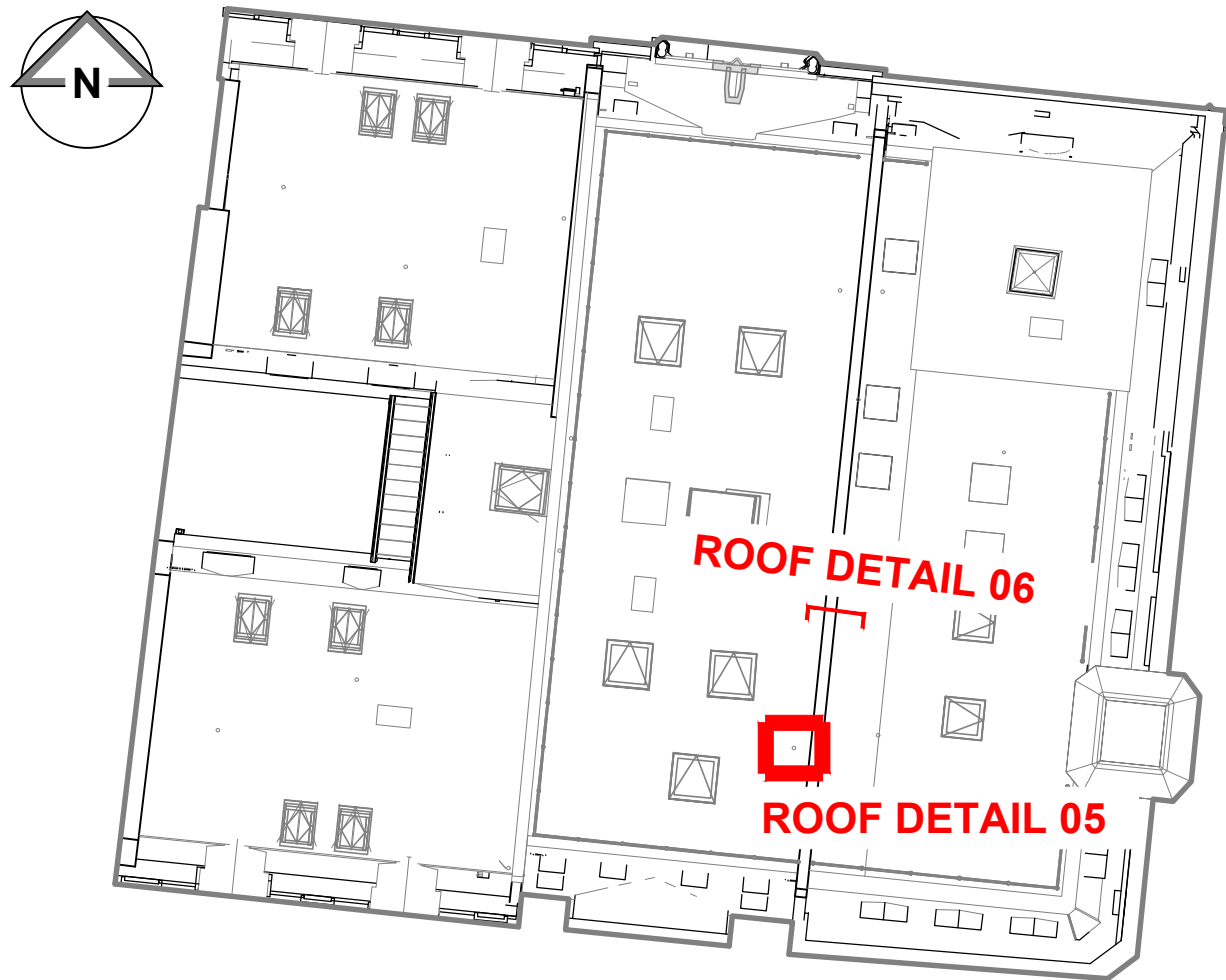




Roof Key Plan - Scale 1:500

Scope of Roof Repair

Lightning protection
Test the lightning protection.

Cleaning
Clean off biological growth and remove dirt, debris and loose material from all roof surfaces (except flat roof to be replaces) including hipped, mansard, dutch gable and flat roofs, parapets, copings, leadwork and other surfaces.

