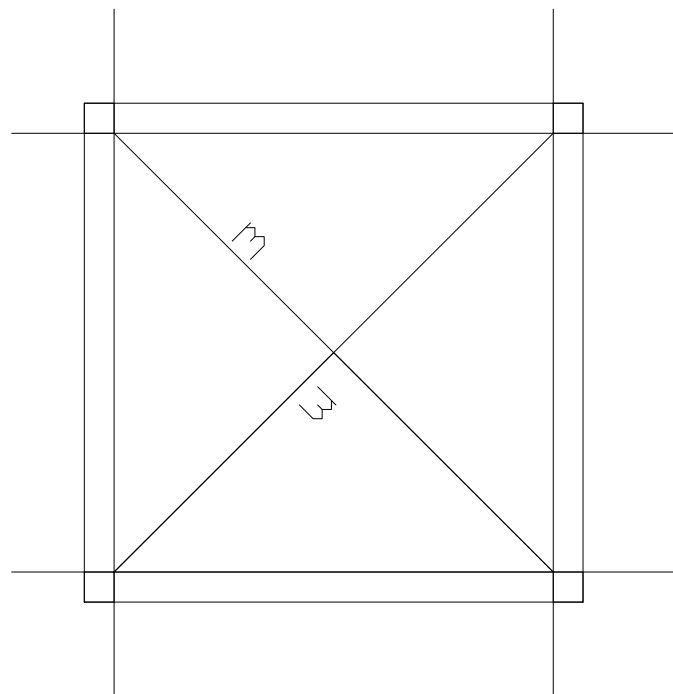


Factored load 10 kn/m.s



Assuming zero negative moment

Applying the virtual work method

$$E=D$$

$$0.5 \times 5 \times 2.5 \times (1/3) \times 10 \times 4 = 5 \times (1/2.5) \times 4 \times m$$

solving for m

$$m = 10.41 \text{ kn.m/m}$$

Multiplying by 1.1 as recommended
by the concrete center:

$$m = 11.5 \text{ kn.m/m}$$

This is 35 percent less than

moment from finite element

even without distributing

any negative moment to columns