

The background features a photograph of a tall, multi-story apartment building. A person is visible on a balcony in the middle ground. The image is overlaid with technical annotations: a red line points to a horizontal structural element labeled 'BEAM', and another red line points to a vertical structural element labeled 'BRICK'. The text is overlaid on a semi-transparent light green rectangular area.

***Activities
damaging
Your Building***

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***Trifle makes
perfection***

And

***Perfection is no
trifle***

CULTURE OF IGNORANCE

***If you don't care for
your health, you
cannot live longer,
perform & achieve
better.***

***You fall sick now &
then.***

CULTURE OF IGNORANCE

***If you abuse and
misuse your building
you live in, it exhibits
early signs of distress
& can't sustain itself
to prevent premature
collapse***

NATIONAL LOSS ~ YOUR LOSS

Premature collapse of built assets affects national economy when acute shortage of shelters are affecting quality of life & living of millions throughout the country

TRAVELLING IN BANDWAGON

Collapse is not an everyday affair. We carry on with our life with an apathetic attitude. Make a proud statement of ignorance

“Who has seen Tomorrow?”

& shut the mouth of timid non-ignorant

TRY OUR BEST

We shall not discuss :

- a) Technology in practice**
- b) Design philosophy**
- c) Mathematical analysis
& deductions**
- d) Substandard
construction**

DON'T MEDDLE WITH STRUCTURE

- 1. Structural element (Slabs, beams, columns, footing, in filled walls etc.) are designed for required strength, stiffness & stability within optimised limits of economy. Don't meddle or tamper with these to compromise with your safety**

FIDDLING WITH STRUCTURE

**2. For any reason whatsoever
(Decoration, refurbishment,
painting, coating etc)
structural framework
providing strength,
stiffness, stability & safety
to your building should not
be fiddled with**

FIDDLING WITH STRUCTURE

3. If any change, damage repair, restoration of deterioration, rehabilitation consequent to natural calamities, retrofitting to update code provisions / revisions to zones of natural disasters is planned, **a qualified structural engineer with right experience in profession should be consulted**

DON'T FIDGET WITH STRUCTURE

- 1. Under no circumstances, make chase cut, drill holes for conduits, create cutouts for ducts, access way etc., chisel to reduce dimensional levels, fix brackets for unspecified loads beyond permissible limit / carrying capacity of structural element or fix a vibratory machine on structure**

DON'T FIDGET WITH STRUCTURE

- 2. Don't remove an in filled masonry wall between columns, enclose a balcony with masonry or create a load at the end of a cantilevered verandah, canopy, add a room at the terrace or eliminate a column**
- 3. Never embed pipes, conduits on floors, within columns or shear walls, cut slab concrete to fix fan hook or embed electrical conduits**

EFFECT OF MOISTURE INGRESS

- 1. Water in the form of moisture with O_2 in air at ambient temperature / exposure to ultraviolet rays of sun or chloride ions of saline atmosphere accelerate decay of most of the materials**
- 2. Permeation of water within constructed assets is detrimental to service life of the asset**

EFFECT OF MOISTURE INGRESS

3. In a high rise building, disposal of used water efficiently is of utmost importance for healthier hygienic living conditions & for good maintenance of built assets
4. In presence of moisture & O₂ most of the metallic components of the buildings undergo corrosion
5. Stay dry

FLOOR WASH

- 1. Who does not want house floor clean & shining ? It is an age old practice in villages & towns to pour water on floor & broom it aside**
- 2. We carried this practice to our homes in multistoreyed living. Our maids do it everyday.**

FLOOR WASH

- 3. We don't realise what permanent damage we inflict to the building**
- 4. Daily water percolation through tile joints, edges at walls, concrete stairs, balcony slabs etc. with harmful dissolved ingredients in ionic state is accelerating corrosion in RCC structure reducing its life span**

NO DEVELOPED COUNTRY PERMITS IT

WASHING OF CLOTHES

- 1. We have carried the practice of clothe washing system from our village single storey buildings**
- 2. In spite of good quality washing powders or machines being available, many of us leave it to maids to spread water with wet clothes for alternate rinsing & thrashing or beating with wooden mallet on the floor**

WASHING OF CLOTHES

- 3. Tile joints loosen, bedding mortar cracks and seepage of water starts. If RCC slab below is a sunken one, you create a reservoir and supply water to neighbour below**
- 4. In western countries, wetting of floor is prohibited. Hardly you have an alternative to washing machine. Maids are beyond your reach**

BATH ON FLOOR

- 1. It is still a luxury for some to sit on a stool & pour mugs of water from a bucket under the tap or to sit under a shower**
- 2. Our municipalities or tankers still supply enough water**
- 3. Consequently, our neighbour below starts getting his extra share of water within a year or two**

BATH ON FLOOR

4. Bath tubs did not come as an item of luxury to give you comfort of rubbing your body all round under water or to give you the feel of being in swimming pool. It avoided wetting of floor with added luxury

5. Today, bath cabins are popular in smaller bath rooms discharging sullage water directly out of walls through pipes. Floors remain dry

NAILING IN WALLS

- 1. Done for convenience of home activities, interior decoration, aesthetic improvements, hanging of wall fittings, paintings, photographs etc.**
- 2. Hammer nail, damage plaster & wall masonry even if it is well built & finish the surface with patch of plaster & costliest paint**

HAMMER TO NAIL

4.

- a) Rooms glitter for some period
- b) Hammering initiates cracks at places where concrete or masonry walls are weaker
- c) Structure's load carrying capacity declines
- d) Junction between concrete & other non-load bearing parts open up ~ Moisture ingress leads to leakages

HAMMER NAIL

5. Tampered integrity and redundancy
reduce life span of structural system

6. People in developed countries drill
(do not hammer) to fix attachments at
predetermined locations, preplanned as
a part of original construction at places
of low stress intensity **Are they**
less knowledgeable?

HAMMER & CHISEL

Indiscriminate use of tools for repair damage a building :

- 1. Chisel out existing plaster to demolish it**
- 2. Replace kitchen or bathroom wall tiles**
- 3. Remove floor finish / tiles to renovate or to go for better one**

HAMMER & CHISEL

- 4. Demolish existing masonry wall with chisel & hammer to reintroduce water supply pipe / outlet of WC / Nahani trap**
- 5. Remove fittings / fixtures from walls / concrete bases**

HAMMER & CHISEL

- 1. All mentioned activities are meant to improve glamour & glitter of your room or services**
- 2. But you ensure leakages through :**
 - a) Loosened / rusted joints of water pipes**
 - b) Tile joint, junction of floor & walls**
 - c) Seating & sealants around Nahani trap, WC fixed on floor finish**

HAMMER & CHISEL

d) Initiate or widen cracks in weakest points of masonry, concrete structural members and at cold joints / construction joints

*"You cannot achieve
the
impossible without
attempting the absurd"*