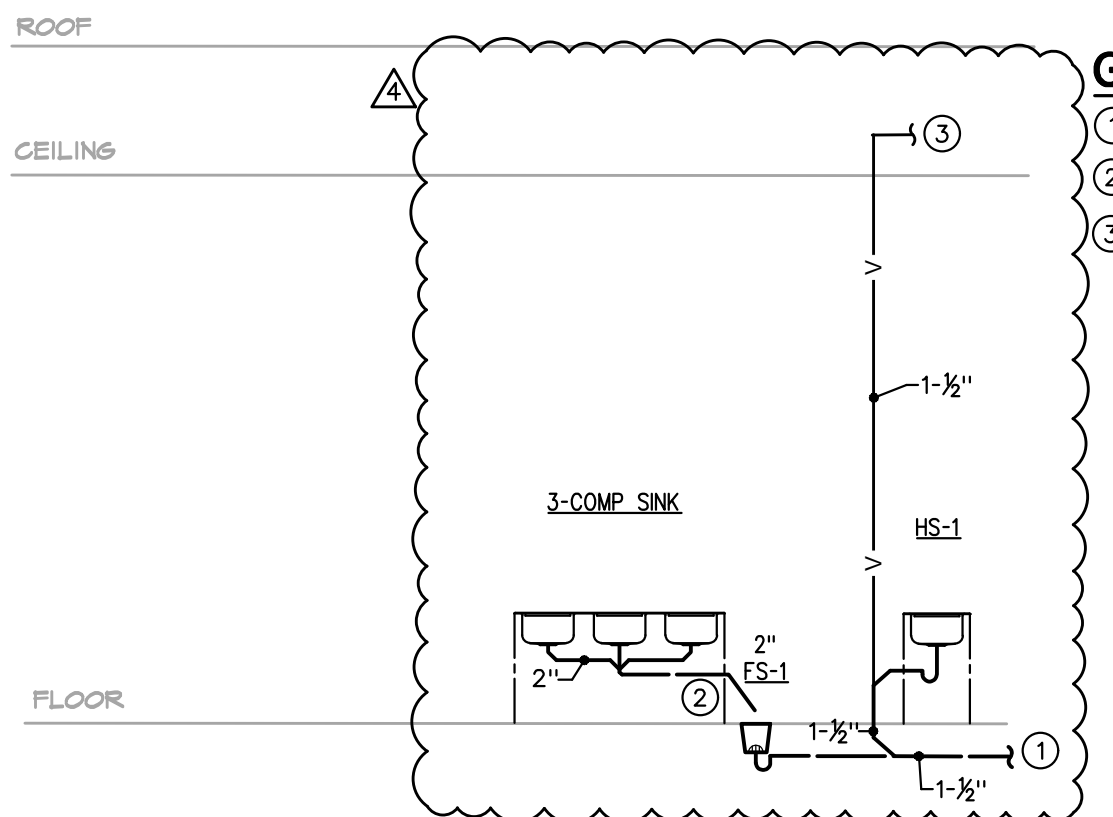
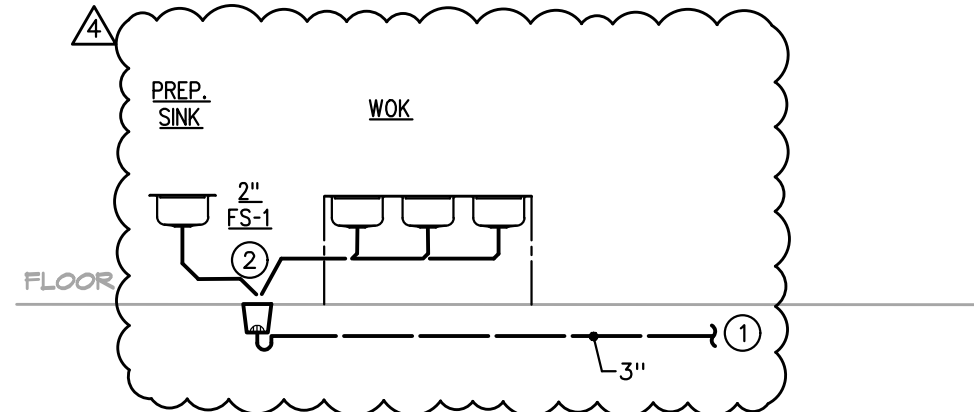


