



Dempsey Dyer Ltd

## **Section 5 - Method for Frame Preparation and Positioning**

***Spiral Sash Slider***

***Timber Tilt***

***Box Sash Slider***

## 5. Sash Sliders Installation

Read Section 1, Industry Standard, Survey, Design & Installation and note the following points which are significant to the installation of sash sliders.

### 5.1 Dempsey V Sash Slider on Spiral Balances



5.1.1 Do not open the sash slider sashes when they are unglazed – the balances are designed to operate with the weight of the glass as well as the timber. Without the weight of the glass, the slider will “slam” into the open position, potentially damaging both spring balances and could cause injury to the person opening the sash.

5.1.2 Take care that the sash sliding window is perfectly square before fixing it. Otherwise the slider cannot operate smoothly or seal correctly on the gaskets. For example, if the frame legs are fixed in a concave/ convex line (i.e. Not straight), or in twist, the sliding operation will be stiff and could damage the balances

#### 5.1.3 Fixing methods into reveal:

- Through fix through liner, countersink and fit timber plug taking care not to defect/bow the liner
- Fix using fixing cleats/straps.



#### 5.1.4 Fixing method into check:

Recommend screw fix 50mm x 50mm treated timber battens to the edge of the external liner of outer frame and then fix the 50mm x 50mm battens to masonry.

#### 5.1.5 Site Glazing

If frames are ordered unglazed or part glazed or are part glazed because of manual handling requirements, see section 10 - Glazing Methods.

## 5.1.6 Adjustment to Spiral Sash Slider Balances

1. Mount the balances into the outer frame, do not over-tighten the screws as this will distort the balance.
2. Attach the tensioning tool to the hole in the bottom of the balance rod. A firm grip of the tensioning tool is required at all times when in use. Do not let the balance rod rotate as this will result in a loss of tension.

Note: To avoid damaging the balance, it is essential that it is not distorted whenever fitting, connecting or tensioning balances. No side loading should be applied as this will permanently affect the balance.

3. To engage the balance rod in the sash bracket, the balance should be extended down by means of the tensioning tool until the pins of the balance bracket can be fully engaged in the hook of the sash bracket. The tensioning tool can now be disengaged. If fitting Spirex or Spiralift see below for tensioning details.

4. Tensioning for SPIREX or SPIRALIFT balances.  
To tension the balance it is necessary to apply the appropriate number of turns, in a clockwise direction, shown on the job sheet or tensioning chart, DATASHT-00086.  
Always tension both balances identically.  
During tensioning, position the end of the rod approx. 50mm down from the bottom of the aluminium tube, once tensioned insert the pins into the hook on the sash bracket.

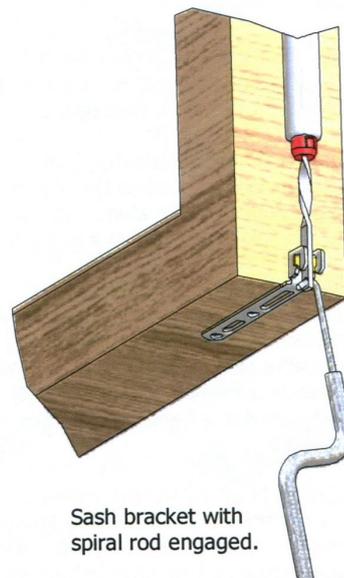
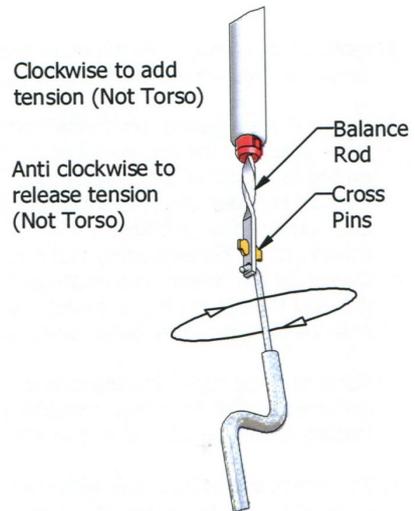
5. Tensioning ULTRALIFT balances.  
Ultralift balances are pre-tensioned when manufactured & therefore should not normally require tensioning on the window.  
As a feature of their design the tension can be increased or decreased by a maximum which equals 1kg sash weight.  
This adjustment is a maximum & any further adjustment may damage the balance.

If adjustment of the Ultralift balance is required, attach the tensioning tool to the hole in the bottom of the balance & remove the rod from the sash bracket. Allow the balance bracket to retract to within approx. 50mm of the end of the tube.

To release tension, rotate the balance one turn anti-clockwise, and no further.

To add tension, rotate the balance one turn clockwise, and no further. Reconnect the balance rod to the sash bracket & check the operation of the sash.

Always tension both balances equally.



All of the information shown on this data sheet was correct at the time of issue. All information however is subject to change and therefore it is advisable to check with Caldwell Hardware to ensure that you have the latest issue level.

## 5.2 Dempsey V Timber Tilt on Spiral Balances



5.2.1 Do not open the sash slider sashes when they are unglazed – the balances are designed to operate with the weight of the glass as well as the timber. Without the weight of the glass, the slider will “slam” into the open position, potentially damaging both spring balances and could cause injury to the person opening the sash.

