



Mechanical Legends

AIR HANDLING UNIT

OUTDOOR CONDENSE

EXHAUST AIR DIFFUSER

KITCHEN CHIMNEY

SUPPLY AIR DUCT

AHJ

RTU

ENGRTEAM.COM

ENGINEER'S TEAN

430 E 8TH ST STE 8017 HOLLAND MI 49423

SUPPORT@ENGRTEAM.COM

OWNER:

GENERAL ARRANGEMENT PLAN

ROCK LEOPARD BREWERY 13 WAGTAIL WALK, LONDON, SE2 9FE

SEAL:

Release for construction

HVAC LAYOUT PLAN

Drawn by:	Engr. Al Amin
Checked:	
Date:	NOV, 24.

H. 1

EXHAUST FAN SCHEDULE

		L/\1	<i>''</i>	J 1 1 7			· - -		
MARK	SERVING	CFM	SP	WATTS	RPM	VOLTAGE	MAKE MODEL	NOTES	FAN TYPE
EF-1	BATHROOM	50	-	50	460	120/60/1	Broan-NuTone 688		IN-LINE
EF-2	KITCHEN	1600	-	78	1291	115/60/1	HOODMART 28D-1600-FF		IN-LINE

NOTES

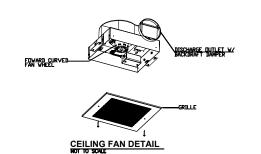
- 1. COMPLETE W/BACKDRAFT DAMPER.
- 2. PROVIDE THERMOSTATIC CONTROL DEVICES
- 3. INTERLOCK TO OPERATE WHENEVER RTU'S OPERATE.
- 4. MAINTAIN A MINIMUM CLEARANCE OF 10'-0" FROM ALL INTAKE AIR FANS AND ALL ROOF TOP UNITS OUTSIDE AIR INTAKE OPENINGS.

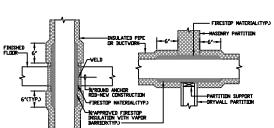
Note:

This HVAC layout plan for Rock Leopard Brewery has been created in compliance with all relevant and updated codes and standards required in London, UK. The design meets the following key regulations:

- Part F Ventilation: Ensures adequate ventilation with attention to air quality, airflow, and humidity control. This includes
 adherence to specifications on preventing condensation and maintaining proper indoor air quality for industrial spaces.
- Part L Conservation of Fuel and Power: Addresses energy efficiency, optimizing the HVAC system to reduce energy consumption while achieving the necessary heating and cooling performance. This part requires updates every few years to meet the evolving UK energy conservation standards.
- Part B Fire Safety: Ensures all HVAC components are placed and designed to minimize fire hazards and provide safe egress, including provisions for smoke extraction where necessary. This compliance supports occupant safety in the case of an emergency.
- 4. BS EN 378 Refrigeration Systems and Heat Pumps: This British Standard governs the safe operation of refrigerants, ensuring environmental safety and adherence to UK standards for systems using refrigeration.
- 5. CIBSE Guide B Heating, Ventilating, Air Conditioning, and Refrigeration: As advised by the Chartered Institution of Building Services Engineers (CIBSE), this guide ensures the HVAC system follows best practices in mechanical and environmental engineering, emphasizing energy efficiency, thermal comfort, and safety.

This layout has been meticulously planned to meet all these standards, ensuring it aligns with current UK codes and promotes operational efficiency, safety, and environmental responsibility.

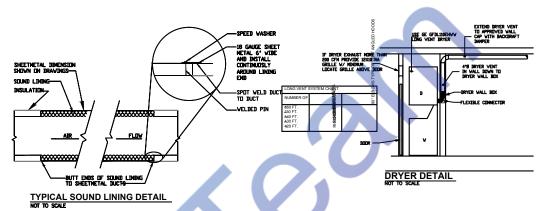


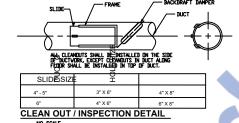


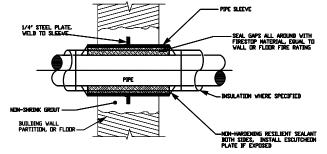
FLOOR OR DECK PENETRATION APPLICABLE TO PENETRATIONS OF ALL FIRE RATED MEMBRANES, IN ACCORDANCE WITH 2012 IBC 714. REFER UL LISTED FIRE STOPPING SYSTEMS UL-1479, UL-2043 PENETRATION OF FIRE/SMOKE BARRIERS

