

# **The Building and Office**

# **Concept Design**

Largely, the <u>office area</u> will be **open space**, what means collaborative work in a comfortable and light environment with acoustic comfort and interactive environment. A minor area will be **individual offices** placed in opposite corners of the floor, generally 2 per floor, physically separated from the open space both with solid and glass partitions. **Quiet rooms** will be placed among the open space to hold short meeting and not disturb the working area.

# Space Plan of 13<sup>th</sup> floor



# 13<sup>th</sup> floor comprises:

1 x Social area (lunch, coffee) 1 x Wellbeing room 1 x Server Room

2 x Head of Unit Office 2 x Storage Room 2 x Toilets (women and men)

5 x Open Office Area 1 x Archive/storage Room 1 x Bathroom for disabled

2 x Meeting Rooms (10 & 20 person) 2 x Printer Room 1 x Cleaners Room

4 x Quiet Rooms 4 person 1 x Telecom Room (landlord's equipment only) Entrance areas and corridors

## **Materialization Concept**

There will be an identity for each floor, which will help staff to immediately identify which floor they are visiting. Constructive elements<sup>1</sup> of the office will have a neutral colour that encourages lighting space and at the same time enhances accent colours in order to provide an identity to each of the floors.

- Accent elements in 14th floor will be inspired in 'Mountain'/'Lake' atmosphere with a blue/grey/white colour palette.
- Accent elements in 13th floor will be inspired in 'Savannah'/'seaside' atmosphere with a yellow/brown/beige colour palette.
- Accent elements in 11<sup>th</sup> floor will be inspired in 'Forest' atmosphere with a green/pistachio/russet colour palette.

Colour accents will be applied strategically in elements easy to replace (special furniture, acoustic elements, vinyl and picture wallpapers), no colour accents are applied to permanent fixtures.

<sup>&</sup>lt;sup>1</sup> The term of constructive elements concerning the design concept are referred to ceilings, doors, walls, carpets and frames of glass partitions.

# Flooring of 13<sup>th</sup> floor



## **Flooring**

### 1. Office Areas, Meeting Rooms and Quiet Rooms

All flooring will be covered with carpet tiles, comprising a base colour that will be neutral and light. There will be a differentiation of colour between spaces and corridors.

The carpets must be installed in accordance with the manufacturer's recommendations. Where carpets meets other floor finishes they shall be completed with an appropriate profile to avoid trip hazards and offer a smooth transition.

### 2. IT Rooms

Will have a standard raised floor tile incorporated with anti-static vinyl finish in a grey colour.

### 3. Social area

Will have vinyl floor covering of the TAPIFLEX ESSENTIAL 50 Range of Vinyl Tiles.

### 4. Storage rooms

Will have vinyl floor covering. The selected vinyl covering range will be the CAVALIO range.

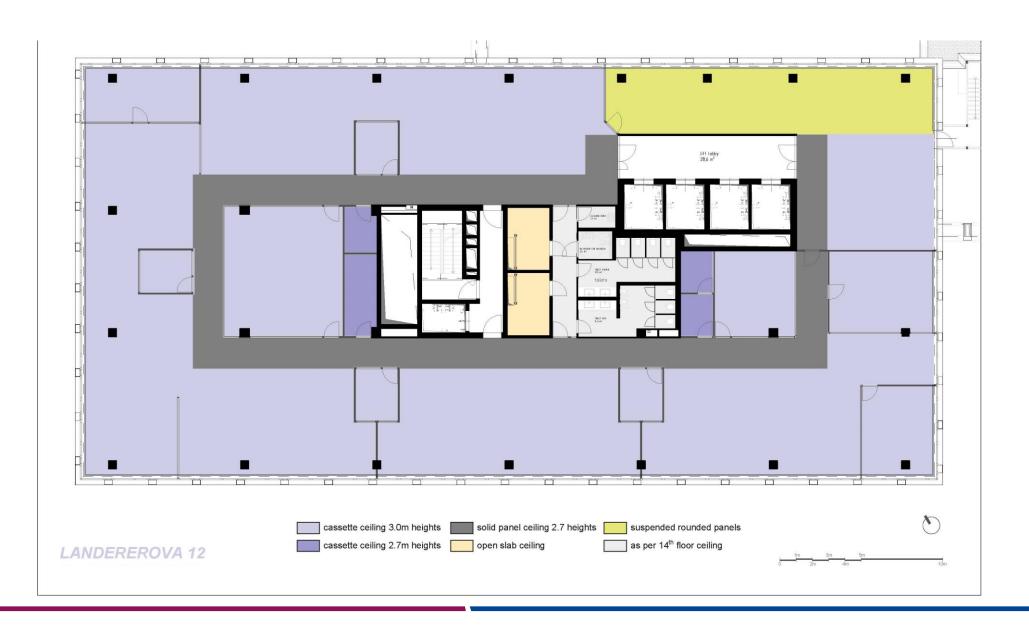
#### 5. Toilets and Cleaners room

Will have a standard of the building.

