

EndoTherm™

CASE STUDY: Mountjoy Centre, Durham
Durham University



The Estates and Buildings Department of the Durham University trialed the performance of EndoTherm at the Mountjoy Centre. The Centre, which hosts departmental offices, is a two storey office building split into three wings. The heating system is powered by two 200kW boilers and required 17 litres of EndoTherm, which was installed on the 1st May 2015.

The building is currently only heated during the week. Using the on-site, half hourly precise, data a direct comparison of usage between 1st May 2015 to 30th April 2016 and the same period a year before (1st May 2014 to 30th April 2015) was made, ensuring to eliminate weekend usage. Weekday heating degree day (HDD) data was obtained from the nearby North End weather station with a 15.5°C baseload.

Mountjoy Centre	Usage (kWh)	Degree Days (15.5°C)	Usage/Degree Days (kWh/DD)
01/05/14 - 30/04/2015	305,938	1585.6	192.948
01/05/15 - 30/04/2016	297,670	1674	177.820

Total Compensated Savings 7.84%

Based on the historic Usage/Degree Days value, a prediction of usage without EndoTherm was compared with actual usage. This difference showed a saving of £911.69 (based on 3.6p/kWh) and a CO₂ saving of 5,140 kg.

NOTE: A weekend shutdown was implemented mid-way through the comparison year, meaning that for a portion of the pre-install period the building was heated throughout the weekend. This usage was eliminated from the comparison. The benefit of having a warm building on Monday morning is an additional factor to consider during this trial.

7.84
%

TOTAL SAVINGS

FINANCIAL SAVING

£911.69

CO₂ SAVING

5,140 kg

KEY INFORMATION

Installed: 01/05/2015

Trial period: 12 Months

Boiler spec

2 x 200 kW

Volume EndoTherm installed

17 litres