

Materials

FOOTINGS

Early footings, in fact footings right up until approximately 1910, were almost exclusively of stone. These were satisfactory except on soils with a high clay content where the lack of tensional strength in the footing resulted in settlement. Bluestone and other local stone used tended to break down with the action of salt damp.

REINFORCED CONCRETE footings were introduced in about 1912. They were usually wide and shallow with a large 'toe'. Due to on site mixing and sometimes poor supervision, the concrete often deteriorated. There was no significant progress until the early 1960's when Consulting Engineers began recommending footings for individual sites. There are a variety of such footings for different problems, e.g. grillage raft and pier and beam. Raft footings/floor systems prevail today.

DAMP COURSES

The need for damp courses in Adelaide became obvious probably about 1850 when a variety of materials including lead, hand blown glass bottles, jarrah and slate were laid at the base of the wall. These were mostly ineffective — they tended to crack or break often on account of the fretting of the stone footing underneath.

A tar and sand compound was introduced approximately the same time as concrete footings, i.e. about 1912 and continued to be used right up until the mid 1940's with varying success.

At about this time, mid 1940's, chemical additives to the mortar were employed. These are difficult to detect unless coloured black which often is the case.

Some progressive architects used membranes such as "Alcor" and malthoid as early as the 1950's, but the universal employment of P.V.C. membranes did not occur until the mid 1960's. These are easily recognizable by the embossed surface (purportedly to reduce slippage).

WALLING

The early houses covering the cottage/villa era were predominantly of stone (bluestone, limestone, sandstone) with a lime mortar bonding. The walls, especially very early on, were up to 450 mm thick. Even until approximately 1910, it was quite common to find stone walls of 350 mm thickness.

Bricks also were used in this period, often as decorative quoins in the stonework. Many of the first bricks were imported and brought out as ballast on the wool clippers returning from England. However, brick kilns were established in the very earliest days of the Colony.

Cavity brick walls 250 mm thick were introduced as early as 1890 — often used in conjunction with a 350 mm stone front wall.

Walling heights of 4.27 metres (14 feet) or more were not uncommon in the better class of construction. These were reduced to about 3.66 metres (12 feet) at the turn of the century and to 3.05 metres (10 feet) after World War 1. After the Second World War, a further reduction to 2.74 metres (9 feet), due to a shortage of materials, occurred and in the early 1970's to 2.44 metres (8 feet).

In approximately 1900, timber framed construction with corrugated steel or pressed metal wall cladding became prominent particularly in the small workmen's cottages in and around Port Adelaide. Weatherboard was also used, although on a limited scale, and sometimes in conjunction with metal cladding.

The "State Bank" bungalow of the 1920-1925 period employed a perimeter lintel of concrete which helped tie the house together.

Poured concrete was used as a walling material as early as 1910 and depending on the quality of the mix, has proven quite durable.

Reinforced concrete walls again became popular in the late 1940's-early 1950's and have stood up well particularly in areas where soil movement is a problem.

A shortage of materials after World War 2 led to the use of home cast concrete bricks. Many houses constructed of these bricks have subsequently been rendered as were the solid concrete houses.

Asbestos cement sheeting also became prevalent as an external cladding about this time, although it was used as an internal material (walls and ceilings) at least ten years earlier.

A significant development occurred in the early 1960's when brick veneer construction became popular. This lighter type of construction suits Adelaide soils and is most often used.

ROOFING

Corrugated, galvanised steel sheeting and slate shingles were used as roofing materials from the outset. The very earliest dwellings had roofs of thatch, reeds or timber shingles, but these were invariably covered by steel sheeting as they became subject to weathering.

All steel roofing material was imported being carried back on the wool clippers returning from England. This practice continued until approximately 1920 when Lysaghts commenced manufacturing in South Australia.

Slate was used often on the more elaborate homes and was prevalent mainly between 1840 and 1870. Much of this material was also imported, although poorer quality slate was mined around Willunga.

Imported 'Marseilles Tiles' enjoyed brief popularity as a roofing material from 1910 to approximately 1916.

The Wunderlich Tile Company began producing roof tiles in Adelaide in 1921. These were of terra cotta (clay) and were almost identical to the 'Marseilles' variety. Many of these tiles were branded with a date on the underside.

During the shortages of the Post World War 2 period, clay tiles were imported from India (1946-1948) — these were also branded.

It was not until the late 1940's that corrugated galvanised steel gave way to concrete tiles as the most widely used roofing material (they remain so). Monier concrete tiles commenced in 1953. Prior to this concrete tiles were made by a company called Jaywoth. The 'Roman' style concrete tile (adaptation of Cordova tile) appeared for the first time in approximately 1963, and continues to enjoy popularity to the present time. Boral Hollostone began producing concrete roofing tiles in 1972. The profile of these tiles is readily distinguishable.

Other materials, for example cedar and asbestos shingles, have been periodically used and have no definite era. Metal tiled roofs, particularly for lighter construction such as transportable homes, became popular in the early 1970's although an earlier type of metal tile was used in the 1950's. Steel or aluminium tile sheeting have been used extensively to replace old and rusted corrugated galvanised iron roofs.

The James Hardie standard corrugated asbestos cement sheeting appeared in the mid 1930's followed in the late 1940's by the large corrugation profile (Deep Six).

CEILINGS

Lath and plaster ceilings were in general use up until 1915. Occasionally matchboard, pressed metal and small fluted corrugated iron were used around the turn of the century, although examples particularly of matchboard can be found in a much earlier era and as late as the 1920's.

Fibrous plaster was a significant development of 1915 and was used almost exclusively until 1959 when plasterboard was first seriously marketed in South Australia, although it had been available since 1953. In 1965, a plasterboard manufacturing plant was established in this State and this material has virtually taken over both for ceilings and internal walling.

FLOORING

In the very early construction period, large pieces of slate or large flat stones were used for flooring. Baltic and local pine were used almost exclusively from then onwards, right up until the late 1960's, when they had to compete with the greater use of concrete and such new materials as particle board and asbestos cement sheeting.

Today, fewer than half of newly erected homes have timber floors; the concrete raft being the more popular.

INTERNAL FINISHES

Original 'internal finishes' for homes built largely between 1840 and 1900 would be rarely found today. Through various periods when renovation was in vogue, many of the earlier original finishes and decoration disappeared and reliance on these could be misleading for the purpose of age identification.

Bathrooms (except in more elaborate homes) were rarely found in the main section of the home, usually they were located in a detached 'wash house' or, in the lean-to adjacent to the kitchen. It was not until 1880 that bathrooms were incorporated in the main or became a specific room in the lean-to attached to the main.

In the earliest homes, kitchens were located in the lean-to. Generally construction of the lean-to was similar to the main.

