Archer Humphryes Architects

142 Central Street LONDON EC1V 8AR

17.06.2021

DESIGN INTENT - INDICATIVE SPECIFICATION FOR:

Koko Dome – Cupola maintenance access mansafe system

NOTE:

AHA architectural design intent specification only – all information below is indicative. Final design by specialist engineers only, system installation by accredited specialists only.

This document should be read in association with the following architectural plans:

AHA-KKR-DET-050 Dome Overall Section
AHA-KKR-DET-051 Dome Copper Cladding Details (Sheet 1)
AHA-KKR-DET-052 Dome Copper Cladding Details (Sheet 2)
AHA-KKR-DET-053 Dome Copper Cladding Details (Sheet 3)
AHA-KKR-DET-054 Dome Ladder Details (Sheet 1)
AHA-KKR-DET-055 Dome Ladder Details (Sheet 2) Rev A

AIMS:

To provide indicative design information and specifications with the following objectives:

- Devise an access to the dome cupola for general maintenance
- Devise an access so that all maintenance tasks can be discharged safely

Clear possible debris clogging windcatcher

Maintain cupola (repairs to paint work, weather proofing)

Maintain lightening rod

Clear any debris accumulating in cupola

Regular inspections

- A system for 2 operatives working at once
- A safe access system fully compliant with current Regulations and Standards

The system is envisaged as composed of 4 elements:

- 1. The access ladder
- 2. The access ladder's vertical mansafe system
- 3. The horizontal mansafe system (access around the cupola)
- 4. End user PPE (2 operatives)

All elements must be designed as a complete coordinated access system delivered with appropriate certifications.

1. THE ACCESS LADDER

The ladder is to be fixed at the head and base. Intermediate fixings to the ladder stiles to be avoided if possible.

Design criteria:

BS 4211:2005

Material:

Mill finish Aluminium (or equal approved).

Ladder height:

6965mm approx.

Exact dome dimensions to be verified on site prior to fabrication. For indicative ladder length dimensions refer to AHA-KKR-DET-050.

Fixing details to head:

Fixed back to structural element.

Refer to the following S.E. documents:

HTS-1444-GGS-01 29/05/20 Koko – Comments on Dome Connections HTS Comments date 19.01.21 – AHA Dome Drawings – AHA/KKR/DET/055

Fixing details to base:

Design intent: Base plate fixed to dome structural slab.

Refer to AHA/KKR/DET/055 Detail 2

Fixing details to ladder stiles:

Design intent: fixed back to structural steel

Structural Engineer to confirm dome structural elements on to which ladder is to be fixed.

2. THE ACCESS LADDER'S VERTICAL MANSAFE SYSTEM

Vertical mansafe to be fixed to the ladder.

Specialist contractor to supply, install and test Ladderlatch vertical fall protection systems (or approved equal).

Tested in line with European and British standards, and tested and approved by manufacturers.

Can be designed for use for 1no. operative at any one time with a maximum free-fall distance of 0.5m.

Fixing background:

Permanently fixed steel or aluminium ladder

Design criteria:

EN353-2:2002 and equivalent current British Standard.

Loading:

max. 10 kN indicative (to be confirmed by S.E.)

Post Material:

Galvanised mild steel

Component material:

316 stainless steel

Wire rope :

8mm 316 S16 stainless steel BS MA29

Int. centres:

4m max.

Fixing details:

Mechanically fixed to existing ladder

3. THE HORIZONTAL MANSAFE SYSTEM

Specialist contractor to design, supply, install and test penetrative traditionally fixed Latchways fall protection systems.

System is to be mechanically fixed back to structural members as indicated by S.E. If suitable steelwork is not available, alternative fixing methods will be required.

All should be tested in line with European and British Standards and designed for use for up to 2no. operatives working at once with a maximum free-fall distance of 2.0m.

