



## THE BELFRY HOTEL & RESORT CASE STUDY SUTTON COLDFIELD

Surrounded by over 500 acres of rolling countryside, the world renowned Belfry Hotel & Resort offers luxurious meeting and events rooms, guest bedrooms and suites, restaurant bars, a nightclub, a luxury Spa and Health Club and of course amazing golf. Jacklin House was chosen for a pilot of the Genius Hub because it has consistently high occupancy levels and as such would be a rigorous test for the Genius Hub system and as a result would potentially show the lowest savings.

The world renowned Belfry Hotel & Resort were looking for a low cost and effective energy saving measure that could be easily retrofitted to the buildings across the resort, with little or no disruption to the occupants of the building, and would not only reduce the cost of heating but also improve the heating levels for guests.

As part of this installation of the Genius Hub a full Monitoring and Verification report was carried out to analyse the heat data provided by The Belfry Hotel for 'before' and 'after' the installation. This was to determine the energy saved as a result of installing the Genius Hub system used to control the temperature of the bedrooms in Jacklin House. **This building is of modern construction with wet radiators in each room and frequently runs at high occupancy often above 95%.**

**The Monitoring and Verification report found an average saving of 64% when comparing the original heating schedule with an occupancy based schedule over the trial period of 10 weeks.** The trial consisted of alternating the heating schedule between 'Timer Mode' - where rooms are heated regardless of occupancy - and 'Sense Mode' - where only occupied rooms are heated.

The mode of the heating was alternated for the first 4 weeks, spending 2 weeks in Timer Mode and 2 weeks in Sense Mode, and was then left in Sense Mode for the next 6 weeks.

This test was carried out between 27th November 2019 - 5th February 2020. **During the period of the trial it was reported that the number of complaints regarding the heating in Jacklin House reduced compared to before the Genius Hub was installed.**

The guest rooms are of modern cavity wall construction with double glazing and the rooms had manual Thermostatic Radiator Valves (TRVs) before they were changed for wireless Genius Radiator Valves.

No plumbing was required as part of the installation so each room took only 30 minutes (approx.) to change to 'smart' control. The monitoring of the heat being supplied to the building during the trial was by a fiscal quality heat meter.

**We interviewed the head of maintenance at the hotel and this is what he had to say about Genius Hub.**

***"We were extremely pleased to calculate that the Genius Hub has saved us 64% off our heating costs."***



#### What were the main considerations before purchasing?

As an award winning 4\* hotel, guest satisfaction was of key importance and the energy savings really only come as a bonus. We have demanding guests who expect everything to be perfect with their stay with us, and we cannot have a situation where there are any problems with the temperatures in the guest rooms.

#### Was there anything you were concerned about?

Yes, we have full BEMS (Building Energy Management Systems) controlling all of our 13 plant rooms, but we lacked experience with this sort of system. It's important that we can diagnose an issue with the hotel's systems as quickly as possible so reception can let the guest know something is being done about it. With the BEMS system we can do that for the boiler plant, and we were hoping that Genius Hub will allow us to do that for the rooms. We realise now that it gives us a lot more information about the rooms than we were expecting.

#### What were your first impressions of Genius Hub?

The whole company was very professional and they came across well. The engineer explained well what we were getting and how it would be used by the guests and the maintenance team here at the hotel.

We chose to block off the individual floors for the engineers from Genius Hub which was appreciated by them, but we realised now that this was not really necessary, the installation went really smoothly and was less disruptive than expected, in fact it was completely trouble free with no disruption to the day to day running of the hotel at all.

We also expected more snagging and more of the valve bodies to cause problems as we chose to keep all of the old radiators and valves, but again this was something that caused less issues than we were expecting and didn't end up adding extra cost to the system.

#### How much can Genius Hub cut your heating bill?

In the proposal we received from the salesman they predicted the standard 30% savings, however as we plan to potentially roll this out across the site we wanted to know for sure what it would be. We paid for a heat meter to be installed which gave us 30 minute heat energy usage for this block and we installed this onto the pipework in the plant room.

We then ran tests over 10 weeks to compare what the energy use was like in a 'before' and 'after' individual room control situation. **We were extremely pleased to calculate that the Genius Hub has saved us 64% off our heating costs meaning that the system has about a 2 year payback on the cost of installation.**

#### What do you like about the Genius Hub?

The remote control and monitoring is key to us, we now have the ability to look at the heating history on the charts for each individual room. Now when a customer says that there was a problem with the temperature in their room, we have evidence of any given day what was actually happening in a room.

**This significantly reduces confrontation for reception and the number of refunds we have to give out for rooms.**



We can control and schedule each room which means we don't have to rely on the housekeepers resetting the TRVs (Radiator Valves) back to 3 all of the time, when they'd often forget, and now they can work in the rooms at a cooler temperature so they are pleased with that too.

#### **What were your staff's impression of the Genius Hub?**

Reception is the first point of contact for any guest, and the feedback from reception about the Genius Hub has been excellent. They have said to us that once they have explained to the guest that they have adjusted the heating in their room whilst they were on the phone, the instant resolution for the guests is priceless for guest satisfaction. The only thing that caught them out initially was reception needed to learn to also tell the guest that they are doing it remotely and no one was actually going to visit the room to adjust the heating!

#### **What's been your experience of Genius Hub overall?**

Simple. You get what you are sold and it exceeded our expectations!

#### **How do you use the system?**

I do use the app on the phone as I'm not always in the office, we also have it on the designated BEMS computer in the office. I can log on easily when I'm home if there is a problem saving me to have to come to site. We have a WhatsApp group where I can help remotely if there is a problem that's not being resolved quickly and it just gives me another bit of visibility of what's going on in the hotel when I'm not there. When comparing it to using the BEMS it is easy. We like the built in troubleshooter in the app and we've managed to fix most issues without having to phone Genius Hub for help. We've certainly not had to call anyone out to site in the first 5 months since the installation.

***"The whole company was very professional and they came across well."***

#### **Conclusion:**

We are now looking to roll it out across other parts of the site, the gas consumption has been dramatically reduced and guest complaints have gone down for this part of the site too, so it has given us all that we wanted and a lot more besides, we'd definitely recommend Genius Hub to others.

