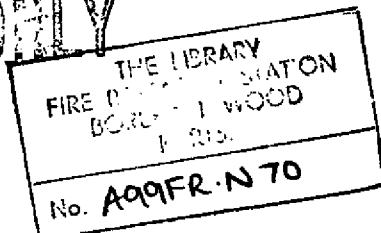


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(Telephone: ELStree 1341 and 1797)

FIRES IN POST-WAR DWELLINGS XXXVII. REVIEW OF STATISTICAL WORK ON REPORTS
OF FIRES ATTENDED BY THE N. F. S. AND FIRE BRIGADES 1946 - 52

by

D. W. MILLAR and J. F. FRY

Summary

An examination has been made of statistical data on fires in post-war dwellings for the period 1946-52. The data have been obtained from reports of the fires attended by Fire Brigades in Great Britain. Information is given on the numbers of occupied dwellings damaged by fire, and on the rates of incidence of fire in temporary and permanent non-traditional dwellings.

Statistical methods have been used to examine the differences between the annual rates of incidence of fires in particular types of houses, to examine the differences between the rates of incidence in different types of houses for particular years, and to test the validity of the hypothesis that series of rates have followed recognisable trends.

From the data on temporary houses it has been found that the rate of incidence of fires in Aluminium houses increased steadily up to 1951 and then decreased in 1952, and that the rate of incidence in Arcon houses, after remaining approximately constant during the period 1946-51, increased sharply in 1952. In both cases "electric wire and cable" was a frequent cause, and between 60 and 70 per cent of these fires involved fuse-box panels or distribution boards. The incidence of fires attributed to "fire in grate" was also higher in Aluminium and Arcon houses than in other temporary dwellings. A large proportion of the fires in this category were due to the ignition of furniture or airing linen by radiated heat, sparks or embers. The highest rates of incidence of serious fires (i.e. fires involving more than half of the building) in temporary dwellings were in Phoenix and U.S.A. houses.

Among the fires in permanent non-traditional dwellings those caused by "fire in grate" were fairly numerous, and, as in temporary houses, generally resulted from ignition of furniture, airing linen etc. by sparks, embers or radiation. Fires caused by flues were an important group and the rates of incidence were highest in B.I.S.F. and Unity houses.

About 50 per cent of the fires in post-war temporary and permanent non-traditional dwellings were attributable to carelessness or ignorance of fire dangers.

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Cunard Building,
15, Regent Street,
London, S.W.1

File No. F.1030/1/1.

(Telephone: WHItEhall 9788)

DB 32521/1

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FIRES IN POST-WAR DWELLINGS XXXVII

Review of statistical work on reports of fires attended
by the N.F.S. and Fire Brigades
1946-52

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FIRES IN POST-WAR DWELLINGS XXXVII

Review of statistical work on reports of fires
attended by the M.F.S. and Fire Brigades.
1946-52

D. W. Millar and J. F. Fry

(I) - INTRODUCTION

The collection of statistical data on fires in post-war dwellings has been proceeding since 1946. The data now cover the periods 1946-52 for temporary dwellings and 1947-52 for permanent dwellings. No information is available on the number of permanent post-war dwellings occupied in 1946. These periods are considered to be of sufficient length for the general pattern of the fire behaviour of the dwellings to have become clear, and to enable useful deductions to be drawn from a study of the trends indicated by changes in the rates of incidence of fires.

For some purposes it has been found convenient to classify all post-war dwellings in three categories:

- (i) temporary (nominal useful life 10 years)
- (ii) permanent non-traditional (nominal useful life 60 years)
- (iii) permanent traditional (nominal useful life 60 years)

This classification has been adopted in the present report, as in previous ones, both for the sake of continuity and because there are differences between the fire risks of the classes (see fig. 1); but it should be noted that the grouping is to some extent artificial, and that structural differences between houses in one group may be at least as great as those between houses in different groups.

(II) - METHODS OF OBTAINING DATA

Most of the statistical investigations carried out by the Joint Fire Research Organization are, of necessity, restricted to those fires attended by Fire Brigades, and this has been the case in studying fires in post-war dwellings. All fires attended by Fire Brigades in the United Kingdom are reported on specially devised forms, known by the code number K 433, and the Brigades have been asked to indicate each fire occurring in a dwelling known to be of the post-war period by a mark on the relevant report form. All report forms received by the Organization are scrutinised and those referring to post-war dwellings are extracted for the purpose of the special analysis. To calculate rates of incidence of fires it is necessary also to know the numbers of dwellings at risk, and these are obtained from the Housing Returns published by H.M. Stationery Office⁽¹⁾.

It will be seen that the accuracy with which rates of incidence of fires can be calculated depends upon the accuracy of the two sets of data obtained. Errors in the figures obtained from the Housing Returns may be assumed to be small and, since the numbers of most types of dwellings at risk are fairly large, such errors are unlikely to affect the calculation of rates of incidence to any appreciable extent. This is not, however, true of the reports of fires. Here, for each type of dwelling, the numbers involved are small and comparatively small omissions could have a serious effect upon the calculated rates of incidence so that care has to be taken to include all reports in the analyses.

It is known that not all fires in post-war dwellings are recorded as such in the reports from Fire Brigades. As far as temporary and permanent non-traditional dwellings are concerned, however, the risk of serious error is overcome by examination of the reports. Each of these contains a description of the type of structure involved and, even when the report is not marked as referring to a post-war dwelling, a post-war type of construction is generally easily recognised. In cases of doubt further information is always obtained

from the Brigade reporting the fire. Unfortunately it is not possible, by any similar means, to identify post-war permanent traditional dwellings, since, except where a concrete ground floor is mentioned, the type of construction gives little guidance. No satisfactory method of estimating the true number of incidents in post-war traditional dwellings has been found and no data on these have been included in the present report.

It is of interest to compare the rates of incidence of fires in post-war dwellings with the over-all rates for pre-war dwellings, and to do this it has been necessary to obtain an estimate of the number of pre-war dwellings at risk. A figure of 12-million was estimated from the Social Survey enquiry on population and housing made in 1945⁽²⁾ and this figure has been used in earlier reports on fires in post-war dwellings. It has recently been possible to confirm that the figure of 12-million is of the correct order of magnitude by reference to the 1 per cent sample tables of census reports issued by the Registrar General⁽³⁾.

It should be noted that the information given in this report differs from many collections of similar statistical data in that, except in the case of traditional houses, all reports are believed to be included and there is, therefore, no "sampling error" involved. It follows that a difference between two rates of incidence is always a real difference although it may be of insufficient magnitude to be of practical importance. It should be noted, however, that in the origin of most fires the element of chance is large so that, in order to observe whether a change in a rate of incidence is attributable to a particular set of circumstances, it is necessary to carry out statistical tests of significance.

(III) - THE STATISTICAL DATA PRESENTED

Tables 1 to 13 in this report give information on the numbers of occupied dwellings damaged by fire and the rates of incidence of fire. The rate of incidence for any one type of dwelling in a given year is defined as the ratio between the number of occupied dwellings damaged by fire during the year and the average number of the dwellings at risk (i.e. occupied) in the year. The assumption is made that a completed house is immediately occupied, and the rate is conventionally expressed as the number of damaged dwellings per 10,000 dwellings at risk per year.

Rates of incidence have been calculated both for all dwellings damaged and for those seriously damaged (tables 1, 2, 7, 8, 13) "serious damage" being arbitrarily defined as that occurring when more than half the dwelling is affected by fire.

The actual numbers of dwellings at risk and the numbers of incidents occurring are also given in the tables (tables 1, 2, 8). The word "incident" is used to describe any fire or group of connected fires attended by a Fire Brigade, so that the number of incidents differs from the number of damaged dwellings by the number of fires that spread from one dwelling to another.

The numbers of dwellings damaged by fire attributed to various causes and the corresponding rates of incidence are presented both in total (tables 3 and 9) and for individual types of dwellings (tables 4 and 10). The numbers have also been grouped (in tables 3, 4, 9 and 10) according to the materials first ignited. Where constructional materials were ignited first more detailed information is given (in tables 5, 6, 11 and 12). The numbers of seriously damaged dwellings grouped according to the supposed cause of fire are given in tables 7 and 13. Information on the numbers of casualties, both fatal and non-fatal, is contained in Table 14 and the causes of death of fatal casualties grouped according to the supposed cause of fire in Table 15.

An analysis of the circumstances underlying the causes of fires is given in Table 16, and information on the extent of fires in pre-war and post-war dwellings, in relation to the urban or rural location of the dwelling, is given in Tables 17 and 18.

(IV) - FACTORS INFLUENCING FIRE RISK

The fire risk in any dwelling is influenced by the following major factors:-

- (i) the design and layout and the materials used in the construction of the dwelling,
- (ii) the heating, lighting, cooking and other domestic equipment used in the dwelling,
- (iii) the standard of "housekeeping", and to some extent the age distribution, of the inhabitants, and
- (iv) the location of the house.

In the information available to the Organization the various types of non-traditional post-war dwellings, both temporary and permanent, are distinguished from one another so that, although there may be minor variations in houses classified as being of one type, layout and construction may be taken into account.

The domestic equipment used will, of course, vary from one household to another, but it is reasonable to assume that some types of equipment are likely to be common to nearly all post-war dwellings. For example, it is probable that all post-war dwellings contain electrical installations including fuse-boxes, distribution boards, meters, wire and cable, lamp fittings and power points; similarly, although there are likely to be many forms of heating equipment in use, most dwellings can be expected to contain enclosed stoves or open fire grates (or both), so that most will have some type of flue. Comparisons between the rates of incidence of fires associated with equipment common to all types of dwelling can give an indication either of deficiencies in the design of the equipment fitted in a particular type of house, or of faults in the layout and design of the dwelling.

It is not possible to assess either the standard of "housekeeping" or the age distribution of the inhabitants of the post-war dwellings in which fires occur, although, because of the methods of allocating houses adopted by local authorities, there are likely to be some children in most temporary and permanent non-traditional houses.

The geographical location of dwellings in which fires occur is always given in the fire reports, but there is generally no information about the spacing of houses in the locality and it is not always possible to distinguish between terraced, semi-detached and detached houses of the permanent types. A broad classification into urban and rural districts is possible from the reports; this has been made in connection with the present analysis, and the results are presented in Section 5. From the evidence at present available it appears that climatic variations in the United Kingdom produce no marked effect upon the incidence of fires in buildings generally, and there is no reason to suppose that post-war dwellings differ from other buildings in this respect. No attempt has been made in the present analysis to study this aspect of the effect of location.

(V) - COMPARISON OF THE EXTENT OF FIRES IN PRE-WAR AND POST-WAR DWELLINGS

The classification of fires into those occurring in urban and those occurring in rural districts is given in Tables 17 and 18 for pre-war and post-war dwellings respectively.

The numbers and proportions shown in Table 17 are derived from random samples, so in comparisons of any two or more proportions this fact should be taken into account. From Table 17 it is seen that the total numbers of damaged dwellings differ widely from one category to another. This means that the sampling errors for some proportions may be larger than for others.

It is reasonable to conclude that the proportion of fires in pre-war houses in which damage was confined to the room of origin, was higher in towns than in country districts in England and Wales and in Scotland. The same fact is probably true of pre-war flats in England and Wales (though the evidence is not

decisive), but not of pre-war flats in Scotland where the proportion of fires confined to the room of origin is much the same in town and country districts. This tendency for fires in dwellings in country districts to involve more of the dwelling of origin than fires in towns is also in evidence among post-war dwellings the data for which are shown in Table 18. This table is on the same basis as Tables 1 - 16, that is a complete enumeration of all fires reported by Fire Brigades, and it can be seen that for nearly all years the proportion of fires confined to the room of origin, both for temporary and permanent non-traditional dwellings, is higher in towns than in country districts. The reason for this is presumed to be mainly the tendency for the time interval between the outbreak of fire and the start of fire fighting by the Fire Brigade to be longer in the country than in towns.

The numbers of pre-war houses and flats at risk in Scotland is not known, but it is obvious from Table 17, that, unless the fire-risk of dwellings in Scotland is seriously different from that in England and Wales, the ratio of flats to houses is much higher in Scotland. In the absence of information on numbers at risk in relation to population density and geographical location it is not possible to draw any conclusions about the spread of fire in flats in country districts in Scotland.

So far as the averages for 1948 to 1952 are concerned, the proportions of fires in the three categories of damage distinguished in Table 18 show no appreciable difference between temporary and permanent post-war dwellings either in country districts or in towns. The proportions for individual years fluctuate considerably but the rates of incidence for "seriously" damaged dwellings given in Table 1 bear out this conclusion, except for 1952 in which year the rate for seriously damaged permanent non-traditional dwellings was very much lower than that for temporary dwellings. It has been established that the proportion of fires confined to the room of origin is higher in towns than in the country. It can also be seen from Table 18 that the difference in the proportions of fires that spread beyond the room of origin lies in those damaging more than half the dwelling, that is in the "serious" fires.

The final comparison made is between pre-war and post-war dwellings in the United Kingdom. From the rates of incidence of "serious" fires shown in Table 1 it can be seen that fires in pre-war dwellings tend to spread less than those in post-war dwellings, and this is true of both town and country districts.

It is pertinent to remark that the classification of fires into the three categories of damage shown in Tables 17 and 18 cannot be entirely objective especially when distinguishing between fires which spread beyond the room of origin. Small differences in proportions in these categories should not therefore be regarded as important.

(VI) - FIRES IN TEMPORARY DWELLINGS

(a) Rates of incidence

As may be seen from Table 1, there was a fairly steady increase in the overall rate of incidence of fires in temporary dwellings from 1946 to 1952. No great importance can be attached to the small decrease from a rate of 17.0 in 1951 to one of 16.5 in 1952, although there is a possibility that modifications were made to some types which tended to reduce the fire risk. The rate for seriously damaged dwellings remained approximately constant except for the year 1951.

There are about 157,000 temporary dwellings currently at risk, the five most frequently occurring types being:-

- Aluminium
- Arcon
- Tarran
- Uniseco
- U.S.A.

These five types account for most (about 96%) of the total number and there are no more than 2,400 of any other single type at risk.

There has been no exhaustive investigation of the differences in construction between the five types of temporary dwellings or of the effects that these differences may have on the fire risk; none-the-less some details of the overall rates of incidence of fire are of interest as an indication of the existence of differences in the fire risks, and of the manner in which the risks have been changing with time. The rates are conveniently collected together in the following table:-

Rates of incidence of fires in post-war temporary dwellings

Type of dwelling	Number of damaged dwellings per 10,000 dwellings at risk per year						
	1946	1947	1948	1949	1950	1951	1952
Aluminium	4.4	8.2	10.5	12.9	16.2	22.8	17.3
Arcon	6.5	11.4	12.8	11.8	13.4	13.1	22.1
Tarran	9.5	9.7	10.7	12.6	10.5	13.7	10.5
Uniseco	2.5	10.2	8.4	12.8	10.3	16.2	12.4
U.S.A.	6.2	3.7	11.8	9.5	13.0	14.2	15.4

It is possible to test statistically, by a form of the χ^2 test, whether the rates either for a given type of house over a period of years, or for a number of different types for one or more years, are essentially the same within the limits of chance variation, that is variation not assignable to any specific factor. And it is possible to combine with this operation a test, devised by Dr. F. N. David⁽⁴⁾, of the hypothesis that a series of rates over a period of years follows a recognisable upward or downward trend. These tests have been applied to the data on temporary dwellings, all tests being made at the 5 per cent level of significance.

Rates of incidence in Aluminium houses. The rates of incidence of fires in Aluminium houses increased steadily up to 1951 and then decreased between 1951 and 1952. The increasing rate for these houses up to 1951 was responsible for a large proportion, though not the whole, of the increase in the total rate for all the temporary dwellings put together. Faults in "electric wire and cable" were the largest single cause contributing to the increase up to 1951, but fires attributed to other causes such as "electric cooker", "electrical apparatus other than cooker" and "fire in grate" also increased in numbers. The pattern of the distribution of causes in the decrease from 1951 to 1952 was similar to that in the increase up to 1951. It should be noted that the phrase "electric wire and cable" is used in these analyses to include fuse boxes and distribution boards which, in fact, give rise to most of the fires in this category.

Rates of incidence in Arcon houses. The test of the rates for Arcon houses for the years 1946-52 strongly suggests an increase in the fire risk over the period, but much of this is due to the high rate for 1952, the rates for 1946-1951 being not incompatible with the hypothesis that the fire risk remained constant for this period. On the evidence at present available it seems reasonable to conclude that the fire risk for Arcon houses remained approximately constant between 1946 and 1951 and increased sharply during 1952. The increase in the rate for this year was due to an increase in the numbers of fires due to "electric wire and cable" (including fuse boxes and distribution boards), to "smoking materials" and to miscellaneous causes.

Rates of incidence in Tarran houses. The rates for Tarran houses indicate that the fire risk for this type of house may be regarded as constant since 1946.

Rates of incidence in Uniseco houses. The rates for Uniseco houses varied a great deal from year to year during the period 1946-52, and while there is some evidence of an upward trend during this period the evidence for the shorter period 1947-52 is not at all strong. In other words the test for a trend during 1946-52 is influenced by the very low rate for 1946. The rate for 1952 in these

houses was influenced by an exceptional incident in which five houses were set alight by burning petrol from a crashed aircraft. It is reasonable to conclude that, while the rates for these houses fluctuated considerably, there is little evidence of an upward trend.

Rates of incidence in U.S.A. houses: The rates for the U.S.A. houses may, at first sight, appear to follow an upward trend, although not increasing steadily. A test of the significance of the difference between the yearly rates however, does not provide evidence of a definite trend. This negative result appears reasonable when it is realised that there are only 8,500 of these houses at risk, so that 1 fire is equivalent to a rate of 1.2.

Rates of incidence in temporary dwellings considered in groups. The individual rates for Arcon, Tarran, Uniseco and U.S.A. houses suggest that the fire risk for these houses remained approximately constant during the period 1947-51, but a statistical test shows that the hypothesis is barely acceptable since there is some evidence, though not very strong, of the existence of an irregular upward trend in the average rates for each year when all four types of house are grouped together. This upward trend is confirmed by tests applied to the rates for the periods 1947-52 and 1946-51. If the rates of incidence for these four types of house are considered in different groupings, it is found that the risk for Tarran and U.S.A. houses may be considered to be common to the two types and to have remained constant during the whole period 1946-52.

The rates for Arcon and Uniseco houses when considered together show strong evidence of an upward trend for the period 1946-1952, with a marked difference between the rates for the two types. It should be remembered in this connection that the Arcon rate for 1952 was exceptionally high and that the Uniseco rate was inflated by an exceptional occurrence. There is also strong evidence of an upward trend, however, when the rates are considered together for the period 1946-1951.

From the tests referred to above it appears that the rates of incidence in Arcon and Uniseco houses may be following an irregular upward trend; that the rates for Tarran and U.S.A. houses show no evidence of an increasing fire risk; and that the fire risk in Aluminium houses increased steadily, at least up to 1951, the increase being assignable to certain causes.

(b) Causes of fires in temporary houses

To provide some guidance for the action to be taken to reduce the fire risk in any type of occupancy it is necessary to examine the rates of incidence of fires due to various causes.

The following table gives the rates of incidence due to the chief causes in temporary houses, and the graph in fig. 2 presents the most important features when all temporary dwellings are considered together.

Average rate of incidence for each supposed cause of fire,
in occupied post-war temporary dwellings 1947-52

Supposed cause of fire	Aluminium	Arcon	Tarran	Uniseco	U.S.A.
Electric cooker	1.4 (40)	0.8 (19)	1.6 (17)	1.6 (28)	-
apparatus other					
than cooker	1.2 (34)	1.5 (34)	1.8 (20)	1.7 (29)	0.8 (4)
wire and cable	4.9 (142)	3.5 (79)	1.6 (18)	1.9 (32)	1.6 (8)
Fire in grate	2.9 (84)	3.1 (69)	2.1 (23)	1.6 (28)	1.2 (6)
Flue	1.5 (42)	0.4 (10)	0.6 (7)	0.5 (8)	0.4 (2)
Gas (coal)					
apparatus	0.4 (13)	0.9 (21)	0.4 (4)	0.5 (9)	2.6 (13)
Smoking materials					
and matches	0.9 (25)	1.5 (34)	0.9 (10)	1.6 (28)	1.6 (8)
Other causes	1.2 (35)	1.1 (24)	1.6 (18)	1.5 (25)	1.8 (9)
Unknown cause	1.1 (32)	1.3 (30)	0.6 (7)	0.9 (15)	1.4 (7)
Total rate	15.5 (447)	14.2 (320)	11.3 (124)	11.8 (202)	11.3 (57)

(The figures in brackets are actual numbers of dwellings damaged)

Fires caused by cookers. Inspection of the table shows certain fairly obvious relations, with bearing on the factors influencing fire risk already mentioned. For example the rates for 'electric cookers' were lower in Arcon and U.S.A. houses than in the other three types of house, and conversely the rates for 'gas (coal) apparatus', which in fact is mainly 'gas cooker', higher. This suggests that the figures merely reflect the division of cooking facilities between gas and electric cookers in the various types of house and that there may even be no electric cookers at all in U.S.A. houses. The important fact to note is that the fires in either case were very rarely due to defects in the cookers, but were largely due to human carelessness; the majority of the fires were caused by foodstuffs over heating or boiling over, or by airing clothing or linen being set alight by the cooker. In a few of the fires building board, strawboard, insulating packing or wood in the vicinity of the stove was ignited by heat from the stove.

