

# Mondi Scaffold Requirement





# Scaffold Requirement



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# Scaffold Requirement



## ● Scaffold Definition

**Means any temporary elevated platform from ground level (supported or suspended) and its supporting structure (including points of anchorage), used for supporting personnel (employees or contractors) or materials or both**

- **Including regular scaffolds (standing or hanging)**
- **Including work or access platforms build from scaffold material**



# Scaffold Requirement



## ● Scaffold Ownership

### Client (Mondi)

Mondi Safety Requirements and rules, including this scaffold requirement are included in the tender and contract documents. Mondy ensures that contractors agree to the requirements

### Mondi Project/Contract Manager

Owns the contract and ensures that Mondy Requirements are implemented including the mandatory use of a competent scaffold inspector (internal or external)

Provides a Mondi Client Brief to the scaffold contractor – containing the following information: 1. Detailed description of the task, 2. Scaffolding and access requirements; 3. Requirements concerning height, length, location, working platform numbers, loading capacities, strengthened scaffold section requirements such as loading bays (see references & Appendix III)

### Certified and competent Scaffolder is selected per site

SCC or similar certified scaffolder selected. Designs the scaffold. Completes a scaffold material safe for use checklist and assures Mondy that all material is safe for use before erecting the scaffold according to the design, Mondy requirements and local legislation. Completes the scaffold pre-use inspection checklist before initial use and certifies the scaffold as safe for use using a competent scaffold inspector (internal or external)

### Scaffold User (Mondi or Contractor)

Once certified safe for use the scaffold receives the appropriate certificate and the scaffolding contractor arranges regular inspection using the competent scaffold inspector (internal or external). The user does not modify or interfere with the scaffold. Changes to scaffold are certified by both the scaffold inspector and the Mondy project leader