### 6. Wellbeing room

This will have a solid wooden parquet flooring,

# Ceiling of 13<sup>th</sup> floor

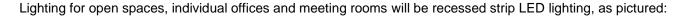


## Ceiling

The main colour of ceilings will be white RAL9010, unless otherwise specified. In planning the ceiling,

### 1. Office Areas and Meeting rooms

Ceiling in office areas will be 3.00 m height and will incorporate the necessary facilities and lighting. The system of ceiling will consist of a combination of suspended fixed plasterboard and cassette ceiling. Fixed plasterboard system will be used in perimeter bands of the spaces. The cassette system will be a 600 x 600 (600 or 1200) mm raster and acoustic absorbent boards will be in white RAL9010 colour..



Lighting for quiet rooms will be 4 round recessed lights, as pictured below:



#### 2. Corridors

Ceiling in corridors will be 2.70 m height and will incorporate the necessary facilities and lighting. The system of ceiling will consist of suspended fixed plasterboard (Solid Panel) in white RAL9010 colour. Some adjacent areas have also been lowered for aesthetic reasons, see the plan above.

The lighting above the main walkways will be round recessed spots, as shown:



#### 3. IT Rooms

These will have open slab ceiling with LED Strip lighting same as the office space above suspended from the slab ceiling.

### 4. Social area

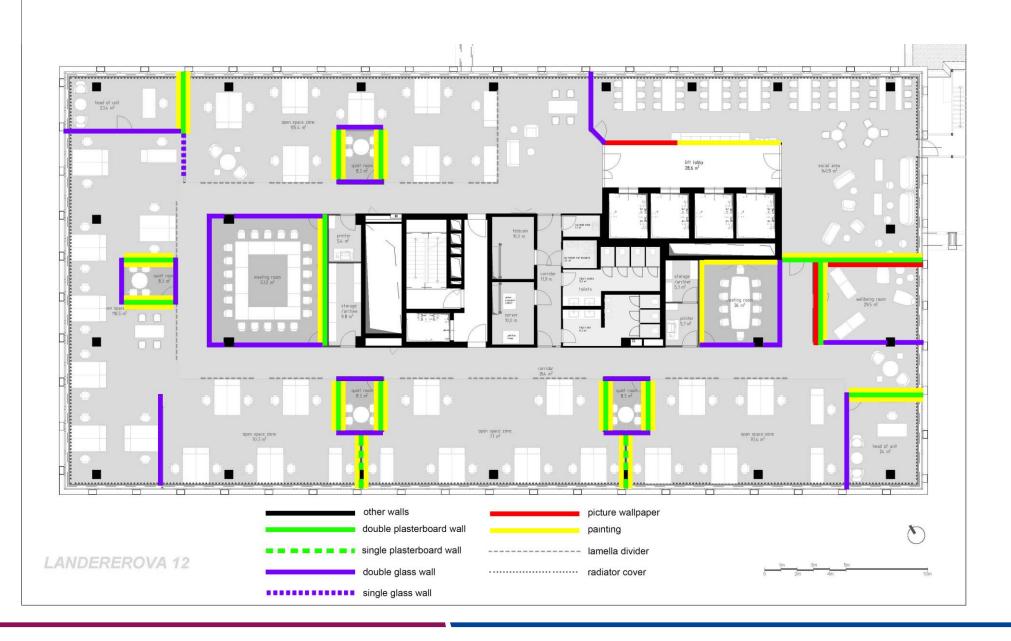
This will mainly be constructed in open slab with suspended rounded fabric ceiling and feature lighting. This will be used in the area indicated on the plan. The rest will be constructed in grid ceiling and incorporate recessed round spotlights as necessary to provide sufficient lighting for this space.



### 5. Toilets and Cleaners room

Will have a standard of the building.

# Wall Partitions of 13<sup>th</sup> floor



### **Wall Partitions**

### 1. Double plasterboard walls and doors

Solid walls will be constructed of standard plasterboard with sound insulation in the cavity. Acoustic measures for double layer partitions are required to meeting rooms (quite rooms included) and individual offices, to prevent sound bleeding between the office space and the meeting rooms/offices, which requires the partitions to these spaces will be extended to slabs both over the false ceiling and below the raised floor. This acoustic barrier will reduce the acoustic bridge through cavities of floor and ceiling.

The finish on these walls is shown in the plan above and detailed below.

