

## License Information

**Scope** – Tests a candidate's knowledge of the design, installation, maintenance, repair, fabrication, alteration, and extension of air conditioning, refrigeration, piping vessels, warm air heating, low and high pressure boilers, ventilation systems, duct systems, insulation, and related appurtenances within a complete system unlimited in horsepower or tonnage.

## Examination Outline

### Open Book

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

Exam Topic	%
HARV General	20
Heating, Low and High Pressure Boiler	18
Ducts and Ventilation	15
HARV Controls	15
Piping	10
Fuel Gas Systems	8
HARV Load Calculations/Psychrometric Analysis	7
Insulation	4
Safety	3

## References

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

1. *2010 Florida Building Code: Building Volume*, 2010, International Code Council (ICC), 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, [www.iccsafe.org](http://www.iccsafe.org).
2. *2010 Florida Building Code: Fuel Gas Volume*, 2010, International Code Council (ICC), 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, [www.iccsafe.org](http://www.iccsafe.org).
3. *2010 Florida Building Code: Mechanical Volume*, 2010, International Code Council (ICC), 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, [www.iccsafe.org](http://www.iccsafe.org).
4. *Code of Federal Regulations, Title 29, Part 1926* (OSHA), Revised July 1, 2011. Superintendent of Documents, P.O. Box 979054, St. Louis, MO, 63197, (866)512-1800. For Online CFR: <http://bookstore.gpo.gov>.

5. *ACCA Duct Slide Rule*, Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206, [www.acca.org](http://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](http://www.naima.org).
7. *High Pressure Boilers*, Fourth Edition, 2009. American Technical Publishers (ATP), 1155 West 175<sup>th</sup> Street, Homewood, IL 60430-4600, [www.go2atp.com](http://www.go2atp.com).
8. *Low Pressure Boilers*, Third Edition, 2008. American Technical Publishers (ATP), 1155 West 175<sup>th</sup> Street, Homewood, IL 60430-4600, [www.go2atp.com](http://www.go2atp.com).
9. *Manual D – Residential Duct Systems*, 2009 Edition, Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206, [www.acca.org](http://www.acca.org).
10. *Manual J – Residential Load Calculation*, Eighth Edition, 2002, Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206, [www.acca.org](http://www.acca.org).
11. *Manual N – Commercial Load Calculation*, Fifth Edition, 2008, Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206, [www.acca.org](http://www.acca.org).
12. *Modern Refrigeration and Air Conditioning*, 18th Edition, 2004. Goodheart-Willcox Company, Inc., 18604 West Creek Drive, Tinley Park, IL 60477-6243, [www.g-w.com](http://www.g-w.com).
13. *Pipefitters Handbook*, Third Edition, 1967, Industrial Press, Inc., 989 Avenue of the Americas, New York, NY 10018, [www.industrialpress.com](http://www.industrialpress.com).

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

## Copyrighted Exam Questions

All test questions are the property of Prometric Inc. and are protected by copyright. Federal law provides severe civil and criminal penalties for the unauthorized reproduction, distribution, or exhibition of copyrighted materials.