#### data sheet W40



An evolutionary development from W20, W40 offers continuity of style with the same casement sightlines as W20, but the 40mm wide profiles permit the use of double or triple glazing up to 26.8mm thick. The insulating glass units are drained and ventilated in accordance with modern best practice and gasket glazed to ensure consistent neatness and reliability of seal. In addition to improved thermal performance, weathertightness is significantly enhanced and fittings can be less obtrusive with variable geometry hinges, friction pivots and multi-point locking cremone bolts concealed within the profiles. W40 achieves the Secured by Design standard (please see W40-SBD product).

W40 range is available in a plain galvanised finish in addition to an extensive range of RAL colour polyester powder coat finishes



The W40 range of profiles is the most heavy-duty of the available mild steel window ranges and thus offers the client the best choice of opening window and doors types and the widest range of permitted sizes. Sightlines, being that of the W20 range, are not compromised by the increased strength and this allows the architect complete design flexibility whilst maintaining the slim elegant aesthetic which is synonymous with mild steel windows.

### Replica Replacement

In addition to being a product designed for modern new build applications, W40 is also the natural replica replacement product for Universal Range windows installed between 1922

(introduction of mild steel windows) up to the early 1960's (when Universal ranges were withdrawn in favour of W20, and then later W40 for improved thermal insulation and weathering).

W40 is therefore ideal for windows in recognised historic or aesthetically sensitive buildings or areas where improvement in window performance is sought in addition to minimal maintenance. W40 is used predominantly on listed buildings to offer a practical and affordable route to compromising between planning constraints and the client's preferences.

# Galvanising

All windows are hot dipped galvanised after manufacture to British Standards to completely protect the window against corrosion.

# **Polyester Powder Coating**

After chemical cleaning, all windows are optionally coated to British Standards with our attractive and durable factory applied polyester powder coating to enhance their aesthetics and minimise future maintenance. An extensive range of colours is available (any standard RAL reference).

### Ironmongery

A large range of quality modern or traditional face mounted ironmongery can be fitted, in addition to restrictors, background trickle ventilators and security locks. All available with a range of attractive finishes in addition to standard finishes of satin chrome plate or RTD RotoTone Dark bronze lacquer. Main ironmongery, comprising handles and stays, are generally solid brass. W40 range is also unique in that it also permits the use of variable geometry concealed hinges and multi-point locking systems.

For a full specification, please refer to: "W40 - Model specification / NBS specification"

# Key facts and features

# **Product Applications**

Commercial

Conservation / Historic only

**Light Commercial Domestic** 

Fire-Rated (see W40-FR) Enhanced Security (see W40-SBD)

# Window / Door Types









#### Weather Performance

Window Type	Air (Pa)	Water (Pa)	Wind (Pa)	Exposure Category (Pa)		
Fixed light	Cl. 4	300	CI. A5	2000		
Top hung open out	Cl. 3	300	CI. C5	2000		
Side hung open out/in	Cl. 4	300	CI. C5	2000		
Bottom hung open in	Cl. 4	300	CI. C5	2000		
Horizontal pivot	CI. 4	300	CI. C5	2000		
Vertical pivot	Cl. 2	150	CI. C5	1200		
To BS 6375-1:2009. See "Weather performance" for full details.						

### Permissible Sizes (mm)

Туре	Length	Height	Perim.			
Fixed light	300 - 3000	300 - 3000	9400			
Top hung open out	300 - 2000	300 - 2000	6600			
Side hung / folding leaf	300 - 1000	300 - 2400	6600			
Bottom hung open in Horizontal pivot	300 - 2000	300 - 1600	6600			
Horizontal pivot	400 - 1800	400 - 1800	6400			
Vertical pivot (centre)	400 - 1500	400 - 2400	6500			
Vertical pivot (1/3-2/3)	600 - 1200	400 - 2400	6500			
Door leat	4/5 - 1000	1500 - 2500	6600			
See "Window / door types and permissible sizes" for full details.						

### Glazing

# Method

Putty

Flush clip-in

aluminium bead

Rectangular / square clip-on steel bead

Type Single Side  $\square$ Inside

Double

Outside **Technology** 

M

Thickness

Triple

Solid bed

24-26.8 mm

Drained / ventilated

# Thermal Insulation

See "Typical details" for full details.

### **Building Regulations Document L** (Conservation of Fuel and Power)

Compliant

Combined frame and glass U values (Uw): 2.3 - 1.8 W/m²K Uw Centre pane glass U values (Ug): 1.1 - 0.8 W/m2K Ug

For replacement windows in domestic or commercial buildings, extensions and most new buildings.
U value depends on reference window used, glass, gas fills etc.

See Thermal Insulation data sheet for full details.

### **Acoustic Insulation**

Sound insulation of weather stripped windows (approximate values averaged over a frequency range of 100 to 3150Hz): 28 - 30dB reduction (double glazed) 35 - 40dB reduction (with secondary window / 200mm cavity).