

TGD M 1.3.4.3 Internal Stairs for Ambulant Disabled People

- (a) The minimum clear width should be 1200 mm
- (c) The landings should be level and have an unobstructed length (clear of any door swing) of at least 1200 mm or the width of the flight whichever is greater;
- (i) The rise of each step should be between 150 mm and 180 mm and have a going of at least 300 mm.

TGD M 1.3.3.3 Corridors and Passageways

- (a) The unobstructed clear width should be at least 1200 mm. Elements such as columns, radiators and fire hoses should not project into this corridor width;
- (b) Passing places should be provided where the unobstructed width of the corridor is less than 1800 mm. Passing places should have a total unobstructed width of corridor of 1800 mm wide over an 1800 mm length.

TGD M 1.4.5 Wheelchair Accessible Unisex WC

- (a) Room dimensions of 1800 mm x 2500 mm are based on an 1800 mm x 1800 mm turning space
Diagram 15a

TGD M 1.4.5 Standard WC Cubicle

- Diagram 18 - 1400mm clothes hook above floor level
- Diagram 18 - 450mm diameter min space clear of door swing

TGD M 1.1.3.5 Stepped Access Route

- (c) The landings should be level and have an unobstructed length (clear of any door or gate swing) of at least 1200 mm;
- (d) Tactile hazard warning surfaces should be incorporated at both the top and bottom landings.
- (k) The rise of each step should be between 150 mm and 180 mm.
- (l) The going of each step should be between 300 mm and 450 mm.

TGD M 1.1.3.6 Handrails

- (a) The vertical height to the top of the upper handrail from the pitch line of the surface of a flight should be between 900 mm and 1000 mm and from the surface of a landing should be between 900 mm and 1100 mm

Travel Distance:

- One-way travel:
Direct 15m
Actual: 22m
- Two-way travel
Direct: 37m
Actual: 55m
(BS9999:2017 Table 11)

Min no. of Escape Routes: Minimum number is 2
(BS9999:2017 16.3.1 Table 10)

Door Widths: Main entrance and Fire exit are 1600mm
3.6mm p/p x 434 = 1563mm min clear width
(BS9999:2017 16.3.1 Table 12)

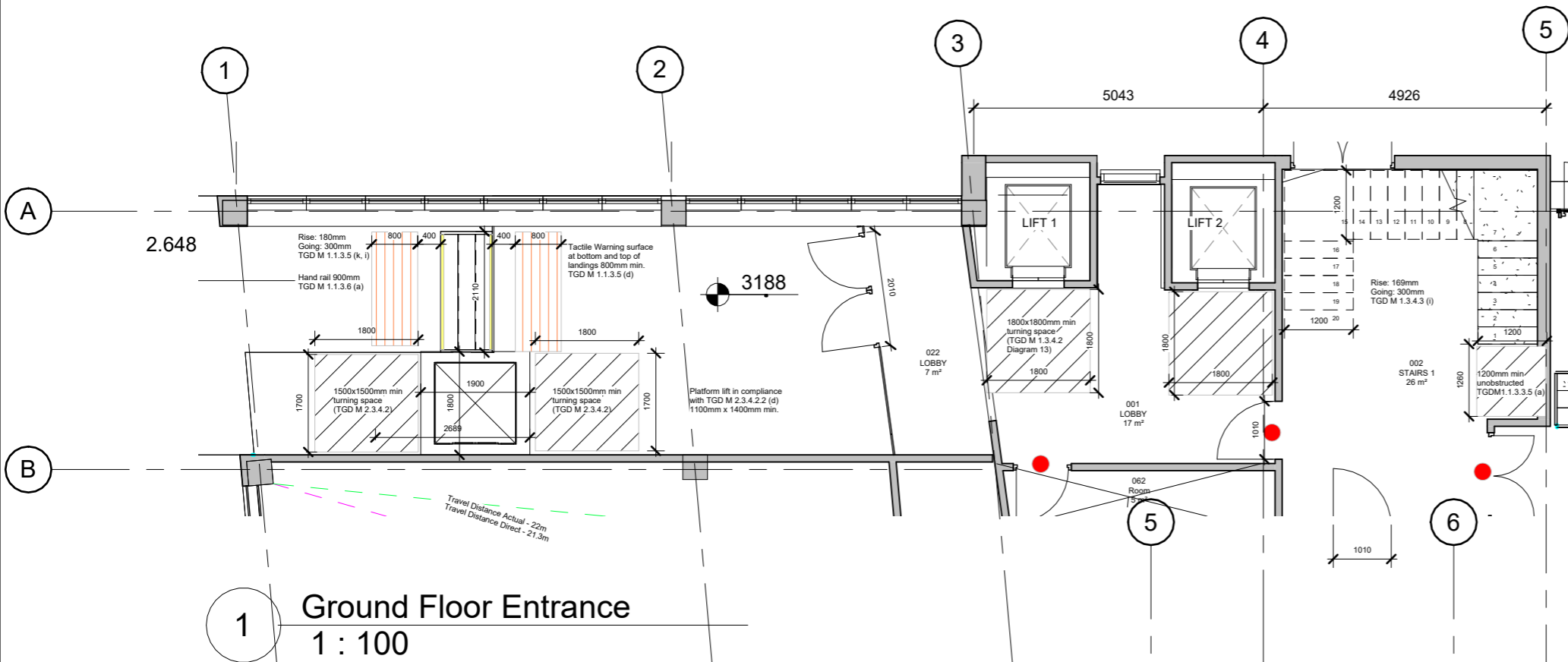
Occupancy Characteristics: Class A
(BS9999:2017 Table 2)

Risk Profile: Class A2
(BS9999:2017 Table 4)

Fire Growth Rate: Category 2 - 0.012kJ/s³
(BS9999:2017 Table 4)

Simultaneous Evacuation:

Width of Stairs:
Risk profile A2 and 5 floors = 2.45mm p/p
1st-5th occupancy 434x2.45 = 1064mm min width of stairs



1 Ground Floor Entrance
1 : 100

TGD M 1.1.3.5 Stepped Access Route
 (c) The landings should be level and have an unobstructed length (clear of any door or gate swing) of at least 1200 mm;
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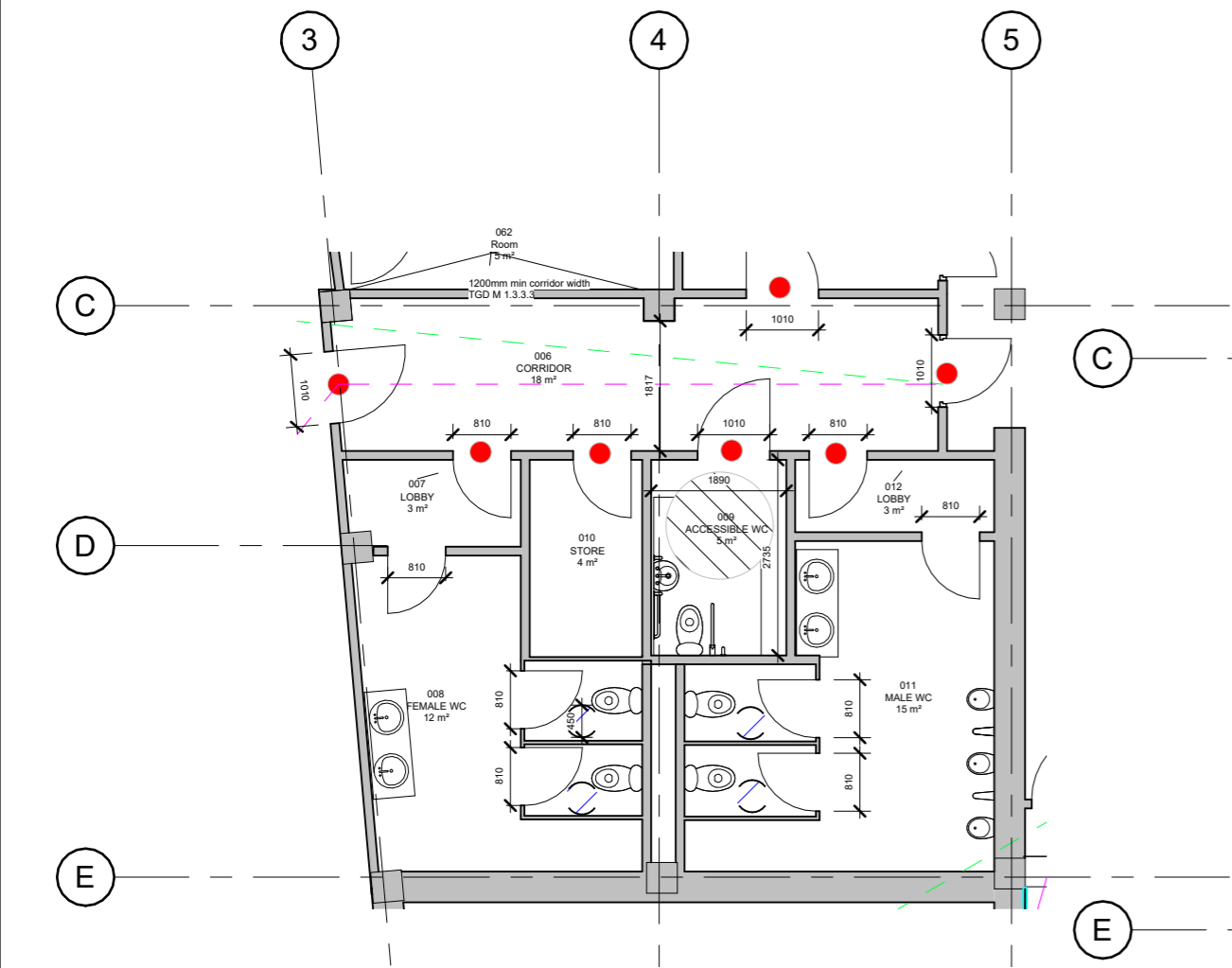
TGD M 1.1.3.6 Handrails
 (a) The vertical height to the top of the upper handrail from the pitch line of the surface of a flight should be between 900 mm and 1000 mm and from the surface of a landing should be between 900 mm and 1100 mm

