ROOF

The first question to ask is whether the roof should assume a major visual role or whether it should remain obscured behind a parapet wall. The notion of 'parapet' generally suggests a heavy wall envelope with a flat roof concealed behind it, whereas the decision to use a pitched roof generates a range of possibilities not only regarding roof form (steep/shallow or dual/mono pitch, for example) but also regarding the nature of the membrane (heavy/light), and more particularly, how the roof and wall effect a satisfactory junction.

Just as a structural grid can assist in ordering a plan, so can a pitched roof give order to the building's final form by providing a dominant canopy to which all other formal interventions are secondary. Wright's prairie houses, with their low-pitched roofs and massively projecting eaves illustrate how a dominant roof can bring together and unify subservient visual incident (Figure 5.8). Furthermore, it is possible visually to enrich the roof by tectonic display; exposed rafters, trusses and how they connect with supporting walls and columns offer an endless range of visual incident for the designer to explore (Figure 5.9). Part of this overt display can involve rainwater collection from the roof; architects have exaggerated gutters, gargoyles, downpipes and water shutes to gain

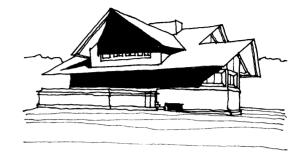


Figure 5.8 Frank Lloyd Wright, Warren Hickox House, Kankalee, Illinois, 1900. From Architecture of the Nineteenth and Twentieth Century, Hitchock, Pelican, p. 376.

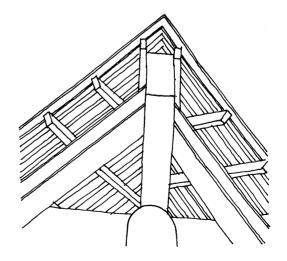


Figure 5.9 David Thurlow, Eurocentre, Cambridge, 1985.

maximum visual effect from the simply utilitarian (**Figure 5.10**).

And how will the roof turn a corner? Will the chosen eaves detail be repeated at every corner and re-entrant so that a 'hip' and a 'valley' respectively are the inevitable result (Figure 5.11), or will the corner reveal a 'gable' and a 'verge' (Figure 5.12)? Will the verge project beyond the wall plane to expose purlins and rafters (Figure 5.13), or will the verge be 'clipped' (Figure 5.14), or even concealed behind a parapet? Will such a change in roof treatment at a corner imply an elevational hierarchy and the inevitable consequences in 'reading' the building?

If the plan is deep or if internal circulation routes need daylight it will be necessary to

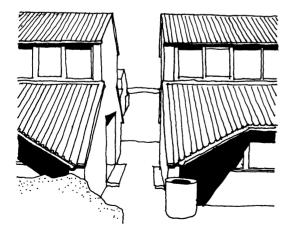


Figure 5.10 Edward Cullinan, Housing, Highgrove, London, 1972.

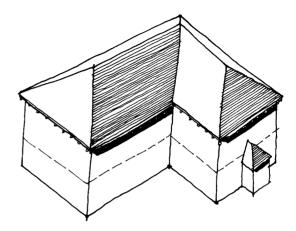


Figure 5.11 Hipped and valleyed roof.

penetrate the roof membrane with some form of roof light. Again, the form these rooflights take will have visual consequences both internally and externally. It is as well to group rooflights or make them a continuous extrusion so that they are of sufficient visual mass to 'read'

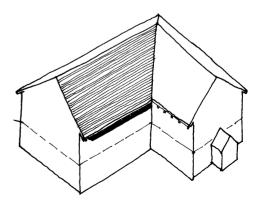


Figure 5.12 Gabled roof.