



**ENERGY ASSESSORS
WALES**

EPC+ **RATING IMPROVEMENT REPORT**

Southgate House, Wood Street, Cardiff



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1 Introduction

The objective is to provide a report that gives considered and costed options for investment works to improve the current EPC rating to mitigate the risk of being unable to let the property from 2018 under the Energy Act 2011 & the Energy Efficiency Regulations 2015 (Minimum Energy Efficiency Standards - MEES).

Under the current MEES regulations landlords are, subject to certain exemptions, prohibited from granting new leases (including renewals and extensions) of non-domestic privately rented property with an EPC rating below E. There are stringent financial penalties for landlords that do not comply. From 1 April 2023, the ban extends to prohibit the continuation of any existing lease of non-domestic premises in England and Wales with an EPC rating below E.

MEES Regulations will be enforced by Local Weights and Measures Authorities (LWMAs), who may serve compliance notices if they believe a landlord is in breach of the regulations.

For breaches of MEES that last less than 3 months, a landlord renting out a sub-standard commercial property may receive a fine of £5,000, or 10% of the property's rateable value, up to a maximum of £50,000.

A breach of MEES regulations lasting longer than 3 months can trigger a fine of the higher of £10,000 or 20% of the rateable value of the property, up to £150,000.

It has been requested that Energy Assessors Wales re-examine the recommendations made in their original EPC report and also provide the assessors' own recommendations (where applicable). Through a process of re-modelling various scenarios using the original data captured on survey Energy Assessors Wales have been asked to provide a proposed improved EPC that might be achieved for the building.

2 The Energy Efficiency Regulations 2015

- 2.1 In 2011 the coalition government released the Energy Act 2011. The Act has three principal objectives: tackling barriers to investment in energy efficiency; enhancing energy security; and enabling investment in low carbon energy supplies. Section 49 of The Act placed an obligation on the Secretary of State for Energy and Climate Change to bring into force by 1st April 2018 regulations which will make it unlawful for a landlord to lease a property in England and Wales which does not meet a prescribed minimum energy efficiency standard. The Act requires the property's energy efficiency standard is to be demonstrated by an EPC.
- 2.2 The Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015 were passed into law on the 26th March 2015. Properties with an EPC rating of 'F' or 'G' are defined in the Regulations as a sub-standard property. The Regulations makes it unlawful from 1st April 2018 for landlords to grant a tenancy to new or existing tenants for a sub-standard non-domestic property, without implementing cost-effective energy efficiency improvements or fulfilling an exemption criterion. From 1st April 2023, landlords must not continue letting a sub-standard non-domestic property which is already let.
- 2.3 In February 2017, the Government released the 'Guidance for landlords and enforcement authorities on the minimum level of energy efficiency required to let non-domestic property under the Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015'. This document provides guidance and advice on the scope of the regulations, the relevant improvements works that can be carried out on a sub-standard non-domestic property, the cost effectiveness of improvements, the exemptions and exclusions, the enforcement framework and the appeals process.

3 MEES (Minimum Energy Efficiency Standards)

The rules around minimum energy efficiency standards (“MEES”) came into force on 1 April 2018. From this date, a landlord will be unable to let a property that has an EPC with a rating below an E unless one of the exemptions in the Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015 applies. From 1 April 2023, a landlord will be in breach of the regulations if it continues to let a property that has an energy rating below an E. Any lease will still be valid between the landlord and the tenant even if the landlord is in breach of the regulations on letting the property or continuing to do so.

Exclusions & Exemptions

If a property does not have an energy performance certificate (“an EPC”), then the regulations will not apply to it.

The regulations do not apply to short leases (defined as less than 6 months) or long leases (greater than 99 years).

The key exemptions where property with a low energy rating can be let are:

- all cost effective improvements, being works that would pay for themselves through energy savings within seven years, have been undertaken, or there are no such works that could be done;
- a landlord is unable to obtain third party consent, for example from the planning authority, lender, superior landlords or consent from the tenant under a lease to enter the property to carry out improvement works;
- an independent surveyor determines that the energy efficiency improvements would devalue the property by more than 5% (such as providing thermal insulation to the internal face of external walls) or would damage the property.