TGD M 1.3.4.2 Passenger Lifts
 Diagram 13 1800mm x 1800mm min space

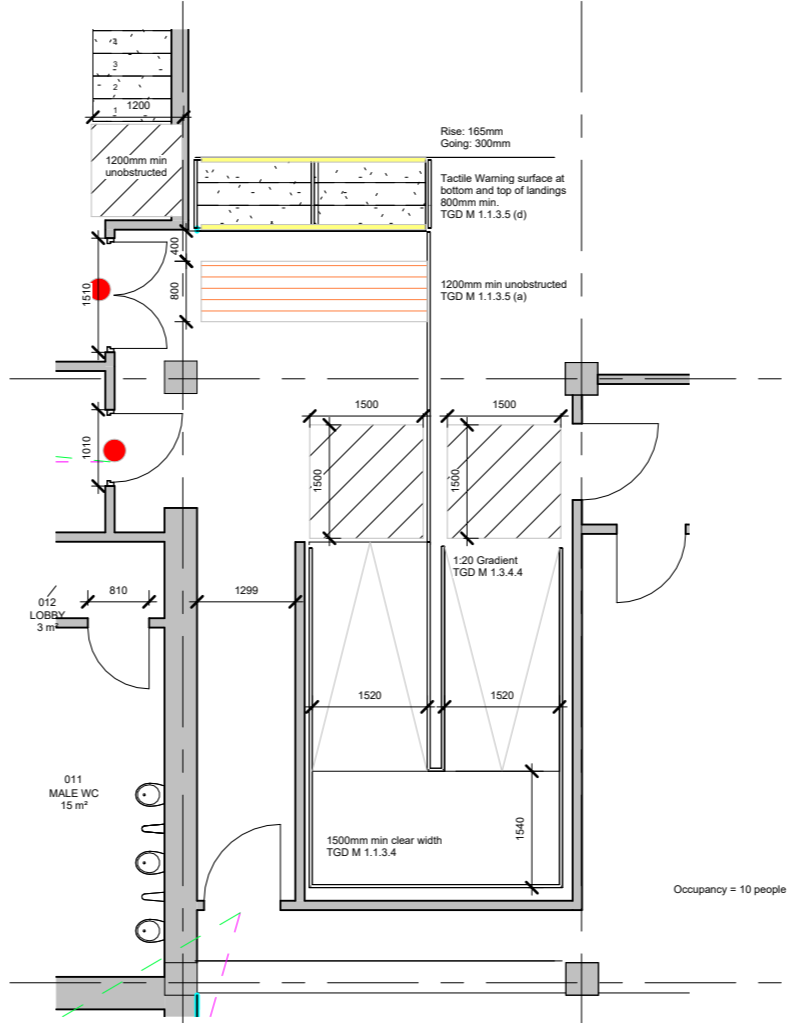
TGD M 2.3.4.1.1 Lifts
 (d) The minimum clear dimensions of a platform lift should be 1100 mm wide x 1400 mm deep
 (e) Doors or access openings to lifting platforms should have a minimum effective clear width of 800 mm

TGD M 2.3.4.2 Passenger Lift
 (a) Where it is not practicable to provide the manoeuvring space in front of the lift, the manoeuvring space should be as large as possible but not less than 1500 mm wide and 1500 mm deep

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2 Ground Floor Sanitary
1 : 100



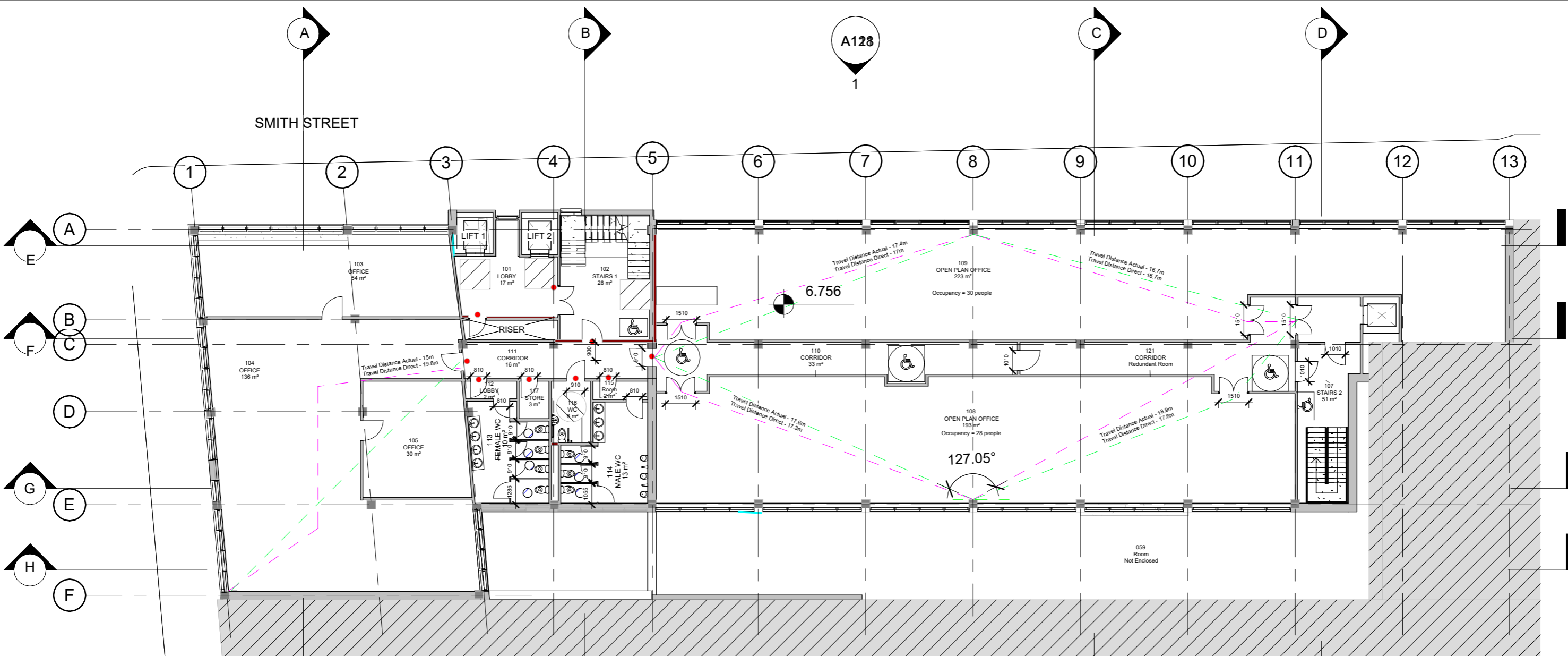
3 Ground Floor Ramp
1 : 100

TGD M 1.3.3.3 Corridors and Passageways
 (a) The unobstructed clear width should be at least 1200 mm. Elements such as columns, radiators and fire hoses should not project into this corridor width;
 (b) Passing places should be provided where the unobstructed width of the corridor is less than 1800 mm. Passing places should have a total unobstructed width of corridor of 1800 mm wide over an 1800 mm length.

