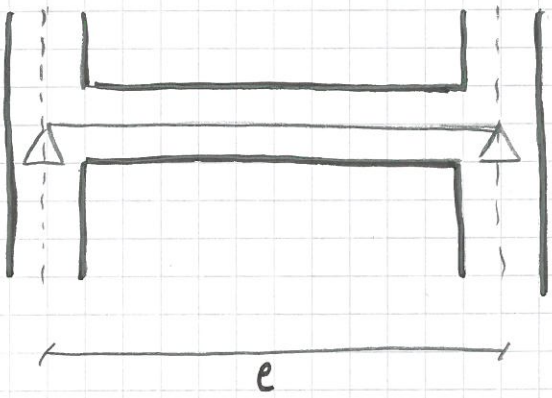
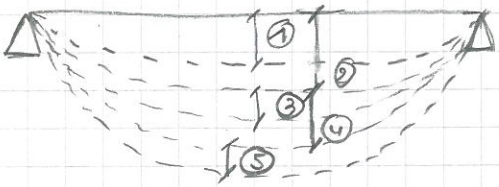
20/10/11

TERRELL

Slab Deflection





① f_{gi}
② f_{gv}
③ $f_{g'i}$
④ $f_{g'v}$
⑤ f_{qi}

Σ ② + ④ + ⑤ = f_{tot}

criteria

$\Delta f_t < \frac{\ell}{500}$ (detrimental deflection)

used for fragile partitions supported by the concrete slabs

f_{gi}

"i" stands for instantaneous deflection (short term effect)

"v" stands for long term deflection

g deflection due to permanent loads (dead load)

g' deflection due to extra permanent loads (partitions, false floor, ...)

q deflection due to live loads (short term effect only)

$\Delta f_t = f_{tot} - ① - ③$

WIND PRESSURE

$q = 66\ daN/m^2$ (normal wind) (NV 65 rules)

$q' = 144\ daN/m^2$ (severe storm)