

A woman in a beige trench coat is walking through a turnstile in a modern building. She is holding a smartphone in her right hand and looking towards the camera. In the background, other people are walking, and a staircase is visible. The scene is dimly lit, suggesting an indoor environment at night or in low light.

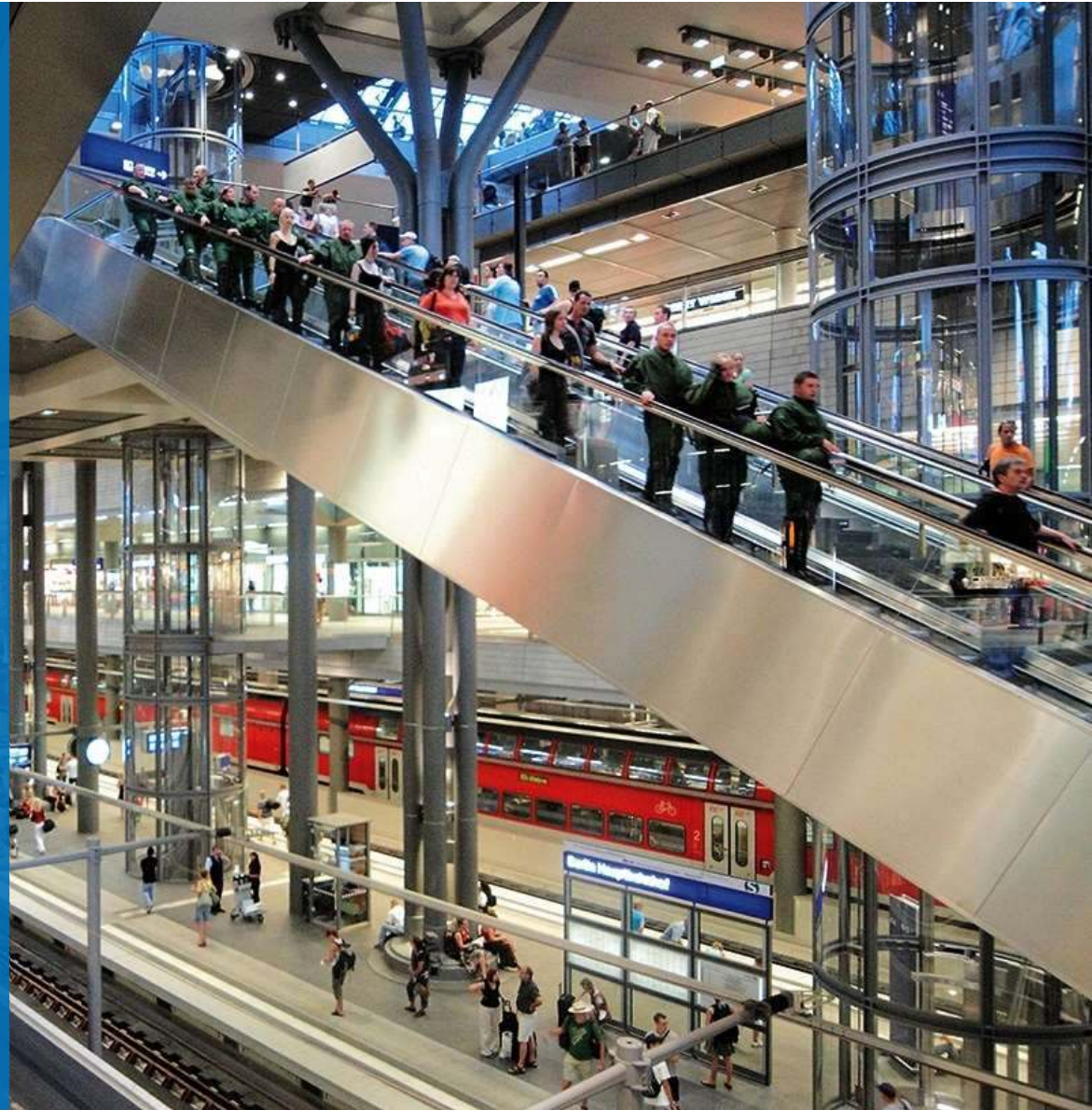
Elevators, Escalators & Building Management Moving People Together



Introductions

AGENDA

- Introductions
- Safety Message
- Servicing Elevators
 - Maintenance Control Programs
 - Types of Elevators & Testing
 - Inspections
 - Service Requests, Shutdowns, & Entrapments
 - Types of Maintenance
 - Service Delivery
 - Automated Communication
 - New Technologies
 - Code Updates
- Q&A



Safety Message

Elevator Entrapments

Elevator Entrapments



KONE

How should I react
when someone is
trapped in an
elevator?





