



Essex County  
Fire & Rescue Service

# Risk Based Inspection Programme 2023-2024

Profiling risk in regulated premises

ECFRS protection methodology



## Document version control

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## Introduction

At Essex County Fire & Rescue Service (ECFRS) we have undertaken a review of our Risk Based Inspection Programme (RBIP) and assured our data.

This programme is intended to assist people, both in and outside of our Service, to understand how fire safety risk is identified and protection activity targeted in regulated premises across Essex which are regulated under the Regulatory Reform (Fire Safety) Order 2005 (The Order).

## Scope

The regulated premises include all buildings used for a commercial purpose, or for public use, as well as the areas within residential buildings which are shared by more than one household.

In November 2022 there were approximately 82,000 premises within Essex that fall in scope of the Order.

The risk-based inspection programme (RBIP) forms just one strand of the protection strategy. There are many other tasks undertaken by our Service's Protection Officers, these include:

- Statutory consultations e.g. building regulations, planning applications, licensing applications
- Post fire investigation
- Alleged/emerging fire risk
- Operational fire safety activity
- Enforcement activity

## Definitions

<b>Address base</b>	The Ordnance Survey national gazetteer of all UK postal addresses.
<b>Attribute</b>	A feature of a premises which has influence on the likelihood a fire may occur or the degree of harm that may be sustained in the event of a fire.
<b>(the) Authority</b>	The Essex Police, Fire and Crime Commissioner Fire and Rescue Authority (EPFCC). The body with a statutory duty to enforce the provisions of the Regulatory Reform (Fire Safety) Order 2005 (RRFSO). (Also the Enforcing Authority).
<b>CFRMIS/CRM</b>	Management information system used by ECFRS Protection Department.
<b>Dwelling</b>	A domestic premises as defined in Article 2 of the RRFSO.
<b>Harm</b>	The adverse impact on life safety of relevant persons.
<b>Likelihood</b>	The relative probability that an event will occur based upon local historical data from the preceding three years.
<b>Protection risk model</b>	The ECFRS model that incorporates a risk profile and RBIP of all regulated premises in Essex.
<b>Regulated</b>	A premises to which the RRFSO is applicable.
<b>Relevant person</b>	Relevant persons as defined in Article 2 of the RRFSO.
<b>Risk</b>	A combination of likelihood and severity; the likelihood that a fire will actually cause harm, together with a measure of effect.
<b>Risk based inspection programme</b>	Pre-planned fire safety visits based upon the protection risk profile

<b>Risk data capture</b>	An activity whereby information is collected and recorded forming the foundation of risk profiling.
<b>Risk profile</b>	The value assigned to one or more premises record(s) allowing comparison between individual premises, types of premises or geographic locations.
<b>(the) Service</b>	Essex County Fire & Rescue Service (also ECFRS or our Service)
<b>Severity</b>	A value representing the potential maximum harm in the event of a fire.

## **Risk Based Inspection Programme (RBIP)**

The ECFRS RBIP identifies those premises which will be subject to a pre-planned visit by ECFRS personnel in order to check compliance with the requirements of the Regulatory Reform (Fire Safety) Order, referred to as The Order. With over 82,000 properties that currently fall within the scope of this work within Essex (as of Nov 2022), it is recognised that attending all these properties is unrealistic. This document sets out a commitment to understanding the risk at our very high risk premises over the next 3 years, and at our high risk premises over the next 5-years, with these visits gathering information to allow an evidence-based approach to selecting properties on a year-by-year basis going forward. Resource numbers within the Protection Department are linked directly with this commitment we have made. This is assessed by considering of the use of the premises, historical data of fires at those premises and previous compliance with The Order.

When considering risk, this RBIP is concentrating on the risk to life safety of relevant persons, which is the focus of The Order. This is a departure from the previous fire safety activity programme, which considered other factors, including emergency responders, economic, environmental, social community, and heritage. This will enable resources to more accurately target those premises where the public are at risk from fire.

## **Thematic Inspections Programmes**

From time to time, it is acknowledged that incidents or occurrences locally, nationally, or even internationally will raise awareness of issues that may have an impact on premises and therefore the safety of people within Essex.

In such circumstances, consideration will be given to the implementation of a thematic inspection programme in order to ensure that the risk in those premises is reduced to an acceptable level.

Thematic inspections have been implemented within Essex in recent years, e.g. high rise residential buildings following fires at Grenfell Tower, escape rooms in Koszalin, Poland and university buildings at student accommodation in Bolton.

