

# MOJAVE<sup>®</sup> LT MONITOR

## DENTAL DRY VACUUM

Part Nos: LT3M and LT5M

## 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

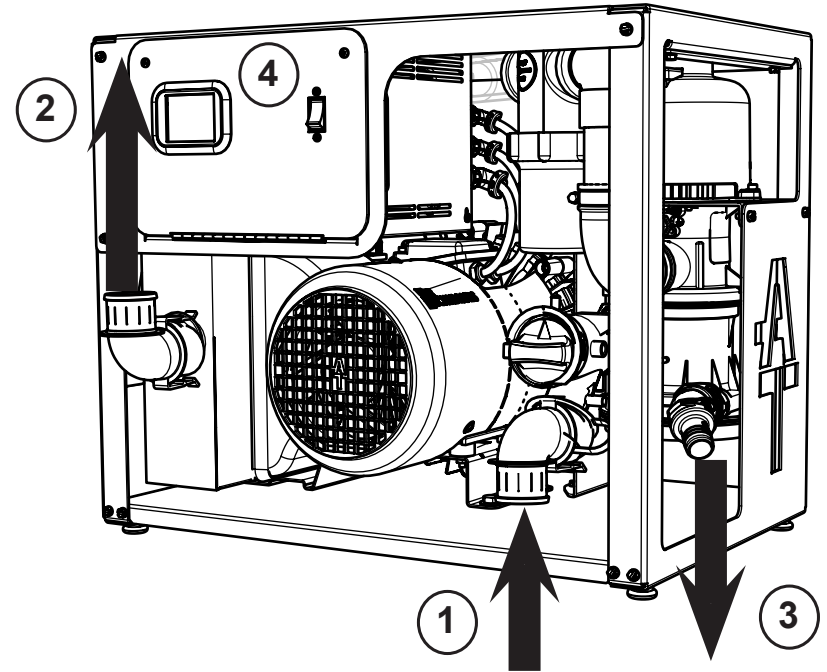
## Recommended Number of Simultaneous Users

| PN   | Simultaneous Users | SCFM @ 7 inHg | HP  |
|------|--------------------|---------------|-----|
| LT3M | 2 to 4             | 28            | 1.4 |
| LT5M | 3 to 6             | 42            | 1.7 |

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

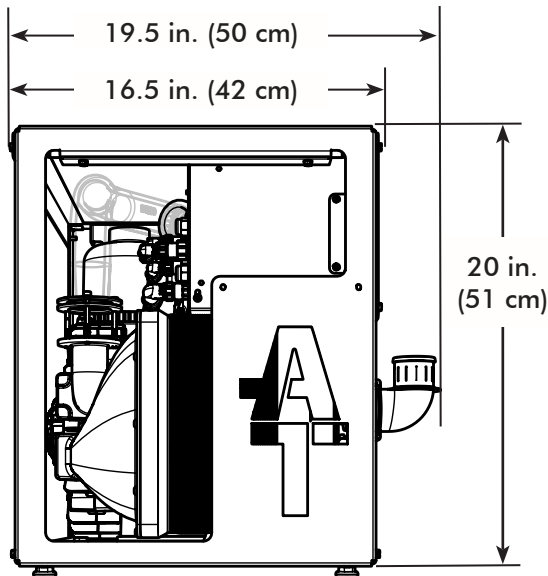
## UL60601-1 Classification

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.

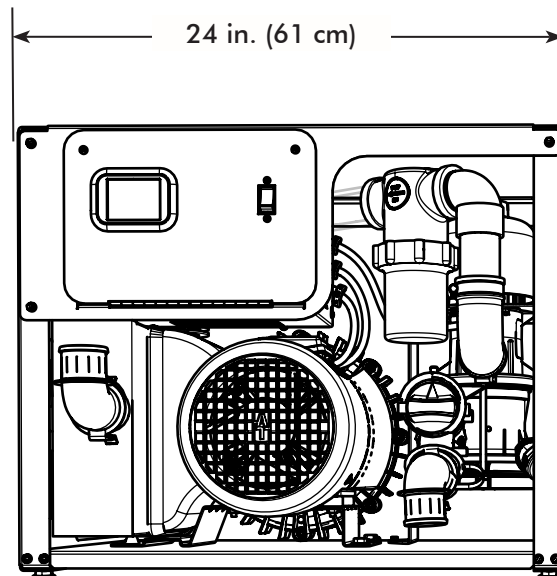


## MOJAVE LT Dry Vacuum System Operation

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.