Fires due to electrical apparatus. The fires due to electric apparatus other than cookers were caused in the main by electric fires, by electric irons left switched on, or by faults in wireless and television sets. The most serious of these, though not numerically in the majority, are the incidents in which unguarded electric fires set alight to clothing such as dresses or night-gowns worn by children or old people. These fires nearly always result in injury, often serious to the individual concerned.

Fires due to electric wire and cable. The incidence of fires due to electric wire and cable (including fuse boxes and distribution boards) is shown in the table below.

Rates of incidence of fires caused by electric wire and cable
in temporary houses

Year	Type of house			
	Aluminium	Arcon	Other types	Total all types
1947	2.7 (6)	1.5 (5)	2.1 (12)	2.1 (23)
8	2.8 (14)	5.1 (19)	0.8 (5)	2.6 (38)
9	4.0 (22)	2.8 (11)	2.7 (17)	3.2 (50)
50	5.5 (30)	2.3 (9)	1.9 (12)	3.3 (51)
1	7.7 (42)	3.1 (12)	2.4 (15)	4.4 (69)
2	5.1 (28)	5.9 (23)	0.8 (4)	3.5 (55)
Average	4.9 (142)	3.5 (79)	1.8 (65)	3.2 (286)

(The figures in brackets are numbers of fires)

The rates of incidence due to this cause in Aluminium houses increased steadily up to 1951 and then decreased; and the rates for Arcon houses were, in general, higher than those for other temporary houses excluding the Aluminium type. It will be seen that during the 6 years, the average rate for Aluminium houses was about 3 times, and that for Arcon houses about twice the average rate for the other types of temporary dwellings. Between 60 and 70 per cent of fires classified as being due to "electric wire and cable" involved fuse box panels or distribution boards, and it is clear that a considerable proportion of these fires occurred in Aluminium and Arcon houses.

Fires due to "fire in grate". The incidence of fires due to "fire in grate" remained fairly uniform between 1946 and 1952 with an average rate of 2.5 per 10,000 dwellings at risk per year. The incidence in Aluminium and Arcon houses however, was higher than in the other types of temporary house with the exception of the Phoenix type of which there were only 2,400 at risk. The annual rates for Aluminium houses varied about an average of 2.9, those for Arcon houses about an average of 3.1 and those for the other types about an average of 1.7.

In the four years 1949-1952 between 60 per cent and 75 per cent of the fires due to "fire in grate" were caused by radiated heat, or sparks and embers, igniting furniture, or airing clothing or linen; only between 5 and 15 per cent were due to faulty design or construction of fire places. The remaining fires in this category were due to clothes being ignited whilst being worn, to sparks or embers igniting structural materials, to flash-backs when lighter-fuel, paraffin or methylated spirit were used to light or re-kindle fires and to a few other miscellaneous causes.

The rates of incidence of fires caused by "fires in grates" igniting the contents of dwellings were higher in Aluminium, Arcon and Tarran houses, which had an approximately uniform average rate of 2.4, than in Uniseco houses with an average rate of 1.3. There was a total of only 5 fires of this type in U.S.A. houses in five years, which corresponds to a rate of 1.0. The plans of the various houses indicate no obvious reason for the differences in the rates of incidence, and the stoves installed in them appear to have been similar, if not identical, in construction; it is possible, however, that an inspection of the actual houses would reveal some difference in layout or construction that would help to account for the differing rates.

The rates of incidence of fires attributed to "fire in grate" in which constructional materials were ignited first were higher for Aluminium houses, at an average of 0.6, than for the other four types considered, which had an average rate of 0.25. In Tarran houses there were no fires in which the material first ignited was constructional in any of the five years. These rates suggest the possible existence of some fault in the installation of the heating equipment in the Aluminium houses.

Fires caused by smoking materials and matches. The only remaining common cause of fires is that described as "smoking materials and matches". There is some evidence of an upward trend in the annual rates of incidence of fires due to this cause in all temporary houses together, but it is often a difficult cause to identify positively and may sometimes be reported when no other obvious cause is apparent. The source of ignition for the greater number of fires in this class is reported to be "smoking materials". The average rate for "children playing with matches" is about a third of that for "smoking materials". In either case the cause depends on the standard of 'housekeeping' and should be expected to be independent of the type of house. It is, therefore, surprising to find that the Aluminium and Tarran houses may be regarded as forming one group with a uniform average rate of 0.9 while the Arcon, Uniseco and U.S.A. houses having an average uniform rate of 1.6. The difference between the average rate is statistically significant.

(c) Serious fires in temporary dwellings

The average rates of incidence (1946-52) of serious fires are given in Table(7). It is apparent that the highest rates were those for Phoenix houses (of which there are only 2,400 at risk) and U.S.A. houses. The other houses may be regarded as belonging to one group, the mean of the average rates being 0.9. A serious fire may depend on the size of the object first ignited, the interior furnishing, the effectiveness of any fire fighting undertaken before the arrival of the Fire Brigade, and the time between the ignition of the fire and the arrival of the Fire Brigade, all of which factors are generally independent of the structure of the dwelling. If, however, the rate of incidence in a particular type of house is appreciably higher than that in other types, as is the case in Phoenix and U.S.A. houses, it leads to the suspicion that some feature of the construction of the house may be at fault.

(VII) - FIRES IN PERMANENT NON-TRADITIONAL DWELLINGS

(a) Overall rates of incidence

The information in Table (1), on fires in permanent dwellings of non-traditional design, suggests that the total rate for all types of dwelling considered together, has remained more or less constant between 1947 and 1952. The total rate for seriously damaged dwellings was roughly constant between 1947 and 1950, decreased considerably in 1951 and stayed at a low level in 1952. A statistical test shows that the figures are quite compatible with a hypothesis along these lines.

It can be seen from Table (8) that there were different rates of incidence of fire in different types of dwelling and that, for a given type the rate varied from year to year. The only dwellings in which the variation was important were the B.I.S.F. houses. There are considerable numbers of this type of house currently at risk, and the total rate almost steadily from 1947 to 1952, when it was higher than the rate for any other type with a comparable number of dwellings at risk. There are other types, notably the Atholl, Cruden, Howard and Unity houses, for which the rates of incidence either had an exceptionally high average value, or showed exceptional variation between 1947 and 1952. The total number of these four types currently at risk is only about 15,000.

The rates for some types of house were exceptionally high in the earlier years of the construction programme such as 1947 and 1948. These rates, based on small numbers of damaged dwellings, are not considered to be important and in some cases may be misleading. For example there were in 1948, 612 Airey houses standing at the beginning of the year and 7,815 at the end of the year, but the average number of dwellings at risk for 1948 was 3,002. This indicates a higher rate of building in the latter part of the year than in the former part, and hence the rate of incidence, though certainly higher than those for the succeeding years, may not have been so high as the calculated rate of 33.3 would indicate.

(b) Causes of fires in permanent non-traditional dwellings

The rates of incidence for the various causes of fire when all types of house are considered together, are given in Table (9) and the variation in the main causes is shown graphically in fig. (3). It is apparent that the rates for nearly all the causes of fire were almost uniform during the years 1948 to 1952, and that for reasons already mentioned, the rates for the few fires which occurred in 1947 may be misleading. The only cause of fire for which the rate of incidence was not sensibly constant during the five year period was "spread of fire from other house or flat". The differences between the yearly rates for this cause were due to fires in more than one type of house.

Fires due to electrical apparatus. Little need be said about the fires caused by electric cookers since, as in temporary houses, they were nearly all due to carelessness in allowing foodstuffs to over-heat or airing linen to become ignited. The fires due to electric apparatus other than cookers were also very similar to those in temporary houses, being caused mainly by electric fires, electric irons and faults in television and wireless receivers.

Fires due to electric wire and cable. Fires due to electric wire and cable (including fuse boxes and distribution boards) were not nearly so important in permanent non-traditional houses (average rate 0.7) as in temporary houses (average rate, excluding Aluminium and Arcon houses, 1.8). The proportion of fires starting in fuse boxes and distribution panels was not so consistently high as in the temporary houses, and varied from about 20% to 50% in the last four years, but this figure is obtained from a far smaller number of fires.

Fires attributed to "fire in grate"

The source of ignition described as "fire in grate" is, as in temporary houses, a composite source of fire. The proportion of fires due to sparks or embers setting fire to furniture, or airing clothing or linen varied between 40% and 60%; while the fires due to faulty construction or design of the fire-place amounted to about 10% of the total number of fires due to this source of ignition in each year. The average rates varied considerably between different types of permanent non-traditional dwelling, but although the Atholl, Cruden, Howard, Orlit, Swedish Timber and Unity had comparatively high rates, it was only in the B.I.S.F. type that the numbers of fires were large enough to be important. In only 5 out of the 54 fires attributed to "fire in grate" in these dwellings were constructional materials ignited first. This suggests a high degree of laxity in "housekeeping", that is in the provision of fireguards, in the arrangement of airing clothing and linen, and in the disposition of furniture and rugs and carpets.

Fires caused by flues. Fires caused by flues were the second most important group among the fires in permanent non-traditional dwellings. Two types of house, the B.I.S.F. and the Unity, accounted for between 50% and 75% of these fires in each of the years 1948-52. The average rates for the Orlit and Wimpey

houses were also high. In each of the years 1948-50 and again in 1952 at least 60% of the fires were caused by radiated heat from flue-pipes; in general constructional materials were first ignited.

The proportion in 1951 was little over 50%. The materials first ignited were - roof or ceiling timbers, flue-ducts, airing cupboards, roofing felt or the paper backing to roof insulation, lagging to water pipes, and a few odd contents of roof voids. The other fires were largely due to accumulations of soot in flues being ignited, the radiated heat setting fire to structure or contents; or to defective flues which allowed sparks or flames to ignite structure or contents. It may often be difficult to draw a distinction between fires due to radiated heat from flue-pipes and fires due to radiated heat caused by an accumulation of soot being ignited, so that this sub-division is a little uncertain.

Fires caused by smoking materials and matches. As in the temporary houses the rates of incidence of fires due to smoking materials and matches differed, in non-traditional permanent dwellings, between various types of house. The average rates during 1948-52 for the Airey, Aluminium, B.I.S.F., Laing, Orlit, and Wimpey houses were 0.2, 1.0, 1.6, 0.3, 0.9 and 0.8. From statistical tests applied to these rates it appears that the houses cannot be regarded as constituting a single group with a common fire risk; when the B.I.S.F. houses are excluded the numbers of fires are too small to test whether the fire risks in the remaining houses differ among themselves. During the five years considered there were only 3 fires, all in B.I.S.F. houses, in which constructional materials were said to have been ignited by smoking materials or matches, so that, so far as this source of ignition is concerned, the fire risk of the structures is very slight.

(c) Fires in types of dwellings in which there were marked fluctuations or high levels of incidence.

In certain of the types of permanent non-traditional dwellings the rates of incidence of fire were either consistently high or varied greatly from year to year; brief comments on these types are given below:-

Fires in B.I.S.F. houses. The average rate of incidence in B.I.S.F. houses between 1948 and 1952 was 15.7; the average rate for fires due to "fire in grate" and "flue" together was 7.8 which compares unfavourably with the average rate for all other types of permanent non-traditional dwelling of 3.6. The rates for fires due to 'electric apparatus other than cooker', 'coal gas apparatus', 'smoking materials' and 'unknown cause' were approximately twice the corresponding average rates for all other types of permanent non-traditional dwellings. The increase in the overall rates for this type of dwelling was largely due to 'fire in grate' and 'flue' but the other causes mentioned above also contributed.

Fires in Atholl houses. There have been considerable fluctuations in the rates of incidence in Atholl houses, the figures for which were 39.1 in 1950, 8.5 in 1951 and 4.4 in 1952. Out of the 10 fires on which the 1950 rate was based, 5 were due to fire in grate and 4 to spread of fire from other house or flat.

Fires in Cruden houses. The rates of incidence in Cruden houses were very high, of the order of 42, in the years 1948-1950. In 1951 the rate was 14.8 and in 1952 it was 8.7. There was a very high proportion of fires in the first three years in which constructional materials were first ignited from various sources of ignition. 'Spread of fire from other house or flat' was prominent among these. In 1951 and 1952 the rates for these fires were lower. The internal walls and ceilings of Cruden houses were lined with fibre-board and the internal partitions constructed of this material. This circumstance suggested that a very rapid spread of fire would occur once ignition had taken place. The rapidity of the spread of fire was experimentally compared with that of a similar house in which the fibre-board was covered with $\frac{3}{8}$ in. thickness of plasterboard(5) and the result confirmed the hazardous nature of the fibre board lining. The low rates of incidence for 1951 and 1952 reflect the effectiveness of the action taken to reduce the fire risk in these houses.

Fires in Unity houses. The overall rates for Unity houses were consistently very high, and it can be seen that fires due to flues were the predominating feature. With the increase in the numbers of these houses at risk fires due to other causes became more apparent, but the flue fires remained the major cause.

(d) Serious fires in permanent non-traditional dwellings

The average rates (1947-52) for serious fires are given in Table 13. The rates for the Cruden and the Swedish Timber houses are the highest at 5.2 and 3.3 respectively. The probable explanation of the high rate for the Cruden house lies in the fact, mentioned in Section 6(c) that all of these houses originally had linings and internal partitions of fibre-board. It should be noted, however, that all of the serious fires occurred before action was taken to reduce this fire-risk and that, in 1951 and 1952, not only was the rate for all damaged dwellings lower than in previous years, but there were no serious fires.

The Swedish Timber house, as its name implies, is constructed of timber. This might increase the general fire risk and the risk of serious fire especially in dry climatic conditions, but the point requires more evidence than that provided by the fire statistics for these houses. When the numbers of dwellings at risk are taken into account, the average rates for serious fires in the Airey and B.I.S.F. houses are higher than for the other types of permanent non-traditional dwelling (excluding Cruden and Swedish Timber houses), but the difference is only that between 1.0 and 0.3, and not of practical importance.

(VIII) - OVERALL DISTRIBUTION OF CAUSES OF FIRES
IN POST-WAR DWELLINGS

While many, if not all, fires are largely due to chance occurrences, there are some clearly identifiable circumstances among the factors which determine outbreaks. Some causes of fire depend on the design, layout and construction of the dwelling (e.g. fires caused by flues), while some depend on the domestic equipment used in the dwelling, and others on the standard of housekeeping of the inhabitants.

It would obviously be impossible to eliminate fires in dwellings simply by correcting all faults in design and construction, but it is of interest to obtain some measure of the maximum effect that might be possible by these means. To do this the reported causes of all fires in temporary and permanent non-traditional dwellings during the three years 1950-1952 have been separated into the three categories shown in Table (16). The first of these contains all fires attributed to mechanical, structural or electrical faults, and those attributed to faulty design or layout of either the structure or fixed domestic apparatus; the second category consists of fires in which carelessness, ignorance or other human failings appear to have been the chief factors; and the third, and smallest, consists of fires which could not be classified in either of the other categories.

It will be seen that, for both groups of dwellings about 50 per cent of the fires occurring each year were due to carelessness or failure by the occupier to take appropriate precautions. The most important groups of causes in this class of fires were "fire in grate", "smoking materials and matches", and electric and gas cookers.

Fires caused by some fault in the dwelling or in fixed domestic equipment averaged 37.5 per cent of the total in temporary dwellings and 29.4 per cent in permanent non-traditional dwellings, the most important groups of causes being electric wire and cable (chiefly fuse-box or distribution panel) in the temporary, and flues in the permanent dwellings.

From these figures it is clear that, while the correction of certain faults in the dwellings could cause an appreciable reduction in the incidence of fires, the most effective measure would be greater care and fire-consciousness on the part of the occupants themselves.

(IX) - CONCLUSIONS

It is clear that certain features of some houses could be improved. For example replacement of the fuse-box or distribution board only in Aluminium and Arcon houses would prevent many fires due to electric wire and cable. Of all the fires in temporary houses due to this cause in the period 1947-1952 77% took place in Aluminium and Arcon houses, and between 1949 and 1952 some 60% to 70% involved the fuse box or distribution panel. The average rate of incidence of fires of this type (1947-52) in temporary houses other than Aluminium and Arcon was 1.8; the average (1948-52) for permanent non-traditional houses was 0.7, but there were wide differences between various types suggesting that the quality of fixed electrical installations varies considerably and that reduction of the fire risk from this cause in houses to be built in the future may be an economic proposition.

One group of fires of particular interest in connection with non-traditional forms of construction is that caused by radiated heat or sparks from flues; a group at present being investigated by the Inter-departmental Panel on Cased-in Flues. Between 50 and 60 per cent of the fires caused by flues in temporary dwellings were in Aluminium houses, and between 50 and 75 per cent of those in permanent non-traditional dwellings were in B.I.S.F. and Unity houses. The rate of incidence of these fires depends to some extent on the design of the heating installation itself, but, even with this limitation, there is probably room for improvement of the fire incidence by careful design and construction of the buildings even in types other than those mentioned above.

Reduction of the incidence of fires due to mechanical and electrical faults in some items of domestic equipment (e.g. wireless and television sets) must depend upon improvements in design and the provision of safety devices in the equipment itself; this would not normally be within the sphere of activities of authorities responsible for housing.

The design and construction of houses, and of the domestic equipment used in them, are important factors in determining the fire risk; but it appears that the "house-keeping" element is greater than is commonly realised. Here the possibility of reducing the fire incidence appears to lie in the direction of educating householders and of general propaganda rather than of recommendations concerning construction or design. It is possible that social factors may be of importance in the incidence of fires in which the risk is largely determined by the human element. For example in different types of house there are unexpected differences in the rates of incidence of fires caused by smoking materials and matches. This group of causes is entirely dependent upon standards of housekeeping and can have little connection with the design of the houses; it may however, be influenced by social factors which are outside the scope of this report.

There is also a possibility that the fire risk of a dwelling is partly dependent upon architectural features, such as the size and arrangement of living rooms, which are generally not taken into account in this connection. This possibility is suggested by the figure for the incidence of fires attributed to "fire in grate" which were different for different types of house, and were rather lower for permanent non-traditional houses than for temporary houses.

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Table 1

RATE OF INCIDENCE OF FIRES IN OCCUPIED DWELLINGS
Reports from the N.F.S. and Fire Brigades in Great Britain, 1946 - 1952

Type of dwelling	Year	Number of dwellings at risk	Number of incidents	Damaged Dwellings		Number of damaged dwellings per 10,000 dwellings at risk per year	Number of seriously damaged dwellings per 10,000 dwellings at risk per year
				Total number	Number seriously damaged		
PRE-WAR	1946	12,000,000	14,464	15,180	628	12.7	0.5
	1947	12,000,000	16,218	16,849	414	14.0	0.3
	1948	12,000,000	16,076	16,686	344	13.9	0.3
	1949	12,000,000	18,340	19,148	340	16.0	0.3
	1950	12,000,000	19,372	20,096	266	16.7	0.2
	1951	12,000,000	18,398	19,890	Not available	16.6	Not available
	1952	12,000,000	21,508	22,072	288	18.4	0.2
POST-WAR Temporary	1946	35,816	34	34	6	9.5	1.7
	1947	110,361	105	105	10	9.5	0.9
	1948	148,531	154	154	13	10.4	0.9
	1949	156,605	194	195	16	12.5	1.0
	1950	156,623	215	215	22	13.7	1.4
	1951	156,623	266	266	7	17.0	0.4
	1952	156,623	249	257	19	16.4	1.2
Permanent non-traditional	1946	-	2	2	-	-	-
	1947	10,939	10	10	1	9.1	0.9
	1948	56,546	67	71	8	12.6	1.4
	1949	118,420	118	130	18	11.0	1.5
	1950	155,557	144	165	15	10.6	1.0
	1951	185,826	187	192	7	10.3	0.4
	1952	220,359	234	248	6	11.3	0.3

* Figures for numbers of post-war permanent houses occupied by families were not published until 1947, and it is therefore impossible to calculate the equivalent number of dwellings at risk.

