

# INSTRUCTION MANUAL

for

## DCTD55HT/DCWD55HT Steam Heated Dryers

The dryer must not be stored or installed where it will be exposed to water and/or weather and is suitable for use in room temperatures between 40F and 105F (5C and 45C.)

Post the following “**For Your Safety**” caution in a prominent location:

**FOR YOUR SAFETY**

Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance or machine.

It is important that you read this Manual and retain it for future reference.

For service or replacement parts, contact the Dexter Distributor in your area or the manufacturer.

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### WARNINGS ABOUT USE AND OPERATION

**KEEP SHIELDS, GUARDS AND COVERS IN PLACE.** These safety devices are provided to protect everyone from injury.

**THIS DRYER IS EQUIPPED WITH A MANUALLY RESETTABLE OVER-TEMPERATURE THERMOSTAT** located on the back side of the return air boot beside the heating element housing. Should the dryer cease to heat, reset the thermostat by inserting a wooden (nonconductive) pencil or dowel through the guide bushing in the cover. Should the thermostat continue to trip, the dryer must be inspected by a qualified service person.

**CHECK THE THERMOSTAT WHEN INSTALLING DRYER** to assure it is not tripped. Impacts, such as rough handling in shipment, may trip the thermostat. It may be reset by inserting a wooden (nonconductive) pencil or dowel through the guide bushing in the cover.

