

## 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 –4-1/2-hour time limit

75% Correct Required to Pass

SUBJECT AREA	PERCENTAGE
HARV GENERAL	20
HEATING-LOW AND HIGH PRESSURE BOILER	18
DUCTS/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. *ACCA Duct Slide Rule*, Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206, www.acca.org.
2. *Code of Federal Regulations, Title 29, Part 1926 (OSHA)*, 2003 Edition, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954, www.access.gpo.gov.
3. *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.
4. *Florida Building Code*, 2002/2003, Revised Second Edition, 2001, International Code Council (ICC), 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, www.iccsafe.org.
5. *Florida Building Code: Fuel Gas Volume*, 2002/2003, Revised Second Edition, 2001, International Code Council (ICC), 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, www.iccsafe.org.
6. *Florida Building Code: Mechanical Volume*, 2002/2003, Revised Second Edition, 2001, International Code Council (ICC), 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, www.iccsafe.org.
7. *High Pressure Boilers*, Third Edition, 2003, American Technical Publishers (ATP), 1155 West 175<sup>th</sup> Street, Homewood, IL 60430-4600, www.go2atp.com.
8. *Low Pressure Boilers*, 2001 Edition, American Technical Publishers (ATP), 1155 West 175<sup>th</sup> Street, Homewood, IL 60430-4600, www.go2atp.com.
9. *Manual D – Duct Design for Residential Winter and Summer Air Conditioning and Equipment Selection*, 1984 Edition, Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206, www.acca.org.
10. *Manual J – Load Calculation for Residential Winter and Summer Air Conditioning*, Seventh Edition, 1986, Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206, www.acca.org.
11. *Manual N – Commercial Load Calculation*, Fourth Edition, 1988, Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300, Arlington, VA 22206, www.acca.org.
12. *Modern Refrigeration and Air Conditioning*, Eighteenth Edition, 2004, Goodheart-Willcox Company, Inc., 18604 West Creek Drive, Tinley Park, IL 60477-6243, www.goodheartwillcox.com.
13. *Pipefitters Handbook*, Third Edition, 1967, Industrial Press, Inc., 200 Madison Avenue, New York, NY 10016, www.industrialpress.com.
14. *TRANE Air Conditioning Manual*, Revised Edition, 1996, TRANE Company, c/o Inland Marketing Services, 3030 Airport Road, La Crosse, WI 54603, www.trane.com/bookstore.
15. *TRANE Ductulator*, TRANE Company, c/o Inland Marketing Services, 3030 Airport Road, La Crosse, WI 54603, www.trane.com/bookstore.

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

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