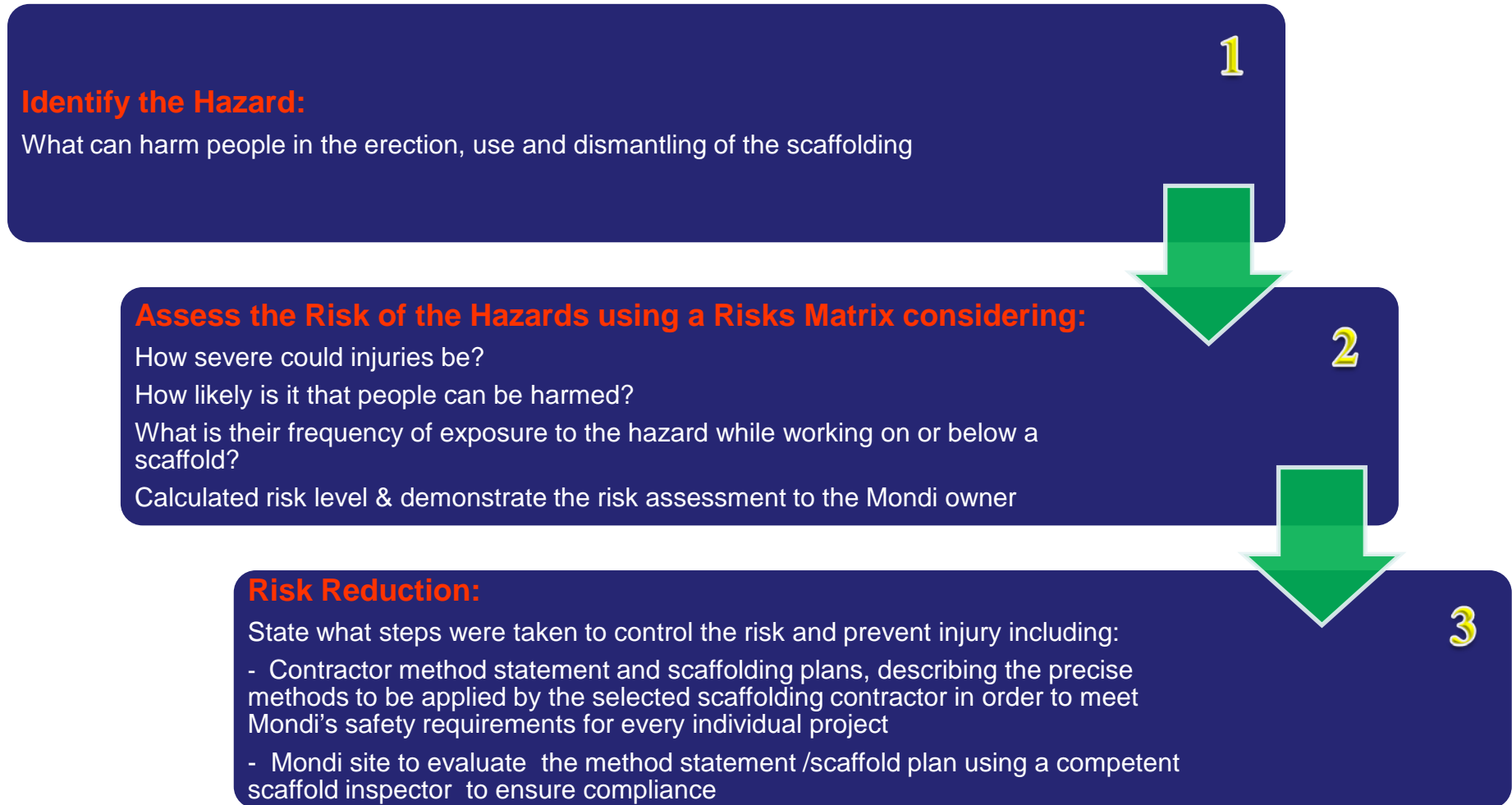


# Scaffold Requirement



## ● Scaffold Risk Assessment

- Completed by the scaffolder and the scaffold user before scaffold hand over



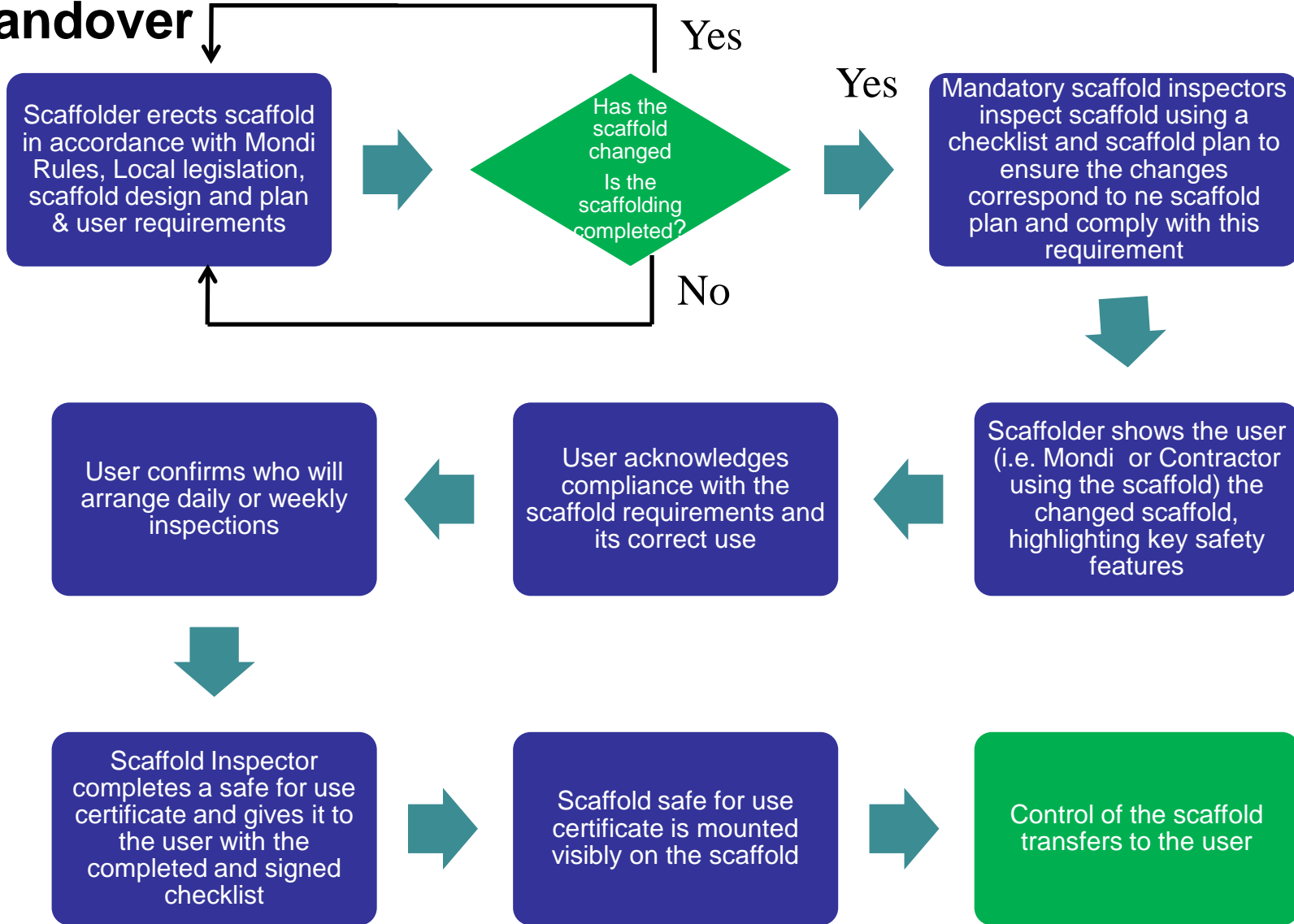


# Scaffold Requirement



## ● Scaffold Change & Handover

Scaffolder reports change (planned or unplanned alterations or after severe weather) to Mondri manager and goes through the change management process





# Scaffold Requirement



## ● Working at Height – Scaffolding – Mondri Requirement 18.13

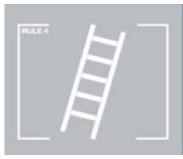
### ***PR 18.13: Working At Height and Fall Protection***

*This Performance Requirement implements GS 18, Employee & Contractor Safety, Occupational Health and Security*

#### **1. Scope**

***All operations over Mondri has control are required to have systems of work that ensure the safety and health of people. This requirement applies to safe access at heights where there is a risk of fall from 2 metres (or a lower distance set by national legislation).***

- 2.1 In general, Operations Managers shall ensure that:
- Site-specific work at height and fall protection systems and procedures are in place to meet this Requirement, as well as all applicable laws and regulations, whichever is more stringent.
  - Sufficient resources (people, time, money) are allocated to develop and implement safe working at height and fall protection that meets the intent of this requirement.
  - Sufficient budgets are allocated for purchase of adequate equipment, fall protection and rescue equipment and its regular inspection and maintenance.
  - The work at height and fall protection systems and procedures are reviewed on a regular basis and incidents as well as near miss trends are used to identify gaps.
- 2.4 A Responsible Person shall be appointed to ensure that before Mondri personnel use equipment for work at height and fall protection (ladders, platforms, railing, scaffoldings, and personal protective equipment) the equipment is checked in regularly prescribed intervals set by the local operation, but no longer than is prescribed in national legislation. The equipment must be checked for completeness and functionality before each usage by authorised Mondri personnel, either own or contracted. The same check must be made after any extraordinary event e.g. fall with the fall protection personal protective equipment.
- 2.5 Based on the risk assessment, an inventory of tools for work at height and fall protection shall be developed. This shall cover the following aspects: reference number, type of tools for work at height, period of regular check. In addition all tools for work at height and fall protection shall be labelled and shall include the following information: reference number, the maximum load allowed for scaffoldings, the name of provider of the scaffolding, date of mounting and expected date of removal.
- 2.8 All above mentioned provisions shall apply to the same extent to contractors working on Mondri operations.



