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Scheme Rules - Appendix M Temporary Works Supervisor Training Course (TWSTC)



Site Safety Plus
Temporary Works Supervisor Training Course (TWSTC)
Course Appendix M

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1. Introduction

This course complements the Temporary works coordinator training course (TWCTC) and is designed to provide training for those undertaking the role of temporary works supervisor (TWS), as defined in BS 5975:2019.

The role can be defined by relating it to four clauses within BS 5975:2019.

1. (Clause 12.2.1.) The TWS, where appointed, should be responsible to the principal contractor's temporary works coordinator (PC's TWC) or the temporary works coordinator (TWC), as appropriate. The TWS should assist the PC's TWC or TWC, as appropriate, in the supervision and checking of the temporary works.
2. (Clause 12.2.2.) A TWS should only be authorised to issue a permit to proceed (for example, to load or unload) if the designated individual (DI) of their organisation and the PC's TWC are satisfied that:
 - a. the individual TWS is competent and has been given appropriate authority in respect of that individual, **and**
 - b. the risk classification (6.2.3) has been identified as low or very low.
3. (Clause 12.2.3.) The role of the TWS is to provide on-site support to the PC's TWC or TWC for the control of temporary works. The TWS should not be responsible for the design or checking the design of temporary works but should be responsible for implementing the PC's or contractors' procedure for the control of temporary works.
4. (Clause 12.2.4.) However, appointing someone to be the TWS should not prevent them from carrying out the design or checking designs if they are considered competent to do so.

The rationale for the TWSTC is to set and raise standards across the industry, and to enable a transferable knowledge base between employers to avoid unnecessary supplementary training.

2. Aims and objectives

2.1. Aims

To ensure that all those given temporary works supervisory responsibilities understand the:

- need for and duties of a TWS
- roles of others
- use of BS5975:2019 in relation to the role
- importance of the 4Cs: communication, coordination, co-operation and competence
- need for risk management.

2.2. Objectives

At the end of the course delegates should:

- understand the duties of a TWS and roles of others
- have a detailed knowledge and understanding of BS 5975:2019
- be able to communicate effectively in the workplace.

3. Entry requirements

There are no formal entry requirements. However, delegates should hold, or be about to hold, the role of a temporary works supervisor.

4. Assessment

Assessment will be by multiple-choice questions at the end of the course. Delegates will also be expected to interact and participate during the course.

5. Delegate numbers

The minimum number of delegates per course is four. The maximum number of delegates per course is 20. These minimum and maximum delegate numbers are not subject to an appeal.

6. Course duration and attendance

This course is designed to be completed in one day. Delegates are required to attend the full day (seven hours) and pass the end-of-course assessment to be eligible for certification.

Attendance does not confer competency as a TWS. Competence is a result of education, training and experience, and should be judged by an appropriate senior individual, usually referred to as the DI. Training is considered to be an essential element of TWS competence.

7. Progression

The natural progression from this course would be to the Temporary works coordinator training course (TWCTC) if duties allowed.

8. Course publications and materials

This course, including its group work and exercises, is constructed around BS 5975:2019. Delegates should bring a copy with them in order not to be disadvantaged.

For in-house courses, the trainer is expected to tailor the course around the organisation's procedures, providing they are comprehensive and follow the philosophy of BS 5975:2019. In these cases, delegates will also need a copy of their company's own procedures.

8.1. Recommended supporting publications

Temporary Works forum: www.twforum.org.uk/home (see 'Resources')

- TWf Information Sheet No. 2 – Temporary works training
www.twforum.org.uk/viewdocument/twf-information-sheet-no-2-tempo
- TWf Information Sheet No. 6 – The safe management of temporary works
www.twforum.org.uk/viewdocument/twf-information-sheet-no-6-the-s
- TW17.037: Principles for the management of temporary loads, temporary conditions and temporary works during the construction process
www.twforum.org.uk/viewdocument/principles-for-the-management-of-te
- TW11.027, Rev F: Competencies of the TWC
www.twforum.org.uk/viewdocument/competencies-of-the-twc-tw11027

