

# MOJAVE<sup>®</sup> LT MONITOR

## DENTAL DRY VACUUM

Part Nos: LT3M, LT5M, 2LT3M, and 2LT5M

## PRE-INSTALLATION GUIDE

All pumps comply with NFPA 99C level 3 requirements.

All installations must conform to local codes.

Doctor: \_\_\_\_\_

Address: \_\_\_\_\_

Phone#: \_\_\_\_\_

Dealer: \_\_\_\_\_

Dealer Address: \_\_\_\_\_



# MOJAVE SYSTEM CONFIGURATION

## Recommended Number of Simultaneous Users

Part No.	Simultaneous Users	HP
LT3M	Up to 4	1.4
LT5M	Up to 6	1.7
2LT3M	Up to 7	2.8
2LT5M	Up to 11	3.4

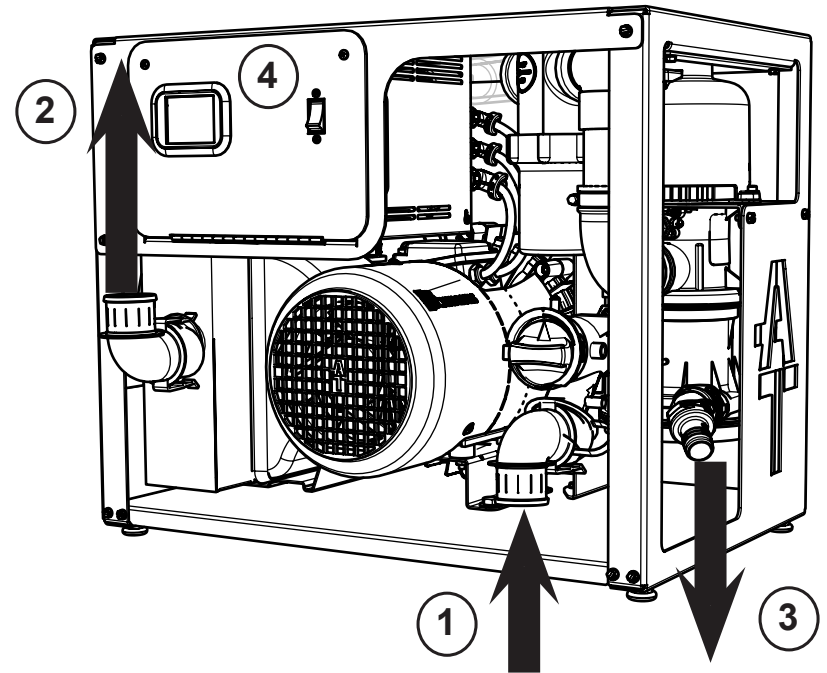
**Note:** Vacuum cuspidors and vacuum sinks cannot be connected to the LT system. Their use will damage the system and void the warranty.

## UL60601-1 Classification

Protection against electrical shock (5.1, 5.2) Class I, Transportable, Continuous Operation. No applied parts. Protection against ingress of liquids-Ordinary Equipment not suitable for use in the presence of flammable anaesthetic mixture with air or with oxygen or nitrous oxide.