<u>Design criteria:</u>

BS EN795:2012

Loading (top of post):

max. 38kN factored

Post Material:

Galvanised mild steel

Component Material:

316 stainless steel

Wire rope:

8mm 316 S16 stainless steel BS MA29

Post centres:

10m max.

Post height:

400mm

Fixing details:

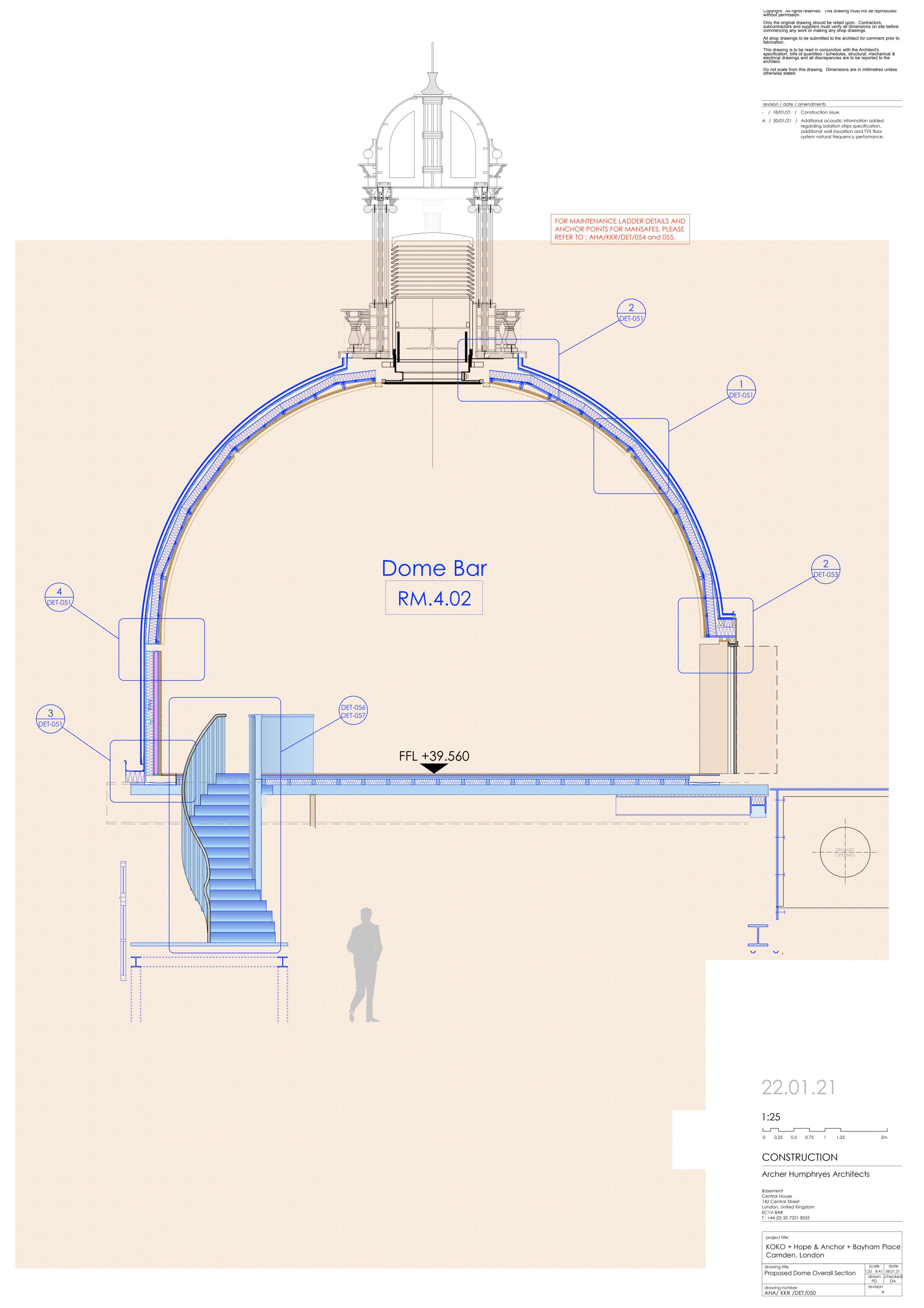
Mechanical to structural elements – verified by S.E.

