

Skanska UK - Prevention of Falling Materials Standard

Who this Standard applies to

This document sets out the standard for minimising risk to activities and operations where there is a potential for falling tools, equipment and components. It applies to all persons working on Skanska UK Projects, activities including multi-occupancy buildings as from the 1st October 2019

Objective

In order to maintain an Injury Free Environment for our people, our workforce, our client and suppliers, and any other person who may be affected by our activities, Skanska UK are introducing this Prevention of Falling Materials Standard aimed at reducing the risk of items falling. This standard is to be used in conjunction to the Project/activity specific Fall Prevention Plan (EHS 015-F01)

Scope

Where possible all tools, equipment and components are to be prevented from falling when being used on Skanska UK projects/activities in any, or a combination of the following situations, this includes work on both internal and external elevations. If it is not possible to tether/secure alternative controls must be put in place:

- When working on the leading edge of an opening or edge of the structure above 2.5m.
- When working adjacent to an opening or edge of the structure. There is no prescribed distance regarding when this is applicable, the distance shall be assessed on an individual activity basis based on the degree of risk.
- When working externally to the structure where tools, equipment and components can fall more than one storey or more than 2.5m.
- Where there is a risk of tools, equipment and components falling more than one storey or more than 2.5m within the building e.g. risers, stairwells, lift shafts, atria and entrance halls.
- Any location where tools, equipment and components could fall into PPE free zones or public areas.
- When working out of access equipment such as MEWPs, Pop-ups, mobile tower scaffolds, podium steps and stepladders from a height of more than 2.5m. (see the risk matrix in appendix A for the Building OU specific requirements).
- When working above or adjacent to excavations that are deeper than 2.5m.

Risk assessment and Planning expectations

All employers are to carry out a risk assessment to identify and specify the measures necessary to control the risk of tools, equipment and components falling. For locations where Skanska has a direct responsibility a Fall Prevention Plan will also be produced.

The employer shall produce either a specific Prevention of Falling Materials Risk Assessment for each relevant RAMS or include detail within the general risk assessment for the activity. Documents must detail the measures they intend to take to prevent tools, equipment and components from falling throughout the duration of that specific activity.

Where there is a risk of items falling for activities that Skanska are directly responsible for, a risk assessment (in either format as detailed above) shall be produced in addition to those of the trade contractors risk assessments.

The risk assessment shall be briefed and made available to all personnel who are expected to work within the prescribed control measures.

The employer must ensure that the prescribed means for preventing items falling does not increase the risk of injury.

Full Height Containment

Full height containment shall be installed on all Skanska UK projects at the earliest opportunity within the build process or in the case of scaffolding the earliest reasonable opportunity during its erection. For civil engineering structures that are not traditional buildings, such as bridge structures, full height containment shall be installed where reasonably practicable, depending on the nature of risk. This applies to all external elevations from the one storey and above (note one storey could be below ground where basements and underground structures are concerned). The containment shall provide collective protection to prevent any item falling into public/work areas. There may be a requirement for containment on internal elevations which extend above one storey in height such as atria and entrance halls.

Full height containment can be in the form of debris netting, cargo nets, screens or other proprietary systems. Containment used must be deemed acceptable via a temporary works assessment or design.

All full height containment must be fire retardant to LPS 1215 (for scaffold sheeting) or equivalent British Standards for netting systems.

The installation of containment does not automatically remove the requirement for other means of preventing tools, equipment or components from falling.

The containment can be fixed to the structure or by using alternative proprietary systems.

The containment shall be subject to a formal weekly inspection which is recorded on a temporary works register.

Any project that is unable to provide full height containment must detail alternative controls that are to be put in place that have been identified through risk assessment. These controls must be authorised by a competent

person identified based on the nature of the risks/activities, this is for all Operating Units with the exception of Building where authorisation is required from an Operations Director and the Head of Health, Safety and Wellbeing.

Handrails on perimeter edges

It is not permitted to use open rail edge protection on perimeter edges of buildings or structures including those on both external and internal elevations. All projects must utilise steel mesh guard, brick guard or debris netting.

The choice of protection shall be relevant to the risks associated with falling items at the time. The protection may require changing as the project progresses. This does not remove the requirement for full height containment as detailed above.

Other work in different locations to buildings or structures shall consider this approach based on the risk of items falling i.e. excavations.

