14 RESTORING OLD HOUSES

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WHAT IS JOINERY?

Joinery is an all embracing term which refers to the lighter, finer and more ornamental timberwork of a house. Doors, windows, staircases, architraves, skirtings, archways and turnery are considered joinery,

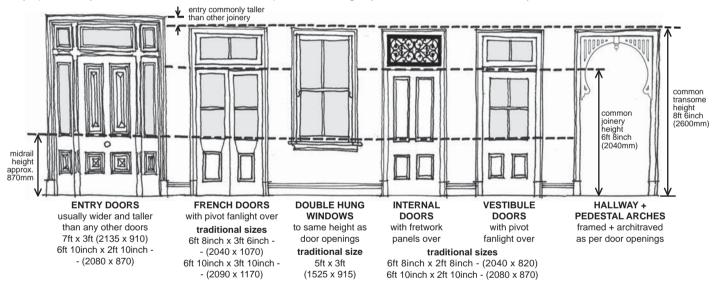
whereas heavier timberwork such as bearers, floors, walls and roof framing are carpenter's work. Furniture and built in cupboards are cabinet maker's work.

WHAT ARE THE JOINERY ISSUES WHEN EXTENDING OR RAISING AN OLD HOUSE?

There are a few design considerations that you need to take into account when renovating a traditional worker's cottage that can have a major bearing on the resale value of the venture and its costs. The original cottages were kit houses that used standard components. Generally all the windows were the same size and so were the doors. The design was composed using 'off the shelf' items that were repeated around the facade and internally. Later additions may have blurred this simplicity but the rules for a successful renovation are:

- Retain the original character of the house. This means preserving its original features and not over-restoring so that the authenticity is lost.
 Original victorian & federation houses had a very simple set of design rules. The internal and external iniperval maintained the same
- Original victorian & federation houses had a very simple set of design rules. The internal and external joinery all maintained the same joinery height. Picture rails would quickly highlight any discrepancy. The height of windows, french doors etc, all maintained the same joinery height, with only the front door being slightly larger to signal its importance. (see diagram below)
- Renovating an old house calls for skill and attention to detail. There is usually a consistent theme to joinery so that moulding patterns and
 profiles on doors and glazing patterns in windows are the same throughout. Dimensions of individual items may vary but their appearance
 will generally be consistent. Variations may occur in the quality and extent of details in joinery items, as for example, from the more
 complex details found in major rooms to simpler forms used in lesser rooms but the theme will generally remain consistent. It is important
 that new additions or renovations respect the original details and operate within their parameters.
- Look for the proportion and strength of traditionally constructed joinery. Although slight differences exist between imperial and metric joinery sizes, external joinery doors should always be 40mm thick, window sashes 35mm thick and internal doors no less that 35mm thick. A great deal of joinery available in the market place is thinner and will not last as well in the harsh Australian climate. Insist on solid timber joinery rather than veneered, engineered or hollow core doors as they can delaminate in our climate due to moisture movement. You also, of course, can't cut them down or fit them as is generally required in older homes.

Remember that it's a house, not a museum. You are just as much a part of its history as anyone else. Live in it, respect its pedigree and alter it sympathetically. The aim is for it to be in better shape for the changes you've made than it was when you arrived.



WHY USE TIMBER JOINERY AT ALL?

Timber joinery is often seen as requiring more maintenance than its aluminium counterpart but time has proven this to be incorrect. While powdercoated aluminium will outlast the first paint coat on timber, it may not outlast the second repainting, particularly in salty environments. Whereas timber can always be sanded and repainted, powdercoating cannot be over-painted successfully and the entire joinery needs to be replaced. Timber joinery simply performs better and enhances the integrity of the original architecture compared to its aluminium competition.

DO WOODWORKERS RESTORE OLD JOINERY?

Old doors meet a variety of misfortunes but can often be repaired to continue their life provided their basic structure is sound. Woodworkers are happy to advise if a joinery item can be retrieved rather than replaced, as it is always preferable to conserve originals if they've made it this far. The original door, though it may be badly worn or knocked about, has the patina of age and is part of the living history of your house. Blistered paint, missing mouldings and loose joints can all be rectified.

