



Specification & Product overview

Wood Burning Hot Air Space Heaters



**SPACE HEATERS. THE LOW COST SOLUTION FOR HEATING INDUSTRIAL UNITS,
WORKSHOPS OR FACTORIES WITH WOOD.**

Free fuel

Up to 399kW of energy instantly delivered directly to where it is needed

Workshop and factory heating with wood and clean secondary wood waste

Heating for workshops, industrial units or warehouses.

If you have a large industrial area to heat and are looking for a far cheaper solution to fossil fuels, then a Zero Ridge Space Heater could be the right choice for you. If you have access to dry, seasoned wood then a space heater is without doubt a cost effective and efficient way of heating your premises.

Our Zero Ridge Space Heater is a purpose built, large scale industrial heater, built to last and to deliver lots of heat quickly into large industrial units or workshops.



Channel heat to where its needed



Fits anywhere

For over 40 years have been refining and developing the idea to produce a simple and efficient industrial space heater. The current range of Zero Ridge Space Heaters are the culmination of many years of evolution.

Zero Ridge space heaters are powerful, simple to

operate, yet

highly efficient. They are solely designed to heat large areas quickly, using whatever dry wood, such as pallets or off cuts are available, whilst offering low maintenance and longevity.

- ✓ Low purchasing cost
- ✓ Low installation cost
- ✓ Low running costs
- ✓ Low maintenance costs
- ✓ CO² friendly
- ✓ Highly efficient
- ✓ Simple to use
- ✓ Long life





Features

1. Ventilation air is drawn into the base of the space heater.
2. Grate is suspended above the base so ash can be removed from below.
3. Easy removable access plate for flue-way cleaning.
4. Upper loading door insulated with reinforced refractory brick.
5. Lower access door with safety plate to prevent system over firing.
6. Electrical control panel, including ventilation air temperature read out.
7. Directional hot air distribution ports.

Which size model for you?

Model	surface m ² floor area	volume m ³
F28	100 / 150 m ²	500 m ³
F 55	200 / 250 m ²	1,000 m ³
F 85	300 / 350 m ²	1,500 m ³
F 120	500 / 600 m ²	3,000 m ³
F 240	1,000 m ²	5,000 m ³
F 350	1,800 m ²	8,000 m ³

See www.zeroridge.co.uk

for sizing calculator

* Before the use of manufactured and preserved wood you should contact your local environmental department to confirm its suitability.

Hot air

Instant hot air is circulated directly into your room

More than just a heater - it heats in winter and ventilates in the summer

Fill with any dry, seasoned wood and minutes later you have masses of hot air blasting into your workspace.

Simplicity and efficiency is what is required when heating large areas. Everything about the heaters is robust and made to last. The whole range is very easy to use, with no time being lost with complicated manuals or training courses.

Once you have mastered the art of lighting a fire it takes only minutes to start. Equally the safety aspect has not been overlooked. Thermostats ensure that no energy is wasted.

The details

The Zero Ridge range of wood burning workshop heaters have heat outputs from 29 to 399 kW.

The range is suitable for burning all types of dry seasoned wood and clean secondary waste wood, but not manufactured wood such as treated wood or ply and MDF.

The fuel chambers are constructed of high grade stainless steel for long life, no fire bricks to change. The fuel is loaded through an upper separate large fuelling door while the ash is removed through a lower access door.

Each model is fitted with a large capacity ventilation fan which passes air over the workshop heater's heat exchanger which is specially designed to be as efficient as possible. This results in lower fuel consumption and higher heat outputs. The ventilation fan is automatically activated by the on board controls when heat is produced. At the end of the burning cycle the fan automatically switches off.

Models fitted with the external flue fan will ensure correct chimney operation whatever the weather conditions.

Summer ventilation

An override switch is included so during warmer weather the unit workshop heater can be used as a cooling ventilation system.



Range of sizes



Front loading



Space heating



Ideal for industry

Do I need a flue fan?

