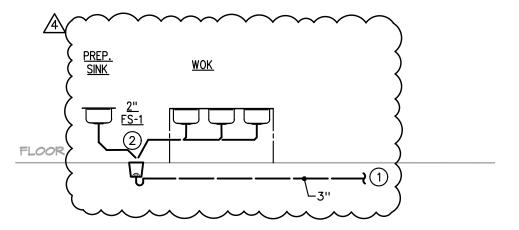
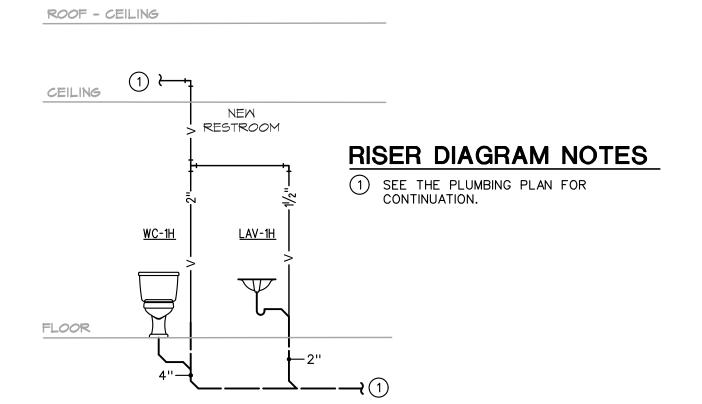
CEILING



GREASE WASTE & VENT RISER DIAGRAM #2

NO SCALE

NO SCALE



GREASE INTERCEPTOR CALCULATION (GI-1)

3-COMPARTMENT SINK - THREE (3) 18"x18"x14" BOWLS

(18"x18"x14") x 3 = 13,608 CUBIC INCHES

13,608 CUBIC INCHES/231 GALLONS/CUBIC INCH = 59 GALLONS

59 GALLONS x .45FILL CAPACITY FACTOR = 26.5 GALLONS

WOK VOLUME = 6912 INCHES

6912 CUBIC INCHES/231 GALLONS/CUBIC INCHES = 30 GALLONS

30 GALLONS x .45 FILL CAPACITY FACTOR = 13.5 GALLONS

PREP SINK VOLUME = 4,536 CUBIC INCHES

+8.9 GALLON (PREP SINK) = 48.9 GALLONS

4,536 CUBIC INCHES/231 GALLONS/CUBIC INCH = 19.7 GALLONS 19.7 GALLONS x .45 FILL CAPACITY FACTOR = 8.9 GALLONS

TOTAL GALLONS = 26.5 GALLON (3 COMPARTMENT) + 13.5 GALLONS (WOK)

FOR A 1 MINUTE DRAINAGE RATE - 48.9 GPM IS REQUIRED.

GREASE INTERCEPTOR GI-1 SHALL BE A SCHIER GREAT BASIN MODEL GB3, 50 GPM, 272# GREASE RETENTION, 4" INLET AND OUTLET.

GREASE INTERCEPTOR CALCULATION (GI-2)

GREASE INTERCEPTOR CALCULATION (GI-2)

WOK VOLUME = 4950 CUBIC INCHES

4950 CUBIC INCHES/231 GALLONS/CUBIC INCH = 22 GALLONS

FOR A 1 MINUTE DRAINAGE RATE - 22 GPM IS REQUIRED.

GREASE INTERCEPTOR GI-1 SHALL BE A SCHIER GREAT BASIN MODEL #GB1, 25 GPM, 64# GREASE RETENSION, 2/3" INLET AND OUTLET.

O DIFFUSER SCHEDULE					
MARK NO.	MANUFACTURER	MODEL NO.	FACE SIZE (INCHES)	MOUNTING	REMARKS
А	TITUS	TMS	24×24	LAY-IN	1,2,3
В	TITUS	TMS	12×12	SURFACE	1,2,3
С	TITUS	PAR	24x24	LAY-IN	2,4
NOTES:					

SEE THE PLANS FOR NECK SIZE.

2. COLOR PER ARCHITECT.

3. PROVIDE DAMPER AT DUCT TAKE-OFF EXCEPT PROVIDE GRILLE MOUNTED DAMPER WHERE OUTLET IS ABOVE INACCESSIBLE CEILING.

EXHAUST

REQUIRED

(CFM)

(NOTE 5)

272

140

412

REMARKS

ZONE

OUTDOOR

134

591

734

4. PROVIDE WITH DAMPER OR EXTRACTOR IF REQUIRED FOR BALANCING.

MECHANICAL SYMBOLS NEW SHEET METAL DUCTWORK & SIZE.

 \longrightarrow NEW SHEET METAL DUCTWORK & SIZE.

SUPPLY AIR DUCT OR OUTSIDE AIR INTAKE.

