



Integrated central  
vacuum cleaner system for flats

# YOUR SOLUTION FOR BETTER INDOOR AIR.



## Why choose Allaway?

- ✓ Improve the comfort of your home
- ✓ Improve the quality of indoor air
- ✓ Improve the equipment of your property affordably
- ✓ Predict user needs
- ✓ The design decisions you make have a direct effect on the everyday life of future residents
- ✓ Design that predicts future use has an opportunity to significantly improve living comfort

# Allaway in flats

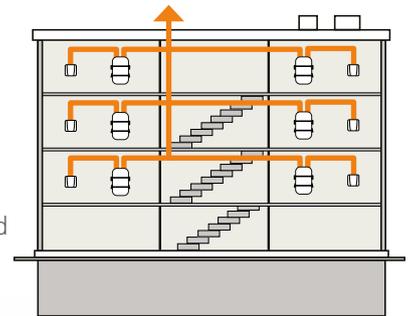
Did you know that the Allaway central vacuum system you know from detached and semi-detached houses is also easy to install in flats?

## Dreaming of healthy flats

A central vacuum cleaner is the designer's statement for better indoor air.

Clean indoor air is one of the most significant factors affecting living comfort.

The Allaway central vacuum system directs exhaust air from the vacuum away from inhabited areas and it is easy to install in both new buildings and renovation sites.



## A modern way to clean

The Allaway system improves indoor air quality. When exhaust air is not blown back into inhabited spaces, it is easier to breathe in your home.

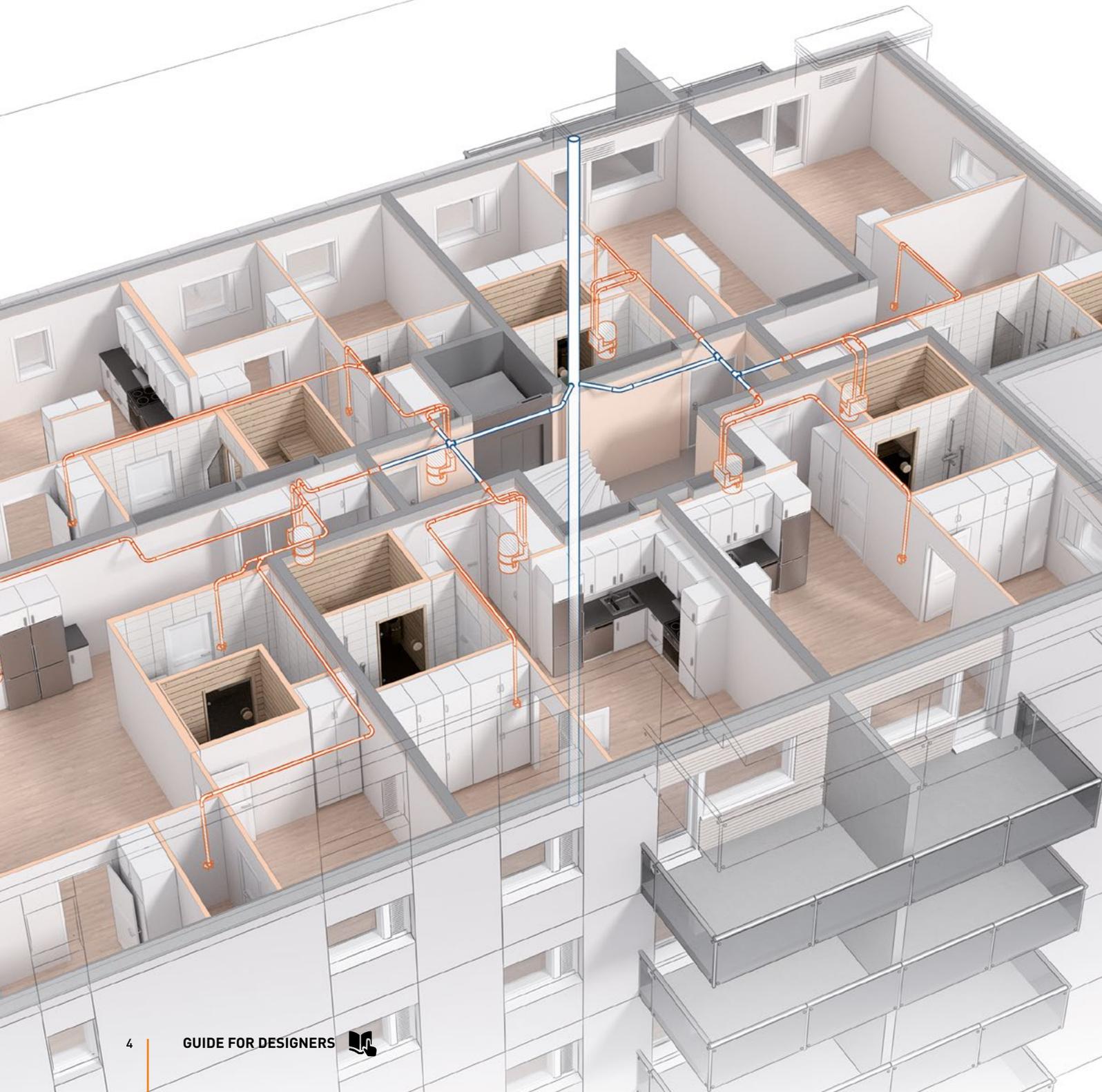
The cleaning equipment and accessories collection designed with the needs of the user in mind increase residents' living comfort significantly. The various parts of the unique and comprehensive Allaway system fit together perfectly.

