5.5 Shelving

As long ago as 2000 BC Mesopotamian archivists stacked clay tablets on shelves off the floor and away from the walls to protect the vulnerable clay from damp (Banks, 1999).

In most cases shelving has been provided as a result of colonial administrations and is often of wood construction, although varieties of metal shelving have been introduced. Generally there is much work to be done on standardisation and significant improvements could be made by strengthening and securing shelving – especially cross-bracing and wall fixings. Raising shelves above ground level must be a priority, as this will greatly improve the life expectancy of stored materials. These best practices are vital and easy to achieve (Rhys-Lewis, 1999).

Adjustable steel shelving is highly recommended, because of its strength and resistance both to fire and insect attack. It should have a baked enamel finish to resist abrasion and corrosion. Since archive material does not come in standard sizes, flexibility in shelving is important. Wooden shelving is acceptable providing it is sealed with an acrylic paint or varnish (for painting problems see Adefarati, 1980). Then again wooden shelves have the drawback of being combustible and they are also vulnerable to the attack of termites. Yet, in most tropical countries many local timbers are suitable for furniture and shelving, many are resistant to fungal infestation and certain timbers are termite-proof (see also section on Integrated Pest Management). A disadvantage of wooden shelves and furniture, particularly inadequate seasoned wood, is that it will swell or contract according to the humidity. Next the (animal) glue may weaken and imperfectly constructed wooden items may tend to fall to pieces (Plumbe, 1961c). Cement is, in the first instance, not an alternative as it is not flexible and very often creates dust (Pérotin, 1966). Yet, there are exceptions. Local archives in Africa suffer heavily from one particular termite (Pseudocanthotermes) which does not have an epigeal termiteury and is spread out everywhere. Only cement stops them and in combination with metal supports, bars or grills this provides the best security against termite infestation (Hurault, 1997).

Generally, sharp edges and rough surfaces should be avoided. The shelving chosen should allow the greatest air-circulation; solid shelves and back panels should be avoided. Compact shelving is inadvisable because it interferes with the circulation of air (Duciein, 1988). Avoid shelves running against an outside wall, as they may conduct damp and impede the free flow of air. Setting the shelves at right angles to the walls creates a better airflow. This is also necessary to avoid the development of fungus in places which may not be well aired. For the same reason full sheet iron must be avoided and instead cross pieces or ladders, which permit air to circulate amongst the shelves, must be adopted (Karim, 1988; MacKenzie, 1996).

In case of insufficient shelving when records must be stored on the floor, some type of blocks or pallets should be used so that records are not directly in contact with the floor. If the cost of new shelving is beyond reach, it is sometimes possible to purchase second hand shelving. This must be cleaned thoroughly prior to use and it may be necessary to have it resprayed in case of bad damage (Ling, 1998). It is obvious that shelving should be sufficiently sturdy to withstand earthquakes, and in this case back panels should be considered (see section on Disaster Preparedness – Natural Disasters – Earthquakes). The NAA (National Archives of Australia) recently developed guidelines for mobile shelving (NAA, 1997).

For some experiences, mainly in the West, with different archival shelving systems see Atlanti (International Institute for Archival Science, Maribor), 1993.