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PERSPECTIVES

Martlet v Mulalley: Design Considerations of a 'Reasonable' Architect on Fire-Safety Issues Post-Grenfell

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INTRODUCTION

The disastrous fire event at Grenfell Tower in 2017 marked the beginning of the latest batch of fire safety reforms, and the significant cultural and professional shift in the design and construction of high-rise and complex buildings in the United Kingdom ("UK").

The UK construction industry[1] was put in an unfavourable spotlight following the Grenfell Tower tragedy. Common industry practices were subject to intense scrutiny. One such seminal effort included an investigation led by Dame Judith Hackitt resulting in the publication in May 2018 of 'The Independent Review of Building Regulations and Fire Safety.' The pressure on the topic and industry has not abated since the Grenfell Tower Inquiry and the subsequent publication of its findings.

The Hackitt Report identified *"the key issues underpinning the system failure."*[2] Perhaps most notable of the issues identified included the ambiguity and misinterpretation of regulations and guidance, and the lack of clarity on roles and responsibilities within the construction industry. These issues have become drivers for culture change within the construction industry. This shift has been reinforced by a new and more stringent regulatory framework, including the Fire Safety Act 2021 and the Building Safety Act 2022[3], which also laid out clearer accountability within the design and construction process.

In parallel to the regulatory and legislative developments, related industry publications guided owners of existing high-rise residential buildings to begin a review of cladding systems on their properties.

The Department for Levelling Up, Housing & Communities ("DLUHC") estimates there are 12,500 high-rise residential buildings of 18 meters or more in height, or at least seven storeys,[4] that fall within the category of 'higher-risk buildings' under the Building Safety Act 2022 in England. All of these have the potential to be subject to remediation to comply with the Act.

The uncertainty over the outcome of fire-related matters in litigation was also a point of discussion within the UK construction industry, particularly in light of a number of ongoing cladding-related disputes. Recently, and specifically addressing fire safety issues in the external wall construction of a high-rise building, the Technology and Construction Court ("TCC") closed the proceedings in the case of Martlet Homes Limited v Mulalley and Co Limited[5] (*"Martlet v Mulalley"*) and issued the first High Court judgment since the Grenfell Tower disaster on this topic.

This article discusses the key issues raised by the parties and the Court in *Martlet v Mulalley*, including the Court's interpretation of relevant guidance and legislation. The authors also offer views on the impact the Court's ruling may have upon the future of construction industry professionals involved in similar projects, particularly from the perspective of an architect. This case is likely to be of great interest within the construction industry, including building owners and other parties involved in assessing potential shortcomings and in preparing remedial schemes, by providing the first guidance to the approach that the Court may take on this type of case.

THE CASE

To provide social housing, in the early 1960s five concrete tower blocks were built in Gosport, Hampshire. All five towers are significantly higher than 18 meters in height. This makes them special in terms of fire safety provisions and the level of risk to those occupying them. In the early 2000s, Kelsey Housing Association Ltd. (a social housing company) decided to improve the towers' resistance to cold and damp penetration by the application of an External Wall Insulation ("EWI") cladding system to the exterior of the buildings ("the Original Works"). The work was undertaken by Mulalley & Co Ltd (Mulalley) under a design and build contract ("the Contract"). The EWI cladding system consisted of expanded polystyrene ("EPS") insulation boards, two coats of acrylic organic non-cementitious render finish, and horizontal mineral wool fire barriers.

[1] This would include all parties involved in procuring, designing, constructing, and maintaining buildings, manufacturing, fabricating, and supplying products, materials and systems fitted in buildings, and those developing, implementing, and enforcing fire safety legislation.
[2] See p.5 of the Hackitt Report.
[3] https://www.gov.uk/guidance/the-building-safety-act
[4] This figure was estimated as of April 2020: see Section 1.2 'High-rise Residential Buildings in England' in 'Building Safety Programme Monthly Data Release, England: 31 July 2022'.
[5] [2022] EWHC 1813 (TCC).

