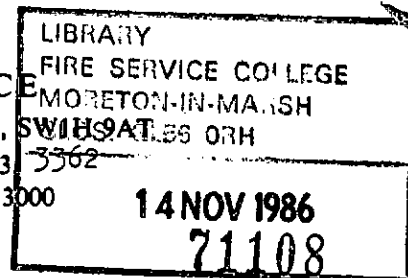




HOME OFFICE
 Queen Anne's Gate, LONDON, SW1A 9AT
 Direct line: 01-213 3362
 Switchboard: 01-213 3000



Our reference:

Your reference:

To all Chief Officers

No 8/1986

5 November 1986

Dear Chief Officer

- A. BUILDING REGULATIONS 1985 : SCHEDULE 1 PARAGRAPH B1
 MEANS OF ESCAPE IN CASE OF FIRE : LIMITS ON APPLICATION
- B. CENTRAL REGISTER OF TRAINING AIDS
- C. EVACUATION SIGNALS
- D. MANUAL OF FIREMANSHIP - AMENDMENTS
- E. MANUAL OF FIREMANSHIP - BOOK 7
- F. THE IONISING RADIATIONS REGULATIONS 1985
 TYPE APPROVAL SCHEME FOR SMOKE DETECTORS
- G. TRIALS OF A REMOTELY OPERATED VEHICLE FOR FIRE SERVICE USE
- H. FIRE SAFETY EDUCATION FOR CHILDREN

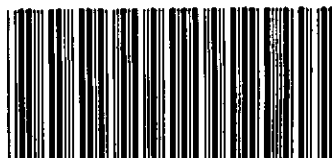
For the sake of economy I have incorporated seven items in this letter.
 To facilitate handling each item is on a separate sheet.

Yours sincerely

SIR PETER DARBY

FIR/86 744/32/1
 FIR/85 610/83/1
 FIR/82 620/33/16
 FIR/80 7/6/19
 FIR/80 7/6/12
 FIR/85 26/4/5
 FIR/85 82/131/1
 FEP/86 18/161/1

**The Fire Service
 College**



00124245



A. BUILDING REGULATIONS 1985: SCHEDULE 1 PARAGRAPH B1
MEANS OF ESCAPE IN CASE OF FIRE: LIMITS ON APPLICATION

The Department of the Environment (DOE) issued informal guidance, earlier this year, to local authorities on the application of paragraph B1 of Schedule 1 to the Building Regulations 1985.

2. A copy of the DOE guidance and covering letter is attached for your information. It is recommended that fire prevention officers should refer to the guidance when responding to requests for advice on the application of the Building Regulations in respect of buildings which are to be erected, extended or materially altered, whether such requests come from building contractors, building control officers, approved inspectors or any other source. There are no significant cost or manpower implications for fire authorities arising from this guidance.

File reference: FIR/86 744/32/1

Telephone number of contact: 01 213 3237



Department of the Environment

Room B153

Romney House 43 Marsham Street London SW1P 3PY

Telex 22221

Direct line 01-212 5135
Switchboard 01-212 3434
GTN 212

The Chief Executive,
County Councils in England and Wales
District Councils in England and Wales
London Borough Councils;
The Town Clerk, City of London

22 April 1986

Dear Sir

BUILDING REGULATIONS 1985 : SCHEDULE 1 PARAGRAPH B1
MEANS OF ESCAPE IN CASE OF FIRE : LIMITS ON APPLICATION

1. In response to enquiries about the application of Paragraph B1 to the Building Regulations 1985, particularly in the case of extensions and alterations, the Department prepared a note earlier this year which has been sent to those authorities which asked.
2. It may be helpful to all authorities to have a copy of this note, which offers informal guidance on the operation of B1, and I am therefore enclosing two copies with this letter, one of which you may like to pass to your Chief Building Control Officer.

Yours faithfully

Stephen McQuillin

S T McQUILLIN
Construction Industry Directorate
Building Regulations Division

**MEANS OF ESCAPE IN CASE OF FIRE: SCHEDULE 1 PARAGRAPH B1
LIMITS ON APPLICATION**

1. In response to enquiries about the application of paragraph B1 of Schedule 1 to the Building Regulations 1985, particularly in the case of extensions and alterations, the Department of the Environment have prepared the following guidance note.

