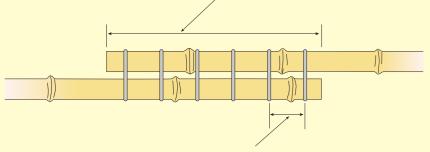
Figure F: Proper connection of bamboo members for bracings/rakers, ledgers, standards used in the erection of bamboo scaffold

For connection between 2 bamboo members, the length of overlap should be:

- a) 1.5m to 2m for standards
- b) at least 2m for ledgers and bracings/rakers

(the 'tail' of one bamboo member should be connected to the 'head' of the other)



Distance between 2 fastenings should not be greater than 300mm

Inspection and maintenance of bamboo scaffolds

- The scaffold shall be inspected with a report made by a competent person before use for the first time, within 14 days immediately preceding each use and after exposure to adverse weather conditions.
- 2. The competent person should check the strength and stability of the scaffold and ascertain whether it is safe or needs to be repaired.



Dismantling of bamboo scaffolds

- 1. Work out a dismantling plan and working procedures.
- 2. Ensure that the dismantling work is done by trained workmen under the immediate supervision of a competent person.
- 3. Allow sufficient time for the dismantling work.
- 4. Install fences on the ground level and post up warning notices.
- 5. Check the strength and stability of the scaffold before dismantling.
- Ensure that no components, which endanger the stability of the remaining structure, are removed first while dismantling work is in progress.
- 7. Prohibit throwing or tipping scaffolding materials from height.
- 8. Ensure that no materials are stored on the scaffold.
- 9. Use personal protective equipment.

"Competent person" means a person

- + who has completed substantial training, i.e.
- who has satisfactorily completed a formal training in bamboo scaffolding works such as an apprenticeship in the trade of bamboo scaffolder under section 28 of the Apprenticeship Ordinance (Cap. 47) or 1-year full-time basic craft course on construction scaffolding works of the Construction Industry Council Training Academy (CICTA); or other similar bamboo scaffolding training courses/ programmes; or
- has satisfactorily passed the trade test for bamboo scaffolder of the CICTA.
- + who has possessed practical experience (10 years or more in bamboo scaffolding work)
- + who has the ability to read and understand the design drawings, specifications and method statements of the scaffolding work
- + who is capable of identifying existing and predictable hazards
- + who is appointed in writing by the contractor and competent to perform the duty

"Trained workman" means a person

+ who has satisfactorily completed a formal training in bamboo scaffolding works equivalent to any of those mentioned for a competent person or has satisfactorily passed the intermediate trade test for bamboo scaffolder of the CICTA and possesses at least 1 year of experience in bamboo scaffolding works (inclusive of experience under the formal training period); or + who are registered skilled, semi-skilled, skilled (provisional) or semi-skilled (provisional) workers under the Construction Workers Registration Ordinance (Cap. 583) for the trade of bamboo scaffolders.

Points to note

This leaflet is a simple guide to bamboo scaffolding safety. Please refer to the "Code of Practice for Bamboo Scaffolding Safety" and "A Guide to the Provisions for Safe Places of Work under Part VA of the Construction Sites (Safety) Regulations" for further details and legal requirements on work safety. These two publications can be obtained free of charge from offices of the Occupational Safety and Health Branch of the Labour Department or downloaded from website of the Department at http://www.labour.gov.hk/eng/public/content2_8d.htm.

Enquiries

If you wish to enquire about this leaflet or require advice on occupational safety and health matters, please contact the Occupational Safety and Health Branch of the Labour Department through:

Telephone : 2559 2297 (auto-recording service available outside office hours)

```
Fax : 2915 1410
```

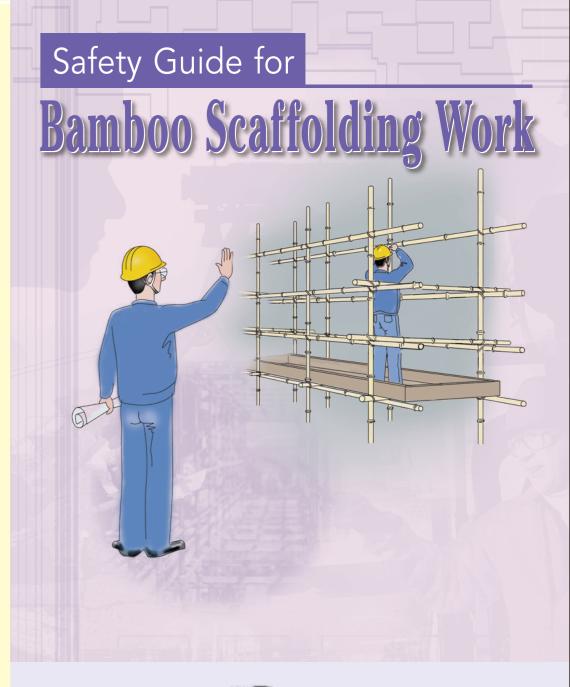
E-mail : enquiry@labour.gov.hk

Information on the services offered by the Labour Department and on major labour legislation is also available on our website at http://www.labour.gov.hk.

For details on the services offered by the Occupational Safety and Health Council, please call 2739 9000.

Complaints

If you have any complaints about unsafe workplaces and practice, please call the Labour Department's occupational safety and health complaint hotline at 2542 2172. All complaints will be treated in the strictest confidence.



