

REA

REA METAL WINDOWS LIMITED

W40 range of mild steel windows

January 2010



Ferry Quays, Brentford for Riato Homes Ltd

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.

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.



Murray's Mill, Ancoats, Manchester.

Architects - BDP

Contractor – Wates Construction

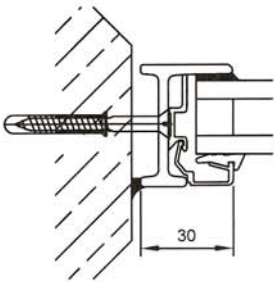
Dimensions Windows are purpose made in any size, generally within the limits shown in the table below; sizes outside these limits can be made after consultation.

COMPONENT	Width:		Height:		Perimeter: Maximum (mm)
	Minimum (mm)	Maximum (mm)	Minimum (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

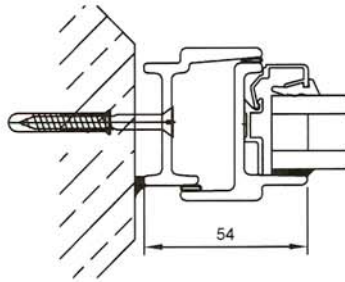
THERMAL PERFORMANCE (Energy Conservation) W40 steel windows can accommodate sealed glass units up to 24mm thick, which can comply with Part L (England & Wales), Part J (Scotland) & Part F (Northern Ireland) of the current Building Regulation (April 2006). W40 commercial style reference steel window double glazed with a 24mm double glazed unit comprising a super soft coat low E coating to the inner pane and an argon gas filled cavity of 16mm, will offer a whole window "U" value of 2.1 W/m²K. W40 commercial style reference steel window double glazed with a 24mm double glazed unit comprising a super soft coat 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 2.2 W/m²K.

REA40 SECTIONAL DETAILS

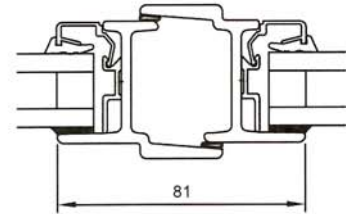
SHORT LEG FIXED
LIGHT JAMB (EXTERNALLY
GLAZED)



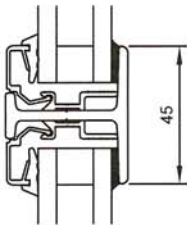
SHORT LEG OPENING
CASEMENT JAMB



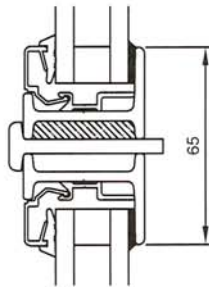
FRENCH CASEMENT
CENTRAL STYLE



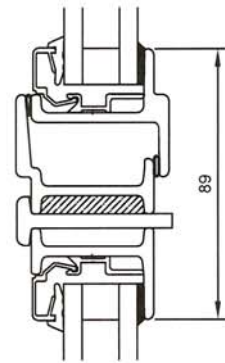
GLAZING T-BAR



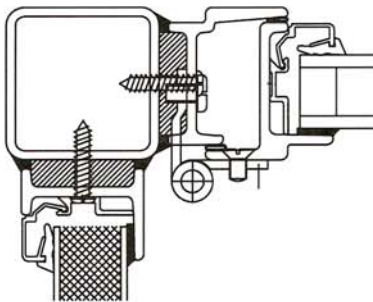
FIXED LIGHT/FIXED LIGHT
COUPLING



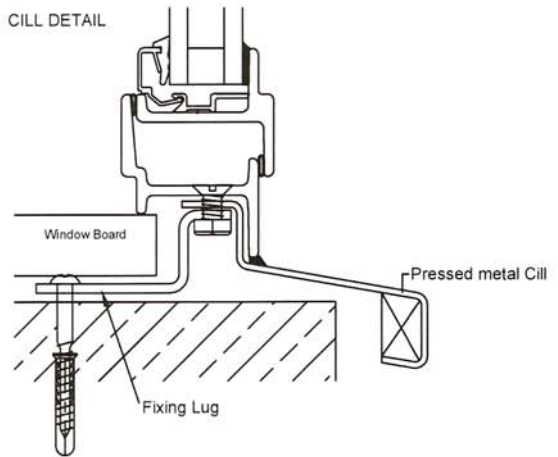
FIXED LIGHT/OPENING
CASEMENT COUPLING



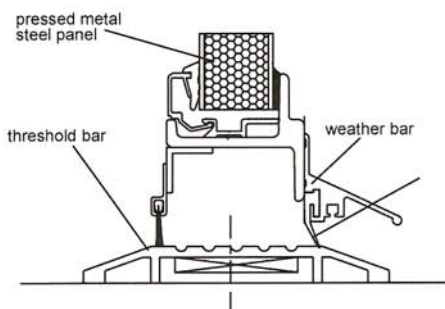
CORNER DETAIL



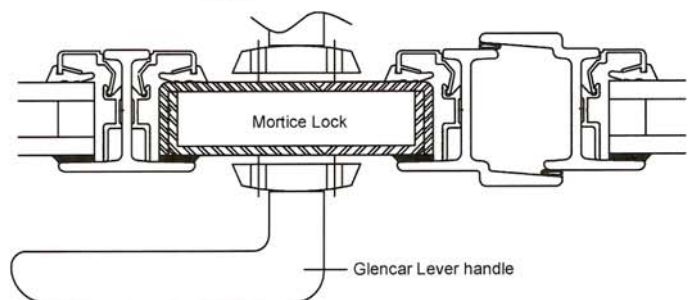
CILL DETAIL



DOOR THRESHOLD



DOOR LOCK PANEL/MEETING
STYLE



PERFORMANCE

Weather tightness has been tested to BS 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.

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 W40			
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

AUTHORITY The windows are manufactured in accordance with the general principles of BS 6510:2002 Specification for steel windows. **REA** operate a Quality Management system which complies with the requirements of BS EN ISO 9001:2000 Certificate No.FM20449 and is a BSI Registered firm for design and manufacture.

SERVICE OFFERED **REA** will design, 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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