GANG-NAIL
an Eleco plc company

Preliminary Engineering – Course Syllabus

Overview

Course Objective

This course is intended to introduce truss designers to the Roof & Truss design software for the creation of 3D models, schedules and manufacturing layouts and drawings for the fabrication of trusses.

Duration

2 Day's

Course Content

Varies according to customer requirements but may include the following topics.

General

- *Welcome & role of Gang-Nail Systems*
- *Personnel at Gang-Nail Systems*

Introduction

- *Roof Shapes*
- *Standard Trusses*
- *Stub/Cantilever Trusses*
- *Asymmetric Trusses – selecting*
- *Worked Example*
- *Heel Types*
- *Simple/Hard Trusses*

Bracing

- *Struts & Ties*
- *Lateral Bracing*
- *Stability Bracing*
- *Wind Bracing*
- *Responsibility for Bracing*

Codes of Practice

- *BS4978*
- *BS5268 Part 2 & 3*
- *CP3 Chapter V Part 2*
- *BS6399 Part 1, 2 & 3*
- *Building Regulations*
- *Agrément Certificates*

Timber

- *Species*
- *Grades*

Connector Plates

- *Manufacture*
- *Quality Control*
- *Ventilation*
- *Comparison with nails and bolts*
- *Investigation of ultimate loads*
- *Effect of plate mispositioning*

Loads

- *Tile Types*
- *Explanation of Loads*
- *Service Loads*
- *Additional Loads*

Use of Truss Types

- *Valley Frames*
- *Attics*
- *Girders*
- *Hips*
- *Top Hat Trusses*
- *Site Infill*
- *Tank Supports*
- *Loft access/chimney openings*
- *Gable Ladders*
- *Checking on site*
- *Information Required*

GN Roof Output

- *Explanation of Input*
- *Explanation of Output*

Remedial Details

- *Builders Comments*
- *Building Tolerances*
- *Cutting and notching*
- *Drilling of Trusses*
- *Altering designs issued by Gang-Nail*

Worked Examples

- *Simple test on subject covered*
- *Discussion on Results*
- *Review of Training*

Certificate
At the end of the course, following satisfactory completion of the above, you will be presented with a certificate.