Padstone calculator Oct 2023

174A Main Rd Sidcup DA14 6NZ

Masonry Input	Structural cald	culations for padstones
Beam End Reaction	20.7 kN (factored) 1 2.4 N/mm ² 1	
Characteristic strength of masonry Width of beam end bearing	2.4 N/mm ² 1	γm = 3.0
Length of beam end bearing	150 mm	Bearing Factor = 1.25

Masonry Results

Maximum Bearing Stress: 1.00 N/mm²

Actual Bearing Stress: 1.04 N/mm²

Padstone Required

Characteristic strength of Padstone Width of Padstone Length of Padstone 15 N/mm² mm Length of Padstone 150 mm

Padstone Results

Allowable padstone stress: **6.25** N/mm²

Stress under beam end bearing: 1.04 N/mm²

Allowable masonry stress: 1.00 N/mm²

Stress under padstone: 0.99 N/mm²

Therefore Masonry Stress OK Therefore Padstone Stress OK