# Scaffold Requirement



## Working at Height – Scaffolding – Mondri Requirement 18.13 Explanation:

Operational managers need to provide sufficient resources to ensure the following:

- Scaffold contractors to be certified to the SCC or similar scaffold standard and being inspected/audited by a mandatory third party scaffold inspector
- The scaffold inspector ensures that:
  - scaffold complies with legislation and this requirement
  - scaffold is checked in regularly prescribed intervals
  - completeness & functionality & safe scaffold, before use by Mondri or contractors
  - an inventory of scaffold equipment (register) and training register is available and complaint
  - all change (planned or unplanned) to scaffold is certified as safe before scaffold use
  - unsafe scaffold is stopped immediately
- Refer to Appendix II ( 25 Feb 13 – Syktyvkar Scaffold Collapses on Project Site) for additional requirements supporting this SDMS requirement

3rd Party inspector service details



Safety and Access Ltd, Dabell Avenue, Blenheim Industrial Estate, Bulwell, NOTTINGHAM, NG6 8WA  
(Registered in England 2560824)

Tel: 0115 979 4523  
Fax: 0115 977 1228  
Mob: 07715 477122  
Web: [www.safetyaccess.co.uk](http://www.safetyaccess.co.uk)





# Scaffold Requirement



## ● Working at Height – Scaffolding – Mondri Safety Rule 4

### **SAFETY RULE FOUR – WORKING AT HEIGHT**



*Working at heights where there is a risk of falling requires personnel to use fall arrest safety equipment at all times. Managers shall not allow working at heights above 2 metres unless:*

- *A fixed platform with guards or hand-rails is used verified by a competent person;*
- *All personnel are competent to perform the work including the use of fall prevention and protection equipment;*
- *All work at height equipment is fit for purpose, inspected prior to use and maintained by a competent person;*
- *Platforms, scaffolds and other temporary structures are constructed by competent and authorised persons;*
- *Powered mobile platforms are designed to be failsafe in the event of an hydraulic or electrical failure;*
- *Platforms are suitably provided with toe boards, guards and hand rails;*
- *Rescue plans are in place to retrieve personnel in emergency;*
- *As a last resort, the fall arrest system in use is capable of supporting 15 kN static load and has:*
  - *A proper anchor, mounted preferably overhead;*
  - *Full body harness using double latch self-locking snag hooks at each connection;*
  - *Synthetic fibre lanyards which incorporates a shock absorber;*
  - *Rescue plan in place to minimise suspension trauma.*



# Scaffold Requirement



## ● Working at Height – Scaffolding – Mondri Safety Rule 4

*Employees and contractors shall always use fall protection safety equipment when working at heights:*

- *Wear fall arrest equipment to limit free fall to 2 metres or less;*
- *Secure items including tools and equipment from falling;*
- *Not use any platform or scaffold that has not been inspected, certified and authorised for use;*
- *Ensure that ladders have been secured to a structure and a person is anchoring it at ground level;*
- *Be declared medically fit to work at heights;*
- *Complete a visual inspection of the fall arrest equipment before work commences;*
- *Take out of service any equipment that has been found damaged / defective and ensure it's not used again.*



# Scaffold Requirement



## Safety Rule 4 Explanations:

Ensure systems are in place to ensure the following:

- Ensure only competent authorised persons erect, alter or dismantle scaffolding.
- All scaffolding (including scaffold material) is checked and authorised before use by a mandatory competent scaffold inspector.
- Scaffold tags are used to declare a scaffold safe for use (see Appendix I)
- Red tags are use to prohibit persons using the scaffolding
- All persons using scaffolding understand the safety principles of scaffolding

1	Handrails installed	1		Approval Signature	Confirmation Signature
2	Secured to structure	2		Scaffolding Inspector	Mondi Representative
3	Kneerails installed	3		1	
4	Kick/Toe Boards in place	4		2	
5	Trap Doors installed	5		3	
6	Working platform complete	6		4	
7	Ladder or steps installed	7		5	
8	Scaffold permit signed	8		6	
9	Green Tag Displayed	9		7	
10	Foot plates installed	10		8	
11	Cross bracing in Place	11		9	
		<input type="checkbox"/>	10		
		<input type="checkbox"/>	11		
		<input type="checkbox"/>	Date		

Scaffold Registration Number														
Supervisor Name	Date	Initial each cell confirming issue was inspected											Signature confirming 11 points are in place and scaffold is safe for use	
		1	2	3	4	5	6	7	8	9	10	11		





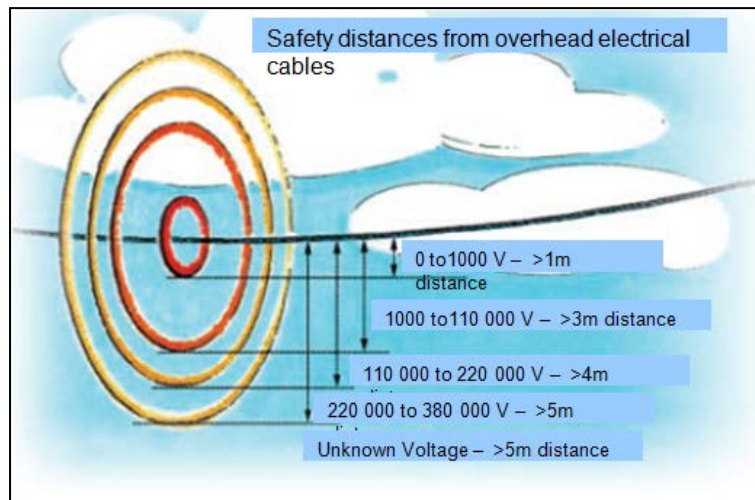
# Scaffold Requirement



## Safety Rule 4 Explanations:

Ensure a system is in place to check scaffolding regularly:

- Complete a scaffold checklist before scaffold commissioning, after any adaptation's or alterations and at pre-defined and agreed frequencies and after poor weather conditions, rain, snow, wind, etc, using a competent scaffold inspector
- Ensure employees / contractors are trained and competent to work on scaffolding
- Ensure electrical safety when building and using scaffolds



Scaffold Registration Number

Supervisor Name	Date	Initial each cell confirming issue was inspected											Signature confirming 11 points are in place and scaffold is safe for use	
		1	2	3	4	5	6	7	8	9	10	11		



# Scaffold Requirement



## Safety Rule 4 Explanations

Ensure safety of persons in the area by:

- Barricading the area off around the scaffolding and platforms
- Safe walkways with roof cover are in place if scaffolding is erected above entrance doors or areas;
- Demarcate safe walkways;
- Symbolic safety signs are displayed “work above”







