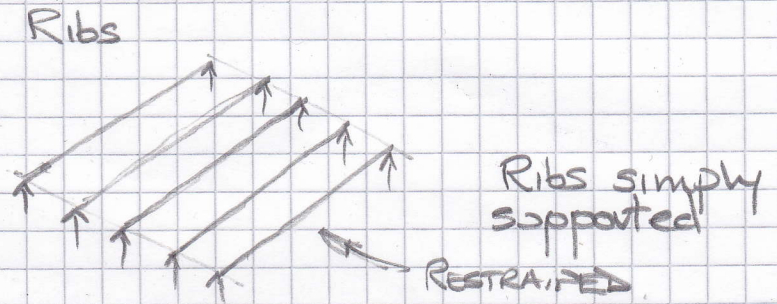


The ribs support the plate. The plate is free to slide over the ribs.



The ribs are treated as a single plate supported on 2 edges.
i.e. (Number of ribs) \times EI for a rib.

Then (drawn in section)



The load P to deflect the plate by 1
Deflection in plate = Deflection in ribs.

$$P \left(\frac{u}{EI} \right)_{\text{plate}} - P \left(\frac{u}{EI} \right)_{\text{Ribs}} = 0 \quad u = \text{constants}$$

$$EI_{\text{Ribs}} = n \times \text{rib} \leftarrow$$