## Recommended Space Requirement

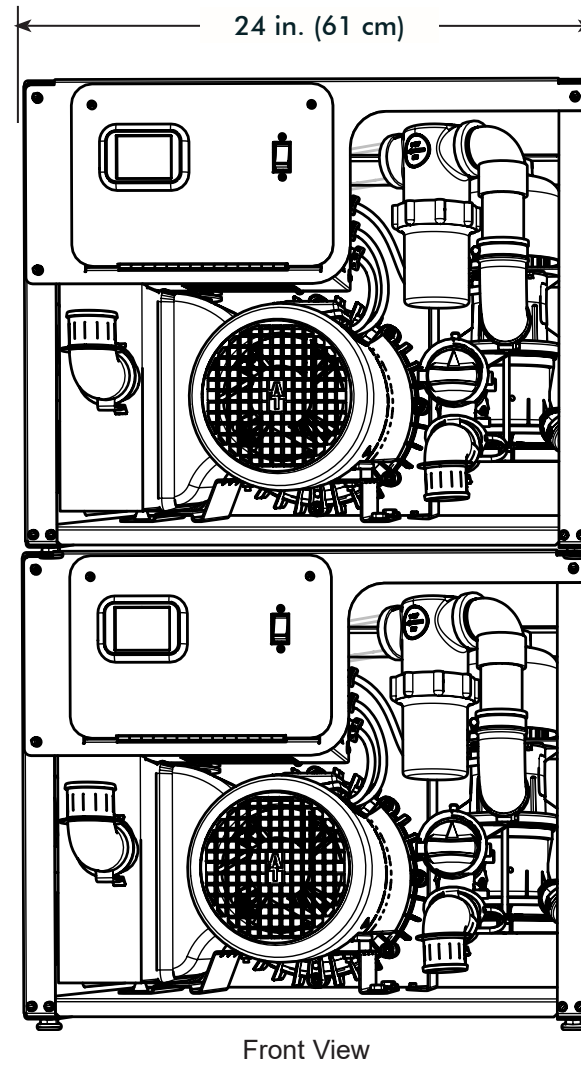
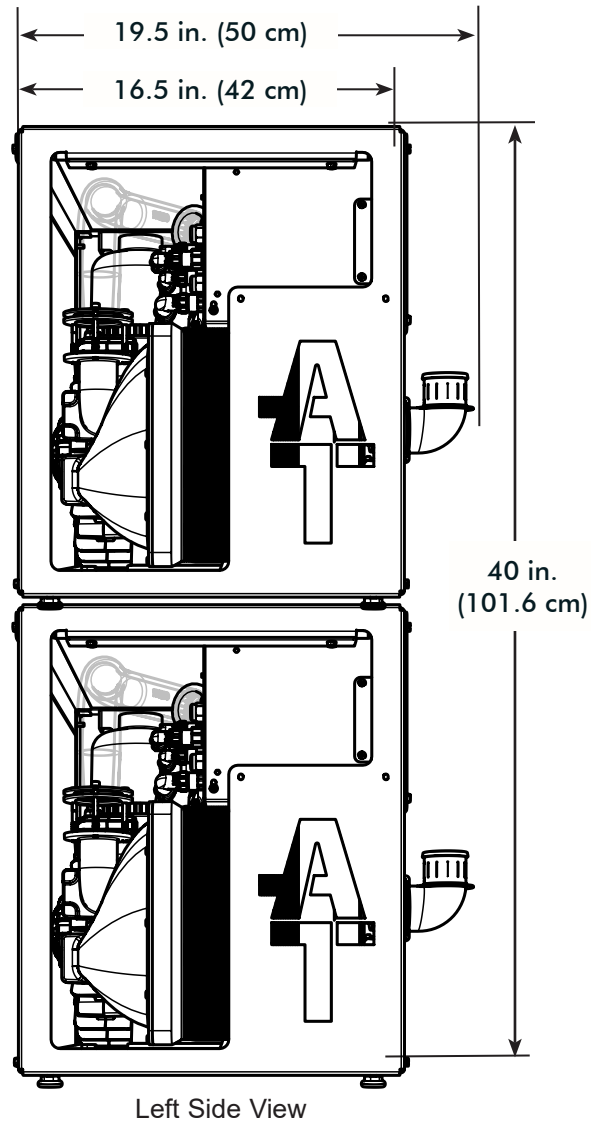
Unit Dimensions:	LT3M, LT5M
Height	20 in. (51 cm)
Width	24 in. (61 cm)
Depth	16.5 in. (42 cm)