TABLE 2

RATE OF INCIDENCE OF FIRES IN OCCUPIED POST-WAR TEMPORARY DWELLINGS

Reports from Fire Brigades in Great Britain 1946 - 1952

Type of dwelling	Year	Number of dwellings occupied on -		Number of dwellings at risk	Number of incidents	Number of damaged dwellings				Number of damaged dwellings per 10,000 dwellings at risk per year			
		1st January	31st December			Total	Fire confined to room of origin	Fire spread beyond room of origin damaging		Total	Fire confined to room of origin	Fire spread beyond room of origin damaging	
								less than half the dwelling	more than half the dwelling			less than half the dwelling	more than half the dwelling
Aluminium	1946	56	9,823	2,274	1	1	1	-	-	4.4	4.4	-	-
	1947	9,823	39,988	21,825	18	18	14	3	1	8.2	6.4	1.4	0.5
	1948	39,988	54,456	49,379	52	52	39	8	5	10.5	7.9	1.6	1.0
	1949*	54,456	54,456	54,456	70	70	63	5	2	12.9	11.6	0.9	0.4
	1950	54,456	54,456	54,456	88	88	75	8	5	16.2	13.8	1.5	0.9
	1951	54,456	54,456	54,456	124	124	110	13	1	22.8	20.2	2.4	0.2
	1952	54,456	54,456	54,456	95	95	85	5	5	17.4	15.6	0.9	0.9
Arcon	1946	381	27,193	9,161	6	6	4	1	1	6.5	4.4	1.1	1.1
	1947	27,193	36,156	32,351	37	37	29	5	3	11.4	9.0	1.5	0.9
	1948	36,156	38,818	37,576	48	48	36	6	6	12.8	9.6	1.6	1.6
	1949*	38,818	38,859	38,855	46	46	37	4	5	11.8	9.5	1.0	1.3
	1950	38,859	38,859	38,859	52	52	43	6	3	13.4	11.1	1.5	0.8
	1951	38,859	38,859	38,859	51	51	42	6	3	13.1	10.8	1.5	0.8
	1952	38,859	38,859	38,859	86	86	69	11	6	22.1	17.8	2.8	1.5
Orlit	1946	-	46	1	-	-	-	-	-	-	-	-	-
	1947	46	255	147	1	1	1	-	-	68.0	68.0	-	-
	1948	255	255	255	-	-	-	-	-	-	-	-	-
	1949*	255	255	255	1	1	1	-	-	39.2	39.2	-	-
	1950	255	255	255	-	-	-	-	-	-	-	-	-
	1951	255	255	255	-	-	-	-	-	-	-	-	-
	1952	255	255	255	-	-	-	-	-	-	-	-	-
Phoenix	1946	1,908	2,428	2,352	16	16	12	-	4	68.0	51.0	-	17.0
	1947	2,428	2,428	2,428	2	2	2	-	-	8.2	8.2	-	-
	1948	2,428	2,428	2,428	-	-	-	-	-	-	-	-	-
	1949*	2,428	2,428	2,428	5	5	4	-	1	20.6	16.5	-	4.1
	1950	2,428	2,428	2,428	10	10	7	-	3	41.2	28.8	-	12.4
	1951	2,428	2,428	2,428	5	5	3	2	-	20.6	12.4	8.2	-
	1952	2,428	2,428	2,428	3	3	3	-	-	12.4	12.4	-	-

* The temporary housing programme was completed in March, 1949

TABLE 2 (continued)

RATE OF INCIDENCE OF FIRES IN OCCUPIED POST-WAR TEMPORARY DWELLINGS

Reports from Fire Brigades in Great Britain 1946 - 1952

Type of dwelling	Year	Number of dwellings occupied on -		Number of dwellings at risk	Number of incidents	Number of damaged dwellings				Number of damaged dwellings per 10,000 dwellings at risk per year			
		1st January	31st December			Total	Fire confined to room of origin	Fire spread beyond room of origin damaging		Total	Fire confined to room of origin	Fire spread beyond room of origin damaging	
								less than half the dwelling	more than half the dwelling			less than half the dwelling	more than half the dwelling
Spooner	1946	.81	1,704	584	1	1	1	-	-	17.1	17.1	-	-
	1947	1,704	1,896	1,824	2	2	2	-	-	11.0	11.0	-	-
	1948	1,896	2,000	1,969	-	-	-	-	-	-	-	-	-
	1949*	2,000	2,000	2,000	3	3	3	-	-	15.0	15.0	-	-
	1950	2,000	2,000	2,000	3	3	2	-	1	15.0	10.0	-	5.0
	1951	2,000	2,000	2,000	1	1	1	-	-	5.0	5.0	-	-
	1952	2,000	2,000	2,000	-	-	-	-	-	-	-	-	-
Tarran	1946	531	13,451	4,220	4	4	2	2	-	9.5	4.7	4.7	-
	1947	13,451	16,947	15,489	15	15	10	1	4	9.7	6.5	0.6	2.6
	1948	16,947	18,928	17,796	19	19	15	4	-	10.7	8.4	2.2	-
	1949*	18,928	19,014	19,000	24	24	21	-	3	12.6	11.0	-	1.6
	1950	19,014	19,014	19,014	20	20	15	3	2	10.5	7.9	1.6	1.1
	1951	19,014	19,014	19,014	26	26	21	3	2	13.7	11.0	1.6	1.1
	1952	19,014	19,014	19,014	19	20	17	3	-	10.5	8.9	1.6	-
Uniseco	1946	5,043	23,613	11,848	3	3	3	-	-	2.5	2.5	-	-
	1947	23,613	27,982	26,339	27	27	23	2	2	10.2	8.7	0.8	0.8
	1948	27,982	28,999	28,540	24	24	22	1	1	8.4	7.7	0.4	0.4
	1949*	28,999	28,999	28,999	37	37	30	3	4	12.8	10.4	1.0	1.4
	1950	28,999	28,999	28,999	30	30	22	3	5	10.3	7.6	1.0	1.7
	1951	28,999	28,999	28,999	47	47	43	3	1	16.2	14.8	1.0	0.3
	1952	28,999	28,999	28,999	33	37	29	5	3	12.4	9.6	1.7	1.0
Universal	1946	1	1,580	527	-	-	-	-	-	-	-	-	-
	1947	1,580	1,999	1,812	-	-	-	-	-	-	-	-	-
	1948	1,999	2,000	2,000	1	1	1	-	-	5.0	5.0	-	-
	1949*	2,000	2,000	2,000	1	1	1	-	-	5.0	5.0	-	-
	1950	2,000	2,000	2,000	1	1	1	-	-	5.0	5.0	-	-
	1951	2,000	2,000	2,000	-	-	-	-	-	-	-	-	-
	1952	2,000	2,000	2,000	3	3	2	-	1	15.0	10.0	-	5.0

* The temporary housing programme was completed in March, 1949.

TABLE 2 (continued)

RATE OF INCIDENCE OF FIRES IN OCCUPIED POST-WAR TEMPORARY DWELLINGS

Reports from Fire Brigades in Great Britain 1946 - 1952

Type of dwelling	Year	Number of dwellings occupied on -		Number of dwellings at risk	Number of incidents	Number of damaged dwellings				Total	Number of damaged dwellings per 10,000 dwellings at risk per year			
		1st January	31st December			Total	Fire confined to room of origin	Fire spread beyond room of origin damaging			Total	Fire confined to room of origin	Fire spread beyond room of origin damaging	
								less than half the dwelling	more than half the dwelling				less than half the dwelling	more than half the dwelling
U.S.A.	1946	901	7,581	4,848	3	3	1	1	1	6.2	2.1	2.1	2.1	
	1947	7,581	8,411	8,026	3	3	2	1	-	3.7	2.5	1.2	-	
	1948	8,411	8,462	8,444	10	10	9	-	1	11.8	10.7	-	1.2	
	1949*	8,462	8,462	8,462	7	8	7	-	1	9.5	8.3	-	1.2	
	1950	8,462	8,462	8,462	11	11	7	1	3	13.0	8.3	1.2	3.5	
	1951	8,462	8,462	8,462	12	12	10	2	-	14.2	11.8	2.4	-	
	1952	8,462	8,462	8,462	10	13	6	3	4	15.4	7.1	3.5	4.7	
Other Types	1946	-	100	29	-	-	-	-	-	-	-	-	-	
	1947	100	100	100	-	-	-	-	-	-	-	-	-	
	1948	100	150	143	-	-	-	-	-	-	-	-	-	
	1949*	150	150	150	-	-	-	-	-	-	-	-	-	
	1950	150	150	150	-	-	-	-	-	-	-	-	-	
	1951	150	150	150	-	-	-	-	-	-	-	-	-	
	1952	150	150	150	-	-	-	-	-	-	-	-	-	
TOTAL	1946	8,902	87,519	35,846	34	34	24	4	6	9.5	6.7	1.1	1.7	
	1947	87,519	136,162	110,361	105	105	83	12	10	9.5	7.5	1.1	0.9	
	1948	136,162	156,496	148,530	154	154	122	19	13	10.4	8.2	1.3	0.9	
	1949*	156,496	156,623	156,605	194	195	167	12	16	12.5	10.7	0.8	1.0	
	1950	156,623	156,623	156,623	215	215	172	21	22	13.7	11.0	1.3	1.4	
	1951	156,623	156,623	156,623	266	266	230	29	7	17.0	14.7	1.9	0.4	
	1952	156,623	156,623	156,623	249	257	211	27	19	16.4	13.5	1.7	1.2	

* The temporary housing programme was completed in March, 1949

TABLE 3

SUPPOSED CAUSE OF FIRES IN OCCUPIED POST-WAR TEMPORARY DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1946-52

Note: figures in brackets refer to numbers of fires.

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SUPPOSED CAUSE OF FIRE	Number of damaged dwellings per 10,000 dwellings at risk per year																				
	Fires igniting														TOTAL						
	Constructional Materials							Contents													
	1946	1947	1948	1949	1950	1951	1952	1946	1947	1948	1949	1950	1951	1952	1946	1947	1948	1949	1950	1951	1952
Electric cooker	-	0.1 (1)	0.1 (1)	0.4 (6)	0.1 (1)	0.1 (1)	0.2 (3)	0.6 (2)	0.4 (4)	0.9 (13)	1.1 (18)	0.9 (14)	1.7 (27)	1.0 (15)	0.6 (2)	0.5 (5)	0.9 (14)	1.5 (24)	1.0 (15)	1.8 (28)	1.1 (18)
apparatus other than cooker	-	0.1 (1)	0.2 (3)	0.2 (3)	0.2 (3)	0.4 (6)	0.1 (1)	0.3 (1)	0.6 (7)	1.3 (19)	0.7 (11)	1.3 (20)	1.9 (29)	1.6 (25)	0.3 (1)	0.7 (8)	1.5 (22)	0.9 (14)	1.5 (23)	2.2 (35)	1.7 (26)
wire and cable	1.4 (5)	2.0 (22)	2.4 (36)	3.1 (48)	3.2 (50)	4.4 (69)	3.5 (55)	-	0.1 (1)	0.1 (2)	0.1 (2)	0.1 (1)	-	-	1.4 (5)	2.1 (23)	2.6 (38)	3.2 (50)	3.3 (51)	4.4 (69)	3.5 (55)
Fire in grate	0.8 (3)	0.6 (7)	0.5 (7)	0.4 (6)	0.2 (3)	0.3 (4)	0.4 (6)	2.2 (8)	2.0 (22)	1.3 (20)	1.9 (29)	2.3 (36)	2.5 (39)	2.4 (38)	3.1 (11)	2.6 (29)	1.8 (27)	2.2 (35)	2.5 (39)	2.7 (43)	2.8 (44)
Flue	2.0 (7)	0.5 (5)	0.3 (4)	0.7 (11)	1.0 (15)	1.1 (17)	0.7 (11)	-	-	0.1 (2)	0.1 (2)	0.1 (1)	0.2 (3)	0.2 (3)	2.0 (7)	0.5 (5)	0.4 (6)	0.8 (13)	1.0 (16)	1.3 (20)	0.9 (14)
Gas (coal) apparatus	-	0.1 (1)	-	-	0.1 (1)	0.2 (3)	0.1 (2)	-	0.4 (4)	0.7 (10)	0.6 (9)	0.6 (10)	0.8 (12)	0.6 (9)	-	0.5 (5)	0.7 (10)	0.6 (9)	0.7 (11)	1.0 (15)	0.7 (11)
Smoking materials and matches	-	0.1 (1)	-	-	0.1 (1)	-	-	-	0.8 (9)	1.0 (15)	1.2 (19)	1.3 (21)	1.4 (22)	1.9 (30)	-	0.9 (10)	1.0 (15)	1.2 (19)	1.4 (22)	1.4 (22)	1.9 (30)
Spread of fire from other house	-	-	-	0.1 (1)	-	-	0.2 (3)	-	-	-	-	-	-	-	-	-	-	0.1 (1)	-	-	0.2 (3)
Other causes	-	0.4 (4)	0.3 (4)	0.3 (4)	0.3 (5)	0.2 (3)	0.7 (11)	0.6 (2)	0.2 (2)	0.5 (8)	0.6 (10)	0.8 (12)	1.0 (15)	1.7 (26)	0.6 (2)	0.5 (6)	0.8 (12)	0.9 (14)	1.1 (17)	1.1 (18)	2.4 (37)
Rate of incidence of fires of known cause.	4.2 (15)	3.8 (42)	3.7 (55)	5.0 (79)	5.0 (79)	6.6 (103)	5.9 (92)	3.7 (13)	4.4 (49)	6.0 (89)	6.4 (100)	7.3 (115)	9.4 (147)	9.3 (146)	7.8 (28)	8.2 (91)	9.7 (144)	11.4 (179)	12.4 (194)	16.0 (250)	15.2 (238)
Unknown cause															1.7 (6)	1.3 (14)	0.7 (10)	1.0 (16)	1.3 (21)	1.0 (16)	1.2 (19)
Rate of incidence of all fires															9.5 (34)	9.5 (105)	10.4 (154)	12.5 (195)	13.7 (215)	17.0 (266)	16.4 (257)

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T A B L E 4(a)

SUPPOSED CAUSE OF FIRES IN OCCUPIED POST-WAR TEMPORARY ALUMINIUM DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1947-1952

Note figures in brackets refer to the number of fires.

SUPPOSED CAUSE OF FIRE	Number of damaged dwellings per 10,000 dwellings at risk per year																	
	Fires igniting												TOTAL					
	Constructional Materials						Contents											
	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952
Electric cooker	— —	— —	0·2 (1)	0·2 (1)	0·2 (1)	0·4 (2)	— —	0·8 (4)	1·3 (7)	1·3 (7)	2·4 (13)	0·7 (4)	— —	0·8 (4)	1·5 (8)	1·5 (8)	2·6 (14)	1·1 (6)
apparatus other than cooker	— —	— —	0·2 (1)	— —	0·2 (1)	— —	— —	1·0 (5)	0·2 (1)	1·3 (7)	2·0 (11)	1·5 (8)	— —	1·0 (5)	0·4 (2)	1·3 (7)	2·2 (12)	1·5 (8)
wire and cable	2·7 (6)	2·8 (14)	3·9 (21)	5·3 (29)	7·7 (42)	5·0 (28)	— —	— —	0·2 (1)	0·2 (1)	— —	— —	2·7 (6)	2·8 (14)	4·0 (22)	5·5 (30)	7·7 (42)	5·0 (27)
Fire in grate	1·4 (3)	1·0 (5)	0·9 (5)	— —	0·4 (2)	0·4 (2)	0·9 (2)	1·0 (5)	1·7 (9)	2·9 (16)	3·5 (19)	2·9 (16)	2·3 (5)	2·0 (10)	2·6 (14)	2·9 (16)	3·9 (21)	3·3 (18)
Flue	1·4 (3)	0·6 (3)	1·5 (8)	1·5 (8)	1·8 (10)	1·3 (7)	— —	— —	— —	— —	0·2 (1)	0·4 (2)	1·4 (3)	0·6 (3)	1·5 (8)	1·5 (8)	2·0 (11)	1·7 (9)
Gas (coal) apparatus	0·5 (1)	— —	— —	— —	0·4 (2)	— —	0·5 (1)	0·8 (4)	0·4 (2)	0·2 (1)	— —	0·4 (2)	0·9 (2)	0·8 (4)	0·4 (2)	0·2 (1)	0·4 (2)	0·4 (2)
Smoking materials and matches	0·5 (1)	— —	— —	— —	— —	— —	— —	0·8 (4)	0·6 (3)	0·4 (2)	1·3 (7)	1·5 (8)	0·5 (1)	0·8 (4)	0·6 (3)	0·4 (2)	1·3 (7)	1·5 (8)
Other causes	0·5 (1)	0·4 (2)	0·2 (1)	0·9 (5)	0·2 (1)	— —	— —	0·4 (2)	0·7 (4)	0·6 (3)	1·1 (6)	1·8 (10)	0·5 (1)	0·8 (4)	0·9 (5)	1·5 (8)	1·3 (7)	1·8 (10)
Rate of incidence of fires of known cause	6·9 (15)	4·9 (24)	6·6 (37)	7·9 (43)	10·8 (59)	7·0 (39)	1·4 (3)	4·9 (24)	5·0 (27)	6·8 (37)	10·5 (57)	9·2 (50)	8·2 (18)	9·7 (48)	11·8 (64)	14·7 (80)	21·3 (116)	16·2 (89)
Unknown cause													— —	0·8 (4)	1·1 (6)	1·5 (8)	1·5 (8)	1·1 (6)
Rate of incidence of all fires													8·2 (18)	10·5 (52)	12·9 (70)	16·2 (88)	22·8 (124)	17·3 (95)

T A B L E 4 (b)

SUPPOSED CAUSE OF FIRES IN OCCUPIED POST-WAR TEMPORARY ARCON DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1947-1952.

Note figures in brackets refer to the number of fires

SUPPOSED CAUSE OF FIRE	Number of damaged dwellings per 10,000 dwellings at risk per year																	
	Fires igniting												TOTAL					
	Constructional Materials						Contents											
	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952
Electric cooker	0.3 (1)	— (—)	0.3 (1)	— (—)	— (—)	— (—)	0.3 (1)	0.5 (2)	0.5 (2)	1.0 (4)	0.8 (3)	1.3 (5)	0.6 (2)	0.5 (2)	0.8 (3)	1.0 (4)	0.8 (3)	1.3 (5)
apparatus other than cooker.	— (—)	0.5 (2)	— (—)	0.3 (—)	— (—)	— (—)	0.6 (2)	1.3 (5)	1.8 (7)	1.3 (5)	1.5 (6)	1.6 (6)	0.6 (2)	1.9 (7)	1.8 (7)	1.5 (6)	1.5 (6)	1.5 (6)
wire and cable	1.5 (5)	4.5 (17)	2.8 (11)	2.3 (9)	2.1 (12)	5.9 (23)	— (—)	0.5 (2)	— (—)	— (—)	— (—)	— (—)	1.5 (5)	5.1 (19)	2.8 (11)	2.3 (9)	3.1 (12)	5.9 (23)
Fire in grate	0.6 (2)	0.3 (1)	— (—)	0.3 (1)	0.3 (1)	0.8 (3)	4.0 (13)	2.4 (9)	2.6 (10)	2.6 (10)	2.1 (8)	2.8 (11)	4.6 (15)	2.7 (10)	2.6 (10)	2.8 (11)	2.3 (9)	3.6 (14)
Flue	0.3 (1)	— (—)	— (—)	0.5 (2)	0.5 (2)	0.5 (2)	— (—)	0.3 (1)	0.3 (1)	0.3 (1)	— (—)	— (—)	0.3 (1)	0.3 (1)	0.3 (1)	0.8 (3)	0.5 (2)	0.5 (2)
Gas (coal) apparatus	— (—)	— (—)	— (—)	— (—)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)	0.3 (1)	1.3 (5)	1.5 (6)	1.3 (5)	0.3 (1)	0.3 (1)	0.3 (1)	1.3 (5)	1.8 (7)	1.5 (6)
Smoking materials and matches	— (—)	— (—)	— (—)	— (—)	— (—)	— (—)	0.3 (1)	1.1 (4)	1.8 (7)	2.1 (8)	0.8 (3)	2.8 (11)	0.3 (1)	1.1 (4)	1.8 (7)	2.1 (8)	0.8 (3)	2.8 (11)
Other causes	0.6 (2)	— (—)	— (—)	— (—)	— (—)	0.5 (2)	0.3 (1)	0.5 (2)	0.3 (1)	0.5 (2)	1.0 (4)	2.6 (10)	0.9 (3)	0.5 (2)	0.3 (1)	0.5 (2)	1.0 (4)	3.1 (12)
Rate of incidence of fires of known cause	3.4 (11)	5.3 (20)	3.1 (12)	3.3 (13)	4.1 (16)	8.0 (31)	5.9 (19)	6.9 (26)	7.5 (29)	9.0 (35)	7.7 (30)	12.4 (48)	9.3 (30)	12.2 (46)	10.6 (41)	2.4 (48)	11.8 (46)	20.3 (79)
Unknown cause													2.2 (7)	0.5 (2)	1.3 (5)	1.0 (4)	1.3 (5)	1.8 (7)
Rate of incidence of all fires													11.4 (37)	12.8 (48)	11.8 (46)	3.4 (52)	13.1 (51)	22.1 (86)

T A B L E 4(c)

SUPPOSED CAUSE OF FIRES IN OCCUPIED POST-WAR TEMPORARY PHOENIX DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1947 - 1952

Note figures in brackets refer to the number of fires.

