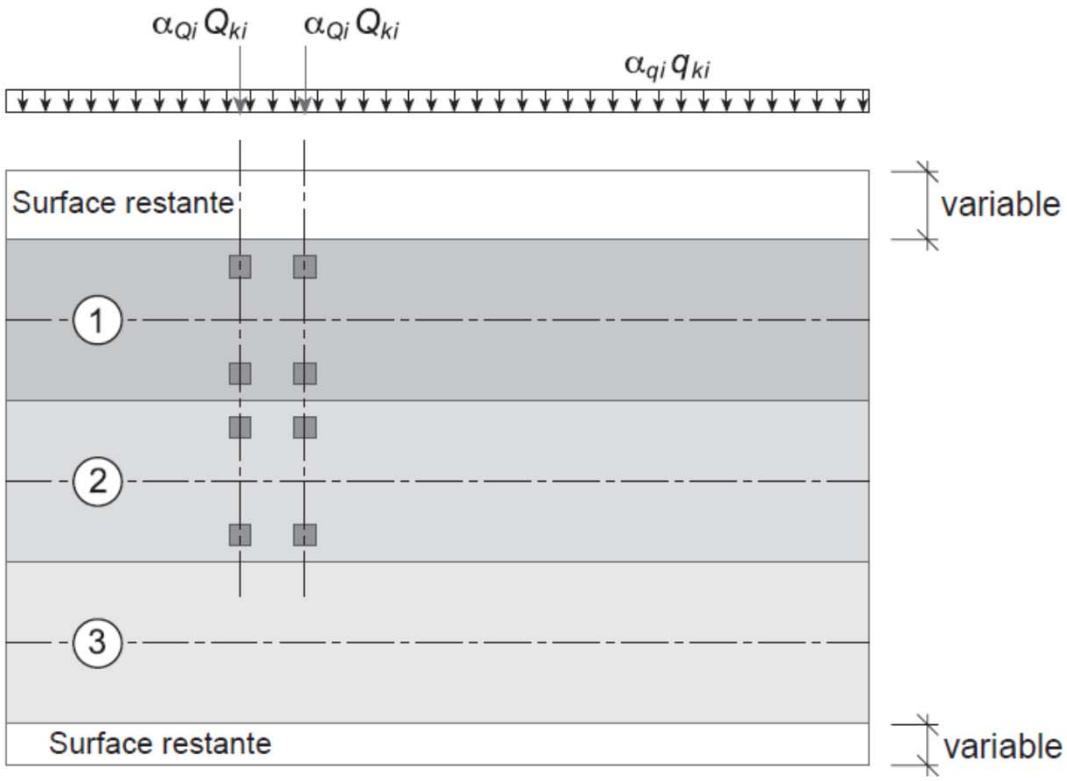
# Pont en bois
# Charge ponctuelle

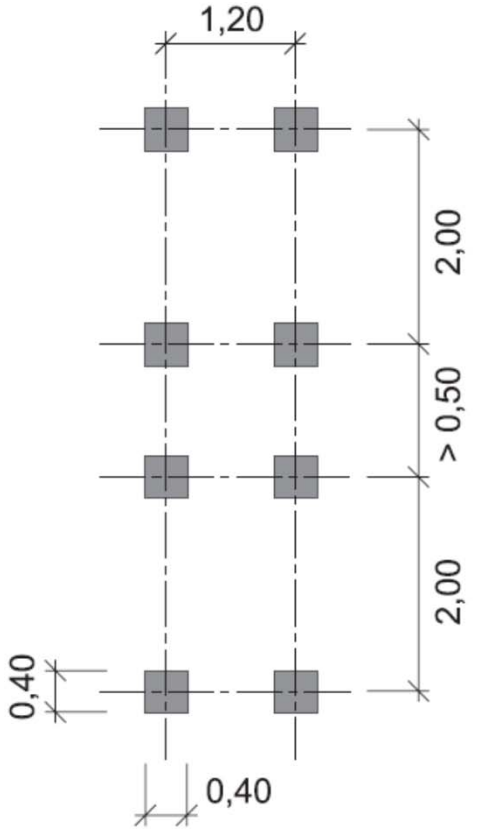
Natterer Johannes

Ing. dipl. EPFL

# Problématique de base

Figure 8: Disposition possible des charges du modèle de charge 1 (dimensions en m)