All doors in solid walls as indicated above will be either wooden door white or wooden door wood décor.

Walls incorporating AV solutions will require specific containment and reinforcement which are detailed below in drawings *Meeting Room Containment of 14<sup>th</sup> floor* and *Display Monitor Containment in entrance of 14<sup>th</sup> floor*.

### 2. Single plasterboard walls

Solid walls will be constructed of standard plasterboard with single plasterboard.

### 3. Double/single glass walls and doors

Doors in glass partitions will be of the same constructions as the glass walls: double glass partitions will contain double glass doors and single glass partitions will contain single glass doors. Glass partitions and associated doors will have manifestations offering some privacy for the attendees. Single glass walls will be resistant to horizontal loads.

### 4. Picture wallpaper

The plan above shows the maximum size of walls that could be covered by picture wallpapers. The concept is to provide some panoramic pictures or inspiring natural landscapes.

### 5. Painting

The plan above shows the size of walls that could be painted 50% of them in white RAL9010 and 50% in colour. Painting on walls will be minimum double layer of paint.

#### 6. Other walls

Will be painted in white colour RAL9010. The partitions of existing toilets (and toilet cubicles), bathroom for disabled and the cleaning room.

The entrance doors connecting the lift lobby with occupier space will be a sliding system opened by the access control system.

#### 7. Lamella dividers

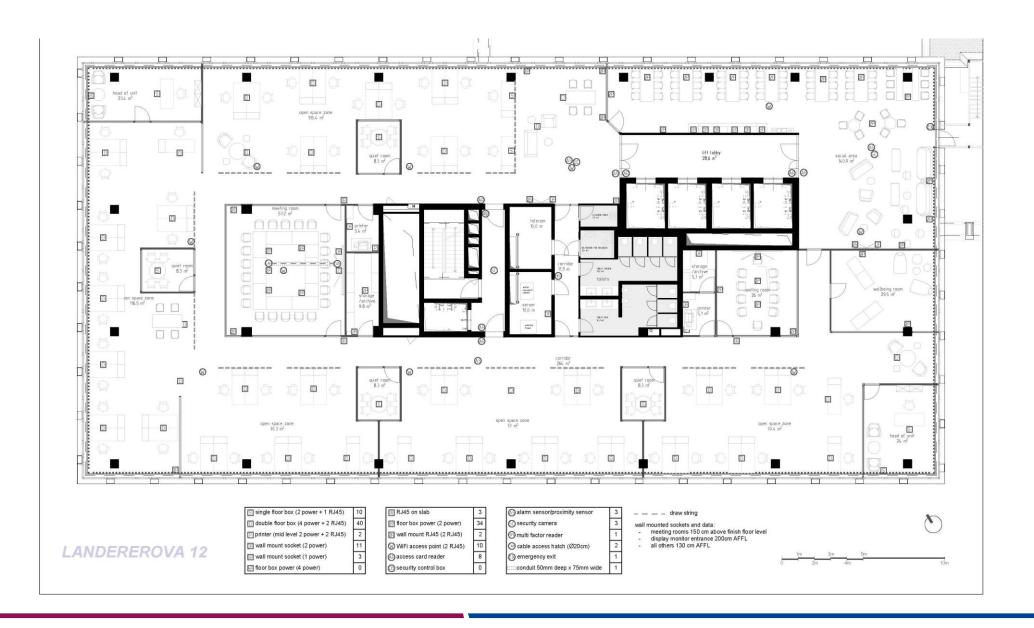
Vertical lamellas will physically separate the office space from the corridor, the height will be from finish floor level to the finish corridor ceiling level, except in the entrance area where it will rise the cassette ceiling. The system consists of rotated slats 18 mm thick laminated with melamine with the same finish as the furniture. The exact wood finishing from EGGER will be Light Sorano Oak H1334.

There shall be at least 1m space between the lamella panels leading into the open office.