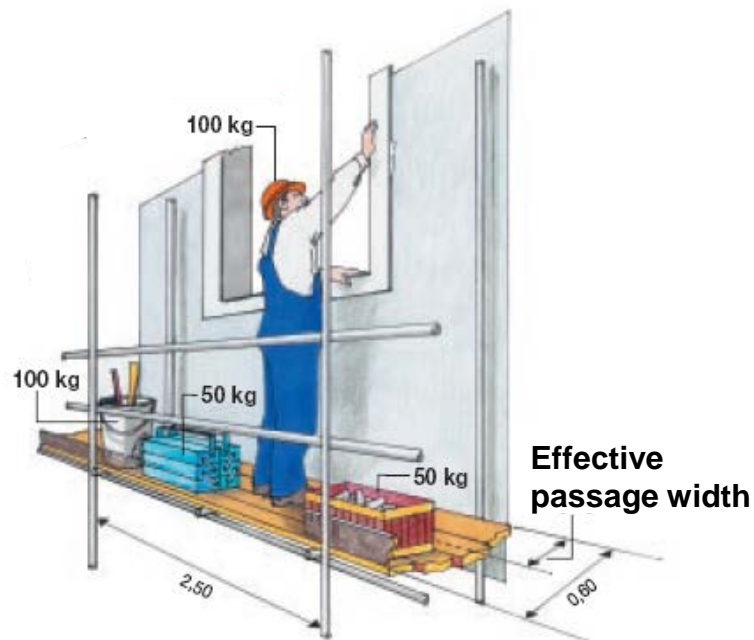
# Scaffold Requirement



## Safety Rule 4 Explanations:

Ensure objects don't fall to lower areas by:

- Installing toe-boards on all working platforms
- Tools are secured from falling during carrying or whilst being used
- Tools are removed from scaffolding during bad weather conditions
- Loose objects are secured at all times
- Heavy equipment and tools are hoisted up and not carried by hand





# Scaffold Requirement



## Safety Rule 4 Explanations:

Scaffolding must be checked and declared safe before use by a mandatory competent scaffold inspector

Aspects that will be covered:

- Scaffold according to method statement/scaffold plan
- Scaffolding level, secure and braced;
- Scaffolding secured to structure to prevent collapsing;
- Drilled anchor & tie testing processes and test reports provided to Mondri and scaffold inspector
- Mandatory test of drilled anchor points to ensure safe harness attachment, provided to Mondri and scaffold inspector
- Handrails, knee-rails and toe-boards securely in place;
- Working platforms cover complete area;
- Working platforms securely in place;
- Safe access to all of the working platforms;
- Safety lines installed (to connect safety harness) where there is a risk of falling;
- Scaffolding erected to this and legal requirements;
- Sufficient outriggers fitted and secured;
- Castor wheels locked;
- Trap doors are fitted over access areas / openings





# Scaffold Requirement



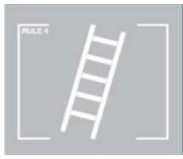
## Safety Rule 4 Explanations:

Persons using the scaffolding must ensure that:

- Conduct visual inspection of scaffold prior to use;
- Check the tag to ensure scaffolding is authorised for use;
- Report concerns, defects to the supervisor;
- Never make use of unsafe scaffolding;
- Don't overload the working platforms;
- Maintain good housekeeping standards;
- Climb off mobile tower scaffolding before it is moved;
- Do not use scaffolding during high winds, rain and snow;
- Ensure tools and equipment is secured and cannot fall to lower levels;
- Understand and adhere to all site specific standards and procedures
- Wear fall arrest equipment when working on scaffold higher than 2m
- Wear head protection helmets with chinstrap
- Wear appropriate protective clothing and equipment







# Scaffold Requirement



## ● Scaffolding and Related – Norms (EU and BS) – Compliance Required

### ○ EU Norms:

BS EN 1263, Part 1: 2002, *Safety nets – safety requirements – test methods*

BS EN 1263, Part 2: 2002, *Safety requirements for erection of safety nets*

BS 6651: 1999, *Code of practice for the protection of structures against lightning*

BS EN 12810-1: 2003, *Facade scaffolds made of prefabricated components. Products specifications*

BS EN 12811-1: 2003, *Temporary Work Equipment: Scaffolds Performance requirements and general design*

*TG20:08 Scaffolding Guidance*



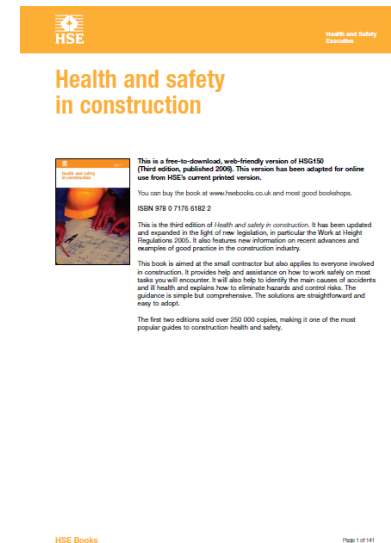
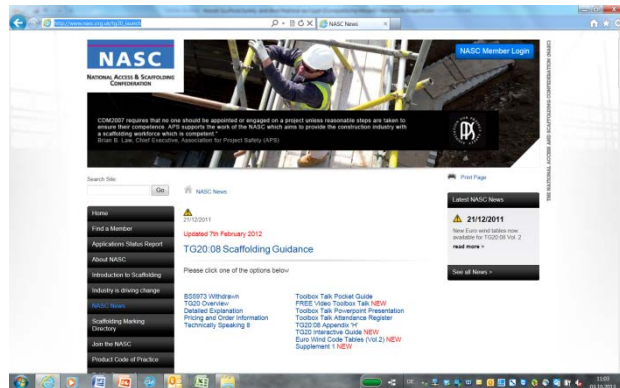
# Scaffold Requirement



## ● Best Practice Guidance

### ○ Best practice examples – useful information:

- [http://www.nasc.org.uk/Introduction to Scaffolding](http://www.nasc.org.uk/Introduction%20to%20Scaffolding) (nice video and TG20-08 Guidance Document)
- <http://www.hse.gov.uk/construction/information.htm>
- [http://www.nasc.org.uk/tg20 launch](http://www.nasc.org.uk/tg20_launch)
- <http://www.hse.gov.uk/pubns/priced/hsg150.pdf>

