

INSTITUTE FOR WORK AT HEIGHT



Good Practice Note 2026-01

Good Practice notes inform the industry on how to embrace best practice and how to deal with issues that may arise. They are aligned with, but do not replace regulation as well as endorse industry standards

Steel Frame Scaffolds

Foreword:

The latest SANS 10085-1:2024 - The design, erection, inspection, use, modification and dismantling of steel access scaffolding and working platforms was published in May 2024 and gazetted in February 2025 (Government Gazette No. 52062 of February 2025).

The section on steel Frame scaffolds was not included in the latest SANS 10085-1:2024 because the information was product specific, outdated and did not cater for Frame scaffolds that are currently available in South Africa.

The SABS working group, that re-wrote the SANS 10085-1 Standard, considered it prudent to exclude the Frame scaffolds section (in addition to other sections such as Outrigger scaffolds, Roof scaffolds, Buttress scaffolds, Pavement gantries, etc.) and include them in a new SANS 10085-Part 2. Until this new SANS 10085-Part 2 is published, these scaffolds should be treated as specially designed scaffolds as per Clause 4.4 of the SANS 10085-1:2024.

It is anticipated that it will take several years to complete the new SANS 10085-Part 2.

In the absence of a steel Frame scaffold section in the latest SANS 10085-1:2024, there is concern within the industry that persons working with steel Frame scaffolds will incorrectly erect, inspect, modify, use and dismantle Frame scaffolds on construction sites.

In the interim, this Guideline has been compiled to assist contractors with the safe design, erection, inspection, use, modification and dismantling of steel Frame scaffolds.

The fact that steel Frame scaffolds are not included in the latest SANS 10085-1:2024, does not make them illegal or require them to be phased out. All it means is that it is the responsibility of the supplier / OEM to provide sufficient technical / relevant information such that steel Frame scaffolds can be erected, modified, used and dismantled safely in accordance with their specifications. This is a legal requirement in terms of section 10 of the Occupational Health and Safety Act.

It must be pointed out that this Guideline only includes information regarding steel Frame scaffolds and does not cater for Frame scaffolds made from aluminium or any other material(s).

Components and Application Guidance:

Sole boards:

Sole boards may be made from wood or any other suitable material, provided they are at least as strong as SA Pine, Grade S5 timber. They should be at least 50 mm thick and of width and length to suit the strength of the ground / bearing surface on which they are standing.

Refer to section 5.4, 6.3, 6.4 and Table 5 of the SANS 10085-1 for the minimum sole board and founding specifications.

Base Jacks:

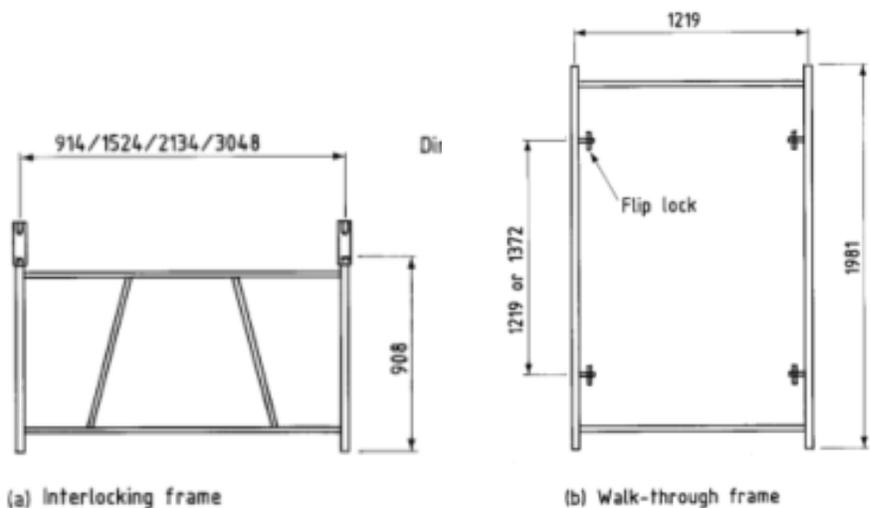
Ensure that the correct type and size are installed as per the supplier's / OEM's specifications.

The maximum allowed thread extension and the allowed axial load on the Base Jacks must be obtained from the supplier. Excessive thread extensions should be braced to stabilize the scaffold and strengthen the Base Jacks.

