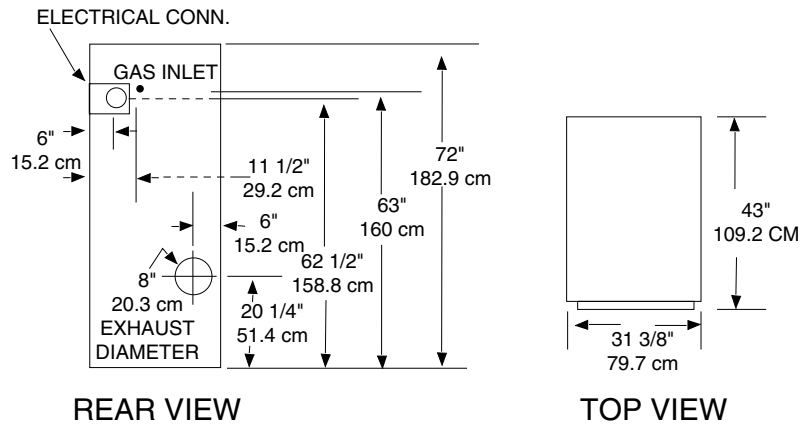




Commercial Multi-Load Dryers

Models
MDG30MC2
MDG30PC2
MDG30PNA
MDG30MNA

PRODUCT DIMENSIONS



PRODUCT SPECIFICATIONS

- Drive motor: 1/2 H.P. (.373 Kw)
- Air flow: 600 cubic feet (17 cubic meters) per minute.
- Amperage Draw: 9.8 amps (approximate).
- Heat source: 90,000 BTU/Hr. (22,680 kcal/hr.).
- Flush to side wall installation possible, 24" rear clearance suggested for ease of maintenance.
- Tumbler Capacity: 12.3 cu. ft. (.348 cu.m.)
- Tumbler Diameter: 30" (76.2 cm)
- Tumbler Depth: 30" (76.2 cm)
- Door Opening: 21 1/2" Dia. (54.61 cm)
- Weight: Crated: 550 lbs. (250 Kg)
Uncrated: 500 lbs. (227 Kg)
- Gas Inlet 1/2" I.D.

ELECTRICAL REQUIREMENTS

- 120 volts, 60 Hz single phase, (some 240 volts, 50 Hz models available for export).
- Individual branch circuit serving only the dryer is recommended.
- Minimum wire size required, awg. 12 with a 20 amp fuse or comparable circuit breaker. Copper wire only.
- Dryer must be installed and grounded in accordance with National Electrical Codes and local codes and ordinances.

EXHAUST REQUIREMENTS

Exhaust duct work **should be** designed and installed by a qualified professional. Improperly sized duct work will create excessive back pressure which results in slow drying, increased use of energy, and shutdown of the burner by the airflow (sail) switch, burner hi-limit chamber hi-heat protector thermostat.

Where possible, it is suggested to provide a separate (single) exhaust duct for each dryer.

CAUTION: IMPROPERLY SIZED OR INSTALLED EXHAUST DUCT WORK CAN CREATE A POTENTIAL FIRE HAZARD.

CAUTION: DRYER *MUST BE* EXHAUSTED TO THE OUTDOORS.

The exhaust duct work **should be** laid out in such a way that the work travels as directly as possible to the outdoors with as few turns as possible. The shape of the duct work is not critical so long as the minimum cross section area is provided. Single or independent dryer venting is recommended.

It is suggested that the use of 90° turns be avoided; use 30° or 45° angles instead.

The duct work **should be** smooth inside with no projections from sheet metal screws or other obstructions which will collect lint. When adding ducts, the ducts to be added should overlap the duct which it is connected. **ALL** duct work joints **must be** taped to prevent moisture and lint from escaping into the building. Additionally, inspection doors **should be** installed at strategic points in the exhaust duct work for periodic inspection and cleaning.