Cleaning (not required to flat roof) to be undertaken using non-abrasive, low pressure techniques and done so carefully so as not to cause damage to the coverings or water to ingress e.g. through capillary action. Surfaces to be cleaned with a neutral pH soap, clean and warm water. Rainwater outlets are to be protected during cleaning to prevent vegetation and debris from entering the underground drainage system, as far as reasonably practical.

Copings
Allow to rebed any loose coping stones and renew any defective sections of pointing between the coping stones e.g. where sections have failed, are cracked or are friable using a suitable lime mortar.

The contractor shall allow to replace any coping stones that are not fixed integrally, are cracked, spalled or significantly damaged a not pose either a risk of future failure or internal water ingress.

Copings to be of natural stone and match the existing size, profile, shape, cut and most importantly colour, texture and porosity, strength and durability. Joint widths to match existing. Stone is to be free from defects and free from face defects visible in completed work. Masonry to be accurately aligned and positioned with existing masonry. Existing defective stonework is to be carefully removed without disturbing or damaging the adjacent retained masonry.

Slates

Re-fix all loose and slipped slates to the hipped roofs, mansard roofs, behind the dutch gables and to the head of the lift shaft. Replace any carcked, broken or damaged slates; check integrity of nails and replace any apparent fixings that are damaged or corroded.

Slates to be sourced from a reclaimed site and to be in keeping with the existing as close as possible, including size, profile, thickness and appearance. All sourced slates shall be sound and defect free. Where hip or ridge tiles are to be replaced the contractor shall allow for general re-pointing associated with such replacement. When replacing slates, the contactor shall take care not to disturb or damage the surrounding slates, unless where necessary to facilitate the works.

Flat roof

Inspect the condition of the flat roof coverings and prepare an inspection report with any defects. Defects to include torn or damaged felt coverings, blistering, exposed / defective / loose or lifting lap joints, sagging / undulation, saturated insulation, extensive degradation of surface, splits along / within upstands and around roof penetrations and other similar matters.

Take up the existing flat roof coverings including the main roof and lower flat roofs / ledges and supply and install a new single ply membrane roofing system (Bauder or equal and approved). New roof covering to be fully adhered in accordance with the manufacturer's instructions. Allow for installation of new rigid insulation board, VCL, plywood decking and fixings.

Rainwater goods and flashings

Cast iron

Inspect, check the integrity of pipework, gutter clips, stop ends or brackets.

UPVC

Inspect, check the integrity of pipework, gutter clips, stop ends or brackets.

Cleaning

Allow to undertake a thorough clean of the existing rainwater goods in order to leave free flowing. (Remove all loose debris, rod through and jet wash all hoppers, gutters, downpipes and gullies.)

Leadwork

Allow to redress the leadwork along the edge of the mansard roof to no. 58-60 facing south king street. Inspect and check the condition of all the remaining leadwork to the parapets, gutters, valleys, flashings and capping pieces etc. and undertake any localised repair or replacement works. All lead replacement works to be in accordance with the lead sheet association guidelines and relevant British standards.

NOTES

AEWTP026C

- All dimensions and levels are to be checked on site.
- Any discrepancies are to be reported to the architect before any work commences
- This drawing shall not be scaled to ascertain any dimensions. Work to figured dimensions only.
- This drawing shall not be reproduced without express written permission from AEW.
- Title overlay drawings and ownership boundaries are produced using all reasonable endeavors. AEW cannot be responsible for the accuracy or scale discrepancy of base plans supplied to them.
- All works are to be undertaken in accordance with Building Regulations and the latest British Standards.
- All proprietary materials and products are to be used strictly in accordance with the manufacturers recommendations.

CDM 2015

Client notified of duties: 04/11/2020

Principal Designer: AEW Architects

Unless noted below, all known hazards have been highlighted on the drawing:

Note:

The whole of the existing roof to be **reroofed**. Existing pitched roofs to be stripped. Existing slates to be reused with 25% new reclaimed slates to match existing. Existing leadwork to be inspected and retained where possible. Existing flat roof lining to be stripped to the steel deck and replaced with new Bauder reinforced bitumen membrane system including insulation for thermal upgrade. Please refer to the roof condition survey and separate detail proposal for the detailed scope of works

Note:

RWP and gulleys not shown. Refer to survey information

Note:

Existing building information is based on survey information and drawings provided. This information may not be a true reflection of what was actually built on site and as such appointed main contractors are to undertake their own on-site investigations in order to satisfy themselves that the information provided within this drawing is an accurate representation of the building and to verify wall and floor type construction build up. It is assumed that the existing internal linings which are to be retained incorporate a vapour control layer

