

TECHNICAL GUIDE

JUNE 2021
03.06.2021

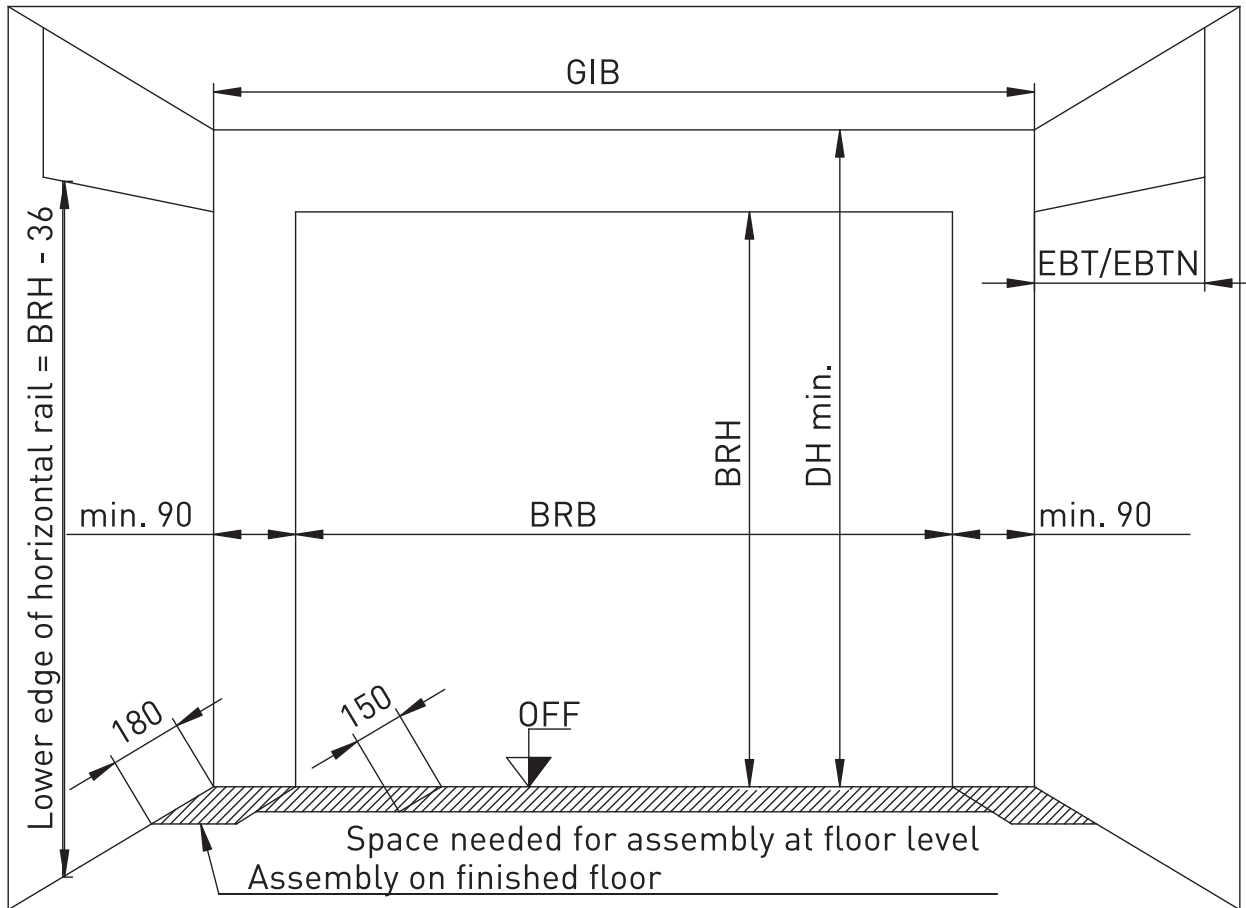


TECHNICAL INFORMATION

iso45 & 20 OVERHEAD SECTIONAL GARAGE DOORS E® SPRING UP TO 3000MM WIDE X 2700MM HIGH



iso45 sizes above 3000mm x 2700mm are supplied with front mount torsion spring as standard.
All sectional doors including wicket doors are supplied with front mount torsion spring as standard.



REQUIRED INSTALLATION DIMENSIONS

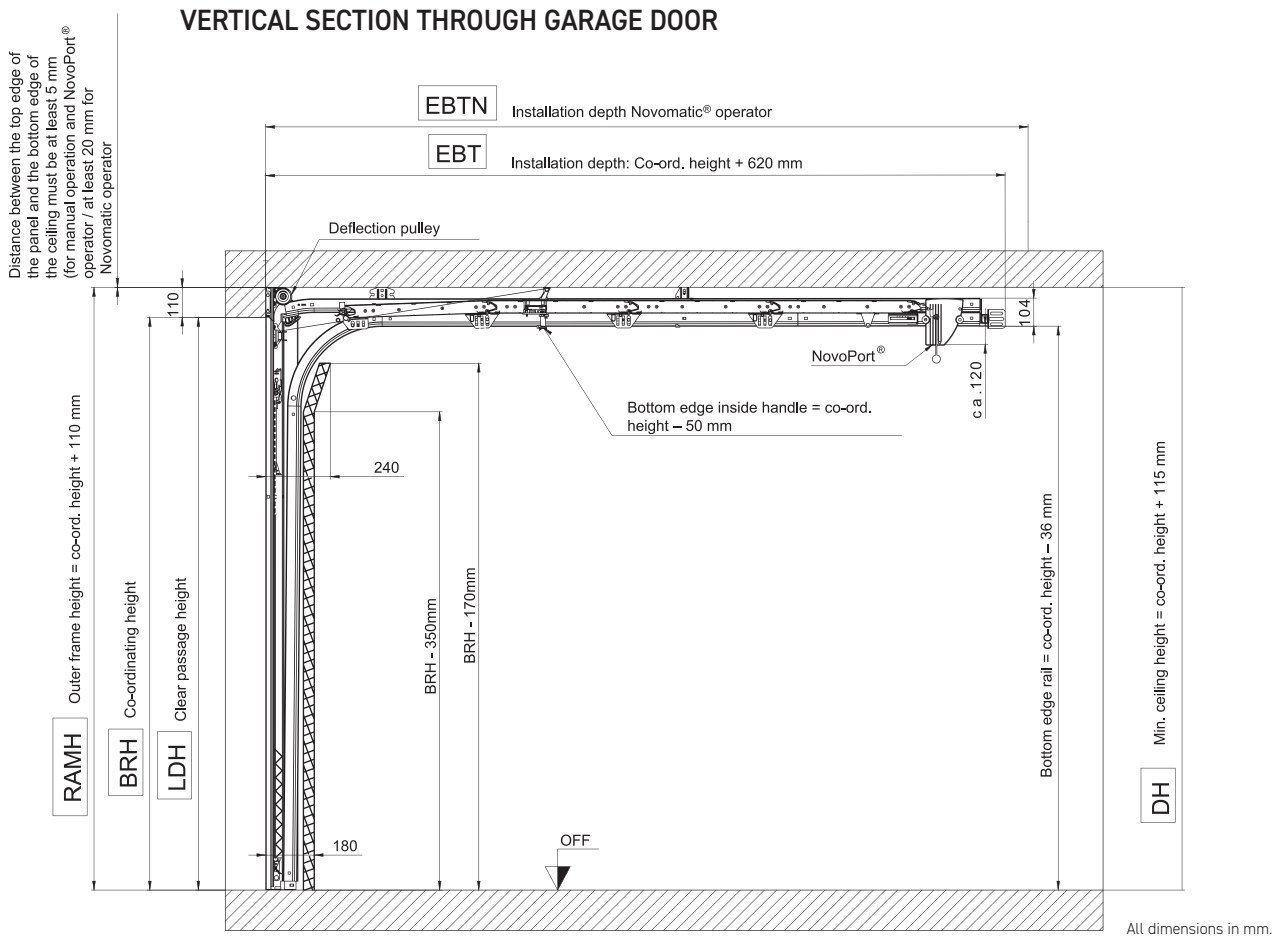
- BRB = Coordinating width (order size)
- BRH = Coordinating height (order size)
- DH = Ceiling height (minimum dimension)
- GIB = Interior garage width (minimum dimension)
- EBT = Installation depth of the door
- EBTN = Installation depth of garage door with Novomatic operators
- RAMB = Outer frame width
- RAMH = Outer frame height
- OFF = Upper-edge finished floor
- LDH = Clear passage height

Please consult the "Coordinating widths and heights" chart or calculate the dimensions based on the drawings.

