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Occupational Safety and Health Regulations for Daily Casual Workers in Construction Services: A Worker-Centered Documentary Regulatory-Compliance Assessment in the Tulungagung Context

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ABSTRACT

Background: Daily casual workers are common in construction, where rapid workforce turnover can complicate induction, competency checks, employment documentation, task authorization, supervision, and social-security administration. Purpose: This study examines Indonesian occupational safety and health (OHS) and employment regulations relevant to daily casual construction workers and develops a worker-centered documentary framework for a Tulungagung context. Methods: A qualitative documentary regulatory-compliance assessment combined a normative review of legal instruments with a structured narrative synthesis of 19 peer-reviewed studies published between 2018 and 2026. The literature component was not a systematic review, and original database-level search logs and screening counts were not retained; therefore, exhaustive retrieval is not claimed. During revision, the cited regulations were re-verified against official Indonesian legal-information repositories, including amendment and repeal status, on 6 October 2026. No company-level interviews, observations, accident records, or proprietary workforce data were analyzed. Results: The regulatory mapping indicates that OHS duties apply irrespective of short-term employment status. The synthesis organizes the evidence into eight documentary domains and four recurring vulnerability themes concerning worker traceability, continuity of safety communication, PPE within the wider hierarchy of controls, and synchronization of safety with employment and social-security administration. These themes are documentary interpretations, not measured prevalence estimates. Conclusion: The framework, worker master-list concept, and proposed 90-day sequence are practical hypotheses generated from documentary synthesis and require empirical validation before their effectiveness can be inferred.

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INTRODUCTION

Construction remains strategically important to Indonesia's economy. Statistics Indonesia reported that construction contributed about 10.43% of national gross domestic product in the fourth quarter of 2024, while sectoral surveys continue to record both permanent workers and substantial volumes of casual worker-days (Statistics Indonesia, 2025). The project-based nature of construction produces marked fluctuations in labor demand because excavation, structural work, masonry, finishing, mechanical-electrical installation, and maintenance require different numbers and categories of workers at different stages. Contractors therefore often engage workers through short-duration, attendance-based, or output-based arrangements. Although this flexibility supports project delivery, it can create a safety-governance challenge when workforce turnover occurs faster than employment documentation, training, supervision, and social-protection systems can be updated. Broader systematic evidence has also linked precarious or temporary employment with increased occupational-injury risk, underscoring the importance of fully including short-term workers in preventive systems (Koranyi et al., 2018; Debela et al., 2022).

Construction also has a persistently high hazard profile. Indonesian studies describe recurring tensions between production targets and safety, limited resources, weak enforcement, poor reporting, uneven training, and hazardous work environments (Lestari et al., 2020; Kadir et al., 2022). An analysis of unsafe behavior in Indonesian construction identified improper placement of tools and materials, failure to attach safety lines, and unsafe movement of equipment and materials among frequent violations associated with falls and struck-by or cut-by events (Machfudiyanto et al., 2023). An analysis of 150 Indonesian court decisions concerning construction accidents likewise emphasized the importance of regulatory compliance, standard operating procedures, and equipment suitability in preventing fatal outcomes (Bria et al., 2024). Evidence from other construction settings similarly identifies unsafe behavior, inadequate safety training, inconsistent PPE use, and insufficient supervision as recurring injury determinants (Meng et al., 2021; Ashuro et al., 2021; Meseret et al., 2022). Collectively, these findings suggest that construction-safety failures arise from interactions among work organization, supervision, competence, equipment, and enforcement rather than from a single unsafe act.

Daily casual workers require particular attention because employment status can affect how consistently they are incorporated into safety systems even when their substantive right to protection is unchanged. Government Regulation No. 35 of 2021 permits a daily work agreement for qualifying work that changes in time or volume and is paid according to attendance (Article 10(1)-(2)). Such workers must work fewer than 21 days in one month (Article 10(3)); if they work 21 days or more for three consecutive months or longer, the daily agreement ceases to apply and the employment relationship changes by law (Article 10(4)). Article 11 also requires written daily-work documentation. These employment requirements have OHS implications because induction, competency control, insurance coverage, and incident follow-up depend on an accurate worker roster and employment record (Government of Indonesia, 2021a).

