

11 Precautionary & Safety Measures

11.1 Record Checking

11.1.1 The contractors are recommended to check the approved building records (such as the building plans, structural plans, calculations and etc.) from the Buildings Department ("BD") before the commencement of works.

11.1.2 This is important especially when the works are required to be carried out in accordance with the original design such as:

- (a) repair of structural elements (minor works item 1.17);
- (b) repair of slab or beam (minor works item 2.17);
- (c) reinstatement of slab opening (minor works items 1.35 & 2.35);
- (d) replacement of GRP water tank (minor works item 2.3); and
- (e) repair or replacement of protective barrier (minor works items 2.5 & 3.3).

11.1.3 The "Building Information Centre"¹⁵ ("BIC") of the BD provides inspection and copying services of the latest approved plans, including building, structural & drainage plans etc. and related documents, such as occupation permit (hereafter called "building records") of existing completed private buildings¹⁶ in Hong Kong. Members of the public may apply for inspection or issue of copies of these building records by submitting the application forms and paying the prescribed fees. Applications can be submitted by:

- (a) attending the BIC in person [operates on Monday to Friday at 9:00 am to 5:00 pm (walk-in cases will be cut off at 4:00 pm)] – on average, it takes 1.5 hours for the applicant to complete the application procedure and inspecting the building records and another 1.5 hours for issue of the required copies; or
- (b) gaining access to BD's "Building Records Access and Viewing On-line" ("BRAVO") system over the internet (<http://bravo.bd.gov.hk>) for on-line application.

Detailed information for inspection and copying of plans and documents may refer to PNAP APP-39 or the BD's pamphlet on "Building Information Services" at http://www.bd.gov.hk/english/documents/pamphlet/BIC_e.pdf.

11.1.4 The contractor may also approach the AP, RSE and/or RGE of the subject building structure or building works for obtaining the information of its original design before carrying out the works.

