Notifier by Honeywell:

Audible & Visual Alarm Device
Selection Guide

NOTIFIER®
by Honeywell

Introduction

This guide has been produced to help guide you through the recent changes to the Notifier range of non-addressable audible and visual fire alarm warning devices.

EN54-23 and how it affects you

The majority of our products are required to be approved to the EN54 suite of standards to demonstrate their capability to perform in the life safety market, we are all used to these product standards and the introduction of EN54- part23 standard to test strobes to on the 1st January is the latest edition to the EN54 family.

EN54-23 is a new European performance standard relating to the light output of Visual alarm devices (VADs). Its purpose is to standardise the requirements and performance criteria of VADs to ensure that light output is defined in a uniform manner across Europe. All beacons used as a primary method of notification are required to comply with the new standard from 1st January 2014 in Europe. En54-23 is a standard (strobes) and gives VAD's the same status as sounders that are already tested against EN54-3.

Both EN54 parts 3 and EN54 part 23 define the purpose of a fire alarm device either audible or visual as to warn person(s) within, or in the vicinity of, a building of the occurrence of a fire emergency in order to enable such person(s) to take appropriate measures.

Key requirements

The standard sets a base level for performance. Each model must be tested by the manufacturer to establish a light coverage envelope. Compliance is **mandatory under European law from 1st January 2014 in Europe.** It affects all fixed installation pulsing or flashing devices that use software for their operation, e.g. LED, Xenon or rotating beacons.
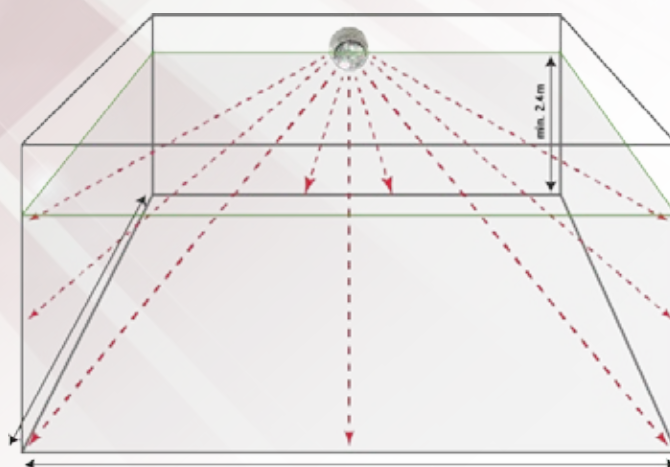
C,W & O Categories

The committee that developed EN54-23 required a fundamental change in visible warning technology to ensure that the light output from warning beacons was sufficiently bright to attract attention. Their solution was to develop three classes: W, wall; C, ceiling, and O open.

- "C" refers to a device intended to be mounted on the ceiling
- "W" refers to a device intended to be mounted on a wall
- "O" class allows the manufacturer to gain third party certification for a device with a specific function or fulfils a specific application, eg a narrow beam of light.

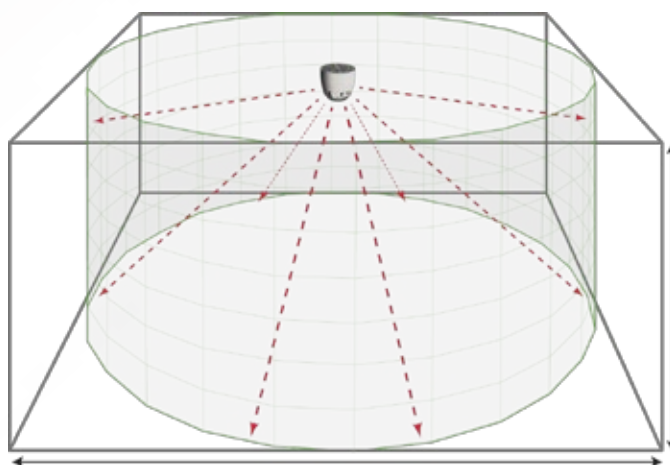**Defined light coverage for wall mount (W Category) applications**

A cube of light with a minimum of 0.4 Lumens/m^2

X & Y dimensons are defined by the device manufacturer

Defined light coverage for ceiling mount (C Category) applications

The diameter of a cylinder of light with a minimum of 0.4 Lumens/m^2

Open Category (O Category) applications

The coverage of an O Category device is a cuboid of light, defined by the manufacturer as independent of the EN54-23 height/placement requirements.

