



CONSTRUCTION  
INDUSTRY COUNCIL  
建造業議會

# Rigger / Metal Formwork Erector Trade Test Mock Practical Test Paper

此文件關於索具工（叻噪）/ 金屬模板裝嵌工工藝測試考題。如有需要索取此文件的中文版本，請致電 2100 9000 與香港建造業工藝測試中心聯絡。

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## **Enquiries**

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## Trade Test Paper

Trade : Rigger / Metal Formwork Erector

Grade : Skilled Worker

- Content : 1. According to the drawing 1, show the correct hand signals to crane operator for striking and erecting a metal formwork (W1&W2) and the subsidiary events. (35 marks)
- i) Strike and erect a metal formwork (W1&W2) and wall end screws.
  - ii) Base on the wall thickness, select and make use the suitable PVC tubes.
  - iii) Spay a coat of form oil on formwork surfaces.
  - iv) Check the verticality of metal formwork. (the tolerance is 2mm in 1 meter)
- 2 According to the drawing 2, use a proper sling and hand signals to raise up or lower down a working platform to the designated level. (15 marks)
- 3 According to the drawing 3, use a proper sling and hand signal to install a precast slab (35 marks)
- i) Erect and adjust the props
  - ii) Adjust the level of a precast slab 2300 x 2350mm. (the tolerance is 2mm in 1 meter)
  - iii) Erect and strike the external wall kicker.
  - iv) After the erection of precast slab and checked by the invigilator, strike all the false-works, props and put back to the store yard.

- 4 According to the drawing 4, use a proper sling and hand signals to complete the following tasks. (15 marks)
- i) Erect a façade.
  - ii) Check the verticality of facade. (the tolerance is 2mm in 1 meter)
  - iii) After the erection of facade and checked by the invigilator, strike the facade and put it back to the store yard.

Test : Candidate should advise our instructor assistant how to perform the requirements for suiting his / her needs. Including the miner hoist the metal adjust the verticality of formwork by adjustable legs, take out and put back screws while raise up or lower down the working platform, the subsidiary events while install the precast slab, false-works and props.

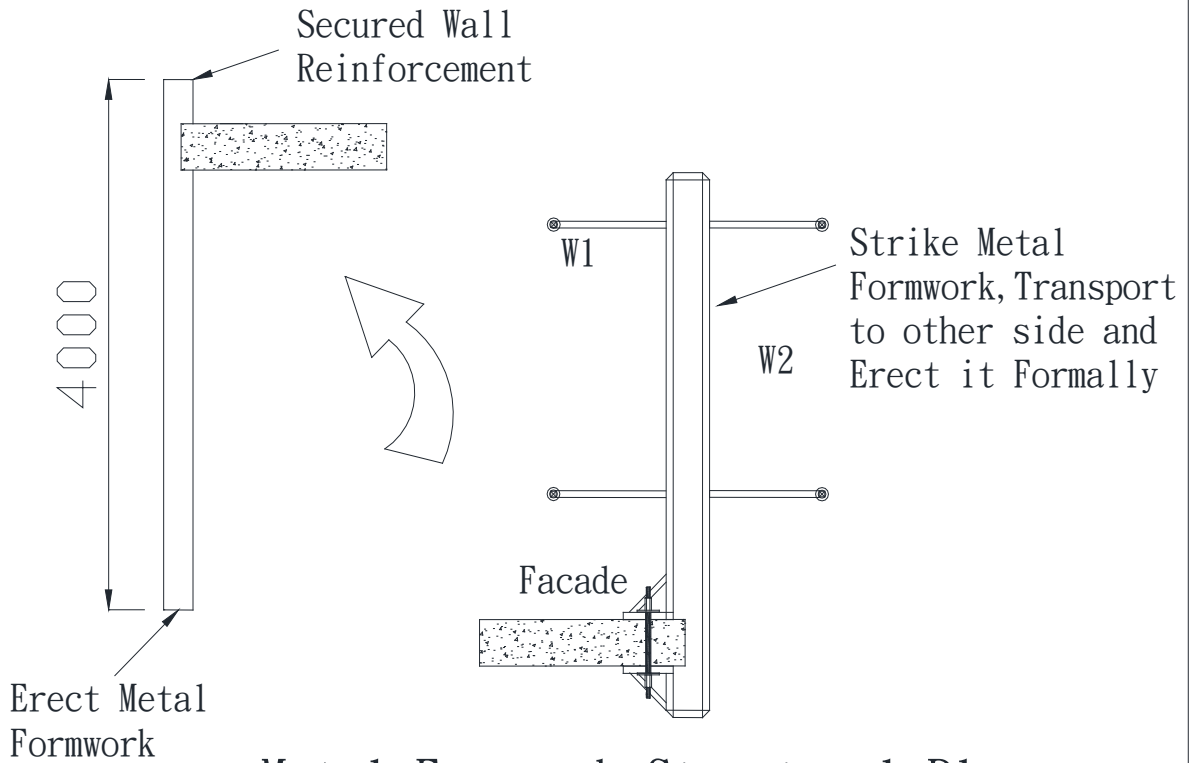
Duration : 3 Hours

Notes : (1) Candidate should read the attached "Notes to Candidates" before commencement of work.