SUPPOSED CAUSE OF FIRE	Number of damaged dwellings per 10,000 dwellings at risk per year																	
	Fires igniting												TOTAL					
	Constructional Materials						Contents											
	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952
Electric cooker	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
apparatus other than cooker	-	-	-	-	-	-	4*1 (1)	-	-	-	8*2 (2)	4*1 (1)	4*1 (1)	-	-	-	8*2 (2)	4*1 (1)
wire and cable	4*1 (1)	-	8*2 (2)	4*1 (1)	-	-	-	-	-	-	-	-	4*1 (1)	-	8*2 (2)	4*1 (1)	-	-
Fire in grate	-	-	-	4*1 (1)	-	4*1 (1)	-	-	4*1 (1)	4*1 (1)	4*1 (1)	-	-	-	4*1 (1)	8*2 (2)	4*1 (1)	4*1 (1)
Flue	-	-	4*1 (1)	8*2 (2)	-	4*1 (1)	-	-	-	-	-	-	-	-	4*1 (1)	8*2 (2)	-	4*1 (1)
Gas (coal) apparatus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Smoking materials and matches	-	-	-	-	-	-	-	-	4*1 (1)	-	4*1 (1)	-	-	-	4*1 (1)	-	4*1 (1)	-
Other causes	-	-	-	-	-	-	-	-	-	12*4 (3)	4*1 (1)	-	-	-	-	12*4 (3)	4*1 (1)	-
Rate of incidence of fires of known cause	4*1 (1)	-	12*4 (3)	16*5 (4)	-	8*2 (2)	4*1 (1)	-	8*2 (2)	16*5 (4)	20*6 (5)	4*1 (1)	8*2 (2)	-	20*6 (5)	32*9 (8)	20*6 (5)	12*4 (3)
Unknown cause													-	-	-	8*2 (2)	-	-
Rate of incidence of fires of known cause.													8*2 (2)	-	20*6 (5)	41*2 (10)	20*6 (5)	12*4 (3)

T A B L E 4(d)

SUPPOSED CAUSE OF FIRES IN OCCUPIED POST-WAR TEMPORARY TARRAN DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1947 - 52

Note figures in brackets refer to the number of fires.

SUPPOSED CAUSE OF FIRE	Number of damaged dwellings per 10,000 dwellings at risk per year																	
	Fires igniting											TOTAL						
	Constructional Materials						Contents											
	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952
Electric cooker	-	0.6	0.5	-	-	0.5	-	1.1	1.6	1.6	1.1	2.1	-	1.7	2.1	1.6	1.1	2.6
	-	(1)	(1)	-	-	(1)	-	(2)	(3)	(3)	(2)	(4)	-	(3)	(4)	(3)	(2)	(5)
	0.6	0.6	-	0.5	-	-	1.9	1.7	0.5	1.1	2.1	2.1	2.6	2.2	0.5	1.6	2.1	2.1
apparatus other than cooker	(1)	(1)	-	(1)	-	-	(3)	(3)	(1)	(2)	(4)	(4)	(4)	(4)	(1)	(3)	(4)	(4)
wire and cable	2.6	0.6	1.1	1.1	2.6	1.6	-	-	0.5	-	-	-	2.6	0.6	1.6	1.1	2.6	1.6
	(4)	(1)	(2)	(2)	(5)	(3)	-	-	(1)	-	-	-	(4)	(1)	(3)	(2)	(5)	(3)
Fire in grate	-	-	-	-	-	-	1.9	2.2	2.6	2.1	1.6	2.1	1.9	2.2	2.6	2.1	1.6	2.1
	-	-	-	-	-	-	(3)	(4)	(5)	(4)	(3)	(4)	(3)	(4)	(5)	(4)	(3)	(4)
Flue	-	0.6	1.1	-	0.5	-	-	-	0.5	-	0.5	0.5	-	0.6	1.6	-	1.1	0.5
	-	(1)	(2)	-	(1)	-	-	-	(1)	-	(1)	(1)	-	(1)	(3)	-	(2)	(1)
Gas (coal) apparatus	-	-	-	-	-	-	-	0.6	1.1	-	0.5	-	-	0.6	1.1	-	0.5	-
	-	-	-	-	-	-	-	(1)	(2)	-	(1)	-	-	(1)	(2)	-	(1)	-
Smoking materials and matches	-	-	-	0.5	-	-	-	1.1	1.1	1.1	1.6	-	-	1.1	1.1	1.6	1.6	-
	-	-	-	(1)	-	-	-	(2)	(2)	(2)	(3)	-	-	(2)	(2)	(3)	(3)	-
Other causes	0.6	-	0.5	-	0.5	1.1	0.6	1.7	1.6	1.6	1.1	0.5	1.3	1.7	2.1	1.6	1.6	1.6
	(1)	-	(1)	-	(1)	(2)	(1)	(3)	(3)	(3)	(2)	(1)	(2)	(3)	(4)	(3)	(3)	(3)
Rate of incidence of fires of known cause	3.9	2.2	3.2	2.1	3.7	3.2	4.5	8.4	9.5	7.4	8.4	7.4	8.4	10.7	12.6	9.5	12.1	10.5
	(6)	(4)	(6)	(4)	(7)	(6)	(7)	(15)	(18)	(14)	(16)	(14)	(13)	(19)	(24)	(18)	(23)	(20)
Unknown cause													1.3	-	-	1.1	1.6	-
													(2)	-	-	(2)	(3)	-
Rate of incidence of all fires													9.7	10.7	12.6	10.5	13.7	10.5
													(15)	(19)	(24)	(20)	(26)	(20)

T A B L E 4(e)

SUPPOSED CAUSE OF FIRES IN OCCUPIED POST-WAR TEMPORARY UNISECO DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1947 - 52

Note figures in brackets refer to the number of fires.

SUPPOSED CAUSE OF FIRE	Number of damaged dwellings per 10,000 dwellings at risk per year																	
	Fires igniting												TOTAL					
	Constructional Materials						Contents											
	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952
Electric cooker	—	—	0·7	—	—	—	1·1	1·8	2·1	0·3	3·1	0·7	1·1	1·8	2·8	0·3	3·1	0·7
	—	—	(2)	—	—	—	(3)	(5)	(6)	(1)	(9)	(2)	(3)	(5)	(8)	(1)	(9)	(2)
apparatus other than cooker	—	—	0·7	0·3	1·7	—	0·4	1·8	0·3	1·0	2·1	1·7	0·4	1·8	1·0	1·4	3·8	1·7
	—	—	(2)	(1)	(5)	—	(1)	(5)	(1)	(3)	(6)	(5)	(1)	(5)	(3)	(4)	(11)	(5)
wire and cable	1·9	0·4	3·1	2·4	2·4	0·7	0·4	—	—	—	—	0·7	2·3	0·4	3·1	2·4	2·4	0·7
	(5)	(1)	(9)	(7)	(7)	(2)	(1)	—	—	—	—	(2)	(6)	(1)	(9)	(7)	(7)	(2)
Fire in grate	0·8	0·4	0·3	—	0·3	—	1·1	0·4	1·0	1·0	2·8	1·7	1·9	0·7	1·4	1·0	3·1	1·7
	(2)	(1)	(1)	—	(1)	—	(3)	(1)	(3)	(3)	(8)	(5)	(5)	(2)	(4)	(3)	(9)	(5)
Flue	—	—	—	0·7	1·0	0·3	—	0·4	—	—	0·3	—	—	0·4	—	0·7	1·4	0·3
	—	—	—	(2)	(3)	(1)	—	(1)	—	—	(1)	—	—	(1)	—	(2)	(4)	(1)
Gas (coal) apparatus	—	—	—	—	—	—	0·4	0·7	1·0	0·3	0·3	0·3	0·4	0·7	1·0	0·3	0·3	0·3
	—	—	—	—	—	—	(1)	(2)	(3)	(1)	(1)	(1)	(1)	(2)	(3)	(1)	(1)	(1)
Smoking materials and matches	—	—	—	—	—	—	1·5	0·4	1·4	2·4	1·7	2·4	1·5	0·4	1·4	2·4	1·7	2·4
	—	—	—	—	—	—	(4)	(1)	(4)	(7)	(5)	(7)	(4)	(1)	(4)	(7)	(5)	(7)
Other causes	—	0·4	0·7	—	—	2·1	0·8	1·4	0·7	0·3	0·3	2·1	0·8	1·8	1·4	0·3	0·3	4·1
	—	(1)	(2)	—	—	(6)	(2)	(4)	(2)	(1)	(1)	(6)	(2)	(5)	(4)	(1)	(1)	(12)
Rate of incidence of fires of known cause	2·7	1·1	5·5	3·4	5·5	3·1	5·7	6·7	6·6	5·5	10·7	8·6	8·3	7·7	12·1	9·0	16·2	11·7
	(7)	(3)	(16)	(10)	(16)	(9)	(15)	(19)	(19)	(16)	(31)	(26)	(22)	(22)	(35)	(26)	(47)	(35)
Unknown cause													1·9	0·7	0·7	1·4	—	0·7
													(5)	(2)	(2)	(4)	—	(2)
Rate of incidence of all fires													10·2	8·4	12·8	10·3	16·2	12·4
													(27)	(24)	(37)	(30)	(47)	(37)

SUPPOSED CAUSE OF FIRES IN OCCUPIED POST-WAR TEMPORARY U.S.A. DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1947 - 52

Note figures in brackets refer to the number of fires

SUPPOSED CAUSE OF FIRE	Number of damaged dwellings per 10,000 dwellings at risk per year																	
	Fires igniting												TOTAL					
	Constructional Materials						Contents											
	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952
Electric cooker	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
apparatus other than cooker	-	-	-	-	-	-	-	1*2 (1)	1*2 (1)	1*2 (1)	-	1*2 (1)	-	1*2 (1)	1*2 (1)	1*2 (1)	-	1*2 (1)
wire and cable	-	2*4 (2)	2*4 (2)	2*4 (2)	2*4 (2)	-	-	-	-	-	-	-	-	2*4 (2)	2*4 (2)	2*4 (2)	2*4 (2)	-
Fire in grate	-	-	-	1*2 (1)	-	-	-	1*2 (1)	1*2 (1)	1*2 (1)	-	2*4 (2)	-	1*2 (1)	1*2 (1)	2*4 (2)	-	2*4 (2)
Flue	1*2 (1)	-	-	-	1*2 (1)	-	-	-	-	-	-	-	1*2 (1)	-	-	-	1*2 (1)	-
Gas (coal) apparatus	-	-	-	1*2 (1)	-	1*2 (1)	1*2 (1)	2*4 (2)	1*2 (1)	3*5 (3)	3*5 (3)	1*2 (1)	1*2 (1)	2*4 (2)	1*2 (1)	4*7 (4)	3*5 (3)	2*4 (2)
Smoking materials and matches	-	-	-	-	-	-	1*2 (1)	1*2 (1)	1*2 (1)	3*5 (3)	3*5 (3)	2*4 (2)	1*2 (1)	1*2 (1)	-	1*2 (1)	3*5 (3)	2*4 (2)
Spread of fire from other house	-	-	1*2 (1)	-	-	3*5 (3)	-	-	-	-	-	-	-	-	1*2 (1)	-	-	3*5 (3)
Other causes	-	1*2 (1)	-	-	1*2 (1)	-	-	-	1*2 (1)	-	2*4 (2)	-	-	1*2 (1)	1*2 (1)	-	3*5 (3)	-
Rate of incidence of fires of known cause	1*2 (1)	3*6 (3)	3*5 (3)	4*7 (4)	4*7 (4)	4*7 (4)	2*5 (2)	5*9 (5)	4*7 (4)	7*1 (6)	9*5 (8)	8*3 (6)	3*7 (3)	9*5 (8)	8*3 (7)	11*8 (10)	14*2 (12)	11*9 (10)
Unknown cause													-	2*4 (2)	1*2 (1)	1*2 (1)	-	3*5 (3)
Rate of incidence of all fires													3*7 (3)	11*8 (10)	9*5 (8)	13*0 (11)	14*2 (12)	15*4 (13)

T A B L E V

NATURE OF CONSTRUCTIONAL MATERIALS IGNITED FIRST IN OCCUPIED POST-WAR TEMPORARY DWELLINGS

Reports from N.F.S. and Fire Brigades in Great Britain 1946 - 52

Note figures in brackets refer to number of fires

NATURE OF CONSTRUCTIONAL MATERIALS	Number of damaged dwellings in which constructional materials were ignited first per 10,000 dwellings at risk per year.						
	1946	1947	1948	1949	1950	1951	1952
Roof	0·6 (2)	0·1 (1)	0·1 (1)	0·1 (2)	0·3 (4)	0·7 (11)	0·4 (7)
Ceiling	1·1 (4)	0·2 (2)	0·1 (1)	0·3 (5)	0·2 (3)	0·1 (2)	0·3 (5)
Partitions, walls, linings to walls	0·8 (3)	1·4 (15)	0·9 (13)	0·8 (11)	0·4 (7)	0·5 (8)	0·5 (8)
Floor	0·3 (1)	0·1 (1)	0·1 (1)	0·2 (3)	0·1 (1)	0·1 (2)	0·3 (4)
Insulation of electric wiring	—	0·3 (3)	0·3 (4)	0·4 (6)	0·1 (2)	0·6 (10)	0·6 (9)
(a) No fire spread	—	—	—	—	—	—	—
(b) Fire confined to fuse box panel, switchboard, distribution board, pipe and tank laggings.	0·3 (1)	0·9 (10)	0·8 (12)	1·5 (23)	1·6 (25)	1·8 (28)	1·6 (25)
(c) Fire involving (b) but spread to contents.	—	—	0·1 (1)	—	0·1 (1)	0·1 (2)	0·1 (2)
(d) Fire involving walls, floors, ceilings, rafters, built-in cupboards.	1·1 (4)	0·8 (9)	1·3 (19)	1·2 (19)	1·4 (22)	1·6 (25)	0·8 (17)
(e) Fire involving other materials	—	—	—	—	—	0·3 (4)	0·1 (2)
Miscellaneous and undefined	—	0·1 (1)	0·2 (3)	0·6 (10)	0·9 (14)	0·7 (11)	0·8 (13)
Rate of incidence of fires in which constructional materials were ignited first.	4·2 (15)	3·8 (42)	3·7 (55)	5·0 (79)	5·0 (79)	6·6 (103)	5·9 (92)

T A B L E 6(a)

NATURE OF CONSTRUCTIONAL MATERIALS IGNITED FIRST IN OCCUPIED TEMPORARY ALUMINIUM ARCON AND PHOENIX DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1947 - 52

Note figures in brackets refer to number of fires

NATURE OF CONSTRUCTIONAL MATERIALS	Number of damaged dwellings in which constructional materials were ignited first per 10,000 dwellings at risk per year																	
	ALUMINIUM						ARCON						PHOENIX					
	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952
Roof	-	-	0.2 (1)	0.2 (1)	1.3 (7)	0.2 (1)	-	-	-	0.3 (1)	0.3 (1)	-	-	-	-	4.1 (1)	-	-
Ceiling	0.5 (1)	-	0.6 (3)	-	-	0.7 (4)	0.3 (1)	-	-	0.3 (1)	-	1.0 (4)	-	-	4.1 (1)	4.1 (1)	-	-
Partitions, walls, linings to walls.	3.7 (8)	1.4 (7)	0.9 (5)	0.7 (4)	0.7 (4)	0.5 (3)	1.5 (5)	0.5 (2)	0.3 (1)	0.3 (1)	0.5 (2)	1.0 (4)	-	-	-	-	-	-
Floor	-	-	0.2 (1)	-	-	-	-	0.3 (1)	-	0.3 (1)	-	0.3 (1)	-	-	-	-	-	-
Insulation of electric wiring	-	0.6 (3)	0.4 (2)	0.2 (1)	0.9 (5)	0.4 (2)	-	0.3 (1)	0.6 (2)	0.3 (1)	0.8 (3)	1.3 (5)	-	-	-	-	-	4.1 (1)
(a) No fire spread	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) Fire confined to fuse box panel, switch board, pipe and tank laggings	1.4 (3)	1.0 (5)	1.8 (10)	2.9 (16)	3.9 (21)	2.4 (13)	0.3 (1)	1.6 (6)	1.5 (6)	1.8 (7)	0.5 (2)	2.1 (8)	4.1 (1)	-	4.1 (1)	-	-	-
(c) Fire involving (b) but spreading to contents	-	0.2 (1)	-	-	-	0.4 (2)	-	-	-	-	0.3 (1)	-	-	-	-	-	-	-
(d) Fire involving walls, floors, ceilings, rafters, built-in-cupboards	1.4 (3)	1.0 (5)	1.7 (9)	2.2 (12)	2.8 (15)	1.4 (7)	1.2 (4)	2.7 (10)	0.8 (3)	0.3 (1)	1.0 (4)	2.1 (8)	-	-	4.1 (1)	4.1 (1)	-	-
(e) Fire involving other materials	-	-	-	-	0.2 (1)	-	-	-	-	-	0.5 (2)	-	-	-	-	-	-	-
Miscellaneous and undefined	-	0.6 (3)	1.1 (6)	1.7 (9)	1.2 (6)	1.3 (7)	-	-	-	-	0.3 (1)	0.3 (1)	-	-	-	4.1 (1)	-	4.1 (1)
Rate of incidence of fires in which constructional materials were ignited first-	6.9 (15)	4.9 (24)	6.8 (37)	7.9 (43)	10.8 (59)	7.0 (39)	3.4 (11)	5.3 (20)	3.1 (12)	3.3 (13)	4.1 (16)	8.0 (31)	4.1 (1)	-	12.4 (3)	16.5 (4)	-	8.2 (2)

NATURE OF CONSTRUCTIONAL MATERIALS IGNITED FIRST IN OCCUPIED TEMPORARY TARRAN UNISECO AND U.S.A. DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1947 - 1952

Note Figures in brackets refer to numbers of fires

NATURE OF CONSTRUCTIONAL MATERIALS	Number of damaged dwellings in which constructional materials were ignited first per 10,000 dwellings at risk per year																	
	TARRAN						UNISECO						U. S. A.					
	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952
Roof	-	-	0.5 (1)	-	0.5 (1)	0.5 (1)	-	-	-	0.3 (1)	0.3 (1)	1.7 (5)	1.2 (1)	1.2 (1)	-	-	1.2 (1)	2.4 (2)
Ceiling	-	0.6 (1)	0.5 (1)	-	0.5 (1)	-	-	-	-	-	0.3 (1)	-	-	-	-	-	-	-
Partitions, walls, linings to walls	1.3 (2)	1.1 (2)	-	0.5 (1)	-	0.5 (1)	0.4 (1)	0.4 (1)	1.4 (4)	0.3 (1)	0.3 (1)	-	-	-	1.2 (1)	-	1.2 (1)	2.4 (2)
Floor	-	-	-	-	-	0.5 (1)	-	0.4 (1)	0.7 (2)	-	0.7 (2)	0.3 (1)	-	-	-	-	-	-
Insulation of electric wiring	0.6 (1)	-	-	-	0.5 (1)	0.5 (1)	0.8 (2)	-	0.3 (1)	-	0.3 (1)	0.3 (1)	-	-	-	-	-	-
(a) No fire spread	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) Fire confined to fuse box, panel switch board, pipe and tank laggings	1.3 (2)	-	0.5 (1)	-	0.5 (1)	1.1 (2)	1.1 (3)	0.4 (1)	1.7 (5)	0.7 (2)	1.0 (3)	0.3 (1)	-	-	-	-	1.2 (1)	-
(c) Fire involving (b) but spreading to contents	-	-	-	-	-	-	-	-	-	-	0.3 (1)	-	-	-	-	1.2 (1)	-	-
(d) Fire involving walls, floors, ceiling rafters, built-in in cupboards	0.6 (1)	0.6 (1)	0.5 (1)	1.1 (2)	1.6 (3)	-	-	-	1.0 (3)	1.7 (5)	0.7 (2)	-	-	2.4 (2)	2.4 (2)	1.2 (1)	1.2 (1)	-
(e) Fire involving other materials	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous and undefined	-	-	1.1 (2)	0.5 (1)	-	-	0.4 (1)	-	0.3 (1)	0.3 (1)	1.3 (4)	0.3 (1)	-	-	-	2.4 (2)	-	-
Rate of incidence of fires in which constructional materials were ignited first.	3.9 (6)	2.2 (4)	3.2 (6)	2.1 (4)	3.7 (7)	3.2 (6)	2.7 (7)	1.1 (3)	5.5 (16)	3.4 (10)	5.5 (16)	3.4 (9)	1.2 (1)	3.6 (3)	3.5 (3)	4.7 (4)	4.7 (4)	4.7 (4)

T A B L E 7

SUPPOSED CAUSE OF SERIOUS FIRES IN OCCUPIED POST-WAR TEMPORARY DWELLINGS

Reports from the M.F.S. and Fire Brigades in Great Britain 1946-52:

SUPPOSED CAUSE OF FIRE	Type of House								Total number of seriously damaged dwellings
	Aluminium	Arcon	Phoenix	Spoonér	Tarran	Unjseco	U.S.A.	Universal	
Electric cooker	-	-	-	-	-	1	-	-	1
fire	-	1	-	-	-	-	-	-	1
iron	-	-	-	-	1	-	-	-	1
television set	-	-	-	-	-	1	-	-	1
wireless set	5	-	-	-	1	-	-	-	6
wire and cable	1	5	2	-	-	-	-	-	8
Fire in grate	6	8	1	-	1	3	2	-	21
Matches, child playing with	-	-	-	1	-	-	1	-	2
Oil stove	-	-	-	-	1	-	-	-	1
Slow combustion stove	-	1	-	-	1	-	-	1	3
Smoking materials	-	1	1	-	1	3	1	-	7
Matches	-	1	-	-	-	-	-	-	1
Miscellaneous	-	1	-	-	1	1	1	-	4
Unknown	8	9	4	-	4	7	6	-	38
TOTAL NUMBER OF SERIOUSLY DAMAGED DWELLINGS	20	27	8	1	11	16	11	1	95
AVERAGE RATE 1946 - 52	0.7	1.2	4.7	1.0	1.0	0.9	2.0	0.9	1.0

T A B L E 8

RATE OF INCIDENCE OF FIRES IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL DWELLINGS

Reports from N.F.S. and Fire Brigades in Great Britain 1947-52

1/1

Type of dwelling	Year	Number of dwellings occupied on.		Number of dwellings at risk	Number of incidents	Number of damaged dwellings				Number of damaged dwellings per 10,000 dwellings at risk per year			
		1st. January	31st. December			Total	Fire confined to room of origin	Fire spread beyond room of origin damaging		Total	Fire confined to room of origin	Fire spread beyond room of origin damaging	
								less than half the dwelling	more than half the dwelling			less than half the dwelling	more than half the dwelling
Airey	1947	168	612	235	—	—	—	—	—	—	—	—	—
	1948	612	7,815	3,002	8	10	5	2	3	33.3	16.7	6.7	10.0
	1949	7,815	18,643	14,313	7	8	5	2	1	5.6	3.5	1.4	0.7
	1950	18,643	21,259	20,296	11	14	10	1	3	6.9	4.9	0.5	1.5
	1951	21,259	22,161	21,745	19	19	19	—	—	8.7	8.7	—	—
	1952	22,161	23,012	23,012	20	21	19	2	—	9.1	8.2	0.9	—
Aluminium	1947	—	138	—	—	—	—	—	—	—	—	—	—
	1948	138	10,840	4,376	2	2	2	—	—	4.6	4.6	—	—
	1949	10,840	15,965	14,558	10	10	8	—	2	6.9	5.5	—	1.4
	1950	15,965	17,253	16,406	12	12	11	1	—	7.3	6.7	0.6	—
	1951	17,253	19,289	18,525	16	16	14	2	—	8.6	7.6	1.1	—
	1952	19,289	19,851	19,646	13	13	13	—	—	6.6	6.6	—	—
Atholl	1947	60	464	211	—	—	—	—	—	—	—	—	—
	1948	464	1,096	676	—	—	—	—	—	—	—	—	—
	1949	1,096	2,180	1,593	2	3	2	1	—	18.8	12.6	6.3	—
	1950	2,180	3,018	2,556	6	10	8	1	1	39.1	31.3	3.9	3.9
	1951	3,018	4,052	3,535	3	3	3	—	—	8.5	8.5	—	—
	1952	4,052	4,838	4,494	2	2	2	—	—	4.5	4.5	—	—
B. I. S. F.	1947	94	13,885	3,640	2	2	2	—	—	5.5	5.5	—	—
	1948	13,885	33,086	24,169	20	21	15	3	3	8.7	6.2	1.2	1.2
	1949	33,086	35,696	34,872	45	47	33	12	2	13.5	9.5	3.4	0.6
	1950	35,696	35,906	35,793	59	63	44	11	8	17.6	12.3	3.1	2.2
	1951	35,906	36,274	36,079	61	62	54	6	2	17.2	15.0	1.7	0.6
	1952	36,274	36,334	36,334	68	69	61	6	2	19.0	16.8	1.7	0.6

T A B L E 8 (continued)

RATE OF INCIDENCE OF FIRES IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL DWELLINGS

Reports from N.F.S. and Fire Brigades in Great Britain 1947-52

11/1

Type of dwelling	Year	Number of dwellings occupied on		Number of dwellings at risk	Number of incidents	Number of damaged dwellings				Number of damaged dwellings per 10,000 dwellings at risk per year			
		1st. January	31st. December			Total	Fire confined to room of origin	Fire spread beyond room of origin damaging		Total	Fire confined to room of origin	Fire spread beyond room of origin damaging	
								less than half the dwelling	more than half the dwelling			less than half the dwelling	more than half the dwelling
Cornish Unit	1947	—	80	20	—	—	—	—	—	—	—	—	—
	1948	80	573	253	2	2	2	—	—	79.1	79.1	—	—
	1949	573	2,416	1,354	1	1	—	1	—	7.4	—	7.4	—
	1950	2,416	4,833	3,586	2	2	2	—	—	5.6	5.6	—	—
	1951	4,833	7,693	6,283	4	4	4	—	—	6.4	6.4	—	—
	1952	7,693	11,242	9,506	6	6	5	1	—	6.3	5.3	1.1	—
39 Cruden	1947	—	712	57	—	—	—	—	—	—	—	—	—
	1948	712	1,955	1,182	4	5	4	1	—	42.3	33.8	8.5	—
	1949	1,955	3,284	2,743	9	12	5	2	5	43.8	18.2	7.3	18.2
	1950	3,284	3,380	3,356	8	14	8	3	3	41.7	23.8	8.9	8.9
	1951	3,380	3,384	3,383	5	5	4	1	—	14.8	11.6	3.0	—
	1952	3,384	7,145	4,622	4	4	3	1	—	8.7	6.5	2.2	—
Foamslag	1947	—	178	41	1	1	1	—	—	244.0	244.0	—	—
	1948	178	540	331	1	1	1	—	—	30.2	30.2	—	—
	1949	540	1,010	777	—	—	—	—	—	—	—	—	—
	1950	1,010	1,346	1,179	—	—	—	—	—	—	—	—	—
	1951	1,346	1,622	1,503	—	—	—	—	—	—	—	—	—
	1952	1,622	1,622	1,622	2	2	2	—	—	12.3	12.3	—	—
Howard	1947	458	1,225	825	3	3	2	1	—	36.4	24.2	12.1	—
	1948	1,225	1,404	1,347	3	3	2	1	—	22.3	14.8	7.4	—
	1949	1,404	1,404	1,404	2	2	2	—	—	14.2	14.2	—	—
	1950	1,404	1,404	1,404	—	—	—	—	—	—	—	—	—
	1951	1,404	1,404	1,404	6	6	6	—	—	42.7	42.7	—	—
	1952	1,404	1,404	1,404	6	6	4	1	1	42.7	28.5	7.1	7.1

T A B L E 8 (continued)

RATE OF INCIDENCE OF FIRES IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL DWELLINGS

Reports from N.F.S. and Fire Brigades in Great Britain 1947-52

521/1

Type of dwelling	Year	Number of dwellings occupied on		Number of dwellings at risk	Number of incidents	Number of damaged dwellings				Number of damaged dwellings per 10,000 dwellings at risk per year			
		1st. January	31st. December			Total	Fire confined to room of origin	Fire spread beyond room of origin damaging		Total	Fire confined to room of origin	Fire spread beyond room of origin damaging	
								less than half the dwelling	more than half the dwelling			less than half the dwelling	more than half the dwelling
Laing Easiform	1947	717	2,650	1,364	-	-	-	-	-	-	-	-	-
	1948	2,650	7,411	4,781	1	1	-	-	1	2.1	-	-	2.1
	1949	7,411	11,523	9,529	3	3	3	-	-	3.1	3.1	-	-
	1950	11,523	15,917	13,641	5	5	5	-	-	3.7	3.7	-	-
	1951	15,917	20,602	18,143	7	7	7	-	-	3.9	3.9	-	-
	1952	20,602	26,208	23,347	3	3	3	-	-	1.3	1.3	-	-
Orlit	1947	113	912	280	-	-	-	-	-	-	-	-	-
	1948	912	4,626	2,370	3	3	2	1	-	12.7	8.4	4.2	-
	1949	4,626	8,769	6,855	6	6	6	-	-	8.8	8.8	-	-
	1950	8,769	10,568	9,816	9	10	9	2	-	10.2	8.1	2.0	-
	1951	10,568	11,703	11,146	9	9	8	1	-	8.1	7.2	0.9	-
	1952	11,703	12,962	12,325	17	17	16	1	-	13.8	13.0	0.8	-
Spooner	1947	-	124	55	-	-	-	-	-	-	-	-	-
	1948	124	579	344	-	-	-	-	-	-	-	-	-
	1949	579	909	711	-	-	-	-	-	-	-	-	-
	1950	909	1,352	1,170	2	2	2	-	-	17.1	17.1	-	-
	1951	1,352	1,450	1,419	2	2	-	1	1	14.1	-	7.0	7.0
	1952	1,450	1,773	1,550	2	2	2	-	-	12.9	12.9	-	-
Stuart	1947	180	180	30	-	-	-	-	-	-	-	-	-
	1948	180	1,064	570	1	1	1	-	-	17.5	17.5	-	-
	1949	1,064	1,930	1,488	2	4	2	-	2	26.9	13.4	-	13.4
	1950	1,930	2,444	2,152	-	-	-	-	-	-	-	-	-
	1951	2,444	3,587	2,949	2	3	2	1	-	10.2	6.8	3.4	-
	1952	3,587	4,342	4,035	4	4	4	-	-	9.9	9.9	-	-

T A B L E 8 (continued)

RATE OF INCIDENCE OF FIRES IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL DWELLINGS

Reports from N.F.S. and Fire Brigades in Great Britain 1947-52

24/4

Type of dwelling	Year	Number of dwellings occupied on		Number of dwellings at risk	Number of incidents	Number of damaged dwellings				Number of damaged dwellings per 10,000 dwellings at risk per year			
		1st. January	31st. December			Total	Fire confined to room of origin	Fire spread beyond room of origin damaging		Total	Fire confined to room of origin	Fire spread beyond room of origin damaging	
								less than half the dwelling	more than half the dwelling			less than half the dwelling	more than half the dwelling
Swedish Timber	1947	1,322	4,346	2,820	3	3	2	—	1	10.6	7.1	—	3.5
	1948	4,346	4,894	4,702	9	9	8	—	1	19.1	17.0	—	2.1
	1949	4,894	5,085	4,932	7	10	5	1	4	20.3	10.1	2.1	8.1
	1950	5,085	5,930	5,622	5	5	3	2	—	8.9	5.3	3.6	—
	1951	5,930	5,950	5,938	6	9	3	3	3	15.2	5.1	5.1	5.1
	1952	5,950	6,002	5,963	9	9	7	1	1	15.1	11.7	1.7	1.7
Trusteel	1947	2	62	9	—	—	—	—	—	—	—	—	—
	1948	62	764	334	—	—	—	—	—	—	—	—	—
	1949	764	1,149	1,004	—	—	—	—	—	—	—	—	—
	1950	1,149	1,190	1,175	—	—	—	—	—	—	—	—	—
	1951	1,190	1,222	1,201	2	2	2	—	—	16.7	16.7	—	—
	1952	1,222	1,720	1,415	—	—	—	—	—	—	—	—	—
Unity.	1947	2	107	27	1	1	1	—	—	370.0	370.0	—	—
	1948	107	838	384	5	5	4	1	—	130.0	104.0	26.0	—
	1949	838	1,766	1,365	4	4	3	1	—	29.3	22.0	7.3	—
	1950	1,766	2,619	2,133	9	10	9	1	—	46.9	42.2	4.7	—
	1951	2,619	3,677	3,161	15	16	12	4	—	50.6	38.0	12.7	—
	1952	3,677	5,069	4,271	14	16	11	5	—	37.5	25.8	11.7	—
Wates	1947	60	409	130	—	—	—	—	—	—	—	—	—
	1948	409	2,495	1,282	3	3	3	—	—	23.4	23.4	—	—
	1949	2,495	4,329	3,557	4	4	4	—	—	11.2	11.2	—	—
	1950	4,329	5,628	4,971	1	2	1	1	—	4.0	2.0	2.0	—
	1951	5,628	6,764	6,099	5	5	5	—	—	8.2	8.2	—	—
	1952	6,764	9,159	7,851	3	3	3	—	—	3.8	3.8	—	—

RATE OF INCIDENCE OF FIRES IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL DWELLINGS

Reports from N.F.S. and Fire Brigades in Great Britain 1947-52

1952/1

Type of dwelling	Year	Number of dwellings occupied on		Number of dwellings at risk	Number of incidents	Number of damaged dwellings				Number of damaged dwellings per 10,000 dwellings at risk per year			
		1st. January	31st. December			Total	Fire confined to room of origin	Fire spread beyond room of origin damaging		Total	Fire confined to room of origin	Fire spread beyond room of origin damaging	
								less than half the dwelling	more than half the dwelling			less than half the dwelling	more than half the dwelling
Weir	1947	104	562	237	—	—	—	—	—	—	—	—	—
	1948	562	1,618	958	—	—	—	—	—	—	—	—	—
	1949	1,618	3,262	2,464	2	2	—	1	1	8.1	—	4.1	4.1
	1950	3,262	4,726	3,858	2	2	2	—	—	5.2	5.2	—	—
	1951	4,726	6,954	5,728	3	3	3	—	—	5.2	5.2	—	—
	1952	6,954	10,763	8,620	8	8	7	1	—	9.3	8.1	1.2	—
Whitson — Fairhurst	1947	—	54	26	—	—	—	—	—	—	—	—	—
	1948	54	430	141	—	—	—	—	—	—	—	—	—
	1949	430	2,306	1,347	1	1	1	—	—	7.4	7.4	—	—
	1950	2,306	2,950	2,700	—	—	—	—	—	—	—	—	—
	1951	2,950	3,190	3,089	1	1	1	—	—	3.2	3.2	—	—
	1952	3,190	3,284	3,263	—	—	—	—	—	—	—	—	—
Wimpey	1947	58	373	129	—	—	—	—	—	—	—	—	—
	1948	373	3,233	1,640	1	1	1	—	—	6.1	6.1	—	—
	1949	3,233	5,070	4,009	5	5	4	1	—	12.5	10.0	2.5	—
	1950	5,070	8,077	6,535	3	4	3	1	—	6.1	4.6	1.5	—
	1951	8,077	11,858	9,834	1	1	1	—	—	1.0	1.0	—	—
	1952	11,858	20,123	15,619	9	9	9	—	—	5.8	5.8	—	—
Other types	1947	359	1,673	803	—	—	—	—	—	—	—	—	—
	1948	1,673	6,515	3,704	4	4	4	—	—	10.8	10.8	—	—
	1949	6,515	14,700	9,545	8	8	6	1	1	8.3	6.3	1.0	1.0
	1950	14,700	22,827	19,192	10	10	8	2	—	5.2	4.2	1.0	—
	1951	22,827	28,518	25,846	19	20	15	4	1	7.7	5.8	1.5	0.4
	1952	28,518	34,935	31,888	44	54	44	8	2	16.9	13.8	2.5	0.6
Total	1947	3,521	23,746	10,939	10	10	8	1	1	9.1	7.3	0.9	0.9
	1948	29,746	91,776	56,546	67	71	54	9	8	12.6	9.5	1.6	1.4
	1949	91,776	139,410	118,420	119	130	89	23	18	11.0	7.5	1.9	1.5
	1950	139,410	171,447	155,557	144	155	124	26	15	10.6	8.0	1.7	1.0
	1951	171,447	201,354	185,826	186	192	161	24	7	10.3	8.7	1.3	0.4
	1952	201,354	241,798	220,359	234	248	215	27	6	11.3	9.8	1.2	0.3

T A B L E 9

SUPPOSED CAUSE OF FIRES IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1947-1952

Note: Figures in brackets refer to numbers of fires

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Supposed cause of fire	Number of damaged dwellings per 10,000 dwellings at risk per year																	
	Fires Igniting												Total					
	Constructional materials						Contents											
	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952	1947	1948	1949	1950	1951	1952
Electric cooker	-	-	0.2	0.1	0.1	0.1	-	0.9	0.4	0.6	0.4	0.8	-	0.9	0.6	0.3	0.5	0.5
	-	-	(2)	(2)	(2)	(2)	-	(5)	(5)	(10)	(8)	(18)	-	(5)	(7)	(12)	(10)	(20)
apparatus other than cooker	0.9	0.2	0.2	0.1	0.2	0.3	1.8	0.6	0.5	0.2	0.7	0.5	2.7	0.7	0.6	0.2	0.7	0.8
	(1)	(1)	(2)	(1)	(2)	(6)	(2)	(3)	(6)	(3)	(12)	(12)	(3)	(4)	(8)	(4)	(14)	(18)
wire and cable	-	0.5	0.7	0.4	0.7	0.8	-	0.2	-	-	-	0.1	-	0.7	0.7	0.4	0.7	0.9
	-	(3)	(8)	(6)	(13)	(17)	-	(1)	-	-	-	(2)	-	(4)	(8)	(6)	(13)	(19)
Fire in grate	-	0.5	0.3	0.3	0.3	0.4	1.8	1.9	1.6	2.0	2.4	2.1	1.8	2.5	1.9	2.2	2.6	2.5
	-	(3)	(4)	(4)	(5)	(8)	(2)	(11)	(19)	(31)	(44)	(47)	(2)	(14)	(23)	(35)	(49)	(55)
Flue	0.9	2.5	2.4	1.9	2.1	1.6	-	0.4	0.3	0.2	0.3	0.3	0.9	2.8	2.6	2.1	2.4	1.9
	(1)	(14)	(28)	(29)	(39)	(35)	-	(2)	(3)	(3)	(5)	(7)	(1)	(16)	(31)	(32)	(44)	(42)
Gas (coal) apparatus	-	0.2	0.4	0.1	0.1	-	-	0.5	0.3	0.4	0.3	0.5	-	0.7	0.7	0.5	0.4	0.6
	-	(1)	(4)	(1)	(1)	(1)	-	(3)	(4)	(7)	(6)	(12)	-	(4)	(8)	(8)	(7)	(13)
Smoking materials and matches	-	0.2	-	-	0.1	-	-	0.9	0.8	0.8	0.9	1.1	-	0.9	0.8	0.8	1.0	1.0
	-	(1)	-	-	(1)	(1)	-	(5)	(10)	(12)	(17)	(23)	-	(5)	(10)	(12)	(19)	(24)
Spread of fire from house or flat	-	0.7	1.0	1.3	0.3	0.4	-	-	-	-	-	-	-	0.7	1.0	1.3	0.3	0.4
	-	(4)	(12)	(21)	(6)	(8)	-	-	-	-	-	-	-	(4)	(12)	(21)	(6)	(8)
Other causes	2.7	1.0	0.6	0.7	0.4	0.7	-	1.2	0.7	0.8	0.5	1.1	2.7	2.4	1.9	1.5	1.0	1.2
	(3)	(6)	(7)	(11)	(8)	(15)	-	(6)	(7)	(12)	(10)	(24)	(3)	(13)	(14)	(23)	(18)	(30)
Rate of incidence of fires of known cause	4.6	5.8	5.7	4.8	4.1	4.2	3.7	6.4	4.6	5.0	5.5	6.6	8.2	12.2	10.2	9.8	9.6	10.8
	(5)	(33)	(67)	(75)	(77)	(93)	(4)	(36)	(54)	(78)	(102)	(145)	(9)	(69)	(121)	(153)	(179)	(258)
Unknown cause													0.9	0.4	0.8	0.8	0.7	0.5
													(1)	(2)	(9)	(12)	(13)	(10)
Rate of incidence of all fires													9.1	12.6	11.0	10.6	10.3	11.3
													(10)	(71)	(130)	(165)	(192)	(248)

T A B L E 10 (a)

SUPPOSED CAUSE OF FIRES IN OCCUPIED POST-WAR PERMANENT AIREY DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1948-52