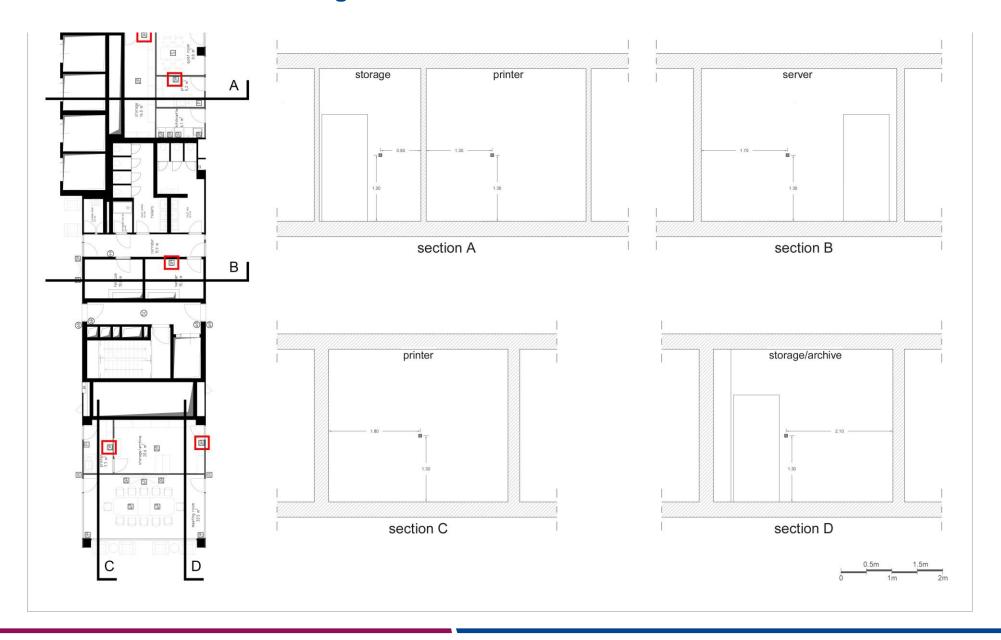
### 8. Radiator covers

All the perimeter wall of the façade will have a cover design for radiators. A continuous cover with grids on top and interior side will be installed from the finish floor level up to the low edge of the windows. The system will allow the access to radiators for maintenance purposes. The covering material will be melamine with the same finish as the furniture. The exact wood finishing for the top cover will be Light Sorano Oak H1334, and for the side cover will be White Grey U775, both from EGGER.

## IT Cabling Termination, Floor Box & Outlet locations for 13<sup>th</sup> floor



# Elevations showing wall mounted boxes at 130cm AFFL of 13<sup>th</sup> floor



## **Cabling Requirements & Specification**

All cabling shall be completed in accordance with the Cabling Requirements, is associated with this Design Concept and is the same for all the floors. This includes the specification for the Cabling, Floor Boxes, Racks, PDU's, UPS, vertical cabling & Comms Room flooring and more specifically the concept of the Active Cabinet and Patching Cabinets that will be installed in each Telecomms Room.

This document is included below.

#### **Comms Room Rack Specification** 13<sup>th</sup> Floor Comms Room Example of an open also a guide for the Comms rooms on floors 14, 11 & 3 patch frame **Locked Active** equipment Open Patch Cabinet Frame RJ45 Cabinet Interconnect Vertical RJ45 Cabling **RJ45 Cabinet Interconnect** RJ45 Low Level Desk Ports Core Router Access Switch 1 Access Switch 2 Access Switch 3 High & Mid Lev Access Switch 4 Every Active port is patched and the patch panel which interconnects the Active Cabinet to the Open Patch Frame, mimicking the active switch ports. This is repeated for all distribution switches and this is where the office ports are patched to active ports. Patch Panel 1 - 48 Patch Panel 1-48 Live RJ45 Network Patch Panel 49 - 96 Patch Panel 49-96 Ports on Distribution Patch Panel 97 - 144 Patch Panel 97 - 144 Switches Patch Panel 144 - 192 Patch Panel 144 - 192 Cable loom of 48 x RJ45 Cat 6a Cables interconnecting the two racks

42U x 800mm

wide with 19"

rack mounts

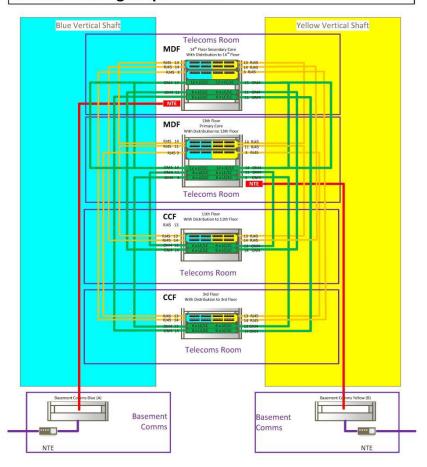
42U x 800mm

wide x 800mm

deep with 19"

rack mounts

# Vertical Cabling Requirement



Legend	
Telco Bearer	
OM4 Fibre x 12 Cores (6 x LC/LC Presentation)	
Telco provided cables	
Cat 6a Copper x 6 cables RJ45 Presentation (F/FTP)	

