

Remarks: See §7.2, example 1, page 246 till 250

Answers:

- a. $n = 4800 \text{ N/m}$
- b. At the concrete beam: $n_v = 2400\sqrt{3} \text{ N/m} = 4157 \text{ N/m}$
 $\rightarrow A_{\text{beam}} = 0,1\sqrt{3} \text{ m}^2 = 0,173 \text{ m}^2$
- c. The horizontal load on the ring belt is an equally distributed load pointing to the outside of the structure and equal to the horizontal component of the membrane force: $n_h = 2400 \text{ N/m}$

This creates tensile forces in the tie-rods between the concrete beams.

$$N_{\text{tierod}} = 6000 \text{ N}$$