

D4 & D6 Sash Balance Installation

Covers D4 Standard, D6 Standard, D4 Version 2 (V2), D6 Version 2 (V2)

It is recommended that the sashes are glazed and painted to ensure both sashes slide freely in the frame.

Preparation of the window

1) Grooves to house balances can be in either frame jambs or in sash stiles, **rounded or square** and must be of minimum dimensions shown in (Figs 1 & 2).

Bottom of sashes should be prepared to suit balance foot attachment. Cut-outs should be sufficient depth to receive attachments and screw heads.

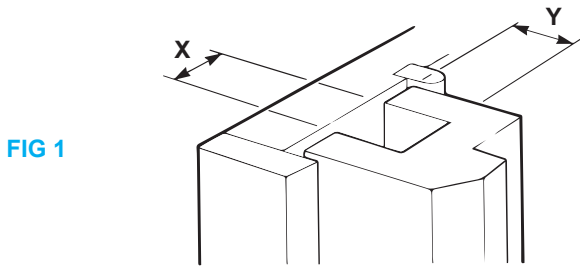


FIG 1

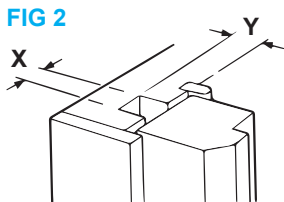


FIG 2

Dimensions (min)	
X	Y
17mm	17mm

FIG 3 Bottom rail preparation for standard foot

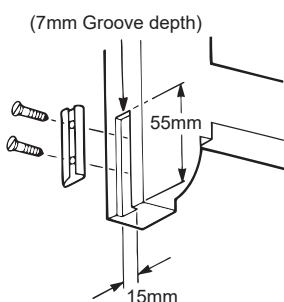
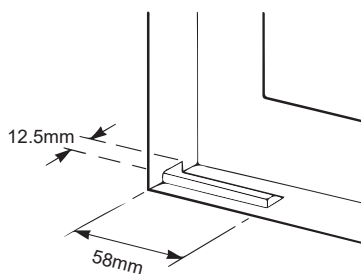


FIG 4 Stile preparation for channel fitting

FIG 5 Bottom rail preparation for standard foot - Grooved stile

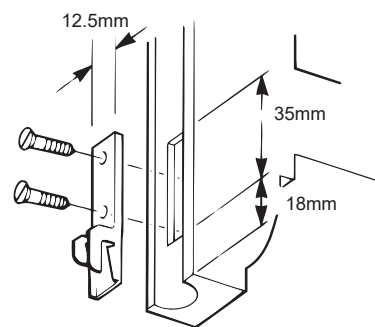
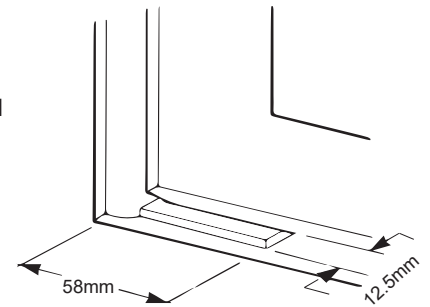


FIG 6 Grooved stile preparation (fix foot attachment prior to fitting sash into frame)

Checking Balances

2) It is important that the balances used are suitable for the weight of the sash. The size of balance you have (D4 or D6) will be printed on the tube (Fig 7).

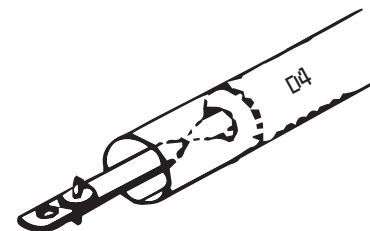


FIG 7

When balances are to be used with timber side and bottom fix brackets ensure black washers supplied are fitted either side as shown (A).

D4	Up to 13.6kg (29lbs)
D6	13.6kg (30lbs) - 18.1kg (39lbs)

Installing Balances

3) It is important to note that short balances are used for top sash and long balances for bottom sash, assuming sashes are of equal height.

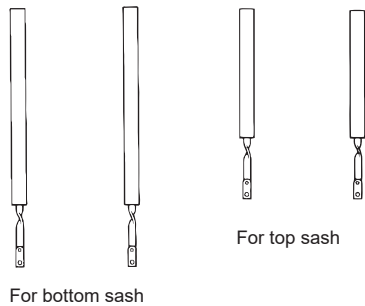


FIG 8

When sashes are of equal size and in lowered position, the balances can easily be inserted into the grooves (Fig 9). In the case of unequal sized sashes, it is possible to slightly bow the balance for insertion into the groove of the larger sash. In some cases larger sashes may have been removed.