M: GEG PROJECTS\PROJECTS 24\COMPLETED GEG-AEC PROJECTS\GEG\_24-242\_LS DRAGON J\24-242\_MP300\_2024-04-17\_MKS\_24X36.DWG : 4/17/2025 12:07:09 PM : Malerie



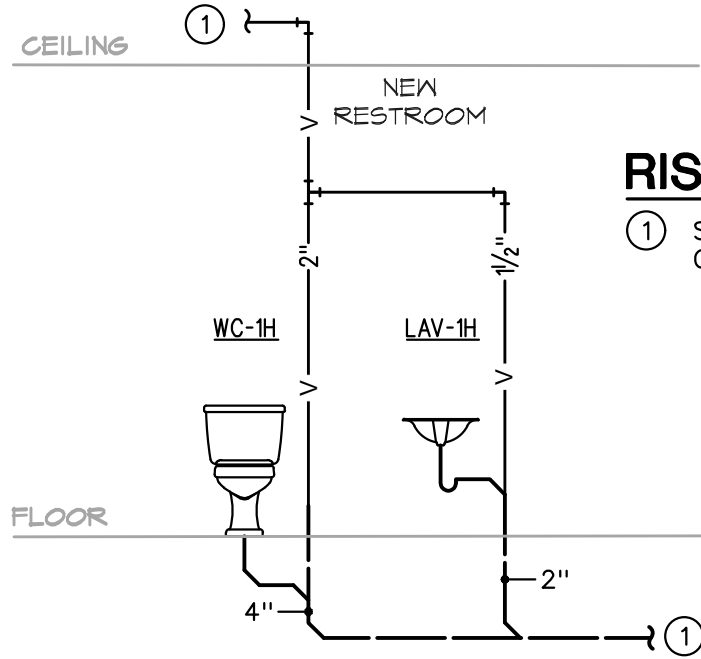
**GREASE WASTE & VENT RISER DIAGRAM #1**  
NO SCALE

CEILING



**GREASE WASTE & VENT RISER DIAGRAM #2**  
NO SCALE

ROOF - CEILING



**PLUMBING RISER DIAGRAM**  
NO SCALE

### RISER DIAGRAM NOTES

- SEE THE PLUMBING PLAN FOR CONTINUATION.

### GREASE WASTE RISER DIAGRAM NOTES

- SEE THE PLUMBING PLAN FOR CONTINUATION.
- AIR-GAP DRAIN FROM FIXTURE ABOVE FLOOR SINK.
- CONNECT TO NEAREST VENT PIPING 1-1/2" OR LARGER.

### 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 .45 FILL 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

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)

+8.9 GALLON (PREP SINK) = 48.9 GALLONS

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.

### DIFFUSER SCHEDULE

MARK NO.	MANUFACTURER	MODEL NO.	FACE SIZE (INCHES)	MOUNTING	REMARKS
A	TITUS	TMS	24x24	LAY-IN	1,2,3
B	TITUS	TMS	12x12	SURFACE	1,2,3
C	TITUS	PAR	24x24	LAY-IN	2,4

#### NOTES:

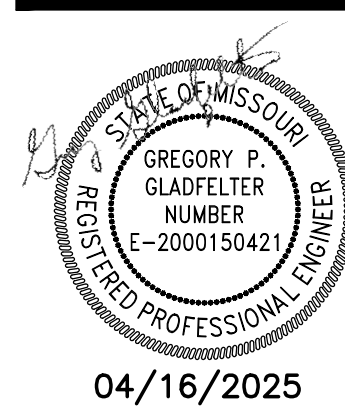
- SEE THE PLANS FOR NECK SIZE.
- COLOR PER ARCHITECT.
- PROVIDE DAMPER AT DUCT TAKE-OFF EXCEPT PROVIDE GRILLE MOUNTED DAMPER WHERE OUTLET IS ABOVE INACCESSIBLE CEILING.
- PROVIDE WITH DAMPER OR EXTRACTOR IF REQUIRED FOR BALANCING.

