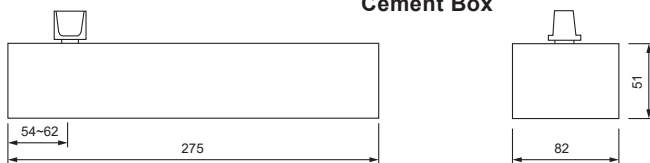
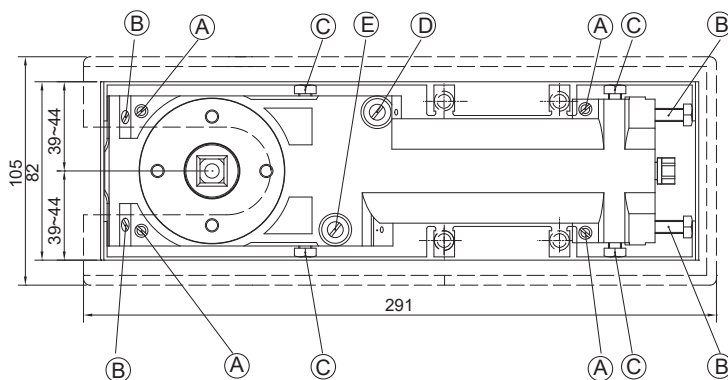


BS EN1154:1997+ A1:2002					
3	8	4	1	1	3
 www.synergyhardware.co.uk		 2812 CPR-AD5281		 16	
		 1121-CPR UK-AD7838		 21	

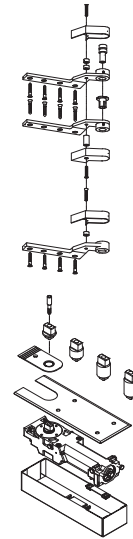
Synergy floor springs are supplied in component form, depending on whether the door is double swing or single swing. All Synergy floor spring mechanisms are for use on both double or single swing doors, as it is the strap sets that are made specifically for double or single action doors.

Power Size	Max. Door Width	Max. Door Weight	Full Turns Of Spring Adjusting Nut
EN1	800mm max.	20kg	-5
EN2	900mm max.	40kg	-2
* EN3	950mm max.	60kg	0
EN4	1100mm max.	80kg	+3

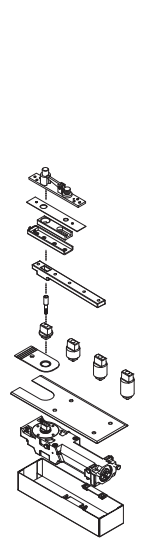
\* Factory preset  
(Maximum door weight capacity 150kgs which is outside of EN1154 testing classification.)



Single action floor spring  
Component View



Double action floor spring  
Component View

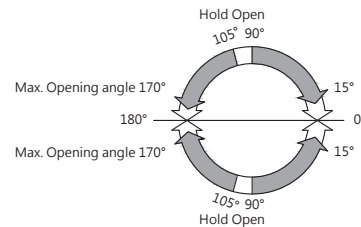


Single or Double action strap set.

Mechanism cover plate.

Floor spring mechanism

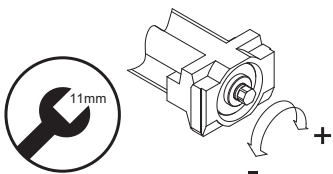
Cement box.



- (A) Height adjustment (4 screws)
- (B) Forward / Backwards adjustment (4 screws)
- (C) Left / Right adjustment (4 screws)
- (D) Closing speed adjustment from 170° ~ 15°.
- (E) Latching speed adjustment from 15° ~ 0°.

### Adjustment Details

- Adjustment between door and frame can be made after loosening screws (B) and (C).
- Adjustment of door height can be made after loosening screws (B) and (C) and adjusting screw (A).
- Adjustment of closing speed is via the 2 regulating valves. (D) controls the closing range 170° ~ 15°. (E) controls the closing range 15° ~ 0°. FAST SLOW



**PLEASE NOTE** adjustment should not exceed 10 turns from the minimum setting otherwise the unit may be damaged and invalidate its warranty.

