Life safety Security

UL EN ISO standard

Foring.WU

Knowing the Codes and Standards

Timeline: 1990 | 1996 | 2002 | 2003 | 2008 | 2018 | 2019

1990 — Clery Act

Federal statute codified at 20 U.S.C. § 1092(f), with implementing regulations in the U.S. Code of Federal Regulations at 34 C.F.R 668.46.

1996 — Terrorist's act - Khobar Towers Housing Complex, Dhahran, Saudi Arabia

2X Beirut in 1983

80 X larger than any previous bomb in Saudi Arabia

2002 — UFC 04-010-01

DoD Minimum Antiterrorism Standards for Buildings

Annex B: Initial requirements for Mass Notification

2003 — The Air Force petitioned NFPA to develop MNS standards

The military found that they could **not** use **approved fire alarm** systems for Mass Notification while remaining in full compliance with NFPA 72

2008 — UL 2572

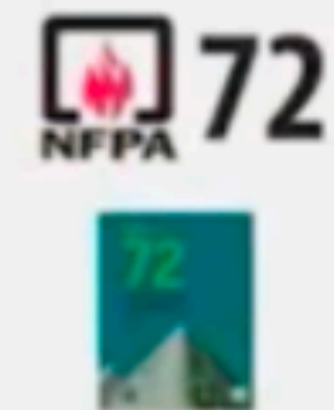CONTROL AND COMMUNICATION UNITS FOR MASS NOTIFICATION SYSTEMS

NEW Standards by UL. For systems to comply and provide **MNEC with HIGHEST PRIORITY**

2018 — 2018 IBC and NFPA 101

Risk Analysis for Mass Notification Systems

2019 — Chapter 24

Emergency Communications System (ECS)

Chapter 7: Documentation

Chapter 10: Fundamentals Reorganized

The Clery Act also requires schools to **send timely warnings to the school community** when there are known risks to public safety on campus.

3 Year assessment due every October

Supplemental

NFPA 1600 | NFPA 1616 | NFPA 1620 | National Incident Management System

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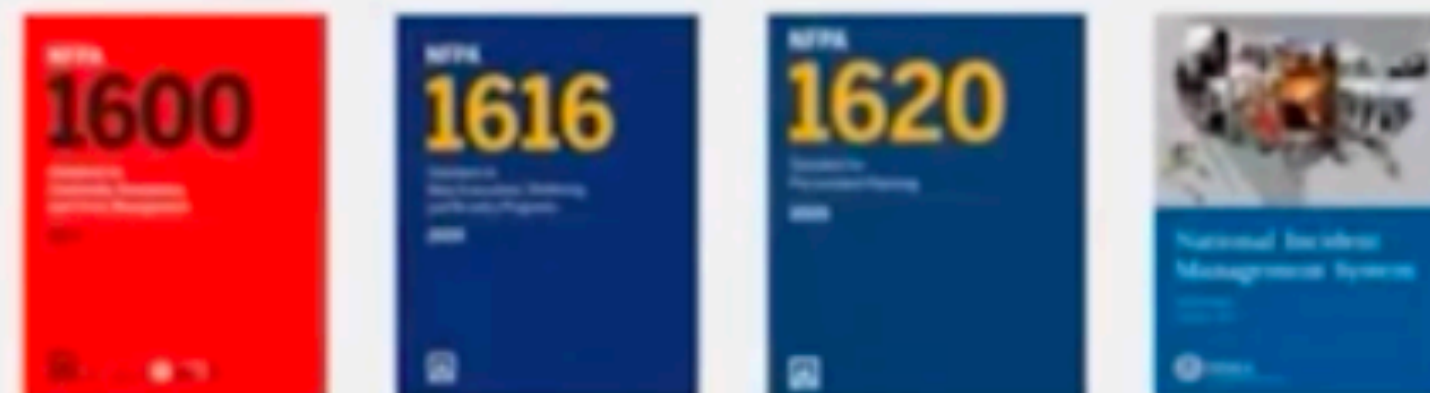
Mass Notification Systems.

Education requires a Risk Analysis for Mass Notification Systems is significant component of a IMS & ERP...

