

# CONSTRUCTION SAFETY





## Connect Control Unit

Connect is the real brains behind the WES3 system that enables full management and real-time diagnostics/alarm activations for any connected unit in the network.



## Manual Call point

Manual Call Point allows a fire/evacuation alarm to be raised from any unit on site, to initiate a site-wide alarm. It also includes a medical alert button.



## Heat sensor

Incorporating heat sensors into your WES3 network allows you to receive automatic activations 24/7 in the event of fire.



## Smoke sensor

Incorporating dust-resistant smoke sensors into your WES3 network gives you early notification in the event of fire whilst eliminating false alarms caused by dust.



## Interface

Allows WES3 to be seamlessly integrated with third party systems, such as permanent fire alarms, Building Management Systems, standpipe flow switches, etc.



## Link

A simple repeater unit that boosts the radio signal capability in particularly large, complex or high-density sites.

## SYSTEM

# WES3 Wireless Evacuation and Emergency System

**Fire, evacuation and medical alerts for your construction job site.**

WES3 is a completely wireless system that has been developed to provide a simple, fast, and secure method of communicating and notifying personnel in the event of a site emergency. Fully wireless and battery operated, WES3 can be rapidly deployed and remotely monitored, without the need for cabling or fixed, wired power. From property renovations through to sprawling construction sites, WES3 can be easily customized to tackle it all.

**Did you know?**

Over 250,000 WES3 units have been installed around-the-world to protect construction job sites.

## WES3 Manual Call Points

The WES3 Manual Call Point is the primary alert unit in the WES3 range. The unit incorporates 94dB(A) horn, bright strobe lights, and a site-wide evacuation button for activating the alarm.

### Activating the alarm

Activate the alarm by pressing any call point in the network, this will initiate a site-wide alarm or activate the pre-alarm function. The control unit will notify the user of the exact location where the alarm has been triggered for quick identification of the search area.

### Integrated medical alert button

The integrated medical alert button provides all personnel with the means to raise an alert when medical assistance is required, this will immediately alert the main safety team.



#### Did you know?

There are more than 6,400 construction fires every year, causing approximately \$408 million in property loss.