The three smaller models F28, F55 and F85 can be supplied for use with natural draught. The F55 and F85 have the option of a flue fan. Whilst certainly not essential, Zero Ridge do

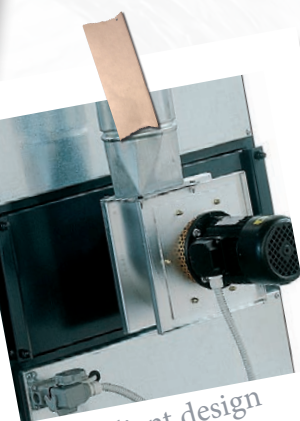
recommend that you have a flue fan to reduce any potential problem with flue draught and to make installation and operation straight forward.

By not having a flue fan you will need to ensure that you have enough flue height to draw the emissions from the chamber and expel them outside any down draught zone.

This is no different to any other similar device or stove. By installing a fan flue you eliminate any potential flue problems, installation becomes easier and your heater will be far more efficient.

Maintenance

Simple cleaning and maintenance ensure reduced input. General maintenance is the removal of ash when required and once or twice a year a general clean and chimney sweep.

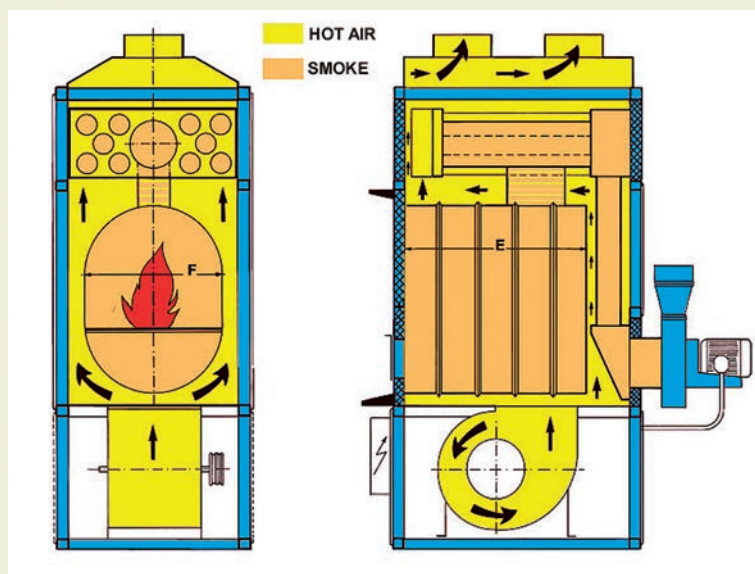


Brilliant design



Small footprint

labour



How it works

Room air is drawn into the space heater from a lower panel and is circulated around the combustion chamber, where it is heated before being vented into the room via the ducts on the top. The combustion gasses never mix with the clean heated air as the two chambers are completely separate.

Heating remote areas

Additional ventilation ducts can be added. However due to the large built in ventilation fan hot air will be circulated over very large areas.

Guarantee

Zero Ridge guarantee the range for 12 months. We offer full industry leading pre and after sales technical support.

Easy fit

Where can you install a wood heater?

You can install and run these units almost anywhere. They are designed to heat large areas by funneling clean hot air directly into the surrounding area. Exhaust gasses need to be vented through the wall or roof to the outside.

Heating requirements

Your should be sited with the recommended minimum clearances.

We recommend that your is installed centrally within the building. This removes the requirement for further ducting, which will allow the to heat the largest of premises effortlessly and efficiently as shown below.



