

MECHANICAL SMOKE SHAFT NOTE:

1. SHAFT TO BE SMOOTH INTERNALLY, SUBSTANTIALLY AIR TIGHT, STRAIGHT AND FIRE RATED AS APPROPRIATE TO THE SURROUNDING STRUCTURES.
2. MINIMUM SHAFT DIMENSION TO BE 0.6m² AND WITH AN ASPECT RATIO OF NO MORE THAN 2:1.
3. MAXIMUM SHAFT LEAKAGE RATE TO BE NO MORE THAN 3.8m³/HOUR/m² @ 50Pa.
4. TOP OF THE LOBBY VENTILATOR TO BE 50mm FROM FINISHED CEILING LEVEL.
5. FOR ADDITIONAL GUIDANCE REFER TO COLT DESIGN GUIDE FOR CONSTRUCTION OF SHAFTS FOR SMOKE VENTILATION.

HEAD OF STAIR VENTILATOR
SEE DRAWING No.
COLT_AKAN43_DET_XX_RF_303

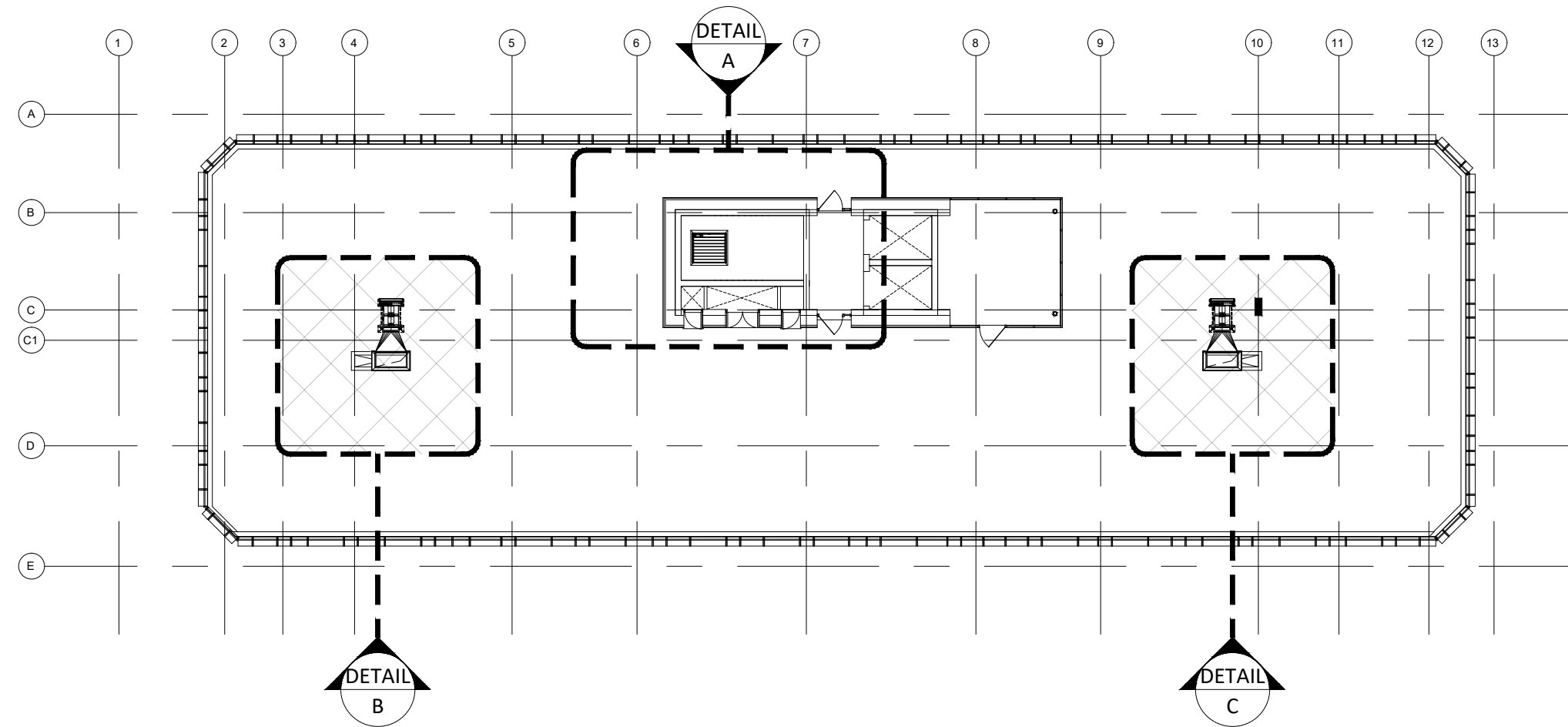
DETAIL A
DETAILED ARRANGEMENT
(SCALE 1:50)

