

HIGHER TECHNICAL INSTITUTE

GENERAL STUDIES DEPARTMENT
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DIPLOMA PROJECT

COMPUTER AIDED HVAC MODULAR SYSTEM

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JUNE 1997



INTRODUCTION

Heating is a process and system of raising the temperature of an enclosed space for the primary purpose of ensuring the comfort of the occupants. To be able to design a central heating system in a building the first and main step is to find the heat requirements, in order to select the appropriate equipment since this project deals with heating, then the load requirements that will be considered are the heat losses that occur during winter.

The system suggested to the user is the central heating system with forced circulation. This system results from the combination of a boiler and a burner in order to heat up the water, that circulates through a system of pipes, radiators, water circulators, expansion tank and e.t.c.

Historical development.

The earliest method of providing interior heating was an open fire. Such as source, along with related methods such as fireplaces, cast-iron stoves, and modern space heaters fuelled by gas or electricity, is known as direct heating because the conversion of energy into heat takes place at the site to be heated. A more common form of heating in modern times is known as central, or indirect, heating. It consists of the conversion of energy to heat at a source outside of, apart from, or located within the site or sites to be heated; the resulting heat is conveyed to the site through a fluid medium such as air, water, or steam.

Except for the ancient Greeks and Romans, most cultures relied upon direct-heating methods. Wood was the earliest fuel used, though in places where

Context Diagram

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