Advice should be sought before paint stripping joinery in caustic baths. It will destroy the colour of the original cedar and usually loosens the glues that hold the joinery together. Beware however, that not all existing joinery may be original to your house. Many houses contain an accumulation of demolition yard 'finds' that may confuse and bastardise the original style. These should be removed and a consistent style reinstated throughout the house. Replacement joinery should be sympathetic to the originals with careful attention paid to the proportions and style.



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WHAT IS WOODWORKERS STYLE GUIDE TO OLD QUEENSLAND HOUSES?

The Woodworkers Company aims to make joinery that blends comfortably with the traditional styles of Queensland architecture. We've spent hours measuring and recording the fine details of old Queensland houses and we hope this summary will prove useful to renovators, designers and builders who have inherited houses that have been tormented by earlier modernisation efforts. Increasingly we see property markets handsomely rewarding authenticity and the thoughtful approach to renovation, and this style guide may assist these endeavours by providing an easy reference to the main eras of Queensland dwelling construction. The guide intends to be informative and not constrictive. Knowing a building's architectural style provides a framework for renovation or restoration and permits consistency of detailing. Ultimately however, the success of such work depends on the skill of the designer and artisan. We believe we have a responsibility to the increasingly scarce timbers we use to be disciplined about our work. As a component manufacturer, we hope our work can make it that much easier for our clients to preserve our unique architectural heritage. For more information refer to Ian Evan's book "The Queensland House" which was sponsored by the Woodworkers Company to provide a broder biew of the Queensland style. For even more details try Judy Rechner's book "Brisbane House Styles 1800 to 1940 A guide to the affordable house".

DOES EVERYTHING HAVE TO EXACTLY MATCH THE ORIGINAL DETAILS?

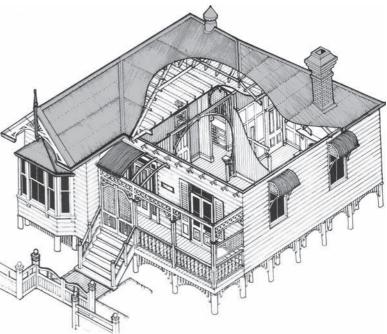
No. The prevailing architectural theory on restorations suggests that it is preferable to leave clues to those who follow you as to what you altered and what you didn't. This means that restoration architects will often insist that joinery mouldings and details are just slightly different from the originals so that future owners will be able to decipher the extent of your alterations. It doesn't matter if new joinery has a 25mm glazing bar whereas the originals were 20mm. The same criteria is often applied to the size of joinery items. Each generation typically becomes taller and wider and the original joinery sizes are usually too small by today's standards. It is not sensible to use joinery sizes today that were designed for people 100 years ago. It is preferable to change sizes to cater for future generations than to hold rigidly to Victorian sizes. This is not only more convenient to live with but also simpler for future renovators to identify. You regularly see alterations that stand architecturally distinct from the original building, often diametrically different in style. This isn't a problem if the integrity of the original building was respected throughout and the alterations are clearly added on. It is a problem if

the original building has been modernised so that it loses its original identity. As a rule of thumb, things added on can have their own architectural flavour; things added in or under should preserve the character of the original.

WHAT ARE THE ISSUES IN RAISING & BUILDING UNDER AN EXISTING TIMBER COTTAGE?

The attraction to double your floor space becomes overpowering as families and possessions grow and that underhouse area tempts you to raise the house and build under. In many instances, the result can be aesthetically successful depending on the skill of the designer. A very useful place to start to understand the issues involved is to obtain a free publication from the Ipswich City Council (Tel: 07 3810 6256) entitled 'Heritage Information Kir'. This booklet explains both the local authority viewpoint on appropriate restorations and explains the practical issues that need to be considered. These include:

- * The architectural character of the original house. Houses with surrounding verandahs can be raised successfully provided the under-verandah areas are not built in and the stumps or columns are visually expressed. Houses without verandahs assume an entirely different appearance when raised and careful attention to overall proportions and aligning windows is essential to avoid a hybrid result.
- * Raising houses also levels them. This can be a problem if you've already restored the upper building and the process of raising the house cracks your tiles and jams all your windows and doors. If you are considering raising, it is best to leave upstairs restoration until later.
- * Not all existing fireplaces will withstand the stress of being lifted. Soft colonial bricks in lime mortar are more likely to crumble than modern bricks in cement mortar. It is likely that fireplaces will be supported on steel superstructure after a lift (rather than masonry) and the downstairs plan needs to accommodate all of this structure.
- * Walking on the upper floor will resonate like a drum to the lower floor unless the upper & lower floors are isolated for sound transmission. A separate lower floor ceiling that is heavily insulated from the upstairs floor joists can achieve this but lining the ceiling on the underside of the floor joists is a recipe for disaster.