Applications

It is important to understand that the application and use of these devices is not defined within these performance standards. It is therefore the designer of the fire system in conjunction with all relevant parties who must provide a suitable design for the building. The guidance for the appropriate use of fire alarm devices are described in several documents such as building regulation approved document B, M and BS5839-1:2013 which recommends Visual alarm signals need to be used to supplement audible alarm signals in situations in which the latter are likely to be ineffective, and it is also recommended that VADs ought not to be used on their own.

Visual alarm devices are therefore to be used principally in areas with high ambient sound levels, where hearing protection is likely to be worn, to alert the hard of hearing, as the sole initial warning to staff or in situations in which the disturbance of an audible warning is undesirable (e.g. television and radio studios, cinemas, theatres and hospital operating theatres).

Compliance with standards

Once the decision has been made that a VAD should be used as the primary means of evacuation then the following products can be considered:
* Sounders shall be third party approved to EN54 part 3.
* Beacons shall be third party approved to EN54 part 23
* Combined Sounder Beacons shall be third party approved to EN54 part 3 and part 23

Functionality

Notifier has six basic product groups available consisting of:
* Addressable - Wall or ceiling mounting sounders (EN54-3)
* Conventional - Wall or ceiling mounting beacons (EN54-23, W & C categories)
* Conventional - Wall or ceiling mounting combined sounder beacons (EN54-3 & EN54-23 W, C & O categories);
* Addressable - Wall or ceiling mounting combined sounders with supplementary indicator – White Lens (EN54-3 and EN54-23 O category)
* Addressable – Wall mounting beacon – White lens (EN54-23 O category)
* Addressable - Wall or ceiling mounting combined sounders with supplementary indicator – Red Lens (only EN54-3 approved)

Increase in volume of VAD's to be compliant may lead to an increased number of panels and loop required to fulfil the solution leading to more expensive solutions. Use VAD's where you have to and consider the alternative evacuation strategies where possible.

Non-Addressable Sounders

New EN54-3 Approved Devices

	Part Number	Description	Approvals (sound)	Sounds Volume	Number of Tones
	CWSO-RR-S1	Red EN54-3 approved low profile wall and ceiling mount sounder, 32 tones including new bell tone, suitable for 12 and 24V systems. Low profile base included.	EN54-3	107dB (A) @ 1m (Tone 23)	32
	CWSO-RR-S2	Red EN54-3 approved low profile wall and ceiling mount sounder, 32 tones including new bell tone, suitable for 12 and 24V systems. Low profile base included. **With first fix option to reduce installation time.**	EN54-3	107dB (A) @ 1m (Tone 23)	32
	CWSO-RR-W1	Red EN54-3 approved IP65 deep base wall and ceiling mount sounder, 32 tones including new bell tone, suitable for 12 and 24V systems. Deep base included.	EN54-3	107dB (A) @ 1m (Tone 23)	32
	CWSO-RR-W2	Red EN54-3 approved IP65 deep base wall and ceiling mount sounder, 32 tones including new bell tone, suitable for 12 and 24V systems. Deep base included. **With first fix option to reduce installation time.**	EN54-3	107dB (A) @ 1m (Tone 23)	32
	CWSO-WW-S1	White EN54-3 approved low profile wall and ceiling mount sounder, 32 tones including new bell tone, approved to EN54-3 suitable for 12 and 24V systems. Low profile base included.	EN54-3	107dB (A) @ 1m (Tone 23)	32
	CWSO-WW-S1	White EN54-3 approved low profile wall and ceiling mount sounder, 32 tones including new bell tone, approved to EN54-3 suitable for 12 and 24V systems. Low profile base included.	EN54-3	107dB (A) @ 1m (Tone 23)	32
	CWW	White Deep IP65 base, provides cable access for indoor surface & applications up to IP65, suitable for use with all commonly encountered fire cable sizes & ranges. pack of 5	-	-	-
	NBS4	Ceiling mounting base sounder, four tone (white), no cover. If required the DBSLIDR (red) or DBSLIDW (white) lid to be ordered separately.	EN54-3	up to 92db (A) @1m	4