TGD M 1.4.5 Wheelchair Accessible Unisex WC
 (a) Room dimensions of 1800 mm x 2500 mm are based on an 1800 mm x 1800 mm turning space
 Diagram 15a

TGD M 1.4.5 Standard WC Cubicle
 Diagram 18 - 140mm clothes hook above floor level
 Diagram 18 - 450mm diameter min space clear of door swing

TGD M 1.1.3.4 Ramp
 Clear width 1500mm min
 1:20 gradient



Simultaneous Evacuation:

Width of Stairs:

Risk profile A2 and 5 floors = 2.45mm
 1st-5th occupancy 418x2.45 = 1025mm min width of stairs

Occupancy Characteristics Class A
 (BS9998:2017 Table 2)

Risk Profile: Class A2
 (BS9998:2017 Table 4)

Fire Growth Rate: Category 2 - 0.012kJ/s³
 (BS9998:2017 Table 4)

Travel Distance: One-way travel of 22mm and two-way travel of 55mm
 (BS9999:2017 Table 11)

Min. no. of Escape Routes: Minimum number is 2
 (BS9999:2017 16.3.1 Table 10)

Door Widths: Main entrance and Fire exit are 1600mm
 3.6mm p/p x 418 = 1505mm min clear width
 (BS9999:2017 16.3.1 Table 12)

TGD M 1.3.3.3 Corridors and Passageways

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TGD M 1.4.5 Wheelchair Accessible Unisex WC

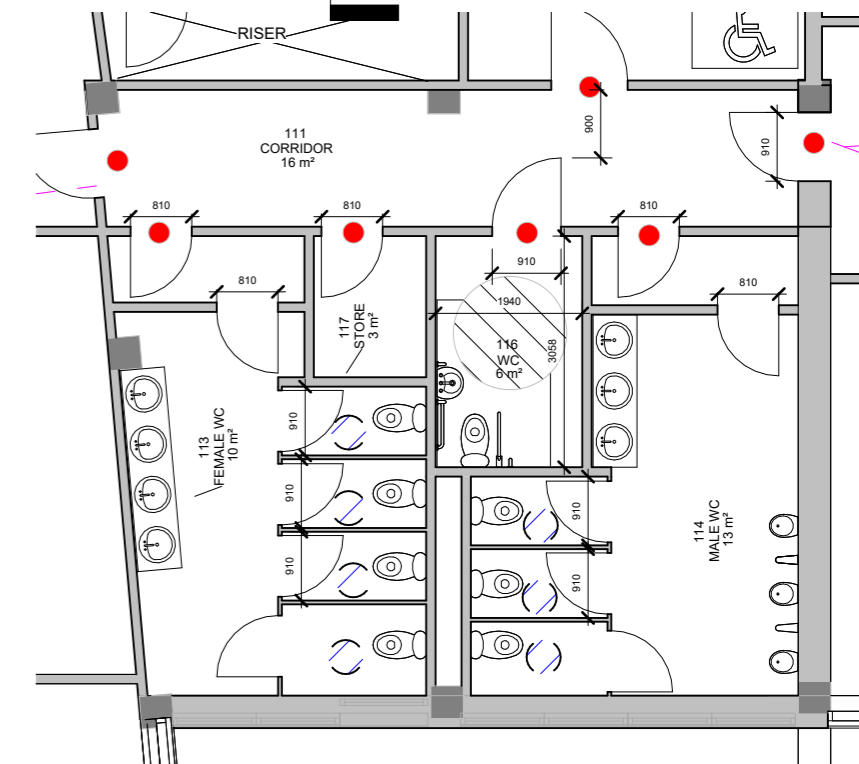
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TGD M 1.4.5 Standard WC Cubicle

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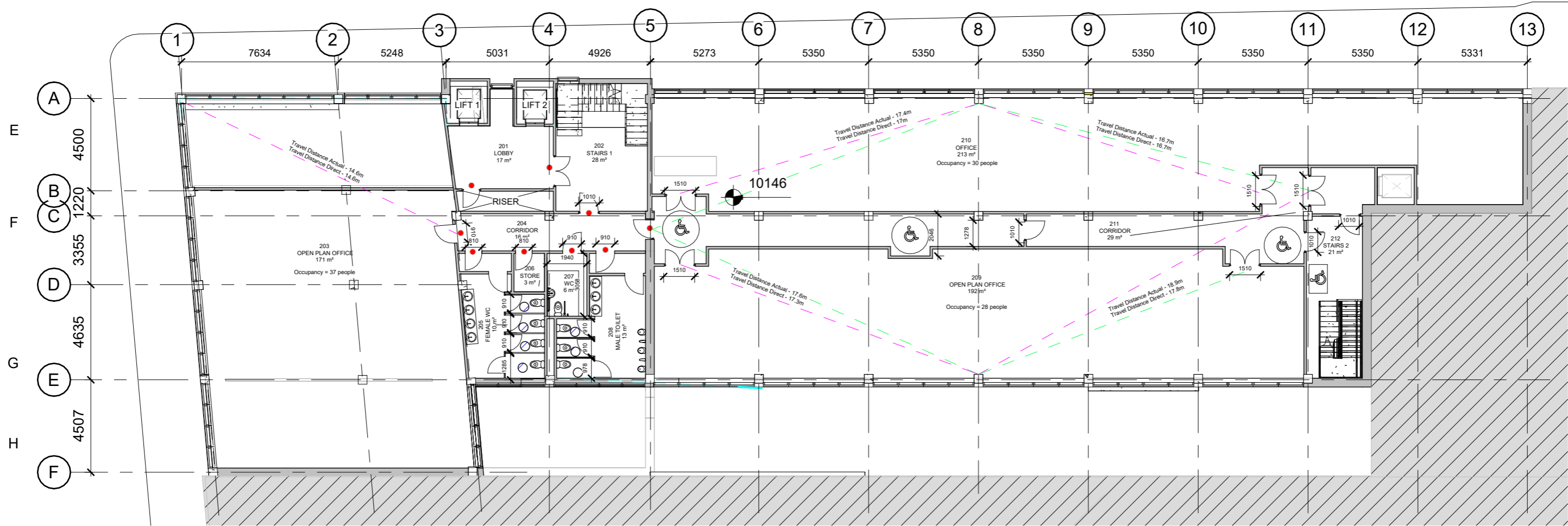
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1 First Floor Fire/M.
1 : 200

2 First Floor Sanitary
1 : 100



1 Second - Fourth Floor
1 : 200

Occupancy Characteristics: Class A
(BS9999:2017 Table 2)

Risk Profile: Class A2
(BS9999:2017 Table 4)

Fire Growth Rate: Category 2 - 0.012kJ/s³
(BS9999:2017 Table 4)

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1st-5th occupancy 434x2.45 = 1064mm min width of stairs

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TGD M 1.4.5 Standard WC Cubicle

