



Sturgis Community Health Care Center - CT Scan Installation



Project Data

A 512 square foot addition to the Sturgis Community Healthcare Center was provided on a fast-track basis to accommodate the installation of a new GE Medical HiSpeed XI Scanner. The CT scan (computerized axial tomography scan) is an x-ray procedure combining many x-ray images with the aid of a computer to generate cross-sectional views and, if required, three-dimensional images of the internal organs and structures of the body.

Location

Sturgis, South Dakota

Building Type

Healthcare

Building Area

512 square feet

Mechanical Systems / Features

3-Ton CRAC
Overhead Medical Gases

Electrical Systems / Features

Electrical Distribution
CT Scan Installation

Completion Date

July, 2003

Architect

Lund Associates, Ltd.
www.lundltd.com

Mechanical Engineering

Mechanical design services included providing a dedicated cooling system for the CT Scan equipment room and extending existing facility oxygen, vacuum systems to the new addition.

Precise temperature and humidity control and high efficiency filtration not only meet strict equipment environmental conditions, but make the space comfortable for both patients and staff.

Electrical Engineering

Evaluation of the existing building power system and the electrical load requirements of the proposed CT Scan equipment determined adequate power capacity was not available for the addition. Electrical design included extension of power from an existing service panel in an adjacent building to the new CT Scan Room addition. The locations of scan equipment electrical connections, box mounting heights, control interconnection conduits, etc. were carefully coordinated with equipment supplier drawings and equipment installation drawings.

Lighting was designed to provide dimmable low level incandescent downlighting over the CT table and the control station for use during patient procedures and equipment operations. Higher level general room illumination was provided with 2x2 parabolic fluorescent lights to accommodate cleaning and room set-up tasks. Existing building fire alarm, data, telephone and paging systems were extended to include the new addition.