## Open Patching Frame Cabling Requjirement

U	Cable Access	Patching Frame	Standard Approach
42		1U Blanking Panel	1. Cabinet Interconnect at U41
41		RJ45 Cabinet Interconnect	2. Active Distribution Switch ports start at U35
40		1U Blanking Panel	3. Horizontal LL Desk Ports start at U25
39		1U Blanking Panel	4. Horizontal ML Ports start at U10
38		1U Blanking Panel	5. Horizontal HL Ports inside Ceiling void start at
37		1U Blanking Panel	
36		1U Blanking Panel	
35		Distribution Sw 24 ports No. 1	
34		Distribution Sw 24 ports No. 2	
33		Distribution Sw 24 ports No. 3	
32		Distribution Sw 24 ports No. 4	
31		Distribution Sw 24 ports No. 5	
30		Distribution Sw 24 ports No. 6	
29		1U Blanking Panel	
28		1U Blanking Panel	
27		1U Blanking Panel	
26		1U Blanking Panel	
25		Horizontal RJ45 LL 24 Ports No. 1	
24		Horizontal RJ45 LL 24 Ports No. 2	
23		Horizontal RJ45 LL 24 Ports No. 3	
22		Horizontal RJ45 LL 24 Ports No. 4	
21		Horizontal RJ45 LL 24 Ports No. 5	
20		Horizontal RJ45 LL 24 Ports No. 6	
19		Horizontal RJ45 LL 24 Ports No. 7	
18		Horizontal RJ45 LL 24 Ports No. 8	
17		1U Blanking Panel	
16		1U Blanking Panel	
15		1U Blanking Panel	
14		1U Blanking Panel	
13		1U Blanking Panel	
12		1U Blanking Panel	
11		1U Blanking Panel	
10		Horizontal RJ45 ML 24 Ports 1	
9		1U Blanking Panel	
8		1U Blanking Panel	
7		1U Blanking Panel	
6		1U Blanking Panel	
5		Horizontal RJ45 HL 24 Ports 1	
4		1U Blanking Panel	
3		1U Blanking Panel	
2		1U Blanking Panel	
1		1U Blanking Panel	

### **Detailed Specifications Cabling Cabinets & Power**

#### RJ45 - Copper cabling

Cat 6a, 4 pair F/FTP,  $100\Omega'$ low-smoke' and halogen-free to standards EN 50167 and 50169 ISO/IEC 11801 2nd ed. Cat. 6a Installation to class Ea Standards, to meet the following standards: Standards:

- ISO/IEC DIS 11801 2nd edition, amendment 1, class Ea channel requirements

(April 2008) and ISO/IEC 11801 2nd edition, amendment 2, Links and

components: Information technology - Generic cabling

- EN 50173 2nd edition: Information technology Generic cabling systems ISO/IEC
- ISO/IEC 60793-2-10 Multimode fibre and ISO/IEC 60793-2-50 Single-mode fibre
- EN 50167: : Screened horizontal wiring cables
- EN 50168: : Screened patching cabling
- EN 50169: : Screened backbone cables
- EN 50288-5-1
- EN 55022: Electromagnetic interference
- EN 50081-1: Generic emission standard
- B Technical descriptions Building systems

17 1

- EN 50082-1: Generic immunity standard
- CENELEC HD-608-51: Multicore symmetrical pair and quad cables for digital transmission.

#### Fibre Optics Single Mode:

OS2, Cables to comprise 12 single mode fibres of 9/125 µm.

Cabling must have heat-shrunk tips at each end.

They must meet the following attenuation specifications:

- maximum 0.45 dB/km (1300 nm)
- maximum 0.30 dB/km (1550 nm)

Termination SC/SC

#### Fibre Optics Multi Mode:

OM4, Cables to comprise 12 single mode fibres of  $50/125 \mu m$ .

Cabling must have heat-shrunk tips at each end.

They must meet the following specifications at 25C:

- Useful range: 850/1300 nm
- Bandwidth: 500 MHz for 1300 nm and 1500 MHz for 850 nm
- Attenuation: 850nm < 3.0 dB/km, 1300nm < 1.0 dB/km

Termination LC/LC

#### CCF (Cable Concentration Room)/MDF (Main Distribution Frame) Cabinet Specifications

Active equipment cabinet:  $800 \times 800 \times 42U$  tall, locking (Half Euro Cylinder locking barrel) perforated doors front and back, sides can be solid or perforated (depending of value proposition) if solid sides are proposed, then suggest adding some fans to the top of the rack to provide good air circulation inside the rack, 19" rack mounts brackets front and back,

Open Patching Frame 800 wide x applicable depth & 42U tall, with cable management vertically either side of the 19" rack mount frames used to hold the patching ports. This can be a cabinet similar to the active cabinet, but shall not have any doors or sides (the simple rack frame is sufficient with 19" rack mounting bracket to front only). One suggested brand is "Mighty MO 20" system from Legrand:

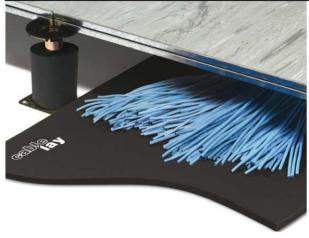
https://www.legrand.us/ortronics/physical-support/rack-systems/mighty-mo/mighty-mo-20-rack-system.aspx

Horizor	ntal Po	orts R	equir	emer	its					•			
		Powe	r & RJ	45 Ou	tlet Re	quirem	ent						
											Nu	mber of Bo	oxes
Floor  Drawing	Double Desk Floorbox (D)	Single Desk Floorbox (S)	Dual Power only (2P)	Print rooms (P)	Wall mount dual power (DP)		Single RJ45 (on slab or ML) (1R)	wifi (W)	Wall mount Dual RJ45 (2R)				
Legend											ш	ML	HL
Floor 14	33				10	2	_				88		
Floor 13	40			2	11	3	3	10	2		87		
Floor 11	42			1	9	0		9			<b>7</b> 5		
Floor 3	2	0	75	1	9	0	0	9	1		77	11	9
Outlets/box													
RJ45 Sockets	2	1	0	2	0	0	1	2	2				
Power sockets	4	2	2	2	2	1	. 0	0	0				
Total Outlets										Total	LL	ML	HL
RJ45	234	45	0	12	0	0	11	76	14	392	290	26	76
230V Power	468		<del>                                     </del>	12	78	5	0	0		961			
Key													
Low Level													
Mid Level													
High Level													
												mber of RJ4 by position	
				Total	RJ45 Outlets	by Floor					LL	ML	HL
Floor 14	66	24	0		0		5	20	2		95		
Floor 13	80			4	0	0		20	4		93		
Floor 11	84				0	0		18	6		98		
Floor 3	4				0	0		18	2		4		18
Total	234				0	0		76			290		
Grand Total											392		

# Summary of Vertical Cabling Requirements

Flo	ors	Cabling						
Source	Destination	OM4	OS2	Copper	route			
14	13	24 Cores		6 RJ45	Blue			
14	13	24 Cores		6 RJ45	Yellow			
14	11	12 Cores		6 RJ45	Blue			
14	11	12 Cores		6 RJ45	Yellow			
13	11	12 Cores		6 RJ45	Blue			
13	11	12 Cores		6 RJ45	Yellow			
14	3	12 Cores		6 RJ45	Blue			
14	3	12 Cores		6 RJ45	Yellow			
13	3	12 Cores		6 RJ45	Blue			
13	3	12 Cores		6 RJ45	Yellow			
14	B Comms	12 Cores	12 Cores		Blue			
13	B Comms	12 Cores	12 Cores		Yellow			

# **Floor Box Specification**





#### Specification of Installation of horizontal Copper Cables:

- 1. Data Cables are laid on cable matting and loomed together on the matting to ensure the cables are not chafed by the concrete of the floor slab. See picture of example attached.
- 2. Power cables will be installed in accordance with the existing building specifications,
- 3. Each Floor box should be standard with at least 3 com[partments, as shown in the example attached, 2 compartment for the  $2 \times 2$  Power Sockets and the  $3^{rd}$  for 2 or 3 RJ45 Data outlets.
- 4. Data cables are not joined below the false floor, and are a continuous cable from the telecoms patching frame to each floor box socket.
- 5. Power cables can be connected to floor box as per existing landlord specifications or local regulations.
- 6. The floor box must have adjustable vents to protect cables connected to the sockets in the floor box.

# **Comms Room Flooring Specification**

The Comms Room Flooring Specification:

- 1. False raised floor raised to height of the office floor
- 2. Constructed of 600mm x 600mm removable floor tiles, each on columns at each corner, see picture below:
- 3. Finish on each tile shall be grey antistatic vinyl (specific colour or pattern is unimportant).
- 4. Tiles constructed to support weight of cabinets and cabling.
- 5. A tile lifted to be provided in each Comms Room, plus one spare.
- 6. Each tile must be removable, as shown in the picture below.



