



Safer travel

COVID-19 fact sheet for
bus company owners

SETRA

The Sign of Excellence.

Overview.

Setra stands for safety, and this is especially visible during the COVID-19 pandemic. Drivers and passengers should be able to continue enjoying their travels aboard a Setra coach because they are afforded high levels of safety on board – including protection against infections.

This fact sheet provides bus company owners and drivers with practical recommendations for the correct operation of roof-mounted air conditioning systems and for bus travel operations. Furthermore it contains valuable information for your passengers which will increase their confidence in bus travel.

Rapid exchange of air in the bus

Pages 3-6

How the air conditioning system ensures a constant flow of fresh air.

General recommendations for coach travel operations

Page 8

Other points to consider in order that coach travel is safer for your drivers and passengers.

Recommendations to the driver for the optimal purification of the passenger compartment with fresh air.

Page 7

How to ensure the optimal purification of the passenger compartment with fresh air.

Possible retrofit solutions for the bus

Page 9

How you can optimise the equipment in your Setra buses in the age of COVID-19.

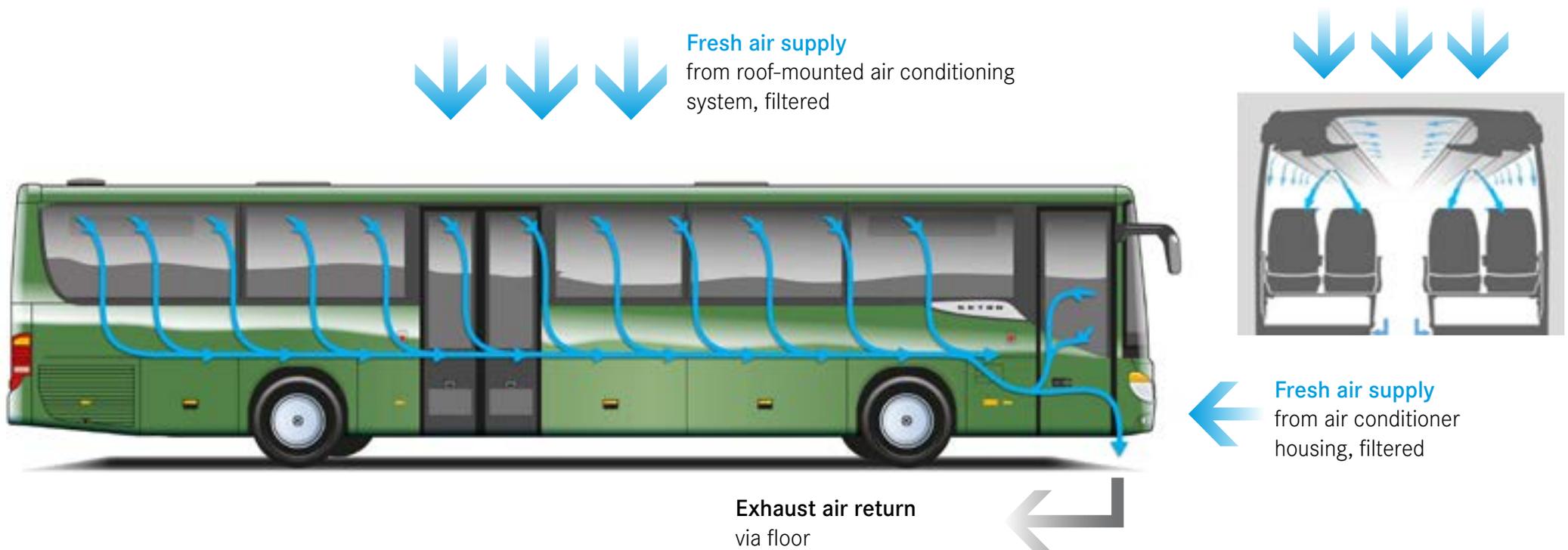
Rapid change of air in the MultiClass UL.

According to current findings, rapid exchange of air significantly decreases the risk of a virus spreading. The high-performance ventilation and air conditioning systems meet this requirement as this data impressively shows.