Range Overview

DEVICE	APPROVALS	BODY COLOUR		INSTALLATION OPTIONS		BASE OPTIONS	ENVIRONMENT COMPLIANCE
Sounders	EN54-3	Red	White	Standard device	First Fix	Low Profile or Deep/IP65	RoHS/WEEE

Non-Addressable Beacons

New EN54-23 Approved Devices

	Part Number	Description	Approvals (light)	Coverage Volume
	CWST-RR-S5	**Red flash** EN54-23 W and C class approved strobe with clear lens and red body, provides omni directional wall and ceiling mounting to ensure correct installation first time, comes with softstart feature as standard and suitable for 12 and 24V systems. Low profile base included.	EN54-23	W-2.4-6.2 C-3-9.3 C-6-8.5
	CWST-RR-S6	**Red flash** EN54-23 W and C class approved strobe with clear lens and red body, provides omni directional wall and ceiling mounting to ensure correct installation first time, comes with softstart feature as standard and suitable for 12 and 24V systems. Low profile base included. **With first fix option to reduce installation time.**	EN54-23	W-2.4- 9.1 C-3-9.3 C-6-8.5
	CWST-RW-S5	**White flash** EN54-23 W and C class approved strobe with clear lens and red body, provides omni directional wall and ceiling mounting to ensure correct installation first time, comes with softstart feature as standard and suitable for 12 and 24V systems. Low profile base included.	EN54-23	W-2.4-6.2 C-3-10 C-6-10 C-9-10
	CWST-RW-S6	**White flash** EN54-23 W and C class approved strobe with clear lens and red body, provides omni directional wall and ceiling mounting to ensure correct installation first time, comes with softstart feature as standard and suitable for 12 and 24V systems. Low profile base included. **With first fix option to reduce installation time.**	EN54-23	W-2.4-6.2 C-3-10 C-6-10 C-9-10
	CWST-RR-W5	**Red flash** IP65 deep base EN54-23 W and C class approved strobe with clear lens and red body, provides omni directional wall and ceiling mounting to ensure correct installation first time, comes with softstart feature as standard and suitable for 12 and 24V systems. Deep base included.	EN54-23	W-2.4- 6.2 C-3-9.3 C-6-8.5
	CWST-RR-W6	**Red flash** IP65 deep base EN54-23 W and C class approved strobe with clear lens and red body, provides omni directional wall and ceiling mounting to ensure correct installation first time, comes with softstart feature as standard and suitable for 12 and 24V systems. Deep base included. **With first fix option to reduce installation time.**	EN54-23	W-2.4- 6.2 C-3-9.3 C-6-8.5
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Range Overview

DEVICE	APPROVALS	BODY COLOUR	FLASH COLOUR		INSTALLATION OPTIONS		LENS COLOUR	ENVIRONMENT COMPLIANCE
Beacon	EN54-23 C & W Class	Red	Red	White	Standard Device	First Fix	Clear	RoHS/WEEE

Non-Addressable Sounder/Beacons

New EN54-3 and EN54-23 Approved Devices

Part Number	Description
CWSS-RR-S5	Red body with **red flash** EN54-Pt.3 and Pt.23 W and C class approved sounder strobe with clear lens, provides omni directional wall and ceiling mounting, comes with softstart feature as standard and suitable for 12 and 24V systems. Low profile base included.
CWSS-RR-S6	Red body with **red flash** EN54-Pt.3 and Pt.23 W and C class approved sounder strobe with clear lens, provides omni directional wall and ceiling mounting, comes with softstart feature as standard and suitable for 12 and 24V systems. Low profile base included. **With first fix option to reduce installation time.**
CWSS-RW-S5	Red body with **white flash** EN54-Pt.3 and Pt.23 W and C class approved sounder strobe with clear lens, provides omni directional wall and ceiling mounting, comes with softstart feature as standard and suitable for 12 and 24V systems. Low profile base included.
CWSS-RW-S6	Red body with **white flash** EN54-Pt.3 and Pt.23 W and C class approved sounder strobe with clear lens, provides omni directional wall and ceiling mounting, comes with softstart feature as standard and suitable for 12 and 24V systems. Low profile base included. **With first fix option to reduce installation time.**
CWSS-RR-W5	Red body with **red flash**, IP65 deep base, EN54-Pt.3 and Pt.23 W and C class approved sounder strobe with clear lens, provides omni directional wall and ceiling mounting, comes with softstart feature as standard and suitable for 12 and 24V systems. Deep base included.
CWSS-RR-W6	Red body with **red flash**, IP65 deep base, EN54-Pt.3 and Pt.23 W and C class approved sounder strobe with clear lens, provides omni directional wall and ceiling mounting, comes with softstart feature as standard and suitable for 12 and 24V systems. Deep base included. **With first fix option to reduce installation time.**
CWSS-RW-W5	Red body with **white flash**, IP65 deep base, EN54-Pt.3 and Pt.23 W and C class approved sounder strobe with clear lens, provides omni directional wall and ceiling mounting, comes with softstart feature as standard and suitable for 12 and 24V systems. Deep base included.
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CWSS-WW-S5	White body with **white flash** EN54-Pt.3 and Pt.23 W and C class approved sounder strobe with clear lens, provides omni directional wall and ceiling mounting, comes with softstart feature as standard and suitable for 12 and 24V systems. Low profile base included.
CWSS-WW-W5	White body with **white flash** EN54-Pt.3 and Pt.23 W and C class approved sounder strobe with clear lens, provides omni directional wall and ceiling mounting, comes with softstart feature as standard and suitable for 12 and 24V systems. Low profile base included. **With first fix option to reduce installation time.**