## MOJAVE LT Dry Vacuum System Operation

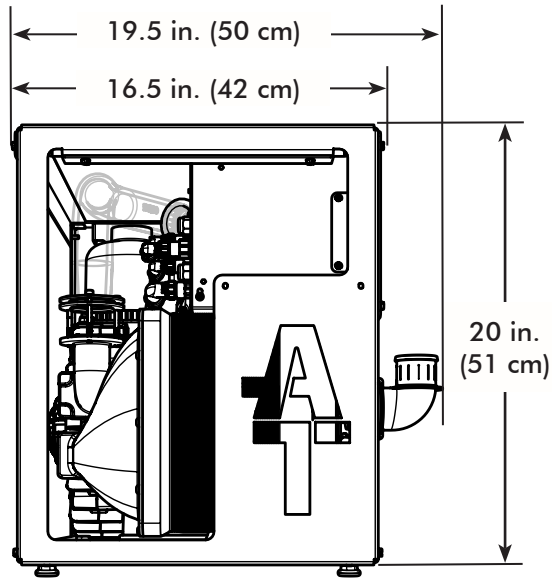
1. Gas/Liquids/Solids from the Treatment Room into Air/Water Separator.
2. Heat Exhaust to Outside Vent
3. Liquids/Solids from the Air/Water Separator to Sewer Drain
4. The LCD touch screen provides the operational user interface for the MOJAVE LT system.

# MOJAVE LT SITE REQUIREMENTS

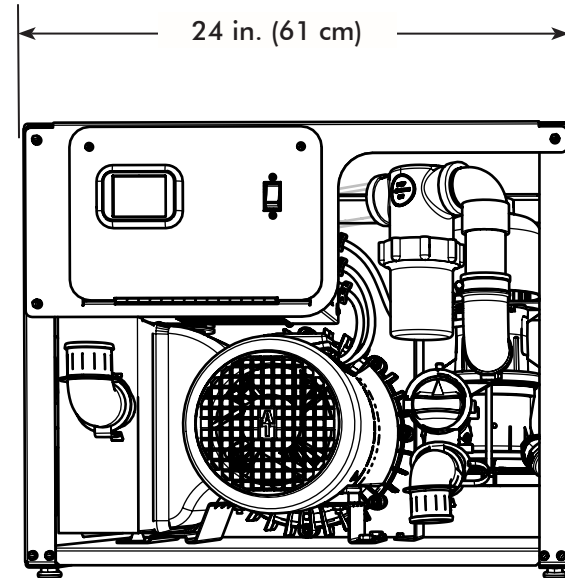


Recommended Space Requirement	
Unit Dimensions:	2LT3M, 2LT5M
Height	40 in. (101.6 cm)
Width	24 in. (61 cm)
Depth	16.5 in. (42 cm)

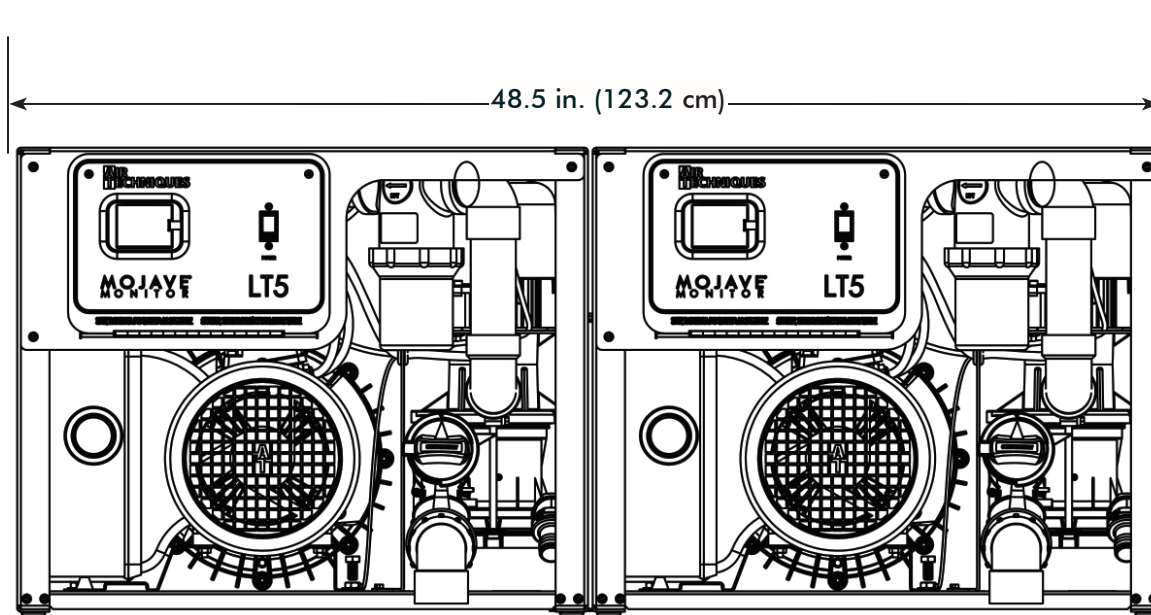
# MOJAVE SYSTEM CONFIGURATION



Left Side View



Front View



Front View

Recommended Space Requirement	
Unit Dimensions:	2LT3M, 2LT5M
Height	20 in. (51 cm)
Width	48.5 in. (123 cm)
Depth	16.5 in. (42 cm)

