

Refrigeration/ Air-conditioning/ Ventilation Mechanic (Thermal Insulation) Trade Test Written Test Mock Paper

(Version : EAT-WM-EN-01)



此文件關於空調製冷設備技工（保溫）技能測試（大工）技術知識測試（筆試）模擬試題。
如需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。

Disclaimer

No part of this material may be reproduced or transmitted in any form or by any means without the written permission from the Construction Industry Council (CIC). Whilst reasonable efforts have been made to ensure the accuracy of the information contained in this material, the CIC nevertheless would encourage readers to seek appropriate independent advice from their professional advisers where possible and readers should not treat or rely on this material as a substitute for such professional advice for taking any relevant actions. The CIC will not assume any liability in relation to any loss or damage directly or indirectly resulted from unintended or/and unforeseeable use of this document.

This document is provided as reference for test preparation only. Under all circumstances all content in the official test papers, including but not limited to the terms and conditions therein, prevails.

The CIC reserves the right, at its sole and absolute discretion, to change, update or delete the contents in this document at any time without prior notice.

The CIC reserves all rights of final interpretation for any content in this document.

Enquiries

Enquiries on this material may be made to Hong Kong Construction Industry Trade Testing Centre (HKCITTC) at:

Address: 95 Yue Kwong Road, Aberdeen, Hong Kong

Tel: (852) 2100 9000

Fax: (852) 2100 9090

Email: hkcittc@cic.hk

Website: www.cic.hk

Refrigeration/ Air-conditioning/ Ventilation Mechanic (Thermal Insulation) Trade Test Written Test Mock Paper

1. Exposing polystyrene (Styrofoam) materials of the air-conditioning of ceiling ventilation devices may constitute a violation of (the) _____.
 - a. Fire Services Ordinance
 - b. Environmental Hygiene Ordinance
 - c. Buildings Structural Safety Ordinance
 - d. All of the above ordinances
2. For the aluminum foil tape used alongside with glass wool, the minimum width is:
 - a. 75mm
 - b. 45mm
 - c. 55mm
 - d. 65mm
3. Which of the following ducts does not require insulation treatment?
 - a. Cold air duct
 - b. Hot water pipe
 - c. Cold water pipe
 - d. Fresh air or exhaust duct
4. When boiling asphalt, there should not be water nearby because _____.
 - a. Water vapour makes asphalt difficult to hold
 - b. It is easy to fall due to slippery ground
 - c. Water will cool off asphalt
 - d. Hot asphalt will splash upon meeting water
5. In the product information of thermal insulation materials, the unit/ symbol used to express the density is:
 - a. kg/m^3
 - b. Kpa
 - c. W/mk
 - d. $\text{W/m}^\circ\text{C}$
6. When a double thermal insulation layer has to be laid on the pipes, the joining points should:
 - a. Align both vertically and horizontally
 - b. Branch off vertically and align horizontally
 - c. Align vertically and branch off horizontally
 - d. Branch off both vertically and horizontally

Precautions

This document is provided as reference for test preparation only. Under all circumstances all content in the official test papers, including but not limited to the terms and conditions therein, prevails. There are different versions of the test paper, content include but not limited to tools, materials, equipment, drawing, construction details or procedures and different simulated site environments. Candidates should refer to the official test documents during testing.

The CIC reserves the right, at its sole and absolute discretion, to change, update or delete the contents in this document at any time without prior notice.

Refrigeration/ Air-conditioning/ Ventilation Mechanic (Thermal Insulation) Trade Test Written Test Mock Paper (Con't)

