

INTISARI

Dalam dunia konstruksi, bekisting berperan penting membentuk beton sesuai desain sebelum mengeras, melibatkan instalasi, fabrikasi, dan pembongkaran. Risiko dalam proses ini perlu dikelola. Tujuan penelitian ini ialah mengkaji efektivitas metode *Job Safety Analysis* (JSA) dan *Hazard Identification Risk Assessment and Determining Control* (HIRADC) dalam pengendalian risiko pekerjaan bekisting pada proyek rumah susun tenaga pendidik UGM.. Penelitian berfokus pada proyek rumah susun tenaga pendidik UGM, bertujuan memahami kontribusi metode-metode tersebut dalam mengurangi risiko dan meningkatkan keamanan pekerjaan. Hasilnya diharapkan bermanfaat bagi industri konstruksi dan keselamatan, memberikan wawasan baru dalam mengidentifikasi, menilai, dan mengendalikan risiko bekisting, juga meningkatkan kesadaran akan keselamatan di kalangan tenaga pendidik dan praktisi, berpotensi mengurangi insiden di proyek konstruksi mendatang.

Metode penelitian ini menggunakan metode *Job Safety Analysis* (JSA) dan *Hazard Identification, Risk Assessment, and Determining Control* (HIRADC) dalam mengidentifikasi, dan mengevaluasi risiko pekerjaan yang terjadi pada pekerjaan bekisting dan perancah di proyek Rumah Susun Tenaga Pendidik UGM.

Hasil dari penelitian ini menunjukkan bahwa dalam proses identifikasi risiko pada pekerjaan bekisting dan perancah dalam proyek Rumah Susun Tenaga Pendidik UGM, digunakan metode *Job Safety Analysis* (JSA) dan *Hazard Identification, Risk Assessment, and Determining Control* (HIRADC). Penelitian ini mengidentifikasi tiga tingkat bahaya yang mengacu pada indeks/matriks risiko sesuai dengan standar SNI IEC/ISO 31000:2016. Ketiga tingkatan bahaya tersebut mencakup bahaya rendah, sedang, dan tinggi, dan penerapannya difokuskan pada aktivitas fabrikasi, instalasi, dan pembongkaran. Temuan ini memberikan pemahaman yang lebih jelas mengenai keragaman tingkat risiko dalam pekerjaan bekisting dan perancah di lingkungan proyek konstruksi, serta berkontribusi pada perancangan langkah-langkah pengendalian risiko yang lebih efektif dan tepat.

Kata kunci : Bekisting, Manajemen Risiko, K3

ABSTRACT

In the study of construction, formwork plays a pivotal role in shaping concrete according to design specifications prior to its curing phase, involving installation, fabrication, and subsequent removal. The inherent risks associated with this process necessitate careful management. The primary objective of this research is to assess the effectiveness of the Job Safety Analysis (JSA) and Hazard Identification Risk Assessment and Determining Control (HIRADC) methodologies in controlling the risks inherent in formwork operations within the context of the educator's apartment building project at Gadjah Mada University (UGM). This study is centered on the educator's apartment building project at UGM, with the aim of comprehending the contributions of these methods in mitigating risks and enhancing occupational safety. The anticipated outcomes hold potential significance for the construction industry and occupational safety by shedding new insights into the identification, evaluation, and control of formwork-related risks, while concurrently augmenting safety awareness among educators and practitioners, thereby potentially reducing incidents in future construction endeavors.

The research methodology employed encompasses the utilization of the Job Safety Analysis (JSA) and Hazard Identification, Risk Assessment, and Determining Control (HIRADC) methods to identify and evaluate occupational risks inherent in formwork and scaffolding activities within the framework of the Educator's Apartment Building project at UGM.

The outcomes derived from this research reveal that in the process of risk identification pertaining to formwork and scaffolding activities within the Educator's Apartment Building project at UGM, the Job Safety Analysis (JSA) and Hazard Identification, Risk Assessment, and Determining Control (HIRADC) methodologies were employed. This study delineates the identification of three levels of hazards referencing the risk index/matrix as stipulated by the SNI IEC/ISO 31000:2016 standard. These three tiers encompass low, moderate, and high hazards, with their application specifically tailored to fabrication, installation, and dismantling activities. These findings furnish a clearer comprehension of the diversified spectrum of risk levels entailed in formwork and scaffolding operations within the construction project milieu, thereby contributing to the formulation of more effective and precise risk control measures.

Keywords: *Formwork, Risk Management, Occupational Health and Safety.*