IMPORTANT: When connecting duct work to the dryer exhaust duct, be sure that when screws are used they do not restrict the operation (both opening and closing) of the damper.

NOTE: When the exhaust duct passes through a wall, ceiling, or roof made of combustible materials, the opening must be 2-inches larger (all the way around) than the duct. The duct ***must be*** centered within this opening.

To protect the outside end of horizontal duct work from the weather, a 90° elbow bent downward **should be** installed where the exhaust exits the building. If the duct work travels vertically up through the roof, it **should be** protected from the weather by using a 180° turn to point the opening downward. In either case, allow at least twice the diameter of the duct between the duct opening and the nearest obstruction (i.e., roof of ground level).

IMPORTANT: ***DO NOT*** use screens or caps on the outside of opening of exhaust duct work.

IMPORTANT: Exhaust back pressure measured by a manometer at the dryer exhaust are ***must not*** exceed 0.3 inches of water column (W.C.)

SINGLE DRYER VENTING

IMPORTANT: For exhaust duct runs over 30 feet a minimum diameter size of 10 inches *must be* used

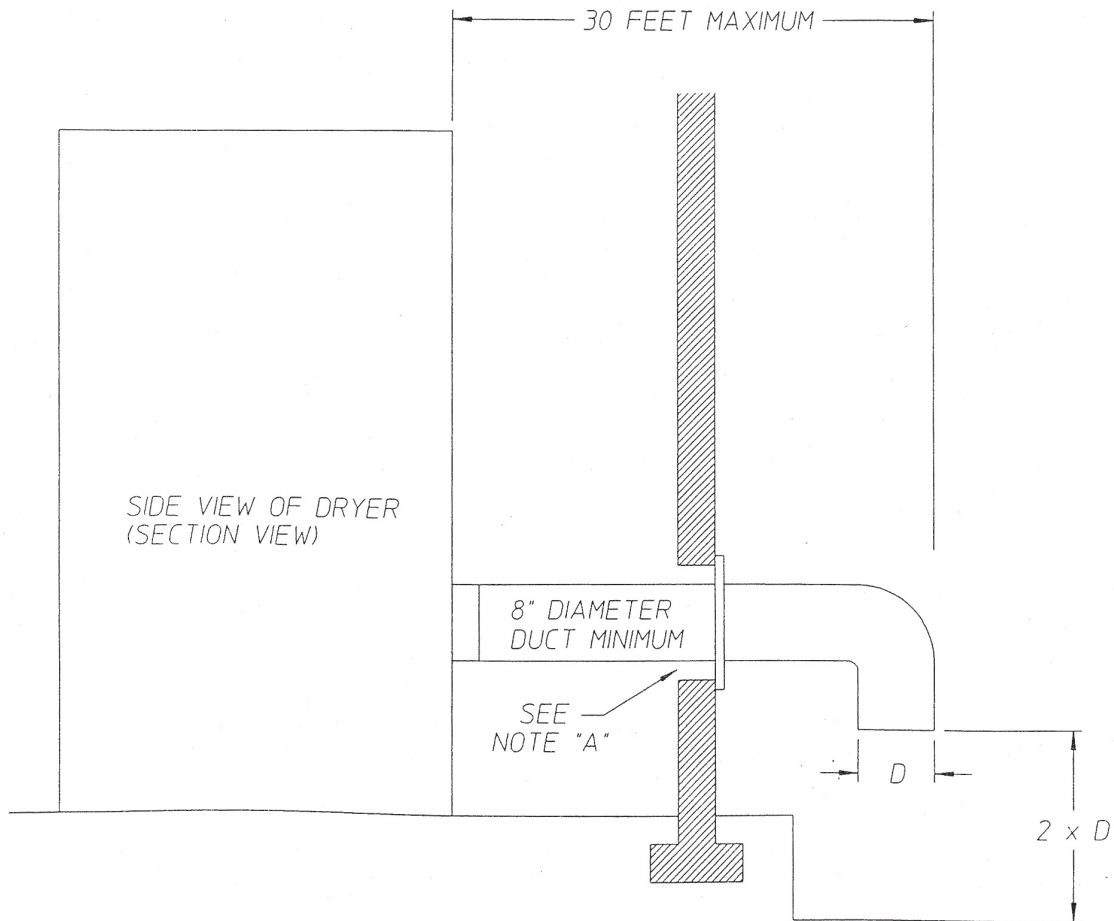
HORIZONTAL VENTING

When horizontal single 8-inch venting is used, the duct work to the outlet cannot **exceed** 30 feet (refer to **Illus. A below**). This calculation of 30 feet compensates or allows for the use of a maximum of only one (1) elbow.