## **Enforcement**

ECFRS regard activity from fire safety inspections through to audits as enforcement activity. The purpose of these activities is to engage with those with a statutory responsibility for fire safety in order to check compliance with The Order and to provide advice and information as appropriate. Officers will, where possible, work with those responsible for the premises to ensure that premises are compliant with the requirements of The Order to keep relevant persons safe from fire. In situations where we are unable to resolve issues informally, or those issues are so serious as to pose a risk to relevant persons of injury or risk to life, we will take any appropriate formal enforcement action. The levels of enforcement are listed below in ascending order, although dependent on circumstances and severity of any issues identified it is possible that enforcement activity may commence at the formal stage.

## **Informal Enforcement**

- Advise, educate and inform
- Notification of deficiencies

## **Formal Enforcement**

- Enforcement notice
- Prohibition notice
- Prosecution

## **Profiling Risk from Fire**

A fire hazard is defined as a source, situation, or unsafe act, with the potential to result in a fire.

Fire risk is also defined as, a combination of the likelihood of the occurrence of a fire and consequence(s) (number and severity of injuries) likely to be caused by a fire.

The risk from fire profile described in this document is derived from assessing the likelihood of a fire occurring in a premises, based upon data of fires that have occurred in types of premises (weighted dependent on the severity of injury caused), and assigning a value of potential harm to each premises based on its use/ attributes. Data used for the assessment will be from the preceding three years.

Having assessed the likelihood and potential harm, the level of risk can be assessed using the matrix method, and those premises presenting a higher risk level can be prioritised.

## **Capturing Data**

In order to create a risk profile, data must be recorded. Data collected by staff, partners, or other agencies, or obtained via (up to date) datasets, provides the most accurate basis for calculations.

Protection staff provide the very best data when they collect information as part of 'risk data capture' activities during fire safety visits.

Not all premises have been or ever will be visited and there may be no other data source to confirm the individual attributes that a premises has. In order to run a protection risk model (PRM) and create a risk profile where attributes have not been validated, assumed values are assigned. These assumed values are a default given to every new premises and remain until overwritten as data is acquired.

## **AddressBase Data**

Previous iterations of the FSAP/RBIP have been based upon data held on the CRM system used by Protection Officers. This RBIP has been adapted to use AddressBase. The benefit of this is that AddressBase is updated every six weeks with data from local authorities in relation to premises within their respective areas.

AddressBase is a product from Ordnance Survey, which provides users with a gazetteer of all postal addresses. It is the most comprehensive and reliable database of properties available to our Service.

AddressBase is continually updated; the custodian, responsible for the currency and accuracy of the dataset is the local authority.

### Utilising the Regulated Premises Risk Profile

The risk profile described enables ECFRS staff to target fire risk with a high level of effectiveness. It also supports evidence-based decisions involving the allocation of resources by team managers, the directorate, and the Service.

The ECFRS protection risk model therefore gives effect to:

- a. A risk-based inspection programme (RBIP)
- b. Establishing an evidence-based team size disposition for the medium and longer term
- c. Allocation of available staff and other resources to risk reduction for shorter term activity (thematic reviews etc.)

### ECFRS Protection Risk Model

The Protection Risk Model is built using multiple data sets as set out below.

#### Historic risk of fire

This will be calculated from the preceding three years data for each premises type, with a weighting applied to each fire based on Table 1, below:

**Table 1**

<b>Historic fire risk</b>	
<b>Unwanted fire signal (no. of false alarms/no. of premises x 1)</b>	<b>1</b>
<b>Fire (no. of fires/no. of premises within classification x 50)</b>	<b>50</b>
<b>Fire involving persons (no. of fires/no. of premises within classification x 50)</b>	<b>50</b>

#### Enforcement action

This will be calculated from the preceding three years data for each premises with a weighting applied based on the severity of the level(s) of enforcement taken against the premises type, based on Table 2, below:

**Table 2**

<b>Historic enforcement outcome</b>	
<b>Advise, educate &amp; inform</b>	<b>+0</b>
<b>Notification of deficiencies</b>	<b>+0</b>
<b>Enforcement notice</b>	<b>+5 per case</b>
<b>Prohibition notice</b>	<b>+5 per case</b>
<b>Prosecution</b>	<b>+5 per case</b>

## Building occupancy attributes

Table 3 below shows the types of premises and their associated risk groups based upon their attributes from the Chief Fire Officers Association<sup>1</sup>

<sup>1</sup> CFOA – Fire Safety Guidance Notes and Audit – Version 4.3 (May 2016)

