ABSTRAK

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Judul : Analisis Sistem Proteksi Penangkal Petir Studi Kasus di Hotel Al-Hambra Singaparna

Penelitian ini bertujuan untuk menganalisis Sistem Proteksi Petir Eksternal dan mengetahui efektifitas sistem penangkal petir yang telah terpasang pada Gedung Hotel Al-Hambra Singaparna. Standar yang digunakan dalam menganalisis Sistem Proteksi Petir (SPP) adalah SNI 03-7015-2004, dan Peraturan Umum Instalasi Penangkal Petir (PUIPP). Dalam penelitian ini metode yang digunakan adalah Metode Sudut Proteksi, Metode Bola Bergulir dan *Early Steamer Emmision*. Menurut hasil analisis yang telah dilakukan, Sistem Proteksi Petir di Gedung Hotel Al-Hambra Singaparna belum sepenuhnya melindungi kebutuhan area proteksi, karena masih belum memenuhi zona proteksi petir sesuai standar yang ditentukan. Berdasarkan hasil analisis yang telah dilakukan Sistem Proteksi Petir pada Gedung Hotel Al-Hambra tidak sepenuhnya aman, karenanya disarankan untuk menambah atau mengganti proteksi petir yang memenuhi zona proteksi petir sesuai yang dibutuhkan.

Kata Kunci: Metode Bola Bergulir, *Early Steamer Emmision*, Sistem Proteksi Petir.

ABSTRACT

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This study aims to analyze the External Lightning Protection System and determine the effectiveness of the lightning rod system that has been installed in the Al-Hambra Singaparna Hotel Building. The standard used in analyzing the Lightning Protection System (SPP) is SNI 03-7015-2004, and the General Regulation of Lightning Protection Installation (PUIPP). In this study the methods used were the Protection Angle Method, the Rolling Ball Method and Early Steamer Emmision. According to the results of the analysis that has been carried out, the Lightning Protection System in the Al-Hambra Singaparna Hotel Building has not fully protected the needs of the protection area, because it still does not meet the lightning protection zone according to the specified standard. Based on the results of the analysis that has been carried out, the Lightning Protection System at the Al-Hambra Hotel Building is not entirely safe, so it is recommended to add or replace lightning protection that meets the lightning protection zone as needed.

Keywords: *Rolling Ball Method, Early Steamer Emmision, Lightning Protection System.*