LIMITS ON APPLICATION

2. Paragraph 1 of the limits on application of B1 states that the requirement applies only to -

(a) a building which is erected and which -

- (i) is or contains a dwelling-house of three or more storeys,
- (ii) contains a flat and is of three or more storeys
- (iii) is or contains an office, or
- (iv) is or contains a shop;

(b) a dwelling-house which is extended or materially altered and will have three or more storeys, and

(c) a building of three or more storeys, the use of which is materially changed to use as a dwelling-house.

THE EFFECT OF THE LIMITS

3. The effect of these limits is that B1 applies only:

- (a) when a building in category (i), (ii), (iii) or (iv) is erected, extended, or materially altered.
- (b) when a dwelling-house of not more than 2 storeys is extended or materially altered so that it will have 3 or more storeys and
- (c) when a building of 3 or more storeys has its use changed to use as a dwelling-house.

4. In the case of an extension or material alteration of a building in category (i), (ii), (iii) or (iv) the effect of B1 is that the building which is extended or materially altered must not be adversely affected. This means that if the existing building would, if it were newly erected, comply, then the building as extended or altered must also comply. If the existing building would not comply, the building as extended or altered must not be any more unsatisfactory than the existing building. In cases (b) and (c) the building as a whole must comply with B1 after the extension, material alteration or change of use.

EXPLANATION

5. The conclusions in paragraphs 3 and 4 above follow from consideration of what requirements are relevant (or applicable) for the purposes of regulation 4 and regulation 2(4), (5) and (6). Whether a particular requirement (in this case B1) is relevant depends on its limits on application. Since B1 applies to the erection of any building in categories (i) to (iv), it will also apply in the case of an extension or material alteration to such a building because of the way regulation 2(5) operates.

6. In the case of an existing building which is not in categories (i) to (iv), but which will be brought into one of these categories as a result of an extension, material alteration or change of use (when 2(4) (b) will apply) the effect of the limits in paragraphs 1(b) and 1(c) is that B1 applies in the two cases specified and no others.

PRACTICAL IMPLICATIONS

7. The definition of material alteration in regulation 3(2) includes one which could adversely affect compliance with B1. The fact that B1 will apply if the existing building is in categories (i) to (iv) should ensure that in the event the building as altered will not be adversely affected.

8. In the case of an extension to an existing building which would not, if newly erected, comply with B1 it may be difficult to establish what would be an equivalent degree of non-compliance in the extended building. A more practical approach could be to consider whether relaxation of the mandatory rules would be appropriate. (Paragraph 1.4 of the rules is in effect a relaxation of 1.3 for loft conversions).

9. Where it is intended to extend or materially alter a building containing an office or shop B1 will apply. Consequently, the effect of regulation 11(2) is that a building notice cannot be given. Full plans must be deposited and the local authority must consult the fire authority in accordance with section 16 of the Fire Precautions Act 1971.

DoE
CID(BR)
JANUARY 1986

B. CENTRAL REGISTER OF TRAINING AIDS

1. Item G of DCOL 3/1985 brought to the attention of brigades a scheme for sharing training material in a Central Register of Training Aids. It invited brigades to submit details of material to enable the Register to be set up. Brigades could then consult the Register and borrow material from the other brigades. Only 21 brigades have responded to the invitation and it is felt there is much material which has yet to be submitted.

2. To be of real value the Register needs to be as comprehensive and up-to-date as possible. Those brigades who have not as yet responded are therefore asked to submit material or nil returns to Assistant Inspector B F Webb, Room 955, Home Office, 50 Queen Anne's Gate, London SW1H 9AT.

File reference: FIR/85 610/83/1

Telephone number of contact: 01 213 4183 [Mr Webb]

C. EVACUATION SIGNALS

1. A Study Group of the Joint Committee on the Fire Brigade Operations has recently completed a review of personal warning devices and personal radio. The main task of the Group was to consider the use of personal radio within the fire service and details of the outcome were circulated to Chief Fire Officers in my letter of 30 July (DCOL6/1986). The Joint Committee have also endorsed the Group's findings on evacuation signals, and asked that they be drawn to Chief Fire Officers' attention.
2. The Study Group noted that all existing evacuation signal equipment had recognised limitations and that in the long term developments in personal communication offered the most effective and reliable way forward. For the present, the Group concluded that handsignals were not suitable for evacuation purposes. Thunderer whistles, despite some drawbacks were felt to be a very effective means of warning, and the Group saw advantage in issuing whistles to more personnel. They felt that issuing the whistle only to leading firemen and above as was often the case at present was insufficient, and that all operational firefighters should be provided with a thunderer whistle.
3. There is likely to be modest additional expenditure for some brigades if the Group's suggestion is adopted. The present cost of the thunderer whistle is approximately £10 per dozen.

