

MONAFRAME*Non-Insulated Systems*

Secondary Window Systems

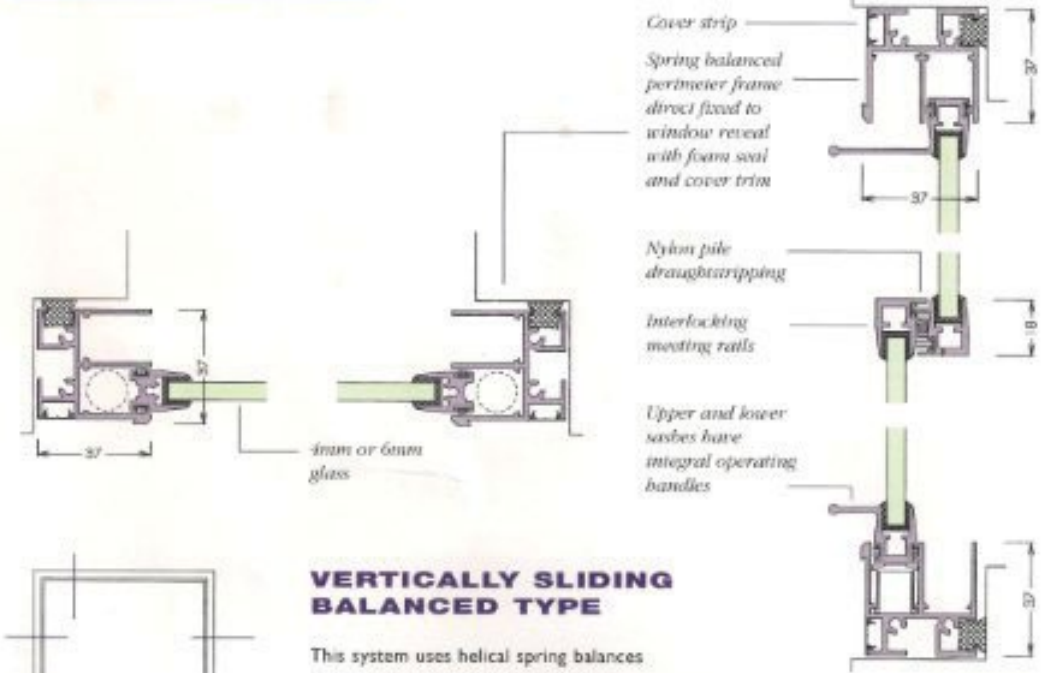
Monarch produces a complete range of secondary window systems to suit the specifier's requirements according to type, appearance, operation and cost level. All the sections used have been designed and developed in detail and are both strong and slim in appearance.

Monarch is a range of products from Sapa Building Systems Limited; its systems are fabricated and installed through a nationwide network of specialists. Monarch systems have been used successfully on many commercial and residential projects.

**VERTICALLY SLIDING****HORIZONTALLY SLIDING****HINGED****LIFT-OUT**

ADVANTAGES

- Improves the performance of existing windows
- Appropriate where existing windows must be retained for aesthetic, historic or cost reasons
- System options provide Vertically Sliding, Horizontally Sliding, Hinged or Lift-Out configurations
- Direct fixed into window reveals or can use timber sub-frames
- Improves thermal insulation
- Improves draught-proofing and comfort
- Improves acoustic insulation
- Improves security
- Slim framing sections provide a discreet appearance with minimum sight lines
- Suitable for slim or laminated glazing
- Virtually maintenance-free
- Wide choice of colour finishes