RETURN AIR DUCT OR EXHAUST AIR DUCT.

DIRECTION OF RETURN AIRFLOW.

THERMOSTAT OR TEMPERATURE SENSOR.

——CD—— CONDENSATE DRAIN.

SUPPLY AIR. OUTSIDE AIR.

RETURN AIR.

EXHAUST AIR.

CONDENSING UNIT.

EXHAUST FAN.

ROOFTOP UNIT.

PLAN REVISION DESIGNATION.

PLAN NOTE DESIGNATION.

CONNECT TO EXISTING.

MECHANICAL EQUIPMENT DESIGNATION - TOP PORTION IS EQUIPMENT (RTU, EF, HP, ETC.), BOTTOM PORTION IS NO. OR LETTER (SEE APPROPRIATE SCHEDULE).

PLUMBING SYMBOLS

EXISTING TO REMAIN.

----- NEW PIPING WORK.

———— DOMESTIC HOT WATER (HW).

———— DOMESTIC COLD WATER (CW).

———— HOT WATER RECIRCULATION (HWR).

——V—— PLUMBING VENT ABOVE FLOOR (V).

——SAN—— SANITARY WASTE ABOVE FLOOR (W). — — SANITARY WASTE BELOW FLOOR (W).

——NG—— GAS (NATURAL) (NG).

———— ELBOW DOWN.

─────+O ELBOW UP.

— ICI TEE DOWN. ───── TEE UP.

——II—— PIPE UNION. — 1/4 TURN SHUT-OFF VALVE.

——— CHECK VALVE.

── PUMP

VENT THRU ROOF (VTR).

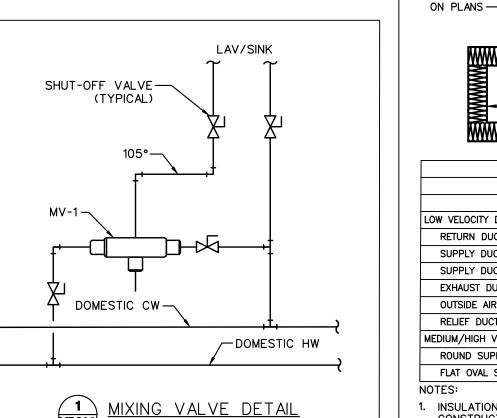
EXISTING TO REMAIN.

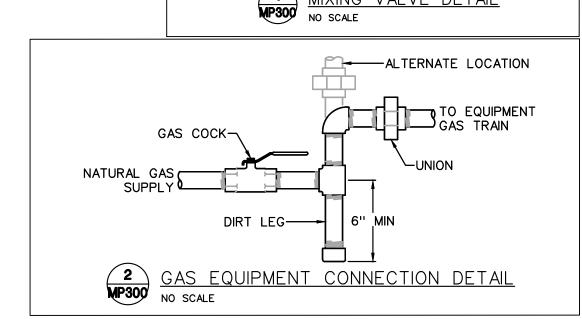
PLAN NOTE DESIGNATION.

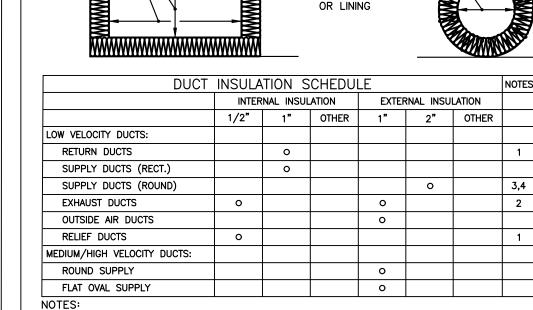
PLAN REVISION DESIGNATION. CONNECT TO EXISTING.

PLUMBING EQUIPMENT DESIGNATION - TOP PORTION IS EQUIPMENT (HW, RTU, ETC.), BOTTOM PORTION IS NO. OR LETTER (SEE APPROPRIATE SCHEDULE).

ON PLANS -







INSULATION SHALL BE INSTALLED WHEN INDICATED OTHERWISE IN THE CONSTRUCTION DOCUMENTS. OTHERWISE, NO INSULATION IS REQUIRED.

INSULATION IS REQUIRED WITHIN 6'-O" OF TERMINATION POINT OF EXHAUST AIR. RECTANGULAR DUCTS SHALL BE LINED, ROUND DUCTS SHALL BE WRAPPED.

CONCEALED ROUND SUPPLY AIR DUCTS AND ROUND SUPPLY AIR DUCTS IN UNCONDITIONED SPACES SHALL BE INSULATED AS INDICATED AND SHALL INCLUDE A VAPOR BARRIER TO PREVENT CONDENSATION FROM FORMING ON COLD METAL SURFACES. NO INSULATION IS REQUIRED FOR ROUND SUPPLY AIR DUCT EXPOSED IN CONDITIONED SPACES UNLESS INDICATED OTHERWISE.