## MOJAVE LT SITE REQUIREMENTS

Electrical	LT3M	LT5M	2LT3M	2LT5M
Voltage Rating Volts AC	220 Volts, Single Phase AC, 50/60 Hz			
Voltage Minimum/Maximum	198/242 Volts AC @ 60 Hz   209/231 Volts AC @ 50 Hz			
Wire Size AWG Minimum Gauge	#12 AWG			
Minimum Circuit Breaker Rating	20A		2 x 20A	
Incoming Power	Hard wire Connection (unit is supplied with a 6 foot BX cable)			
Remote (Low Voltage Wiring)	#18 AWG Wire Connection between the pump and the Remote Switch Panel. Use of a high voltage switch not allowed.			
Power Application	Constant power MUST be supplied to the system at all times. Applications where power cannot be constantly provided, such as in many mobile dentistry environments, are not recommended for use with this system and will void the warranty.			
Plumbing	LT3M	LT5M	2LT3M	2LT5M
Exhaust Vent Pipe	1 ½" PVC Sch. 40		One 2" or Two 1 ½" PVC Sch. 40	
Minimum Suction Line Pipe	1" PVC Sch. 40	1 ½" PVC Sch. 40	1 ½" PVC Sch. 40	2" PVC Sch. 40
Maximum Suction Line Pipe (See note 2)	1 ½" PVC Sch. 40	2" PVC Sch. 40	2" PVC Sch. 40	2 ½" PVC Sch. 40
Riser Pipe	½" PVC Sch. 40			
Vacuum Line Termination	1 ½" Spigot			
Drain Hose	1" Corrugated, A full gravity drain is required.			

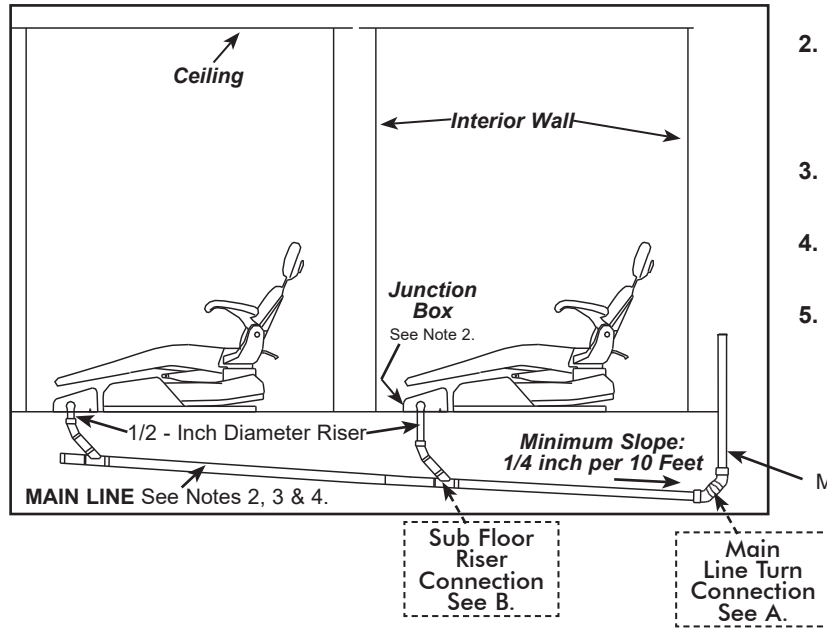
### NOTES

1. Recommended for all new installations.
2. Use maximum internal diameter for the main line when preparing any new installation.

# TREATMENT ROOM PLUMBING INSTALLATIONS

## SUB FLOOR INSTALLATION -

Recommended system installation layout should be used whenever possible.



