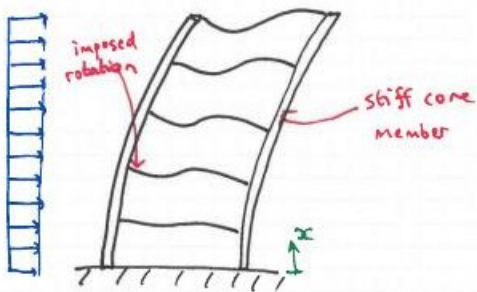


## Perfectly Flexible



For perfectly flexible lintels, the moment in each 'stiff core member' scales:

$$M(x) \sim x^2$$

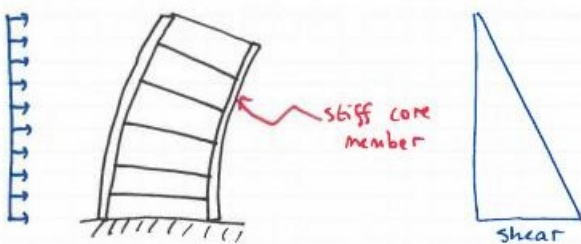
as  $\frac{d\theta}{dx} \propto M(x)$

$$\rightarrow \theta \sim x^3$$

The moment in the lintels is due to the imposed rotation

$$\therefore [\text{lintel moment}] \propto [\text{height}]^3$$

## Perfectly Rigid



The perfectly rigid lintels (causing the 'stiff core members' to act compositely) transfer the shear between 'stiff core members'.

$$\therefore [\text{Lintel moment}] \propto [\text{global shear}]$$

$\therefore$  the lintel moment increases linearly down the building.

Note: lintel moment:

