

NEOsash[®]
INCORPORATING **FINEO**

The new generation of
sash windows



1.2
U-value
AVAILABLE

masterframe[®]
SASH WINDOWS



NEOsash

Introduction

NEOsash® windows combine the aesthetics of traditional sash windows with the very latest in glazing technology which not only looks great but also surpasses the demands of the modern home.

NEOsash® windows feature FINEO vacuum glass, the very latest generation of glazing that has an insulation value similar to that of triple-glazed windows, but is only 10mm thick (a fraction of the thickness of triple-glazing) and exceptionally lightweight.

NEOsash® windows are not only beautiful to behold but they embody a full house of authentic and exclusive features.

Engineered with a blend of traditional aesthetics and attention to detail, this sash window will add value to any home where the architectural design requires new sash windows to maintain the original character of the building.

These sash windows are as close to the original timber window in styling and design as possible and therefore ideally suited for use in conservation areas.

NEOsash® is also environmentally friendly as the PVC-U, steel & aluminium reinforcing, as well as the glass are all recyclable.

The state-of-the-art NEOsash® window is manufactured in the United Kingdom by a specialist company that has been solely focused on producing bespoke sash windows since 1988, constantly innovating to offer you the most exceptional sash windows in the market today.



15
YEAR
GUARANTEE

1.2
U-value
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Features and Benefits

NEOsash® incorporates the new ground-breaking FINEO vacuum glass, which outperforms traditional insulating glass.

Using a new glass technology to create the very latest generation of glazing, consisting of two panes separated by a vacuum gap, NEOsash® has an insulation value of **1.2U**.

The thermal performance of NEOsash® is similar to that of triple-glazed windows, but the glazing is only 10mm thick, a fraction of the thickness of triple-glazing, and exceptionally lightweight in comparison.

With the Police Approved Secured by Design accreditation as standard, you have complete peace of mind when it comes to window security.

The frames, sashes and the bespoke locking furniture are exclusive, along with features such as chamfered putty-lines, and staff bead options for both inside and outside frames.

NEOsash® is constructed using Timberweld® butt jointed corners. The authentic designed deep bottom rail, run through horns and white foil finish gives the appearance of a freshly painted wooden sash window.



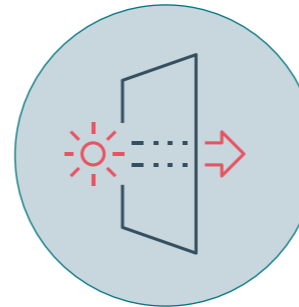
1.2
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INSULATION AND COMFORT

NEOsash® offers the same thermal performance as triple glazing, whilst being a fraction of the thickness. Thanks to NEOsash®, the heat stays inside your building, making it more comfortable without increasing your heating bill.

BRIGHTNESS

FINEO offers an amazing **15%** more natural light. Natural light offers a variety of added benefits such as improvement to physical health and decreases utility bills.



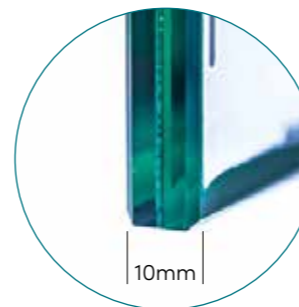
SLIM 39MM MEETING RAIL

To replicate the timber aesthetics of traditional sash windows, NEOsash® windows come, as standard, with a 39mm slim meeting rail.



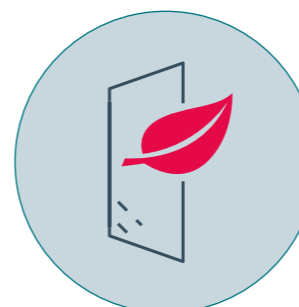
THICKNESS

With a thickness of only **10mm**, FINEO glass is a fraction of the thickness of double glazing and triple glazing. This allows for more ecological transportation and easier installation due to the lighter weight of the glass.



SUSTAINABILITY

NEOsash® cares deeply about the environment. FINEO glass is **100%** recyclable with no waste, a truly advanced product with amazing green credentials.