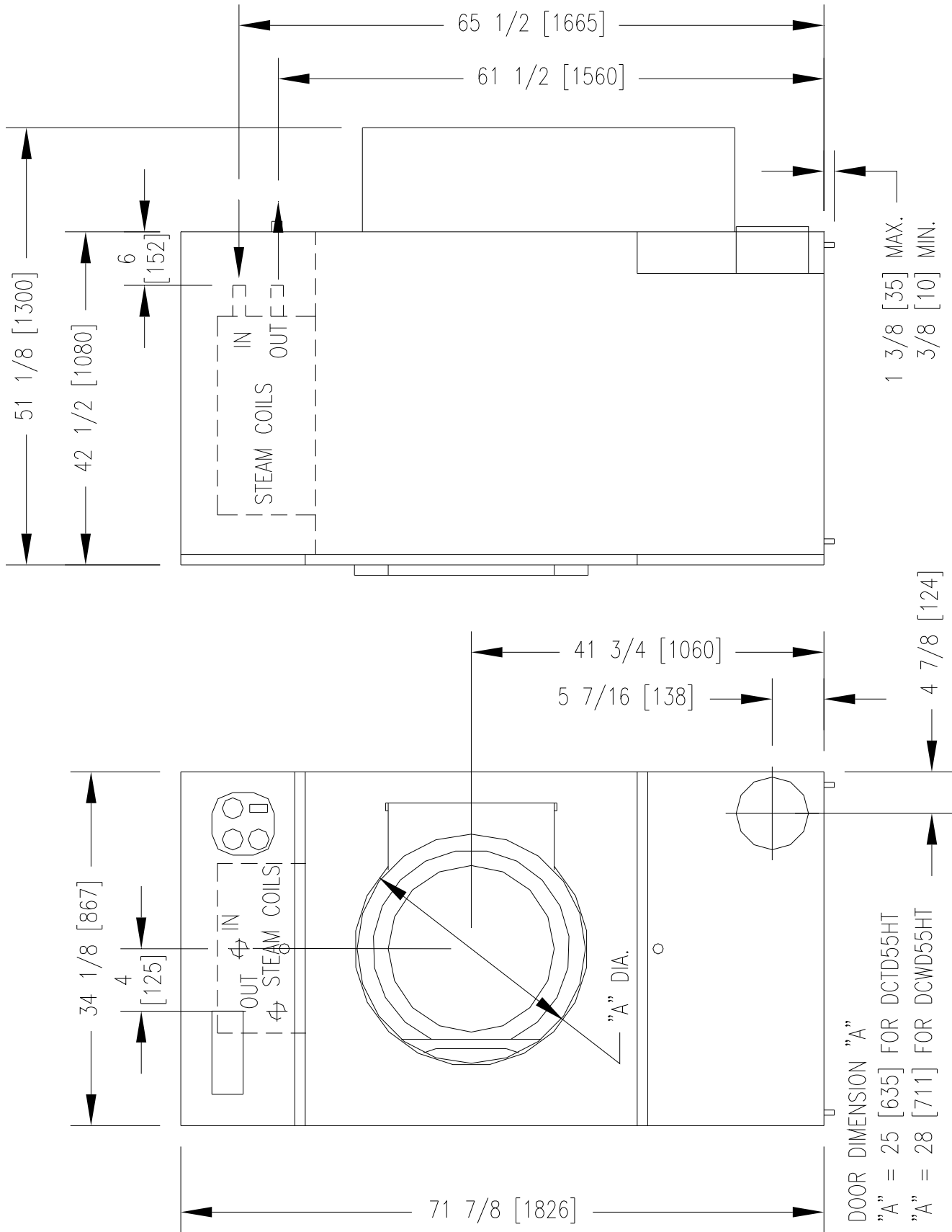


FIGURE 1 - 55# Dryer Dimensions.

## INSTALLATION AND OPERATING INSTRUCTIONS

### UNCRATING

1. Remove cardboard container and innerpack.
2. Complete the uncrating as described in the procedure listed on the instruction sheet taped to the loading door glass.

### FIELD ASSEMBLY

For secure packaging, the dryer is shipped with the tee, one part of the heat reclaimer, inside the lower service door.

To install:

#### STEP 1.

Remove 4 metal screws from the bag in dryer tumbler. Go to the rear of the dryer and remove the tape holding the top of the vertical 8 in. (203 mm) pipe.

#### STEP 2.

Install the tee into both the vertical pipe and the horizontal boot. Using the four pilot holes provided, drill 4 matching 9/64 in. (3.6 mm) diameter mounting holes; 2 holes through the boot into the tee outlet, and 2 holes through the tee inlet into the 8 in. (203 mm) vertical pipe. Install the 4 screws provided to secure the tee to the pipe and boot.

#### STEP 3.

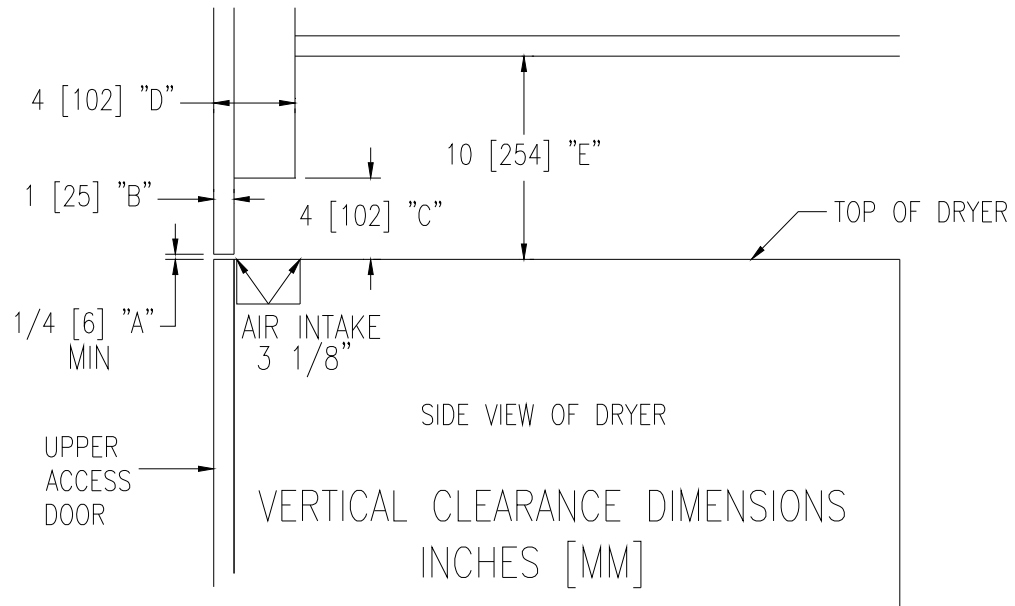
Install your exhaust system to the tee. Tape all joints with 2 in. (50 mm) duct tape.

