The qualification program for technicians has been established as a natural progression of NEBB’s original purpose. This qualification program is intended to enhance NEBB’s stature with owners and designers, while promoting the professional integrity of NEBB’s certified firms. It will also allow NEBB-certified TAB firms, which employ these technicians, to bid and perform on projects that specify the requirement for qualified technicians.

The following is a generalized listing of skills and/or responsibilities between of a technician:

- Implement and perform the work.
- Possess basic knowledge of report forms.
- Identify problems.
- Comply with common safety practices.
- Use instrumentation properly.
- Have a basic knowledge of controls.

Eligibility requirements for a technician are:

- A TAB certified firm, who is in good standing with NEBB, must currently employ the candidate. The candidate must demonstrate competency, reliability, cooperativeness, sound judgment, high ethical standards, and the ability to work independently in a safe, professional manner. The candidate must satisfy one of the following conditions:
  - Successful completion of the NEBB TAB Technician Home Study Course AND must also have at least two years employment with a minimum of 1,000 hours of documented TAB fieldwork experience each year within the last two years.
  - Four years employment with a minimum of 1,000 hours of documented TAB fieldwork experience each year within the last four years.
  - Provide documentation of having completed a program (other than the NEBB program), which is acceptable to NEBB on an individually approved basis. If a candidate has completed a program other than the NEBB previously approved programs, the candidate must include all relevant information concerning that program with his application.

You can obtain the appropriate forms from your local chapter. The application must be filed with the local NEBB chapter with the application fees and the appropriate forms and documentation. The chapter will review your application and if meets the requirements they will contact you with all the testing information you will need. They may also ask for more clarification.

There are both written and practical examinations for this program. The written examination portion will consist of three sections:

- Air systems – 1 hour (open book).
- Hydronic systems – 1 hour (open book).

The practical, or “hands-on,” examination may utilize test boards to simulate actual test and balance procedure, or it may consist of actual field installations. The two sections are:

- Air systems – 1-½ hours.
- Hydronic systems – 1-½ hours.

The closed book section of the examination packages will include “formula reference” sheets. Only a non-programmable calculator may be used throughout examination.

The administration of the examinations is flexible. The chapter may elect to administer all of the written sections simultaneously on one day and administer the practical hands-on sections on a different day. The chapter will arrange the location and assign “proctors” to give the exam. If you are an approved NEBB proctor, you cannot administer the test to your own employees or co-workers.

The Chapter will contact you after the test to let you know if you passed or failed. If you fail the exam, you will need to retake the section(s) you failed. Once you’ve passed a section you do not need to retake it. If you fail one or more sections of the examination, you must wait at least 90 days before you can retake the failed section(s). If you fail the first re-examination, you will have to obtain and successfully complete the NEBB Home Study Course for TAB Technicians with a passing grade of 70% or greater, or you will have to wait one year and re-apply.
If you pass, you will receive notification and a certificate from NEBB within 60 days after (but not at) the examination. You will be listed on NEBB’s database and will be considered a NEBB qualified technician provided you continue to maintain your qualification requirements.

Your Technician Qualification is maintained by:

- Continued employment with a certified firm and having a minimum of 1,000 hours of documented TAB fieldwork experience each year.
- Keeping dues current.

Your TAB supervisor will verify your continued employment with the firm, and document your TAB fieldwork at the time of your firm’s bi-annual re-certification.

If you fail to maintain your qualification for more than one year, but less than five years, you will be required to attend a six-hour re-qualification seminar approved by your local chapter.

If you fail to maintain your qualification for more than five years, you will be required to re-apply for qualification, including successfully completing the written and practical exams.

You can be disqualified if:

- You fail to maintain your status as a qualified technician in good standing with the local chapter.
- You falsify balance reports and/or data.
- You do not adhere to NEBB Procedural Standards.
- You exhibit willful disregard for safety and safe work practices.
- You fail to renew your qualification or fail to pay renewal fees.
- Your firm loses its NEBB certification.

The national fees for US firms are $100 to apply, $50 to transfer, and $25 annual maintenance. Non-US firms receive a 25% discount. Your local chapter will determine its own fees for testing and administration.

To pass the exam, you should be proficient in all of the following categories:

**Mathematics**
- Addition
- Subtraction
- Multiplication
- Square Root
- Cube Root
- Ratios
- Percentages
- Equations
- Decimals

**Fluid Flow**
- Pressure (static, velocity and total)
- Resistance (friction and dynamic loss)
- Velocity
- Density
- Quantity

**Heat Transfer**

**General System Knowledge**

**Air Distribution**
- Know the purpose of each component in an air system and how these components interact as related to system operating pressure.
- Know the effect of duct leakage on balancing.
- Know the function of the fan laws, system effect and V-belt drives
- Understand the function of the components in various types (constant volume, VAV, dual-duct, terminal reheat, etc) of air distribution systems.
Hydronic Systems
- Know the purpose of each component in a hydronic system.
- Know the effect on balancing of system resistance.
- Be able to apply Pump Laws, the effect on pumps when balancing, and pump curves.

Automatic Control Systems
Electrical Systems
Instrumentation
- Air Measuring Instruments
- Hydronic Measuring Instruments
- Rotation Measuring Instruments
- Temperature Measuring Instruments
- Electrical Measuring Instruments
- Computer – DDC Controls

Preliminary TAB Procedures
- Preliminary Procedures
- Air System Inspections
- Hydronic System Inspections

Specific Air & Hydronic Systems TAB Procedures
Other Considerations for Technician Qualification
- Working Safely
- Data Gathering
- Effective communication with the supervisor

The TAB Committee is also considering developing a hands-on training course that would be held at a location(s) around the US.

To apply for this program, please contact NEBB or your local Chapter.