REMINDER - Stay below 0.3" WC back pressure.

Illus. A

HORIZONTAL SINGLE DRYER VENTING 8 INCH DUCTING



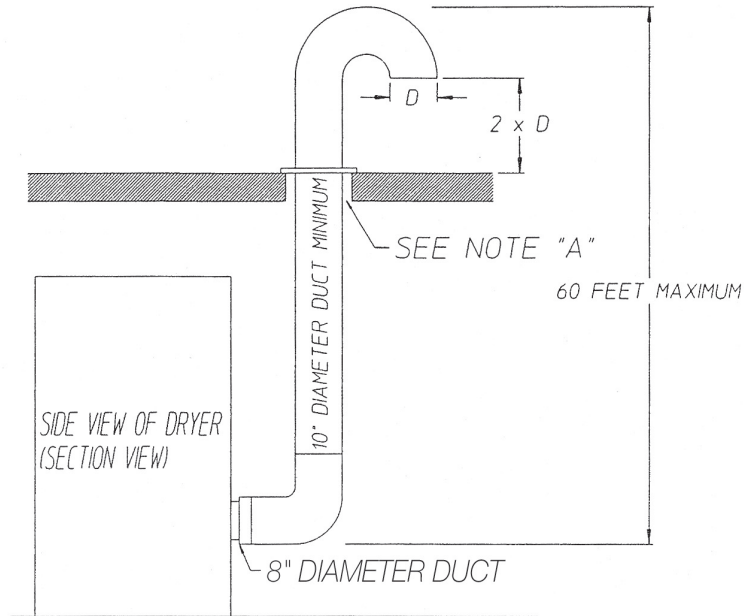
NOTE A. OPENING MUST BE TWO (2) INCHES LARGER THAN THE DUCT (ALL THE WAY AROUND). THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

VERTICAL VENTING

When vertical venting is used minimum duct diameter size is 10 inches (refer to **Illus. B below**), the duct work from the dryer to the outside outlets **cannot** exceed 60 feet (refer to **Illus. B below**). This calculation compensates for the use of a maximum of three (3) elbows including the two (2) elbows creating the 180° (turned downward) outside outlet.

Illus. B

VERTICAL SINGLE DRYER VENTING



NOTE A. OPENING MUST BE TWO (2) INCHES LARGER THAN THE DUCT (ALL THE WAY AROUND). THE DUCT MUST BE CENTERED WITHIN THIS OPENING.

If the length of the duct run or quantity of elbows used exceeds the above noted specifications, the cross section area of the duct work **must be** increased in proportion to the number of elbows or duct run added.

IMPORTANT: For extended duct work runs, the cross section area of the duct can only be increased to an extent. For extended duct work runs, a professional HVAC firm **should be** consulted for proper venting information.

