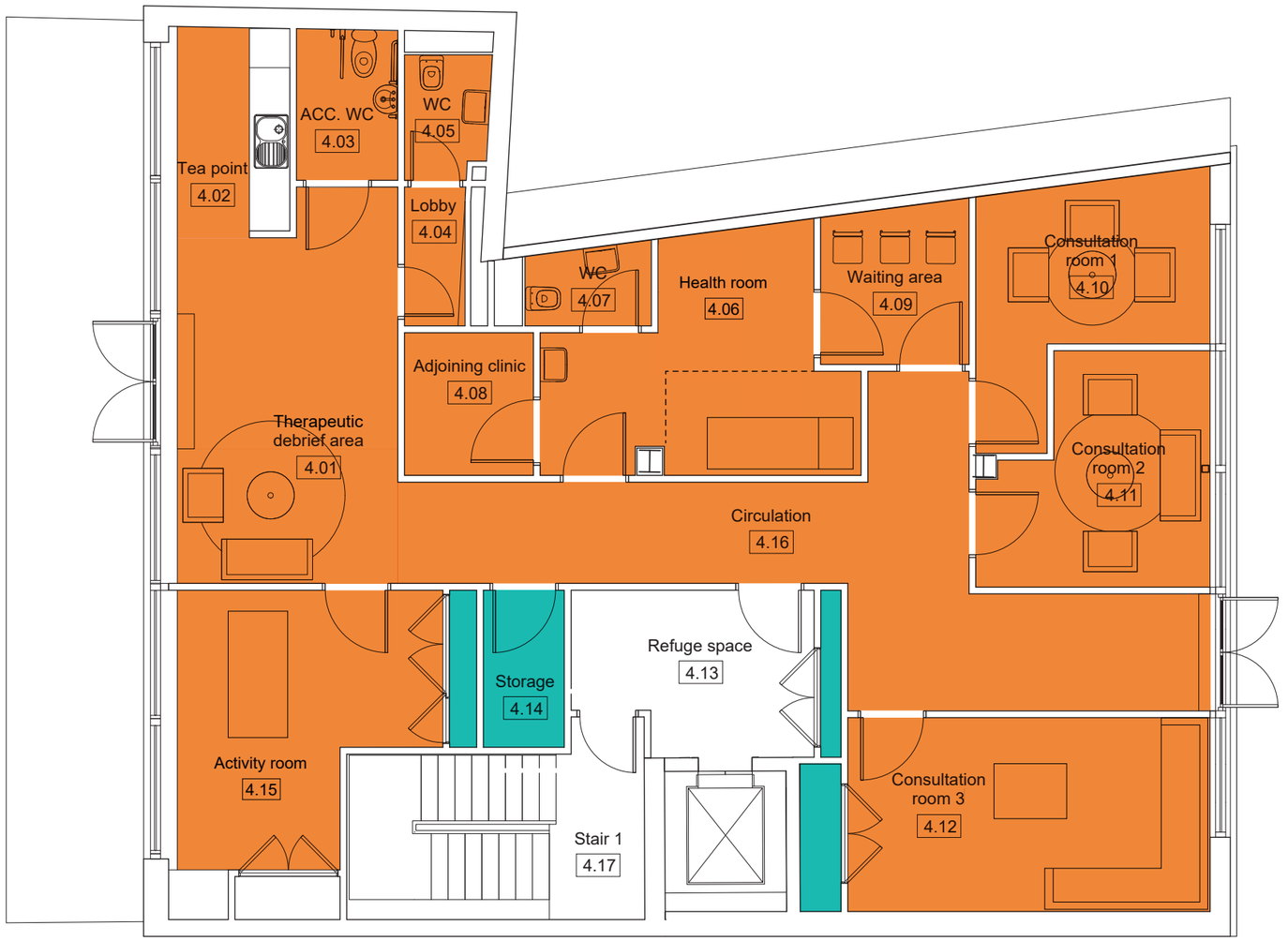
Service users zone

4.01 Therapeutic debrief area
4.02 Tea point
4.03, 4.04, 4.05 Toilets & Lobby
4.06, 4.07, 4.08 Health room
4.09 Waiting area
4.10, 4.11, 4.12 Consultation rooms
4.15 Activity room
4.16 Circulation

Staff Zone

Secured Area Zone

Storage areas



Reception
Room 0.02

SPACE TYPES - ARCHITECTURE

PUBLIC ZONE

Bright, open and engaging environment allowing a good view of the area to quickly identify the different areas within and adjoining the reception

- Ample arrival area with clear view over entire space.
- Large reception desk to accommodate two receptionists.
- Separate seating areas for children and families.

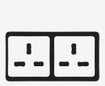
FURNITURE


Task chairs


Reception Desk


Plants

TECHNOLOGY


Desktop power


Wired network


Access control system

CHARACTERISTICS

- First approach to building
- Dual branding
- Open and engaging environment
- Wide reception desk

ACTIVITIES

- Reception
- Break-out
- Phone calls
- Waiting

Finishes

Floor:

- Laminate - Aspecta Iceland pine oyster
- Pale pinewood colour pattern.
- Circulation route separation.

Paint/wall applications:

- Matt water based emulsion paint.
- Standard colour range to match room identity.

Ceiling:

- Suspended plasterboard ceiling.
- Painted white matt water based emulsion.

Reception
Room 0.02

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
21ºC winter, 23±2ºC summer	LST Radiators/ Air	Yes	10 l/s/p	10 l/s/p	Neutral	G3/F6	No	No	No

ELECTRICAL SERVICES

Luminaire choice	"Recessed down lights (open cone) Consider suspended luminaires above desk (if ceiling height allows) to create a feature"
Lighting and Lighting Control	Manual switches (contactor controlled as necessary to control lighting to all common parts of the building. Exemplar building switched the waiting areas and each of the corridors on each of the floors separately).
Power (and Data)	"Consider provision for powered door. Both workstations on the desk to be serviced as D1 type."
Security	Button under desk.
CCTV	CCTV
Intruder Detection	Within the exemplar building this area was considered to require a movement sensor
Access Control	DC1
WiFi	WiFi for children and families
TV	-
Extract fans	-
General notes	"General alarms panel behind desk Inner and outer door access control system behind desk, release buttons and intercom on desk"

Waiting Areas
Rooms 0.03, 0.04 & 0.05

SPACE TYPES - ARCHITECTURE

PUBLIC ZONE

Bright, warm, safe and comfortable area for visitors. Children and carers/parents will be waiting, some for their first time, in a new environment. The waiting area needs to convey a feeling of trust as this is the first contact children and carers will have with the child house.

» 3 distinct seating areas with their own identity.
» Comfortable seating and middle table for children to read, draw while they wait.

FURNITURE

TECHNOLOGY

CHARACTERISTICS

» 3 seating areas
» Warm, safe and comfortable area for visitors.
» Shelf with books and toys

ACTIVITIES

» Welcome
» Waiting
» Small gatherings

Finishes

Floor:

» Laminate - Aspecta Iceland pine oyster.
» Pale pinewood colour pattern.

Paint/wall applications:

» Matt water based emulsion paint.
» Standard colour range to match room identity.

Ceiling:

» 600 x 600mm suspended metal lay in ceiling tiles with acoustic fleece - white
» Suspended plasterboard ceiling on ceiling edges Painted white matt water based emulsion

Waiting Areas
Rooms 0.03, 0.04 & 0.05

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
21ºC winter, 23±2ºC summer	LST Radiators/ Air	Yes	10 l/s/p	10 l/s/p	Neutral	G3/F6	No	No	No

ELECTRICAL SERVICES

Luminaire choice	Recessed down lights (open cone)
Lighting and Lighting Control	Controlled from Reception desk
Power (and Data)	Allow for 13A socket with integral USB A and C outlets for visitor's phone charging (outlet mounted at 1000AFFL)
Security	-
CCTV	Visible from the general CCTV
Intruder Detection	-
Access Control	-
WiFi	WiFi for children and families
TV	-
Extract fans	-
General notes	-

Consultation Rooms
Room 0.12 & 0.16

SPACE TYPES - ARCHITECTURE

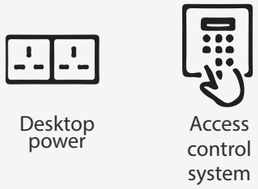
SERVICE USERS ZONE

Child friendly rooms to allow the children to feel safe and able to express themselves.

- Each room personalized with its own decoration theme and name.
- Comfortable seating with tables for children to play, draw, read and shelves with books and toys.

FURNITURE

TECHNOLOGY



CHARACTERISTICS

- Located at ground and 4th floor
- Warm materials
- Small capacity space 2-5 persons
- Sense of privacy and safety
- Shelf with books and toys, sand trays
- Variety of seating e.g. sofa, bean bag, swivel chair

ACTIVITIES

- Conversations
- Interview
- Therapy
- Waiting
- Playing, reading, drawing

Finishes

Floor:

- Laminate - Aspecta Iceland pine oyster.
- Pale pinewood colour pattern.

Paint/wall applications:

- Washable matt water based emulsion paint.
- Standard colour range to match room identity.

Ceiling:

- 600 x 600mm suspended mineral lay in acoustic ceiling tiles - white
- Suspended plasterboard ceiling on ceiling edges Painted white matt water based emulsion

Consultation Rooms
Room 0.12 & 0.16

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
25ºC winter, 18ºC summer (controllable range rather than set-point)	LST Radiators/ Air	Yes	10 l/s/p	10 l/s/p	Neutral	G3/F6	No	No	No

ELECTRICAL SERVICES

Luminaire choice	Lay in 600 x 600 with opal cover
Lighting and Lighting Control	Retractive switch by door and sensor in ceiling
Power (and Data)	"1 No. D3 work station provision Do not use dado trunking (as it is meant to be as domestic as possible)"
Security	-
CCTV	-
Intruder Detection	-
Access Control	DC1
WiFi	-
TV	-
Extract fans	-
General notes	-

Waiting Room
Room 0.15

SPACE TYPES - ARCHITECTURE

SERVICE USERS ZONE

Child friendly room. Provides a good sense of privacy and comfort for the Children and their parents/carers.

» Each room personalized with its own decoration theme.

» Comfortable seating with tables for children to play, draw, read and shelves with books and toys.

FURNITURE

TECHNOLOGY

CHARACTERISTICS

» Located at ground and 4th floor

» Warm materials

» Medium capacity space 2-4 persons

» Sense of privacy and safety

» Shelf with books and toys

ACTIVITIES

» Waiting

» Conversations

» Playing, reading, drawing

Finishes

Floor:

» Aspecta Iceland Pine Oyster.

» Pale pinewood colour pattern.

Paint/wall applications:

» Matt water based emulsion paint.

» Standard colour range to match room identity.

Ceiling:

» 600 x 600mm suspended mineral lay in acoustic ceiling tiles - white

» Suspended plasterboard ceiling on ceiling edges Painted white matt water based emulsion

Waiting Room
Room 0.15

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
25ºC winter, 18ºC summer (controllable range rather than set-point)	LST Radiators/ Air	Yes	10 l/s/p	10 l/s/p	Neutral	G3/F6	No	No	No

ELECTRICAL SERVICES

Luminaire choice	Lay in 600 x 600 with opal cover
Lighting and Lighting Control	Retractive switch by door and sensor in ceiling
Power (and Data)	"To comply with ABE suite requirements. Allow for 13A socket with integral USB A and C outlets for visitor's phone charging (outlet mounted at 1000AFFL) 1 No. D3 work station provision Do not use dado trunking (as it is meant to be as domestic as possible)"
Security	-
CCTV	-
Intruder Detection	-
Access Control	-
WiFi	WiFi for children and families
TV	TV
Extract fans	-
General notes	-

Talking Room
Room 0.14

SPACE TYPES - ARCHITECTURE

SECURED AREA ZONE

This is the ABE or "Achieving Best Evidence" interview room. Even though it needs to provide the best conditions for an interview, it also needs to be a child friendly room and provides a good sense of privacy and comfort for the children or young people.

- Room personalized with its own decoration theme
- Comfortable seating with tables for children to play, draw, read and shelves with books and toys.
- Special care given to the acoustic performance of the materials in the room.
- Plain walls.

FURNITURE

TECHNOLOGY

CHARACTERISTICS

- Located at ground floor
- Warm materials
- High acoustic performance
- Medium capacity space 2-3 persons
- Sense of privacy and safety
- Equipped with specialized IT equipment

ACTIVITIES

- Recording Interviews
- Conversations
- Playing, reading, drawing

Finishes

Floor:

- Aspecta Iceland Pine Oyster.
- Pale pinewood colour pattern.

Paint/wall applications:

- Matt water based emulsion paint.
- Standard colour range to match room identity.
- Install sound absorption wall panel on all room internal walls.

Ceiling:

- 600 x 600mm suspended metal lay in ceiling tiles with acoustic fleece - white
- Suspended plasterboard ceiling on ceiling edges Painted white matt water based emulsion

Talking Room
Room 0.14

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
25ºC winter, 18ºC summer (controllable range rather than set-point)	Air	Yes	10 l/s/p	10 l/s/p	Neutral	G3/F6	No	No	No

ELECTRICAL SERVICES

Luminaire choice	"Lay in 600 x 600 with opal cover Consider camera positions and likelyhood of glare."
Lighting and Lighting Control	"Retractive switch by door and sensor in ceiling. Sensor to have a second output channel to operate a 'room in use' illuminated sign above the door into this room."
Power (and Data)	"To comply with ABE suite requirements. 1 No. D3 work station provision Do not use dado trunking (as it is meant to be as domestic as possible). Cable ways required for ABE cameras and microphones."
Security	-
CCTV	-
Intruder Detection	-
Access Control	DC1
WiFi	-
TV	-
Extract fans	-
General notes	-

Control Room
Room 0.13

SPACE TYPES - ARCHITECTURE

SECURED AREA ZONE

This is the room that controls the process of the interview in the talking room. This room is only accessed by authorized staff, visitors are not allowed.

- Office space provided with desk, chairs and relevant IT equipment.
- Room with acoustic treatment.

FURNITURE

TECHNOLOGY

CHARACTERISTICS

- Located at ground floor
- High acoustic performance
- Small capacity space 1-4 persons
- Equipped with specialized IT equipment.

ACTIVITIES

- Control the recording of the Interviews in the Talking room.
- Work sessions.

Finishes

Floor:

- Aspecta Iceland Pine Oyster.
- Pale pinewood colour pattern.

Paint/wall applications:

- Matt water based emulsion paint.
- Standard colour range to match room identity.

Ceiling:

- 600 x 600mm suspended metal lay in ceiling tiles with acoustic fleece - white
- Suspended plasterboard ceiling on ceiling edges Painted white matt water based emulsion

Control Room
Room 0.13

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
25ºC winter, 18ºC summer (controllable range rather than set-point)	Air	Yes	10 l/s/p	10 l/s/p	Neutral	G3/F6	No	No	No

ELECTRICAL SERVICES

Luminaire choice	"Recessed down lights (open cone) Consider suspended luminaires above desk (if ceiling height allows) to create a feature"
Lighting and Lighting Control	Manual switches (contactor controlled as necessary) to control lighting to all common parts of the building. Exemplar building switched the waiting areas and each of the corridors on each of the floors separately).
Power (and Data)	"Consider provision for powered door. Both workstations on the desk to be serviced as D1 type."
Security	-
CCTV	CCTV
Intruder Detection	Within the exemplar building this area was considered to require a movement sensor
Access Control	DC1
WiFi	
TV	
Extract fans	
General notes	"General alarms panel behind desk Inner and outer door access control system behind desk, release buttons and intercom on desk"

Manager's Office
Room 1.01

SPACE TYPES - ARCHITECTURE

STAFF ZONE

Private office designed to provide the service manager and clinical lead a more premium space with the possibility to perform tasks that can involve confidential and or sensitive material.

- Located in the staff floor
- Closed office but with glazed partitions to provide a certain degree of visual permeability from and to the manager's office.

FURNITURE

Task chairs

Workstation

TECHNOLOGY

Desktop power

Wired network

Access control system

CHARACTERISTICS

- Small Capacity: 1-3 persons
- Acoustic performance
- Privacy
- Workstation with standard office equipment

ACTIVITIES

- Office management
- Focus work
- 1-1 Meetings
- Phone calls

Finishes

Floor:

- Aspecta Iceland Pine Oyster.
- Pale pinewood colour pattern.

Paint/wall applications:

- Matt water based emulsion paint.
- Standard colour range to match room identity.

Ceiling:

- 600 x 600mm suspended mineral lay in acoustic ceiling tiles - white
- Suspended plasterboard ceiling on ceiling edges Painted white matt water based emulsion

Manager's Office
Room 1.01

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
21ºC winter, 23±2ºC summer	Air	Yes	10 l/s/p	10 l/s/p	Neutral	G3/F6	No	No	No

ELECTRICAL SERVICES

Luminaire choice	Lay in 600 x 600 with LG7 compliant cover
Lighting and Lighting Control	Retractive switch by door and sensor in ceiling
Power (and Data)	"1 No. D2 work station provision Although an existing glazed wall within the exemplar building precluded the use of dado trunking, dado should be considered for future flexibility."
Security	-
CCTV	-
Intruder Detection	-
Access Control	DC1
WiFi	-
TV	-
Extract fans	-
General notes	-

Hot desk area
Room 1.02

SPACE TYPES - ARCHITECTURE

STAFF ZONE

Bright, open and engaging environment allowing the individual and teams to hot desk.

- Workstations will provide universal desk arms and power. They will have access to natural light and the workstations will be height adjustable to support well-being
- Open plan type configuration, with 5 hot desks.
- Close to the break-out space & teapoint.

FURNITURE


Task chairs


Workstation


Laptop desk


Height adjustable Workstation

TECHNOLOGY


Desktop power


WiFi


Wired network


Bring your own laptop

CHARACTERISTICS

- Open plan type office space
- Open and engaging environment
- Modular for greater flexibility
- Workstations with standard office equipment

ACTIVITIES

- Office work
- Individual tasks
- Phone calls

Finishes

Floor:

- Laminate - Aspecta Iceland pine oyster
- Pale pinewood colour pattern.

Paint/wall applications:

- Matt water based emulsion paint.
- Standard colour range to match room identity.

Ceiling:

- 600 x 600mm suspended mineral lay in acoustic ceiling tiles - white
- Suspended plasterboard ceiling on ceiling edges Painted white matt water based emulsion

Hot desk area
Room 1.02

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
21ºC winter, 23±2ºC summer	Air	Yes	10 l/s/p	10 l/s/p	Neutral	G3/F6	No	No	No

ELECTRICAL SERVICES

Luminaire choice	Lay in 600 x 600 with LG7 compliant cover
Lighting and Lighting Control	Retractive switch by door and sensor in ceiling
Power (and Data)	"Constraints within the exemplar building necessitates floor boxes be installed in the conventional boarded / joisted floor in order to provide power / data delivery to the work station positions. Dado would be preferred. Provide each work station with one floor box containing 2No. twin switched socket outlets and 1No. twin data outlet."
Security	-
CCTV	-
Intruder Detection	-
Access Control	There was no door between the corridor and the Hot desk area on at the exemplar building
WiFi	Wifi
TV	-
Extract fans	Exemplar building used a self contained (through-the-wall) extract fan in this area. Consider power and control.
General notes	-

Training - Meeting Room
Room 1.10

SPACE TYPES - ARCHITECTURE

STAFF ZONE

Enclosed room for private meetings, secure conversations, conference calls, staff training and presentations.

Large room with neutral finishes and the addition of some vibrant accents and furniture to add character.

FURNITURE

Table

Stackable chairs

TECHNOLOGY

Access to power

Wired network

Bring your own laptop

CCTV

Audio/Video conferencing

Projector

CHARACTERISTICS

- Closed room
- Located near the work space
- Large capacity: 1-22
- Appropriate IT equipment to support office work

ACTIVITIES

- Meetings
- Work sessions
- Virtual meetings
- Catch ups
- Group calls
- Training

Finishes

Floor:

- Laminate - Aspecta Iceland pine oyster
- Pale pinewood colour pattern.

Paint/wall applications:

- Matt water based emulsion paint.
- Standard colour range to match room identity.

Ceiling:

- 600 x 600mm suspended mineral lay in acoustic ceiling tiles - white
- Suspended plasterboard ceiling on ceiling edges Painted white matt water based emulsion

Training - Meeting Room
Room 1.10

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
21ºC winter, 23±2ºC summer	Air	Yes	10 l/s/p	10 l/s/p	Neutral	G3/F6	No	No	No

ELECTRICAL SERVICES

Luminaire choice	Lay in 600 x 600 with opal cover
Lighting and Lighting Control	"Retractive switch by door and sensor in ceiling. No requirement for Scene setting control."
Power (and Data)	"Floorbox in centre of room containing 2No, twin switched socket outlets and 1 No. twin data outlet. Dado to two walls. Both runs to contain a position comprising a twin switched socket outlet and a twin data point. Both runs to also contain a position comprising a twin switched socket outlet. One run to additionally contain a D3 work station arrangement, and, a 13A socket with integral USB A and C outlets for phone charging, and a brush outlet plate (linked to floor box, for future client 'video' cabling). Brush outlet plate to be located adjacent to D3 outlets. Provide equivalent of a D3 work station arrangement within the ceiling void for connection of projector."
Security	-
CCTV	-
Intruder Detection	-
Access Control	-
WiFi	-
TV	-
Extract fans	-
General notes	Electrically operated blinds NOT provided.

Office Rooms
Room 1.11, 1.12 & 1.13

SPACE TYPES - ARCHITECTURE

STAFF ZONE

Bright, open and engaging environment allowing the individual and teams to conduct their core work.

- Workstations will provide universal desk arms and power. They will have access to natural light and 50% of workstations will be height adjustable to support well-being
- Located in the staff floor
- Open plan type configuration

FURNITURE


Task chairs


Workstation


Laptop desk


Height adjustable Workstation


Staff lockers

TECHNOLOGY


Desktop power


Wired network


Bring your own laptop


Access control system

CHARACTERISTICS

- Open plan type office space
- Open and engaging environment
- Modular for greater flexibility
- Workstations with standard office equipment
- Staff lockers for personal items and valuables

ACTIVITIES

- Office work
- Individual tasks
- Phone calls

Finishes

Floor:

- Laminate - Aspecta Iceland pine oyster
- Pale pinewood colour pattern.

Paint/wall applications:

- Matt water based emulsion paint.
- Standard colour range to match room identity.

Ceiling:

- 600 x 600mm suspended mineral lay in acoustic ceiling tiles - white
- Suspended plasterboard ceiling on ceiling edges Painted white matt water based emulsion

Office Rooms
Room 1.11, 1.12 & 1.13

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
21ºC winter, 23±2ºC summer	LST Radiators/ Air	Yes	10 l/s/p	10 l/s/p	Neutral	G3/F6	No	No	No

ELECTRICAL SERVICES

Luminaire choice	Lay in 600 x 600 with LG7 compliant cover
Lighting and Lighting Control	Retractive switch by door and sensor in ceiling
Power (and Data)	"Dado to all walls if possible, but two walls minimum (window sill heights and access to built in cupboards in the exemplar limited dado to two walls only). Provide a D2 work station arrangement to each workstation position (exemplar building had four workstations in two of the offices, six in the other)"
Security	-
CCTV	-
Intruder Detection	Within the exemplar building this area was considered to require a movement sensor
Access Control	DC1
WiFi	-
TV	-
Extract fans	-
General notes	-

Server Room
Room 1.14

SPACE TYPES - ARCHITECTURE

SECURED AREA ZONE

Primary IT server room.

The Server room should be considered as part of the critical operational infrastructure for the building. Only authorized staff are allowed to access this room.

FURNITURE

Server rack

TECHNOLOGY

Desktop power

CCTV

Access control system

CHARACTERISTICS

- Secure room – limited access
- Environment conditions to meet BS Standards and rack capacity
- Antistatic floor finish
- No ceiling finish required
- Air conditioning

ACTIVITIES

- IT upgrades / repairs
- Utility connections

Finishes

Floor:

- Heavy Contact Rubber flooring - Chroma Artigo Avio U16
- Mid grey solid colour..

Paint/wall applications:

- Matt water based emulsion paint.
- Standard colour range to match room identity.

Ceiling:

- No finish.

Server Room
Room 1.14

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
Range 18ºC to 27ºC, 20-80% RH	Air	Yes	4ACH	4ACH	+ve	G3/F7	No	No	No

ELECTRICAL SERVICES

Luminaire choice	Impact resistant, corrosion resistant, IP65
Lighting and Lighting Control	Retractive switch by door and sensor in ceiling
Power (and Data)	"Allow for 13A socket with integral USB A and C outlets for visitor's phone charging (outlet mounted at 1000AFFL adjacent to door). Local isolation of the dedicated server room cooling equipment. TVSS to dedicated local DB 'Test socket' provided adjacent to dedicated local DB for connection of IT engineer's test equipment. Cleaners outlet in this room not fed from dedicated local DB One 32A rated commando outlet above each proposed data cabinet location (exemplar building contained three cabinets) The server room within the exemplar building was used to house the Door Controllers, "
Security	-
CCTV	CCTV
Intruder Detection	-
Access Control	DC2
WiFi	-
TV	-
Extract fans	-
General notes	-

Therapeutic Debrief Area
Room 4.01

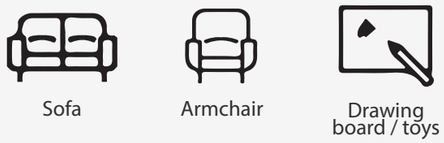
SPACE TYPES - ARCHITECTURE

SERVICE USERS ZONE

Area for children and parents/carers to relax and wait on 4th floor during an initial assessment.

» Room personalized with its own decoration theme.
» Comfortable seating with tables for children and parents/carers.

FURNITURE



TECHNOLOGY

CHARACTERISTICS

» Located at 4th floor
» Warm comfortable materials
» Small capacity space 2-5 persons
» Shelf with books and toys
» Close to tea point

ACTIVITIES

» Conversations
» Waiting
» Playing, reading, drawing

Finishes

Floor:

» Laminate - Aspecta Iceland pine oyster
» Pale pinewood colour pattern.

Paint/wall applications:

» Matt water based emulsion paint.
» Standard colour range to match room identity.