Note: Figures in brackets refer to numbers of fires

Supposed cause of fire	AIREY														
	Number of damaged dwellings per 10,000 at risk per year														
	Fires igniting										TOTAL				
	Constructional Materials					Contents									
	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952
Electric cooker	-	-	-	-	-	-	-	-	-	0.9 (2)	-	-	-	-	0.9 (2)
apparatus other than cooker	-	0.7 (1)	-	0.5 (1)	-	3.3 (1)	-	0.5 (1)	0.5 (1)	-	3.3 (1)	0.7 (1)	0.5 (1)	0.9 (2)	-
wire and cable	-	-	1.0 (2)	0.5 (1)	1.3 (3)	-	-	-	-	-	-	-	1.0 (2)	0.5 (1)	1.3 (3)
Fire in grate	-	-	1.0 (2)	-	0.4 (1)	3.3 (1)	0.7 (1)	-	2.3 (5)	1.3 (3)	3.3 (1)	0.7 (1)	1.0 (2)	2.3 (5)	1.7 (4)
Flue	-	0.7 (1)	-	0.5 (1)	0.4 (1)	-	0.7 (1)	-	0.9 (2)	-	-	1.4 (2)	-	1.4 (3)	0.4 (1)
Gas (coal) apparatus	-	-	-	-	-	-	-	-	0.5 (1)	0.9 (2)	-	-	-	0.5 (1)	0.9 (2)
Smoking materials and matches	-	-	-	-	-	-	-	0.5 (1)	0.5 (1)	0.4 (1)	-	-	0.5 (1)	0.5 (1)	0.4 (1)
Spread of fire from other house or flat	6.7 (2)	0.7 (1)	1.5 (3)	-	0.4 (1)	-	-	-	-	-	6.7 (2)	0.7 (1)	1.5 (3)	-	0.4 (1)
Other causes	13.3 (4)	2.1 (3)	0.5 (1)	0.5 (1)	0.9 (2)	3.3 (1)	-	1.5 (3)	0.9 (2)	1.7 (4)	16.7 (5)	2.1 (3)	2.0 (4)	1.4 (3)	2.6 (6)
Rate of incidence of fires of known cause	20.0 (6)	4.2 (6)	3.9 (8)	1.8 (4)	3.5 (8)	10.0 (3)	1.4 (2)	2.5 (5)	5.5 (12)	5.4 (12)	30.0 (9)	5.6 (8)	6.4 (13)	7.4 (16)	8.7 (20)
Unknown cause											3.3 (1)	-	0.5 (1)	1.4 (3)	0.4 (1)
Rate of incidence of all fires											33.3 (10)	5.6 (8)	6.9 (14)	8.7 (19)	9.1 (21)

SUPPOSED CAUSE OF FIRES IN OCCUPIED POST-WAR PERMANENT ALUMINIUM DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1948-52

Note: Figures in brackets refer to numbers of fires

Supposed cause of fire	ALUMINIUM														
	Number of damaged dwellings per 10,000 at risk per year														
	Fires igniting										TOTAL				
	Constructional Materials					Contents									
	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952
Electric cooker	—	1·4	0·6	1·1	1·0	—	—	0·6	—	2·0	—	1·4	1·2	1·1	3·1
	—	(2)	(1)	(2)	(2)	—	—	(1)	—	(4)	—	(2)	(2)	(2)	(6)
apparatus other than cooker	—	—	—	—	—	—	—	0·6	0·5	—	—	—	0·6	0·5	—
	—	—	—	—	—	—	—	(1)	(1)	—	—	—	(1)	(1)	—
wire and cable	4·6	2·7	1·2	2·2	1·0	—	—	—	—	—	4·6	2·7	1·2	2·2	1·0
	(2)	(4)	(2)	(4)	(2)	—	—	—	—	—	(2)	(4)	(2)	(4)	(2)
Fire in grate	—	—	0·6	—	—	—	—	1·2	1·6	0·5	—	—	1·8	1·6	0·5
	—	—	(1)	—	—	—	—	(2)	(3)	(1)	—	—	(3)	(3)	(1)
Flue	—	—	—	—	—	—	—	—	0·5	—	—	—	—	0·5	—
	—	—	—	—	—	—	—	—	(1)	—	—	—	—	(1)	—
Gas (coal) apparatus	—	—	—	—	0·5	—	—	—	—	0·5	—	—	—	—	1·0
	—	—	—	—	(1)	—	—	—	—	(1)	—	—	—	—	(2)
Smoking materials and matches	—	—	—	—	—	—	2·1	0·6	1·1	0·5	—	2·1	0·6	1·1	0·5
	—	—	—	—	—	—	(3)	(1)	(2)	(1)	—	(3)	(1)	(2)	(1)
Spread of fire from other house or flat	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
other causes	—	—	—	—	—	—	—	1·2	1·0	0·5	—	—	1·2	1·0	0·5
	—	—	—	—	—	—	—	(2)	(2)	(1)	—	—	(2)	(2)	(1)
Rate of incidence of fires of known cause	4·6	4·1	2·4	3·2	2·5	—	2·1	4·3	4·9	4·1	4·6	6·2	6·7	8·1	6·6
	(2)	(6)	(4)	(6)	(5)	—	(3)	(7)	(9)	(9)	(2)	(9)	(11)	(15)	(13)
Unknown cause											—	0·7	0·6	0·5	—
											—	(1)	(1)	(1)	—
Rate of incidence of all fires											4·6	6·9	7·3	8·6	6·6
											(2)	(10)	(12)	(16)	(13)

T A B L E 10 (c)

SUPPOSED CAUSE OF FIRES IN OCCUPIED POST-WAR PERMANENT ATHOLL DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1948-52

Note: Figures in brackets refer to number of fires

Supposed cause of fire	ATHOLL														
	Numbers of damaged dwellings per 10,000 at risk per year														
	Fires igniting										TOTAL				
	Constructional Materials					Contents									
	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952
Electric cooker	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
apparatus other than cooker	-	-	-	-	-	-	-	3.9 (1)	-	-	-	-	3.9 (1)	-	-
wire and cable	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fire in grate	-	6.3 (1)	3.9 (1)	-	-	-	6.3 (1)	15.6 (4)	2.8 (1)	2.2 (1)	-	12.6 (2)	19.6 (5)	2.8 (1)	2.2 (1)
Flue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Smoking materials and matches	-	-	-	-	-	-	-	-	2.8 (1)	2.2 (1)	-	-	-	2.8 (1)	2.2 (1)
Spread of fire from other house or flat	-	6.3 (1)	15.6 (4)	-	-	-	-	-	-	-	-	6.3 (1)	15.6 (4)	-	-
Other causes	-	-	-	-	-	-	-	-	2.8 (1)	-	-	-	-	2.8 (1)	-
Rate of incidence of fires of known cause	-	12.6 (2)	19.6 (5)	-	-	-	6.3 (1)	19.6 (5)	8.5 (3)	4.4 (2)	-	18.8 (3)	39.1 (10)	8.5 (3)	4.5 (2)
Unknown cause											-	-	-	-	-
Rate of incidence of all fires											-	18.8 (3)	39.1 (10)	8.5 (3)	4.5 (2)

T A B L E 10 (d)

SUPPOSED CAUSE OF FIRES IN OCCUPIED POST-WAR PERMANENT BLACKBURN DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1948-52

Note: Figures in brackets refer to number of fires

Supposed cause of fire	BLACKBURN															
	Numbers of damaged dwellings per 10,000 at risk per year															
	Fires igniting										TOTAL					
	Constructional Materials					Contents										
	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	
Electric cooker	-	-	-	-	-	-	-	-	3.8 (2)	-	-	-	-	3.8 (2)	-	
apparatus other than cooker	-	-	-	-	1.7 (1)	-	-	-	-	-	-	-	-	-	1.7 (1)	
wire and cable	-	-	-	1.9 (1)	3.4 (2)	-	-	-	-	-	-	-	-	1.9 (1)	3.4 (2)	
Fire in grate	-	-	-	-	1.7 (1)	-	-	-	1.9 (1)	5.0 (3)	-	-	-	1.9 (1)	6.8 (4)	
Flue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Smoking materials and matches	-	-	-	-	-	-	-	-	3.8 (2)	3.3 (2)	-	-	-	3.8 (2)	3.3 (2)	
Spread of fire from other house or flat	-	-	-	1.9 (1)	-	-	-	-	-	-	-	-	-	1.9 (1)	-	
Other causes	-	-	-	-	-	-	-	3.5 (1)	1.9 (1)	-	-	-	3.5 (1)	1.9 (1)	-	
Rate of incidence of fires of known cause	-	-	-	3.8 (2)	6.8 (4)	-	-	3.5 (1)	11.3 (6)	8.3 (5)	-	-	3.5 (1)	15.1 (8)	15.1 (9)	
Unknown cause											-	-	-	-	-	1.7 (1)
Rate of incidence of all fires											-	-	3.5 (1)	15.0 (8)	16.9 (10)	

T A B L E 10 (e)

SUPPOSED CAUSE OF FIRES IN OCCUPIED POST-WAR PERMANENT B.I.S.F. DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1948-52

Note: Figures in brackets refer to number of fires

Supposed cause of fire	B.I.S.F.														
	Number of damaged dwellings per 10,000 at risk per year														
	Fires igniting										TOTAL				
	Constructional Materials					Contents									
	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952
Electric cooker	-	-	0.3 (1)	-	-	1.2 (3)	0.6 (2)	1.4 (5)	0.6 (2)	1.4 (5)	1.2 (3)	0.6 (2)	1.7 (6)	0.6 (2)	1.4 (5)
apparatus other than cooker	-	-	-	0.3 (1)	0.8 (3)	0.4 (1)	1.4 (5)	-	1.1 (4)	0.8 (3)	0.4 (1)	1.4 (5)	-	1.4 (5)	1.7 (6)
wire and cable	0.4 (1)	-	0.3 (1)	0.6 (2)	0.6 (2)	0.4 (1)	-	-	-	0.3 (1)	0.8 (2)	-	0.3 (1)	0.6 (2)	0.9 (3)
Fire in grate	0.8 (2)	-	0.3 (1)	0.3 (1)	0.3 (1)	0.8 (2)	2.0 (7)	3.9 (14)	3.3 (12)	3.6 (13)	1.7 (4)	2.0 (7)	4.2 (15)	3.6 (13)	3.9 (14)
Flue	2.1 (5)	4.0 (14)	4.5 (16)	6.1 (22)	4.7 (17)	-	0.3 (1)	-	0.3 (1)	0.3 (1)	2.1 (5)	4.3 (15)	4.5 (16)	6.4 (23)	5.1 (18)
Gas (coal) apparatus	-	0.9 (3)	0.3 (1)	-	-	0.4 (1)	0.9 (3)	0.3 (1)	0.3 (1)	1.7 (6)	0.4 (1)	1.7 (6)	0.6 (2)	0.3 (1)	1.7 (6)
Smoking materials and matches	0.4 (1)	-	-	0.3 (1)	0.3 (1)	0.8 (2)	1.4 (5)	1.4 (5)	1.9 (7)	1.4 (5)	1.2 (3)	1.4 (5)	1.4 (5)	2.2 (8)	1.7 (6)
Spread of fire from other house or flat	0.4 (1)	0.6 (2)	1.1 (4)	-	0.3 (1)	-	-	-	-	-	0.4 (1)	0.6 (2)	1.1 (4)	-	0.3 (1)
Other causes	-	-	0.6 (2)	0.3 (1)	1.1 (4)	-	0.6 (2)	1.4 (5)	1.1 (4)	0.6 (2)	-	0.6 (2)	2.0 (7)	1.4 (6)	1.7 (6)
Rate of incidence of fires of known cause	4.1 (10)	5.4 (19)	7.3 (26)	7.8 (28)	8.0 (29)	4.1 (10)	7.2 (25)	8.4 (30)	8.6 (31)	9.9 (36)	8.3 (36)	12.6 (44)	15.6 (56)	16.4 (59)	17.9 (65)
Unknown cause											0.4 (1)	0.9 (3)	2.0 (7)	0.8 (3)	1.1 (4)
Rate of incidence of all fires											8.7 (21)	13.5 (47)	17.6 (63)	17.2 (62)	19.0 (69)

SUPPOSED CAUSE OF FIRES IN OCCUPIED POST-WAR PERMANENT CRUDEN DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1948-52

Note: Figures in brackets refer to number of fires

Supposed cause of fire	CRUDEN														
	Number of damaged dwellings per 10,000 at risk per year														
	Fires igniting										TOTAL				
	Constructional Materials					Contents									
	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952
Electric cooker	-	-	-	-	-	-	3.6 (1)	3.0 (1)	-	-	-	3.6 (1)	3.0 (1)	-	-
apparatus other than cooker	-	3.6 (1)	-	-	-	-	-	-	-	-	-	3.6 (1)	-	-	-
wire and cable	-	3.6 (1)	-	3.0 (1)	2.2 (1)	-	-	-	-	-	-	3.6 (1)	-	3.0 (1)	2.2 (1)
Fire in grate	-	3.6 (1)	-	3.0 (1)	2.2 (1)	-	-	6.0 (2)	5.9 (2)	2.2 (1)	-	3.6 (1)	6.0 (2)	8.9 (3)	4.4 (2)
Flue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gas (coal) apparatus	8.5 (1)	3.6 (1)	-	-	-	-	-	3.0 (1)	-	2.2 (1)	8.5 (1)	3.6 (1)	3.0 (1)	-	2.2 (1)
Smoking materials and matches	-	-	-	-	-	8.5 (1)	-	-	3.0 (1)	-	8.5 (1)	-	-	3.0 (1)	-
of fire from other house or flat	8.5 (1)	10.9 (3)	17.9 (6)	-	-	-	-	-	-	-	8.5 (1)	10.9 (3)	17.9 (6)	-	-
Other causes	16.9 (2)	3.6 (1)	6.0 (2)	-	-	-	-	3.0 (1)	-	-	16.9 (2)	3.6 (1)	8.9 (3)	-	-
Rate of incidence of fires of known cause	33.8 (4)	29.2 (8)	23.8 (8)	5.9 (2)	4.4 (2)	8.5 (1)	3.6 (1)	14.9 (5)	8.9 (3)	4.4 (2)	42.3 (5)	32.8 (9)	38.7 (13)	14.8 (5)	8.7 (4)
Unknown cause											-	10.9 (3)	3.0 (1)	-	-
Rate of incidence of all fires											42.3 (5)	43.8 (12)	41.7 (14)	14.8 (5)	8.7 (4)

SUPPOSED CAUSE OF FIRES IN OCCUPIED POST-WAR PERMANENT HOWARD AND EASIFORM DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1950-52

Note: Figures in brackets refer to the number of fires

51

Supposed cause of fire	HOWARD							LAING EASTFORM								
	Number of damaged dwellings per 10,000 at risk							Number of damaged dwellings per 10,000 at risk								
	Fires igniting				TOTAL			Fires igniting						TOTAL		
	Constructional Materials		Contents					Constructional Materials			Contents					
	1951	1952	1951	1952	1951	1952		1950	1951	1952	1950	1951	1952	1950	1951	1952
Electric cooker	-	-	-	-	-	-	-	-	-	0.7	-	-	0.7	-	-	
	-	-	-	-	-	-	-	-	-	(1)	-	-	(1)	-	-	
apparatus other than cooker	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
wire and cable	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Fire in grate	7.1	-	7.1	7.1	14.2	7.1	-	-	-	0.7	1.1	0.4	0.7	1.1	0.4	
	(1)	-	(1)	(1)	(2)	(1)	-	-	-	(1)	(2)	(1)	(1)	(2)	(1)	
Flue	14.2	7.1	-	-	14.2	7.1	0.7	0.6	0.4	-	-	-	0.7	0.6	0.4	
	(2)	(1)	-	-	(2)	(1)	(1)	(1)	(1)	-	-	-	(1)	(1)	(1)	
Gas (coal) apparatus	-	-	-	-	-	-	-	0.6	-	0.7	-	-	0.7	0.6	-	
	-	-	-	-	-	-	-	(1)	-	(1)	-	-	(1)	(1)	-	
Smoking materials and matches	-	-	-	-	-	-	-	-	-	-	1.1	-	-	1.1	-	
	-	-	-	-	-	-	-	-	-	-	(2)	-	-	(2)	-	
Spread of fire from other house or flat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other causes	-	7.1	7.1	21.4	7.1	28.5	-	0.6	-	0.7	-	0.4	0.7	0.6	0.4	
	-	(1)	(1)	(3)	(1)	(4)	-	(1)	-	(1)	-	(1)	(1)	(1)	(1)	
Rate of incidence of fires of known cause	21.4	14.2	14.2	28.5	35.6	42.7	0.7	1.7	0.4	2.9	2.2	0.9	3.7	3.9	1.3	
	(3)	(2)	(2)	(4)	(5)	(6)	(1)	(3)	(1)	(4)	(4)	(2)	(5)	(7)	(3)	
Unknown cause						7.1							-	-	-	
						(1)							-	-	-	
Rate of incidence of all fires						42.7	42.7							3.7	3.9	1.3
						(6)	(6)							(5)	(7)	(3)

TABLE 10(h)

SUPPOSED CAUSE OF FIRES IN OCCUPIED POST-WAR PERMANENT SWEDISH TIMBER AND ORLIT DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1948-52

Note: Figures in brackets refer to numbers of fires

Supposed cause of fire	ORLIT															SWEDISH TIMBER																
	Number of damaged dwellings per 10,000 at risk per year															Number of damaged dwellings per 10,000 at risk per year																
	Fires igniting										Total					Fires igniting										Total						
	Constructional Materials					Contents										Constructional Materials					Contents											
	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952		
Electric cooker	-	-	-	-	-	-	1.5 (1)	4.1 (4)	-	0.8 (1)	-	1.5 (1)	4.1 (4)	-	0.8 (1)	-	-	-	-	-	2.1 (1)	2.0 (1)	-	1.7 (1)	3.4 (2)	2.1 (1)	2.0 (1)	-	1.7 (1)	3.4 (2)		
apparatus other than cooker	-	-	-	-	-	-	-	-	0.9 (1)	1.6 (2)	-	-	-	-	0.9 (1)	1.6 (2)	-	-	-	-	2.1 (1)	-	1.8 (1)	-	-	-	1.7 (1)	2.1 (1)	-	1.8 (1)	-	1.7 (1)
wire and cable	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.1 (4)	-	-	-	-	8.1 (4)	-	-	-	-	
Fire in grate	-	-	-	0.9 (1)	-	-	4.4 (3)	-	3.6 (4)	3.2 (4)	-	4.4 (3)	-	4.5 (5)	3.2 (4)	-	-	-	-	-	6.4 (3)	-	-	1.7 (1)	5.0 (3)	6.4 (3)	-	-	1.7 (1)	5.0 (3)		
Flue	8.4 (2)	2.9 (2)	2.0 (2)	-	3.2 (4)	-	-	2.0 (2)	0.9 (1)	2.4 (3)	8.4 (2)	2.9 (2)	4.1 (4)	0.9 (1)	5.7 (7)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gas (coal) apparatus	-	-	-	-	-	-	-	1.0 (1)	-	-	-	-	1.0 (1)	-	-	-	-	-	-	-	2.1 (1)	2.0 (1)	1.8 (1)	-	-	2.1 (1)	2.0 (1)	1.8 (1)	-	-	-	
Smoking materials	-	-	-	-	-	4.2 (1)	-	-	0.9 (1)	1.6 (2)	4.2 (1)	-	-	0.9 (1)	1.6 (2)	-	-	-	-	-	-	-	3.6 (2)	-	1.7 (1)	-	-	3.6 (2)	-	1.7 (1)	-	
Spread of fire from another house or flat	-	-	1.0 (1)	-	-	-	-	-	-	-	-	-	1.0 (1)	-	-	-	6.1 (3)	-	5.1 (3)	-	-	-	-	-	-	-	6.1 (3)	-	5.1 (3)	-	-	
Other causes	-	-	-	0.9 (1)	-	-	-	-	-	0.8 (1)	-	-	-	0.9 (1)	0.8 (1)	-	-	1.8 (1)	1.7 (1)	1.7 (1)	6.4 (3)	2.0 (1)	-	3.4 (2)	1.7 (1)	6.4 (3)	2.0 (1)	1.8 (1)	5.1 (3)	3.4 (2)	-	
Rate of incidence of fires of known cause	8.4 (2)	2.9 (2)	3.1 (3)	1.8 (2)	3.2 (4)	4.2 (1)	5.8 (4)	7.1 (7)	6.3 (7)	10.5 (13)	12.7 (3)	8.8 (6)	10.2 (10)	8.1 (9)	13.8 (17)	2.1 (1)	14.2 (7)	3.6 (2)	6.7 (4)	1.7 (1)	17.0 (8)	6.1 (3)	5.3 (3)	6.7 (4)	13.5 (8)	19.1 (9)	20.3 (10)	8.9 (5)	13.5 (8)	15.1 (9)		
Unknown cause											-	-	-	-	-														-	1.7 (1)	-	
Rate of incidence of all fires											12.7 (3)	8.8 (6)	10.2 (10)	8.1 (9)	13.8 (17)											19.1 (9)	20.3 (10)	8.9 (5)	15.2 (9)	15.1 (9)		

TABLE 10(1)

SUPPOSED CAUSE OF FIRES IN OCCUPIED POST-WAR PERMANENT UNITY, AND WATES DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain, 1948-52

