



CONSTRUCTION
INDUSTRY COUNCIL
建造業議會

HONG KONG CONSTRUCTION INDUSTRY TRADE TESTING CENTRE
香港建造業工藝測試中心

The 1st Hong Kong Construction Skills Competition

Competition Handbook (Version 4)

Metal Scaffolding (Open Group)

〈 The document only serves as a reference for pre-competition preparation
and is updated from time to time without prior notification. 〉

The 1st Hong Kong Construction Skills Competition

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Competition Handbook

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1. Test Project

Content	Score
Complete the following items according to the drawings at the designated location:	
a. Erecting of tubular steel scaffolding	
This includes: estimating the materials needed, selecting appropriate tubes, clamps and components, and erecting a tubular steel scaffolding equipped with a staircase, working platform and a suspended bridge according to the dimensions, distances, framework and set-up indicated in the drawings.	
Technical and quality requirements include	
Estimation, selection and handling of materials needed, use and handling of tools	(20 marks)
Quality of scaffolding	(60 marks)
Safety precautions, erection procedures, skills and techniques, etc.	(20 marks)
Total	100

Time allowed: 6 hours (lunch time excluded)

2. Notes to Competitors

2.1 General Instructions

- 2.1.1 Read the test project, specifications and regulations listed in the Handbook carefully and ask the adjudicators for any queries.
- 2.1.2 Carry out the test project according to working drawings and specifications provided.
- 2.1.3 Check and collect the tools and materials required before the competition starts. Obtain additional items as soon as possible in case of shortage.
- 2.1.4 Competitors are required to handle tools and materials and carry out associated works on their own. All tools must be returned after the competition. Please ask the adjudicators for any queries.
- 2.1.5 Stop all works when time is up.
- 2.1.6 Do not talk loudly, cause nuisance or affect other Competitors during the competition.
- 2.1.7 No photos or videos are allowed, including those taken with cameras and mobile phones.
- 2.1.8 The use of mobile phones is not allowed during the competition except for emergency situations.
- 2.1.9 The display of behaviours and objects with religious, political, sexual and violent implications or causing discomfort and controversies are not allowed during the competition. The Construction Industry Council (CIC) reserves the right to discretion

on the above behaviour without the need to provide any explanations.

2.1.10 In case of substantiated violations of item 2.1.9, Competitors will be disqualified from the competition.

2.1.11 The judging criteria are briefly listed as follows:

- a. Understanding of drawings and specifications
- b. Preparation before work
- c. Work procedures
- d. Accuracy and quality of work
- e. Work progress
- f. Appropriate use of handling of materials
- g. Proper use of tools and equipment
- h. Housing-keeping after work completion
- i. Safety precautions

Note: Detailed judging criteria will be announced later.

2.2 Technical Guidelines

- 2.2.1 Take necessary safety precautions.
- 2.2.2 Erect scaffolds according to the dimensions, distances, framework and set-up indicated in the drawings.
- 2.2.3 The standard should be erected at the designated location.
- 2.2.4 Erect scaffolds with tubes with the most appropriate length.
- 2.2.5 Select clamps and couplers complying with the requirements stated in industry guidelines.
- 2.2.6 The verticality and level of components should comply with the requirements stated in industry guidelines.
- 2.2.7 Ensure accurate and even spacing between components.
- 2.2.8 Components should be joined according to requirements stated in the industry guidelines.
- 2.2.9 Handle and use tools properly.
- 2.2.10 Report work completion for time recording purpose.

2.3 Safety and Environmental Guidelines

- 2.3.1 Competitors should wear the safety helmet with chinstrap provided by the organizer during the competition.
- 2.3.2 Bring and wear proper clothing and safety shoes. Other safety equipment will be provided at the venue.
- 2.3.3 Wear the personal protective equipment provided by the organizer. Do not wear cotton gloves when operating motor tools and machinery with spinning components.
- 2.3.4 Certain works involve work above ground. Competitors can use related safety equipment provided by the organizer if necessary.
- 2.3.5 Check the tools and materials distributed by the organizer before the competition starts. For any irregularities, inform staff members on the site for follow-up.
- 2.3.6 No eating and drinking within the workstation area.
- 2.3.7 Safety constitutes one of the judging criteria. Competitors should take all safety precautions to ensure safety. Those displaying unsafe behaviour or affecting other Competitors would receive mark penalty or face disqualification from the competition.
- 2.3.8 In case of emergency (e.g. fire), the competition will be halted. Competitors should evacuate according to the instructions of fire inspectors (personnel wearing red safety helmets) at the venue.
- 2.3.9 In case of physical discomfort or injury, inform staff members immediately for arranging first-aid assistance.

2.3.10 The organizer has prepared a sufficient supply of materials for all Competitors. Competitors should make good use of all materials to avoid wastage.

