

# Clase #11

CI44A

## Empuje en reposo

$$k_0 = 1 - \text{sen}\phi$$

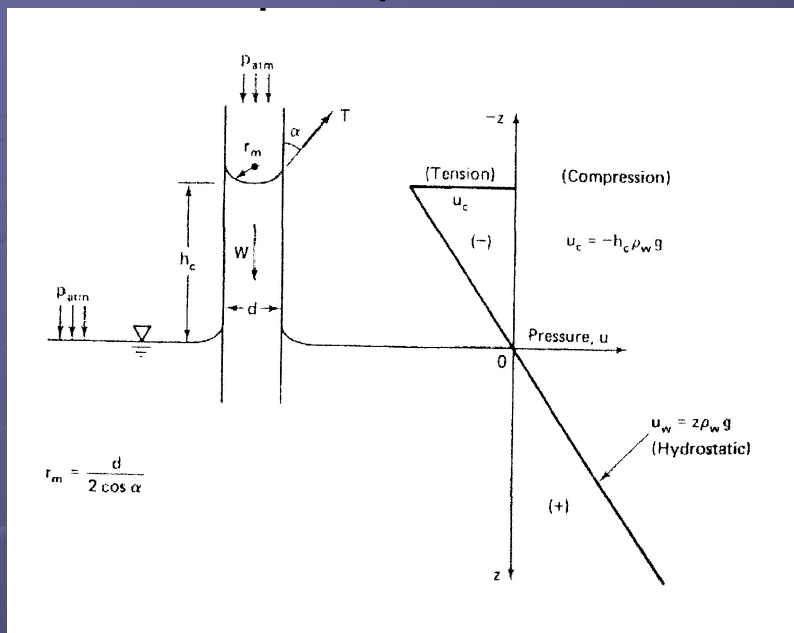
Jaky (1944)