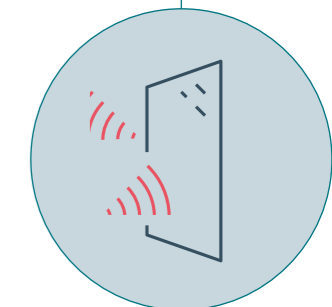
CONTINUOUS HORNS

Our new concealed Continuous Horn replicates that of a timber window, it creates a seamless edge that enhances a traditional appearance.



SOUNDPROOFING

The vacuum technology has the added advantage of providing outstanding sound insulation, especially from street noise. Dampening an additional **6dB**, far outperforming double or triple glazing.



Standard specification

Optional features

- Timberweld® joints
- FINEO Glass - Now exclusively available in our NEOsash window with **1.2U-value**
- Secured by Design approved – an Association of Chief Police Officers (ACPO) third party endorsement scheme for security, and complete peace of mind
- Exclusive product 15 year guarantee
- White wood foil
- Concealed continuous horn
- Exclusive Staff Bead outerframe design
- External putty line detail to match original features
- Tilt restrictors to all sliding sashes to assist with easy cleaning*
- Torso II spring balances tested to 50,000 cycles
- Choice of fully suited bespoke hardware available in a choice of Champagne Gold, Chrome, Satin Chrome or Polished Bronze
- Exclusive locking cam catches with nylon insert to protect the claw from scratching and allowing smooth engagement
- Exclusive Georgi® Clips ensuring the bars remain attached for life
- White infill strip allows a perfect finish
- Exclusive cill pads creates a weather tight seal
- Deep bottom 105mm rail
- Authentic deep GRP cill (55mm)
- Slim integral mullion on multi-light windows
- Slim 39mm meeting rail

Scroll handles



Gold



Chrome



- A pair of lockable limit stops to reduce opening initially to 100mm
- Cream wood foil
- Exclusive frame vent concealer or sash vent options
- Exclusive internal staff bead, 'picture frames' the window
- Egress options for easy exit in the case of fire
- Colour matched to any Farrow & Ball, RAL, British Standard Colours and other leading brand paint manufacturers' colours
- Obscured & Patterned Glass is available in film format
- Large 63mm bottom rail
- Standard PVC-U cill
- No horns
- Projecting cill
- Bay post and trims (non - load bearing)
- Arched and shaped windows
- Exclusive London sash and frame design available

*Dependent upon window size



Bespoke furniture

All NEOsash® furniture is available in a choice of colours, perfectly suited and manufactured by the same UK based hardware company, therefore you will find all the components match perfectly and you will not experience any colour differences. We are the only Sash Window manufacturer to offer this level of detailing.

