

PROKON Support Portal

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Chris Swart - 2020-10-01 - 0 Comments - in M02:Masonry wall design

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Scenario

When designing a masonry wall for lateral loads (Bending), you are required to enter a "Dead Load (kPa)". The dead load pressure on the level of the moment parallel to the bedding joints is required to calculate the cracking moment resistance. This article contains the procedure on how to calculate the dead load pressure.

Solution

Characteristic vertical load, G_k , at mid-height:

= thickness x (height/2) x density

= kN/m

Design vertical load at mid-height:

= partial safety factor on loads x characteristic load (G_k)

= $\gamma_f \times G_k$

= kN/m run

Design vertical stress per m length, g_A :

= Design vertical load / Area

= kPa

Comments (0)