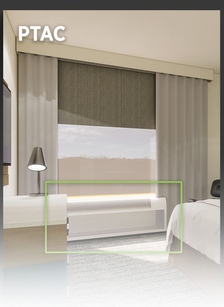
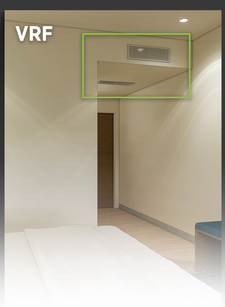
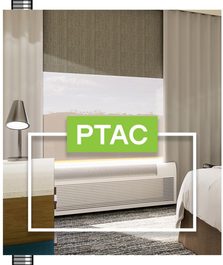


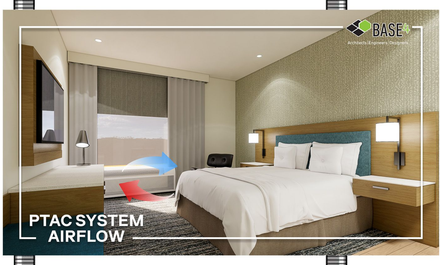


BASE4
Architects | Engineers | Designers

HVAC Systems

for Your Hotel Project



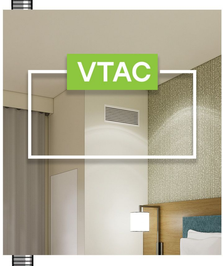


BENEFITS:

- Easy to install. The PTAC unit is installed in a sleeve that serves as a platform for the outdoor grille and interior unit kit. The sleeve is connected to electrical and condensate lines.
- No outdoor units and refrigerant lines are needed as the units are self-contained.
- PTACs are ideal for single zones.
- No ductwork is required.
- The PTAC is the least expensive HVAC option.

DRAWBACKS:

- Standard PTAC units cannot provide dehumidified fresh air to an area.
- Note that several manufacturers provide "outside air" PTACs that do offer this feature, but these units cannot pressurize the guestroom.
- Typically, fresh air is provided via a separate DOAS (dedicated outside air system), and an outside/dehumidified air is directly ducted to the guestroom.
- PTAC units can only serve a single room.
- The HVAC condenser is inside the guest room, and the guests can hear this pump turn on and off.



BENEFITS:

- The terminal is installed in a closet-like corner enclosure with a top-air discharge that is ducted into single or multiple rooms.
- Easy to install. Installation is possible from any interior side (front, right or left) and does not require skilled labor.
- No outdoor units and refrigerant lines. The units are self-contained.
- Easy to maintain and replace the parts as units are installed in the closet.

DRAWBACKS:

- Standard VTAC units cannot provide dehumidified fresh air to a room.
- Typically, fresh air is provided via a separate DOAS (dedicated outside air system), and outside/dehumidified air is directly ducted to the guestroom. A dedicated closet is required, which reduces the overall floor space.
- Units must be placed with a louver on an exterior wall. This might affect the building's elevation.
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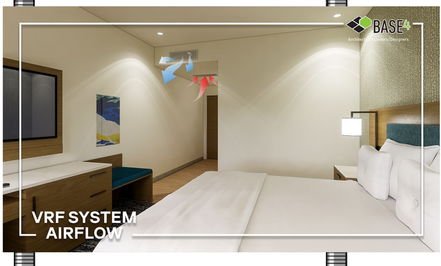

BENEFITS:

- The multi-split system connects multiple indoor units to one outdoor unit.
- The system saves space and is more aesthetically pleasing to the elevations due to fewer outdoor visible units.
- VRF units simultaneously heat or cool different zones thanks to individually controlled refrigerant flow to different evaporators (indoor units).
- VRF units do not have condensers in the guest rooms, so this is the quietest option.

DRAWBACKS:

- Fresh air is provided via a separate DOAS (dedicated outside air system), and outside/dehumidified air is directly ducted to the guestroom.
- Typically, the installation cost is higher than other air-conditioning systems.
- A qualified refrigeration mechanic is required for installation.