Indonesian OHS protection is designed to apply on the basis of workplace exposure and employer responsibility rather than the permanence of employment. Law No. 1 of 1970 establishes fundamental workplace-safety duties, while Government Regulation No. 50 of 2012 provides the framework for the Occupational Safety and Health Management System (SMK3). In construction,

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Minister of Public Works and Housing Regulation No. 10 of 2021 addresses the Construction Safety Management System (SMKK). Personal protective equipment is addressed by Minister of Manpower Regulation PER.08/MEN/VII/2010, and work at height by Minister of Manpower Regulation No. 9 of 2016. Social protection is also relevant through the administration of JKK, JKM, and JHT under Minister of Manpower Regulation No. 5 of 2021 as amended by Regulation No. 1 of 2025 (Government of Indonesia, 1970, 2012; Ministry of Public Works and Housing, 2021; Ministry of Manpower, 2010, 2016, 2021, 2025).

The Tulungagung context gives the issue practical relevance. Azhari and Mustofa (2023) reported weaknesses related to education, discipline, and understanding of OHS practices among construction workers in Tulungagung and recommended stronger socialization, stakeholder cooperation, and clearer accident-investigation processes. National studies have examined safety climate, unsafe behavior, fatal accidents, and management factors, while broader reviews have addressed precarious employment, supervision, training, PPE, and injury risk (Koranyi et al., 2018; Lestari et al., 2020; Kadir et al., 2022; Machfudiyanto et al., 2023; Bria et al., 2024). The present study does not claim that these research streams have never been combined elsewhere. Rather, within the 19 peer-reviewed sources actually included in this documentary synthesis, few sources jointly addressed daily employment documentation, construction-safety management, task-level controls, and social-security traceability. Table 1 therefore presents a purposefully selected gap map from the cited evidence set, not an exhaustive map of all published literature.

For the gap map, each cited study was read for its stated population or setting, principal topic, reported findings relevant to OHS governance, and the elements it did not address in relation to the present worker-centered framework. The "main focus" and "what it contributes" columns summarize content reported by each source; the "gap relative to present study" column is the authors' comparative documentary interpretation. Because the original literature search was not systematic and the full search history was not retained, these comparisons are bounded by the 19-source evidence set and should not be read as claims of exhaustive absence in the wider literature.

Table 1. Literature-Gap Mapping for the Present Documentary Study

Study	Main focus	What it contributes	Gap relative to present study
Koranyi et al. (2018)	Precarious employment and occupational injury	Links insecure/temporary employment with injury risk	Not construction-specific to Indonesia; no integrated compliance framework
Lestari et al. (2020)	Indonesian construction safety climate	Management, communication, and safety-climate factors	Does not integrate daily employment administration or social protection
Kadir et al. (2022)	Indonesian construction safety climate and demographics	Shows job and worker characteristics can shape safety climate	No worker-level linkage across employment, task control, and BPJS records

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Study	Main focus	What it contributes	Gap relative to present study
Azhari & Mustofa (2023)	PPE use in Tulungagung construction	Provides local contextual evidence on education, discipline, and OHS understanding	Focused on PPE; not an integrated regulatory-compliance framework
Machfudiyanto et al. (2023)	Unsafe behavior in Indonesian construction	Identifies recurring unsafe acts and task-related risks	Does not address daily casual employment documentation or social protection
Bria et al. (2024)	Fatal construction accidents in Indonesian court decisions	Highlights regulatory compliance, procedures, and equipment suitability	Accident/legal-case focus; not worker-centered administrative-safety traceability
Al-Bayati (2023)	PPE non-compliance	Shows role of supervision, risk perception, training, and management support	International evidence; PPE-centered rather than integrated compliance
Asih (2026)	Legal protection for construction workers	Discusses OHS protection under current Indonesian labor law	Legal analysis without an operational worker-level integration pathway

This study addresses that gap through two questions: (1) Which OHS and employment requirements are relevant to daily casual workers in the Indonesian construction-services sector? and (2) What recurring implementation vulnerabilities and control areas are identified by the documentary synthesis in a Tulungagung context? The contribution is a proposed worker-centered documentary framework that integrates employment documentation, SMK3/SMKK requirements, task-level risk control, PPE and work-at-height controls, incident management, supervision, and social-security traceability. The framework is not presented as an empirically validated model.