I WANT TO TOTALLY CHANGE THE CHARACTER OF MY EXISTING HOUSE. SHOULD I?

Not usually. It is better to buy a house more to your liking than try to convert a house you don't like. So many 'moderisations' that haven't worked stand testament to the principle that trying to impose a new style on an old building is a poor decision, financially and architecturally. That is not to say that it can't be done but only that this is the realm of professionals. If you don't know what you're doing you may simply waste a lot of money for an unsatisfactory solution. It's a bit like trying to change a vintage car into today's roadster; technically possible perhaps... but still not a great idea.



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JOINERY ISSUES



HOW DO I KEEP COSTS UNDER CONTROL?

The cost of joinery can easily be 15 to 20% of the total building budget and will regularly be the most important single component of the renovation costs. A strategy for reducing its cost can therefore be



very rewarding. Once all the openings have been built you lose the flexibility to take advantage of market specials. It is generally better to do your shopping before the walls are built so that you do not get locked into having every piece custom made when standard 'off the shelf' joinery may have been a cheaper alternative. The use of second hand joinery can very occasionally be an option but remember that very few good buildings are demolished anymore and most are simply relocated. This means that very little good stock comes into the second hand market and it is hard to get any quantities of matching joinery. You then have to deal with toxic lead paint stripping, locks in the wrong location and glass that does not meet current regulations. The cost of second hand joinery follows the cost of new joinery closely, usually with a \$100 margin to attract the punters. When the cost of resizing, paint removal and repair is taken into account it is rarely economical. The next option is to investigate Woodworkers joinery orphanage for discounted excess stock that may meet your needs. You can shop on line at www.woodworkersxs.com.au and there is a separate FAQ sheet devoted to how to select joinery from our joinery orphanage. Most orphanage product is new and warranted and may be discounted 30% or more. As you rarely get more than a single item in any one size from the orphanage, it can often bring the overall costs down when used in conjunction with Woodworkers stock joinery range. Woodworkers carry the industry's largest range of stock doors, windows, hardware and restoration supplies. There are separate brochures on all stock products which are commonly priced 20 to 30% cheaper than their custom made equivalents. Even when sizes are fixed, stock items may be able to be used in combination with custom joinery to reduce overall costs. Where no such options exist Woodworkers has a well deserved reputation for highly competitive pricing that has made us the industry leader in custom made joinery.

WHAT ABOUT WINDOW STYLES?

Do not mix window styles - use all double hungs if the house pre-dates the mid 1920s and casements only if the original building had them. Casements were not used generally until after WW1 when the friction stay was invented, but were not universally popular until post WW2 when building restrictions reduced ceiling heights. Original double hungs had an extremity of frame size of approximately 1500 x 900, usually leaving 600mm between the top of the window and the ceiling. As ceiling heights fell in the 1930s and 1940s so did window heights, with the style change to 1200 high casements. When raising a house, choose a window height that harmonises with the existing joinery and if it is possible to exactly match original sizes, so much the better.

Original workers cottages were designed around constraints in joinery availability and glass sizes. Glass was transported from Sydney in pre-cut sizes and sashes were constructed to suit. This discipline in joinery sizes continued long after the size constraints of glass were removed and the Victorian preference for repetition and symmetry ensured that the facades of buildings were ordered and regimented. Avoid using odd size windows and always try to align joinery horizontally and vertically. Colonial double hung sashes were usually 1 or 2 lights per sash.

Casements used from 1930 to 1960 came in a wide variety of designs and were usually 4ft x 18¼ inch x 1½ inch (1220mm x 464mm x 35mm) in size with mostly obscure glass for privacy. They were hung on Whitco friction stays (which still exist) or hinged with telescopic stays. Woodworkers no longer use Whitcos for casement work as we believe the quality has deteriorated and superior stainless steel adjustable stays are now preferred. Many of the original glasses used in casements are no longer available or legal within modern codes and particular attention needs to be paid to glass availability and suitability when planning renovations.

DO I NEED WINDOW HOODS?

