

EVALUASI MUTU BETON, PENULANGAN, METODE PELAKSANAAN, DAN HASIL PENGECORAN EKSISTING DI LAPANGAN (STUDI KASUS: PEMBANGUNAN RUMAH SAKIT KASIH IBU SURAKARTA)

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INTISARI

Rumah Sakit Kasih Ibu Surakarta menginisiasi pembangunan gedung baru setinggi 14 lantai di atas tanah seluas lebih dari 10.000 m². Gedung ini menggunakan konstruksi beton bertulang sebagai konstruksi utamanya, sehingga kualitasnya perlu diperhatikan dan dievaluasi agar menghasilkan konstruksi yang sesuai dengan rencana.

Evaluasi dilakukan terhadap mutu beton, mutu tulangan, metode pelaksanaan, dan hasil pengecoran eksisting di lapangan. Evaluasi mutu beton ditinjau dari nilai *slump* dan kuat tekan benda uji silinder. Evaluasi mutu tulangan ditinjau dari mutu bahan baku, sifat tampak, sifat mekanis, *shopdrawing* penulangan, dan hasil penulangan di lapangan. Evaluasi metode pelaksanaan ditinjau dari cara penuangan, perataan, dan pemadatan adukan beton. Evaluasi hasil pengecoran dilakukan dengan mengamati secara langsung hasil pengecoran di lapangan. Acuan yang digunakan dalam evaluasi yaitu Standar Nasional Indonesia (SNI) dan dokumen Rencana Kerja dan Syarat-syarat (RKS).

Hasil evaluasi menunjukkan bahwa pengujian *slump* sebanyak 150 pengujian telah memenuhi persyaratan. Pengujian silinder beton sebanyak 123 benda uji telah memenuhi persyaratan rencana. Mutu tulangan dan hasil penulangan telah sesuai dengan persyaratan. Metode pelaksanaan pengecoran telah sesuai dengan prosedur yang disyaratkan. Hasil pengecoran terdapat beberapa ketidaksesuaian yaitu berlubang pada kolom K6, *retaining wall* mengalami bocor, balok B5 berlubang, dan balok B1-A mengalami keropos. Penanganan kerusakan dilakukan dengan metode pengecoran ulang dan *grouting*.

Kata kunci: RS Kasih Ibu, evaluasi mutu, beton, tulangan, hasil pengecoran

***EVALUATION OF CONCRETE QUALITY, REINFORCEMENT,
IMPLEMENTATION METHODS, AND RESULTS OF EXISTING FIELD
CASTING (CASE STUDY: CONSTRUCTION OF KASIH IBU HOSPITAL,
SURAKARTA)***

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ABSTRACT

Kasih Ibu Hospital in Surakarta initiated the construction of a new building with a height of 14 floors on a land area of more than 10,000 m². This building uses reinforced concrete construction as its main construction, so its quality needs to be considered and evaluated in order to produce construction according to plan.

Evaluation is carried out on the quality of concrete, quality of reinforcement, method of implementation, and results of existing casting in the field. Evaluation of concrete quality in terms of slump value and compressive strength of cylindrical specimens. Evaluation of reinforcement quality in terms of raw material quality, visible properties, mechanical properties, reinforcement shop drawing, and reinforcement results in the field. The evaluation of the implementation method is reviewed from the method of pouring, levelling, and compacting the concrete mix. Evaluation of casting results is carried out by directly observing the results of casting in the field. The references used in the evaluation are the Indonesian National Standards (SNI) and the Work Plan and Requirements (RKS) documents.

The evaluation results show that 150 slump tests have met the requirements. Testing of concrete cylinders as many as 123 specimens have met the requirements of the plan. The quality of the reinforcement and the results of the reinforcement are in accordance with the requirements. The casting method is in accordance with the required procedure. The results of the casting showed several discrepancies, namely holes in the K6 column, leaking retaining walls, B5 beams with holes, and B1-A beams with holes. Damage handling is done by re-casting and grouting methods.

Keywords: Kasih Ibu Hospital, quality evaluation, concrete, reinforcement, casting results