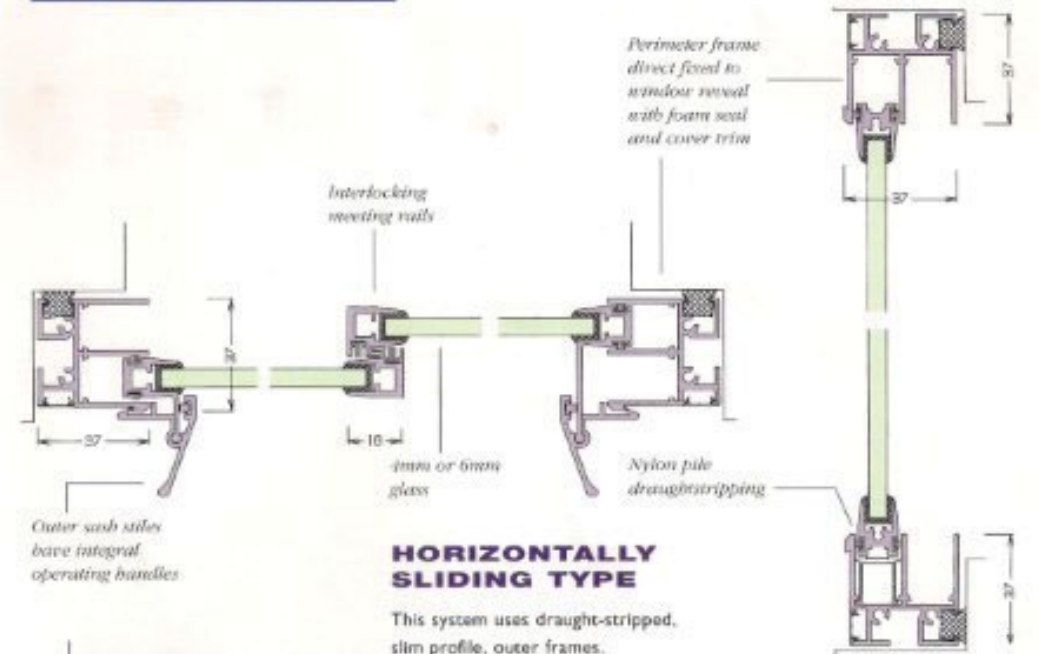
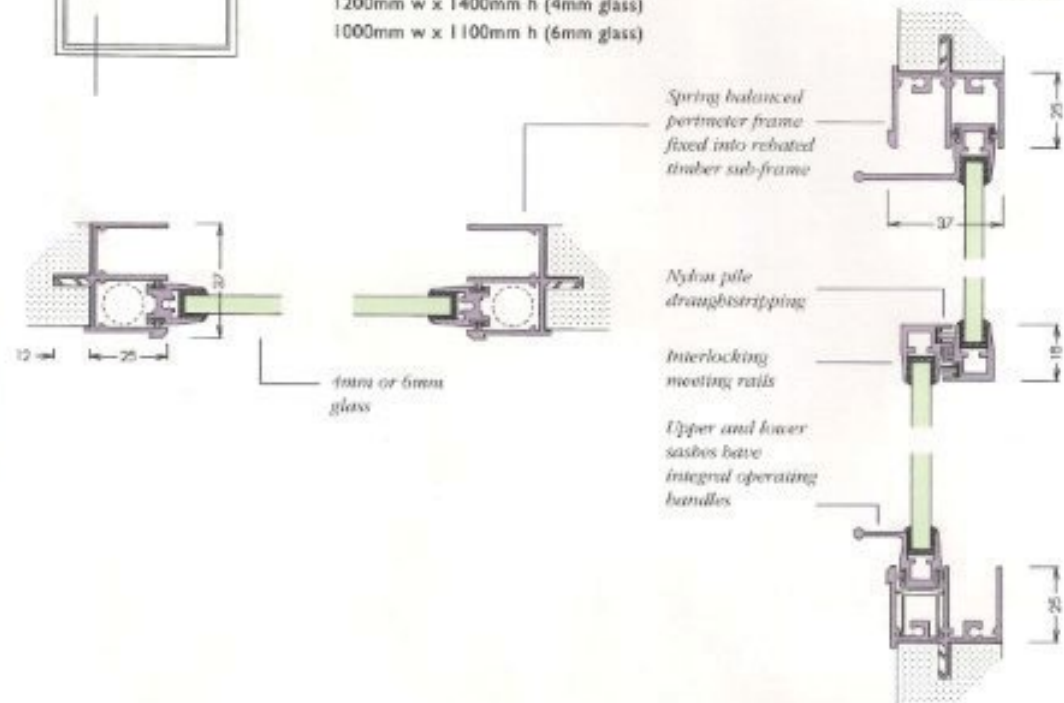
VERTICALLY SLIDING BALANCED TYPE

This system uses helical spring balances within draught-stripped, slim profile, outer frames. The system can either be direct fixed into window reveals or can use timber sub-frames.