## Installation and Maintenance Instructions:

### Warning

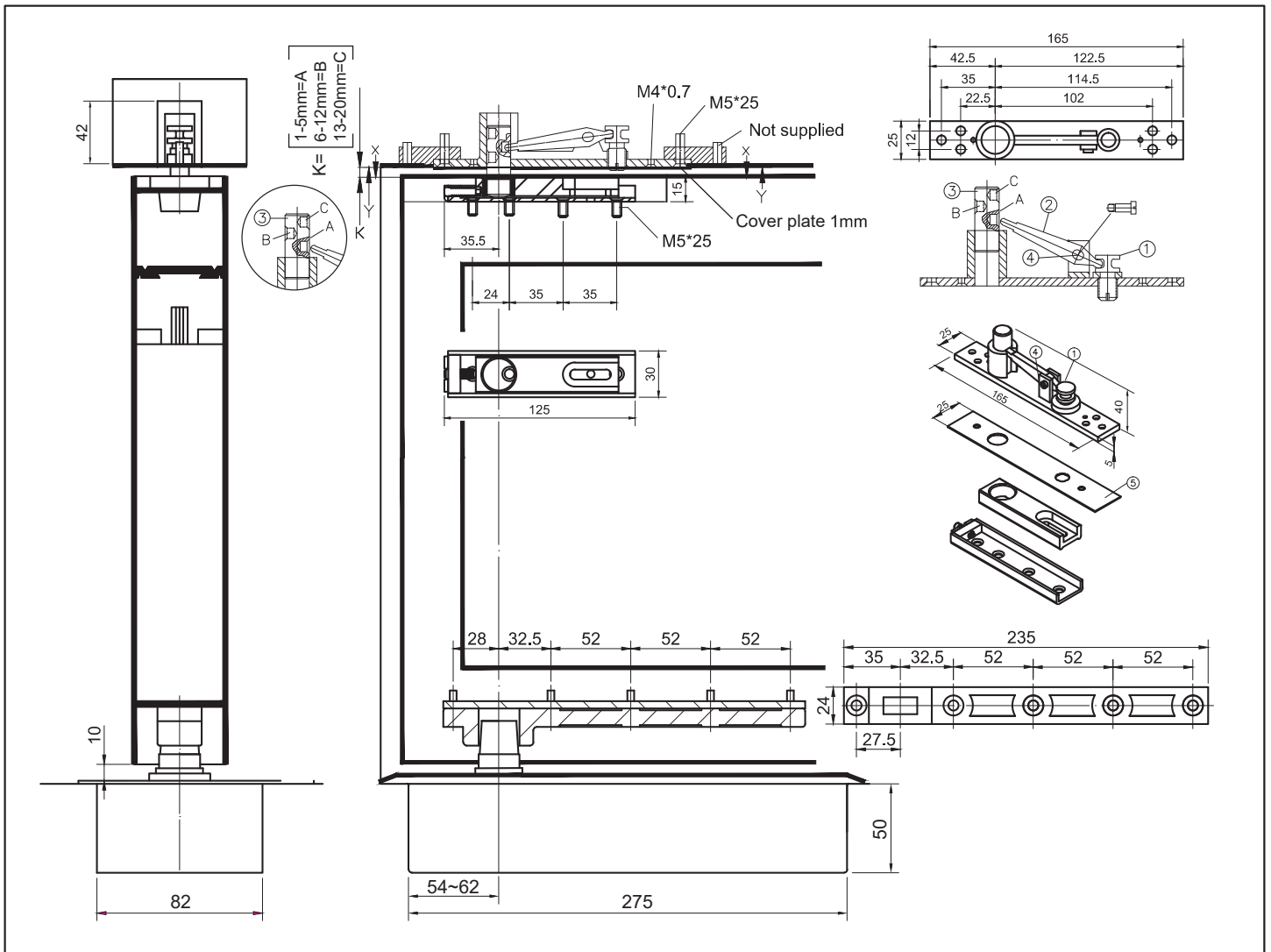
1. Please note the minimum power size requirement for fire / smoke door assemblies is 3 as required by Approved Document B.
2. Do not install mechanical hold open devices on fire / smoke door assemblies.
3. Take care not to exceed the maximum opening angle as detailed above.
4. Care and attention must be taken when adjusting any of the units control valves to avoid damage through over adjustment.
5. All Synergy Door Closer units are sealed for life and the internal components assembled under high load, therefore, tampering with the mechanism is to be strictly avoided.