Left Side View



Front View

## Recommended Space Requirement

| Unit Dimensions: |                  |
|------------------|------------------|
| Height           | 20 in. (51 cm)   |
| Width            | 24 in. (61 cm)   |
| Depth            | 16.5 in. (42 cm) |

## MOJAVE LT SITE REQUIREMENTS

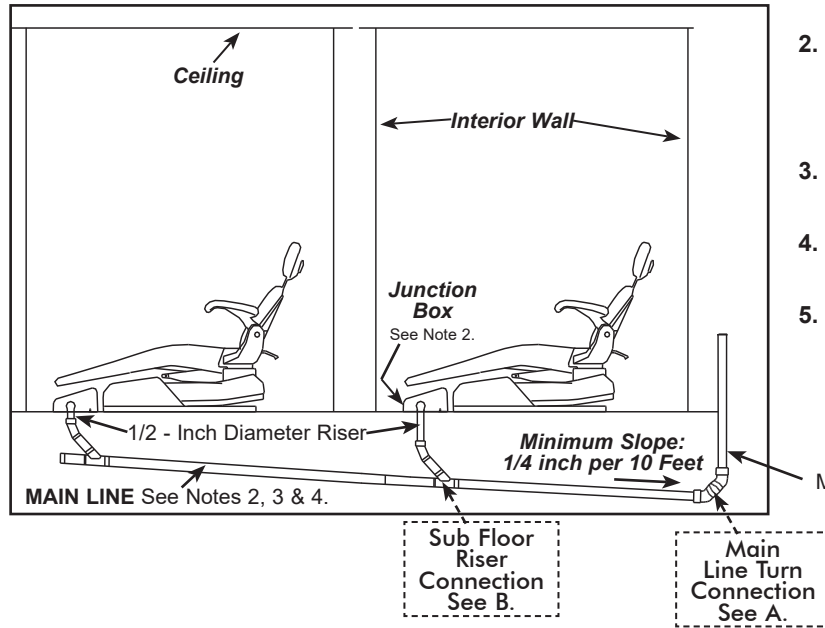
| Electrical                             |   | LT3M & LT5M Requirement   |  |
|--|---|---------------------------|--|
| Voltage Rating Volts AC                | 220 Volts, Single Phase AC, 60 Hz   |                           |  |
| Voltage Minimum/Maximum                | 198/242 Volts AC  |                           |  |
| Wire Size AWG Minimum Gauge            | #12 AWG   |                           |  |
| Minimum Circuit Breaker Rating         | 20A   |                           |  |
| Incoming Power                         | Hard Wire Connection<br>(unit is supplied 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. |                           |  |
| Plumbing                               |   | LT3M & LT5M Requirement   |  |
| Exhaust Vent Pipe                      | 1 ½" PVC Sch. 40  |                           |  |
| Minimum Suction Line Pipe              | 1" PVC Sch. 40 for LT3M   | 1 ½" PVC Sch. 40 for LT5M |  |
| Maximum Suction Line Pipe (See note 2) | 1 ½" PVC Sch. 40 for LT3M   | 2" PVC Sch. 40 for LT5M   |  |
| Riser Pipe                             | ½" PVC Sch. 40  |                           |  |
| Vacuum Line Termination                | 1 ½" Spigot   |                           |  |
| Drain Hose                             | A full gravity 1" corrugated drain required.  |                           |  |
| Network                                |   | LT3M & LT5M Requirement   |  |
| Network Cable                          | 1 Cable per MOJAVE LT   |                           |  |

MOJAVE LT vacuum pumps comply with NFPA 99C level 3 requirements.

