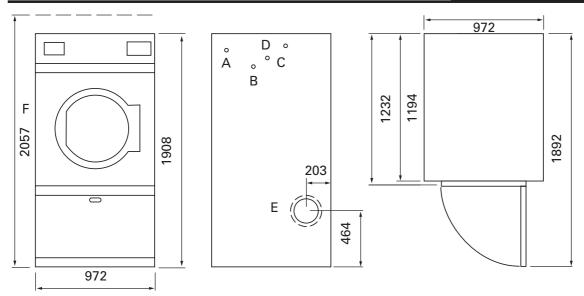
# **AD 75 DRYER**

# **Installation Specification - Dimensions shown in millimetres**

AD75/02/00/1



- A Steam Return, B Gas Inlet, C Steam Inlet, D Electrical Connection, E Exhaust Outlet,
- F Operating Height of Steam Model

Model		AD75			
Dimensions (HxWxD)Gas/Electric		1908 x 972 x 1194mm	Boxed	2060 x 1040 x 1270mm	
Dimensions (HxWxD)Steam		2057 x 972 x 1194mm	Boxed	2060 x 1040 x 1270mm	
Weight	Gas/Electric	361kg (796lb)			
	Steam	377kg(832lb)			
Min service area at rear		600mm			
Electrical					
Standard Gas or Steam		1ph 240v 50hz	13A		
Reversing Gas or Steam		3ph 415v	10A/ph		
Electric	24kw	3ph 415v	40A/ph		
	30kw	3ph 415v	50A/ph		
Gas					
Heat input		58.6kw (200000BTU)			
Pressure	Natural gas	19mb - 24mb +/- 1mb (7	7.5" - 9.5"wc	)	
	LPG	Propane 37mb(14.8"wc)	Butane 28m	nb(11.2wc")	
nlet size		3/4 "BSP via a 3/4"flexible a	3/4 "BSP via a 3/4"flexible armoured hose		
Exhaust & V	entilation				
Exhaust outlet size		250mm (10")			
Total max. length at outlet size		24m (80ft)			
Equiv. length of fittings		$90^{\circ}$ bend = 6m (20ft) to for	90°bend = 6m (20ft) to form part of the total max length		
		$45^{\circ}$ bend = 3m (10ft) to for	orm part of t	he total max length	
Airflow	Gas/Electric	34cmm (1200cfm)			
	Steam	38.2cmm (1350cfm)			
Free air intake requirement		45 x 45cm $(1^{1}/2 \times 1^{1}/2 \text{ft})$	45 x 45cm (1 <sup>1</sup> / <sub>2</sub> x 1 <sup>1</sup> / <sub>2</sub> ft)		
Steam					
Consumption		108.3kg/hr (238lb/hr)	108.3kg/hr (238lb/hr)		
Operating Pressure (maximum)		8.8kg/cm3 (125psi) (min	imum) 7Kg/d	cm3 (100psi)	
Connection		1"BSP			
Steam return		1"BSP		<u> </u>	
Compressed	air (Steam Model Only)				
Consumption	(maximum)	0.2m3/hr (0.75ft3/hr)			
Pressure		80psi			
Connection		1/8"			

## **Foundations**

The machine should be sited on a firm level floor capable of withstanding its loaded weight.

# **Electrical supply**

Single phase - Each dryer must be provided with a separate isolation point, usually a fused switched spur outlet. Electrical connections are made inside the rear service box located at the upper left of the machine. Notice must be taken of the connection diagram.

Ensure that the machine is also earthed correctly using the copper lug provided.

Three phase - A separate circuit serving each dryer must be provided. On gas and steam models connection is made in the service box at the upper left at the rear. On electric heat models the connection is made on the oven contactor at the rear. The isolator must be in an accessible position for emergency shut off. A competent installer must carry out all work. All work and materials must comply with local and national codes of practice. The machine must be installed using correctly sized cable (not provided) and an appropriate protection device, i.e. fuse or circuit breaker.

# **Gas supply**

Ensure that the correct pressure is supplied to the dryer.

Depending upon the type of gas used if the inline pressure exceeds that which is required a regulator should be fitted. If this is the case consult the supplier.

The machine is designed to burn at a certain rate, known as the BTU or kW rating of the appliance. To ensure that this rate is maintained the gas supply should remain constant. To achieve this the supply line must be of the correct size. Distance from the meter and other appliances on the same supply will have an effect on the pressure. Each dryer should have a gas isolation tap test gauge point, and restraining wire/chain

The machine should be connected to a supply using a flexible armoured hose as vibrations could cause a solid connection to fracture. The hose may have union or bayonet connection points. A bayonet connector should not be used as an isolation point. A qualified and competent person should carry out the installation of the gas supply.

All gas work must be carried out by a registered CORGI gas operative and must comply with all regulations relating to the installation.

## **Exhaust**

All exhaust ductwork must be designed by a competent operative to ensure that the installation does not have any detrimental effect on the performance of the dryer. The duct should follow the shortest possible route to atmosphere using the least number of bends possible and should be constructed of a smooth wall, rigid stainless steel or galvanised tubing. The diameter of the duct must never be reduced in size. Flexible ducting should only be used for a short final connection to the dryer. If a common duct is to be used to vent a multiple dryer installation the diameter shall be increased to accommodate the cumulative effect of all the dryers.

Exhaust terminations may be hooded weather cowling (china hat) for vertical ducts or a downturn 90° elbow for horizontal. Louvres or grills may be used to prevent entry by foreign objects but consideration must be given to potential restrictions to air flow. When louvres and grills are used they must be in an accessible location for regular cleaning.

We recommend that the supplier should be consulted for any multiple dryer exhaust systems. Duct terminations must be a minimum of two metre away from opening windows and any other means of ventilation.

The exhaust should be properly sealed at all joints by ducting tape (not rivets).

### **Ventilation**

The dryer removes a large amount of air, while it is operating, from the room via the exhaust. Therefore the air inside the room must be continually replenished with fresh air from atmosphere. If there is an imbalance between the air being pushed out to that which is being drawn in, there will be an adverse effect on the performance and operation of the dryer.

Where louvres or grills are fitted then the size should be increased to achieve the correct size of free air space. Ventilation must be fixed and unrestricted. Ventilation should not be positioned within two metre of exhaust duct outlet. If more than one dryer is installed the opening can be increased to match their requirements; there is no need to make a separate opening.

#### Steam

All steam pipework in the installation must be sized by a competent operative taking into account the distance from the steam source and the amount of steam that is required. The steam supplied must be dry. Final connection to the steam coil shall be made with a flexible hose. Suitable isolation taps and a strainer must be fitted to facilitate ease of service.

A condensate return line must be fitted incorporating a trap mounted 300mm below the steam coil outlet, non-return valve and isolation tap.

All pipes should be lagged and form part of a pressure systems examination scheme.

Note! For steam dryers a clean, dry, regulated compressed air supply at 70 - 80psi is required.

Site conditions may vary and these should be taken into account when planning the exhaust.