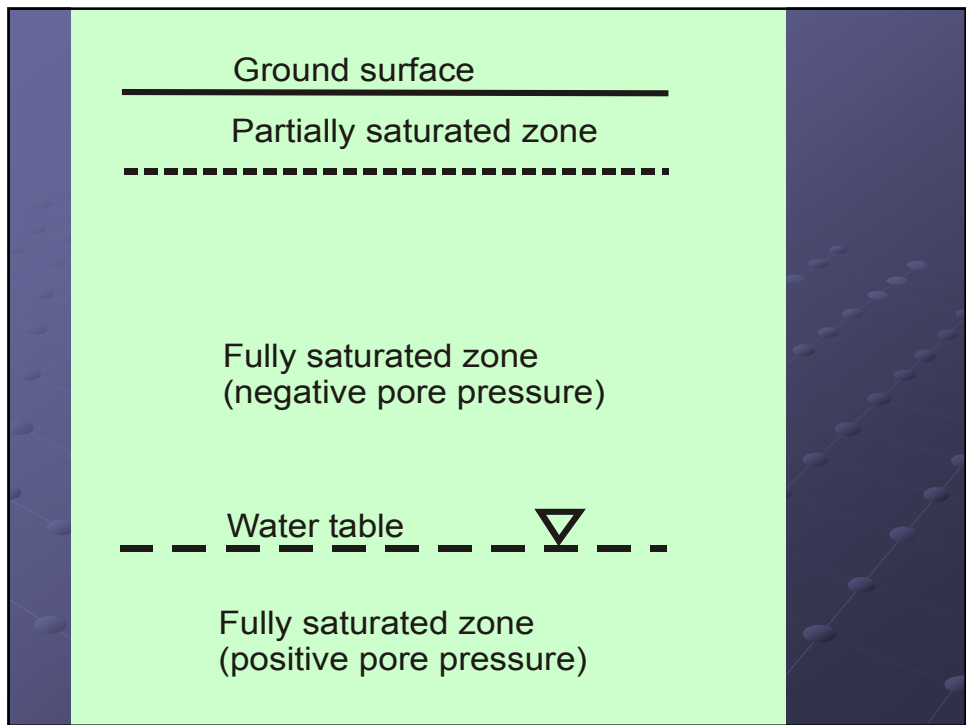
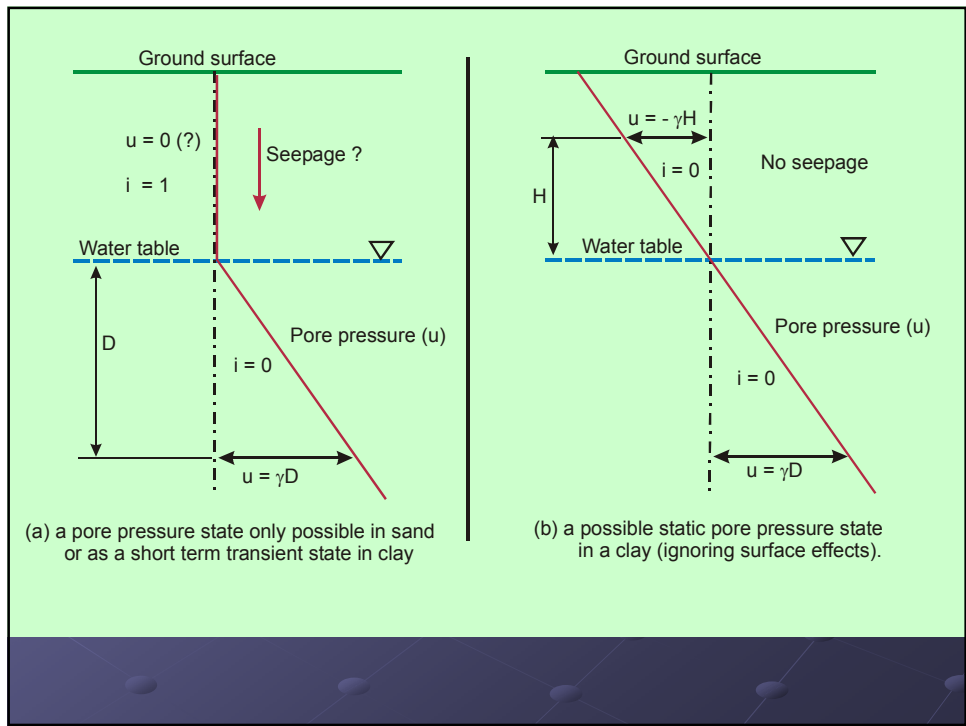
- Ecuación válida para suelos normalmente consolidados que no han presentado deformaciones laterales.

$$k_{0,OC} = (1 - \text{sen } \phi) OCR^m$$

- Para suelos levemente preconsolidados  $OCR < 5$
- (Canadian Geotechnical Society, 2006)
- $m = 1 - \text{sen } \phi$  (usualmente  $m = 0.5$ )
- Para suelos con un nivel de pre-consolidación mayor se recomienda el uso de  $k_p$