Martlet, the Claimant, acquired the Gosport towers in 2017. Nine days after the Grenfell Tower tragedy in June 2017, Martlet began investigating the EWI cladding system that had been designed and installed by Mulalley, the Defendant. Those investigations revealed that the system had numerous installation defects, and the EPS boards were 'combustible.' Martlet immediately implemented 24-hour waking watch patrols to ensure the safety of the residents. Martlet later replaced the EPS-based cladding system with a non-combustible alternative that used stone wool insulation panels (referred to in the case as the 'Replacement Works'). Thereafter, Martlet halted the waking watch.

After an unsuccessful non-binding adjudication, Martlet issued court proceedings against Mulalley for the £8 million costs of the Replacement Works and the waking watch for four towers. At that point, Martlet claimed that the Mulalley installation workmanship breaches created the need for the Replacement Works and the waking watch.

Mulalley admitted to some installation defects but disputed the extent of the problems and argued a less expensive 'repair' rather than 'replacement' approach would have sufficed to remedy the installation workmanship breaches. Additionally, Mulalley argued Martlet's realisation had been triggered by the Grenfell Tower disaster and the risks posed by combustible insulation not meeting heightened safety standards. Furthermore, such heightened standards were not in existence until after the Original Works had been completed and accordingly, could not be applied retrospectively.

The Court Held That Martlet Had Proven Both Installation and Specification Breach Cases

The Court held that Martlet had successfully proven the installation breach against Mulalley. In response to Mulalley's argument, Martlet also was successful in obtaining an alternative plea based upon an allegation that Mulalley's design work resulted in a design breach as opposed to the installation workmanship breaches. Specifically, Martlet argued Mulalley's failure to specify a compliant EWI system that met the applicable fire standards at the date of the Original Works Contract was the root cause justifying the need for the Replacement Works and waking watch.

STATUTORY GUIDANCE AND LEGISLATION

TIn the decision issued by HHJ Stephen Davies ("the Judge"), he referred to a number of documents and guidance that were applicable to the design and construction of the towers at the time of the contract for the Original Works and at the time of the contract for the Replacement Works. These included the Building Act 1984 ("the Building Act"), the Building Regulations 2000 and 2010[6], the 2002 and 2006 editions of Approved Document B ("ADB")[7], and the 1988 and 2003 versions of the document entitled 'Fire performance of external thermal insulation for walls of multistorey buildings' ("BR 135")[8].

Regarding the *"true interpretation of the relevant provisions"*[9], the Judge stated *"the proper interpretation… is to be found primarily from the words used"*[10], and that *"the provisions are intended to be read and relied upon by a wide range of persons"*.[11] He then provided several key points regarding the legislative framework, referencing the drafting of the applicable sections of the Building Act, the requirements ("the Requirements") of the Building Regulations, and provisions of ADB.

The Judge confirmed that the objective of Requirement B4(1) of the Building Regulations for the external walls of buildings like the towers was for the design and installation to *"adequately resist the spread of fire over the walls and from one building to another."* The decision went further to explain that such design and installation efforts **must** [emphasis added] be achieved by considering the context and circumstances of a given project.[12] Furthermore, while the

[6] The Building Regulations are a set of 'functional' requirements made under powers provided by the Building Act, which are minimum standards for design and construction of buildings.
[7] Technical guidance on compliance with the Requirements dealing with the fire safety matters, such as Requirement B4(1) of the Building Regulations.
[8] This document is referred to in ADB and was published by the Building Research Establishment ("BRE") in 1988, and then updated in 2003, to provide guidance on the design and application of thermal insulation in the growing market of external cladding systems.
[9] [2022] EWHC 1813 (TCC), para. 76.
[10] [2022] EWHC 1813 (TCC), para. 77.
[11] [2022] EWHC 1813 (TCC), para. 77.
[12] [2022] EWHC 1813 (TCC), para. 85. The Judge also referred to Sir Martin Moore-Bick, the chairman of the Inquiry, who stated that *"although in another context there might be room for argument about the precise scope of the word 'adequately', it inevitably contemplates that the exterior **must** [our emphasis] resist the spread of fire to some significant degree appropriate to the height, use and position of the building".*

