DUCT COLOUR / SYMBOL

KITCHEN EXHAUST DUCTWORK

KITCHEN SUPPLY DUCTWORK

TOILET EXHAUST DUCTWORK

GENERAL EXHAUST DUCTWORK

AC - SUPPLY DUCTWORK

AC - RETURN AIR DUCTWORK

EXISTING DUCTWORK

25mm INTERNALLY INSULATED

50mm INTERNALLY INSULATED

SILENCER

FYREWRAP (FR)

FLEX

RISER / DROPPER

FIRE DAMPER (FD)

VOLUME CONTROL DAMPER (VCD)

AIRFLOW DIRECTION

MECHANICAL EQUIPMENT

KEH	KITCHEN EXHAUST HOOD
KEF	KITCHEN EXHAUST FAN
KEG	KITCHEN EXHAUST GRILLE
SAF	SUPPLY UP AIR FAN
SAG	SUPPLY UP AIR GRILLE
VSD	VARIABLE SPEED DRIVE
ESP	ELECTROSTATIC PRECIPITATOR
CB	CARBON BOX UNIT
OZ	OZONE GENERATOR
TEF	TOILET EXHAUST FAN
TEG	TOILET EXHAUST GRILLE
GEF	GENERAL EXHAUST FAN
GEG	GENERAL EXHAUST GRILLE
FD	FIRE DAMPER
VCD	VOLUME CONTROL DAMPER
MVCD	MOTORISED VOLUME CONTROL DAMPER
FCU	FAN COIL UNIT (INDOOR)
CU	CONDENSING UNIT (OUTDOOR)
AHU	AIR HANDLING UNIT
ACG	AC GRILLE
OAF	OUTSIDE AIR FAN
VFD	VARIABLE FREQUENCY DRIVE
DOL	DIRECT ON LINE

ABBREVIATIONS

L/S	LITERS PER SECOND
PA	PASCALS
FFL	FINISHED FLOOR LEVEL
TBC	TO BE CONFIRMED
SM	SITE MEASUREMENT
AP	ACCESS PANEL - INDUCT
CAP	CEILING ACCESS PANEL
FR	FYREWRAP
BB	BASE BUILD
U/S	UNDERSIDE
UNO	UNLESS NOTED OTHERWISE
TYP	TYPICAL

CAVALIER VENTILATION
"COMPLETE - TURN KEY SOLUTIONS"
1300 4 CAVALIER (22825)
www.cavaliervent.com.au
29 Liverpool St, Ingleburn, NSW, 2565

CHIPPERS , MANLY

MANLY WHARF

SIGNATURE AND DATE

SITE CONTACT NAME

PH # 04

CAVALIER LEGEND

JB

MECH 101

Date 4-04-2025

Drawn by AC

DO NOT SCALE FROM DRAWING

Scale @ A3

REV 5

4/04/2025 11:09:11 AM

DRAWING NOTES

1: ALL DUCTWORK SIZES SHOWN ARE OVERALL DUCTWORK SIZE AND NOT CLEAR AIRWAY SIZE.
2: ALL WORK TO BE CARRIED OUT IN A WORKMANSHIP LIKE MANNER AND COMPLIES WITH ALL RELEVANT CODES AND STANDARDS. BCA, AS1668.1:1998/2015, AS1668.2:2012, AS 4254 SECTION J.
3: CLEAN OUT / ACCESS PANELS TO BE INSTALLED IN ACCORDANCE WITH AS1668 PART 1. ACCESS PANELS TO BE INSTALLED EVERY 3 METERS OR TURN OF DIRECTION. HORIZONTAL DUCTWORK ONLY. DUCTWORK SHALL BE INSTALLED WITH A RISE IN DIRECTION OF AIRFLOW OF NOT LESS THAN 0.5% IN ACCORDANCE WITH AS1668 PART 1. PROVIDE DRAINS AT ALL LOW POINTS.
4: KITCHEN EXHAUST DUCTWORK WITHIN THE FIRE COMPARTMENT OF THE HOODS BEING SERVED SHALL BE INSULATED TO ACHIEVE -/-/30 FRL WITH DUCT WRAPPED IN 25mm MINERAL WOOL ATTACHED WITH NON-COMBUSTIBLE FASTENINGS IN ACCORDANCE WITH AS1668.1:2015 SECTION 6.2.3.3 WHERE DUCTWORK IS INSTALLED WITHIN 300MM OF ANY COMBUSTIBLE MATERIAL BY BUILDER.
5: ALL FAN UNITS TO BE WIRED TO COMPLY WITH AS3000:2018. OVERLOAD PROTECTION WITH PHASE FAIL, ALSO TO BE WIRED IN COMPLIANCE WITH AS1668.2:2012 BCA AND SECTION J PER CODES.
6: SERVICES TO BE RELOCATED BY OTHERS TO SUIT NEW MECHANICAL DESIGN WHERE REQUIRED (BUILDING WORKS).
7: COOKING EQUIPMENT SHOWN ON DRAWING ARE FOR VISUAL PURPOSE ONLY. PLEASE REFER TO COOKING SPEC SHEET FOR DATA AND SIZES
8: ALL DRAWINGS BELONG TO CAVALIER VENTILATION P/L AND CANNOT BE REPRODUCED PARTLY OR WHOLE WITHOUT THE APPROVAL FROM CAVALIER VENTILATION P/L.
9: WHERE THE DIAMETER OF THE FLEXIBLE DUCT EXCEEDS THE DEPTH OF THE RIDGE DUCT IT ORIGINATES FROM, AN OVAL DUCT HAVING A SIMILAR CIRCUMFERENCE TO THE FLEXIBLE DUCT MAY BE USED
10: LOCATION OF GRILLES AND DIFFUSERS LOCATED IN CEILING AND DUCTWORK ARE APPROXIMATE AND FINAL POSITION TO BE CONFIRMED ONSITE
11: ALL DOORS TO MECHANICALLY VENTILATED AMENITIES AREAS SHALL BE 25mm UNDERCUT OR GRILLE INSTALLED INTO DOOR BY BUILDER (UNLESS NOTED OTHERWISE)
12: ACCESS PANELS LOCATED IN PASTEBOARD CEILING SHALL BE POSITION TO SUIT MECHANICAL SYSTEM EQUIPMENT/S AND SHALL BE SUPPLIED AND INSTALLED BY BUILDER
13: A SUITABLE SIZE CONDENSATE DRAIN SHALL BE RUN FROM EACH AC UNIT TO A TUNDISH OR FLOOR WASTE BY BUILDER
14: FAN COIL UNITS (FCU'S) SHALL BE MOUNTED ON SPRINGS
15: ALL PENETRATIONS THROUGH FIRE RATED WALLS AND CONCRETE SLAB BY BUILDER
16: NO RCD'S TO BE INSTALLED ONTO MECHANICAL SYSTEM/S THAT HAVE A VARIABLE SPEED DRIVE INSTALLED.

KITCHEN HOODS REQUIREMENTS

1: THE PURCHASER IS RESPONSIBLE FOR PROVIDING CAVALIER, ACCURATE INFORMATION FROM COOKING EQUIPMENT SUPPLIER/S FOR CONSIDERATION IN HOOD DESIGN.
2: THE KITCHEN EXHAUST SYSTEM MUST ACHIEVE THE AIRFLOW AS SPECIFIED IN THIS DOCUMENT, MEASURED AT THE RANGEHOOD FILTERS IN THE CAVALIER KITCHEN EXHAUST HOOD/S.
3: THE SPECIFIED EXHAUST STATIC PRESSURE AT THE HOOD'S COLLAR IS NOT THE TOTAL SYSTEM PRESSURE AND DOES NOT INCLUDE THE PRESSURE DROP OF DUCTS INCLUDING TRANSITIONS AND BENDS, INDUCT FILTRATION OR TREATMENT SYSTEMS, ATTENUATORS, DISCHARGE REGISTERS OR ANY OTHERS ITEMS IN THE EXHAUST SYSTEMS.
4: IF THE MAKE-UP AIR IS HOTTER THAN 27°C OR LESS THEN 18°C , AIR CONDITIONING OR TEMPERING SHOULD BE CONSIDERED TO PROVIDED COMFORT IN THE KITCHEN ENVIRONMENT. IF AMBIENT TEMPERATURES EXCEED 27°C, ALL AIRFLOW RATES MUST BE INCREASED TO COMPENSATE FOR BODY HEAT AND ODOUR (REF AS1668.2) AND REMOVE CONTAMINANTS FROM THE KITCHEN.
5: THE KITCHEN EXHAUST FAN SHOULD HAVE BACKWARDS INCLINED CENTRIFUGAL BLADES TO ALLOW RELEASE OF ANY GREASE DURING OPERATION. THE EXHAUST FAN SHOULD ACHIEVE THE REQUIRED AIRFLOW AT NO MORE THAN 70% OF IT'S DESIGN STATIC CAPACITY.
6: CANOPY LIGHTS ARE WIRED TO A 240V AC 10A 3 PIN PLUG WITH ~1m FLEX FOR CONNECTION BY OTHERS TO THE KITCHEN LIGHTING POWER SUPPLY.
7: THE MAKE-UP AIR AIRFLOW NOMINATED IN THIS DOCUMENT IS THE AMOUNT OF AIR THAT CAN BE PASSED THROUGH THE FRONT PANEL WITHOUT CREATING TURBULENCE. TO BALANCE THE KITCHEN ADDITIONAL MAKE-UP AIR MAY NEED TO BE SUPPLIED THROUGH CEILING OR WALL REGISTERS BY OTHERS. SUCH REGISTERS MUST NOT BE POSITIONED TO CREATE TURBULENCE OR DRAFT IN THE COOKING ZONE.

AS 1668 - TABLE 3.4
MINIMUM SEPARATION DISTANCES BETWEEN DISCHARGES AND INTAKES, BOUNDARY OR NATURAL VENTILATION DEVICE

AIRFLOW RATE WITHIN THE MINIMUM DISTANCE L/S	MINIMUM DISTANCE m
<200	1 (SEE NOTE)
<400	2
<600	3
<800	4
<1000	5
≥1000	6

NOTE: FOR AIRFLOW RATES LESS THAN 200L/S, SEPARATION OF DISCHARGE FROM NATURAL VENTILATION OPENING WITHIN THE SAME SOLE OCCUPANCY UNIT DO NOT APPLY

MANUFACTURING AND ORDERING OF ALL COMPONENTS WILL NOT START UNTIL DRAWINGS HAVE BEEN SIGNED OR WRITTEN APPROVAL HAS BEEN RECEIVED AND DEPOSIT PAID (IF APPLICABLE, AS PER TERMS AND CONDITIONS LISTED ON QUOTATION).

CAVALIER VENTILATION
"COMPLETE - TURN KEY SOLUTIONS"
1300 4 CAVALIER (22825)
www.cavaliervent.com.au
29 Liverpool St, Ingleburn, NSW, 2565

CHIPPERS , MANLY

MANLY WHARF

SIGNATURE AND DATE

SITE CONTACT NAME

PH # 04

DRAWING NOTES

JB

MECH 102

Date 4-04-2025

Drawn by AC

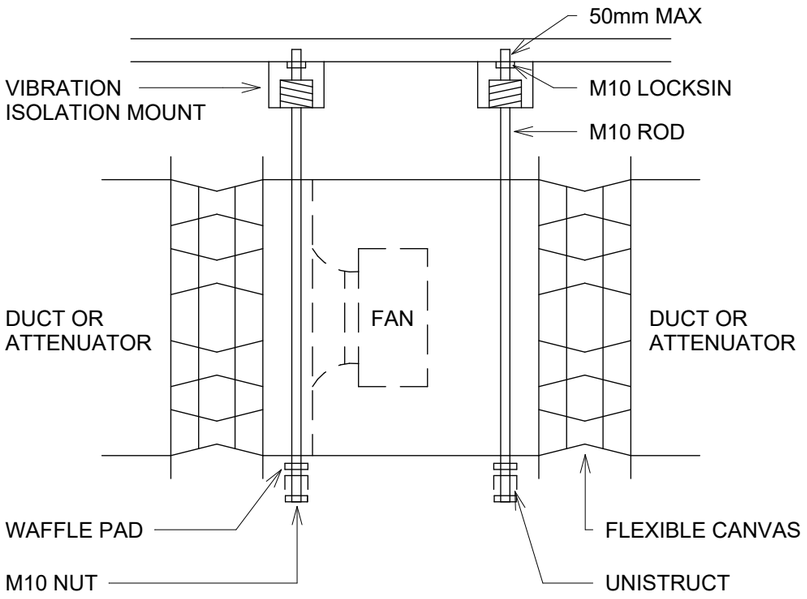
DO NOT SCALE FROM DRAWING

Scale @ A3

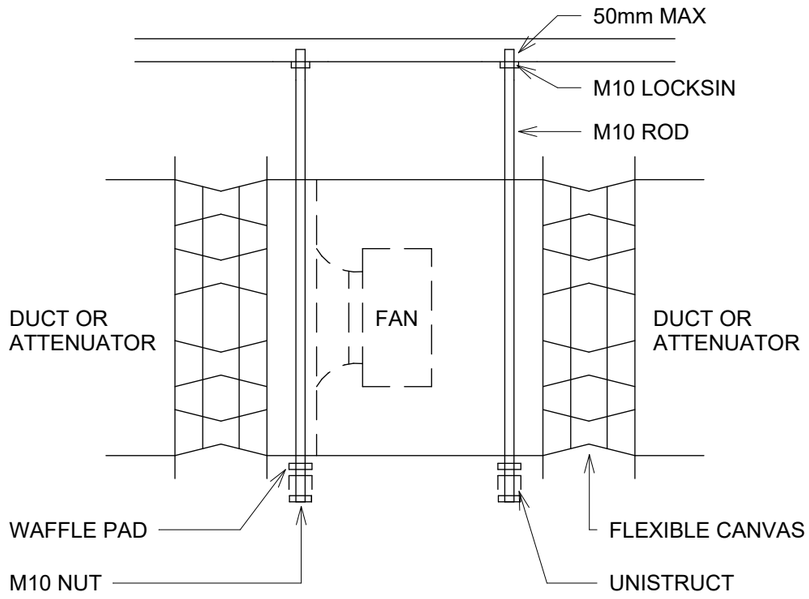
REV 5

4/04/2025 11:09:12 AM

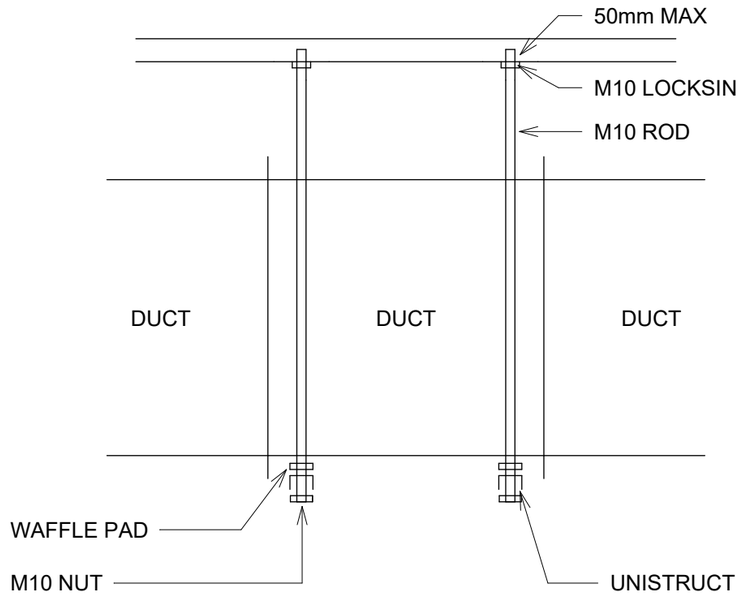
TYP HANGING INLINE FAN MOUNTING SETOUT - RESIDENTIAL ABOVE