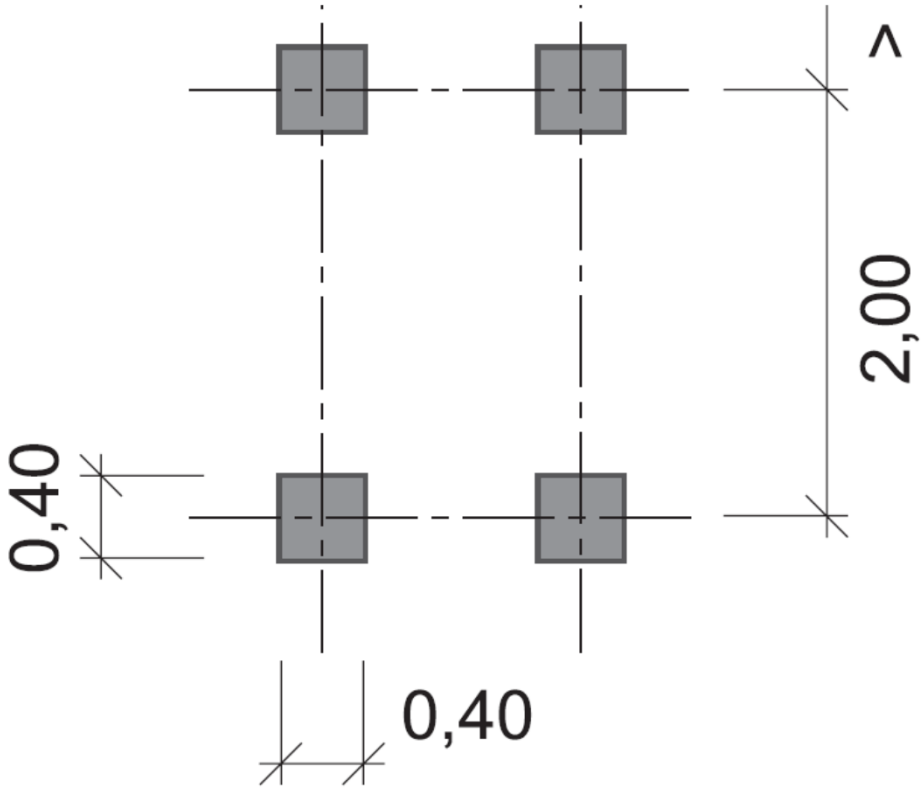

① Voie de circulation fictive $Q_{k1}$ = 300 kN $q_{k1}$ = 9,0 kN/m²
② Voie de circulation fictive $Q_{k2}$ = 200 kN $q_{k2}$ = 2,5 kN/m²
③ Voie de circulation fictive $q_{k3}$ = 2,5 kN/m²
Surface restante $q_{kr}$ = 2,5 kN/m²