LOW VELOCITY ELBOWS LOW VELOCITY TRANSITIONS LOW VELOCITY OFFSETS

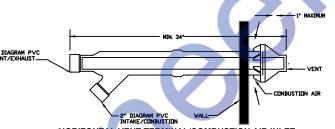
LOW VELOCITY TRANSITIONS, OFFSETS AND ELBOWS
NOT TO SCALE







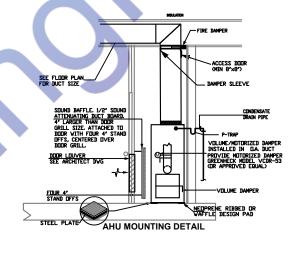
INTERIOR MASONRY WALL AND FLOOR PENETRATION
NOT TO SCALE

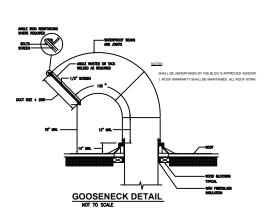


2" DIAGRAM PVC
INTAKE/COMBUSTION
HORIZONTAL VENT TERMINAL/COMBUSTION AIR INLET
NOT IS SCHE
TO SCHE
THE APPLIANCE MANIFACTURER'S INSTRUCTIONS. PLASTIC PIPE VENTING
ACCIDENACE VITH THE APPLIANCE MANIFACTURER'S INSTRUCTIONS. PLASTIC PIPE VENTING
METERIAL SIZED AND LABELD IN ACCIDENACE VITH UI. 1738 SHALL BE INSTRULED IN
ACCIDENACE VITH THE VENT MANIFACTURER'S INSTRULATION INSTRUCTIONS. FLUID PVC PIP
SHALL NOT BE USED FOR COMBUSTION GAS VENTING.

DESIG	Type (refer to details)	SERVICE	AIR FLOW RANGE (CFM)	NOMINAL SIZE/ DESCRIPTION (INCH)	INLET/ NECK SIZE (IN)	BASIS OF DESIGN/REMA
A	REGISTER	SA	0-50	6x4	476	300RL, BORDER TYPE
В	REGISTER	SA	51-100	6x6 OR 10X4	6"#	300RL, BORDER TYPE
С	REGISTER	SA	101-150	10x6	79	300RL, BORDER TYPE
D	REGISTER	SA	151-200	12x6	8"#	300RL, BORDER TYPE
E	REGISTER	SA	201-250	14x6	9"4	300RL, BORDER TYPE
F	RG	RA/EA	0-100	6x6	6x6	350RL, BORDER TYP
G	RG	RA/EA	101-200	8x8	8x8	350RL, BORDER TYP
н	RG	RA/EA	201-300	10x10	10x10	350RL, BORDER TYP
1	RG	RA/EA	301-450	12x12	12x12	350RL, BORDER TYP
J	RG	RA/EA	451-600	14x14	14x14	350RL, BORDER TYP
К	RG	RA/EA	601-800	16x16	16x16	350RL, BORDER TYP
L	RG	RA/EA	801-1100	18x18	18x18	350RL, BORDER TYP
М	RG	RA/EA	1101-1300	20x20	20x20	350RL, BORDER TYP
N	RG	RA/EA	1301-1600	22x22	22x22	350RL BORDER TYP

FRESH AIR HUTTERIZED RETURN RETURN TURNING GAS VENT & COMBUSTIEN AIR FRESH AIR HUTTERIZED DETAIL BETAIL BETAIL
GAS-FIRED AIR HANDLING UNIT DETAIL







ENGRTEAM.COM

TEAM

ENGINEER'S

430 E 8TH ST STE 8017 HOLLAND MI 49423

SUPPORT@ENGRTEAM.COM

OWNER:

GENERAL ARRANGEMENT PLAN

ROCK LEOPARD BREWERY 13 WAGTAIL WALK, LONDON, SE2 9FE

SEAL:

Release for construction

HVAC PLAN

Drawn by: Engr. Al Amin Checked: NOV, 24. Date:

H. 2