Ceiling:

» 600 x 600mm suspended mineral lay in acoustic ceiling tiles - white
» Suspended plasterboard ceiling on ceiling edges Painted white matt water based emulsion

Therapeutic Debrief Area
Room 4.01

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
21ºC winter, 23±2ºC summer	LST Radiators/ Air	Yes	10 l/s/p	10 l/s/p	Neutral	G3/F6	No	No	No

ELECTRICAL SERVICES

Luminaire choice	Lay in 600 x 600 with opal cover
Lighting and Lighting Control	Retractive switch by door and sensor in ceiling
Power (and Data)	" Allow for 13A socket with integral USB A and C outlets for phone charging (outlet mounted at 1000AFFL adjacent to casual seating) Allow for Dish washer, Fridge, Chilled water machine. Consider provision for Water heater, Water conditioner. 2No. Twin switched socket outlet above countertop. "
Security	-
CCTV	-
Intruder Detection	-
Access Control	-
WiFi	WiFi
TV	-
Extract fans	-
General notes	-

Health Room
Room 4.06 & 4.07

SPACE TYPES - ARCHITECTURE

SERVICE USERS ZONE

The health room needs to provide a child friendly space whilst complying with the NHS requirements of a clinical examination room.

Finishes

Floor:

- Rubber flooring - Chroma Artigo granito.
- Yellow 9315.

Paint/wall applications:

- Anti-bacterial & stain resistant matt water based emulsion paint.
- Standard colour range to match room identity.

Ceiling:

- 600 x 600mm suspended metal lay in with bio-guard acoustic ceiling tiles - white

FURNITURE

Task chairs | Workstation | Medical Equipment | Sink | Hot and cold lever taps

TECHNOLOGY

Desktop power | Wired network | Access control system

CHARACTERISTICS

- Medical equipment
- Warm colours
- Child-friendly decoration
- Shelf with books and toys

ACTIVITIES

- Physical examination
- Medical counselling

Health Room
Room 4.06 & 4.07

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
25ºC winter, 18ºC summer (controllable range rather than set-point)	LST Radiators/ Air	Yes	Air to be extracted through adjoining clinic	10 ACH	+ve	F7	Yes	No	Yes

ELECTRICAL SERVICES

Luminaire choice	Lay in 600 x 600 with opal cover
Lighting and Lighting Control	Retractive switch by door and sensor in ceiling
Power (and Data)	"Provide electrical connections to Colposcope, V-Pod and examination couch. Provide wall mounted switch and ceiling mounted outlet for a 'specialist examination lamp'. Precise positions of outlets and control switches are critical to the function of the equipment / process they serve). Provide D1 work station position. Provide additional D1 work station position within the clinic's 'ante-room'. Provide switched fused connection unit above worktop and socket below worktop for fridge within the clinic's 'ante-room'."
Security	-
CCTV	-
Intruder Detection	-
Access Control	DC1
WiFi	-
TV	-
Extract fans	-
General notes	-

Adjoining Clinic
Room 4.08

SPACE TYPES - ARCHITECTURE

SERVICE USERS ZONE

This room is to be used as a preparation / storage area for medical equipment such as vaccines, PPE equipment, fridge, etc....

FURNITURE

Medical Equipment

TECHNOLOGY

Access to power

Wired network

Access control system

CHARACTERISTICS

- Medical equipment
- Storage space for medical supplies
- Desk for preparation
- Fridge

ACTIVITIES

- Medicine preparation
- Storage

Finishes

Floor:

- Rubber flooring - Chroma Artigo granito.
- Yellow 9315.

Paint/wall applications:

- Anti-bacterial & stain resistant matt water based emulsion paint.
- Standard colour range to match room identity.

Ceiling:

- 600 x 600mm suspended metal lay in with bio-guard acoustic ceiling tiles - white

Adjoining Clinic
Room 4.08

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
25ºC winter, 18ºC summer (controllable range rather than set-point)	LST Radiators/ Air	Yes	6 ACH + 10 ACH from Examination room	-	-ve	-	Yes	No	Yes

ELECTRICAL SERVICES

Luminaire choice	Lay in 600 x 600 with opal cover
Lighting and Lighting Control	Retractive switch by door and sensor in ceiling
Power (and Data)	"Provide electrical connections to Colposcope, V-Pod and examination couch. Provide wall mounted switch and ceiling mounted outlet for a 'specialist examination lamp'. Precise positions of outlets and control switches are critical to the function of the equipment / process they serve). Provide D1 work station position. Provide additional D1 work station position within the clinic's 'ante-room'. Provide switched fused connection unit above worktop and socket below worktop for fridge within the clinic's 'ante-room'."
Security	-
CCTV	-
Intruder Detection	-
Access Control	DC1
WiFi	-
TV	-
Extract fans	-
General notes	-

Consultation Rooms
Room 4.10, 4.11 & 4.12

SPACE TYPES - ARCHITECTURE

SERVICE USERS ZONE

Child friendly rooms to allow the children to feel safe and able to express themselves.

» Each room personalized with its own decoration theme.
» Comfortable seating with tables for children to play, draw, read and shelves with books and toys.

FURNITURE

Sofa
Armchair
Table
Drawing board / toys
Plants

TECHNOLOGY

Desktop power
Access control system

Sky room

Sky room

Sun room

Seascape room

CHARACTERISTICS

» Located at ground and 4th floor
» Warm materials
» Small capacity space 2-5 persons
» Sense of privacy and safety
» Shelf with books and toys
» Sand tray

ACTIVITIES

» Conversations
» Therapy
» Playing, reading, drawing

Finishes

Floor:

» Laminate - Aspecta Iceland pine oyster
» Pale pinewood colour pattern.

Paint/wall applications:

» Washable matt water based emulsion paint.
» Standard colour range to match room identity.

Ceiling:

» 600 x 600mm suspended mineral lay in acoustic ceiling tiles - white
» Suspended plasterboard ceiling on ceiling edges Painted white matt water based emulsion

Consultation Rooms
Room 4.10, 4.11 & 4.12

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
25ºC winter, 18ºC summer (controllable range rather than set-point)	LST Radiators/ Air	Yes	10 l/s/p	10 l/s/p	Neutral	G3/F6	No	No	No

ELECTRICAL SERVICES

Luminaire choice	Lay in 600 x 600 with opal cover
Lighting and Lighting Control	Retractive switch by door and sensor in ceiling
Power (and Data)	"1 No. D3 work station provision Do not use dado trunking (as it is meant to be as domestic as possible)"
Security	-
CCTV	-
Intruder Detection	-
Access Control	DC1
WiFi	-
TV	-
Extract fans	-
General notes	-

Activity Room
Room 4.15

SPACE TYPES - ARCHITECTURE

SERVICE USERS ZONE

Child friendly room to allow the children to feel safe and able to express themselves.

» Comfortable seating with tables for children to play, draw, role play games and messy play.

FURNITURE


Table


Drawing board / toys


Plants

TECHNOLOGY


Desktop power


Access control system


Screens

CHARACTERISTICS

» Located at 4th floor
» Warm materials
» Small capacity space 2-5 persons
» Sense of privacy and safety
» Toys and play equipment including role play
» Wipe clean for messy play

ACTIVITIES

» Conversations
» Playing, reading, drawing

Finishes

Floor:

» Rubber flooring - Chroma Artigo granito.
» Pale blue 9372.

Paint/wall applications:

» Matt water based emulsion paint.
» Standard colour range to match room identity.

Ceiling:

» 600 x 600mm suspended mineral lay in acoustic ceiling tiles - white
» Suspended plasterboard ceiling on ceiling edges Painted white matt water based emulsion

Activity Room
Room 4.15

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
25ºC winter, 18ºC summer (controllable range rather than set-point)	LST Radiators/ Air	Yes	10 l/s/p	10 l/s/p	Neutral	G3/F6	No	No	No

ELECTRICAL SERVICES

Luminaire choice	Lay in 600 x 600 with opal cover
Lighting and Lighting Control	Retractive switch by door and sensor in ceiling
Power (and Data)	"1 No. D3 work station provision Do not use dado trunking (as it is meant to be as domestic as possible) Allow for 13A socket with integral USB A and C outlets for phone charging (outlet mounted at 1000AFFL adjacent to casual seating). This outlet will also be suitable for a V-Pod (if provided) Provide a twin switched socket outlet for a microwave oven."
Security	-
CCTV	-
Intruder Detection	-
Access Control	DC1
WiFi	-
TV	TV
Extract fans	-
General notes	-

Circulation

SPACE TYPES - ARCHITECTURE

PUBLIC ZONE / STAFF ZONE &
SERVICE USERS ZONE

Bright, wide circulation areas

» Clear circulation space with signage and easy way-finding.

Finishes

Floor:

» Laminate - Aspecta Iceland pine oyster

» Pale pinewood colour pattern.

» Circulation route separation.

Paint/wall applications:

» Matt water based emulsion paint.

» Standard colour range to match room identity.

