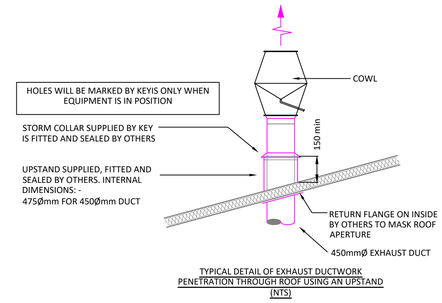
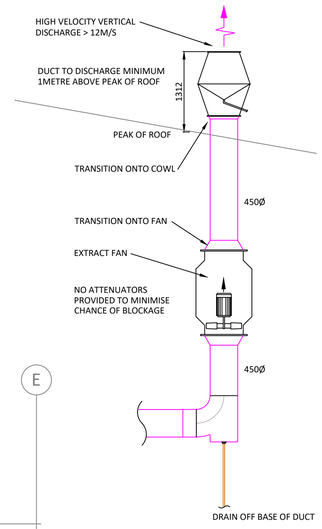
Line 17 Extract Flowrates				
Hood No.	Location	Duct Size (mm)	Velocity in Duct (m/s)	Volume Flowrate @ 10m/s (m^3/s)
FV1 (250Ø)	Filler machine floor front duct end	250	15	**0.750**
FV2 (120Ø)	Filler machine floor back duct end	120	15	**0.160**
FV3 (120Ø)	Local can seamer booth front duct end	120	15	**0.160**
FV4 (120Ø)	Local can seamer booth side duct end	120	15	**0.160**
FV5 (120Ø)	Local can seamer booth back duct end	120	15	**0.160**
FV6 (Enclosed)	Beer & water separator	80	15	**0.070**
FV7 Additional Volume	Low Level	200	15	**0.540**
Note: The flowrates above have been calculated to match the existing total flowrates on the BES commissioning report			**Total**	**2.000**

Line 18 Extract Flowrates				
Hood No.	Location	Duct Size (mm)	Velocity in Duct (m/s)	Volume Flowrate @ 10m/s (m^3/s)
FV1 (120Ø)	Filler machine floor front duct end	120	15	**0.160**
FV2 (120Ø)	Filler machine floor back duct end	120	15	**0.160**
FV3 (200Ø)	Seamer booth above can conveyor	200	15	**0.500**
FV4 (80Ø)	Seamer booth side	80	15	**0.070**
FV5 (Enclosed)	Beer & water separator	80	15	**0.070**
FV6 Additional Volume	Low Level	200	15	**0.540**
FV7 Additional Volume	Low Level	200	15	**0.500**
Note: The flowrates above have been calculated to match the existing total flowrates on the BES commissioning report			**Total**	**2.000**



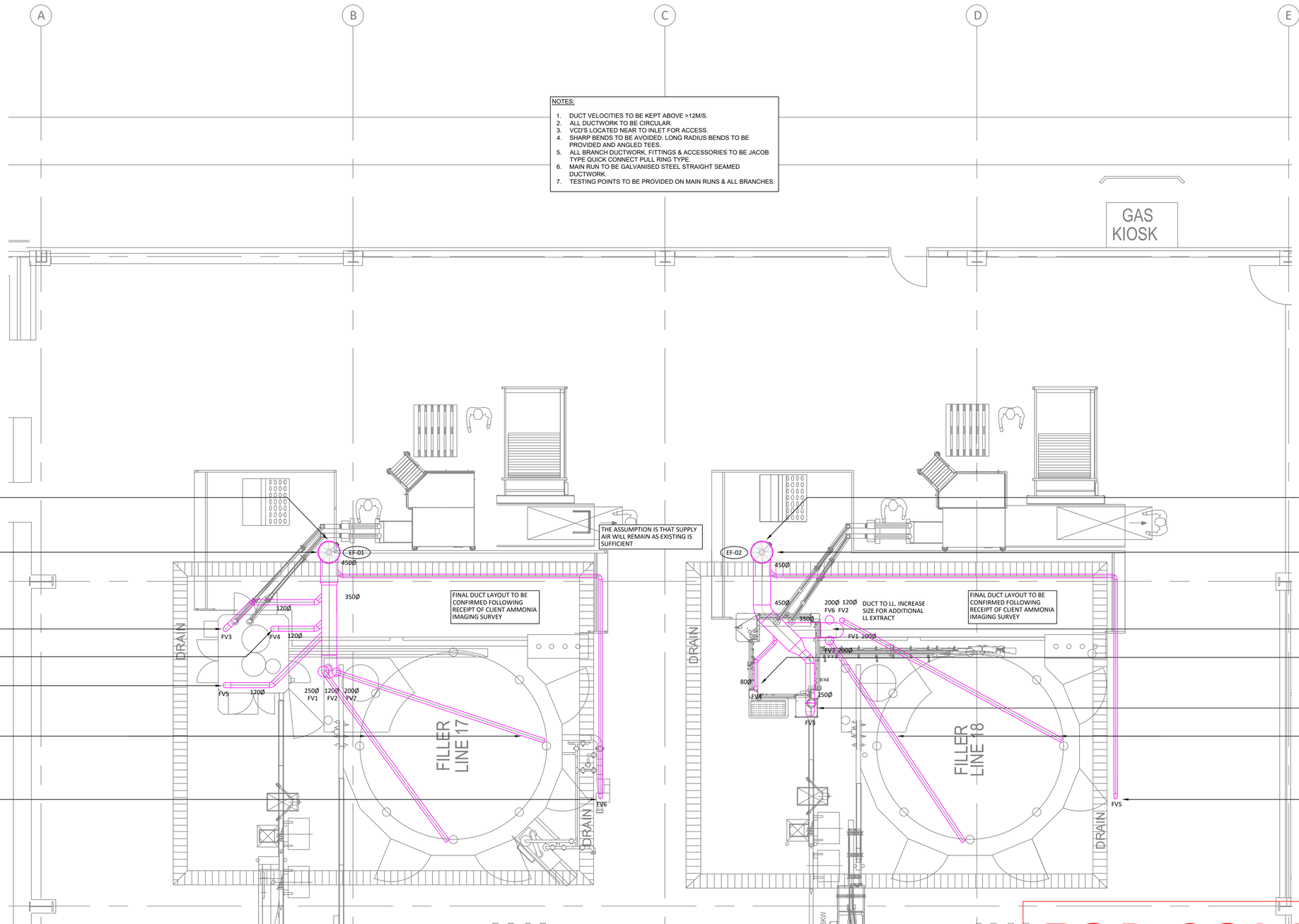
TYPICAL DETAIL OF EXHAUST DUCTWORK PENETRATION THROUGH ROOF USING AN UPSTAND (NTS)