5.2.2 Take care that the sash sliding window is perfectly square before fixing it. Otherwise the slider cannot operate smoothly or seal correctly on the gaskets. For example, if the frame legs are fixed in a concave/ convex line (i.e. Not straight), or in twist, the sliding operation will be stiff and could damage the balances

### 5.2.3 Fixing methods into reveal:

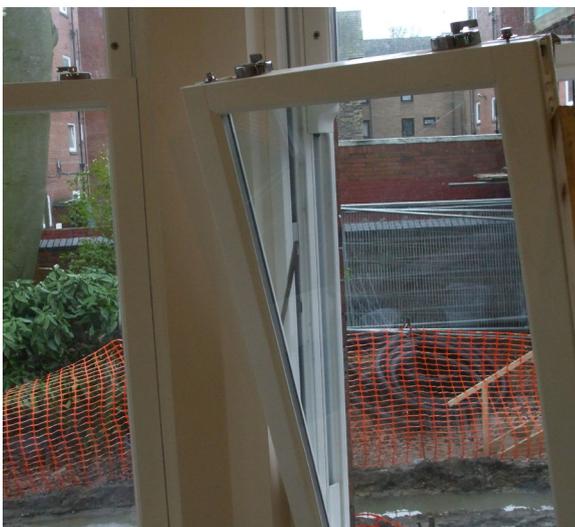
- Through fix through liner, countersink and fit timber plug taking care not to defect/bow the liner
- Fix using fixing cleats/straps.

### 5.2.4 Fixing method into check:

Recommend screw fix 50mm x 50mm treated timber battens to the edge of the external liner of outer frame and then fix 50mm x 50mm battens to masonry.

### 5.2.5 Site Glazing

If frames are ordered unglazed or part glazed or are part glazed because of manual handling requirements, see section 10 - Glazing Methods.



## 5.2.6 Adjustment to Timber Tilt on Spiral Balances

1. Mount the balances into the outer frame, do not over-tighten the screws as this will distort the balance.
2. Attach the tensioning tool to the hole in the bottom of the balance rod. A firm grip of the tensioning tool is required at all times when in use. Do not let the balance rod rotate as this will result in a loss of tension.

Note: To avoid damaging the balance, it is essential that it is not distorted whenever fitting, connecting or tensioning balances. No side loading should be applied as this will permanently affect the balance.

3. To engage the balance rod in the sash bracket, the balance should be extended down by means of the tensioning tool until the pins of the balance bracket can be fully engaged in the hook of the sash bracket. The tensioning tool can now be disengaged. If fitting Spirex or Spirallift see below for tensioning details.

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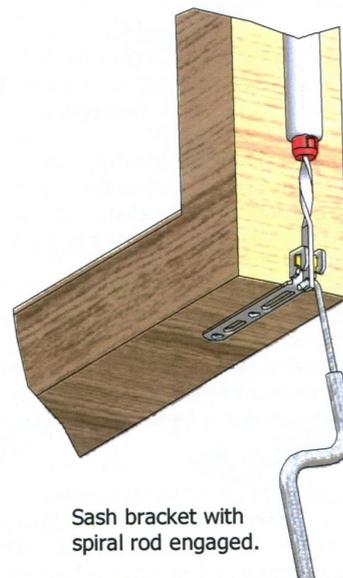
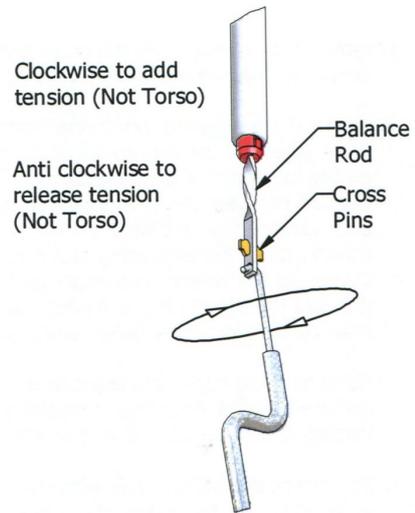
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To release tension, rotate the balance one turn anti-clockwise, and no further.

To add tension, rotate the balance one turn clockwise, and no further. Reconnect the balance rod to the sash bracket & check the operation of the sash.

Always tension both balances equally.



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## 5.3 Dempsey V Box Sash Slider



5.3.1 Do not open the sash slider sashes when they are unglazed – the balances are designed to operate with the weight of the glass as well as the timber. Without the weight of the glass, the slider will “slam” into the open position, potentially damaging both spring balances and could cause injury to the person opening the sash.

5.3.2 Take care that the sash sliding window is perfectly square before fixing it. Otherwise the slider cannot operate smoothly or seal correctly on the gaskets. For example, if the frame legs are fixed in a concave/ convex line (i.e. Not straight), or in twist, the sliding operation will be stiff and could damage the balances

### 5.3.3 Fixing Methods

There are several fixing methods into reveal and check dependent upon the check design or/and size. As with all installations, the final decision is made by your surveyor. Some options are:

#### 5.3.4 Fixing method into reveal:

- Fix using cleat/straps screwed to the edge of the side jamb linings and to the edge of the head and cill side linings if required for rigidity.
- Timber Battens (50mm x 50mm) can be fixed to the edge of the external or internal jamb liner and then through the batten to the structural opening.

#### 5.3.5 Fixing method into check

- Timber battens 50mm x 50mm secured to the edge of the external jamb linings can be used dependent upon the dimension of the “check opening”.