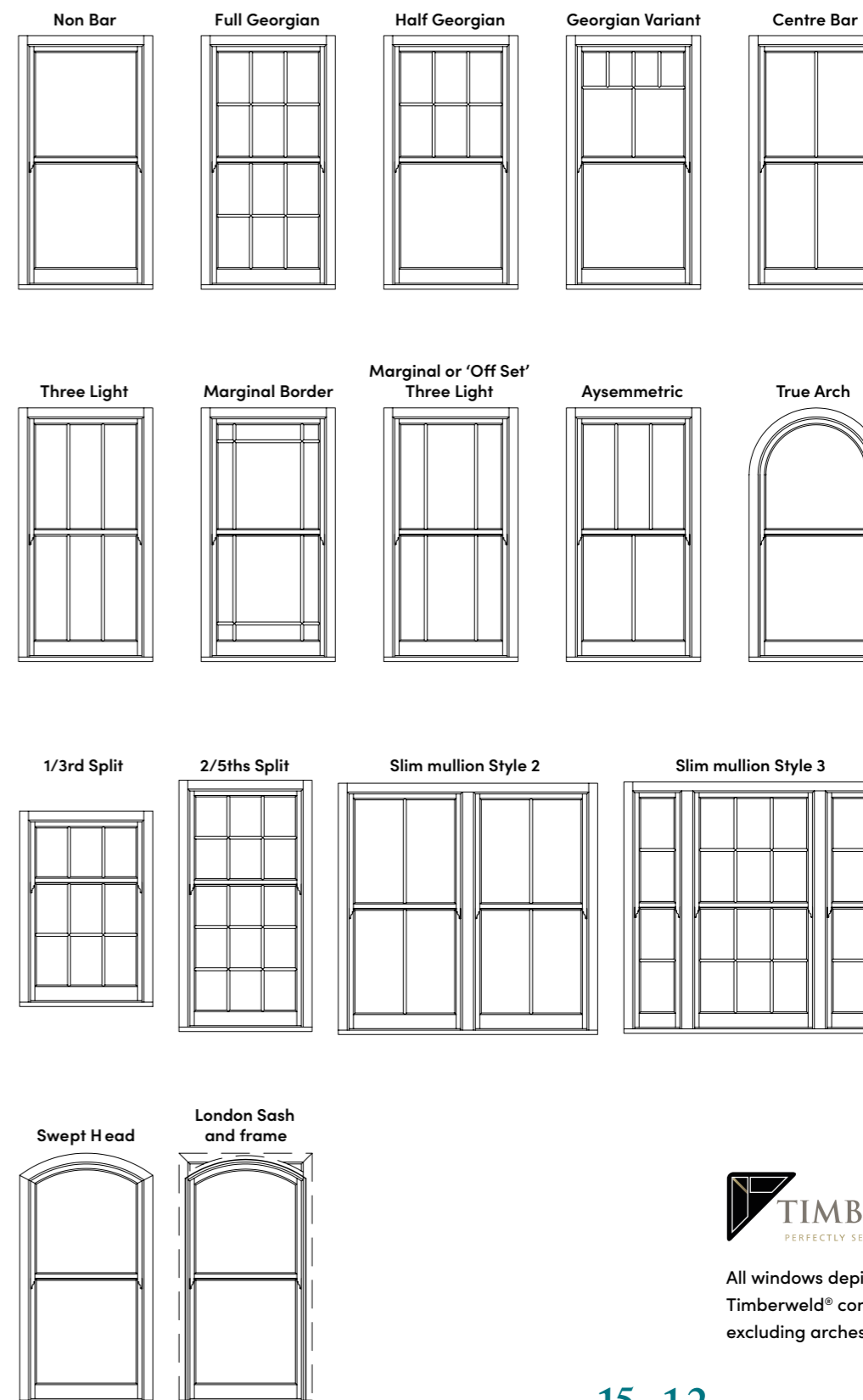
Scroll handles are always supplied loose so that you are able to specify exactly where you would like these fitted.



Claw cam catch



Typical styles



All windows depicted show Timberweld® construction excluding arches

15 YEAR GUARANTEE
1.2 U-value AVAILABLE

Colour options

A colour matching service is available to the standard industry charts such as RAL, British Standard Colours, Dulux and Farrow & Ball.

Colour bonded alternatives

Usually we spray entire windows the same colour, however we can offer different colours externally to internally and different combinations from sash to frame. A black frame with white sashes is popular, whilst we have also sprayed combinations of blue and white or cream and maroon.

When the outside of the window is a different colour to the inside, we mask up and spray the balance chambers to the desired colour, so only one colour is visible from either side when in the closed position.

In the interests of durability, the two-part paint we use in our on-site paint plant is far harder wearing than water based paint. In marine or coastal environments, salt corrosion must also be considered, however we apply a durable clear lacquer on all paint finishes, regardless of exposure, to ensure that the risk of any visible signs of aging is reduced. All windows require regular cleaning to keep looking their best.



Accreditations



In general all our products are British Board of Agrément, 'Whole of life'* endurance tested, meaning our product range is fully BBA approved.**

This essentially means that everything is submitted for testing, including all components, balances and even our unique hardware.

Additionally, and unlike any other company, our method of plant on Georgian bars convinced the BBA to approve them for ten years!