### DRYER INSTALLATION

1. **CODE CONFORMITY:** All commercial dryer installations must conform to the local and national codes for the location of installation.
2. **INSTALLATION CLEARANCES:** This unit may be installed at the following alcove clearance.
  - I. Left Side 0 in.
  - II. Right Side 1 in. (25 mm)\*

- III. Back allow 18 in. (457 mm) clearance is necessary behind the belt guard to servicing and maintenance.
- IV. Front 48 in. (1220 mm) to allow use of dryer.
- V. Top Refer to figure labeled "Vertical Clearance Dimensions".
  - AB. 0 clearance at the top, 1 in. (25 mm) back from the front. However 1/4 in. (6 mm) clearance is required to allow opening the upper service door.
  - CD. A 4 in. (102 mm) clearance is required at the top between 1 in. (25 mm) and 4 in. (102 mm) from front.
  - E. A 10" (254 mm) clearance is required from top at all other points.
- VI. Floor This unit may be installed upon a combustible floor.

\*Units may be installed in direct contact with an adjacent dryer, providing allowance is made for opening upper and lower service doors.



3. MAKE-UP AIR. Adequate make-up air (830 CFM) (24 m<sup>3</sup>/Min.) must be supplied to replace air exhausted by dryers on all types of installations. Provide a minimum of 1.0 sq. ft. (.10 m<sup>2</sup>) make-up air opening to the outside of 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.

#### 4. ELECTRICAL REQUIREMENTS:

The electrical requirements are listed on the serial plate located on the back panel of the dryer. The electrical connection should be made to the pigtail leads in the junction box (120V) attached to the back of the dryer or to the field wiring terminal block in the controls box (220-240V). Use a wire adequate to handle the voltage and amperage listed on the serial plate, but never smaller than No.12 AWG wire. It is absolutely necessary that the dryer be connected to a known ground.

Individual circuit breakers are required for each dryer. The wiring diagram is located on the belt guard on the rear belt guard.

#### MISE À LA TERRE

Cet appareil doit être relié à une canalisation électrique métallique fixe ou la dérivation doit comporter un conducteur de terre connecté à la borne ou au fil de terre de l'appareil.

#### 5. STEAM INSTALLATION

**WARNING:** Only a qualified technician should perform this installation. Observe all local and national codes for this installation.

**Steam source:** This appliance is designed for use with steam not exceeding 125 psi. For proper performance, it is recommended that 80 to 125 psi steam be supplied.

**Piping recommendations:** Refer to Figure X for a typical installation. Please note the following:

- One-inch steam supply piping and ¾" condensate return piping is recommended.
- An electrically operated steam valve is provided to control steam flow to the dryer. Connections to the valve are ½" and it should be located as shown in Figure X.
- Flexible hoses should be used for the piping connections to the dryer steam coil. This reduces strain on the coils and on connections from movement during dryer operation.
- The condensate return line must have a vertical drop (6") at the connection to steam coil.
- Each steam dryer will require the following materials (150-psi rating, unless otherwise noted) be obtained for proper installation:

Manual steam shut-off valves (2) for service disconnection

Flexible steam hoses (2) with 125-psi minimum rating and 1" NPT connections

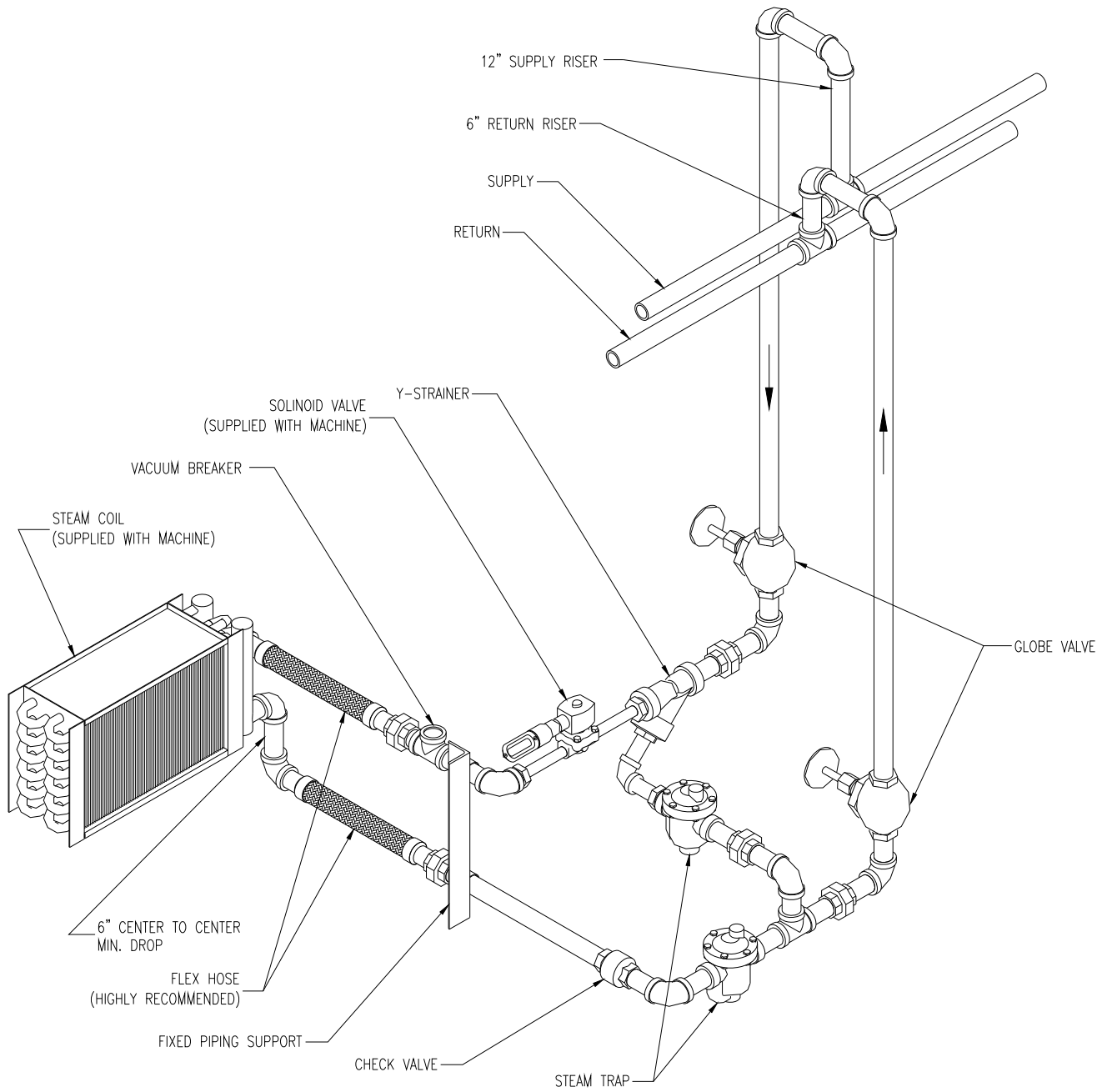
Steam traps (2)

Y-Strainer

Vacuum breaker

Check valve for condensate return line

<p><b>WARNING</b> – Insulate all steam supply and condensate return lines. Pipe surfaces will become extremely hot when dryer is put in service and create a burn hazard if uncovered.</p>
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**Figure X**

6. EXHAUST INSTALLATION. (Refer to Figure 2 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 heaters and results in inefficient drying.

