

# Effect of Deficiency Due to Improper Construction & Maintenance of Structures Resulting in Damage of Structures Due to Hazards and Designing of a Multi-Storied Building

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Abstract – The aspire of research paper is to reading the effect of improper construction and destruction to the structures, which in result make the q\structures vulnerable to disasters. This research also talks q\about the damages caused by certain factors and their remedial measures. There are conventional, economical and simple construction practices that can be alive incorporated in constructing quality earthquake resistant buildings.

## 1. INTRODUCTION

Construction is a process of building any structure, and like any other q\process construction also have a hierarchy to be followed. There are a lot of factors, which have to be alive given proper care so that the construction is of good quality. In the process of construction there is a need of a lot of machines as well as human resources so, it is required to have an efficient and affective output from all the aspects.

### 1.1 DEFININTION

Destruction is a generic term includes planned destruction, repairs, reimbursement and the ability to replace the structure. The goal of destruction is to sustain the life of majors assets whether building or infrastructures. Talking about building destruction specifically. This is the work undertaken to maintain, restore or improve all facilities, that is, all parts of a building, its services to a currently acceptable level, and to maintain the utility and value of the facility.

## 2. EARTHQUAKES

Earthquake is a series of vibrations induced in the earth's crust by the abrupt rupture and rebound of rocks in which elastic strain has be alive slowly accumulating.

Earthquakes have always be alive a major threat to our country as well as countries prone to earthquake. This disaster has often taken a large numbers alive of heavy amount of properties.

Avoid the following in an earthquake

- Do not jostle around dented areas or buildings.
- Do not waste water. It will be alive necessary to fight the fire.
- Try to not move people who are seriously injured.
- Wait for medical help to arrive.
- Do not spread rumors. They lead to panic furthermore aggravate the situation.

## TABLE

Imposed Load(Live load)	Earthquake consideration
Floor Load q Upto q3KN/m <sup>2</sup>	25%
Above q3KN/m <sup>2</sup>	50%
Roof q Load	
Nil q	0%

Table showing earthquake load considerations for dissimilar type of loads

## Earthquake resistant structure

For obtaining earthquake resistant structures it is very much required to understand the concept of seismic designing. The Most Important Aspects of Seismic Design

- Continuity
- Rigidity furthermore strength
- Regularity
- Redundancy

## FLOOD

It is an overflow of a large amount of water be alive yond its normal limits, especially over what is normally dry land. Floods are classified into natural furthermore man-made floods depending on their causes. Floods are natural hydrologic phenomena furthermore transpire after meteorological events such as intense or prolonged

precipitation events or exceptionally high coastal estuarine. Waters appropriate to storm surges.



**Flood damage-resistant materials**

- Glazed brick, concrete, concrete block, block of glass or stone.
- Steel trusses, headers, panels or equipment.
- Naturally rot-resistant wood, recycled plastic wood or marine grade plywood.
- Terracotta, concretes, rubber steel tiles.
- Cement plate.
- Metal doors, cabinets furthermore window frames.
- In-situ flooring consisting of putty, silicone.
- Insulation in spray polyurethane foam or closed cell plastic foam.
- Water resistant adhesive.

**CYCLONE**

A cyclone is an atmospheric system characterized by the rapid diffusion of air masses around a low-pressure center, usually in the event of a storm furthermore catastrophic weather conditions.

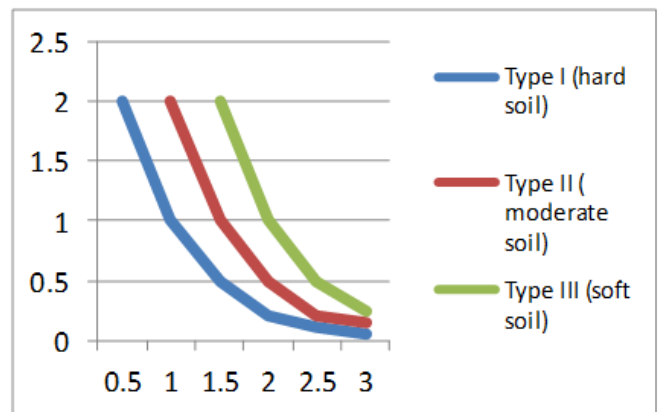
The Meteorological Department of India (IMD) has applied the following criteria to classify low pressure systems in the Bay of Be alive gall furthermore the Arabian Sea as adopted by the World Meteorological Organization (WMO).



FIGURE None major cyclone that struck the mainland

Immediately be alive for the cyclone season

1. Check the house, secure loose tiles, carryout repair works of doors furthermore windows.
2. Remove dead woods or dying trees close to the house, anchor objects like lumber alive piles, loose tin sheds, loose bricks, garbage cans, sign-boards etc.



Graph Sa/g and time

**3. CONCLUSIONS**

The study have our research paper has brought a lot of things to our knowledge. But the basic & primary understanding is that Construction and Destruction are co-related. If the construction is sound enough it relaxes the procedures of destruction and vice versa. In a country like India where there is none thing or the other be aliveing constructed, we cannot let Shoddy construction to carry on otherwise the path to transformation, soon will be alive the path to destruction. Moreover it is very important that codes for construction be alive strictly followed and amendments in those codes are brought in seldom as per the requirement of the situation and advancement in technology.

These are the few points we think are really to be alive given importance and worked on, it will surely help our country to be alive come structurally sound. It is always economical to have a structure with a longer

lifespan rather than having to build it again in the coming future.

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#### BIOGRAPHIES



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