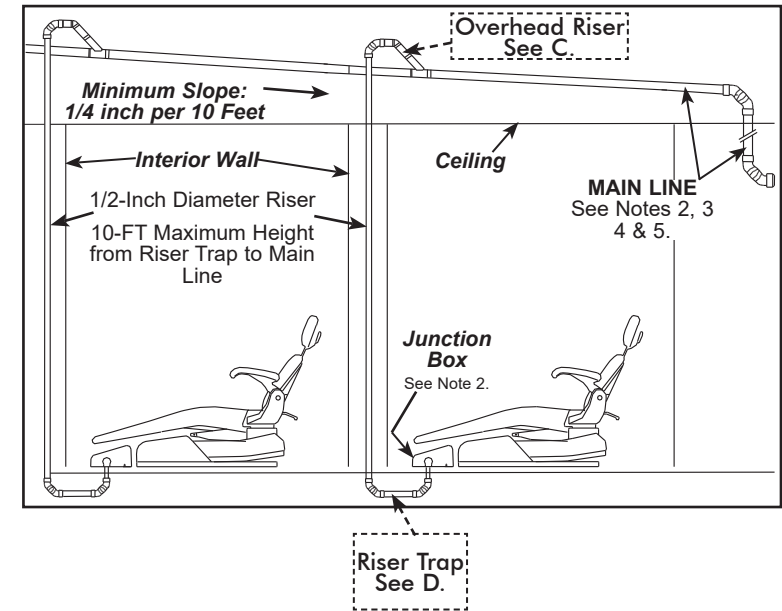
### Notes:

- 10-foot Maximum Height from Main Line to unit.
- Consult Dental Unit Manufacturer's Guidelines for correct reduced size and height of termination of vacuum line inside junction box.
- Limit branches. Orient main line under junction box or cabinet.
- When piping line is above 3/4" I.D. or larger, use 45° Y's & elbows only.
- Recommend installing separate line connection for scavenger when using Nitrous scavengers in overhead piping installations.

Main Line Riser for connection to unit input. See Note 1.

## OVERHEAD INSTALLATION -

Alternate system installation layout should be used only when unable to use the sub-floor plumbing layout.

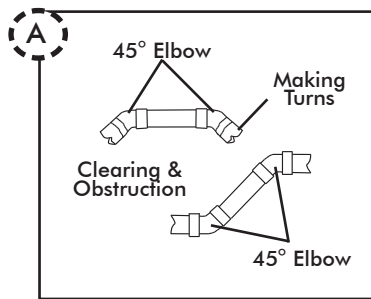


## CONNECTOR DETAILS - ALL INSTALLATIONS

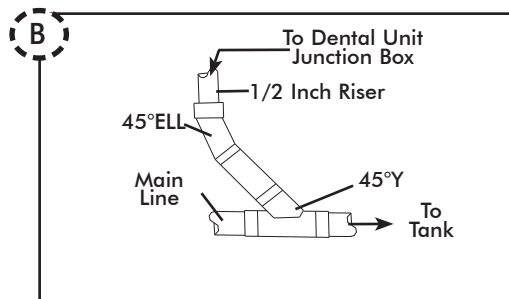
- Use only 45° elbows to make turns in main line.
- Make sure to use the proper pipe type for associated system.
- If piping is diverted to clear an obstruction, **DO NOT MAKE A TRAP.** See detail A, Main Line Turn Connections.
- DO NOT use standard 90° elbows.

**Important:**

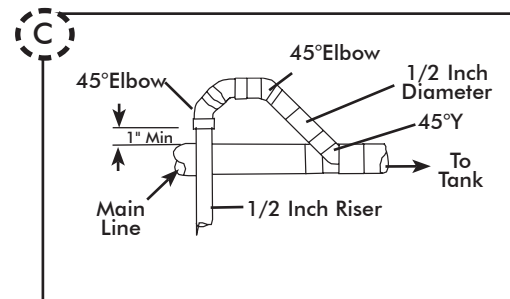
All installation pipes and fittings provided by plumber.  
All installations must conform to local codes.



