Heritage Centre Education Kit

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TIMBER HOUSES IN TOWNSVILLE

The houses at the Heritage Centre illustrate the changes in housing construction over the last 100 years.

If you look around Townsville today, you will notice that houses in the newer suburbs are built mainly of brick or concrete block. They have roofs of tiles or pressed metal.

But the houses in the older suburbs are built mainly of timber, and have corrugated-iron roofs. There are a number of reasons for this.

Building materials in the 19th century

When the first European settlers arrived in 1864 the only available building material was local timber. As Aboriginal people had used bush material to create bark or palm leaf shelters before Europeans arrived, so the new settlers turned to the bush.

The first house they built in Townsville was a log hut of native timber in the area we now call North Ward. As there

was no timber mill, the logs must have been hewn by adze, axe or saw.

While the more ephemeral bark or palm leaf shelters satisfied the needs of the nomadic Aboriginal people, European and Asian settlers came with a longestablished heritage of agricultural and urban settlement and technological development. They expected more substantial permanent dwellings.

Few of the native trees in the area were suitable for erecting such substantial houses — and those trees were soon cut out. Local stone suitable for building, and clay for brick making were also scarce. Building materials had therefore to be imported from other areas.

Brick, stone and tiles are heavy. Weight and bulk were important considerations, as everything had to be brought by ship from the south, and then carted by horse and bullock drays. Machinery for handling cargo was not introduced until well into the 20th century, so all cargo was handled by men using only wooden hand trolleys.



Aboriginal shelters, probably at Pallarenda, about 1870. John Oxley Library



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An early example of exposed framing, on the Worker's Dwelling at the National Trust Heritage Centre

The popularity of timber and iron

Timber and iron were light and easy to handle, and cheaper to transport over long distances than other available building materials. Timber was also the most readily available material. Large resources of hardwood timber existed in the Maryborough district, where timber mills were already established by 1865.

John Melton Black and Robert Towns, the founders of Townsville, ordered the first supplies of milled timber and other building components, such as windows and French windows, from Greathead & Gladwell of Maryborough.

By the 1870s other timber supplies are known to have come from Tasmania and from the West Coast of the United States. Oregon pine was imported from America for many

Style of exposed framing showing belt rails and internal VJ boards, introduced



years. Cedar, silky oak and other timbers came from north Queensland forests, both north and south of Townsville. We now know that timber supply is not inexhaustible. It is a renewable resource only with good forest management to replace the milled trees. But our ancestors did not understand the need to conserve forests. They did not hesitate to use timber as the cheapest and most easily obtainable material for building their houses and making their furniture. So timber supplies were almost exhausted over the next century.

Also many settlers — British, Chinese Scandinavian and German were familiar with the techniques of timber construction, and they brought carpentry skills to their new land.

Exposed framing

The earliest houses were sheeted externally with wide horizontal boards. We do not know whether they were lined on the inside, but, in colder areas where many settlers came from, they needed double-lined walls for protection from cold. So it is assumed that these earliest houses, none of which have survived, were most probably sheeted both internally and externally.

By the late 1860s the system known as exposed framing was universally adopted in building timber houses.

External sheeting for insulation was not needed in the tropical climate of north Queensland. Houses were obviously quicker to build with only one layer of sheeting. They required less timber than double-lined timber houses, so were cheaper to erect. On mining fields they were easy to shift to new sites when mines closed.

'Exposed framing' describes the building technique where the framing of the house, with horizontal bottom plates and top plates joined by vertical studs, was exposed on the outside. The frame was sheeted with wide horizontal boards on the inside.

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An early example of a high-blocked house, about 1890

'Currajong' and the Worker's Dwelling both illustrate this building technique.

High blocks

Until 1900 most timber houses were on low blocks or piers, of brick or timber. From the 1890s houses raised on high piers, usually of timber, became increasingly common.

The Farmhouse at the Heritage Centre, showing chamfer boards on the rear walls There are a number of reasons for this change. In some cases houses were



built in flood-prone areas, and the higher blocks saved them from inundation. In other cases higher houses were thought to catch more breezes. Some early settlers believed that it was unhealthy to build houses close to the ground, while others found the extra space beneath high-blocked houses useful for storage, as shaded places to work or for

children to play, or to dry washing in wet weather.

Changes in building techniques

At the turn of the century, a new building technique was introduced.

Whereas the space between the stud framing on earlier houses was narrow, the studs were now placed further apart and held firm with top and bottom plates and horizontal belt rails. The sheeting, though still internal, was of narrower boards, called VJs, placed vertically. The Farmhouse illustrates this building technique.

By the 1930s, and perhaps even as early as the 1920s, exposed framing went out of use. Chamfer boards or weatherboards were placed horizontally on the outside of the frame, and VJs were used to line the

Weatherboard: Wall cladding using overlapping lengths of hard wood timber placed horizontally. and providing a weatherproof surface resistant to shrinking and swelling.

Chamfer board: Wall cladding using horizontal lengths of timber with a shallow groove giving a smooth finish but again providing a weatherproof surface.

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inside walls, so that houses were double sheeted.

This form of construction can be seen on the rear of the Farmhouse, which was enclosed in the 1940s.

Introduction of other building materials

By the 1930s a building board called Fibrolite® (fibrous-cement sheeting) revolutionised house building. It came in large sheets, so that builders could cover walls very quickly. From then on one finds houses either sheeted externally and internally with Fibrolite, or sheeted externally with Fibrolite and with VJs on the inside walls.

Fibrolite could be used in many ways. Most commonly, it was used to enclose the open verandahs of older houses to create extra rooms, as you can see on the house at 4 Castling Street, where part of the verandah is enclosed.

There are also some houses in Livingstone Street where you can see houses with Fibrolite sheeting and either louvres or timber casement windows enclosing verandahs. After World War II timber was scarce. Fibrous-cement sheeting came into common use. It was found that the asbestos fibres used in its manufacture were a health hazard, so new materials were introduced to replace the asbestos fibre, making modern fibrous -cement sheeting quite safe.

By the 1960s timber was in short supply. Most new houses were sheeted externally with Fibrolite, and a new material called plasterboard (made from gypsum plaster) was used for internal sheeting. A good example of a house of the late 1960s and 1970s sheeted with Fibrolite stands at 3 Castling Street, next door to the Heritage Centre.

New building techniques introduced concrete masonry blocks, brick veneer over timber or steel framing, and a variety of new roofing materials. So very few houses were built of timber and iron after the 1970s.

Across the street from the Heritage Centre is an example of a concrete block structure.

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So the houses at the National Trust Heritage Centre enable us to understand the changes that have taken place in house construction in the last 100 years.

One of the earliest houses in Townsville to be sheeted externally with Fibrolite



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