

C-21A REFRIGERATION CONTRACTOR

SCOPE OF WORK

The construction, erection and installation of devices, machinery and units for the control of air temperatures below 50°F in refrigerators, refrigerated rooms and insulated spaces, and installation of any related insulation, ducts, blowers, registers, controls over humidity and thermostatic controls, lines for supplying natural gas from the unit to the point of connection in the existing line for natural gas at the meter or at any point thereafter, electrical service from the unit's device to protect against excessive current to the main electrical panel, but not the installation of other gas or electric services for the devices, machinery or units.

# of Questions	Minimum Passing Score	Time Allowed
50	35	2 Hours

CONTENT OUTLINE

Subject Area	# of Items
Refrigeration and Refrigerants	17
Piping and Tubing	8
Condensers and cooling towers	4
Controls, Valves and Wiring	7
Walk-ins/Box Construction	2
Ducts and Ventilation	2
Test and Inspection	3
Gas	3
Safety	4

REFERENCE LIST

The reference material listed below was used to prepare the questions for this examination. The examination may also contain questions based on trade knowledge, or general industry practices. **Except for Code books**, you can use later editions of references as they become available. For Code questions, the examination will be based **only** on the edition of the Code book that is listed.

Candidates may use a silent, nonprinting, non-programmable calculator in the examination center.

This examination is OPEN BOOK.

The following reference material is allowed in the examination center:

1. *Uniform Mechanical Code*, 1997, International Association of Plumbing and Mechanical Officials, IAPMO World Headquarters, 5001 E Philadelphia St, Ontario, CA 91761 USA, 800.85.IAPMO, ISBN: 884590-77-2 www.iapmo.org

Reference material may be highlighted, underlined, and/or indexed. They must be otherwise unmarked (not written in) and may not contain additional papers (loose or attached). THESE REFERENCES WILL NOT BE AVAILABLE IN THE EXAMINATION CENTER.

The following reference materials are not allowed in the examination center:

1. *Modern Refrigeration and Air Conditioning*, Althouse, Turnquist, Bracciano, 2000, Goodheart-Willcox, ISBN: 1566377242
2. *Code of Federal Regulations - 29 CFR Part 1926* Revised as of 2002 or later (OSHA), Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954, OR *Code of Federal Regulations - 29 CFR Part 1926 Selections* as of 2003 by PSI, (800) 733-9267, (See order form at the end of the Candidate Information Bulletin.)
3. *Industrial Refrigeration Handbook*, Wilbert F. Stoecker, 1998, McGraw-Hill, PO Box 182605, Columbus, OH 43218, ISBN: 0-07-061623-X