NASC: www.nasc.org.uk/information

- TG20:21: Good practice guidance for tube and fitting scaffolding
- TG9:18: Guide to the design and construction of temporary roofs and buildings

British Standards Institution (BSI): shop.bsigroup.com

BS 5975:2019: Code of practice for temporary works procedures and the permissible stress design of falsework

- BS 7121: Parts 1 to 14: Code of practice for safe use of cranes

HMSO

- Bragg, SL (1974). Interim report of the Advisory Committee on Falsework. (Final report issued in 1975)

HSE: www.hse.gov.uk

- Managing health and safety in construction. Construction (Design and Management) Regulations 2015. Guidance on Regulations
www.hse.gov.uk/pubns/priced/l153.pdf
- CIS56: Safe erection, use and dismantling of falsework
www.hse.gov.uk/pubns/cis56.pdf

Concrete Centre: www.concretecentre.com/Publications-Software.aspx

CONSTRUCT: www.construct.org.uk/publications/guide-safe-use-formwork-falsework

- CSG005: Guide to the safe use of formwork and falsework (2008)

ICE Publishing: www.icevirtuallibrary.com

- Pallett, PF and Filip, R (2018). Temporary Works: Principles of Design and Construction. Second edition
- McAleenan, C and Oloke, D (2010). ICE Manual of Health and Safety in Construction

CIRIA: www.ciria.org

- C579 (2003). Retention of masonry facades – Best practice guide

Concrete Society: www.concrete.org.uk

- CS030 (2012). Formwork – A guide to good practice. Third edition

8.2. Supplementary information

The role and duties of the TWS are explained in the latest version of BS 5975:2019. This is as follows. The TWS should:

- a) liaise and co-operate with the PC's TWC or TWC, where appropriate
- b) assist the appropriate TWC in ensuring that the site is operating in accordance with the approved procedures
- c) check that information, relevant to the temporary works, has been received before work starts work on site, including any residual risk information from the temporary works designer (TWD)
- d) supervise the erection, use, maintenance and dismantling of the temporary works, as applicable
- e) carry out or supervise the required checks at appropriate stages during the construction, erection or installation of the temporary works
- f) carry out or supervise any planned maintenance of the temporary works
- g) ensure that any changes or modifications to the scheme or differences from the envisaged conditions (whether use or environmental) are drawn to the attention of the PC's TWC or TWC, and designer as appropriate
- h) carry out the final check prior to use of the temporary works
- i) if inspections reveal discrepancies between the certified and as-constructed temporary works, issue a notice to prevent loading (or unloading) until the discrepancies have been rectified to the satisfaction of the PC's TWC and/or the TWC
- j) after a final check, which is satisfactory, and when authorised, ensure a permit to load or proceed (bring into use) is issued and provide a copy of the permit to the PC's TWC and/or TWC
- k) when it has been confirmed that the permanent structure is sufficiently strong and/or stable, and when authorised, ensure a permit to unload (take out of use) the temporary works is issued and provide a copy of the permit to the PC's TWC and/or TWC.

9. Notes to training providers

Training providers may make minor adjustments to the programme to meet delegate needs so long as the aims and objectives of the course are met.

All trainers must adhere to the course note requirements. These are as follows.

- Trainers will develop detailed notes, case studies and exercises from the scheme of works, suitably indexed and presented for the delegate to take away on completion of the course. It is essential that the underlying theme of proportionate risk management, from a safety- and business-critical perspective, is present throughout the module.
- Notes should expand on and explain the background of, in particular, the role of the TWS, as set out in BS 5975:2019, as well as explaining other aspects of the module. Trainers may assume that delegates will bring their own copies of BS 5975:2019.
- Notes will form a delegate pack, to be issued on the day of the course. These will be updated by the trainers as required, to ensure they are contemporary.
- The notes will be supplemented by hand-outs for exercises.

CITB has a licence with BSI that enables training providers to reproduce up to 20 copies (per provider) of only Section 2, Clause 6(14) of BS 5975:2019, for exclusive use in training material. These copies must be retained by the provider.

Copies of any significant proposed programme changes, if any, must be submitted prior to course delivery.