METHODS

This study used a qualitative documentary regulatory-compliance approach combining normative analysis of Indonesian legal instruments with a structured narrative synthesis of construction-safety literature. Tulungagung Regency, East Java, was used as the contextual setting. The study did not include company-level interviews, direct observations, worker rosters, accident statistics, or other proprietary records. The unit of analysis was therefore the documentary statement: a legal provision that creates an obligation, or a reported finding in a peer-reviewed source that bears on implementation of that obligation. Results are presented as an evidence-informed framework and proposed implementation approach, not as measured company performance or a validated causal model.

The regulatory corpus comprised Law No. 1 of 1970 on Occupational Safety; Government Regulation No. 50 of 2012 on SMK3; Government Regulation No. 35 of 2021 on fixed-term

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employment, outsourcing, working time, rest time, and termination; Law No. 2 of 2017 on Construction Services together with Government Regulation No. 14 of 2021 and the current Job Creation framework; Minister of Public Works and Housing Regulation No. 10 of 2021 on SMKK; Minister of Manpower and Transmigration Regulation PER.08/MEN/VII/2010 on PPE; Minister of Manpower Regulation No. 9 of 2016 on work at height; and Minister of Manpower Regulation No. 5 of 2021 as amended by Regulation No. 1 of 2025 on JKK, JKM, and JHT administration. These instruments were selected because they directly govern employment status, workplace-safety management, construction safety, PPE, high-risk work, or social protection relevant to daily casual construction workers. During manuscript revision, the legal texts were reverified on 6 October 2026 using the JDIH BPK database and the legal-information repositories of the responsible ministries. Verification covered the instrument title and number, current status, linked amendments or partial repeals, and the specific provisions relied on in the analysis. Where an instrument had been amended, the base regulation and amending instrument were read together. This check confirmed, among other matters, the 2025 amendment to Minister of Manpower Regulation No. 5 of 2021 and the partial 2026 repeal of limited provisions of Minister of Manpower Regulation No. 9 of 2016 by Minister of Manpower Regulation No. 11 of 2026; the work-at-height provisions cited in this study were checked against that change.

The evidence component was a structured narrative synthesis rather than a systematic review. The final evidence set contained 19 peer-reviewed studies published between 2018 and 2026, together with official statistical and legal sources listed in the references. Studies were retained when they addressed at least one of the following topics: precarious or temporary employment and injury risk; Indonesian construction safety climate; unsafe behavior or fatal accidents; PPE compliance; work organization, supervision, training, worker participation, or near-miss learning; or legal protection relevant to construction workers. Non-peer-reviewed commentary was excluded from the evidence synthesis except for official laws, regulations, and Statistics Indonesia data. The original search was assembled as a targeted narrative evidence collection, not as a prospectively logged database review. Database names, exact search strings, search dates, duplicate-removal records, title/abstract screening counts, and exclusion logs were not retained in a form that can be reconstructed reliably. Those details are therefore not reconstructed retrospectively. The verifiable search record for this revision is the complete 19-study reference set used in the synthesis. This limitation reduces reproducibility and means the literature component may be non-exhaustive; no PRISMA flow or claim of comprehensive retrieval is made.

Analysis proceeded in three stages. First, the unit of analysis in the legal corpus was a provision that could be translated into an operational obligation for daily casual workers, such as written employment documentation, induction, task authorization, PPE provision, work-at-height control, incident management, supervision, or social-security administration. These obligations formed the initial deductive domain set. Second, each peer-reviewed source was read for findings relevant to one or more of those obligations. A source could be assigned to more than one domain when its reported findings crossed categories; ambiguous material was retained only when the connection to a domain could be stated explicitly and was otherwise left uncoded rather than forced into a category. Third, the domains were refined by comparing legal obligations with recurring themes in the literature, producing eight analytical domains. Coding for this manuscript was

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conducted by the author; no independent second-coder reliability check or formal inter-rater statistic was performed. No numerical scores, high–medium–low rankings, or formal prioritization algorithm were used. The analysis therefore identifies recurrent documentary control areas rather than empirically ranked priorities. Table 2 makes the regulatory and literature basis of each domain explicit, while the source-to-theme matrix in the Results section shows how the four vulnerability themes were derived. Because only public documents and published literature were used and no identifiable human-participant data were collected, human-subject data were not involved.