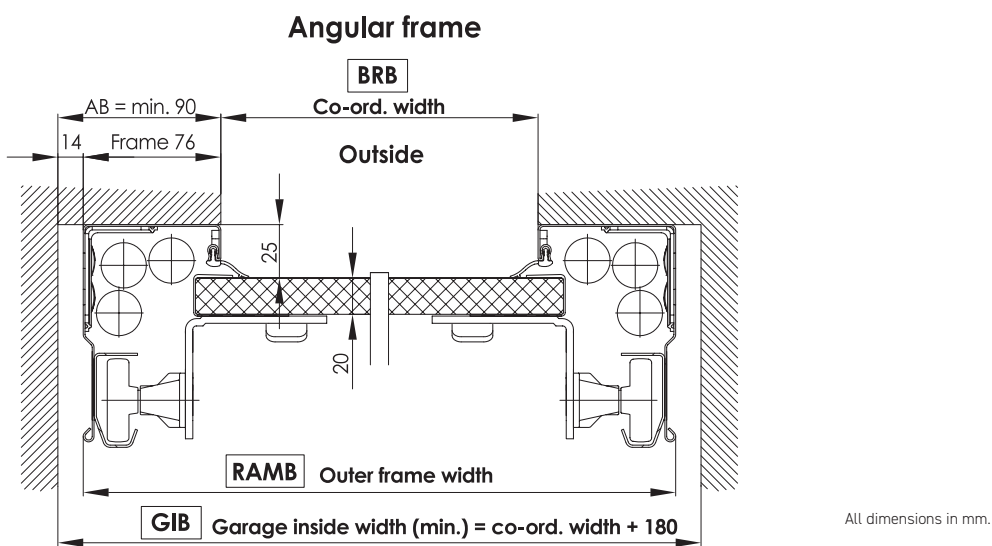
If the structure does not have the required minimum dimensions, it can be compensated by fitting panels and profiles.

All dimensions in mm.

iso45 & 20 OVERHEAD SECTIONAL GARAGE DOORS E[®] SPRING UP TO 3000MM WIDE X 2700MM HIGH



HORIZONTAL SECTION THROUGH GARAGE DOOR



ORDERING INFORMATION

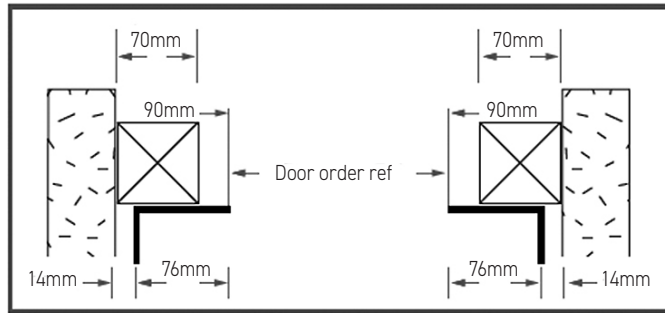
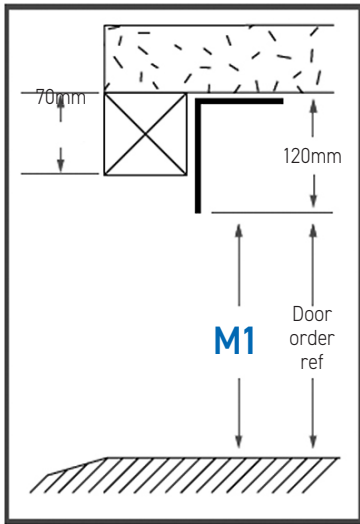
To calculate the correct door order size to fit within a structural opening, deduct 180mm from the width and 120mm (rear mount) or 215mm (front mount) from the height. For behind the reveal fit calculate from drawings (using required headroom for front/rear mount).

iso45 OVERHEAD SECTIONAL GARAGE DOORS TORSION SPRINGS REAR MOUNTED TORSION SPRING DETAIL



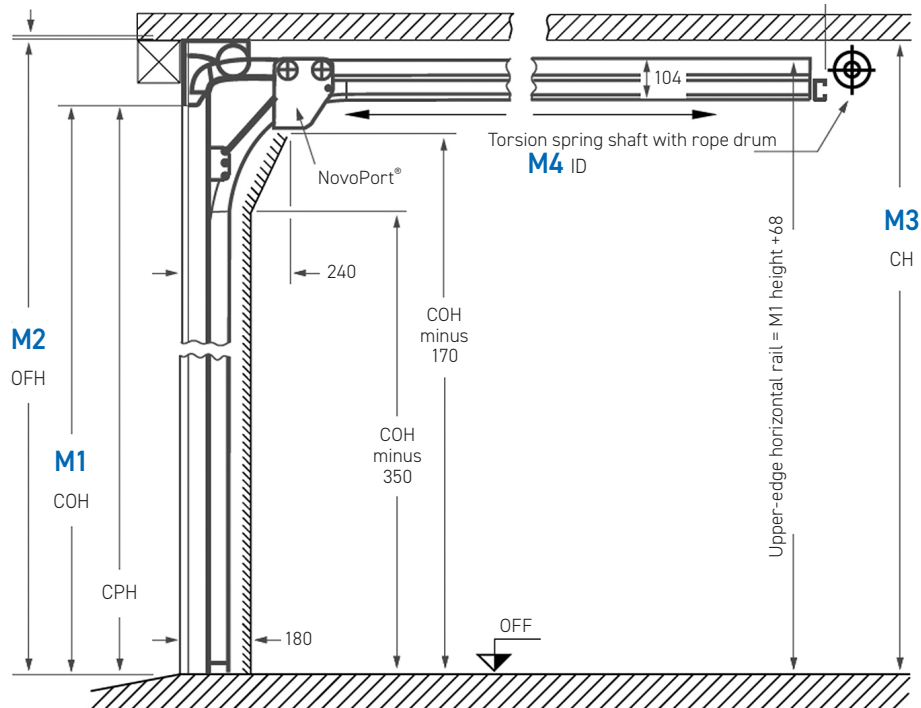
ALL DOORS WITH WICKET DOORS HAVE TORSION SPRINGS

FITTING WITHIN THE OPENING



Order ref height	Standard size heights			
	M1	M2	M3	M4
6'4"	1925	2045	2050	2690
6'6"	2000	2120	2125	2765
6'10"	2075	2195	2200	2840
7'0"	2125	2245	2250	2890

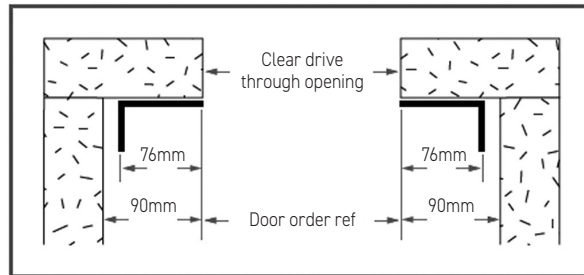
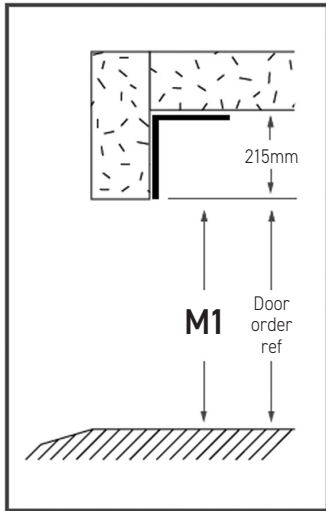
- CPH Clear Passage Height (with NovoPort®)
- COH (M1) Co-ord Height
- OFH (M2) Outer Frame Height
- CH (M3) min. Ceiling Height
- ID (M4) min. Installation Depth