Elevator Entrapments

RECOMMENDATIONS



If you are able to communicate with the trapped passengers you should first determine if there is a medical emergency occurring.

Call Your Elevator Service Provider's 24.7 monitoring service and/or 911 immediately

Additional points to remember:

- Tell them to remain calm, help is on the way

- Advise them to stay in the car, do not attempt to pry open the doors or exit the car

- Assure them there is an adequate air supply

Having established procedures to follow will reduce entrapment time and limit additional risk.



Elevator Entrapments

THINGS TO AVOID



Never try to remove a trapped passenger from an elevator

Only a licensed and certified elevator technician or trained emergency personnel (such as a fire fighter) should remove trapped passengers

Do not attempt to reset the elevator

By cycling power to the elevator you place employees in a potentially dangerous situation by handling 3-phase power

You also lose the "fault log" within the memory of the elevator controller that could help diagnose the problem which can help an elevator technician avoid similar faults in the future

Improper responses to entrapments can result in severe injury or death.



In Review

THINGS TO REMEMBER



Call Elevator Service Provider and/or 911 immediately.

If you can speak with the entrapped passenger remind them to keep calm, that they have plenty of fresh air and that help is on the way

Never try to remove the entrapped passenger yourself

Have a written plan for your employees to follow in the event of an elevator entrapment

Knowing how to react during an elevator entrapment will reduce entrapment time and help prevent passenger injuries.





Servicing Elevators

MAINTENANCE CONTROL PROGRAMS

Service & Code Compliance

- Elevators & Escalators follow **ASME 17.1, 17.2 & 17.3**
- General Requirements – MCP in place (Maintenance Control Program with your service provider)
- A MCP is defined as a Maintenance program that satisfies the needs of the elevator's maintenance requirements
- Having a Maintenance Control Program is the responsibility of the owner of the elevator, or owner's representation (Property Management Or Chief Engineer)

Terminology

- “Maintenance” - Regular Intervals of pro-actively servicing and maintaining elevator equipment.
- “Service Request” “Callback” or “Callout” – A call placed by a customer or a building owner when an elevator requires service or is experiencing a shutdown.
- “Entrapment” – When an elevator unexpectedly shuts down with riders entrapped in the elevator.
- “Safety Testing” – A Safety Test which is performed annually on your elevator Equipment
- “Inspection” – an Inspection performed by a 3rd party inspector, not your elevator company.

The background of the slide is a dark blue gradient with abstract, glowing lines in shades of cyan and magenta. These lines form various shapes, including wavy patterns, straight lines, and some that resemble data charts or signal waveforms. The overall aesthetic is high-tech and futuristic.

Types of Vertical Transportation Equipment

& SAFETY TESTING BREAKDOWN

General Equipment Requirements and Safety Testing Overview

- All elevators require annual safety testing.
 - Hydraulic elevator and Traction elevators have different requirements
- All Escalators will require Annual Safety Testing
- All Elevators outfitted with Fire Service Phase 1 & 2 will require monthly testing and logging. Anybody can test this, not just Elevator Technicians
- General rule of thumb: Annual Safety Testing is always required

