

FIGURE 1— Dryer Dimensions  
inches (MM)

# INSTALLATION AND OPERATING INSTRUCTIONS

## UNCRATING AND PLACING DRYER

Tools Required: 3/4" hex socket & ratchet driver, wood block 4" or 5" thick, a knife and a groove joint plier which will open to 1 3/8".

1. Remove and discard packaging.

2. The crate base is attached to the dryer by (4) cap screws driven upward from below the crate base. Remove crate base from dryer, by tipping dryer sidewise and place block under crate base rail in center of dryer. Using a ratchet and 3/4" hex socket remove and discard (2) crating bolts from side which is raised. Remove block from under crate base. Repeat for other side.

3. Install leveling legs. Using a walking motion, move dryer sideways about 6" off crate base. Tip dryer up and place block under edge of dryer. Thread two leveling legs about two-thirds into the T-nuts on the base from which the crating bolts were removed. Remove block from under dryer.

With a walking motion move dryer completely off crate base. Discard crate base.

Tip dryer sidewise, as previously done, and place block under edge of dryer on raised side. Thread leveling legs into nuts as was done for the first side.

Slide unit into position where it will be installed. Adjust leveling legs, using the groove joint plier, to level and align dryer with adjacent units.

## DRYER INSTALLATION

1. CODE OF CONFORMITY. All commercial dryer installations must conform with local codes or, in the absence of local codes, with the Nation Fuel Gas Code ANSI Z223.1A. Canadian installations must comply with current Standard CAN/CGA-B149 (.1 or .2) Installation Code for Gas Burning Appliances or Equipment, and local codes if applicable. The appliance, when installed, must be electrically grounded in accordance with the National Electric Code, ANSI/NFPA No. 70-1990, or, when installed in Canada, with Standard CSA C22.1 Canadian Electrical Code Part 1.

2. INSTALLATION CLEARANCES: This unit may be installed at the following alcove clearance. (millimeters)

- |                |   |
|----------------|---|
| I. Left Side   | 0"  |
| II. Right Side | 0"  |
| III. Back      | 18" (457) (Certified for 6" (152) clearance; however, 18" (457) clearance is necessary behind the motors to allow servicing and maintenance.)   |
| IV. Front      | 48" (1220) (to allow use of dryer)  |
| V. Top         | Refer to figure labeled "Vertical Clearance Dimensions".<br>AB. Certification allows 0" clearance at the top 4" (102) back from the front.<br>However, a 1/4" (6) clearance should be allowed in case the dryer needs moving.<br>C. A 10" (254) clearance is required from top at all other points. |
| VI. Floor      | This unit may be installed upon a combustible floor.  |

Do not obstruct the flow of combustion and ventilation air.

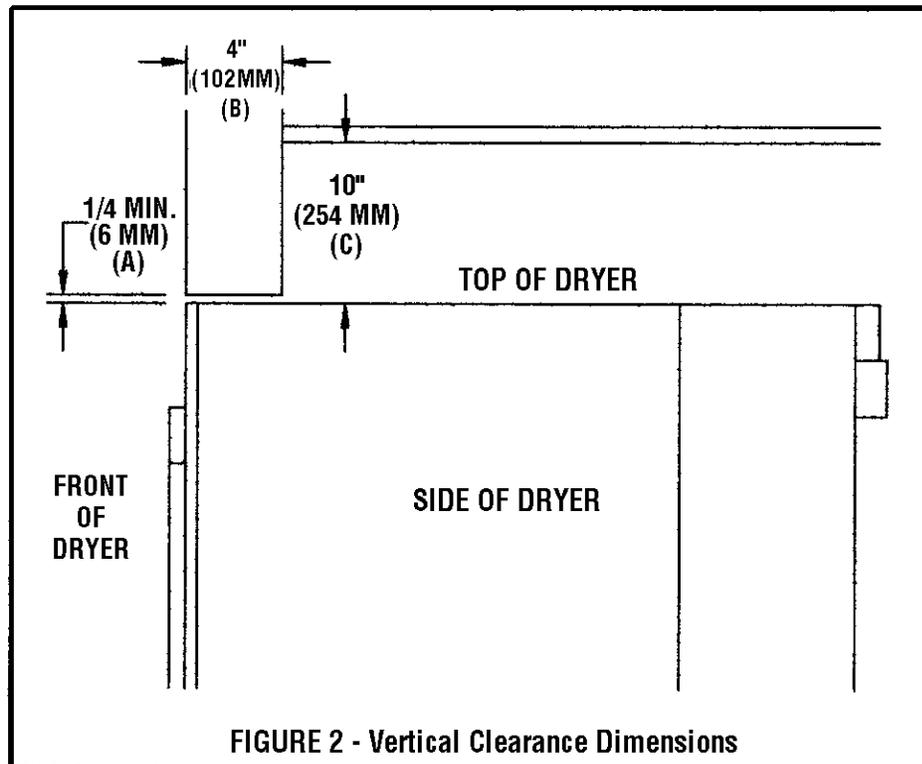
Maintain minimum of 1" (25) clearance between duct and combustible material.