SMOKE EXTRACT PLANT
SEE DRAWING No.
COLT_AKAN43_DET_XX_RF_301

DETAIL B
DETAILED ARRANGEMENT
(SCALE 1:50)

SMOKE EXTRACT PLANT
SEE DRAWING No.
COLT_AKAN43_DET_XX_RF_301

DETAIL C
DETAILED ARRANGEMENT
(SCALE 1:50)



GENERAL ARRANGEMENT
(SCALE 1:250)

BUILDING DETAILS ARE INDICATIVE ONLY.
ALL BUILDING, PREPARATION AND WEATHERING ARE NOT IN COLT SCOPE OF WORKS AND SHOULD BE COMPLETED PRIOR TO INSTALLATION.
BUILDING TOLERANCES TO BE NO MORE THAN PLUS OF MINUS 5MM

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CUSTOMER
WEST LANCASHIRE GROUP LIMITED
PROJECT
BENGAL STREET

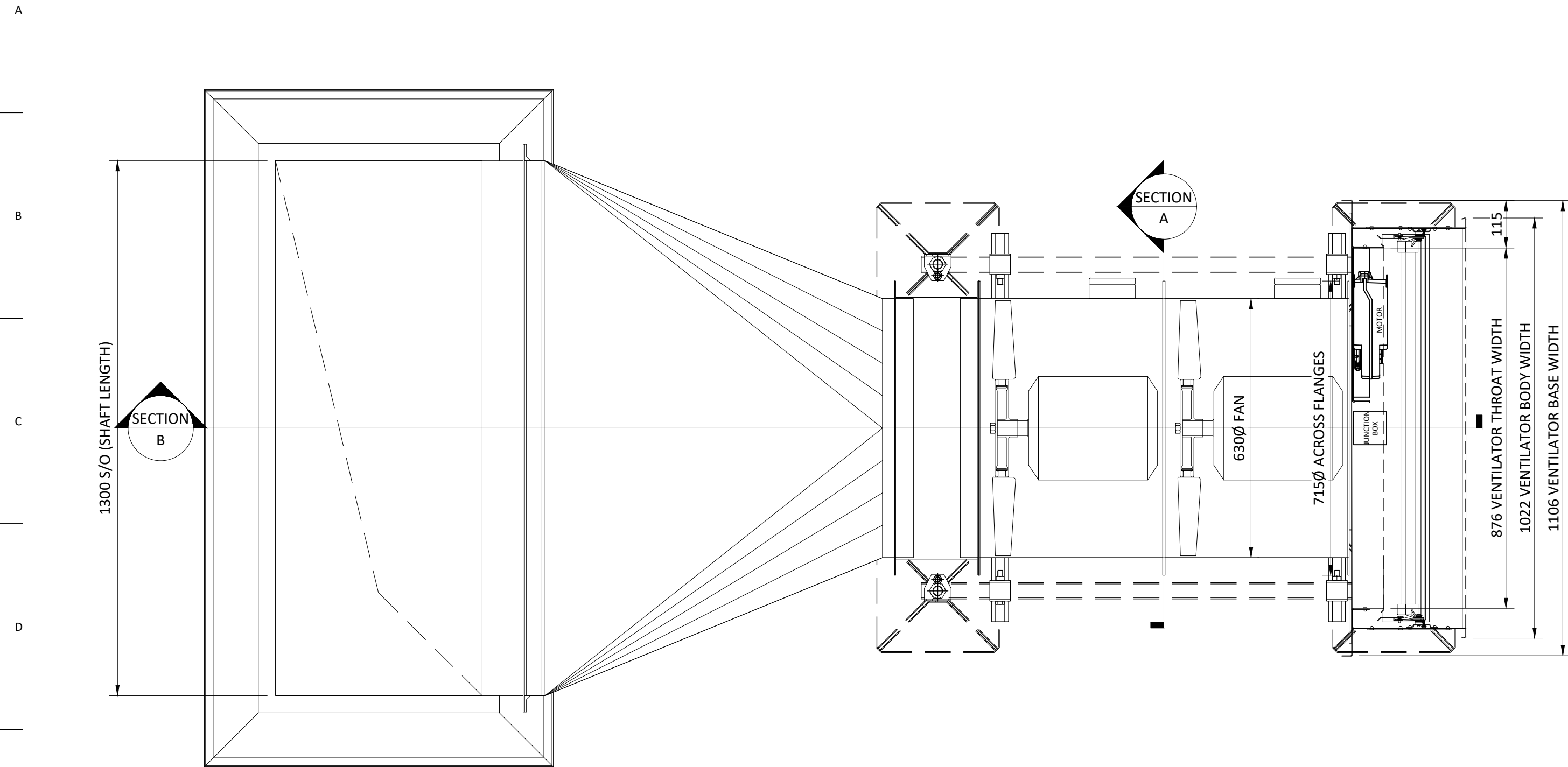
COLT REF **AKAN43**
STATUS
☐ Preliminary ☐ For Construction
☒ For Approval ☐ As Built

