



# **Window Frame Installer Skilled Trade Test Mock Practical Test Paper**

此文件關於窗框工工藝測試考題。如有需要索取此文件的中文版本，請致電 2100 9232 與工藝測試中心聯絡。

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## **Enquiries**

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## Trade Test Paper

**Job Title:** Window Frame Installer

**Grade:** Skilled Worker

**Test Topic:** Complete the following work in accordance with the plan at the designated location:

1. In accordance with requirements of Working Plan I, install a set of aluminium corner windows (W1), including: (40 Points)
  - i) Adjust and install window frames in accordance with the ink lines and spirit level;
  - ii) Cut a piece of glass to the specified size with a hand tool;
  - iii) Install a piece of 5mm thick glass supplied by the testing centre.
2. In accordance with requirements of Working Plan II, ink lines and spirit level, install a flat steel window frame (W2). (15 Points)
3. In accordance with requirements of Working Plan III and IV, install a set of aluminium door frame, including: (35 Points)
  - i) Choose appropriate materials to put together and install a set of aluminium door frame;
  - ii) At the specified location, install aluminium door frame, floor hinge, relevant accessories, and then the aluminium door.
4. Conduct inspection and acceptance of a set of prefabricated aluminium window in accordance with items listed on the aluminium window inspection form. (10 points)

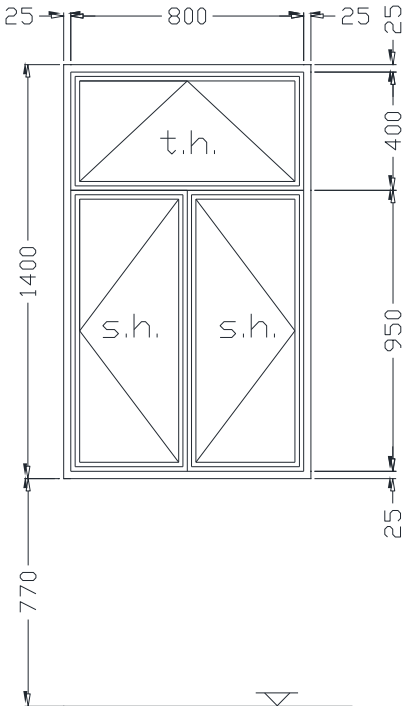


**Testing Time:** 6 Hours (Excluding Lunchtime)

- Notes:**
- (1) Before commencement of work, candidates must read the attached “Notice to Candidates”;
  - (2) A candidate will be deemed as failed if he/she does not take appropriate safety measures in the testing process; and
  - (3) The test paper consists of 6 pages with 100 points being the full score for all tested items, and 60 and plus the passing one.

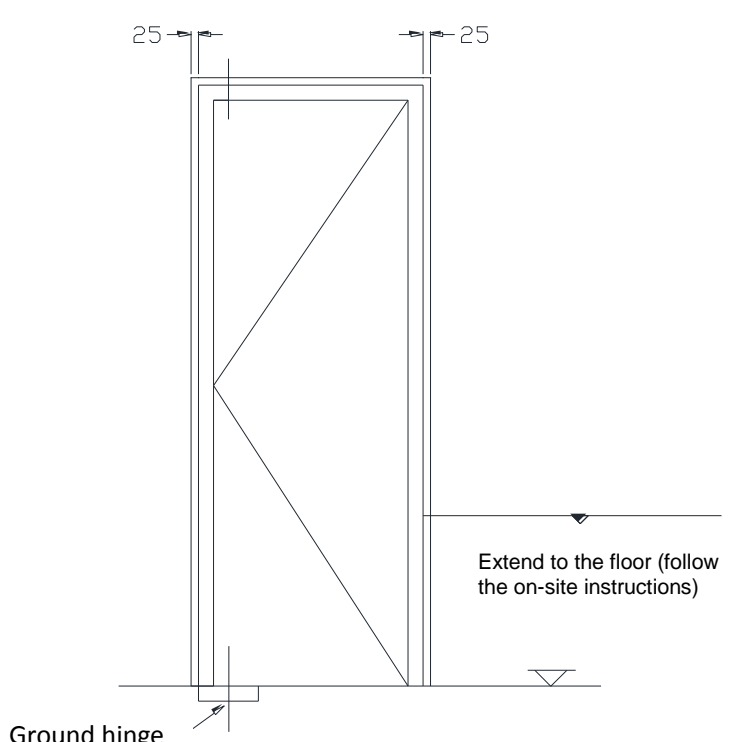
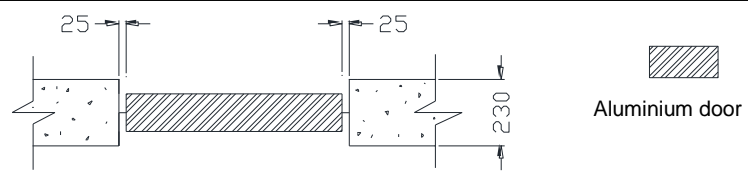
## Working Plan I for Window Frame Installer Trade Test

Elevation Plan	
	<p><b><u>Requirements for Installing Corner Windows (W1) are as follows:</u></b></p> <ol style="list-style-type: none"><li>1. Corner clips (square channels) and window frames must be connected with screws, and sealed with glass sealant;</li><li>2. Window's vertical and horizontal levelling error tolerances 2 mm;</li><li>3. Drill holes in the wall, insert plastic plugs, and tighten tapping screws for friction adjusters;</li><li>4. Spaces between friction adjusters must meet general standards;</li><li>5. After installing window glass and strips, apply glass sealant;</li><li>6. Fill in waterproof mortar around the window frame to prevent water leakage.</li></ol>
Type : Corner aluminium window	
Content : Install glass to specified window	
<div><div><div>1. Install window and frames</div><div>2. apply waterproof mortar to fix window frames</div><div>3. base criteria on materials and ink lines provided on site</div></div></div>	