2.3.11 All tools and materials used in the competition will be recycled for other uses after the competition.

3. Reference List of Tools

3.1 Tools provided by the organizer

Item no.	Item	Quantity
1	Ratchet wrench	1
2	Combination spanner	1
3	5m tape measure	1
4	7.5m magnetic tape measure	1
5	250mm spirit level	1
6	600mm spirit level	1
7	Slate pencil	Sufficient supply
8	Rubber-coated cotton gloves	1 pair
9	Tool pocket with belt	1 set

3.2 Self-prepared tools allowed

Item no.	Item	Quantity
1	Ratchet wrench	1
2	Tape measure	1
3	Spirit level	1

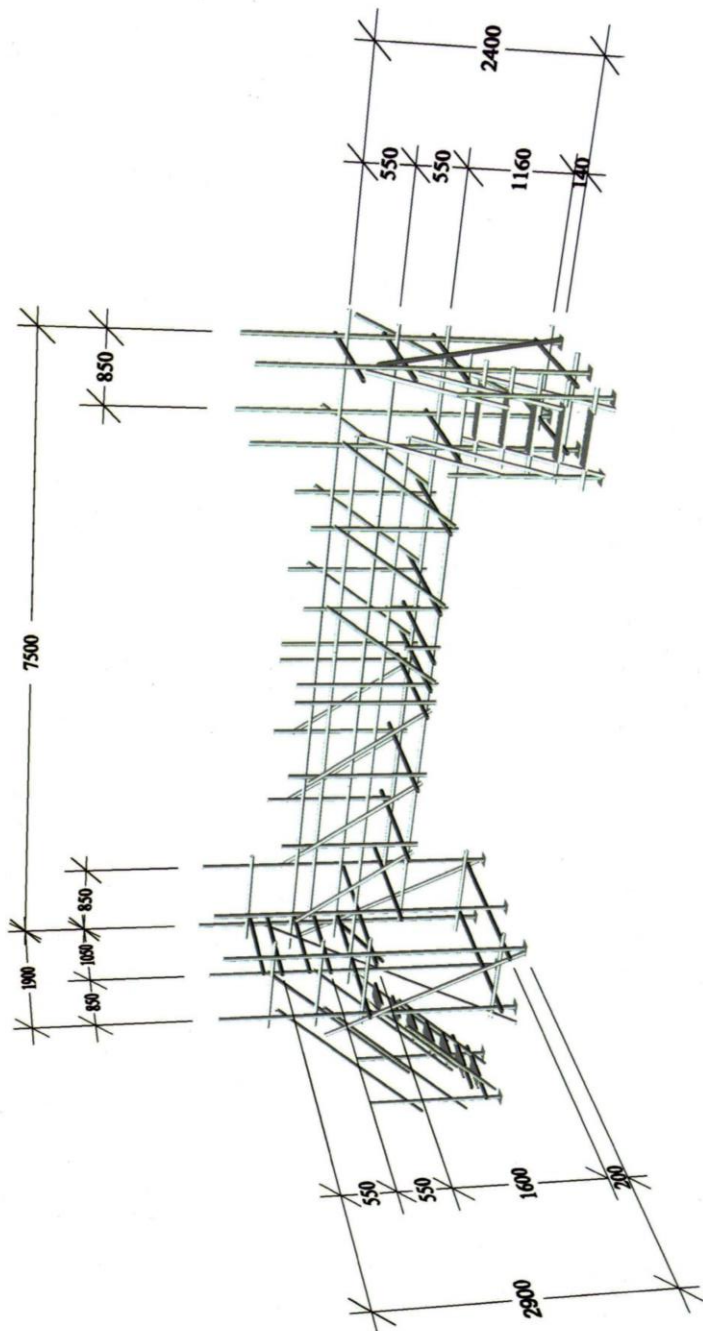
4. Reference List of Materials

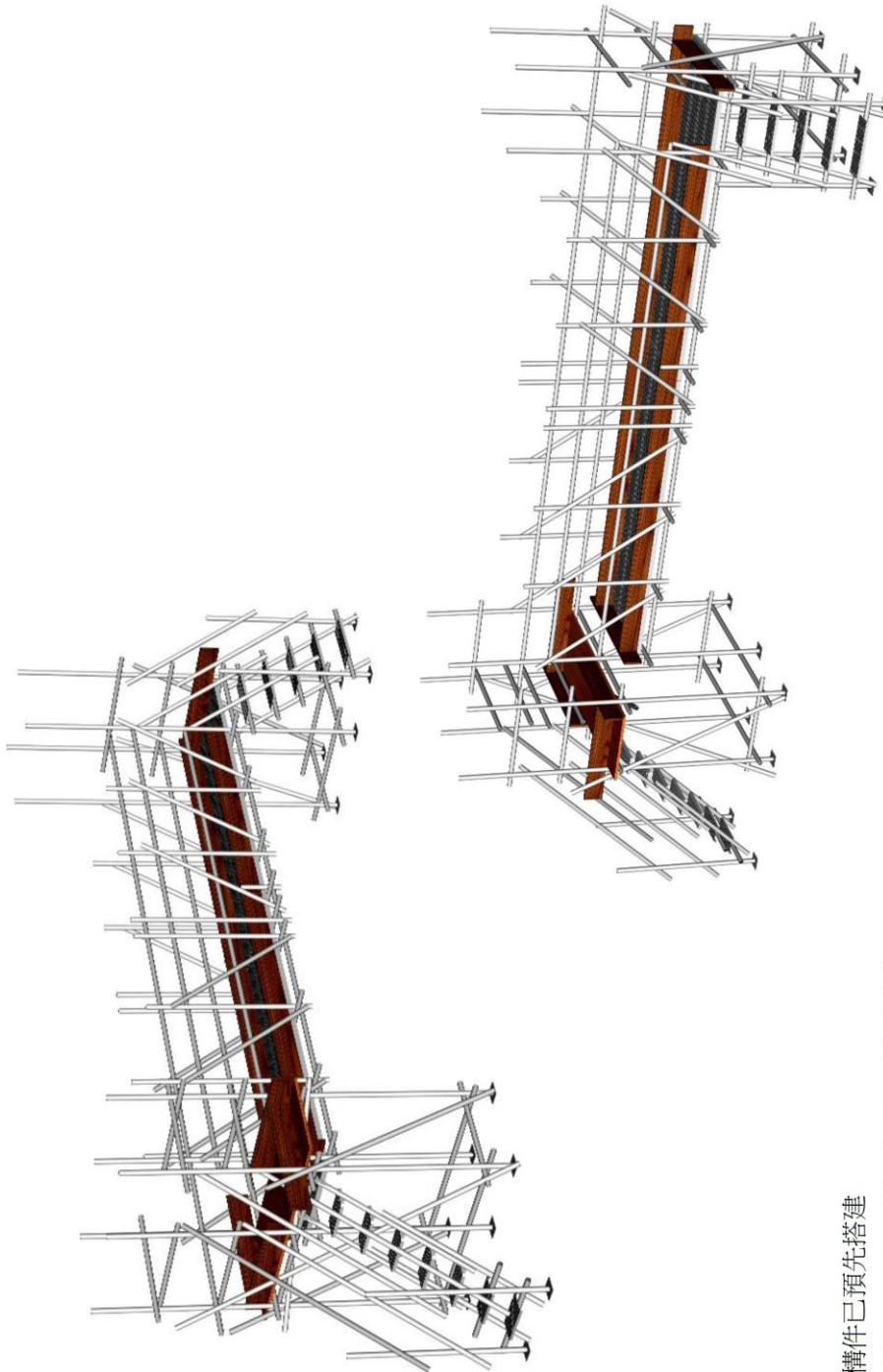
Item no.	Item	Quantity
1	Tube	Sufficient supply
2	Double coupler	Sufficient supply
3	Swivel coupler	Sufficient supply
4	Socket	Sufficient supply
5	Toe-board clamp	Sufficient supply
6	Board cover	Sufficient supply
7	Steel plank	Sufficient supply
8	Wooden plank	Sufficient supply
9	Ladder	1
10	Stairstep	7

5. Reference List of Safety Equipment

Item no.	Item	Quantity
1	Safety helmet with chinstrap	1 set
2	Full body safety harness with lanyard	1 set
3	Fall arrester	1

6. Reference Test Project Drawings

<p>尺寸以毫米為單位 Dimensions in Millimeter</p>  <p>*部份構件已預先搭建 *Part of the component has been prefabricated</p>	<p>Name: Competition Drawing (1)</p>	<p>Date: 11th September 2020</p>	<p>Drawing No.: HKCISC_2020_MIs_01</p>	<p>Version: 01</p>	<p>Not to Scale</p>
<p>HONG KONG CONSTRUCTION INDUSTRY TRADE TESTING CENTRE 香港建造業工藝測試中心</p>			<p>The 1st HK Construction Skills Competition</p>	<p>Metal Scaffolding Open</p>	<p>Page 1 of 2</p>



*部份構件已預先搭建

*Part of the component has been prefabricated

Name: Competition Drawing (2)

Date: 11th September 2020

Drawing No.: HKCISC_2020_MIs_02

Version: 01

Not to Scale

7. Contact Information

For an enquiries related to the Competition Handbook, please refer to the official website

http://www.cic.hk/chi/main/aboutcic/news_and_updates/events_calendar/event-370.html

or contact the Hong Kong Construction Industry Trade Testing Centre via:

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