

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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Trade Test Paper

Job Title : Window Frame Installer

Grade : Skilled Worker

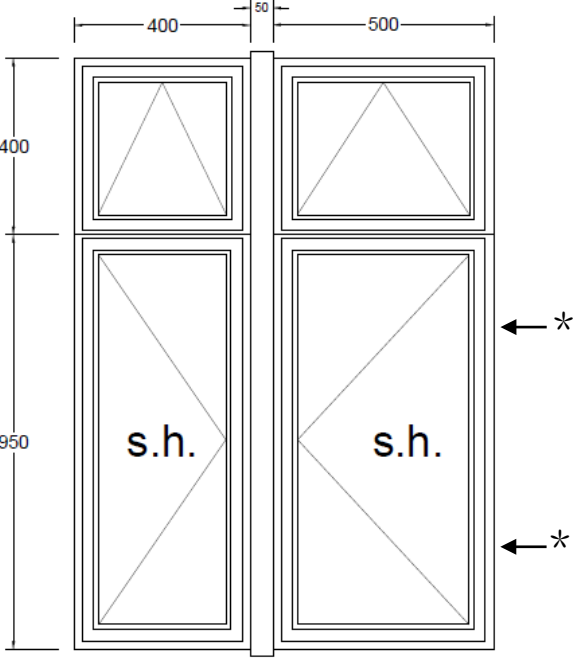
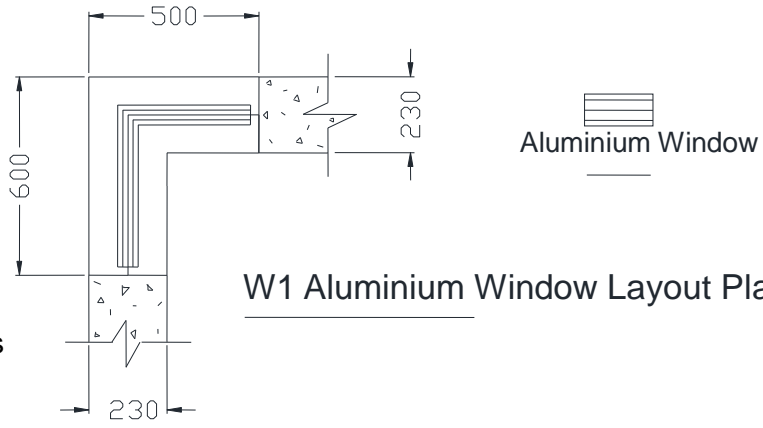
Test Content : Complete the following items according to the drawing(s) at the designated location:

- I. Installing a set of angular aluminium windows (W1) according to the requirements of Working Drawing 1, with the tasks including: (50 marks)
 - i) Calibrating and installing window frames according to the leveller and levelling requirements, and applying waterproof mortar on the four sides of window frames to ensure absence of water seepage;
 - ii) Replacing the dual locks as window accessories;
 - iii) Using hand tools to cut out a glass pane of designated dimensions;
 - iv) Installing 5 mm-thick glass panes supplied at the test venue.
- II. Installing a planar steel window frame (W2) according to Working Drawing 2, the leveller and levelling requirements. (10 marks)
- III. Installing an aluminium door frame according to the requirements of Working Drawings 3 and 4, with the tasks including: (30 marks)
 - i) Selecting appropriate materials and tools to assemble and install an aluminium door frame;
 - ii) Installing the aluminium door frame, floor hinge and relevant accessories at the designated location, and then installing the aluminium door.
- IV. Performing inspection and acceptance on a set of pre-installed, completed aluminium windows, according to the items shown on the Aluminium Window Inspection Checklist. (10 marks)

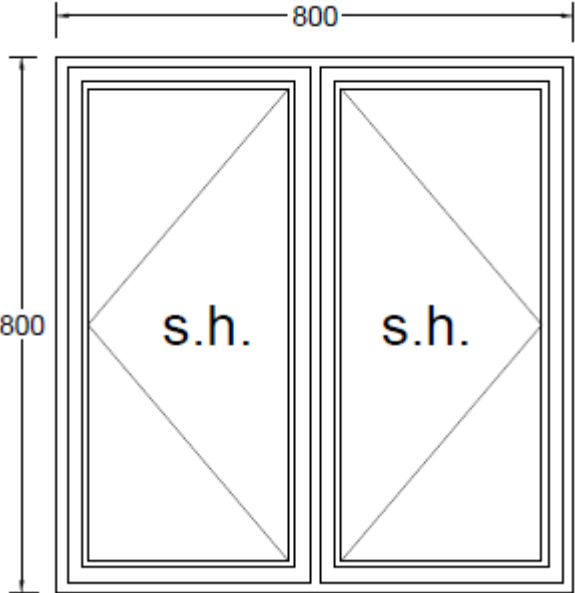


Testing Time: 6 Hours (Excluding Lunchtime)

- 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.