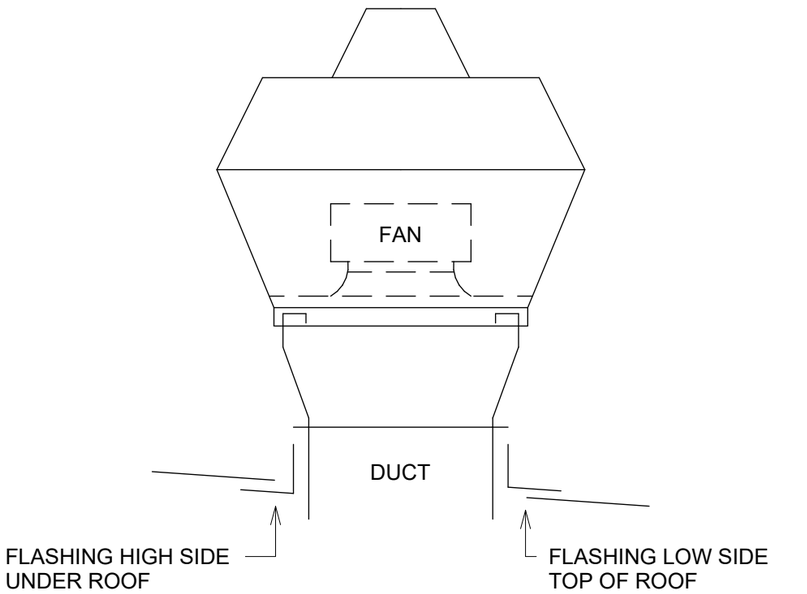
TYP HANGING INLINE FAN MOUNTING SETOUT - NO RESIDENTIAL ABOVE



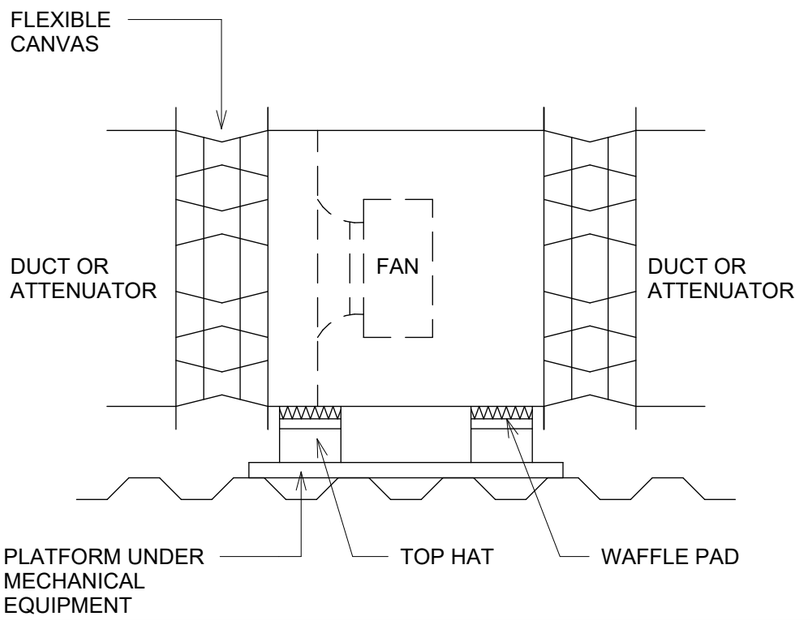
TYP HANGING DUCTWORK MOUNTING SETOUT - UNDER 15KG



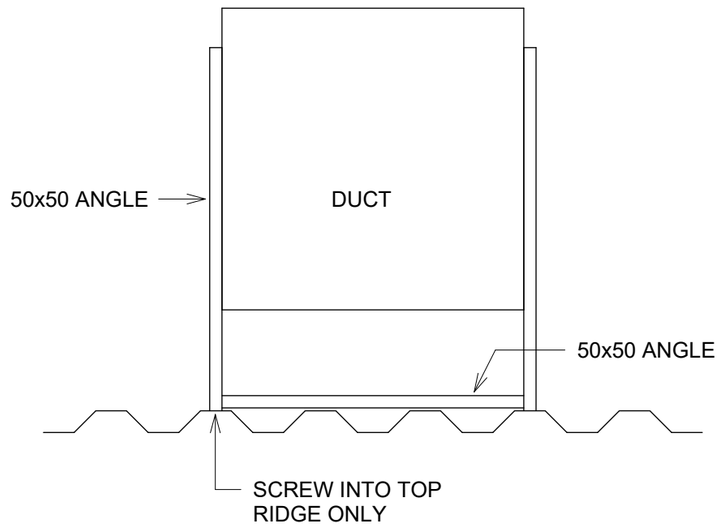
TYP ROOF FLASHING AND FAN SETOUT



TYP INLINE FAN ROOF SETOUT



TYP HORIZONTAL DUCTWORK ROOF STAND



DRAWINGS ARE FOR REFERENCE ONLY AND NOT TO SCALE / RATIO

CAVALIER VENTILATION
"COMPLETE - TURN KEY SOLUTIONS"
1300 4 CAVALIER (22825)
www.cavaliervent.com.au
29 Liverpool St, Ingleburn, NSW, 2565

CHIPPERS , MANLY

MANLY WHARF

SIGNATURE AND DATE

SITE CONTACT NAME

PH # 04

TYPICAL DETAIL DRAWING

JB

MECH 103

Date 4-04-2025

Drawn by AC

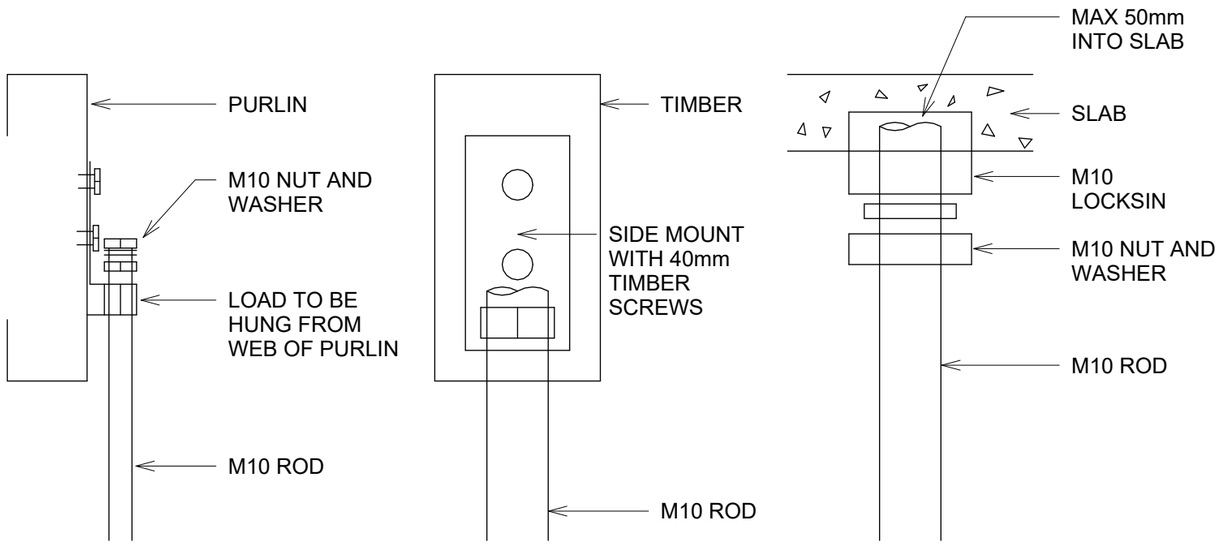
DO NOT SCALE FROM DRAWING

Scale @ A3

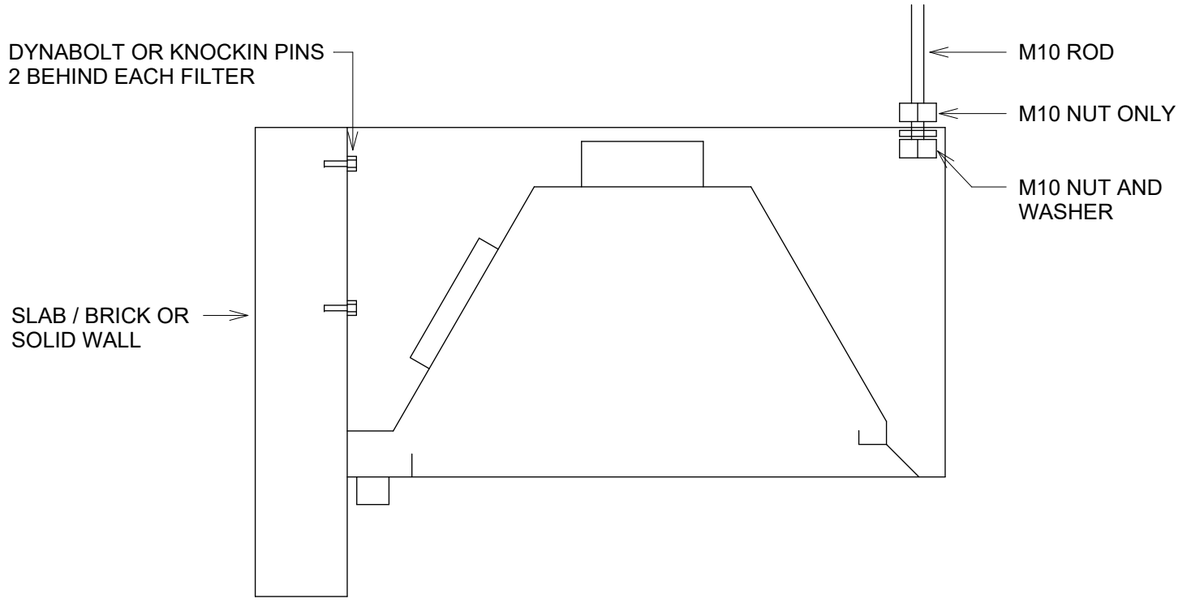
REV 5

4/04/2025 11:09:12 AM

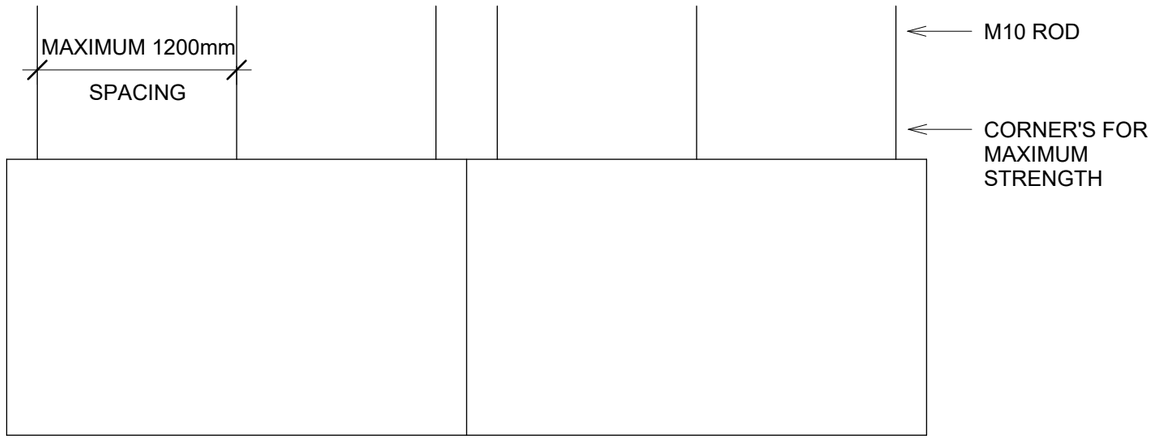
TYP HANGING SUPPORT SETOUT FOR RANGEHOOD



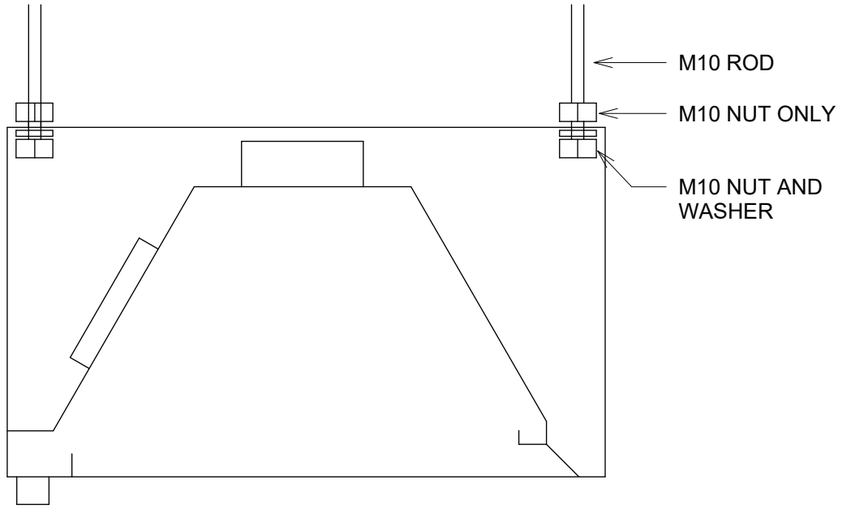
TYP WALL MOUNT RANGEHOOD SETOUT



TYP RANGEHOOD ROD SETOUT



TYP ISLAND MOUNT RANGEHOOD SETOUT



DRAWINGS ARE FOR REFERENCE ONLY AND NOT TO SCALE / RATIO

CAVALIER VENTILATION
"COMPLETE - TURN KEY SOLUTIONS"
1300 4 CAVALIER (22825)
www.cavaliervent.com.au
29 Liverpool St, Ingleburn, NSW, 2565

CHIPPERS , MANLY

MANLY WHARF

SIGNATURE AND DATE

SITE CONTACT NAME

PH # 04

RANGEHOOD DETAIL HANGING SETOUT

JB

MECH 104

Date 4-04-2025

Drawn by AC

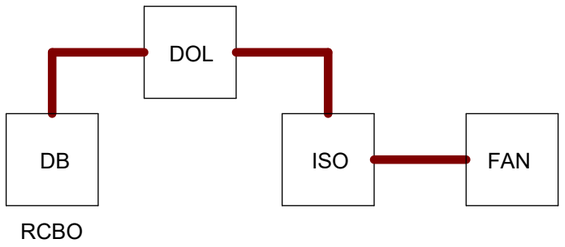
DO NOT SCALE FROM DRAWING

Scale @ A3

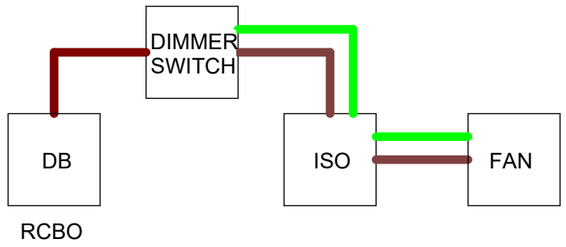
REV 5

4/04/2025 11:09:13 AM

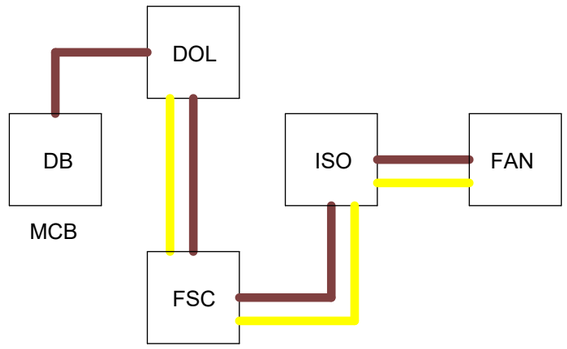
SINGLE PHASE - DOL



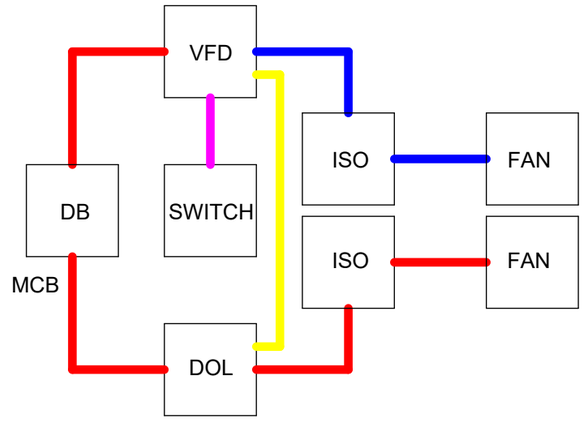
SINGLE PHASE - DIMMER CONTROL VA 2.0 - VA5.0