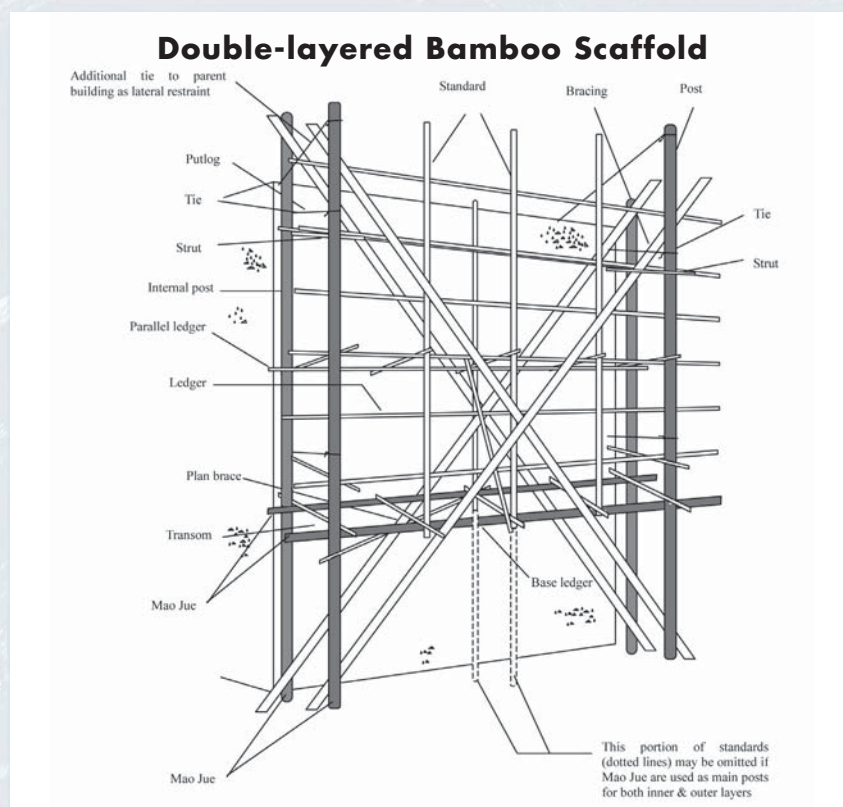


15. The "Building Information Centre" is located at 13/F, Pioneer Centre, 750 Nathan Road, Mongkok, Kowloon.

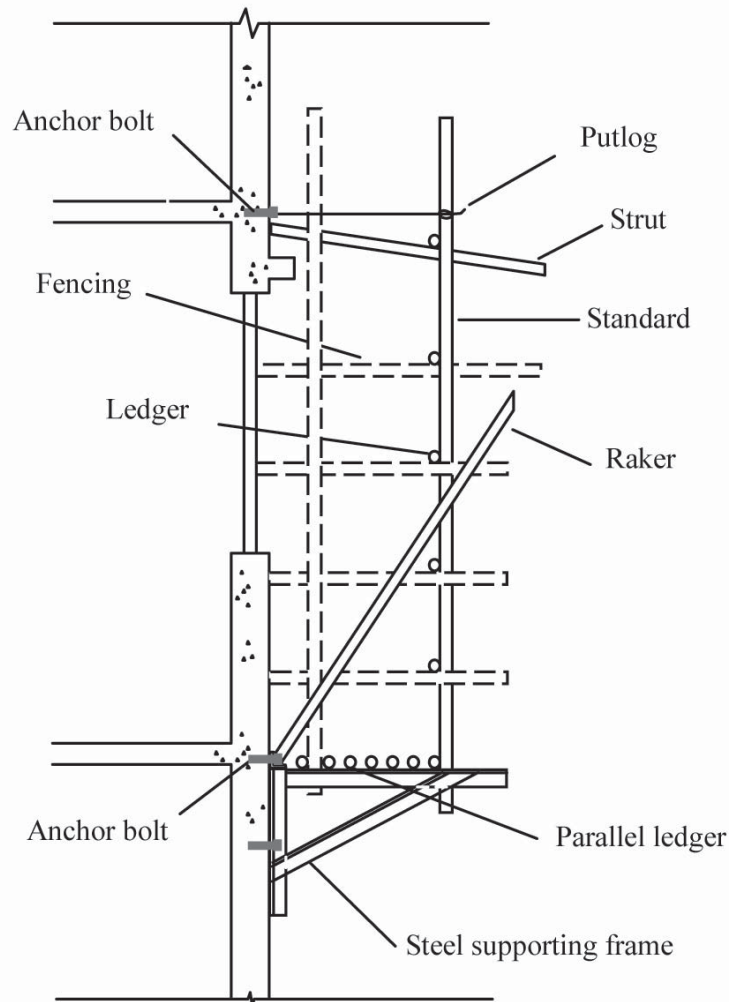
16. Excluding exempted houses in the New Territories and previous Housing Authority buildings sold or disposed of to the private sector such as home ownership scheme buildings, tenants purchase scheme buildings and Link properties.

11.2 Precautionary and Protective Measures

- 11.2.1 All precautionary and protective measures should be completed before the commencement of works.
- 11.2.2 Scaffolding is the most commonly used measure for providing:
- a temporary accessible platform for working at height; and
 - a physical separation of the works areas from the surroundings.
- 11.2.3 The design, construction, maintenance and dismantling of scaffold should strictly comply with regulations 2 and 38D of the Construction Sites (Safety) Regulations ("CS(S)R"), the "Code of Practice for Bamboo Scaffolding Safety" and where applicable, the "Code of Practice for Metal Scaffolding Safety" issued by the Labour Department ("LD"). The scaffold including the working platform, gangway, run, associated ladder or step-ladder together with guard-rail, toe-board or other safeguards and all fixings should be of suitable and sound materials of sufficient strength and capacity for the purpose for which it is to be used. Working platforms in which should not be less than 400mm wide and be protected by guard-rails, fitted with toe-boards of a minimum height of 200mm and closely planked complying with Schedule 3 of the CS(S)R.
- 11.2.4 "Guidelines on the Design and Construction of Bamboo Scaffolds" and a pamphlet "Make Sure Bamboo Scaffolds are Safe Against Strong Winds" have also been published by the BD as reference.
- 11.2.5 Below are some of the typical examples of bamboo scaffolds for reference.



Truss-out Bamboo Scaffold (Flying Scaffold)



11.2.6 According to regulation 38F of the CS(S)R, inspection of the scaffold by a competent person should be arranged:

- (a) before their use for the first time;
- (b) after any substantial addition, partial dismantling or other alteration;
- (c) after any exposure to weather that is likely to affect their strength or stability; and
- (d) at regular intervals of not more than 14 days immediately preceding each use of the scaffold.

11.2.7 Covered walkway should be provided for areas with passage unless the affected areas had been properly fenced. Other appropriate measures such as dust screen and catch fan should be provided when considered necessary and compatible to the nature of works.

11.2.8 The contractor should check and inform the building management or owners of the proposed works and seek their advices or consent before the commencement of any works on site. If the proposed minor works is located at the common part of a building, the contractor should give advance notice to the affected occupants.

11.3 Personal Protective Equipment

11.3.1 The contractor should provide adequate and suitable personal protective equipment for each worker carrying out “minor works” on site, for example, safety helmet, safety shoes or boots, safety belt or harness, gloves, eye protector, ear protector, respiratory protective equipment, and etc., as required.

11.3.2 Reference is recommended to the following publications of LD on their usage:

- (a) “Guidance Notes on Classification and Use of Safety Belts and their Anchorage Systems”;
- (b) “Guidance Notes on the Selection, Use and Maintenance of Safety Helmets”; and
- (c) “Safety at Work: A Guide to Personal Protective Equipment”.

11.4 Fire Safety Measures

11.4.1 Measures should be taken to minimize any fire hazard to the building where the works take place.

11.4.2 It is important to make sure before the works that the existing fire services installations are in good working order. The means of escape are freely accessible without obstruction. All fire resisting doors to the staircase are kept closed. In case of any works to the lift shaft, their openings should be sealed with fire resisting material to prevent the spread of smoke and fire.

11.4.3 Safe use and storage of inflammable substance should be noted.

11.5 Electric Safety Measures

Reference to the “Guidance Notes for the Safe Isolation of Electricity Source at Work” issued by the LD is recommended.

11.6 Gas Safety Measures

11.6.1 Care should be taken of concealed gas pipes in the carrying out of renovation and repair works in existing buildings.

11.6.2 The Gas Authority and HK & China Gas Co. Ltd. have issued the following documents for reference by the trade:

- (a) “Code of Practice : Avoiding Danger from Gas Pipes” issued by the Electrical and Mechanical Services Department; and
- (b) “Operating Procedures – Services : Installation of Low Pressure Installation Pipes” issued by HK & China Gas Co. Ltd.

11.7 Other Recommended Measures or Guidance

- 11.7.1 In case of works involving the asbestos containing material, the provision of safety measures should comply with the “Code of Practice: Safety and Health at Work with Asbestos” issued by the LD.
- 11.7.2 If excavator is to be used for excavation works associated with the carrying out of other “minor works”, the requirements under the “Code of Practice on Safe Use of Excavators” published by LD should be met.
- 11.7.3 The contractor is also recommended to make reference to a guideline on “Risk Assessment for the Prevention of Heat Stroke at Work” (<http://www.labour.gov.hk/eng/public/oh/HeatStress.pdf>) issued by the Occupational Safety and Health Branch of LD and the “Guidelines on Site Safety Measures for Working in Hot Weather” (http://www.hkcic.org/files/eng/documents/Publications/Working_in_hot_weather.pdf) published by the Construction Industry Council.
- 11.7.4 The “Guidance Notes to Renovation Safety” and the “Safety Handbook for Construction Site Workers” published by the LD provide a simple check on working at height, requirements of the working platforms, electricity safety, fire safety for inflammable substances, personal protective equipment and safe operation of common tools.