



# BS 5839-6 HUSH BUTTONS

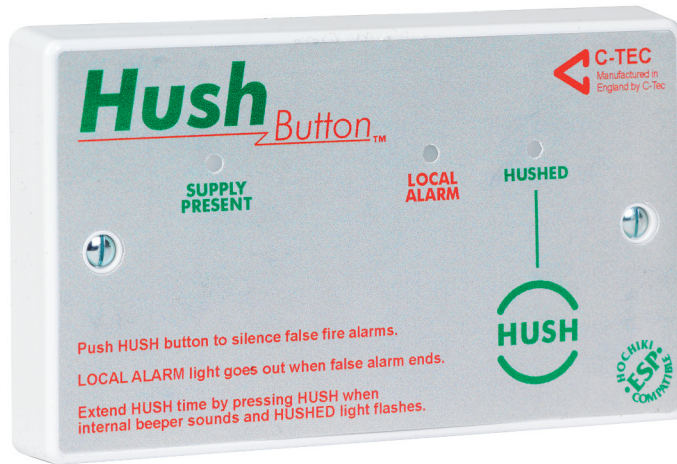
## A REVOLUTIONARY BS 5839 PART 6 COMPLIANT FIRE ALARM SOLUTION FOR HOUSES OF MULTIPLE OCCUPATION

Designed to work with widely available open protocol analogue fire alarm systems, C-TEC's latest innovation gives fire alarm installers a unique opportunity to enter the lucrative and rapidly expanding HMO marketplace.

According to BS 5839 part 6 (the code of practice for fire alarm systems in dwellings) around 80% of all UK fire deaths and injuries occur in dwellings. Nowhere is the risk greater than in houses of multiple occupation where a fire in one 'dwelling' can quickly spread to another.

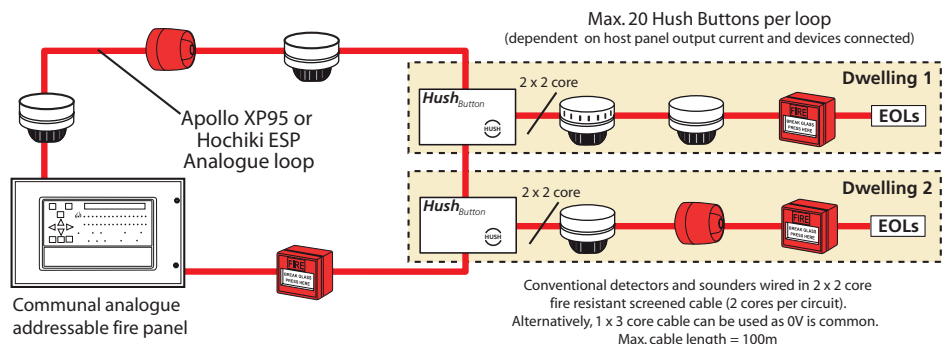
C-TEC's Hush Button solution meets and exceeds the requirements of BS 5839 Part 6 in all areas, providing reliable and fully monitored fire detection, alarm and silencing facilities **inside each individual HMO dwelling.**

Utilising readily-available, cost-effective technology, C-TEC's Hush Button solution puts each HMO occupant firmly in control of their own fire detection systems, helping to reduce false alarms, unnecessary building evacuations and the likelihood of a true alarm condition being ignored.



- Fully compliant with BS 5839 part 6
- Provides each individual HMO dwelling with its own two-minute silence facility (to BS 5839-6/12.2b) and 15-minute isolate facility (to BS 5839-6/12.2a) - see over for details
- Designed to sit on a communal fire panel's analogue loop and to communicate its status back to the host panel for the attention of building management
- Includes a built-in loop isolator, conventional detector circuit and conventional sounder circuit (0V is common allowing cost-effective three core cable to be used)
- Mounts on a standard UK 25mm double gang back box
- Compatible with Hochiki's ESP and Apollo's XP95, Discovery and Xplorer protocols
- Fully monitored for open and short circuit faults to BS 5839 part 1
- Failsafe operation - a general fire condition at the host panel overrides any silenced/isolated state at the Hush Button and immediately turns on its local sounders
- Each Hush Button derives its power from the analogue loop - no separate PSU required
- Typically up to 20 Hush Buttons can be connected to one loop (40 on a two loop panel)
- Upgrades the level of protection offered in a HMO dwelling from the minimum Grade D requirement (mains/battery powered detectors) to Grade A or B

### A typical Hush Button installation



## HOW DO C-TEC'S HUSH BUTTONS WORK?



Each Hush Button can be looked upon as a miniature fully monitored, self-powered single zone fire alarm panel that sits and is addressed on an analogue loop with the ability to communicate its status back to the main panel.