Ceiling:

» 600 x 600mm suspended mineral lay in acoustic ceiling tiles - white

» Suspended plasterboard ceiling on ceiling edges Painted white matt water based emulsion

CHARACTERISTICS

» Circulation corridors and opened spaces

» Neutral finish

ACTIVITIES

» Walking through

TECHNOLOGY

Access control system

WiFi

CCTV

Circulation

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
21ºC winter	LST Radiators/ Air	No	3 ACH	3 ACH	Neutral	G3/F6	No	No	No

ELECTRICAL SERVICES

Luminaire choice	Recessed down lights (open cone)
Lighting and Lighting Control	Controlled from Reception desk
Power (and Data)	-
Security	-
CCTV	CCTV
Intruder Detection	Within the exemplar building this area was considered to require a movement sensor
Access Control	DC1
WiFi	WiFi
TV	-
Extract fans	-
General notes	-

Tea Points

SPACE TYPES - ARCHITECTURE

PUBLIC ZONE / STAFF ZONE & SERVICE USERS ZONE AT GROUND, FIRST AND FOURTH FLOOR

An open and engaging space for refreshment, to be used by staff and visitors.

Bright and vibrant colours can be used on accent walls and furniture to add personality to the space, but should be balanced with the need for relaxation and recharging.

FURNITURE

Counter
White goods
Hot & chilled water taps
Recycling
Preparation Surface
Sink
Storage
Dish washer

TECHNOLOGY

Access to power
CCTV

CHARACTERISTICS

- Functional and centrally located on floorplate
- Engaging and modern
- Adaptable
- Bright social space
- Capacity: 1-2 people

ACTIVITIES

- Self-serve hot and cold drinks

Finishes

Floor:

- Laminate - Aspecta Iceland pine oyster
- Pale pinewood colour pattern.

Paint/wall applications:

- Matt water based emulsion paint.
- Standard colour range to match room identity.

Ceiling:

- 600 x 600mm suspended mineral lay in acoustic ceiling tiles - white
- Suspended plasterboard ceiling on ceiling edges Painted white matt water based emulsion

Tea Points

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
21ºC winter, 23±2ºC summer	LST Radiators/ Air	Yes	10 l/s/p + extract for microwaves	10 l/s/p	-ve	G3/F6	Yes	Yes	Yes

ELECTRICAL SERVICES

Luminaire choice	Recessed down lights (open cone)
Lighting and Lighting Control	Controlled from Reception desk
Power (and Data)	"Allow for Dish washer, Fridge, Chilled water machine. Consider provision for Water heater, Water conditioner. Socket outlets were intentionally omitted."
Security	-
CCTV	CCTV (ground floor tea point only)
Intruder Detection	-
Access Control	-
WiFi	-
TV	-
Extract fans	Exemplar building used a self contained (through-the-wall) extract fan in this area. Consider power and control.
General notes	-

Toilets

SPACE TYPES - ARCHITECTURE

PUBLIC ZONE / STAFF ZONE &
SERVICE USERS ZONE

Universal, individual, fully enclosed washrooms have floor to ceiling walls on all sides and a door that closes to create a fully enclosed space.

They should include a toilet, sink, mirror, hand drying facilities, a general waste bin, a sanitary waste bin and clothes hooks. For further guidance on the provision of accessible WCs, refer to the Inclusive Design Standards.

FURNITURE

CHARACTERISTICS

- Clean and safe environment
- Sense of privacy
- Easy to maintain and clean
- Accessible to all

ACTIVITIES

- Sanitary use

Finishes

Floor:

- 600x600mm Porcelain Floor Tiling.
- Light grey colour.

Paint/wall applications:

- Anti-bacterial & stain resistant matt water based emulsion paint.
- Standard colour range to match room identity.

Ceiling:

- 600 x 600mm suspended mineral lay in ceiling tiles - white

Toilets

SPACE TYPES - MEP

MECHANICAL SERVICES

Internal Temp (°C):	Method of Heating	Comfort cooling	Extract Ventilation	Supply Ventilation	"Room pressure relative to adjacent"	Supply Air Filtration	Hot water	Potable Water	Drainage
21ºC winter	LST Radiators/ Air	No	10 ACH	9 ACH	-ve	G3/F6	Yes	Yes	Yes

ELECTRICAL SERVICES

Luminaire choice	Recessed down lights (with IK10 polycarbonate cover)
Lighting and Lighting Control	Fully automated
Power (and Data)	"Consider provision for Water heater, Water conditioner, Electric Radiator. Electric hand dryers NOT provided."
Security	-
CCTV	-
Intruder Detection	-
Access Control	-
WiFi	-
TV	-
Extract fans	Exemplar building used a self contained (through-the-wall) extract fan in this area. Consider power and control.
General notes	DTA as necessary

3 DESIGN NARRATIVE

CHAPTER 3

ARCHITECTURE

MEP

ARCHITECTURE

3.1 TECHNICAL STANDARDS

BUILDING REGULATIONS

Building Regulations define the expected minimum criteria for construction works; these are to be followed as a minimum standard for government construction and refurbishment works. The relevant regulations for each location will be followed with considerations to the countries they are within. These include:

» Building Regulations for England and Wales;
» Building Regulations for Northern Ireland;
» Technical Standards for Scotland.

BRITISH STANDARDS AND BEST PRACTICE GUIDANCE

British Standards (BS) and British and European Standards (BS EN and BS EN ISO) are quoted throughout the design guide, any revisions and/or amendments to these standards are expected to be implemented going forward.

GOVERNMENT STANDARDS

BCO

» The British Council for Offices (BCO) provides best practice guidance and research for use in offices. Reference is made to the BCO Guide to Specification throughout this document and the latest version of the BCO Guide to Specification should be used.

Basis of area measurement

» RICS Property Measurement, incorporating the International Property Management Standards should be used for measurements within the government estate.

NHS Clinical Estates Standards (design deviation, consult updated documentation)

Met Police ABE Interview Suite Standards (design deviation, consult updated documentation)

ARCHITECTURE

3.2 OCCUPANCY STANDARDS

BUILDING FORM

The design parameters set out within building form will aid how the building will function, allowing the space to be planned in the most efficient way.

CEILING/CLEAR HEIGHT

For floor depths of up to 18m the recommended dimensions of ceilings/ clear heights, from finished floor to the underside of ceilings is 2.75m. For deeper plan spaces, or deeper than 18m from the glazed perimeter, a height of 3.0m should be provided. Where this is not possible, in the case of refurbishments, MEP strategy will need to be carefully designed as it was on Camden Child house.

	New Build	Refurb.
Acquisition Density	6m² / FTE	8m² / FTE
Planned Occupancy Density	9m² / planned occupant	12m² / planned occupant
Building Services & Infrastructure	8m² / FTE	12m² / FTE
Fire Safety	6m² / FTE	8m² / FTE

OCCUPANCY STANDARDS

SHELL & CORE

Occupancy standards take into account modern office construction techniques, standard absence factors and smarter more flexible working. These values should be used for building services design.

DESIGNING SPACE

Planned Occupancy Density is how we ensure a great place to work. This allows us to design buildings that are cost effective yet still provide a high-quality working environment. Whilst acquisition and occupation density varies from new build and refurbishment, there will always be a constant look and feel however big or small a building is, ensuring a consistent, standard across all hubs. This includes all the elements of our workspaces: focus, informal, do not disturb, interact, book and use and our amenity spaces.

We anticipate an average of two thirds of the FTE will be in occupation at any one time. This means the space should be designed accordingly: 9m² per occupant of the Net Internal Area (NIA) of the whole of a new building (proportionally more for a refurbishment) to achieve the quality and blend of workplace types needed and taking into account the nature of the building.

ARCHITECTURE

3.3 WALL TYPES

COMMON PARTITION WALL TYPE (P1) AND ACOUSTIC WALLS TYPE (P2) FOR ABE ROOM

WALL P1

Screw fix 48mm 'C' studs @ 600mm centres full height from floor to structural soffit, infill with 25 mm Isover 1200 cavity insulation & finish with 2no. layers of 12.5 mm Soundbloc plasterboard with staggered joints. Scrim & fill joints & leave ready for decoration. Refix architrave & skirting & make good where disturbed.

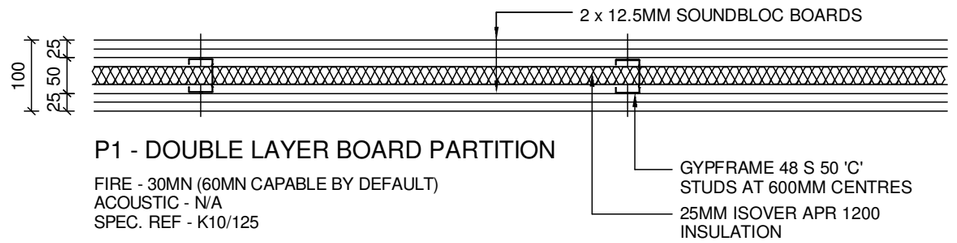
Studs from British Gypsum Gypframe system or equal & approved.

