MACSUU

BEAM ON ELASTIC FOUNDATION ANALYSIS
For Soil Supported Beam, Combined Footing, Slab Strip or Mat Strip of Assumed Finite Length with Both Ends Free

Job Name:	Example	Notes: Metrics and graphs provided for design given loading conditions and DUF from site walk.
Checker:	John Smith	
Date:	August 3, 2023	

INPUTS		
Soil Deflection Under Foot	**4**	in
SGM (subgrade modulus)	**1.75**	pci
Load Point(s) Configuration	**2**	
2 Point Spacing	**8**	ft
Load Offset from Center	**0**	ft
Load at Point(s)	**22**	kips
Width of Load Distribution	**4**	ft
Matting	**Emtek 4.5x4x24**	
Mat Length	**24**	ft
Length of Load Distribution	**3**	ft
Layers	**1**	

RESULTS*	
Bending Stress (% of Allowable)	**61%**
Shear Stress (% of Allowable)	**14%**
Max Deflection	**-3.7''**
Edge Deflection	**0.0''**
Max Soil Bearing Pressure	**6.6 psi**
Average Soil Bearing Pressure	**4.2 psi**

*MACSUU is an estimating tool.
Values should be verified by a licensed engineering professional.

GRAPHS