Masonry Input Structural calculations for padstones kN (factored) 6 40 Beam End Reaction N/mm² **1** 2.6 Characteristic strength of masonry Width of beam end bearing 204 mm γ m = 3.0 150 Length of beam end bearing mm Bearing Factor = 1.25

Maximum Bearing Stress: 1.08 N/mm²

Actual Bearing Stress: 1.31 N/mm²

Padstone Required

Padstone Input Characteristic strength of Padstone Width of Padstone Length of Padstone 250 mm Length of Padstone 215 mm

Padstone Results

Allowable padstone stress: 12.50 N/mm²

Stress under beam end bearing: 1.31 N/mm²

Allowable masonry stress: 1.08 N/mm²

Stress under padstone: 0.74 N/mm²

Masonry Input	Structural calculations for padstones
Beam End Reaction	166 kN (factored) 1
Characteristic strength of masonry	4.5 N/mm ² 1
Width of beam end bearing	254 mm γm = 3.0
Length of beam end bearing	150 mm Bearing Factor = 1.25

Masonry Results

Maximum Bearing Stress: 1.88 N/mm²

Actual Bearing Stress: 4.36 N/mm²

Padstone Required

Padstone Input Characteristic strength of Padstone Width of Padstone Length of Padstone 30 N/mm² mm Length of Padstone 300 mm

Padstone Results

Allowable padstone stress: 12.50 N/mm²

Stress under beam end bearing: 4.36 N/mm²

Allowable masonry stress: 1.88 N/mm²

Stress under padstone: 1.68 N/mm²

Masonry Input Structural calculations for padstones kN (factored) 6 58 Beam End Reaction N/mm² **1** 2.6 Characteristic strength of masonry Width of beam end bearing 146 mm γ m = 3.0 150 Length of beam end bearing mm Bearing Factor = 1.25

Masonry Results

Maximum Bearing Stress: 1.08 N/mm²

Actual Bearing Stress: 2.65 N/mm²

Padstone Required

Padstone Input Characteristic strength of Padstone Width of Padstone Length of Padstone 250 mm Length of Padstone 215 mm

Padstone Results

Allowable padstone stress: 12.50 N/mm²

Stress under beam end bearing: 2.65 N/mm²

Allowable masonry stress: 1.08 N/mm²

Stress under padstone: 1.08 N/mm²

Masonry Input Structural calculations for padstones 124 kN (factored) 🗗 Beam End Reaction N/mm² **1** 4.5 Characteristic strength of masonry Width of beam end bearing 266 mm γ m = 3.0 150 Length of beam end bearing mm Bearing Factor = 1.25

Maximum Bearing Stress: 1.88 N/mm²

Actual Bearing Stress: 3.11 N/mm²

Padstone Required

Padstone Input Characteristic strength of Padstone Width of Padstone Length of Padstone 440 mm

Padstone Results

Allowable padstone stress: 12.50 N/mm²

Stress under beam end bearing: 3.11 N/mm²

Allowable masonry stress: 1.88 N/mm²

Stress under padstone: 0.97 N/mm²