Conceptual and Analytical Framework

The analytical framework uses worker traceability as the organizing link between employment administration and project safety. The sequence in Figure 1 follows a documentary rule rather than a causal claim: records first establish who the worker is and the applicable employment arrangement; entry controls then verify induction and competency; those checks support task authorization and hazard control; task-specific exposure determines PPE and other high-risk controls; supervision and reporting provide feedback during work; and social-security and audit records provide administrative and assurance layers. This ordering is supported by the legal obligations mapped in Tables 2 and 3 and by literature on training, supervision, safety climate, unsafe behavior, PPE, and incident learning (Lestari et al., 2020; Nykänen et al., 2020; Zhang et al., 2020; Meng et al., 2021; Al-Bayati, 2023; Bria et al., 2024). The arrows therefore represent an analytical pathway for organizing documents and controls, not a validated causal model or a tested sequence of effects.



Figure 1. Proposed Worker-Centered Documentary Compliance Framework

Table 2. Analytical Codebook for the Eight Documentary Domains

Domain	Operational definition	Primary regulatory basis	Representative evidence/indicator	Literature basis/source
Employment documentation	Ability to identify the worker, employment arrangement, worker-days, and status	PP 35/2021 Arts. 10-11	Written agreement, attendance, wage/status records	Koranyi et al. (2018); Asih (2026)

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Domain	Operational definition	Primary regulatory basis	Representative evidence/indicator	Literature basis/source
Induction & competency	Entry information, task briefing, and authorization for competent work	Law 1/1970 Art. 9; PUPR 10/2021 Arts. 6-7	Induction register, toolbox record, certificates	Lestari et al. (2020); Peiró et al. (2020); Nykänen et al. (2020); Zhang et al. (2020)
Hazard identification & task control	Identification and control of project and task-specific hazards	PP 50/2012 Arts. 6-7; PUPR 10/2021 Arts. 10, 26	HIRADC/IBPRP, JSA/AKK, permit-to-work	Machfudiyanto et al. (2023); Meng et al. (2021); Bria et al. (2024)
PPE	Provision, suitability, use, maintenance, and replacement of PPE	Permenaker PER.08/MEN/VII/2010 Arts. 2-5	PPE matrix, issue log, inspection	Azhari & Mustofa (2023); Al-Bayati (2023); Lestari et al. (2020)
Work at height	Planning, procedures, fall prevention/protection, competence, and rescue	Permenaker 9/2016 Arts. 2-6 and Ch. VI	Permit, anchorage/fall protection, competency, rescue plan	Machfudiyanto et al. (2023); Bria et al. (2024); Meng et al. (2021)
Incident & emergency management	Reporting, first aid, emergency response, investigation, and corrective action	Law 1/1970 Arts. 3, 9; PUPR 10/2021 Art. 10	Incident/near-miss log, investigation, closure evidence	Bria et al. (2024); Zhou et al. (2019)
Social security	Current JKK/JKM/JHT-related registration and reporting for applicable workers/projects	Permenaker 5/2021 as amended; Arts. 68-75 for construction services	BPJS registration, worker list, payment/reporting evidence	Asih (2026); primarily regulatory evidence from Permenaker 5/2021 as amended

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Domain	Operational definition	Primary regulatory basis	Representative evidence/indicator	Literature basis/source
Participation & supervision	Competent supervision, worker communication, participation, and feedback	PUPR 10/2021 Arts. 6-7, 11	Supervisor assignment, briefings, worker feedback	Lestari et al. (2020); Kadir et al. (2022); Zhang et al. (2020); Cheung & Zhang (2020); Schwatka et al. (2020); Goh et al. (2021)

RESULTS

1. Regulatory Protection Applicable to Daily Casual Construction Workers

The regulatory mapping indicates that daily casual status does not create a lower tier of OHS protection. Instead, it adds employment-documentation requirements to ordinary safety obligations. Table 3 summarizes the principal instruments, specific provisions, operational relevance, and auditable evidence. The synthesis indicates a recurring integration problem: the same worker may appear in attendance records but not be consistently traceable across induction, competency, PPE, task authorization, incident reporting, and social-security records.

Table 3. Regulatory Framework and Operational Obligations for Daily Casual Construction Workers

Instrument	Specific article/provision	Core obligation	Relevance to daily casual workers	Primary evidence to verify
Law No. 1/1970 on Occupational Safety	Arts. 3(1), 9(1)-(4), 14(c)	Safety conditions, induction/instruction, supervision, and required PPE must be provided.	New or short-tenure workers remain covered when they enter the workplace and must understand hazards and safeguards before work.	Safety policy, induction, hazard controls, training, supervision, PPE, and emergency arrangements.