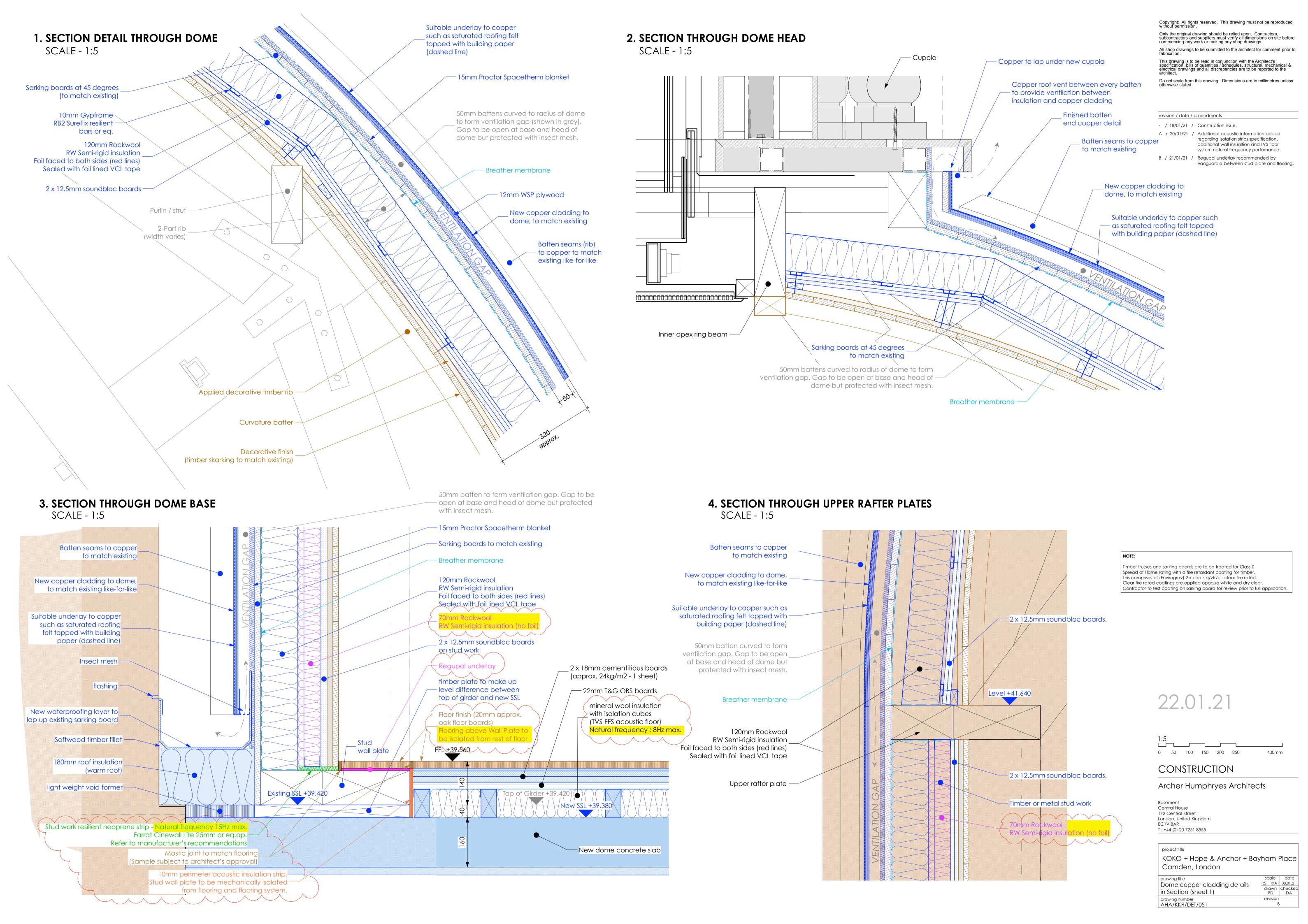
4. END-USER PERSONAL PROTECTION EQUIPMENT