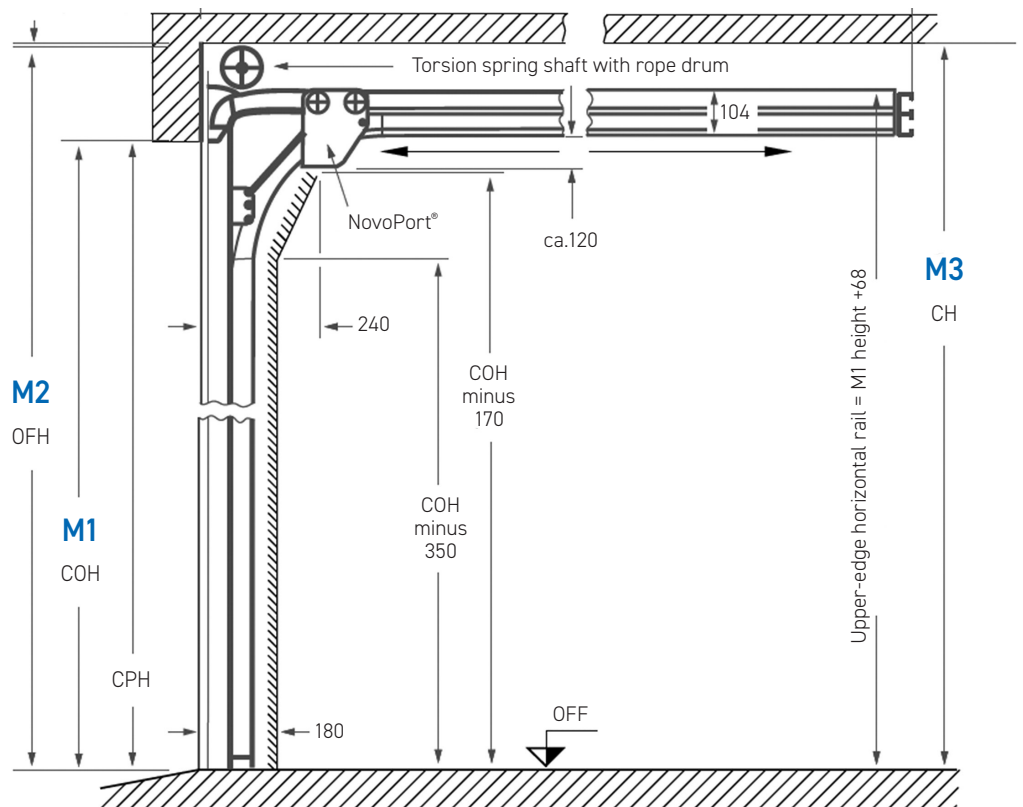
iso45 OVERHEAD SECTIONAL GARAGE DOORS

TORSION SPRINGS FRONT MOUNTED TORSION SPRING DETAIL

FITTING BEHIND THE OPENING



Order ref height	Standard size heights			
	M1	M2	M3	M4
6'4"	1925	2140	2145	2505
6'6"	2000	2215	2220	2580
6'10"	2075	2290	2295	2655
7'0"	2125	2340	2345	2705



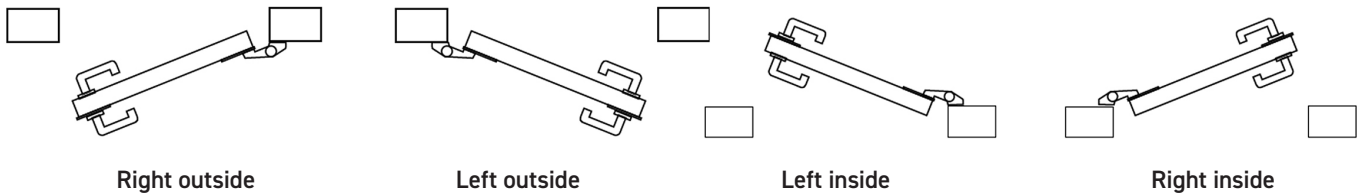
- CPH Clear Passage Height (with NovoPort®)
- COH (M1) Co-ord Height
- OFH (M2) Outer Frame Height
- CH (M3) min. Ceiling Height
- ID (M4) min. Installation Depth

MATCHING SIDE DOORS (SECTIONAL)



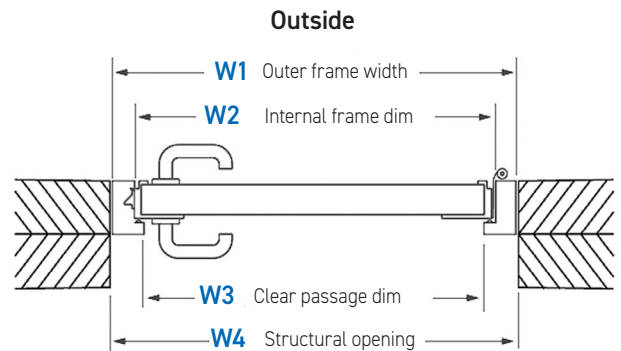
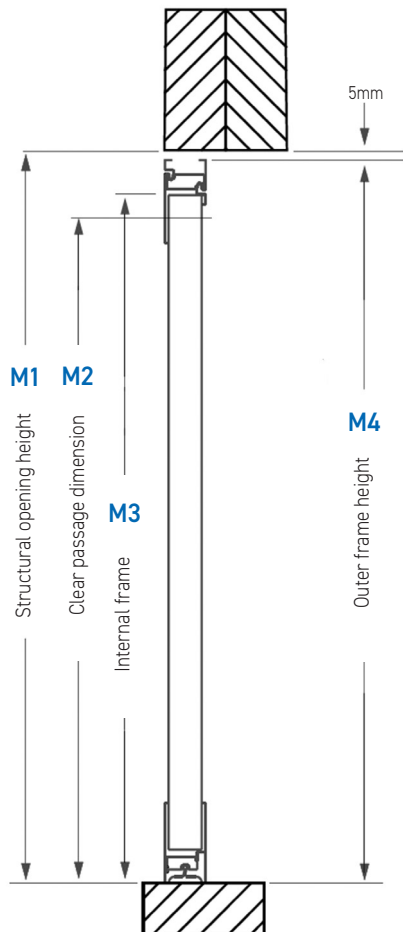
SIDE DOOR HANDING OPTIONS

(Please specify when ordering)



UP & OVER ONE PIECE MATCHING SIDE DOORS

(To match steel and timber infill doors)



Inside

Order ref width	W1	W2	W3	W4
875	932	862	832	945
1000	1057	987	957	1070

Frame leg dimensions 68mm wide x 55mm deep

Order ref height	M1	M2	M3	M4
2000	2055	1978	2000	2050
2125	2180	2103	2125	2175

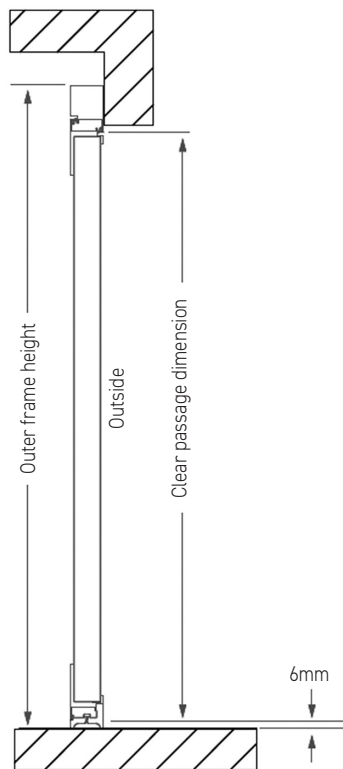
MATCHING SIDE DOORS

ISO45 SECTIONAL MATCHING SIDE DOORS

(To match iso20 and iso45 steel sectional overhead doors)

