

# Housing to 2040

## Electrical Safety First response

February 2020



## 1. RESPONSE SUMMARY

Electrical Safety First is a charity committed to reducing fires, deaths and injuries caused by electricity. We work in partnership with key stakeholders to improve electrical safety in Scottish homes – where electricity causes almost three quarters of house fires.<sup>1</sup> So, we welcome this opportunity to respond to the Scottish Government's 'Housing to 2040' consultation. Our submission concentrates on question 6 which asks for 'proposals that would improve the quality, standards and state of repair of existing and new housing.'

This consultation is intended to be a 'vision' document. But our submission offers practical and deliverable policy solutions designed to help tackle some of the most significant electrical risks in the home.

### Key facts:

- Three quarters of house fires are caused by electricity in Scotland, and 44 people have lost their lives in electrical dwelling fires between 2014-2019.<sup>2</sup>
- 47% of electrical dwelling fires occurred in flats or tenements during 2019. This level has remained consistent for the last 6 years.<sup>3</sup>
- Only half (52%) of council tenants are currently protected by five-yearly electrical safety checks, with the remaining only receiving these on a ten-yearly cycle, during major home improvements or on change of tenancy, which is low in the sector.<sup>4</sup>
- There is a clear and unfair disparity with gas safety regulations which require both social and private landlords to carry out annual gas safety checks.
- Over half (51%) of Scottish homeowners either haven't or don't know, if their property has been inspected by an electrician in the last ten years.<sup>5</sup>

---

<sup>1</sup> Electrical Safety First methodology of fire data provided by the Scottish Fire and Rescue Service in February 2020.

<sup>2</sup> Ibid

<sup>3</sup> Ibid

<sup>4</sup> Data obtained from an FOI to all 32 Scottish Local Authorities in February 2019.

<sup>5</sup> YouGov survey of Scottish homeowners with fieldwork undertaken 21st - 28th February 2017. Unweighted sample of 1884.



- The majority of older people (62%) live in owner-occupied properties,<sup>6</sup> and the risk of dying in a fire for elderly people is over twice as high as the average for all ages.<sup>7</sup>

Ultimately, we are calling for an enhanced and common standard for electrical safety, for all tenures. But this can be delivered through a considered, strategic approach, including a sequence of harmonisations to existing housing standards, in incremental stages, and with an initial focus on the rented sectors and apartment properties.

Despite electricity being the number one cause of all of Scotland's domestic fires<sup>8</sup>, housing legislation is subject to a 'tenure lottery' - with different 'levels' of protection for different tenures. As detailed in our consumer awareness campaign – Inequality Street – we believe everybody should feel electrically safe in their home, regardless of tenure, age or income.

In 2015, Scotland led the UK in improving protection for private renters by introducing mandatory electrical checks in the Private Rented Sector (PRS). Owner-occupied homes, on the other hand, are only required to meet the minimum 'Tolerable Standard' - which has no statutory underpinning and only a basic electrical safety element. There are also clear inconsistencies in the electrical safety standards required between private and social rented housing, with there being no legal protections for the latter. There are specific safety concerns with tenements and flats because of the potential impact of fire on other occupiers. And, often, their sheer population density.

The importance of electrical safety can only increase during the drive for the electrification of energy. New technologies - and new products - are making the smart home mainstream and the evolution of electric vehicles, highlight how it is central to our lives. This requires a joined-up approach across policy areas to tackle the safety risks from these challenges.

By extending the safety essential of regular, mandatory electrical checks to social and owner-occupied homes, prevents the continuance of the current multiple-tier housing system; and avoids a highly fragmented, self-regulated electrical safety regime. It should not be the case that one tenure is improved while another declines and a uniform set of safety measures across all tenures will help prevent this.

---

<sup>6</sup> <https://www.gov.scot/collections/scottish-house-condition-survey/>

<sup>7</sup> <https://www.firescotland.gov.uk/news-campaigns/news/2014/09/sfrs-backs-ageing-safely-week.aspx>

<sup>8</sup> Electrical Safety First methodology of fire data provided by the Scottish Fire and Rescue Service in February 2020



However, there also needs to be effective enforcement and clear requirements and timeframes for inspections and repairs.

**Key Recommendations:**

- A move towards mandatory electrical safety checks for all homes.
- The more immediate introduction of a common electrical safety standard for all rented sectors – bringing social housing in line with the PRS.
- This would require five-yearly electrical checks and mandatory fitting of RCDs for social housing, to bring requirements in line with the PRS.
- Owner of flats should be required to complete mandatory electrical safety checks.
- A requirement for landlords to register any new electrical appliances they provide with lets and to ensure they are not subject to any product recalls or safety alerts.
- New in-depth research to understand any specific electrical risks in blocks of flats and tenements.
- Decisions on future housing policy must consider electrical safety issues which arise as a result of steps to decarbonise our homes.

In the following pages we set out in more detail our policy proposals for electrical safety which should be considered as part of the Scottish Government's vision and strategy for housing for the next twenty years.



## 2. THE CURRENT POLICY CONTEXT

Legislation and duties for electrical safety varies across housing tenures in Scotland. Currently, private tenants are better protected than those living in social housing, and there are minimal electrical safety requirements for owner-occupiers, who make-up the biggest proportion of Scotland's housing mix, and the sector is home to the largest number of older and vulnerable people.

### Summary of current safety duties in different tenures

	<b>Social Landlords</b>	<b>Private Landlords</b>	<b>Owner Occupiers</b>	<b>New and Converted Buildings</b>
Fire Detectors	Yes	Yes	Yes	Yes
Periodic Electrical Safety Checks	No	Yes	No	No
Periodic Gas Safety Inspections	Yes	Yes	No	No
Residual Current Devices	No	Yes (from 2024)	No	Yes

**Source: The Scottish Government<sup>9</sup>**

Since December 2015, the Repairing Standard was amended to place a duty on private landlords to carry out an electrical safety inspection of their property by a registered electrician at least every five years, and also to complete portable appliance testing of any electrical appliances supplied with a let.

<sup>9</sup> <https://www.gov.scot/binaries/content/documents/govscot/publications/factsheet/2016/11/common-housing-quality-standard-topic-papers/documents/topic-paper-2-safety-elements-common-standard-pdf/topic-paper-2-safety-elements-common-standard-pdf/govscot%3Adocument/Topic%2Bpaper%2B2%2B%25E2%2580%2593%2BSafety%2Belements%2Bof%2Ba%2BCommon%2BStandard.pdf>



Social landlords are not required to carry out similar measures as the Scottish Housing Quality Standard (SQHS) does not prescribe a frequency to conduct electrical safety checks. Owner-occupiers, on the other hand, only need to meet the Tolerable Standard which is a "condemnatory" standard. In other words, it is not reasonable to expect people to continue to live in a house that falls below. In relation to electrical safety, it only states that "the electrical wiring and associated components and fittings in a house are adequate and safe to use" and does not prescribe any specific measures to ensure that this is the case.

Over the next twenty years, we believe there needs to be significant progress towards a common standard for electrical safety for all dwellings, and this could be achieved through a number of harmonisations to existing housing standards, with a focus on the rented sectors and flatted properties.

### 3. SOCIAL HOUSING

The social housing sector (SRS) currently houses around 600,000 tenants.<sup>10</sup> Social tenants are currently not legally protected by the same electrical legislation as private tenants in Scotland, who benefit from five-yearly electrical inspections and will be further protected with mandatory Residual Current Devices (RCDs)<sup>11</sup> from 2024.<sup>12</sup>

There is also a clear and unfair disparity with gas safety regulations which require both social and private landlords to carry out annual gas safety checks. Compliance levels are very encouraging for these regulations, with the Scottish Housing Regulator reporting that of the 477,000 social tenants in Scotland who use gas at home, 99.9 per cent had their annual gas safety check completed on time in the 2016/17 financial year.<sup>13</sup>

Current electrical safety practice amongst social landlords is inconsistent at best. Only half (52%) of Council housing providers conduct electrical safety checks every five years, with the rest completing inspections every 10 years, during major home improvements or on change of

---

<sup>10</sup> <https://www.housingregulator.gov.scot/landlord-performance/national-reports/national-reports-on-the-scottish-social-housing-charter/national-report-on-the-scottish-social-housing-charter-201819>

<sup>11</sup> RCDs – Residual Current Devices - reduce the risk of electrocution and fire by breaking the circuit in the event of a fault.

