

Structured Cabling Installation Training

Correct installation procedures are a fundamental part of today's structured cabling industry. We are committed to ensuring that our cabling systems are installed quickly, professionally and in compliance with the rapidly changing standards proposed by the ISO/IEC, EIA/TIA and CENELEC. Modern building designs often include consideration for cabling infrastructures to support voice and data distribution. It is increasingly the case that tender documents, project specifications and detailed plans make reference to relevant standards and terminology that anyone working in this field should be aware of.

Course Description

SC01 is a one day structured cabling installation course with the following key elements. A mixture of theory presentation, worked examples, practical demonstration and delegate hands on exercises are used to relate theory to real world scenarios.

Introduction to Connectix

- · Background, history and activities
- · Information with regards to 25 Year Warranties

Course Introduction

· Course materials, objectives, test information

Structured Cabling Theory

- · What is structured cabling?
- · Where did it develop from?
- · Clarification of patching
- Development of standards and how installers/end users work with them
- Category 5e through to Category 8 (detailed explanation)
- · The importance of twisted pairs
- Cat 5e or Cat 6, they both support 1 gigabit so, which one for my customer?
- Permanent Link, Consolidation points and 'pre-terminated' solutions
- Generic cabling system structure, backbone and horizontal cabling
- · Pair designation and colour coding
- · Backbone cabling, Copper or Fibre?
- Circumstances/environments where shielded solutions should be considered
- Where should Category 6a be specified/installed and why, is it usually a shielded copper solution?
- What are 'cross talk' and 'return loss' and how can this affect my installed system?

<u>Product Information</u>

- · What are the different outlet options?
- · Different patch panels for different scenarios
- Things to consider with planning and supplying wall and floor mounted cabinets and enclosures

- Cable sheathing, PVC,LSOH,External. Some important selection details
- CPR regulations and what the 'CE' mark on cables actually means

Structured Cabling Installation Processes

- · Overview of a 'typical' installation process
- · Bend radius and pulling strains
- · Segregation from mains cabling
- Fixing and supporting cables
- · Cable preparation
- Cable termination how it should be done (and not done)

Structured Cabling System Testing

- · Why test? What to test?
- · Methods of testing
- How can a cheap tester become a useful tool?
- · Different types of test equipment
- · Testing for warranty application

Features and Benefits

- Gives delegates the confidence to install and test Connectix Cabling Systems correctly.
- Coverage of industry standards, installation techniques and test equipment
- Introduction to typical structured cabling system infrastructure elements.
- Practical exercises including cable installation and termination, testing and fault identification
- Successful delegates receive a certificate forming the basis of the Connectix Approved Installer programme.

Training Centre Opening/Course Time Tables

The training centre will be open from 8:45am with a selection of tea and coffee available. A lunch consisting of sandwiches/drink will be supplied. Courses start at 9am. Courses aim to finish by 5:00pm with the training centre being closed by 5:30pm. The course timetable may be flexible during the day however we have to start promptly, please ensure you can arrive at the start time specified in the course itinerary.



The SC01 is a one-day course which aims to offer a balanced mix of theory, worked examples and practical examples relating to the structured cabling system standards EIA/TIA-568, ISO/IEC 11801 and EN50173. This course requires no prior knowledge or experience. A practical exercise is used to enable delegates to have a 'hands on' experience with the common copper products such as outlets and patch panels.

It is intended that inexperienced delegates will leave with adequate knowledge, confidence and practical experience for future assessment and/or installation of system installations.

Delegates new to Structured Cabling and those already experienced in practical installation will obtain/improve formal knowledge of the standards and cable installation / termination practice. The course is run by a fully qualified Connectix Cabling Systems Trainer who is constantly updated in line with the rapidly changing standards, technologies and terminologies. Upon completion of the course a test is offered for assessment purposes. Successful delegates are awarded a certificate acknowledging their competence, this can then be used to obtain Connectix Approved Installer status.

Practical Exercise - Key Activities

The practical elements of this course take place in a training environment with elements of overhead containment, multi compartment trunking, cable termination at wall outlet and patch panel termination in a cabinet. Testing of cabling installed during the exercise allows delegates to validate their work and, if necessary, understand how to rectify faults. Practical exercises are conducted as teamwork allowing delegates new to cabling to observe effective coordination of effort.

The practical aspect will include:

- Routing of cables over/within containment
- Patch Panel mounting and terminations
- Outlet mounting and terminations
- Testing using a Fluke Versiv DSX certification tester

Course Availability

Please contact Connectix Cabling Systems for up-to-date course availability information.

Telephone: 01376 346600 **Fax:** 01376 346620

Email: training@connectix.co.uk



General Guidance & Information

Training is primarily held at the Connectix Training Centre based at the Connectix HQ in Braintree, Essex.

If required, courses can be held externally at a customer's site. Typically, 6 or more delegates will be required to justify an external course.

Please note that while external courses aim to provide the same value as those held in our training centre the practical exercises may not be as comprehensive or offer the same level of learning benefit.