The products in the system are designed to be used as an entity; and to be comfortable with regular, long-term use. Thanks to the carefully thought-out, high-quality equipment and accessories, it is quick and easy to clean your home.



# Allaway – an integrated system for flats

Central vacuum systems in flats are designed in accordance with the same principles as systems in detached houses. Installation is most convenient in new builds, but the piping can also be installed retrospectively, in connection with renovation, for example.



## Suction piping

Suction piping is implemented with Allaway's Ø 44 mm pipe. The 44 mm pipe is well-suited for all walls made of wood, metal, blocks or bricks as well as prefabricated walls. The piping may run through all warm spaces, i.e. the ceiling, partition walls, suspended ceilings and floor casting. The piping may be installed from the central unit towards wall units or from the furthest wall unit towards the central unit. The pipe is pressed into the sleeve perpendicularly while turning it slightly, until the end of the pipe touches the bottom of the sleeve. Installation does not require any glue or special tools. Pipe sealant is used to secure the joint. The arrows on the pipe indicate the correct direction of the flow.

## The exhaust air duct

Inside flats, Allaway's Ø 44 mm dust pipes are used as exhaust pipes. The connection from the flat to the Ø 100 mm exhaust air duct in the hallway is achieved using the Allaway converter coupling muff 44/100. The converter coupling muff is sealed to the spiral-weld tube with sealing compound. The joint with the Ø 100 mm exhaust air duct must be implemented inside the flat. The flat-specific Ø 44 mm exhaust pipe can be up to 5 metres long, after which an expansion to the Ø 100 mm spiral-weld tube must be executed.

The 100 mm exhaust air tube is connected to the shared vertical exhaust air duct. The diameter of the vertical exhaust air duct is dimensioned according to the number of flats and floors (see table below). The exhaust pipe must be protected from rainwater. If the pipe is installed in cold spaces, it must be insulated with thermal insulation of at least 50 mm in thickness. Type-approved firestop equipment must be used in between various fire compartments. The fire regulations and instructions given by the authorities must be adhered to in designing the exhaust pipes for the entire building.

## Piping sizes

The diameter of the vertical exhaust pipe is determined by the number of flats and floors. Please refer to the table provided for the diameter of the exhaust duct.

EXHAUST DUCT DIAMETER IN MM

Number of floors	10	125	160	160	160	200	200	200	250	250
	9	125	160	160	160	200	200	200	250	250
	8	125	160	160	160	200	200	200	200	200
	7	125	160	160	160	200	200	200	200	200
	6	125	125	160	160	160	200	200	200	200
	5	100	125	125	160	160	160	200	200	200
	4	100	125	125	125	160	160	160	160	160
	3	100	100	125	125	125	160	160	160	160
	2	100	100	100	100	125	125	125	125	125
		2	3	4	5	6	7	8	9	10

flats/floor

The same-sized exhaust air duct is installed from bottom to top. For example, if there are six storeys, and six flats per storey, the diameter of the exhaust air duct is 160 mm

If necessary, the vertical exhaust air duct can also be replaced by several exhaust air ducts. For example, a nine-storey building comprising 9 flats can be fitted with one Ø 250 mm exhaust air duct from bottom to top or two Ø 160 mm exhaust air ducts.

# Designing the central vacuum system

The starting point for designing the system is the flat-specific location of the central unit. Each flat is fitted with an Allaway C-series central unit (see models on page 12) according to the size of the flat and the length of the pipes.

The Allaway C-series central unit can be fitted in small spaces. Thanks to its size, the central unit can be placed anywhere within the flat: the closet or the walk-in wardrobe, for example. The central units in the C-series are protected from splashing water. Therefore, the machines can be installed in sanitary cabins in bathrooms without the need for protective housing. The C-series central units are fitted with a return valve as standard, which means that their waste air can be directed to a general exhaust air duct.

The wall inlets must be situated so that the system covers all areas to be cleaned. The suction hose lengths vary from 8 to 12 metres.

The flat-specific exhaust pipe is connected to the shared exhaust air duct. The central unit should be located close to the exhaust air duct.

