

Remarks: See §7.3, page 255 till 269 and example 4

Also see §7.2, page 248 till 254

Answers:

- a. A tensile force in direction of the curved weirs: $N = 6750 \text{ kN}$
- b. Total force on pier B: $2N = 13500 \text{ kN}$

Remarks:

a.

Resultant from a 1 m width part of the weir: 281,25 kN.

Replace the water pressure by a distributed load perpendicular to the curved weirs: 281,25 kN/m

Tensile force in the weir (see §7.2)

$$N = q_w r = (281,25 \text{ kN/m})(24 \text{ m}) = 6750 \text{ kN}$$