Another case of overheating... in September!



London office building converted to apartments. Fitted with new double glazing with a U-value of 1.1

Temperatures



The temperatures indicated above are peak operative temperatures. For bedrooms in summer the recommended operative temperatures are between 23-26°C.

The study highlighted that with insulation to current building regulations the building retains heat in the heating season. It is difficult to lower it overnight without creating season of noise and security hence the high starting temperatures in the rooms.

Light levels 100,000 **Light level readings** - no blind Internal lux reading 75.000 Recommended lux level for office work - 500 lux 50,000 25,000 -Min internal lux reading = 609Max internal lux reading = 72,400Lux 500 lux (All readings taken on one day) Levels 04 0730 1600 Time

Statistically proven that:

Rooms with internal blinds reduce operative temperatures compared to rooms without blinds Rooms with external blinds reduce operative temperatures compared to rooms with internal blinds

How we did it



Control - no blind

External measurements



- Air temperature
- Lux levels •

Internal measurements





- Air temperature •
- Lux levels
- Operative temperature
- Glazing surface temperature
- Mullion surface temperature
- Blind fabric surface temperature

BBSA

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Measurements

All photographs taken with a wide angle lens

Room fitted with internal Venetian blind

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