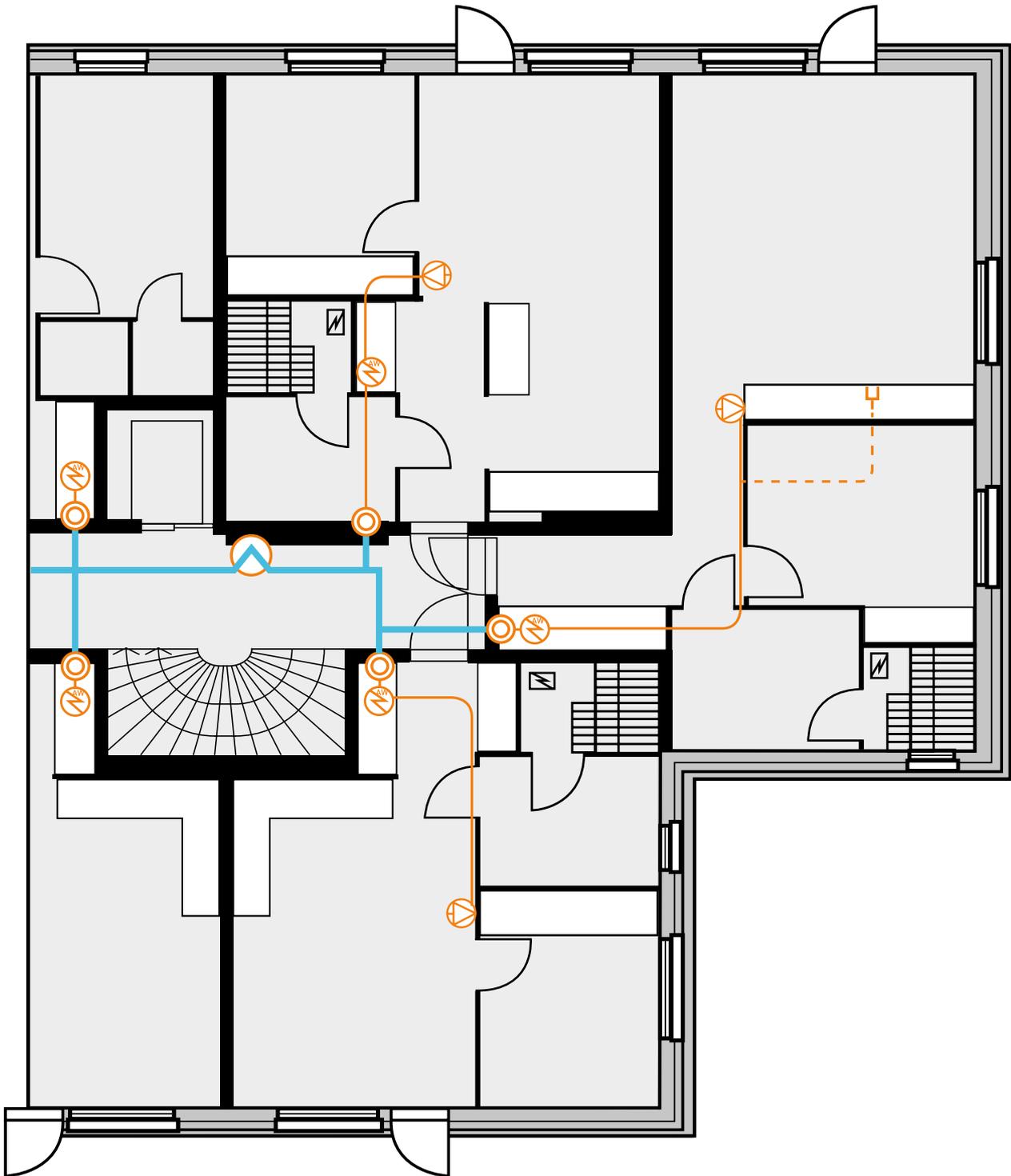
## Design resources

Download the handy Allaway design symbols for CAD software in the correct DWG format from the Allaway media bank!

<http://Allaway.mediabank.fi>

### Parts of the overall system:

- ✓ Shared exhaust air duct
- ✓ Central unit
- ✓ Piping and wall inlets
- ✓ Cleaning equipment