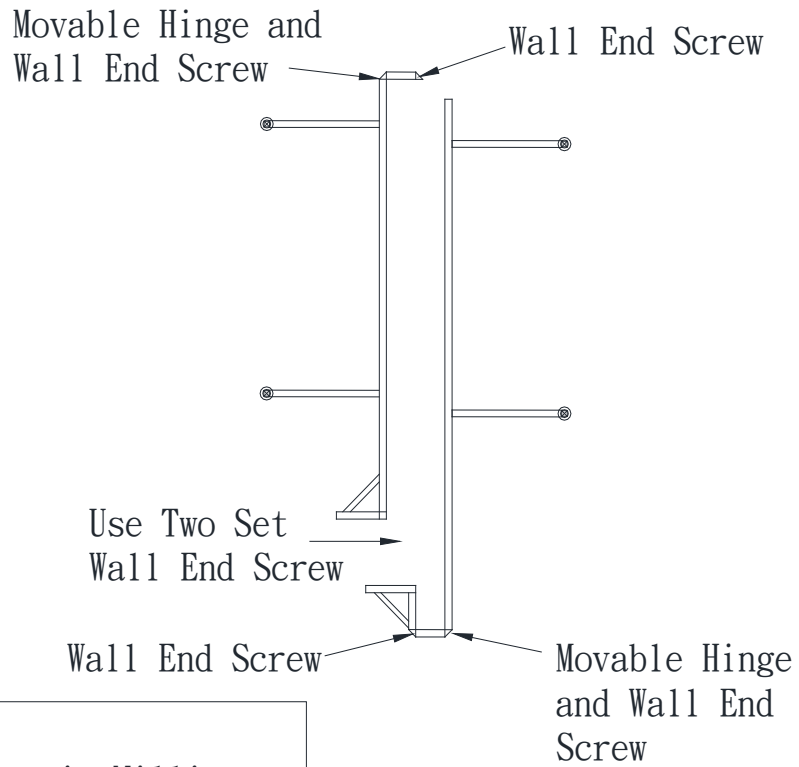
(2) Candidate will be marked as fail if he / she does not carry out safety precautions during the test.

(3) The test paper consists of 3 pages. Total mark is 100. Passing mark is 60.

