

HVAC Technical Center of Expertise

Program Manager: 256-603-2705

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG

Mission: The U.S. Army Engineering and Support Center Huntsville Heating, Ventilating, and Air-Conditioning Technical Center of Expertise's mission is to serve as a subject matter expert for USACE on heating, ventilating, and air-conditioning, HVAC, related topics including refrigeration.

Establishment: The Heating, Ventilating, and Air-Conditioning Technical Center of Expertise, HVAC TCX, was established in 2002 to support the Army and USACE with HVAC-related design, construction and maintenance issues. Since the program's inception, the customer base has grown to include other DOD elements as well as the Corps' Civil Works offices.

Services: Services commonly provided by the HVAC TCX include the following:

- Scope / Criteria Development
- Design Development / Design Review
- Construction Support (Submittal Reviews, Testing, Commissioning, etc.)
- Site Assessments / Energy Audits
- System Assessments / Performance Verification Testing / Troubleshooting
- HVAC Training

Technical Capabilities: Tools / analysis commonly performed by the TCX include the following:

- Energy Analysis
- Heating and Cooling Load Analysis
- Systems Comparisons / Life-Cycle Cost Analysis
- Equipment Sizing / Selection
- Piping Sizing / Stress Analysis
- Ductwork Sizing
- Ventilation Analysis
- Sequences of Control / Control Points List
- Ground Source Heat Pump Design / Evaluation

Organization: The HVAC-TCX is operated and managed by Huntsville Center's Engineering Directorate, Mechanical and Manufacturing Technology Branch. The branch is structured in a matrix type support model that allows support to multiple programs and projects concurrently. Projects associated with the HVAC-TCX are handled under this same matrix support structure. The branch's setup allows for the full resources of group to support the HVAC-TCX as needed and when available.

Latest Certification: The HVAC-TCX is an active TCX and was most recently re-certified by USACE on April 26, 2023.

Personnel: The TCX includes a group of mechanical engineers with experience in supporting a broad range of HVAC and refrigerant related programs and projects.

Contacts: Technical questions and requests for HVAC-TCX services may be submitted via email to CEHNC-HVACTCX@usace.army.mil. Phone numbers for key personnel include:

Branch Chief - (256) 895-1727 Technical Lead - (256) 603-2705