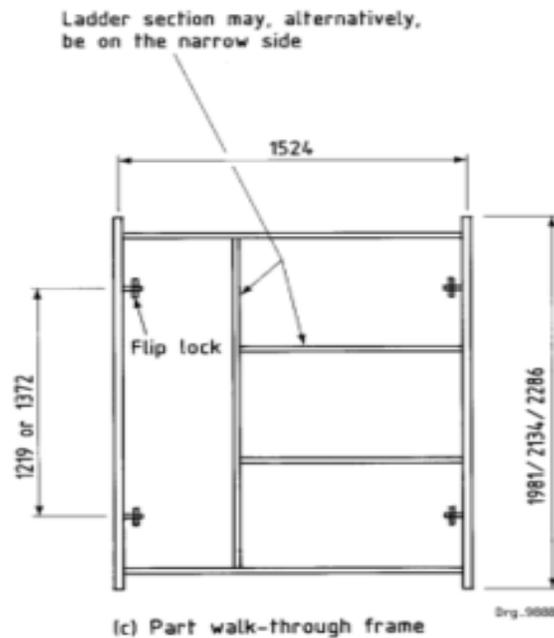
Steel Frames:

There are many types, sizes and shapes of steel Frame scaffolds available for use on construction sites, such as:

- Interlocking Frames (only used for tower scaffolds)
- Walk-through Frames
- Part walk-through Frames.



Examples of types of Frames



Examples of types of Frames

Different types of steel Frame scaffolds are generally not interchangeable and mixing them up in one scaffold should be avoided. However, if properly assessed by a person competent in scaffold design, two different types of steel Frame scaffold systems may be erected side by side, laced and adjoining platforms may be installed.

Due to the large variety of frames available, the method of joining frames together vertically and horizontally varies. Frames must therefore be joined together in accordance with the supplier's / OEM's specifications.

Where X-Braces are used to brace / stabilize the steel Frame scaffolds, they must be installed in accordance with the supplier's / OEM's specifications / instructions. Usually, the entire outside face is fully X-Braced.

Note: X-Braces attached to Flip Locks must not be used for the purpose of Side Protection. Refer to Side Protection below.

Towers:

Steel Frame tower scaffolds may be either static (on Base Jacks) or mobile (on Castor wheels).

All towers shall have a minimum base width of 1200 mm unless specially designed and tied in position.

Also Refer to Section 9 of the SANS 10085-1:2024 for general guidance on tower scaffolds.

Static Towers:

Static towers must be erected on Base Jacks. The use of Base Plates in lieu of Base Jacks is not permitted because in all probability the bearing surface will not be perfectly level and the tower could have the tendency to lean over and will only be resting on three of the four Base Plates.

Mobile Towers:

Mobile steel Frame towers are erected on Castor wheels / Jacking Castors. Mobile steel Frame towers may not carry a vertical working load on the platform(s) exceeding the total capacity of 3 of the 4 selected castor wheels.

When being moved, have no workers or materials on the platform(s), and have external guy ropes kept taut by workers to stabilize the tower during movement.

Height restrictions:

The maximum height of steel Frame scaffolds must not exceed the specifications of the supplier / OEM.

Refer to Table 11 in the SANS 10085-1:2024 for the allowable free-standing height of tower scaffolds.

Working platforms:

Ensure full width platforms are used and that the same type of platform / timber boards are used within a single bay.

Refer to the SANS 10085-1:2024, Section 5.9 for platform specifications and Section 6.9 for platform applications.

The allowable number of working / non-working platforms and the allowable loading on each of the platforms is to be in accordance with the supplier's / OEM's specifications.

Ties:

Where tying specifications are not specified by the supplier / OEM, refer to the SANS 10085-1:2024, Section 6.11 for the minimum tying requirements for scaffolds or alternatively a person competent in scaffold design must approve the tying requirements.

Bracing for steel Frame scaffolds:

All face bracing, transverse bracing and plan bracing for steel Frame scaffolds must be installed, to stabilize the scaffold, in the positions and frequency as specified by the supplier / OEM.

Side Protection:

Ensure that Side Protection (including handrails, knee rails and toe boards) are installed around all exposed edges of working platforms as per the supplier's / OEM's specifications.

Refer to the SANS 10085-1:2024, Section 6.10 for platform / Side Protection specifications.

