



Metal Technology

# Silverwood

Timber and Aluminium composite window system



interior, exterior  
performance,  
compliance,  
colour,  
co-ordination  
aesthetics,  
ambience,  
w  
al,  
integ  
tactile,  
natural,  
thermal, warmth





Metal Technology Headquarters

# Introduction

Composite window systems are a relatively new innovation to the window industry. Architects and specifiers want a window that can offer the appeal of natural timber without its structural and durability disadvantages and on going maintenance requirements.

Aluminium offers excellent structural characteristics, is extremely stable and should last a lifetime with minimum maintenance. It has long been the preferred material for window construction within commercial markets where these qualities are essential. Composite aluminium and timber windows perfectly combine the natural warmth and beauty of real timber with the strength and durability of aluminium. A synthesis of the aesthetic appeal of natural and traditional building materials with all the benefits of modern engineering technology.

The 'Silverwood' composite window is the latest development within this niche market and is proof of Metal Technology's commitment to product development and innovation. It offers many advantages over its competitors - particularly its superior quality and attention to detail.



# The performance of aluminium with the warmth of natural wood



Silverwood windows are designed for use in modern new build and refurbished buildings where there is a requirement for the natural appeal, beauty and warmth of real timber internally in conjunction with the strength and durability of aluminium externally.

Silverwood windows are designed for use in modern new build and refurbished buildings where there is a requirement for the natural appeal, beauty and warmth of real timber internally in conjunction with the strength and durability of aluminium externally. The timber element of the window has therefore been designed and specified to suit an internal, heated environment. In order to minimise the risk of timber movement Metal Technology have specified a moisture content, in accordance with TRADA

recommendations, to meet the requirements of BS EN 942:1996 'Timber in Joinery - General Classification of Timber Quality' for buildings where heating provides room temperatures of 12°C to 21°C and a relative humidity of 54% to 56%. Where the Metal Technology Silverwood product is intended for use in an environment where these conditions are expected to exceed these limits further advice should be sought from Metal Technology's Technical Department.



Silverwood window profiles are manufactured from the highest quality materials and components using the latest manufacturing technology and industry standards





# Technical

Aluminium profiles are produced from an engineering standard alloy 6060 T4, T5 or T6 and are extruded by Metal Technology in accordance with the latest European standards BS EN 12020-2: 2001 and BS EN 755-9: 2001.

The aluminium alloy sections will be provided polyester powder coated to BS6496. Metal Technology are able to offer an extensive range of finishes and colours. Details of the full range of colours are available upon request.

Silverwood windows uniquely incorporate a polyamide thermal break system. These thermal breaks are inserted into the aluminium sections by the most advanced rolling technology currently available world wide, incorporating digitally programmed and automated CAD CAM facilities. The manufacturing processes engaged to produce these composite sections are further monitored, checked and tested in accordance with Metal Technology's ISO 9001:2000 quality procedures.

We ensure that high quality timber is selected to give consistency in terms of visual appearance, stability, structural and machining characteristics.

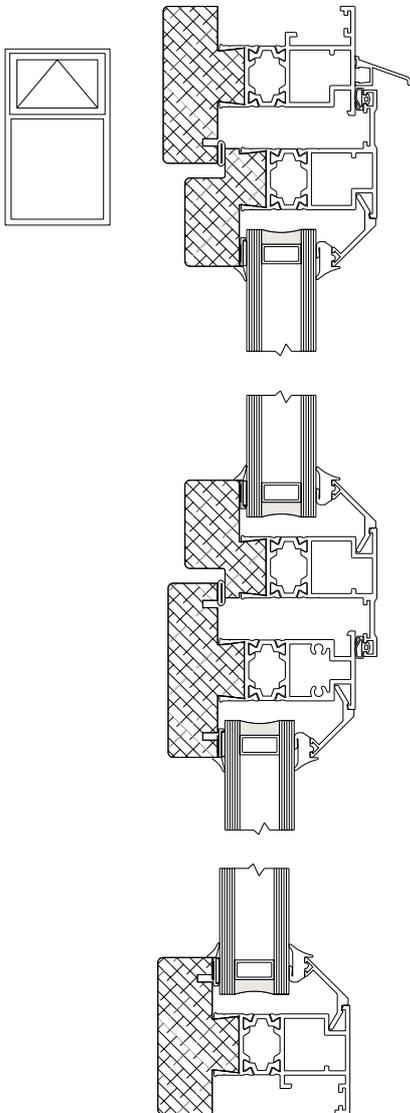
Metal Technology works with environmentally conscious suppliers that source their timber from well-managed forests, which operate a recognised sustainable timber management policy. The timber is kiln dried to the optimum moisture level, for the appropriate timber species, in accordance with TRADA recommendations.

The machining of the timber is performed to the highest standards achieved within the industry. Accuracy and consistency within the machining process are paramount and tight tolerances are maintained in order to minimise movement of the timber thereafter. Machining of the timber is undertaken using the latest custom designed milling technology and dedicated laser cutting tooling.

All timber profiles are factory finished using a fully automated spray line which coats all surfaces using a multi-coat lacquer application procedure. After each lacquer application the surfaces are debibbed in order to ensure a high quality, robust and sustainable finish.



# Architectural Support



## Materials

**Aluminium:**  
Extruded alloy 6060  
T4, T5, T6.

**Wood:**  
Southern yellow pine.  
Other species available  
on application.

**Approvals:**  
BS 6375 Parts 1 & 2  
and BS 4873.

**Glazing:**  
28mm Double  
glazed units.

**Handles:**  
Cockspur or  
Espagnolette.

**Hardware:**  
Securistyle friction  
hinges with optional  
restrictors.

**Construction:**  
Patented jointing  
system utilising  
polyamide thermal  
breaks.

## Architectural Support

**Innovation:**  
With a dedicated design team,  
Metal Technology offers one of the  
most diverse ranges of Window and  
Door Systems, capable of  
applications from a single shopfront  
to a multi storey building.

Metal Technology also offer the facility  
for the design of bespoke systems or  
sections to fulfill Client and Architect  
requirements, or simply to allow  
design freedom for the specifier to  
give a project that unique feature.

**Support:**  
Metal Technology's expertise  
lies in an in-depth working knowledge  
of their industry and by keeping  
abreast of changing legislation.  
To this end they offer their  
architectural partners:

- Tailored Specifications/NBS format
- Structural Advice
- Technical Literature/CD ROM  
/Auto CAD support
- Budget Costings
- RIBA approved CPD seminars

Metal Technology offer a substantial  
localised fabricator/installer network  
throughout the UK and Ireland. This is  
supported by dedicated architectural  
advisors who are on hand to advise  
on all aspects of fenestration.

Having many years experience,  
our products are installed in a wide  
variety of applications which include  
residential housing, local authority,  
commercial office developments, PFI,  
retail multiples and leisure facilities  
with total contract values in excess  
of £250 million.

## Aluminium Systems

Dual Colour Range

Casement

Tilt Turn

Top Swing

Commercial Doors

Curtain Walling

Structural Glazing

Ground Floor Treatments

Commercial Windows

Tilt Turn

Casement

Top Swing

Pivot

Horizontal Sliding

Vertical Sliding

Patent Glazing

Architectural Subframe



## Metal Technology

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