TRO TECHNIK

VSD35-V3 AND VSD50- V3 SPRING CLIP

INSTALLATION INSTRUCTIONS

As standard the VSD slot diffuser will come with spring clips that fix the diffuser to the plenum.







- 2) Spring Clip
- 3) Adjuster
- 4) Retainer plate
- 5) Adjuster screw
- 6) Anti rotation post
- 7) Fixing Screw

FITTING THE CLIPS TO THE EXTRUSION

1 & 2 Slot Diffusers;

Each diffuser section will be supplied with 2x spring clip assy's for supporting the diffuser within the false ceiling. The spring clip assy's. should be placed at each end of the diffuser (opposite sides), approximately 100mm in from each end by locating the retainer plate on the outer extrusions.

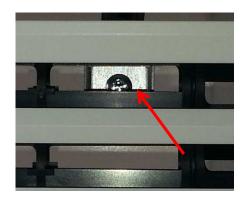
3 & 4 Slot Diffusers;

Each diffuser section will be supplied with 4x spring clip assy's. The spring clip assy's. should be placed at each end of the diffuser (on each corner), approximately 100mm in from each end by locating the retainer plate on the outer extrusions.

2x additional spring clip assy's are provided with each diffuser section (1, 2, 3 & 4 slot) to allow fixing within TROX supplied plenum boxes.

2. Ensure the fixing is located at the open section of the blade so that a screw driver can get clear access to the screw head from the front of the diffuser.

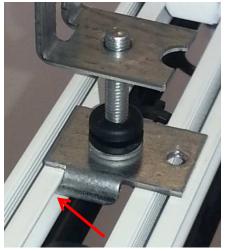




3. Check the adjuster is at the top of the adjuster screw with a gap of 25mm.



4. The retainer plate will hook under the outer extrusion so the hole lines up with the narrow channel in the adjacent extrusion. Check the position of the fixing is appropriate for the plenum it will fit into.

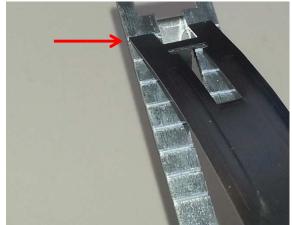


Slide the anti-rotation post onto the 30mm pan head screw and feed the screw through the hole in the retainer plate screwing the screw into the aluminium channel. This will clamp the assembly in place.



FITTING THE DIFFUSER TO THE PLENUM

6. For plenum installation the spring clip should be located in the top groove on the adjuster (Position 1)



7. Offer the diffuser up to the opening of the plenum neck and gently push the diffuser into the neck compressing the spring clips.





8. Once the spring clips pass through the neck to the wider section of the plenum the springs will extend fully preventing the diffuser falling out.



- 9. Using a battery powered screw driver set to the minimum torque, use a pozi head screw driver bit pass it through the diffuser blade to tighten the screw adjuster. This will pull the diffuser up into the plenum neck.
- !) Do not over tighten the assembly as this could cause damage.



10. Ensure the plenum neck fits inside the up stand on diffuser extrusion.



INSTALLING THE DIFFUSER IN A BOARD

When installing the diffuser without a plenum into a board product the spring clip can be used to hold the diffuser in place.

NOTE - Suitable battens should be used under each spring clip to evenly distribute the weight of the diffuser across the board and to prevent the spring clips penetrating the substrate.

The board + batten depth should be sufficient to meet the **MINIMUM** board thickness dimensions detailed on the tables overleaf in order for the spring clip to operate correctly.



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The spring clip can be relocated on the adjuster to accommodate a range of board thicknesses. Lift the spring clip out of the groove on the adjuster and slide it to the correct groove position according to the tables below.



Note

- 1) the VSD50 has 9 positions
- 2) the spring clip is supplied with the spring clip in position 1 as standard $\,$

VSD35

	Min	Max
	board	Board
Groove	thickness	thickness
Position	mm	mm
1	45	52
2	40	47
3	35	42
4	30	37
5	25	32
6	20	27
7	15	22
8	12.5	17

VSD50

	13030		
Groove Position	Min board thickness	Max Board thickness	
1	60	67	
2	55	62	
3	50	57	
4	45	52	
5	40	47	
6	35	42	
7	30	37	
8	25	32	
9	20	27	

- 11. Install the spring clip assy. as described in the 'Fitting Spring clips to the extrusion' section and follow steps 1 to5.
- 12. Offer the diffuser up to the opening in the board and gently push the diffuser through the opening compressing the spring clips.
- 13. Once the spring clips pass through the opening, the springs will extend fully preventing the diffuser falling out.
- 14. Using a battery powered screw driver set to the minimum torque, use a pozi head screw driver bit and pass it through the diffuser blade to tighten the screw adjuster. This will pull the diffuser up into the board opening.
- !) Do not over tighten the assembly as this could cause damage.



REMOVING THE DIFFUSER FROM THE PLENUM OR BOARD

15. Remove the diffuser after it has been installed by unscrewing the adjuster screw on each of the spring clips

used to hold the diffuser in place. The diffuser will need supporting from below. Unscrew the adjuster screw until the adjuster screws off the top of the screw. The diffuser will be lose and need supporting.

!) Take care that lose parts of the assembly do not fall out when lowering the diffuser.

CHECKING THE BLADE ARRANGEMENT AFTER INSTALLATION

16. Once the diffuser is installed reposition the air diffusion blades that will have been moved to allow access to the screw head.





Alignment of linear sections

1. Where multiple linear sections are required to form the overall run length, alignment pins are provided loose for fitting by the installer.



2 pins are required per joint and should be inserted into the boarder extrusion on each side of the diffuser.

Alignment pins should be installed before installing each diffuser section.



For more information about the diffuser and installation options please refer to the VSD technical leaflets available on our website.

VSD35;

http://www.troxuk.co.uk/slot-diffusers/type-vsd-35-9abfe8c0f70966ab

VSD50;

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