Refer to the label attached to the Belt Guard on the rear of the dryer for other installation information and start-up instructions.

3. MAKE-UP AIR. Adequate make-up air (480CFM/DRUM, 960CFM/DRYER) must be supplied to replace air exhausted by dryers on all types of installations. Provide a minimum of 1 1/2 square feet make-up air opening to outside for each dryer. This is a net requirement of effective area. Screens, grills or louvers which will restrict the flow of air must be considered. Consult the supplier to determine the free area equivalent for the grill being used.

The source of make-up air should be located sufficiently away from the dryers to allow an even air flow to the air intakes of all dryers. Multiple openings should be provided.

NOTE: The following considerations must be observed for gas dryer installations where dry cleaners are installed.



The sources of all make-up air and room ventilation air movement to all dryers must be located away from any dry cleaners. This is necessary so that solvent vapors will not be drawn into the dryer inlet ducts. Dry cleaner solvent vapors will decompose in contact with open flame such as the gas flame present in clothes dryers. The decomposition products are highly corrosive and will cause damage to the dryer(s) ducts and clothes loads.

4. **ELECTRICAL REQUIREMENTS.** The electrical power requirements necessary to operate the unit satisfactorily are listed on the serial plate located on the back panel of each dryer. The electrical connection should be made to the terminal board, on the rear of the unit, using #10 AWG wire for 120V, #12 AWG for 208-240V.

It is absolutely necessary that the dryer be grounded to a known ground.

Individual circuit breakers for each stacked dryer are required. Use 30A circuit breakers for 120V and a 15A or 20A circuit breakers for 208-240V.

This dryer is adjusted for 120V as shipped. Conversion instructions to 208-240V are at the end of this booklet.

5. **GAS REQUIREMENTS.** The complete gas requirements necessary to operate the dryer satisfactorily are listed on the serial plate located on the back panel of the dryer.

The inlet gas connection to the unit is 1/2 inch pipe thread. However, the size of the piping to supply the dryer should be determined by reference to the National Fuel Gas Code ANSI Z223.1A and consultation with the local gas supplier.

A joint compound resistant to the action of liquefied petroleum gases should be employed in making pipe connections.

A 1/8 inch NPT plugged tapping, accessible for test gage connection, must be installed immediately upstream of the gas supply connection to the dryer.

A drip tee is provided in the unit gas piping to catch dirt and other foreign articles.

All pipe connections should be checked for leakage with soap solution. Never check with an open flame.

For altitudes above 2,000 feet (610m) it is necessary to derate the BTU input. Contact your local distributor for instructions.

L.P. gas conversion kits are available for this dryer. Contact your local distributor.

**CAUTION:** The dryer and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig. The dryer must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig.

6. **EXHAUST INSTALLATION.** (Refer to Figure 3 at the end of section 6.) Exhausting of the dryer(s) should be planned and constructed so that no air restrictions occur. Any restriction due to pipe size or type of installation can cause slow drying time, excessive heat, and lint in the room.

From an operational standpoint, incorrect or inadequate exhausting can cause a cycling of the high limit thermostat which shuts off the main burners and results in inefficient drying.

The oval exhaust duct connection near the top of the dryer will accept a compressed 8" round duct. Individual exhausting of the dryers is recommended. All heat, moisture, and lint should be exhausted outside by attaching a pipe of the proper diameter to the dryer adapter collars and extending it out through an outside wall. This pipe must be very smooth on the inside, as rough surfaces tend to collect lint which will eventually clog the duct and prevent the dryer from exhausting properly. All elbows must be smooth on the inside. All joints must be made so the exhaust end of one pipe is inside the next one downstream. The addition of an exhaust pipe tends to reduce the amount of air the blower can exhaust. This does not affect the dryer operation if held within practical limits. For the most efficient operation, it is recommended that no more than 14 ft. (4.25 m) of straight 8 in. diameter pipe with two right angle elbows be used for each cylinder.

