

ENERGY CONSERVATION REQUIREMENTS

1997

- 1 Consideration should be given to the site's micro-climate and opportunities for wind sheltering should be assessed using indigenous tree species.
- 2 Where a new dwelling is formed or, in the case of other building uses newly constructed, they should comply with the energy conservation guidance contained in the current building regulation requirements. Ideally dwellings should achieve the appropriate rating using the Standard Assessment Procedure (SAP rating), but it is desirable to aim for a higher value wherever possible.
- 3 The use of electricity should be minimised in order to reduce CO2 emissions (NB electricity is responsible for 4 times more CO2 emissions than gas).
- 4 Insulants must be C.F.C. and H.F.C.'s free.
- 5 The use of tropical hardwoods should be avoided and all timber (including softwood) must come from sustainable, well managed sources.
- 6 Consideration should be given to the energy content of building materials; and their transport by sing local suppliers.
- 7 Ensure that the maximum amount of soft landscaping is incorporated (helps absorb CO2).
- 8 Consideration should be given to the use of re-cycled materials (e.g. hardcore) particularly in view of the existing materials on the site. Some re-cycled materials contain sulphates or phenols which have a detrimental effect on the building and should not be used. Recycling also reduces waste taken to landfill sites and the effects of transport.
- 9 Consideration should be given to the conservation of water, i.e. showers, sprinkler taps, rainwater butts, and W.C. cisterns as required in current building regulations.
- 10 Ensure that storage space is provided on each property in a screened location for at least two of the Council's wheeled refuse bins so that in the event of the Council extending a recycling policy provision is made for the storage of recyclable household waste.
- 11 Use lead-free, non-toxic paints.
- 12 Use low energy light fittings and appliances.
- 13 Consider the use of gas condensing boilers with appropriate controls which operate at 90% plus efficiency.
- 14 It is expected that the developer will provide simple heating controls and advise as to the efficient running of the system including estimation of running costs to occupants. Requirement L1 (Building Regulations) makes heating controls a necessity.

- 15 Mechanical ventilation systems complying with Building Regulation requirements should be installed in bathrooms or kitchens. Natural 'Passive Stack' systems should be considered as a preferential alternative to mechanical extraction systems. In habitable rooms both rapid and background ventilation openings should be provided. As Building Regulation energy conservation requirements increase, it is likely that provisions requiring the installation of forced ventilation systems will be introduced in order to reduce the risk of condensations occurring within the fabric of a building.
- 16 It is desirable to limit leakage of the heating of a building by reducing unintentional air paths as far as practical, by fitting draught stripping in the frames of openable elements of windows, doors, rooflights and loft hatches. Also be ensuring that boxing for concealed services are sealed at floor and ceiling levels, and sealing piped services where they project into hollow constructions or voids.
- 17 Hot water vessels should be insulated in accordance with Building Regulation requirements. They should also incorporate a thermostat which shuts off the heating source when the storage temperature is reached and a timer which enables the heat supply to be switched off for periods when water heating is not required.
- 18 Hot water pipes and warm air ducts should be insulated where they pass through unheated spaces, (eg floor and loft voids) or areas where they are not used to contribute to the heating of that space.