

ANALISIS KERENTANAN BANGUNAN SEKOLAH TERHADAP BENCANA GEMPA
BUMI MENGGUNAKAN *RAPID VISUAL SCREENING* (STUDI KASUS : SEKOLAH
LUAR BIASA DI KABUPATEN BANTUL)

Oleh Salma Maya Puspita
21/481276/GE/09709

INTISARI

Kabupaten Bantul merupakan salah satu wilayah di Indonesia yang berpotensi rentan terhadap gempa bumi karena secara geografis dekat dengan *Zona Megathrust* dan keberadaan Sesar Aktif Opak. Peristiwa gempa bumi di Bantul menyebabkan banyak kerusakan, salah satunya kerusakan bangunan Sekolah Luar Biasa (SLB). Penelitian ini bertujuan untuk (1) mengidentifikasi kerentanan bangunan terhadap potensi bencana gempa bumi pada SLB di Kabupaten Bantul menggunakan metode *Rapid Visual Screening*; (2) menganalisis faktor yang berpengaruh terhadap kerentanan bangunan terhadap potensi bencana gempa bumi pada SLB di Kabupaten Bantul berdasarkan metode *Rapid Visual Screening*. Penilaian kerentanan bangunan menggunakan metode *Rapid Visual Screening* dengan formulir FEMA P-154 Level 1 *High Seismicity* dan *Very High Seismicity*. Data yang digunakan berupa data tipe bangunan, jumlah lantai, bahaya jatuhnya, ketidakberaturan vertikal, ketidakberaturan horizontal, usia bangunan, dan jenis tanah. Hasil penelitian berupa klasifikasi kerentanan bangunan dimana 73 bangunan atau 78% bangunan dari 18 SLB di Kabupaten Bantul tergolong rentan dengan 13 bangunan termasuk klasifikasi ancaman terjadi kerusakan, 17 bangunan termasuk kerentanan sangat tinggi, 43 bangunan termasuk kerentanan tinggi, 3 bangunan termasuk kerentanan sedang, dan 18 bangunan termasuk kerentanan rendah. Faktor yang menyebabkan kerentanan bangunan SLB adalah tipe material, ketidakberaturan horizontal, tipe bangunan, dan ketidakberaturan vertikal.

Kata kunci : Bangunan, Kerentanan, RVS, SLB

ANALYSIS OF SCHOOL BUILDING VULNERABILITY TO EARTHQUAKE
DISASTERS USING RAPID VISUAL SCREENING (CASE STUDY: SPECIAL SCHOOLS
IN BANTUL DISTRICT)

by Salma Maya Puspita
21/481276/GE/09709

ABSTRACT

Bantul Regency is one of the regions in Indonesia that is potentially vulnerable to earthquakes because it is geographically close to the Megathrust Zone and the presence of the Opak Active Fault. The earthquake in Bantul caused a lot of damage, one of which was damage to Special School (SLB) buildings. This study aims to (1) identify the vulnerability of buildings to potential earthquake disasters at SLB in Bantul Regency using the Rapid Visual Screening method; (2) analyze factors that influence the vulnerability of buildings to potential earthquake disasters at SLB in Bantul Regency based on the Rapid Visual Screening method. Building vulnerability assessment uses the Rapid Visual Screening method with the FEMA P-154 Level 1 High Seismicity and Very High Seismicity forms. The data used are building type, number of floors, fall hazard, vertical irregularities, horizontal irregularities, building age, and soil type. The results of the study are in the form of a building vulnerability classification where 73 buildings or 78% of the buildings from 18 SLB in Bantul Regency are classified as vulnerable with 13 buildings included in the classification of the threat of damage, 17 buildings included in very high vulnerability, 43 buildings included in high vulnerability, 3 buildings included in medium vulnerability, and 18 buildings included in low vulnerability. Factors that cause the vulnerability of SLB buildings are material type, horizontal irregularity, building type, and vertical irregularity.

Keyword : Buildings, RVS, SLB, Vulnerability