



ORANGE Heritage FACT SHEETS

Stained glass & leadlight

WHAT GLASS HAVE I GOT?

The difference between a stained glass window and a lead light window is a stained glass window is made up of specially cut pieces of coloured and textured clear glass. These pieces of glass are then hand painted. The paint is fused to the glass when it is fired in a kiln. The window is then assembled using strips of lead, which are soldered together. Putty is then applied between the glass and lead, making it weather proof. Steel rods are joined to the window on the interior for reinforcement. A leadlight window is made up of specially cut pieces of coloured, textured or clear glass. The window is assembled exactly the same way as a stained glass window using lead, solder, putty and steel for reinforcement.

From the 1870s through to the 1940s, four styles of stained glass and lead light windows emerged:

- Victorian 1870 - 1900
- Federation (Art Nouveau) 1900 - 1910
- Edwardian 1910 - 1920
- Interwar (Art Deco) 1920 - 1940

Most Orange and district 19th Century and early 20th Century churches contain stained glass and leadlight windows. St Josephs Catholic Church in Orange has a fine example of ecclesiastical stained glass. Other examples of domestic mid Victorian stained glass can be found at Duntryleague Golf Club located at the western end of Byng Street and Newstead on the corner of Kite and Hill Streets, both have excellent examples of late Victorian stained glass.

REPAIRS

Lead light and stained glass windows can become weak (especially front door panels) when the lead starts to fatigue causing the solder joints to break, allowing the putty to fall out, making the window rickety. Older style windows are usually reinforced with steel rods on the interior of the window. Copper wire sometimes will break over time, making the window loose.

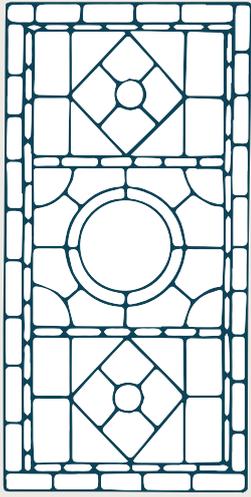
Many later style windows are strengthened with reinforced lead. Reinforced lead has a strip of steel in it. Lead light windows with this type of reinforcement sometimes break down on the perimeter only.

Other problems are bulging lead work, cracked or missing glass pieces and mangled lead work. A quick fix for all of the above problems is clear vinyl contact sheeting (the one used for covering books), applied to both sides of the damaged window to temporarily hold it together. The lead light is then removed by an experienced lead lighter for repairs. There are two types of contact sheeting on the market, which are contact and dura seal, contact is the better to work with.

CARE OF STAINED GLASS

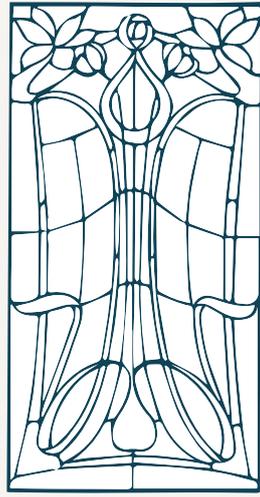
Procedures for cleaning leaded glass windows can vary considerably depending upon the type and condition of the window. In all cases pressure cleaning window exteriors will cause more harm than good and should be avoided.

Cleaning should be performed thoroughly but gently, avoiding the use of any solvents or other substances, which might adversely affect the glass, glass paint and leading.



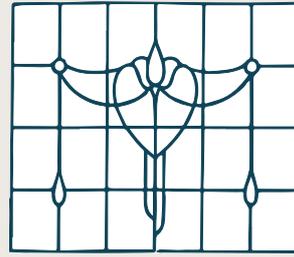
VICTORIAN

Victorian stained glass and lead light windows are usually flat, symmetrical or repeating design, almost mechanical in appearance. The type of design was influenced by the industrial revolution. In the centre of the design was sometimes a large square, circle or oval, this area is for stained glass painting. Other features of Victorian windows are small discs of glass with a central raised point called a rondel, and 'faceted' jewels. The Art Nouveau style appears in some Victorian windows as early as the 1880s, but it did not become common until Federation, 'Mena' in Kite Street is a sound example of this.



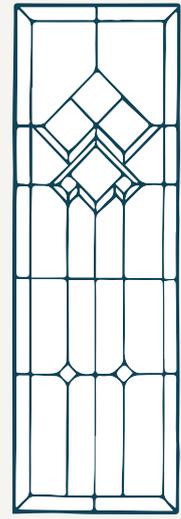
FEDERATION

Federation leadlight windows are Art Nouveau in design, always flowing, intertwining, feminine and organic. Australian birds and flowers were sometimes used in the design. Rich streaky and opalescent glasses start to appear at this point. Fine examples can be found at 'Kangarooobie' and 'Galbally' in Byng Street.



EDWARDIAN

Edwardian style lead light windows are a streamlined version of Art Nouveau, simple florals with draping lead lines are typical designs. Quite complex clear glasses start to appear at this time. Reinforced lead, rather than steel rods, was used in windows. One of the earliest examples of reinforced lead lighting is 'Galbally' (1917), a private residence in Kite Street.



INTERWAR

Interwar leadlight windows are almost always Art Deco. A typical design is bold, angular and modern. Clear glass bevelling is often used, as well as very bold textured clear glass. Orange has an extensive collection of interwar housing and many fine examples of this style of glass.

FURTHER READING

G Butler, 2001, *The Californian Bungalow in Australia*, Lothian Books Melbourne

I Evans, 1998, *Caring for Old Houses*, Flannel Flower Press, Glebe

I Evans, 1998, *The Federation House; a restoration guide*, Flannel Flower Press, Glebe

I Stapleton, 1991, *How to restore the Old Aussie House*, Flannel Flower Press, Glebe

Information for the production of this fact sheet has been obtained from The Federation House; a restoration guide by Ian Evans and *How to restore the Old Aussie House* by Ian Stapleton.

This information is provided as guidance only, further clarification should be sought from authorised heritage specialists. Orange City Council accepts no responsibility for any change, injury or incident that may result.