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Instrument	Specific article/provision	Core obligation	Relevance to daily casual workers	Primary evidence to verify
Government Regulation No. 50/2012 on SMK3	Arts. 5(1)-(4), 6(1); Art. 7	Companies meeting the statutory criteria must implement SMK3 through policy, planning, implementation, monitoring/evaluation, and improvement.	Daily casual workers who are exposed to company operations should be incorporated into applicable risk-control and monitoring processes.	SMK3 policy, HIRADC, inspections, audits, management review.
Government Regulation No. 35/2021	Arts. 10(1)-(4), 11(1)-(3)	Daily work agreements are for qualifying non-fixed work, require written documentation, and are subject to worker-day limits and status consequences.	Accurate worker-day records support lawful employment status and continuity of safety onboarding.	Written daily agreements, attendance, wage records, employment-status review.
Law No. 2/2017 on Construction Services	Art. 59(1)-(3)	Users and providers must meet construction security, safety, health, and sustainability standards, including OHS and worker social protection.	Project-level construction-safety and social-protection obligations extend to workers engaged in delivery, including short-tenure workers.	Contract safety clauses, competency requirements, project safety organization, social-protection evidence.
PUPR Regulation No. 10/2021 on SMKK	Arts. 2, 6-11, 24-26	Construction users/providers must implement	Short-tenure workers need to be captured	RKK/SMKK documents, induction/toolb

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Instrument	Specific article/provision	Core obligation	Relevance to daily casual workers	Primary evidence to verify
		SMKK; RKK includes leadership, planning, support, operations, and evaluation; special-risk work requires task analysis.	in project risk controls, communication, task authorization, supervision, and evaluation.	ox records, IBPRP/AKK, inspections and permits.
Manpower Regulation PER.08/MEN/VII/2010 on PPE	Arts. 2-5	Employers must provide compliant PPE free of charge and require its use where hazards exist.	PPE provision is tied to exposure and hazard, not permanence of employment. Casual workers performing height work require the same task-specific competency and fall-protection controls as other workers.	PPE matrix, issue log, replacement, fit/condition checks, enforcement.
Manpower Regulation No. 9/2016 on Work at Height	Arts. 2-6; Ch. VI (Arts. 31-38)	Work at height requires planning, risk assessment, written procedures, safe techniques, fall protection, competent workers, and supervision.		Work-at-height permit, risk assessment, anchorage/fall-arrest system, competency, rescue plan.
Manpower Regulation No. 5/2021 as amended by No. 1/2025	Construction-services provisions, including Arts. 68-75	Regulates JKK/JKM/JHT administration, including registration, contributions, reporting, and accident/PAK reporting for construction-service workers.	Worker and project records need to correspond with actual work periods so applicable protection and reporting remain current.	BPJS project registration, worker lists, contribution and payment records, and accident-reporting records.

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2. Implementation Vulnerabilities Identified from the Evidence Synthesis

The documentary synthesis produced four vulnerability themes that are especially relevant to rapidly changing daily workforces. These themes are interpretive categories derived from the sources and regulations; they are not estimates of prevalence and were not verified at company level. The first theme, legal inclusion but possible operational invisibility, arises from the contrast between legal coverage and the need for consistent worker-level records across employment, induction, competency, PPE, task authorization, incident, and social-security systems. The literature on precarious employment and legal protection supports the importance of inclusion (Koranyi et al., 2018; Asih, 2026), while the cross-record "invisibility" formulation is the authors' documentary interpretation of the regulatory mapping rather than a directly observed site condition.

The second theme is discontinuity in safety communication. Lestari et al. (2020) and Kadir et al. (2022) describe communication, training, and enforcement as important components of Indonesian construction safety climate, while Peiró et al. (2020), Nykänen et al. (2020), and Zhang et al. (2020) emphasize training design and supervisory communication in construction settings. On that evidence, the present synthesis treats short tenure as a condition that may reduce continuity of induction, refresher information, and task-specific communication when worker turnover is rapid. This is a documentary inference and should be tested against project-level onboarding and briefing records.

The third theme concerns potential over-reliance on PPE when broader organizational and task controls are weak. Azhari and Mustofa (2023) reported education, discipline, and OHS-understanding issues in the Tulungagung construction context, while Al-Bayati (2023) associated PPE non-compliance with supervision, risk perception, training, and management support. Indonesian safety-climate findings also place worker behavior within wider management and communication conditions (Lestari et al., 2020; Kadir et al., 2022). The synthesis therefore treats PPE as one layer of control rather than as a stand-alone explanation for safety performance.