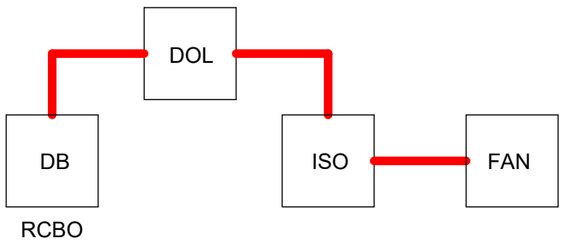
SINGLE PHASE VA 8.0 - VA 10.0



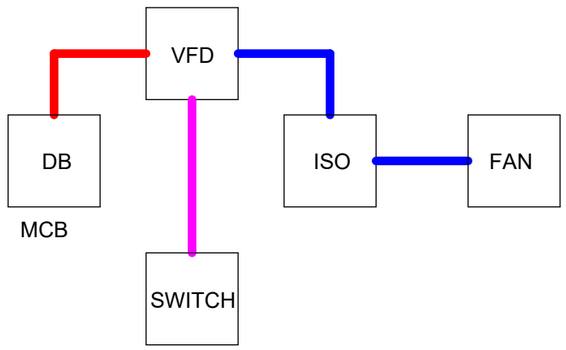
3 PHASE - VFD / DOL - MULTI FANS



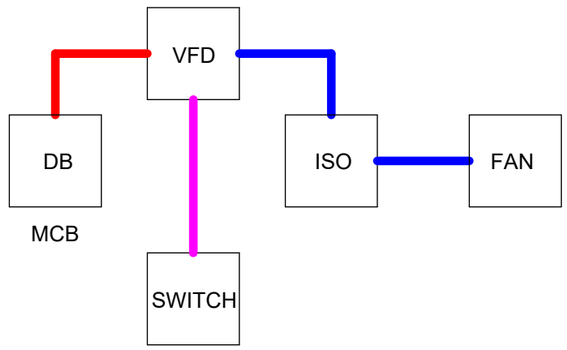
3 PHASE - DOL



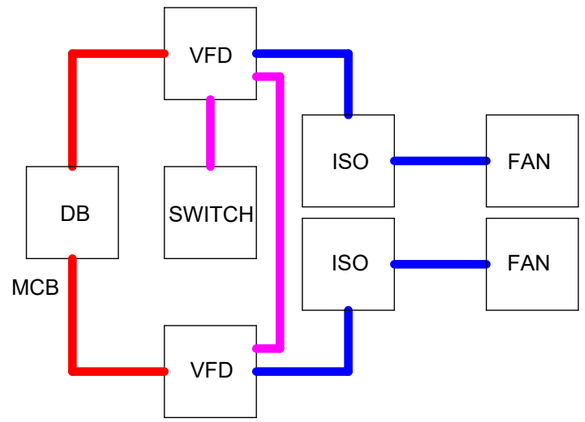
3 PHASE - 2 SPEED VFD



3 PHASE - VFD



3 PHASE - VFD - MULTI FANS



3 CORE + EARTH	- ORANGE CIRCULAR CABLE, 2.5mm	
4 CORE	- SCREEN, 2.5mm	
4 CORE	- SHIELDED CABLE, HI / LOW SPEED	
TWIN + EARTH	- 2.5mm	
TWIN	- 2.5mm	
SINGLE DOUBLE INSULATED	- 2.5mm	

DOL	DIRECT ON LINE
DB	DISTRIBUTION BOARD
ISO	ISOLATION SWITCH
FSC	FAN SPEED CONTROLLER

TYPE C BREAKERS

CAVALIER VENTILATION
"COMPLETE - TURN KEY SOLUTIONS"
1300 4 CAVALIER (22825)
www.cavaliervent.com.au
29 Liverpool St, Ingleburn, NSW, 2565

CHIPPERS , MANLY

MANLY WHARF

SIGNATURE AND DATE

SITE CONTACT NAME

PH # 04

ELECTRICAL WIRING DETAIL

JB

MECH 105

Date 4-04-2025

Drawn by AC

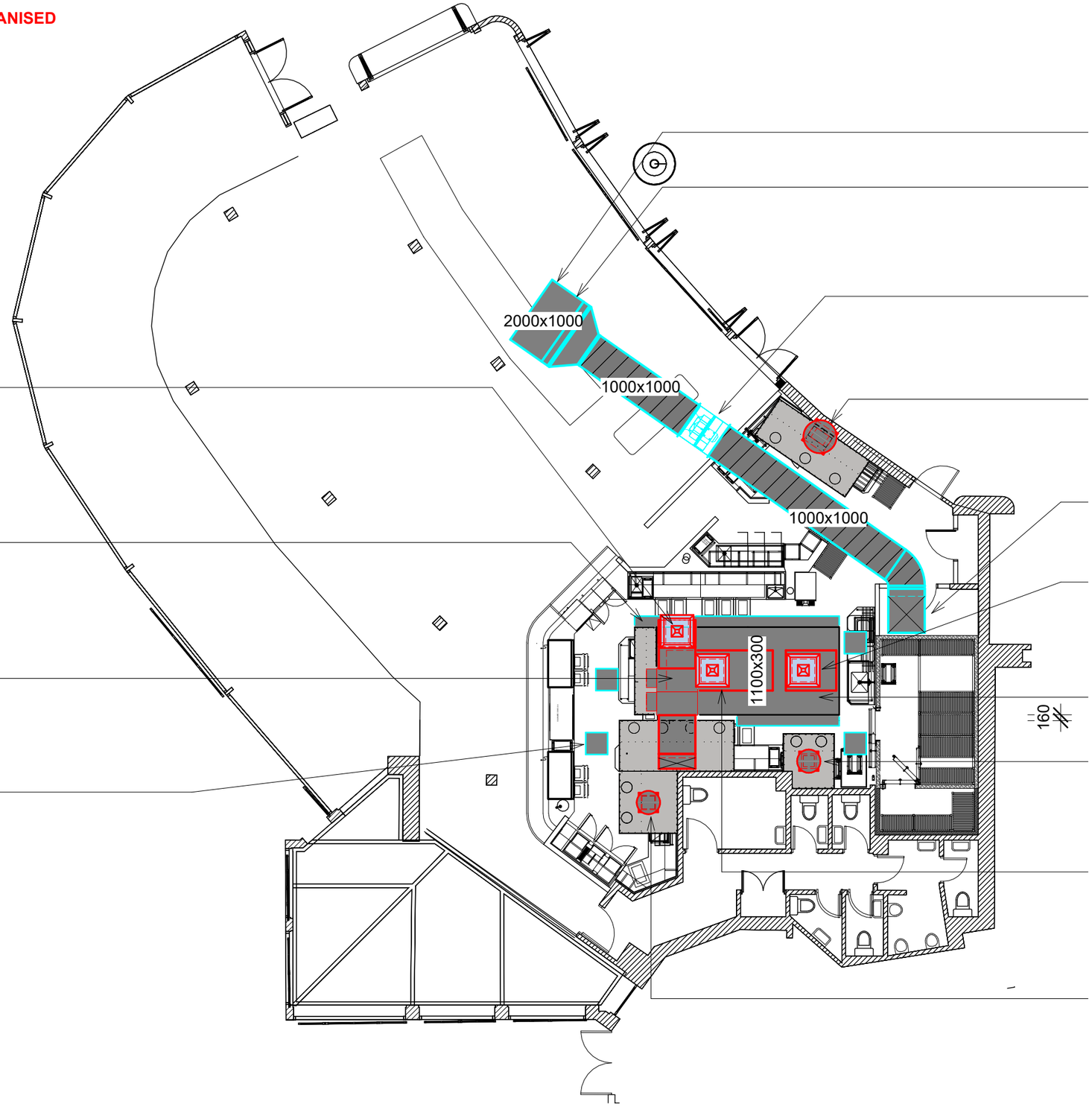
DO NOT SCALE FROM DRAWING

Scale @ A3

REV 5

4/04/2025 11:09:13 AM

ALL DUCTWORK TO BE MADE OUT OF GALVANISED



MUA INTAKE @ 45DEG WITH BIRDMESH

G4 PLEATED DUCT FILTER
2000x1000

MUA-1
SILC-710-4D-7.5KW
- SET ON VSD
6200L/S @ 220PA

KEF-3
HUD504
- SET ON VSD
1600L/S @ 400PA

KEF-5
GUE404V
- DOL
1000L/S @ 100PA

DROPPER INTO CEILING VOID
- FLEXI TO RANGEHOOD / LINEAR BAR AND DIFFUSER GRILLES

LINEAR BAR GRILLE
5600x300 - QTY 1 (2000L/S)
2800x300 - QTY 1 (1000L/S)
COLOUR: TBC

KEF-2
HUD454
- SET ON VSD
- QTY 2
1750L/S @ 150PA

ESP-1
CAVAIR-12T
SINGLE STACK, TWIN PASS
RIGHT TO LEFT

EXISTING RANGEHOOD TO BE SHIFTED UP 160mm

4 WAY DIFFUSERS
600x600
- QTY 4
- 350L/S EACH
COLOUR: TBC

KEF-4
CE404V
- DOL
650L/S @ 100PA

KEF-1
HUD504
- SET ON VSD
- QTY 2
2650L/S @ 150PA

KEF-6
CE404V
- DOL
800L/S @ 100PA

CAVALIER VENTILATION
"COMPLETE - TURN KEY SOLUTIONS"
1300 4 CAVALIER (22825)
www.cavalierventilation.com.au
29 Liverpool St, Ingleburn, NSW, 2565

CHIPPERS , MANLY

MANLY WHARF

SIGNATURE AND DATE

SITE CONTACT NAME

PH # 04

PLAN VIEW

JB

MECH 201

Date 4-04-2025

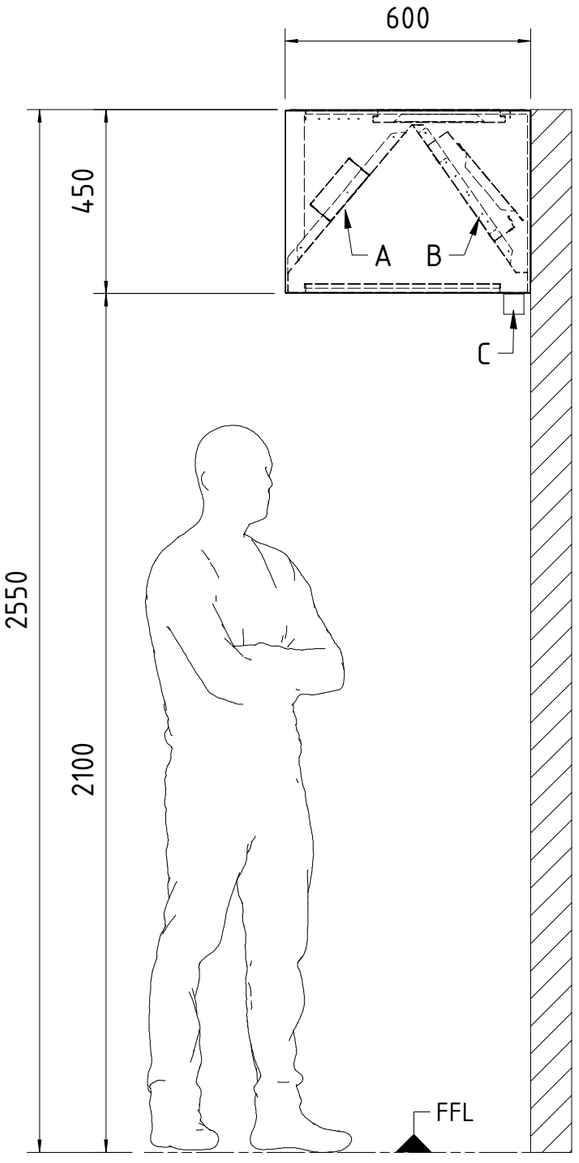
Drawn by AC

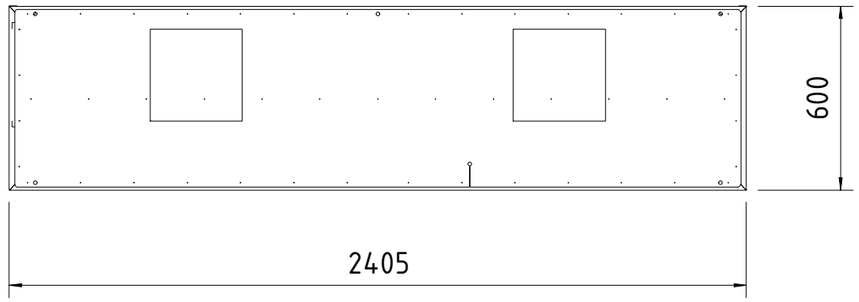
DO NOT SCALE FROM DRAWING

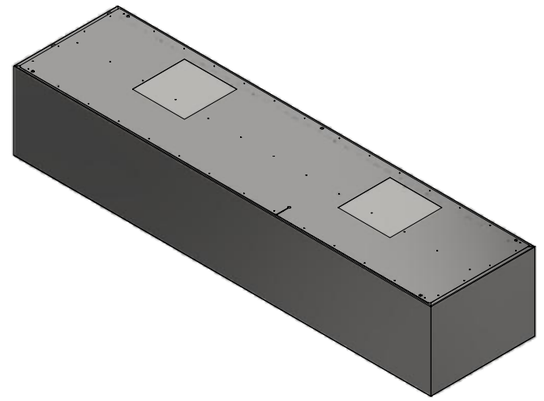
Scale @ A3 1 : 125

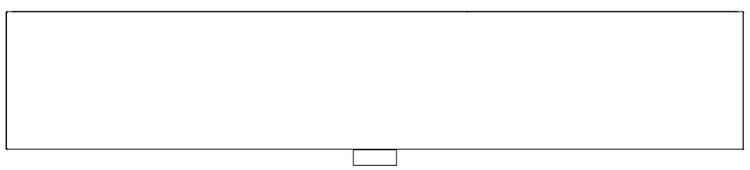
REV 5

4/04/2025 11:09:17 AM









SPIGOTS TO BE COORDINATED ONSITE

INTERNAL SLIDE DAMPER INSTALLED IN HOOD FOR BALANCING

10 AMP MALE PLUG LEAD ON TOP OF RANGEHOOD
CENTER OF EACH SECTION APPROX 300mm LONG LEAD

REMOVAL OF PLASTIC ON RANGEHOOD TO BE DONE BY CLEANER
UPON COMPLETION OF PROJECT

K24 EXT
STD 2405/600/450

EXHAUST 700L/S @ 110PA

CAVALIER RANGEHOOD
- STAINLESS STEEL

A LED DOWNLIGHTS - QTY 2
B STAINLESS STEEL BAFFLE FILTERS - QTY 4 (457x381)
C WASTE DRAIN POT - QTY 1
D BALANCING SLIDE DAMPER