WALL P2

Control & Interview rooms - prepare walls and provide & install full height fabric faced acoustic wall panels throughout, secured with proprietary concealed fixings, 40mm thick; allow for cutting to edges & abutments.

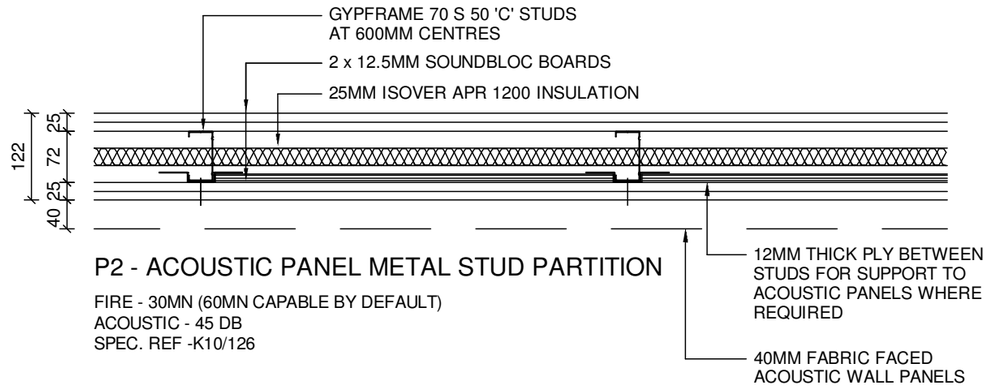
All installation & detailing to be strictly as per manufacturer's instructions. Colour to choice from standard range.

Install sound absorption Class A wall panel - Ecophon Wall Panel C acoustic wall panels from Saint Gobain Ecophon AB 0464 217 9900 or equal & approved.



P1 - DOUBLE LAYER BOARD PARTITION

FIRE - 30MN (60MN CAPABLE BY DEFAULT)
ACOUSTIC - N/A
SPEC. REF - K10/125



P2 - ACOUSTIC PANEL METAL STUD PARTITION

FIRE - 30MN (60MN CAPABLE BY DEFAULT)
ACOUSTIC - 45 DB
SPEC. REF -K10/126

ARCHITECTURE

3.4 FINISHES - FLOORS

GENERAL PURPOSE FLOORS

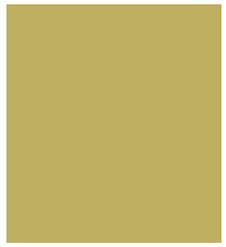
Office areas, reception, waiting areas

» Vinyl laminate flooring - Better presentation
Iceland Pine Oyster

ACOUSTIC & ANTISTATIC FLOORS

Health room & activity room

» Artigo Granito rubber flooring - Better comfort, acoustic properties and wipe clean for clinical procedures or messy play - Yellow (G315), Pale blue (G312)



ANTISTATIC FLOORS

Server room

» Rubber flooring - Rubber floor with antistatic properties

WATERPROOFED FLOOR

Toilets

» Porcelain floor tiling

ARCHITECTURE

3.5 FINISHES - CEILINGS

GENERAL PURPOSE CEILINGS

» Suspended gypsum plasterboard ceiling
» Suspended mineral acoustic ceiling tiles

ACOUSTIC CEILINGS

ABE, Control room & Waiting area (Ground floor)

» Suspended acoustic metal ceiling tiles with acoustic fleece
» Suspended plasterboard ceiling on ceiling edges

CLINIC CEILING

» Suspended metal ceiling tiles with bio-guard acoustic

TOILETS CEILING

» Suspended mineral ceiling tiles

3.6 FINISHES - WALLS

GENERAL PURPOSE WALLS

» Matt water based emulsion paint.

CONSULTATION ROOM WALLS

» Washable matt water based emulsion paint.

CLINIC & TOILET WALLS

» Anti-bacterial & anti-stain matt water based emulsion paint.

ARCHITECTURE

3.7 ACOUSTICS

ACOUSTIC RATINGS

We were asked to follow an acoustic rating of 45dB for walls and doors on the ABE room; below are the different specs used on these areas.

WALLS

The acoustic insulation for the ABE rooms is done in two steps, the first one being the wall build-up providing its own acoustic performance. It is crucial to follow the manufacturers building step by step guidelines to achieve best performance. It is not only the wall build-up that needs to be properly executed but all the fixings to the floor/ ceiling and acoustic layering to prevent noise leakage through the top or bottom of the wall.

The second step is to add an additional acoustic treatment to the partition by lining the wall internal faces with acoustic panels. The panels used in the Camden Lighthouse are the sound absorption Class A wall panels - Ecophon Wall Panel C acoustic wall panels from Saint Gobain Ecophon AB 0464 217 9900. Equal or approved to be adopted. Install 12mm thick plywood between studs to support acoustic slab.

The wall build-up achieves 52 RW dB thus outperforms the 45dB requirements. This is often the case to allow for construction defects and/or bad site workmanship.

Any alteration to the wall build-up such as adding ventilation grills, lighting fixtures, fixings for furniture, etc. will need to provide guarantee that the wall acoustic performance is not compromised.

The wall specification chose for Camden Lighthouse is shown here as an example.

Product reference: British Gypsum - Gypwall Classic
- Nominal thickness (excluding finishes): 122 mm.
• Performance criteria:
- Fire resistance to BS 476: Part 22: 30mn. Wall build-up achieves up to 60 minutes by default.
- Sound insulation: 45 Rw dB required, wall build-up achieves up to 52 Rw dB by default.
• Framing: Independent Gypframe metal stud frames. Studs:
- Type: Gypframe 70S50 ''C" studs at 600mm centres and at wall abutments, openings and junctions.
- Floor channel: Gypframe 72FECC50 for heights up to 4200mm
- Head channel: Gypframe 72DC60.
• Head condition: Fixed to concrete soffit.
- Deflection allowance: TBC.
• Insulation: Isover Acoustic Partition Roll (APR 1200).
- Thickness: 25 mm in cavity between studs.
• Linings: 2 No. skins of 12.5 mm Gyproc Soundbloc to each side of framing with staggered joint.
• Finishing: Scrim & fill joints & leave ready for decoration
• Other requirements:
12 mm thick wpb plywood between studs supported by Gypframe Service Plates to support acoustic slabs full height fabric faced acoustic wall panels throughout, secured with proprietary concealed fixings, 40mm thick; allow for cutting to edges & abutments. All installation & detailing to be strictly as per manufacturer's instructions.
Install sound absorption Class A wall panel Ecophon Wall Panel C acoustic wall panels from Saint Gobain Ecophon AB 0464 217 9900 or equal & approved.
Wall build-up to be maintained as above

ARCHITECTURE

FLOOR

The floor build-up will need to provide the necessary acoustic requirement (not provided on this exercise).

Several items will influence the floor acoustic rating such as build-up (i.e. a concrete slab does not have the same performance as a timber floor), what is under the floor (screed, void, another floor) and the floor finish.

Any alteration to the floor build-up such as adding ventilation grills, lighting fixtures, fixings for furniture, etc.. will need to provide guarantee that the floor acoustic performance is not compromised.

The floor finish on the ABE room is a rubber flooring (Artigo multi floor Nd/Uni) with noise reduction properties up to 20dB that lays on top of screed.

CEILINGS

The same requirements that apply to the floor acoustic performance also applies to the ceilings. All the ceiling and substrate will need to be taken into consideration into the study.

Several items will affect the ceiling acoustic rating such as it's build-up, what is above the ceiling (roof, concrete slab, another floor) and the actual ceiling finish.

Any alteration to the ceiling build-up such as adding ventilation grills, lighting fixtures, fixings for furniture, etc.. will need to provide guarantee that the ceiling acoustic performance is not compromised.

The ceiling finish on the ABE room is a metal suspended ceiling lined on the interior with an acoustic fleece. The floor build-up is timber construction and there is an occupied floor above.

ARCHITECTURE

DOORS

The same 45dB acoustic rating applies to the doorset. Doors are always a week point on a wall build-up and need to be executed to the highest standard. The wrong door and bad workmanship can compromise the acoustic performances of an entire room through noise leakage through the door/frame.

The door specification chosen for Camden lighthouse is shown here as an example.

Product reference: Integrated Doorset Solutions Limited, Audiodor Super

- Acoustic performance: 45 RwdB required, 46 RwdB capable.

• Door leaf:

- Facings: Crown Cut American White Oak veneer

- Lippings: American White Oak lippings all round, concealed by the face

• Dimensions: Door leaf 926 x 2040 mm, 1010 x 2110 mm structural opening.

• Frame and architraves:

- Liner and Stop

- Wood species: American White Oak

- Architrave: 55x18mm

• Preservative treatment: Not required

• Glazing/ Infill details: None

- Dimensions: N/A

- Manifestation: None.

• Ironmongery:

- Swinging device: SZP durability butt hinges

• Perimeter seals: Intumescent and smoke seal.