**Table 3**

<b>Risk groups</b> (derived from the IRMP Note 4 and 17 FSEC categories)					
<b>Groups</b>	<b>Group A</b>	<b>Group B</b>	<b>Group C</b>	<b>Group D</b>	<b>Outside RBIP</b>
<b>FSEC code</b>	<b>Sleeping unfamiliar (x100)</b>	<b>Sleeping familiar and licensed premises (x75)</b>	<b>Public unfamiliar (x25)</b>	<b>Workplace familiar (x10)</b>	
<b>A</b>	Hospitals				
<b>B</b>	Care homes				
<b>C</b>					HMO
<b>D</b>		Flat			
<b>E</b>	Hostel				
<b>F</b>	Hotel				
<b>G</b>		Converted flat			
<b>H</b>	Other sleeping				
<b>J</b>			Further education		
<b>K</b>			Public building		
<b>L</b>		Licensed premises			
<b>M</b>			School		
<b>N</b>			Shop		
<b>P</b>			Other public building		
<b>R</b>				Factory	
<b>S</b>				Office	
<b>T</b>				Other workplace	

## Houses of Multiple Occupation (HMO)

HMO's fall under the Housing Act 2004. The Order only applies to the common shared areas (with the exception of serving a prohibition notice under Article 31(10)) of such premises. Therefore, unless above commercial premises, the Local Housing Authority (LHA) should take the lead in auditing and enforcement activities in HMO's. There are plans to recruit a Housing Officer into the Protection Department in 2023 as part of our Business Engagement Team to work more closely with LHA's and build develop clear MOU's.

Our Business Engagement Team will work closely with LHA's to sample audit the common areas of some HMO's less than 7 storeys high (less than 18m) based on our risk intelligence data. Where possible such audits will be carried out jointly with the LHA.

## Strategic Weighting and Overall Severity

Resulting from the risk model an overall risk value is assigned to each regulated premises. These values are then mapped against Table 4 to ascertain what level of activity will be undertaken by the Service.

**Table 4**

<b>Protection Risk Descriptor</b>		
<b>Level</b>	<b>Description</b>	<b>Activity/Frequency</b>
<b>Very High (Risk Score ≥100)</b>	Data indicates that a very high number of fires have occurred in these premises. Data or local knowledge indicates that malicious fire setting is a problem in this area. High levels of non-compliance with RR (FS) O and enforcement Specific aspects of construction, occupancy, use, or processes give rise for serious concern.	Full audit by Protection Officers.  All premises classified as Very-High will have been audited by 31 <sup>st</sup> December 2025
<b>High (Risk Score ≥50- &lt;100)</b>	Data indicates that a high number of fires have occurred in these premises. Above average non-compliance with RR (FS) O and enforcement activities. Specific aspects of construction, occupancy, use, or processes give rise for concern.	Audit by Protection Officers. This could be a full audit, a short audit, or a desktop audit, based upon inspector's judgement and history of compliance.  All premises classified as High-Risk will have been audited by 31 <sup>st</sup> December 2027.
<b>Medium (Risk Score &gt;25 - &lt;50)</b>	Data indicates that medium number of fires have occurred in these premises. Evidence of compliance with RR (FS) O and low if any enforcement activities Specific aspects of construction, occupancy, use, or processes give some cause for concern	Fire safety check (FSO40) by operational crews, targeted to once every 6 years, to check compliance against The Order.
<b>Low (Risk Score 0-&lt;25)</b>	Data indicates that low number of fires have occurred in these premises types. Evidence of compliance with RR (FS) O negligible enforcement activities. Specific aspects of construction, occupancy, use or processes give little cause for concern	Targeted education through the Business Engagement Team



### **Audit Frequency & Department Capacity**

Due to the quantity of non-domestic premises within the county, ECFRS will commit to auditing all its Very-High Risk premises by 31<sup>st</sup> December 2025 (3-years). We will also commit to auditing all High-Risk premises by 31<sup>st</sup> December 2027 (5-years).

The information gathered at these audits will be used to create a more evidence-based approach to audit frequency in the future.

The number of trained Inspecting Officers (IO) budgeted for within Protection is a direct reflection of this commitment and builds in the capacity for all other statutory obligations and enforcement activity.

	<b>RBIP Premises</b>	<b>Premises visited in 2022</b>	<b>Commitment</b>	<b>Monthly Target</b>
Very High	1872	631	Over 3-years	36
High	7884	824	Over 5-years	121
<b>Monthly Target Total</b>				<b>157</b>
<b>Number of Inspecting Officers Required</b>			<b>9 audits per month, per IO</b>	<b>17.5</b>

Inspecting Officers will also react to all fires in premises where The Order applies regardless of risk level.