COOKING EQUIPMENT UNDER HOOD

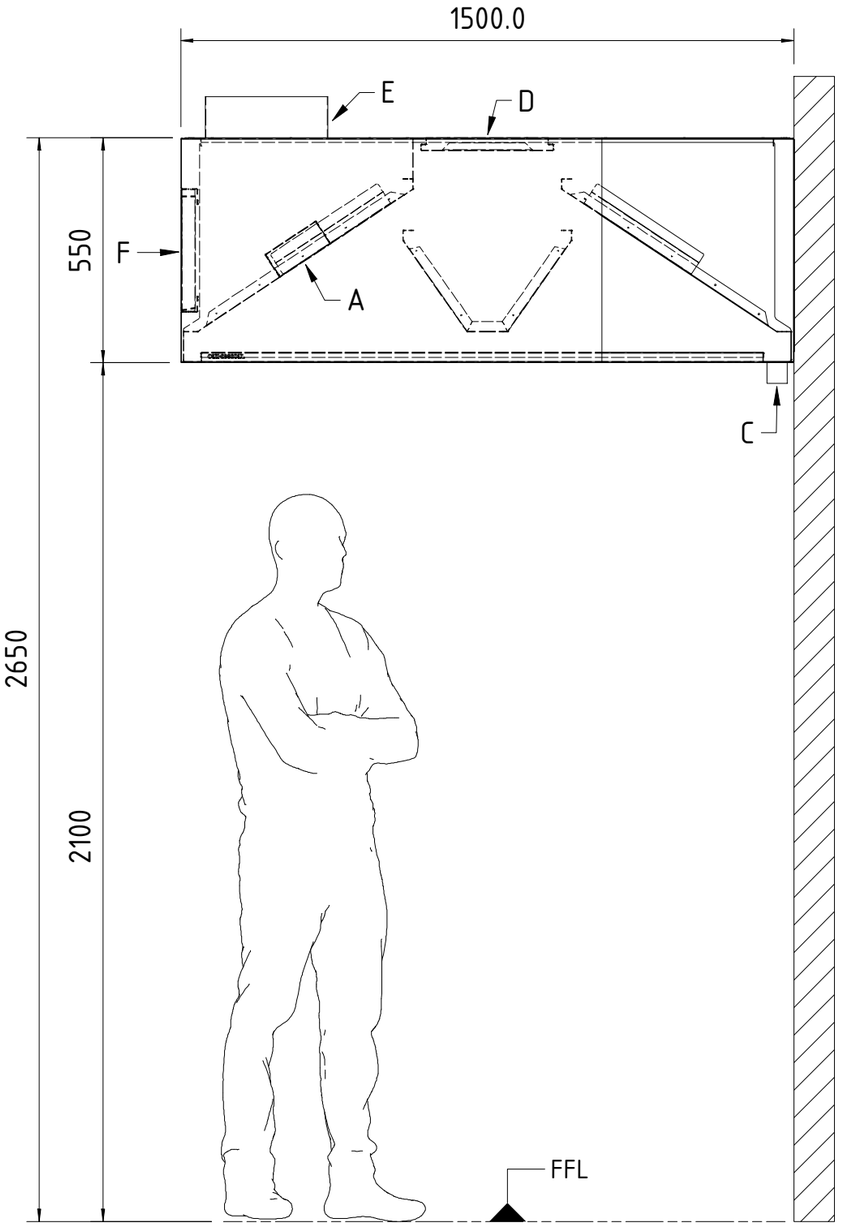
FRYER
SALAMANDER

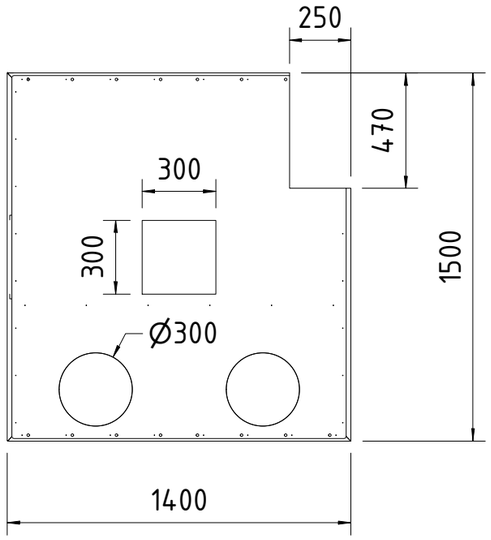
CAVALIER VENTILATION
"COMPLETE - TURN KEY SOLUTIONS"

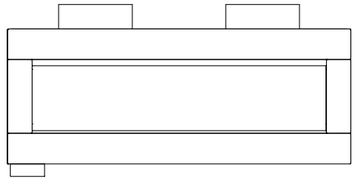
ALL DIMENSIONS IN mm
DO NOT SCALE - IF IN DOUBT ASK

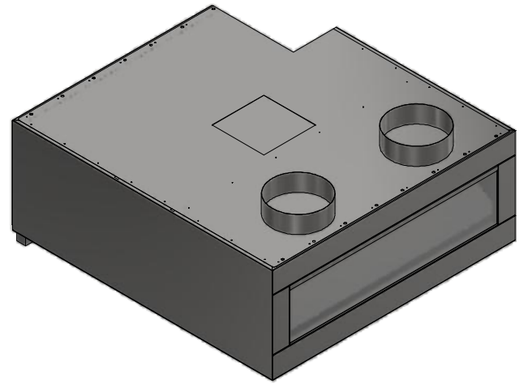
AS1100
3RD ANGLE
PROJECTION

SCALE: 1/20	JOB No.: JB02882-K24 EXT		
DATE: 3/08/2023	CLIENT: CHIPPERS, MANLY		
DRAWN: CONFIG 4.6	DESCRIPTION: EXTRACTION HOOD ASSEMBLY		
REVISION: 1	PART No.: EHA-JB02882-K24 EXT	A3	









SPIGOTS TO BE COORDINATED ONSITE

INTERNAL SLIDE DAMPER INSTALLED IN HOOD FOR BALANCING

10 AMP MALE PLUG LEAD ON TOP OF RANGEHOOD
CENTER OF EACH SECTION APPROX 300mm LONG LEAD

REMOVAL OF PLASTIC ON RANGEHOOD TO BE DONE BY CLEANER
UPON COMPLETION OF PROJECT

K30
WCDS 1400/1500/550

EXHAUST 650L/S @ 60PA

SUPPLY 500L/S @ 60PA

CAVALIER RANGEHOOD
- STAINLESS STEEL

A LED DOWNLIGHTS - QTY 1
C WASTE DRAIN POT - QTY 1
D BALANCING SLIDE DAMPER
E SUPPLY SPIGOT - 300ø
F STAINLESS STEEL PERFORATED MESH

COOKING EQUIPMENT UNDER HOOD

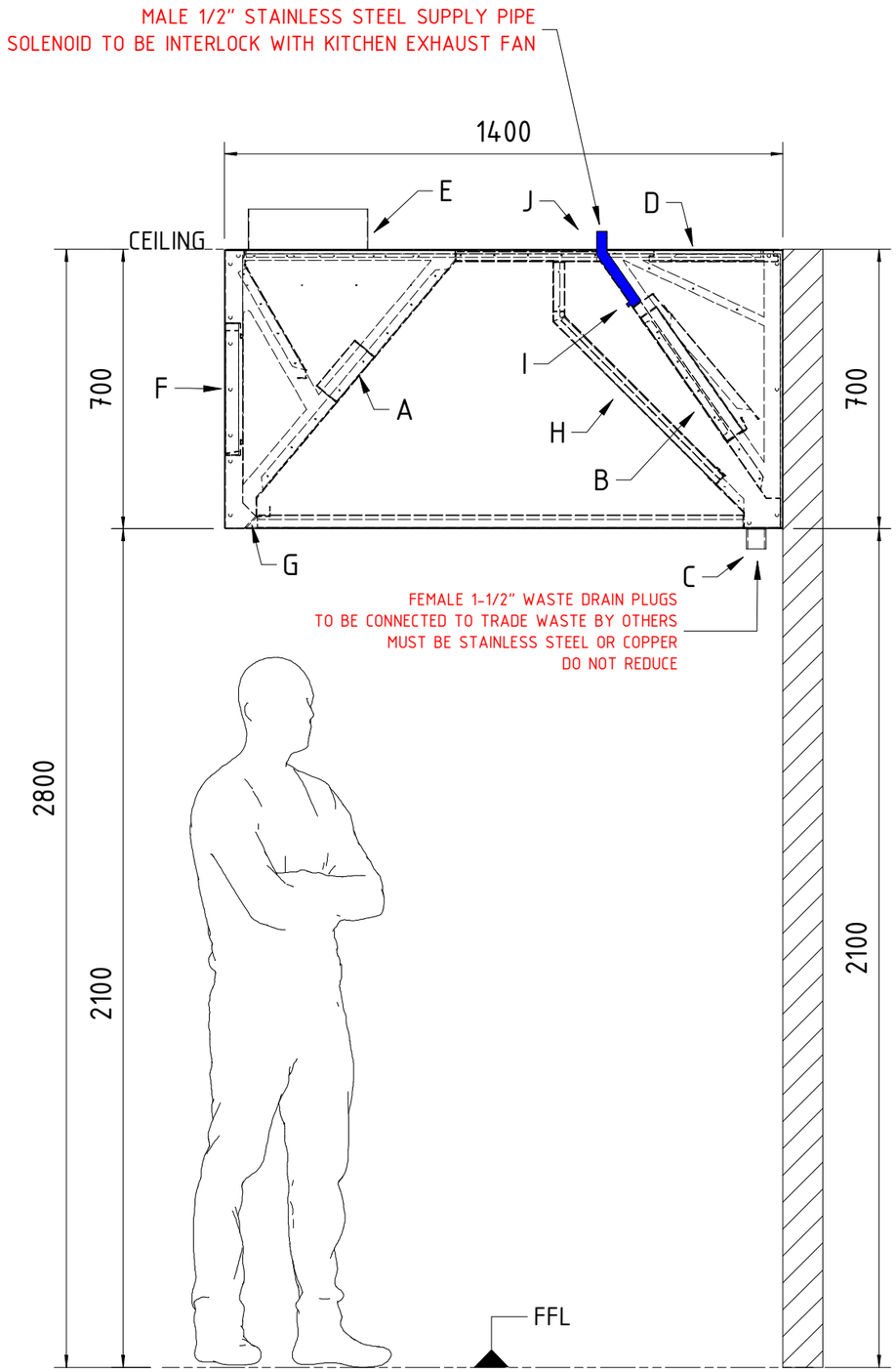
COMBI OVEN

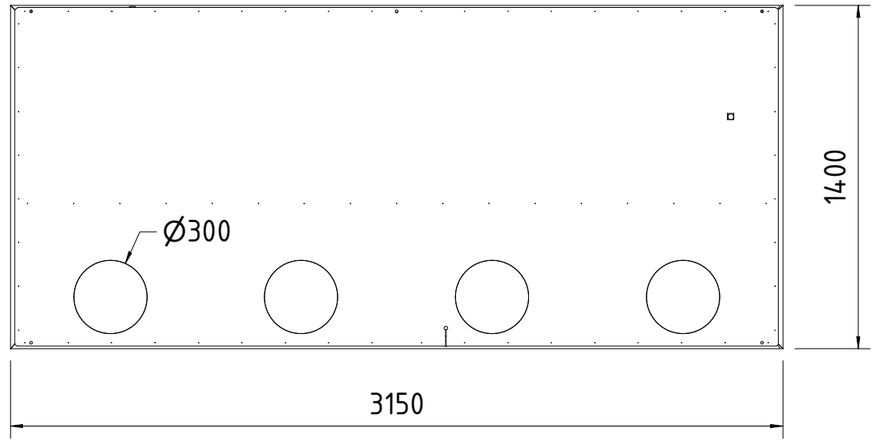
CAVALIER VENTILATION
"COMPLETE - TURN KEY SOLUTIONS"

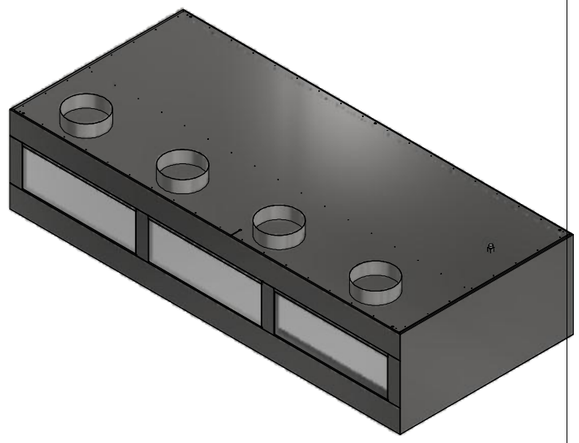
ALL DIMENSIONS IN mm
DO NOT SCALE - IF IN DOUBT ASK

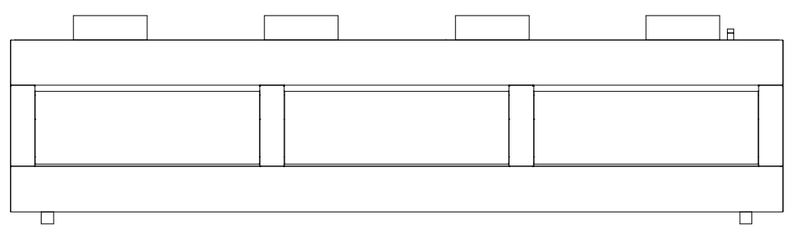
AS1100
3RD ANGLE
PROJECTION

SCALE: 1/25	JOB No.:	JB02882-K30	
DATE: 3/08/2023	CLIENT:	CHIPPERS, MANLY	
DRAWN: CONFIG 4.6	DESCRIPTION:	EXTRACTION HOOD ASSEMBLY	
REVISION: 1	PART No.:	EHA-JB02882-K30	A3









SPIGOTS TO BE COORDINATED ONSITE

INTERNAL SLIDE DAMPER INSTALLED IN HOOD FOR BALANCING

10 AMP MALE PLUG LEAD ON TOP OF RANGEHOOD
CENTER OF EACH SECTION APPROX 300mm LONG LEAD

REMOVAL OF PLASTIC ON RANGEHOOD TO BE DONE BY CLEANER
UPON COMPLETION OF PROJECT

K35
HE 3150/1400/700

EXHAUST 1600L/S @ 150PA

SUPPLY 1000L/S @ 80PA

CAVALIER RANGEHOOD
- STAINLESS STEEL

A LED DOWNLIGHTS - QTY 3
B STAINLESS STEEL BAFFLE FILTERS - QTY 6 (457x381)
C 50mm WASTE DRAIN PLUG - QTY 2
D BALANCING SLIDE DAMPER
E SUPPLY SPIGOT - 300ø
F STAINLESS STEEL PERFORATED MESH
G AIR INJECTION SLOTS
H MISTING FLAME GUARD
I MISTING SPRAY NIPPLES
J MISTING SUPPLY PIPE WITH SOLENOID

COOKING EQUIPMENT UNDER HOOD

JOSPER GRILL
CHARCOAL GRILL

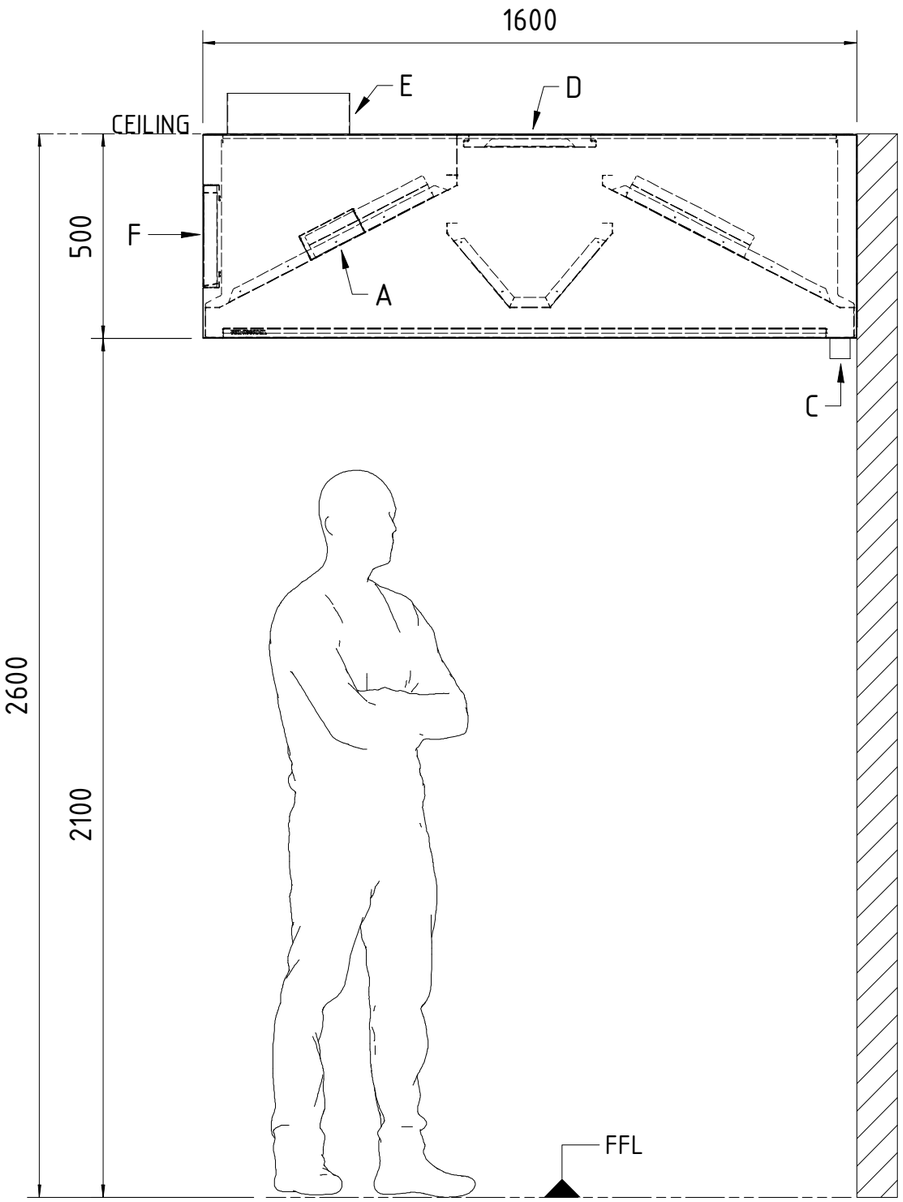
CAVALIER VENTILATION
"COMPLETE - TURN KEY SOLUTIONS"