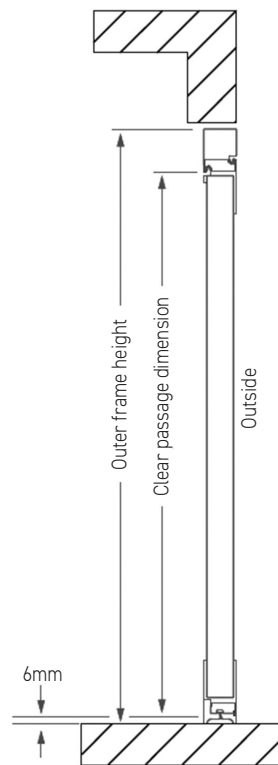
Door opening inwards

vertical section



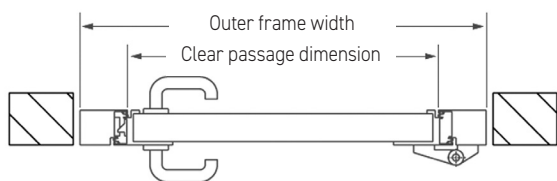
Door opening inwards and outwards

vertical section



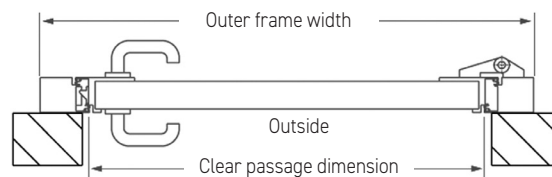
Door opening inwards - standard size

horizontal section



Door opening inwards and outwards - special size

horizontal section



Standard sizes

horizontal rib, large rib, flush, raised panel

Door order ref	Order sizes outer frame dimensions	Clear passage dimensions
875 x 2000	995 x 2060	845 x 1970
875 x 2125	995 x 2185	845 x 2095
1000 x 2000	1120 x 2060	970 x 1970
1000 x 2125	1120 x 2185	970 x 2095

Frame leg dimensions 68mm wide x 55mm deep

SINGLE UP AND OVER GARAGE DOORSCANOPY GEAR TYPE (EXCEPT GRP)

STANDARD DOOR HEIGHTS

Door height			=H1+50	=H1	=H1-150				
imp	mm	H1	H2	H3	H4	H5	H6	R	C
6'4"	1931	1931	1981	1931	1781	1300	49	675	625
6'6"	1981	1981	2031	1981	1831	1300	49	725	657
6'10"	2085	2085	2135	2085	1935	1300	49	825	775
7'0"	2134	2134	2184	2134	1984	1300	49	880	825

H1 = Internal Frame Height

H2 = Minimum Height from floor to underside of ceiling

H3 = Minimum Brickwork Opening Height

H4 = Clear Drive Through Height (Internal Handle is the lowest point)

H5 = How far the door extends into the garage from the back of the brickwork opening

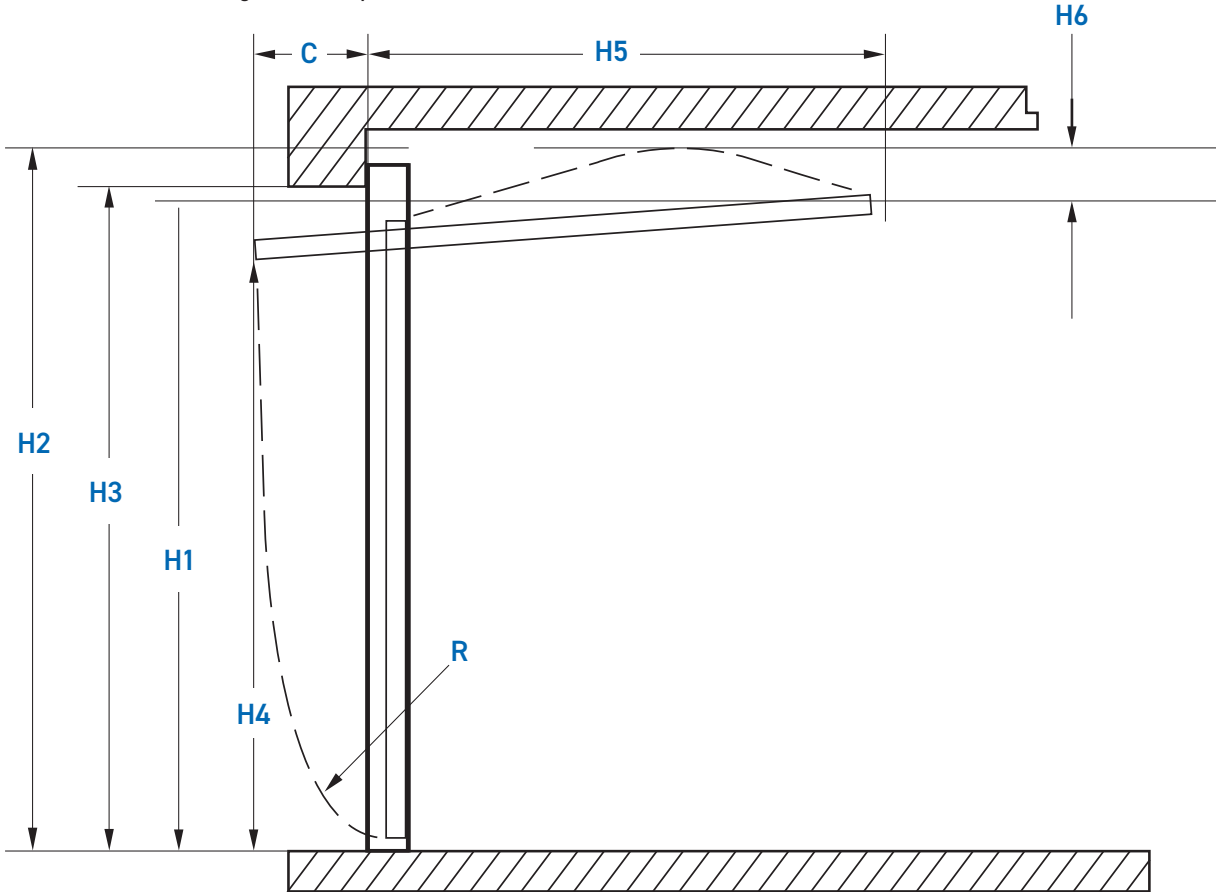
H6 = Kick Up (The height above the Internal Frame Height the door panel rises during the opening cycle)

R = The Arc of travel of the bottom edge of the door

C = The canopy (How far the door protrudes from the frame front)

Note:- The Kick up is greater than the frame Lintel Height and peeks above the Lintel at 1100mm into the garage from the frame front

Frame Header Dimensions 45mm high 40mm deep



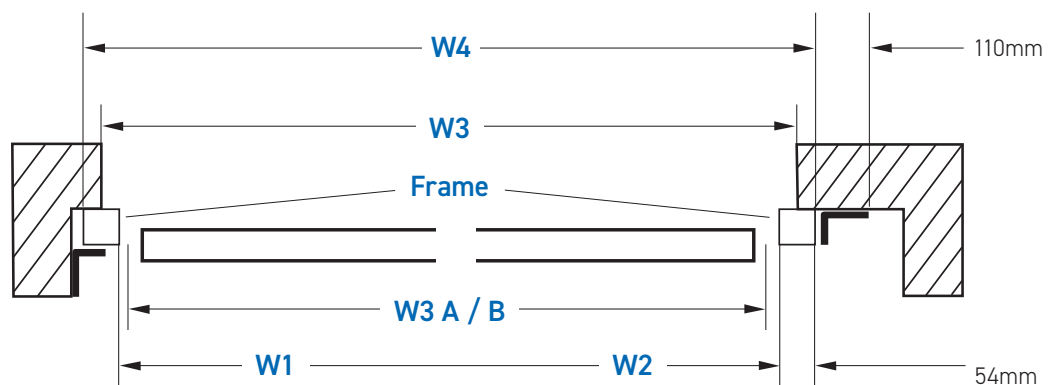
SINGLE UP AND OVER GARAGE DOORS CANOPY GEAR TYPE (EXCEPT GRP)