# TREATMENT ROOM PLUMBING INSTALLATIONS

## SUB FLOOR INSTALLATION -

Recommended system installation layout should be used whenever possible.



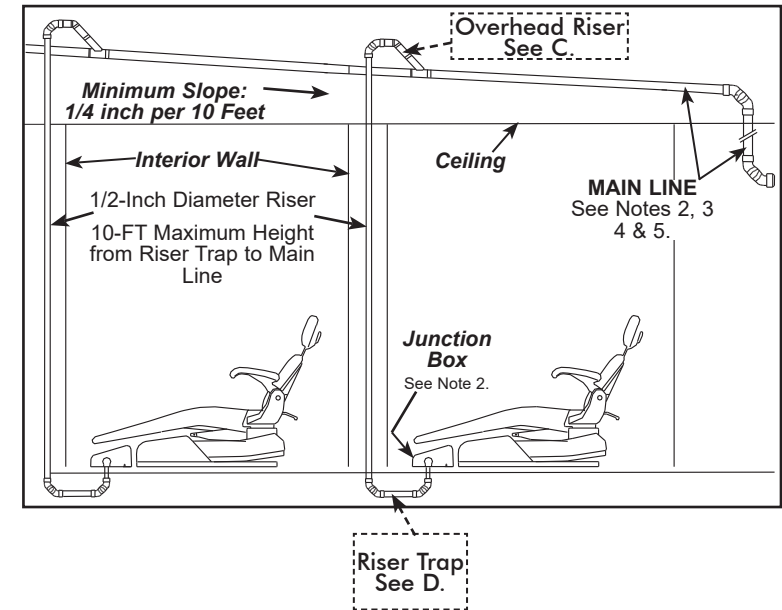
### Notes:

- 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 -

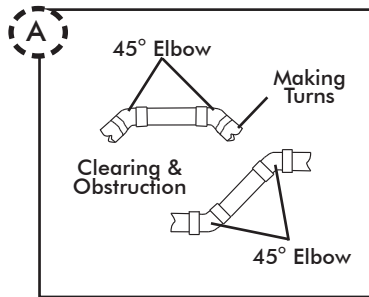
Alternate system installation layout should be used only when unable to use the sub-floor plumbing layout.



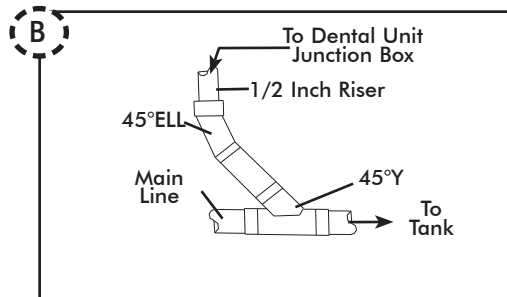
## CONNECTOR DETAILS - ALL INSTALLATIONS

- 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.

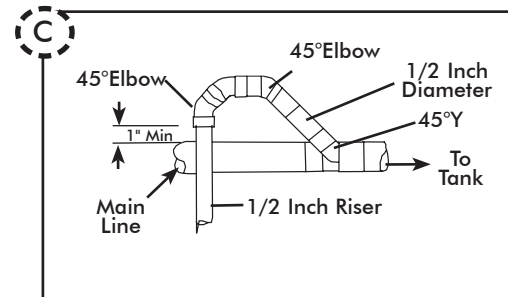
**Important:**  
All installation pipes and fittings provided by plumber.  
All installations must conform to local codes.