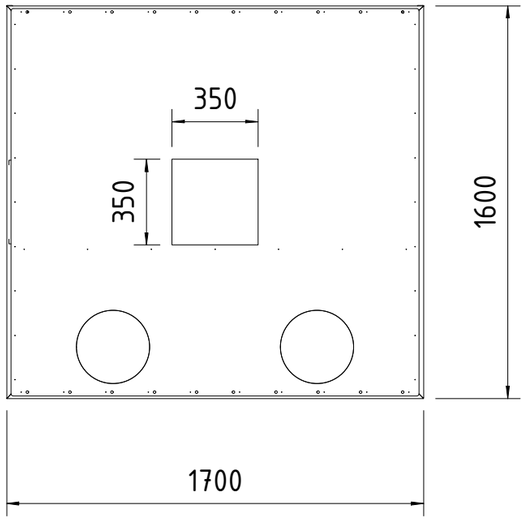
ALL DIMENSIONS IN mm
DO NOT SCALE - IF IN DOUBT ASK

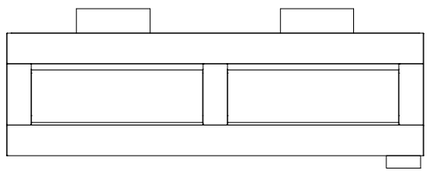
AS1100
3RD ANGLE
PROJECTION

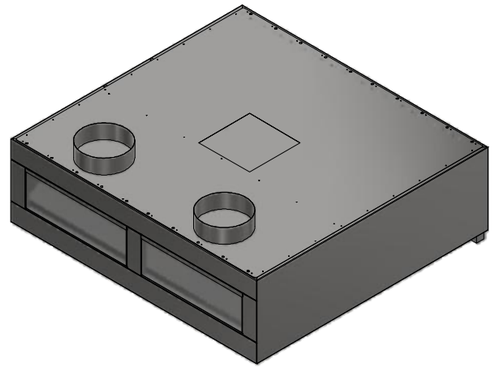
SCALE:	1/25
DATE:	3/08/2023
DRAWN:	CONFIG 4.6
REVISION:	1
JOB No.:	JB02882-K35
CLIENT:	CHIPPERS, MANLY
DESCRIPTION:	EXTRACTION HOOD ASSEMBLY
PART No.:	EHA-JB02882-K35

A3









SPIGOTS TO BE COORDINATED ONSITE

INTERNAL SLIDE DAMPER INSTALLED IN HOOD FOR BALANCING

10 AMP MALE PLUG LEAD ON TOP OF RANGEHOOD
CENTER OF EACH SECTION APPROX 300mm LONG LEAD

REMOVAL OF PLASTIC ON RANGEHOOD TO BE DONE BY CLEANER
UPON COMPLETION OF PROJECT

K55
WCDS 1700/1600/500

EXHAUST 800L/S @ 60PA

SUPPLY 600L/S @ 60PA

CAVALIER RANGEHOOD
- STAINLESS STEEL

A LED DOWNLIGHTS - QTY 2
C WASTE DRAIN POT - QTY 1
D BALANCING SLIDE DAMPER
E SUPPLY SPIGOT - 300ø
F STAINLESS STEEL PERFORATED MESH

COOKING EQUIPMENT UNDER HOOD

TRIPLE DECK PIZZA OVEN

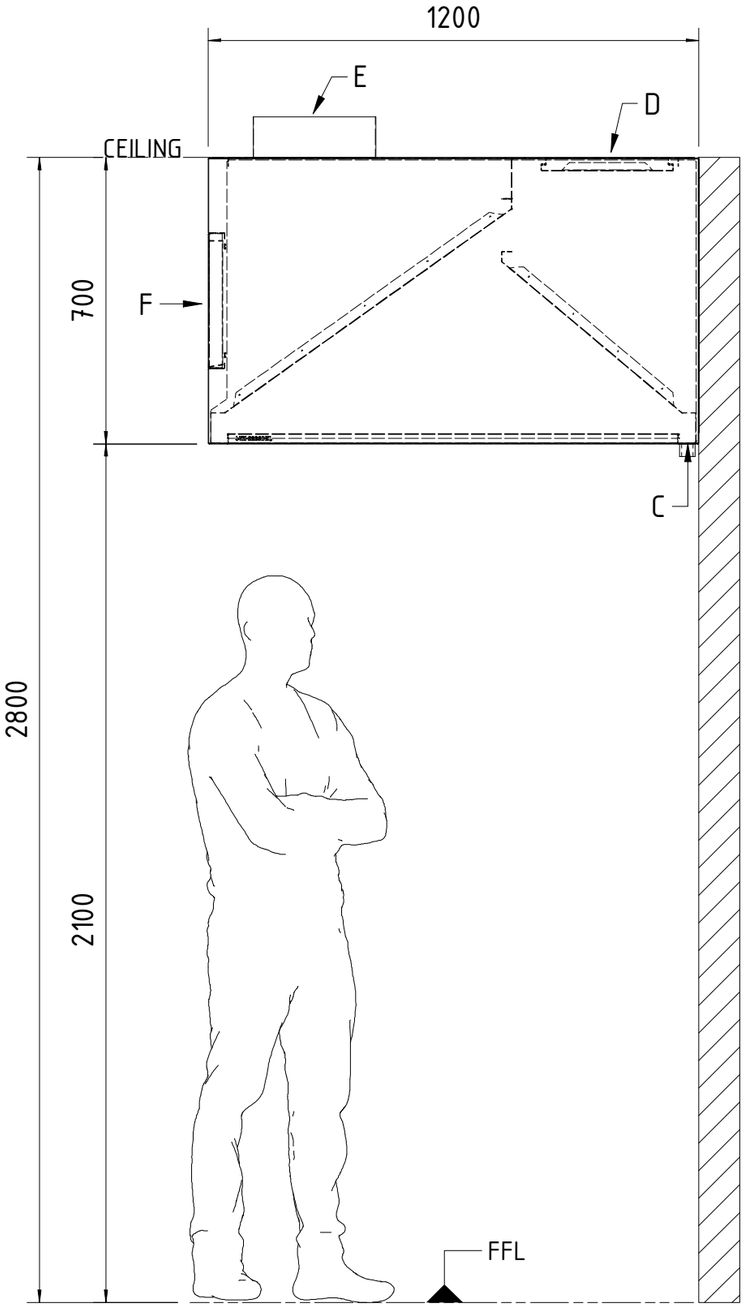
CAVALIER VENTILATION
"COMPLETE - TURN KEY SOLUTIONS"

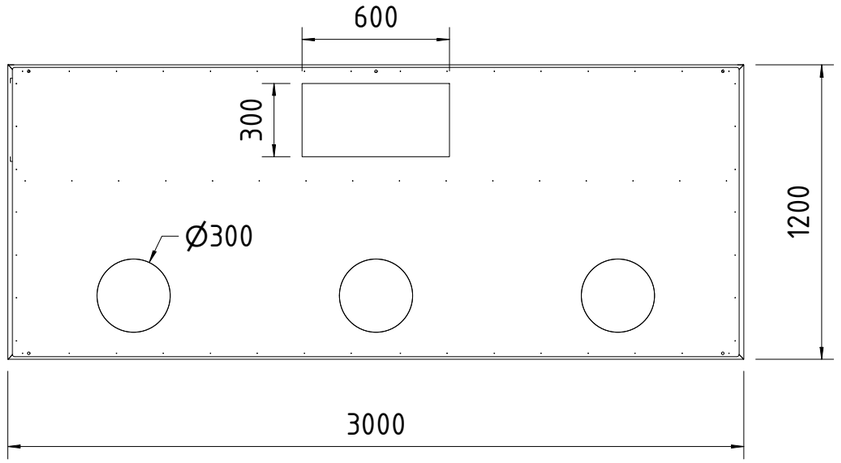
ALL DIMENSIONS IN mm
DO NOT SCALE - IF IN DOUBT ASK

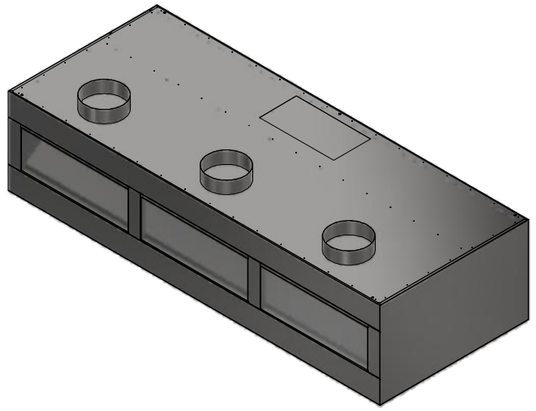
AS1100
3RD ANGLE
PROJECTION

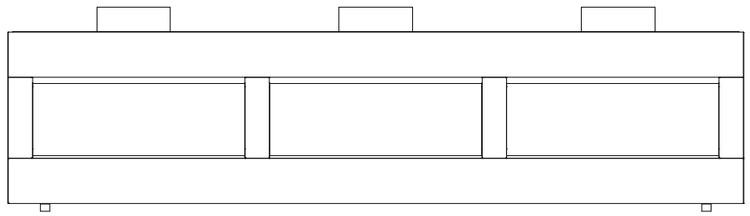
SCALE:	1/25
DATE:	3/08/2023
DRAWN:	CONFIG 4.6
REVISION:	1
JOB No.:	JB02882-K55
CLIENT:	CHIPPERS, MANLY
DESCRIPTION:	EXTRACTION HOOD ASSEMBLY
PART No.:	EHA-JB02882-K55

A3









SPIGOTS TO BE COORDINATED ONSITE

INTERNAL SLIDE DAMPER INSTALLED IN HOOD FOR BALANCING

10 AMP MALE PLUG LEAD ON TOP OF RANGEHOOD
CENTER OF EACH SECTION APPROX 300mm LONG LEAD

REMOVAL OF PLASTIC ON RANGEHOOD TO BE DONE BY CLEANER
UPON COMPLETION OF PROJECT

K74
CDS 3000/1200/700

EXHAUST 1000L/S @ 60PA

SUPPLY 800L/S @ 60PA

CAVALIER RANGEHOOD
- STAINLESS STEEL

C 38mm WASTE DRAIN PLUG - QTY 2
D BALANCING SLIDE DAMPER
E SUPPLY SPIGOT 300ø

COOKING EQUIPMENT UNDER HOOD

CONVEYOR DISHWASHER

CAVALIER VENTILATION
"COMPLETE - TURN KEY SOLUTIONS"

ALL DIMENSIONS IN mm
DO NOT SCALE - IF IN DOUBT ASK

AS1100
3RD ANGLE
PROJECTION

SCALE:	1/25
DATE:	3/08/2023
DRAWN:	CONFIG 4.6
REVISION:	1
JOB No.:	JB02882-K74
CLIENT:	CHIPPERS, MANLY
DESCRIPTION:	EXTRACTION HOOD ASSEMBLY
PART No.:	EHA-JB02882-K74

A3

Represented by:
Fantech Pty. Ltd.
A.B.N. 11 005 434 024
8 Healey Circuit
Huntingwood NSW 2148
Telephone: +61 (02) 8811 0400
Facsimile: +61 (02) 9831 3676
E-mail: ftnsw@fantech.com.au

Technical Data - Fan Model HUD504

Location:

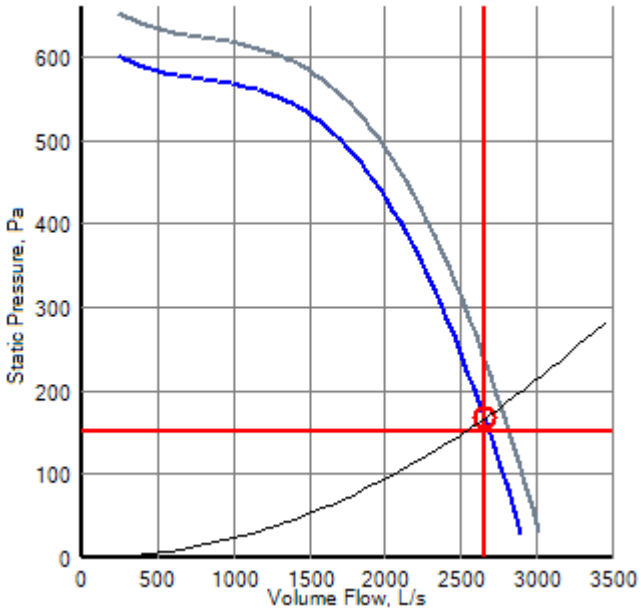
Designation: KEF-1

Performance - Required

Air Flow :	2650 L/s
Static Pressure :	150 Pa
Selection Pressure:	167 Pa
Installation Type:	n/a
Air Density:	1.204 kg/m³
- Atmos. Temp:	20 °C
- Altitude:	0 m
- Humidity:	0.0 %

Actual

Air Flow:	2653 L/s
Static Pressure:	167 Pa
Total Pressure:	204 Pa

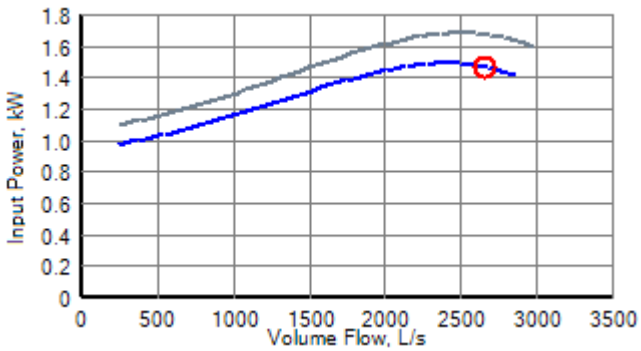


Fan Data

Catalogue Code:	HUD504		
Description:	Heritage Ultra Series		
Diameter:	500 mm		
Impeller Type:	Mixed Flow		
Blade Material:	-		
Speed:	23 r/s @48 Hz		
Power, Abs:	1.23 kW		
Input Power:	1.47 kW	Peak:	1.25 kW
Efficiency Total:	43.9%		
Fan Weight:	56.0 kg	Static:	36.0%
		BAL:	29

Motor Data (at STP)

Motor Type:	
Electrical Supply:	415V 3ph 50Hz
Motor Frame:	D90L
Motor Power:	1.50kW
FLC/Start:	3.36A / 23.86A
Motor Speed:	4 pole
Motor Efficiency:	83.5%



Energy Efficiency, NCC/BCA Vol. 1, Section J compliant

+ 2010 - 2012, 2013 - 2016, 2019 - 2022

Energy Efficiency, H1/VM3 2021 compliant

+ H1/VM3 2021

Sound Data

Spectrum (Hz):	63	125	250	500	1K	2K	4K	8K	dBW	dB(A) @ 3m
Inlet (dB):	81	84	79	78	72	69	64	67	87	59
Outlet (dB):	81	91	85	83	79	74	70	67	93	64

Sound levels are quoted as free-field values. dB(A) values are average spherical free-field for comparative use only. Sound levels for fans running at non-standard speeds are estimated.