Typically one double gang Hush Button is fitted in each HMO dwelling complete with conventional detectors and sounders to provide occupants with a simple, cost-effective means of invoking two types of 'hushed' period.

Press the Hush Button during a local alarm condition and a hushed period of two minutes begins. If the local zone returns to its normal condition within these two minutes, the unit returns to its normal state. If it doesn't, a fire alarm condition is flagged at the host panel to be acted upon according to the building's fire management plan.

Press the Hush Button prior to a local alarm condition and a hushed period of 15 minutes begins. During this period, power is cut to the local zone so no alarm signals can be detected. If the Hush Button is pressed again during this period, the unit reapplies power to the local zone allowing normal signal processing to resume.

A beeper gives feedback to the occupant 15 seconds before either hushed period is about to expire. If the button is pressed again during this period, the original hushed period of two or 15 minutes restarts.

The whole system is geared towards reducing unwanted false alarms by putting HMO occupants in control of their own fire detection systems without losing sight of the fact that its primary purpose is to protect people and property. If, at any time, the main analogue panel enters a general fire condition, it overrides any hushed state at the Hush Button and turns on its local sounders.

Also, depending on the detectors and manual call points used, the Hush Button's detector circuit can be configured to send an alarm condition to the main panel the moment a call point or a second detector is triggered, overriding the two-minute delay.

Moreover, the Hush Button and all of its cables are fully monitored. Should an open circuit, short circuit or tampering fault occur, it is relayed to the main panel for the attention of building management via the analogue communication network. This gives the client a level of knowledge of the condition of the system in each dwelling that is simply not available when mains/battery type 'D' systems are installed.

## WHY ARE THEY REQUIRED?



According to BS 5839 part 6 (the code of practice for fire alarm systems in dwellings) around 80% of all UK fire deaths and injuries occur in dwellings - that's a frightening 500 fatalities and 14,000 injuries a year.

In a bid to reduce this figure, the standard specifies minimum grades and categories for fire alarm systems in dwellings. For houses of multiple occupation (HMO) dwellings, it recommends at least Grade D (mains/battery powered smoke/heat alarms) and Category LD2 or LD3 systems (detectors in all circulation spaces forming part of its escape routes). It also acknowledges the need for a BS 5839 part 1 system in all HMO communal areas.

In recent years, there has been a general trend towards installing higher-grade EN54 equipment in HMOs so that a single system covers all of its communal areas **and** its dwellings in order to give one route of responsibility for all of the site's fire alarm requirements. Unfortunately, many of these systems compromise BS 5839 part 6 in several key areas.

For example, clause 12.2 of BS 5839 part 6 indicates there be provision within each HMO dwelling for:-

- (a) silencing unwanted alarms when there is a local fire condition; and
- (b) isolating the dwelling's detectors and sounders when activities are taking place that could cause a false alarm.

On most current single system solutions, silencing the alarm sounders can only be done at the communal fire panel which is usually located outside the dwelling. To initiate this facility, the occupier must first locate the communal panel, enter its secure user mode and work out which button to press - all within two minutes. On this point alone it is clear such systems cannot comply with the clauses nor the spirit of BS 5839 part 6.

C-TEC's Hush Button solution not only has the ability to meet the requirements of BS 5839-6 in full, it exceeds them.

- Copies of BS5839-6 can be viewed at your local reference library or purchased from the British Standards Institute. Tel: +44 (0)20 8996 9000. Web: [www.bsi-global.com](http://www.bsi-global.com)

## TECHNICAL SPECIFICATIONS

Order code:	XFP508H (Hochiki ESP protocol); XFP508X (Apollo XP95, Discovery, Xplorer protocol)
Max. no of hush buttons per analogue loop:	20 (dependent on output current of host panel and devices connected) Note: to communicate with the host fire panel each Hush Button requires <u>two</u> addresses
Onboard loop isolator:	Yes
Max. no. of conventional detectors per hush button:	10
Max. no. of manual call points per hush button:	10
Max. sounder circuit load per hush button:	30mA (e.g. three sounders @ 10mA)
Operating voltage:	17-40Vdc
Quiescent current:	5mA
Max. length of hush button detector/sounder circuits:	100m
Line monitored for open and short circuit faults:	Yes
User indicators:	Supply present; local alarm and hushed LEDs; 'Hushed period due to expire' buzzer
Engineer Indicators:	Open/short circuit fault (also shown at host panel via analogue loop)
Control buttons:	1 x Hush
Dimensions (WxHxD) in mm:	144 x 84 x 37. Mounts on a 25mm deep back box