عنوان مقاله:

Technical Evaluation of Integrated Wall and Roof Formwork System and Its Comparison with Ordinary Concrete Building Construction Method

محل انتشار:

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نویسندگان:

Hossein Maleki Toulabi - *Department of Civil Engineering, South Tehran Branch, Islamic Azad University, Tehran, Iran*

Mojtaba Hosseini - *Associate Professor, Department of Engineering, Lorestan University, Khorramabad, Iran*

Kamran Rahim of - *Assistant Professor, Department of Engineering, Payame Noor Universtiy, Tehran, Iran*

خلاصه مقاله:

Nowadays, the development of construction industry is one of the development indices of countries. On the other hand, development of construction industry is more urgent than ever with increased population and consequently, increased desire for urbanization. Considering the inadequacy of traditional and conventional systems for mass housing production, the approach to use modern industrial methods of building along with new technology and observance of the latest technical standards is critical. Therefore, the present study aimed to investigate and compare construction method of reinforced concrete cast in-situ walls and slabs with the conventional method of constructing concrete structures using MSP software. Studies show that the integrated wall and ceiling molding technique has been used since the late 1970s in the construction of high-rise residential towers. Currently, integrated wall and ceiling molding system is used as one of the methods in the construction of buildings with load-bearing wall and concrete ceiling. This method brings about improvements in quality, earthquake resistance, reduced run-time, reduced cost, quick return on investment, saving on materials consumption, reduced labor, eco-friendliness, sustainability and longer durability, reduced resource consumption, integrated structure, fire resistance, high flexibility, and employee safety.

کلمات کلیدی:

Monolithic Concrete System; Modern Technology; MSP Software