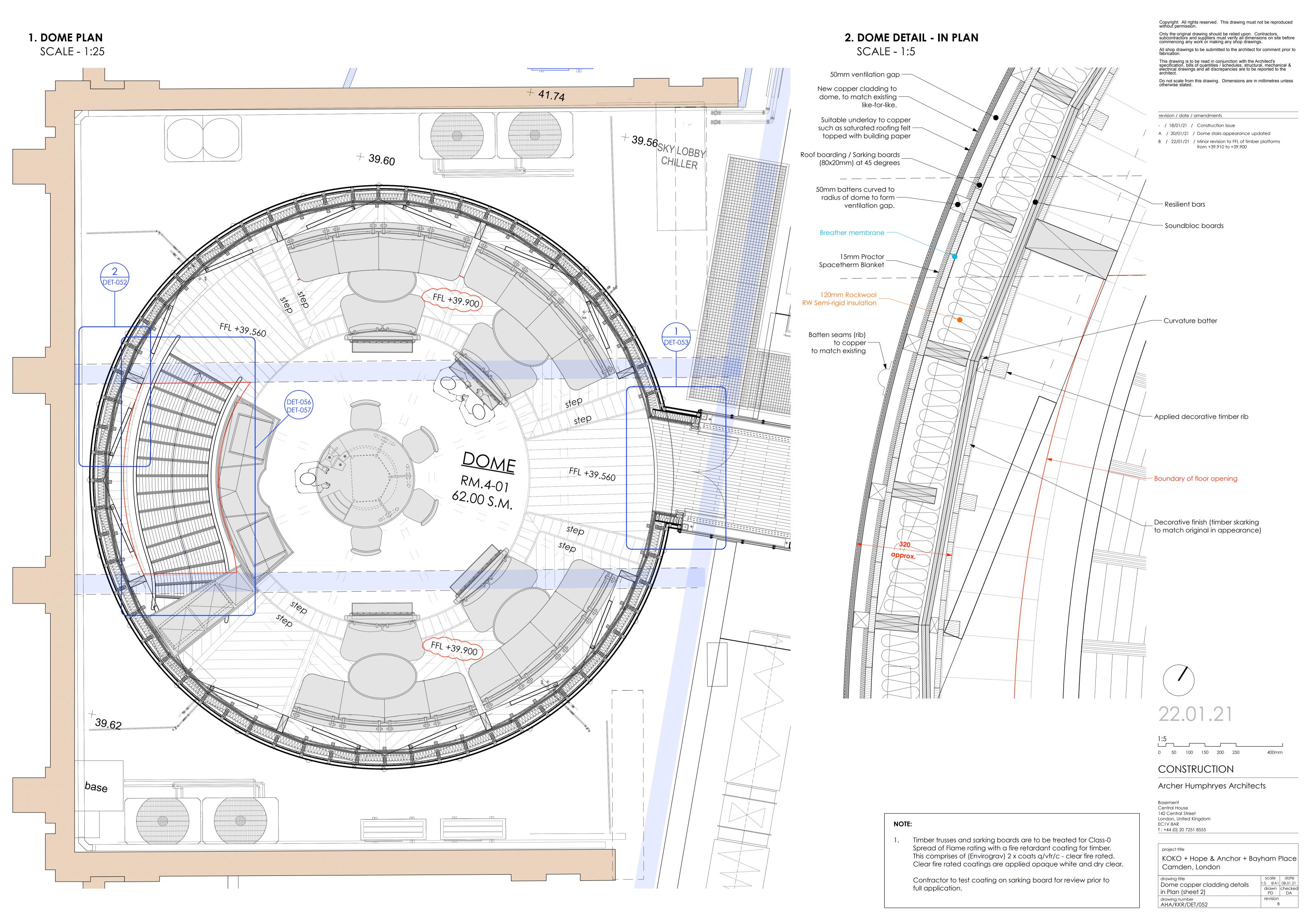
Plan for 2no. operatives.