Hydraulic Elevator Overview

General Recommendations

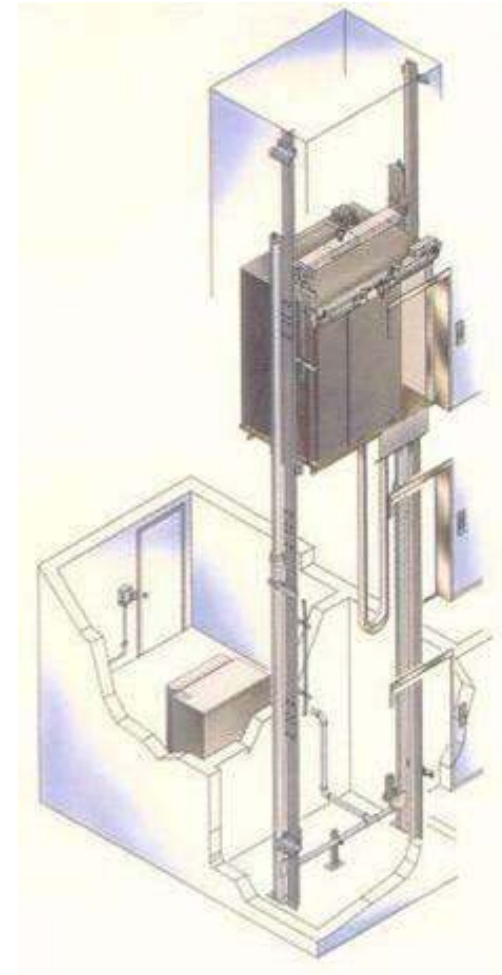
- Application: 2-4 landings
- Travel distances (up to 20'-0")
- Capacities 2000lb to 5000lb
- Speed (80,100,125 FPM)
- Meets minimum ADA compliance

General Applications

- Schools
- Churches
- Parking Garages
- Residential & commercial

❖ **CATEGORY 1 TESTS - PERFORMED ANNUALLY**

❖ **Pressure Test**



Traction Elevator Overview

General Recommendations

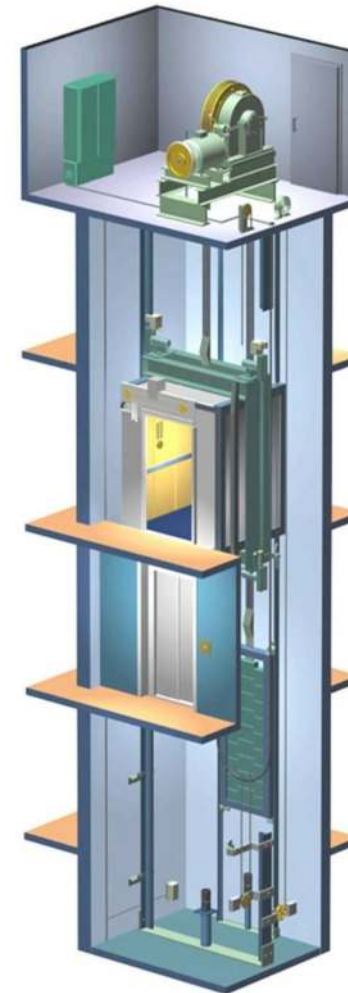
- Application: 2 to 130 landings
- Speeds (150 - 1600 FPM)
- Capacities: 2500 – 8000lbs

General Applications

- Commercial
- Residential
- Hospital

❖ **CATEGORY 1 TESTS - PERFORMED ANNUALLY**

❖ **CATEGORY 5 TESTS - PERFORMED EVERY 5 YEARS**



Machine-Roomless Elevators (Traction)

General Recommendations

- Application: 2 to 25 landings
- Speeds (150 - 500 FPM)
- Capacities: 2500 – 8000lbs
- Benefits
- No machine room
- All elevator technology within the confines of the hoistway

❖ **CATEGORY 1 TESTS - PERFORMED ANNUALLY**

❖ **CATEGORY 5 - PERFORMED EVERY 5 YEARS**



Inspections

The background is a dark blue gradient with a starry, cosmic texture. It features several glowing, neon-like lines in shades of cyan and magenta. These lines form various shapes, including wavy curves, straight paths, and a series of vertical bars that resemble a bar chart or data visualization. The overall aesthetic is futuristic and technological.