94 dB(A) horn with a built-in strobe light

Integrated first aid button for medical emergencies

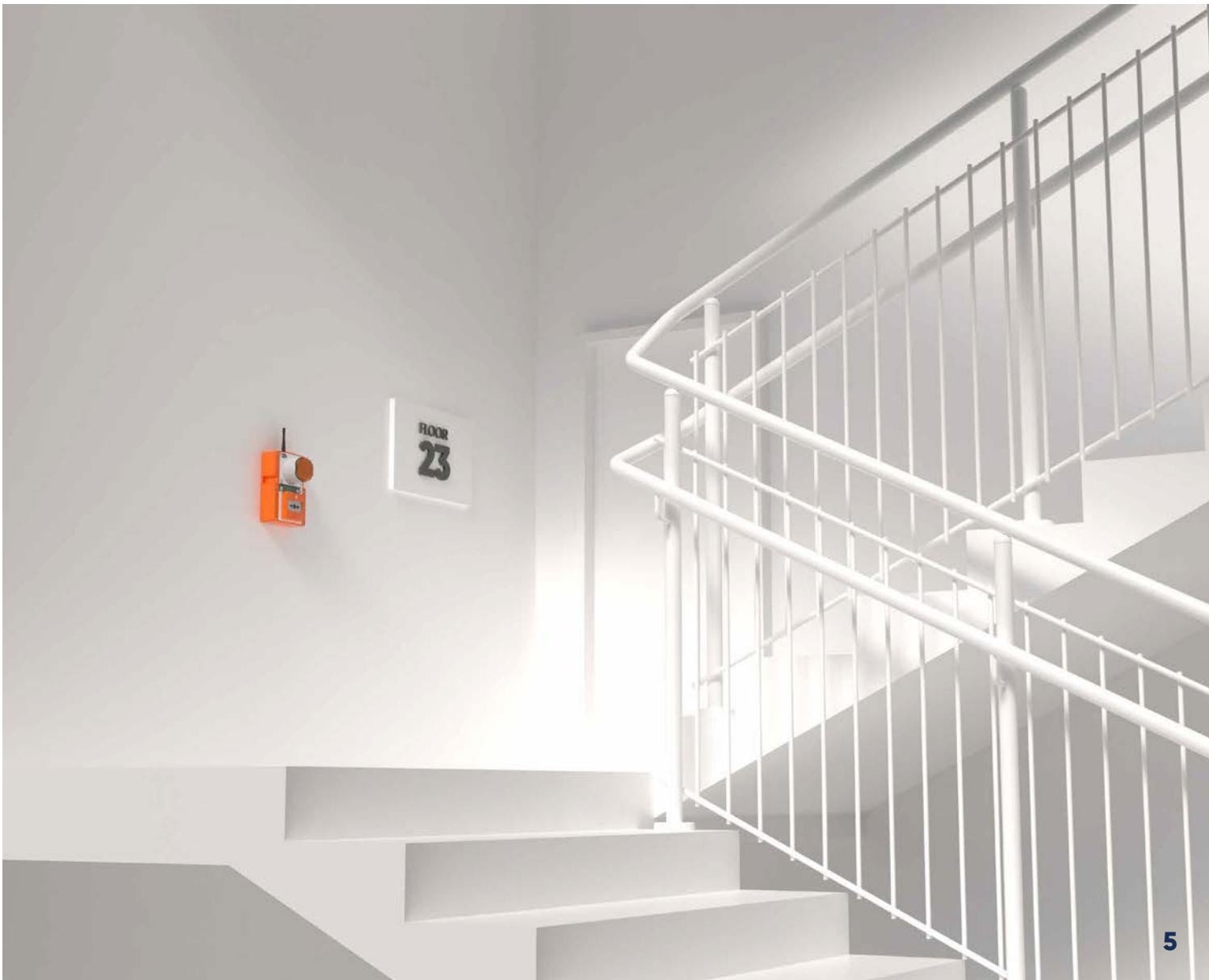
Manual call button

## EVACUATION

# Wireless Evacuation and Medical Alert System

**Our wireless evacuation alarm system is a cost-effective way to protect your people and property.**

One of the leading innovations of the WES3 Manual Call Point is the introduction of the integrated medical alert feature, also known as a first-aid button. With WES3 call points you can manually raise a fire or medical emergency alert at a simple touch of a button. Call points are suitable for both indoor and outdoor use, under IP55 conditions. Typically situated around a site in prominent places, such as main escape routes, stairwells and on or near fire points, where they are visible in case of an emergency.



## PROTECTION

# Wireless Heat & Smoke Sensors

**Incorporating heat or smoke sensors into the WES3 network provides automatic cover 24/7.**

Rest easy, knowing your site is protected around-the-clock. Our wireless dust-resistant smoke and heat sensors provide constant protection and early smoke and fire warnings, particularly essential outside of working hours when personnel are not present. The units connect directly to the WES3 system, automatically raising the alarm in the event of fire.



### Dust-resistant smoke sensor

WES3 smoke sensor with dual optic technology minimizes risk of false alarms and provides 24/7 protection overnight/weekends.



### Heat sensor

Heat sensors are an integral part of the system, providing essential automatic detection in and out of working hours on all types of sites.



#### Did you know?

WES3 smoke and heat sensors can be easily relocated and repositioned to follow the risk of fire as the build progresses.

#### Heat sensor

The heat sensor will activate at a temperature of 135°F and has an individual coverage of 17.5ft radius.



#### Smoke sensor

The smoke sensor units have an individual coverage of 25ft radius and can differentiate between smoke and dust particles.



## WATER

# Wireless water detection solution

## A cost-effective water detection solution for the construction and industrial sector with real-time alerts

Water leaks and flooding can come from various sources—frozen pipes, damaged pipework, burst pipes, loose fittings and many more. Ramtech water detection solution can help reduce downtime by sending real-time alerts about leaks before they cause significant damage.

Our water detection sensors placed strategically throughout your site or facility can be your best protection against potential damage from **escape of water**.

- **No plumbing**, specialist skills or equipment required
- **Rapid installation** and low maintenance costs.
- **Get real-time alerts** about leaks via REACT
- **Easy integration** into existing systems
- **Available in a variety of lengths** in both cable/ tape
- **Relocated** and re-used





## How does it work?

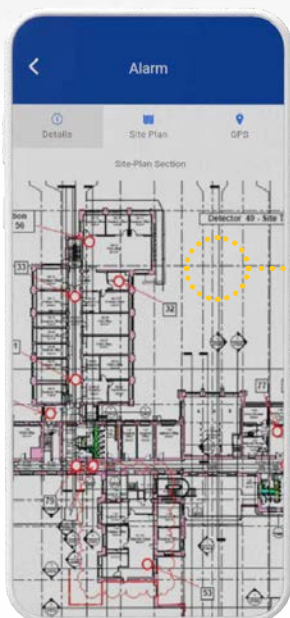
The system provides 24/7 monitoring on site and immediately alerts relevant personnel if a water is detected. When water comes into contact with the detection cable or tape, the sensor immediately activates the WES3 Water Interface unit and transmits water presence data to the WES3 Connect Control unit and REACT cloud-based platform. All relevant personnel receive an immediate notification by text, email or the REACT mobile app.



