

ZZ-20 Design and Installation Notes

- Extra consideration should be given when applying any zone control system to a building that requires large amounts of cooling in the core zones during cold weather. Consider adding auxiliary heat to external zones or using one system for the core zones and one system for the external zones.
- It is recommended that the system installation be limited to 50 tons of capacity. Rooftop units with economizers and relief dampers are strongly recommended for buildings with core cooling loads.
- Oversizing of the HVAC equipment is not recommended. In most cases, it is better to slightly undersize the equipment.
- It is recommended that the HVAC equipment have two stages of heating and two stages of cooling.
- The pressure drop through the zone dampers is negligible and should not be a factor when sizing branch duct runs.
- Zone dampers are rated up to 2" w.c. of static pressure and up to 2,000 fpm.
- Zone dampers should be installed as far back from the discharge air grille as possible. Flex duct should be used for the last 5 feet of each branch run.
- Bypass dampers should be sized for 90% of the total system air flow at 2,500 fpm. The ZZ-20 panel should be located near the center of the building to keep wire runs as short as possible.
- DO NOT mount the ZZ-20 panel on or inside the rooftop unit.
- Use a separate 24 VAC, 40 VA transformer for the ZZ-20 panel.
- One 24 VAC, 75 VA transformer can power up to 20 zone dampers.
- All wiring should be 18 ga standard or plenum rated thermostat wire.
- Wiring should comply with all local and national codes.