

BS 5839-9:2021



BSI Standards Publication

Fire detection and fire alarm systems for buildings

Part 9: Code of practice for the design, installation,
commissioning and maintenance of emergency voice
communication systems

Publishing and copyright information

The BSI copyright notice displayed in this document indicates when the document was last issued.

© The British Standards Institution 2021

Published by BSI Standards Limited 2021

ISBN 978 0 539 13563 3

ICS 13.220.20; 13.320

The following BSI references relate to the work on this document:

Committee reference FSH/12/5

Draft for comment 20/30416719 DC

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

Contents

	Page
Foreword	iii
Introduction	1
Section 1: General	2
1 Scope	2
2 Normative references	2
3 Terms and definitions	3
4 Need for an emergency voice communication system	6
5 Exchange of information and definition of responsibilities	7
6 Variations from the recommendations of this British Standard	8
Section 2: Design considerations	9
7 Purpose	9
8 System circuitry and software	10
9 Audio and data signal paths	11
10 Fault monitoring and indication	12
10.1 Fault conditions	12
10.2 Fault indications	13
10.3 Audible fault warning	14
10.4 Resetting from the fault warning condition	14
10.5 Monitoring of software-controlled equipment	14
10.6 Monitoring of memory contents	14
10.7 System integrity	15
11 Outstations	15
11.1 General	15
11.2 Controls	16
11.3 Indications	16
11.4 Electrical performance	17
11.5 Mechanical details	17
11.6 Location	18
11.7 Audio frequency induction loop systems	20
<i>Figure 1 — Measuring field strength – plan view</i>	20
<i>Figure 2 — Measuring field strength – side view</i>	21
12 Master stations	21
12.1 General	21
12.2 Controls	23
12.3 Indicators	24
12.4 Electrical performance	25
12.5 Mechanical construction	26
12.6 Location	26
13 Power supplies	27
13.1 Recommendations for low voltage mains power supplies	28
13.2 Recommendations for EVC system power supply units	29
14 Cables, wiring and other interconnections	30
15 Wireless-linked EVC systems	32
16 Environmental conditions	35
17 Electromagnetic compatibility	36
18 Electrical safety	36
Section 3: Installation	38
19 Responsibilities of the installer	38