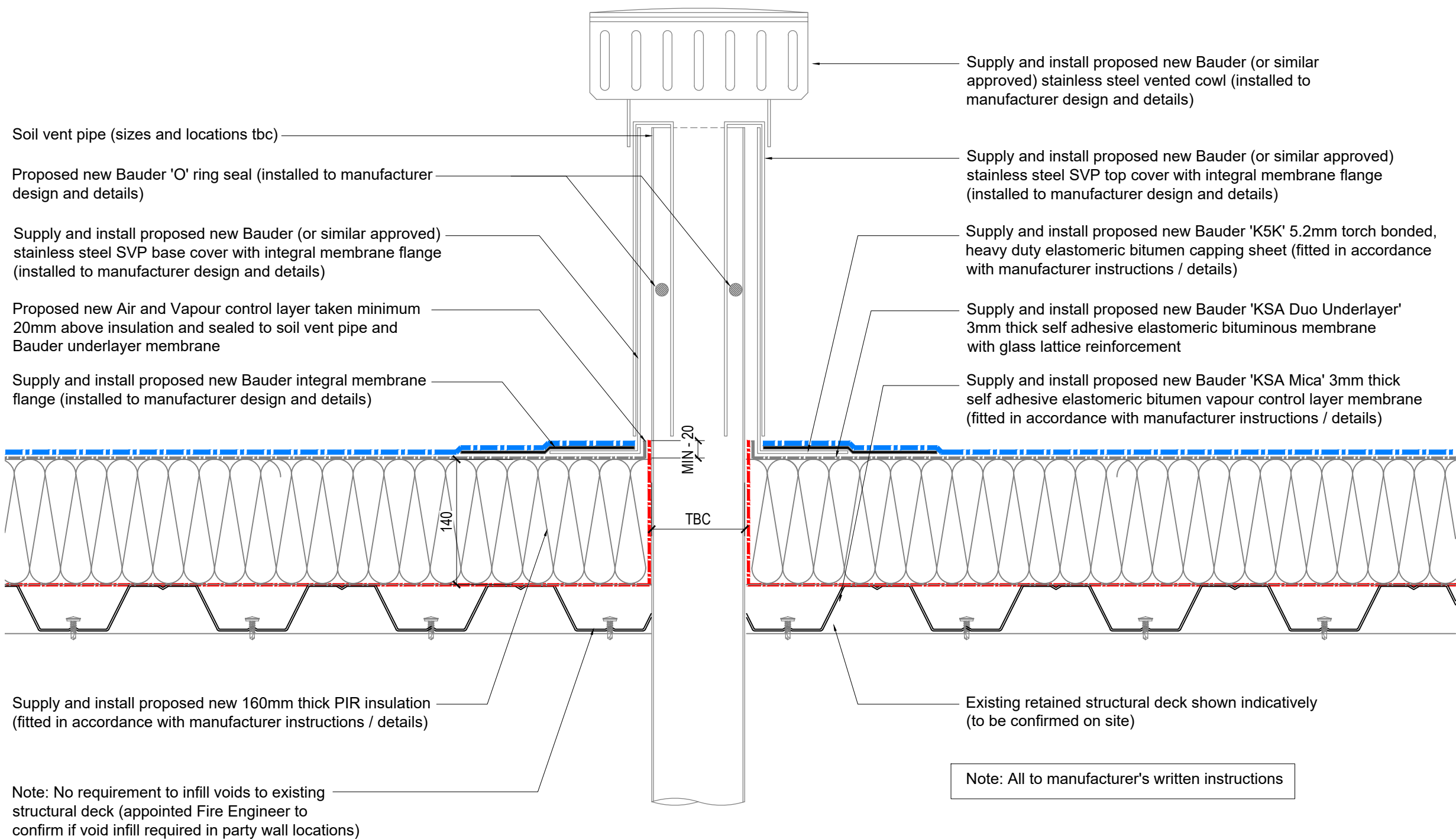
Note:

Fire Engineer to clarify any requirements for fire protection of structural elements. Structural Engineer to inspect the existing structural members and schedule any necessary repairs.

Refer to manufacturers' standard details and written instructions for all products.