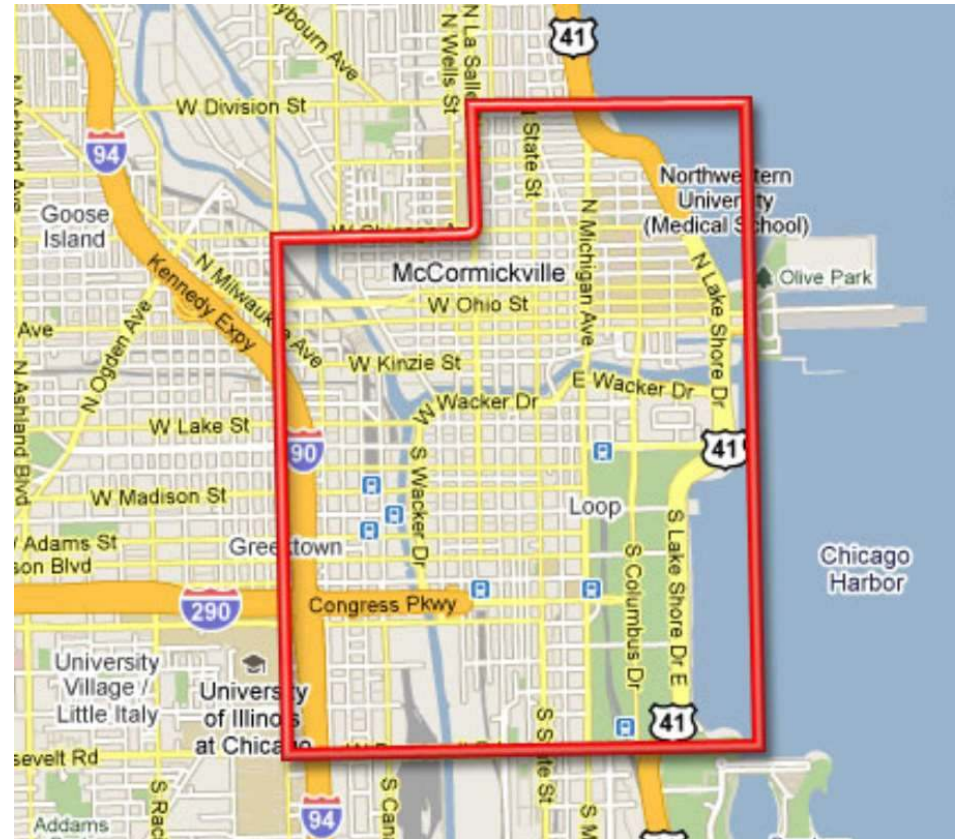
AIC vs Non-AIC

AIC

OWNERSHIP or Property Management will reach out to QEI inspection companies. AIC Inspector provides invoice

NON-AIC

CITY will reach out to you, set up a date, perform inspection. An Inspector will be assigned to your building per location.



AIC – Accelerated Inspectors Certification
A.S.M.E – American Society of Mechanical Engineers



Annual Inspection AIC & Non AIC

Step By Step

Step 1

Ensure your conveyance is being serviced by licensed company and tests are up to date.

Step 2 - (NON AIC)

City of Chicago
City of Chicago
Inspectors to perform
annual inspection

Step 2 – (AIC)

Ownership to contract
with 3rd party
inspection company to
perform annual
inspection.

Step 3

Address violations &
schedule re-inspection

Step 4

Obtain your certification,
post it in the elevator,
and make sure testing
forms are left onsite.

Types of Maintenance & Service



Predictive vs Preventative maintenance

Traditional preventative maintenance is performed:

During scheduled visits

When faults occur

Predictive maintenance provides:

Insights on how your building is being used

24/7 remote diagnosis enables earlier detection of issues

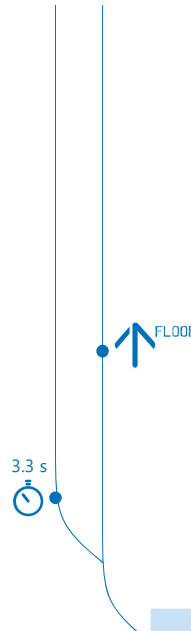
Automatic reporting and detection of most common faults

Additional preventive checks during scheduled visits based on data analysis

Additional troubleshooting visits in urgent cases to prevent breakdowns

Traditional maintenance

- Early detection of symptoms rarely reported by users
- Customer saves reporting time
- Fixing issues early avoids downtime and more costly repairs
- Improved user experience and availability



The background is a dark blue gradient with abstract, glowing lines in shades of cyan and magenta. These lines form various shapes, including wavy curves, straight paths, and some that resemble bar charts or data points, creating a sense of motion and technology.