7. The laying of thermal insulation materials on rectangular ducts should start with:
 - a. The two sides, and then the top and the bottom
 - b. The top and the bottom, and then the two sides
 - c. The top and the two sides, and then the bottom
 - d. The bottom and the two sides, and then the top
8. During installation of the fiberglass insulation and the metal nail, the maximum distance between the nail and the edge is:
 - a. 300mm
 - b. 200mm
 - c. 50mm
 - d. 100mm
9. For the thermal insulation work with glass wool, if the height of duct flange exceeds the thickness of thermal insulation materials,
 - a. Insert two thermal insulation layer rings no narrower than 100mm at the two sides of the joints and then continue the work
 - b. Use thicker thermal insulation materials instead
 - c. Ignore the problem and leave the flange exposed
 - d. Cover it with self-adhesive aluminum foil for air ducts
10. The calculation of the thickness of thermal insulation materials does not need to take into account:
 - a. Air temperature and relative humidity
 - b. Pipe water temperature
 - c. Pipe outer diameter
 - d. The height of pipe installation
11. When a water pipe 90° try square is used for insulation treatment, the backlash error of the insulation ducts should not be larger than _____.
 - a. 15mm
 - b. 10mm
 - c. 2mm
 - d. 5mm
12. Phenolic foam of which of the following densities facilitates the best thermal insulation effect?
 - a. 100kg/m³
 - b. 80kg/m³
 - c. 50kg/m³
 - d. 35kg/m³

Precautions

This document is provided as reference for test preparation only. Under all circumstances all content in the official test papers, including but not limited to the terms and conditions therein, prevails. There are different versions of the test paper, content include but not limited to tools, materials, equipment, drawing, construction details or procedures and different simulated site environments. Candidates should refer to the official test documents during testing.

The CIC reserves the right, at its sole and absolute discretion, to change, update or delete the contents in this document at any time without prior notice.

Refrigeration/ Air-conditioning/ Ventilation Mechanic (Thermal Insulation) Trade Test Written Test Mock Paper (Con't)

13. In an air conditioning system, pipes are marked with the letters "CHW" to indicate their function to transport:
- Chilled water
 - Warm water
 - Freshwater
 - Saltwater
14. In an air conditioning system, pipes are marked with the letters "FAD" to indicate their function to transport:
- Hot air
 - Cold air
 - Exhaust gas
 - Fresh air
15. Which of the following duct(s) does not require insulation treatment?
- Fresh air or exhaust duct
 - Cold water pipe
 - Hot water pipe
 - Cold air duct
16. To prevent condensation (dripping) during thermal insulation work,
- There should be two layers of thermal insulation laid perpendicular to each other
 - High density thermal insulation materials should be used
 - A Z-bend should be installed
 - None of the above works are needed
17. What is the minimum amount of "interest" as stated in Prevention of Bribery Ordinance?
- \$100
 - \$200
 - \$500
 - No limited amount
18. A person should be serious at work and should uphold work ethics, including:
- Appropriation of other's property
 - Craving for personal interest and neglecting the damages dealt to others
 - Accepting money and other advantages
 - Integrity, be honest and responsible, keep moral principles. Never corrupt and accept illegal advantage.

Precautions

This document is provided as reference for test preparation only. Under all circumstances all content in the official test papers, including but not limited to the terms and conditions therein, prevails. There are different versions of the test paper, content include but not limited to tools, materials, equipment, drawing, construction details or procedures and different simulated site environments. Candidates should refer to the official test documents during testing.

The CIC reserves the right, at its sole and absolute discretion, to change, update or delete the contents in this document at any time without prior notice.

Refrigeration/ Air-conditioning/ Ventilation Mechanic (Thermal Insulation) Trade Test Written Test Mock Paper (Con't)

19. When lifting heavy objects, which of the following methods is correct?
- Correct posture should be used. Workers should remain upright in their back.
 - Ask for a heavier load each time to hasten the process
 - Throw the object to higher places to strengthen the body
 - Hasten the speed of work suddenly
20. What may happen if working under hot and humid environments for a long period?
- Heat stroke
 - Temporary blindness
 - Hunger
 - Anaemia

Precautions

This document is provided as reference for test preparation only. Under all circumstances all content in the official test papers, including but not limited to the terms and conditions therein, prevails. There are different versions of the test paper, content include but not limited to tools, materials, equipment, drawing, construction details or procedures and different simulated site environments. Candidates should refer to the official test documents during testing.

The CIC reserves the right, at its sole and absolute discretion, to change, update or delete the contents in this document at any time without prior notice.