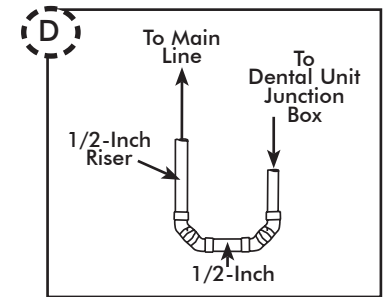
Main Line Turn Connections



Sub Floor Riser to Main Line Detail

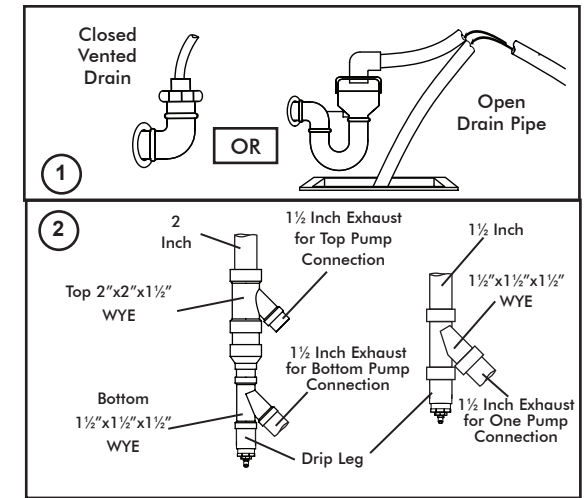
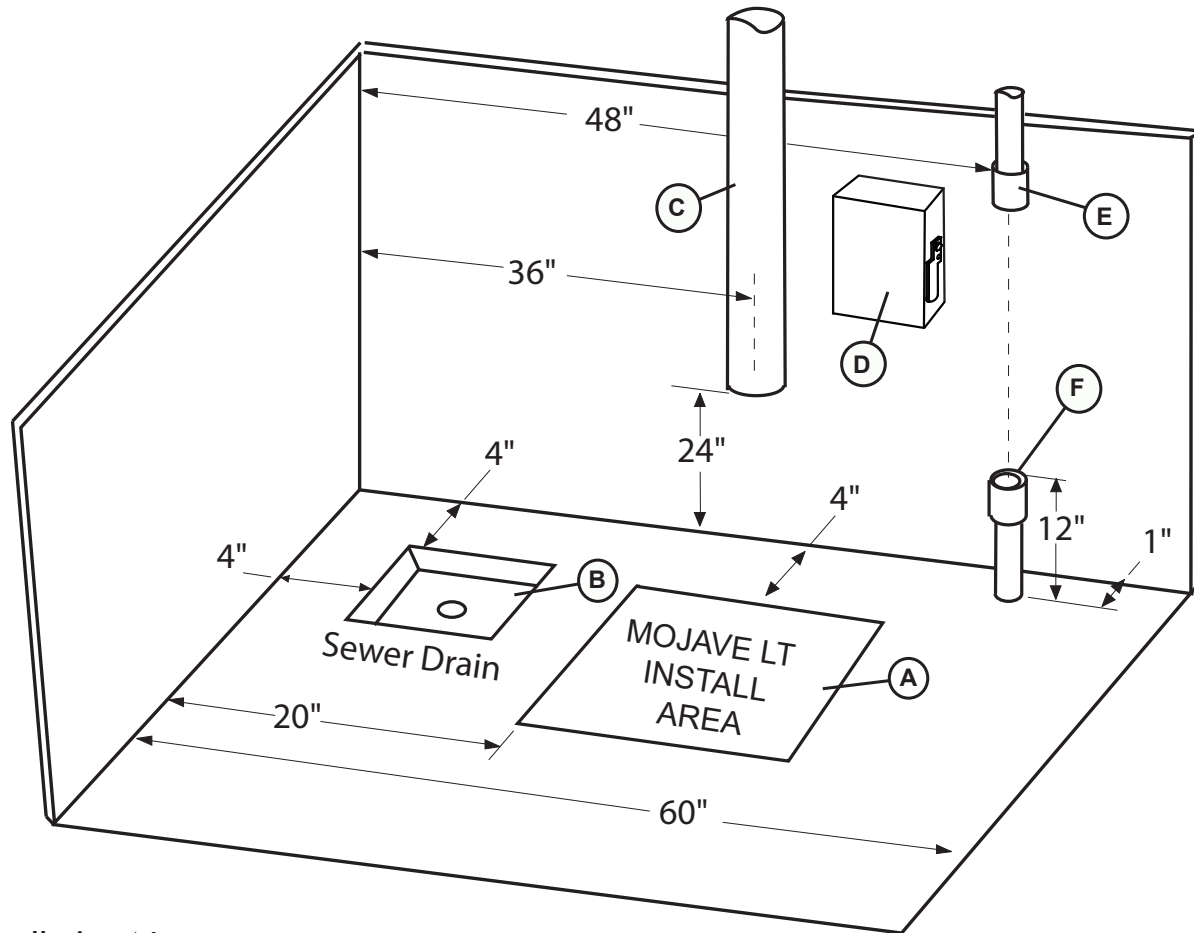


