ELECTRICAL DOMESTIC INSTALLATION FOR THE HIGH RISE DWELLING

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ABSTRACT

This paper is about electrical domestic installations for high rise dwellings. The scope includes wiring system the whole building with all equipment and facilities needed in building such as compound lighting, fan, lift and electrical accessories (plugs and socket outlet). The design involved equipments design, size and type of cable design and lastly safety and protection design.

The first part is introduction and background of the design. The second part is the design of electrical equipment designs such as lighting, socket outlet, low voltage power supply.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Electrical installations or wiring is a system of electric conductors, components, and apparatus for conveying electric power from source to the point of use. In general, electric wiring for light and power must convey energy safely and reliably with low power losses, and must deliver it to the point of use in adequate quantity at rated voltage. Electric installations systems are designed to provide a practically constant voltage to the load within the capacity limits of the system.

The building wiring system originates at a source of electric power, conventionally the distribution lines or network of an electric utility system. Nowadays there are many consultant involved in electrical domestic installations. Therefore they have many choices to choose what type of electrical installation systems for specific projects. It is because increasing the developments in materials.

Currently, there is much equipment with great technology inventions in markets. An electrical installation designer must know the suitable equipment before planning and carrying out an electrical installation.

This paper is to design the electrical installation for 9 storeys buildings consider as flat houses. It is consist installation of lighting, MATV, telephone system and other accessories such as socket outlet, switches, ceiling roses, plug etc. It is also consider the maximum demand and diversity to decide the type of cables, protective device, size of circuit protective conductor and type of protection to be used. In general, electric installation for light and power must convey energy safely and reliably with low power losses, and must deliver it to the point of use in adequate quantity at rated voltage.