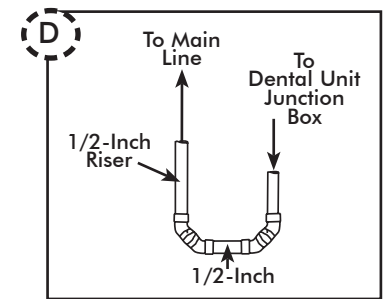
Main Line Turn Connections



Sub Floor Riser to Main Line Detail

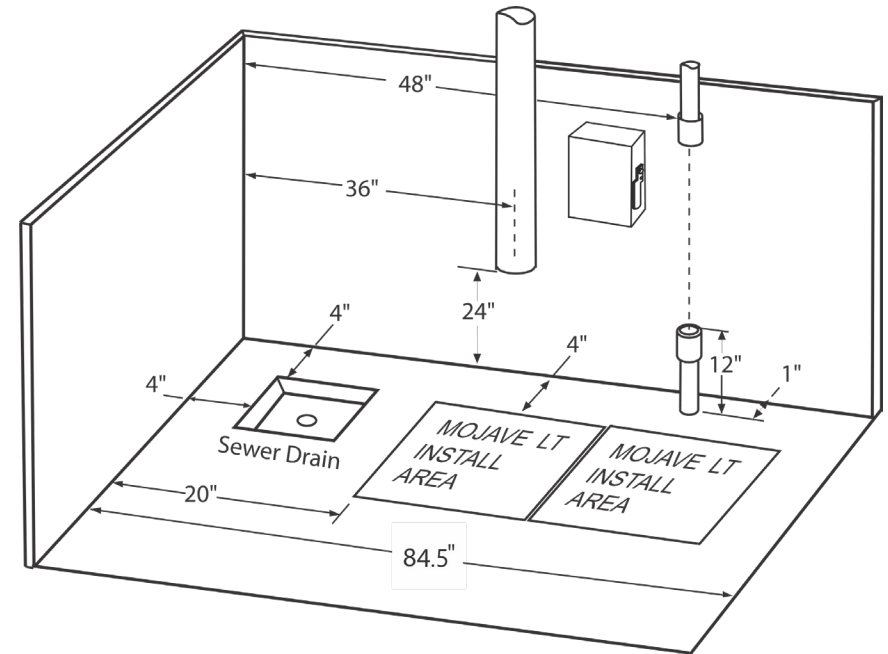
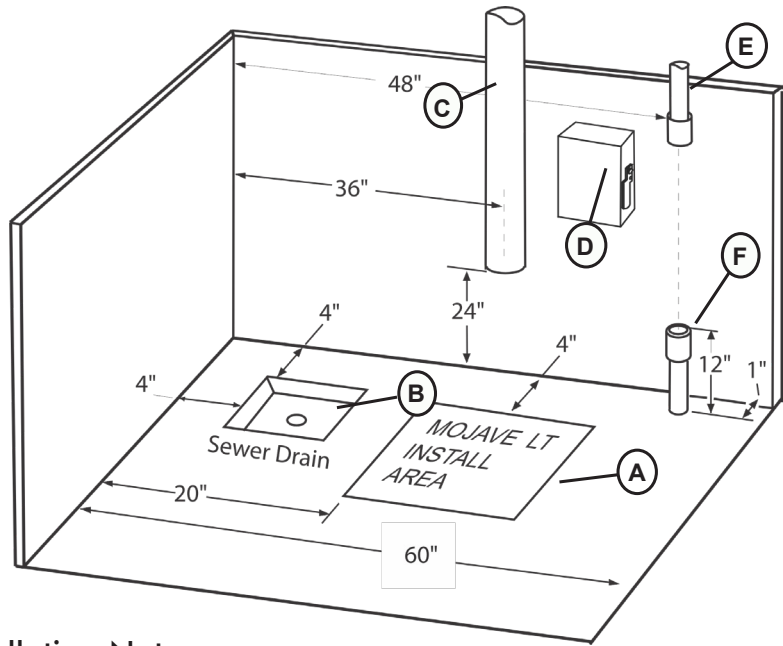
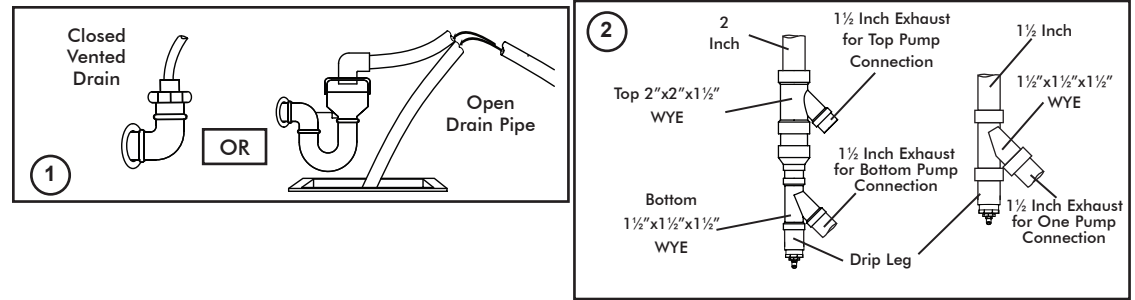