NEOsash® being such a new and exclusive product is presently under review with the options available for BBA testing.

NEOsash® windows are 'A' rated as standard.



BFRC is the British Fenestration Ratings Council and they decide how to interpret energy efficiency calculations for the whole of the UK.

The BFRC rate products from 'F' to 'A'. 'A' rating means the window is energy neutral or 'energy positive', in that it gains more heat than it loses over its annual cycle. Find out more on FENSA and WER's at: www.bfrc.org



The Energy Savings Trust can only recommend the highest performing companies so it is only the best products that get to be Energy Savings Trust endorsed. Having been awarded the first five certificates from the BFRC, (the British Fenestration Ratings Council), we were further recognised by the Energy Savings Trust as the first company to be recommended by them in the UK.



Masterframe are associate members of the Glass and Glazing Federation www.ggf.org.uk

* 20,000-cycle endurance testing is to simulate a "whole of life" test, it is an onerous test designed to recreate a 20-year lifetime of a product. www.bbacerts.co.uk

** Subject to ongoing product testing and size parameters.



The Association of Chief Police Officers (ACPO) set up Secured by Design (SBD) to encourage the building industry to adopt crime prevention measures in housing.

The scheme creates a safer and more secure environment, including safer windows.

Very few products meet these enhanced security levels but by fully reinforcing our sashes with steel, using robust furniture and reinforced finger latches and then having them independently tested by SBD, means you can be satisfied that your windows will be as secure as we claim them to be.



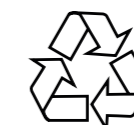
Manufactured by an ISO 9001: 2015 approved company ensuring recognised business management systems for consistency are applied.



Masterframe sash windows are virtually lead free, using calcium organic stabilisers as a healthier option for the planet.



Proudly manufactured in the UK, using the very best quality components sourced in the UK, to ensure ongoing continuity.




Masterframe Windows Ltd are dedicated to recycling and recycle all plastic, glass, paper and cardboard used in their factory.

Features and Choices

Check that you are offered the following features and choices

Traditional appearance:

-  **Traditional exclusive Timberweld® corners and bespoke sash sections** ensure that the appearance is appropriate, rather than four sections of the same welded together.

Timberweld® technology ensures perfectly sealed frames with no chance of leaking, drafts or insects nesting in open channels.
- Slim sight-lines** through both the upper and lower sashes maximise the visible glass area.
- Equal panes in both sashes** create a balanced appearance consistent with original timber sash windows.
- External staff bead and internal staff bead trim are authentic features** developed to replicate the appearance of an original timber box frame window.
- Continuous run-through sash horns** utilised by the Victorians and synonymous with sash windows.
- Chamfered 'putty line' sashes** are included on the outside of every window to replicate original Victorian and Georgian sash timber windows. To enhance authenticity, internal glazing beads are, by contrast, ovolo shaped.

- Traditional deep bottom rail** which is sympathetic to original timber designs.
- Georgian bars** are faced fixed, authentically creating the depth and shadow lines of original timber muntin bars. Our patented Georgi® Clip ensures bars stay firmly attached for the lifetime of the glass unit.
- Slim integral mullion** available for multi-light window
- Authentic deep cill** (55mm)
- Wood grain effect offered** in white or cream are extremely low maintenance and durable. These wood-foil finishes make the window hard to distinguish from a timber window and are therefore highly recommended for Conservation Areas.
- Patented infill strip** hides 50% of the visible brush pile on the inside of the window making it aesthetically more appealing and easier to slide. The remaining brush pile can be hidden behind the internal staff bead trim.
- Bespoke cam catches** in a choice of colours between chrome and champagne gold.
- Colour matching** to all leading brand paint suppliers including Farrow & Ball.
- Clear lacquer** is applied on all paint finishes, regardless of exposure to marine or industrial environments to reduce the risk of visible signs of aging.