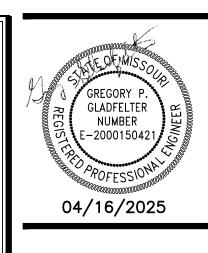
4. AT CONTRACTORS OPTION, GALVANIZED STEEL ROUND DOUBLE WALL DUCT MAY BE USED WHERE ROUND SUPPLY AIR DUCTS ARE REQUIRED TO BE INSULATED. DOUBLE WALL DUCT SHALL BE LINX LINDLAB SPIRO-SAFE SPIRAL LOCKSEAM DUCTWORK. SEE

5. AT CONTRACTOR'S OPTION, ROUND DUCT LINER MAY BE USED WHERE ROUND SUPPLY AIR DUCTS ARE REQUIRED TO BE INSULATED. DUCT LINER SHALL BE JOHNS MANVILLE SPIRACOUSTIC PLUS, OR APPROVED EQUAL, 1.5" THICK (R6.4). SEE THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.



INSULATED OR LINED DUCT DETAIL

Gladfelter Engineering Group assumes design responsibility for this project for only the mechanical, plumbing and electrical disciplines with drawing sheet number beginning with M, P and E. All other drawings should be considered the work of others. Further, drawings in this project set may contain drawing information, including but not limited to: architectural plans. sections and elevations, site plans and surveys and other information pertinent to showing mechanical, plumbing and electrical work which is furnished by others, generally indicated b screened or light type. Gladfelter Engineering Group assumes no responsibility or liability for the accuracy or régulatory compliance for work prepared by others even though shown on MPE drawings. Gladfelter Engineering Group assumes responsibility only for the design of mechanical, plumbing and electrical disciplines contained herein, generally indicated in bold type



dno G Engineering adfelter

Issued for: 11/07/24 PERMIT 12/03/24 1 CITY COMMENTS 01/27/25 2 CHANGE ORDER 02/12/25 3 CITY COMMENTS 04/16/25 4 OWNER REVISIONS Project number: 24-242

Drawn: JEE/GPG/MKS

2025/04/16 Sheet Number:

2. CALCULATION DONE IN ACCORDANCE WITH 2018 IMC, CHAPTER 4. 3. VENTILATION AIR PROVIDED BY DIRECT CONNECTION TO THE OUTDOORS IN ACCORDANCE WITH SECTION 401, 2018 IMC.

SPACE

KITCHEN (COOKING)

DINING ROOM

CORRIDOR

STORAGE

RESTROOM

TOTAL

PLUMBING RISER DIAGRAM

OUTSIDE AIR SUMMARY (SINGLE ZONE SYSTEMS) (NOTES 2 & 3)

4. BATHROOM MINIMUM EXHAUST AIR PROVIDED AT MINIMUM 70 CFM PER FIXTURE IN ACCORDANCE WITH CHAPTER 4, 2018 IMC.

CALCULATED

OCCUPANT

TOTAL

(Pz)

47

55

(SQUARE

FEET)

389

44

32

61

1,193

5. SPACE EXHAUST REQUIRED AT THE INDICATED RATE.

1. ZONE AIR DISTRIBUTION EFFECTIVENESS (Ez) DETERMINED FROM TABLE 403.3.1.2 AND IS BASED ON AIR DISTRIBUTION CONFIGURATION IN ACCORDANCE WITH THE 2018 IMC.

VENTILATION

(CFM/PERS)

7.5

NO SCALE

SYSTEM

RTU-1

(5-TON)

6. MINIMUM KITCHEN EXHAUST AIR PROVIDED AT 0.7 CFM/SQUARE FOOT IN ACCORDANCE WITH CHAPTER 4, 2018 IMC (ACTUAL EXHAUST MAY BE HIGHER DUE TO MAKE-UP REQUIRED FOR THE TYPE 1 HOOD).

SPACE OUTDOOR

AIRFLOW IN

BREATHING ZONE

Vbz=RpPz+RaAz

CFM

106.68

472.56

2.64

3.84

AREA OUTDOOR

AIRFLOW IN

BREATHING ZONE

(Ra) CFM/SF

0.12

0.18

0.06

0.12

ZONE AIR

DISTRIBUTION

EFFECTIVENESS (Ez

COOLING/HEATING

(NOTE 1)

1.0/0.8

1.0/0.8

1.0/0.8

1.0/0.8

ZONE

OUTDOOR

AIRFLOW

(Voz=Vbz/Ez)

COOLING

106.68

2.64

3.84

ZONE

OUTDOOR

AIRFLOW

HEATING

133.35

590.70

3.30

4.80

| (Voz=Vbz/Ez) | AIR SETPOINT