### After Installation

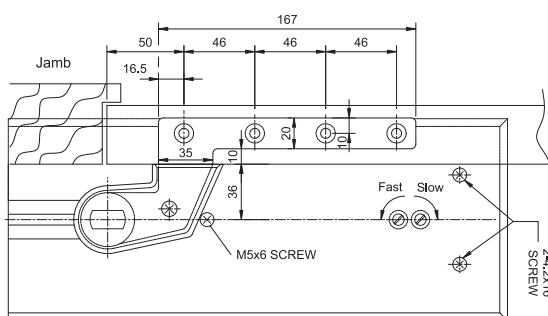
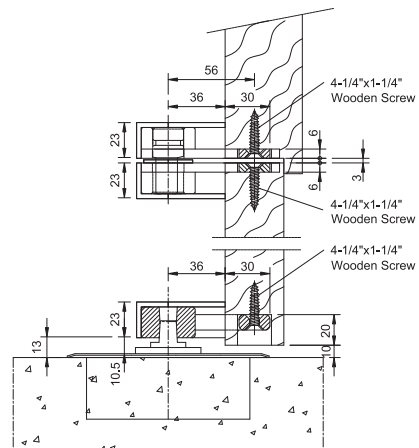
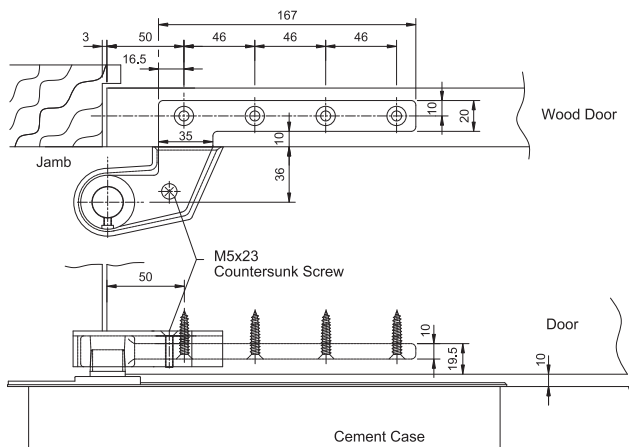
1. When the closer operates to close the door from its maximum opening position, it should ensure the lock latchbolt and any seals are overcome and the leaf returned into its frame.
2. When the door is slightly open and the latch bolt resting against the strike, release the door to ensure the leaf fully closes into its frame.

### Maintenance

1. Once the unit has been correctly fitted it is recommended that periodic checks (every six months) are carried out to ensure all fixings are tight and the door closes freely and positively into the frame, without slamming.
2. A light oil lubricant (non-graphite) should be applied to the moving joints and exposed pivot points.



### Top pivot



### Additional adjustments:

Support the weight of the door with a wedge and loosen the machine screw in the door portion of the top centre. Rotate the bushing as necessary, and then re-secure with the screw. The screw must always locate into a groove in the bushing.

Turn the neutral (0) position to  
 A = pulls door into frame  
 B = increases gap at hanging stile (T)  
 C = pulls door out of frame

-1mm  
 +2mm  
 +1mm