MODIFICATION DETAILS			
DESCRIPTION		CHECKED	APPROVED

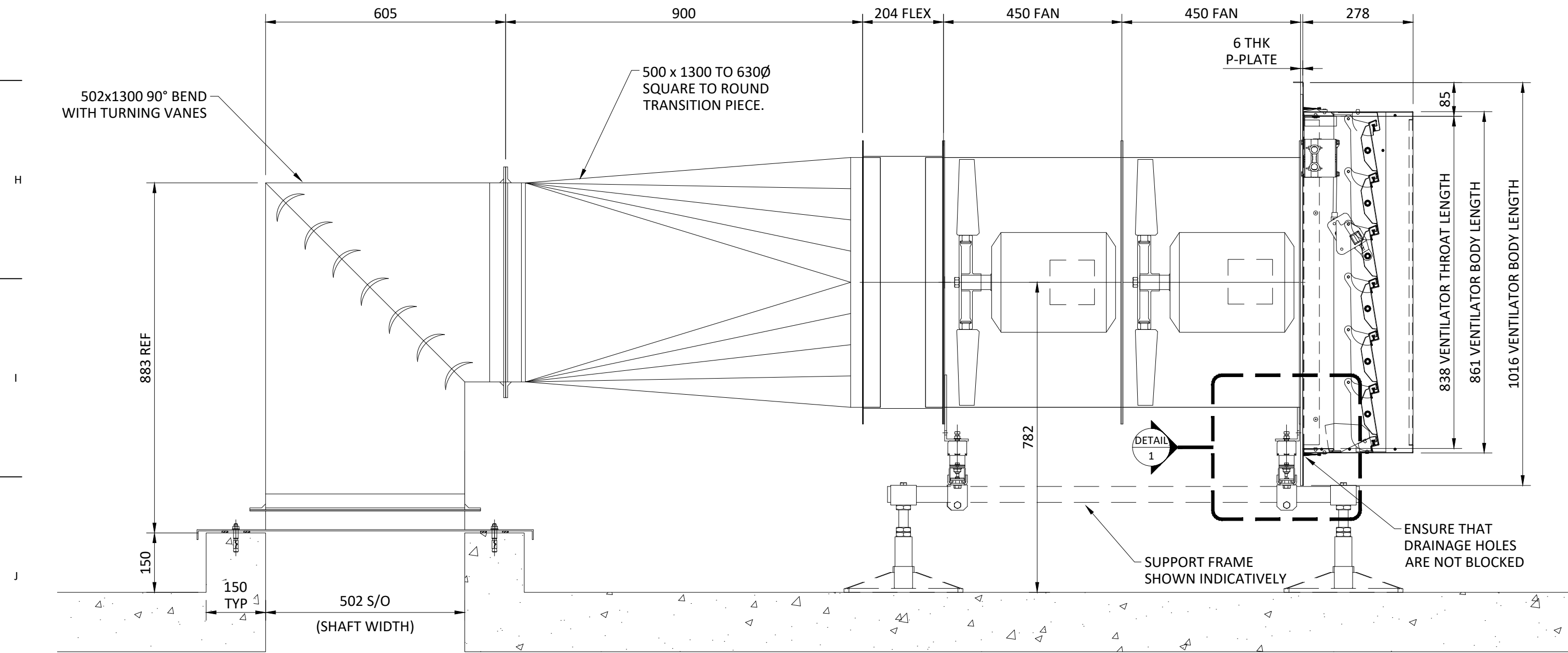
R01 FIRST ISSUE NEW DRAWING		QC RMS	JS	IM
PPH	21.01.2021	C000		
SCALE		DRAWN	PPH	
AS INDICATED @ A1		21.01.2021		
TITLE				
GENERAL ARRANGEMENT ROOF				