Overhead Riser to Main Line Detail  
(Prevents liquids from draining down the 1/2" riser.)



Riser Trap Detail (45° Elbows)

## TYPICAL EQUIPMENT ROOM FLOOR PLAN LAYOUT



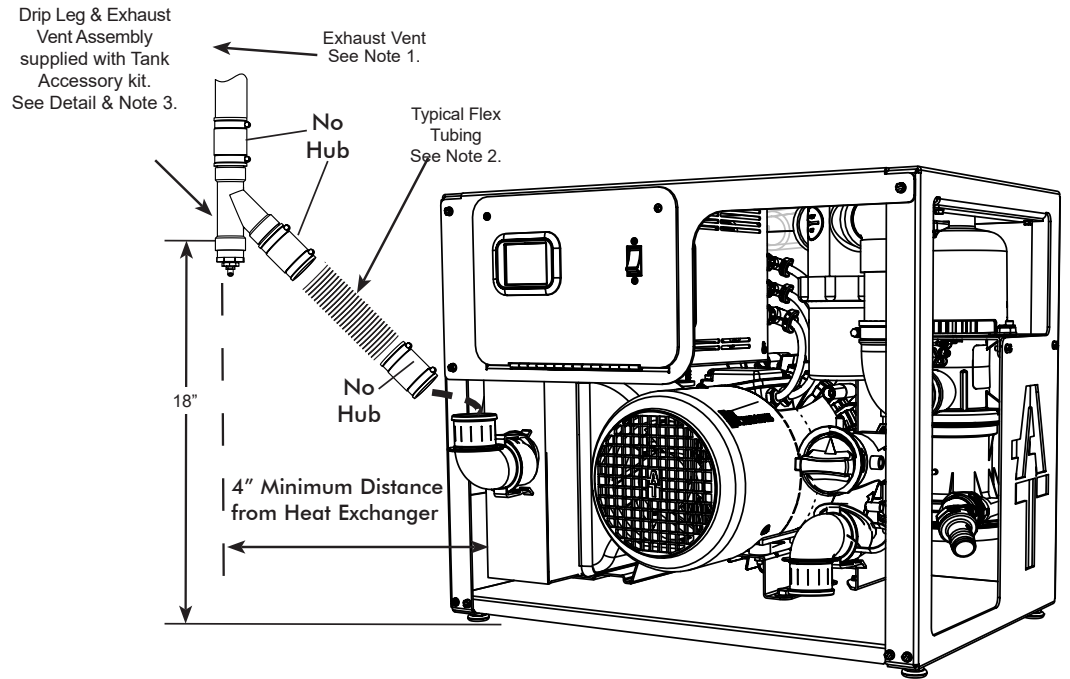
### Installation Notes.