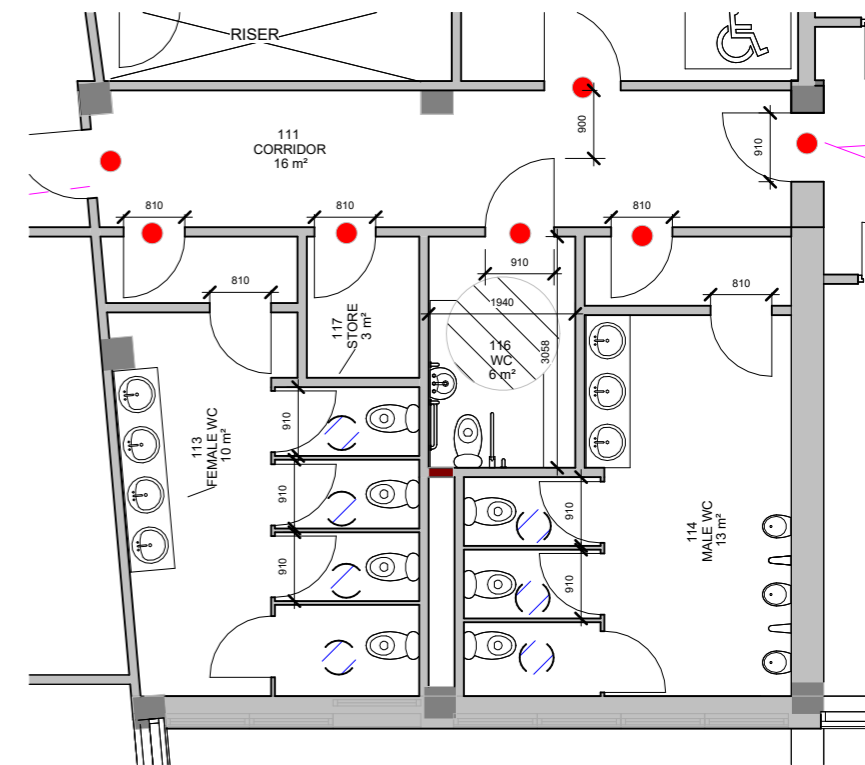
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TGD M 1.1.3.5 Stepped Access Route

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TGD M 1.1.3.6 Handrails

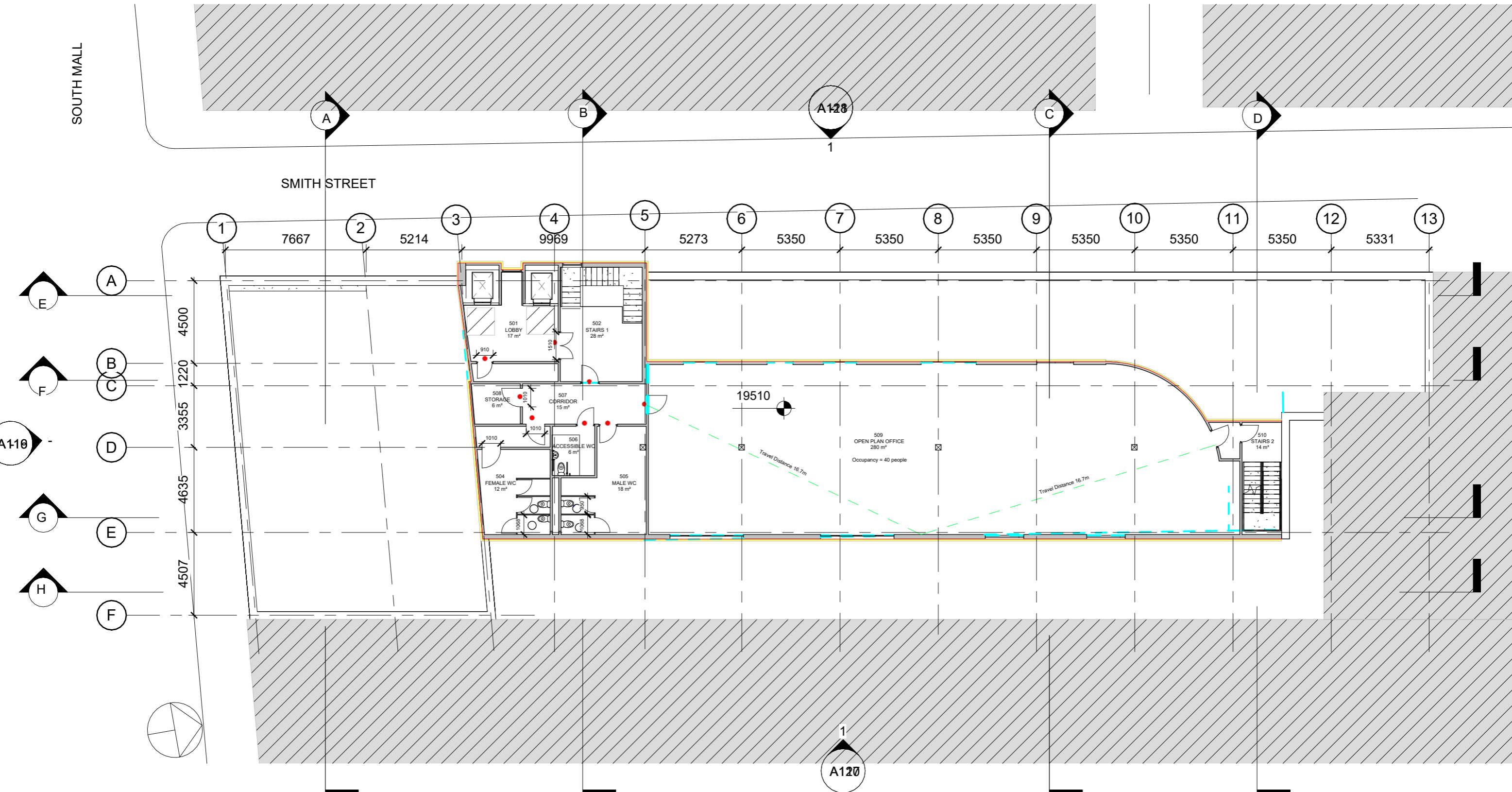
- (a) The vertical height to the top of the upper handrail from the pitch line of the surface of a flight should be between 900 mm and 1000 mm and from the surface of a landing should be between 900 mm and 1100 mm



