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# **Knowledge FOR Resilient soCiEty**

## **TYPES OF STRUCTURAL COLLAPSE**

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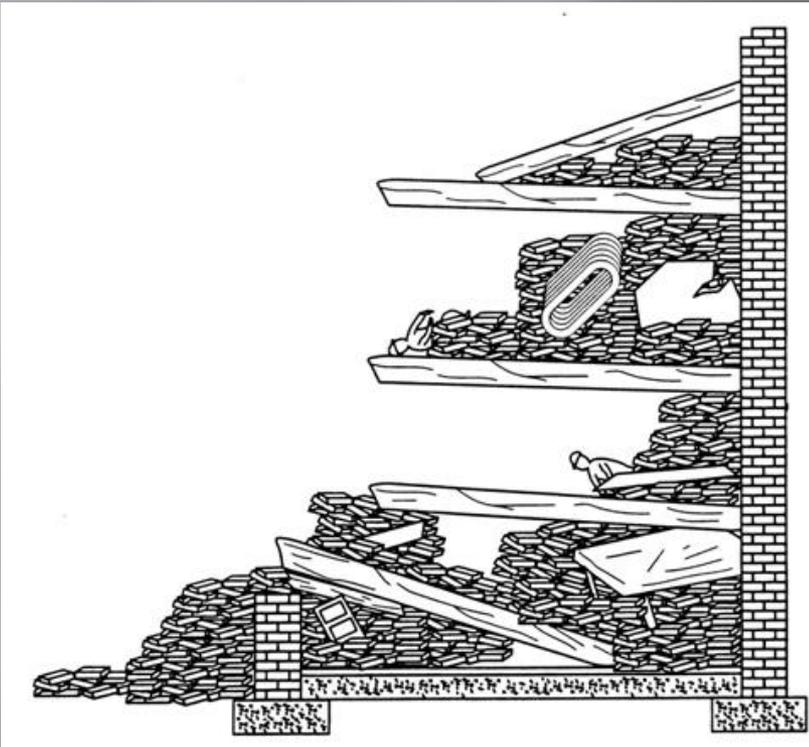
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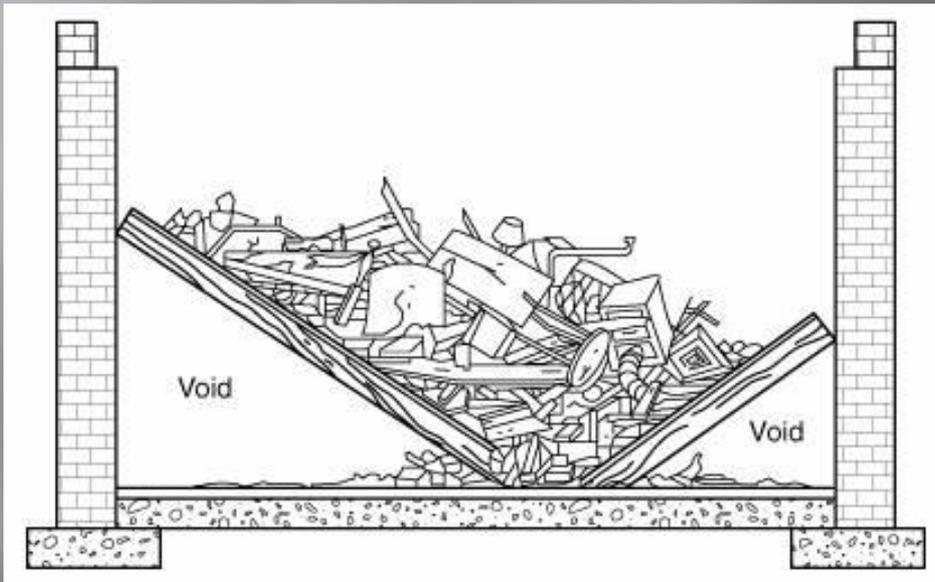


# Cantilever

- Results from a wall collapse which allows a floor or roof assembly to drop *partially*, but to remain *suspended above the floor* or base below on the side where the wall failed.
- The opposite end of the floor assembly remains *attached to the wall* and at its original connection point.
- This type of collapse is extremely unstable and dangerous

