Plumbing & Mechanical Inspector Certification

Personnel Certification as a Means to Protecting Public Health & Safety

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THE IAPMO GROUP
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- International Association of Plumbing & Mechanical Officials (IAPMO)
  - Code Development
  - Personnel Certification
  - International Symposiums
  - Education & Training
  - ANSI Accredited
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- IAPMO Research & Testing
  ~ Conformity Assessment Services
  ~ Standard Development
  ~ ISO 9000 QMS Registration
  ~ Witness Testing Program
  ~ ISO Guide 65 Compliant
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- IAPMO Testing & Services, LLC
  - NVLAP Accredited Laboratory
  - Toxicity Testing
  - Impact Analysis
  - Component Testing
  - Environmental Exposure & Corrosion Testing
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- IAPMO Evaluation Services
  ~ Building Product Conformity Assessment Program
  ~ Supporting NFPA 5000 Building Code
  ~ Pending ANSI Accreditation
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Turn-key Services for the Building Industry

International Personnel Certification Summit
The 21st Century Solution to Workforce Competitiveness
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ANSI Accredited Building Codes

- **Uniform Plumbing Code™**
  - IAPMO/ANSI UPC 1-2003

- **Uniform Mechanical Code™**
  - IAPMO/ANSI UMC 1-2003
C3 Codes are developed and maintained by the following organizations:

- THE IAPMO GROUP
- The National Fire Protection Association (NFPA)
- The Western Fire Chiefs Association (WFCA)
- The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
Why certify personnel?

- To measure & verify competency
- To verify specific qualifications against specific tasks
- To analyze an individual's periodic intellectual and vocational growth
- To permit institutional awareness of an individual's baseline capabilities
- To instill confidence in the individual
Why certify personnel to an international standard?

- globalization of domestic markets
- To achieve a globally acceptable minimum standard for professional qualification
- To establish an acceptable benchmark by which personal capabilities can be measured
- To provide for a transparent, global certification scheme permitting career transfer
What does 17024 mean to THE IAPMO GROUP?

- A competence standard defining minimum requirements for organizations operating personnel certification programs
- 17024 provides a mechanism by which a certification body can develop & maintain a scheme of personnel qualification with ongoing validation
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What does 17024 mean to THE IAPMO GROUP?

- 17024 also permits THE IAPMO GROUP to re-assess the qualifications of the certified individuals against ever changing benchmarks.
- Enables THE IAPMO GROUP to verify an individuals knowledge & skills as demonstrated by the individuals personal attributes, as provided for in the scheme.
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- **Characteristics of Personnel Certification:**
  - Develop & administer an examination using objective criteria to verify competency using written, oral, practical and observational means.
  - Certification bodies operating personnel certification schemes do so in a consistent, comparable & reliable manner.
Characteristics of Personnel Certification:

- Provides confidentiality that is defined & incorporated as an essential part of the Personnel Certification Standard.
- That a management system is necessary in order to fulfill the basic elements of the 17024 standard.
- The scheme’s characteristics are general in nature thereby providing a minimum standard.
Why does all this matter?

- Today, THE IAPMO GROUP does business in Countries that are home to 80% of the world’s inhabitants
- Plumbing & Mechanical Inspectors are primarily responsible for Code enforcement
- Codes & Standards form the foundation for public health & safety
- Protection of the environment
Personnel Certification as a Means to Protecting Public Health & Safety

Option 1
- Internal program development & administration
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**Personnel Certification as a Means to Protecting Public Health & Safety**

**Option 2**

- Internal program development with external administration
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Option 3

- External program development & administration
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17024 Program Analysis --

- Considered resources required to provide market access by 1 January 2003
  - Financial
  - Time
  - Expertise
  - Personnel
17024 Program Analysis --

- Evaluated competition to determine program capabilities & service levels
  - Analyze market need
  - Determine program acceptance
  - Predict continued need & acceptance of personnel certification program
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17024 Program Analysis --

- Analyzed current IAPMO GROUP Inspector Certification Program to determine suitability
  - Is there value in using 17024 as the basis for future program development / administration
  - Is the market saturated
  - Will 17024 open markets that would otherwise be unavailable to THE IAPMO GROUP
1 October 2002 -- THE IAPMO GROUP selects:

**Option 2**

- **Internal program development with external administration**

- Signed agreement with the *National Inspection, Testing, Certification (ITC) Corporation*
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Why select National ITC Corporation?
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- National ITC Corp provides significant value --
  - Plumbing & Mechanical industry experience & expertise
  - Location -- close to IAPMO GROUP WHQ
  - Commitment to ANSI program compliance
  - Involved with ANSI pilot program
  - Personal relationship with National ITC Corp senior staff
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- National ITC Corp provides significant value --
  - Enjoys a reputation of high integrity, creditability & superior customer service
  - Ability to meet 1 January 2003 implementation date
  - Obtained ISO 9001 QMS registration
  - Shares THE IAPMO GROUP’s commitment to protecting public health & safety
National ITC Corp provides significant value --

And finally, our decision was sealed upon learning that National ITC Corp shares THE IAPMO GROUP’s vision of doing business in international markets.
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- **IAPMO GROUP** International offices/representatives
  - Beijing, China
  - Buenos Aires, Argentina
  - Suva, Fiji
  - Brussels, Belgium
  - Jakarta, Indonesia
  - Toronto, Canada

**IAPMO GROUP World Headquarters**
Ontario, California
United States of America
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International Code Adoptions / References

- Samoa
- China
- Colombia
- St Croix, USVI
- Indonesia
- Israel
- Guam
- Philippines

- Saipan
- St Thomas, USVI
- Saudi Arabia
- St Johns, USVI
- Taiwan
- South Pacific Islands
- Venezuela
- Vietnam
A Case In Point

- **November 2002**
  - An unknown virus affects humanity
  - SARS or “Severe Acute Respiratory Syndrome”

- **March 2003**
  - Index patient infects relatives while visiting their Flat at the Amoy Garden Apartments, HK, SAR
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A Case In Point

- **April 2003**
  - Care givers at the Prince of Wales Hospital in HK, SAR, are infected by the index patient and his relatives

- **May 2003**
  - The World Health Organization initiates an analysis of the Amoy Gardens SARS outbreak
A Case In Point

- **June 2003**
  - WHO convenes first meeting of public health experts to determine severity of the SARS outbreak and recommendations on preventing further spread

- **August 2003**
  - World Plumbing Council invited to participate in an Informal Consultation involving 11 experts
September 2003

- WHO releases document entitled “Inadequate Plumbing Systems likely contributed to SARS transmission”
- “It (inadequate plumbing) also contributes to the spread of a number of other infectious diseases in several other countries.”
A Case In Point

- January 2004
  - WHO releases a *Consensus Statement from the September 2003 Informal Consultation*
  - The Statement identifies areas where further study is required before conclusive results can be identified
  - Plumbing industry to play a crucial role
A Case In Point

- At the time of the Consultation (Sep`03), the global SARS epidemic was estimated to have:
  - Resulted in 8097 cases of clinical illness
  - Resulted in 774 deaths
  - In 27 countries
  - On six continents
WHO Conclusions:

- Health-based regulations should be enforced by inspectors that are properly trained and certified.
- Certification schemes linked to health-based regulations & standards, ... contribute to controlling associated risks.
- Inadequate devices may have also contributed
A Case In Point

- **WHO Conclusions:**
  - Responsibility for building safety should be the responsibility of professional groups ... secured through licensing (certification) schemes linked to updating knowledge of good practice.
  - All of the above depend upon ... a suitable regulatory framework and a commitment to enforce the health based regulations.
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