Energy Sustainability Data

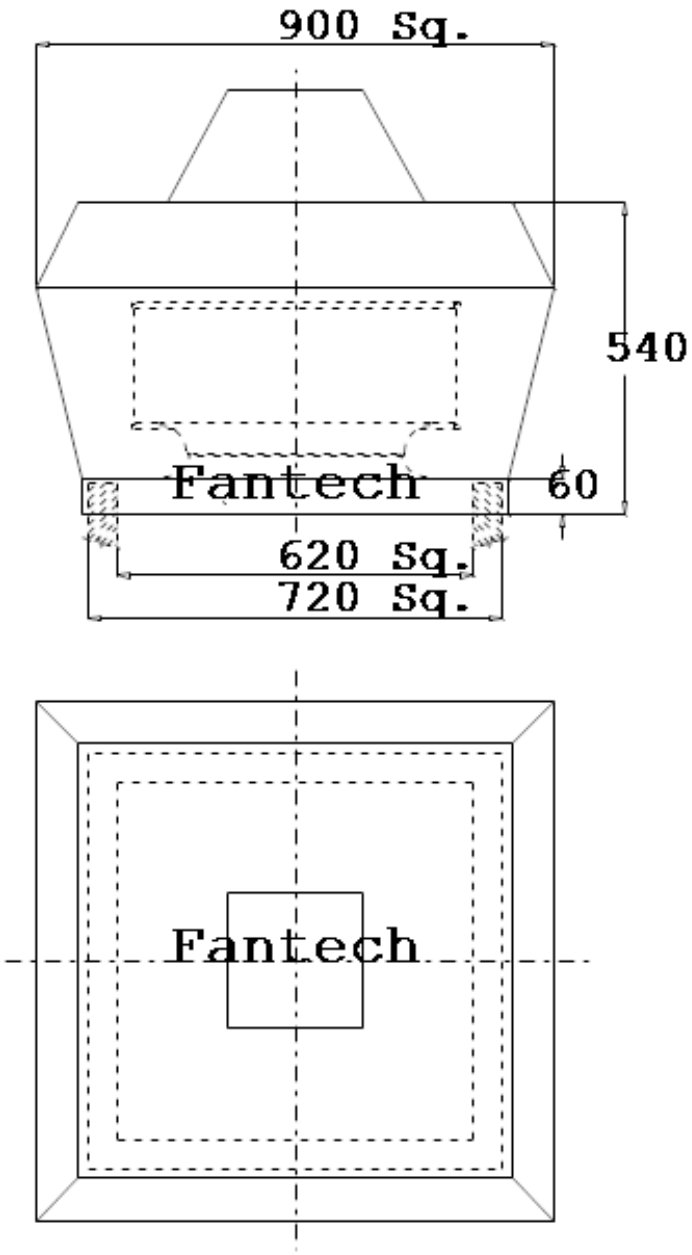
Hours Per Day:	10	Annual Electricity Cost ($):	705.3
DaysPerYear:	300	Annual GH Gas (Tonnes):	6.5
CO2 per kWh (kg):	1.467	Annual Carbon Usage (Tonnes):	1.8
Cost per kWh ($):	0.16		

Represented by:
Fantech Pty. Ltd.
A.B.N. 11 005 434 024
8 Healey Circuit
Huntingwood NSW 2148
Telephone: +61 (02) 8811 0400
Facsimile: +61 (02) 9831 3676
E-mail: ftnsw@fantech.com.au

Drawing for Fan Model HUD504

Location:

Designation: KEF-1



Represented by:
Fantech Pty. Ltd.
A.B.N. 11 005 434 024
8 Healey Circuit
Huntingwood NSW 2148
Telephone: +61 (02) 8811 0400
Facsimile: +61 (02) 9831 3676
E-mail: ftnsw@fantech.com.au

Technical Data - Fan Model HUD454

Location:

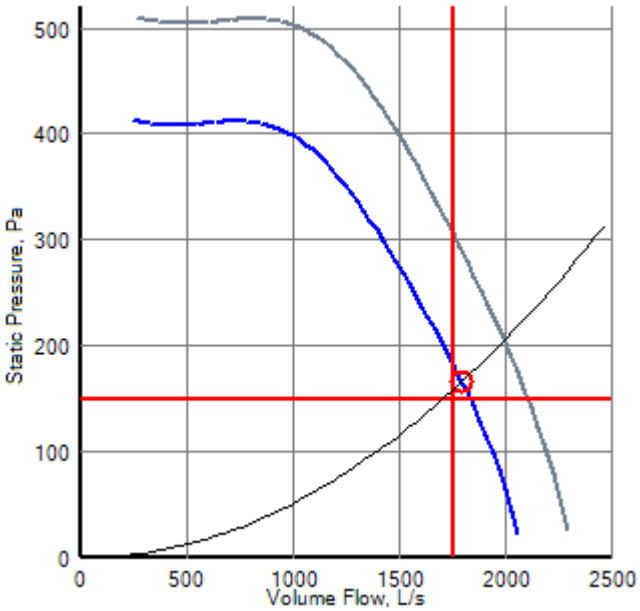
Designation: KEF-2

Performance - Required

Air Flow :	1750 L/s
Static Pressure :	150 Pa
Selection Pressure:	158 Pa
Installation Type:	n/a
Air Density:	1.204 kg/m³
- Atmos. Temp:	20 °C
- Altitude:	0 m
- Humidity:	0.0 %

Actual

Air Flow:	1793 L/s
Static Pressure:	166 Pa
Total Pressure:	182 Pa

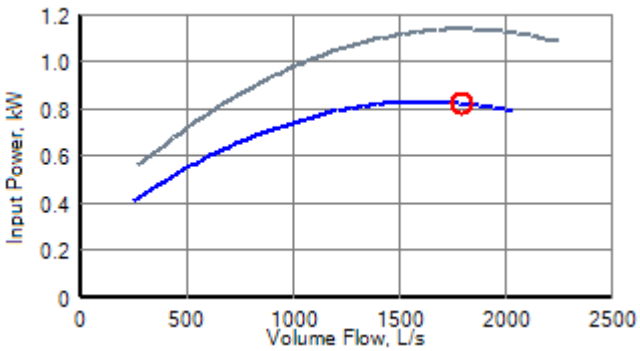


Fan Data

Catalogue Code:	HUD454		
Description:	Heritage Ultra Series		
Diameter:	450 mm		
Impeller Type:	Mixed Flow		
Blade Material:	-		
Speed:	22 r/s @45 Hz		
Power, Abs:	0.67 kW		
Input Power:	0.82 kW	Peak:	0.67 kW
Efficiency Total:	49.0%		
Fan Weight:	54.0 kg	Static:	44.8%
		BAL:	29

Motor Data (at STP)

Motor Type:	
Electrical Supply:	415V 3ph 50Hz
Motor Frame:	D90S
Motor Power:	1.10kW
FLC/Start:	2.60A / 17.16A
Motor Speed:	4 pole
Motor Efficiency:	83.0%



Energy Efficiency, NCC/BCA Vol. 1, Section J compliant

+ 2010 - 2012, 2013 - 2016, 2015 - 2016 Carpark
+ 2019 - 2022

Energy Efficiency, H1/VM3 2021 compliant

+ H1/VM3 2021

Sound Data

Spectrum (Hz):	63	125	250	500	1K	2K	4K	8K	dBW	dB(A) @ 3m
Inlet (dB):	69	79	76	72	67	65	60	59	82	54
Outlet (dB):	76	81	77	77	75	72	67	59	85	59

Sound levels are quoted as free-field values. dB(A) values are average spherical free-field for comparative use only. Sound levels for fans running at non-standard speeds are estimated.

Energy Sustainability Data

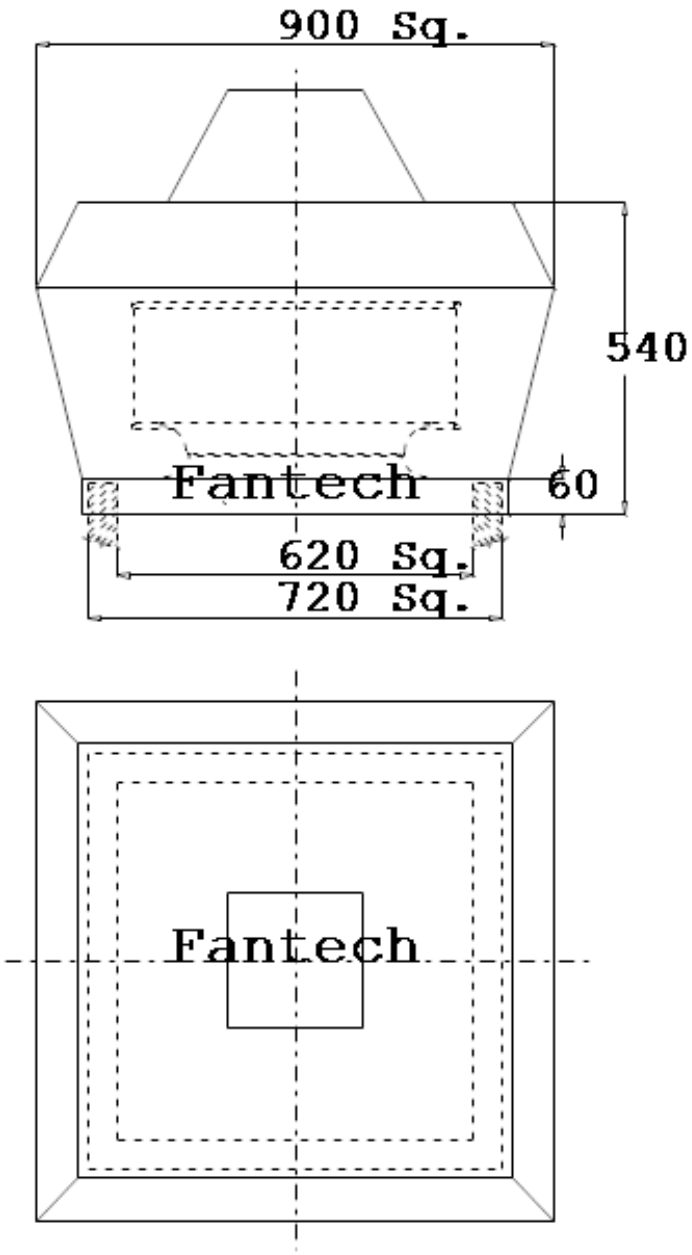
Hours Per Day:	10	Annual Electricity Cost ($):	394.9
DaysPerYear:	300	Annual GH Gas (Tonnes):	3.6
CO2 per kWh (kg):	1.467	Annual Carbon Usage (Tonnes):	1.0
Cost per kWh ($):	0.16		

Represented by:
Fantech Pty. Ltd.
A.B.N. 11 005 434 024
8 Healey Circuit
Huntingwood NSW 2148
Telephone: +61 (02) 8811 0400
Facsimile: +61 (02) 9831 3676
E-mail: ftnsw@fantech.com.au

Drawing for Fan Model HUD454

Location:

Designation: KEF-2



Represented by:
Fantech Pty. Ltd.
A.B.N. 11 005 434 024
8 Healey Circuit
Huntingwood NSW 2148
Telephone: +61 (02) 8811 0400
Facsimile: +61 (02) 9831 3676
E-mail: ftnsw@fantech.com.au

Technical Data - Fan Model HUD504

Location:

Designation: KEF-3

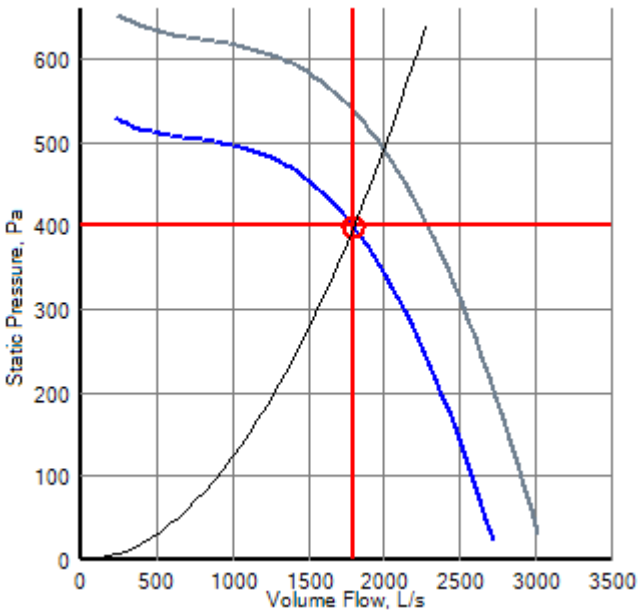
Warning: Duty point is greater than fan performance.

Performance - Required

Air Flow :	1800 L/s
Static Pressure :	400 Pa
Selection Pressure:	400 Pa
Installation Type:	n/a
Air Density:	1.204 kg/m³
- Atmos. Temp:	20 °C
- Altitude:	0 m
- Humidity:	0.0 %

Actual

Air Flow:	1797 L/s
Static Pressure:	399 Pa
Total Pressure:	415 Pa

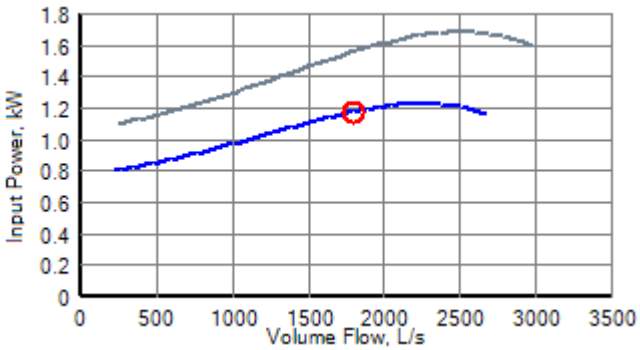


Fan Data

Catalogue Code:	HUD504		
Description:	Heritage Ultra Series		
Diameter:	500 mm		
Impeller Type:	Mixed Flow		
Blade Material:	-		
Speed:	22 r/s @45 Hz		
Power, Abs:	0.98 kW		
Input Power:	1.18 kW	Peak:	1.03 kW
Efficiency Total:	75.8%		
Fan Weight:	56.0 kg	Static:	72.8%

Motor Data (at STP)

Motor Type:	
Electrical Supply:	415V 3ph 50Hz
Motor Frame:	D90L
Motor Power:	1.50kW
FLC/Start:	3.36A / 23.86A
Motor Speed:	4 pole
Motor Efficiency:	83.8%



Energy Efficiency, NCC/BCA Vol. 1, Section J compliant

+ 2019 - 2022

Energy Efficiency, H1/VM3 2021 compliant

+ H1/VM3 2021

Sound Data

Spectrum (Hz):	63	125	250	500	1K	2K	4K	8K	dBW	dB(A) @ 3m
Inlet (dB):	79	82	77	76	70	67	62	65	85	57
Outlet (dB):	79	89	83	81	77	72	68	65	91	62

Sound levels are quoted as free-field values. dB(A) values are average spherical free-field for comparative use only.
Sound levels for fans running at non-standard speeds are estimated.

