

VDI 6022 General Instructions for Hygienic Design

General

VDI 6022 contains guidelines for hygiene-related technical and organisational requirements to be observed in the planning, manufacture, installation/assembly, and operation and maintenance of ventilation and air conditioning systems. These requirements aim to protect human health in terms of the quality of the supply air.

VDI 6022 applies to all rooms and common areas used by people for more than 30 days per year or periodically for more than two hours per day. For more information, refer to [VDI Engineering Homepage](#) . For general information on the guidelines, refer to [VDI 6022 Part 1](#).

Customer and user requirements

- Keep the packaging on the unit for as long as possible prior to installation to protect it from rain, dust, etc.
- Prevent precipitation (snow, rain) from accumulating in the outdoor air duct and being conveyed to the unit, and avoid short-circuiting between the supply air and extract air. Refer to the assembly instructions for the unit.
- Observe the specific requirements for operation and maintenance. Refer to the unit's Operation and Maintenance Instructions and VDI 6022 Additional Maintenance.

General requirements for the unit configuration

- The supply air side components and ducting systems must be easy to clean.
- The unit base must not contain grooves or indentations.
- Necessary inspection doors.
- Drip trays should be designed to slope towards a drain to fulfill drainage requirements.
- Filter assembly with horizontal air direction and top inlet must be equipped with drainage on the inlet side.
- All gaskets must be constructed with closed cells.

Requirements when selecting a unit

- Outdoor air filter no less than class ePM1-50%.
- All components must be accessible with regard to required inspection and cleaning work. Inspection doors should be in place on both sides of the supply air components that are not withdrawable, and must be able to be inspected, cleaned and tested; for example drip trays, heat exchanger surfaces and humidifiers.
- Fin spacing for coils must be at least 2.5 mm on cooling coils and 2 mm on heating coils for easy cleaning depending on dust and particle size.
- Sound attenuators in the outdoor air must be placed after the filter. Sound attenuators must be fitted with withdrawable supply air baffles and must not be placed directly after the cooling coil or humidifier.



- Unit sections with an internal height exceeding 1600 mm must be equipped with an inspection window and light fitting in the fan and filter section and humidifier section.
- To use duct components (coils and sound attenuators), it must be possible to inspect the duct system before and after the component.

Control systems, special requirements

- Enable automatic dry-blowing of cooling coils and supply air components before downtime. Refer to the unit's Operation and Maintenance Instructions.
- Humidifiers together with preheaters and additional heating coils must be sized and controlled to prevent relative moisture in the supply air from exceeding 90%.