COLT REF	TYPE	ZONE	LEVEL	REF	ISSUE
COLT_AKAN43_PLN_XX_RF_204_R01					

BACKGROUND LAYOUT TAKEN FROM FCH LTD
DRAWING No. P16082-FCH-BA-09-DR-A-3040 REV P2



PLAN VIEW
(SCALE 1:10)



VERTICAL SECTION B
(SCALE 1:10)

NOTES:-

CERTIFIED ACCORDING TO EN 12101-2

1No.

TYPE 1011 VENTILATOR

CO/3E/1011/A18/M1C230I/1F72/R/X/STD/N5/X/X/X/X

EuroCO is fall-through proof according to GS-Bau-18. Lowloss weather seals are fitted for minimum air leakage when closed.

CONTROL:

3000N/m² windload
680N/m² snowload

1 spring return electric motor 230V with assisting spring, power to close & spring to open
1 Fire override assembly, release temp. 72 °C

LOUVRES:

Single skin aluminium louver with pile weather seal
Externally removable louver - first louver from top

GUARD:

No bird guard & insect mesh.
No burglar guard.

COATING:

Mill finish (natural aluminium).

UNIT WEIGHT:

Approximate weight of the ventilator = 28 kg.

AREAS:

Geometric free area of the ventilator (Av) = 0.73 m²
Aerodynamic free area of the ventilator (Aa) = 0.48 m²

NOTES:

Axial Fan:-

- High Temperature Long Cased Fan

630 mm

- Number of Blades

6

- Blade Angle

23 °

- Motor Power

8.25 kW (AOM)

- Full Load Current (FLC)

15.84 Amps

- Motor Type

F300

Ductwork:-

- Ductwork is provided and installed by Colt.

- To be manufactured in accordance with classification DW144 with high temperature sealant

Steelwork & Fixings:-

- Support frame and fixings are provided and installed by Colt.

- Support frame and fixings are shown indicatively.

