



- ▶ Mechanical HVAC Systems
- ▶ General Contracting

KROESCHELL PROJECT CASE STUDY:

HVAC and BAS Upgrade at 21st Medical Group, Schriever AFB

THE CHALLENGE:

The 21st MDG was experiencing airflow deficiencies in spaces throughout their medical facility. The system was struggling to satisfy the heating and cooling needs during both summer and winter seasons.

The challenges the facility faced included:

- Many of the perimeter offices and treatment rooms had full glazing from floor to ceiling with window shade on the exterior walls and typically only one square supply air grill in the middle of the room that caused uneven heating/cooling.
- The facility had an inefficient dental instrument processing center (DIPC) configuration that did not meet Air Force standards. Proper pressurization and air changes were a concern.
- The existing building automation system (BAS) was in need of re-commissioning.
- Contract maintenance, located at Peterson AFB, required remote access to the existing BAS; however, it was currently limited to personnel onsite at Schriever.



THE SOLUTION:

Kroeschell repaired all issues including:

- Corrected airflow deficiencies throughout the clinic by replacing square diffusers with linear diffusers in perimeter offices with glass windows. Kroeschell also replaced the existing return air fan, installed new VFDs and provided commissioning for each VAV box.
- Repaired dental DIPC rooms by demolishing the existing room finishes and infrastructure to remodel the area into a three room DIPC consisting of a decontamination room, a sterilization room and a sterile storage room.
- Furnished and installed new sterilizer; disconnected, relocated and reconnected existing washer; and remodeled two rooms into a single functional dental lab.
- Re-commissioned the BAS and expanded it to allow for viewing, monitoring and controlling from Peterson AFB.

THE RESULTS:

The repairs Kroeschell made to improve the performance of the HVAC systems were completed with very little impact to the 21st MDG. The new DIPC configuration and design meet AFMSA standards and will be used on future projects. All designs, system modifications and installation of equipment have improved operations, reduced costs, increased reliability and extended the operational life of the system.

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PROJECT OVERVIEW:

Location: Schriever AFB, CO

Project Scope:

- Upgraded HVAC to correct airflow deficiencies throughout the clinic.
- Remodeled existing DIPC into a three room DIPC and remodeled two rooms into a single functional lab.
- Recommissioned BAS and expanded capabilities to allow remote monitoring and control.

Customer Profile:

The Schriever Clinic handles most medical services for service members assigned to Schriever AFB, dependents and retired military. Services include primary care, aeromedical, dental, immunizations, pharmacy, laboratory, radiology, public health and mental health.



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