

## Fuel Usage Analysis Of Lordship Road property Stoke Newington London

### HISTORY

The property is a top floor flat on the end of a four storeys high block in a fairly unsheltered position. Built approximately 1955 it consists of un-insulated brick and block cavity walls, a flat UN-insulated roof and single glazed metal windows. There had been a condensation problem in the unused bedroom adjacent to the gable end of the building.

The property had a conventional central heating and hot water system, with a 14 year old boiler, which up until the end of January 1995 was controlled by a 2 on 2 off programmer in conjunction with a wall thermostat. In February 1995 the programmer and wall thermostat were replaced by a Dataterm EMS energy management system (the previous model of Dataterm). The Dataterm gave independent control of the central heating and domestic hot water.

The tenants' original heating programme was:-

Mon-Sat 8:00 - On (21° C) 9:00 - Off  
18:00 - On (21° C) 22:00 - Off

After the Dataterm was installed they adopted one of the preset plans which at the time gave:-

Mon-Fri 8:00 - 20°C 9:00 - 14°C 18:00 - 21°C 19:00 - 22°C 23:00 - 12°C  
Sat 8:00 - 20°C 17:00 - 21°C 19:00 - 22°C 23:00 - 12°C  
Sun 8:30 - 20°C 17:00 - 21°C 19:00 - 22°C 22:30 - 12°C

After the Dataterm was installed the tenants condensation problem disappeared and their gas consumption reduced by 17-23% over the following 12 months. The recorded gas consumption figures were as follows:-

Date	CF	CH	KwHour	Annual Total
13/01/93	210	594.3	6322	
14/04/93	190e	537.7e	5705e	
16/07/93	81	229.2	2425	
12/10/93	79e	223.5	2402	
12/01/94	246	696.1	7405	17,937 KwH
14/04/94	189	534.8	5689	
08/07/94	93	263.1	2799	
12/10/94	79	223.5	2383	
11/01/95	195	551.8	5855	16,726 kWh
??/04/95	151	427.4	4534	
14/07/95	68	192.4	2046	
11/10/95	65	183.9	1976	
12/01/96	175	495.2	5254	13,810 kWh

Note:

1. The above figures have not been adjusted for degree days.
2. The above figures show that since the Dataterm was installed gas consumption has been reduced by 17.43% compared with 1994, and 23% for 1993.

3. After the Dataterm was installed the internal temperature was not allowed to drop below 14° C. during the day and 12° C. at night, and at weekends the daytime temperature remains at 20° C.