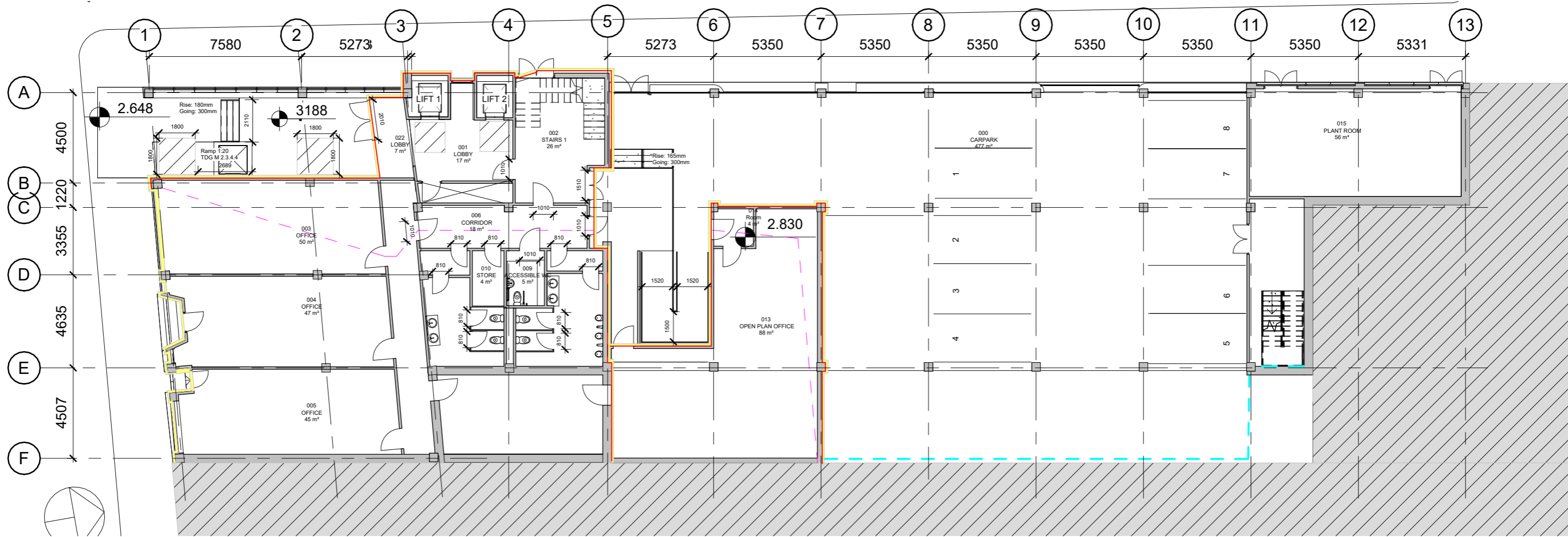
2 Second - Fourth Sanitary
1 : 100

SOUTH MALL

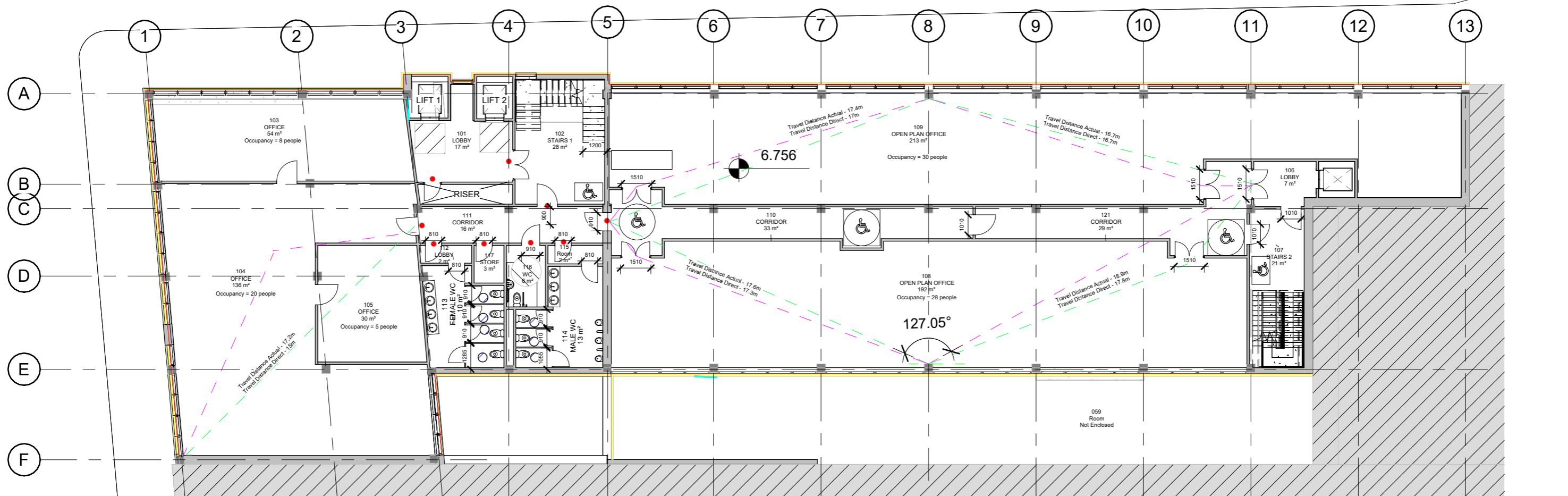
SMITH STREET



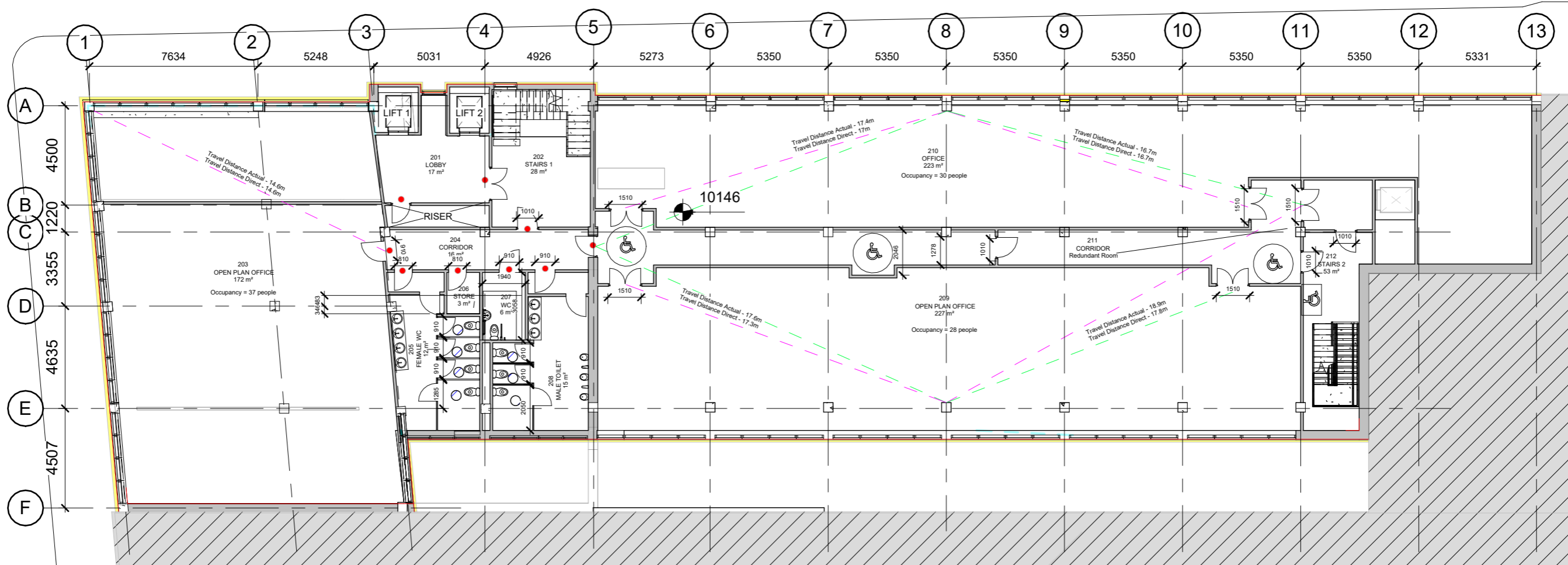
1 Fifth Floor
1 : 200



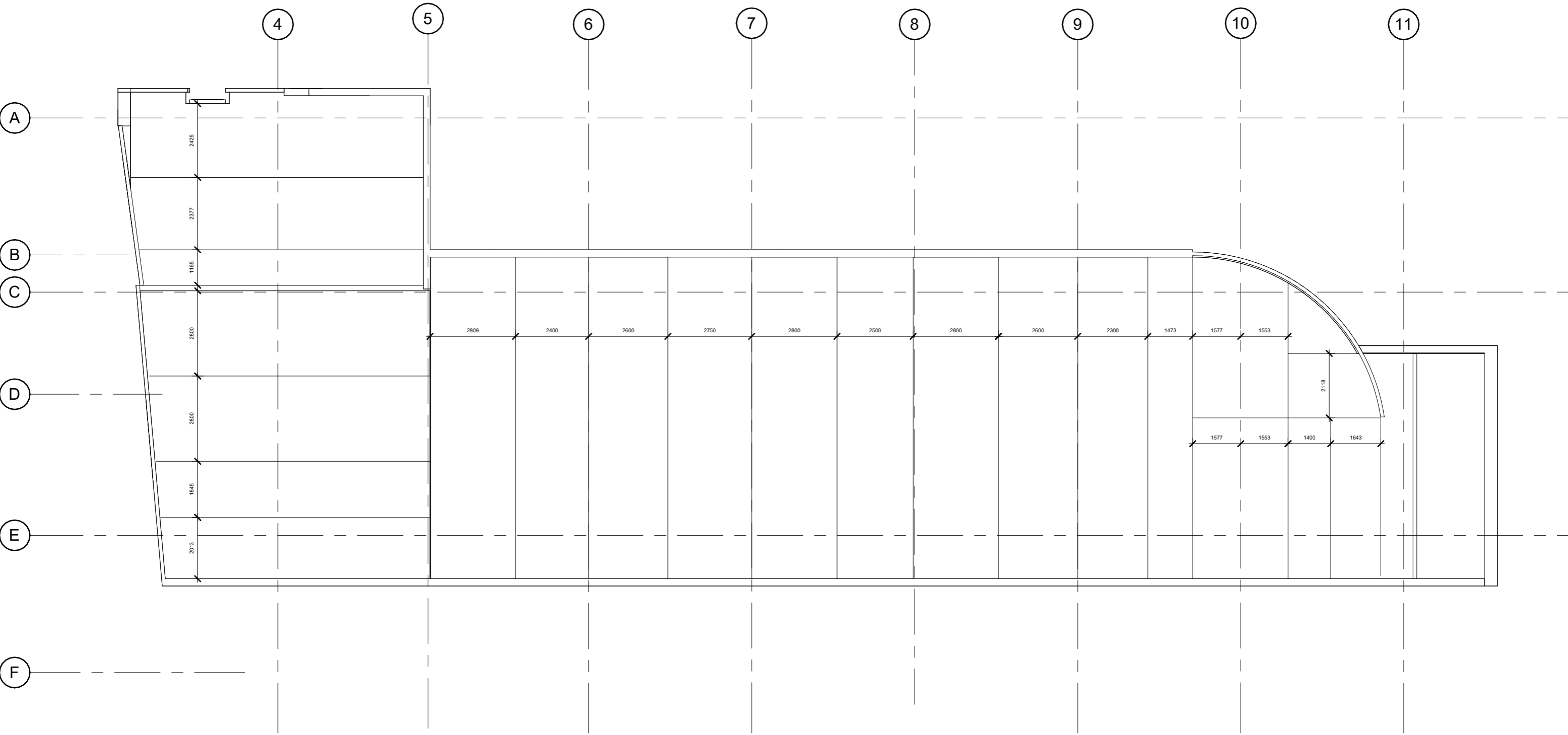
1 Ground Floor Airtightnes
1 : 200



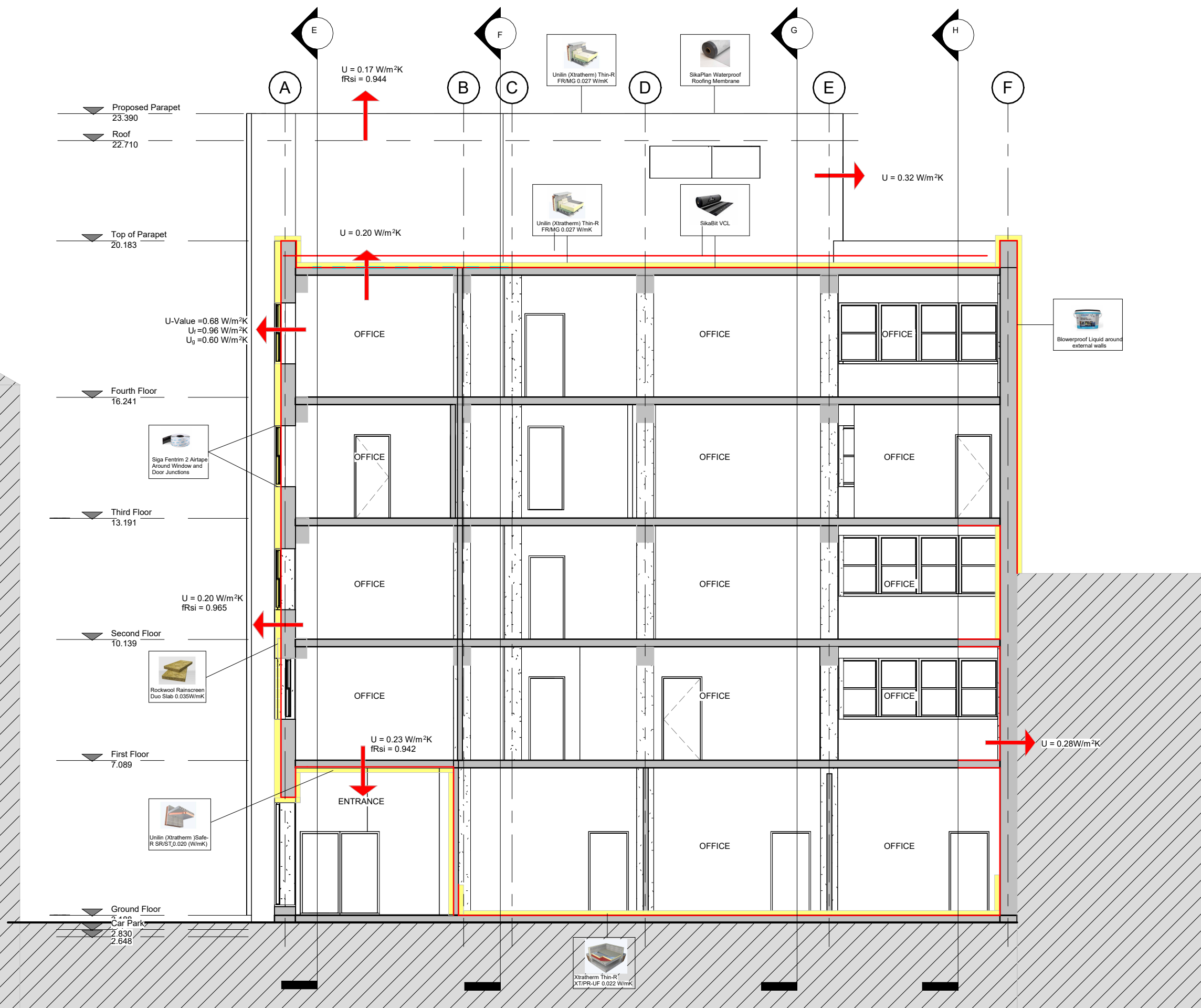
2 First Floor Airtightness
1 : 200



1 Second - Fourth Floor Airtightness
1 : 200



1 Roof Panel Layout
1 : 125