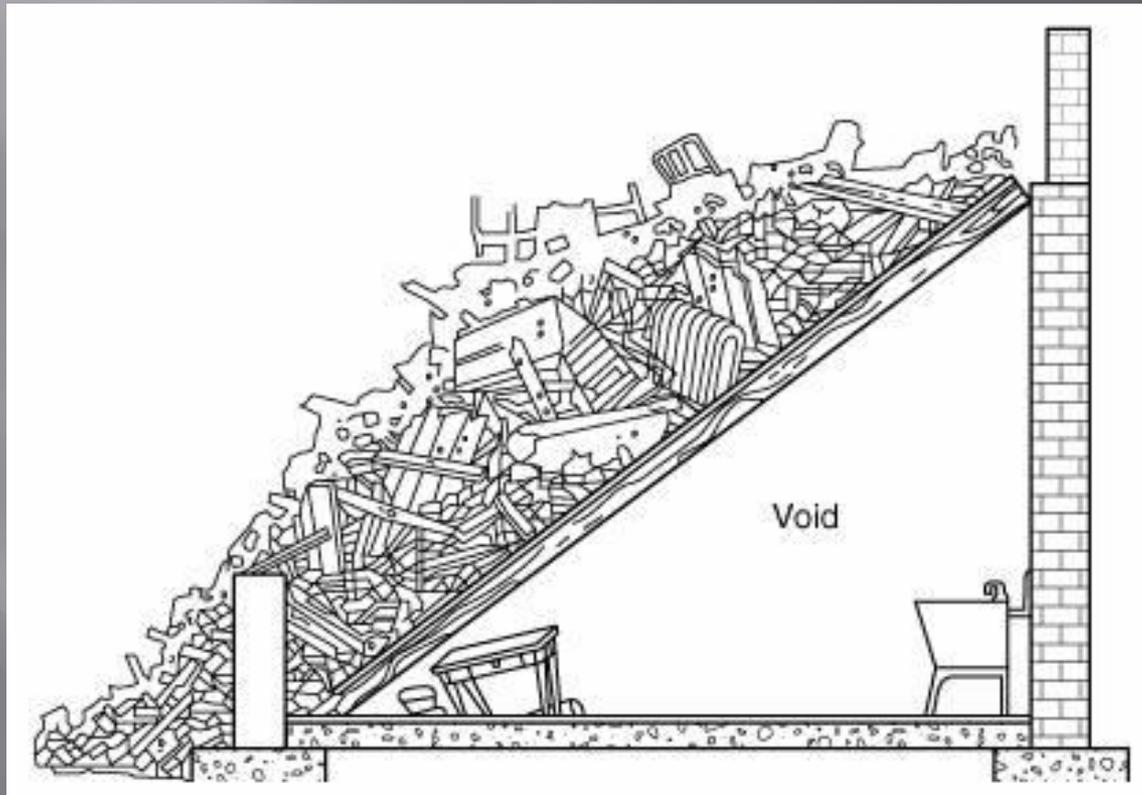


# V -Shape

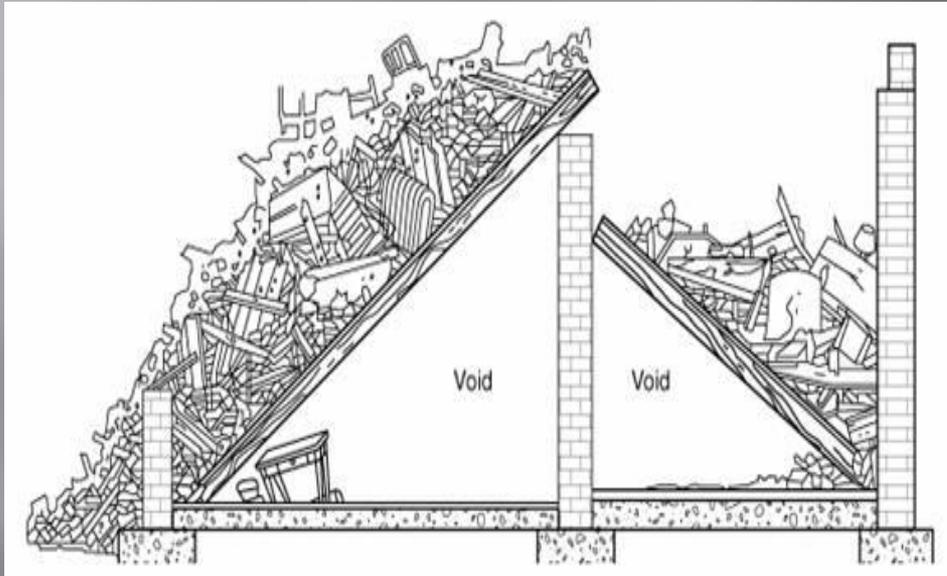


- This collapse will be created when a floor assembly collapses in the *middle* due to failure of centre supports or overload of the floor.
- The result is two identifiable voids which are created on *each side of the* broken floor assembly

# L-Shape



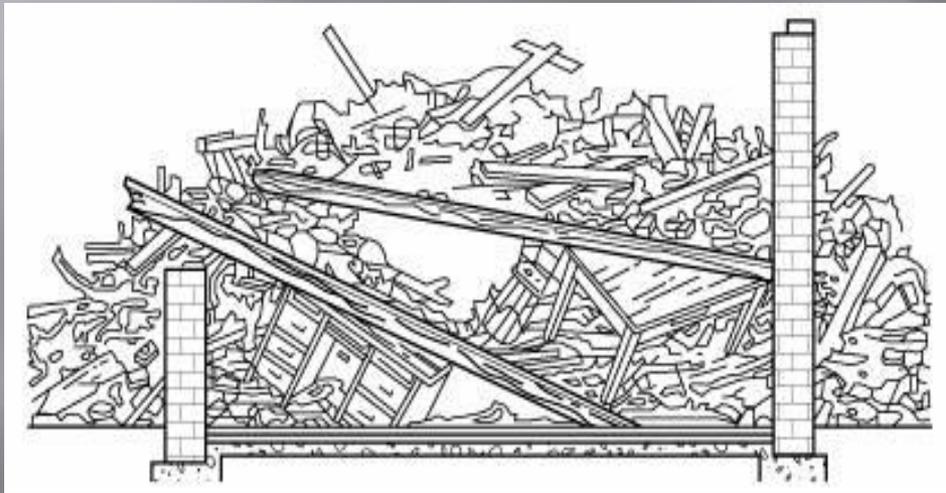
# A Frame



- Found where a wall failure causes a floor or roof section to fall completely on *one side, while the other end remains supported.*
- This collapsed usually results in a *triangular void.*
- Remember that the remaining supported end of the fallen section may be precariously supported

# Pancake

- Refers to multi-floor collapses where several floor slabs completely fail and ***stack up on top of each other.***
- The resulting voids are ***limited in*** space and are difficult to access, especially in concrete structures



**Thank you for your attention!**