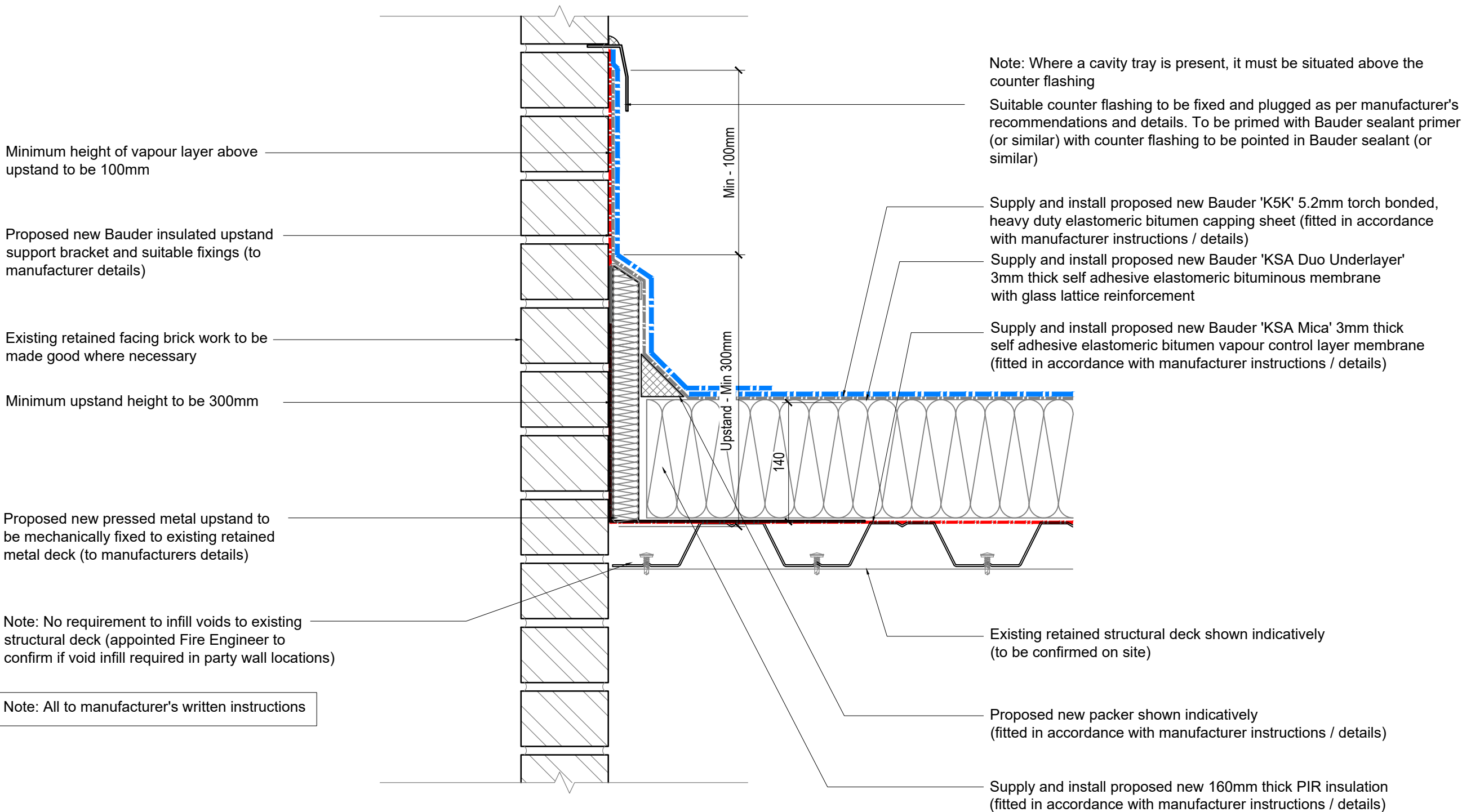
Note:

All to manufacturer's written instructions



Roof Detail 05 - Typical Proposed Soil Vent Pipe Detail (Scale 1:5)

Proposed Flat Roof Details - Typical SVP Penetrations & Parapet Details



Roof Detail 06 - Typical Proposed Parapet Detail (Scale 1:5)