## Capilaridad





# Incremento de tensiones

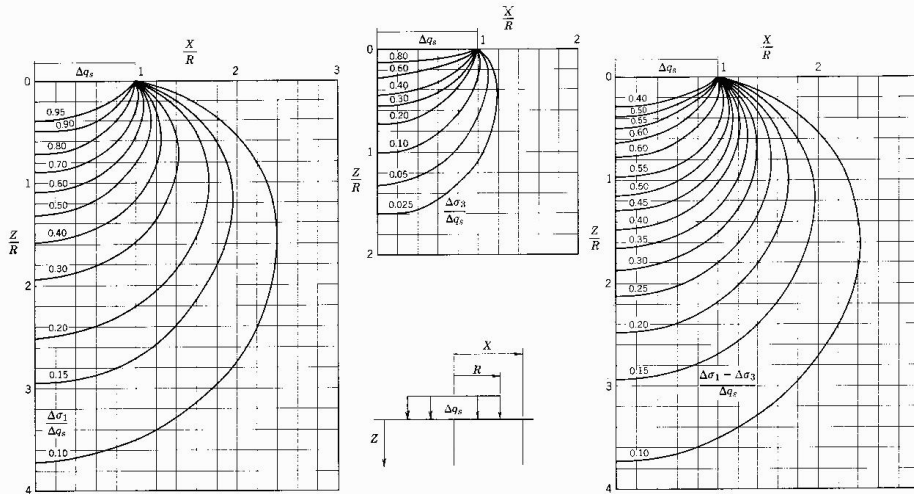
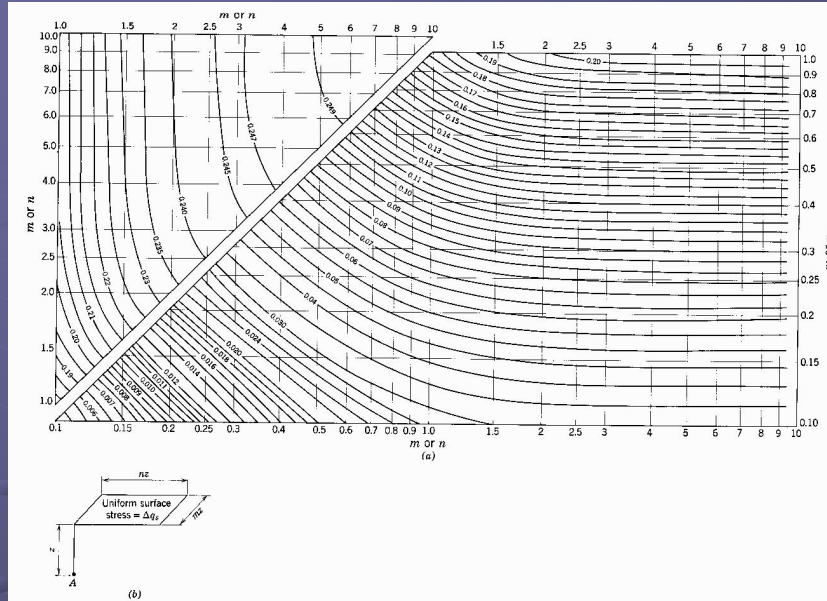


Fig. 8.5 Stresses under uniform load on circular area.

(Lambe, Soil Mechanics, 1969)



Lambe, Soil Mechanics (1969)

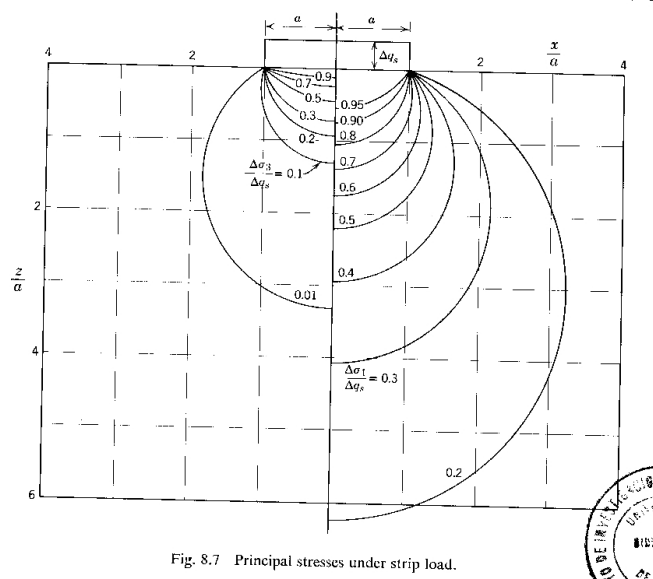


Fig. 8.7 Principal stresses under strip load.

Zapata corrida (Lambe, Soil Mechanics, 1969)