Note: Figures in brackets refer to numbers of fires

Supposed cause of fire	UNITY															WATES					
	Number of damaged dwellings per 10,000 at risk per year															No. damaged dwellings per 10,000 dwellings at risk per year					
	Fires Igniting															Fires Igniting					
	Constructional Materials					Contents					Total					Constructional Materials		Contents		Total	
	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1951	1952	1951	1952	1951	1952
Electric cooker	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.6 (1)	-	1.6 (1)	-
apparatus other than cooker	-	-	-	-	2.3 (1)	-	-	-	-	-	-	-	-	-	2.3 (1)	-	-	1.6 (1)	-	1.6 (1)	-
wire and cable	-	-	-	9.5 (3)	2.3 (1)	-	-	-	-	-	-	-	-	9.5 (3)	2.3 (1)	-	1.3 (1)	-	-	-	1.3 (1)
Fire in grate	-	-	-	-	-	-	-	-	3.2 (1)	4.7 (2)	-	-	-	3.2 (1)	4.7 (2)	-	-	-	1.3 (1)	-	1.3 (1)
Flue	52.1 (2)	29.3 (4)	32.8 (7)	31.6 (10)	14.0 (6)	52.1 (2)	-	4.7 (1)	-	4.7 (2)	104.2 (4)	29.3 (4)	37.5 (8)	31.6 (10)	18.7 (8)	4.9 (3)	-	-	-	4.9 (3)	-
Smoking materials	-	-	-	-	-	-	-	-	-	2.3 (1)	-	-	-	-	2.3 (1)	-	-	-	-	-	-
Spread of fire from other house or flat	-	-	4.7 (1)	3.2 (1)	4.7 (2)	-	-	-	-	-	-	-	4.7 (1)	3.2 (1)	4.7 (2)	-	-	-	-	-	-
Other causes	-	-	-	-	-	26.0 (1)	-	-	-	2.3 (1)	26.0 (1)	-	-	-	2.3 (1)	-	-	-	-	-	-
Rate of incidence of fires of known cause	52.1 (2)	29.3 (4)	37.5 (8)	31.6 (14)	23.4 (10)	78.1 (3)	-	4.7 (1)	3.2 (1)	14.0 (6)	130.2 (5)	29.3 (4)	42.2 (9)	47.5 (15)	37.5 (16)	4.9 (3)	1.3 (1)	3.3 (2)	1.3 (1)	8.2 (5)	2.5 (2)
Unknown cause	-	-	-	-	-	-	-	-	-	-	-	-	4.7 (1)	3.2 (1)	-	-	-	-	-	-	1.3 (1)
Rate of incidence of all fires	-	-	-	-	-	-	-	-	-	-	130.2 (5)	29.3	46.9 (10)	50.6 (16)	37.5 (16)	-	-	-	-	8.2 (5)	3.8 (3)

TABLE 10(j)

SUPPOSED CAUSE OF FIRES IN OCCUPIED PERMANENT WIMPEY DWELLINGS

Reports from N.F.S. and Fire Brigades in Great Britain, 1948-1952

Note: Figures in brackets refer to numbers of fires

Supposed cause of fire	WIMPEY										Total					
	Number of damaged dwellings per 10,000 at risk per year															
	Fires Igniting															
	Constructional Materials					Contents										
	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	
Electric other apparatus	-	-	-	-	-	-	-	-	1.0 (1)	-	-	-	-	1.0 (1)	-	
Fire in grate	-	-	-	-	-	6.1 6.1	-	6.1 (1)	-	1.3 (2)	6.1 (1)	-	1.5 (1)	-	1.3 (2)	
Flue	-	7.5 (3)	3.1 (2)	-	1.3 (2)	-	2.5 (1)	-	-	0.6 (1)	-	10.0 (4)	3.1 (2)	-	1.9 (3)	
Gas (coal) apparatus	-	-	-	-	-	-	-	-	-	0.6 (1)	-	-	-	-	0.6 (1)	
Smoking materials and matches	-	-	-	-	-	-	2.5 (1)	-	-	1.3 (2)	-	2.5 (1)	-	-	1.3 (2)	
Spread of fire from house or flat	-	-	1.5 (1)	-	-	-	-	-	-	-	-	-	1.5 (1)	-	-	
Rate of incidence of fires of known cause	-	7.5 (3)	4.6 (3)	-	1.3 (2)	6.1 (1)	5.0 (2)	1.5 (1)	1.0 (1)	3.8 (6)	6.1 (1)	12.5 (5)	6.1 (4)	1.0 (1)	5.1 (8)	
Unknown cause											-	-	-	-	-	0.6 (1)
Rate of incidence of all fires											6.1 (1)	12.5 (5)	6.1 (4)	1.0 (1)	5.8 (9)	

TABLE 11

NATURE OF CONSTRUCTIONAL MATERIALS IGNITED FIRST IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1947-1952

Note: Figures in brackets refer to numbers of fires

Nature of constructional materials	Number of damaged dwellings in which constructional materials were ignited first, per 10,000 dwellings at risk per year					
	1947	1948	1949	1950	1951	1952
Roof	- (1)	0.7 (4)	0.9 (11)	1.6 (25)	0.9 (16)	1.0 (21)
Ceiling	0.9 (1)	0.5 (3)	0.8 (9)	0.6 (9)	0.6 (11)	0.4 (8)
Partitions, walls, linings to walls	2.7 (3)	2.5 (15)	2.0 (24)	0.7 (11)	0.4 (8)	0.8 (18)
Floor	0.9 (1)	0.2 (1)	0.5 (6)	0.2 (4)	0.4 (7)	0.4 (8)
Built-in cupboards, cabinets	-	-	-	0.6 (9)	0.3 (6)	0.1 (2)
Insulation of electric wiring						
(a) No fire spread	-	-	0.2 (2)	-	-	0.1 (3)
(b) Fire confined to fuse box panel, switchboard	-	-	0.3 (3)	-	0.1 (1)	0.1 (3)
(c) Fire involving (b) but spread to contents	-	-	-	-	0.1 (1)	- (1)
(d) Fire involving walls, floors, ceilings, rafters, built in cupboards	-	0.5 (3)	0.3 (3)	0.4 (6)	0.4 (8)	0.4 (8)
(e) Fire involving other materials	-	-	-	-	0.2 (3)	-
Miscellaneous and undefined	-	1.4 (7)	0.7 (9)	0.7 (11)	0.9 (16)	0.9 (19)
Rate of incidence of fires in which constructional materials were ignited first	4.6 (5)	5.8 (33)	5.7 (67)	4.8 (75)	4.1 (77)	4.2 (93)

TABLE 12(a)

NATURE OF CONSTRUCTIONAL MATERIALS IGNITED FIRST IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1948-1952

Note: Figures in brackets refer to numbers of fires

NATURE OF CONSTRUCTIONAL MATERIALS	Number of damaged dwellings in which constructional materials were ignited first, per 10,000 dwellings at risk per year																			
	AIREY					ALUMINIUM					ATHOLL					BLACKBURN				
	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952
Roof	3.3 (1)	0.7 (1)	1.5 (3)	-	-	-	-	-	-	-	-	-	3.9 (1)	-	-	-	-	-	1.9 (1)	-
Ceiling	-	-	-	-	-	-	-	-	-	-	-	6.3 (1)	3.9 (1)	-	-	-	-	-	-	-
Partitions, walls, linings to walls	13.3 (4)	3.5 (5)	0.5 (1)	0.9 (2)	0.9 (2)	-	2.1 (3)	-	0.5 (1)	1.5 (3)	-	-	7.8 (2)	-	-	-	-	-	-	1.7 (1)
Flue casings	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Floor	-	-	1.0 (2)	-	0.4 (1)	-	-	-	-	-	-	6.3 (1)	3.9 (1)	-	-	-	-	-	-	1.7 (1)
Built-in cabinets, cupboards	-	-	-	0.5 (1)	0.9 (2)	-	-	0.6 (1)	0.5 (1)	-	-	-	-	-	-	-	-	-	-	-
Lagging of water pipes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Insulation of electric wiring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(a) No fire spread	-	-	-	-	-	-	-	-	-	0.5 (1)	-	-	-	-	-	-	-	-	-	1.7 (1)
(b) Fire confined to fuse box panel	-	-	-	-	0.4 (1)	-	1.4 (2)	-	0.5 (1)	0.5 (1)	-	-	-	-	-	-	-	-	-	1.7 (1)
(c) Fire involving (b) but spread to contents	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1)
(d) Fire involving walls, floors, ceilings, rafters, built-in cupboards	-	-	1.0 (2)	0.5 (1)	-	4.6 (2)	0.7 (1)	1.2 (2)	1.1 (2)	-	-	-	-	-	-	-	-	-	1.9 (1)	-
(e) Fire involving other materials	-	-	-	-	-	-	-	-	0.5 (1)	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous and undefined	3.3 (1)	-	-	-	0.9 (2)	-	-	0.6 (1)	-	-	-	-	-	-	-	-	-	-	-	-
Rate of incidence of fires in which constructional materials were ignited first	20.0 (6)	4.2 (6)	3.9 (8)	1.8 (4)	3.5 (8)	4.6 (2)	4.1 (6)	2.4 (4)	3.2 (6)	2.5 (5)	-	12.6 (2)	19.6 (5)	-	-	-	-	-	3.8 (2)	6.8 (4)

TABLE 12(b)

NATURE OF CONSTRUCTIONAL MATERIALS IGNITED FIRST IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1948-1952

Note: Figures in brackets refer to numbers of fires.

NATURE OF CONSTRUCTIONAL MATERIALS	Number of damaged dwellings in which constructional materials were ignited first, per 10,000 dwellings at risk per year																			
	B.I.S.F.					CRUDEN					HOWARD					LAING EASIFORM				
	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952
Roof	-	0.9 (3)	1.7 (6)	1.9 (7)	1.7 (6)	8.5 (1)	3.6 (1)	6.0 (2)	-	-	-	-	-	7.1 (1)	14.2 (2)	2.1 (1)	-	-	-	-
Ceiling	1.2 (3)	1.4 (5)	2.0 (7)	1.9 (7)	1.4 (5)	-	3.6 (1)	-	-	-	-	-	-	7.1 (1)	-	-	-	-	-	-
Partitions, walls, linings to walls	0.8 (2)	2.0 (7)	0.8 (3)	0.8 (3)	1.1 (4)	25.4 (3)	14.6 (4)	3.0 (1)	-	2.2 (1)	-	-	-	-	-	-	-	0.7 (1)	1.1 (2)	0.4 (1)
Flue casings	-	-	-	0.8 (3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Floor	-	-	-	-	0.3 (1)	-	-	-	3.0 (1)	-	7.4 (1)	-	-	-	-	-	2.1 (2)	-	-	-
Built-in cabinets, cupboards	-	-	0.8 (3)	0.6 (2)	0.3 (1)	-	-	3.0 (1)	-	-	-	-	-	-	-	-	-	-	0.6 (1)	-
Lagging of water pipes	-	-	-	0.8 (3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Insulation of electric wiring	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(a) No fire spread	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) Fire confined to fuse box panel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(c) Fire involving (b) but spread to contents	-	-	-	0.3 (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(d) Fire involving walls, floors, ceilings, rafters, built-in cupboards	0.4 (1)	-	0.3 (1)	0.3 (1)	1.1 (4)	-	3.6 (1)	-	3.0 (1)	2.2 (1)	-	-	-	-	-	-	-	-	-	-
(e) Fire involving other materials	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous and undefined	1.7 (4)	1.1 (4)	1.7 (6)	0.3 (1)	2.2 (8)	-	3.6 (1)	11.9 (4)	-	-	14.8 (2)	-	-	7.1 (1)	-	-	-	-	-	-
Rate of incidence of fires in which constructional materials were first ignited	4.1 (10)	5.4 (19)	7.3 (26)	7.8 (28)	8.0 (29)	33.8 (4)	29.2 (8)	23.8 (8)	5.9 (2)	4.4 (2)	22.3 (3)	-	-	21.4 (3)	14.2 (2)	2.1 (1)	2.1 (2)	0.7 (1)	1.7 (3)	0.4 (1)

TABLE 12(c)

NATURE OF CONSTRUCTIONAL MATERIALS IGNITED FIRST IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1948-1952

Note: Figures in red refer to numbers of fires

NATURE OF CONSTRUCTIONAL MATERIALS	Number of damaged dwellings in which constructional materials were ignited first, per 10,000 dwellings at risk per year																								
	ORLIT					SWEDISH TIMBER					UNITY					WATES					WIMPEY				
	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952	1948	1949	1950	1951	1952
Roof	4.2 (1)	2.9 (2)	2.0 (2)	0.9 (1)	2.4 (3)	-	-	-	3.4 (2)	-	-	-	18.8 (4)	9.5 (3)	14.0 (6)	-	2.8 (1)	4.0 (2)	-	-	-	-	3.0 (2)	-	-
Ceiling	-	-	-	-	-	-	-	1.8 (1)	-	-	-	7.3 (1)	-	6.3 (2)	-	-	-	-	-	-	-	2.5 (1)	-	-	0.6 (1)
Partitions, walls, linings to walls	4.2 (1)	-	-	-	-	2.1 (1)	-	1.8 (1)	-	1.7 (1)	26.0 (1)	14.7 (2)	-	-	-	-	-	-	-	-	-	-	1.5 (1)	-	-
Flue Casings	-	-	-	-	-	-	-	-	-	-	-	-	3.2 (1)	-	7.8 (1)	-	-	1.6 (1)	-	-	-	-	-	-	-
Floor	-	-	0.9 (1)	-	-	-	-	-	-	-	26.0 (1)	7.3 (1)	4.7 (1)	6.3 (2)	9.4 (4)	-	-	-	3.3 (2)	-	-	5.0 (2)	-	-	0.6 (1)
Built-in cabinets, cupboards	-	-	1.0 (1)	-	-	-	-	-	-	-	-	-	14.1 (3)	3.2 (1)	-	-	-	-	-	-	-	-	-	-	-
Lagging of water pipes	-	-	-	-	-	-	-	-	-	-	-	-	6.3 (2)	-	-	-	-	-	-	-	-	-	-	-	-
Insulation of electric wiring																									
(a) No fire spread	-	-	-	-	-	-	4.1 (2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(b) Fire confined to fuse box panel	-	-	-	-	-	-	2.0 (1)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(c) Fire involving (b) but spread to contents	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(d) Fire involving walls, floors, ceilings, rafters, built-in cupboards	-	-	-	-	-	2.0 (1)	-	-	-	-	-	-	3.2 (1)	-	-	-	-	-	1.3 (1)	-	-	-	-	-	-
(e) Fire involving other materials	-	-	-	-	-	-	-	-	-	-	-	-	6.3 (2)	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous and Undefined	-	-	-	-	0.8 (1)	-	6.1 (3)	-	3.4 (2)	-	-	-	-	-	-	7.8 (1)	-	-	-	-	-	-	-	-	-
Rate of incidence of fires in which constructional materials were ignited first.	8.4 (2)	2.9 (2)	3.1 (3)	1.8 (2)	3.2 (4)	2.1 (1)	14.2 (7)	3.6 (2)	6.7 (4)	1.7 (1)	52.1 (2)	29.3 (4)	37.5 (8)	44.3 (14)	23.4 (10)	15.6 (2)	2.8 (1)	4.0 (2)	4.9 (3)	1.3 (1)	-	7.5 (3)	4.6 (3)	-	1.3 (2)

TABLE 13

SUPPOSED CAUSE OF SERIOUS FIRES IN OCCUPIED POST-WAR PERMANENT NON-TRADITIONAL DWELLINGS

Reports from the N.F.S. and Fire Brigades 1947-1952

SUPPOSED CAUSE OF FIRE	AIREY	ALUMINIUM	B.I.S.F.	CRUDEN	LAING-EASIFORM	STUART	SWEDISH TIMBER	WEIR	OTHER TYPE	TOTAL NUMBER OF SERIOUSLY DAMAGED DWELLINGS
Ashes, soot	-	-	-	-	-	-	2	-	-	2
Blowlamp	1	-	-	-	-	-	-	-	-	1
Candle	-	-	-	1	-	-	-	-	-	1
Electric cooker	-	-	-	-	-	-	2	-	-	2
iron	1	-	-	-	-	-	-	-	-	1
wire and cable	1	-	2	-	-	-	1	-	1	5
Fire in grate	-	-	3	-	-	1	1	-	3	8
Flue	-	-	4	-	1	-	-	-	-	5
Matches, children playing with	-	-	2	-	-	-	-	-	-	2
Slow combustion stove	1	-	-	-	-	-	-	-	-	1
Smoking materials	-	1	-	-	-	-	-	-	-	1
Spread from other house or flat	1	-	-	3	-	1	3	-	-	8
Spread from other hazard	-	-	-	-	-	-	-	-	2	2
Miscellaneous and undefined	-	-	-	-	-	-	-	-	1	1
Unknown cause	2	1	6	4	-	-	1	1	-	15
TOTAL NUMBER OF SERIOUSLY DAMAGED DWELLINGS	7	2	17	8	1	2	10	1	7	55
AVERAGE RATE 1947-52	0.8	0.3	1.0	5.2	0.1	1.8	3.3	0.5	0.3	0.7

TABLE 14

CASUALTIES IN FIRES IN POST-WAR DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1946-52

TYPE OF DWELLING	YEAR	Number of Casualties		
		Non-fatal	Fatal	Total
Temporary	1946	1	-	1
	1947	11	6	17
	1948	14	2	16
	1949	23	1	24
	1950	23	4	27
	1951	47	2	49
	1952	28	1	29
	Total	147	16	163
Permanent non-traditional	1946	-	-	-
	1947	-	-	-
	1948	5	2	7
	1949	20	3	23
	1950	14	1	15
	1951	16	1	17
	1952	23	-	23
	Total	78	7	85

TABLE 15

FATAL CASUALTIES IN FIRES IN POST WAR DWELLINGS

Reports from the N.F.S. and Fire Brigades in Great Britain 1946-52

Type of dwelling		Year	Casualty *	Supposed cause of fire	Cause of death
Temporary	Aluminium	1950	Child	Child's night attire ignited by electric fire.	Shock from severe burns.
		1952	Man	Naked light in contact with settee.	Asphyxia due to carbon monoxide poisoning and shock from 2nd degree burns.
	Arcon	1947	Child	Radiated heat from living room fire ignited linen airing in front of it. (Fire confined to room of origin).	Asphyxiated by inhalation of smoke.
			Child	Unknown (house severely damaged).	Severe burns.
		1948	Child	Electric fire ignited night-dress.	Extensive burns; secondary shock.
		1950	Child	Child's night attire ignited by flame from gas cooker.	Acute toxæmia and shock.
		1951	Adult	Person collapsed on to coal fire causing ignition of clothing.	Not reported.
	Orlit	1949	Man	Unknown (severe damage to arm-chair only, slight damage to rest of room and contents).	Severe burns.
	Phoenix	1947	Woman	Electric fire ignited night-dress.	Shock due to extensive burns.
	Uniseco	1947	Child	Child playing with matches ignited clothing.	Shock due to extensive burns.
		1948	Child	Unknown (house severely damaged).	Burns.
		1950	Child	Child playing with matches ignited clothing.	Shock following extensive burns.
	Tarran	1947	Child	Unknown (house severely damaged).	Burns and shock.
		1947	Child	Unknown (house severely damaged).	Suffocation and severe burns.
		1950	Child	Unknown (house and contents severely damaged).	Not stated.
		1951	Child	Oil stove was upset by occupier causing ignition of spilt oil.	Shock.
Permanent non-traditional	Airey	1948	Child	Heat from stove, door of which was left open ignited clothing.	Shock due to severe burns to whole of body.
	B.I.S.F.	1948	Child	Fault in electrical installation (house severely damaged).	Asphyxia and severe and extensive burns.
		1949	Child	Portable electric fire ignited wearing apparel.	Severe burns to whole of body.
		1950	Child	Child's clothing came into contact with open coal fire.	Severe burns.
	Cruden	1949	Child	Unknown (house severely damaged).	Asphyxia and burns.
	Laing Eagiform	1949	Child	Explosion of metal can containing black lacquer being used to ignite fire. (Contents of room damaged by lacquer, clothing of two children damaged by fire).	Asphyxia, due to inhalation of vomit while undergoing medical treatment for severe burns.
	Wates	1951	Child	Child's clothing was ignited by electric heater.	Shock

* Casualties under sixteen years of age have been classified as children.

TABLE 16

AN ANALYSIS OF THE CIRCUMSTANCES UNDERLYING FIRES IN POST-WAR DWELLINGS

Reports from the N.F.S. and Fire Brigades 1950-52

The figures in brackets are the numbers of fires per 10,000 dwellings at risk per year.