Chapter 24: ECS added use of Microphones and Textual Appliances

INTERTEK'S LIFE SAFETY & SECURITY SERVICE SOLUTIONS

intertek
Total Quality. Assured.

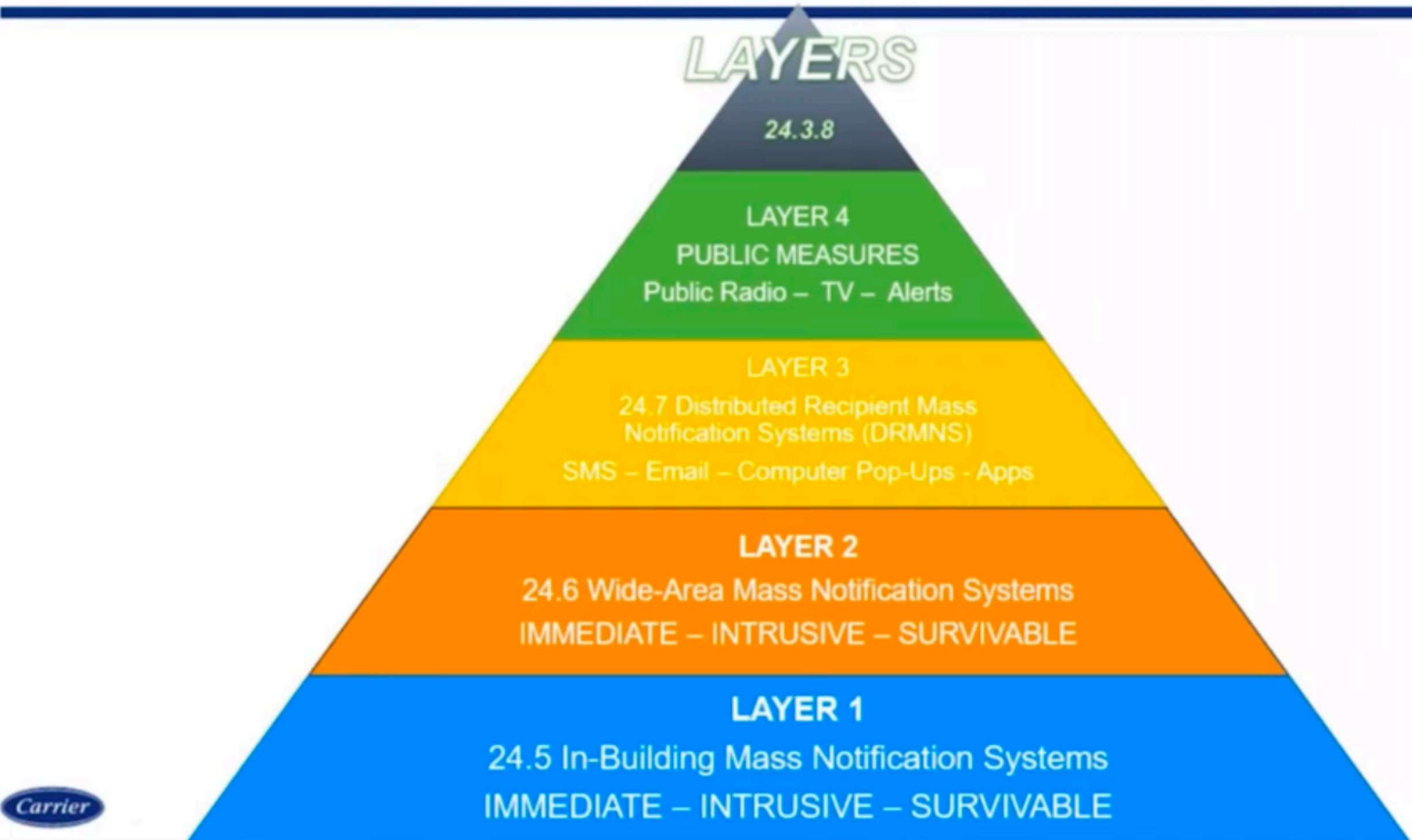The Life Safety & Security industry plays a critical role in safeguarding individuals and organizations, and its products and services are essential for maintaining public safety and protecting valuable assets. Partner with Intertek to navigate regulatory complexities from compliance testing to global market access and bring trusted, secure solutions to the market.