Special features:

- Energy efficiency 'A'** rated as standard.
 - Balances** are the mechanism that allows the windows to operate and 'Torso II' spiral balances are the best balances on the market, reducing the effort required to open and close the windows.
 - A pair of tilt restrictors** ensures that each sash can be safely tilted back at the perfect angle for easy cleaning internally.
- or
- Safety arms** are fitted when the windows are too large to tilt.
 - Lift-out pivot bars** on all windows ensure that sashes can be removed without the need to tamper with the intricate balance mechanism, should the need arise for large pieces of furniture to be lifted through the window.
 - Bespoke cill pads** seal the joints between the cill and the frame preventing water from entering the joint, even in inhospitable situations.

Security enhancements:

- To meet PAS24/Secured by Design** criteria, cam catches with stainless steel claw have been developed and are robustly secured directly into the sash using a "three screw" method.
- On larger windows where two catches are needed, **opposite handed cams** are used. This unique patented feature prevents the sash being forced to either side in order to gain entry.
- Nylon inserts** to protect cam catches against wear on the inside of the keep.



Continuous commitment to design, development and uncompromising quality means we deliver what we promise

NEOsash®

Acrylic wood grain foil

An acrylic covering with a wood grain finish.

Anodised

An anti-corrosive coating applied to aluminium components.

Architrave

Timber or PVC-U moulding used around windows to make good internally.

Argon gas

A particular type of gas found inside sealed glass units that increases thermal efficiency.

Article 4 directive

An additional restriction applied to conservation properties requiring development right and compulsory planning permission.

Astragal bar

The traditional Victorian glazing bar found on sash windows.

Balance retaining clips

Exclusive clips that prevent balance springs becoming detached from sashes.

BBA

The British Board of Agrément third party product testing.

BFRC

British Fenestration Rating Council.

Box sash

Another name for a sash window – originates because the sashes were traditionally housed within a timber box containing the sash weights and pulleys.

Brush pile

The draught-excluder or wool pile around the sashes to prevent air leakage.

Brush seal

See brush pile.

Butt joints

This is the vertical corner joint traditionally found on timber windows.

Cam catch and keep

The male & female parts of the locking mechanism found on the mid-rail on the inside of a window sometimes referred to as a fitch catch.

CC31 Cam catch

A stylish and secure locking claw cam catch standard on the NEOsash® windows.

Chamfered

The angled moulding that copies a traditionally 'putty-lined' timber window, found on the external Georgian bar and sash profile on the outside of a NEOsash® window.

Cill pads

Silicone joints can leak, but this specially designed foam pad, creates a perfect weather tight seal between integral cill and frame jamb.

Conservation area

An area that may be considered of historical or cultural importance to the local authority.

Continuous run-through horns

A decorative continuation of the stiles, incorporating a mechanical butt joint on the bottom of the upper sash.

Deep bottom rail (DBR)

A deep bottom rail on the lower sash, incorporating a mechanical 'butt' joint to strengthen the bottom sash.

Deep GRP cill

A traditional feature 55mm deep.

DGU

'Double glazed unit' is a term for a sealed glass unit consisting of two panes of glass and a central cavity, often containing a instead gas.

Double glazed

When two panes of glass are used instead of one.

Dummy sashes

Sashes within a window that are deliberately fixed and do not slide.

Existing box frame

The original timber box that housed the original sash weights and pulleys.

Face-fixed bars

Astragal bars that are fixed to the outside of the glass both internally and externally to recreate the impression of timber glazing bars.

Fenestration

The arrangement of windows and doors on a building.

Finger latch

The mechanism operated by a tilt knob that allows the sash to be disengaged from the frame for the 'tilt to clean' facility.

Foam baffles

A foam square applied above the tilt rest guides, preventing air penetration through the balance chambers.

Frame profile

The outside frame member.

Georgi® Clips

A small patented metal clip that fits around a glass unit and under the glazing bead to securely attach astragal glazing bars.

Glazing bead

The beading around the inside edge of a sash, holding the glass unit in place.

Grade I and II listed

A heritage rating given to properties of historical significance, stipulating planning permission to protect their appearance.