9.1. Distribution and format

Notes should be issued at the start of the course and be in hard copy, unless delegates have been notified prior to the course that electronic methods (for example, USB sticks) will be used instead. Trainers should be aware that the latter option will require all delegates to have tablets or laptops so that they are not disadvantaged.

9.2. Course notes content

Course notes will not be acceptable if they are:

- copies of slides (slides should follow good practice and contain minimal textual information)
- including only specific company procedures that just say what must be done, without any background. These will not cover the entire course however relevant they are.

The notes are expected to cover the entire course subject matter. For example:

- historical background
- the key Bragg report recommendations
- risk management philosophy
- examples of failure of temporary works
- the 3Ps, 4Cs and ERIC
- contract and statute, and their impact on the TWS.

All the above need explanatory notes to 'tell a story' (and none of these points are contained sufficiently, or at all, within BS 5975:2019). The notes should also include the following.

- The individual duties of the TWS require examples and explanations. Some require particular prominence (for example, supervision and checking), as well as the appointment and roles of others. The notes should also cover how the role fits into typical contractual scenarios.
- Case studies also require written provision.
- Sample forms, examples of completed forms and so on.
- Delegate exercises.
- References and further reading.

This is not an exhaustive listing.

If the course is in-house then the trainer is expected to insert company procedural examples and requirements into the notes, or alternative methods, as agreed with the client.

9.3. Interaction with delegates

It is expected that the course will involve a significant number of exercises and discussions. The exercises should be outlined in the notes.

Examples should be spread across the construction industry as far as is reasonable, specifically buildings and civil works, including above- and below-ground temporary works situations.

9.4. The risk management thread

This is a risk management course that happens to concentrate on the role of the TWS in supporting the TWC in managing the coordination of temporary works to avert their failure. Avoiding failure, from a safety perspective, is the prime aim (and the original concept of the TWS), but avoiding failure from a business or commercial perspective is of almost equal importance. The same processes can be used to achieve both aims and both should be given emphasis. The basis of the risk management process is safety legislation (ERIC) but it can be used for any type of risk.

The course, and notes, should emphasise:

- ERIC
- the 3Ps
- the 4Cs.

These are essential tools to the understanding of proportionate qualitative risk management, recognising that the majority of problems lie with the first two Ps – people and process.

9.5. References for trainers

The following background information and advice is suitable for trainers, who can decide whether to draw them to the attention of delegates. They are written largely with reference to permanent works but the principles apply to temporary works.

- Carpenter, J, 'Practical application of risk management', *The Structural Engineer*, 15 July 2003, pp19–20, [www.istructe.org/journal/volumes/volume-81-\(published-in-2003\)/issue-14](http://www.istructe.org/journal/volumes/volume-81-(published-in-2003)/issue-14)
- Carpenter, J, 'A simple approach to the management of risk on civil and structural engineering projects: how to get on with ERIC', *The Structural Engineer*, 7 April 2010, p20 [www.istructe.org/journal/volumes/volume-88-\(published-in-2010\)/issue-7](http://www.istructe.org/journal/volumes/volume-88-(published-in-2010)/issue-7)
- CDM guidance for designers: www.citb.co.uk/about-citb/partnerships-and-initiatives/construction-design-and-management-cdm-regulations/cdm-regulations

10. Learning outcomes

Delegates taking this course should be able to achieve all the learning outcomes listed below by the end of the course. We have added an estimated delivery time to support you in your course planning

Module 1 – What are temporary works? (Estimated delivery time 30 mins)

1. Describe types of temporary works

Describe the different types of temporary works and temporary works solutions, and the impact of their failure on health and safety on construction sites.

Module 2 – The history of temporary works (Estimated delivery time 30 mins)

1. The history of temporary works

Describe the history that set requirements for a series of changes, creating a robust, safety-conscious process in the design, installation, management and removal of temporary works.

2. The consequences of failure

Describe the consequences of failure and the importance of avoiding failure in relation to the 3Ps and 4Cs.