### EXPLANATION FOR THE MARKINGS

- 

Piping system  
Ø 44 mm
- 

Wall inlet
- 

Central unit
- 

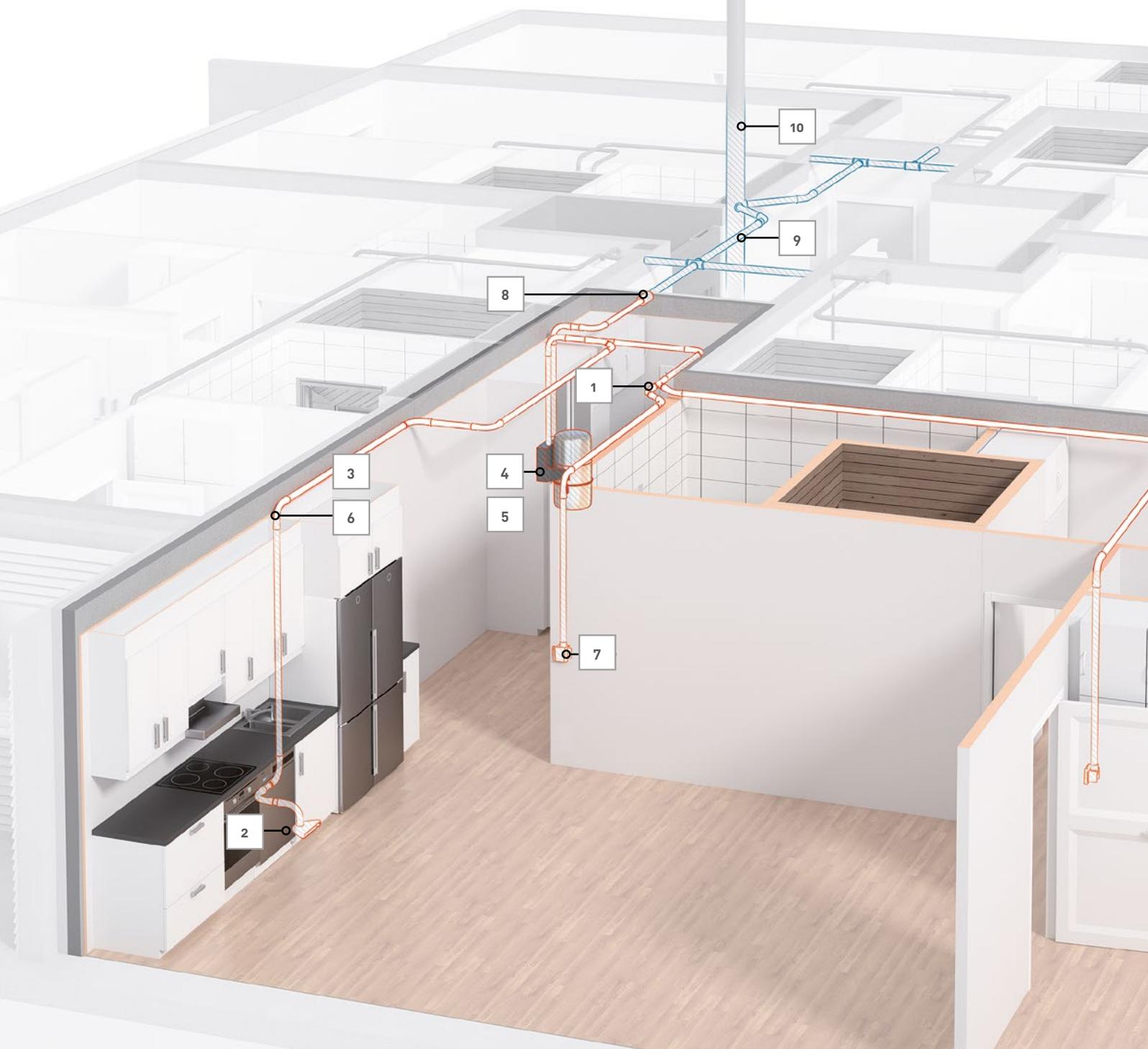
Option
- 

Converter coupling muff
- 

Sweep slot
- 

The vertical exhaust air duct. Please see duct diameter in the table on page 5.
- 

Spiral-weld tube  
Ø 100 mm



- |  |  |   |   |   |
|--|--|---|---|---|
| <p><b>1</b> Y branch 45°</p>                    | <p><b>2</b> Sweep slot</p>  | <p><b>3</b> Direct pipe</p>                              | <p><b>4</b> Central unit</p>  | <p><b>5</b> Cleaning equipment series</p>  |
| <p><b>6</b> Elbow in the piping system 90°</p>  | <p><b>7</b> Wall inlet</p>  | <p><b>8</b> Converter coupling muff<br/>Ø 44/100 mm</p>  | <p><b>9</b> Ø 100 mm spiral-weld tube</p>   | <p><b>10</b> Vertical exhaust air duct<br/>See diameter in the table on page 5</p>  |

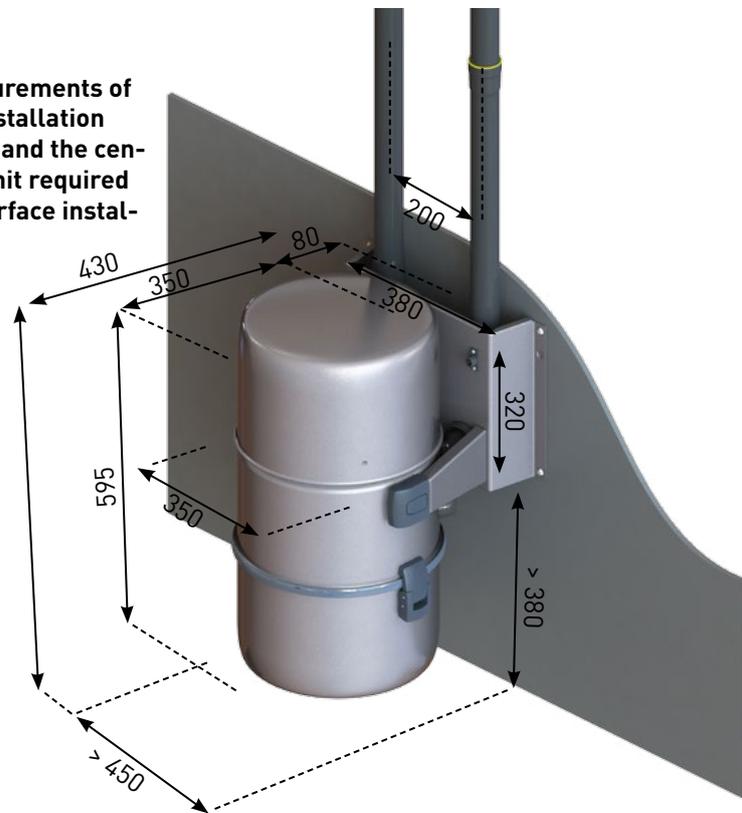
# Installing the central unit

The C-series central unit wall bracket can be installed either flush to the wall or on its surface.

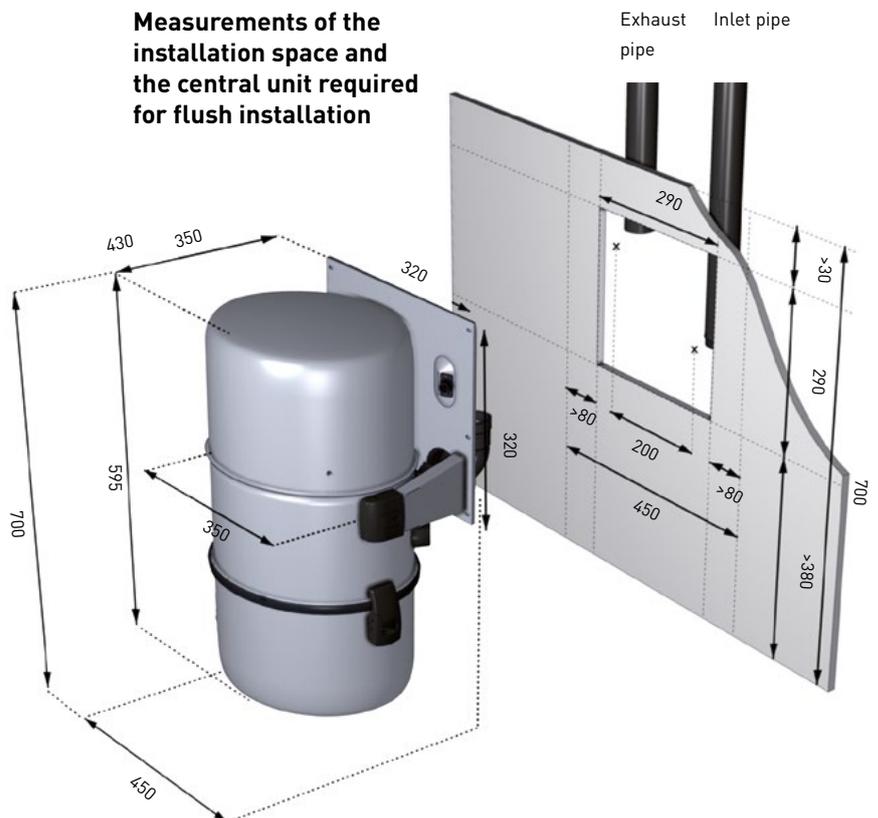
The wall bracket can be installed at the required height, as long as there is at least 50 mm of free space below the central unit for emptying the dust canister.