The fourth theme is a possible disconnect between project-safety records and employment or social-security administration. Government Regulation No. 35 of 2021 requires accurate daily-work documentation, and the JKK/JKM/JHT framework requires current administrative records for applicable workers and projects. Asih (2026) discusses legal protection for construction workers under the current labor-law framework. Taken together, these sources support the need to reconcile worker identity, work period, onboarding, and applicable social-protection records. The proposition that these records may become unsynchronized is an authors' documentary interpretation; its frequency and practical magnitude must be established empirically.

Table 4. Source-to-Theme Matrix for the Four Documentary Vulnerabilities

Source(s)	Reported finding or documentary basis	Analytical domain	Assigned vulnerability/theme	Rationale for synthesis
Koranyi et al. (2018); Asih (2026); PP 35/2021	Temporary/precarious work is relevant to injury risk and legal protection; daily-work arrangements require	Employment documentation; social protection	Legal inclusion but possible operational invisibility	The sources support inclusion and documentation; cross-system invisibility is

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Source(s)	Reported finding or documentary basis	Analytical domain	Assigned vulnerability/theme	Rationale for synthesis
	traceable employment records.			the authors' interpretation of what can occur when records are not reconciled.
Lestari et al. (2020); Kadir et al. (2022); Peiró et al. (2020); Nykänen et al. (2020); Zhang et al. (2020)	Safety climate, training quality, communication, and supervisory interaction influence how workers receive and apply safety information.	Induction & competency; participation & supervision	Discontinuous safety communication	Short tenure may interrupt repeated briefings or refresher communication; this is inferred from the literature and requires project-level verification.
Azhari & Mustofa (2023); Al-Bayati (2023); Lestari et al. (2020); Kadir et al. (2022)	PPE behavior is associated with education, discipline, supervision, risk perception, training, management support, and safety climate.	PPE; hazard identification & task control; supervision	Potential over-reliance on PPE	The synthesis interprets PPE non-compliance as a systems issue rather than an isolated worker-level problem.
PP 35/2021; Permenaker 5/2021 as amended by 1/2025; Asih (2026)	Employment status, worker-days, and applicable social-protection administration depend on current, identifiable worker records.	Employment documentation; social security	Possible administrative-safety disconnect	The need for synchronization is directly supported by regulatory requirements; the existence or magnitude of a disconnect is not measured in this study.

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Table 5. Evidence-Informed Compliance Risks and Verification Points

Domain	Minimum control	Risk if weak	Verification focus
Employment documentation	Written daily agreement; attendance and worker-day monitoring; monthly status review.	Misclassification, unclear employer responsibility, poor worker traceability.	Agreement, roster, attendance, wage and status-review records.
Induction & competency	Entry induction for every new worker; task briefing; competency check for specialized/high-risk work.	New workers begin work without understanding site rules or hazards.	Induction register, toolbox record, certificates/authorization.
Hazard identification & task control	Project HIRADC plus daily JSA/briefing for changing tasks and conditions.	Generic risk assessment fails to reflect actual daily exposure.	HIRADC/JSA, permit-to-work, supervisor sign-off.
PPE	Correct PPE provided before exposure, maintained/replaced, and consistently enforced.	Falls, struck-by, cut, eye/foot/head injuries; normalization of non-compliance.	PPE matrix, issue log, inspection, observation.
Work at height	Safe platform/access, edge protection or fall arrest, anchorage, competent worker, rescue plan.	High-severity fall events and ineffective emergency response.	Work-at-height permit, equipment inspection, rescue drill/plan.
Incident & emergency management	Near-miss/incident reporting, first aid, emergency contacts, investigation and corrective action.	Underreporting; repeat events; casual workers disappear from follow-up.	Incident log, first-aid record, investigation, closure evidence.
Social security	Project registration and up-to-date worker data for JKK/JKM; timely updates as the workforce changes.	Workers may remain unprotected, or claim processing may be delayed following an accident.	BPJS registration, worker list, payment and reporting evidence.
Participation & supervision	Named competent supervisor, stop-work authority, two-way	Production pressure overrides safety and workers hesitate to report hazards.	Supervisor assignment, observations, briefings, worker feedback.

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Domain	Minimum control	Risk if weak	Verification focus
	communication, literacy-sensitive instructions.		