• Other requirements:

- Door Viewer

• Fixing: Plugged and screwed

NOTE

The acoustic performance requirements for this project have been reviewed and additional measures have been taken to improve the soundproofing of the clinic. This has resulted in a deviation of the specifications, schedules and drawings issued by Atkins on May 4th 2018 for both the Architecture and MEP package.

It is advised for the viewer of this document to refer to the relevant documentation for the Camden Lighthouse Health Centre for the updated specifications.

MEP

Technical Standards
Services to be provided
Design Criteria
Incoming utilities
Mechanical Services
Public Health services
Electrical Engineering Services

3.8 TECHNICAL STANDARDS

- The Building Regulations
- International, European and/or British Standards
- CIBSE Guides and Commissioning Codes
- BSRIA Guides
- Good Practice
- Codes of Practice
- Requirements of the Health and Safety Executive (and CDM Regulations where applicable).
- The Control of Asbestos at Work Regulations
- Control of Substances Hazardous to Health (COSHH) Regulations
- Local and Authorities Regulations and Bye-Laws
- Requirements of the Local Water Company and Water Regulations
- Requirements of the Local Authority Public Health Engineers Department
- Local Drainage Authority Regulations.
- Requirements of the Local Gas Company.
- The Gas Safety (installation and Use) Regulations
- Recommendations of the Institute of Gas Engineers Publications
- Recommendations within publications issued by the HVCA
- Workplace (Health, Safety and Welfare) Regulations and Approved Code of Practice
- L8 - The Control of Legionella bacteria in water systems,
- Clean Air Acts
- Environmental Protection Act and associated Technical Guidance Notes
- Employer's Requirements
- Institute of Engineering and Technology requirements (Formerly the IEE wiring regulations)
- Utility Board Regulations
- Manufacturers Requirements and Recommendations.
- WRAS Regulations.

MEP

Technical Standards
Services to be provided
Design Criteria
Incoming utilities
Mechanical Services
Public Health services
Electrical Engineering Services

3.9 SERVICES TO BE PROVIDED

In accordance with the technical standards and the room data sheets including:

- Heating
- Cooling
- Ventilation
- Domestic Water Services (hot and cold)
- Above Ground Drainage
- Lighting and lighting control
- Emergency Lighting
- Fire Detection and Alarm
- Emergency Voice Communication system
- Door holders and powered doors
- Disable Toilet Alarms
- LV distribution and Small power
- Modification to the existing incoming telecom / data utility service
- Modification to the existing incoming LV electrical utility service
- Lightning protection and Transient Voltage Surge Suppression.
- Structured cabling and passive equipment
- Security installation (Panic Alarms, Door position monitoring, CCTV, Door entry phone, door access control, Intruder alarms)

3.10 DESIGN CRITERIA

In accordance with the technical standards and the room data sheets.

3.11 INCOMING UTILITIES

Gas – No gas services were present on site and as such the services need to accommodate the existing infrastructure.

Water – Existing mains water connections were utilised

Drainage – Existing drainage connections were utilised.

Electrical – Due to space planning requirements, the existing incoming utility equipment and cable had to be relocated

telecom / data - Due to space planning requirements, the existing incoming utility equipment and cable had to be relocated

MEP

3.12 MECHANICAL SERVICES

The building had some limiting factors when considering the mechanical services:

1. There was no gas supply to the building
2. There was very limited ceiling void on each of the floors
3. The building is located in central London where background noise can be an issue.

Ventilation Strategy:

Mechanical ventilation was required in all areas due to the sensitivity of some areas and the possible issue of background noise. Due to the limited void space the ventilation strategy had to maintain the existing strategy of providing supply air directly to the space via ductwork and diffusers with extract air being taken from a central point of each floor via a ducted riser.

This required the need for air transfer grilles to be installed in most of the rooms and corridors so there was a path back to the central extract riser. Cross talk attenuation had to be considered in noise sensitive areas such as the ABE suite.

Air was supplied and extracted from the existing Air Handling Unit (AHU) located on the roof which also served the 2nd and 3rd floors which were out of the scope of the refurbishment.

An additional heat reclaim AHU was needed to incorporate a training meeting room on the first floor and was installed on the roof. Due to the lack of risers and void space the ductwork needed to be installed on the outside of the building and planning permission obtained.

If the ceiling void space had been available ventilation would have been extracted directly from the room reducing the complexity of the air paths back to the AHU and minimising the risk of noise breakout.

Heating/Cooling Strategy:

The existing building was served via Variable Refrigerant Flow (VRF) units dedicated to each floor. The outdoor units were located on the roof complete with acoustic attenuation and serve 4-way cassette units located in the various areas on all floors.

The VRF systems had passed their economic life and since we could install on a floor by floor basis without affecting the 2nd and 3rd floors it was decided to replace the existing VRF systems on the Ground, First and Fourth floors and adopt the same strategy based on the required cooling and heating loads needed.

Due to the lack of ceiling void we selected 4-way cassette units to serve most the areas whilst ensuring that noise criteria was met in all areas and sizing accordingly.

If the ceiling space had been available and from a discretionary and occupant comfort point of view we would have selected ceiling ducted fan coil units which would have been ducted into the space via ceiling diffusers ensuring that their presence was minimal and provide a better distribution of air.

MEP

Typical 4-way Cassette Fan coil Unit

Some area did not require cooling and would have been over design had fan coil units been installed such as refuge spaces and WC's. We installed Low Surface Temperature (LST) Dimplex electrical radiators in these areas which is not ideal from an energy perspective but are minimal in quantity.

Typical LST Electric Radiator

Ideally, we would have selected radiators served from a Low Temperature Hot Water (LTHW) system via a boiler in these areas as this is more energy efficient, however, the lack of gas supply meant this wasn't possible.

The server rooms were served via 2 no. wall mounted split Direct Expansion (DX) units. If one of the units fails, the other is able to

Ideally, server rooms are served via Computer Room Air Conditioning (CRAC) units which supply air through a floor void to give a better distribution. However, given the space constraints and the limited number of servers this was not deemed feasible or necessary.

MEP

3.13 PUBLIC HEALTH SERVICES

Above Ground Drainage:

The above drainage was only adjusted locally to allow for the introduction of services located in tea points, WC's, breakout areas and clinics.

Cold Water Services:

The existing building was serviced directly from the mains cold water with no break or potable water storage tank located on site. The mains cold water service provides water to the various outlets located in tea points, WC's, breakout areas and clinics including localised water heaters in keeping with the existing strategy.

Ideally a break tank with a boosted water supply would have been installed at ground floor level to serve the various floors which would allow for better control of water pressure and provide a reserve of water in the event of failure to the mains cold water supply.

Hot Water Services:

There is no centralised hot water services installed on the existing site. With minimal space for centralised plant and no gas supply new localised water heaters were installed to serve the various hot water outlets in the tea points, WC's, breakout areas and clinics. Given the small-scale hot water usage on the site this is deemed an economical solution.

MEP

3.14 ELECTRICAL

Introduction

With only three of the five floors of the building to be sub-let to form the Child house, works were required to separate the existing tenant's systems from the Child house systems. The building has only a single entrance and a single stair and passenger lift, these services had to be shared between both tenants.

The existing services philosophy utilised fabric that separated adjacent floors to house a common containment for lighting cabling to the lower floor and the small power cabling to the upper floor. This arrangement had to be unpicked and reprovided.

The limited ceiling height and the fire boarding between floors provided constraints on the new cable containment systems. Primary containment was kept to corridors, single pulls of uPVC conduit were run within rooms to individual outlet positions. Fire boarding necessitated the use of fire hoods over luminaires and smoke detectors.

As a 'partial refurbishment' of a small building, separate metering of the power and lighting installations to the refurbished areas was considered to provide no value to the client. Furthermore, the existing rising busbar installation that fed the power and lighting distribution boards on each floor was to be retained. Separate metering was however provided to;

- The child house server room,
- The lift service
- The rising busbar.

Scope of this document.

This guide identifies elements specific to a Child House. Generic items such as locations of the Fire Alarm Panel / Provision of Emergency Voice Communications Systems should follow established design / construction practices

Open Protocol

All systems installed shall use open protocols (with passwords / pass codes recorded in O&Ms) such that future maintenance contracts may be tendered competitively.

Resilience

The exemplar building did not have generator back up.

The exemplar building did not have UPS back up provided as part of the construction contract.

It is not known if the client provided local UPS equipment as part of their IT contract.

It is known that some form of UPS is required to ABE suites.

MEP

Lighting and Lighting Control

Wherever possible the provision of multiple light switches that will all be used in the same way should be avoided. In such instances, utilise a single switch to control contactors on multiple circuits. An example would be the keyswitch to be operated by the first person into the building should control all lighting up to the reception desk

Control shall always incorporate a light sensing element regardless of the availability of daylight such that maintained illuminance of the space may be provided throughout the life of the installation and thus optimising energy usage.