Maintain a minimum of 1" (25mm) clearance between duct and combustible material.

If the exhaust pipe passes through a wall, a metal sleeve of slightly larger diameter should be set in the wall and the exhaust pipe passed through this sleeve. This practice is required by some local codes and is recommended in all cases to protect the wall.

This type of installation should have a means provided to prevent rain and high winds from entering the exhaust when the dryer is not in use. A hood with a hinged damper can be used for this purpose. Another method would be to point the outlet end of the pipe downward to prevent entrance of wind and rain. In either case, the outlet should be kept clear, by at least 24 in. (610 mm) of any objects which would cause air restriction.

Never install a protective screen over the exhaust outlet.

When exhausting a dryer straight up through a roof, the overall length of the duct has the same limits as exhausting through a wall. A rain cap must be placed on top of the exhaust and must be of such a type as to be free from clogging. The type using a cone shaped "roof" over the pipe is suitable for this application.

Exhausting the dryer into a chimney or under a building is not permitted. In either case there is a danger of lint buildup which can be highly combustible.

Installation of several dryers, where a main discharge duct is necessary, will need the following considerations for installation (see Figure 3). Individual 8" exhaust ducts from each dryer should enter main discharge duct at a 45 degree angle in the direction of discharge air flow.

**NOTE:** Never install the individual ducts at a right angle into the main discharge duct. The individual ducts from the dryers can enter at the sides or bottom of the main discharge duct. Figure 3 indicates the various round main duct diameters to use with the individual dryer ducts. The main duct can be rectangular or round, provided adequate air flow is maintained. The total exhausting (main discharge duct plus duct outlet from the dryer) should not exceed the equivalent of 14 ft. (4.25 m) and two elbows. The diameter of the main discharge duct at the last dryer must be maintained to exhaust end.

**NOTE:** A small diameter duct will restrict air flow; a large diameter duct will reduce air velocity - both contributing to lint build up. An inspection door should be provided for periodic clean-out of the main duct.

DIAMETER TO INCREASE AS SHOWN

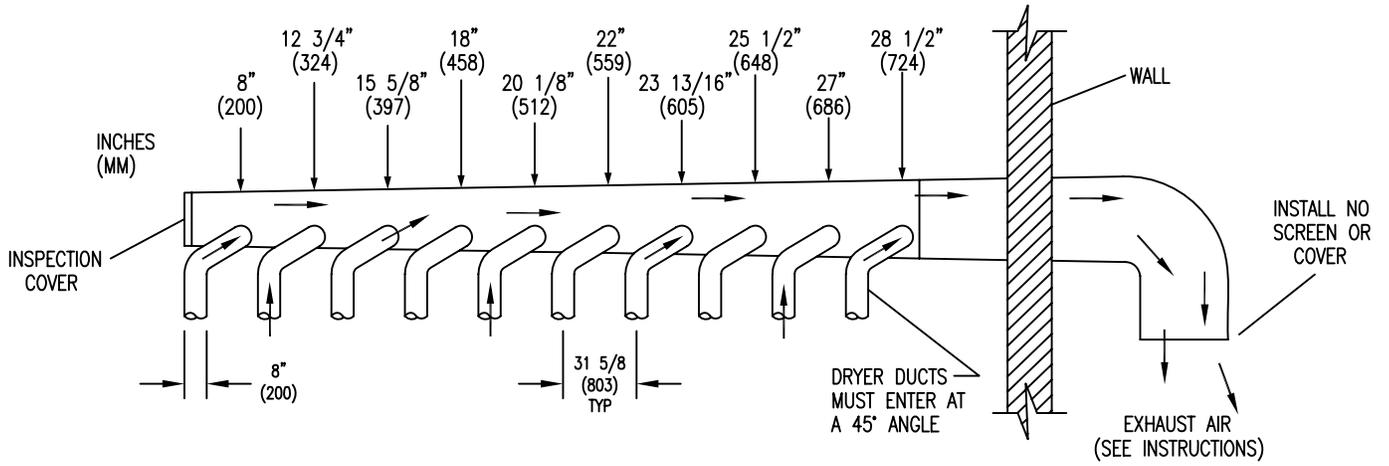


FIGURE 3- Dryer Exhausting Using A Main Discharge Duct.