DISCUSSION

The central documentary interpretation is that Indonesia has several regulatory mechanisms relevant to construction-worker protection, yet their practical value depends on whether employment and safety records are connected at worker level. Government Regulation No. 35 of 2021 makes daily-work documentation a clear administrative requirement, while Law No. 1 of 1970, Government Regulation No. 50 of 2012, and the SMKK framework establish safety-management duties. The present study interprets these requirements together: an accurate worker record can serve as a traceability point for checking induction, competency, task authorization, PPE, and applicable social protection. This is a documentary proposition derived from the mapped regulations; the study did not observe whether construction companies in Tulungagung actually maintain or reconcile these records.

A second documentary conclusion is that short employment duration does not, by itself, justify weaker task controls. The legal duties mapped in this study attach to workplace hazards and employer responsibilities, while construction research identifies unsafe behavior, training, supervision, and task conditions as important safety determinants (Meng et al., 2021; Machfudiyanto et al., 2023; Bria et al., 2024). A daily worker performing scaffolding, lifting, cutting, electrical work, excavation, or work at height may face the same task hazard as a longer-tenure worker. The framework therefore proposes equivalent risk-based controls and competency checks for comparable exposures. This proposal remains to be tested with project-level evidence.

Third, the reviewed literature supports interpreting PPE behavior within a wider organizational system. Lestari et al. (2020) and Kadir et al. (2022) link construction safety climate to management and communication factors; Al-Bayati (2023) identifies supervision, risk perception, training, and management support among contributors to PPE non-compliance; and Azhari and Mustofa (2023) report education and discipline issues in Tulungagung. On that basis, the present framework proposes that PPE provision and enforcement be examined together with training, task planning, supervisory practice, and the hierarchy of controls. The manuscript does not infer a measured rate of PPE non-compliance in any specific Tulungagung project.

Fourth, the documentary mapping suggests that social-security administration is most useful when treated as part of worker onboarding and traceability rather than only as a post-incident administrative step. The current JKK/JKM/JHT framework and construction-services provisions require identifiable project and worker records, while preventive OHS rules address the hazards that those workers encounter. The proposed integration of identity, employment documentation, induction, task authorization, PPE, and applicable social protection is therefore a governance proposition derived from the combined legal corpus. Its feasibility, completeness, and effect on safety outcomes have not been evaluated in this study.

A worker master list is presented here as one practical documentation option, not as an intervention shown to improve outcomes. Its potential value lies in providing a single reconciliation point for worker identity, dates worked, employment status, induction, authorized tasks, PPE, high-

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risk work competency, and applicable social-security status. Its usefulness would depend on timely updating, clear ownership, identity matching across HR/safety/BPJS systems, and actual use in site access and task authorization. Subcontracting, worker rotation, literacy barriers, or weak administrative capacity could limit implementation. Small contractors could test a simplified paper register or spreadsheet, but empirical evaluation is needed before effectiveness is claimed.

The findings also have implications for supervision and safety communication. Indonesian safety-climate research suggests that job status, education, work experience, position, and project location may influence perceptions of safety (Kadir et al., 2022). Broader construction-safety research likewise shows that supervisory communication, organizational support, and frontline safety leadership shape group safety climate and worker safety practices (Zhang et al., 2020; Cheung & Zhang, 2020; Schwatka et al., 2020; Goh et al., 2021). Supervisors should therefore avoid relying on a single communication method. Daily casual workers may differ in literacy, language, and experience; briefings can use demonstrations, visual cues, task-specific examples, and confirmation of understanding rather than written SOP distribution alone. Supervisory capacity should also remain proportionate to task complexity and risk, particularly when labor is added rapidly to meet project schedules.

From a governance perspective, SMK3 and SMKK can be treated as complementary systems. SMK3 provides a company-level cycle of policy, planning, implementation, monitoring, and improvement, whereas SMKK focuses on construction-project safety requirements and deliverables. The eight analytical domains should not be interpreted as equally important in every project or task. Their relative salience varies with hazard profile, project size, work phase, subcontracting structure, workforce turnover, and contractor capacity. Work-at-height controls, for example, become central only when exposure exists, whereas employment documentation, induction, supervision, and social-security traceability remain broadly relevant across most daily-work arrangements. Internal audits can therefore use risk-based worker sampling rather than mechanically applying equal weight to every domain.

