

Passive Solar

Architecture

Collecting winter sun without inheriting a summer problem, in five moves.

Free heat only helps if you can store it and reject it later.

The moves

Long axis east to west, main glass to the sun

Glazing sized to the room, not maximised

Exposed thermal mass behind that glazing

Overhang tuned to summer and winter angles

Insulation and airtightness first, always

Ways it goes wrong

Too much glass, so it overheats by March

Mass buried under carpet and plasterboard

No way to purge heat on a warm night

Trees or a neighbour shading the winter sun

Fabric first: an under-insulated house with a sunspace still loses more heat than the sun brings in.