

**License Information**

**Scope** – Tests a candidate’s knowledge of the design, installation, maintenance, repair, alteration, and extension of air conditioning, refrigeration, warm air heating, low and high pressure boilers, ventilation systems, duct systems, unfired pressure vessels, fuel transmission lines, and related appurtenances.

**Examination Outline****Open Book****100 Questions****Time limit: 3 hours and 50 minutes****70% Correct required to pass**

Exam Topic	%
HARV General	15
Heating - Low and High Pressure Boilers, Warm Air	15
HARV Controls	15
Ventilation	15
Fuel Gas Systems	12
Piping	8
Load Calculations/Psychrometric Analysis	8
HARV Maintenance	4
Insulation	4
Safety	4

**References**

The following references **are allowed** in the testing center.

1. *2007 Florida Building Code: Building Volume*, 2008, International Code Council (ICC), 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, www.iccsafe.org.
2. *2007 Florida Building Code: Fuel Gas Volume*, 2008, International Code Council (ICC), 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, www.iccsafe.org.
3. *2007 Florida Building Code: Mechanical Volume*, 2008, International Code Council (ICC), 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, www.iccsafe.org.
4. *Code of Federal Regulations, Title 29, Part 1926* (OSHA), Revision July 1, 2008, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954, www.access.gpo.gov.

5. *ACCA Duct Slide Rule*, Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206, www.acca.org.
6. *Fibrous Glass Duct Construction Standards*, Fifth Edition, 2002, North American Insulation Manufacturers Association (NAIMA), 44 Canal Center Plaza, Suite 310, Alexandria, VA 22314, www.naima.org.
7. *High Pressure Boilers*, Third Edition, 2003, American Technical Publishers (ATP), 1155 West 175th Street, Homewood, IL 60430-4600, www.go2atp.com.
8. *Low Pressure Boilers*, Third Edition, 2008, American Technical Publishers (ATP), 1155 West 175th Street, Homewood, IL 60430-4600, www.go2atp.com.
9. *Manual N – Commercial Load Calculation*, Fifth Edition, 2008, Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206, www.acca.org.
10. *Modern Refrigeration and Air Conditioning*, Eighteenth Edition, 2004, Goodheart-Willcox Company, Inc., 18604 West Creek Drive, Tinley Park, IL 60477-6243, www.g-w.com.
11. *NFPA 90A – Installation of Air Conditioning and Ventilating Systems*, 2002 Edition, National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101, www.nfpa.org.
12. *NFPA 96 – Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations*, 2008, National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101, www.nfpa.org.
13. *Pipefitters Handbook*, Third Edition, 1967, Industrial Press, Inc., 989 Avenue of the Americas, New York, NY 10018, www.industrialpress.com.

For information on how to obtain exam references, please call toll-free 877.624.2562.

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