The Fabbri air distribution systems ensures even the largest of areas are circulated with warm air



Natural Energy



Roof support



Wall support



Starter Kit



Funnels

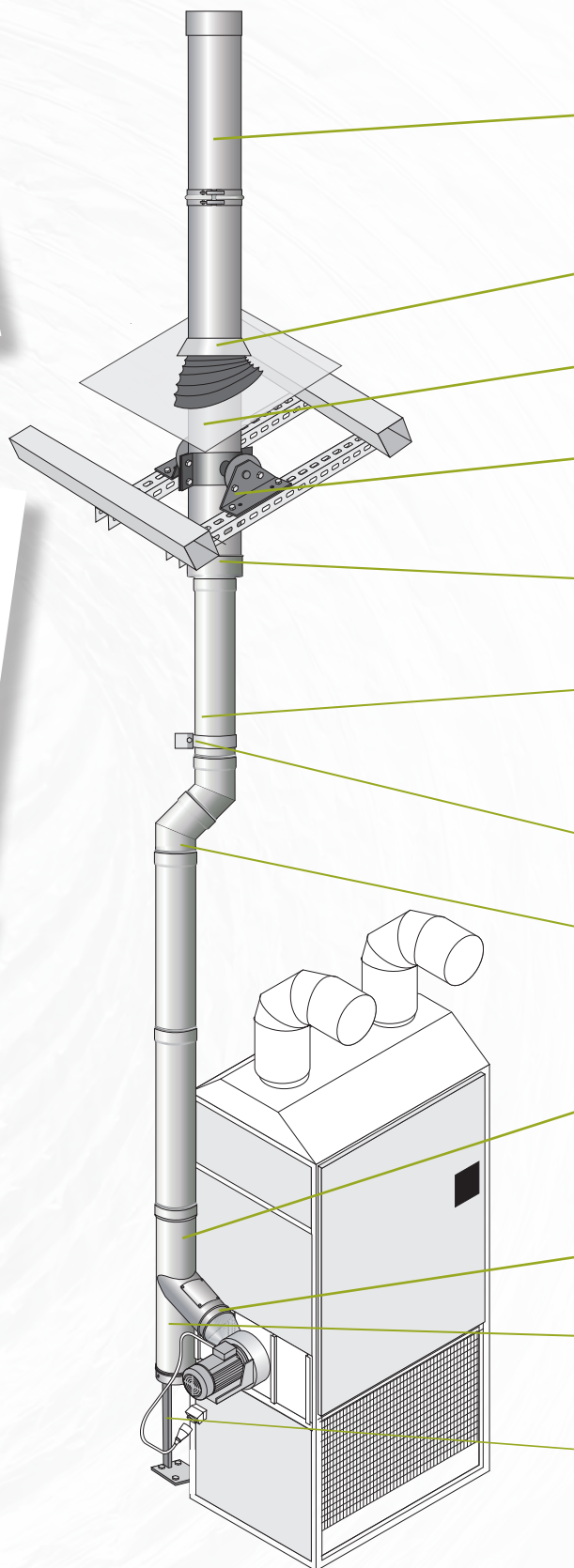


Working Fabbri



heater

Typical Installation for with flue fan



Insulated flue

All chimney sections passing through a roof or exposed outside a building must be twin wall installed chimney suitable for wood burning applications.

Storm collar

Fits above flashing to prevent water leakage through flashing.

Roof flashing

Prevents water ingress around the chimney as it exits the roof.

Roof support

To support the chimney as it exits through the roof to create a stable platform.

Twin wall to single wall adaptor

This adaptor allows the connection between twin wall chimney and single wall flue pipe.

Single wall flue pipe

This can be used within a building if the distance from the flue to combustible materials is at least three times the diameter of the flue pipe.

Wall support

To support and prevent movement of the flue system.

Bends within the flue system

Up to two bends can be used in a flue system to assist when having to pass obstacles in the flue route. These bends should not exceed 45 degrees.

Connection (Flue starter kit)

Connection to the flue fan should be made with a 135 degree bend or a 90 degree bend with debris trap. Connection must not be vertical. This will help prevent rain and debris entering the fan assembly.

Connecting collar*

To enable cleaning from the rear, the flue connecting collar must be removable.

Debris trap*

The connection assembly must include a debris/cleaning access.

Support stand*

The weight of the chimney should be supported from the floor and not on the fan flue connection.

* Part of the Starter kit (see page 8) can be supplied by Zero Ridge.