<sup>12</sup> <https://www.gov.scot/publications/regulations-to-modify-repairing-standard-summary/>

<sup>13</sup> <https://www.housingregulator.gov.scot/landlord-performance/national-reports/thematic-work/gas-and-tenant-safety-in-social-housing-in-scotland>



tenancy,<sup>14</sup> which is low in the sector. This picture does not include registered social landlords as they have only recently become subject to freedom of information laws in Scotland. Protection for electrical safety is currently a postcode lottery in the SRS. For example, Council tenants in Orkney are better protected from electrical risks than those renting from Perth and Kinross Council. Tenants, regardless of tenure, should be afforded the same safety protections.

**Recommendation:** *Mandatory five-yearly electrical safety checks in all social housing.*

#### 4. THE OWNER-OCCUPIED SECTOR AND OTHER DWELLING TYPES

The owner-occupied sector is even more vulnerable to electrical threats – it is the largest housing tenure in Scotland and most older people, who are most at risk, live in homes they own. As noted earlier, dwellings in the owner-occupied sector are only required to meet the ‘condemnatory’ Tolerable Standard. In 2018, 27% of dwellings failed this standard because they did not have safe electrical systems, which was one of the four most common failures.<sup>15</sup> The standard does not require any periodic testing of electrical installations.

We know that the majority of older people (62%) live in owner-occupied properties,<sup>16</sup> and the risk of dying in a fire for elderly people is over twice as high as the average for all ages.<sup>17</sup> Set against a backdrop of an ageing population, with dementia and other degenerative syndromes heightening electrical risk, those in later life may find themselves asset rich but cash poor with limited electrical safety grant funding available to mitigate dangers in the oldest housing stock. Policies have consistently referred to providing for older people to stay within their own home for as long as possible and there is evidence to show that remaining at home is beneficial if it is safe to do so.<sup>18</sup>

We appreciate that owner-occupiers are in stronger position to make informed decisions about acceptable risk levels. However, there needs to be step change in attitudes towards electrical safety and government has a key role to play. We believe legislating for mandatory electrical safety checks in the owner-occupied sector would not only improve the safety of these dwellings but could lead to a wider

---

<sup>14</sup> Data obtained from an FOI to all 32 Scottish Local Authorities in February 2019.

<sup>15</sup> <https://www.gov.scot/collections/scottish-house-condition-survey/>

<sup>16</sup> *Ibid*

<sup>17</sup> <https://www.firescotland.gov.uk/news-campaigns/news/2014/09/sfrs-backs-ageing-safely-week.aspx>

<sup>18</sup> <https://www.scie.org.uk/publications/guides/guide54/what-older-people-want.asp>



understanding of other electrical risks, ranging from 'rogue traders' to undertaking electrical DIY, and faulty white goods. We know that homeowners don't arrange domestic electrical work on a regular basis – with recent research highlighting that 22% had never had any carried out in their home and for 18% it was longer than 5 years ago.<sup>19</sup> A legal requirement for owners to carry out electrical safety checks would require homeowners to engage the services of competent and qualified electricians which we believe would undoubtedly lead to a broader awareness and acceptance of electrical safety in the home.

In February 2019, the Scottish Government amended the legislation relating to smoke detection in the home, requiring all domestic properties in Scotland, regardless of tenure, to have the same levels of detection, increasing fire safety. We believe this same, universal, approach must be considered for electrical safety.