Yes. Original Queensland houses used window hoods on all external windows that were not protected by verandahs because hoods provided sun protection, privacy and made original joinery weathertight. While double hung windows have high natural water penetration resistance, original designs of casements and sliders can leak during driving rain. While joinery can be manufactured with seals to eliminate water penetration, seals will deteriorate over time and it is preferable if exposure is better controlled with hoods to provide a long term solution.

WHAT ABOUT INTERIOR DOORS?

Pre-1930, interior doors were hung so that they obscured the view into a room until fully open. This enhanced privacy in an age of larger families and domestic servants. Often doors will have been re-hung and sometimes even hung upside down to 'modernise' when high waist doors replaced Victorian 4 panel designs, or sheeted with ply to mimic flush doors. Woodworkers stock replicas of most internal door designs commonly encountered, or can manufacture to match where required. Perhaps the most common mistake in alterations is fitting out the new work with hollow core doors in fake, wood grain finishes. Pressed hollow core doors may be much cheaper but always make a renovation look as if it was done on a shoe string. As doors are so prominent, unsympathetic budget doors do nothing to enhance property value.

DO I PAINT JOINERY OR CLEAR FINISH?

Most original joinery dating from the colonial era was usually painted externally with oil based enamel and 'clear'finished internally with varnish. Many National Trust properties (e.g. Newstead House) showcase this preference. Original varnish was manufactured from lac beatle flakes mixed with metholated spirits, and Woodworkers still use this method to seal our glazing rebates prior to glass installation. Wherever joinery is exposed to full weather it remains preferable to fully paint the external face with linseed oil based enamels (not acrylics). This allows the exterior elevations to blend in with the original joinery so that the new work is not highlighted. Internally, the choice of paint or clear finish is yours, but remember that once painted you will not easily retrieve the colour of original cedar. Again oil based finishes are always preferred for timber as they nourish the wood rather than suffocating it in plastic (with modern acrylic finishes). Refer our separate FAQ sheet on finishing for our recommendations on suitable clear products. If you choose to traditionally paint joinery, your choice of oil based primer is crucial. Most paint available is too oily, and will take many days or weeks to dry sufficiently to allow the work to be smooth sanded for subsequent coats. What is required is a fast dry (e.g. one hour) oil based primer that will powder quickly when sanded without clogging the sandpaper, & produce a smooth substrate for gloss enamel top coats. Woodworkers sales staff can advise on suitable primer products that will produce a fast, smooth finish.



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COLONIAL STYLE GUIDE 1850 - 1880 The Colonial Victorian Period

Design Houses set low (200mm to 1 metre above ground) with brick fireplaces.

Steep single and corrugated iron in simple skillion or hipped designs Current skillion or hipped designs Curved iron verandah roofs usually separate from main roof No eave overhangs

Verandah

bullnose

convex

Doors

Crow's Ash or Beech Flooring ex 150 x 25. Various curved roof forms used in addition to straight skillions.

Joinery Red cedar preferred due to its similarity to the Honduran Mahogany popular in the Hor England.

concave

cyma

colonial double door

entry portal

elliptical arch

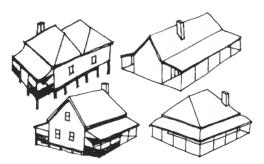
Georgian circular and elliptical arches in grander houses. Little decoration in simpler dwellings.

circular hall arch

Columns

Square columns and newels with simple stop

chamfers



Walls

Deep timber weatherboards and timber chamferboards ex. 200 mm x 25 mm soft bricks or stone occasionally

Floors

Wide Hoop Pine internally (ex 200mm)

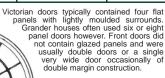
Ceilings

Boarded Hoop (lath and plaster in grander residences)

Hoods Window hoods not common.

Brackets

Decorative brackets not common. Occasionally eaves brackets used between junction of main roof and verandah.



Windows

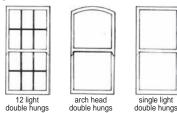
Multiple light double hung sashes made up of 10" x 8" (255 x 204mm) panes or 12" x 10" (305 x 255mm) were common initially as these were the glass sizes available. Glass panels were always slightly higher than they were wide, with very thin timber glazing bars dividing the sashes into six, nine, twelve or more panes. After 1860, two pane glass became available.

