

Product Name :
Basic Roof Truss

Product Code :
ELABBFA0015



Description :

Basic Roof Truss

Technical Specification :

Basic Roof Truss Features Low cost, effective teaching Self-contained Bench mounted Truss angle can be varied Direct read out of strut and tie forces by spring balances Three year warranty Range of Experiments To compare experimental values of the forces in the struts and tie of a basic roof truss with theoretical predictions To observe the effect of changing the tie bar length Description The basic roof truss consists of two rafters or struts and a restraining tie. Both rafters are pivoted at their apex. The other end of one of the rafters is pivoted to a free standing base, whilst the remaining rafter end runs on ball bearings along a track. When a load is hung from the apex, the free end of the rafter moves sideways, restrained by a spring balance tie. Both rafters also include spring balances so that all internal loads can be directly measured. Re-adjustment of the geometry back to its original unloaded configuration is easily made before taking measurements. The length of the tie can be varied to change the angles of the truss. This equipment is part of a range designed to both demonstrate and experimentally confirm basic engineering principles. Great care has been given to each item so as to provide wide experimental scope without unduly complicating or compromising the design. Each piece of apparatus is self-contained and compact. Setting up time is minimal, and all measurements are made with the simplest possible instrumentation, so that the student involvement is purely with the engineering principles being taught. A complete instruction manual is provided describing the apparatus, its application, experimental procedure and typical test results

Elab Engineering Equipments Manufacturers

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