

WL & VCD Combination unit

Model

WL-Combi

Overview

Combination units are a ready made combination of usually a louvre and volume control damper. This makes them especially desirable when fitting costs need to be kept to a minimum, or when access to existing duct internals is not possible.

HVC Series WL-Combi combination units are normally made up a HVC-VCD or BDS, and any series of weather louvre. However any grille can be made a component of a Combi-unit, just as any louvre can.

Construction

- Fully aluminium, lightweight construction.
- Comprehensive range of compatible grilles and louvres.
- Max size of any individual unit 2900mm x 2900mm.



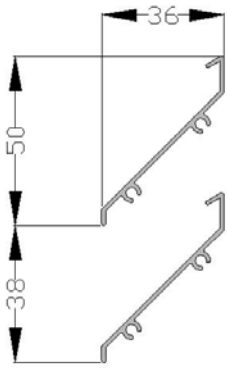
Options and accessories

HVC can supply you a standard combination unit, or a customised unit made to your exact specifications. Please see our list of options and accessories below for an overview of what we can do.

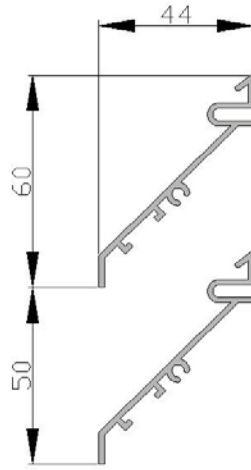
- **Bird/Insect mesh** – Either type of mesh can be fitted to the rear of a unit to prevent birds, insects or other foreign objects being able to penetrate the louvre.
- **Finishes** - HVC can polyester powder coat or nylon coat your louvre or grille to any RAL or BS colour, non painted (STD) finish is mill.
- **Blanking plate** - Blanking plates enable a portion or all of the louvre to be disabled.
- **Fixings** – Countersunk fixing holes and screws, or concealed fixing lugs are available to aid fitting.
- **Brass bushes** – Replacing the standard nylon bushes, brass bushes are recommended if the VCD is to be used to control airflow of elevated temperatures.
- **Side and blade edge seals** – To increase shut off capabilities past those of a standard Volume control damper, side and blade edge seals can be fitted.
- **Adjuster handle / spindle** – A choice of injection moulded handle (Std), locking quadrant or extended spindle for use with actuators is available to best suit application needs.
- **Actuators** – A full range of open/close, modulating, spring return, explosion proof and pneumatic actuators are available to enable remote adjustment of dampers.
- **Blades** – Four blade types can be used on a HVC VCD, please see next page for more information.
- **Spigot** – To allow easy fitment to a duct, spigots can be made in both square and circular formats.
- **VCD Frame type** – 100mm deep standard frames available in both extruded aluminium and roll formed steel, 100mm extruded aluminium offset frame for mounting into a wall also available..