Must include as required:

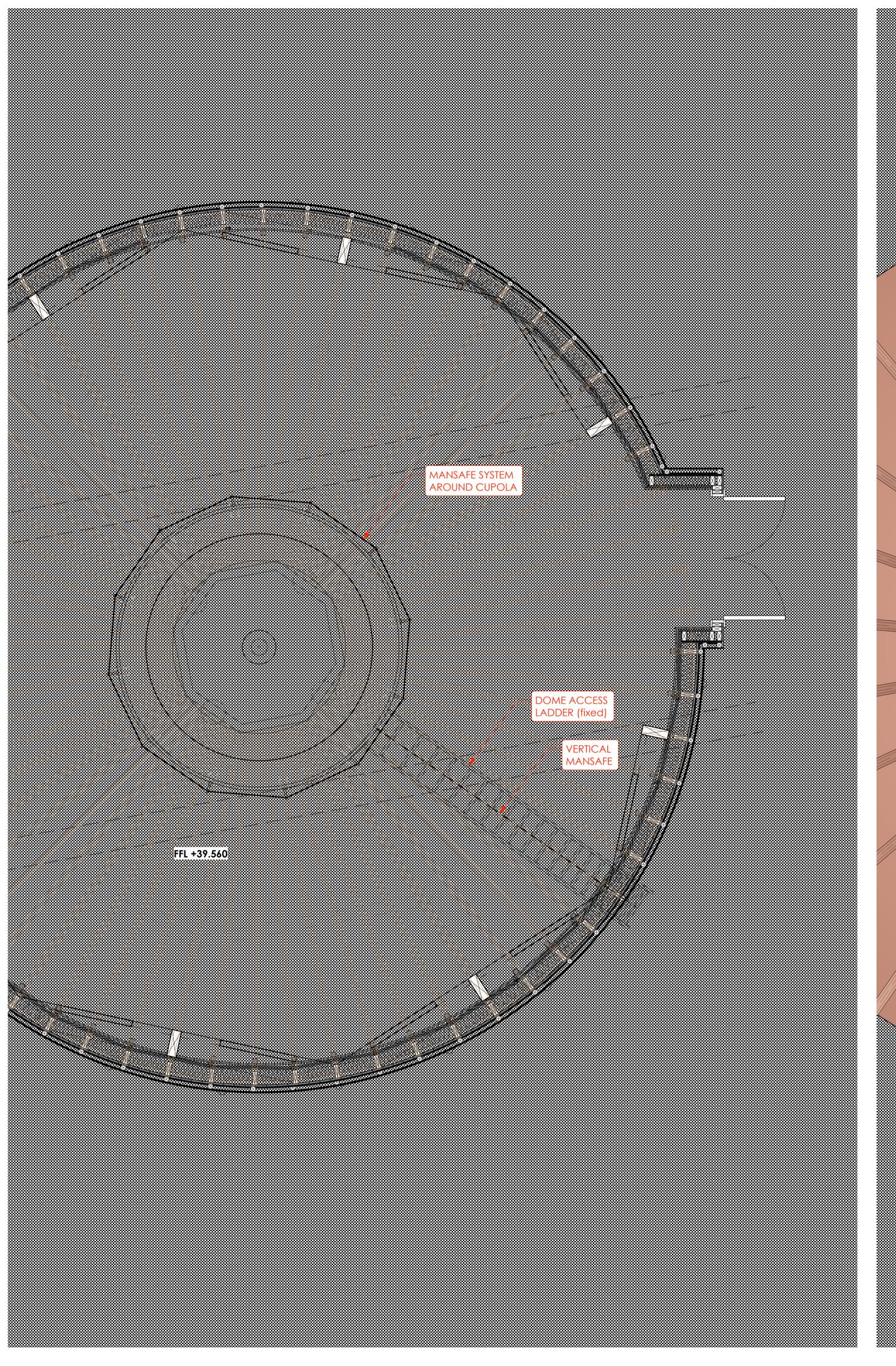
- Transfasteners
- Body harnesses
- Lanyards
- PPE storage

