



St Thomas More achieve 82% cost savings through energy efficient solutions

We were recommended to St Thomas More Roman Catholic Academy, to look at a lighting solution for their main assembly hall and sports hall.

The main assembly hall is used for a variety of different activities. These range from; a chapel; exam hall; cinema; awards presentations and some indoor sports activities.

They wanted to be able to control the lighting to facilitate each of these different activities. They also wanted to reduce the cost of maintenance and electricity in both areas.

We designed two different solutions for each hall:
In the assembly hall we have four different settings.

These facilitate the following:

1. Full power 600 lux with 4,800 kelvins no PIR and day light harvesting. This is for exams when they need the lights to be on permanently.
2. 30% of the lights to be turned off in the central isle when using the room for movies or presentations.
3. Reducing the lux level to 50% with PIR and day light harvesting for general use and sports.
4. Reducing the light level by 80% with PIR and daylight harvesting, when it is being used for discos, or presentations where low level lighting is deemed to be better.

The PIR and daylight harvesting functions are really important as historically despite their being switches to turn the lights on and off they were turned on at 7.30 in the morning and not turned off until 5.30pm, 5 days a week. In the sports hall we also gave 4 different settings;

1. Full power 600 lux with 4,800 kelvins no PIR and day light harvesting. This is for exams when they need the lights to be on permanently.
2. Full power 600 lux with 4,800 kelvins with PIR. This is for tennis, badminton, indoor cricket and hockey. This meets the criteria of the Lawn Tennis Association.
3. 400 lux with 4800 kelvins with PIR suitable for indoor football, netball, basketball and other movement based activities such as gymnastics.
4. 200 lux with 4,800 kelvins and PIR. This is suitable for when the hall is in general use, such as when the students cannot go outside to play because of adverse weather conditions.



- The outcome of this work is that we reduced consumption by 82%.
- They now have a flexible lighting solution that meets their needs and gives the staff and students the correct lighting for a range of different activities.
- ROI is 3.7 years