P02	03/01/24	SPF	DS
Issued for Planning			
P01	14/02/23	SPF	DJ
Initial issue			

REV	Date	Drawn by: -	Checked by: -
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Status	Purpose of Issue
S4	For Approval

drawing stage RIBA Stage 5

client Glasgow City Council as Trustees of Strathclyde Pension Fund

project 58-66 King Street Manchester

drawing title Proposed Roof Details Flat Roof Details SVP Penetrations & Parapet Details

date	14/02/23	drawn	SPF
scale@A1	VARIES	checked	DJ

Rev

P02

11702-AEW-XX-RF-DR-A-6055

Job No

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0161 214 4370
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AEW

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Slate Vent

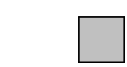


Roof Cowl

Notes:

1. This drawing is subject to copyright and is not to be reproduced in part or whole without approval
2. Do not scale this drawing - check all dimensions on site.
3. This drawing shall be read in conjunction with the project specification (s) and all other contract documentation.
4. All dimensions are in millimetres unless otherwise stated

Legend



SLATE ROOF TILE VENTILATOR AS KLOBER UNIVERSAL 20K ROOF TILE VENT OR SIMILAR



COMBINED INTAKE / EXHAUST ROOF TERMINAL NUAIRE TERMINATOR OR SIMILAR.

C1	17.10.23	FIRST ISSUE	M.H
Rev:	Date:	Status/Amendments:	By:

King Associates
2nd Floor Queens Chambers
5 John Dalton St
Manchester
M2 6ET

Email: info@kingassociates.uk
www.kingassociates.uk



Client:
Glasgow City Council as Trustees of Strathclyde Pension Fund

Project:
58-64 King Street, Manchester

Drawing Title:
**MECHANICAL SERVICES
ROOF LEVEL, VENTILATION COWLS**

Drawn By: M.H	Checked By: A.A	Cad By: M.E
Scale: 1 : 50	Paper Size: A1	Date Created: 10/16/23
Drawing Number: 4052-KIN- XX-04-SK-M-5805	Drawing Revision: C1	

UB41 Hooded Tile Terminal Universal

Product features and benefits

- Up to 18,750mm² large free vent area
- Large diameter spigot c/w Adaptor to accept ducting of 100/110/125/150mm (160mm does not need an adaptor)

Application

- Mechanical extraction
- Minimum pitch of 22.5°

Material

- PVC-U and Ubiflex & polypropylene

Dimensions

- 500mm x 500mm skirt
- Stepped Adaptor— H: 215mm

Weight

- 1.53kg per unit

Packaging

- 1 per box



Colours

- Red/terracotta skirt
- Terracotta/terracotta skirt
- Anthracite /black skirt
- Sepia/black skirt

Product Code

- Red 100130172069
- Terracotta 100130172067
- Anthracite 100130172063
- Sepia 100130172066

Diameter (mm)	Free Vent Area (mm ²)	Pressure/Airflow Resistance (Pascals)	
		100m ³ /h	225m ³ /h
100	7,850	3.0	7.5
110	8,850	4.5	16.0
125	12,250	5.3	24.0
150	17,775	6.3	31.0
160	18,750	6.5	31.0

ROOF COWLS AND TERMINALS

TERMINATOR COWLS DIMENSIONS (mm)

To provide a weatherproof route for supply & exhaust air to your ducted system.

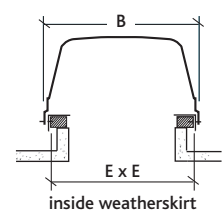
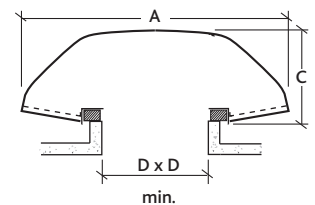
Cowls are manufactured from flame retardant polymer and can be supplied with gravity backdraught shutters, bird guards and hand guards. The terminal is finished in BS00A05 Grey as standard. All BS or RAL colours are available. The cowl will normally be fitted to the upstand by a roofing contractor or builder. The Cowl can be fitted without shutters on a 0-60 degree pitched roof with its longer side running down the roof slope. The Cowl can be fitted with its longer side running across a slope of less than 85 degrees from the horizontal. When fitted to a wall the longer side must run horizontal.

