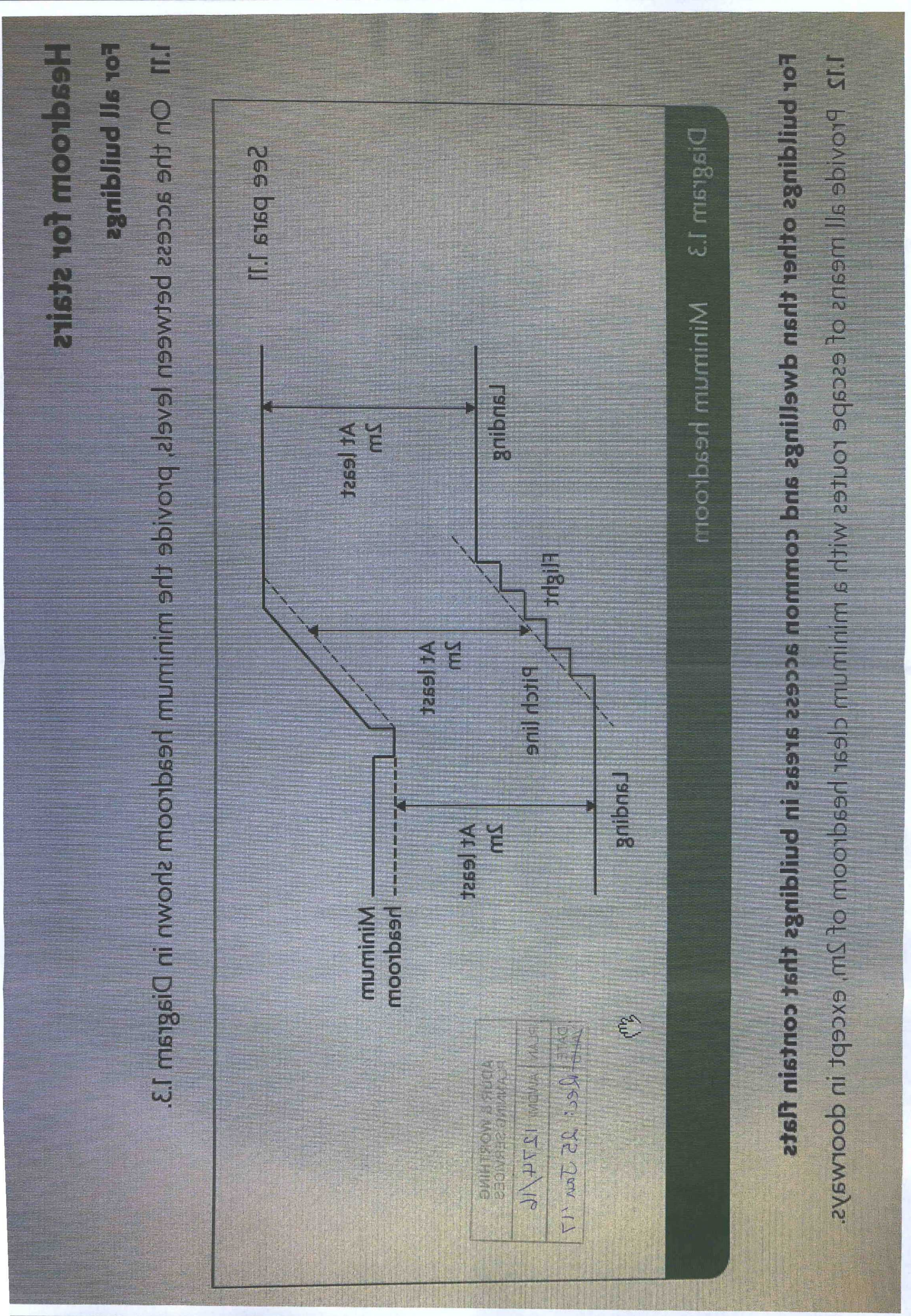
**Question 2.** (25 points) Consider the following right angle building with a minimum height of 2 m. Assume that the building is made of concrete.

**2.1** (10 points) Find the minimum required thickness of the concrete wall if the maximum allowable deflection is 1.3 mm.

Diagram 1.3




**2.2** (15 points) Now assume that the concrete wall is reinforced with steel bars. Find the minimum required thickness of the concrete wall if the maximum allowable deflection is 1.3 mm. Use the same assumptions as in Diagram 1.3.