There must be a 230V socket in close proximity to the central unit (10A slow blow plug fuse or 16A automatic fuse).

**Measurements of the installation space and the central unit required for surface installation**



**Measurements of the installation space and the central unit required for flush installation**



# The Allaway piping

Allaway central vacuum systems use special piping specifically designed for transporting dirt and dust. The outer diameter of the Allaway dust piping is 44 mm and the inner diameter is 40 mm.

The optimal pipe diameter achieves the airflow of 25 m/s necessary for transporting debris efficiently. It is possible to connect two sleeveless pipes with a connector. Therefore, the sleeveless pipes coming from the worksite can be utilised.

A 24V circuit is formed with a low voltage lead between the wall inlet and the central unit. In a system with several wall inlets, the wall inlets are coupled parallel to each other. The leads can be connected both ways to the wall inlet connectors and the low voltage connector of the central unit.



The Allaway pipe clamp supports the pipes. Low voltage leads that run alongside the piping have been accounted for in the pipe clamps.



Wall inlet parallel connection.

The pipes have markings on them that indicate where the pipe is sealed to the bottom of the sleeve. The pipe is sufficiently extended when the point of connection of the pipes is over the white marking line.

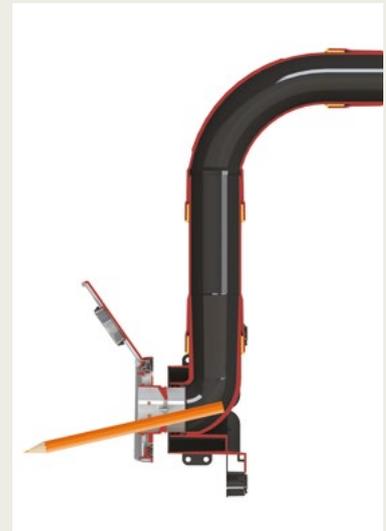
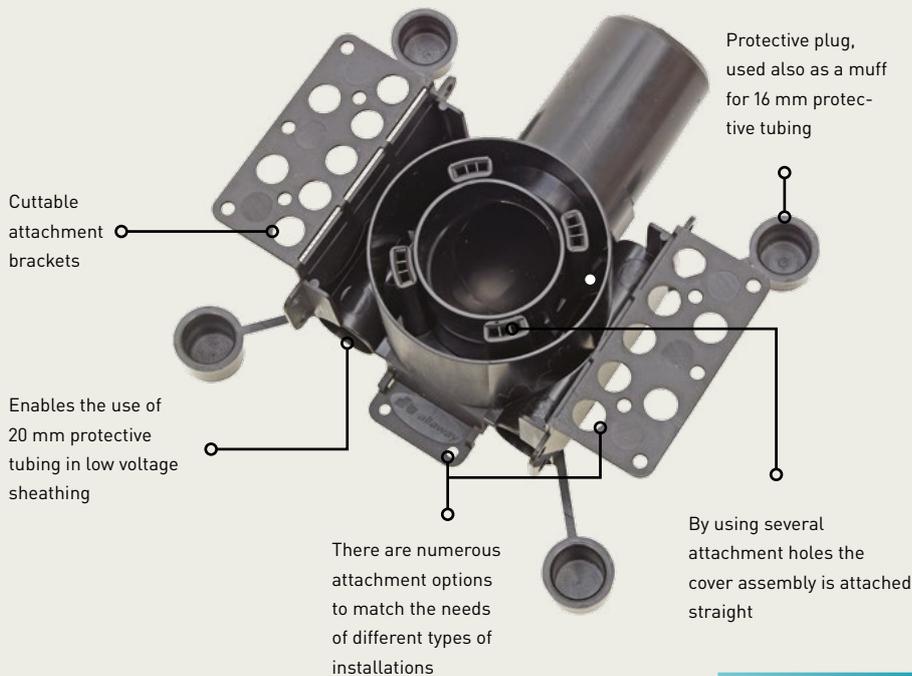


It is easy to cut the pipe to the desired lengths. Connectors can be used to connect sleeveless pipes that have been cut. This minimises the loss of pipe. Due to the innovative structure, a sleeve joint used in Allaway dust piping is also achieved when using a connector.