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 collar 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 20 ft. (6 m) of straight 8 in. (204 mm) diameter pipe be used with two right angle elbows. When more than two elbows are used, 2 ft. (610 mm) of straight pipe should be removed for each additional elbow. No more than four right angle elbows should be used to exhaust a dryer.

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.

Provide a screen or grill over the termination of the exhaust or flue outlet such as will prevent the entry of a ball of 16 mm in diameter while the machine is not operating but will allow entry of a ball 6 mm in diameter while operating.

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.

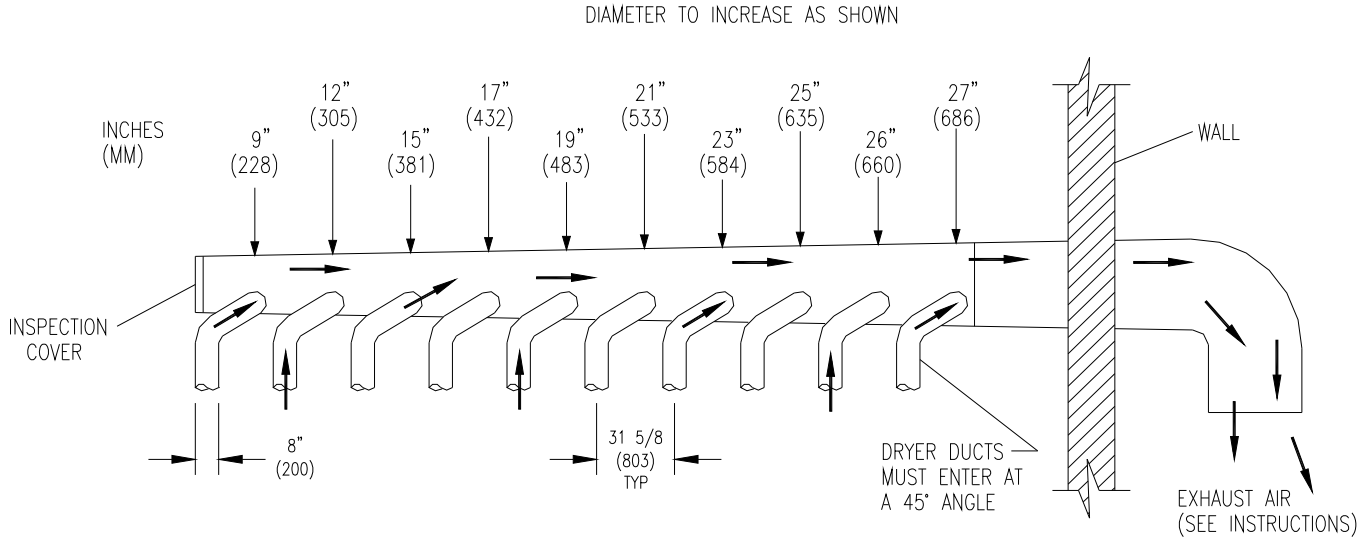


FIGURE 2- Dryer Exhausting Using A Main Discharge Duct.

Exhausting the dryer into a chimney or under a building is not permitted. The exhaust air should not be vented into a wall, a ceiling, or a concealed space of building. In these cases 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 2). Individual ducts from the dryers into the main discharge duct should be 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 2 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. For each individual dryer, the total exhausting (main discharge duct plus duct outlet from the dryer) should not exceed the equivalent of 20 ft. (6 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.

**Caution** - A clothes dryer produces combustible lint and should be exhausted outdoors. The area around the clothes dryer should be kept free of lint.