HIGH VELOCITY DISCHARGE DETAIL (NTS)

NOTES:

1. DUCT VELOCITIES TO BE KEPT ABOVE >12M/S.
2. ALL DUCTWORK TO BE CIRCULAR.
3. VCD'S LOCATED NEAR TO INLET FOR ACCESS.
4. SHARP BENDS TO BE AVOIDED. LONG RADIUS BENDS TO BE PROVIDED AND ANGLED TEES.
5. ALL BRANCH DUCTWORK, FITTINGS & ACCESSORIES TO BE JACOB TYPE QUICK CONNECT PULL RING TYPE.
6. MAIN RUN TO BE GALVANISED STEEL STRAIGHT SEAMED DUCTWORK.
7. TESTING POINTS TO BE PROVIDED ON MAIN RUNS & ALL BRANCHES.



0 FILLER LINE 17 EXTRACT LAYOUT
1:50

1 FILLER LINE 18 EXTRACT LAYOUT
1:50

NOTES

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL MECHANICAL, ELECTRICAL, ARCHITECTURAL AND STRUCTURAL DRAWINGS, CONTRACT DOCUMENTATION, SCHEDULES AND SPECIFICATION FOR THE WORKS.
2. ALL DIMENSIONS SHOWN ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
3. DO NOT SCALE FROM THIS DRAWING AND ALL MEASUREMENTS TO BE CHECKED ON SITE.

HVAC

1. MECHANICAL VENT SHALL VENT TO OUTSIDE VIA VERTICAL DISCHARGE.
2. THE OUTLET FROM THE EXHAUST TO BE IN ACCORDANCE WITH LOCAL REGULATIONS.
3. DRAINAGE TO BE PROVIDE FROM BASE OF EXHAUST DUCT.
4. THE MECHANICAL VENTILATION INSTALLATION SHALL BE IN ACCORDANCE WITH HSG258.
5. EXTERIOR OPENINGS SHALL NOT BE SITUATED WITHIN 2M OF BUILDING EMERGENCY EXIT STAIRCASES OR OTHER BUILDING OPENINGS.
6. ACCESS HATCHES TO BE PROVIDED MAINTENANCE & CLEANING IN ACCORDANCE WITH DW144.
7. ALL METAL DUCTWORK SHALL BE MANUFACTURED & INSTALLED IN ACCORDANCE WITH DW144. DUCTWORK SHALL HAVE ACCESS PANELS IN ACCORDANCE WITH THE REQUIREMENTS OF DW144.
8. ALL PLANT AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS
9. DUCT VELOCITIES TO BE KEPT ABOVE >12M/S.
10. ALL DUCTWORK TO BE CIRCULAR.
11. VCD'S LOCATED NEAR TO INLET FOR ACCESS.
12. SHARP BENDS TO BE AVOIDED. LONG RADIUS BENDS TO BE PROVIDED AND ANGLED TEES.
13. ALL BRANCH DUCTWORK, FITTINGS & ACCESSORIES TO BE JACOB TYPE QUICK CONNECT PULL RING TYPE.
14. MAIN RUN TO BE GALVANISED STEEL STRAIGHT SEAMED DUCTWORK.
15. TESTING POINTS TO BE PROVIDED ON MAIN RUNS & ALL BRANCHES.

Rev	Amendment	Date
P1	PRELIMINARY	08/11/23

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Client: HEINEKEN

Project Title: FILLER LINE C02 EXTRACT

Drawing Title: MECHANICAL SERVICES VENTILATION LAYOUT

Drawn By	Checked By	Designed By	Scale @ A1
MT	SF	MT	1:50

BS1192 Document Number	RIBA Stage
C1886-KEY-XX-DR-M-57-001	4

Status	Revision
PRELIMINARY	P1

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