



DURATION WINDOWS

Heated Glass Running costs

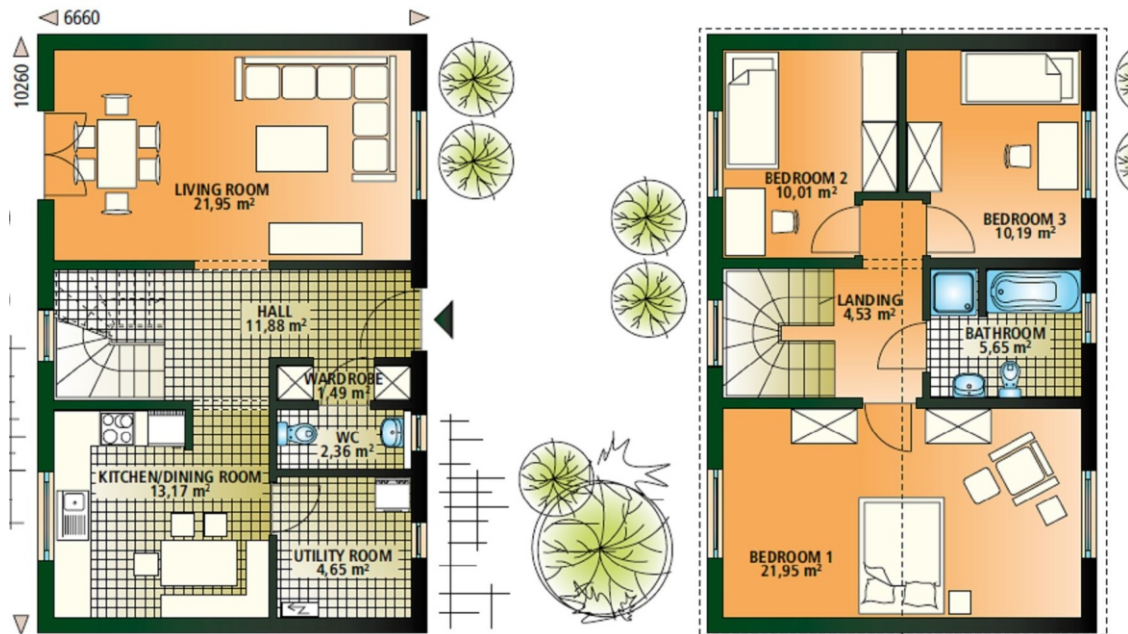
The estimated running costs for a three bedroom social house are as follows. Please find below, the drawings of the house which was used in order to calculate the data:

LIVING PARK 119 119, 28 m²





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All main rooms have only heated glass glazing areas both bathrooms are heated using our mirrors and the landing with a heated glass radiator,

Halls and Bathrooms would have our A-Rated 0 kwh/m²/year heatloss windows with standard glazing and the front door is a 0.25 u-value Composite Door.

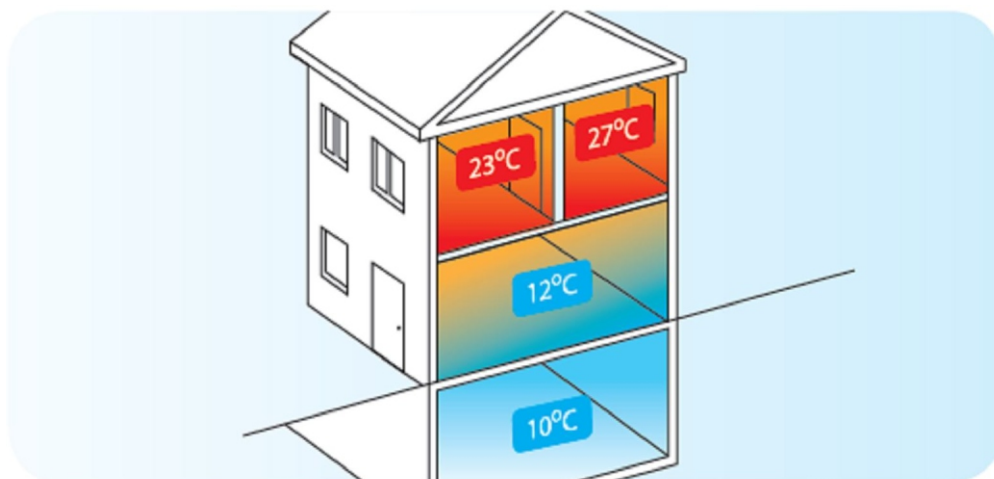
The above SIPS home retains heat at double the rate currently required under UK building regulations. The super-thermal wall system has a U-Value (rate of heat loss) of just 0.18W/m²K – less than half the maximum currently allowed under UK building regulations of 0.35 W/m²K (0.30 W/m²K in Scotland).

The running cost has been calculated to be £696pa for heated glass (electric cost 11p per kwh) compared to £788pa for gas fired radiator system (gas cost 7p per kwh). Both costs were calculated using the same data ie. degree days, U values etc.



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The total requirement for the glass system is 4050watts but the designed glass input is 5250watts so as you can see, the potential output is surplus to requirement. The reason for this is, the extra output delivers extremely quick heat up times eg 7-15 minutes per room which allows true “zoneability”. Imagine heating your house or building around the occupants movements eg living spaces during the day, sleeping areas during the night and virtually turning the system off when people are out. All with the knowledge that you can turn the heat on at the touch of a button, the potential savings here with regards to running costs are huge. In order to reduce the running costs further the heating up of the room to its optimum temperature can be done during times when the Electricity tariff is low. This will further decrease the cost of heating a property and therefore increase the efficiency of the glass. Further to this, the glass can be powered using solar technology with feed in tariffs, so that a property can be heated entirely by the energy from the sun.

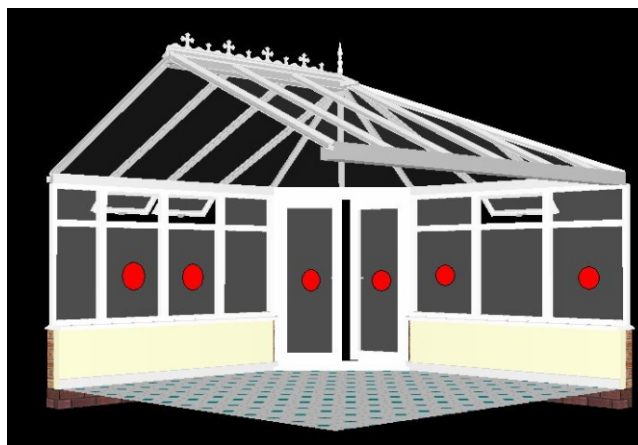


ZONED HEAT



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We have also calculated the running cost data for our 50m³ show conservatory. Please find below a drawing of the conservatory by which the data was calculated. Using a conservatory with a Ultraframe roof and Rehau frames the u value for such conservatory was calculated at 1.1 which is very much a worst case scenario for a heating system. When the temperature outside is 0°C, the average cost of heating the conservatory for 12 hours straight is a mere £1.32. Using Degree Days data for the Manchester region, and estimated family usage of conservatory areas, our engineer has estimated that the annual running costs would be approximately £44. Along with this we have calculated that the heat up times would be 16mins for 10°C to 21°C and 30mins* for 0°C to 21°C.



Only 5.6m² of EGLAS is required to heat this conservatory