

Applicability of NSCP 2010 (Based on American Developed IBC 2009) Of An Office
Live Loadings to Philippine Conditions

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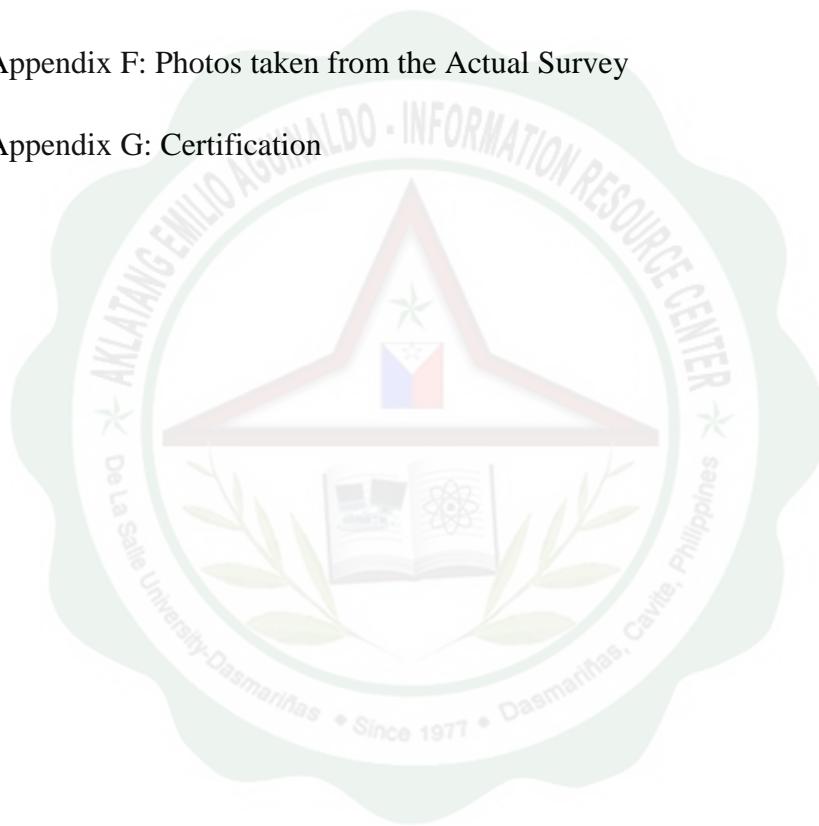
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ABSTRACT

Live loads are those loads produced by the use and occupancy of the building or other structure and changeable dynamic, and they can vary depending on how the building is used. It may be uniformly distributed or concentrated load. Thus, the structural and civil engineers in the Philippines are currently using the NSCP as the minimum requirement of building structure loading. In order to validate the current live load that adopted in American code, the researchers made a live load survey in Philippine setting.

The study presents the result of a live load survey in five (5) government office buildings in Metro Manila with a total area of 1,540.9 m² (16,586.26 ft²). The surveyed data values were analyzed by using Monte Carlo simulation method to obtain the distribution function of a maximum total live load of an office building for a 50-year return period in comparison with the current design values of the live load specified in NSCP 2010 loading code. The result of the study validated that the existing live load value of 50 psf is excessively high that leads to costly design hence, it provides safety level.