PLANNING MODIFICATION OF PDAM BUILDING STRUCTURE INTO 10 FLOORS IN YOGYAKARTA BY USING SPECIAL MOMENT RESISTING FRAME SYSTEM (SRPMK)

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ABSTRACT
PDAM office building which was built in Sidoarjo has 2 floors and was built by using pour concrete in site. The owner would like to plan PDAM office buildings to be constructed in Yogyakarta. The aim of planning this building is to make the building remains constructed when high risk earthquake occurs. One of the reasons why the building is going to be built in Yogyakarta because Yogyakarta is a region with the strong earthquake zone, while Sidoarjo is an area with secondary earthquake zone.

Of a building consists of upper structure and substructure. Upper structure includes column, beam, floor plate, stairs, and roof while the substructure covers puer and foundation. Therefore, planning for PDAM office buildings which can also be used for other office that is located in one building will be discussed.

In setting up building located in high risk earthquake area, region 5 and 6, and to remain forces due to earthquake SRPMK has to be used in planning. SRPMK used in planning of building structure in Yogyakarta. The aim of this final project is only to plan the sturdy and dimension of the structure. The result that is expected from this final project is an office building with 10 floors that can be built in strong earthquake zone.

Keywords : special moment resisting frame (SRPMK).