

AN ASSESSMENT OF CRACKS IN LOW COST BUILDINGS

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Cracks occur in masonry walls due to various reasons. Buildings when undergo distress as a result of movements within the structures, subject to transfer of stresses in the structural elements and cracks appear as an indication when these stresses exceed the limiting value.

Diagnosing the causes of cracking is important as several factors may contribute to a particular defect. Unless the movements responsible for cracking is fully understood, successful methods of repair for these defects cannot be suggested. A study on documentation of the locations and severeness of the cracks present and the potential for propagation of cracks reveal that the redistribution of stresses within the structural members take place especially, when they undergo excessive movements such as high order of settlements.

This paper, as obtained from a detailed study on cracks appeared on masonry walls of low cost buildings constructed in low lying marshy areas, explains the general causative factors for the cracks, locations, propagation and width of cracks with regards to the movement of the buildings etc.

The attempt, as discussed in this paper has helped to evolve some guidelines for design and construction of buildings in marshy lands.