Typical code: TRTS-A Note: S = Shutters

Note: Air Pressure Drop of Cowl (Pa) = $Z \times Q^2$

where Z = Factor listed in table below Q = Air Volume Flow Rate (m³/s)

Code	A	B	C	D	E	Weight Kg	Z Extract	Z Intake
TRTS-A	900	620	340	460	600	16.3	67	118
TRTS-B	1080	740	375	560	695	20.7	39	87
TRTS-C	1320	964	475	700	945	34.4	28	62
TRTS-D	1470	1076	490	800	1050	39.2	19	32
TRTS-E	1780	1170	485	900	1136	66.8	7	11.3
TRTS-F	2260	1476	600	1200	1452	114	2.5	3.6



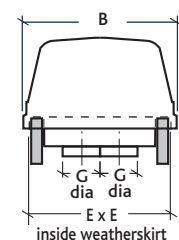
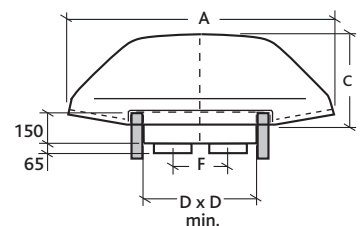
SUPPLY/EXTRACT COWLS DIMENSIONS (mm)

Supply/Extract Cowl: rigid flame retardant cowl, conforming with BS476 (Part 1 class 11) supplied in grey (BS 00 A 05) as standard (any BS or RAL colours available), fixing directly to the base using non-rusting sealed fixings. Air plenum is manufactured from galvanised steel incorporating supply & extract chambers. Rigid spigots are provided for connection of duct work. Supply & extract chamber is fitted with a bird guard.

Typical code: TRSE1

Code	A	B	C	D	E	F	G	Weight Kg
TRSE1	900	620	340	460	600	200	100	21.3
TRSE2	900	620	340	460	600	200	125	21.3
TRSE3	900	620	340	460	600	200	150	21.3
TRSE4	1320	964	475	700	945	345	200	41.4
TRSE5	1320	964	475	700	945	345	250	41.4
TRSE6	1320	964	475	700	945	345	315	41.4
TRSE7	1780	1170	489	900	1150	450	400	76.8

Resistance to airflow of this item is negligible.



ROOF COWLS AND TERMINALS CONT.

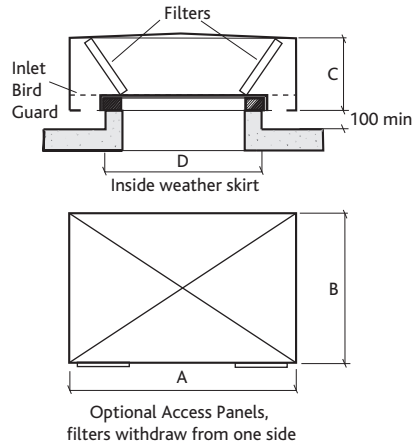
FILTERED TERMINALS DIMENSIONS (mm)

Low profile terminals are to be supplied by Nuair. The terminal is to be rectangular, constructed in aluminium alloy and with non-rusting fixings. Twin inlets fitted with inlet/bird guards and an integral weather skirt. Filtered units are to be fitted with filter frames for removal and replacement of BS2831 and BS2963 filters.

Typical code: 630LPDT/1 - Disposable Filter. 630LPWT/1 - Washable Filter.

Code	A	B	C	D	Weight Kg	Z Extract	Z Intake
630LP*T/1	1250	700	280	690	15.1	67	106
800LP*T/1	1390	800	350	790	25.2	51	88
1400LP*T/1	2620	1800	600	1440	91.0	3.3	6.5

Note:* D = Disposable *W= Washable



NON-FILTERED TERMINALS (mm)

Low profile terminals are to be supplied by Nuair. The terminal is to be rectangular, constructed in aluminium alloy and with non-rusting fixings. Twin inlets fitted with inlet/bird guards and an integral weather skirt.

Typical code: 315LPT/1

Note: Air Pressure Drop of Cowl (Pa) = Z x Q²

where: Z = Factor listed in table below Q = Air Volume Flow Rate (m3/s)

Code	A	B	C	D	Weight Kg	Z Extract	Z Intake
315LPT/1	615	400	150	390	3.5	553	614
400LPT/1	745	500	165	490	5.8	222	296
500LPT/1	915	600	200	590	8.1	105	117
630LPT/1	1350	700	280	690	12.6	48	29
800LPT/1	1390	800	350	790	23.5	32	21
1000LPT/1	1820	1050	420	1040	29.8	13	10
1120LPT/1	2070	1150	500	1140	35.0	6.5	4.6
1250LPT/1	2204	1250	540	1240	41.0	5	4
1400LPT/1	2620	1800	600	1440	65.0	1	1