STANDARD DOOR WIDTHS

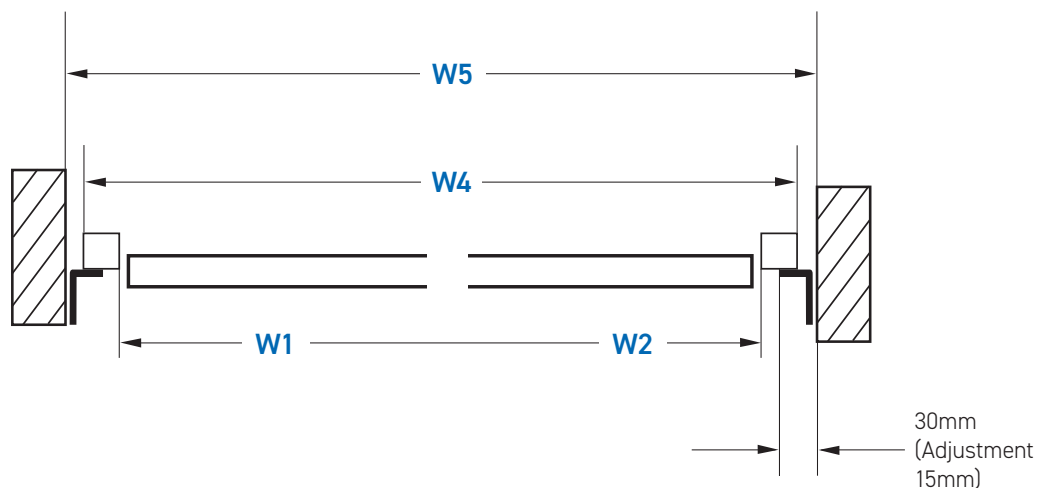
Door width		Common dimensions			54mm wide frame x 40mm wide frame	
		=W1	=W1+24	=W1+24		
imp	mm	W1	W2	W3	W4	W5
6'10"	2085	2085	2085	2109	2193	2199
7'0"	2134	2134	2134	2158	2242	2248
7'3"	2210	2210	2210	2234	2318	2324
7'5"	2261	2261	2261	2285	2369	2375
7'6"	2286	2286	2286	2310	2394	2400
8'0"	2438	2438	2438	2462	2546	2552

W1 = Internal Frame Width
W2 = Clear Drive Through Width
W3 = Minimum Brickwork Opening (fitting behind)
W4 = Recommended Brickwork Opening Width
W5 = Recommended Brickwork Opening Width

FITTING BEHIND THE OPENING



FITTING WITHIN THE OPENING



UP AND OVER GARAGE DOORS

SINGLE RETRACTABLE GEAR TYPE

STANDARD DOOR HEIGHTS

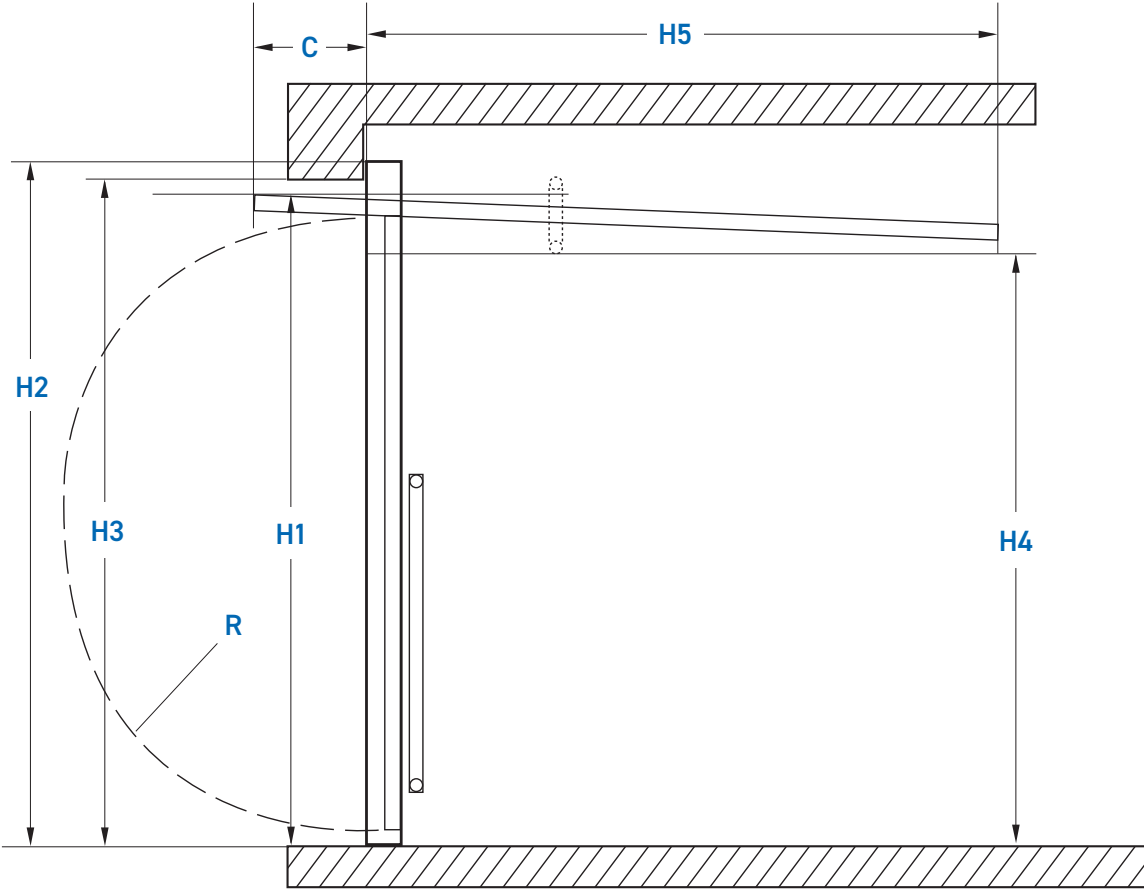
For Doors with Frame header 45mm High and 40mm Deep (Steel and Timber Doors)

Door height			=H1+45	=H1	= H1-150				Lever Arm Crank Height
Imp	mm	H1	H2	H3	H4	H5	R	C	
6'6"	1981	1981	2026	1981	1831	1735	1020	225	1030
7'0"	2134	2134	2180	2134	184	1890	1100	265	1100

For doors with Frame Header 68mm High and 60mm Deep (GRP DOORS)

Door height			=H1+68	=H1	= H1-100				Pivot Arm Crank Height
Imp	mm	H1	H2	H3	H4	H5	R	C	
6'6"	1981	1981	2049	1981	1881	1880	800	40	1050
7'0"	2134	2134	2202	2134	2034	1880	1030	230	1200

- H1 = Internal Frame Height
- H2 = External Frame Height
- H3 = Minimum Brickwork Opening Height
- H4 = Clear Drive Through Height (Internal Handle is the lowest point) For manual doors only
- H5 = How far the door extends into the garage
- R = The arc of travel of the bottom edge of the door
- C = The canopy (How far the door protrudes from the frame front)



UP AND OVER GARAGE DOORS SINGLE RETRACTABLE GEAR TYPE

STANDARD DOOR WIDTHS

Door Width		Common Dimensions				70mm wide frame		FOR GRP DOORS 68mm Wide Frame	
		70mm Wide	=W1+24	=W1-100	=W1-36	=W1+140	=W1+160	= W1 + 136	=W1 + 146
Imp	mm	W1	W2	W3A	W3B	W4	W5	W4	W5
6'10"	2085	2085	2109	1985	2049	2225	2245	2221	2231
7'0"	2134	2134	2158	2034	2098	2274	2294	2270	2280
7'3"	2210	2210	2234	2110	2174	2350	2370	2346	2356
7'5"	2261	2261	2285	2161	2225	2401	2421	2397	2407
7'6"	2286	2286	2310	2186	2250	2426	2446	2422	2432
8'0"	2438	2438	2462	2338	2402	2578	2598	2574	2584
9'0"	2743	2743	2767	2643	2707	2883	2903	N / A	N / A
10'0"	3048	3048	3072	2948	3011	3188	3208	N / A	N / A

W1 = Internal Frame Width

W2 = Minimum Brickwork Opening

W3A = Clear Drive through Width - Above the Crank of the Pivot Arm

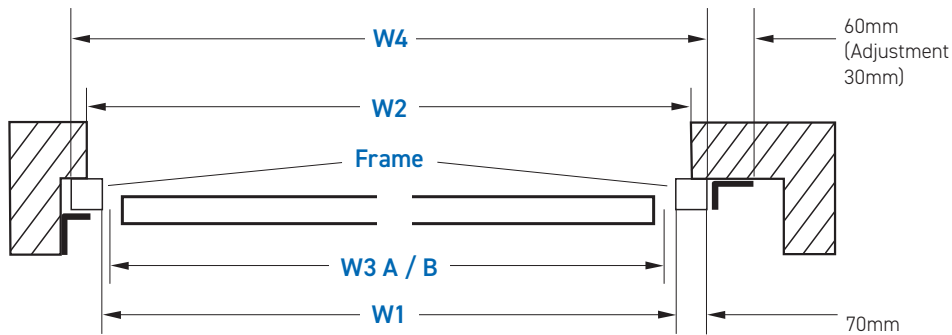
W3B = Clear Drive through Width - Below the Crank of the Pivot Arm