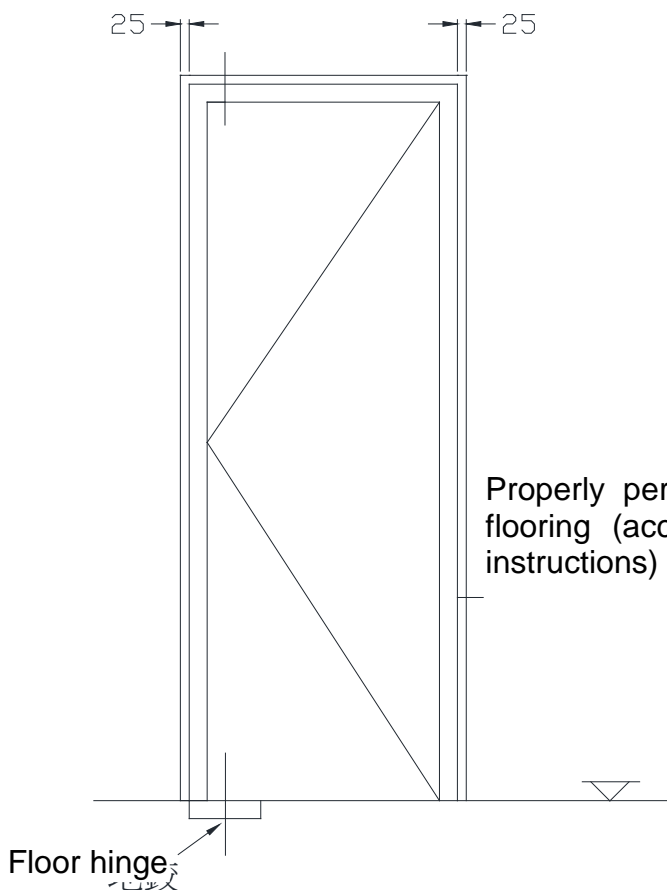
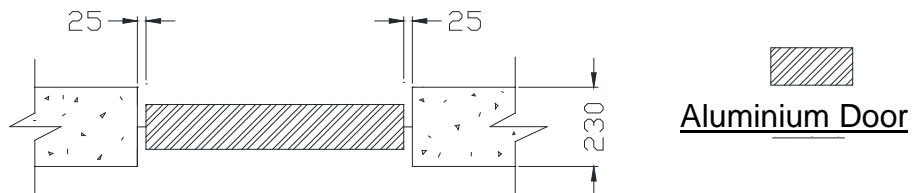
Working Drawing 1 for Trade Test (Window Frame Workers)

No. Content	W1	Installation of angular aluminium windows (W1) <u>Works requirements as follows:</u>
Profile		<ol style="list-style-type: none"> 1. The box section is to be connected to the window frame using screws, and glass cement should be applied outside for sealing purposes; 2. The permitted discrepancy (vertical or levelling) for the window is 2 mm; 3. Drilling holes into the wall, inserting plastic plugs, and using steel screws to secure the holdfasts; 4. The spacing between the holdfasts must comply with the general requirements; 5. Upon installation of the window sill glass, glass cement should be applied outside; 6. Waterproof mortar is to be applied on the four sides of window frames to ensure absence of water seepage; 7. *Replacing the dual locks as window accessories.
Type	Angular aluminium windows	
Glass	Installing glass at the designated aperture	
Remarks	<ol style="list-style-type: none"> 1. Installing window frame and window pane 2. Applying waterproof mortar onto window frames 3. Actual objects and leveller indications are to be taken as yardsticks 	
<p>This diagram is not drawn to scale All dimensions are in millimetres (mm)</p>		 <p style="text-align: center;"><u>W1 Aluminium Window Layout Plan</u></p>