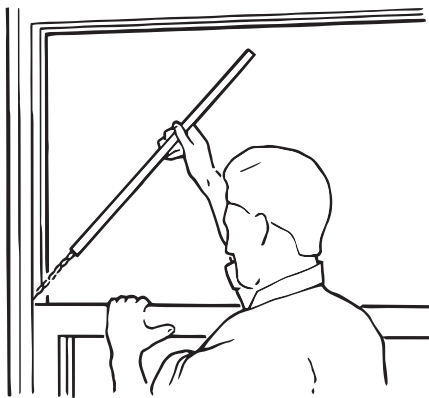


FIG 9

Fix top balances to the frame jamb at the centre of the groove and tighten up against the frame head, using drive screws supplied. (Fig 10).

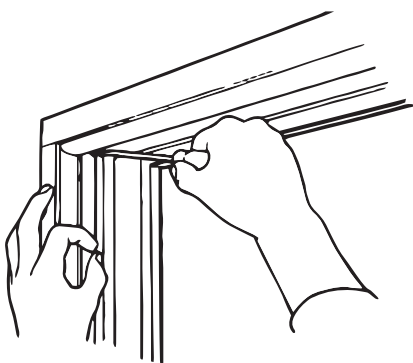


FIG 10

Fixing Travel Stops

4) Fix travel stops provided, the shorter one at the top of the bottom sash run. (Fig 11)

In the case of non-standard applications special stops may be required. In such cases suitable longer timber stops should be substituted for the standard metal type supplied. These should be long enough to prevent the balances from being extended by more than twice its tube length.

IMPORTANT: Failure to fit travel stops may result in balance failure.

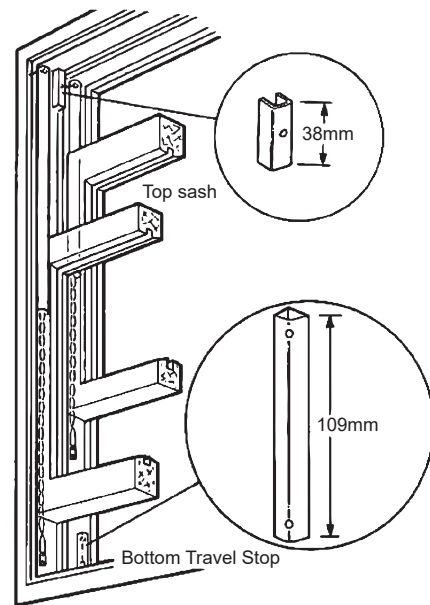


FIG 11

Fixing Foot Attachments

5) Raise the sashes as high as possible and prop up. Fix attachment ensuring that spiral rod is located between sides of fitting

FIG 12 Secure standard foot with screws provided

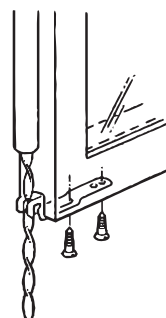
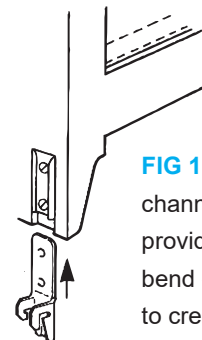


FIG 13 Firstly fix channel with screws provided, then bend end of fitting to create interference fit, insert into channel and tap home



Balancing Sashes - Adjusting Balance

6) Thread the spiral rod upwards into the tube by revolving anti-clockwise, left hand turn as viewed from underside (**Fig 14**). Using the hook tool provided, pull the spiral rod downward about 200mm (8inches) without rotating. Now apply adjustment turns in anticlockwise direction (**Fig 15**). Repeat adjustment for other balance, remove prop and the try sash action. Correct balancing is achieved when sash is just held in its highest position. If necessary make adjustment turns in either direction on both balances obtain this condition. **Do not over tension.**

