

***ANALYSIS OF QUANTITY TAKE OF CALCULATIONS USING THE BIM
(REVIT) METHOD FOR STRUCTURAL WORK***

(Case Study: Development of the Sungai Nanam Agropolitan Market, Solok
Regency)

***Sebagai salah satu syarat untuk menyelesaikan Program Studi Diploma III
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ABSTRACT

In the world of construction, the emergence of digital technology development is quite rapid so that it has an impact on accelerating infrastructure development to be more efficient and productive, one of which is Building Information Modeling (BIM), one of the software in BIM, namely Autodesk Revit. The purpose of this study is to compare and analyze the difference in the calculation of work volume using the manual method with the BIM Revit method. Calculations using the BIM Revit method are more accurate and can minimize human error. Therefore, it can be concluded that the results of the calculation of concrete volume and ironing work using the manual method are greater than the calculation using the BIM Revit method. Based on this study, it was obtained that the difference in concrete volume comparison using the manual method using the BIM Revit method in Bore pile foundation work was 0.1%, pile cap was 0%, sloof beam work was 5.5%, floor plate work was 7.8%, column work was 0.0%, floor beam work was 2.94%, light steel truss work was 1.91%, and roof work was 0.48%. And for the difference in the comparison of ironing work on Bore pile is 0.5%, Pile cap is 17%, sloof work is 0.3%, floor plate work is 4.12%, column work is 0.7%, Beam work is 0.15%.

Keywords: Building Information Modelling (BIM), Autodesk Revit 2022, Quantity Take Off, Conventional.