Equipment Weights:-

2 Axial Fans

45.6 kg Each

4 Anti-Vibration Mounts

1.0 kg Each

1 Flexible Connector

1.4 kg Each

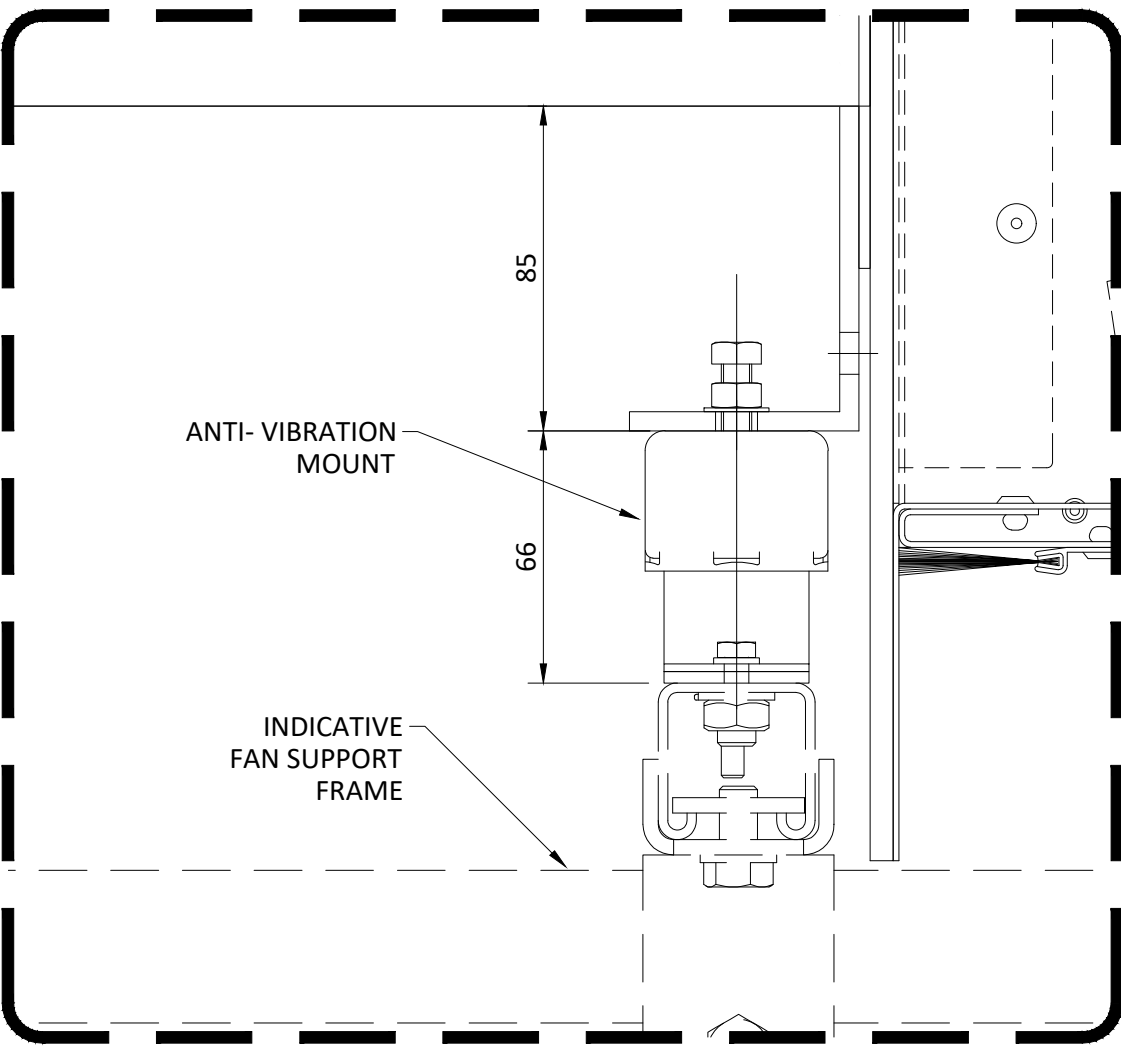
2 Matching Flanges

2.7 kg Each

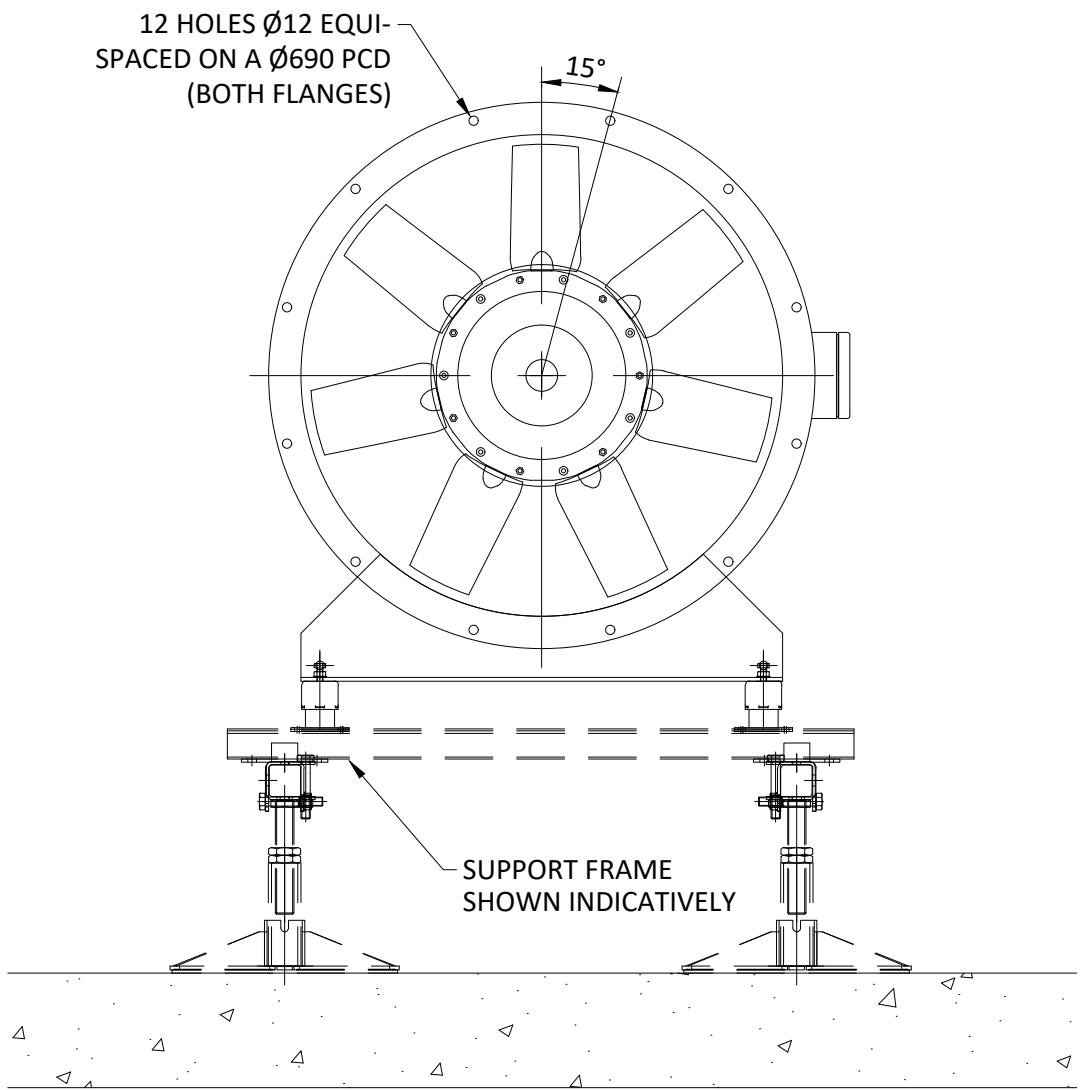
2 Fan Mounting Feet

4.1 kg Each

ASSEMBLY WEIGHT = 110.2 kg Total



DETAIL 1
(SCALE 1:2)



VERTICAL SECTION A
(SCALE 1:10)

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COLT

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BENGAL STREET

AKAN43

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R01 FIRST ISSUE
NEW DRAWING

QC
RMS

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PPH

21.01.2021

C000

SCALE

AS INDICATED @ A1

DRAWN

PPH

21.01.2021

TITLE

EQUIPMENT DETAILS
SMOKE EXTRACT PLANT

COLT REF

TYPE

ZONE

LEVEL

REF

ISSUE

COLT_AKAN43_DET_XX_RF_301_R01