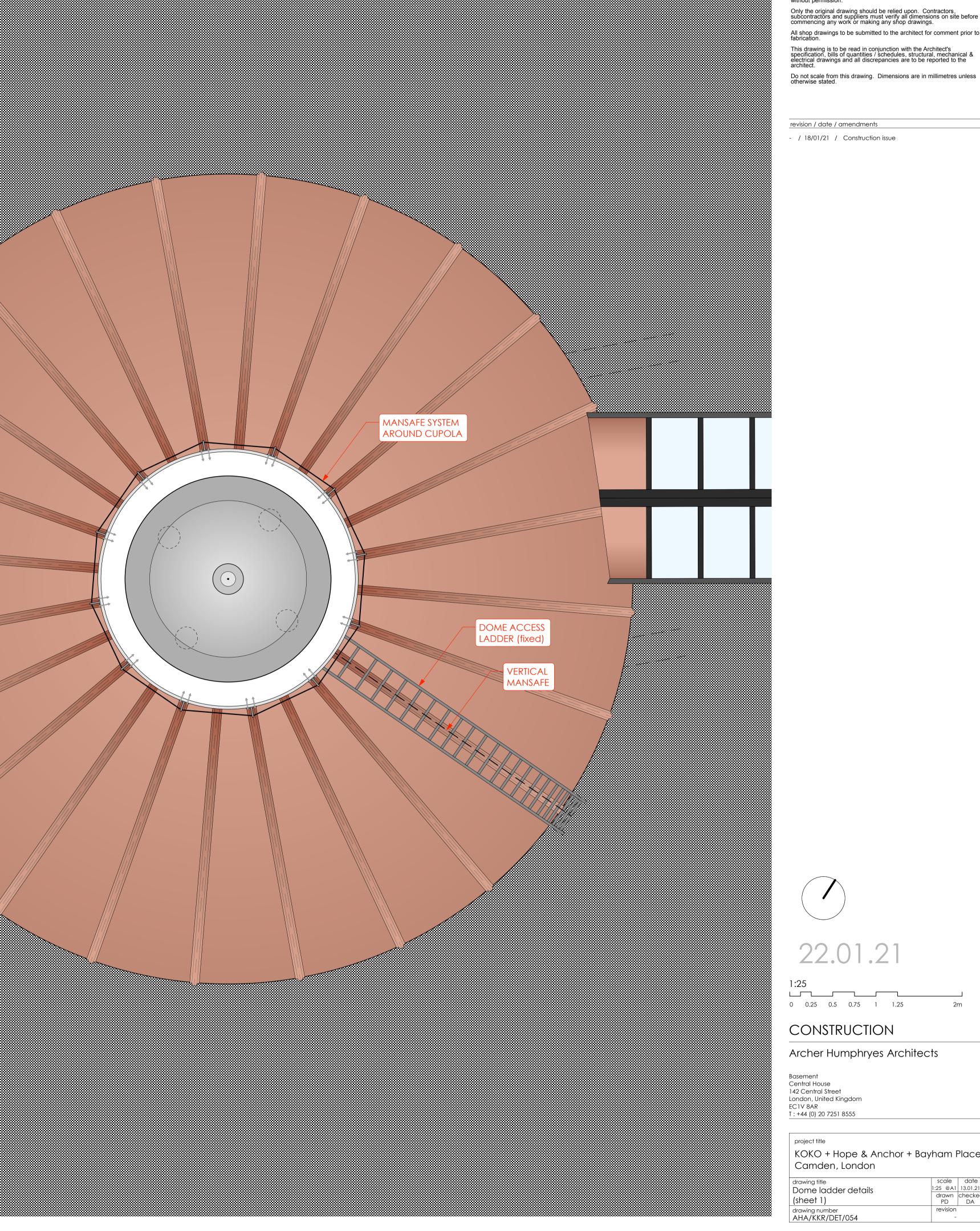






Copyright: All rights reserved. This drawing must not be reproduced without permission. 1. DETAIL IN PLAN - JUNCTION WITH WALKWAY 2. DETAIL IN SECTION - JUNCTION WITH WALKWAY Only the original drawing should be relied upon. Contractors, subcontractors and suppliers must verify all dimensions on site before commencing any work or making any shop drawings. SCALE - 1:5 **SCALE - 1:5** All shop drawings to be submitted to the architect for comment prior to fabrication. Suitable underlay to copper Breather membrane This drawing is to be read in conjunction with the Architect's specification, bills of quantities / schedules, structural, mechanical & electrical drawings and all discrepancies are to be reported to the architect. 50mm ventilation gap - such as saturated roofing felt topped with building paper - 50mm ventilation gap Do not scale from this drawing. Dimensions are in millimetres unless otherwise stated. New copper cladding to Boarding dome, to match dome 50mm battens to form ventilation gap. revision / date / amendments Soundbloc boards -/ 18/01/21 / Construction issue 575 approx. Resilient bars Decorative finish (timber sarking) 50mm battens to form ventilation gap. 120mm Rockwool RW Semi-rigid insulation Decorative finish 720 (timber to match dome) Soundbloc boards DOUBLE DOOR ID4-25 Breather membrane Decorative finish (timber to match dome) RW Semi-rigid insulation Upper rafter plate above doorway - Door head (to be moved up by thickness of plate Decorative finish to achieve required FINISHED FLOORS (timber to match dome) - Door jamb head height) (BY FIT-OUT CONTRACTOR) DOOR ID4-25 Decorative finish DETAIL A: (timber boarding) JUNCTION WITH GLAZING SCALE - 1:2 DOME TRUSS (shown indicatively dashed lines) **DETAIL B:** DOUBLE DOOR ID4-25 JUNCTION WITH GLAZING SCALE - 1:2 FFL +39.560 0 50 100 150 200 250 CONSTRUCTION Archer Humphryes Architects Central House 142 Central Street London, United Kingdom EC1V 8AR approx. 510 T: +44 (0) 20 7251 8555 000000000KOKO + Hope & Anchor + Bayham Place Camden, London drawing title Dome copper cladding details (sheet 3) drawing number AHA/KKR/DET/053





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revision / date / amendments

