REA

REA METAL WINDOWS LIMITED

W20 range of mild steel windows

January 2014

Refurbishment of Matchworks. *Developer: Urban Splash Ltd.* *Architect: Shed KM.*

GENERAL

Introduction The W20 range of mild steel windows is taken from the wide range of designs, styles and sizes of metal windows offered by REA 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	**Top hung**
Side hung open out	**Side hung open in**
Bottom hung	**Horizontal pivot**
Vertical 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. ***REA*** 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 20449.

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 l4 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 channel form 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.

bsi. ISO 9001 Quality Management

Secured by Design SBD Official Police Security Initiative

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.

COMPONENT	Width:		Height:		Perimeter:
	Minimum (mm)	Maximum (mm)	Minimum (mm)	Maximum (mm)	Maximum (mm)
WINDOWS					
Fixed Light	300	3000	300	3000	9200
Top Hung	300	1800	300	1800	6400
Side Hung	300	900	300	2400	6400
Bottom Hung	200	1800	200	1500	6400
Horizontal Pivot	400	1800	400	1800	6400
Vertical Pivot	400	1500	400	2400	6500
DOORS					
Single	600	900	2000	2500	6600
Double	1200	1800	2000	2500	8400

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 pressures ranging from relativity sheltered exposure, up to 1200 Pascal's, to server exposure, reaching 2400 Pascal's.
Weather tightness has tested to B3 6375. Test pressure classes are related to design wind pressures 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)*

COMPONENT	AIR PERMEABILITY (Pascal)	WATER TIGHTNESS (Pascal)	WIND RESISTANCE (Pascal)
REA W20			
Fixed Light	300	300	2400
Top Hung	300	300	2400
Side Hung Open Out	300	300	2400
Side Hung Open In	300	100	2400
Bottom Hung	200	100	2400
Horizontal Pivot	200	100	2400
Vertical Pivot	100	50	2400

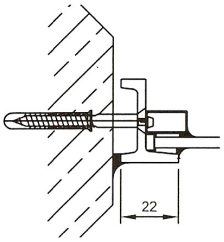
Thermal Performance (Energy Conservation) W20 steel windows can accommodate sealed glass units up to 16mm thick, which can comply with Part L (England & Wales), Part J (Scotland) & Part F (Northern Ireland) of the current Building Regulation. All windows can be externally or internally beaded.

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

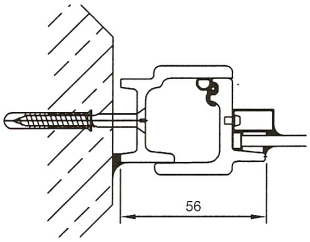
Durability When correctly used and maintained, the windows and their fittings can be expected to provide a long, low cost life.

REA20 SECTIONAL DETAILS

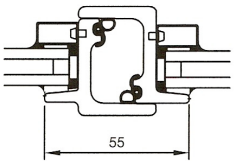
SINGLE GLAZED FIXED LIGHT JAMB



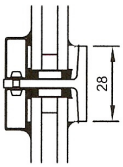
SINGLE GLAZED OPENING CASEMENT JAMB



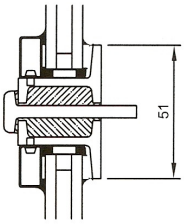
FRENCH CASEMENT CENTRAL STYLE



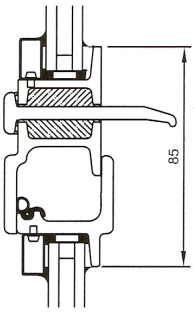
GLAZING T- BAR



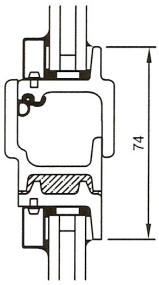
FIXED LIGHT/FIXED LIGHT COUPLING



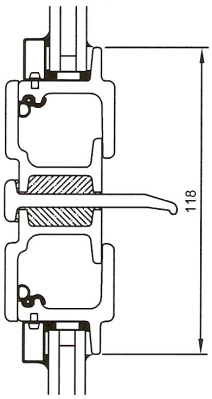
FIXED LIGHT/OPENING CASEMENT COUPLING



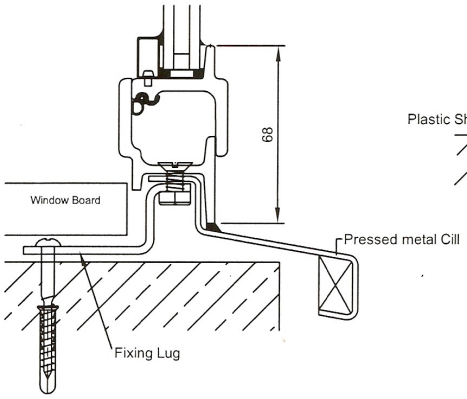
DIRECT COUPLING



OPEN CASEMENT/OPENING CASEMENT COUPLING



CILL DETAIL



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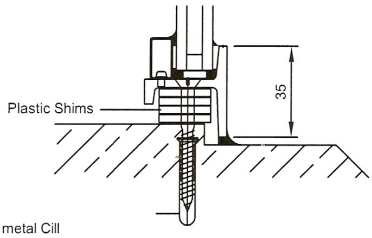
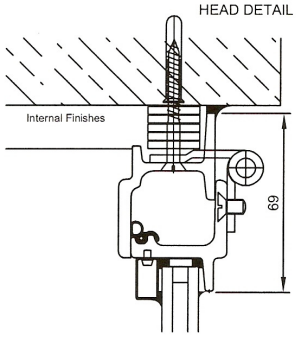
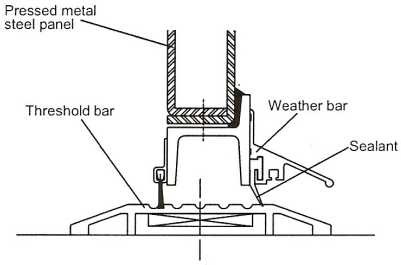


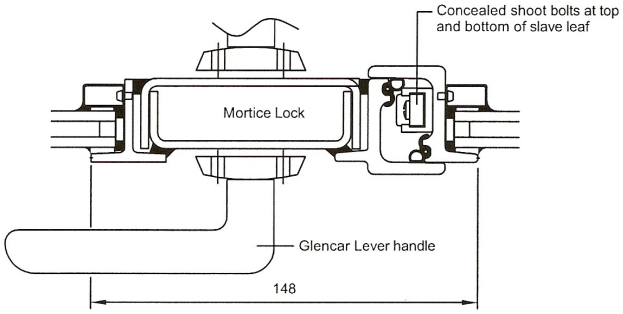
HEAD DETAIL



DOOR THRESHOLD



DOOR LOCK PANEL/MEETING STYLE



Troon Town Hall, Scotland. *Architect: South Ayrshire Council* *Contractor: Forbes & Whiteford*

37 Degrees Health Club, London *Architect: Spence Harris Hogan* *Contractor: Vincent Stokes*

Queens Hotel, Torquay *Architects : TQF* *Contractor: Mulberry Construction*

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.

SERVICES

Sales For assistance on sales matters and for quotations, please contact Paul Richardson at the address below.

Technical For technical advice, please contact Barry McCabe, Director, at the address below.

Installation In addition to supplying windows, REA will undertake to remove existing, fix new and glaze as required.

REA Metal Windows Ltd
126-136 Green Lane
Liverpool
L13 7ED

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Sales Office:
Paul Richardson – Sales Manager
Barry McCabe - Director

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Email:
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Barry.mccabe@remetal.co.uk – All other Enquiries