Exemptions last for 5 years and to qualify for an exemption a landlord must register the exemption that it is relying upon.


Where a landlord buys a property already subject to leases, or where a landlord is required to grant a lease pursuant to a statutory or contractual obligation to do so, such as on a lease renewal, the landlord is not in immediate breach of the regulations. It has six months to comply or to determine that one of the principal exemptions apply – exemptions do not pass from one landlord to another.

4 Existing EPC Rating

The Existing EPC certificate has been prepared using the accredited software iSBEM_v5.6.b using the Simplified Building Energy Model (SBEM) calculation engine. The Simplified Building Energy Model is the national calculation methodology and it models using a simplified methodology to calculate a building's energy consumption and to produce an EPC asset rating.

Current EPCs will be assessed using the new ISBEM 6.1.e methodology. This takes into account the change from carbon to renewable technologies in the power generating industry. This has resulted in heating provided from an electrical source having a less negative result when producing the asset rating.

A previously surveyed floor model was used to generate several improvement options with a purpose of attaining a B rating. The floor model used **was 4th Floor East Wing.**

| PART FOURTH FLOOR EAST, SOUTHGATE HOUSE, WOOD STREET, CARDIFF, CF10 1EW | | |
|---|----------------------------------|--------------|
|  | Unique Property Reference Number | 854016670011 |
| | Draft EPC rating | F133 |
| | Date of Survey | 15/09/2018 |

5 Recalculation Modelling

In accordance with your requirements Energy Assessors Wales have re-modelled the EPC using variations on the types of heating, lighting and construction in order to show how it will be possible to achieve your required EPC rating but using the existing data collected during the initial assessment. The below table shows the current EPC rating set against the EPC rating post all works suggested in Section 6

As this information is for reference purposes only, the improved EPC rating has not been formally lodged and it does not affect any lodged EPC data on the Landmark website.

| | |
|-------------------|---|
| TARGET EPC RATING | B |
|-------------------|---|

Proposed Rating:

| DATE | SOFTWARE VERSION | RATING | GRADE |
|------------|------------------|--------|-------|
| 16/04/2023 | iSBEM_v6.1e | B | 40 |

6 Recommendations to achieve proposed EPC Rating

The following section outlines the individual recommendations required to improve the EPC grading, with indicative budget figures.

| RECOMMENDATION | PROJECTED COST | EASE | POTENTIAL EPC RATING | EPC FIGURE IMPROVEMENT |
|-----------------------------------|----------------|------|----------------------|------------------------|
| Replace T8 lighting to LEDs | £3,000 | 1 | F135 | -2 |
| Add secondary glazing | £7,000 | 1 | E117 | 16 |
| Change heating to air con (4 cop) | £15,000 | 2 | C55 | 78 |

Key – Suggested Ease of Works

| | |
|---|---|
| 1 | Can be implemented with limited capital expenditure and no/little occupier disruption |
| 2 | Medium rated project with some capital and some disruption |
| 3 | Major works required – large disruption and cost implication |

7 Recommendations to Improve EPC Rating (Cumulative)

The following illustrates the cumulative effect of adopting multiple recommendations on the final EPC grading, with indicative budget costs.

| RECOMMENDATIONS | | | EPC RATING | EPC FIGURE IMPROVEMENT | CUMULATIVE COST * |
|-----------------------------------|-----------------------------|-----------------------------|------------|------------------------|-------------------|
| 1 | 2 | 3 | | | |
| Replace T8 lighting to LEDs | | | F135 | -2 | £3,000 |
| Install secondary glazing | Replace T8 lighting to LEDs | | E118 | 17 | £10,000 |
| Change heating to air con (4 cop) | Install secondary glazing | Replace T8 lighting to LEDs | B40 | 78 | £25,000 |

8 Conclusion

If a lodgement was undertaken today, assuming the main heating component is gas with a limited number of air conditioned wings, the expected rating would be between F and E ratings.