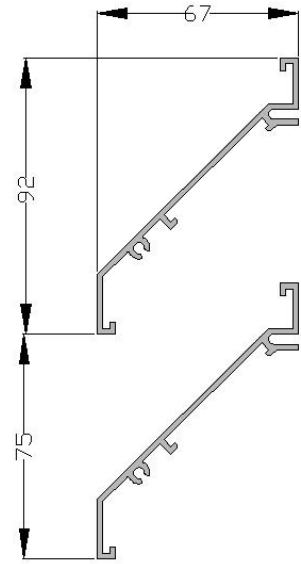
Blade profile & spacing



WL38

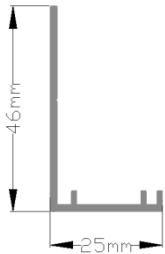


WL50



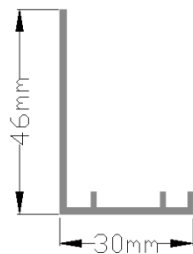
WL75

Frame types



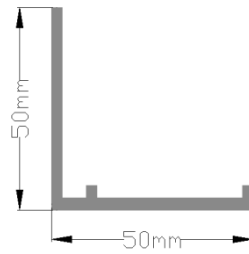
25mm flat
Flange

WL50 &
38



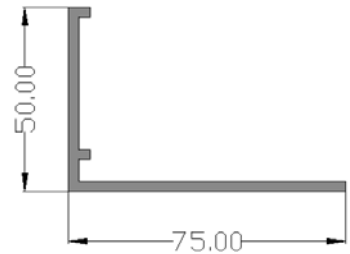
30mm flat
Flange

WL50 &
38



50mm flat
Flange

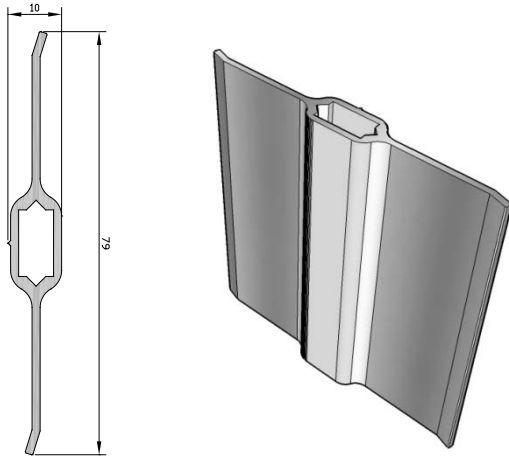
WL50 &
38



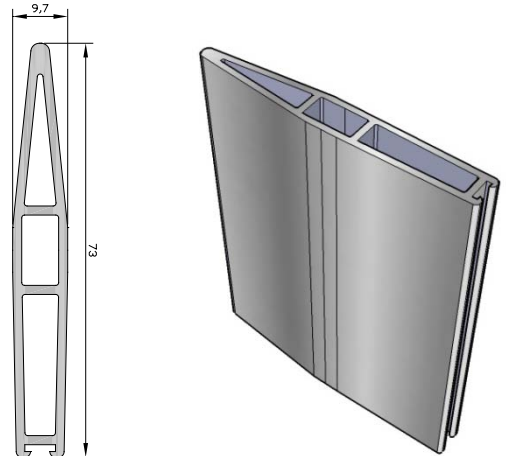
75mm flat
Flange

WL75,
50 & 38

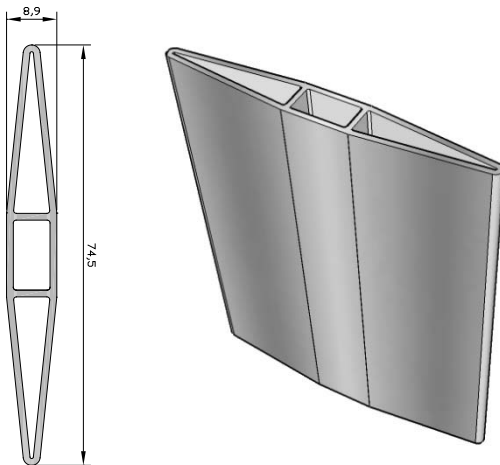
VCD Blade profiles & possible motion



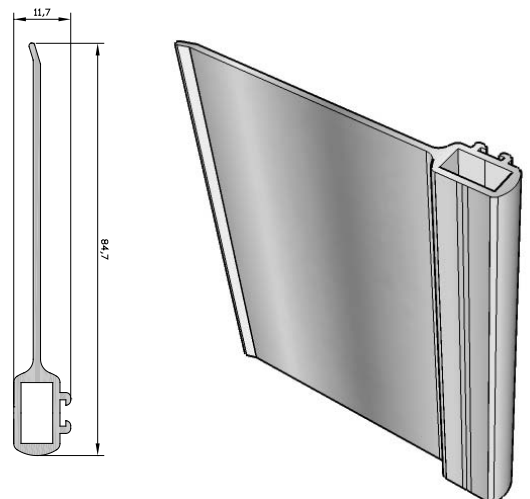
- Standard VCD blade.
- Parallel or opposed motion.
- No edge seals.



- Aerofoil blade.
- Parallel or opposed motion.
- Edge seals standard.



- Aerofoil blade
- Parallel or opposed motion.
- No edge seals.

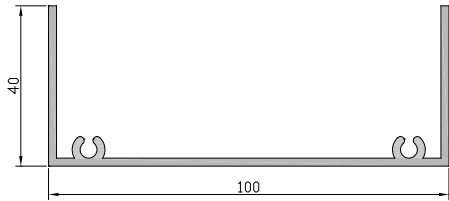


- Back-draught shutter blade
- Parallel motion only.
- Edge seals standard.