### MECHANICAL SYMBOLS

	NEW SHEET METAL DUCTWORK & SIZE.
	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.
	CONDENSATE DRAIN.
	ELBOW DOWN.
	ELBOW UP.
	SUPPLY AIR.
	OUTSIDE AIR.
	RETURN AIR.
	EXHAUST AIR.
	CONDENSING UNIT.
	EXHAUST FAN.
	ROOFTOP UNIT.
	PLAN NOTE DESIGNATION.
	PLAN REVISION DESIGNATION.
	CONNECT TO EXISTING.
	MECHANICAL EQUIPMENT DESIGNATION - TOP PORTION IS EQUIPMENT (RTU, EF, HP, ETC.), BOTTOM PORTION IS NO. OR LETTER (SEE APPROPRIATE SCHEDULE).

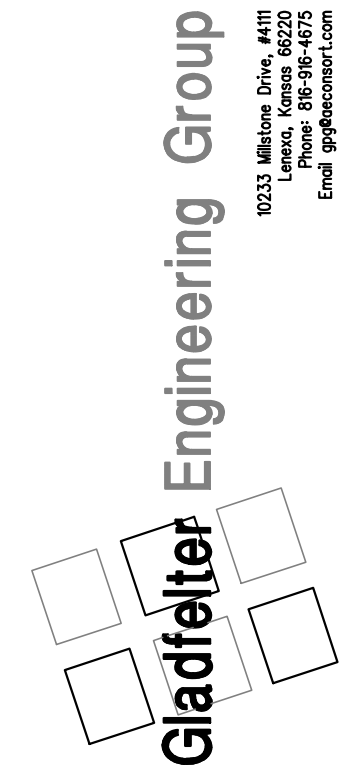
### PLUMBING SYMBOLS

	EXISTING TO REMAIN.
	NEW PIPING WORK.
	DOMESTIC COLD WATER (CW).
	DOMESTIC HOT WATER (HW).
	HOT WATER RECIRCULATION (HWR).
	PLUMBING VENT ABOVE FLOOR (V).
	SANITARY WASTE ABOVE FLOOR (W).
	SANITARY WASTE BELOW FLOOR (W).
	GAS (NATURAL) (NG).
	ELBOW DOWN.
	ELBOW UP.
	TEE DOWN.
	TEE UP.
	CAP.
	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).



RELEASED FOR  
CONSTRUCTION  
As Noted on Plans Review  
Development Services Department  
Lee's Summit, Missouri  
04/21/2025

DRAGON J  
204 NW OLDHAM PKWY  
LEE'S SUMMIT, MO



Date:	Issued for:
11/07/24	PERMIT
12/03/24	CITY COMMENTS
01/27/25	CHANGE ORDER
02/12/25	CITY COMMENTS
04/16/25	OWNER REVISIONS
Project number:	24-242
Drawn:	JEE/GPG/MKS
Date:	2025/04/16
Sheet Number:	