File reference : FIR/82 620/33/16

Telephone number of contact : 01 213 5307

D. MANUAL OF FIREMANSHIP - AMENDMENTS

Due to the length of time between full revision of Books and Parts of the Manual of Firemanship they frequently become obsolete, particularly those sections covering legislation and British Standards.

In future the text will be updated when a reprint becomes necessary and in due course these amendments will be incorporated into the complete revision when it is carried out. The Fire Service will be informed of the amendments as soon as practicable in a Dear Chief Officer Letter. The Fire Services Examinations Board has agreed that the amended Books and Parts of the Manual of Firemanship will not be used as part of the examination bibliography until nine months after the issue of the DCOL.

Two Books have recently been updated: Book 8 (4th Impression 1986) and Book 9 (5th Impression 1986). In the interests of brevity it has been decided not to detail the amendments here but to draw brigades' attention to their location in the updated Books to enable a comparison to be made between the current and previous impressions.

A guide to the location of these amendments is set out below:-

Book 8 (4th Impression 1986)

<u>Page No.</u>	<u>Amendment location</u>
22	First 3 lines
25	(1) Third line "9mm" not "10mm"
33	First 8 lines of 2nd para. Last para. 4-10th lines
34	Last para. of Section 1
42	Last para. of Section e
99	Whole of page except last 4 lines Including caption to Fig. 5.31
123	Section 7 lines 4-6
124	Last line second para. Deletion in second line 3rd para.
125	Section 9 First 3 lines first para.
148	Section 3a. Lines 7 and 13
164	Section 11 last para.
175	Whole of para. b(1)
177	Whole of second para.

Book 9 (5th Impression 1986)

Page No.

Amendment location

87

Change in B.S. last 2 lines

182

Section following BS 3116

183

Last para.

File reference: FIR/80 7/6/19

Telephone number of contact: 01 213 4183

DCOL 8/1986

E. MANUAL OF FIREMANSHIP - BOOK 7

Dear Chief Officer letter No 3/1983 announced revised arrangements for producing the Manual of Firemanship. I can now say that Book 7 of the Manual (hydraulics, pumps and pump operation [2nd Edition]) was published on 1 October 1986 and can be bought from HMSO for £6.50. Its ISBN No. is 0 11 340602 9.

A revised Book 6 on breathing apparatus and resuscitation should be available in 1987.

File reference: FIR/80 7/6/12

Telephone number of contact: 01 213 4183

F. THE IONISING RADIATIONS REGULATIONS 1985
TYPE APPROVAL SCHEME FOR SMOKE DETECTORS

Item E of DCOL 1/1986 set out the main implications of the Ionising Radiations Regulations 1985 on ionisation chamber smoke detectors and self-luminous signs or devices containing gaseous tritium. It was accompanied by Certificates of Approval TA 1 and TA 2, respectively, and 2 Explanatory Notes issued by the Health and Safety Executive.

The Health and Safety Executive have since noted that there was an error in the unit conversion in paragraph 5 of the Explanatory Note for Certificate TA 1 relating to ionisation chamber smoke detectors... and have issued a revised Explanatory Note, a copy of which is attached. The Certificate of Approval TA 1 is not affected and the revised Explanatory Note can simply be substituted for the old one.

There are no cost or manpower implications arising from this part of the Letter.

File ref: FIR/85 26/4/5

Telephone number of contact: 01 213 3501

REVISED EXPLANATORY NOTE FOR CERTIFICATE OF APPROVAL No TA 1

1. This does not form part of the Certificate of Approval.
2. Apparatus specified in the Certificate is type approved for the purposes of Schedule 3 to the Regulations. This means that employers who have such apparatus installed in their premises need not notify the Health and Safety Executive that they are carrying out work with ionising radiations.
3. The approval does not relieve the employer of any other provisions in the Regulations.
4. This approval does not relate to the functional ability of the apparatus.
5. Ionisation chamber smoke detectors containing less than 3.7 MBq Am 241 (100 μ Ci) are not likely to give rise to a dose rate greater than 1 μ Svh-1 at 100 mm, provided that they are maintained in their original condition.
6. In the case of apparatus installed on offshore installations [premises referred to in Article 4 of the Health and Safety at Work etc Act 1974 (Application outside Great Britain) Order 1977] a separate Certificate of Approval has been issued on behalf of the Secretary of State for Energy.