Range Overview

DEVICE	APPROVALS		BODY COLOUR		FLASH COLOUR		INSTALLATION OPTIONS		LENS COLOUR	ENVIRONMENT COMPLIANCE
	EN54-23	EN54-3	RED	WHITE	RED	WHITE	STANDARD DEVICE	FIRST FIX	CLEAR	
Sounder Beacon	W & C Class		✓	✓	✓	✓	✓	✓	✓	RoHS/WEEE

Approvals (sound)	Sound Volume	Number of Tones	Approvals (light)	Coverage Volume
EN54-3	107dB (A) @ 1m (Tone 23)	32	EN54-23	W-2.4-6.2 C-3-9.3 C-6-8.5
EN54-3	107dB (A) @ 1m (Tone 23)	32	EN54-23	W-2.4-6.2 C-3-9.3 C-6-8.5
EN54-3	107dB (A) @ 1m (Tone 23)	32	EN54-23	W-2.4-6.2 C-3-10 C-6-10 C-9-10
EN54-3	107dB (A) @ 1m (Tone 23)	32	EN54-23	W-2.4-6.2 C-3-10 C-6-10 C-9-10
EN54-3	107dB (A) @ 1m (Tone 23)	32	EN54-23	W-2.4-6.2 C-3-9.3 C-6-8.5
EN54-3	107dB (A) @ 1m (Tone 23)	32	EN54-23	W-2.4-6.2 C-3-9.3 C-6-8.5
EN54-3	107dB (A) @ 1m (Tone 23)	32	EN54-23	W-2.4-6.2 C-3-10 C-6-10 C-9-10
EN54-3	107dB (A) @ 1m (Tone 23)	32	EN54-23	W-2.4-6.2 C-3-10 C-6-10 C-9-10
EN54-3 EN54-23	107dB (A) @ 1m (Tone 23)	32	EN54-23	W-2.4-6.2 C-3-10 C-6-10 C-9-10
EN54-3 EN54-23	107dB (A) @ 1m (Tone 23)	32	EN54-23	W-2.4-6.2 C-3-10 C-6-10 C-9-10

Safety, Integrity and Heritage

Notifier by Honeywell is the world's largest manufacturer and supplier of engineered fire alarm systems. With over 400 Engineered Systems Distributors worldwide, and regional support on every continent, we have the flexibility to meet our customers' requirements.

With over 60 years of experience, we offer unrivalled specialist knowledge and products designed to meet all needs. Notifier offers a comprehensive line of quality fire detection and alarm control solutions. These include everything from smoke detection and notification, non-addressable fire alarm panels, analogue addressable systems, to advanced network and integration packages.

As a leader in the fire safety market, Notifier is dedicated to the highest standards of service and product quality. Our operations are accredited to ISO 9001 and our products are designed and manufactured to meet every major international approval, including LPCB, VdS, UL, ULC and BOSEC/ANPI.

Notifier is a division of Honeywell International, a diversified technology and manufacturing leader, serving customers worldwide. By partnering with Notifier, you have the reassurance of working with a company of global standing that provides cutting edge fire detection systems.

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