



CLOUDHOUSE CAFE & GALLERY

Stow, Galashiels

Why Use Woodfuel?

The building comprises of a café and exhibition space and the pellet boiler is situated in the main café area. To make it an attractive feature in the café area, a boiler with a glass door was chosen so that the burning chamber can be seen. Before being developed for its present use, the building was unoccupied and without heating. With no mains gas in the area there was a strong impetus to find a financially viable means of heating the space. The owners were also keen that the new heating system was sustainable and biomass was considered the most suitable option for both the geographic location and the interior space.

Key Benefits of this Woodfuel Installation

- // Very economical solution for off gas mains areas
- // Carbon lean technology preferred by owners
- // Clean and easy fuel to handle
- // Added value to customers and visitors

System Accolades

The boiler provides heating via a wet central heating system, including under floor heating and domestic hot water. The system was part of a larger process of development, with the only significant change to the structure being the provision of a flue and so planning constraints were minimal. The first deliveries of pellets came from Argentina and Ireland but the café now has a secure, local supply of good quality pellets. The performance of the system has been good and the owners are very satisfied.

The small internal pellet store holds 1-2 days of pellets, and allows the boiler to be positioned in rooms and buildings with limited space for a larger fuel hopper.

"We are very enthusiastic about the project and are keen to recommend the system to others. I am looking to install a woodfuel system in my house after seeing it work so well at the café."

Lessons Learned:

- // Seek local fuel supply to maximise carbon savings
- // Installation and ongoing service package should be arranged together
- // Using an experienced woodfuel installer will help guarantee a good installation

What is under floor heating?

- // Warm water is circulated through pipes or tubes that are laid into the floor

Advantages of under floor heating

- // Large radiating area allows efficient heat retention
- // More economical over life cycle of technology (pipework can have a lifespan of up to 100 years)
- // Under floor heating loops are practically maintenance free if installed without any joints
- // Energy savings of up to 40% can be achieved over traditional radiators



BOILER

Application	Café and Gallery Heating and Hot Water Provision
Max output	27 kW
Model	Lucrezia Idro Pellet Boiler
Fuel type	Wood pellets
Moisture content	10%
Installation date	November 2007
Backup system	None
Woodfuel store capacity	1-2 days
Fuel loading interval	Every day when using at full capacity
Annual woodfuel use	4.5 tonnes
Accumulator tank	700 litres

BUILDING

Heated area	60 m ²
Heated volume	145 m ³
Building fabric	16th Century stone
Building use	Café and Gallery space

INSTALLATION COSTS

Boiler system	£7,600
Funding source	Scottish Biomass Support Scheme
Funding support rate	50% of additional costs of woodfuel system

RUNNING COST

Woodfuel cost	£1,000 per annum
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