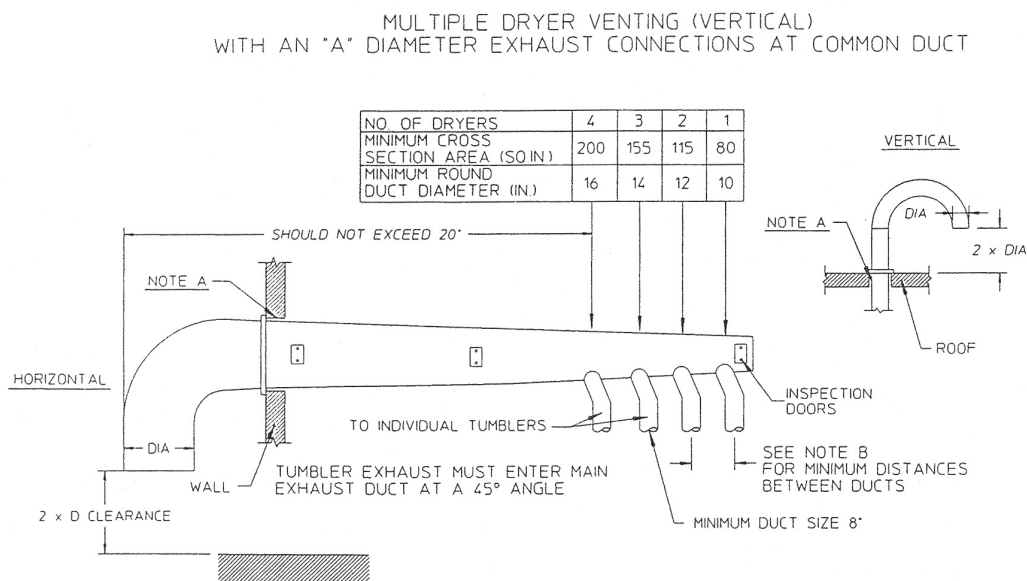
MULTIPLE DRYER (Common) VENTING

HORIZONTAL VENTING

If it is not feasible to provide separate exhaust ducts for each dryer, ducts for individual dryers may be channeled into a common main duct. Each dryer is provided with a back draft damper. The individual ducts should enter the bottom or side of the main duct at an angle not more than 45° in the direction of the airflow. No more than four (4) dryers **should be** connected to one (1) main common duct run.

The main common duct may be any shapes so long as the minimum cross-section area is provided. The main duct should be tapered with the diameter in creasing before each individual 8-inch duct is added (refer to **Illus. C and Illus D**).

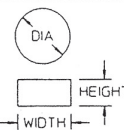
Illus. C



FORMULAS TO CALCULATE DUCTING CROSS SECTIONAL AREA

CROSS SECTIONAL AREA OF A ROUND DUCT = $.785 \times \text{DIA}^2$

CROSS SECTIONAL AREA OF A RECTANGULAR DUCT = WIDTH x HEIGHT



NOTE A OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT (ALL THE WAY AROUND). THE DUCT MUST BE CENTERED WITHIN THIS OPENING

NOTE B MDG-30 31 3/8"

Horizontal venting **must not** exceed 20 feet - this calculation compensates for the use of a maximum of only one (1) elbow which is the outside outlet protection.

NOTE: Distance between dryer ducts being connected to the main common duct **must be** a minimum of 31-1/8" (dryer width).

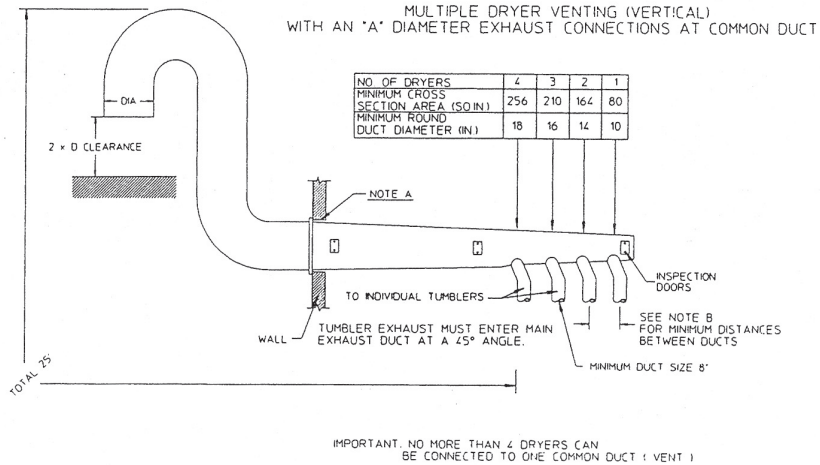
Duct work **should be** laid out in such a manner where allowances are made at rear area of the dryer for removal of rear panels or guards.