WES3 water interface



Water detection cable/tape



NOTIFICATION CENTER

Now

Water Damage Alert Raised - Tower Park.  
Sent 28/10/2022

## CONNECTIVITY

# Wireless Control Unit

**Connect is an enhanced emergency control unit that uses 4G data connectivity to deliver real-time alerts.**

The WES3 Connect is the real brains behind the WES3 system. The control unit will capture data from up to 999 devices situated around a site, it constantly relays data back to the user including active fire alarm activations, medical alerts, low battery warning and signal failure. In addition, WES3 Connect includes 4G cellular connectivity, allowing customized alerts to be sent to 6 different phone numbers and emails ensuring that the relevant persons are notified in the event of an emergency.

- Available in multiple languages
- Color LCD screen
- Off-site communication
- Louder buzzer
- 4G Data connectivity
- Global connectivity
- Numerical keypad
- Pass code protection

**Did you know?**

Connect can deliver real-time alerts to site personnel via SMS and email.

## NOTIFICATION

# REACT

**REACT allows you to communicate site alerts quickly and easily.**

REACT is a cloud-based platform that provides accurate, real-time, and highly customized notifications to all personnel in the event of a site incident or emergency. Registered individuals immediately receive notification of any WES3 alarm activations and site incidents on their mobile device, along with any relevant documentation such as site plans, evacuation routes and emergency procedures.

## How REACT is used

Our site alert and notification solution has a range of different use cases to ensure control over communication during any incident, including:

- To warn and inform site staff of emergency situations
- To raise alerts on-site (e.g. SOS alerts, hazard report, flooding, major spills)
- To lock-down/evacuate sites during emergencies
- To help protect lone workers with advanced man down feature
- To remotely monitor your WES3 system for activations or maintenance issues/faults
- To send alarm activations to an off-site monitoring station



Our REACT app is available on the following platforms:



## THIRD-PARTY INTEGRATION

# Interface

## Easily connect your WES3 system to other systems on-site.

The WES3 Interface unit allows you to integrate your WES3 system with a host of other building management and emergency systems on-site including wired fire alarms, BMS and standpipe flow switches. The interface unit is suited to a wide range of projects, be it a new build through to extensive renovation projects. The unit is capable of communicating with most commonly used technologies in existing buildings, construction projects and site cabins.

### Examples include:

- CCTV cameras
- Access control turnstiles and barriers
- Wired fire alarm systems
- Auto dialers
- Security monitoring systems
- AOV (automatic opening vent) systems
- Sprinkler systems
- Gas, water or flame detectors
- BMS (Building management systems)
- Evacuation lights
- Temporary stand pipe flow switches
- Leak detection



# Quick Code Reference

## What is NFPA 241?

NFPA 241 is the standard for safeguarding construction, alteration and demolition operations. It is a framework document to guide you in the right direction for preparing a proper project impairment and safety plan.

## When is it needed?

The following documents all require compliance with NFPA 241:

- NFPA® 1, Fire Code
- NFPA 5000®, Building Construction and Safety Code®
- International Building Code® (IBC®)
- International Fire Code® (IFC®)

