



W20 is the traditional heavy-duty framing system, 32mm wide with 5mm thick flanges, originally developed for commercial and industrial applications, and which was introduced in the early 1960's to consolidate the various commercial steel window ranges available at that time (most notably the Small, Medium and Heavy Universal ranges). It accommodates single and insulating glass units up to 16mm thick in the same profiles simply with a change of bead. All glazing, whether in fixed lights or casements, is in the same plane. It can be divided into small panes with tee glazing bars, having a table face width of no more than 29mm. Opening windows are weather stripped using integral gaskets. Hinged casements, hung at top, bottom or side, and swing windows pivoted horizontally or vertically, can all be constructed from the same kit of profiles. Elemental coupling is achieved with simple slender transoms and mullions.



W20 replica replacement polyester powder coated and double glazed steel windows with true steel glazing bars

Replica Replacement

W20 windows are 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windows installed between 1922 (introduction of mild steel windows) up to the early 1960's (when Universal ranges were withdrawn in favour of W20). W20 windows are therefore ideal for windows in recognised historic or aesthetically sensitive buildings or areas as they offer a near-exact sightline match for the existing and may therefore be exempt from Building Regulations Document L (Conservation of Fuel and Power). If you require fully compliant double and triple glazed commercial replacement steel windows, please refer to our W40 range. Exemptions are likely (subject to gaining the necessary permissions from the relevant governing authority) to include buildings that are:

- Listed
- In a designated conservation area
- As scheduled ancient monument
- In a designated building of architectural or historical interest
- In a national park or area of outstanding natural beauty
- Buildings of traditional construction with permeable fabric that both absorbs and readily allows the evaporation of moisture.

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.

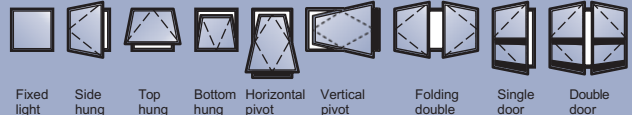
For a full specification, please refer to:
"W20 - Model specification / NBS specification"

Key facts and features

Product Applications

- | | |
|------------------------------------------------------|------------------------------------------------------------------|
| <input checked="" type="checkbox"/> Commercial | <input checked="" type="checkbox"/> Conservation / Historic only |
| <input checked="" type="checkbox"/> Light Commercial | <input checked="" type="checkbox"/> Fire-Rated (see W20-FR) |
| <input checked="" type="checkbox"/> Domestic | <input checked="" type="checkbox"/> Enhanced Security |

Window / Door Types



All side hinged casements and doors can open either inwards (open in) or outwards (open out)

Weather Performance

Window Type	Air (Pa)	Water (Pa)	Wind (Pa)	Exposure Cat (Pa)
Fixed light	600	300	2400	2400
Top / side hung open out	300	200	2000	2000
Side / bottom hung open in	300	200	2000	2000
Horizontal pivot casement	200	100	1600	1200
Vertical pivot casement	200	50	1600	1200

To BS 6375-1:1989. See "Weather performance" for full details.

Permissible Sizes (mm)

Type	Length	Height	Perim.
Fixed light	300 - 3000	300 - 3000	9200
Top hung open out	300 - 1800	300 - 1800	6400
Side hung / folding leaf	300 - 900	300 - 2400	6400
Bottom hung open in	300 - 1800	300 - 1500	6400
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 leaf	475 - 900	1500 - 2500	6600

See "Window / door types and permissible sizes" for full details.

Glazing

Method	Type	Side
<input checked="" type="checkbox"/> Putty	<input checked="" type="checkbox"/> Single	<input checked="" type="checkbox"/> Inside
<input checked="" type="checkbox"/> Sloping clip-on aluminium bead	<input checked="" type="checkbox"/> Double	<input checked="" type="checkbox"/> Outside
<input checked="" type="checkbox"/> Rectangular / square clip-on steel bead	<input checked="" type="checkbox"/> Triple	Technology
	Thickness	<input checked="" type="checkbox"/> Solid bed
See "Typical details" for full details.	2-16 mm	<input checked="" type="checkbox"/> Drained / ventilated

Thermal Insulation

Building Regulations Document L (Conservation of Fuel and Power) Compliant

Combined frame and glass U values (Uw): **5.7 - 2.2 W/m²K Uw**
Centre pane glass U values (Ug): **5.7 - 1.1 W/m²K Ug**

For historic replica replacement for buildings in aesthetically sensitive areas or recognised historic 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 weatherstripped windows (approximate values averaged over a frequency range of 100 to 3150Hz):
20 - 28dB (single glazed) / 28-30dB (double glazed) reduction
35 - 40dB reduction (with secondary window / 200mm cavity).