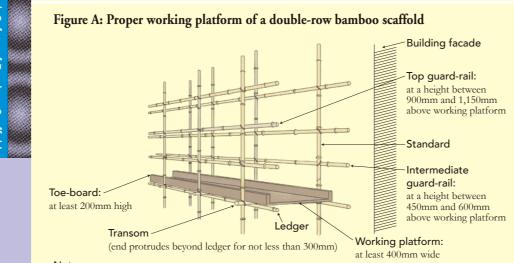






Safety and health management in erection or alteration of bamboo scaffolds

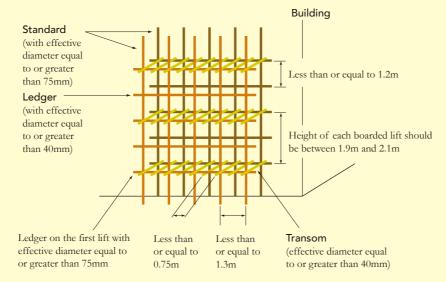
- 1. Give due consideration to all safety factors in the design of bamboo scaffolds.
- 2. Include safety requirements in the contract for scaffolding work.
- 3. Assess site conditions, formulate safety plans and devise safe working procedures.
- 4. Maintain good coordination of work and close communication with all parties concerned.
- 5. Prepare a contingency plan for adverse weather conditions.
- 6. Ensure that work is carried out by "competent persons" and "trained workmen".
- 7. Provide personal protective equipment.
- 8. Monitor safety performance
- 9. Train all personnel involved in the work.
- 10. The latest Guidelines on Planking Arrangement for Providing Working Platforms on Bamboo Scaffolds issued by the Hong Kong Construction Industry Council should be observed in fulfilling the safety responsibilities of laying planks as working platforms on bamboo scaffolds so as to ensure safety at work on bamboo scaffolds. The following essential points should be taken into account in making the planking arrangement:
- (i) Erecting bamboo scaffolds should conform to one of the following:
- (1) Laying working platforms on every lift of a bamboo scaffold; or
- (2) Erecting a suitable working platform at every working location on a lift where the entire scaffold is designed as closely spaced bamboo scaffold (for definition and drawings of closely spaced bamboo scaffold, please refer to the Guidelines on Planking Arrangement for Providing Working Platforms on Bamboo Scaffolds);
- (ii) For works with contract commencement date before 1 March 2018 and not meeting the requirements in item (i) above, at least three consecutive layers of working platforms should be laid on bamboo scaffolds in compliance with the Guidelines on Planking Arrangement for Providing Working Platforms on Bamboo Scaffolds issued in May 2014.



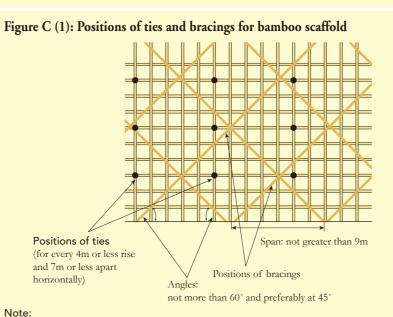
Note:

- (i) Each scaffold board should be not less than 200mm in width and not less than 25mm in thickness or not less than 150mm in width when board exceeds 50mm in thickness.
- (ii) Height of guard-rails in Figure A shall not apply to a working platform on a bamboo scaffold if the platform is protected by not less than 2 horizontal bamboo members of the scaffold spaced at intervals between 750mm to 900mm

Figure B: Double-row bamboo scaffold with recommended erection standards



Note:

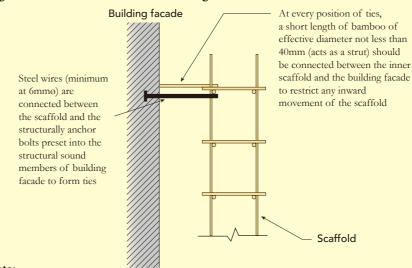


Note:

(i) Positions of transoms are not shown.

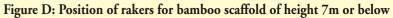
(ii) Ties should be fitted for bamboo scaffold of height greater than 7m.

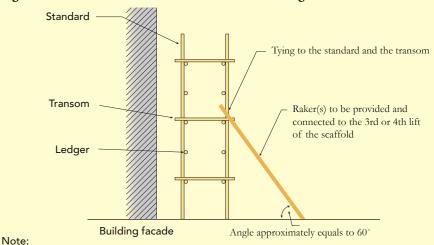
Figure C (2): Details of ties/struts arrangement of a double-row bamboo scaffold



Note:

- (i) For building under construction, structural anchors for the ties can be preset into the structurally sound members of the building facade.
- (ii) For existing building, structural anchors can be provided by expansion type anchor bolts set into the structurally sound members of the building facade.

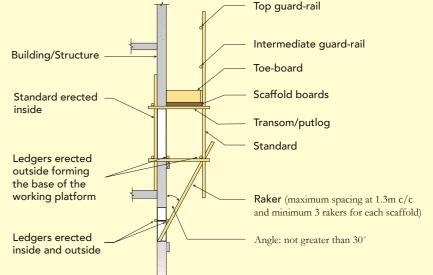




(i) For every 7m apart horizontally or less on the scaffold, one raker should be provided.

(ii) When the scaffold is less than 7m in width, two rakers should be provided near the two ends along the width of the scaffold.

Figure E: Single lift type truss-out bamboo scaffold



Note:

- (i) The truss-out scaffold should be supported on balcony, sills or ledgers on the outside wall and is prohibited to rest on decorative structure of the building.
- (ii) For those load-bearing tying points of the scaffold, they should be tied up with steel wires of adequate strength.
- (iii) There should be a tight control on the loading of the scaffold during the execution of work on it. All the materials and tools should be placed at inner side of the working platform on the scaffold (i.e. the side adjacent to the facade of the building/structure) to maintain the stability of the scaffold.

For all standards and the ledgers on the first lift of the scaffold, the wall thickness of these bamboo members should not be less than 10mm.