Balustrades

Diagonal Cross and Union Jack balustrade popular in first decades of settlement

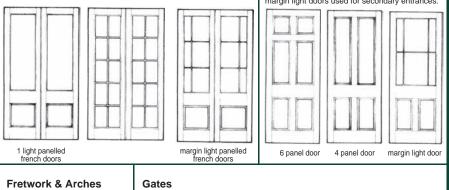
diagonal cross balustrade

diagonal ring balustrade



Internal doors

Internal doors were four or six panel, or ledge and brace construction on simpler houses. Single margin light doors used for secondary entrances.

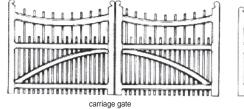


double margin

entrance door

6 panel bollection door

Dowel or square palisade style designs popular on grander properties.





Skirting & architrave

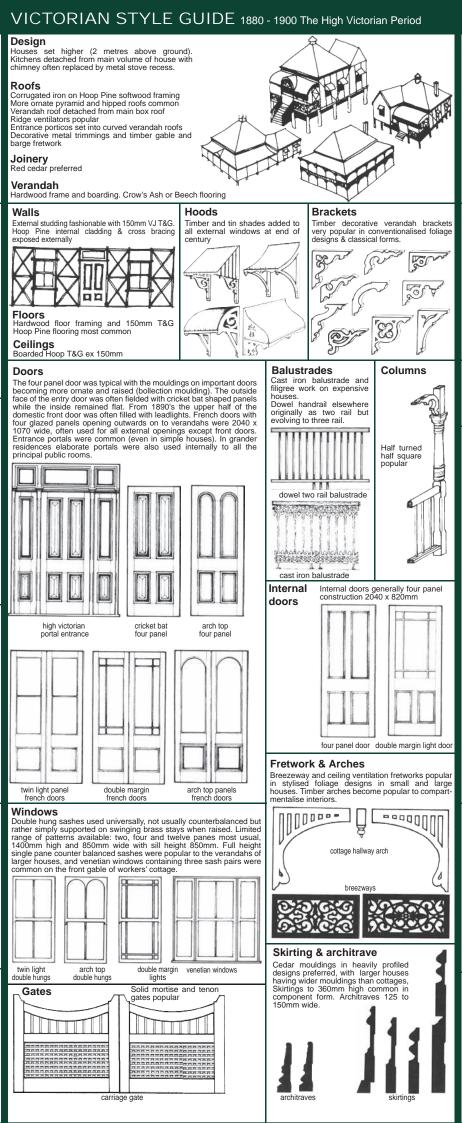
Cedar mouldings preferred with restrained curvilinear forms. Skirtings generally ex 200mm in main rooms ex 100mm elsewhere. Architraves ex 125mm generally.

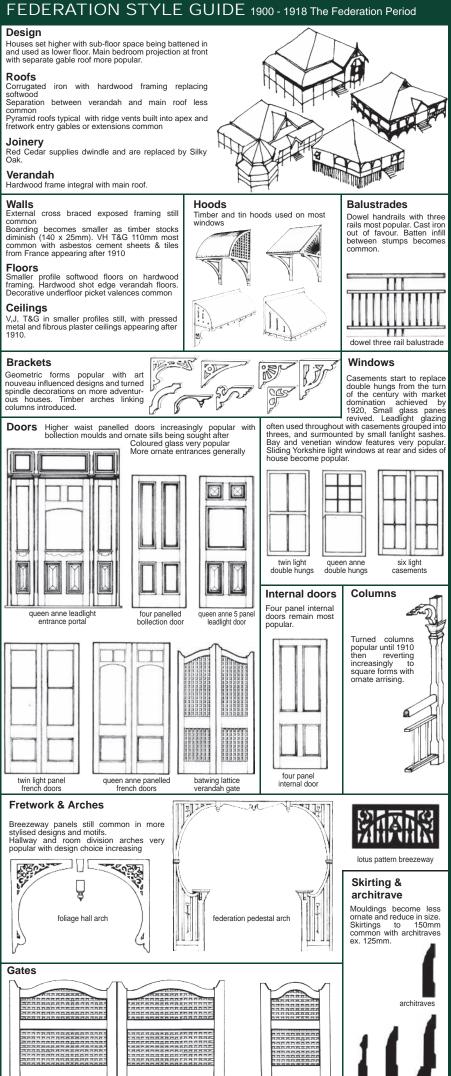




architraves

skirtings





carriage gate

pedestrian gate

skirtings

INTER-WAR STYLE GUIDE 1918 - 1939 The Inter-War Period

Design

Verandahs often partially enclosed as part of original design due to consumer demand for more space. Double gabled front becomes common, Houses still raised off ground but weatherboard fake columns replace stumps to formalise two storey appearance.

