



## VL 414 712

stainless steel

Air extraction / Air recirculation  
Control knob with illuminated ring  
included

## Installation accessories

### AD 410 040

Flexible connecting piece

### AD 851 041

Connecting piece for extension with  
flat duct DN 150 for extra deep  
countertop

### VA 420 000

Connection strip for combination with  
other Vario appliances of the 400 series  
for flush mounting

### VA 420 010

Connection strip for combination with  
other Vario appliances of the 400 series  
for surface mounting

## Optional accessories

### AA 414 010

Air deflector used with VL414  
downdraft adjacent to VG415 or  
VG425 cooktops.

## Combinable with:

Vario cooktops 400 series

VI414

VI422

VG415

VG425

VP414

VR414

## Vario downdraft ventilation 400 series

VL 414

- Can be combined perfectly flush with other Vario appliances of the 400 series
- Precision crafted 3 mm stainless steel
- Solid stainless steel control knob
- Highly efficient, low noise recirculation system with AR 410 710 blower
- Air extraction with AR 400 742, AR 403 722, or AR 401 742 blowers.
- Function for automatic, sensor-controlled power adjustment depending on the build-up of cooking vapors
- Minimal planning and easy installation

## Features

Control knobs with illuminated ring  
included in delivery.

3 electronically controlled power levels  
and 1 intensive mode.

Automatic function with sensor-controlled  
run-on function.

Large-scale metal grease filter with  
high grease absorption.

Grease filter, dishwasher-safe.

Grease filter and activated charcoal  
filter saturation indicator.

Airflow-optimised interior for efficient  
air circulation.

Interval ventilation, 6 min.

Enameled cast iron ventilation grill,  
dishwasher-safe.

Air exhaust bend included in delivery.

Overflow 8.5 oz capacity.

Cooktop-based ventilation control  
(with VI414 and VI422 cooktops).

Home network integration for digital  
services (Home Connect) either via  
cable connection LAN (recommended)  
or wireless via WiFi.

The use of the Home Connect  
functionality depends on the Home  
Connect services, which are not  
available in every country. For further  
information please check:  
home-connect.com.

## Planning notes

For each VL one blower is recommen-  
ded.

Maximum cooktop width between two  
VL: 24" (60 cm).

Vario cooktops like Vario electric grill  
and Vario gas wok must be placed  
between 2 VL downdraft for optimal  
performance.

In case of Vario electric grill,  
recirculation is not recommended.

If operated next to gas appliances, the  
air deflector AA 414 010 is recommen-  
ded to ensure maximum performance  
of the cooktop.

Appliance can be snapped into the  
countertop from above.  
Depending on the type of installation  
(surface-mounted or flush-mounted),  
the specific location of the cut-out and  
the knob positions may vary.  
If combining several Vario appliances  
of the 400 series, a connection strip  
VA 420 must be placed between the  
appliances. Depending on the type of

installation, the corresponding  
connection strip must be provided.  
The bearing capacity and stability, in  
the case of thin worktops in particular,  
must be supported using suitable  
substructures. Take into account the  
appliance weight and additional loads.

Additional instructions for flush  
mounting:

Installation is possible in worktops  
made of stone, synthetics or solid  
wood. Heat resistance and watertight  
sealing of the cut edges must be  
observed. Concerning other materials  
please consult the countertop  
manufacturer.

The groove must be continuous and  
even, so that uniform placing of the  
appliance on the gasket is ensured. Do  
not use discontinuous lining.

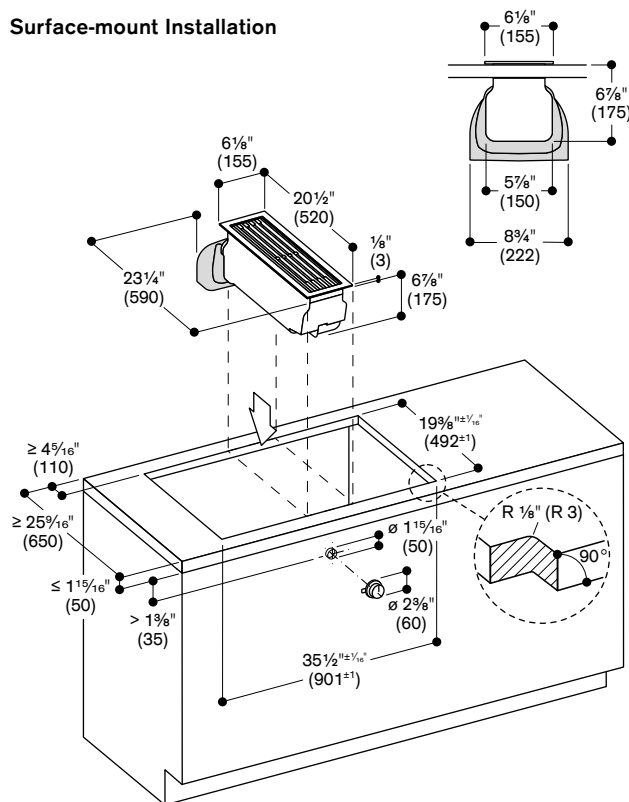
The joint width may vary due to size  
tolerances of the combinations and of  
the countertop cut-out.

## Connection

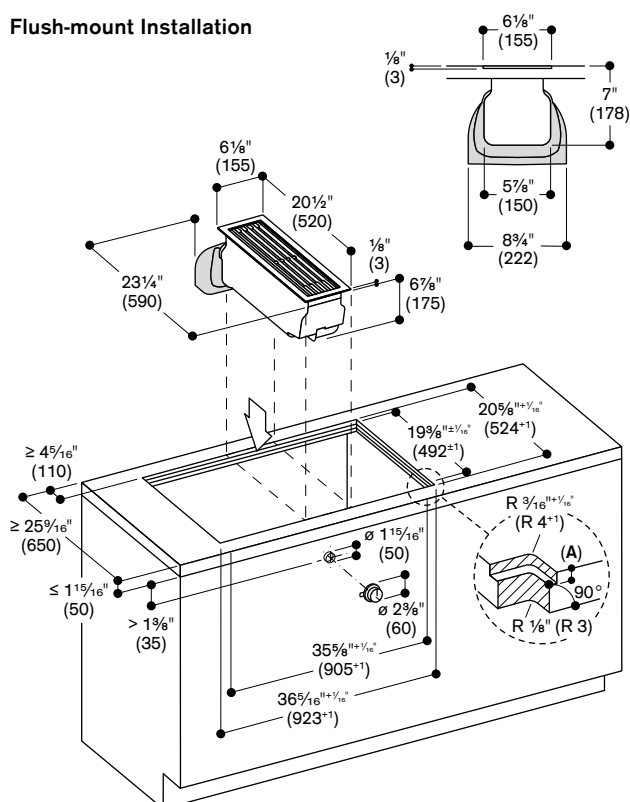
Connecting cable for blower is 68"  
(1.75 m).

Plan a ethernet cable for distances  
where the blower is located over 68"  
(1.75 m)

## Surface-mount Installation

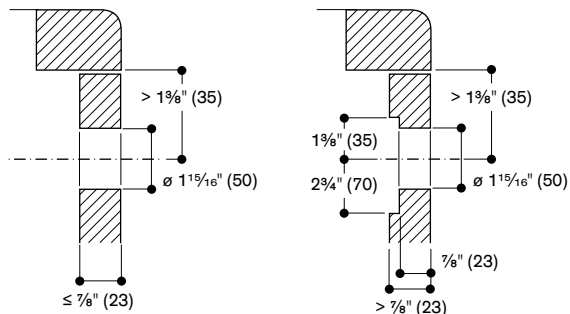


## Flush-mount Installation

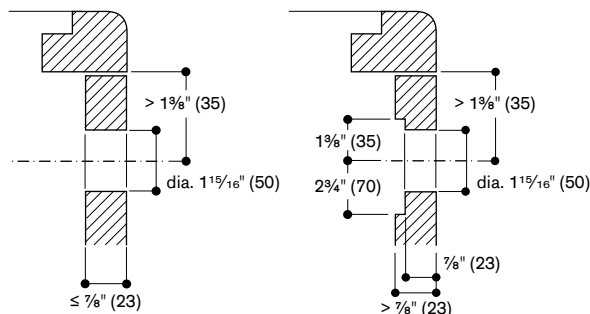


A: 1/8" (3.5-0.5)

## Installation of the control knob; surface mounting

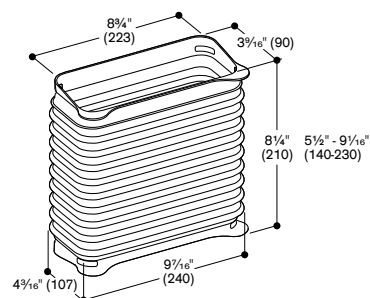


## Installation of the control knob; flush installation

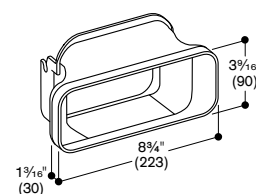


## Installation accessories

### AD 410 040 : flexible connecting piece, DN 150 flat



### AD 851 041: Connecting piece VL for extension with flat duct DN150 for extra deep countertop



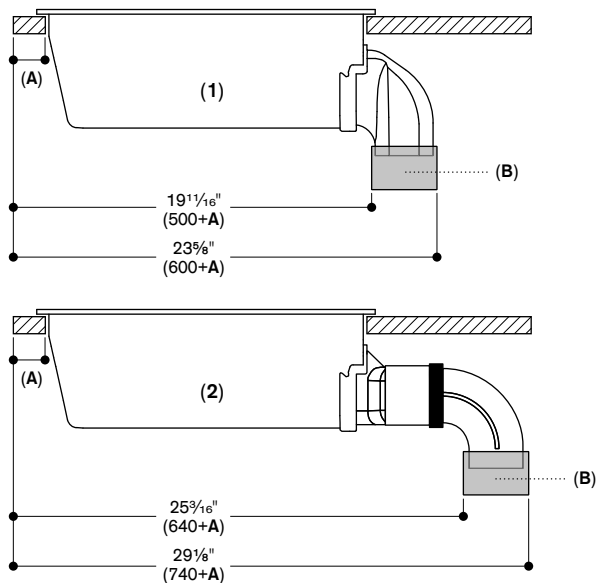
## Recommended configurations of the Vario downdraft ventilation 400 series and blowers

### Good to know – for correct planning and installation

- For depth measurements, take account of the depth of the furniture cavity and countertop overhangs of the kitchen furniture.
- It is also important that ducting is well sealed in order to prevent air leaks, e.g. by using the adequate adhesive tape or using the adequate connecting piece.
- Vario cooktops like Vario electric grill or Vario gas wok must be placed between 2 VL for optimal performance.
- In case of Vario electric grill air recirculation is not recommended.
- With the Vario downdraft ventilation, the ducting can be connected straight down (1) or to the rear using additional connecting pieces (2). These are available as special accessories, see below.

For the total overall dimensions in the furniture, please also take into account the individual dimensions and position of the ducts and the blower.

Please take into account the filter location when using a AR 410 710 blower to allow access for replacement.



- 1: Direct installation  
 2: Installation with extension for deep countertop and metal ducting:
- AD 851 041 (connecting piece for extension)
  - AD 854 000 (flat duct connecting piece, metal)
  - AD 854 030 (flat duct bend, 90°, vertical, metal)

A:  $\geq 1\frac{1}{16}"$  (50)

B: Connecting piece

measurements in inches (mm)

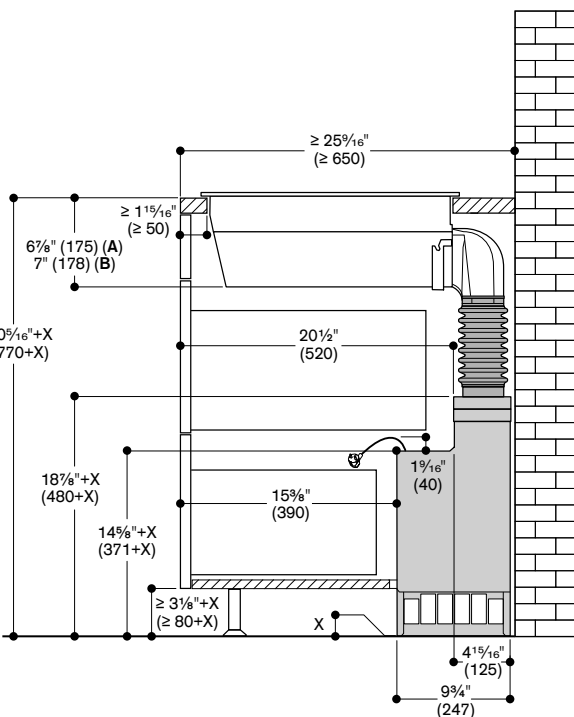
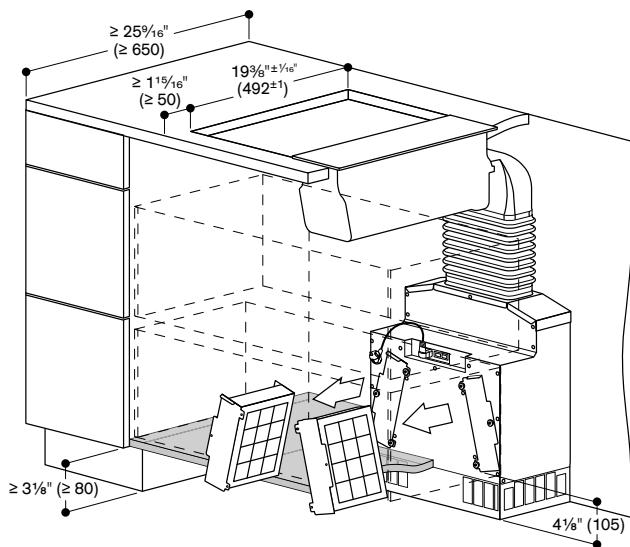
## Planning example (air recirculation) - Direct installation VL414 with AR 410 710 recirculation blower

### Good to know

- Wall installation, countertop depth 25  $\frac{19}{32}$ " (65 cm)
- Allow accessibility to the filters in the lower cabinet for their replacement. Additionally, if the toe-kick is higher than 3  $\frac{5}{32}$ " (80 mm), the recirculation blower unit has to be elevated to enable access to the filters. If the toe-kick is 3  $\frac{5}{32}$ " (80 mm) high, the recirculation blower can be placed directly on the floor.
- For optimum performance, the recirculated air requires sufficient space to escape. Plan for a custom grill (or AA 010 410 stainless steel grill accessory) in the toe-kick for the air to exhaust properly.

### List of components

- 1 x AR 410 710 (air recirculation)
- 1 x AD 410 040 (flexible connecting piece for VL400, DN 150 flat)



A: Surface mounting  
B: Flush mounting (only VL414)

measurements in inches (mm)

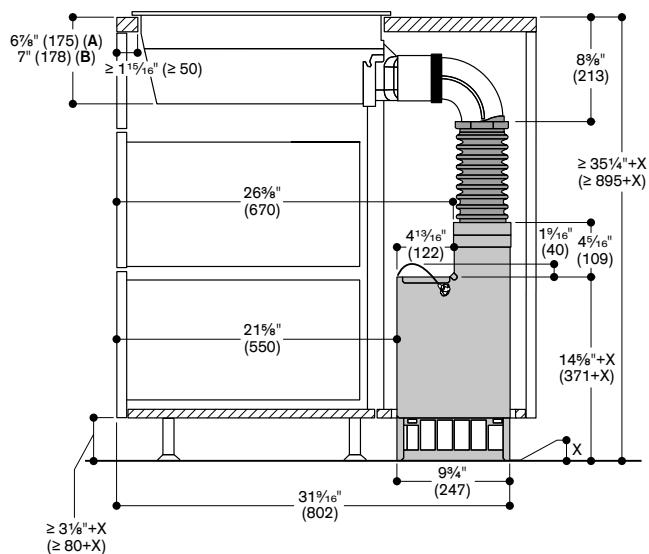
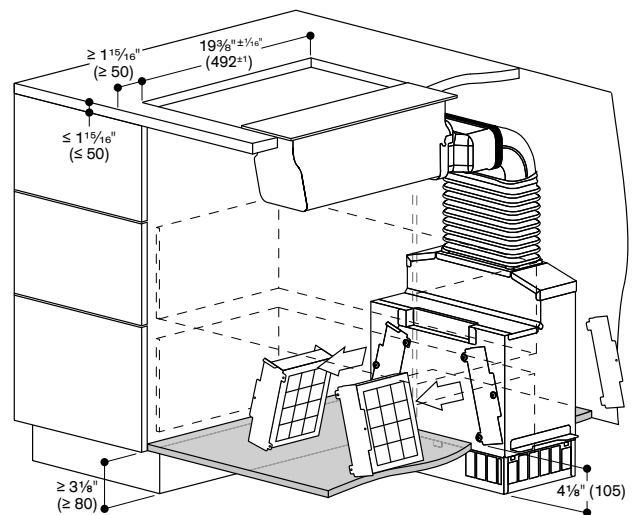
## Planning example (air recirculation) - with extension VL 414 with AR 410 710 recirculation blower

### Good to know

- Allow accessibility to the filters in the lower cabinet for their replacement. Additionally, if the toe-kick is higher than 3  $\frac{5}{32}$ " (80 mm), the recirculation blower has to be elevated to enable access to the filters. If the toe-kick is 3  $\frac{5}{32}$ " (80 mm) high, the recirculation blower can be placed directly on the floor.
- For optimum performance, the recirculated air requires sufficient space to escape. Plan for a custom grill (or AA 010 410 stainless steel grill accessory) in the toe-kick for the air to exhaust properly.

### List of components

- 1x AR 410 710 (blower air recirculation)
- 1x AD 851 041 (connection piece for extension with flat duct for extra deep countertop)
- 1x AD 854 000 (flat duct bend connecting piece, metal, DN 150 flat)
- 1x AD 854 030 (flat duct bend 90° vertical, metal, DN 150 flat)
- 1x AD 410 040 (flexible connecting piece for VL 200, DN 150 flat)
- 1x AA 010 410 air exhaust grill (or custom grill)
- 1x AD 990 091 (adhesive tape for sealing the ducts, aluminum)



A: Surface mounting  
B: Flush mounting (only VL414)

measurements in inches (mm)

## Recommended configurations of the Vario downdraft ventilation 400 series and blowers

### Planning example (air extraction) - Direct installation VL414 with inline/remote blower - Below floor installation

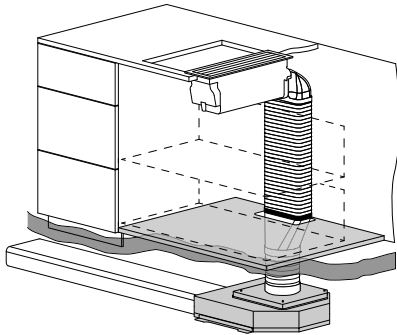
Combination with AR 403 722 / AR 400 742 / AR 401 742

For further detail, please visit [resources.gaggenau.com](https://resources.gaggenau.com) and refer to the "Advanced Planning Notes."

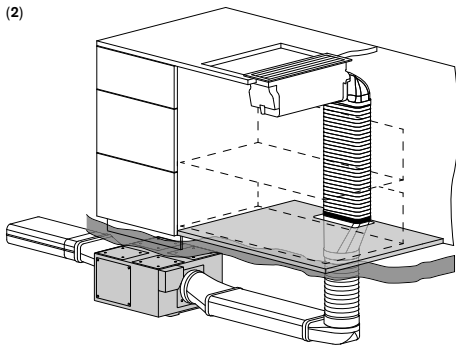
#### List of components vary based upon blower selected

- 1 x AR 403 722 / AR 400 742 / AR 401 742 (extraction blower)
- 1 x AD 858 010 (Flat duct flex pipe)
- 1 x AD 854 041 (Flat duct adapter round) (2x required with AR 400 or AR 401 blower)
- 1 x AD 751 010 (Aluflex pipe)
- 1 x AD 854 032 (Flat duct adapter round 90) (Only required with AR 400 and AR 401 blowers)
- 1 x AD 854 010 (Flat Duct) (Only required with AR 400 and AR 401 blowers)
- 1 x AD 990 091 (Adhesive tape for duct components)

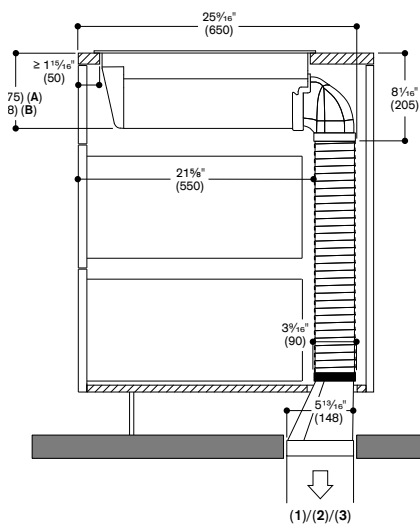
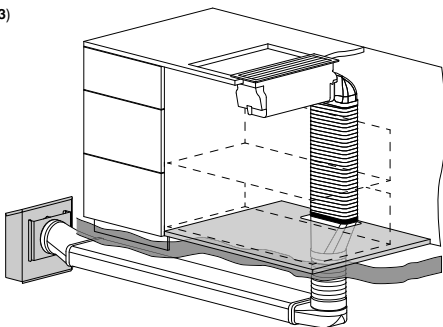
(1)



(2)



(3)



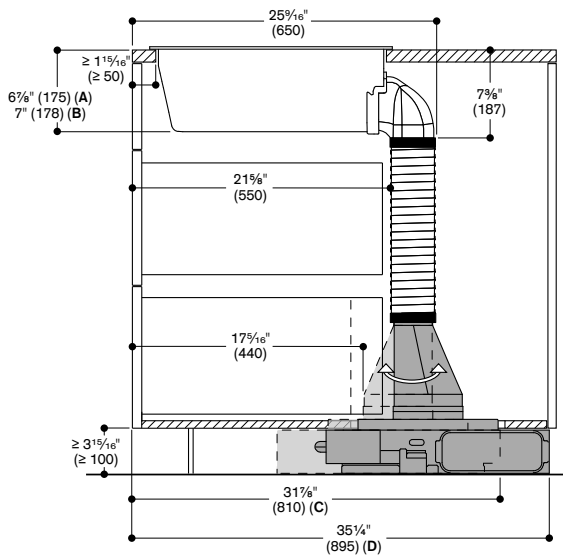
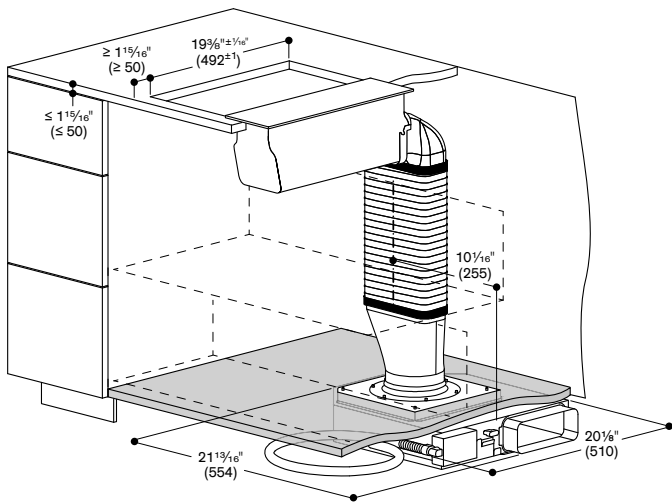
measurements in inches (mm)

## Planning example (air extraction) – Direct installation VL 414 with AR 403 722 inline blower

Island installation, connection to the right or the left side.

### List of components

- 1 x AR 403 722 (toe-kick extraction blower)
- 1 x AD 858 010 (Flat duct flex pipe)
- 1 x AD 854 041 (Flat duct adapter round)
- 1 x AD 990 090 (adhesive tape)



- A: Surface mounting  
B: Flush mounting (only VL414)  
C: Exhaust to the left. Connecting piece flat/round towards the front  
D: Exhaust to the right. Connecting piece flat/round towards the back

measurements in inches (mm)

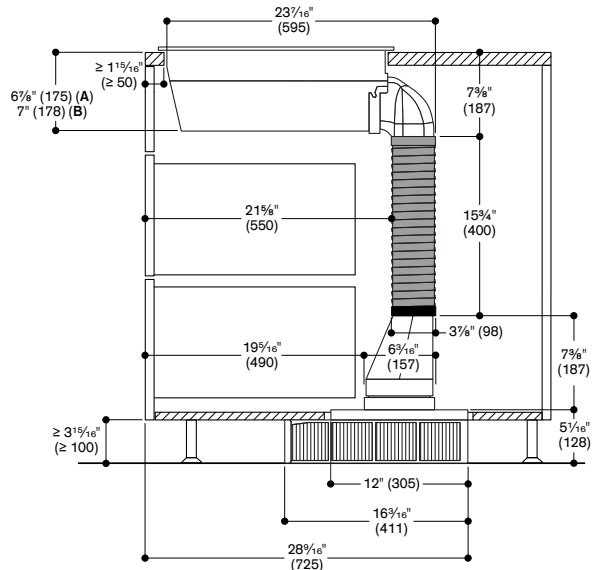
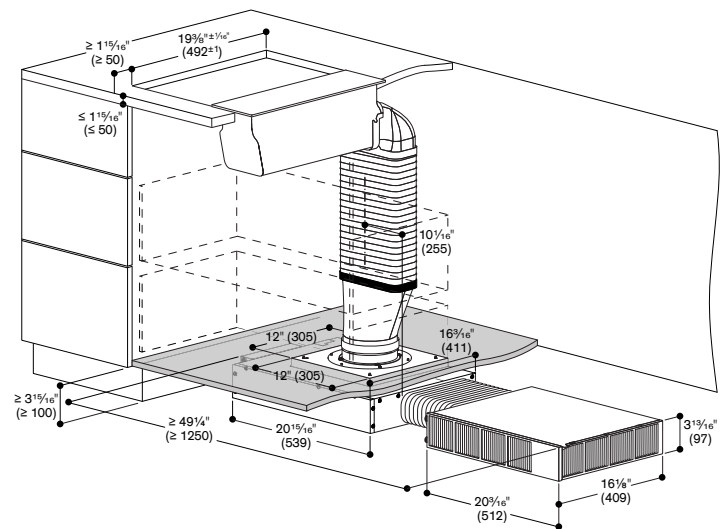
## Planning example (air recirculation) - Direct installation VL414 with AR 413 722 recirculation blower

### Good to know

- Wall or island installation.
- Allow accessibility to the charcoal filters in the lower cabinet for their replacement.
- The recommended minimum distance between filter openings and cabinet wall if there is no ventilation grill directly in front: 6" (15 cm).
- For optimum performance, the recirculated air requires sufficient space to escape. Plan for a custom grill (or AA 010 410 stainless steel grill accessory) in the toe-kick for the air to exhaust properly.

### List of components

- 1x AR 413 722 (blower toe-kick)
- 1x AA 413 722 (recirculation kit)
- 1x AD 858 010 (flat duct flex pipe, metal, DN 150)
- 1x AD 854 041 (flat duct adapter round, metal, DN 150 flat/round)
- 1x AD 413 722 (Oval flex duct)
- 1x AA 010 410 air exhaust grill (or custom grill)
- 1x AD 990 091 (adhesive tape for sealing the ducts, aluminum)



- A: Surface mounting  
B: Flush mounting (only VL414)

## General ventilation planning notes

The aim of good ventilation system planning is to extract cooking vapors out of the kitchen area as completely and quickly as possible. To help you plan and install your system correctly, here are a few important notes on system planning from our ventilation experts.

The planning of a ventilation system is significantly determined by the air requirement and air output. The air requirement must be contrasted with the corresponding air output that a ventilation appliance can produce, while taking the influence of all the ventilation components involved into account.

### Air requirement needed:

Please observe the local applicable building regulations when configuring ventilation solutions. The air output of a complete ventilation system must be designed according to the air requirement needed. For this, the size of the kitchen and a corresponding air change rate for the volume of space are often used as the basis for planning.

If the distance between the ventilation system and the cooktop is less than 4 feet, the factors listed below must be taken into account to ensure that most of the cooking vapors are trapped as soon as they rise from the cooktop:

- **The size and architecture of the kitchen:** As the size of the room increases, the movements of air in the room also increase and, as a result, the air requirement becomes greater.
- **The cooking appliances:** The choice of cooktop is the decisive influencing factor. Every cooktop produces different types and amounts of cooking vapors. The wider the cooktop, the higher the output of the ventilation system should be. Above all, the ventilation system must have a sufficient reserve capacity, if special Vario cooking appliances, such as a fryer, Teppan Yaki, wok or grill, are to be installed, because such appliances can be expected to produce a higher amount of cooking vapors. We therefore also recommend that these special cooking appliances are installed, if possible, in the centre of the cooktop configuration and not at the edge.
- **The type of ventilation system:** Every type of ventilation system has particular characteristics which influence the air requirement needed. Ventilation systems, such as downdraft ventilation, are characterized by extracting vapors directly from the cooktop. As they rise up, the cooking vapors can therefore not spread as far in the ambient air. In this case, the air output required is usually less than for those types of ventilation system that are 30" or further away from the cooktop.
- **The operation mode:** All Gaggenau ventilation systems can be operated both in exhaust air mode and air recirculation mode. It should be noted that, in air recirculation mode, the additional activated charcoal air filter leads to a reduction in air output in comparison to exhaust air mode. The larger the surface of the activated charcoal air filter, the more the ventilation system bears comparison in its extraction and noise behavior with an exhaust air solution. In air extraction mode, the actual air output depends not only on the blower output, but also significantly on the duct system.

### Important influencing factors on the air output/CFM rate:

- The blowers: Gaggenau ventilation systems can be combined with powerful blowers for exhaust air or air recirculation mode. These blowers are also very pressure-stable. They overcome possible pressure losses caused by a ducting system and work highly effectively at a low noise level.
- Ducting and installation: To achieve optimum results, the following points should be observed during installation:
  1. Install duct bends with a minimum clearance of 12" from the exhaust air opening.
  2. Avoid reductions in cross sections.
  3. For duct bends, use bends that are as wide as possible.
  4. For longer duct runs, preferably install ducts that have a smooth and flat inner surface.
  5. Use exhaust air pipes with a diameter of at least  $\varnothing$  5".
  6. Pay attention to the use of a short ducting path where possible.
  7. Fit wall outlets that have wide fins, wide-meshed grills and a low back-pressure.
  8. Ensure sufficient supply air.