W4 = External Frame Width

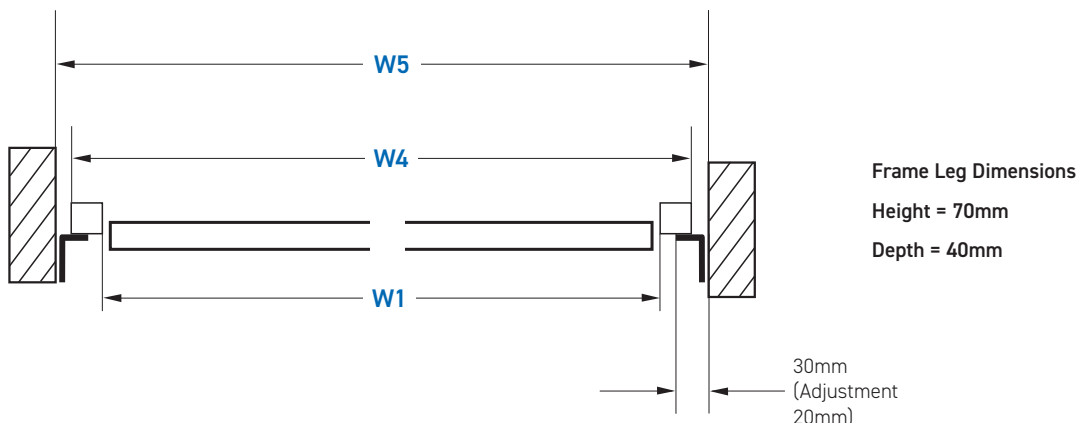
W5 = Recommended Brickwork Opening Width

NOTE When the Side Wall is between 400 and 750mm away from the opening aperture then an additional bracing kit is required to support the Rear Spacer Bar

FITTING BEHIND THE OPENING



FITTING WITHIN THE OPENING



DOUBLE UP AND OVER GARAGE DOORS RETRACTABLE GEAR TYPE



STANDARD DOOR HEIGHTS

Door height			=H1+68	=H1	=HW-150			
Imp	mm	H1	H2	H3	H4	H5	R	C
6'6"	1981	1981	2048	1981	1831	1870	900	60
7'0"	2134	2134	2202	2134	1984	1870	1040	210
7'6"	2286	2286	2354	2286	2136	1870	1180	360
8'0"	2438	2438	2506	2438	2288	1870	1320	510

H1 = Internal Frame Height

H2 = External Frame Height

H3 = Minimum Brickwork Opening Height

H4 = Clear Drive Through Height (Internal Handle is the lowest point)

H5 = How far the door extends into the garage

R = The arc of travel of the bottom edge of the door

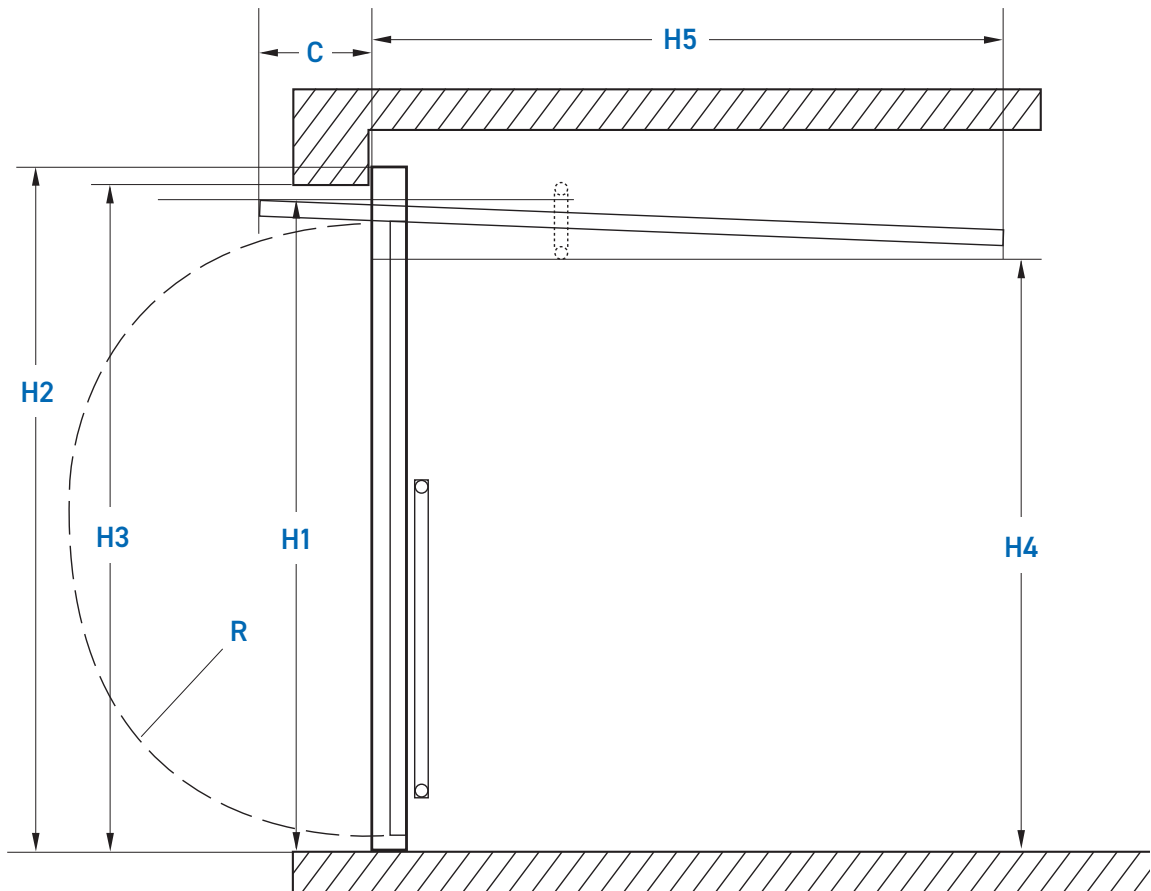
C = The canopy (How far the door protrudes from the frame front, Assumes 70mm thick frame)

K = Kick up = 43mm

Frame Header Dimensions

Height = 68mm

Depth = 75mm



DOUBLE UP AND OVER GARAGE DOORS. RETRACTABLE GEAR TYPE

STANDARD DOOR WIDTHS

Door width		Common dimensions				70mm Wide Frame	
		=W1+24	=W1-120	=W1-50	=W1+140	=W1+150	
Imp	Mm	W1	W2	W3A	W3B	W4	W5
8'0"	2438	2438	2462	2318	2388	2578	2588
10'0"	3048	3048	3072	2928	2998	3188	3198
12'0"	3657	3657	3682	3537	3607	3797	3807
14'0"	4267	4267	4291	4147	4217	4407	4417
16'0"	4877	4877	4901	4757	4827	5017	5027

- W1 = Internal Frame Width
- W2 = Minimum Brickwork Opening
- W3A = Clear Drive through Width Above the Bottom of the Pivot Arm
- W3B = Clear Drive through Width Below the Bottom of the Pivot Arm
- W4 = External Frame Width
- W5 = Recommended Brickwork Opening Width

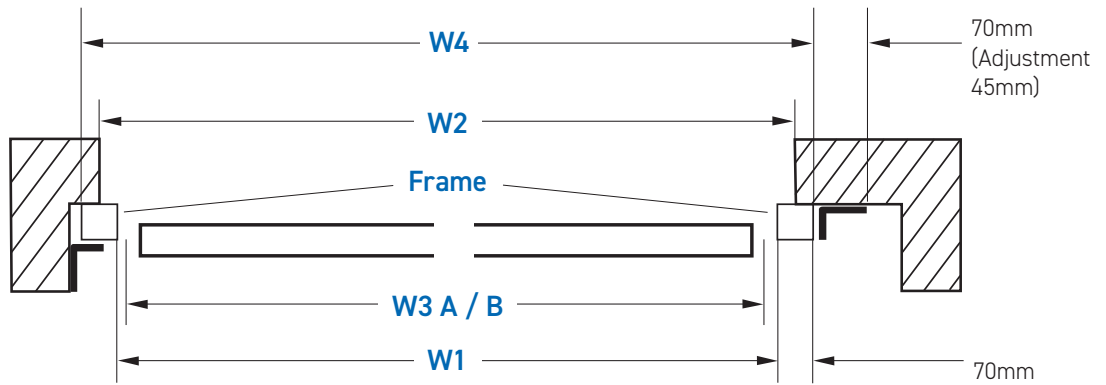
NOTE - The Bottom of the Pivot Arm when the door is open is
 820mm from the floor on 1981mm high doors
 970mm from the floor on 2134mm high doors
 1120mm from the floor on 2286mm high doors