Roofs

Hardwood framing throughout Wunderlich terracotta roof tiles (1914) and corrugated asbestos cement sheeting (1927) locally manufactured Roofs became larger and less ornate

Joinery

Silky Oak most popular

/erandah

Patio entries replace large perimeter verandahs All hardwood construction

Walls

Timber cavity wall construction popular with flush finishes being preferred to VJ, T&G.

Increasing use of weatherboards as good chamferboard material disappears.

Floors

Hardwood flooring most used

Ceilings

Pressed metal, fibrous plaster an asbestos cement sheets most common and

high waisted entrance

porta

5 light panelled french doors

Fretwork &

Arches

Balustrades

Gates

braced dado

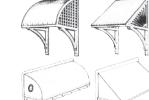
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Brackets

Timber arches linking columns very common. Brackets become larger and more vertical where used, although trend is to eliminate them late in period.

Hoods Still popular although projection increases to accommodate casement swing. Pitch flattens out late in period

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bungalow applique door

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Columns

Square columns

with tapered stop chamfers preferred. Column moulds eliminated

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VI ú

Doors

rose leadlight high waist door

coathanger panelled french doors

000007

Slat style balustrade replace dowels from 1920 with feature fretwork panels in centre.

More decorative "romantic" gate styles most popular

coathanger top

5

-

sunrise

200000

Å

10

Windows Internal doors Entry doors typically same size as internals, usually high waisted. Fully glazed doors commonly used for

commonly used for internal applications with opaque glass. High waist panelled internal doors most popular. eight light glazed door







high wasted batwing doors high waisted 3 panel door diamond Hallway and room division arches very popular with styles becoming less curvaceous with time. Breezeway fretwork replaced by slats and transome lights. from T

tulip scroll pedestal arch

Skirting & architrave

Simple geometric shapes preferred reflecting the economy of the time. Skirtings (splayed or lambstongue design) were commonly ex 125mm with architraves ex 100mm



architraves

POST-WAR STYLE GUIDE 1939 - 1950 The Post-War Period

Balustrades

Design

Pattern books bring a large diversity of housing styles. Skilled labour and materials in short supply in decade following WW 2 resulting in house sizes being restricted. Austere details become fashionable.

Roofs

Terracota tiles and asbestos cement roofs most common Verandah and wide roof overhang all but disappear

Joinery

Hoop Pine common due to Silky Oak shortages

Verandah Replaced by small entry patio or eliminated entirely

Walls

Brick construction increases as considered more prestigious than timber. Plaster or asbestos cement wall cladding preferred with timber cover moulds sometimes featured.

Floors

Hardwood T&G floors most common although concrete floors on the increase.

Ceilings

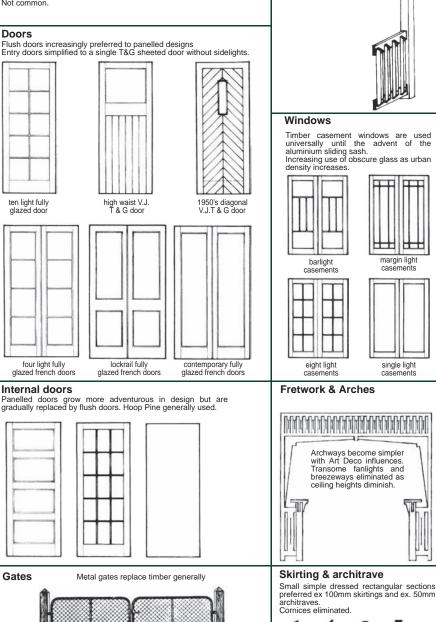
Asbestos cement or fibrous plaster preferred. Flush finishes in vogue.

Hoods

Uncommon, where used, often small cantilevered flat roof instead of full skillion

Brackets

Not common.





Metal bar balustrading in repetitive designs favoured. Very simple batten or rail balustrades become common.

Columns

Square with simple arising

F F F

WOODWORKERS STYLE GUIDE TO OLD QUEENSLAND HOUSE?