ASSURANCE CONSULTING
Consulting services and bespoke solutions designed to assist manufacturers in navigating complex regulatory landscapes, identifying compliance gaps, optimizing product performance, adhering to global safety standards, and achieving product excellence.

SATELLITE™: CLIENT TEST PROGRAM
The SATELLITE™ program empowers manufacturers to conduct product testing in their own facilities while Intertek provides on-going oversight and guides quality assurance. SATELLITE enables flexible testing solutions for manufacturers seeking to expedite the certification process and reduce time-to-market for their life safety and security products.

PERFORMANCE/RESEARCH
Specialized facilities, advanced capabilities, and unparalleled expertise support cutting-edge performance testing and research for the life safety and security industry. Intertek ensures that manufacturers' products meet stringent performance standards, delivering the essential data required to maintain compliance and drive innovation.

CYBERSECURITY SERVICES
Customized cybersecurity evaluations to ensure products, including IoT-enabled alarms and monitoring systems, are secure and protected against vulnerabilities. Through penetration testing, risk assessments, and compliance checks, Intertek helps manufacturers minimize cyber risks and maintain the integrity of their life safety and security products and systems.

PRELIMINARY DESIGN REVIEW
Preliminary design reviews assist manufacturers in streamlining the product development process by identifying potential design challenges early, reducing costs, and accelerating time-to-market. Intertek enhances design reviews to ensure optimal functionality, compliance, and reliability.

EMC, RED, FCC, ISED TESTING
Electromagnetic Compatibility (EMC) testing is crucial to ensure that life safety and security products and systems function reliably as intended, without interference from or causing disruption in electrically noisy environments. This testing guarantees that devices perform consistently and without interruption under various environmental conditions, ensuring the protection of lives and property.

CERTIFICATIONS
Solutions providing manufacturers with a reliable pathway to demonstrate product compliance with safety standards and regulatory requirements. Certifications are essential for gaining market acceptance, building consumer trust, and helping products stand out in competitive markets.

SAFETY TESTING
Comprehensive safety testing for life safety and security products in the US, Canada, EU, UK, UAE, and beyond. We assist manufacturers in achieving compliance with diverse regulatory frameworks, facilitating seamless market entry worldwide.

NFPA 72 Layers defined

LAYERS

24.3.8

LAYER 4
PUBLIC MEASURES
Public Radio – TV – Alerts

LAYER 3
24.7 Distributed Recipient Mass Notification Systems (DRMNS)
SMS – Email – Computer Pop-Ups - Apps

LAYER 2
24.6 Wide-Area Mass Notification Systems
IMMEDIATE – INTRUSIVE – SURVIVABLE

LAYER 1
24.5 In-Building Mass Notification Systems
IMMEDIATE – INTRUSIVE – SURVIVABLE

Carrier

COVERAGE
Channel partners ready to support no matter the location of your job.

TRANSPARENCY
To eliminate surprised, we outline everything in a Strategic Letter of Understanding as our personal pledge to you.

DEPLOYMENT
Highly skilled Strategic Partners exclusively trained to keep fire safety systems performing at its best

COORDINATION
Experience and resources available for customers to make sure every project goes according to plan

TOTAL COST OF OWNERSHIP
Edwards makes it easy to understand costs now and, in the future, taking the guesswork out of budgeting

Life & Security Standard

With testing expertise across a wide range of Life Safety and Security products and technologies, Intertek tests to both national and international standards and can help extend your brand's reach and recognition around the world. Our scope of testing capabilities includes, but is not limited to, the following LSS standards widely recognized and implemented across various industries and sectors:

1-Fire Safety Standards
2-Fire Protection and Suppression
3-Security Standards
4-Emergency Preparedness and Communications Standards
5-Occupational Safety Standards
6-Electrical Safety Standards