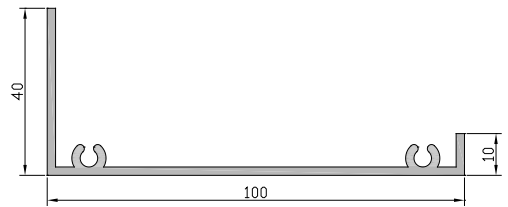
Please note: Edge seals will not be fitted if brass bushes are specified due to likely exposure to high temperatures.



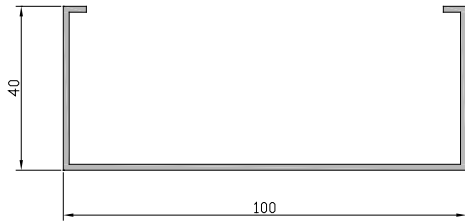
VCD & BDS Frame types



- Standard 40:40 channel



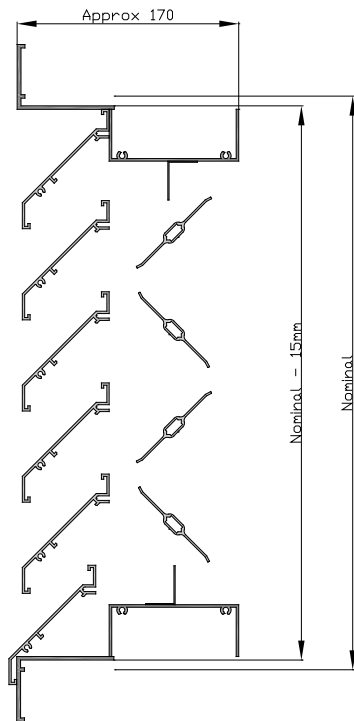
- 40:10 offset channel
- Designed for wall mounting



- Roll formed galvanised steel 40:40 channel

VCD Technical information

- (___ x ___) – WL75 Combi – 30mm – RAL7016 – VCD – STD, Opposed - STD



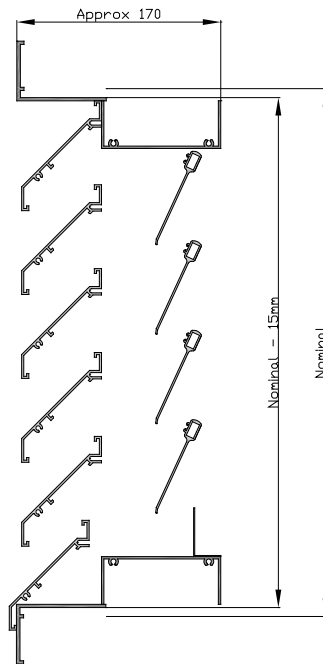
Louvre model	Standard frame	Total unit depth (mm)
WL38	30mm flat	≈140
WL50	30mm flat	≈145
WL75	50mm flat	≈170

Please note that the extremities of the damper must always be inside the dimension labelled 'Nominal - 15mm.' This also applies to any control options required.



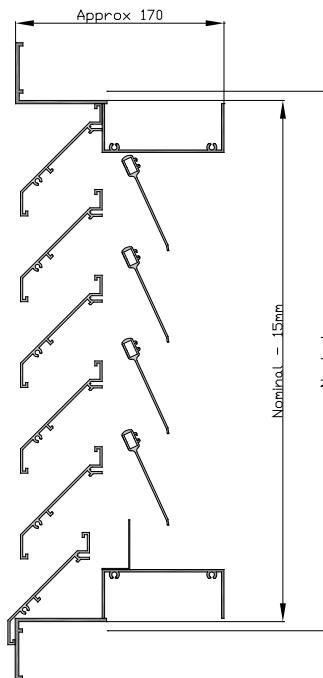
Extract: Specified by EX at the end of ordering code

- (___ x ___) – WL75 Combi – 30mm – RAL7016 – BDS – STD - EX



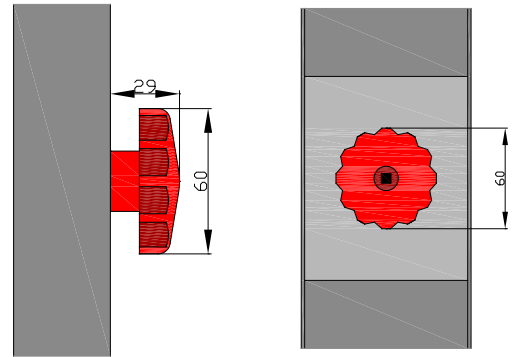
Supply: Specified by SU at the end of ordering code

