# Dismantling of Scaffolds

Refer to Technical Advisory for Scaffolds

<table>
<thead>
<tr>
<th>No.</th>
<th>Hazards</th>
<th>Possible Control Measures</th>
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<tbody>
<tr>
<td>1.1</td>
<td>Fall from heights</td>
<td>• Construct safe work platform</td>
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<td></td>
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<td>• Check that safe access is provided</td>
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<td></td>
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<td>• Conduct training</td>
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<td></td>
<td></td>
<td>• Provide lifelines</td>
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<td></td>
<td></td>
<td>• Provide, check and use appropriate &amp; adequate PPE</td>
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<td></td>
<td></td>
<td>• Follow approved dismantling sequence</td>
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<td></td>
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<td>• Deploy qualified and competent scaffold personnel</td>
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<td></td>
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<td>• Implement buddy system among workers</td>
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<td></td>
<td></td>
<td>• Conduct safe work procedures briefing</td>
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<td></td>
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<td>• Display warning signs</td>
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<td></td>
<td></td>
<td>• Implement effective communication system to stop work when there is bad weather</td>
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</tbody>
</table>
| **1.2** Incompatible works presence | • Check well-being of erectors  
• Ensure immediate supervision by competent scaffold supervisor |
| **1.3** Hit by falling objects | • Plan proper work schedule  
• Cordon off affected work areas  
• Demarcate sufficient safety buffer zone  
• Enforce strict and continuous supervision  
• Conduct briefing on safe work procedures  
• Conduct training  
• Display warning signs | See Appendix Figure 1 |
| **2. Removal of Netting** |  |
| **2.1** Falling from heights | • Install overlay net  
• Use proper toe-boards and guardrails  
• Practice good housekeeping  
• Ensure no work is carried out below the working level  
• Ensure that there is no accumulation of debris  
• Provide and use type approved hard hats  
• Ensure immediate supervision by competent scaffold supervisor  
• Store loose materials (ties, clamps and etc) in sacks or bags  
• Cordon off affected work areas | See Appendix Figure 2 |

• Provide and use lifelines & harness with fall arrester
| 2.2 | Struck by falling objects | • Use barricades  
• Display warning sign  
• Cordon off affected work areas  
• Provide, check and use appropriate & adequate PPE |

3. Removal of Scaffold Components

| 3.1 | Falling from heights | • Ensure proper lowering of dismantling components  
• Cordon off area  
• Use fresh ties and braces to compensate for removed components |

| 3.2 | Crushed by components due to structural instability | • Follow proper sequence |

| 3.3 | Hit by falling objects | • Ensure proper lowering of dismantling components  
• Cordon off area  
• Store loose materials( ties, clamps and etc) in sacks or bags |

4. Removal of Defective Material/Debris
| 4.1    | Falling objects | • Practice good housekeeping  
• Return and report defective materials to the store  
• Avoid or minimise damaged material by proper handling and storage  
• Store loose materials (ties, clamps and etc) in sacks or bags |
|--------|-----------------|------------------------------------------------------------------|
| 4.2    | Tripped by lying debris | • Practice good housekeeping  
• Avoid or minimise damaged material by proper handling and storage  
• Seek other ways of clearing debris  
• Store loose materials (ties, clamps and etc) in sacks or bags |
| 4.3    | Struck by falling materials and objects | • Return and report defective materials to the store  
• Review procedure by scaffold personnel  
• Avoid or minimise damaged material by proper handling and storage  
• Store loose materials (ties, clamps and etc) in sacks or bags  
• Seek other ways of clearing debris |

5. Material Handling

5.1 Space constraints  
• Pre-plan activities  
• Conduct briefing on material handling methods before work
5.2 Crushed by lifting device due to failure of lifting device
- Use proper certified equipment
- Employ competent personnel
- Conduct briefing supplier on precautionary measures

6. Storage of Dismantled Materials

6.1 Hit by falling materials
- Plan for designated access
- Store loose materials (ties, clamps and etc) in sacks or bags