# Wall inlet locations

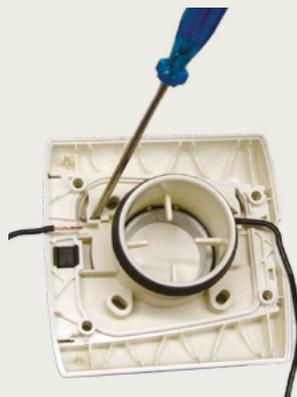
Wall inlets should be located at the same level as light switches or sockets. By using a mounting bracket, you can install the wall inlet cover so that it opens in the desired direction.



The sharpest elbow in the entire piping system is located directly behind the wall inlet. It prevents long items such as pencils from entering the piping system.



Allway wall inlets are equipped with patented catchers that prevent large items such as children's building blocks from entering the suction pipe system.



The starting circuit operates at a voltage of approximately 24V, which means that it does not have to be installed by an electrician. The low voltage lead is attached to each wall inlet and to the sweep slot connectors, where installed.

## What to consider when placing wall inlets

### Accessible

An accessible location, not too close to furniture or fixtures.

### Aesthetic

Various cover options (colour, material) to match other interior surfaces.

### Ergonomic

The wall inlet is at the right height so the user does not need to bend down and it – it is also suitable for wheelchair users. It is a good idea to install covers which open upwards at the same level as light switches, and covers which open downwards lower down.

### Practical

Install a sufficient number of wall inlets in suitable places to ensure easy vacuuming. We recommend increasing the number of wall inlets instead of extending the hose (the 8 to 10 m hose is easy to use).

# C-series central units

Thanks to its safe structure, the Allaway system C-series' central unit, which is suitable for flats, can be conveniently installed in a cleaning cupboard or a bathroom.

Thanks to its steel shell structure, the C-series machine has a silent, non-resonant operating sound. The durable, fire-safe structure ensures that the machine has a long lifespan.

The central unit may also be operated with a dust bag. When using a dust bag, the filter stays cleaner, the changing interval of the filter is prolonged considerably and the central unit remains more hygienic. Allaway dust bags are manufactured from high-quality microfibres. Installation of the dust bag is easy, and the bag can also be retrofitted in the central unit.

## C 30

The C 30 central vacuum cleaner is intended for installation in spaces where the length of the pipeline from the central unit to the wall inlet located furthest away is under 35 metres.

## C 40

The C 40 central vacuum cleaner is intended for installation in spaces where the length of the pipeline from the central unit to the wall inlet located furthest away is under 45 metres. The energy efficient C 40 is an ecological option. Its advanced technology means that it produces more power using less energy.

## C 40 LCD

The C 40 LCD offers the same technical properties as the C 40. The only difference is that it comes with soft start and an LCD screen as standard. Soft start means the vacuum cleaner starts quietly and gradually gets louder. This function protects the motor. The LCD screen displays useful information about the need to empty the dust container, the condition of the filter, and the time spent vacuuming, for example. Due to this information, maintenance and use of the central vacuum cleaner has never been easier.



**Dust bag installation kit 13L**  
Product code 81114.

With C-series microfibre dust bag. 2 pcs.



**Polyester filter**  
Product code 10819.



**Dust bag 13 L**  
HPAC code 6901389.  
Product code 80689.  
C-series microfibre. 2 pcs.

**Dust bags in carton**  
50 pcs 13 l  
Product code 80759.

A convenient storage bracket makes it easy to store cleaning equipment in small spaces.



#### TECHNICAL DATA

Central units	C 30	C 40/C 40 LCD
Electric power W*	1800	1700
Low pressure max kPa*	30	32
Air power max W*	610	670
Noise level Lp dB(A)+/-2dB**	57	57
Dust canister litres	13	13
Suction piping length max m	35	45
Width mm	350	350
Height mm	595	595
Weight kg	8	8
Splash proof	Yes	Yes (C40)
Overload protector	Yes	Yes
Overheat protector	Yes	Yes

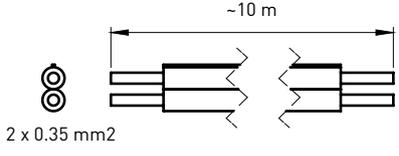
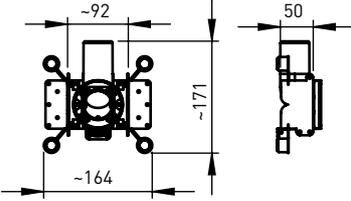
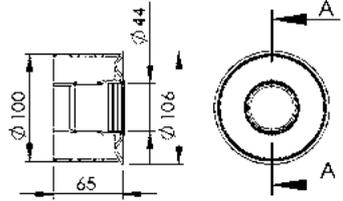
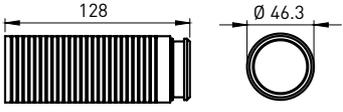
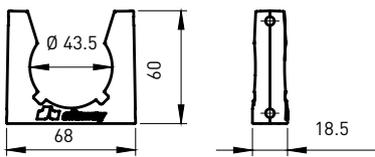
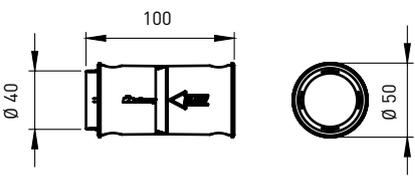
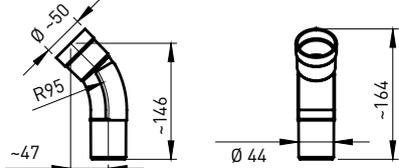
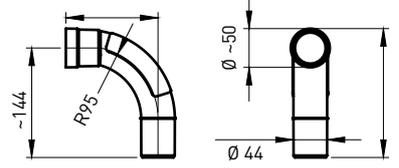
\* measured from the turbine

