

Causes of building failure

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The most common factors that cause building failure.

- Structural layout.
- Quality of material and construction practices
- Lack of earthquake resistance features



Deficiencies in structural layout

- Irregular distribution of load bearing members in plan. (opening front and back)
- Non-uniform distribution of stiffness in plan. (i.e. L,E,H)
- Lack of rigid floor.

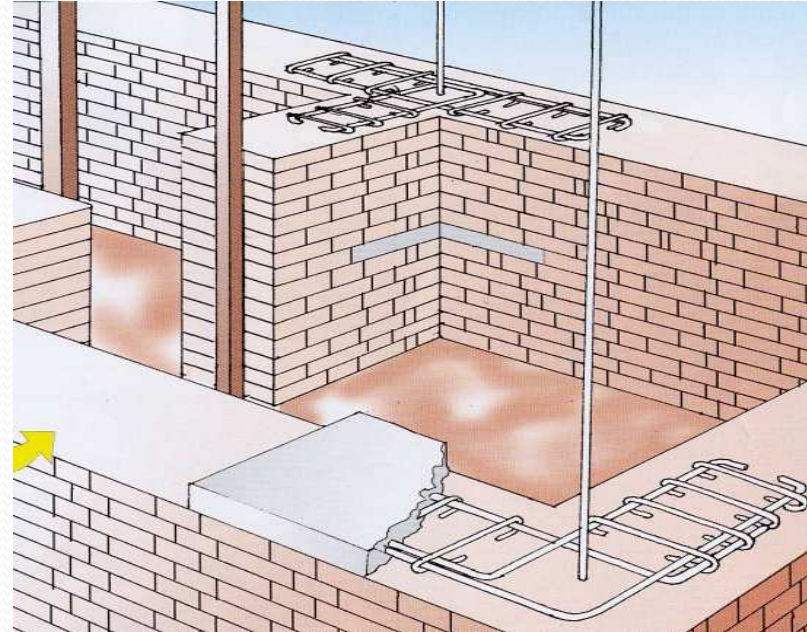


Quality of material..

- Stone and brick laid on weak mortar.(i.e. weak binder)
- Low strength of material.
- Quality material but inferior technologies.
 - Not curing...
 - Vertical joint not filled by mortar..
 - Too much water in concrete.
 - Improper placement of reinforcement bars
 - Improper compaction..etc.

Lack of earthquake resistant features

- No tie beam or band.
- No stitching..
- No vertical joint
- No anchorage.
- No proper joint at T joint, L joint etc.
- Very long wall/no construction joint/break
- Hight too high..etc





Now ...

Let's think !!

how can we improve the
earthquake resistance quality of
school building ?

Three yellow tulips with green stems and leaves are positioned against a bright blue background. The tulips are arranged in a slightly diagonal line from the bottom left towards the top right. The text "Thank You for Careful Listening !!" is overlaid in the center in a large, black, sans-serif font.

Thank You
for
Careful Listening !!