



## GUIDE TO AIRCRAFT OEM CABIN AIR QUALITY

As a passenger on a business aircraft, you are very much in control of your world and your environment. With Covid-19 bringing cabin air quality into sharp focus, we have developed this guide to show what options are available from each aircraft manufacturer to remove pathogens and bacteria from the air in aircraft cabins. Health and safety are our priority and this guide is designed to provide reassurance of the health benefits afforded by business aviation.

There are many ways to ensure high quality cabin air, and the systems used will largely depend on the aircraft type and what it is used for. Many business jets use 100% fresh air systems, compressing and sterilizing air before it enters the cabin. For systems that recirculate a proportion of the cabin's air, HEPA (High-Efficiency Particle Assurance) filters are the most used on airlines and are also found in business aircraft. A HEPA filter must capture a minimum of 99.97% of contaminants at 0.3 microns in size. As well as on aircraft, they are largely used in medical facilities and surgical rooms where pure, high-quality air is needed.

### BOMBARDIER

- HEPA filters are fitted to Global 6,000, 6,500 and 7,500 products as standard.
- In Challenger aircraft, the cabin air is refreshed up to 30 times per hour.

### DASSAULT

- If HEPA filters were not installed as standard to Falcon 7X and 8X aircraft, they can be retrofitted.
- For other Dassault aircraft types, there are procedures in place to limit air recirculation.

### EMBRAER

- The Phenom 100EV, Phenom 300E, Praetor 500 and Praetor 600 all use air recirculation systems.
- The Praetor models can provide either 100% fresh air or recirculated air and HEPA filters can be fitted upon request.

### GULFSTREAM

- All Gulfstream aircraft use 100% Fresh Air Systems. The air supply passes through very high pressures and temperatures before being cooled and entering the cabin, destroying impurities.
- Gulfstream is introducing a plasma ionization system, which emits positive and negative oxygen ions that inactivate harmful molecules and neutralize particulate matter. The system operates whenever the aircraft environmental control system is active.
- The ionization system is available as a retrofit on in-service G650, G650ER, G550, G450, and GV models. Additional installation options are pending foreign certification. It's provided as standard equipment on N-registered G650 and G650ERs, with G500, G600, and international certifications in development.

### TEXTRON AVIATION

- HEPA filters are installed in Cessna Citation Longitude and Cessna Citation Latitude aircraft.
- Textron Aviation also uses Fresh Air Systems on other products, which focus on circulating fresh air from outside the aircraft into the cabin. Air is compressed by the engine, killing germs, bacteria and viruses. It is cooled to cabin temperature before being distributed.

**Most aircraft models we deal with can be upgraded to include HEPA filters. Please talk to your sales representative about cabin air quality for further information.**

*All information regarding aircraft cabin air systems has originated from the OEM in question and is accurate as of September 1st, 2020.*