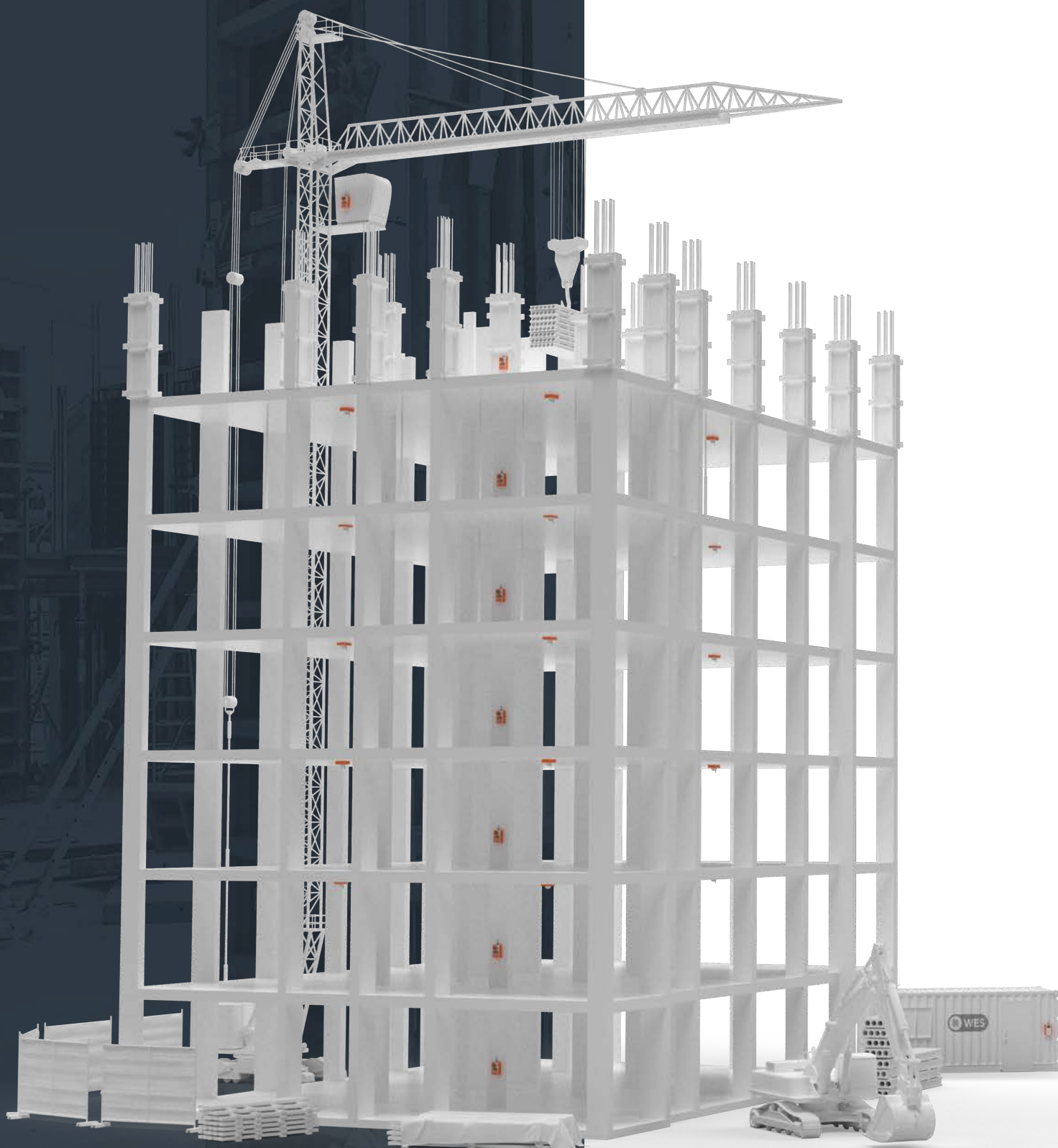
## NFPA 241 (2019) Chapter 7– Fire Protection

- 7.2 Owners responsibility
  - 7.2.1 The owner shall designate a person who shall be responsible for the fire prevention program and who shall ensure that it is carried out to completion
  - 7.2.1.1 The FPPM shall have the authority to enforce the provisions of this and other applicable fire protection standards
  - 7.2.1.2 The FPPM shall have knowledge of the applicable fire protection standards, available FP systems and FP inspection procedures
  - 7.2.1.3 Inspection records shall be available for review by the AHJ
- 7.3 Installation Testing and Maintenance  
Where fire alarm, detection, or protection systems are required, they shall be installed, maintained and tested in accordance with the appropriate NFPA standards
- 7.4 Fire Alarm Reporting
  - 7.4.1 There shall be a readily available public fire alarm box near the premises, telephone service to the responding fire department, or equivalent facilities



**Did you know?**

Once the project is complete, you can easily re-use your WES3 units on the next one.



# Deploying WES3

**Easy set-up that requires no special tools or expertise. Protection that's ready when you are.**

The units that make up the WES3 system can be deployed as soon as the building is out of the ground. Setup is quick and easy – it takes just a few minutes for your units to be a network on active duty protecting your site and workers. All WES3 units connect to form a secure long range flooded mesh radio network, so if a fire breaks out any unit can trigger a site-wide alarm, whether automatically in the case of the sensor unit or manually via the Call Points.

## Benefits of the WES3 system

The WES3 system has been designed to offer a practical and economical emergency solution.

- Completely wireless with 3-year battery
- Simple to setup, install, and reposition
- Long range mesh radio network
- Fire and medical alert function
- 24/7 protection with smoke/heat sensors
- Easily connects with other systems on-site.
- 4G connectivity for offsite communication
- Remote monitoring via REACT

## Features for WES3 system include:

### Full isolation system test mode

Test individual alarm points without the need to trigger the entire system.

### Inspection delay

Enables site managers to validate an alarm before evacuating site to mitigate against false alarms.

### Real-time system notification

System issues and faults are reported to the control unit in real-time as they occur.



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