Energy Sustainability Data

Hours Per Day:	10	Annual Electricity Cost ($):	564.7
DaysPerYear:	300	Annual GH Gas (Tonnes):	5.2
CO2 per kWh (kg):	1.467	Annual Carbon Usage (Tonnes):	1.4
Cost per kWh ($):	0.16		

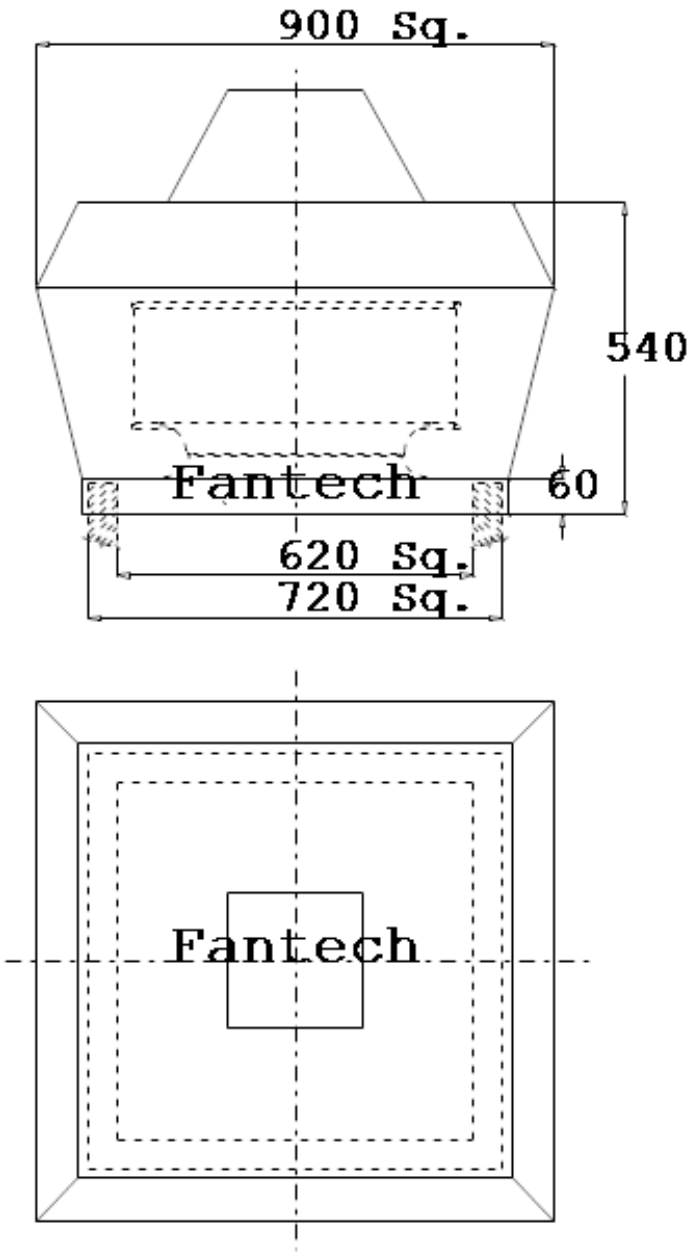
Printed 26/03/2025 12:14:55 PM

Represented by:
Fantech Pty. Ltd.
A.B.N. 11 005 434 024
8 Healey Circuit
Huntingwood NSW 2148
Telephone: +61 (02) 8811 0400
Facsimile: +61 (02) 9831 3676
E-mail: ftnsw@fantech.com.au

Drawing for Fan Model HUD504

Location:

Designation: KEF-3



Represented by:
Fantech Pty. Ltd.
A.B.N. 11 005 434 024
8 Healey Circuit
Huntingwood NSW 2148
Telephone: +61 (02) 8811 0400
Facsimile: +61 (02) 9831 3676
E-mail: ftnsw@fantech.com.au

Technical Data - Fan Model CE404V

Location:

Designation: KEF-4

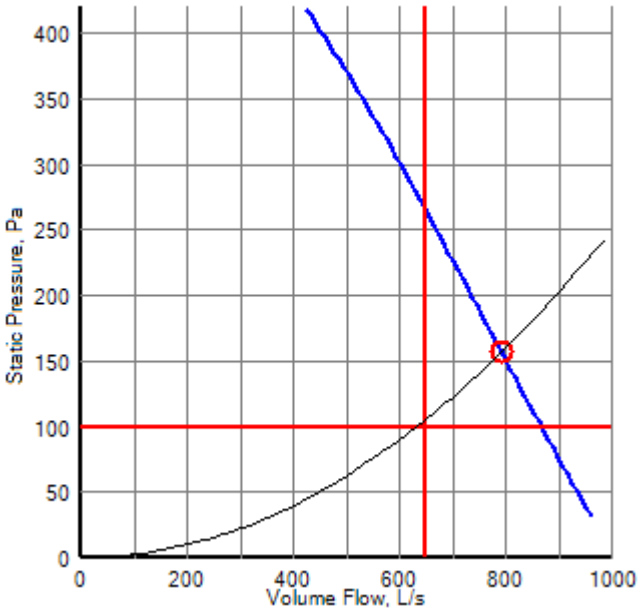
Performance - Required

Air Flow :	650 L/s
Static Pressure :	100 Pa
Selection Pressure:	106 Pa
Installation Type:	n/a
Air Density:	1.204 kg/m³
- Atmos. Temp:	20 °C
- Altitude:	0 m
- Humidity:	0.0 %

Actual

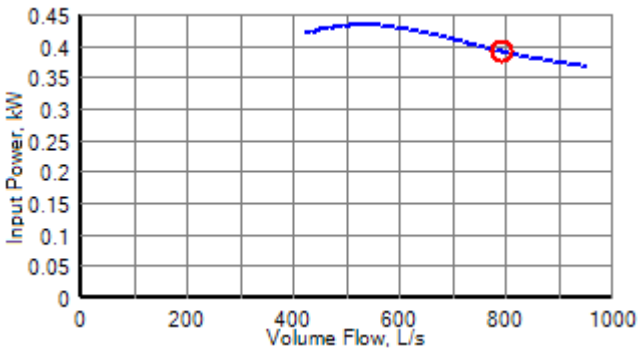
Air Flow:	792 L/s
Static Pressure:	157 Pa
Total Pressure:	184 Pa

22% additional capacity available



Fan Data

Catalogue Code:	CE404V		
Description:	Gamma Vertical Series		
Diameter:	400 mm		
Impeller Type:	Centrifugal		
Blade Material:	-		
Speed:	21 r/s @50 Hz		
Power, Abs:	-		
Input Power:	0.39 kW	Peak:	-
Efficiency Total:	-		
Fan Weight:	18.0 kg	Static:	-
		BAL:	19



Motor Data (at STP)

Motor Type:	
Electrical Supply:	240V 1ph 50Hz
Motor Frame:	
Motor Power:	0.43kW
FLC/Start:	2.40A / 7.20A
Motor Speed:	4 pole
Motor Efficiency:	-

Energy Efficiency, NCC/BCA Vol. 1, Section J compliant

+ 2019 - 2022

Energy Efficiency, H1/VM3 2021 compliant

+ H1/VM3 2021

Sound Data

Spectrum (Hz):	63	125	250	500	1K	2K	4K	8K	dBW	dB(A) @ 3m
Inlet (dB):	82	80	75	72	65	66	66	59	85	54

Sound levels are quoted as in-duct values. dB(A) values are average spherical free-field for comparative use only.

Energy Sustainability Data

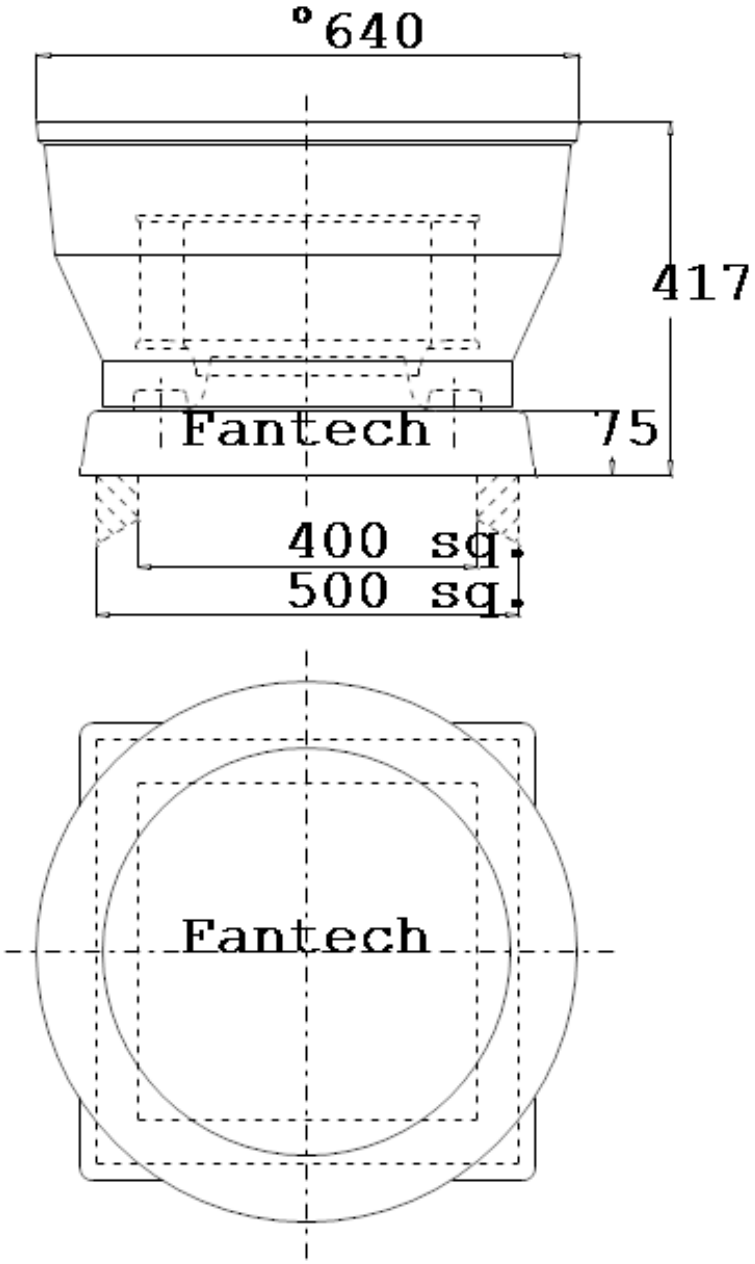
Hours Per Day:	10	Annual Electricity Cost ($):	188.3
DaysPerYear:	300	Annual GH Gas (Tonnes):	1.7
CO2 per kWh (kg):	1.467	Annual Carbon Usage (Tonnes):	0.5
Cost per kWh ($):	0.16		

Represented by:
Fantech Pty. Ltd.
A.B.N. 11 005 434 024
8 Healey Circuit
Huntingwood NSW 2148
Telephone: +61 (02) 8811 0400
Facsimile: +61 (02) 9831 3676
E-mail: ftnsw@fantech.com.au

Drawing for Fan Model CE404V

Location:

Designation: KEF-4



Represented by:
Fantech Pty. Ltd.
A.B.N. 11 005 434 024
8 Healey Circuit
Huntingwood NSW 2148
Telephone: +61 (02) 8811 0400
Facsimile: +61 (02) 9831 3676
E-mail: ftnsw@fantech.com.au

Technical Data - Fan Model GUE404V

Location:

Designation: KEF-5

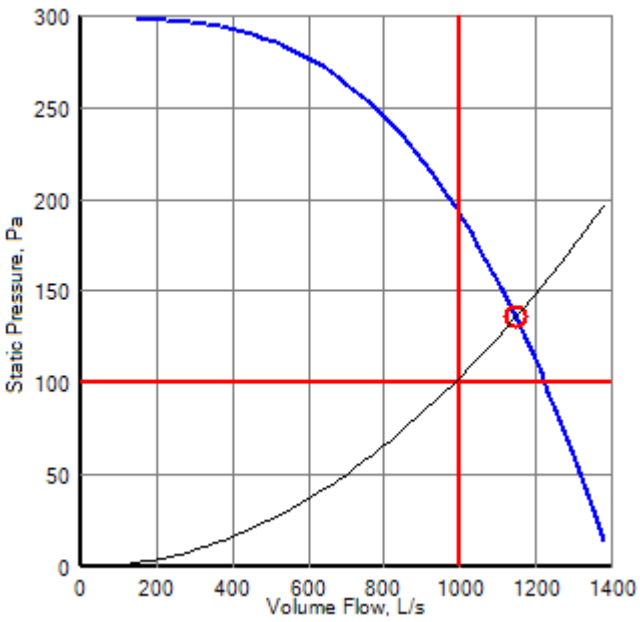
Performance - Required

Air Flow :	1000 L/s
Static Pressure :	100 Pa
Selection Pressure:	104 Pa
Installation Type:	n/a
Air Density:	1.204 kg/m³
- Atmos. Temp:	20 °C
- Altitude:	0 m
- Humidity:	0.0 %

Actual

Air Flow:	1146 L/s
Static Pressure:	136 Pa
Total Pressure:	151 Pa

15% additional capacity available

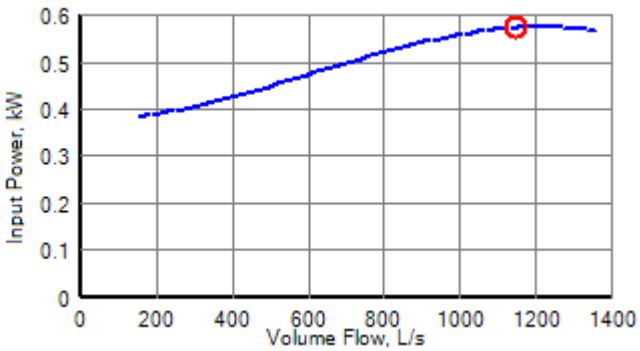


Fan Data

Catalogue Code:	GUE404V		
Description:	Gamma Ultra - Vertical		
Diameter:	400 mm		
Impeller Type:	Mixed Flow		
Blade Material:	-		
Speed:	21 r/s @50 Hz		
Power, Abs:	-		
Input Power:	0.57 kW	Peak:	-
Efficiency Total:	-		
Fan Weight:	28.0 kg	Static:	-
		BAL:	19

Motor Data (at STP)

Motor Type:	
Electrical Supply:	240V 1ph 50Hz
Motor Frame:	106
Motor Power:	0.58kW
FLC/Start (DOL):	2.60A / 5.98A
Motor Speed:	4 pole
Motor Efficiency:	-



Energy Efficiency, NCC/BCA Vol. 1, Section J compliant

+ 2013 - 2016, 2019 - 2022

Energy Efficiency, H1/VM3 2021 compliant

+ H1/VM3 2021

Sound Data

Spectrum (Hz):	63	125	250	500	1K	2K	4K	8K	dBW	dB(A) @ 3m
Inlet (dB):	70	72	73	68	66	63	58	53	78	51
Outlet (dB):	66	76	79	72	72	67	61	54	82	56

Sound levels are quoted as free-field values. dB(A) values are average spherical free-field for comparative use only.

Energy Sustainability Data

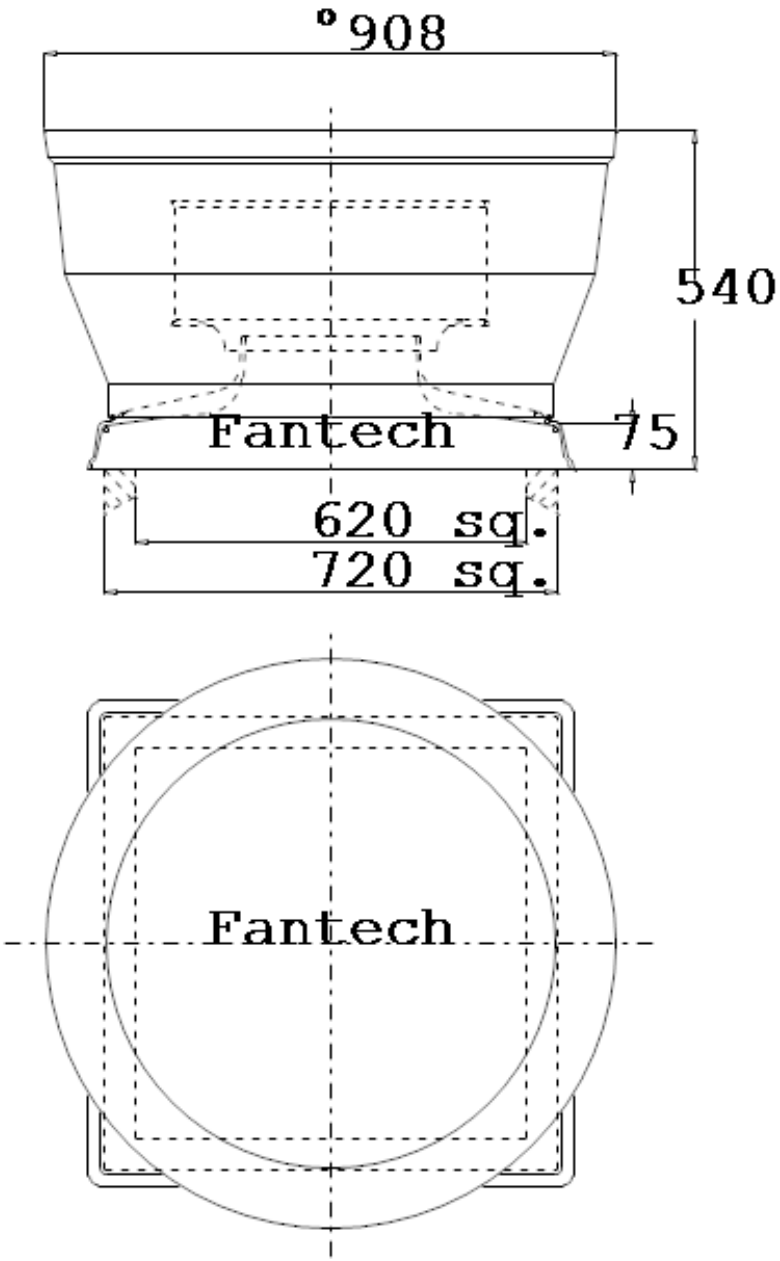
Hours Per Day:	10	Annual Electricity Cost ($):	275.0
DaysPerYear:	300	Annual GH Gas (Tonnes):	2.5
CO2 per kWh (kg):	1.467	Annual Carbon Usage (Tonnes):	0.7
Cost per kWh ($):	0.16		