EN-European standard
EN 54-5: Fire Detection and Fire Alarm Systems - Part 5: Heat Detectors - Point Heat Detectors
EN 54-7: Fire Detection and Fire Alarm Systems - Part 7: Smoke Detectors - Point Smoke Detectors using Scattered Light, Transmitted Light or Ionization
EN 54-10: Fire Detection and Fire Alarm Systems - Part 10: Flame Detectors - Point Detectors
EN 149: Respiratory Protective Devices - Filtering Half Masks to Protect against Particles
EN 14604: Smoke Alarm Devices
EN 50133: Alarm Systems - Access Control Systems for Use in Security Applications
EN 50291: Gas Detectors - Electrical Apparatus for the Detection of Carbon Monoxide in Domestic Premises Test Methods and Performance Requirements
EN 60079-29-1: Explosive Atmospheres - Part 29-1: Gas Detectors - Performance Requirements of Detectors for Flammable Gases

NFPA-National Fire Protection Association

NFPA 72: National Fire Alarm and Signaling Code
NFPA 1981: Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services
NFPA 1983: Standard on Life Safety Rope and Equipment for Emergency Services
NFPA 1984: Standard on Respirators for Wildland Fire Fighting Operations
NFPA 1986: Standard on Respiratory Protection Equipment for Tactical and Technical Operations