→ Complete change of air every two minutes (max. fresh air mode), requirement: exterior temperature between 8 °C and 26 °C*

→ Complete change of air every four minutes (mixed air mode), requirement: exterior temperature below 8 °C and above 26 °C**

→ No exchange of air possible, requirement: exterior temperature above 35 °C*** or SMOG button (tunnel, traffic jam)



* Corresponds to the conditions in central Europe throughout 80 percent of the year
*** Corresponds to less than 1 percent of the year in central Europe

** Corresponds to the conditions in central Europe throughout 20 percent of the year

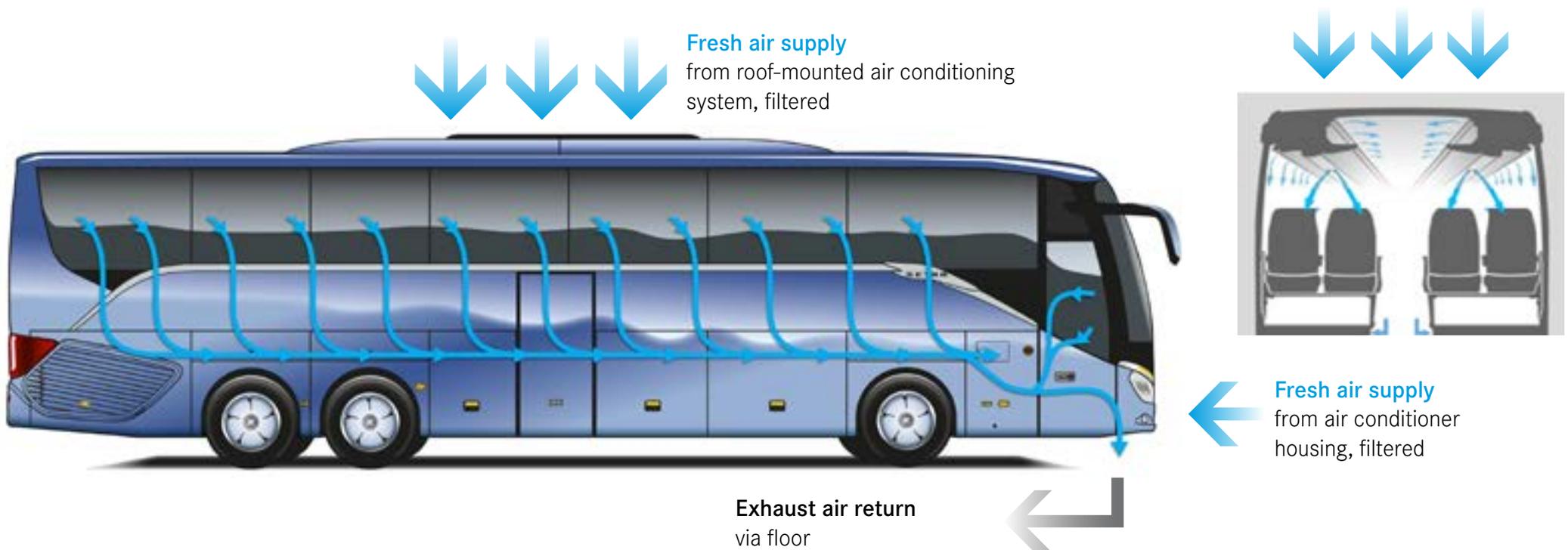
Rapid change of air in the ComfortClass.

According to current findings, rapid exchange of air significantly decreases the risk of a virus spreading. The high-performance ventilation and air conditioning systems meet this requirement as this data impressively shows.

→ Complete change of air every two minutes (max. fresh air mode), requirement: exterior temperature between 8 °C and 26 °C*

→ Complete change of air every four minutes (mixed air mode), requirement: exterior temperature below 8 °C and above 26 °C**

→ No exchange of air possible, requirement: exterior temperature above 35 °C*** or SMOG button (tunnel, traffic jam)



* Corresponds to the conditions in central Europe throughout 80 percent of the year
*** Corresponds to less than 1 percent of the year in central Europe

** Corresponds to the conditions in central Europe throughout 20 percent of the year

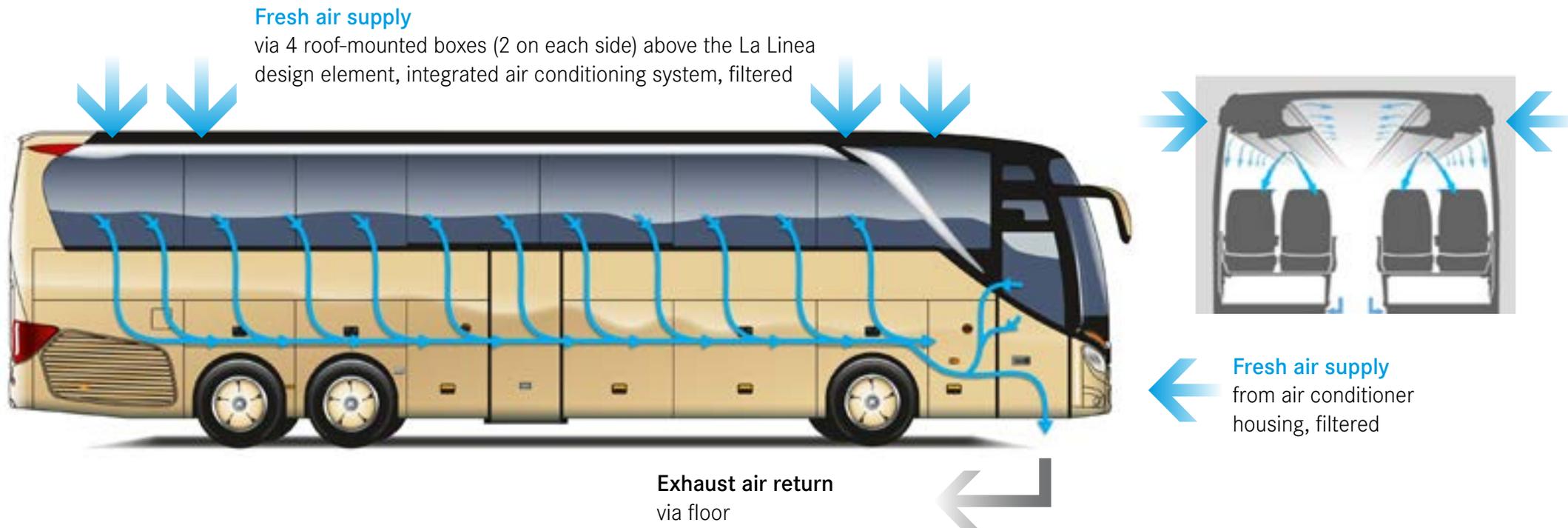
Rapid change of air in the TopClass.

According to current findings, rapid exchange of air significantly decreases the risk of a virus spreading. The high-performance ventilation and air conditioning systems meet this requirement as this data impressively shows.

→ Complete change of air every minute (max. fresh air mode), requirement: exterior temperature between 8 °C and 24 °C*

→ Complete change of air every 3 minutes (mixed air mode), requirement: exterior temperature below 8 °C and above 24 °C**

→ No exchange of air possible, requirement: exterior temperature above 35 °C*** or SMOG button (tunnel, traffic jam)



* Corresponds to the conditions in central Europe throughout 80 percent of the year
*** Corresponds to less than 1 percent of the year in central Europe

** Corresponds to the conditions in central Europe throughout 20 percent of the year

Rapid change of air in the double-decker touring coach.

According to current findings, rapid exchange of air significantly decreases the risk of a virus spreading. The high-performance ventilation and air conditioning systems meet this requirement as this data impressively shows.

→ Complete change of air every minute (max. fresh air mode), requirement: exterior temperature between 8 °C and 24 °C*

→ Complete change of air every 3 minutes (mixed air mode), requirement: exterior temperature below 8 °C and above 24 °C**

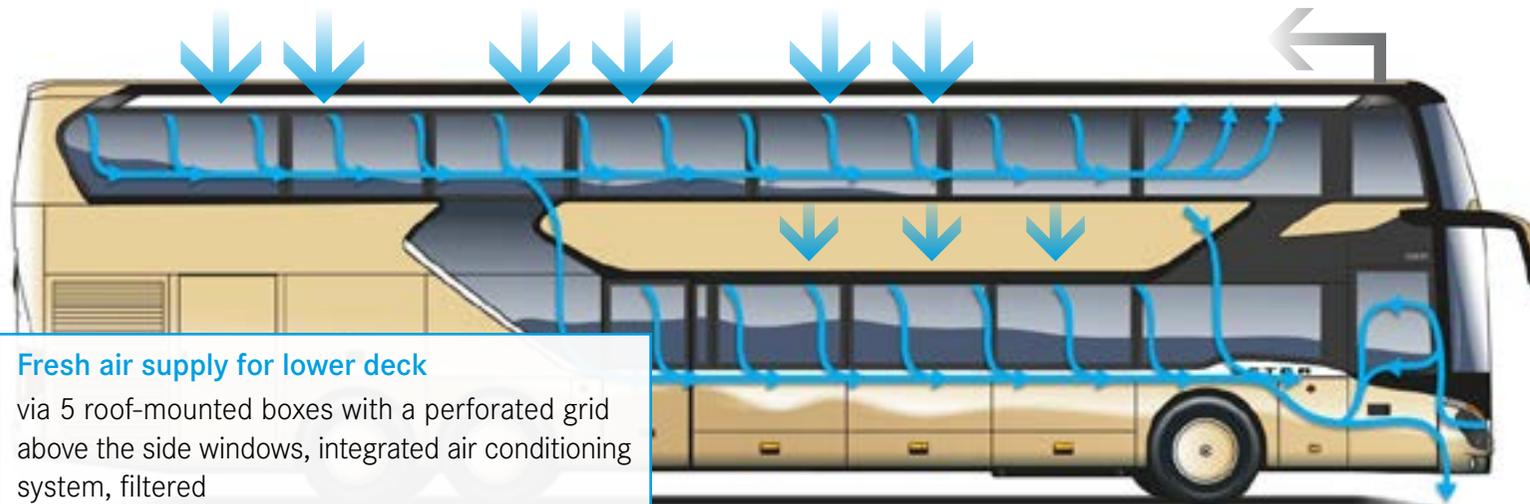
→ No exchange of air possible, requirement: exterior temperature above 35 °C*** or SMOG button (tunnel, traffic jam)

Fresh air supply for upper deck

via 6 roof-mounted boxes (3 on each side) above the La Linea design element, integrated air conditioning system, filtered

Exhaust air return

for upper deck via 2 venting boxes (left/right) and the stairs from the lower deck

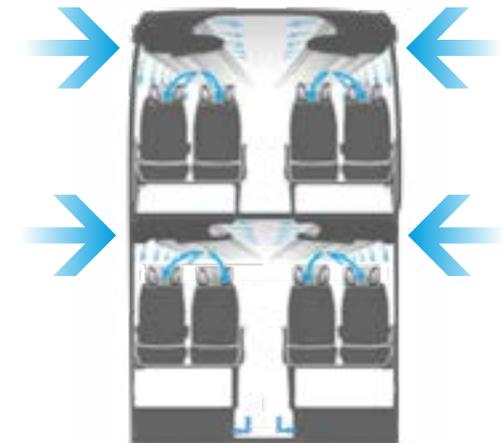


Fresh air supply for lower deck

via 5 roof-mounted boxes with a perforated grid above the side windows, integrated air conditioning system, filtered

Exhaust air return

for lower deck via ventilation grille in the cockpit and floor



Fresh air supply from air conditioner housing, filtered

* Corresponds to the conditions in central Europe throughout 80 percent of the year ** Corresponds to the conditions in central Europe throughout 20 percent of the year
 *** Corresponds to less than 1 percent of the year in central Europe

Recommendations to the driver for the optimal purification of the passenger compartment with fresh air.

Daimler Buses offers sophisticated air conditioning technology for buses which, when operated correctly, provides for a permanently high level of fresh air in the interior. With this information* you can make full use of the technical capacity of your air conditioning system.

Before setting off:

- **Purification of air in vehicle** – engine is running, doors and driver's window closed, HVAC system deactivated (ventilation mode), blower set to at least 50 percent.
- **After a maximum 4 minutes** (air has been completely exchanged) **activate HVAC AUTO mode.**
- **Check that the ventilation grilles are clear** (boot, under the spare wheel).

Breaks while on the road:

- **Open the driver's window, roof hatches and both doors to ventilate the bus** – the vehicle must be supervised and the air conditioning system deactivated.

While driving:

- **Keep the driver's window and roof hatches closed while driving.**
- **Drive in AUTO mode, only use the SMOG and REHEAT button if the situation requires it** (tunnel, traffic jam, misted windows).
- **To avoid the SMOG button in traffic jams,** maintain sufficient distance from the vehicle ahead.
- **Increase the rate of air exchange by setting the blower to a higher speed.**

After the journey:

- **Purification of air in vehicle** – engine is running, doors and driver's window closed, HVAC system deactivated (ventilation mode), blower set to at least 50 percent.
- **After a maximum of 4 minutes** (air has been completely exchanged), **activate HVAC AUTO mode.**

* Detailed information about the correct operation of the air conditioning system can be found in the vehicle Operating Instructions.

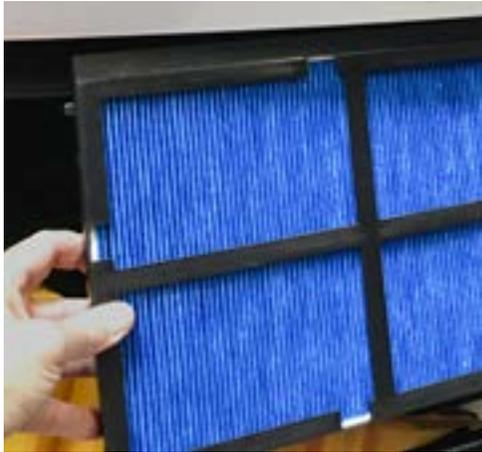
General recommendations for bus travel operations.

Would you like to further increase the safety on board your bus during the COVID-19 pandemic? Here, in addition to simple but effective operating information, you can receive many practical tips for on the road which may help you when dealing with passengers for example.

- Do not overfill luggage racks in order to achieve optimum air flow.
- Exchange the air conditioning system filters in accordance with maintenance recommendations – more often would be better (replace the active filters every 3 months). Do not beat or blow the filters clean.
- Operate the air conditioning system in HVAC AUTO mode while driving.
- Clean the vehicle interior regularly.
- Leave all of the air vents in the passenger control panels open for optimal purification with fresh air.
- Plan sufficient breaks so that the on-board toilet is only used in an emergency.
- Place marker tape outside the vehicle at door 1 to ensure that the 1.5 m social distancing rule is adhered to.
- Define a one-way system for entering and exiting the bus: entry at door 1 – exit at door 2.
- If a one-way system is not possible: divide the passengers into two groups: entry at the rear/entry at the front.
- Advise passengers about current local rules regarding the wearing of face masks.
- Ease seating arrangements, e. g. leave first row of seats behind driver empty, leave alternate rows of seats free, leave individual seats free, etc.

Possible retrofit solutions for the bus.

Setra is supporting bus companies during the COVID-19 pandemic with effective equipment for retrofitting and a range of practical accessories. Measures are continually being updated and expanded – please contact your Setra salesperson.



Filter systems

→ Filter systems (active filters) with anti-viral functionality filter out even the finest aerosols.



Protective driver doors

→ Protective driver doors (made of glass or polycarbonate) protect drivers from droplet infection.



Hand sanitiser dispensers

→ Hand sanitiser dispensers (sensor controlled) provide for the necessary hand hygiene.



Increase in flow of fresh air

→ A software modification extends the range of situations in which the maximum level of fresh air is blown into the vehicle by either 33 or 40 percent (depending on the model).

OMNIplus

Latest on the subject of COVID-19: use the virtual OMNIplus training courses for company owners and drivers. Online training focusses in particular on the function of the air conditioning system. Learning objectives include tips on optimum operation and instruction in basic technological principles. Further information can be found at <https://bus-training.daimler.com>

