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Application of Proper Foundation in Building Construction

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Abstract : Foundation is popularly defined as the lowest load-bearing part of a building, typically below the ground level. It serves as an underlying base which acts as the principle on which every building stands. There are various types of foundations in practice, which includes the strip, pile, pad, and raft foundations, and each of these have their various applications in building construction. However due to lack of professional knowledge, cost, or scheduled time frame to complete a certain project, some of these foundation types are some times neglected or used interchangeably, resulting to misuse or abuse of the building materials man, power, and some times altering the stability, balance and aesthetics of most buildings. This research work is aimed at educating the academic community on the proper application of the various foundation types to suit different environments such as the rain forest, desert, swampy area, rocky area etc. A proper application of the foundation will ensure the safety of the building from acid grounds, damping and weakening of foundation, even building settlement and stability. In addition to those, it will improve aesthetics, maintain cost effectiveness both construction cost and maintenance cost. Finally it will ensure the safety of the building and its inhabitants. At the end of this research work we will be able to differentiate the various foundation types and there proper application in the design and construction of buildings.

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