Flue starter

Flue support stands

The flue starter kits offer a quick and simple means of connecting a space heater to a flue. The debris trap helps prevent rain and debris entering the fan assembly. The flue support stands ensures the weight of the chimney system is supported by the floor and not on the flue fan connection.



Flue stand support



Flue fan



Burn waste wood



Roof support



**Ash Vac
Cleans up ash**



kits



Burn waste wood



Burn seasoned wood



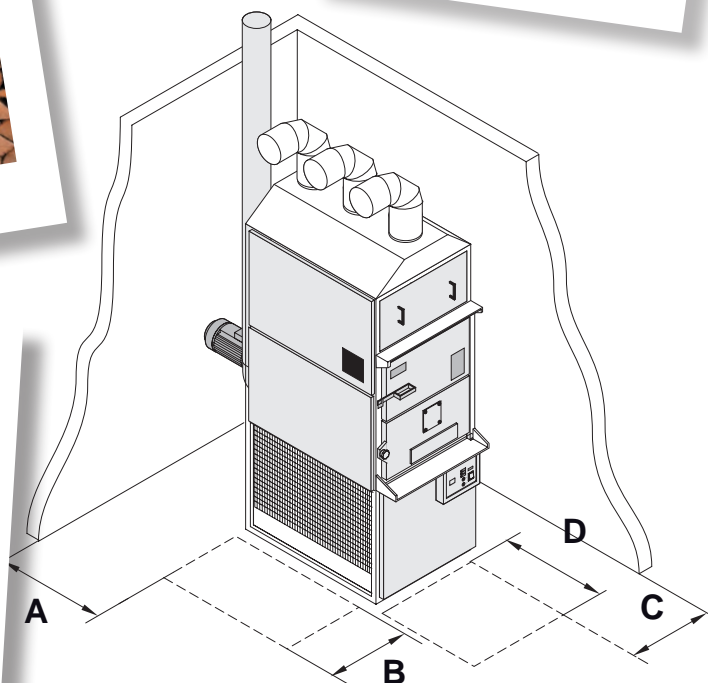
Burn wood chip



Burn logs



Burn clean, cut up pallets



Minimum clearances (mm)

Model	A	B	C	D
F28	1000	600	600	1500
F55	1000	600	600	1500
F85	1000	600	600	1500
F120	1200	600	600	1800
F240	1200	600	600	1800
F350	1200	600	600	2000

Can I burn any type of wood?

No. You can only burn dry or seasoned wood. You must not use painted, treated wood, sawdust or wood containing foreign objects or glue, which includes ply and MDF. Burning these items may cause damage to your and the environment. However you can use any other type of dry or seasoned wood, such as off cuts, broken pallets, waste wood, split logs, pellets, briquettes as well as small quantities of paper and cardboard mixed with wood.

Space Heaters

Space Heaters price & technical overview



F28	Order Code
F28 Biomass Space Heater 29kW Without flue fan. Single phase 230v	F28

Technical Information			
Unit width	550 mm	Fuel chamber width	500 mm
Unit height	1400 mm	Fuel chamber height	400 mm
Unit depth	920 mm	Ventilation fan power	0.26 kW
Flue diameter	160 mm	Ventilation exit static pressure	160pa
Air delivery pipes	2 x 180 mm Ø		
Air flow (at 15 °C)	2200 m3/hr		
Electricity supply	Single phase		
Fuel consumption @ 20% moisture	13Kg per hour		



F55	Order Code	
F55 Biomass Space Heater 64kW Without flue fan. Single phase 230v.	Without flue fan	F55SV
F55 Biomass Space Heater 64kW With flue fan. Single phase 230v.	With flue fan	F55CV

Technical Information			
Unit width	700mm	Fuel chamber depth	660 mm
Unit height	1550 mm	Fuel chamber width	480 mm
Unit depth	1150 mm	Fuel chamber height	600 mm
Flue diameter	180 mm	Ventilation fan power	0.26 kW
Air delivery pipes	2 x 200 mm Ø	Flue fan power (CV only)	0.26 kW
Air flow (at 15 °C)	3500 m³/hr	Ventilation exit static pressure	160pa
Electricity supply	Single phase		
Fuel consumption @ 20% moisture	20Kg per hour		