\*\* measured according to IEC 60704 standards

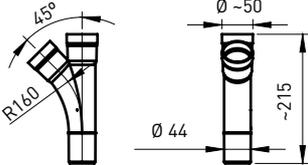
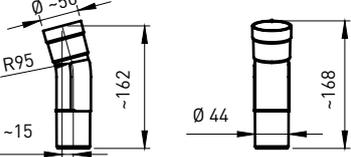
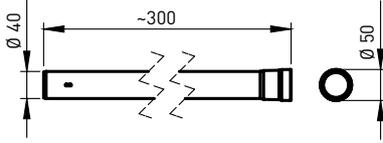
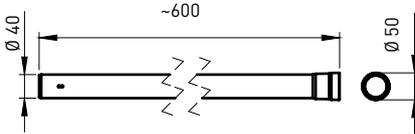
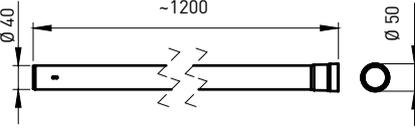
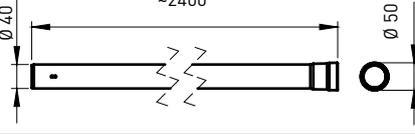
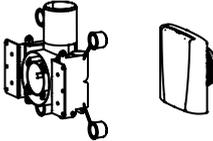
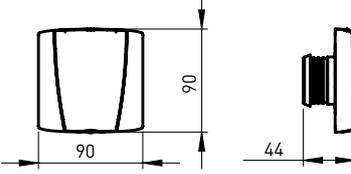
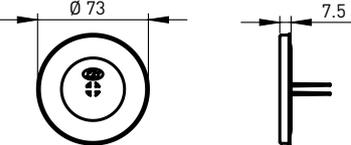
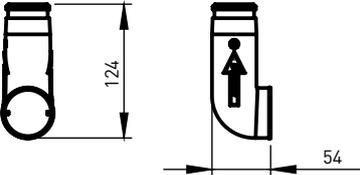


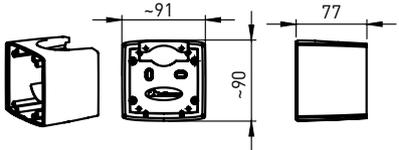
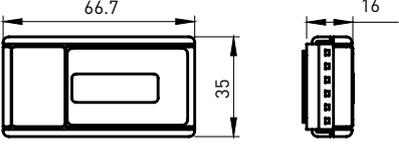
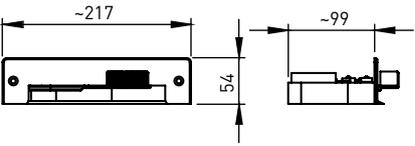
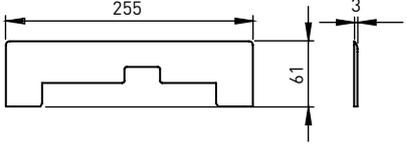
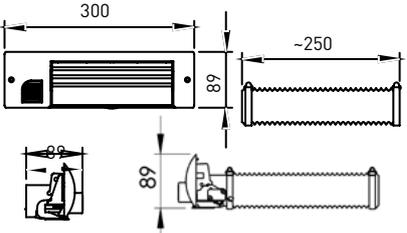
# Product list

## Accessories

	 <p>~10 m 2 x 0.35 mm<sup>2</sup></p>	<p><b>Low voltage lead 10 m</b> Product code 80940. <b>Low voltage lead 20 m</b> Product code 80945. <b>Low voltage lead 30 m</b> Product code 80950. <b>Low voltage lead 100 m</b> Product code 80954</p>
	 <p>~92 ~171 ~164 50</p>	<p><b>The Optima mounting bracket</b> Product code 80223. Optima mounting bracket is quick and easy to install on all wall materials.</p>
	 <p>Ø 100 65 Ø 44 Ø 106</p>	<p><b>Converter coupling muff 44/100</b> Product code 80931.</p>
	 <p>128 Ø 46.3</p>	<p><b>Extension</b> Product code 80214 When the coupling muff of the cover assembly does not reach the elbow coupling, an extension is used. The length of the extension is 13 cm.</p>
	 <p>Ø 43.5 60 68 18.5</p>	<p><b>Pipe clamp 25 pcs.</b> Product code 80294. <b>Pipe clamp 3 pcs.</b> Product code 80293.</p>
	 <p>Ø 40 100 Ø 50</p>	<p><b>Connector</b> Product code 80295.</p>
	 <p>Ø 50 R95 ~146 ~47 Ø 44</p>	<p><b>Elbow 45°</b> Product code 80525. Inner diameter Ø 40 mm. Outer diameter Ø 44 mm. Sleeve outer diameter Ø 50 mm.</p>
	 <p>~144 R95 Ø 50 Ø 44</p>	<p><b>Elbow 90°</b> Product code 80526. Inner diameter Ø 40 mm. Outer diameter Ø 44 mm. Sleeve outer diameter Ø 50 mm.</p>



		<p><b>Branch 45°</b>  Product code 80527.  Inner diameter Ø 40 mm.  Outer diameter Ø 44 mm.  Sleeve outer diameter Ø 50 mm.</p>
		<p><b>Elbow 15°</b>  Product code 80528.  Inner diameter Ø 40 mm.  Outer diameter Ø 44 mm.  Sleeve outer diameter Ø 50 mm.</p>
		<p><b>Pipe 0.3 m</b>  PP 80514.  Inner diameter Ø 40 mm.  Outer diameter Ø 44 mm.  Muff outer diameter Ø 50 mm.</p>
		<p><b>Pipe 0.6 m</b>  Product code 80517.  Inner diameter Ø 40 mm.  Outer diameter Ø 44 mm.  Sleeve outer diameter Ø 50 mm.</p>
		<p><b>Pipe 1.2 m</b>  Product code 80516.  Inner diameter Ø 40 mm.  Outer diameter Ø 44 mm.  Sleeve outer diameter Ø 50 mm.</p>
		<p><b>Pipe 2.4 m</b>  Product code 80515.  Inner diameter Ø 40 mm.  Outer diameter Ø 44 mm.  Sleeve outer diameter Ø 50 mm.</p>
		<p><b>Optima wall inlet, white</b>  Product code 80160.  The package includes the mounting bracket, protective cover, white Optima cover assembly.</p>
		<p><b>Optima cover assembly</b>  <b>Antique brass.</b> Product 80186.  <b>Graphite.</b> Product 80185.  <b>Black.</b> Product 80183.  <b>Silver.</b> Product 80184.  <b>White.</b> Product 80178.</p>
		<p><b>Protective cover, round</b>  Product code 80224.</p>
		<p><b>Wall inlet elbow coupling</b>  Product code 80122  <b>Can be used with surface installation casing, for example.</b></p>

		<p><b>Surface installation casing</b> Product code 80222</p>
		<p><b>Operation indicator</b> Product code 80805.</p>
		<p><b>Sweep slot, white</b> Product code 81009.</p> <p><b>Sweep slot, black</b> Product code 81034.</p>
		<p><b>Sweep slot RST Covering panel</b> Product code 80289.</p>
		<p><b>Allaway sweep slot Europe, white</b> Product code 81234.</p> <p><b>Allaway sweep slot Europe, grey/silver</b> Product code 81235.</p>

## Cleaning equipment sets

Our Premium cleaning equipment set has been developed in collaboration with researchers at the Finnish Institute of Occupational Health. The telescopic wand in the Premium cleaning equipment set is made of aluminium, which is light and durable. Cleaning is easy with lightweight equipment. The Premium set is available with a handle- or wall inlet-mounted starter. Both packages include a large selection of nozzles and a storage bracket.

	<p><b>Premium cleaning equipment sets with a handle-mounted starter</b></p>	<p><b>8 m and 10 m.</b> There are country-specific differences in the contents and the product numbers.</p>
	<p><b>Premium cleaning equipment sets with a wall inlet-mounted starter</b></p>	<p><b>8 m and 10 m.</b> There are country-specific differences in the contents and the product numbers.</p>

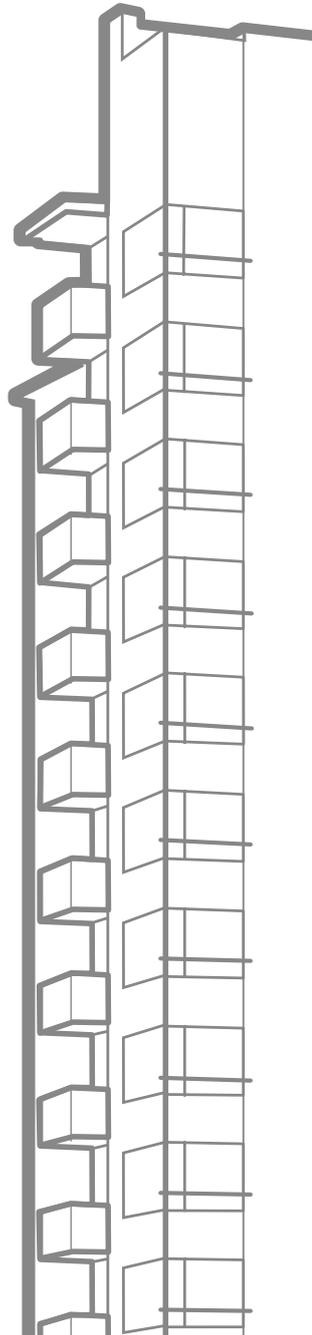
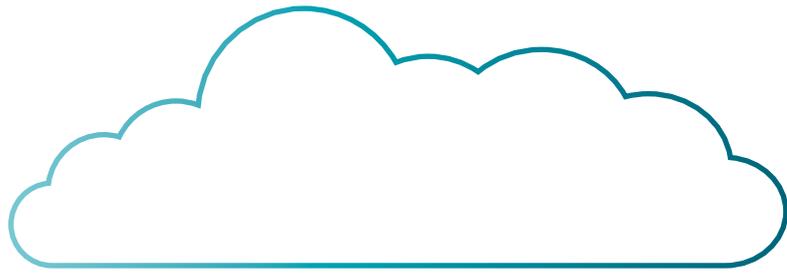
The Standard cleaning equipment set is available with a handle or wall inlet starter. It is delivered with a telescopic wand made of steel and basic equipment required for cleaning.

	<p><b>Standard handle-operated cleaning sets</b></p>	<p><b>10 m.</b> Product code 81244.</p> <p><b>8 m.</b> Product code 81246.</p>
	<p><b>Standard wall inlet-operated cleaning sets</b></p>	<p><b>10 m.</b> Product code 80217.</p> <p><b>8 m.</b> Product code 81216.</p>

## Allaway in renovation sites

The Allaway piping is suitable for casings. This makes piping renovations quick and effortless, especially in rebuilding sites.





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