As mentioned above, steel Frame X-braces cannot take over the function of Side Protection as they do not meet the requirements of the SANS 10085-1:2024, Section 6.10. Omitting handrails, knee rails and toe-boards is not permitted.



Photograph showing the dangerous misuse of X-braces as a substitute for Side Protection

Access within steel Frame scaffolds:

Some frames have built in ladders on one side of each frame. Where the steel Frames do not include built in ladders, safe access must be installed in accordance with the supplier's / OEM's specifications.

Sheeted steel Frame scaffolds:

Where steel Frame scaffolds are sheeted, they must be designed by a person competent in scaffold design.

Inspection of steel Frame scaffold components:

All scaffolding components must be carefully inspected by a person competent in scaffolding supervision, erection and maintenance before erection.

Equipment found to be defective or deemed to be unsafe for use must be clearly marked / labelled and removed to a suitably demarcated quarantine area for destruction, refurbishment or removal from site.

The method of marking / labelling the components, recording the findings, demarcating and controlling the quarantine area is at the discretion of the scaffolding company.

Inspection and handover:

Where a working platform is more than 2 m above the bearing surface, a person who is certificated as an Inspector of Scaffolding shall be appointed to carry out inspections as specified in Sections 14.2 and 14.3 of the SANS 10085-1:2024.

Responsibilities of the end user:

The user of a steel Frame scaffold shall ensure, as far as is reasonably possible, that the scaffold is safe and fit for purpose before allowing any person to utilize the scaffold.

The user of a steel Frame scaffold shall ensure that the persons working on the scaffold are instructed that they may not alter the scaffold in any way during the course of their work and that if any alterations are required to the scaffold, the alterations shall only be carried out by competent scaffolding workers under supervision.

Training:

Training must be done to ensure that steel Frame scaffolds are erected, modified and dismantled only by workers with the required level of experience, knowledge and competence skills relevant to the task at hand.

Persons erecting, modifying and dismantling steel Frame scaffolds must be trained in accordance with the supplier's recommendations.

Tools:

Ensure that only the correct tools, as specified by the supplier, are used.

Spanners and other tools used in the erection, modification and dismantling of steel Frame scaffolds must be inspected prior to use and at other routine intervals as specified in the site's safety plan.

Safety:

Ensure that a proper risk assessment is done prior to erecting, modifying or dismantling the scaffold.

During erection, modification and dismantling, "Not Safe for Use" signs shall be displayed at the entrance points of the scaffold.

Contact Us

Company Name

Institute for Work at
Height

Street Address

Second Floor,
Sami G Square,
80 Greenvale Road,
Wilbert,
1401

Phone

+27(0)11 - 450 - 1804

Email

info@ifwh.co.za

Website

www.ifwh.co.za

After inspection and handover of the scaffold, “Safe for Use” signs shall be displayed at the entrance points of the scaffold.

Ensure that the correct PPE / fall restraint is worn / properly used by the scaffolders.

Storage of steel Frame scaffold components:

Stacking and storage of the steel Frame scaffolding components must be done in accordance with the supplier’s / OEM’s specifications.

Working drawings:

Drawings are required where the upper working platform is more than 2 m above the lowest point of the scaffold. The relevant working drawing(s) and the relevant erection / dismantling sequence documentation must be used and be made available on site.

Deviations from the supplier’s / OEM’s specifications / instructions:

Any deviations from the supplier’s / OEM’s specifications / instructions (such as creating a bridged opening within the scaffold, adding a cantilevered portion to the scaffold, etc.) must be assessed and approved by a person competent in scaffold design.

Good practice:

The user(s) of this Guideline must ensure that “good practice” principles are adopted on site by competent persons and that steel Frame scaffolds are erected, inspected, used, modified and dismantled in accordance with the supplier’s / OEM’s specifications / instructions, the applicable portions of the SANS 10085-1:2024 and the OHS Act and Construction Regulations, 2014



Disclaimer:

While every effort has been made to ensure the accuracy of the information contained in this Guideline, neither the Institute for Work at Heights (IWH) or VB Tempworks Solutions (Pty) Ltd accept any responsibility for any misinterpretation or errors which may occur as a result of reliance on the contents of this Guideline and are not liable for any loss of any nature that may be incurred as a result of such reliance.

Details or information contained herein may change without prior notice.