# Charge ponctuelle

- $Q_{k1}$ = 300 kN
- $Q_{k2}$ = 200 kN

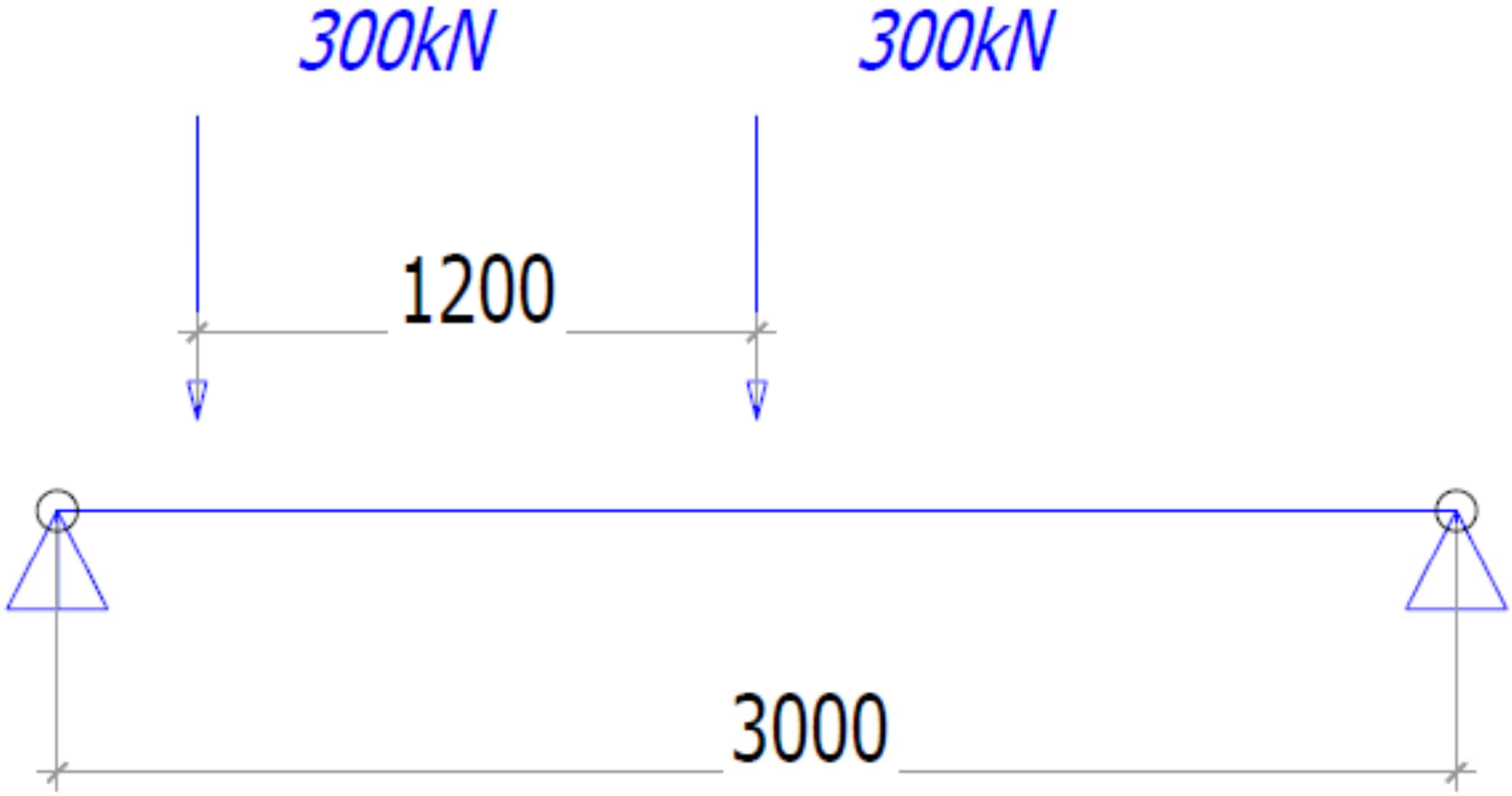
- Surface d'application

  400/400 mm²



# Système statique

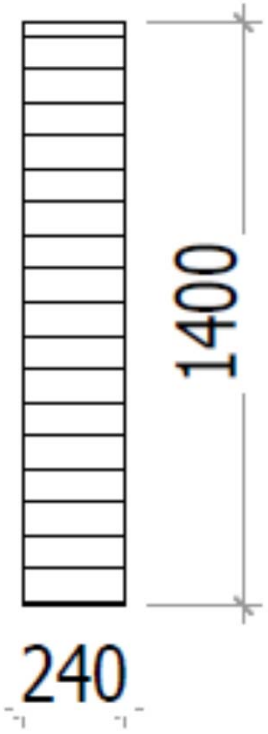
- Pour $Q_{k2}$ =200kN