Illus. C (refers to the **previous page 5-5**) shows the minimum cross-section area for horizontal multiple dryer venting. These figures **must be** increased in proportion if the main duct run from the last dryer to where the exhaust has numerous elbows or is unusually long.

IMPORTANT: For extended duct work runs, the cross-section area of the duct can only be increased to an extent. For extended duct work runs, a professional HVAC firm **should be** consulted for proper venting information.

VERTICAL VENTING

ILLUS. D



FORMULAS TO CALCULATE DUCTING CROSS SECTIONAL AREA

CROSS SECTIONAL AREA OF A ROUND DUCT = .785 x DIA²

CROSS SECTIONAL AREA OF A RECTANGULAR DUCT = WIDTH x HEIGHT

NOTE A OPENING MUST BE TWO (2) INCHES LARGER THAN DUCT (ALL THE WAY AROUND) THE DUCT MUST BE CENTERED WITHIN THIS OPENING

NOTE B MDG-30 . . . 31 3/8"

The maximum length of venting from the last dryer to where it exhausts...

Vertical venting **must not** exceed 2 feet - this calculation compensates for the sue of a maximum of three (3) elbows including the two (2) elbows creating the 180° (turned downward outside outlet protection).

IMPORTANT: No more than four (4) dryers maximum **should be** connected to one (1) main common duct with a vertical run.

NOTE: Distance between dryer single ducts being connected to the main common duct **must be** a minimum of 31-3/8" (dryer width).

Ducts work **should be** laid out in such a manner where allowances are made at rear area of the dryer for removal of rear service panels or guards.

Illus. D shows the minimum cross-section area for vertical multiple dryer venting. These figures **must be** increased in proportion if the main duct run from the last dryer to where it exhausts has numerous elbows or is unusually long.

IMPORTANT: For extended duct work runs, the cross-section area of the duct can only be increased to an extent. For extended duct work runs, a professional HVAC firm **should be** consulted for proper venting information.