F85	Order Code	
F85 Biomass Space Heater 93kW Without flue fan. Three phase 400v.	Without flue fan	F85SV
F85 Biomass Space Heater 93kW With flue fan. Three phase 400v.	With flue fan	F85CV

Technical Information			
Unit width	800 mm	Fuel chamber depth	750 mm
Unit height	1760 mm	Fuel chamber width	560 mm
Unit depth	1280 mm	Fuel chamber height	700 mm
Flue diameter	180 mm	Ventilation fan power	1.12 kW
Air delivery pipes	2 x 250 mm Ø	Flue fan power (CV only)	0.26 kW
Air flow (at 15 °C)	6300 m3/hr	Ventilation exit static pressure	160pa
Electricity supply	8.5 amps supply 1.9 amps per phase		
Fuel consumption @ 20% moisture	30Kg per hour		

Please Note:

An accurate heat load appraisal must be undertaken to ensure a suitable match between the appliance and your heating requirements.

Air Heaters

Air Heaters price & technical overview



F120	Order Code
F120 Biomass Space Heater 140kW With flue fan. Three Phase 400v.	F120

Technical Information			
Unit width	930 mm	Fuel chamber depth	950 mm
Unit height	1970 mm	Fuel chamber width	600 mm
Unit depth	1700 mm	Fuel chamber height	860 mm
Flue diameter	200 mm	Ventilation fan power	2.24 kW
Air delivery pipes	3 x 250 mm Ø	Flue fan power	0.56 kW
Air flow (at 15 °C)	8900 m³/hr	Ventilation exit static pressure	160pa
Electricity supply	10amps supply 4 amps per phase		
Fuel consumption @ 20% moisture	43Kg per hour		



F240	Order Code
F240 Biomass Space Heater 279kW With flue fan. Three phase 400v.	F240

Technical Information			
Unit width	1100 mm	Fuel chamber depth	1200 mm
Unit height	2250 mm	Fuel chamber width	740 mm
Unit depth	1900 mm	Fuel chamber height	1040 mm
Flue diameter	200 mm	Ventilation fan power	2.98 kW
Air delivery pipes	3 x 300 mm Ø	Flue fan power	0.56 kW
Air flow (at 15 °C)	17800 m³/hr	Ventilation exit static pressure	160pa
Electricity supply	10amps supply 5 amps per phase		
Fuel consumption @ 20% moisture	83Kg per hour		



F350	Order Code
F350 Biomass Space Heater 399kW With flue fan. Three phase 400v.	F350

Technical Information			
Unit width	1220 mm	Fuel chamber depth	1900 mm
Unit height	2700 mm	Fuel chamber width	900 mm
Unit depth	2700 mm	Fuel chamber height	900 mm
Flue diameter	250 mm	Ventilation fan power	4.47 kW
Air delivery pipes	4 x 350 mm Ø	Flue fan power	1.12 kW
Air flow (at 15 °C)	26000 m³/hr	Ventilation exit static pressure	160pa
Electricity supply	15amps supply 8 amps per phase		
Fuel consumption @ 20% moisture	125Kg per hour		

Notes:

The stated heat outputs are approximate and should be taken as a guide.

Variables such as fuel, chimney draught, insulation and operation are all governing factors in determining the heat capacity of any biomass space heater. Installation must conform to local building and national regulations.

All appliances must be installed by competent persons and within the required draught range. Precautions must be taken to avoid high and low draughts.

Zero Ridge operate a programme of continuous development and reserve the right to modify its products without prior notice.



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This brochure has been created by Zero Ridge. We have made every effort to ensure correct representation. However this document is only a guide. All installations must conform to current building regulations and be installed by competent persons.

Appliances may require commissioning and at least an annual service.

zerospaceheating.co.uk

Zero Ridge operate a continuous development policy and specifications may have changed since the production of information.
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