

How to design a Centralised Vacuum Cleaning system for a villa?

Centralised Vacuum Cleaning system

Houses have to be regularly **cleaned & cleared from the dust** which accumulates day after day.

The Central Vacuum Cleaning (CVC) system from Aldes is:

- One central unit installed in the utility room or garage
- One hose that has to be connected to an inlet
- A ductwork connecting each inlet to the central unit

CVC system brings several benefits for people living in any villa. It guarantees healthy indoor air quality, noiseless cleaning process and less fatigue due to user friendly accessories for different types of floorings.



Step 1: define the number of air inlets required

While designing a CVC system for a villa, the first step is to define the number of air inlets required. Aldes proposes:

- New villa: 1 air inlet for 40 m²
- Renovation: 1 air inlet for 35 m²

Step 2: where to locate the air inlets

This is very important to correctly identify the location of air inlets. They could be installed in a corridor for instance. But always ensure that their locations have an **easy access** and **maximum area can be swept**.



Tip:

→ Use a little cord on drawing to check if all areas are swept by the house.

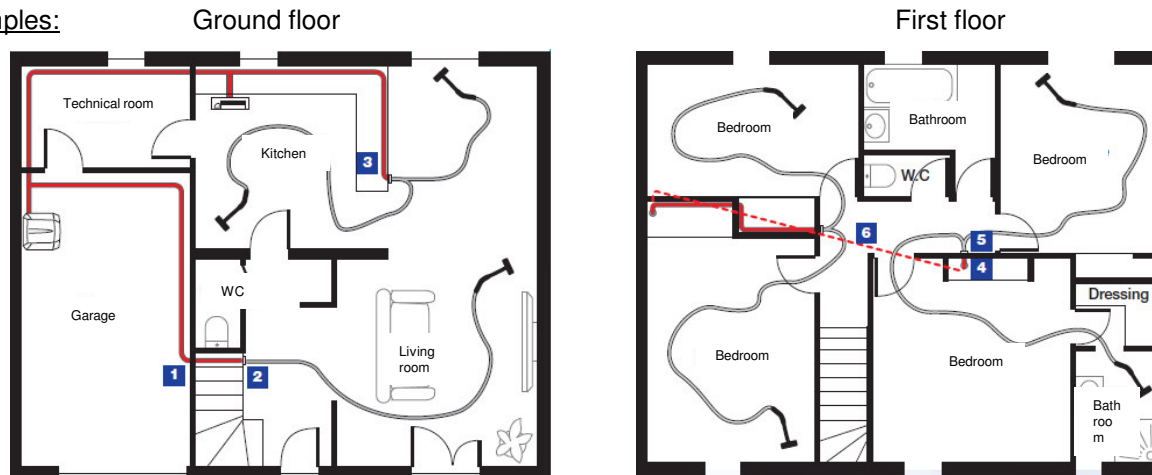


For a better efficiency of Aldes CVC systems, we recommend to have a maximum pipe work length of 25 meters between central unit and furthest air inlet.

Step 3: where to locate the central unit




The central unit should be installed outside the living room, such as in a garage, a technical room or a basement Garage (it is even better if not installed inside villa)

Examples:



Step 4: choose the right unit

Depending on the specificities of each villa, Aldes proposes a range of 3 centralised vacuum cleaners:

Units Models	C. CLEANER	C. BOOSTER	C. POWER
			

Type of floor

Tile, parquet only	●●●	●●●	●●●
Mixed floor (tile + carpets)	●	●●	●●●

Way of use

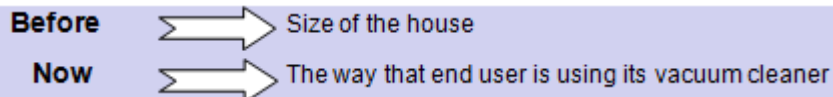
Often car cleaning	●	●●●	●●●
Sofa, rugs, hard conditions cleaning	●	●●	●●●
Animals hair	●	●●●	●●●

Technical

Silence	●	●●	●●●
---------	---	----	-----

● average ●● good ●●● very good

For the advantages of the C.Power, see [Aldes ME Flash 39 – Aldes Centralised Vacuum Cleaning System](#)



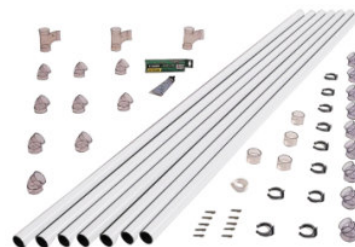
Such as a portable vacuum cleaner, the size of the villa should not be the key factor in the selection rather intended use of the vacuum cleaner will be the deciding factor. All Aldes central units are suitable for houses up to **300 m²**.

In order to optimize the use of the unit, Aldes ME recommends to have a **maximum length of pipe of 25 m** and **maximum 10 elbows** from the central unit to the furthest inlet.

Step 5: choose the right pipe work kit & installation method

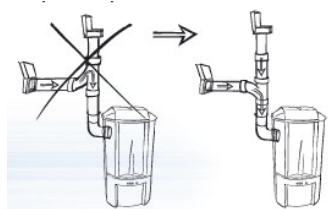
Below table gives details of required accessories and pipe work, based on the required numbers of air inlets.

	T Series 3 inlets	T Series 2 inlets	T Series 1 inlet
Duct bar Ø 51 mm - L = 2.50 m	7	5	3
Collar Ø 51 mm + screws	10	8	6
90° elbow bend Ø 51 mm - F/F	9	6	3
90° Tee-piece Ø 51 mm - F/F/F	3	2	1
Connector sleeve	4	3	2
Tube of glue	1	1	1



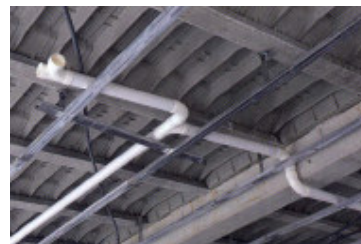
D50 or D51 pipe

- No sharp angled elbow
- Glue mounting
- Aeraulic rules to be followed







In terms of installation, the pipework can be installed:

- in a false ceiling
- through a load-bearing wall
- in a cupboard
- under a staircase
- through a slab
- ...



Step 6: choose the right inlet

Aldes proposes several types of inlets with different aesthetics and colors to suit the client's requirements.

Units Models	EASY inlet 	CELIA inlet 	INITIA inlet 
Doubling	•	•	•
Wall fitting	•	•	•
Dry partition wall	•	•	•
Installation with a switch (purchase of the mechanism alone + C. switch)	—		—
Kind of control panel	wireless	wireless	wireless