# Section minimale

Debout

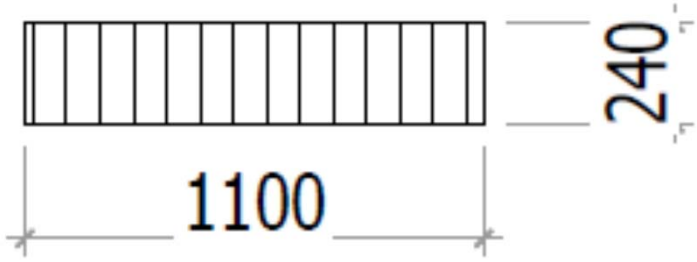
24/132 $cm^2$




Posé à plat

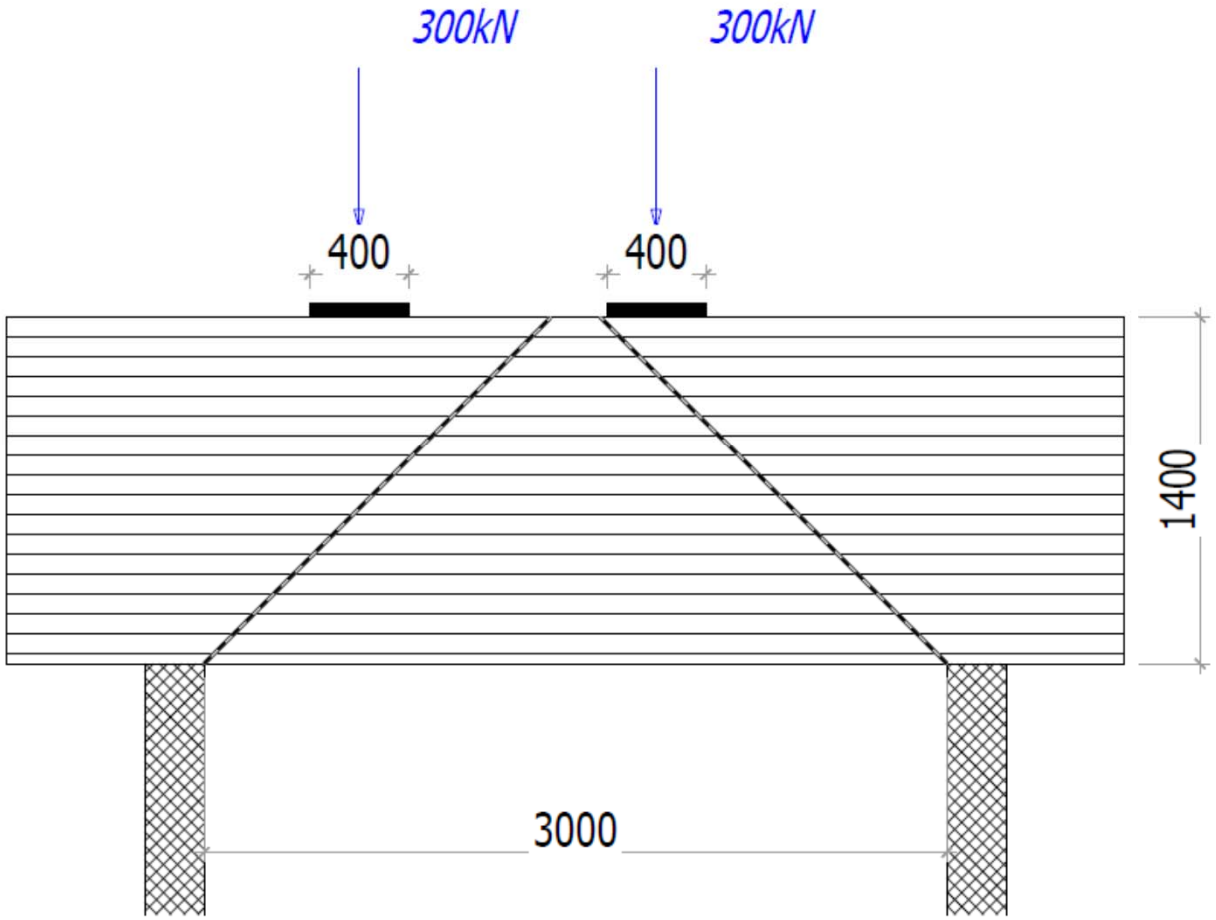
$K_{sys}$

24/110 $cm^2$



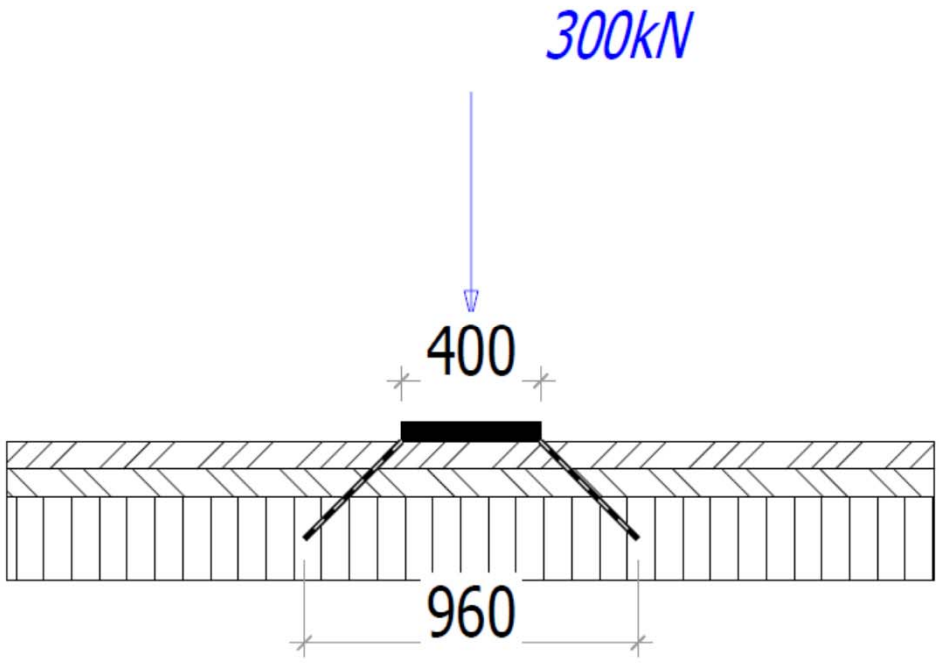
# Diffusion de la charge

- Distance de l’appui