# Drawing 1

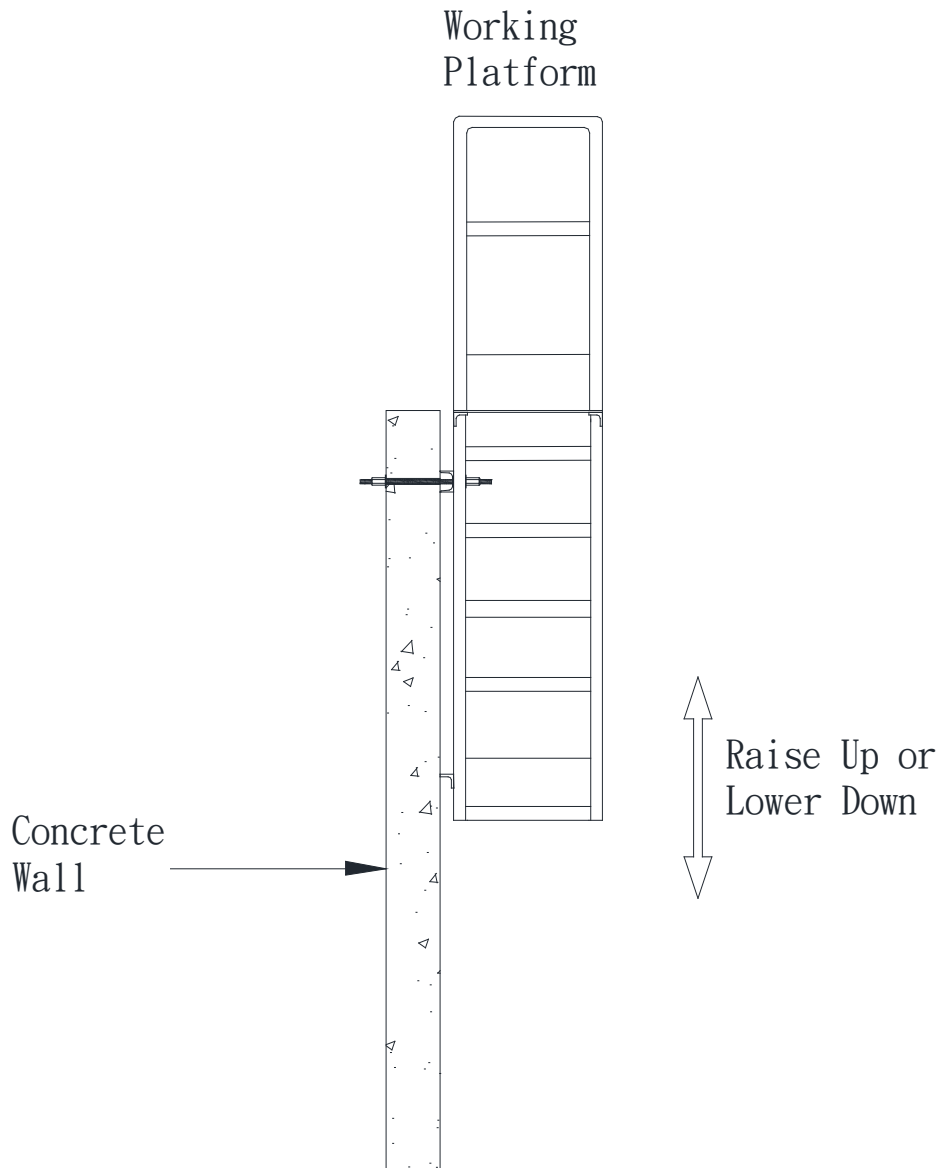


## Metal Formwork Structural Plan



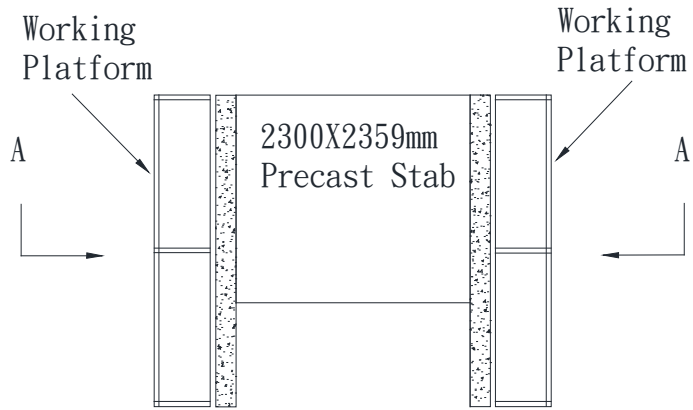
Not to Sale  
All Dimensions in Millimeter