Handed cams

When two NEOsash® cam catches are required on a window they are paired LH and RH for symmetry and security.

Head rail

The top bar of the sash or frame.

Infill strip

A patented PVC-U insert that replaces the brush-pile on the inside of a window.

Integral mullion

An exclusive slim mullion section, used on double or triple windows made in one frame section.

Jambs

The industry term for the sides of a window.

Laminated glass

Two pieces of glass bonded together with an acrylic interlayer.

'Lift out' pivot bars

Metal bars, designed to allow sash removal for maintenance, ease of access and escape.

Limit stops

A recessed item of furniture applied to the top sash that limits the opening of the window (usually 100mm) when engaged.

Meeting Rail

Also know as a mid-rail or transom, this is the rail running across the window, where the top and bottom sashes meet.

Mullion

The dividing section on multi-light windows or is a term also used to describe the brick piers on Victorian or Georgian, Bay windows.

Muntin bar

See Astragal bar.

Obscured glass

Patterned, textured or opaque glazing to obscure transparency and often used in bathroom windows.

Ovolo

Also referred to as Ogee, this is the moulding found on the Georgian bar and glazing bead on the inside of NEOsash® windows.

PAS24

A published product standard for enhanced fenestration security previously known as BS7950 that sets a standard for enhanced window security.

Pole eyes

A circular bracket positioned to the top of the window so a pole hook can be used to lower the tops sash when out of reach.

Pole hook

A wooden pole with a metal hook on one end for lowering a top sash when out of reach and a pole eye is fitted.

Pre-tensioned

A term to describe balance springs that can be used immediately from the factory, without any adjustment required.

Putty line

The term used to describe the chamfered appearance of the sash frame where it meets the glazing. This is due to putty traditionally being used when glazing timber windows.

PVC-U

Polyvinylchloride-Unplasticised.

Safety arms

A more durable stay, employed when sashes are too heavy to be safely held by tilt rests; – see tilt rests.

Safe T stays

See safety arms.

Sand blasted glass

Clear glass blasted with grains of sand at high pressure to achieve a semiopaque appearance.

Sash lifts

A pair of small curved handles that can be positioned on the bottom of the lower sash on the inside allowing the sash to be opened.

Sash profile

The design of the sash and the term used for the individual length of PVC-U used for the window sashes.

Sash stop

A section of PVC-U cover profile, cut to a particular length and covered with a cap that limits the range of the sash to prevent over extending the balances.

Sash vent

A trickle vent fitted to the sash head on a window – see trickle vent.

Satin glass

Semi-opaque glass with a similar appearance to sandblasted with a smoother finish.

Scroll handles

See Sash lifts.

Sealed unit

See DGU.

Secured by Design:

An Association of Chief Police Officers third party endorsement scheme.

Springing line

On a window with a curved head, this is the vertical distance between the apex and the shoulder (start of the curve) of the window.

Swept head

A window with a curved head, but with a shallower radius than a true arch.

Tilt rests

A metal arm housed in the frame and connected to the sash that holds in position when tilted inwards for cleaning.

Timberweld®

This name is a registered Trade Mark that describes a unique method of creating timber style joints that carries a Duchy Investments Ltd. patent.

Torso II balances

Bespoke balance springs, calibrated for each individual sash and selected for their durability and longevity.

Travel restrictors

See limit stops.

Trickle vent

A two part component, consisting of internal vent and external vent hood to promote secure air flow when the window is closed.

True arch

A window with a curved head and springing line of half the width, creating a semi-circular arched head.

UV neutral

Unaffected when exposed to ultra-violet light.

U-value (W/m²K)

The calculation often used to denote the thermal efficiency of a window when considering heat loss. The higher the number, the most energy lost.

WER

'Window energy rating' calculated using the solar gain against heat lost registered with BFRC.

Window board

The internal timber cill fitted underneath a window on the inside.

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Masterframe Windows Limited

4 Crittall Road
Witham
Essex CM8 3DR

Telephone: 0800 591 854

Email: sales@masterframe.co.uk

www.masterframe.co.uk