Specification of tool and equipment tethers

When using tool, equipment and component tethers, employers are responsible for ensuring they are appropriate for the task to be performed. Tool, equipment and component tethers must:

- Carry a CE mark or equivalent.
- Be provided with a test certificate to confirm the maximum weight of the tool or equipment to be tethered.
- Be marked with its Safe Working Load (SWL).
- Be matched to a tool/equipment that has been individually weighed to confirm it is within the maximum weight allowable.
- Be provided with a locking mechanism at the connection points, note looping a lanyard through at one end is acceptable if it provides secure attachment.

A range of lanyards, specialist tools in addition to retrofit solutions (including heat shrink tethers, taped solutions) for existing tools, equipment and components are available and should be selected considering the weight and application of each item to be secured.

Specialist bags for hoisting and holding smaller components and preventing spills are also available and should be considered when assessing the risk.

Tool, equipment and component tethers must not:

- Be modified in anyway unless approved by the manufacturer.
- Increase the overall risk associated with the work activities and conditions, if this is the case alternative controls must be identified and put in place via risk assessment.

Gaps where items could fall

For elements such as scaffolds, hoists, MEWPs, perimeter screens, slipform etc, projects shall adopt a 'no gaps' policy (both horizontally and vertically). Solutions relative to such scenarios (e.g. fully boarded out platforms, rubber

seals, proprietary engineered hinged flaps, appropriately designed mesh, ScaffGap systems or similar etc) must, at all times be deployed and maintained so as to prevent the fall of any tool, equipment or component including smaller items that that have been inappropriately stored or discarded.

Inspection and maintenance

It is essential that tool, equipment and component tethers are inspected and maintained in accordance with the manufacturer's guidance. This should include the following as a minimum:

- A pre-use visual inspection by the user on a daily basis.
- Inspection of tethers must be included in user's weekly tool checks.
- Inspection by users in line with manufacturer's guidance.
- A quarantine procedure for taking items out of service when defects are identified.

Each person required to carry out inspections must have the correct skills, knowledge and experience to do so and be familiar with the arrangements for taking items out of use if a defect is identified.

Training and experience

The responsibility for ensuring all items provided for prevention of falling materials are used, inspected, maintained and stored correctly lies with the employer. The employer is expected to implement and maintain adequate monitoring and review arrangements and ensure all relevant staff have the correct skills, knowledge and experience in line with the requirements of this standard.

Compliance monitoring

Employers are expected to ensure an adequate level of management, supervision and monitoring is in place to meet the requirements laid out in this Standard.

Appendix A

Access equipment requirements (not applicable to leading edge work or work adjacent to leading edges/risers)

Access equipment risk matrix (applicable to Building projects only)

Weight of object (up to)	Platform height	Actual fall risk height	Potential severity	Tether required Y/N
Up to 1.0 KG	0.5m – 3.0m	2.5m – 5.0m	Slight	N
Up to 1.0 KG	Tethers are required for all activities with an actual fall risk height above 5.0m			
1.01 KG - 1.5 KG	0.5m – 1.0m	2.5m – 3.0m	Slight	N
1.01 KG - 1.5 KG	Tethers are required for all activities with an actual fall risk height above 3.0m			
1.51 KG – 2.0 KG	0.5m	2.5m	Slight	N
1.51 KG – 2.0 KG	Tethers are required for all activities with an actual fall risk height above 2.5m			
2.01KG upwards	Tethers are required for all activities with an actual fall risk height above 2.0m			
<p><i>The information above has been put together using a dropped object calculator</i></p> <p><i>Equipment with blades and points (with the potential to puncture an individual's skin) must be tethered from actual fall risk heights above 2.5m no matter what the weight, alternatively an exclusion zone must be provided around the working area.</i></p>				
Tool type	Av.Weight/KG	Tool type	Av.Weight/KG	
Spanner	0.15 KG	Cordless drill	1.95 KG	
Saw	0.5 KG	Boat level	0.23 KG	
Claw hammer	0.95 KG	Scaffold spanner	0.48 KG	
Pliers	0.3 KG	Tape measure	0.58 KG	
Screw driver	0.28 KG	Smart phone	0.14 KG	
<p><i>The information above is for guidance only and an actual assessment of the weight of the equipment to be used must be made.</i></p>				

Appendix B

www.neverletgo.uk

www.enfieldsafety.co.uk

Further guidance and support

www.onsite-support.co.uk

www.leadingedgesafety.co.uk