ADB guidance is not mandatory, if it cannot be demonstrated that the 'functional' requirement has been met by a properly considered alternative solution,[13] a failure to follow the provisions set out in ADB would, as a default position, mean that a building (or part of it) does not comply with the Building Regulations.[14]

Regarding the provisions of ADB, the relevant party should understand the requirements relating to the 'spread of flame' over the surfaces of external walls[15] and 'combustibility' of materials forming the external wall construction.[16] Furthermore, it was proposed in the judgment that the requirement for 'drained and ventilated' cavities in external wall cladding systems in the 2002 edition of ADB[17] *"reflected **the understanding at the time** [emphasis added] that the presence of a ventilated cavity led to a risk of fire spread through that cavity."*[18]

The Judge also recognised substantive differences between the 2002 and 2006 editions of ADB, including those related to the use of materials 'of limited combustibility' in a building over 18 meters in height. Specifically, the following differences were discussed in the decision:

- As set out in three separate un-numbered sub-paragraphs under Paragraph 13.7 of the 2002 ADB in a specific arrangement / situation:
    - In buildings over 18 meters in height, *"a fire risk in using combustible EPS insulation boards"*[19] is *"clear"*.[20]
    - A prohibition to use insulation of *"anything less than limited combustibility"*[21] applied to systems with **ventilated cavities only**.[22] [Emphasis added.]
    - While no express requirement in relation to *"insulation panels as an over-cladding…* [on the] *reading* [of] *paragraph 13.7 as a whole… it could not be assumed that there was no restriction at all as regards their use,"*[23] further advice was specifically provided in the 2002 ADB by reference to BR 135.
- An overarching approach was provided in the 2006 ADB:
    - *"… the second sub-paragraph is **materially new*** [emphasis added]"[24] and provides that external walls should follow the 'strict' guidance in Paragraph 12.6 to 12.9 of the 2006 ADB or meet the performance criteria in BR 135.
    - Paragraph 12.7 of the 2006 ADB is *"**entirely new*** [emphasis added]"[25] and required *"any insulation product"* in the external wall construction of a building with a storey 18 meters or more above ground level, to be 'of limited combustibility.'[26]

The differences between the 2002 and 2006 editions of the ADB may be significant in disputes depending on how the relevant parties interpret the ADB at the time of the design and construction of the project.

While the Court recognised that although available guidance was limited to some extent, it indicated that the role of a specifier / designer to recognise a fire risk in using 'combustible' insulation – particularly in tall residential buildings – is clear. The Court added that specifiers / designers should refer to BR 135 for further advice.

[13] A similar point was raised by the Judge at para. 97 of the judgment, in relation to Paragraph 13.5 of the 2002 ADB, specifically that the compliance with the 'surface spread of flame' requirements can be achieved either with "*specific provisions* [of Diagram 40]" or by *"undertaking – and passing – a full scale test* [based on 'Assessing the fire performance of external cladding systems: a test method', published by BRE in 1999]" ("Fire Note 9").
[14] [2022] EWHC 1813 (TCC), para. 86, by reference to Section 7 of the Building Act.
[15] Covered under Paragraphs 13.5 and 13.6 'External surfaces,' and Diagram 40 of the 2002 ADB; the 'surface spread of flame' in this context is typically captured by fire performance classifications based on test results from the BS 476 suite of British Standards, including 'National' Class 0.
[16] Covered under Paragraph 13.7 'External Wall Construction' of the 2002 ADB; the 'measure of combustibility' in this context refers to materials' capability to ignite or burn.
[17] Covered under Paragraph 13.6.
[18] [2022] EWHC 1813 (TCC), para. 98.
[19] [2022] EWHC 1813 (TCC), para. 100; this is even where the external finish met the provisions of ADB Diagram 40.
[20] [2022] EWHC 1813 (TCC), para. 100.
[21] [2022] EWHC 1813 (TCC), para. 101.
[22] [2022] EWHC 1813 (TCC), para. 101; such that the use of 'combustible' insulation panels *"affixed"* to the buildings was not *"expressly prohibit*[ed]*"*.
[23] [2022] EWHC 1813 (TCC), para. 102.
[24] [2022] EWHC 1813 (TCC), para. 138.
[25] [2022] EWHC 1813 (TCC), para. 140.
[26] The Judge stated that *"this is a clear and mandatory, design and specification requirement which had no equivalent in ADB 2002"*: see [2022] EWHC 1813 (TCC), para. 141.