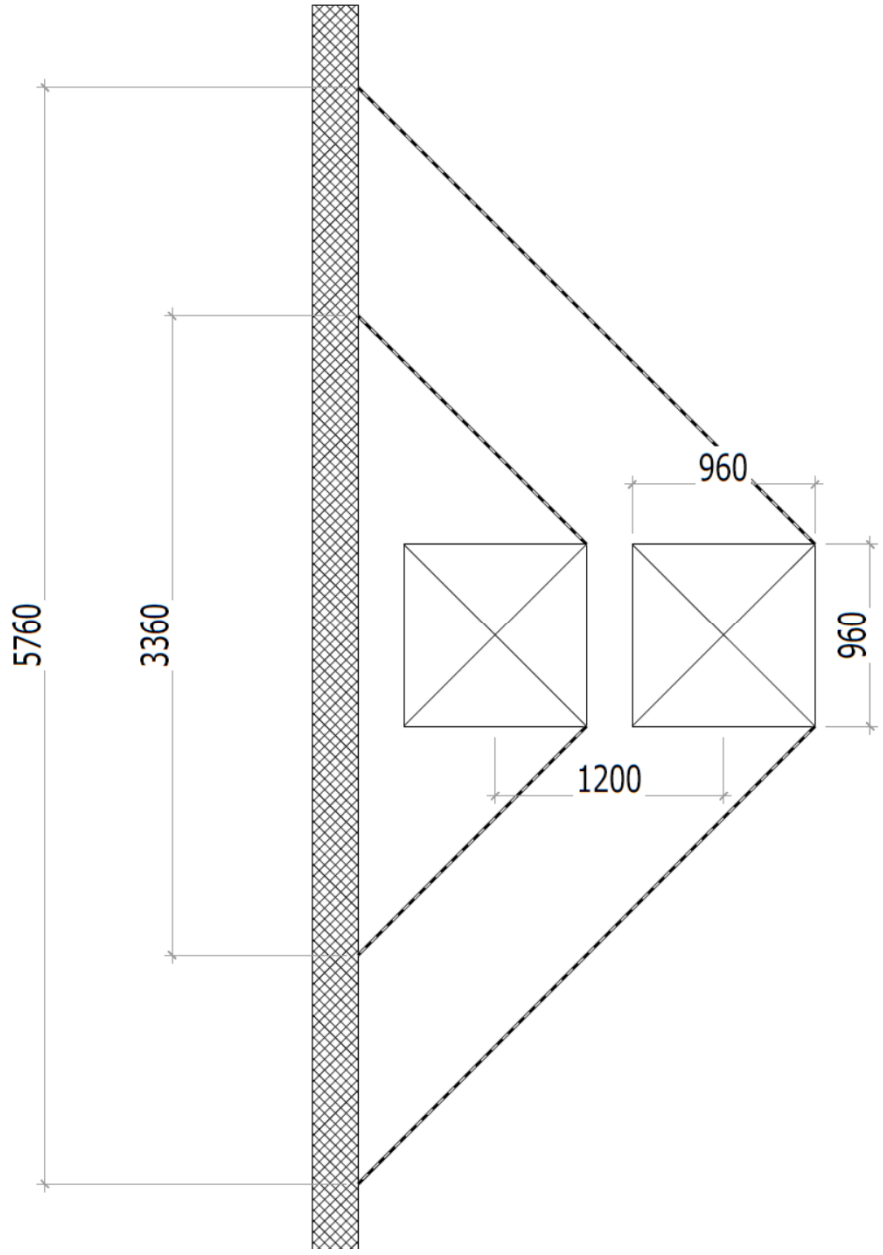
# Diffusion de la charge

- Dans les couches constructive, admis 45°



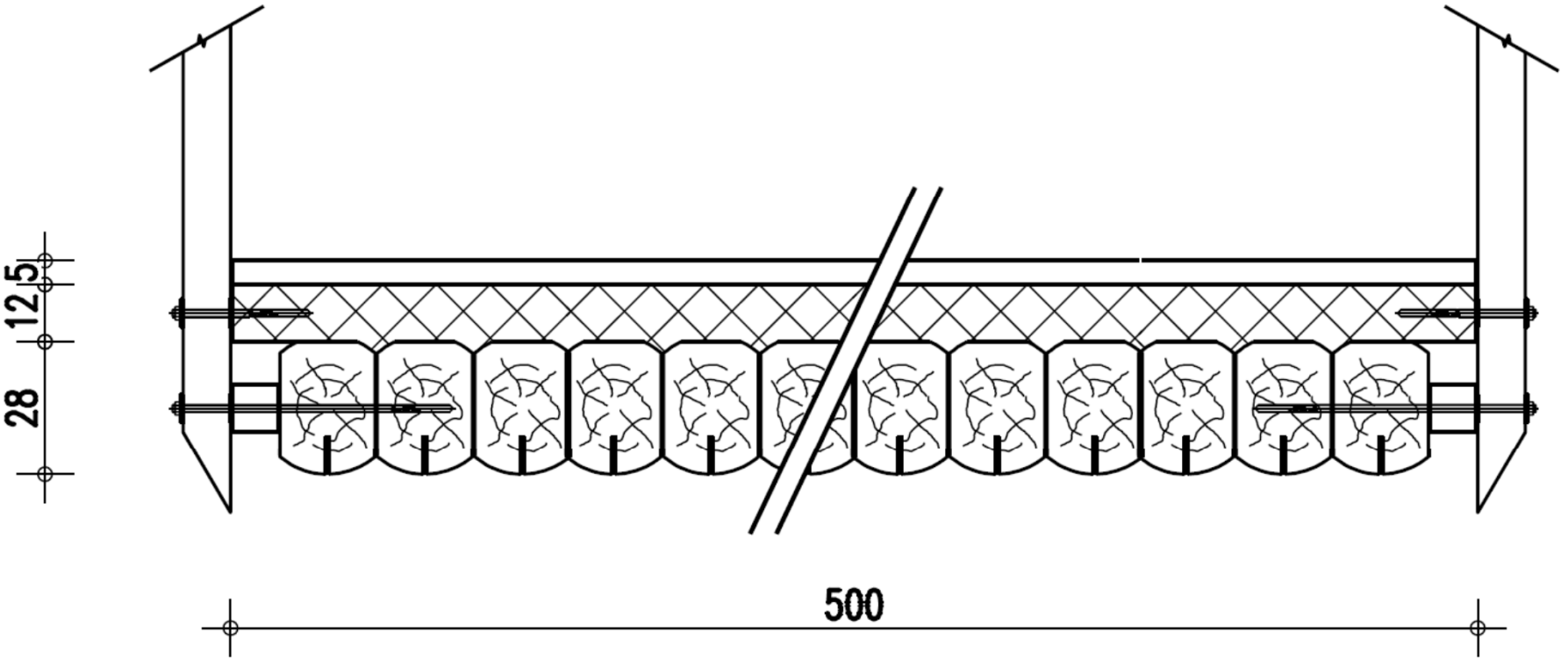
# Diffusion de la charge

- Dans la dalle