- / 18/01/21 / Construction issue



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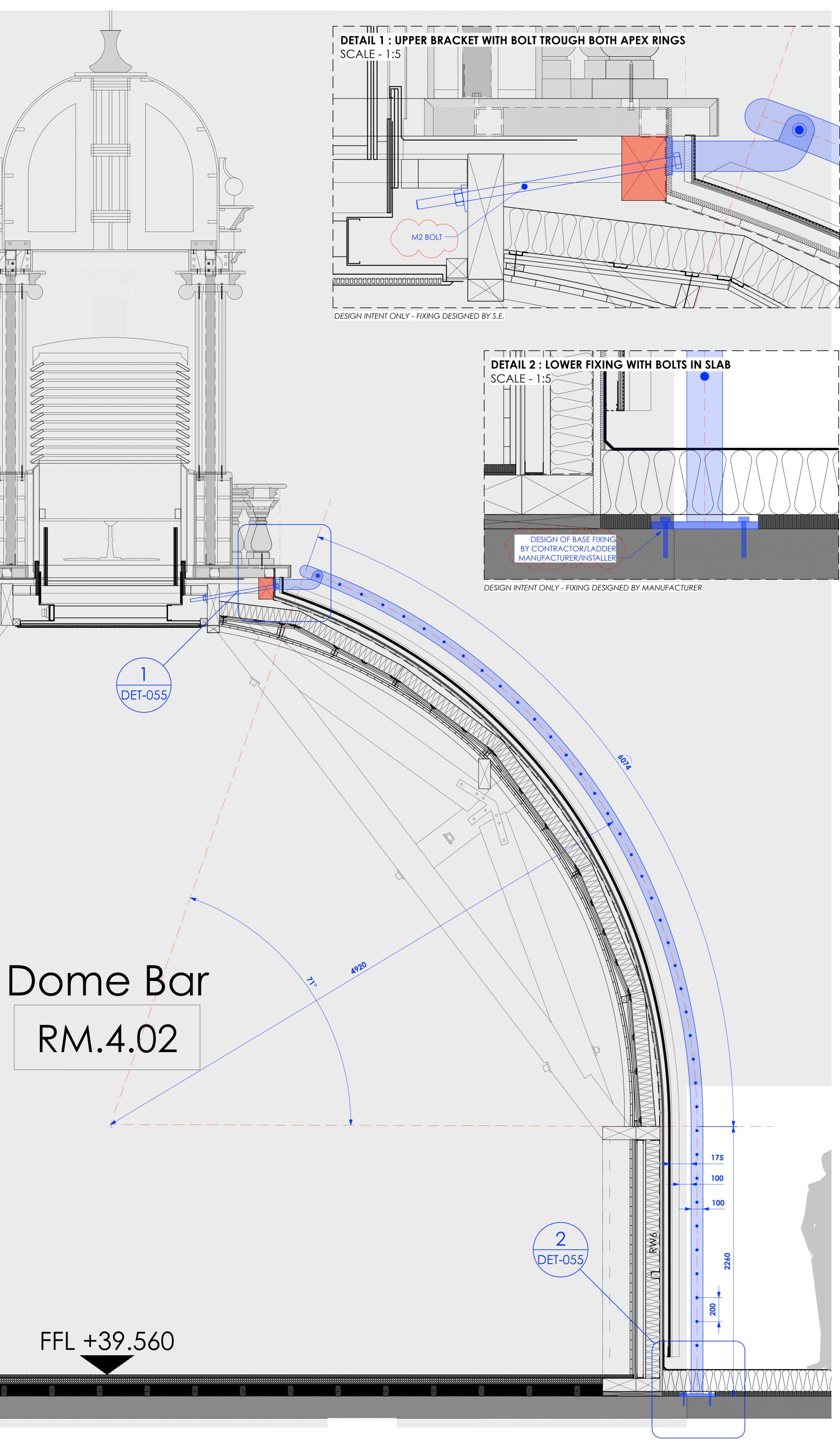
CONSTRUCTION

Archer Humphryes Architects

Basement Central House 142 Central Street London, United Kingdom EC1V 8AR T:+44 (0) 20 7251 8555

project title KOKO + Hope & Anchor + Bayham Place Camden, London

drawing title	scale	da
Dome ladder details (sheet 1)	1:25 @A1	13.01
	drawn PD	chec D/
drawing number	revision	
AHA/KKR/DET/054	-	



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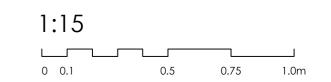
Do not scale from this drawing. Dimensions are in millimetres unless otherwise stated.

revision / date / amendments

- / 18/01/21 / Construction issue.

A / 20/01/21 / Fixing anotations added followwing comments

22.01.21



CONSTRUCTION

Archer Humphryes Architects

Basement Central House 142 Central Street London, United Kingdom EC1V 8AR T: +44 (0) 20 7251 8555

KOKO + Hope & Anchor + Bayham Place Camden, London

scale date 1:15 @A1 08.01.21 drawn checked PD DA drawing title
Dome ladder details (sheet 2) drawing number
AHA/ KKR /DET/055