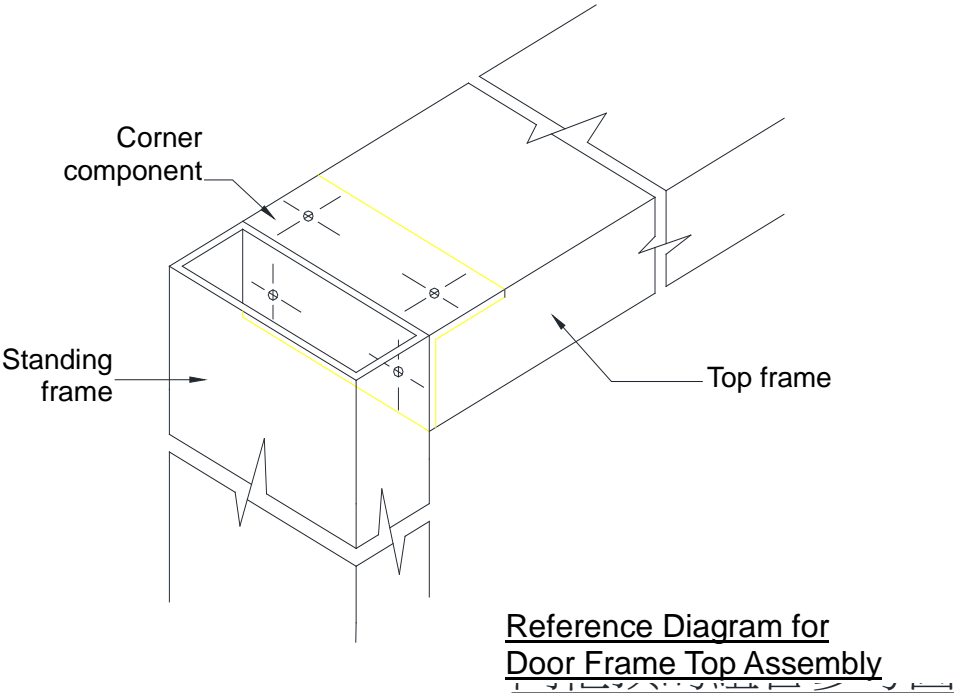
Working Drawing 2 for Trade Test (Window Frame Workers)

No. Content	W2	
Profile		<p><u>Installation of planar steel window frame (W2)</u> <u>Works requirements as follows:</u></p> <ol style="list-style-type: none"> 1. The permitted discrepancy (vertical or levelling) for the window is 2 mm; 2. Drilling holes into the wall, inserting plastic plugs, and using steel screws to secure the holdfasts; 3. The spacing between the holdfasts must comply with the general requirements. 4. Installing such accessories as the steel window handles and window operators properly.
Type	Steel window	
Glass	Installation unnecessary	
Remarks	<ol style="list-style-type: none"> 1. Installation of window frames 2. Actual objects and leveller indications are to be taken as yardsticks 	
<div style="display: flex; justify-content: space-around; align-items: center;">  <div style="text-align: center;">  Steel Window </div> </div> <p style="text-align: center;"><u>W2 Steel Window Layout Plan</u></p> <p>This diagram is not drawn to scale All dimensions are in millimetres (mm)</p>		

Working Drawing 3 for Trade Test (Window Frame Workers)

No.	D1	
Content		
Profile	<div></div>	
Type	Aluminium door frame (76x45 aluminium flat tube)	
Glass	Installation unnecessary	
Remarks	<div>1. Installing door frame and floor hinge at the designated locations</div> <div>2. Installing the door</div> <div>3. Actual objects and leveller indications are to be taken as yardsticks</div>	
<div></div> <div><u>D1 Aluminium Door Layout Plan</u></div> <div>This diagram is not drawn to scale All dimensions are in millimetres (mm)</div>		

Working Drawing 4 for Trade Test (Window Frame Workers)

No. Content	D1
Profile	 <p style="text-align: center;"><u>Reference Diagram for Door Frame Top Assembly</u></p>
Works requirement	<ol style="list-style-type: none"> 1. Cutting out the frame material according to the door dimensions and Working Drawing 3, and performing the assembly; 2. Connecting and assembling the door frame aluminium corner component with machine wires; 3. Pivot accessories must be correctly installed at the top frame; 4. Installing the door frame at the designated location, drilling holes into the wall, inserting plastic plugs and securing holdfasts with steel screws; 5. The spacing between holdfasts is required to comply with general requirements; 6. Floor hinge is required to be aligned and installed sturdily by the candidate; 7. Upon installation of the door, it should be able to be opened and closed smoothly and to stop at the correct location; 8. The gap between the door frame and the door must not exceed 4 mm; 9. The permitted vertical and levelling discrepancy for the door frame is 2 mm.

Aluminium Window Inspection Checklist

There are altogether 15 questions. Marks are calculated based on the following formula:

Marking
formula : $10 \text{ marks} \times \frac{\text{No. of correct questions}}{15}$

Remarks: Rounding to the nearest integer applies in the case of a decimal number

Aluminium Window Inspection Item		Pass	Failure
1	Status of window operator/window hinge		
2	Status of pop-rivets/screws on window frames		
3	Status of pop-rivets/screws on window pane		
4	Sturdy handles		
5	Status of waterproof gaskets		
6	Sturdiness of window aluminium tubes or status of waterproof plastic		
7	Glass status		
8	Glass cement status		
9	Shape/position of holdfasts and sufficiency of the spacing requirements for the screws fixing the window frame		
10	Closure status of the sliding window/casement window		
11	Status of linkage between the external frame edges and the aperture, presence of any cracks or any ineffectiveness of waterproof plastic on the frame edges		
12	Status of window catches, dual locks and cam locks		
13	Status of window frames		
14	Presence of any earth wire connecting to the window frames		
15	Compliance of the cement mortar applied on the sides of window frames		

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>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</p>