Reported cause of fire	Temporary dwellings			Permanent non-traditional dwellings		
	1950	1951	1952	1950	1951	1952
<u>Fires due to mechanical, structural or electrical fault, or the faulty design or wrong layout of structure or fixed domestic apparatus</u>	No.	No.	No.	No.	No.	No.
(1) Electric or gas cookers (a) mechanical or electrical faults in cookers; heat from cookers igniting constructional materials	3 (0.2)	6 (0.4)	4 (0.3)	3 (0.2)	3 (0.2)	2 (0.1)
(2) Electric apparatus other than cooker (a) fires due to electrical faults in wireless or television sets, electric fires, heaters, irons, kettles, lamps, meters switches	6 (0.4)	10 (0.6)	8 (0.5)	2 (0.1)	2 (0.1)	5 (0.2)
(3) Electric wire and cable, including fuseboxes and distribution panels - (a) involving fusebox or distribution panel (b) other fires	36 (2.3) 15 (0.9)	43 (2.7) 26 (1.7)	42 (2.7) 13 (0.8)	1 (0.1) 5 (0.3)	4 (0.2) 9 (0.5)	8 (0.4) 11 (0.5)
(4) Fire in grate (a) faulty construction of fireplace	6 (0.4)	5 (0.3)	5 (0.3)	4 (0.3)	4 (0.2)	5 (0.2)
(5) Flue (a) radiated or conducted heat from flue-pipe ignited roof or ceiling timbers, flue ducts or other constructional materials (b) defects in the flue or in the flashing between flue and casing allowed hot soot or sparks or flames to ignite structure or miscellaneous contents	9 (0.6) 3 (0.2)	13 (0.8) 3 (0.2)	5 (0.3) 4 (0.3)	20 (1.3) 5 (0.3)	23 (1.2) 10 (0.5)	25 (1.1) 7 (0.3)
(6) Other causes of fire	5 (0.3)	2 (0.1)	4 (0.3)	3 (0.2)	3 (0.2)	13 (0.6)
Total of fires due to faulty equipment	83 (5.3)	108 (6.9)	85 (5.5)	43 (2.8)	58 (3.1)	76 (3.4)

TABLE 16 (contd.)

AN ANALYSIS OF THE CIRCUMSTANCES UNDERLYING FIRES IN POST-WAR DWELLINGS

Reports from the N.F.S. and Fire Brigades 1950-52

The figures in brackets are the numbers of fires per 10,000 dwellings at risk per year

Reported cause of fire	Temporary dwellings			Permanent non-traditional dwellings		
	1950	1951	1952	1950	1951	1952
<u>Fires due to carelessness or lack of precautions on the part of the inhabitants of houses</u>	No.	No.	No.	No.	No.	No.
(1) Electric or gas cookers (a) Foodstuffs over heating or boiling over; airing clothing or linen ignited; clothing on person ignited, and miscellaneous causes	19 (1.2)	33 (2.1)	23 (1.5)	14 (0.9)	12 (0.6)	24 (1.1)
(2) Electric apparatus other than cooker (a) electric fire igniting (1) clothing on person	8 (0.5)	9 (0.6)	4 (0.3)	-	1 (0.1)	1 -
(2) airing clothing or other contents of rooms or structure	4 (0.3)	8 (0.5)	7 (0.4)	1 (0.1)	7 (0.4)	4 (0.2)
(b) Careless handling or use of electric irons, clothes boilers, kettles, etc.	5 (0.3)	8 (0.5)	7 (0.4)	1 (0.1)	3 (0.2)	7 (0.3)
(3) Fire in grate (a) Sparks, embers or heat ignited airing clothing or linen or furniture	25 (1.6)	32 (2.0)	26 (1.7)	22 (1.4)	30 (1.6)	26 (1.2)
(b) Accumulation of soot in fireplace ignited by sparks from fire; lighter fuel, paraffin, petrol used to light or re-kindle fire; clothing on person ignited, and miscellaneous causes	8 (0.5)	6 (0.4)	10 (0.6)	9 (0.5)	14 (0.7)	21 (1.0)
(4) Flue Accumulation of soot in flue ignited and radiated heat set fire to structure or contents; cover of hot water tank inadvertently left in contact with flue-pipe; clothing in airing cupboard put too near flue-pipe; miscellaneous causes	4 (0.3)	4 (0.3)	2 (0.1)	7 (0.4)	11 (0.6)	9 (0.4)
(5) Smoking materials and matches (including children playing with matches)	22 (1.4)	22 (1.4)	30 (1.9)	12 (0.8)	18 (1.0)	24 (1.1)
(6) Other causes of fire	15 (0.9)	19 (1.2)	22 (1.4)	15 (1.0)	13 (0.7)	21 (1.0)
Total of fires due to human laxity or carelessness	110 (7.0)	141 (9.0)	131 (8.4)	81 (5.2)	109 (5.9)	137 (6.2)
<u>Fires which cannot be classified above</u>						
(1) Fires due to electric or gas cookers, other electric apparatus, fire in grate, flue or sources of ignition otherwise included in items (1) to (6) above	1 (0.1)	1 (0.1)	11 (0.7)	3 (0.2)	3 (0.2)	6 (0.3)
(2) Fires due to sources of ignition not specified in items (1) to (6)						
(a) lighting; sparks from chimney (outside building)	-	-	2 (0.1)	5 (0.3)	3 (0.2)	5 (0.2)
(b) spread of fire from other house or flat	-	-	3 (0.2)	21 (1.3)	6 (0.3)	8 (0.3)
(c) Spread of fire from other hazard	-	-	6 (0.4)	-	-	6 (0.3)
(d) Unknown	21 (1.3)	16 (1.0)	19 (1.2)	12 (0.8)	13 (0.7)	10 (0.5)
Total all fires	215 (13.7)	266 (17.0)	257 (16.4)	165 (10.6)	192 (10.3)	248 (11.3)

TABLE 17

EXTENT OF FIRES IN PRE-WAR DWELLINGS

Analysis of random 1 in 4 samples of reports received from the N.F.S. during 1948* and from Fire Brigades during 1952

COUNTRY AND DISTRICT			HOUSES				FLATS			
			Total number of damaged dwellings	Percentage of damaged dwellings in which fire -			Total number of damaged dwellings	Percentage of damaged dwellings in which fire -		
				was confined to the room of origin	spread beyond room of origin damaging			was confined to the room of origin	spread beyond room of origin damaging	
					less than half the dwelling	more than half the dwelling			less than half the dwelling	more than half the dwelling
England and Wales	Town	1948	10,056	95.1	3.9	1.0	2,317	91.0	7.0	2.0
		1952	13,148	95.4	4.2	0.4	3,208	90.0	9.6	0.4
	Country	1948	1,868	85.6	7.3	7.1	38	76.3	15.8	7.9
		1952	2,760	86.1	8.0	5.9	116	79.3	17.2	3.4
Scotland	Town	1948	451	96.4	2.7	0.9	1,560	95.9	2.8	1.3
		1952	500	92.8	6.4	0.8	1,816	92.5	7.5	-
	Country	1948	270	80.7	8.9	10.4	126	95.2	-	4.8
		1952	392	78.6	7.1	14.3	132	93.9	6.1	-

* In 1948 the numbers of damaged flats were obtained from a 1 in 3 random sample

TABLE 18

EXTENT OF FIRES IN POST-WAR DWELLINGS

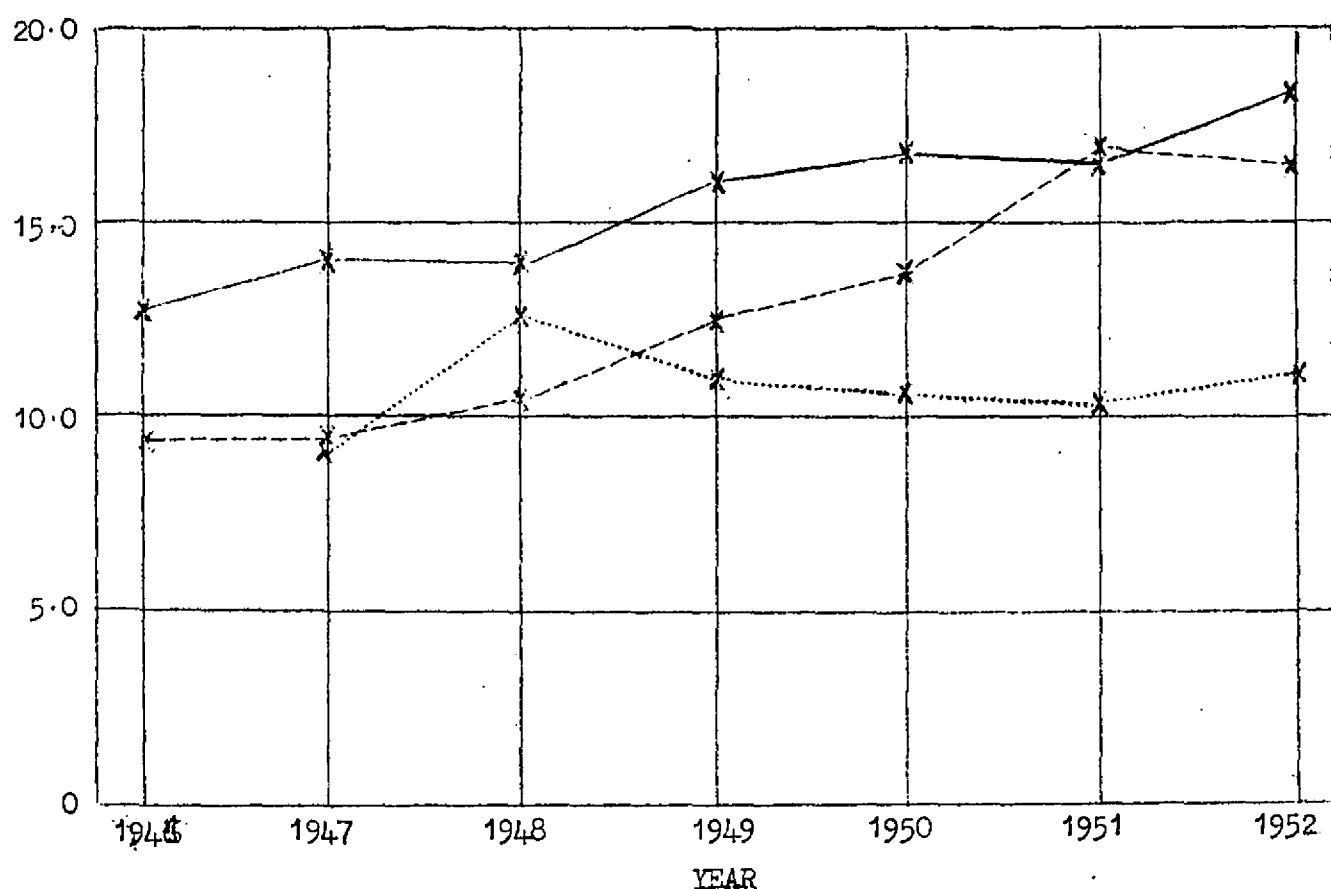
Analysis of all reports received from the N.F.S. and Fire Brigades 1948-52

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TYPE OF HOUSE	Year	Fires in Country Districts				Fires in Towns			
		Total number of damaged dwellings	Percentage of damaged dwellings in which fire -			Total number of damaged dwellings	Percentage of damaged dwellings in which fire -		
			was confined to the room of origin	spread beyond room of origin damaging -			was confined to the room of origin	spread beyond room of origin damaging -	
				less than half the dwelling	more than half the dwelling			less than half the dwelling	more than half the dwelling
TEMPORARY DWELLINGS	1948	17	70.6	11.8	17.6	137	78.1	14.6	7.3
	1949	11	54.5	9.1	36.4	184	87.5	6.0	6.5
	1950	29	69.0	13.8	17.2	186	81.7	9.1	9.1
	1951	22	77.3	13.6	9.1	244	87.3	10.7	2.0
	1952	40	75.0	12.5	12.5	217	83.9	8.8	7.4
Average proportions 1948-52		119	71.4	12.6	16.0	968	84.2	9.6	6.2
PERMANENT NON-TRADITIONAL DWELLINGS	1948	14	57.1	7.1	35.7	57	80.7	14.0	5.3
	1949	25	52.0	24.0	24.0	105	72.4	16.2	11.4
	1950	47	72.3	10.6	17.0	118	76.3	17.8	5.9
	1951	59	74.6	18.6	6.8	133	88.7	9.0	2.3
	1952	56	89.3	7.1	3.6	192	85.4	12.5	2.1
Average proportions 1948-52		201	74.1	13.4	12.4	605	81.7	13.6	4.8

NUMBER OF DAMAGED DWELLINGS PER 10,000
DWELLINGS AT RISK PER YEAR



- x—x Pre-war dwellings
- x---x Temporary post-war dwellings
- x.....x Permanent non-traditional post-war dwellings
(No rate of incidence available for 1946)

FIG.1. FIRES IN HOUSES AND FLATS 1946-52

NUMBER OF DAMAGED DWELLINGS PER 10,000 DWELLINGS AT RISK PER YEAR

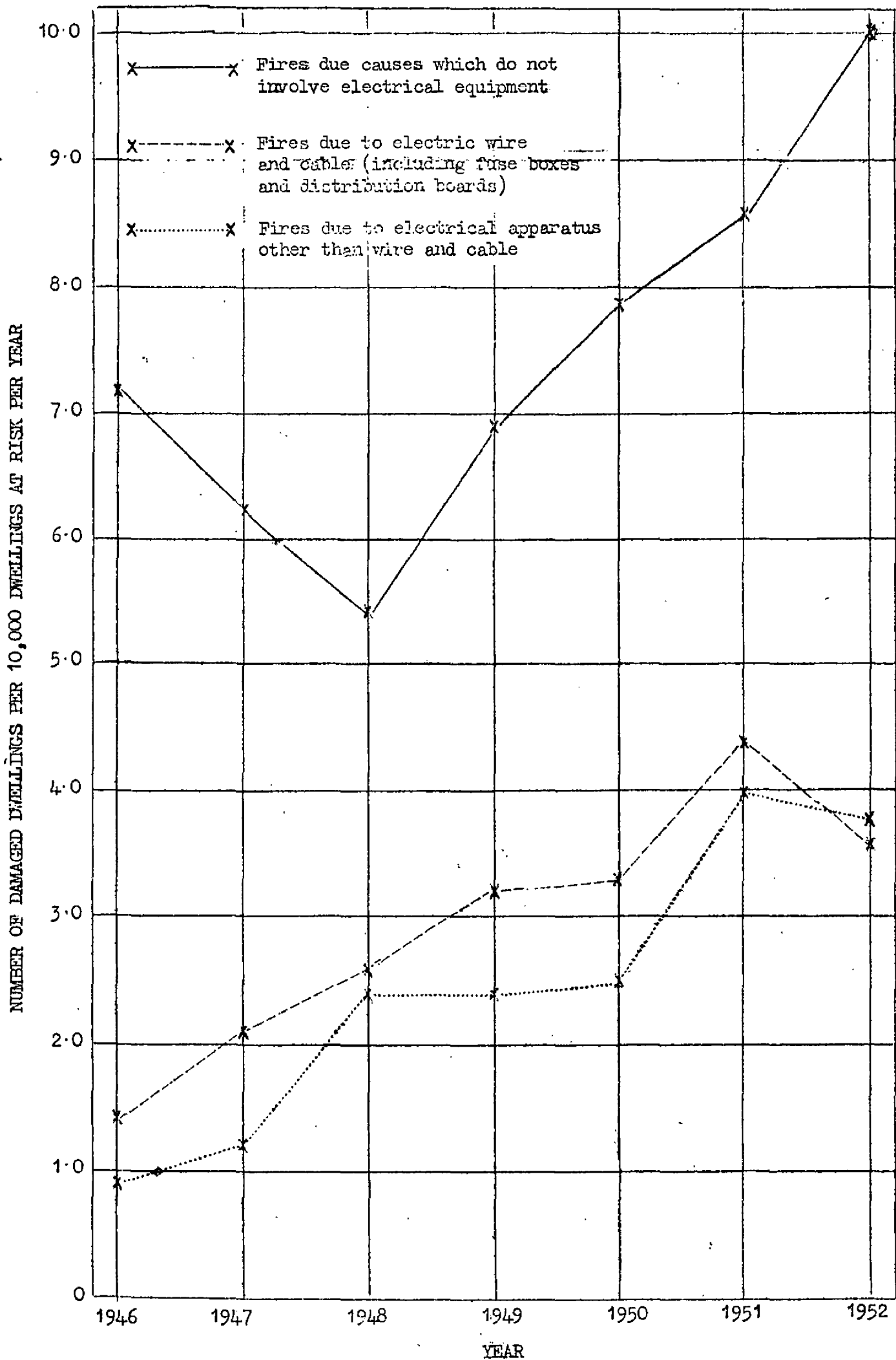


FIG. 2. FIRES IN TEMPORARY POST-WAR DWELLINGS
1946 - 52

RATES OF INCIDENCE FOR VARIOUS CAUSES OF FIRE

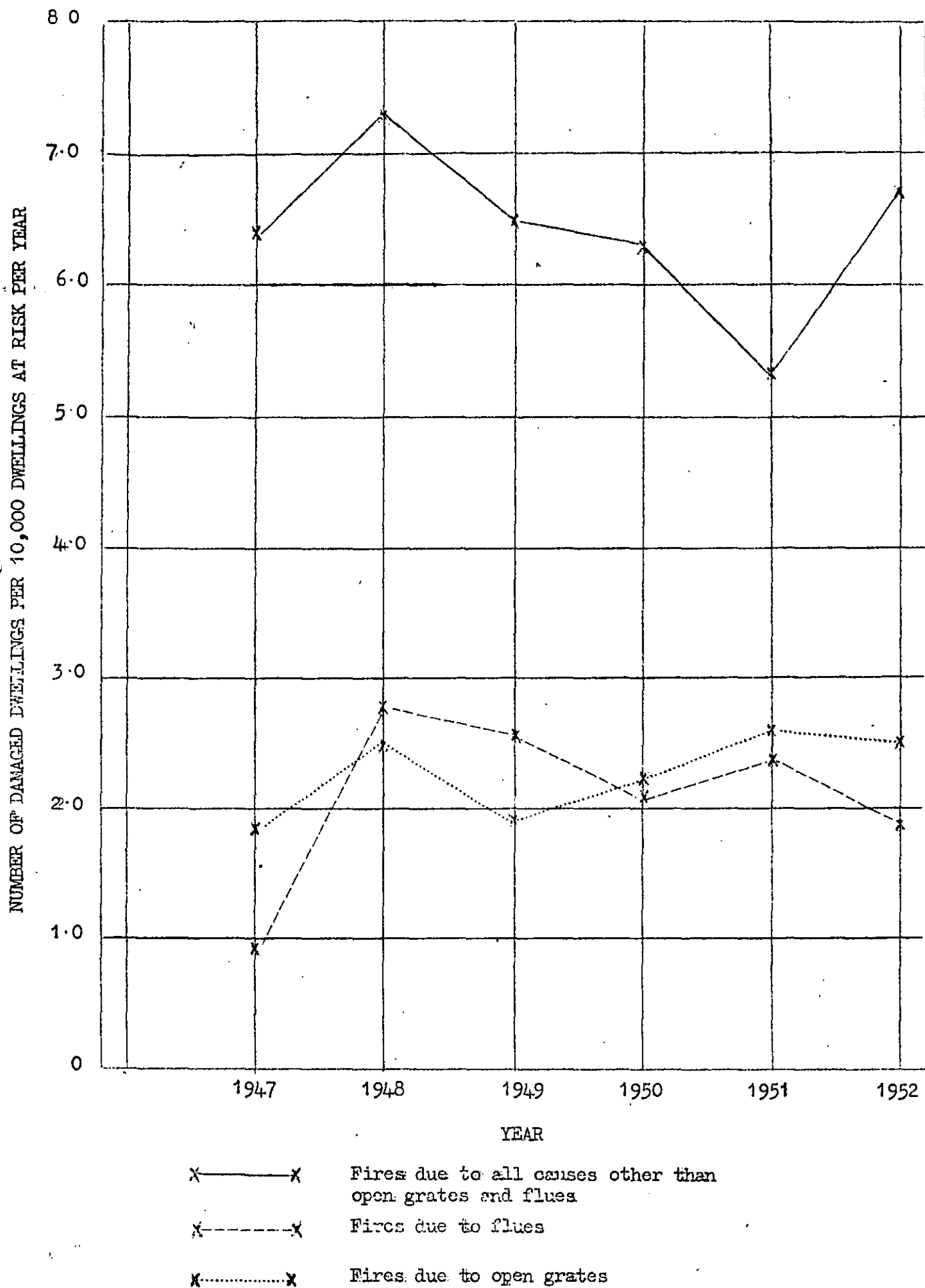


FIG. 3. FIRES IN PERMANENT NON-TRADITIONAL
POST WAR DWELLINGS 1947 - 52
RATES OF INCIDENCE FOR VARIOUS CAUSES OF FIRE

CORRIGENDUM

F.R. Note No. 70/1953. "Fires in Post-War Dwellings XXXVII.
Review of Statistical Work on Reports
of Fires attended by the N.F.S. and
Fire Brigades 1946-52.

Table 4a. In the "TOTAL" column for "Electric wire and cable"
in 1952 for 5.0.(27) read 5.0.(28).

DB 32521/1

F.R.Note No.70/1953
Corrigenda

DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH AND FIRE OFFICERS' COMMITTEE
JOINT FIRE RESEARCH ORGANIZATION

"Fires in Post-war Dwellings XXXVII. Review of Statistical Work
on Reports of Fires attended by the N.F.S. and Fire Brigades 1946-52"

Page 10, paragraph 2, line 5

For "..... were 0.2, 1.0," read "..... were 0.4, 1.0,"

Page 54, Table 10 (j) Cause "Fire in grate igniting contents" in 1948

For 6.1 read 6.1
6.1 (1)