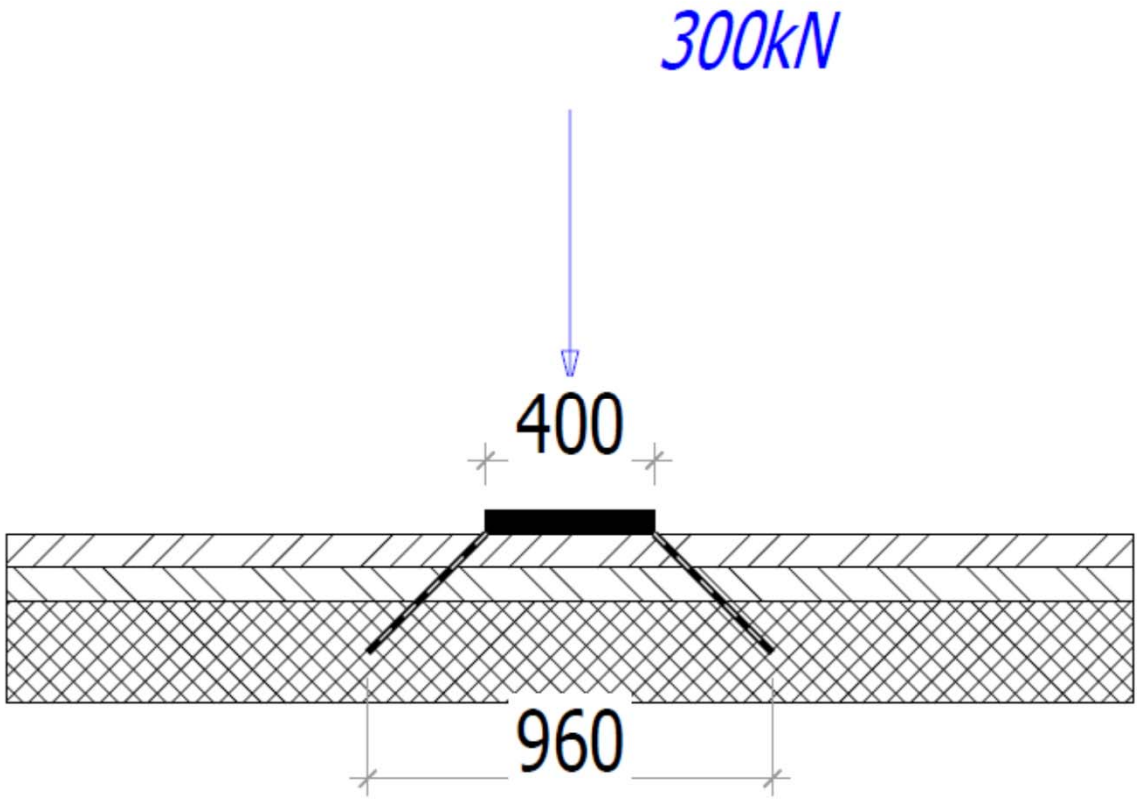
# L’évolution de la solution

# Dalle bois béton mixte

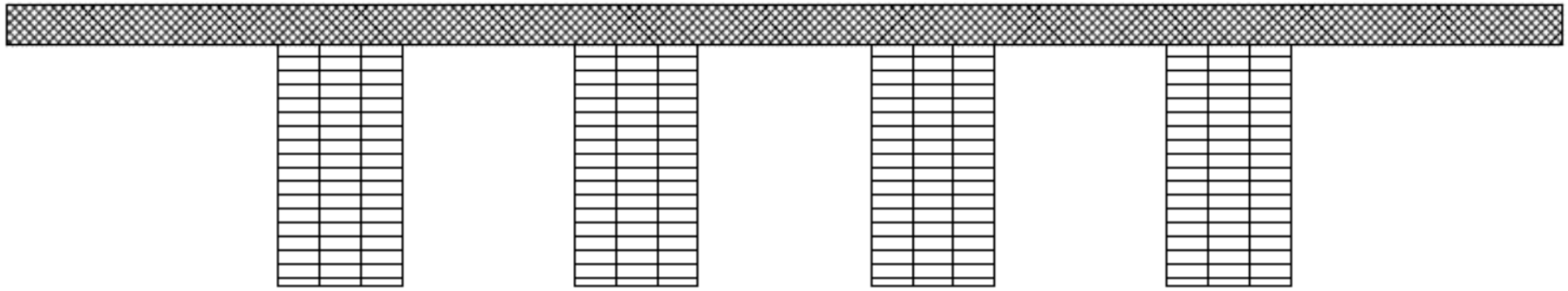


# Poinçonnement

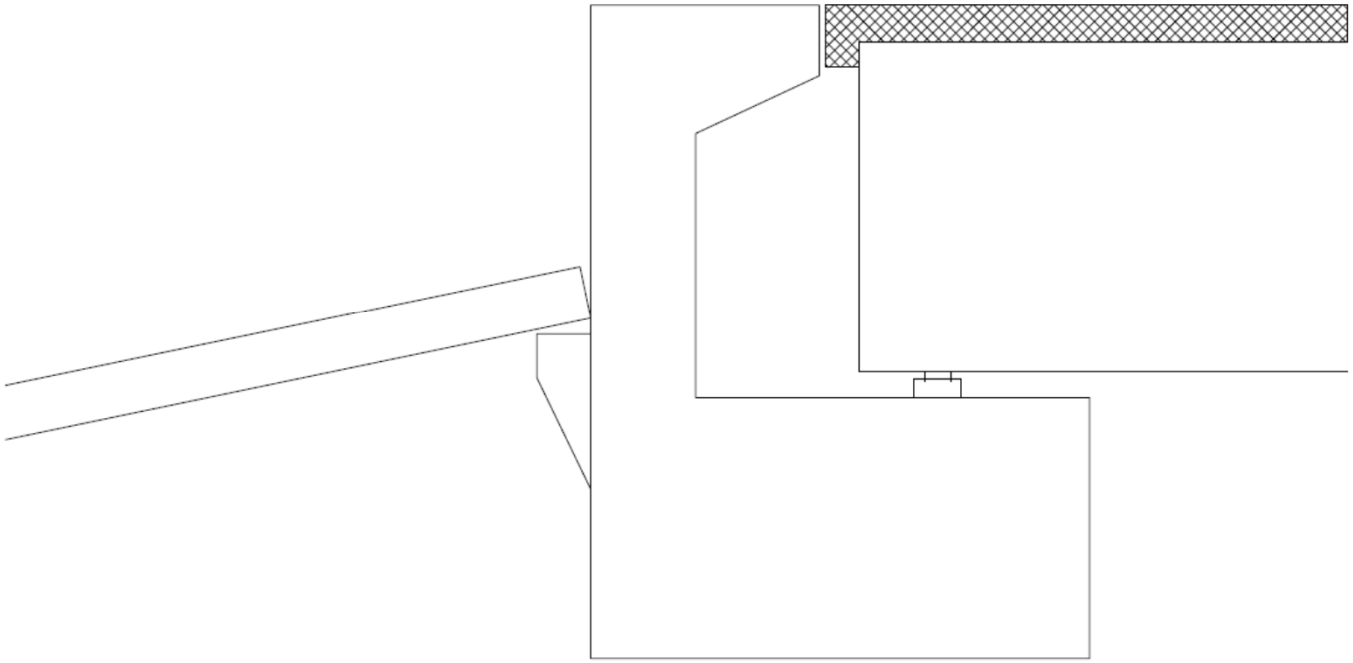
- De la dalle béton



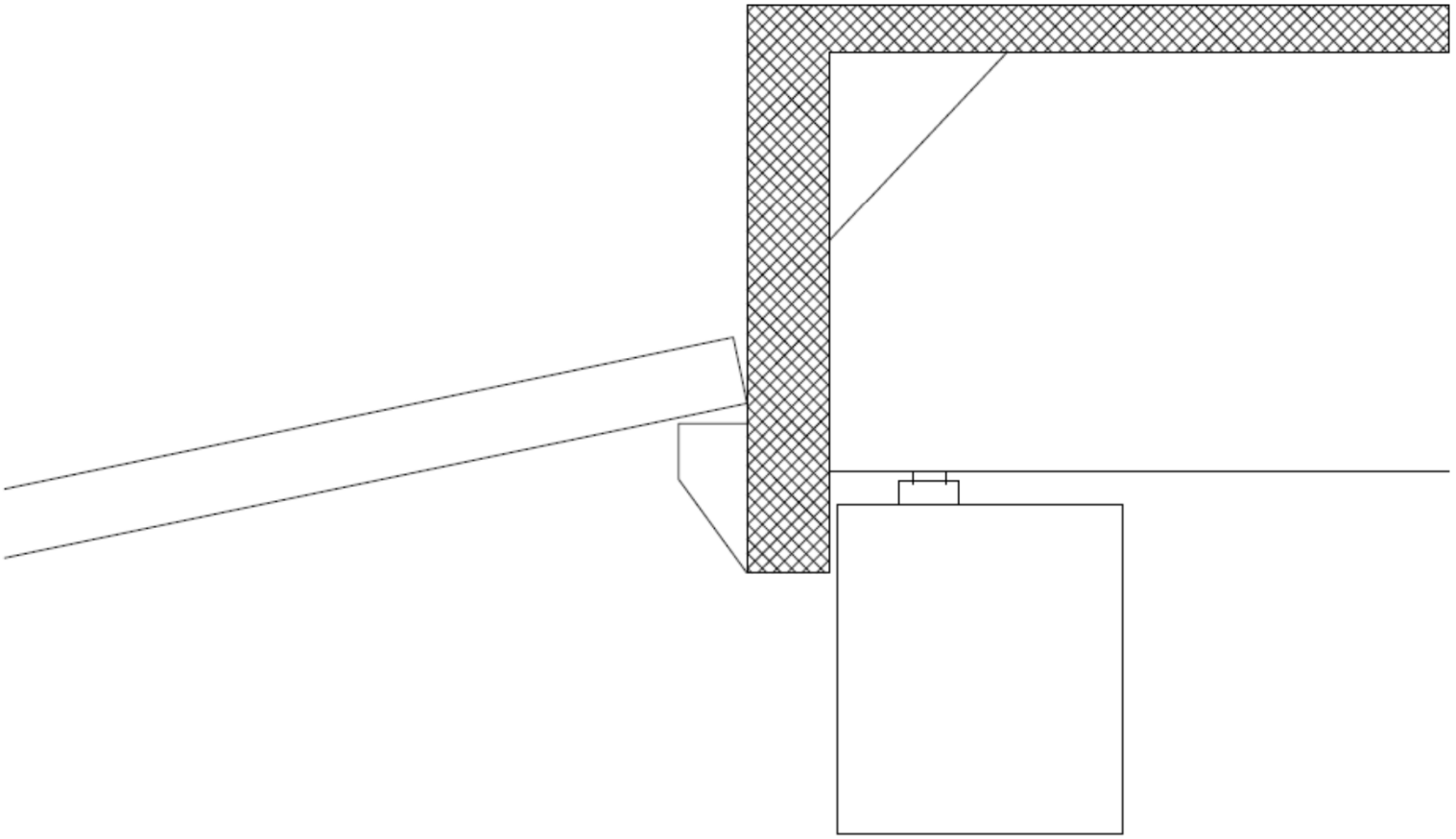