Service Delivery

KEY PERFORMANCE INDEX MEASURING



Measurable Performance Standards and KPIs

Callout Rate:

- **Definition:** Number of service requests per elevator/year.
- **Metric:** Industry average for class A office building is 4 calls/elevator/year.

Meantime Between Calls:

- **Definition:** Duration between service requests.
- **Metric:** 90 days

Equipment Availability:

- **Definition:** % of uptime/runtime for your elevators/escalators.
- **Metric:** 98%

Response Times:

- **Definition:** duration for technician to arrive when a service request is placed.
- **Metric:** 4 hours during regular working hours for non emergency calls. 1 hour for entrapments.



Money Saving Tips & Typical Budgeting Tips

Overtime Callouts, Callbacks, or Service Requests

- Understand your contracts, Overtime calls are either Covered, not covered, or partially covered. If you do not have Overtime Calls Covered and can wait until regular time hours, you may avoid paying for overtime charges.
- **Tip:** Call the service request in for the next working day if you do not need the request addressed immediately.

Vandalism, mis-use, uncontrollable

- **Check with your insurance company**, make sure you have coverage for uncontrollable shutdowns which will not be covered by your elevator company. This includes Vandalism, Building Fire, Water Damage, Earthquake, Electrical malfunctions, overloading.. Etc.
- **Tip:** Sit down with your contractor and review non-covered shutdowns

Monthly Fire Service Testing

- **Monthly Fire Service Testing** can be performed by anybody, and takes less than 5 minutes per elevator. On Smaller buildings, we encourage educating Facilities and Engineering on how to follow perform. Larger buildings with full time technicians may be better to have a technician perform.
- **Tip:** Have your elevator company instruct building engineering on how to perform this task.

Asset management Planning or Capital Planning

- **Set up Annual Asset Management Planning or Capital Planning** with your Elevator Contractor. This should be performed annually, and can help with budgeting, out of pockets, upcoming code updates, and any unplanned work.