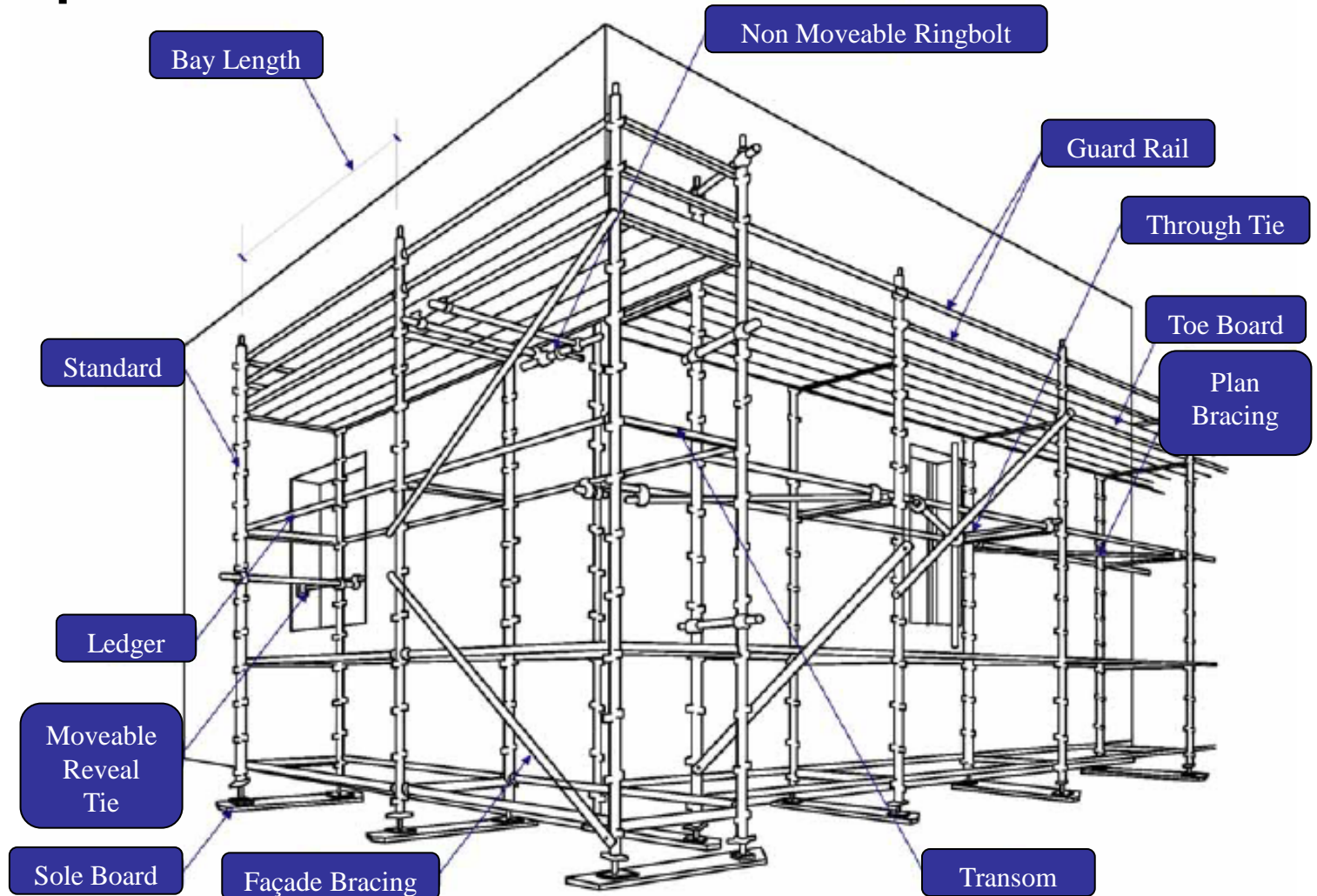




# Scaffold Requirement



## ● Scaffold example

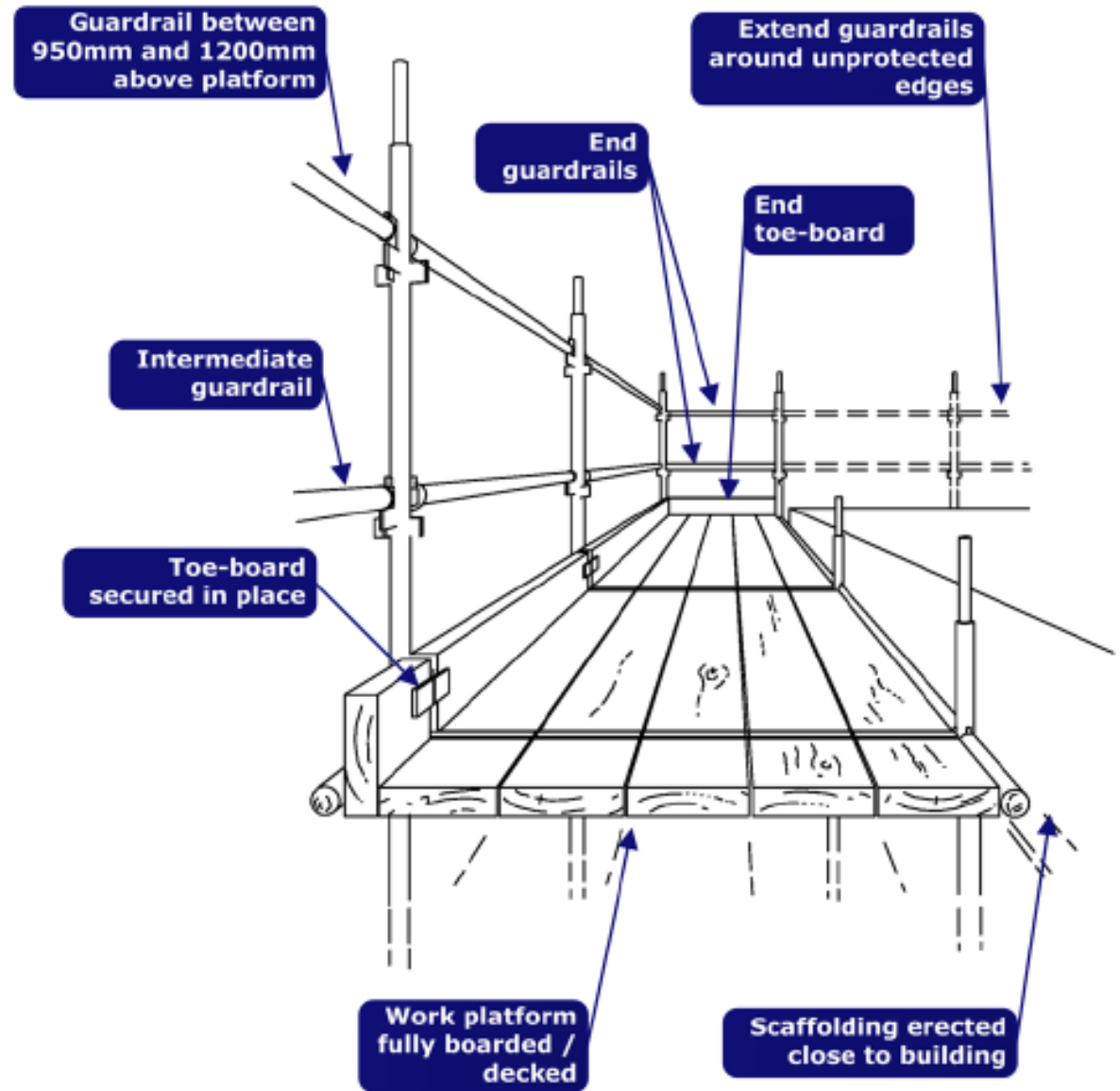




# Scaffold Requirement



## ● Scaffold Working Platform Example

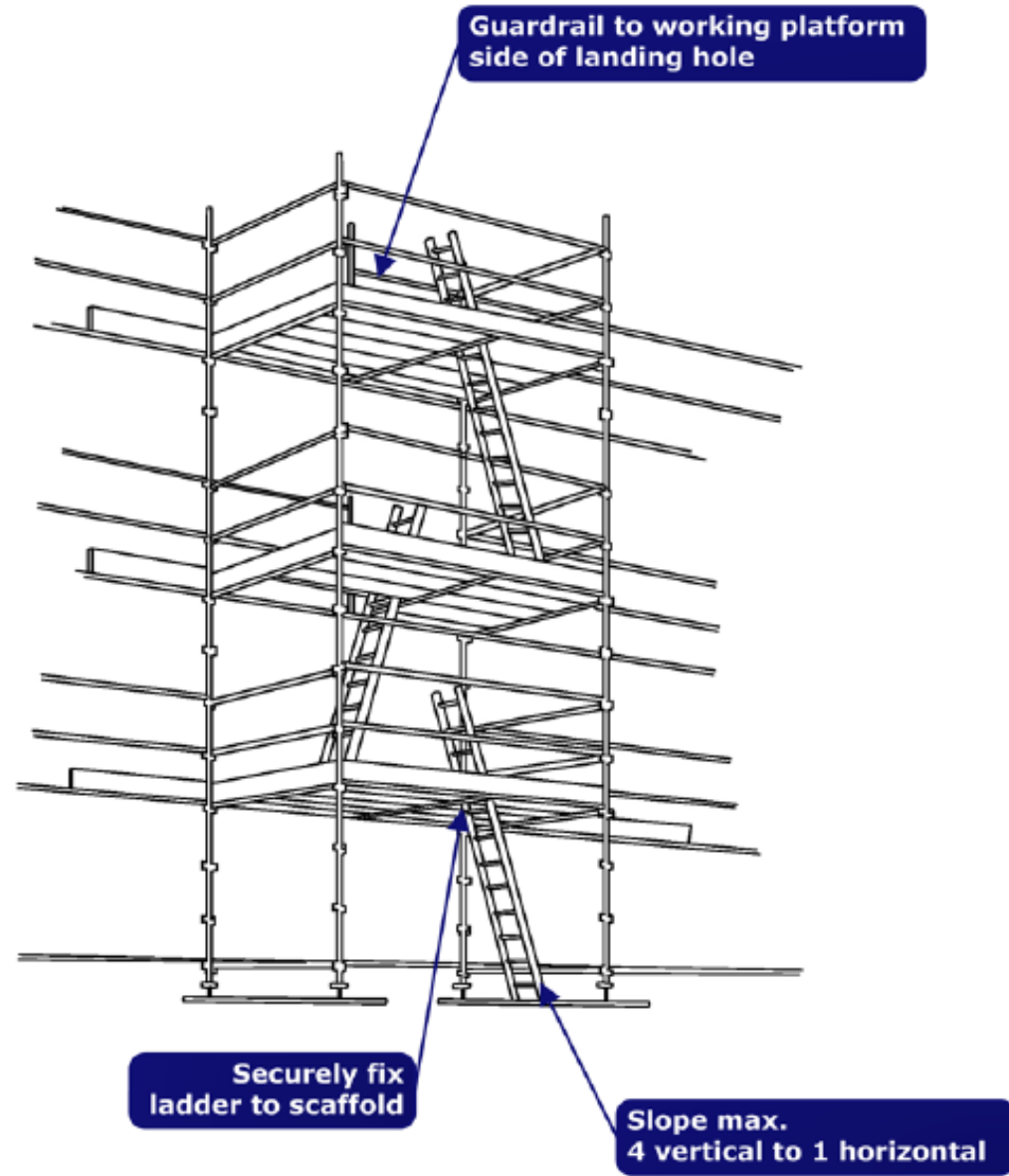




# Scaffold Requirement



- **Scaffold Ladder  
Access Tower  
Example**





# Scaffold Requirement



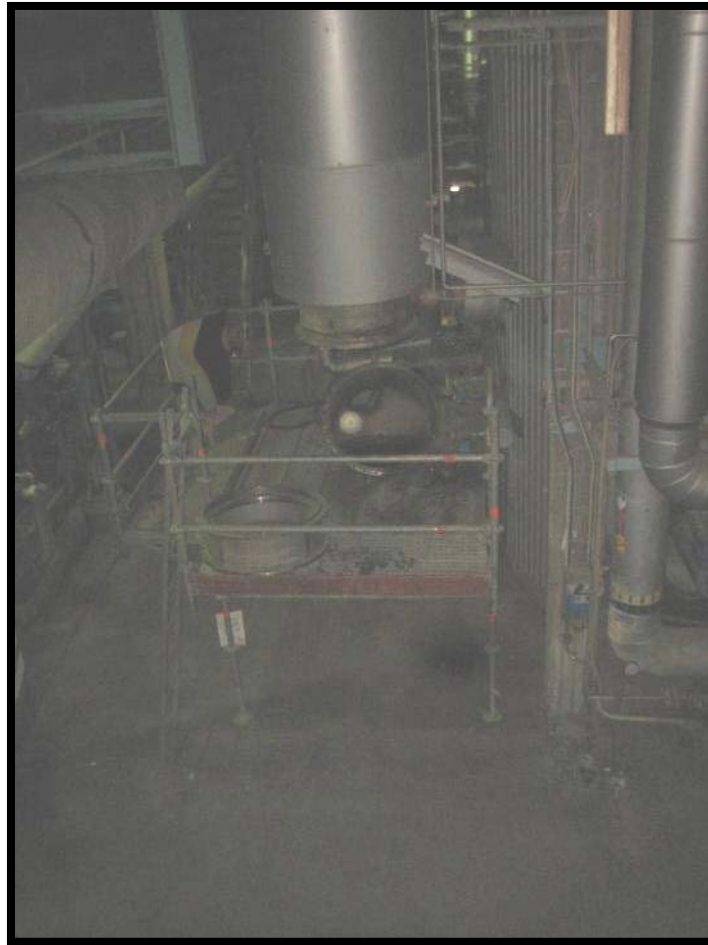
## ● Safe Work Platforms Using Scaffolding

- Stable sole boards, Toe-boards, Railings, Certificate, Safe access, Fixed work platform

Safe access ladder (4:1)



Toe boards & railings



Stable sole boards



Certificated





# Scaffold Requirement



## ● Scaffold Related PPE Use

- **Safety Lines**
- **Safety Harnesses**
- **Harness Use**
  - Type and use of harness
  - Length and correct type of lanyard for height and purpose