6.2 Tripped by lying materials
- Plan for designated access
- Store loose materials (ties, clamps and etc) in sacks or bags
- Remove materials promptly and progressively

7. Dismantling Works in Confined Space

7.1 Inadequate lighting
- Provide "explosion proof" lighting equipment
- Provide emergency / backup lighting

7.2 Asphyxiation / gassing in confined space
- Implement Permit-to-Work system
- Provide adequate and effective mechanical ventilation
- Conduct periodic/regular gas testing in confined space
8. Removal of Components

8.1 Crushed by collapsing scaffold

- Employ competent personnel
- Ensure supervision is carried out by a competent scaffold supervisor
- Conduct pre-work briefing
- Check that modifications are done by competent scaffold personnel
- Follow approved dismantling sequence
- Store loose materials (ties, clamps and etc) in sacks or bags
- Implement special measures to prevent domino effects

8.2 Lack of communication

- Implement good coordination system
- Ensure effective-coordination and communication between main contractor and sub-contractor regarding the modification to be made
## 9. Lifting and Crane Activities During Dismantling

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Precautions</th>
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</table>
| 9.1     | Struck by tools | • Conduct training on safe handling tools procedures  
• Conduct safe work procedures briefing  
• Enforce strict and continuous supervision |
| 9.2     | Crushed by collapsing scaffold | • Construct safe work platform  
• Conduct training  
• Provide, check and use appropriate & adequate PPE  
• Employ qualified personnel  
• Conduct safe work procedures briefing  
• Display warning signs  
• Implement effective communication system to stop work when there is bad weather  
• Cordon off affected work areas  
• Enforce strict and continuous supervision  
*See Appendix Figure 3* |
| 9.3     | Crushed by collapsing scaffold due to structural instability | • Obtain professional design for modifications  
• Only allow approved scaffold contractors to carry out modifications  
• Ensure effective coordination and communication between main contractor and sub-contractor regarding the modification to be made  
• Cordon off affected work areas |
| 9.4     | Electrocution due to exposed | • Suspend cables on 'S' hook |
| wires; lying cables; incorrect plugging | • Provide proper insulation  
• Check for damage part  
• Provide non-conductive supports  
• Conduct regular inspection |
|---|---|
| **9.5** Unsafe access and egress | • Provide sufficient access and egress points  
• Provide proper training  
• Provide, check and use appropriate & adequate PPE | [See Appendix Figure 4](#) |

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1 This document can be retrieved from [http://www.mom.gov.sg/maintaining_safe_and_healthy_workplace.html](http://www.mom.gov.sg/maintaining_safe_and_healthy_workplace.html) under Programme-based Engagement → Scaffold programme

2 This document can be retrieved from [http://www.mom.gov.sg/maintaining_safe_and_healthy_workplace.html](http://www.mom.gov.sg/maintaining_safe_and_healthy_workplace.html) under Programme-based Engagement → Falls from height programme
<table>
<thead>
<tr>
<th>Figure 1: Warning signs</th>
<th>Figure 2: Toe boards</th>
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<tr>
<td><img src="image" alt="Warning signs" /></td>
<td><img src="image" alt="Toe boards" /></td>
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<td>Return to Section 1.2</td>
<td>Return to Section 1.3</td>
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<tr>
<th>Figure 3: Adequate and appropriate PPE</th>
<th>Figure 4: Access and Egress</th>
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<tr>
<td><img src="image" alt="PPE" /></td>
<td><img src="image" alt="Access and Egress" /></td>
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<td>Return to Section 9.2</td>
<td>Return to Section 9.5</td>
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*Contents of this resource are originated from the Risk Assessment workshops organised by the Singapore Contractors Association Limited with the support of the Occupational Safety and Health Division of the Ministry of Manpower.

This material is not intended to be an exhaustive list of hazards and control measures for the above-said activities. Companies are to conduct risk assessment on the work activities specific to their workplaces by identifying the hazards, evaluating the risk and determining suitable control measures where appropriate. References should be made to the relevant regulations and code of practices when in doubt.