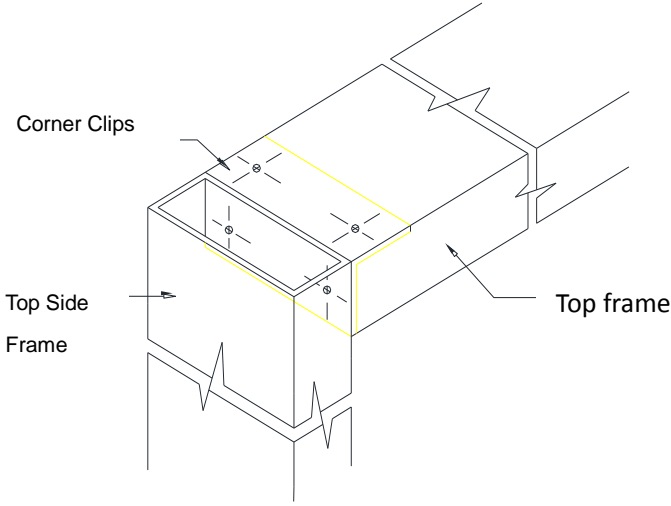
## Working Plan II for Window Frame Installer Trade Test

Elevation Plan		Requirements for Installing Flat Steel Window Frame (W2) are as follows:
		<ol style="list-style-type: none"><li>1. Window's vertical and horizontal levelling error tolerance is 2 millimetres.</li><li>2. Drill holes in the wall, insert plastic plugs, and fasten tapping screws for friction adjusters;</li><li>3. Spaces between friction adjusters must meet the general standards.</li><li>4. Install the steel window accessories including window handles and sash stays.</li></ol>
	Type : steel window	
	Content : no installation needed	
Notes:	<ol style="list-style-type: none"><li>1. Install window frame</li><li>2. Base criteria on the materials and ink lines</li></ol>	
<div><div><p>Aluminium window</p></div></div>		
<div>This plan is not drawn in accord to the actual ratio; all measurement are in millimetres.</div>		<u>W3 Steel Window Plan</u>

### Working Plan III for Window Frame Installer Trade Test

Elevation Plan	
	
Type : Aluminium Door Frame (76x45 Aluminium Flat Pipes)	
Content : no glass installation needed	
Notes:	<ol style="list-style-type: none"><li>1. Install door frame and ground hinge at the specified location</li><li>2. Install the door</li><li>3. Base criteria on the actual materials and ink lines provided on site.</li></ol>
	
This plan is not drawn in accord to the actual ratio; all measurement are in millimetres.	<u>Plan for D1 aluminium door</u>

### **Working Plan IV for Window Frame Installer Trade Test**

Reference drawing for assembling door frame top	
	 <p>The diagram is a 3D perspective view of a door frame assembly. It shows a rectangular frame with a top horizontal member and two vertical side members. At each of the four corners, there is a small circular component labeled 'Corner Clips'. The top horizontal member is labeled 'Top frame'. The left vertical member is labeled 'Top Side Frame'. The entire assembly is shown in a perspective view, with lines indicating the edges and the clips at the corners. Below the diagram, the text 'Elevation Plan' is written.</p> <p><u>Elevation Plan</u></p>
<p>Work Requirements:</p> <ol style="list-style-type: none"><li>1. Cut door frame materials, and assemble according to the door measurements and Working Plan III;</li><li>2. Connect aluminium corner clips of the door frame with screws;</li><li>3. Hinge accessories must be properly installed to the top side frame;</li><li>4. Install door frame at the specified place, drill holes on the wall, insert plastic plugs, and tighten friction adjustors with tapping screws;</li><li>5. Spaces of friction adjustors must meet the general requirements;</li><li>6. Floor hinges must be readjusted and installed to good standards by the student;</li><li>7. After installation, the door must swing smoothly, and stop at the proper position;</li><li>8. Spaces between the door and frame shall not exceed 4 millimeters;</li><li>9. Error allowance is 2 millimeters for the door frame both vertically and horizontally.</li></ol>	



## Aluminium Window Inspection Form

15 Items in total, for which grading is calculated with the following formula:

$$\text{Grading Formula: } 10X \frac{\text{Correct Answers}}{15 \text{ items}}$$

Notes: numbers after the decimal point will be rounded up to the nearest integer.

Aluminium Window Inspection Item		Good	No Good
1	Sash Stay/Window hinge status		
2	Window Frame nails/screws status		
3	Window nails/screws status		
4	Handle stability		
5	Waterproof strip status		
6	Clip aluminium channels stability and waterproof latex status		
7	Glass status		
8	Glass sealant status		
9	Friction adjustor shape /position, and whether spaces between window-frame stabilizing screws are good enough.		
10	Window swing/closing status		
11	Status of joints between the wall opening and external window frame edges, and whether cracks or ineffective waterproof sealant along frame edges were detected.		
12	Window brackets, dual lock and handle(7 字) status		
13	Window frame status		
14	Whether water line (水線) is connected to window frame		
15	Whether cement mortar filled around window frame met the specifications.		

### 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
- h) 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.

<p><b>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</b></p>
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