Luminaires should be dimmable and have LED sources and DALI drivers. Luminaires should be commissioned to provide maintained illuminance (referencing both the depreciation of the luminaires and their environment and the availability of any day light).

Although none were identified at the exemplar site, should any room be sufficiently deep plan to warrant it, multiple light sensors should be provide to dim different rows of lights to different levels (dimming only the row closest to a window wall or all luminaires uniformly is not acceptable).

Preference is for automated lighting control requiring manual interaction to turn it on and allowing manual interaction to turn it off instantly. Control shall be commissioned such that lack of movement within a room for a set period switches lights to OFF. Refer to room data sheets for exception to this. Within all rooms employing automated OFF, the luminaires shall dim to 33% for a period in advance of OFF. Where manual control switches are installed, they shall be of the retractive type ('flick' toggles between ON and OFF, 'hold' cycles through dimming).

The exemplar building was of the scale that self contained sensors / controllers within individual rooms offered the most efficient means of lighting control. The use of a networked, building wide system would be required if the site was considerably larger.

Lighting connections

The exemplar building was of the scale that 'dumb' Lighting Distribution Boxes offered the best method of marshalling the lighting control within each room. The use of a 'smart' Lighting Control Modules would be required if the site was considerably larger and warranted a networked lighting control system.

Emergency Lighting

Over and above the requirements of BS5266, in order to eliminate the possibility that no vulnerable persons could be in a room plunged in to darkness in the event of a power or circuit failure, provide a minimum of 'anti-panic' lighting to all spaces.

Ensure allowance is made for 'Point of Emphasis' lighting to items the client will install post PC (e.g. first aid boxes, statutory signage, defibrillators, etc.).

Utilise internally illuminated exit signage throughout.

MEP

Feature Lighting

The exemplar building contained some architecturally led elements of feature lighting such as suspended globes and a 'tree' feature. Consider power and control as necessary.

Fire Detection and Alarm

Provide a category L3 system to BS5389.

Utilise sounders as method of evacuation.

Risk assessment of the toilets available to visitors deemed them necessary to contain detection.

Provide Visual Indicator Devices within every space in which a person could be with the door closed behind them.

No areas within the exemplar building were considered to be sufficiently noisy to warrant the use of Visual Alarm Devices.

Within the exemplar building, the client chose to control the risks associated with the profoundly deaf and audible alarms with management procedures.

Containment

The exemplar building utilised zinc finished wire basket for primary containment. Three systems were used; LV (all services rated at between 230 and 1000V), Life Safety and ELV (all services rated at below 230V, including the structured cabling).

Vertical drops of cabling were either run within voids in partition walls or within uPVC conduit in solid walls.

Noise Transfer

Refer to the acoustic section of this guide for precautions to be taken where electrical accessories breach acoustic constructions.

Cleaners outlets

In order to avoid the chances of appliance cables being caught under doors / in doorframes, all spaces should be provided with a power outlet identified for cleaner's use. Exceptions shall be made for rooms / cupboards that are sufficiently small that they could be vacuum cleaned from the doorway.

Within the exemplar building, it was stated that the times at which Cleaners would be in the building and when staff would be operating in the building would be mutually exclusive, therefore separate circuits were not required for cleaner's outlets.

Physically locate cleaner's outlets consistently with reference to door swings.

MEP

Connection units

Fixed appliances shall be controlled with switched connection units. In order that the connection units may be used for maintenance isolation, emergency isolation and functional switching, they shall always be accessible. Separate flex outlet plates (or sockets) shall be provided local to the fixed equipment.

Connection units shall be labelled with the function and circuit number.

The exemplar building had no raised floor system and as such dado was the favoured method of providing an installation with a degree of future flexibility. However, it also had some retained glazed partitions which precluded dado. If a raised floor system is available, it should be considered as an alternative to dado on a room by room basis. Where a raised floor system is used, preference should be given to grommets (as opposed to floor boxes).

Room in Use signage

Within the exemplar building this was only considered necessary in the ABE Suite's Interview Room. All other areas would rely on a manual room booking system and key box.

Server Room

Server room shall be provided with a dedicated DB.

The exemplar building was NOT provided with any dedicated earthing arrangement within the server room.

Space planning of the server room is not within the scope of this guide.

Within the exemplar building the server room did not have a suspended ceiling and benefited for it.

ABE Suite

Refer to the specific guidance document for the rooms forming the ABE suite.

Within the exemplar building containment was provided within the Interview Room for microphones and cameras.

Leak Detection Systems

Within the Exemplar building leak detection was NOT provided to Server room, or, toilets, or, kitchenettes, or cleaners cupboards

CCTV

The exemplar building utilised an IP based CCTV system and therefore structured cabling was required to each CCTV camera position. The exemplar building utilised PoE (Power over Ethernet) CCTV cameras.

The exemplar building already had CCTV coverage to the street and the Entrance Lobby.

The exemplar building provided CCTV coverage to all of the Public Zone (including areas such as Refuge Spaces)

MEP

Door Control.

The exemplar building was provided with a proximity card access control system. The system was separated into three Tiers;

- DC1, Staff access
- DC2, IT technician access
- DC3, Electrical maintenance staff access

Door Monitoring.

Monitoring was provided to all emergency exit routes out of the building such that warning would be given if a person tried to abscond.

Although not required at the exemplar building, where the building arrangement requires the general housekeeping procedure of visitors being escorted from the building via an emergency exit, consideration should be given to the interfacing of the door control system and the door monitoring system.

Door Holders

Within the exemplar building door holders were used on fire doors within corridors and from lift lobbies (refuge spaces) to assist wheel chair users.

Door Openers

Electrically operated door openers were provided into the reception.

Door Entry System

Provided to both entrance and lobby doors.

At the exemplar building it was acknowledged that it should be possible to allow visitors efficiently enter the building lobby without having to explain their business whilst standing on a narrow central London. If necessary, further validation could be undertaken once they were in the lobby.

Door entry system linked to powered door operator

Common Alarm Panel

Outputs from the Door Monitoring system, the disabled toilet alarms and the panic alarms were provided to a single panel located behind the reception desk. This position allows alarms to be silenced and reset. No repeater position was provided at the exemplar building.

Intruder Alarm

The exemplar building was provided with warning of intrusion based upon protection of circulation spaces, access to a single room via a window was not generally protected against, however, where ground floor rooms with valuable contents were identified they were individually protected. Site specific complications were encountered at the exemplar building due to the presence of an external, accessible escape stair.

Intruder alarm Reed switch on final exit.

Television

The exemplar building was intended to use an IP based TV broadcast system (as opposed to terrestrial) and therefore structured cabling was designed to selected positions.

MEP

Electrical Supplies to Mechanical and Public Health Systems.

In addition to the elements highlighted on the particular room data sheets, the exemplar building also required electrical connections to Fire/Smoke Dampers, Fan Coil Units, Extract Fans, Branch Selectors. Consider these plus mechanical ventilation and heat recovery units in future designs

Power and Data Provision to individual Workstations

Within the exemplar building provision was standardised into three arrangements (dictated by desk positions being either long or short edge against a wall;

- Each D1 style work station position shall be supplied with a four outlet trailing power module with a 13A plugtop (fused at 13A). Module is provided for supplying fixed items of equipment on the desk position such as PCs and powered from one gang of the local twin switched socket outlet. Module shall be capable of being permanently fixed to modesty screen of furniture.
- Additionally, each D1 style desk position shall be supplied with a two outlet trailing power module with a 13A plugtop (fused at 3.15A). Module is provided for supplying portable items of equipment on the desk position such as phone chargers and powered from one gang of the four gang module. Module shall be capable of being clamped to desk top.
- Each D2 style work station position shall be supplied with a two outlet trailing power module with a 13A plugtop (fused at 3.15A). Module is provided for supplying portable items of equipment on the desk position such as phone chargers and powered from one gang of one of the two local twin switched socket outlets. Module shall be capable of being clamped to desk top.
- Fixed items of equipment on the desk position such as PCs shall be powered from the remaining three gangs of the two local twin switched socket outlets.
- D3 work station positions are provided for the use of ad-hoc equipment such as power to a laptop charger and data to both a network point and a voice over IT point.

Data points for two adjacent D3 work station positions should be rationalised into a single shared ‘quad’ faceplate with four outlets.

It is acknowledged that within some organisations, the above arrangement of desk top modules fed via 13A plugtops defines them as a portable appliance and hence adds them to the PAT (testing) register. Future installations should incorporate the use of GST connectors between under desk and desk top modules within the D1 arrangement negates this.

To reduce the number of positions containing RCDs (must be routinely tested), earth leakage protection to desk positions should be provided at distribution boards (as opposed to individual desks).

To eliminate the chance of nuisance tripping of RCDs no more that 12 work stations should be connected to any circuit.

The ability to patch the data positions for a work station up to the desk top module was considered but rejected at the exemplar building.

Future projects should consider the provision of USB type A and type C outlets within the desk top modules.

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