- A. **PUMP INSTALLATION SPACE** - Area for **MOJAVE LT** pump in typical installation.
- B. **SEWER DRAIN** - Provide a drain for the removal of waste liquids from the Air/Water Separator assembly. Use an open drain pipe (1 1/2 inch P-Trap with 1 inch air gap or floor sink) or a closed vented drain. See Figure above.
- C. **HEAT EXHAUST** - Refer to Figure above and see Plumbing Requirements for the exhaust vent line required for **MOJAVE LT**. Schedule 40 pipe can be used on **MOJAVE LT**.
- D. **PUMP ELECTRIC SERVICE** - The **MOJAVE LT** pump is wired directly with a dedicated 220V, 20 AMP, single phase 60 Hz circuit. If Main Circuit panel is not located in equipment room, a disconnect box with approved ground is needed for each pump. Disconnect boxes should be mounted no more than 3 feet of the installation center line.
- E. **OVERHEAD INSTALLATION VACUUM LINE** - See Plumbing Requirements for **MOJAVE LT** connection.
- F. **SUB FLOOR INSTALLATION VACUUM LINE** - See Plumbing Requirements for **MOJAVE LT** connection.

# EXHAUST VENTILATION REQUIREMENTS

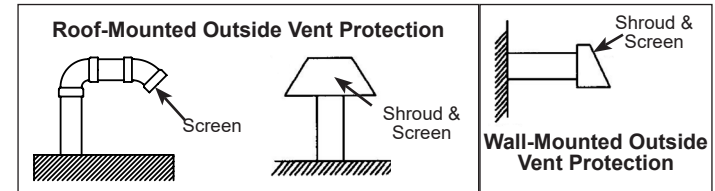
## HEAT EXHAUST CONNECTION NOTES

- 1. EXHAUST VENT LINE** - The exhaust vent line required for MOJAVE systems.  
Use PVC Schedule 40 pipe for the facility vent line.  
Do not make a trap in the exhaust vent piping. Do not use 90° fittings.  
Also see Exhaust Vent Protection and Exhaust Vent Requirements below.
- 2. PUMP EXHAUST VENT CONNECTION** - Connection between the pump heat exchanger output and exhaust vent piping is typically made via the supplied 1½ - inch tubing.
- 3. DRIP LEG and EXHAUST VENT ASSEMBLY** - The supplied Drip Leg and Exhaust Vent Assembly must be installed at the lower end of the vent pipe to collect condensation produced during pump operation. The bottom of the Y connector should be located 18 inches from floor. Attach the drain tube to the drip leg quick-connect fitting to allow drainage into floor drain/sink.



## Exhaust Vent Protection.

If the exhaust piping is venting to the outside of the building, precautions must be taken to protect the equipment room from weather elements and animal intrusion. This can be accomplished by using one of the three methods shown on the right.



## Exhaust Vent Requirements.

The MOJAVE equipment must be used in a controlled-temperature environment. Maintain equipment room temperature between 40 and 105 degrees Fahrenheit. An exhaust fan is necessary if room temperature is not maintained by other methods.

Adequate forced ventilation must be provided across the unit by placing an appropriate exhaust fan opposite an equivalent air intake vent. The fan should be placed higher than the associated intake vent. Recommended minimum exhaust fan requirements for each MOJAVE unit are listed to the right.

Mojave LT Product	Watts (Min)	Watts (Max)	BTU/hr (Min)	BTU/hr (Max)
LT3M	486	1,152	1,657	3,928
LT5M	486	1,188	1,657	4,051
2LT3	972	2,304	3,314	7,856
2LT5	972	2,304	3,314	8,102



MEDICAL ELECTRICAL EQUIPMENT

WITH RESPECT TO ELECTRICAL SHOCK, FIRE, MECHANICAL AND OTHER SPECIFIED HAZARDS ONLY  
IN ACCORDANCE WITH UL-60601-1, CAN/CSA C22.2 NO.601.1 66CA

*NOTES*

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  - Air Compressors
  - Amalgam Separator
  - Utility Accessories
  - Utility Packages
- ❑ **Nitrous Oxide**
  - Analog & Digital Flowmeters
  - Flowmeter mounting
  - Central Gas Supply: Manifold, Alarm, Zone Valve, Outlets, & accessories.
  - Oxygen Delivery & Emergency delivery
  - Scavenger systems & Nasal hoods
- ❑ **Merchandise**
  - Surface Disinfectant
  - Enzymatic Cleaner
  - Hand Sanitizer and Lotion
  - Waterline Cleaner
  - Evacuation System Cleaner
  - Imaging Accessories
  - Chemistry
  - Processor Accessories

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