<b>Year</b>	<b>Inspecting Officers Budgeted</b>
2022/23	21
2023/24	22.6

Operational crews will carry out FSO40 visits at medium risk premises on a 6-year rolling programme. They will also carry out 7(2)(d) familiarisation visits at Very High-Risk premises situated on their station grounds. While carrying out these visits, operational crews will complete a questionnaire developed by the Protection Department, with any concerns identified within this questionnaire resulting in an escalation and a response from a trained Inspecting Officer.

## Essex Fire Risk Model

Total number of regulated premises as of November 2022 – 82,750, however it is recognised that this figure is likely to change regularly.

### Protection Risk Descriptor

Level	Type of Premises	Risk Score	Activity / Frequency
Very High ≥ 100	High rise 7+ floors (18m +)	236.88	Full audit by Protection Officers.  All premises classified as Very-High will have been audited by 31 <sup>st</sup> December 2025 (3-years)
	Hospital / Hospice	110.4	
	Hotel/Motel	105.5	
	Care / Nursing home	100.1	
	Boarding / Guest house / Bed and breakfast / Youth hostel	100.0	
	Holiday Let/Accommodation/Short-term let other than CH01	100.0	
	Holiday / Campsite	100.0	
	Hotel / Motel / Boarding / Guest house	100.0	
High <100 - ≥50	High rise 4-6 floors	88.38	Audit by Protection Officers. This could be a full audit, a short audit, or a desktop audit, based upon inspector's judgement and history of compliance.  All premises classified as High-Risk will have been audited 31 <sup>st</sup> December 2027 (5-years)
	Restaurant / Cafeteria	60.3	
	Communal residence	59.3	

	Public house / Bar / Nightclub	55.3	
	Fast food outlet / Takeaway (Hot / Cold)	50.4	
Medium <50 - ≥25	Sheltered accommodation	50.0	Fire safety check (FSO40) by operational crews, targeted to once every 6 years, to check compliance against The Order.
	HMO bedsit / Other non-self-contained accommodation	50.0	
	HMO not further divided	50.0	
	Other licensed premise / Vendor	50.0	
	Residential education	50.0	
	Licensed private members club	50.0	
	Airfield / Airstrip / Airport / Air transport infrastructure facility	40.8	
	Car / Coach / Commercial Vehicle / Taxi parking / Park and ride site	40.1	
	Shop / Showroom	30.1	

Bingo hall / Cinema / Conference / Exhibition Centre / Theatre / Concert Hall	26.5
Station / Interchange / Terminal / Halt	26.0
Place of worship	25.9
Dentist	25.2
Indoor / Outdoor Leisure / Sporting activity / Centre	25.2
Public / Village hall / Other community facility	25.2
General practice surgery / Clinic	25.1
Marina	25.1
Harbour / Port / Dock / Dockyard / Slipway / Landing Stage / Pier / Jetty / Pontoon / Terminal / Berthing / Quay	25.1
Museum / Gallery	25.0
Petrol filling station	25.0
Amusements	25.0
Mooring	25.0
Bank / Financial service	25.0

	Market (Indoor / Outdoor)	25.0	
	Transport	25.0	
	Cemetery / Crematorium / Graveyard. in current use	25.0	
	Retail	25.0	
	Zoo / Theme park	25.0	
	Arena / Stadium	25.0	
	Church Hall / Religious meeting place / Hall	25.0	
	Castle / Historic ruin	25.0	
	Medical	25.0	
	Library	25.0	
Low <25 - 0	Recycling plant	23.4	Targeted education through the Business Engagement Team
	University	16.4	
	Power station / Energy production	16.3	
	Office / Work studio	15.0	
	Farm / Non-residential associated building	11.5	
	College	11.0	

	Other educational establishment	10.7	
	Secondary / High school	10.6	
	Children's nursery / Crèche	10.2	
	Factory/Manufacturing	10.2	
	Preparatory / First / Primary / Infant / Junior / Middle school	10.1	
	Warehouse / Store / Storage depot	10.1	
	Workshop / Light industrial	10.1	
	Ambulance station	10.0	
	Police / Transport police / Station	10.0	
	Cattery / Kennel	10.0	
	Animal / Bird / Marine sanctuary	10.0	
	Wholesale distribution	10.0	

