

**License Information**

**Scope** – Tests a candidate's knowledge of the design, installation, maintenance, repair, fabrication, alteration, and extension of air conditioning, refrigeration, heating, ventilation, duct systems, piping vessels, insulation, and related appurtenances within a complete system, limited to 25 tons cooling and 500,000 BTU heating.

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

Exam Topic	%
HARV General	15
Air Conditioning and Refrigeration	15
Fuel Gas Systems	15
Ventilation and Sheet Metal	15
Controls	14
Piping	10
Load Calculations	8
Insulation	4
Safety	4

**References**

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

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

- ACCA Duct Slide Rule,* Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206, [www.acca.org](http://www.acca.org).
- 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).
- HVAC Duct Construction Standards – Metal and Flexible,* Third Edition, 2005, SMACNA – Sheet Metal and Air Conditioning Contractors National Association, 4201 Lafayette Center Drive, Chantilly, VA 20151, [www.smacna.org](http://www.smacna.org).
- 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).
- 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).
- 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.

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