

# ARIZONA REGISTRAR OF CONTRACTORS

## C-58 (CR-58) EVAPORATIVE COOLING AND VENTILATING (RESIDENTIAL/COMMERCIAL)

### SCOPE OF WORK

Installation, alteration, and repair of warm air heating systems, gas fired furnaces and space heaters, ventilation and evaporative cooling units, or any combination of these.

Systems may include the following areas of work and related equipment; duct work, air filtering devices, pneumatic or electrical controls, control piping, thermal and acoustical insulation, vibration insulation materials and devices, liquid fuel piping and tanks, water and gas piping from service connection to equipment it serves. Testing and balancing of air handling systems.

If necessary, a new circuit may be added to the existing service panel or sub-panel. Excluded is the installation of a new service panel or sub-panel. The trade test is considered equivalent for these classifications and upon passing the CBME and trade exam, either license classification may be applied for without further testing.

# of Questions	Minimum Passing Score	Time Allowed
60	70%	150 Minutes

### CONTENT OUTLINE

Subject Area	# of Items
Warm Air Heating	15
Ventilation	9
Controls and Motors	6
Sizing and Estimating	4
Piping and Tubing	8
Ducts and Insulation	8
Evaporative Cooling	5
Inspections and Testing	5

### REFERENCE LIST

To find reference materials, you may use the link provided or search for the material online via a search engine such as Google. You may also go to PSI's online store at [www.psionlinestore.com](http://www.psionlinestore.com).

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 base your answers on later editions of references as they become available. For Code questions, the examinations 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.

*The following reference material is allowed in the examination center:*

*Code of Federal Regulations - 29 CFR Part 1926 (OSHA), with latest available amendments, U.S. Government Printing Office, (866) 512-1800 or <https://www.osha.gov/laws-regs/regulations/standardnumber/1926>*

**OR**

*Code of Federal Regulations - 29 CFR Part 1926 Selections by PSI, with latest available amendments, 3210 E Tropicana, Las Vegas, NV 89121, (800) 733-9267, [www.psionlinestore.com](http://www.psionlinestore.com)*

*International Fuel Gas Code, 2009, International Code Council, (800) 786-4452, [www.iccsafe.org](http://www.iccsafe.org) Starting 1/1/2019 the 2018 code will be used*

*International Mechanical Code, 2009, International Code Council, (800) 786-4452, [www.iccsafe.org](http://www.iccsafe.org) Starting 1/1/2019 the 2018 code will be used*

*International Plumbing Code, 2009, International Code Council, (800) 786-4452, [www.iccsafe.org](http://www.iccsafe.org) Starting 1/1/2019 the 2018 code will be used*

*The following reference material is not allowed in the examination center:*

*ACCA Ductulator, Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300. Arlington, VA 22206, (703) 575-4477, [www.acca.org](http://www.acca.org)*

*ACCA Manual D, Air Conditioning Contractors of America, 2800 Shirlington Road, Suite 300. Arlington, VA 22206, (703) 575-4477, [www.acca.org](http://www.acca.org)*

*ACCA Manual J, HVAC Residential Load Calculation, 2800 Shirlington Road, Suite 300. Arlington, VA 22206, (703) 575-4477, [www.acca.org](http://www.acca.org)*

*Modern Refrigeration and Air Conditioning, Althouse, Turnquist, Bracciano, 19<sup>th</sup> or 20<sup>th</sup> edition, Goodheart-Willcox, [www.g-w.com](http://www.g-w.com)*

Candidates are responsible for bringing their own references to the examination center. Reference materials may be highlighted, underlined, annotated and/or indexed prior to the examination session. However, references may not be written in during the examination session. Any candidate caught writing, highlighting, underlining and/or indexing in the references during the examination will be reported to the Arizona Registrar of Contractors. Furthermore, candidates are not permitted to bring in any additional papers (loose or attached) with their approved references. References may be tabbed/indexed with permanent tabs only. (permanent tabs are defined as tabs that would tear the page if removed). Temporary tabs, (defined as Post-It notes, or other tabs that may be removed without tearing the page) are not allowed and must be removed from the reference before the exam will begin. If you are downloading from the Internet, you may bring this reference into the testing center with you as long as it is bound. You can have it spiral bound or you may hole-punch it and put it in a binder.