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BUILDING TECHNOLOGY REPORT

BUILDING SERVICES



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MOH

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PREFACE

The building technology report is a brief report based on various references. It is governed by and will discuss the basic principles of mechanical services in the building, with particular attention to water supply, and sanitation and plumbing systems each with its specified function in a complex mechanism. It also briefly discusses the aspects of design and space requirements.

The report is divided into three parts. The first part deals with water supply, plumbing systems and sanitary installation systems. The second part discusses electrical installation requirements as well as the problems of distribution in large building. The third part comprises communication and control by means of telecommunication and signal system in modern buildings.

Building services form an integral part of most buildings. Therefore it is important for the architect to become familiar with the systems of the various services and to consult specialists in the related fields at the early stage of the design process. It is necessary for the architect and the consultant engineers to understand the interactions between the various services systems and the building fabric.

It is hoped that the information given in this report will be used to students of architecture as well as those in other branches of the building industry, especially those involving with engineers, tradesmen and manufacturers of trades which are broadly grouped under the building services.

The interrelationship of architecture and engineering is the focus of this report. It is hoped that this will provide

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INTRODUCTION

Mechanical installation will cause general changes, not only in structural principles, but production techniques, and planning concepts as well.

It is no longer practicable to build a structure and later provide it with artificial illumination, heat, ventilations and water supply. Even the simplest method or ideas and possibility ways of installation are involved. The ideas challenge not only the design principles but also conception of space and size of buildings.

Progress in mechanical environmental control makes it necessary to contribute the most important factors to the installations and structures.

This for examples, the distribution of cables, pipes and ducts and their outlets should be planned in advance, according to the grid systems and related to the condular coordinations in order to obtain accuracy and suit the instructure.

Similarly in the case of lighting systems, heat, ventilations etc., such method of distributing the installations has an obvious effect on the design of ceiling, floors etc. Continous slab systems, free from beams, will meet there requirements.

For the purpose of the disenssion we shall consider the installation of the following below:-

1. water supply and systems
2. sanitary and plumbing
3. electrical supply system
4. communications system.