W20 range of mild steel windows

Introduction:
The W20 range of mild steel windows is taken from the wide range of designs, styles and sizes of metal windows offered by Monk Metal Windows Ltd.

The W20 range consists of equal and unequal leg steel windows including opening and fixed lights in the following styles:

- Fixed Light
- Side Hung Open Out
- Bottom Hung
- Vertical Pivot
- Top Hung
- Side Hung Open In
- Horizontal Pivot
- Single Leaf/Double Leaf Doors

The windows offer the following benefits:
- Strength; security; slim lines; durability; versatile shapes and combinations; suitability for single or double glazing & all performance tested. **MONK** will offer to remove the existing, design, supply, fix and glazing service.

Authority:
The windows will generally comply with BS 6510:2010 Specification for steel windows. These items are produced under a quality system assessed against BS EN ISO 9002. The company also operate a quality management system which complies with the requirements of BS EN ISO 9001:2008, certificate no. FM 10955.

Applications:
The windows may be used in all types of building where strong, durable frames, efficient opening casements and robust fittings are required.
DESCRIPTION

Composition/Manufacture:
Frames are manufactured from heavy mild steel sections, with corner joints mitred and welded. Small panes can be formed with the glazing bars whose ends are welded into position and cross joints are interlocked and welded. Composite windows can be assembled by connecting windows horizontally and/or vertically with mullions and/or transoms of hot rolled slim steel sections or with box mullions manufactured frame sheet steel and filled with foamed polystyrene insulation. Sills in a choice of profile are available, made from 14 gauge sheet steel.

Finish:
All steel bars and sheet material is positively rust proofed by hot dip galvanising. It can be further finished with a factory applied stove polyester coating to BS 6497 from a large range of standard colours.
Fittings:
Hinges are of galvanised steel with brass pins. Pivots are of hot stamped brass. All handles, stays, openers and catches are of hot stamped solid brass, satin chrome plated.

Glazing:
Windows may be single glazed (maximum glass thickness of 10mm) or double glazed with sealed units (maximum thickness 16mm). The standard method of glazing is by the use of steel/aluminium glazing beads which snap over concealed studs, and can be inserted from inside or outside. Beads are available stove in a polyester powder finish to match windows. Putty glazing can be specified but is not recommended for pre-painted frames. Glazing is undertaken after installation in accordance with BS 6262:2005.

Weather-stripping:
A continuous neoprene gasket is retained in a channel in the steel section.

Accessories:
Windows are supplied with fixing lugs and/or screws appropriate to structural opening. Pressed metal sill flashings and other accessories are available finished to match window frames.

Dimensions:
Windows are purpose made in any size, generally within the limits shown in the table below; sizes outside these limits can be made after consultation.

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>Width: Minimum (mm)</th>
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<td>WINDOWS</td>
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<td>Fixed Light</td>
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<td>Top Hung</td>
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Appearance:
The windows offer the traditional qualities of slender sight lines and glazing beads, ideal for replacing earlier versions of steel profile systems to maintain the authenticity of the original fenestration and design.
PERFORMANCE

Weather tightness has been tested to BS 6375. Test pressure classes are related to design wind pressure ranging from relatively sheltered exposure, up to 1200 Pascal’s, to severe exposure, reaching 2400 Pascal’s (Refer to air permeability, water-tightness and wind resistance table below).

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Thermal Performance (Energy Conservation):

W20 steel windows can accommodate sealed glass units up to 16mm thick, which can comply with Part L (England & Wales), of the current Building Regulation.

Sound:
The average sound reduction index (SRI) of a single glazed unit is approximately 30dB, but varies with window type, size & glass specification.

Durability:
When correctly used and maintained, the windows and their fittings can be expected to provide a long, low cost life.

SITEWORK

Handling and Storage:
Windows must be unloaded and handled with care. They should be stored upright on level battens in a clean area of the site, preferably undercover.

Fixings:
Windows are fixed by traditional methods. All screws, bolts, lugs or other fasteners are supplied, together with full fixing instructions.

SUPPLY

Availability:
Direct from the company at the address below.

W20 Internal Screen
Project Name: 14 Redburn Street, London
Customer: Fox-Davies Gallagher Limited
INTRODUCTION:
The W40 range is an evolutionary development of the W20. The new profiles offer all the characteristic benefits of steel: slim sight lines that are difficult to match in the bulky profiles of other materials; inherent strength and security; positive rust proofing by the hot dip galvanising process plus factory applied stove polyester colour coatings to provide durable, proven low maintenance finishes.

GLAZING:
Gasket glazed 24mm insulating glass units can be accommodated. Most UK wind loading requirements for glass deflection can be satisfied by sealed units comprising 2 sheets of 4mm glass. This means that the higher insulation values of 16mm air gaps are available.

WEATHER TIGHTNESS:
The introduction of a dual weather seal comprising external rain screen and internal air seal has gone a long way towards the improvements that have been made. The product range has been subject to extensive laboratory testing through all stages of its development.
STYLES OF OPENING VENT:
The same wide range of frames and opening vents that are available in the W20 range are available from W40 as follows:

- Fixed Light
- Projection Top Hung
- Projection Side Hung
- Bottom Hung
- Vertical Pivot

- Top Hung
- Side Hung Open Out
- Side Hung Open In
- Horizontal pivot
- Single Leaf/Double Doors

FITTINGS:
Traditional surface mounted hardware, or concealed variable geometry hinges are specially developed concealed multipoint locking handles.

Traditional fitting available in a range of colours

TRICKLE/BACKGROUND VENTILATION:
Through the frame ventilation can be provided through many styles of opening vents. Both the single cockspur and 2point handles can be locked in the fully closed and trickle ventilation position.

Dimensions:
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THERMAL PERFORMANCE (Energy Conservation):
W40 steel windows can accommodate sealed glass units up to 24mm thick, which can comply with Part L (England & Wales), the current Building Regulation. W40 steel windows in conformity with prEN ISO 10077-2: 2001 shows that a W40 standard reference window (BR 443) double glazed with a 24mm double glazed unit comprising a super soft low E coating to the inner pane and an argon gas filled cavity of 16mm (Warm edge spacer), will offer a whole window "U" value of 2.0 Wm²K.

PERFORMANCE
Weather tightness has been tested to BS 6375. Test pressure classes are related to design wind pressure ranging from relatively sheltered exposure, up to 1200 Pascal’s, to severe exposure, reaching 2400 Pascal’s.

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W40 Stair Screen
15 Cheyne Place, London.
Architects: Studio 30 Architects
AUTHORITY:
The windows are manufactured in accordance with the general principles of BS 6510:2002 Specification for steel windows. MONK operates a Quality Management system which complies with the requirements of BS EN ISO 9001:2008 Certificate No.FM 10955 and is a BSI Registered firm for design and manufacture.

SERVICE OFFERED:
MONK will manufacture, install and glaze all of its product range and, when necessary, remove an existing installation prior to replacement. It is recommended that the windows should be installed and glazed by the company to ensure correct assembly and glazing procedures are adopted.

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