Ground Floor
 TGD Part L: 0.45 W/m²K
 Proposed: 0.16 W/m²K

Retrofit Proposed External Wall
 TGD Part L: 0.35 W/m²K
 Proposed: 0.20 W/m²K

Entrance Soffit
 TGD Part L: 0.25 W/m²K
 Proposed: 0.23 W/m²K

Terrace
 TGD Part L: 0.25 W/m²K
 Proposed: 0.20 W/m²K

CLT Wall: TGD Part L: 0.21 W/m²K
 Proposed: 0.19 W/m²K

CLT Roof
 TGD Part L: 0.20 W/m²K
 Proposed: 0.19 W/m²K

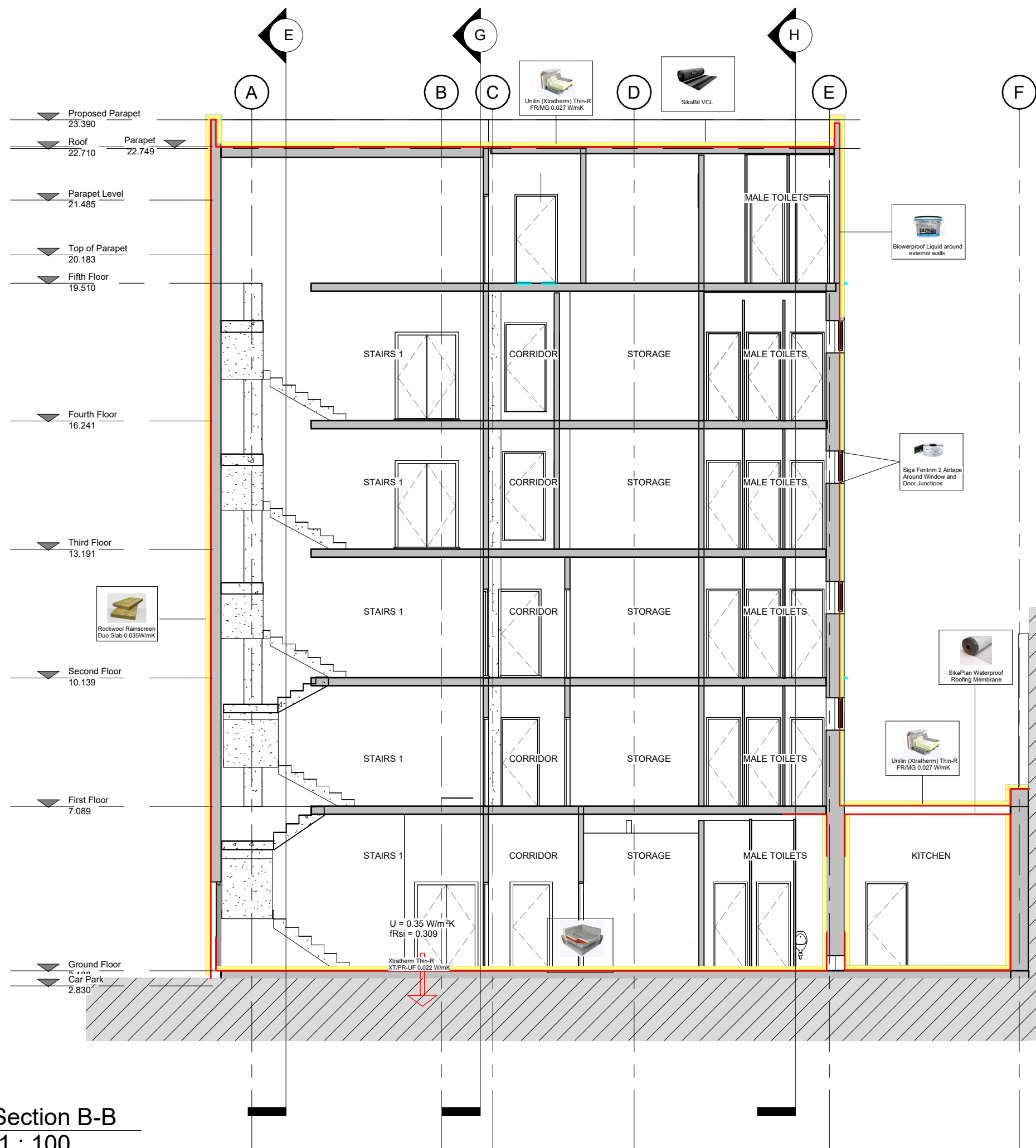
Partition Wall
 TGD Part L:
 Proposed: 0.28 W/m²K