SIZE LIMITS - PER SASH

1200mm w x 1400mm h (4mm glass)
1000mm w x 1100mm h (6mm glass)

Above :
Direct Fixed System
Below :
Timber Sub-Frame System



HORIZONTALLY SLIDING TYPE

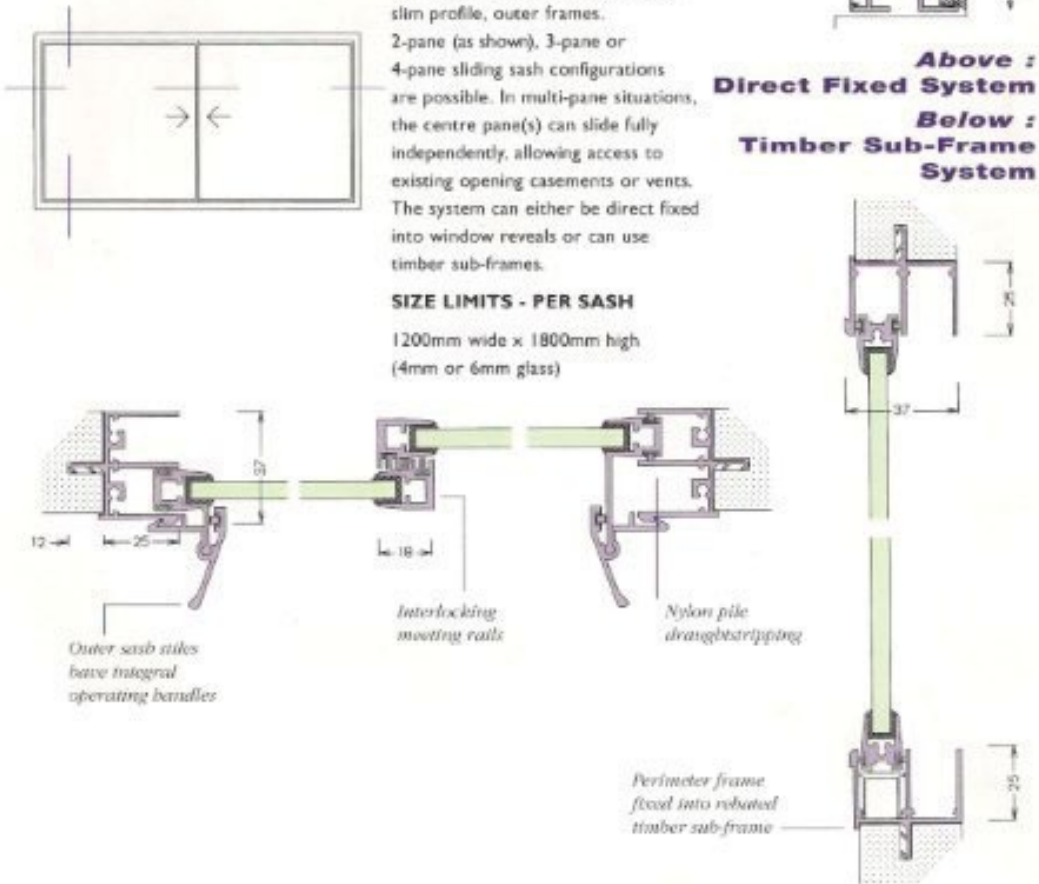
This system uses draught-stripped, slim profile, outer frames.

2-pane (as shown), 3-pane or 4-pane sliding sash configurations are possible. In multi-pane situations, the centre pane(s) can slide fully independently, allowing access to existing opening casements or vents. The system can either be direct fixed into window reveals or can use timber sub-frames.