Frame Leg Dimensions

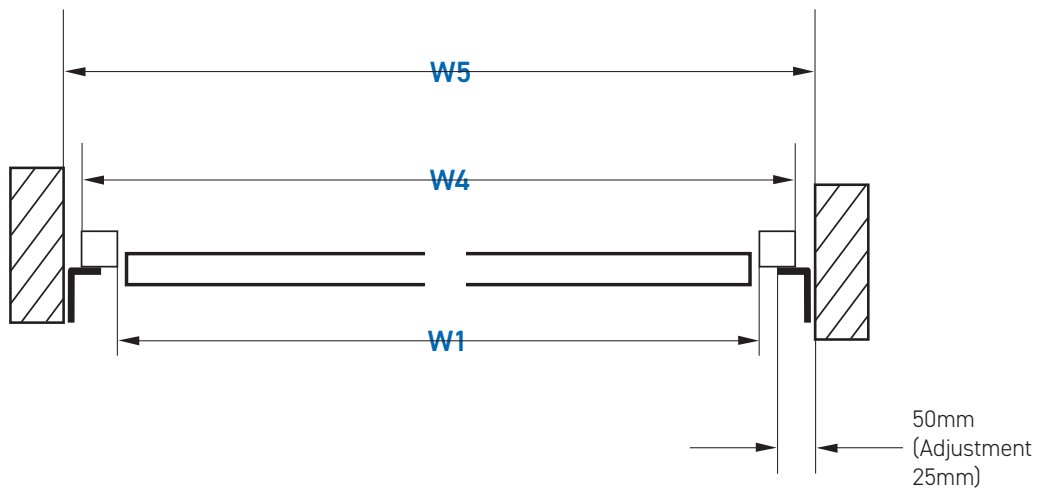
Width = 68mm

Depth = 75mm

FITTING BEHIND THE OPENING



FITTING WITHIN THE OPENING



DUOPORT SIDE HINGE DOOR GEAR TYPE



STANDARD DOOR WIDTHS

Door width			=W1+144	=W1+154	=W1-116
imp	mm	W1	W2	W3	W4
6'6"	1981	1981	2125	2135	1865
7'0"	2134	2134	2278	2288	2018
7'6"	2286	2286	2430	2440	2170
8'0"	2438	2438	2582	2592	2322

W1 = Internal Frame Width

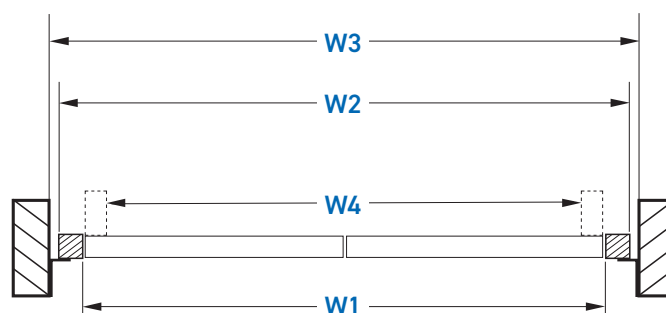
W2 = External Frame Width

W3 = Recommended Brickwork Opening Width – Fitting between the brickwork

W4 = Clear Drive through Width – Door Open to 90 Degrees
Frame Leg Dimensions – 72mm Wide – 70mm Deep

Order by Brickwork Opening Dimensions or External Frame Size Required

Fitting within the opening



STANDARD DOOR HEIGHTS

Door Height			=H1+72	=H1+77	=H1
imp	mm	H1	H2	H3	H4
6'6"	1981	1981	2053	2058	1981
7'0"	2134	2134	2206	2211	2134
7'6"	2286	2286	2358	2363	2286

H1 = Internal Frame Height

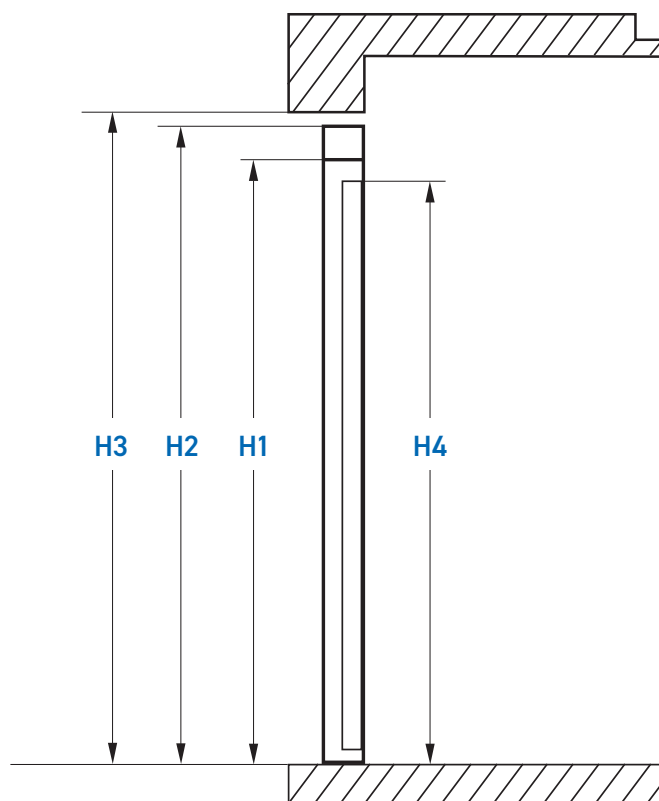
H2 = External Frame Height

H3 = Minimum Brickwork Opening Height

H4 = Clear Drive through Height (Internal Weather Seal is the lowest point)
(Door stay if fitter are lower locally by 60mm)

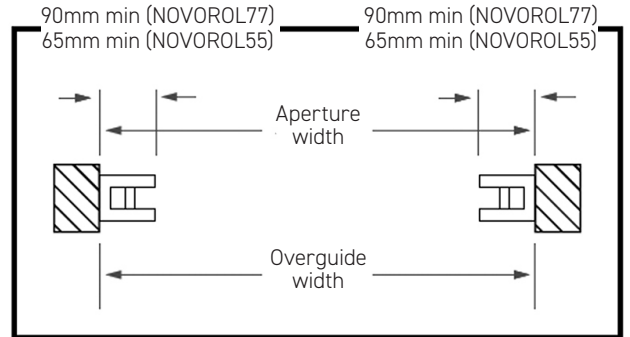
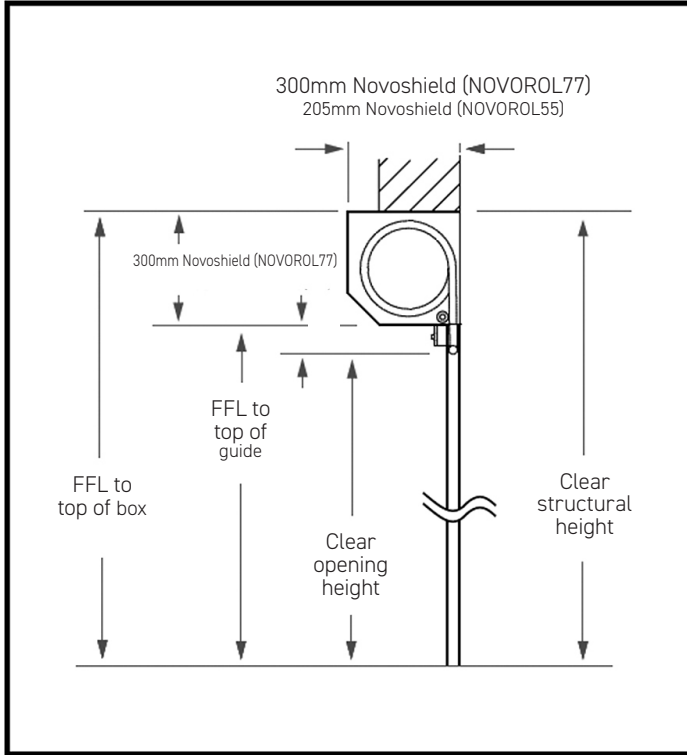
Frame Header Dimensions – 72mm High – 70mm Deep