Represented by:
Fantech Pty. Ltd.
A.B.N. 11 005 434 024
8 Healey Circuit
Huntingwood NSW 2148
Telephone: +61 (02) 8811 0400
Facsimile: +61 (02) 9831 3676
E-mail: ftnsw@fantech.com.au

Drawing for Fan Model GUE404V

Location:

Designation: KEF-5



Represented by:
Fantech Pty. Ltd.
A.B.N. 11 005 434 024
8 Healey Circuit
Huntingwood NSW 2148
Telephone: +61 (02) 8811 0400
Facsimile: +61 (02) 9831 3676
E-mail: ftnsw@fantech.com.au

Technical Data - Fan Model CE404V

Location:

Designation:

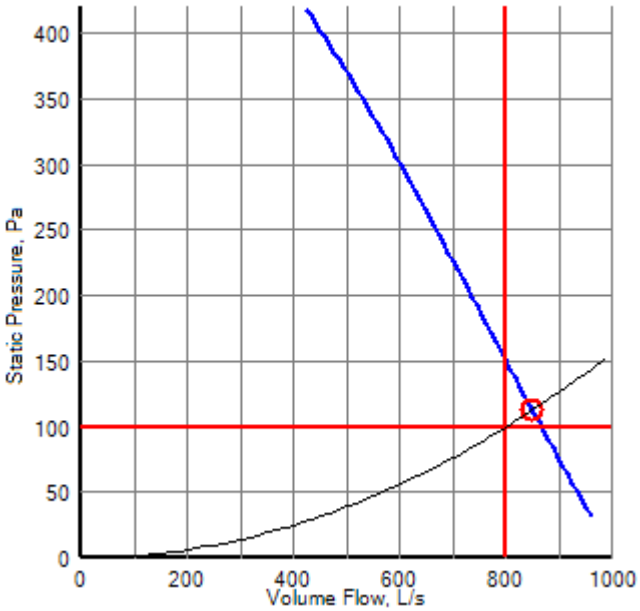
Performance - Required

Air Flow :	800 L/s
Static Pressure :	100 Pa
Selection Pressure:	100 Pa
Installation Type:	n/a
Air Density:	1.204 kg/m³
- Atmos. Temp:	20 °C
- Altitude:	0 m
- Humidity:	0.0 %

Actual

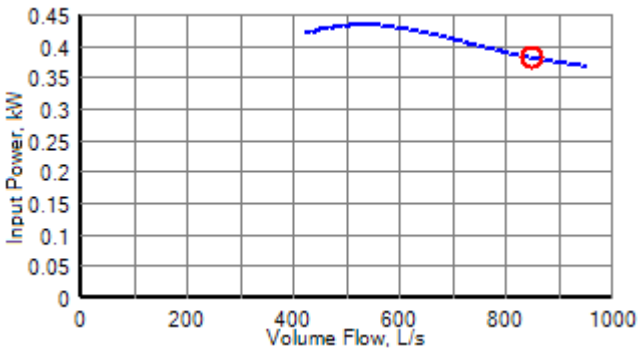
Air Flow:	850 L/s
Static Pressure:	113 Pa
Total Pressure:	144 Pa

6% additional capacity available



Fan Data

Catalogue Code:	CE404V		
Description:	Gamma Vertical Series		
Diameter:	400 mm		
Impeller Type:	Centrifugal		
Blade Material:	-		
Speed:	21 r/s @50 Hz		
Power, Abs:	-		
Input Power:	0.38 kW	Peak:	-
Efficiency Total:	-		
Fan Weight:	18.0 kg	Static:	-



Motor Data (at STP)

Motor Type:	
Electrical Supply:	240V 1ph 50Hz
Motor Frame:	
Motor Power:	0.43kW
FLC/Start:	2.40A / 7.20A
Motor Speed:	4 pole
Motor Efficiency:	-

Energy Efficiency, NCC/BCA Vol. 1, Section J compliant

+ 2019 - 2022

Energy Efficiency, H1/VM3 2021 compliant

+ H1/VM3 2021

Sound Data

Spectrum (Hz):	63	125	250	500	1K	2K	4K	8K	dBW	dB(A) @ 3m
Inlet (dB):	82	80	75	72	65	66	66	59	85	54

Sound levels are quoted as in-duct values. dB(A) values are average spherical free-field for comparative use only.

Energy Sustainability Data

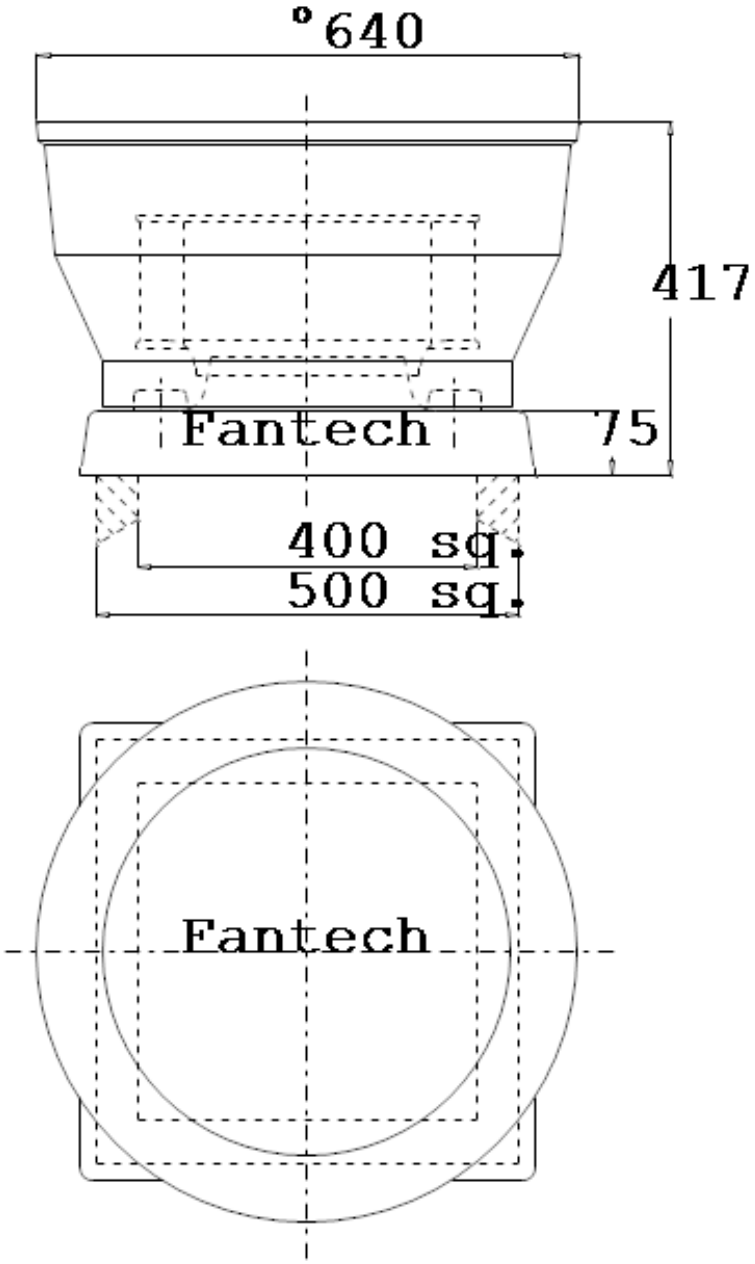
Hours Per Day:	10	Annual Electricity Cost ($):	183.2
DaysPerYear:	300	Annual GH Gas (Tonnes):	1.7
CO2 per kWh (kg):	1.467	Annual Carbon Usage (Tonnes):	0.5
Cost per kWh ($):	0.16		

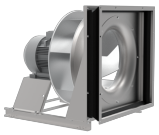
Represented by:
Fantech Pty. Ltd.
A.B.N. 11 005 434 024
8 Healey Circuit
Huntingwood NSW 2148
Telephone: +61 (02) 8811 0400
Facsimile: +61 (02) 9831 3676
E-mail: ftnsw@fantech.com.au

Drawing for Fan Model CE404V

Location:

Designation:

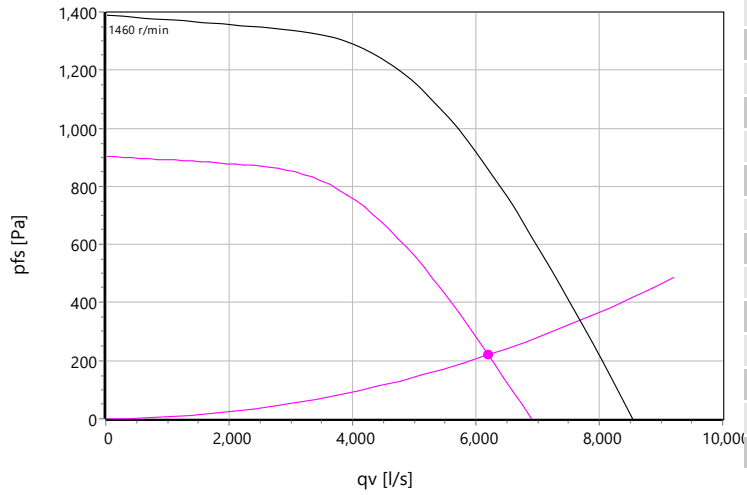




Type: **DKNB 710-4KW.219.A13**

Part no.:

Curve:



ρ: 1.15 kg/m³

Operating Point:

q_V	6200	l/s
p_{fs}	220	Pa
p_{fd}	91	Pa
$\eta_{e,fs}$	33.5	%
$\eta_{e,tot}$	47.3	%
P_e	4.07	kW
P_o	3.68	kW
n	1178	r/min
$L_{WA\ A,IN}$	92	dB(A)
f_{FU}	39.8	Hz
v	12.55	m/s
SFP	656	Ws/m³
$f_{FU\ (max)}$	47	Hz
$p_{Düse}$	2092	Pa

Nominal Data:

U [V]	f [Hz]	C [µF]	P_o [KW]	I_N [A]	n_N [r/min]	t_R [°C]	k_{10} [m²s/h]	I_A / I_N	IP	m [kg]
400D / 690Y	50	-	7.5	14.3	1460	40	370	-	IP55	164

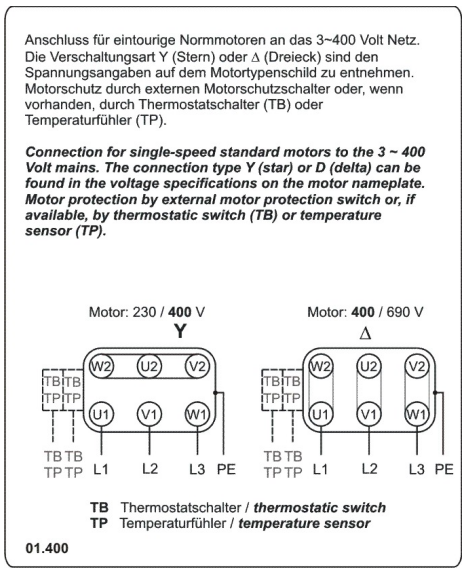
Motor Data:

Part no.	Manufacturer	Size	Poles	Eff.-Rating	Design	Mot.Prot.	η [%]	Ø [mm]
MCDU13202011	AC	132	4	IE3	B3	KL	0.904	38

Sound Data:

Frequency	Σ	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	Distances	1 m	4 m
LwA(A,in) [dB(A)]	92	63	77	79	84	90	82	76	67	LpA(A,in) [dB(A)]	85	75
LwA(A,out) [dB(A)]	95	67	79	82	87	93	85	79	69	LpA(A,out) [dB(A)]	88	78

Wiring Diagram:



Drawing:

Represented by:
Fantech Pty. Ltd.
A.B.N. 11 005 434 024
8 Healey Circuit
Huntingwood NSW 2148
Telephone: +61 (02) 8811 0400
Facsimile: +61 (02) 9831 3676
E-mail: ftnsw@fantech.com.au

Technical Data - Fan Model TD-500/150 (Hi speed)

Location: **Designation:**

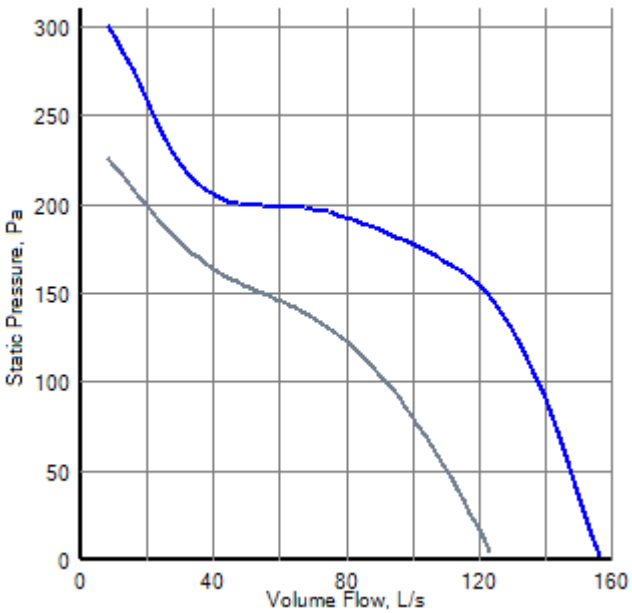
Please Note: Data shown is nominal - enter more criteria for accurate detail.

Performance - Required

Air Flow :	0 L/s
Static Pressure :	0 Pa
Selection Pressure:	0 Pa
Installation Type:	n/a
Air Density:	1.204 kg/m³
- Atmos. Temp:	20 °C
- Altitude:	0 m
- Humidity:	0.0 %

Actual

Air Flow:	0 L/s
Static Pressure:	0 Pa
Total Pressure:	0 Pa

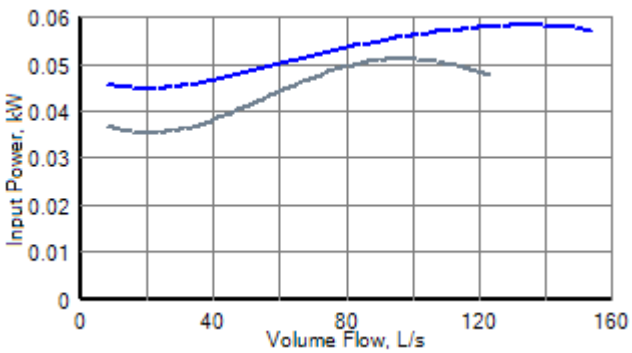


Fan Data

Catalogue Code:	TD-500/150 (Hi speed)		
Description:	Mixvent Series		
Diameter:	150 mm		
Impeller Type:	Mixed Flow		
Blade Material:	-		
Speed:	42 r/s @50 Hz		
Power, Abs:	-		
Input Power:	0.05 kW	Peak:	-
Efficiency Total:	-		
Fan Weight:	2.7 kg	Static:	-

Motor Data (at STP)

Motor Type:	
Electrical Supply:	240V 1ph 50Hz
Motor Frame:	
Motor Power:	0.05kW
FLC/Start:	0.22A / 0.66A
Motor Speed:	2 pole
Motor Efficiency:	-



Energy Efficiency, NCC/BCA Vol. 1, Section J compliant

+ 2019 - 2022

Energy Efficiency, H1/VM3 2021 compliant

+ H1/VM3 2021

Sound Data

Spectrum (Hz):	63	125	250	500	1K	2K	4K	8K	dBW	dB(A) @ 3m
Inlet (dB):	58	51	64	60	59	63	57	47	69	46

Sound levels are quoted as free-field values. dB(A) values are average spherical free-field for comparative use only.

Energy Sustainability Data

Hours Per Day:	10	Annual Electricity Cost ($):	23.2
DaysPerYear:	300	Annual GH Gas (Tonnes):	0.2
CO2 per kWh (kg):	1.467	Annual Carbon Usage (Tonnes):	0.1
Cost per kWh ($):	0.16		

Represented by:
Fantech Pty. Ltd.
A.B.N. 11 005 434 024
8 Healey Circuit
Huntingwood NSW 2148
Telephone: +61 (02) 8811 0400
Facsimile: +61 (02) 9831 3676
E-mail: ftnsw@fantech.com.au

Drawing for Fan Model TD-500/150

Location:

Designation: