DESIGN GUIDELINE 230014
PACKAGED ROOF TOP AIR CONDITIONING UNITS

Roof top air conditioning equipment (RTU) is not preferred and shall be used only when absolutely necessary. Additionally, gas fired RTUs are discouraged and shall be used only when absolutely necessary. Obtain approval from U-M Design Manager (DM) before proceeding with RTUs in general and gas fired RTUs specifically.

Specify high quality roof top air conditioning units only. Refer to list of preferred manufacturers. Where necessary, use a continuous, sound attenuating curb when no access is required to the bottom of the equipment or support the equipment 24" above the roof (18" minimum) so that roof maintenance can be performed. Provide a catwalk for service access to routinely serviced components (such as control cabinets) that will be out of reach.

Typically, rooftop unit controls shall be manufacturer's standard packaged controls, unless U-M DM dictates otherwise. Direct expansion compressor and refrigeration controls shall be manufacturer’s standard.

Ensure RTU has BAS connectivity capability with BACnet IP and MSTP compliance. Coordinate with U-M DM regarding integration requirements.

For rootop units used on U-M hospital projects, see design guideline "230905-H: MECHANCIAL SYSTEM CONTROLS" for use of packaged controls on hospital projects.

Generally, units with return fans are preferred to units with exhaust fans.