

## ECIFSS02

# Assemble components of steel fabrications to meet specification



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### Overview

This standard is about assembling components of steel fabrications to meet specification in engineering construction.

You will need to be able to assemble components in the correct position and secure them using specified connectors and devices whilst adhering to Health and safety legislation, regulations and safe working practices.

In the context of this standard, your responsibility is to interpret and work within given specifications, selecting techniques and making variations to achieve the best possible result. In some cases, you may still be expected to refer to others for final authorisation, even though you remain responsible for identifying and implementing decisions.

#### **Who this standard is for**

This standard is for Platers.

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#### Performance criteria

- You must be able to:*
- P1 work safely at all times, complying with health and safety and other relevant legislation, regulations, guidelines and local rules or procedures
  - P2 ensure that the **work environment**, material, **components**, equipment and tools are suitably prepared for the activities to be undertaken
  - P3 obtain and interpret relevant drawings, instructions and specifications
  - P4 mark out if necessary
  - P5 use appropriate methods and techniques to **assemble** the components in their correct positions
  - P6 assemble components using the specified connectors and securing devices
  - P7 check the completed assembly to ensure that all operations have been completed and the finished assembly meets the required specification
  - P8 **reinstate the work area**
  - P9 deal promptly and effectively with problems within your control and report those that cannot be solved

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#### Knowledge and understanding

*You need to know and understand:*

- K1 relevant legislative, regulatory and local requirements or procedures and safe working practices
- K2 preparation and reinstatement requirements in respect of work area, material, components and equipment, and the possible consequences of incorrect actions in these areas
- K3 assembly drawings and related specifications
- K4 **assembly methods and techniques**
- K5 equipment handling and related procedures
- K6 how to check the assembly complies with specification
- K7 how to identify defects
- K8 your responsibilities for ensuring care and security of tools, components and equipment used
- K9 your responsibilities with regard to reporting lines and procedures in your working environment

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### Scope/range

#### Work environment

Typical work environments could include:

- 1 at height
- 2 confined spaces
- 3 controlled operational and offshore installations
- 4 designated work areas
- 5 engineering construction sites
- 6 existing plants and structures
- 7 fabrication workshops
- 8 nuclear sites
- 9 onshore and offshore installations
- 10 potentially explosive atmospheres
- 11 shafts
- 12 shipyards
- 13 tunnels
- 14 working inside plant and systems
- 15 working on access structures (scaffold)

#### Components

Typical components could include:

- 1 fabricated sections
- 2 formed sections
- 3 plate sections
- 4 rolled sections
- 5 pipe

#### Assemble

The assemblies can be achieved through the making of connections which are several in number and/or may be difficult to access. Types of assemblies could include:

- 1 platework assemblies
- 2 steel section assemblies
- 3 tubework assemblies

#### Reinstate the work area

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This term could include:

- 1 returning the work area to a safe condition
- 2 correctly disposing of waste materials
- 3 storage of re-usable materials, consumables and equipment in accordance with appropriate procedures
- 4 completion of all necessary documentation

#### **Assembly methods and techniques**

The assembly may require the application of several different technologies. Procedures may need to be modified to achieve optimum results. Typical assembly techniques could include:

- 1 clamping
- 2 tack welding
- 3 threaded fastening

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**Suite** Fabricating Steel Structures (Plating); Tray Fitting Tower and Column Internals;

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