The main reason for this poor rating is that the majority of the heating within the building utilises gas boilers. This is coupled with the poor thermal elements of the building (compared to modern day equivalents).

Energy Assessors Wales has had to look at different areas to achieve a MEES compliant EPC rating to B or better as per the client instruction. It has been calculated that replacing the current heating system for the Air Conditioning units (4cop 4 seer) has by far the most impact. Without this option a B rating is unobtainable. The conditioning of the building using a mixture of gas boilers / electric panel heaters and partial air conditioners will at best achieve a C rating

The lighting throughout the building uses mainly T8 fluorescent fittings. Although this is a relatively efficient system, this type of lighting is being phased out of production as are all fluorescents by 2025.

LED lighting was the choice of installation being due to its efficiency, coupled with substantial energy savings and future proofing of the building (although it has little effect on the rating and is not necessary to obtaining the target of the brief).

Changes to the fabric of the building, external walls and roof to current standards has little effect on the EPC rating and therefore have been omitted from the report.

9 Caveats

The SBEM (Simplified Building Energy Model) and the software iSBEM are open to interpretation to the assessor and their skills and knowledge in regards to the SBEM software, buildings M&E and construction. The cumulative recommendations generate an overall figure, when undertaken in the order shown in the table above.

If the recommendations above were to be carried out in a different order then the cumulative figure would be different. Cumulative figures can make the EPC ratings improve or not improve when compared to their standalone improvements. This will be down to the way that SBEM calculates the grading (A-G).

The recommendations given are a guide to what could be done for the costs provided. Prices quoted in this report are purely indicative and not to be utilised as part of any wider project, no responsibility for pricing can be taken by the individual assessor. For full and accurate costing a specialist surveyor from an organisation looking to implement any of the solutions/recommendations must conduct an independent site survey and quote production.

Revisions to the SBEM software are constant and some NCM (National Calculation Method) changes (conventions) can result in an inferior rating even with no changes to the building. If any significant amount of time has lapsed then Energy Assessors Wales would recommend a desktop exercise to explore whether any of the aforementioned changes have altered the EPC rating.

Only once the changes have been made would a new EPC certificate rating be calculated and a further certificate could then be issued in place of the existing one. With improvements being made to the SBEM software through periodic updates to Building Regulations the actual EPC rating at the time of the completion of any site work could only be determined using the most up to date SBEM version at the time of re-assessment.

10 Limitations

Health and safety issues noted during the survey are commented on within this report but are not intended or implied to relieve those responsible from their duties and obligations in respect of current Health & Safety Legislation.

This type of survey cannot establish the true condition of the plant. It is possible to find plant, which, from an external view, appears good but is subsequently found to have a history of operational problems.

The internal condition of the Mechanical, Electrical, Public Health (MEPH) and Vertical Transportation (VT) services such as water storage tanks, air-handling units, terminal units and control panels, drainage or water distribution pipework systems for example, could not be judged or commented on from this level of visual inspection. Additionally, MEPH & VT installations concealed within the fabric of the property, conduits or otherwise inaccessible during the survey could not be judged or commented on.

No design checks, calculations or tests were carried out and it is assumed that the installed systems can meet their original design criteria and parameters.

This survey did not include any examination of deleterious materials within the property and the findings summarised within this report do not allow for the treatment of such materials to affect any recommendations.

Costs provided within this report are for budget purposes only and may vary under competitive tender conditions as well as requiring feasibility studies to be undertaken to explore the options available.

This report is not to be used either in part or in whole for the purpose other than that for which it was originally intended and should not form the basis of any specification for refurbishment or replacement works.

Unless otherwise informed in writing we assume that we are preparing this Report for the recipient named on the front cover page of this Report. No other party can rely on this Report unless we are informed in writing of their identity and that we have agreed in writing to this. Our permission for such reliance may be subject to a charge but not be withheld unreasonably.



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