- (___ x ___) – WL75 Combi – 30mm – RAL7016 – BDS – STD - SU



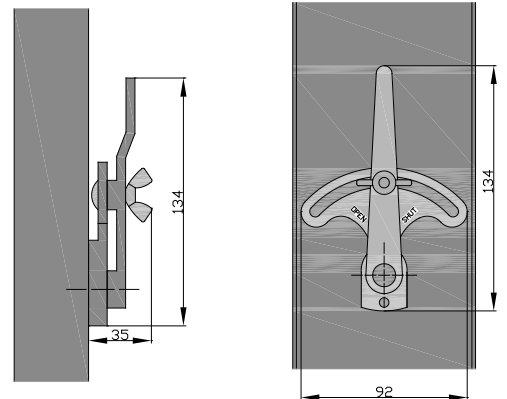
Injection moulded plastic handle:

This is the standard adjustment method fitted to HVC Volume control dampers. Consisting of an ergonomic plastic handle and integrated visual blade position indicator this operation does require access to the unit to enable adjustment. This method also enables the unit to be locked with a grub screw housed in the centre of the handle.



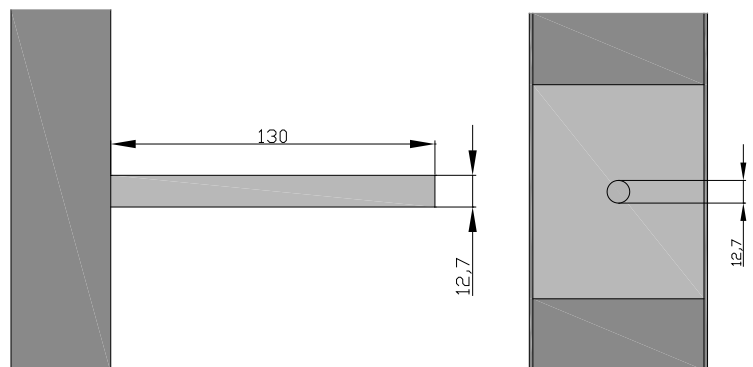
Aluminium locking quadrant:

For even easier adjustment a steel locking quadrant is available. Using the lever the damper blades can be adjusted easily. Just like the standard plastic handle, this method also incorporates a visual position indicator and locking mechanism.



Extended spindle:

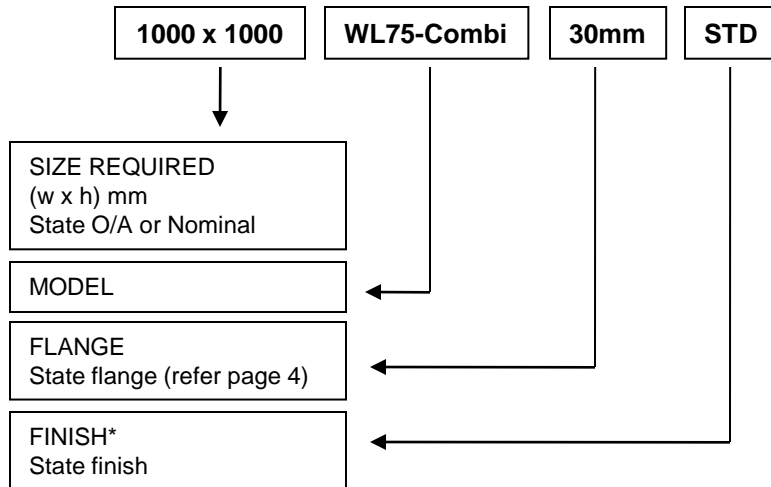
Should you wish to fit your own motor, VCDs can be supplied with an extended steel spindle. Held in place by a mounting plate as used with all control options, the spindle protrudes approximately 130mm from the damper body and 12.7mm diameter.



Actuators:

HVC can supply a wide range of both electrical and pneumatic actuators ready-fitted to your VCD. For specialised situations explosion proof motors suitable for volatile atmospheres like petrol stations and distilleries can also be supplied.