G. TRIALS OF A REMOTELY OPERATED VEHICLE FOR FIRE SERVICE USE

1. In 1983 the West Midlands Fire Service carried out an evaluation of several remotely operated vehicles to assess their suitability for possible fire service use. A vehicle known as the RO-VEH was selected for further trials by the West Midlands brigade and in 1985 a proposal for its subsequent testing within the Home Office fire research programme was agreed. The resultant trials, which were carried out by the Fire Experimental Unit of the Home Office Scientific Research and Development Branch, included measurements of performance capabilities - such as manoeuvrability, traction, stability, load capacity and usefulness of the CCTV camera - and a series of demonstration tests which explored the RO-VEH's possible practical fire services uses. It was not possible, however, in the limited time available to undertake an assessment of the vehicle's resistance to heat, water and chemicals.

2. The trials found that the RO-VEH is very limited in its uses and as such cannot be recommended to the fire service as an operational tool. Particular shortcomings identified during the trials included problems with the trailing control/power cable becoming snagged on obstacles, a low power input to the motors and an inadequate camera performance. The vehicle's resistance to the severe conditions encountered in fire ground operations have not been tested. However, it is believed that damage could result from exposure to heat, water and chemical agents which feature in the fire fighting environment. For these reasons, therefore, the Home Office does not at this stage see any value in carrying out further testing or development work on this particular vehicle. However copies of the report on the trials are available on request, quoting reference number SRDB 12/86, from:

Dr M D Thomas
Fire Experimental Unit
c/o Fire Service College
MORETON-IN-MARSH
Glos
GL56 ORH

File reference : FIR/85 82/131/1

Telephone number of contact: 01 213 3161

H. FIRE SAFETY EDUCATION FOR CHILDREN

As Chief Officers may be aware, the Home Office has for some time been looking for a suitable replacement for the cartoon character "Charley" which featured in one of the fire safety television filler films aimed specifically at younger children. Our Public Relations Branch therefore commissioned some market research into the suitability of three alternative approaches which might be adopted in a filler film on this subject. We were anxious to find a character or personality that was both appealing to children in the 4-7 year old age group, and also one who could put across a fire safety message in a manner which was authoritative, comprehensible and easily absorbed by children.

2. One of the alternative approaches featured "Welephant", the character originally devised by the Greater Manchester Fire Service and now widely used by other brigades. Each concept was tested in both North and South with several different groups of mothers and children.

3. The research findings showed that "Welephant" was the most popular and effective approach and in the light of these findings, a new filler film was produced. Copies were issued to the BBC and ITV contractors in June and the filler has already received 32 transmissions.

4. A summary of the main research conclusions is attached for your information. The findings may be helpful to any brigades who are developing their own education and publicity programmes for young children. In particular, they may assist any brigades who are using or considering using "Welephant".

5. Chief Officers may also like to be aware that the Home Office has welcomed and supported the initiative of the Welephant Club Incorporated in producing a record of the Welephant song, featuring the 'Singing Fireman' from the West Yorkshire Fire Service, and the video which has been made to promote the record.

6. There are no additional cost or manpower implications arising directly from the information contained in this part of the letter.

File reference: FEP/86 18/161/1

Telephone number of contact: 01 213 6108

FIRE SAFETY EDUCATION FOR YOUNG CHILDREN

SUMMARY OF RESEARCH INTO ALTERNATIVE APPROACHES FOR A TELEVISION FILLER FILM

BACKGROUND

Three alternative scripts were prepared, and research was required to discover which of these offered the best potential for communicating to children the message that they should not play with matches.

Qualitative group discussions and depth interviews were used to test the three treatments amongst children aged 4-7 years and their mothers. Each approach was presented to both children and mothers in the form of storyboards and audio tapes. The order in which each approach was shown was rotated throughout the survey to avoid any distortion of the results which might otherwise have occurred.

OBJECTIVES

For a television filler on safety with matches to succeed among children in the target age group it was concluded that the following elements needed to be included.

Primarily

- to use an authority figure who would be both liked and respected.
- to represent realistically and blatantly the horror of the effect of playing with matches and the events involved, such as the fascination of striking a match, fire or flames, and burns.
- to stimulate viewing, particularly amongst children, but not to present the information in a way that allows it to be regarded solely as a story or as entertainment.