Exposed Car Park Soffit
 TGD Part L:
 Proposed: 0.23 W/m²K

Semi Exposed Plant Room
 TGD Part L:
 Proposed: 0.22 W/m²K

Windows
 Triple glazed low-e coated glazing with Pilkington K glass
 Schueco Aluclad
 TGD Part L: 1.6 W/m²K
 Proposed: 0.68 W/m²K

1 Section A-A
 1 : 100



Ground Floor
 TGD Part L: 0.45 W/m²K
 Proposed: 0.16 W/m²K

Retrofit Proposed External Wall
 TGD Part L: 0.35 W/m²K
 Proposed: 0.20 W/m²K

Entrance Soffit
 TGD Part L: 0.25 W/m²K
 Proposed: 0.23 W/m²K

Terrace
 TGD Part L: 0.25 W/m²K
 Proposed: 0.20 W/m²K

CLT Wall: TGD Part L: 0.21 W/m²K
 Proposed: 0.19 W/m²K

CLT Roof
 TGD Part L: 0.20 W/m²K
 Proposed: 0.19 W/m²K

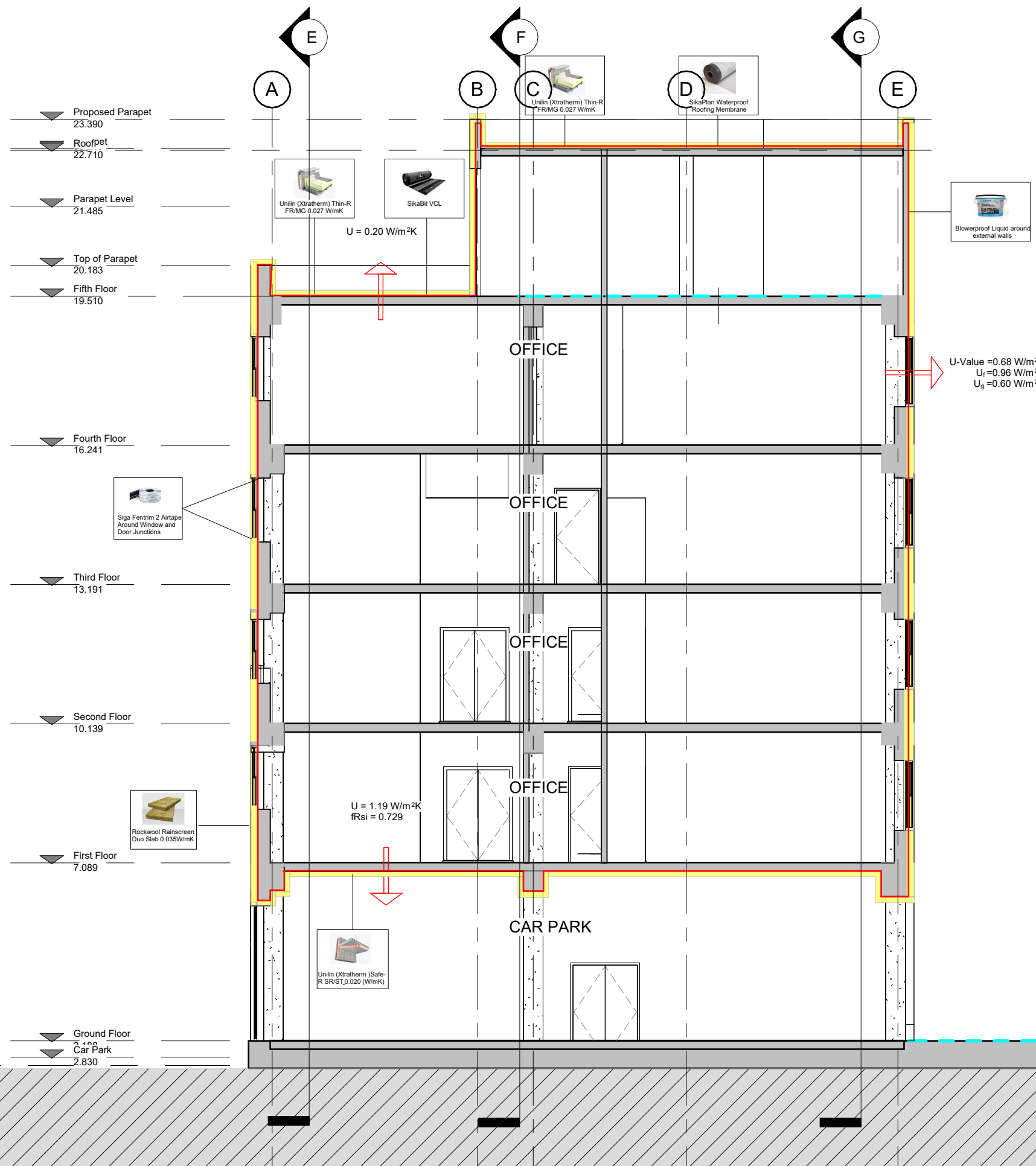
Partition Wall
 TGD Part L:
 Proposed: 0.28 W/m²K

Exposed Car Park Soffit
 TGD Part L:
 Proposed: 0.23 W/m²K

Semi Exposed Plant Room
 TGD Part L:
 Proposed: 0.22 W/m²K

Windows
 Triple glazed low-e coated glazing with
 Pilkington K glass
 Schueco Aluclad
 TGD Part L: 1.6 W/m²K
 Proposed: 0.68 W/m²K