# Pont poutre bois béton mixte



# Culée standard



# Culée semi-intégrale

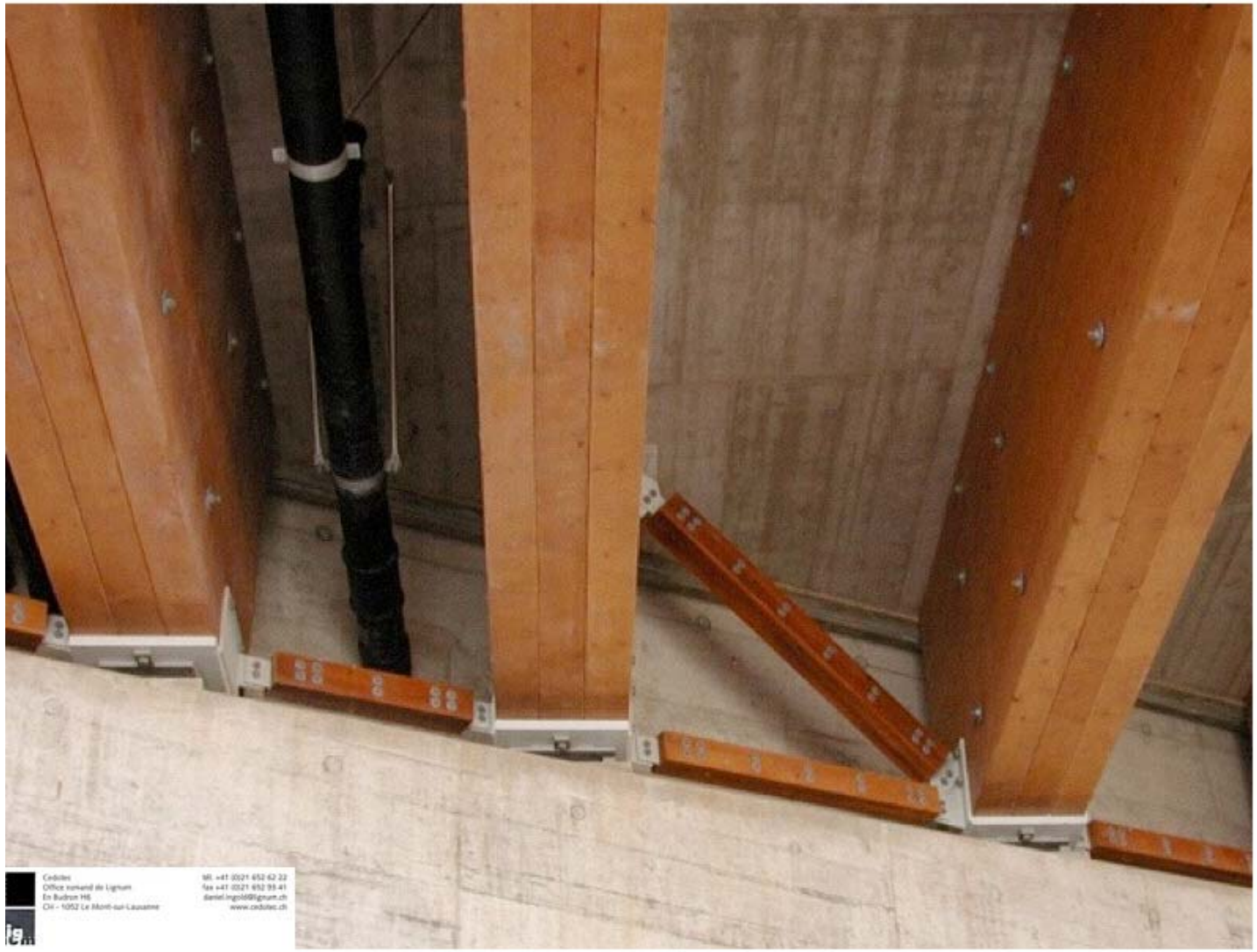


# Exemple
# Le pont de Prachaboud

Source Lignum et Swiss Timber Bridges

Entreprise Vial Charpente Le Mouret

# Entretoise


Cedotec
Office romand de Lignum
En Budron H6
CH - 1052 Le Mont-sur-Lausanne
tél. +41 (0)21 652 62 22
fax +41 (0)21 652 93 41
daniel.ingold@lignum.ch
www.cedotec.ch

# Les poutres

# La connexion

# La protection constructive