Floor Threshold - 19mm High

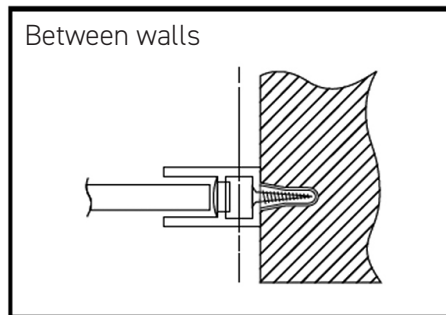
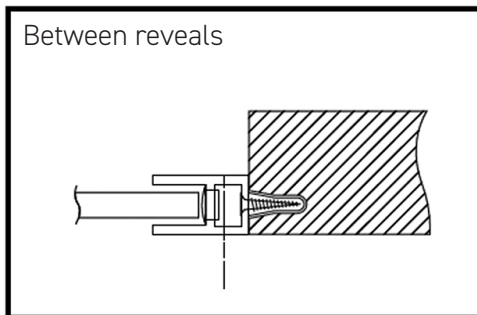


INSULATED ROLLER GARAGE DOORS

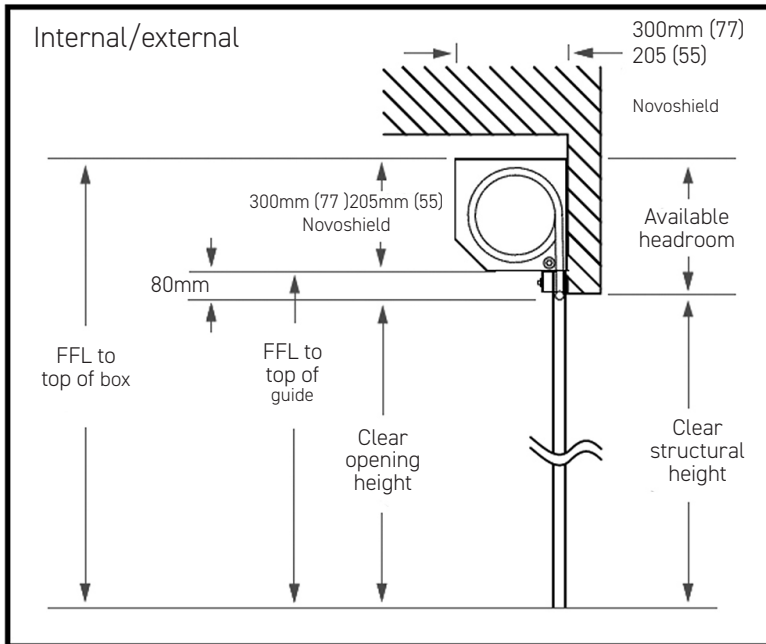
FITTING WITHIN THE APERTURE



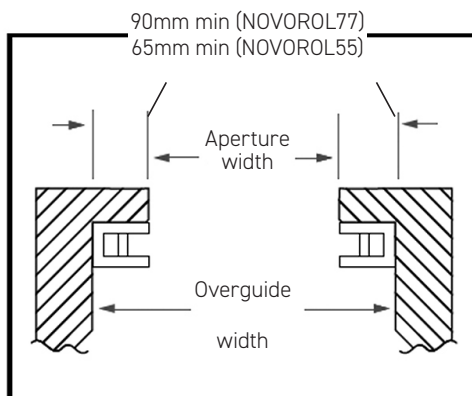
Fixing options



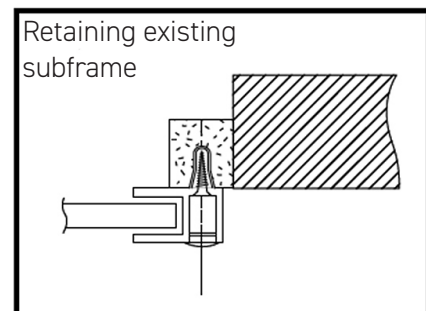
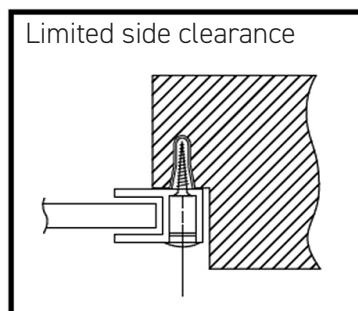
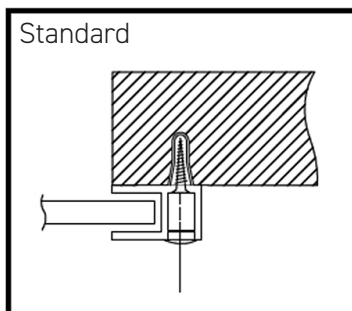
FITTING ONTO THE APERTURE



SIDE CLEARANCE: 90mm (65mm) is required only if the guides are to be fully concealed. A minimum of 40mm (30mm) is required to give sufficient room for fixing but a portion of the guide tracks (white as standard) will be visible.



FIXING OPTIONS





Intelligent Door Solutions

WARRANTY INFORMATION

The purchaser is granted a warranty covering the safe and reliable functioning of the door. For full warranty details please see our website www.novoferm.co.uk.

PRICES

- All orders are accepted on the understanding that the goods will be subject to the price ruling at the time of delivery, unless other terms are specifically agreed.
- All prices are in £ sterling and exclude VAT. UK mainland delivery is included to the buyer's trading address - delivery to site is possible (subject to access). See delivery details below.
- A 25% handling charge applies to all unwanted items on standard stock items only. Items must be returned unopened and in an unused condition.
- All returns are subject to acceptance by the manufacturer of the garage doors.
- All doors are bespoke and made to order. Your right to cancel is not available on non-standard made to order doors.

DELIVERY CHARGES TO SITE

All doors

Delivery charges per door nett for Mainland England, Scotland and Wales only*. 1 Door = £75.00. 2 Doors = £125.00. 3 Doors + = free of charge * Northern Ireland, Channel Islands, Isle of Man, and export delivery - please contact our customer services for further details. *Additional charges may be applied to remote rural locations - please contact our customer services for further details. Carriage charges and VAT to be added to all prices.

Your Novoferm Stockist

Novoferm UK

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T: 01582 563777
E: info@novoferm.co.uk
www.novoferm.co.uk

SPECIFICATION

- Due to the progressive outlook of the manufacturer we reserve the right to alter specifications to design and manufacture without notification.
- All specifications and details are correct at the time of publication, errors and omissions excepted.

ALL DOORS

Colour Match

- Pairs of doors should be ordered together to obtain the best colour match, bearing in mind the limitations of the materials used in the construction.
- Dark colours on garage doors which are exposed to direct sunlight for a considerable period of time should be avoided as they will fade more noticeably due to the strong sunlight.
- All colour samples depicted in this brochure are as close to the original manufacturer's colours as possible. Garage doors supplied may vary in colour from the brochure representation due to printing processes.

TIMBER GARAGE DOORS

- Since wood is a natural product any finish may vary due to the natural nature of the wood grain so we **cannot guarantee** an exact match when ordering a matching set.

SIZE VARIATIONS

- As the size of a door changes in height and/or width, the panel frequency and profile can change, therefore doors of the same style but of different sizes can display a significant difference in appearance.

CLEARANCES

- All doors require operating clearances, i.e. the gap between the door panel and frame opening, these are inbuilt during manufacture and should not be reduced by means of infills, or draught proofing.

DEFLECTION

- When in the open position, all doors will display a level of vertical deflection or 'sag' across the width of the panel.
- Individual manufacturers' specifications should be consulted for exact tolerances.

CARE AND MAINTENANCE

- In order to get the best from your door, and for your door to be fully covered by the Guarantee, there are some things you will need to do throughout the guarantee cover period and throughout the life of the door in order to maintain and care for your garage door. Please see our website for full details on how to do this www.novoferm.co.uk