Overhead Riser to Main Line Detail  
(Prevents liquids from draining down the 1/2" riser.)



Riser Trap Detail (45° Elbows)

## TYPICAL EQUIPMENT ROOM FLOOR PLAN LAYOUT



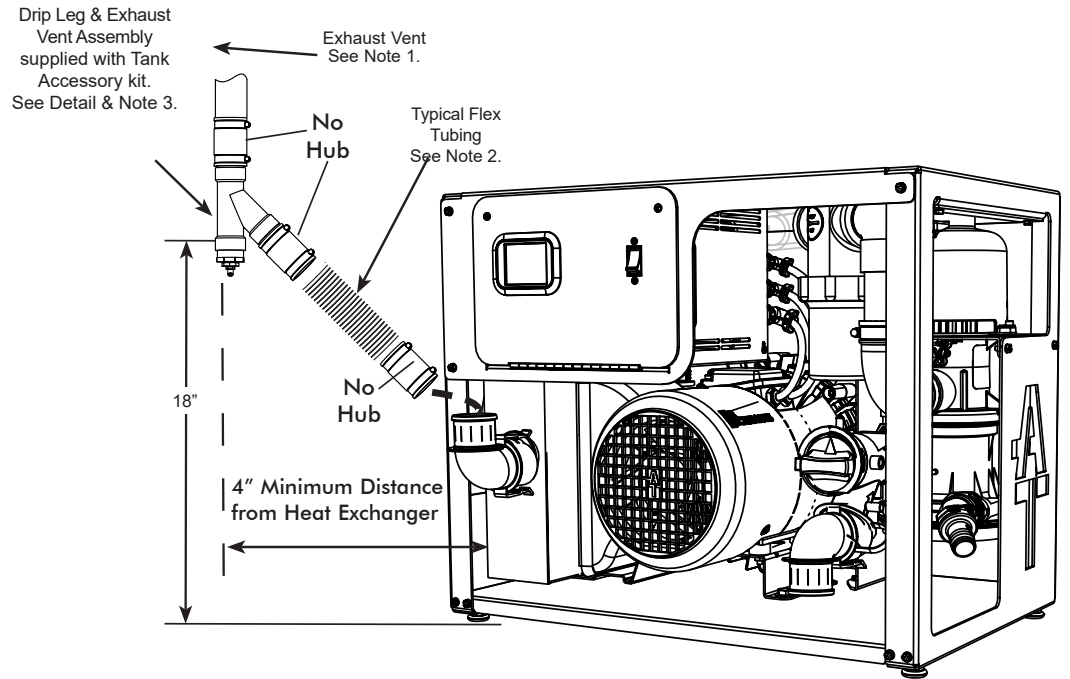
### Installation Notes.

- 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

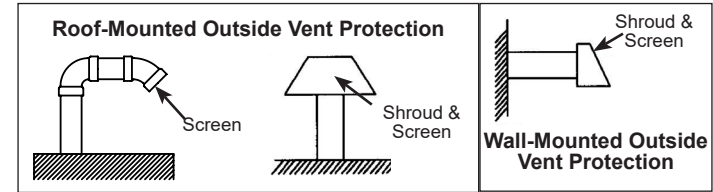
## HEAT EXHAUST CONNECTION NOTES

- 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        |



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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