MP300

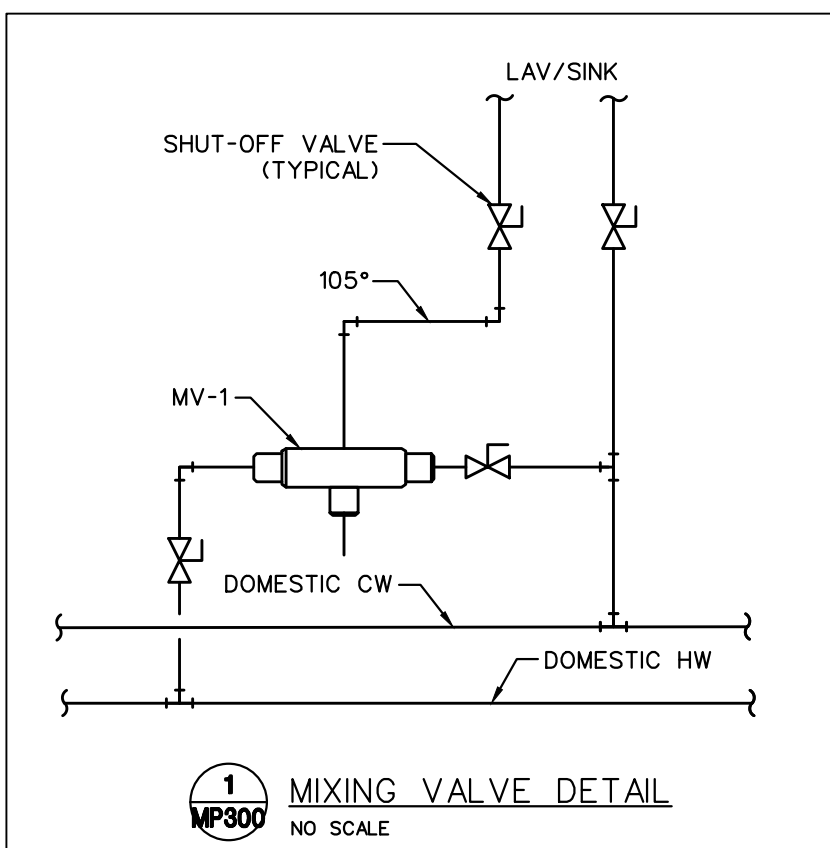
DUCT INSULATION SCHEDULE							NOTES
	INTERNAL INSULATION			EXTERNAL INSULATION			
	1/2"	1"	OTHER	1"	2"	OTHER	
LOW VELOCITY DUCTS:							
RETURN DUCTS		o					1
SUPPLY DUCTS (RECT.)		o					
SUPPLY DUCTS (ROUND)					o		3,4
EXHAUST DUCTS	o			o			2
OUTSIDE AIR DUCTS				o			
RELIEF DUCTS	o						1
MEDIUM/HIGH VELOCITY DUCTS:							
ROUND SUPPLY				o			
FLAT OVAL SUPPLY				o			

NOTES:

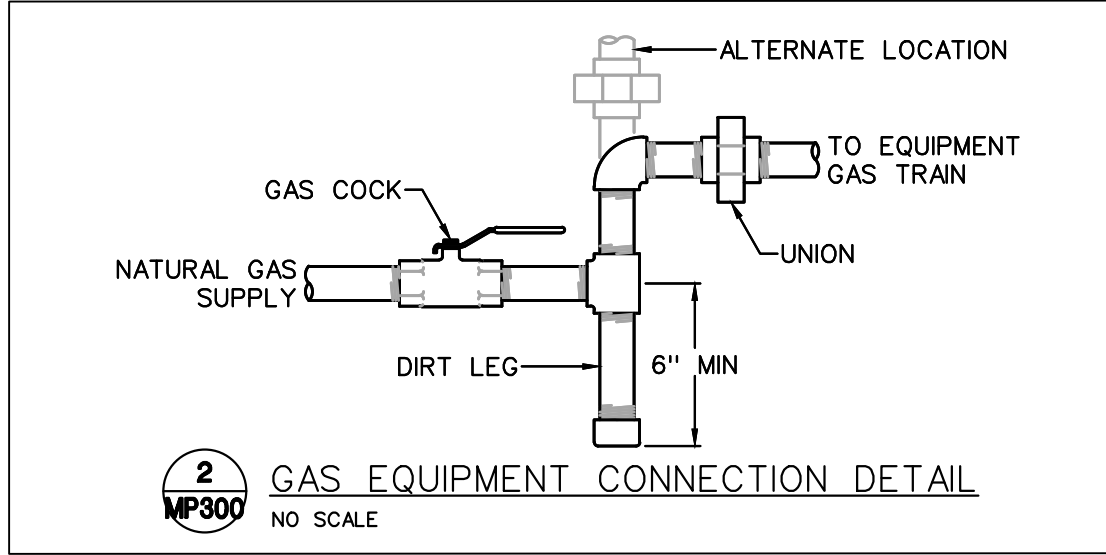
- INSULATION SHALL BE INSTALLED WHEN INDICATED OTHERWISE IN THE CONSTRUCTION DOCUMENTS. OTHERWISE, NO INSULATION IS REQUIRED.
- INSULATION IS REQUIRED WITHIN 6'-0" OF TERMINATION POINT OF EXHAUST AIR. RECTANGULAR DUCTS SHALL BE LINED, ROUND DUCTS SHALL BE WRAPPED.
- CONCEALED ROUND SUPPLY AIR DUCTS AND 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.
- AT CONTRACTOR'S 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 LINK LINDLAB SPIRO-SAFE SPIRAL LOCKSEAM DUCTWORK. SEE THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- 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 SPIROACUSTIC PLUS, OR APPROVED EQUAL, 1.5" THICK (R6.4). SEE THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

INSULATED OR LINED DUCT DETAIL  
NO SCALE

**3 INSULATED OR LINED DUCT DETAIL**  
NO SCALE



**1 MIXING VALVE DETAIL**  
NO SCALE



**2 GAS EQUIPMENT CONNECTION DETAIL**  
NO SCALE

OUTSIDE AIR SUMMARY (SINGLE ZONE SYSTEMS) (NOTES 2 & 3)												
SYSTEM	SPACE	AREA (SQUARE FEET)	CALCULATED OCCUPANT TOTAL (Pz)	VENTILATION RATE (CFM/PERS) (Rp)	AREA OUTDOOR AIRFLOW IN BREATHING ZONE (Ra) CFM/SF	SPACE OUTDOOR AIRFLOW IN BREATHING ZONE Vbz=RpPz+RaAz CFM	ZONE AIR DISTRIBUTION EFFECTIVENESS (Ez) COOLING/HEATING (NOTE 1)	ZONE OUTDOOR AIRFLOW (Voz=Vbz/Ez) COOLING	ZONE OUTDOOR AIRFLOW (Voz=Vbz/Ez) HEATING	ZONE OUTDOOR AIR SETPOINT (CFM)	EXHAUST REQUIRED (CFM) (NOTE 5)	REMARKS
RTU-1	KITCHEN (COOKING)	389	8	7.5	0.12	106.68	1.0/0.8	106.68	133.35	134	272	6
(5-TON)	DINING ROOM	667	47	7.5	0.18	472.56	1.0/0.8	472.56	590.70	591		
	CORRIDOR	44	0	5	0.06	2.64	1.0/0.8	2.64	3.30	4		
	STORAGE	32	0	0	0.12	3.84	1.0/0.8	3.84	4.80	5		
	RESTROOM	61									140	
	TOTAL	1,193	55							734	412	

- 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.
- CALCULATION DONE IN ACCORDANCE WITH 2018 IMC, CHAPTER 4.
- VENTILATION AIR PROVIDED BY DIRECT CONNECTION TO THE OUTDOORS IN ACCORDANCE WITH SECTION 401, 2018 IMC.
- BATHROOM MINIMUM EXHAUST AIR PROVIDED AT MINIMUM 70 CFM PER FIXTURE IN ACCORDANCE WITH CHAPTER 4, 2018 IMC.
- SPACE EXHAUST REQUIRED AT THE INDICATED RATE.
- 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).