NFPA 1987: Standard on Combination Unit Respirator Systems for Tactical and Technical Operations
NFPA 2500: Standard for Operations and Training for Technical Search and Rescue Incidents and Life Safety Report and Equipment for Emergency Service

UL-Underwriters laborations

UL 217: Single and Multiple Station Smoke Alarms (Residential)
UL 268: Smoke Detectors and Fire Alarm Systems (Commercial)
UL 294: Standard for Access Control System Units
UL 521: Heat Detectors for Fire Protective Signaling Systems
UL 681: Installation and Classification of Burglar and Holdup-Alarm Systems
UL 827: Standard for Central Station Alarm Services
UL 1023: Household Burglar-Alarm System Units
UL 1076: Proprietary Burglar-Alarm Units and Systems
UL 1641: Installation and Classification of Residential Burglar-Alarm Systems
UL 1981: Central Station Automation Systems
UL 2034: Single and Multiple Station Carbon Monoxide Alarms
UL 2050: National Industrial Security Systems for the Protection of Classified Materials
UL 2075: Gas and Vapor Detectors and Sensors
UL 2524: In-Building 2-Way Emergency Radio Communication Enhancement Systems (ERCES)
UL 2524A: In-Building Auxiliary Radio Communication Systems (for NYC)
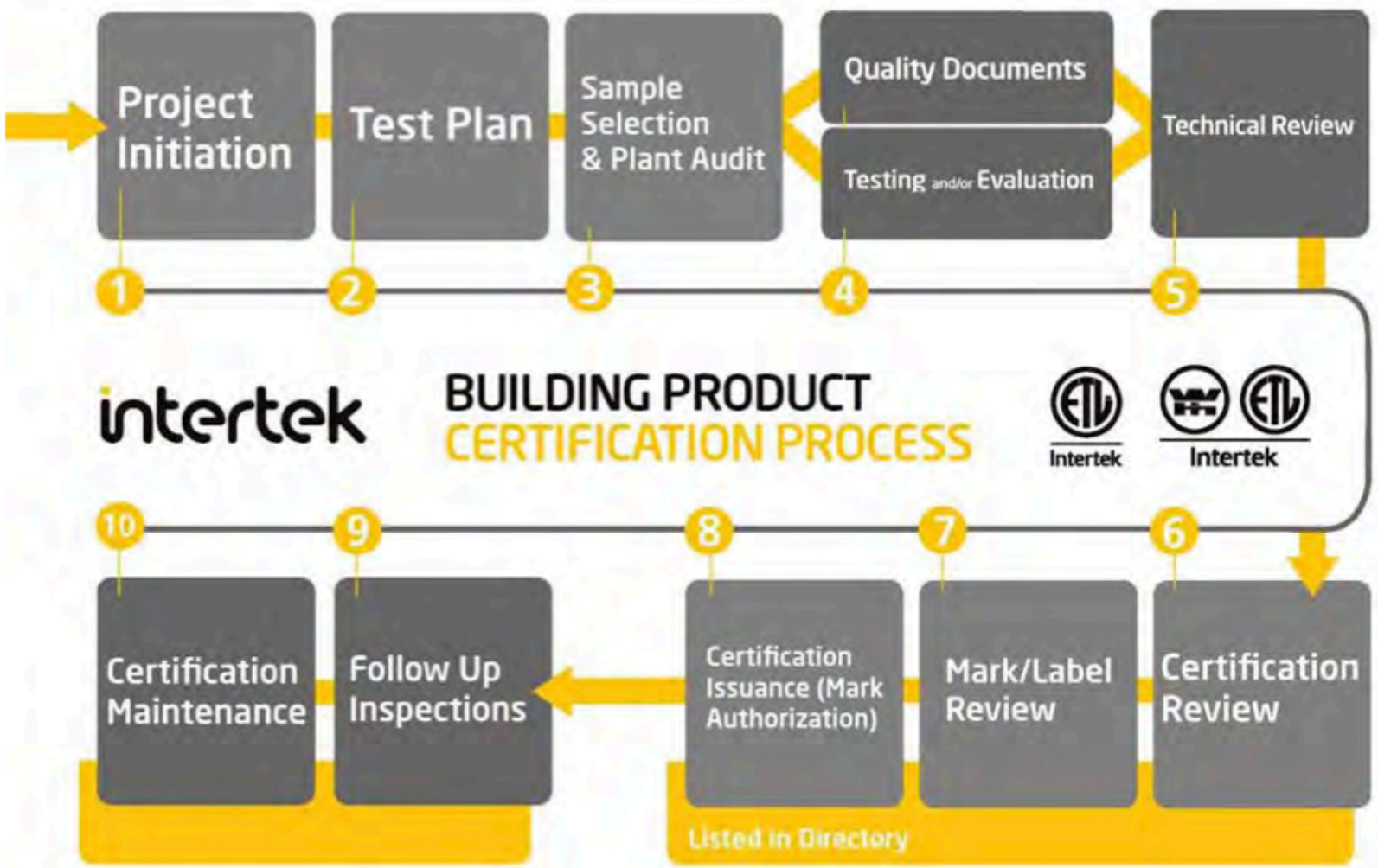UL 2525: Two-Way Emergency Communication Systems for Rescue Assistance