**DRYER SHUTDOWN**

To render the dryer inoperative, disconnect electrical supply to the dryer.

## OPERATING INSTRUCTIONS

**WARNING:** To reduce the risk of fire, electric shock, or injury to persons, read the **IMPORTANT SAFETY INSTRUCTIONS** before operating this appliance.

Maximum Load Capacity: 55 Pounds (25 Kg ) Dry Weight

1. Place the clothes load to be dried in the dryer drum and close the loading door.
2. Set the temperature selector to the desired setting for the type of clothes load to be dried.
3. Set the drying timer to the desired time.
4. Set the cool-down timer to the desired cooling time.
5. Depress the push-to-start button until the dryer continues to run when the button is released.

**IMPORTANT:** If the dryer operation is not interrupted, it will continue through the complete cycle determined by the time set on timer. Opening the loading door will interrupt the circuits and drive motor, and the heating elements will cease to function. The signal light will remain on and the time cycle will continue independent of the interruption until the expiration of the time remaining . The dryer may be restarted by closing the door and repeating the starting procedure.

4. The drying time depends on the size and type of clothes, the amount of water left in the clothes and the temperature/humidity of the room.
5. There is an automatic cool-down period of approximately one minute at the end of the cycle. During the cool-down period, the dryer tumbles and the blower operates with the heat off to cool the clothes.

**IMPORTANT:** Clothes should be removed from the dryer as soon as possible after the cycle is completed and then folded or hung to prevent excessive wrinkling.

**AVERTISSEMENT.** Pour réduire les risques d'incendie, de choc électrique et de blessure, lire les **IMPORTANTES MESURES DE SÉCURITÉ** avant d'utiliser cet appareil.

### **IMPORTANT SAFETY INSTRUCTIONS**

**WARNING** - To reduce the risk of fire, electric shock, or injury to persons when using your appliance, follow basic precautions, including the following:

- 1) Read all instructions before using the appliance.
- 2) Do not dry articles that have been previously cleaned in, washed in, soaked in, or spotted with gasoline, dry-cleaning solvents, or other flammable or explosive substances, as they give off vapours that could ignite or explode.
- 3) Do not allow children to play on or in the appliance. Close supervision of children is necessary when the appliance is used near children.
- 4) Before the appliance is removed from service or discarded, remove the door to the drying compartment.
- 5) Do not reach into the appliance if the drum is moving.

- 6) Do not install or store this appliance where it will be exposed to the weather.
- 7) Do not tamper with controls.
- 8) Do not repair or replace any part of the appliance or attempt any servicing unless specifically recommended in the user-maintenance instructions or in published user-repair instructions that you understand and have the skills to carry out.
- 9) Do not use fabric softeners or products to eliminate static unless recommended by the manufacturer of the fabric softener or product.
- 10) Do not use heat to dry articles containing foam rubber or similarly textured rubber-like materials.
- 11) Clean lint screen at least daily.
- 12) Keep area around the exhaust opening and adjacent surrounding areas free from the accumulation of lint, dust, and dirt.
- 13) The interior of the appliance and exhaust duct should be cleaned periodically by qualified service personnel.
- 14) Do not place items exposed to cooking oils in your dryer. Items contaminated with cooking oils may contribute to a chemical reaction that could cause a load to catch fire.

**SAVE THESE INSTRUCTIONS**

### **IMPORTANTES MESURES DE SÉCURITÉ**

ADVERTISSEMENT. Pour réduire les risques d'incendie, de choc électrique ou de blessure quand on utilise l'appareil, prendre les précautions élémentaires et:

- 1) Lire toutes les instructions avant d'utiliser l'appareil.
- 2) Ne pas faire sécher des articles qui ont été nettoyés ou lavés avec de l'essence, de solvants pour nettoyage à sec ou d'autres substances inflammables ou explosives, ou que l'on a fait tremper dans ces produits. Ces substances dégagent des vapeurs qui fonctionnent.
- 3) Ne pas permettre aux enfants de jouer sur ou dans l'appareil. Surveiller étroitement les enfants lorsqu'ils se trouvent près de l'appareil qui fonctionne.
- 4) Avant de mettre l'appareil hors service ou de le jeter, retirer la porte.
- 5) Ne pas mettre la main dans l'appareil lorsque le tambour bouge.
- 6) Ne pas installer ou placer cet appareil dans un endroit où il sera exposé aux intempéries.
- 7) Ne pas trafiquer les commandes.
- 8) Ne pas réparer ou remplacer les pièces de l'appareil ou procéder à l'entretien de celui-ci sauf si les instructions visant l'entretien et les réparations qui doivent être effectués par l'utilisateur le spécifient, si vous comprenez bien ces instructions et si vous possédez les connaissances nécessaires.
- 9) Ne pas utiliser d'assouplissant ou de produits antistatiques sauf si les fabricants de ces

produits le recommandent.

- 10) Ne pas utiliser de chaleur pour le séchage des articles contenant du caoutchouc mousse ou d'autres matériaux similaires texturés caoutchouteux.
- 11) Nettoyer le filtre à charpie au moins quotidien.
- 12) La zone autour de l'évent doit être exempte d'accumulations de charpie, de poussière et de saleté.
- 13) L'intérieur de l'appareil et du conduit d'évacuation devrait être nettoyé régulièrement par un technicien qualifié.
- 14) Ne pas mettre de vêtements exposés aux huiles de cuisson dans la sécheuse. L'huile de cuisson pourrait provoquer une réaction chimique entraînant l'inflammation des vêtements dans la sécheuse.

## PREVENTIVE MAINTENANCE INSTRUCTIONS

### Routine Non-Technical Maintenance and Cleaning:

#### Daily

- A. Clean lint screens. Use soft brush if necessary. Failure to do so will slow drying, increase temperatures throughout the dryer and increase the risk of fire.. **Dryer must not be operated without lint screen in place.** Without the lint screen in place, lint will accumulate in the duct work and flue exit reducing ventilation.
- B. Check lint screen for tears. Replace if necessary. Failure to replace a torn lint screen can result in lint accumulation and reduced ventilation of exhaust air.

#### Monthly

- A. Removal of accumulated lint using a brush and vacuum cleaner. (Disconnect power to dryer before beginning.)
  - 1. Clean lint from lint compartment.
  - 2. Remove lint accumulation from end bells of motors.
  - 3. Remove any lint from control compartment.
  - 4. Remove lint and dirt accumulation from top of the dryer and all areas above, below and around the steam coils. Failure to keep this portion of the dryer clean can lead to a build up of lint creating poor performance.
- B. Apply a few drops of light oil on top and bottom pivots of the loading door hinge to keep in good working order.
- C. Grease intermediate pulley bearings and shaft using pressure grease gun and lithium base grease. Failure to do so can result in reduced product life.

#### Quarterly

- A. Inspect door gasket for excessive wear.

Maintenance Requiring Technical and Mechanical Skills:

**Note: All procedures must be performed by a service engineer or competent person. when the dryer is not running.**

(Disconnect power to dryer before beginning.)

Quarterly

- A. Check tumbler shaft nut, and, if lose, retighten to 150 lb. ft. (200 Nm).
- B. Check belts for wear needing replacement to prevent reduced performance.

Semi-Annually

- A. Check steam piping connections and steam components. Make sure connections are tight and piping is in good condition.

ANNUALLY

- A. Check intermediate pulley bearings for wear.
- B. Check and remove any lint accumulation from exhaust system. Lint accumulation causes reduced drying performance and an increased risk of fire.

For service and parts information contact your local Dexter agent. If a Dexter agent is not available, contact **The Dexter Company** directly as listed below:

Mailing Address: 2211 W. Grimes  
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## MAINTENANCE NOTES