

ABSTRAK

Pembangunan sistem pemadam kebakaran pada Gedung Anandamaya Residences Sudirman. Dirancang sesuai peraturan Badan Standard Nasional (BSN) dan National Fire Protection Association (NFPA), untuk mengurangi resiko terjadinya kebakaran dalam gedung bertingkat. Dalam perencanaan dan analisis pembangunan sistem pemadam kebakaran ini dilakukan pengukuran dan perhitungan kebutuhan utilitas springkler dengan standard nasional Indonesia maupun NFPA. Begitu juga Kebutuhan air dalam sistem pemadam kebakaran yang tepat dan efektif, Sumber-sumber air yang maksimal akan dapat membantu mengurangi resiko dan mencegah penyebaran api kebakaran. Dalam sistem pemadam kebakaran didesain dengan penggunaan sistem pompa yang dapat maksimal untuk menyalurkan air dalam semua titik titik penyaluran air dalam gedung. Maka perencanaan dan analisis pemilihan Kapasitas pompa mengacu kepada luas gedung ($179,8 \text{ m}^2$) sehingga dapat diukur kebutuhan air dalam tekanan dan daya pompa pemadam kebakaran.

Kata Kunci : SNI, NFPA, Springkler, tekanan, daya



STUDI PERANCANGAN DAN ANALISIS TEKANAN DAN DAYA POMPA PEMADAM KEBAKARAN PADA GEDUNG ANANDAMAYA RESIDENCE

ABSTRACT

A fire fighting system construction at the Anandamaya Residences Sudirman Building Design and construct according to regulations of National Standard Board (BSN) and National Fire Protection Association (NFPA), to reduce the risk of fire in high rise buildings. A fire fighting system construction at the Anandamaya Residences Sudirman Building. Designed and construct according to regulations of National Standard Board (BSN) and National Fire Protection Association (NFPA), to reduce the risk of fire in high rise buildings. Planning and analyzing the needs of sprinkler utilities in this construction of the fire extinguishing system uses the Indonesian national standard formulas and NFPA as a reference and determination of measurement and calculation standards. As well for the calculation of water requirements of the building's fire extinguisher system to be precise, effective and in accordance with existing standards. Certainty the availability of water sources and the accuracy of the position of the sprinkler will be able to help reduce the risk and prevent the spread of fire. And one of the crucial things in this fire extinguisher system is that a pump system that can work optimally with the right pressure in delivering water at all points of the waterways in the building. Then the planning and analysis of the selection of pump capacity refers to the area of the building ($179,8 \text{ m}^2$) so that it can be measured water demand under pressure and fire pump power.

Keywords: SNI, NFPA, Sprinkler, Pressure, Power

UNIVERSITAS
MERCU BUANA