However, the situation is more pressing for owners of flats. In the Scottish Government's report on 'The Common Housing Quality Standard Forum',<sup>20</sup> it noted that it is arguable that owner-occupiers in flats should be expected to meet higher standards where there is a potential impact on other occupiers. 47% of electrical dwelling fires occurred in flats or tenements during 2019 and this level has remained consistent for the last 6 years.<sup>21</sup> In light of these figures, we believe owners of flats should be required to meet specific electrical safety requirements and we need to do more work to fully understand any wider electrical safety issues in blocks of flats and tenements.

## Recommendations:

- *A move towards mandatory electrical safety checks for all dwellings, including the owner-occupied sector. This could be achieved by adding a new safety element to the Tolerable Standard.*
- *Mandatory electrical safety checks for owners of flats.*
- *Undertake new research to understand any specific electrical safety risks in blocks of flats and tenements.*

<sup>19</sup> <https://www.gov.scot/binaries/content/documents/govscot/publications/minutes/2018/04/electricians-working-group-minutes-january-2018/documents/electricians-working-group-paper-second-meeting-protecting-consumers-way-forward-january-2018-pdf/electricians-working-group-paper-second-meeting-protecting-consumers-way-forward-january-2018-pdf/govscot%3Adocument/Electricians%2BWorking%2BGroup%2B-%2B%2Bpaper%2Bfor%2Bsecond%2Bmeeting%2B-%2BProtecting%2BConsumers%2B-%2BThe%2BWay%2BForward%2B-%2BJanuary%2B2018.pdf>

<sup>20</sup> <https://www.gov.scot/binaries/content/documents/govscot/publications/factsheet/2016/11/common-housing-quality-standard-topic-papers/documents/report-common-housing-quality-standard-forum-pdf/report-common-housing-quality-standard-forum-pdf/govscot%3Adocument/Report%2Bon%2BCommon%2BHousing%2BQuality%2BStandard%2BForum.pdf>

<sup>21</sup> Electrical Safety First methodology of fire data provided by the Scottish Fire and Rescue Service in February 2020



- *New measures to support older owner-occupiers and other vulnerable groups, such as financial support for electrical safety checks and repairs.*

## 5. RESIDUAL CURRENT DEVICES

A Residual Current Device (RCD) is a safety device which switches off electricity automatically if there is a fault and is designed to protect against the risks of electrocution and fire. We successfully campaigned for mandatory RCDs in the Scottish PRS which will come into force from 2024.<sup>22</sup> The value of RCDs is also being increasingly recognised by other governments and there have been significant moves to legislate for their wider use in domestic properties in recent years. They are already required under Scottish Building Standards in all new build homes, and internationally an increasing number of governments have made the use of RCDs in all domestic properties mandatory, for example in Western Australia. In 2009, laws introduced by the Government of Western Australia require all landlords to install RCDs, protecting all power points and lighting circuits. Penalties of up to \$15,000 for individuals and up to \$100,000 for a corporate body may apply if the regulations are breached.<sup>23</sup> The trends indicate an overall reduction in electrical accidents in Western Australia.<sup>24</sup>

We believe that the installation of RCDs would not be burdensome on social landlords and makes economic sense. For example, full installation of a new consumer unit protected by an RCD could cost £300 but if an existing fusebox can accommodate the installation it could be brought up to standard for £100, so that the average cost will lie between these figures.

The combination of RCD protection with regular electrical safety checks offers tenants the highest level of protection for electrical safety and significantly reduces the risk of electrical fire or injury from electric shock.

**Recommendation:** *Mandatory RCDs in all social housing.*

<sup>22</sup> <https://www.gov.scot/publications/regulations-to-modify-repairing-standard-summary/>

<sup>23</sup> <https://www.commerce.wa.gov.au/energysafety/rcd-fact-sheet>

<sup>24</sup> [http://www.commerce.wa.gov.au/sites/default/files/atoms/files/electrical\\_incident\\_safety\\_report\\_2015-16.pdf](http://www.commerce.wa.gov.au/sites/default/files/atoms/files/electrical_incident_safety_report_2015-16.pdf)



## 6. ELECTRICAL PRODUCTS

Product recalls are an increasing concern demanding serious action, with most achieving just a 10-20% success rate. Fault-lines in the UK's current product recall system have been highlighted by Whirlpool's recall of over a million tumble dryers and washing machines. And the fact that, last year alone, white goods caused a house fire almost every day in Scotland.<sup>25</sup> Manufacturers and retailers experience major problems tracing consumers with a recalled item if it hasn't been registered. Our research has found that only a third of Scottish consumers register their electrical appliances.<sup>26</sup> We believe measures should be taken to protect tenants from these risks.