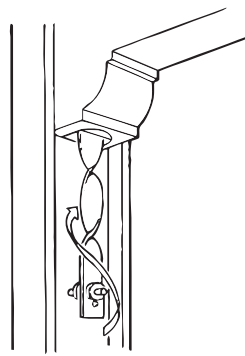


FIG 14

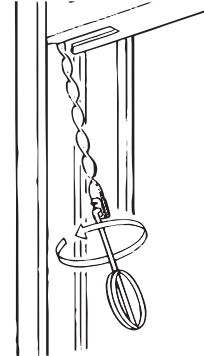


FIG 15

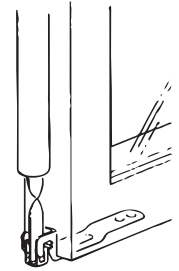


FIG 16

Adjustment charts

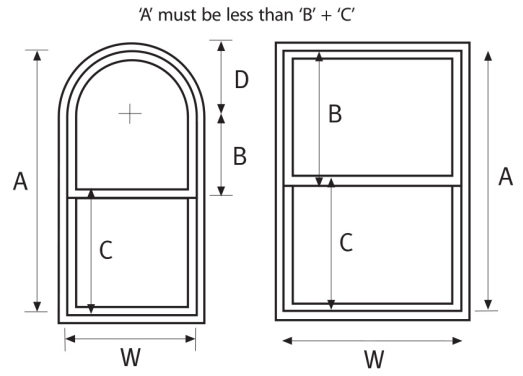
D4												
		Sash weight										
Tube length Inches	Kgs	4.5	5.4	6.4	7.3	8.2	9.1	9.9	10.9	11.8	12.7	13.6
	Lbs	10	12	14	16	18	20	22	24	26	28	30
10		1	1	1	1	2	2	2	3	3	3	3
12		1	1	1	1	2	2	2	3	3	4	4
14		1	1	2	2	2	3	3	3	4	4	4
16		1	1	2	2	3	3	4	4	4	5	5
18		1	1	2	3	3	4	4	4	5	5	6
20		1	1	2	3	3	4	4	4	5	5	6
22		1	1	2	3	3	4	4	4	5	5	6
24		1	1	2	3	3	4	4	4	5	5	6
26		1	1	2	3	3	4	4	5	5	6	6
28		1	2	2	3	3	4	4	5	5	6	7
30		1	2	2	3	4	4	4	5	5	6	7
32		1	2	2	3	4	4	4	5	5	6	7
34		1	2	2	3	4	4	5	5	6	7	8
36		1	2	3	3	4	4	5	6	7	7	8
38		1	2	3	3	4	4	5	6	7	8	9
40		2	2	3	3	4	5	5	6	7	8	9
42		2	2	3	4	4	5	6	7	8	8	9
44		2	2	3	4	4	5	6	7	8	9	9
46		2	2	3	4	4	5	6	7	8	9	10
48		2	2	3	4	4	5	6	7	8	9	10

D6						
		Sash weight				
Tube length Inches	Kgs	14.5	15.4	16.3	17.2	18.1
	Lbs	32	34	36	38	40
14		2	2	2	3	3
16		2	2	3	3	4
18		2	3	3	4	4
20		2	3	3	4	4
22		2	3	3	4	4
24		3	3	3	4	5
26		3	3	4	4	5
28		3	3	4	4	5
30		3	4	4	5	5
32		3	4	4	5	5
34		4	4	5	5	6
36		4	4	5	5	6
38		4	5	5	6	6
40		4	5	5	6	6
42		5	5	6	6	7
44		5	5	6	6	7
45		5	6	6	7	7
46		5	6	6	7	8
47		6	6	7	7	8
48		6	6	7	8	8

Contact Name: _____
 Company: _____
 Address: _____







 Tel No: _____ Postcode: _____
 Email: _____
 Delivery Address (if different from above): _____

 Postcode: _____



DETAILS										
WINDOW QTY	A	W	B	C	D	SIZE OF HORN	GLASS TYPE	GLAZED WEIGHT TOP	GLAZED WEIGHT BOTTOM	CUSTOMER REFERENCE
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
PLEASE TICK AS APPROPRIATE						SASH BALANCE ORDER <input type="checkbox"/>	SASH BALANCE QUOTATION <input type="checkbox"/>	WEIGHT ORDER <input type="checkbox"/>	WEIGHT QUOTATION <input type="checkbox"/>	

PRODUCT CODE	DESCRIPTION	QUANTITY

6 MM RED SPOTTED CORD	8MM RED SPOTTED CORD	6MM WAXED CORD	8MM WAXED CORD	6MM NYLON CORD	8MM NYLON CORD
					
QUANTITY REQUIRED	QUANTITY REQUIRED	QUANTITY REQUIRED	QUANTITY REQUIRED	QUANTITY REQUIRED	QUANTITY REQUIRED
50m	50m	15m 50m 100m	15m 50m 100m	20m 50m 100m	20m 50m 100m