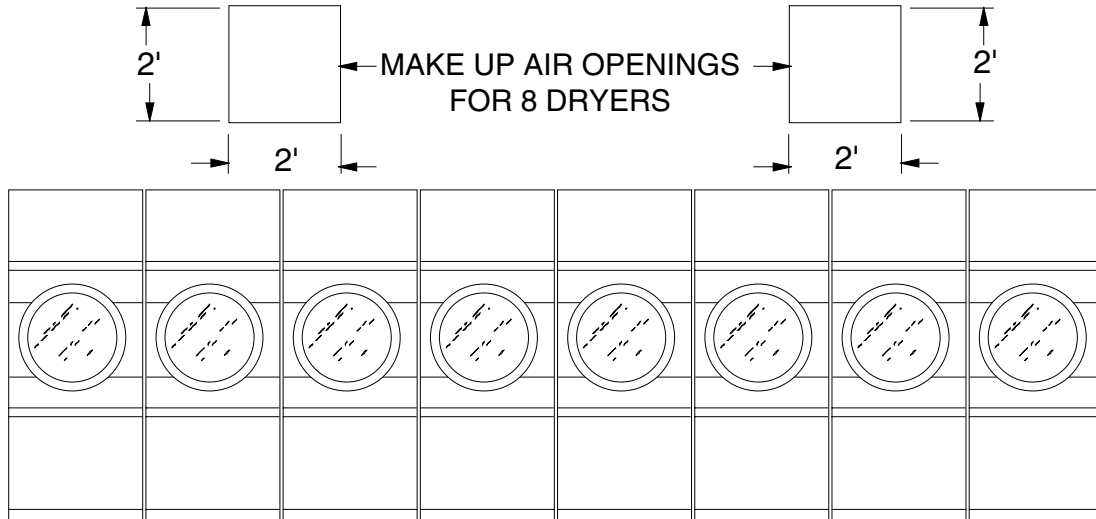
IMPORTANT VENTING REMINDERS

1. Duct work size and installation **should be** done by a qualified professional.
2. The dryer **must be** exhausted to the outdoors.
3. Duct work **should be** routed as short as possible to the outdoors with as few elbows as possible.
4. Avoid 90° turns, use 30° or 45° turns instead. Long radius turns offer resistance to airflow.
5. The size of the duct work **should be** a minimum of 10 inches if vented vertically and 8 inches if vented horizontally.
6. The inside duct work **should be** as smooth as possible with no projections from sheet metal screws.

Ducts **should overlap** the duct to which it is to be connected.
7. All duct joints **should be** taped to prevent moisture and lint from escaping into the building.
8. Inspection or clean out doors **should be** installed at strategic points in the duct work for periodic inspection and cleaning.
9. Where ever the duct passes through combustible materials, the opening must be 2 inches larger (all the way around) than the duct. The duct must be centered within this opening.
10. The outside of the duct work must be protected from the weather. A 90° elbow **should be** used for horizontal run and when vertically through a roof by using a 180° turn to point the opening downward. The distance between the exhaust duct and the nearest obstruction (i.e., roof or ground) **must be** twice the diameter of the duct.
11. **DO NOT** use screens or caps on the outside of the exhaust duct work.
12. Exhaust back pressure measured by a manometer at the dryer exhaust duct area **must not** exceed 0.3 inches of water column (W. C.).
13. WARNING - DRYER **MUST NEVER BE** OPERATED WITH OUT THE LINT FILTER and SCREEN IN PLACE.
14. Exhaust duct work outlets **should not be** located in an area directly where the makeup air openings are located.
15. Make-up air opening must be a minimum of one square foot for each dryer. Common make-up openings are acceptable.

MAKE-UP AIR REQUIREMENTS

- Makeup area opening must have 1 square feet for each dryer.
- Common makeup air openings are acceptable.

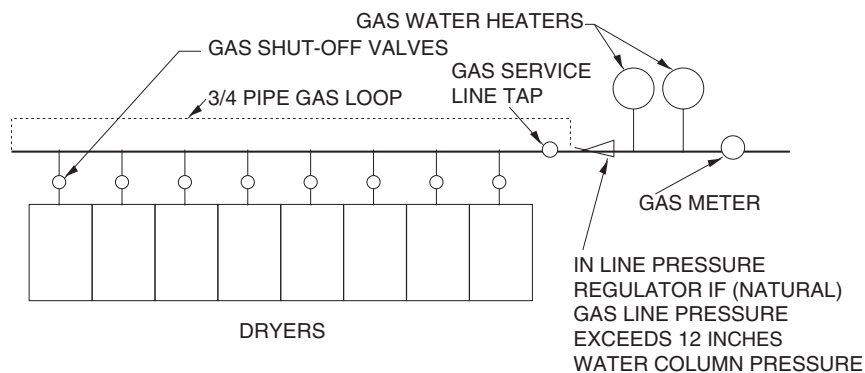


IMPORTANT: Makeup air must be provided from a source free of contaminating fumes such as dry cleaning fumes. Make-up air contaminated by dry cleaning solvent fumes will result in irreparable damage to motors and other dryer components.

GAS REQUIREMENTS

- Gas inlet 1/2" (1.27 cm) NPT.
- Product comes equipped to use natural gas.

TYPICAL NATURAL GAS INSTALLATION



- Accessible line shutoff is recommended.
- Natural gas supply pressure must be 6-12" water column.
- Water column pressure requirements measured at the gas valve tap
 - 4" Natural gas
 - 11" LP gas