Module 3 – Who is involved with temporary works? (Estimated delivery time 90-120 mins)

1. Stakeholders' and duty holders' responsibilities and accountabilities

Identify the key roles and responsibilities of the primary stakeholders responsible for managing the safe implementation, management and dismantling of temporary works, including the appointment of key roles.

Module 4 – Planning temporary works (Estimated delivery time 90-120 mins)

1. Management and control of design

Explain how the TWS supports the TWC in the management and control of the design, materials, components and key solutions.

2. Key processes

State the key processes that form a safe system of work.

3. Risk classification

State the importance of risk classification and its impact on design and risk management.

Module 5 – Undertaking the role of the TWS (Estimated delivery time 90-120 mins)

1. Key activities

Support the TWC in the coordination and supervision of the construction, erection and dismantling of temporary works

11. End-of-course examination rules

11.1. Examination details

The examination paper is compulsory and consists of 25 multiple-choice questions selected by CITB.

It forms the basis of assessing whether a delegate has achieved a sufficient level of understanding to be awarded the Temporary works supervisor training course (TWSTC) certificate.

The examination lasts for 30 minutes and must be completed within this time.

The examination is open book.

The examination pass mark is 72%.

The examination paper number will be notified when the course booking is accepted by CITB.

11.2. Re-sits procedure

Where a delegate has achieved 64%–68% in the examination, the delegate may re-sit the examination on the same day or by attending another course for the exam. Subsequent arrangements will be at the delegate's own expense.

The training provider must make the arrangements with the delegate and ensure that the same examination paper is not used twice.

The delegate must re-sit the examination within 90 days of the last day attended.

A fee may be charged to the delegate; however, this is at the discretion of the training provider. If the training provider wishes to recover additional costs from the delegate, this should be agreed in advance.

If the delegate fails their re-sit, they will be required to take the TWSTC again, or will be offered an alternative course that is considered to better match the delegate's level of knowledge and understanding.

12. Trainer requirements

In addition to the minimum trainer requirements in the Quality Assurance Requirements, trainers must have attended and achieved, and hold a current certificate for this course (or one of a higher level in the SSP temporary works suite) and meet the criteria below:

- be a member of the Institution of Civil Engineers (AMICE/MICE/FICE) **or**
- be a member of the Institution of Structural Engineers (MIStructE/FIStructE) **or**
- be a member of the Institution of Royal Engineers (InstRE) **and**
- be registered with the Engineering Council at IEng or CEng level **and**
- hold relevant practical and design experience of temporary works (such as falsework, formwork, access and protection)

It is good practice, but not mandatory, for trainers to also hold one or more of the following qualifications.

- NEBOSH National Certificate in Construction Safety and Health.
- Level 4 or 5 NVQ Diploma in Occupational Health and Safety Practice (or SVQ equivalent).*
- A health and safety degree.
- NEBOSH Diploma in Occupational Safety and Health Part 2.
- NEBOSH Diploma in Occupational Safety and Health Units A, B, C and D.
- IOSH Level 6 Diploma in Safety Management (or equivalent).

** Note: The Level 5 NVQ/SVQ in Occupational Health and Safety has replaced the Level 4 within the Qualifications and Credit Framework. Holders of a valid certificate for the Level 4 qualification will be accepted.*

Occupational health and safety competence will also be satisfied by Chartered Membership of ICE, IStructE or IOSH, although specific qualifications, such as ICE Health and Safety Register (Level 1) or equivalent, are encouraged.

13. List of abbreviations

3Ps	people, process, product
4Cs	communication, co-operation, coordination, competency
AP	appointed person
BS	British Standard
CDM	Construction (Design and Management) Regulations
DI	designated individual
ERIC	eliminate, reduce, inform, control
HSE	Health and Safety Executive
ICE	Institution of Civil Engineers
IOSH	Institution of Occupational Safety and Health
NASC	National Access and Scaffolding Confederation
NEBOSH	National Examination Board in Occupational Safety and Health
PC	principal contractor
PC's TWC	principal contractor's temporary works coordinator
TWC	temporary works coordinator
TWCTC	Temporary works coordinator training course
TWD	temporary works designer
TWf	Temporary Works forum
TWS	temporary works supervisor
TWSTC	Temporary works supervisor training course