1 Section B-B
 1 : 100



Ground Floor
 TGD Part L: 0.45 W/m²K
 Proposed: 0.16 W/m²K

Retrofit Proposed External Wall
 TGD Part L: 0.35 W/m²K
 Proposed: 0.20 W/m²K

Entrance Soffit
 TGD Part L: 0.25 W/m²K
 Proposed: 0.23 W/m²K

Terrace
 TGD Part L: 0.25 W/m²K
 Proposed: 0.20 W/m²K

CLT Wall: TGD Part L: 0.21 W/m²K
 Proposed: 0.19 W/m²K

CLT Roof
 TGD Part L: 0.20 W/m²K
 Proposed: 0.19 W/m²K

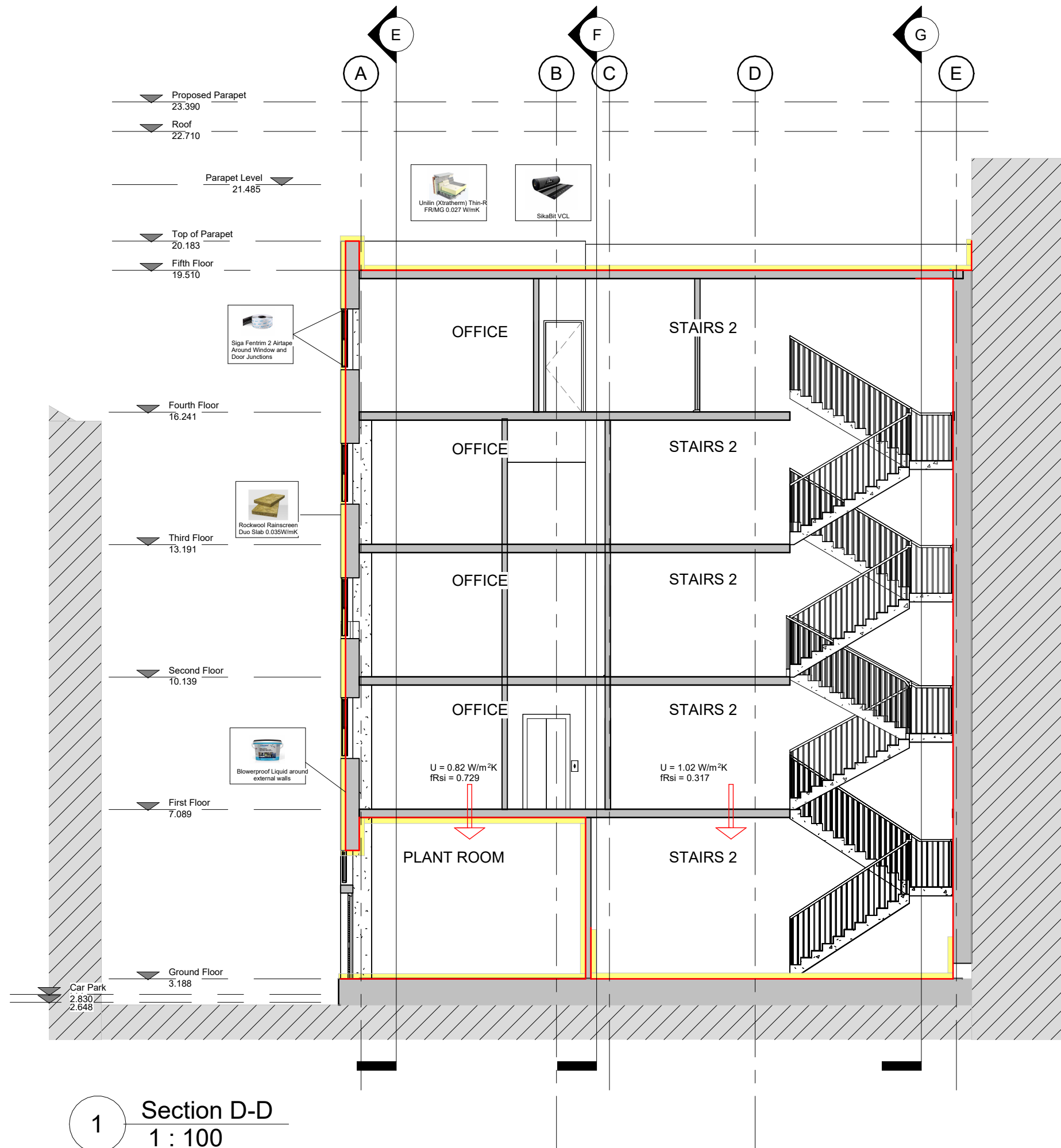
Partition Wall
 TGD Part L:
 Proposed: 0.28 W/m²K

Exposed Car Park Soffit
 TGD Part L:
 Proposed: 0.23 W/m²K

Semi Exposed Plant Room
 TGD Part L:
 Proposed: 0.22 W/m²K

Windows
 Triple glazed low-e coated glazing with Pilkington K glass
 Schueco Aluclad
 TGD Part L: 1.6 W/m²K
 Proposed: 0.68 W/m²K

1 Section C-C
 1 : 100



Ground Floor
 TGD Part L: 0.45 W/m²K
 Proposed: 0.16 W/m²K

Retrofit Proposed External Wall
 TGD Part L: 0.35 W/m²K
 Proposed: 0.20 W/m²K

Entrance Soffit
 TGD Part L: 0.25 W/m²K
 Proposed: 0.23 W/m²K

Terrace
 TGD Part L: 0.25 W/m²K
 Proposed: 0.20 W/m²K

CLT Wall; TGD Part L: 0.21 W/m²K
 Proposed: 0.19 W/m²K

CLT Roof
 TGD Part L: 0.20 W/m²K
 Proposed: 0.19 W/m²K

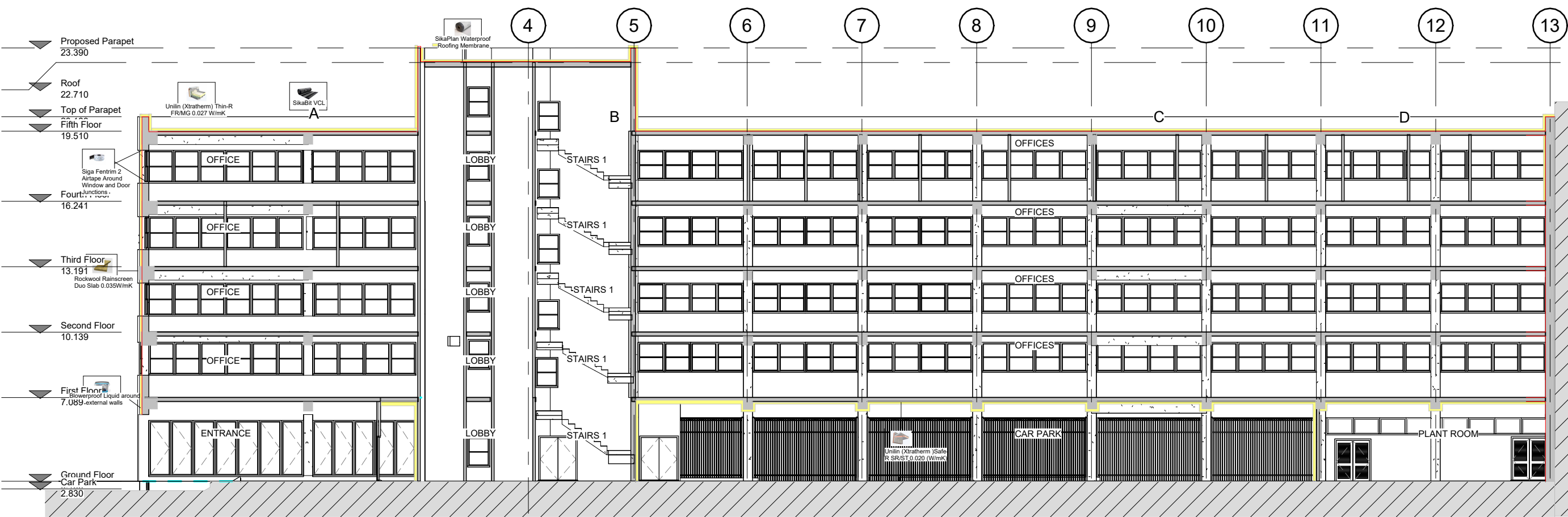
Partition Wall
 TGD Part L: 0.35 W/m²K
 Proposed: 0.28 W/m²K

Exposed Car Park Soffit
 TGD Part L: 0.35 W/m²K
 Proposed: 0.23 W/m²K

Semi Exposed Plant Room
 TGD Part L: 0.35 W/m²K
 Proposed: 0.22 W/m²K

Windows
 Triple glazed low-e coated glazing with
 Pilkington K glass
 Schueco Aluclad
 TGD Part L: 1.6 W/m²K
 Proposed: 0.68 W/m²K

1 Section D-D
 1 : 100



- CLT Roof**
TGD Part L: 0.20 W/m²K
Proposed: 0.19 W/m²K
- Partition Wall**
TGD Part L: 0.35 W/m²K
Proposed: 0.28 W/m²K
- Exposed Car Park Soffit**
TGD Part L: 0.35 W/m²K
Proposed: 0.23 W/m²K
- Semi Exposed Plant Room**
TGD Part L: 0.35 W/m²K
Proposed: 0.22 W/m²K
- Windows**
Triple glazed low-e coated glazing with Pilkington K glass
Schueco Aluclad
TGD Part L: 1.6 W/m²K
Proposed: 0.68 W/m²K
- Ground Floor**
TGD Part L: 0.45 W/m²K
Proposed: 0.16 W/m²K

1 Section E-E
1 : 200



- Retrofit Proposed External Wall**
TGD Part L: 0.35 W/m²K
Proposed: 0.20 W/m²K
- Entrance Soffit**
TGD Part L: 0.25 W/m²K
Proposed: 0.23 W/m²K
- Terrace**
TGD Part L: 0.25 W/m²K
Proposed: 0.20 W/m²K
- CLT Wall:**
TGD Part L: 0.21 W/m²K
Proposed: 0.19 W/m²K

2 Section F-F
1 : 200