**Recommendation:** *A requirement for landlords to register any new electrical appliances they provide with lets and to ensure they are not subject to any current product recalls or safety alerts.*

## 7. FUTURE CHALLENGES

In April 2019, the Scottish Government recognised a 'global climate emergency' and, following the passage of the Climate Change Bill, Scotland will now be required to reach net-zero greenhouse gas emissions by 2045, with an interim reduction of 75% required by 2030, and 90% by 2040. Decarbonising the supply of heat to all of Scotland's buildings is one of the major challenges in responding to this.

The 2019 Programme for Government commits the Scottish Government to making sure that new homes and buildings across Scotland are built to meet the challenge of the climate emergency. Heating our homes makes up a significant part of our energy consumption and greenhouse gas emissions. Decarbonising heat – meaning reducing and eliminating the greenhouse gases emitted during its generation and use – is essential to tackling climate change and a major challenge on the horizon is the electrification of heat. Currently, 81% of homes in Scotland are heated by gas.<sup>27</sup>

The huge increase in electrical appliances, such as electric boilers and heat pumps, together with a shortage of trained installers and a lack of familiarity with electrical heating will impact on electrical safety. The Scottish Government is also investing in a range of measures to accelerate innovation in new

<sup>25</sup> <https://www.firescotland.gov.uk/news-campaigns/news.aspx?page=1&tags=prevention&year=2020&month=0>

<sup>26</sup> YouGov survey of 2102 people, representative of the UK population, carried out in January 2020.

<sup>27</sup> <https://www.gov.scot/publications/scottish-house-condition-survey-2018-key-findings/>



low-carbon technologies such as Electric Vehicles (EVs), which along with the smart homes, are areas Electrical Safety First has already started to focus on.

Our early research on EVs suggests that drivers are charging their vehicles dangerously due to lack of public infrastructure. We surveyed 1,500 EV owners across the UK, including both electric and hybrids, revealing 74% believe that a lack of public charging points near their home has led them to use domestic multi-socket extension leads.<sup>28</sup> More than 8 out of 10 respondents in Scotland admitted they're aware these should not be used outside.

Almost half of Scottish EV users who charge with the aid of an extension lead have left cables running to their vehicle when it has been raining. We also found a high number resorting to 'daisy-chaining' extension leads to reach their vehicle; a method whereby multiple extension leads are plugged into one another to cover a longer distance. Daisy-chaining is advised against in all circumstances due to the resulting heightened risk of electric shock and even fire.

### Recommendations:

- *Housing policy must be considered alongside developments with building standards to consider the impact of new technologies in the home, including an increased need for domestic charging points for EVs, and any potential issues with installing these for flat dwellers and areas of high-density housing.*
- *Decisions on future housing policy must consider any electrical safety issues which may arise as a result of steps to decarbonise our homes.*

## 8. CONCLUSION

Scotland has led the way on home electrical safety policy and the vision for housing over the next 20 years must build on this solid foundation, with an enhanced and common standard for electrical safety, for all tenures. This can be delivered through a considered, strategic approach, including a sequence of

---

<sup>28</sup> Consumer research commissioned by Electrical Safety First and conducted by Censurwide surveying 1,500 owners of plug-in vehicles, whether all-electric or hybrid, in the UK, nationally representative of all UK EV owners



harmonisations to existing housing standards, in incremental stages, and with an initial focus on the rented sectors and apartment properties.

We have offered practical solutions to reduce electrical risk and fires and the damage they can cause to people and property. We should also emphasise that many of the preventative measures we offer would not only improve the safety of housing and well-being of the most vulnerable but also bring cost-savings to the public purse.