  - Size of hook provided by scaffold installers
  
- **Safe Pulleys**
- **Chin Strap Safety Helmet**
- **Scaffolder PPE inspection register & records demonstrated to Mondi owner**
  
- **Proof of training of correct use of harness & PPE**





# Scaffold Requirement

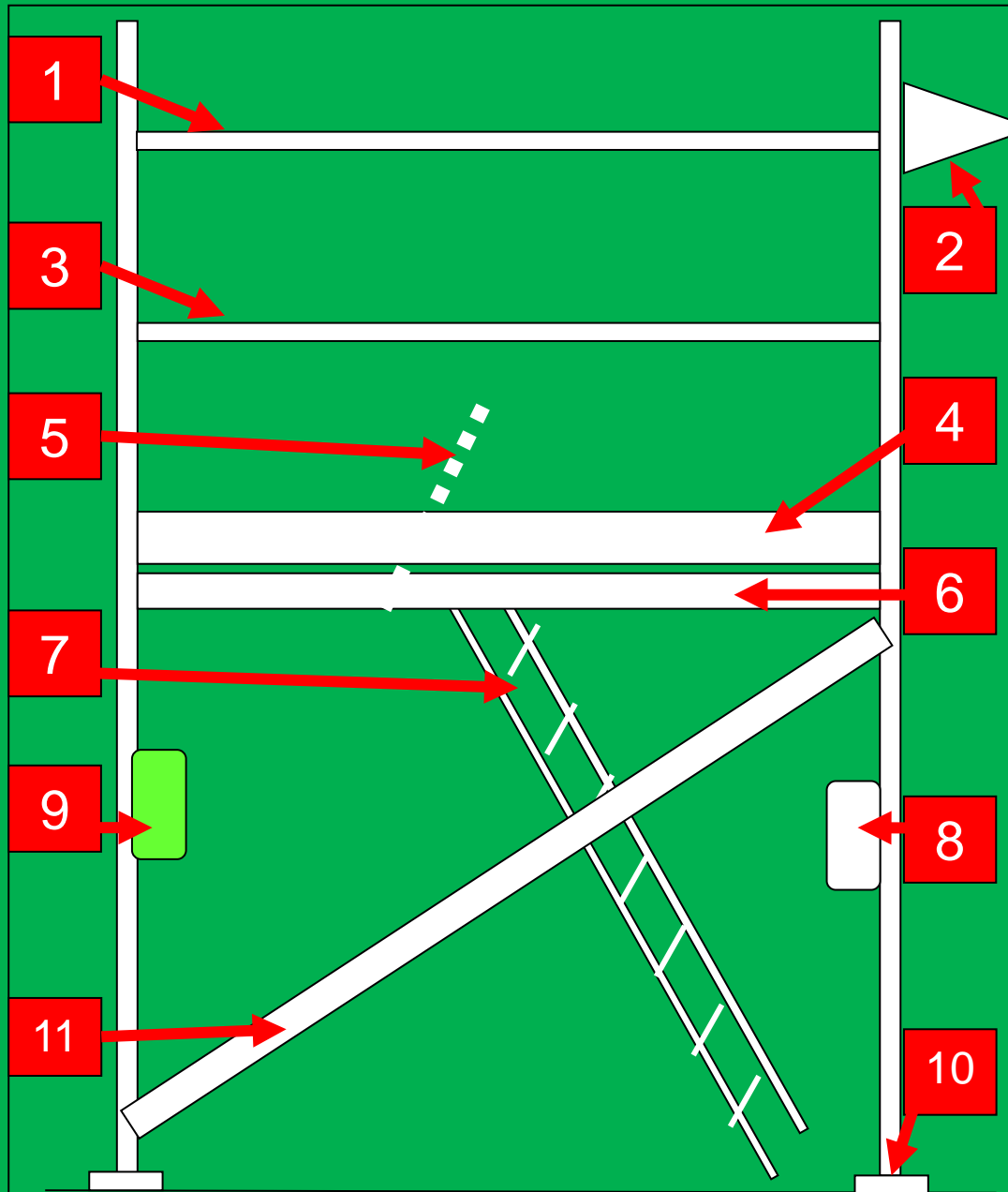


## Appendix I

- **Best Practice Tag (slide 25 to 27)**
  - **Front of checklist tag**
  - **Back of checklist tag**
  - **No go tag**



1	Handrails installed
2	Secured to structure
3	Knee rails installed
4	Kick/Toe Boards in place
5	Trap Doors Installed
6	Working platform complete
7	Ladder or steps installed
8	Scaffold permit signed
9	Green Tag Displayed
10	Foot plates installed
11	Cross Bracing in Place



Exceptions to above approved	Yes	Check Details in Permit to Work
	<input type="checkbox"/>	

	Approval Signature	Confirmation Signature
	Scaffolding Inspector	Mondi Representative
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
Date		





**WARNING**

**Do Not Use**

Use of this scaffolding  
is not permitted and  
any use could lead to  
disciplinary action



# Scaffold Requirement



## safety alert



## Appendix II

➤ 25 Feb 13 – Syktyvkar Scaffold Collapses on Project Site

Alert 01/2013 27 March 2013

### Scaffolding Collapses on Project Site.

#### Incident Details



On 25 February 2013 at approximately 14:30 a scaffolding collapsed inside the newly erected pulp storage tower on a project site at the Syktyvkar mill in Russia. At the time of the incident sixteen contractors were conducting work on the scaffold which included the installation of stainless steel cladding on the inside of the storage tower.