Incinerator / Waste transfer station	10.0
Slaughter house / Abattoir	10.0
Broadcasting (TV / radio)	10.0
Vet / Animal medical treatment	10.0
Office	10.0
Gas / Oil storage / Distribution	10.0
Coastguard rescue / Lookout / Station	10.0
Lock-up garage / Garage court	10.0
Maintenance depot	10.0
Medical / Testing / Research laboratory	10.0
Animal services	10.0
Equestrian	10.0
Community service centre / Office	10.0

	Goods freight handling / terminal	10.0	
	Storage land	10.0	
	Vehicle storage	10.0	
	Fire station	10.0	
	Lifeboat services / Station	10.0	
	Tourist information signage	10.0	
	General storage land	10.0	
	Builders yard	10.0	
	Special needs establishment	10.0	
	Professional medical service	10.0	
	Animal centre	10.0	
	Retail service agent	10.0	

### **Audit Outcomes/Scorings**

During each premises audit assessments are made against each Article within The Order. Table 5 overleaf indicates the weighting of scores applied to different categories of premises dependent upon the Article.



Table 5

Weighting/ Score Awarded to Articles						
Safety Critical Articles/Risks						
Article Number	Description	Group A	Group B	Group C	Group D	Level of deficiency/ risk
		Sleeping unfamiliar	Sleeping familiar and licensed premises	Public unfamiliar	Workplace familiar	
8	General fire precautions	13	13	8	5	Major
		7	7	4	3	Minor
9	Risk assessment	10	10	10	10	Major
		5	5	5	5	Minor
10	Principles of prevention	5	5	5	5	Major
		3	3	3	3	Minor
11	Fire safety arrangements	5	3	2	2	Major
		3	2	1	1	Minor
12	Dangerous substances	5	5	5	5	Major
		3	3	3	3	Minor
13	Fire warning/ alarm	26	13	13	13	Major
		10	5	5	5	Minor
14	Emergency routes and exits	26	26	20	13	Major
		10	10	8	5	Minor
15	Procedures for imminent danger	5	3	2	2	
17	Maintenance	15	15	10	8	Major
		7	7	4	3	Minor
21	Training	6	4	2	2	Major
		3	2	1	1	Minor
38	Maintenance of firefighters measures	3	3	3	3	
Other Articles/ Risks						
Article Number	Description	Group A	Group B	Group C	Group D	Level of deficiency/ risk
		Sleeping unfamiliar	Sleeping familiar and licensed premises	Public unfamiliar	Workplace familiar	
13	Firefighting equipment	1	1	1	1	
16	Additional measures – Dangerous substances	1	1	1	1	
18	Safety assistance	1	1	1	1	
19	Information to employees	1	1	1	1	
20	Information to employers from outside undertakings	1	1	1	1	
22	Cooperation and coordination	2	2	2	2	
23	Employees duties	1	1	1	1	
37	FF switches for luminous tubes	1	1	1	1	
Maximum Score		128	109	89	77	

## Risk Scoring Matrix for Enforcement Activity

A total score for a premises will be attained through Audit activity using Table 5 above. The total score will then be referenced to Table 6 to ascertain the relevant level of enforcement activity that is required. The enforcement activity is a recommendation, and the Protection Officer has discretion to exercise professional judgement when deciding upon the level of enforcement to be imposed.

**Table 6**

<b>Scoring matrix</b>		
<b>Score</b>	<b>Compliance level</b>	<b>Recommended action</b>
<b>0-25</b>	<b>1</b>	<b>Broadly compliant - FS02 A letter of compliance</b>
<b>26-35</b>	<b>2</b>	<b>Inform and educate – FS02 or FS03 (notification of deficiencies) based upon inspecting officers discretion</b>
<b>36-45</b>	<b>3</b>	<b>Notification of deficiencies - FS03 or enforcement notice, based upon inspecting officers discretion</b>
<b>46-55</b>	<b>4</b>	<b>Enforcement notice/Prohibition notice</b>
<b>56+</b>	<b>5</b>	<b>Fast track enforcement notice (consider prosecution)</b>

## Performance/Reporting/Governance

Performance against the risk-based inspection programme will be reported to the Service Leadership Team and Performance and Resource Board through the quarterly performance reports.

## Review Cycle of RBIP

The RBIP will be subject to an annual review, which will coincide with the assessment of Risk to inform the RBIP for the following year. In addition to an annual review, the ECFRS Protection team will need to constantly review information provided through the Home Office, Department for Levelling Up, Housing and Communities and NFCC in relation to fire safety legislation and enforcement guidance which is likely to change in the short term as a direct result of the Grenfell fire in 2017.

## Relevant Legislation

Regulatory Reform (Fire Safety) Order 2005

Fire & Rescue Services Act 2004



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