# **Comms Room Power Specification**

**Power Supply Minimum Requirement:** 2 x Vertical mounted Power Distribution Units each connected to a separate power supply, each power distribution unit to have a single phase 230V 32A 7.2KW rated power supply with minimum 15 x 230V C13 sockets. Example Model is: Geist Part #: G2194 (But we are not dependent on a specific brand and we do not require management features). If EU Sockets are better value proposition, then these can be supplied,

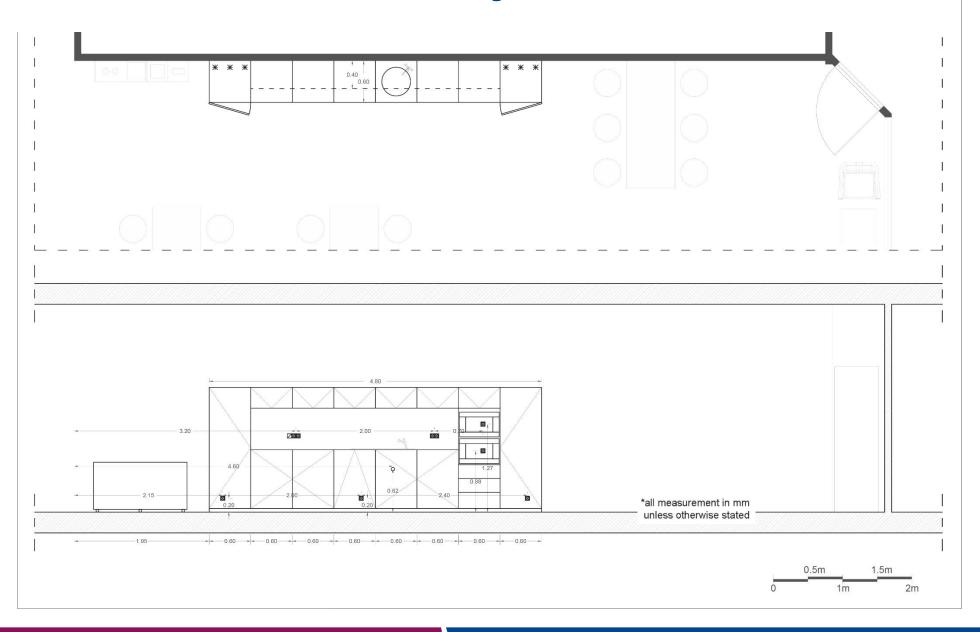
It is presumed that each supply is sourced from a supply that is regulated for power and stability of supply through the Landlords Supply. i.e. The supplies are clean and free from Power spikes or troughs.

**UPS:** is required with the following specifications:

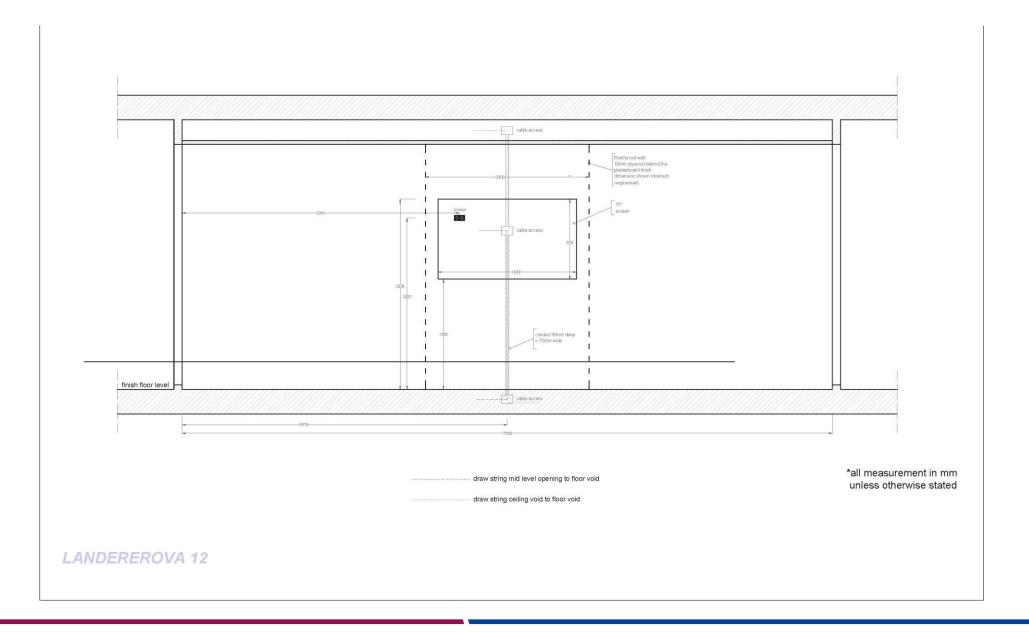
- 1. To offer 30 minutes of autonomy for a supply of 4000W
- 2. To be connected to one of the rack PDU's
- 3. Example model UPS Reillo: SDU 5000, see image below:



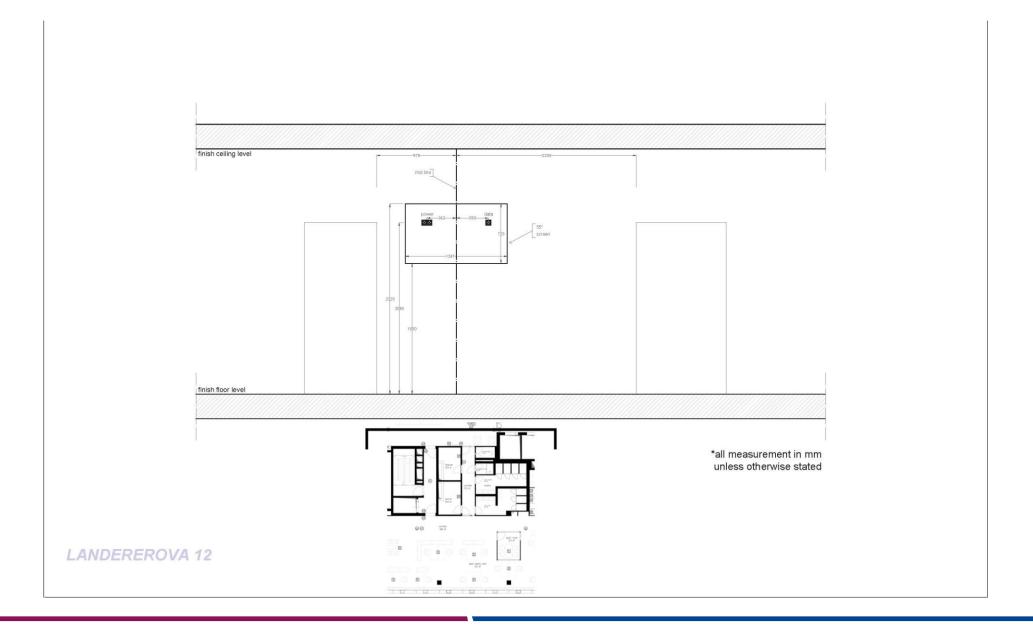
# Kitchen Design of 13th floor



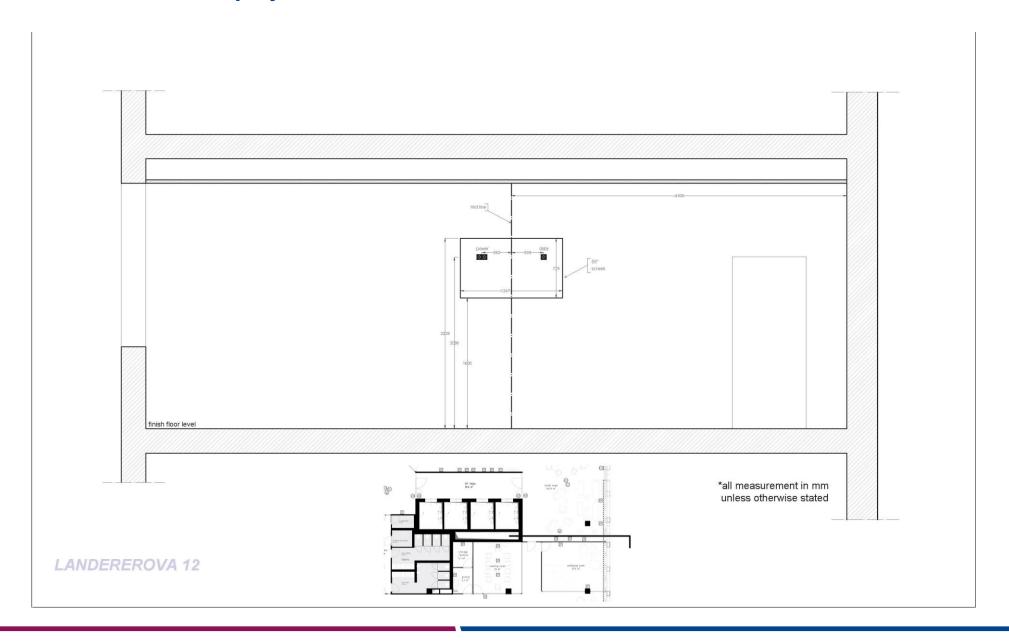
# 20 people Meeting Room Containment of 13<sup>th</sup> floor



# **Display Monitor Containment in entrance of 13th floor**



# Display Monitor Containment in Social Area of 13<sup>th</sup> floor



## **Furniture**

Furniture will be determined and supplied by occupier outside of this agreement. The presence of furniture in plans presented in this document is only seeking to provide the proportions and position of workstations, storage units, open space furniture, meeting rooms and all other associated office items.

# **Greenery**

The design for the greenery will be determined by occupier outside of this agreement.