# Drawing 2

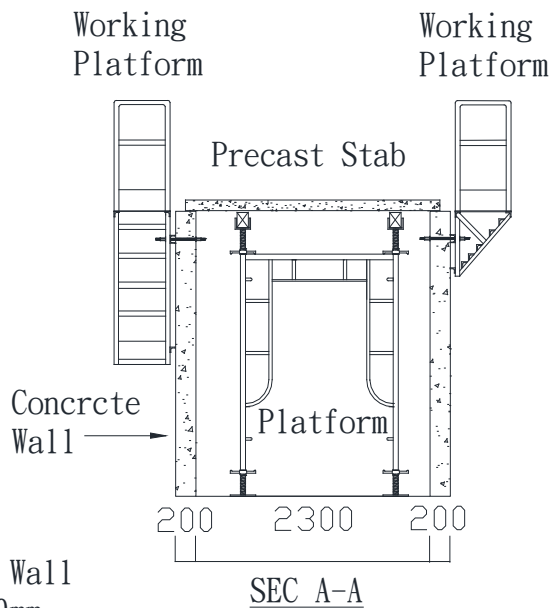


Not to Sale  
All Dimensions in Millimeter

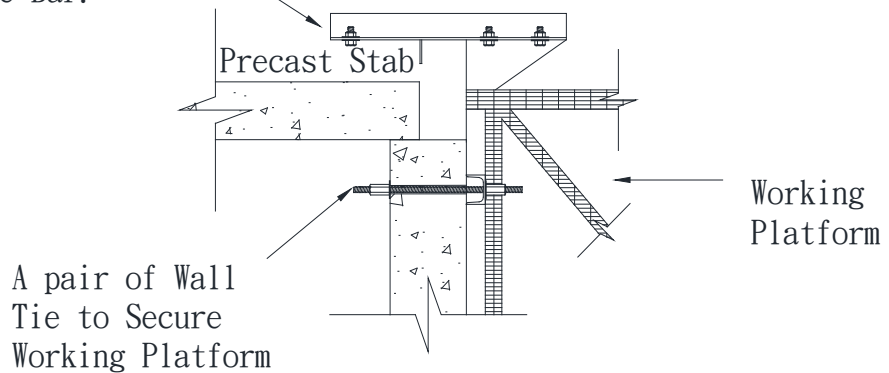
# Drawing 3



Precast Slab and Working Platform Plan



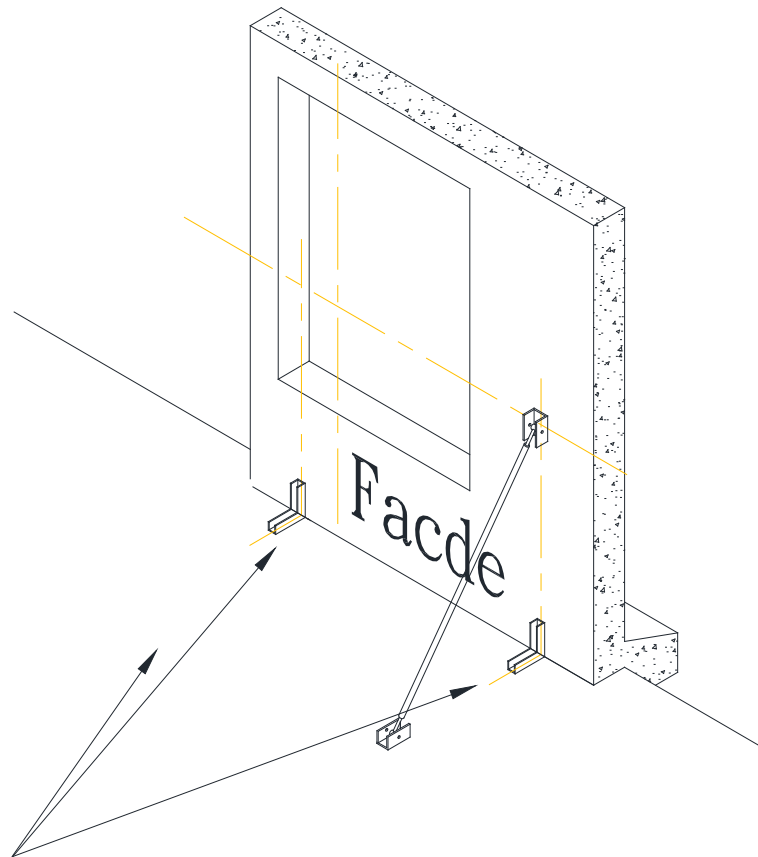
Erect an External Wall  
Kicker Form In 150mm  
Width with a 100 X100 mm  
Metal Angle Bar.



External Wall Kicker & Working Platform Structural Detail.

Not to Sale  
All Dimensions in Millimeter

# Drawing 4



Facade and L Shaped Racks

Not to Sale  
All Dimensions in Millimeter



## Notes to Candidates :

1. Candidates should read the test papers carefully and ask the invigilator for any queries.
2. Candidates should study the drawings and specifications attached to test papers, if any, before the test begins.
3. Candidates should carry out the test according to test papers, working drawings and specifications provided.
4. Candidates shall bring their own safety shoes, other safety equipment will be provided by trade testing centre. Candidates must take all necessary safety precautions to ensure work safety.
5. All tools and materials required by the test will be provided by trade testing centre, candidates should check and ensure their adequacy and quality. Candidates shall use the tools and materials properly based on trade practice. All the tools must be returned to trade testing centre after the test. The candidates may ask the invigilator for any problems.
6. Candidates are required to handle and move the tools and materials for use in the test, and to carry out associated works.
7. Invigilator will take record photos periodically during the test.
8. Candidates are not allowed to take any photo or video with cameras or mobile phones.
9. Candidates are not allowed to use their mobile phones during the trade tests, except for emergency situation.
10. The marking scheme is based on the following criteria :
  - a) Understanding of drawing and specification

- b) Preparation works before commencement of test
- c) Working procedures
- d) Accuracy and quality of works
- e) Progress of works
- f) Proper handling and use of materials
- g) Proper use of tools and equipment
- h) Safety precautions
- i) Considerate of other trades
- j) Housekeeping after completion of test

11. All candidates must stop when time is up.
12. Candidates are required to return the test paper to invigilator after the test.
13. Offering bribe to invigilator is an offence in law and trade testing centre will report to the ICAC for any such case.

**In the event that the candidate fails to take any necessary safety precautions and / or works in any dangerous situations, he / she will be assessed failed**