Secondly

- to use a concept whose central theme or figure could be expanded and extended as an educational tool.

CONCEPTS

The three different concepts considered by the research were as follows:

Teddy Talk

This concept used four toys, 'Teddy', 'Lucy Ragdoll', 'Bunny', and 'Baa Lamb', talking about their owners, 'Polly' and 'Jamie' who had been taken to hospital because they had been burnt whilst playing with matches.

The Dreadful Story About Mary And The Matches

This approach consisted of a presenter reading to a group of children from a book entitled "The Dreadful Story About Mary And The Matches". The story telling was interspersed with pictures from the book showing what happened to Mary when she played with matches.

Welephant Visits a Hospital

This treatment involved Welephant visiting a burns unit of a hospital and talking to some children who had been burnt through playing with matches.

All three concepts ended with the following rhyme:

"Matches, matches, never touch,
They can hurt you very much."

RESULTS

Teddy Talk - failed to meet any of the criteria identified in the objectives.

Mary and the Matches - succeeded in representing the fascination of playing with fire, and the true horror of burning. It was felt that this approach might fail in terms of presenting danger in a story format, which often makes communication lack credibility. In addition Mary and the Matches offered little opportunity for extension, hence it was unlikely that a long term campaign could be developed from this execution.

Welephant - seemed to be successful as a concept, being a well-liked and respected authority figure. He entertained as well as warned, and was also a character who had already been developed in the North of England as a central figure in a safety campaign. The other advantage of Welephant was that he seemed to offer the best vehicle for extension as an educational tool.

SUMMARY AND CONCLUSIONS

The researchers concluded that whatever approach was selected, it needed a strong element of reality intrinsic to the storyline. Mothers and children alike thought that burns were a serious matter and should be treated accordingly. Any cartoon format, or even storybook approach lacked this essential reality and therefore credibility. Like Tom and Jerry, in cartoons and stories everybody always gets better, no matter how badly hurt they are.

Children, particularly those who were 6 years old or more, were accustomed to watching violent programmes on television, and to some extent they were 'anaesthetised'. Too tame an approach would therefore fail to create the desired effect or leave a lasting impression in the child's mind. In order to be an effective communicator of the warning message, the approach must have dramatic visual impact. Auditory stimuli were also important, particularly for younger children who are susceptible to noise association. Both of these concerns were articulated strongly by mothers and also expressed and implied by children themselves, even 4 year olds.

Also, the approach needed to contain a strong central authority figure to whom children could relate and who they both liked and respected.

"Teddy Talk" seemed the least successful of all three approaches presented. It contained the weakest and tamest message and indeed, was often misunderstood by younger children, who asked questions such as "who was burnt - the children or the toys?". In addition, "Teddy Talk" did not communicate, except by the rhyme at the end, and the relationship between matches, fire, burns and pain or distress was not always understood. For this reason, rather than recalling the message, many children recalled the toys. In addition, Teddy seemed an inadequate figure of authority and aroused little emotional identification for children.

Though specific details of "Mary and the Matches" worked very well, it was felt that the concept itself might fail, because although the approach communicated successfully the horror or fear and pain of burning, and the episodic nature of the story illustrated what happened if a child played with matches, the story book format had limitations and might lead to a lack of credibility. The other concern about this approach, was that it might work very well for girls, but may not be of as much interest to boys or older children. The portrayal of the storyteller, as a teacher, worked successfully, because teachers were generally seen to be figures of authority. If a celebrity was to be used, it should be somebody who was recognised, liked and respected by children, such as Michael Aspel or Floella Benjamin, rather than somebody to whom children do not relate or are unfamiliar to them like Wendy Craig or even Felicity Kendall.

Welephant was often selected by both mothers and children as the best vehicle for teaching children not to play with matches. The dominance of Welephant worked well in this execution, as he was seen as an excellent figure of authority particularly in the North where he was most familiar. Mothers and children felt that he would be listened to, even by naughty children or "big boys and girls" who children perceived as most likely to play with matches. Most children, even those who had not encountered Welephant before, considered that he was a fireman or policeman elephant. This approach showed the effect of playing with matches (by showing burnt children) but needed to be realistic and impactful, possibly by using real children rather than a cartoon approach as envisaged in the research version, and also by clearly showing burns.