SIZE LIMITS - PER SASH

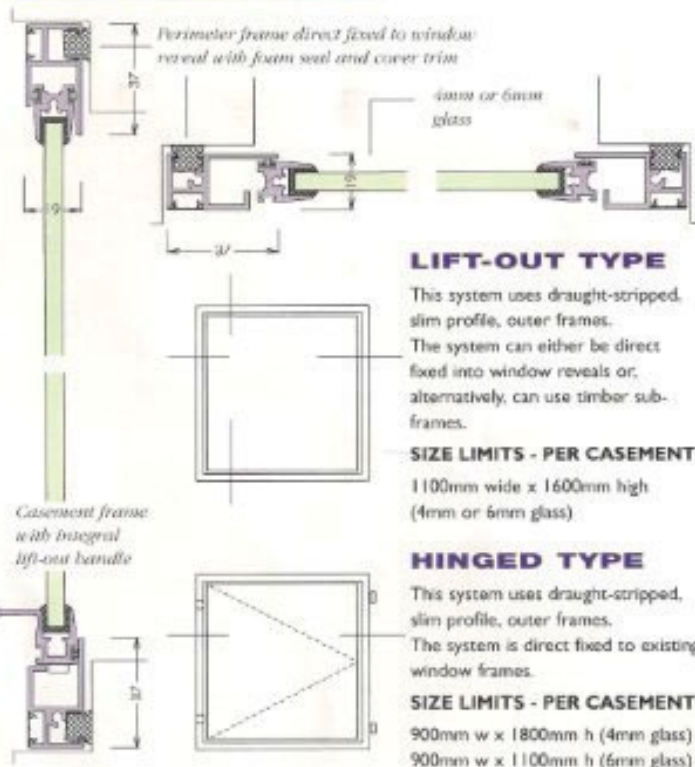
1200mm wide x 1800mm high (4mm or 6mm glass)

Above :
Direct Fixed System
Below :
Timber Sub-Frame System

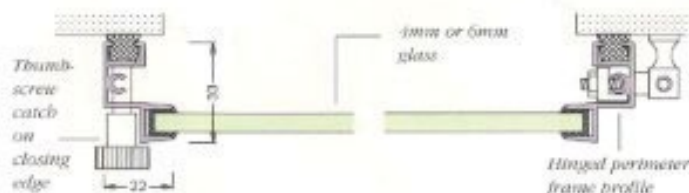


MONARFRAME

Secondary Windows



Head and foot of frame details similar to jambis - same profile used throughout



APPLICATIONS

Monarch Secondary Windows provide improved thermal and acoustic insulation performance in situations where it is necessary or desirable to retain existing windows.

The systems consequently have a wide range of applications and have been carefully designed to fulfil this requirement.

All types, except the Hinged System, have alternative framing profiles to suit installation into timber sub-frames.

STANDARDS AND QUALITY CONTROL

Sapa's quality control procedures have been approved under BS EN ISO 9001. Sapa is a member of the Glass and

Glazing Federation and the Council for Aluminium in Building.

LIMITATIONS

See relevant pages in this publication for information about sash or casement size limitations.

COMPOSITION

Extruded aluminium to BS EN755-9, specification 6060 or 6063 T6. Because of aluminium's inherent strength advantages, Monarch Secondary Window profiles and assemblies are slim and neat in appearance.

GLAZING

The system can be glazed with 4mm or 6mm single glass to BS 6262: 1982. Glazing is retained with wrap around

synthetic rubber gaskets to suit glass thickness.

OPERATION AND FITTINGS

Vertically Sliding Secondary Windows are hung on helical spring balances.

Horizontally Sliding Secondary Windows slide either on plastic skids, or roller assemblies, depending on sash size and weight.

Lift-Out Secondary Windows fit into an outer frame, locating securely on the sill section.

Hinged Secondary Windows are hung from existing window frames and are held in place with thumbscrew catches. All systems include appropriate operating handles and fitch catches are available for sliding windows.

ENVIRONMENTAL PERFORMANCE

The fitting of Monarch Secondary Windows can provide usefully improved thermal and acoustic insulation performance, including condensation control.

All systems are draught-stripped using nylon pile strips or resilient foam seals.

APPEARANCE

Aluminium profiles are polyester powder coated to BS 6496: 1991. Application, using the Syntha Pulvin or Interpon processes, is stringently quality controlled. Full gloss white (9910) is available as standard.

Alternatively, to order, Sapa can supply profiles in a comprehensive range of 389 RAL, BS and metallic colour options, including matt, satin or gloss finishes. Anodised finishes can also be supplied.

Please refer to separate publications for further details. Colour cards and samples are available.

MAINTENANCE

At the time of installation the operating fittings are thoroughly cleaned and pivots and tracks are lightly lubricated with vaseline, silicone lubricant or acid free oil. It is recommended that this action is repeated at least annually to ensure satisfactory operation. The finished appearance of Secondary Windows is easily maintained through regular cleaning.

Sapa's policy is one of continual system development and we reserve the right to incorporate design improvements and changes. All details were correct at time of publication.

Detailed advice, backup and up-to-date information, on all systems and products and their applications, is freely available from