Practical Implications: Proposed 90-Day Managerial Sequence

The following 90-day sequence is an illustrative managerial roadmap generated from the documentary synthesis; it has not been tested as an intervention schedule. The sequence reflects administrative logic rather than evidence of superior effectiveness: establish a reliable baseline of worker identities and employment records, connect workers to operational controls upon entry and during task changes, and then audit whether records and controls remain synchronized. The 0-30, 31-60, and 61-90 day windows are examples that may need to be shortened, extended, or reordered according to project size, hazard profile, workforce turnover, subcontracting arrangements, and contractor capacity. Table 6 should therefore be read as a testable implementation proposal, not a validated protocol.

Table 6. Proposed 90-Day Implementation Sequence for Daily Casual Worker OHS Compliance

Period	Proposed actions	Responsible function	Expected evidence
Days 0–30	Create a worker master list; standardize written daily work agreements; reconcile attendance	Project manager, HR/administration,	Master list, agreements, attendance

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Period	Proposed actions	Responsible function	Expected evidence
	records with employment status; verify applicable BPJS project and worker registration records; conduct a baseline HIRADC; and inspect PPE inventory and condition.	OHS officer, site supervisor.	reconciliation, BPJS proof, HIRADC, PPE inventory.
Days 31–60	Implement induction on entry; daily toolbox/JSA; supervisor checklist; work-at-height permit and rescue readiness; housekeeping and equipment inspection; and near-miss reporting.	OHS officer and line supervisors, with support from project management.	Induction and toolbox logs, JSA/permits, inspection checklists, near-miss reports.
Days 61–90	Audit the integration of worker records and safety evidence; review trends; address identified gaps; evaluate supervisor performance; formalize worker feedback and stop-work mechanisms; and conduct a management review.	Project manager, company management, OHS/quality team.	Internal audit, corrective-action register, KPI review, management-review minutes, updated procedures.

This study has several limitations. First, it is a documentary analysis and contains no interviews, direct observations, accident rates, compliance percentages, or proprietary records from a named construction company in Tulungagung; the location is used to contextualize regulatory and published evidence, not to claim local company performance. Second, the literature component involved a targeted, structured narrative synthesis rather than a systematic review. The original database list, exact search strings, search dates, duplicate-removal records, screening counts, and exclusion logs were not retained and cannot be reliably reconstructed. The 19 cited peer-reviewed studies are therefore a verifiable evidence set but may not be exhaustive, which limits reproducibility of the retrieval process. Third, the documentary coding was performed by the author using a deductive-inductive domain framework; no independent duplicate coding or inter-rater reliability assessment was conducted. Although Tables 2 and 4 make the source-to-domain and source-to-theme logic explicit, interpretive judgment remains. Fourth, the eight-domain framework, four vulnerability themes, worker master-list concept, and proposed 90-day sequence are unvalidated. Future research should test them through site observations, interviews, reviews of employment and BPJS records, sampling of induction, PPE, and permit documentation, and analyses of incidents and near misses. Near-miss information may provide proactive learning when reporting and follow-up are consistently implemented (Zhou et al., 2019).

CONCLUSIONS

This documentary analysis suggests that daily casual work in the construction sector warrants particular attention to worker traceability and recurring safety onboarding. The cited Indonesian framework contains overlapping layers of protection through general occupational-

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safety duties, SMK3, employment documentation, construction-safety management, PPE and work-at-height requirements, and JKK/JKM/JHT administration. Read together, these instruments support applying controls according to exposure and task risk rather than reducing protection because a worker is engaged for a short period or paid by attendance.

For a Tulungagung construction context, the synthesis proposes closer integration of worker administration and project safety as an area for empirical investigation. A worker master list, entry induction, competency verification, task-level hazard control, PPE and work-at-height controls, supervision, incident follow-up, and synchronized social-security records form a coherent documentary pathway, but neither the pathway nor the 90-day implementation sequence has been tested for effectiveness. They should therefore be treated as practical hypotheses for managers and researchers rather than as demonstrated best practices or ranked local priorities.

Future empirical research should test the framework across small, medium, and large construction contractors and compare daily casual workers with permanent and fixed-term workers. Useful outcomes include verified completeness of employment and social-security records, induction and competency coverage, PPE and safe-behavior observations, permit compliance, near-miss reporting, corrective-action closure, and accident frequency. Such studies are needed to determine whether the proposed documentation links and implementation sequence are feasible and whether they improve compliance or safety outcomes.

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