DIRECTORIES OF LISTED PRODUCTS

Intertek ETL - bit.ly/ETLdlp

WH - bit.ly/WHdlp

UL - bit.ly/ULdlp

ICC-ES - bit.ly/ICCESdlp

IAPMO - bit.ly/IAPMOdlp

CSA - bit.ly/CSAdlp

FIELD SERVICES

Intertek

Web: Intertek.com/field-labeling

Field Labeling: 888.385.6275

Directory Help: 888.347.5478

COMMON INDUSTRY CERTIFICATION MARKS

The above is a sample of popular certification marks used within the building products market. The various organizations represented each have different scopes of accreditation and play different roles in the testing and certification process.

BUILDING PRODUCT CERTIFICATION PROCESS
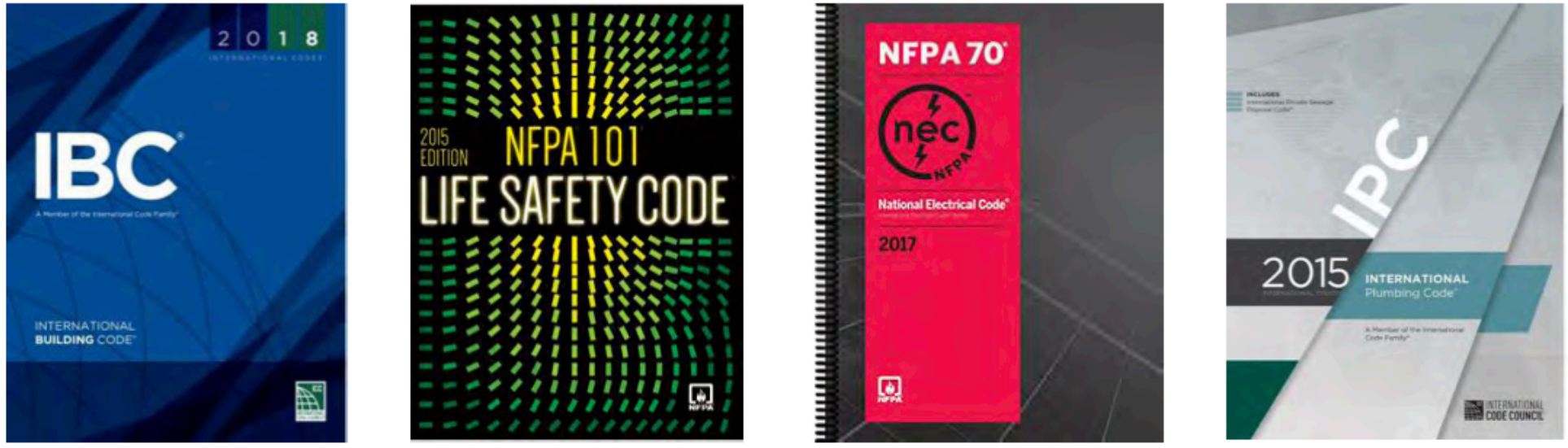

ACCREDITING BODIES

• ANSI – ANSI.org

• A2LA – A2LA.org

• CALA – CALA.ca

• IAS – IASonline.org

• NVLAP – NIST.gov

• OSHA – OSHA.gov

• SCC – SCC.ca

BUILDING PRODUCT CERTIFICATION MARKS

The below marks are a representation of common certification used on building products. While this is not a complete list, it represents the vast majority of certification marks used. NOTE: there are different variations of the marks below and a more comprehensive representation of each organization's marks can be found on their website.

Intertek	UL	FM Global	ICC-ES	IAPMO	Canadian Standards Association (CSA)
Marks: Warnock Hersey & ETL	*Marks:* UL	*Marks:* FM Approved	*Marks:* ICC-ES	*Marks:* Variety of marks	*Marks:* CSA
Intertek.com	UL.com	FMGlobal.com	ICC-ES.org	IAPMO.org	CSAgroup.org
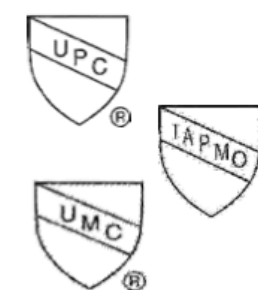
PRODUCT LABELING

A building official presented with a listing or with a product bearing the mark of the listing agency still needs to connect the listing with the code requirements. In many cases, the code will have requirements for the product or installation requirements that go beyond what the listing covers.

The below is Intertek's Directory of Building Products and represents how a certification agency's product directory would look and function like. Typically product directories provide a number of ways for the user to find the product of interest.

BPDLP.intertek.com

Ability to search and view research reports

Search ability via key words

Can find a listing through the company name, category listing, CSI code, or the standard.

Labeling for proper identification of listed products shall include the following:

1) Company Name
2) Product Name
3) Certification Mark (with applicable country identifiers)
4) Certification Number
5) Words "Certified To" and applicable test standards
6) Product rating and/or classification as specified in listing report (when applicable)

The approved Certification Mark for products that have a valid Listing Report has been shown below along with the other required information.

If Listed to US standards, then only the US identifier is used and vice versa for CDN standards; if both, then use C + US identifiers

W/N number is assigned by Certification Department after Artwork is approved

COMPANY NAME
PRODUCT NAME

CERTIFIED TO:
CAN/ULC S114
ASTM E136
ASTM E84
Flame Spread 0 Smoke Developed 0

W/N #####

Refer to Intertek's Directory of Listed Products for detailed information.

The test standards must proceed after "CERTIFIED TO" and only include test standards that are included in the valid Listing Report. If a rating is applicable, it can be shown following the test standard.

ESL

SEI
SAFETY EQUIPMENT INSTITUTE
An Affiliate of ASTM INTERNATIONAL

NIST
NATIONAL VOLUNTARY LABORATORY ACCREDITATION PROGRAM (NVLAP)

CE mark
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English
(133.37 KB - ZIP)
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UKCA
UKCA

FCC制裁
FCC

EDGE
in edge
engineering development global expertise

ETL list
intertek
Total Quality. Assured.
Intertek Directory of Listed Products Search

ETL standard

i2I SAI
intertek
inform

Standards Update Notices (SUN)

BSI check
bsi.

Tick-Mark
Tick Mark (LSS Products)
To search by Certificate Number   Search by Number   Independently tested ✓ Intertek
To search by Client Name   Search by Client Name