Regrettably two contractor employees were fatally injured after being trapped and a further five contractor employees were injured as a result of the collapsed scaffolding. The remaining nine contractors were not injured during the incident and managed to exit the tower safely.

The emergency services arrived on site within minutes of the incident and commenced with rescue and medical treatment of the injured persons. One of the trapped persons was freed, however he passed away during emergency treatment in the ambulance on the site.

#### Key Information of Task

The contractor team was tasked to install stainless steel cladding on the inside of the pulp storage tower by making use of scaffolding that had been erected around the inside of the tower from the ground level to the top.

The contractor had decided to alter the design of the scaffolding at the start of erection phase by replacing the required cross bracing with additional anchor points at all levels of the scaffolding. The design change was not communicated with the Mondy appointed project manager or revised as part of the contractor safety plan.

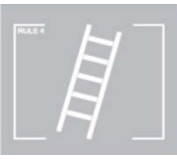
The cladding sheets were being welded into position forming a ring on the inside of the tower. Once the complete ring was welded into position the installation of the next ring commenced below the completed one. As the installation of the cladding moved down, the plan was to dismantle the scaffolding accordingly. The work method required this procedure to be repeated until all the cladding was installed.

Due to problems with the welding, the decision was taken by the contract company to change the work method and to install cladding at different levels lower down in the tower.

In order to do so, the anchor points which were installed to secure the scaffolding to the tower were removed. Therefore when removing the anchor points, and having no cross bracing in place, the scaffold became unstable and eventually collapsed, resulting in the fatal incident.



Operation: Syktyvkar Mill – 5000m<sup>2</sup> Pulp Storage Tower Project Site.  
Alert Type: Work-related fatalities.  
Summary: Collapse of scaffolding on a project site.



# Scaffold Requirement



## Scaffolding Safety

Scaffolding work is regarded as a hazardous activity and if not controlled has the potential to result in incidents with serious or event fatal consequences. It is therefore important that the following controls are in place at all Mondri operations:

- ✓ Careful consideration given to selecting competent scaffolding companies;
- ✓ Only accredited scaffolding companies to be used for the erection and approval of scaffolding on site;
- ✓ Consider the appointment of two or three scaffolding companies and any contractors requiring scaffolding must make use of the appointed companies;
- ✓ Scaffolding companies selected shall make use of latest technology for safe scaffolding;
- ✓ Include scaffolding issues into the working at heights assessments currently being conducted at all Mondri operations;
- ✓ Scaffolding tagging and permit systems must be entrenched for all scaffolding erected and or used;



- ✓ Contractor companies to provide proof that the erectors and persons permitted to approve scaffolding have been trained and deemed competent by an accredited organisation;
- ✓ BU SHE Managers to provide guidance to their respective sites on good scaffolding standards, training etc with reference to the National Access & Scaffolding Federation ([www.nasc.org.uk/training](http://www.nasc.org.uk/training)).

## Appendix II

- 25 Feb 13 – Syktyvkar Scaffold Collapses on Project Site (cont.)



# Scaffold Requirement



## Appendix III

- Example of a scaffold design brief completed by Mondi and supplied to the scaffold builder to provide them with information on Mondi requirements for the scaffold:

### Written Scaffold Design Brief

- Site location:
- 

- Person in your organisation responsible for the 'safe use' of the scaffold.  
Person responsible for determining the scaffold criteria required and liaising with the scaffold designer (if different to above):
- 

- Location and orientation of the scaffold on site:
- 

- The site scaffold requirements?
- 

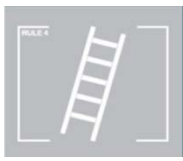
- Required use of scaffold (what works will be carried out)?
- 

- Load class of scaffold (e.g. Load class 3 - general purpose – 2kN/m<sup>2</sup> - general building work including brickwork, window and mullion fixing, rendering and plastering see table 1 on our website extracted from TG20:08 and table A1 of code of practice for access and working scaffolds 2008).
- 

- Number of working levels required:
- 

- Number of boarded levels required:
- 

- Nature of plant to be used on the scaffold, if any:
-



# Scaffold Requirement



If the scaffold has a loading bay how will it be loaded? E.g. by crane, teleporter etc.

---

- What is the required load on the loading bay? Are there point loads, e.g. casters on trolleys or legs of stillages?

---

- Length and height of the scaffold:

---

- Does the scaffold require sheeting or debris netting?

---

- Has your permanent structure design team been consulted in relation to the imposed load of the scaffold on the permanent structure?

---

- Have you informed the Project Supervisor for Design Process (PSDP) that a scaffold design will be carried out?

---

- Do you have drawings of the existing/proposed permanent structure available? Please provide these in Autocad format if possible.

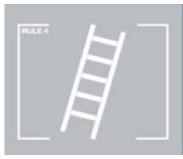
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- Do the details of facade or roof finishes affect the tying of the scaffold? If yes, please make this information available.

---

- Nature, stability and bearing capacity of the supporting ground. Is the ground capable of supporting the scaffold?

---



# Scaffold Requirement



What type of scaffold materials will be used and who is the manufacturer?

---

- Are scaffolding beams required? If so, who is the manufacturer of the beams that will be used?

---

- Duration that the scaffold will be in use for:

---

- Approximate date that scaffold should be available for use:

---

- Is there a presence of any hidden hazards, with special attention to electrical hazards that might create unexpected risks to scaffold erectors and/or users?

---

- Do platforms need to be covered in plywood or a similar material?

---

- Is stairs or ladder access or both required?

---