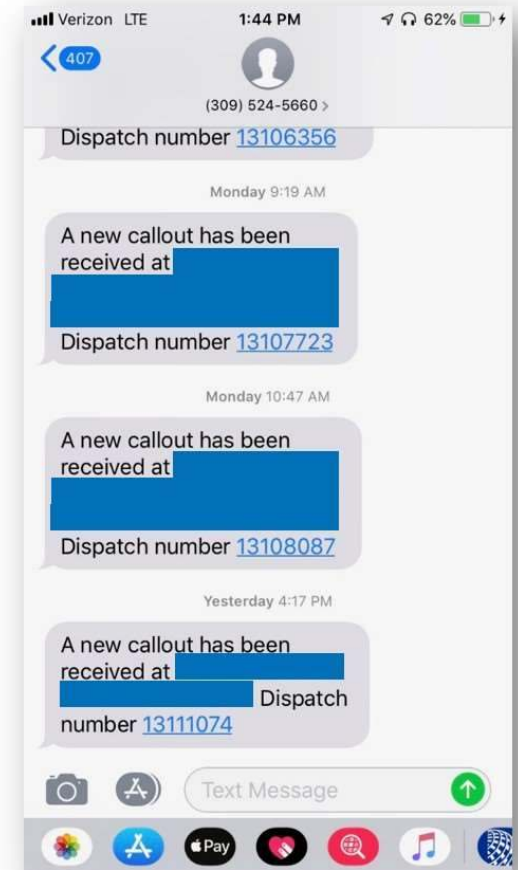
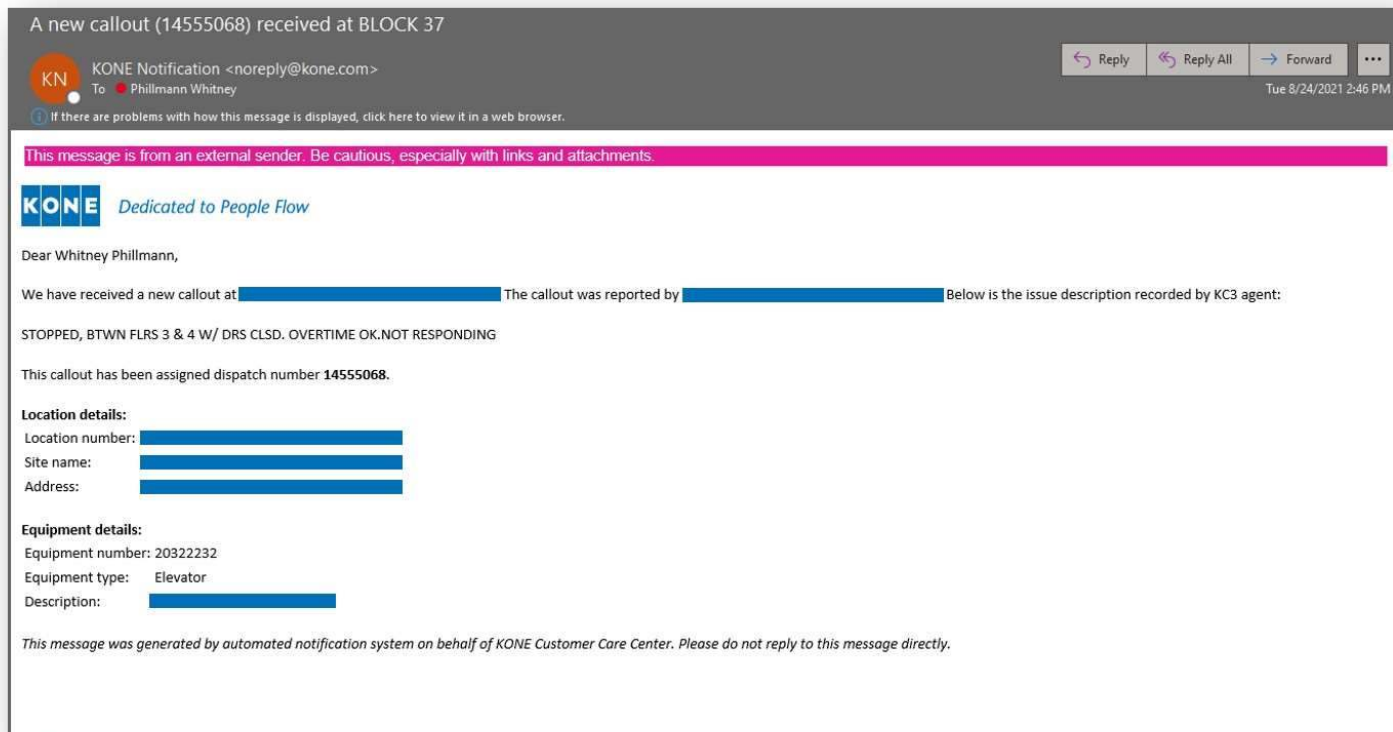
Instant Updates

COMMON AUTOMATED COMMUNICATIONS
EMAIL & TEXT NOTIFICATIONS



Immediate notification

TEXT NOTIFICATION/EMAIL – COMMON WITH MAJOR ELEVATOR COMPANIES
EXAMPLE :



New Technologies

PEOPLE FLOW



Building Owners & Property Managers have changing needs and expectations.




ACCESS GRANTED

CHANGING USE OF BUILDINGS

Flexibility and adaptability play a key role

EASE & CONVENIENCE
Seamless experience increasingly important for building users



SUSTAINABILITY
Responsible, smart, and energy-efficient solutions a key requirement

Recent Code Updates

Recent Code Updates & Industry Chatter

Door Lock Monitoring

- Door Lock Monitoring is still **NOT** required. It may or may not become part of compliance, but is getting less attention than previous years.

Live Video Monitoring (SUBURBS ONLY)

- Two way in elevator video monitoring is now required on new elevators

FAID

- Now needs to be witnessed by elevator Inspector

Fire Service Upgrades (Chicago)

- Any elevators outfitted with Fire Service Recall are required to be brought up to the latest code edition.

Thank You!
Q&A