Stage 1: Choose louvre and louvre options

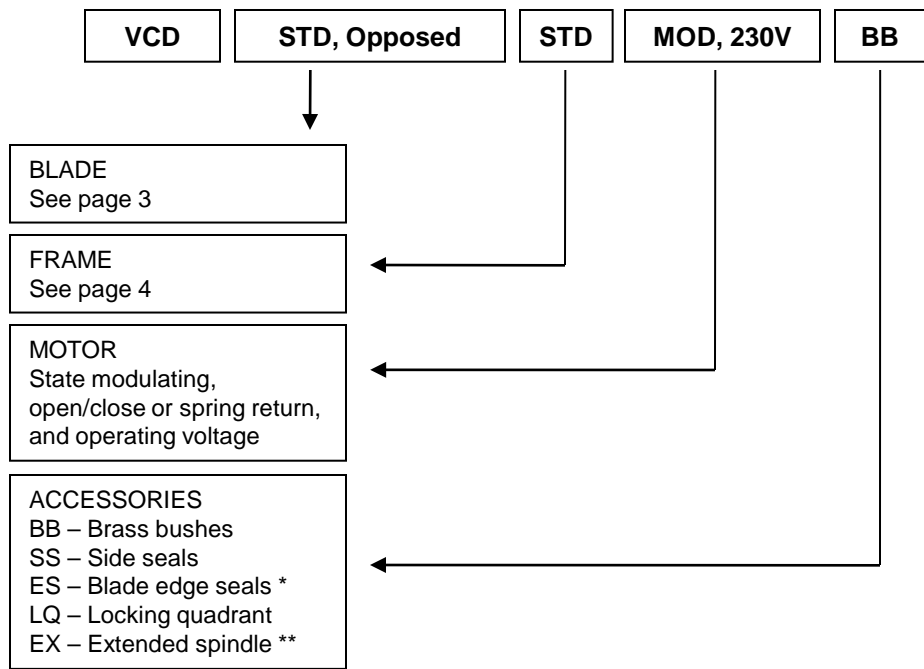


* Standard (STD) finish on weather louvres is mill.

** Plenum boxes are as standard 100mm deep, please state should other depth be required.

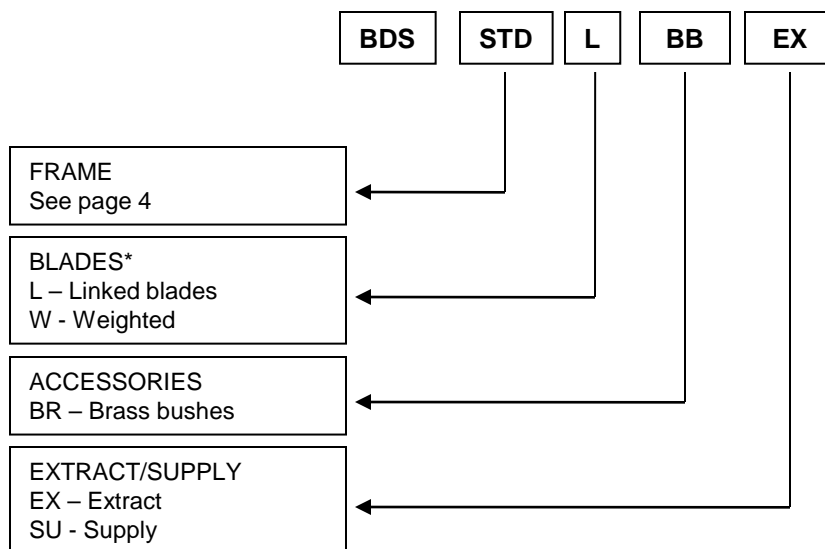


Stage 2: Choose Volume control damper (VCD) and options



OR

Stage 2: Choose Backdraught shutter (BDS) and options



* A unit specified with brass bushes cannot also have blade edge seals due to likely exposure to high temperatures. This also applies to plastic moulded handles which will be replaced with locking quadrants as standard.

** Should a motor be specified, extended spindles will be fitted as standard.

HVC Supplies (Stourbridge) Ltd reserves the right to alter, without notice, any specifications issued. Any alterations made will appear on www.h-v-c.com as soon as possible.