Regarding BR 135, the Court made the following general comments:

- In the 1988 edition of BR 135, *"the requirement for a full-scale fire test was only applicable in the limited cases specified."*[27]
- The purpose of the 2003 edition of BR 135 was *"to provide a fire performance assessment method from full scale fire test data* [and] *to offer design principles reflecting current products and systems."*[28]
- While the 2003 edition of BR 135 did not specify the circumstances that the performance standard introduced therein was mandatory (in the end leaving this decision for specifiers / designers and regulators), this performance standard *"could be adopted"*[29] in tall buildings with sleeping accommodations.[30]

BBA CERTIFICATION: NOT A GUARANTEE

The Court concluded that Clause 2.1 of the Conditions of Contract was clear that Mulalley was responsible for the design as well as the execution of the Original Works, including the completion of the detailed design and the specification for the scheme.

One of the key areas of the dispute was the basis for the selection of the 'StoTherm Classic' system, which is a type of high-performance external wall system with continuous insulation and render finish, and the reference to the British Board of Agrément ("BBA") Certificate for this product (number 95 / 3132). BBA is the UK accreditation body that provides certification for product conformity.

In his specific analysis of the evidence the parties provided, the Judge focused upon the Defendant's architectural expert. The expert opined that at the date of the Contract a typical designer / specifier would regularly specify 'StoTherm Classic' system for high-rise residential buildings. The Judge said:

> *…it was a fair criticism of Mr [Euan] Geddes' [architectural expert for the Defendant] evidence that at times he appeared almost to suggest that it was sufficient for an architect pre-Grenfell to do little more than accept a BBA certificate at face value without need for much, if any, further investigation.*[31]

The Judge was very clear on his view of BBA certification in relation to compliance with the Building Regulations:

> *The BBA Certificates cannot be said to amount to a form of "guarantee" or "passport" to compliance with Building Regulation… it would be wrong to afford a weight to the BBA Certificates above and beyond that which appears from the Building Regulations and approved documents themselves.*[32]

The Judge agreed with Martlet that the 1995 BBA Certificate could not be read as a guarantee that the 'StoTherm Classic' system complied with Requirement B4(1) of the Building Regulations. He continued that while he was prepared to accept the Defendant's expert's evidence that *"in the real world professional designers would place great weight on the existence of such a certificate,"*[33] he did not consider *"this evidence as of any significant weight as regards the strict design and materials obligations in the contract."*[34]

THE ROLES OF TECHNICAL EXPERTS

In cases of this type, technical experts from different fields are typically appointed by the parties to provide their analyses and expert opinions on the actions of a party involved in the design and construction of a project, including the designers, design and build contractors, and specialist sub-contractors. These experts also opine whether a party exercised the level of skill and care expected of another reasonably competent member of their respective professions.[35]

[27] [2022] EWHC 1813 (TCC), para. 119; the requirement related to the omission of fire barriers up to 15m in certain external wall arrangements.
[28] [2022] EWHC 1813 (TCC), para. 122.
[29] BR 135, 'Legislation', p.2
[30] [2022] EWHC 1813 (TCC), para. 124.
[31] [2022] EWHC 1813 (TCC), para. 42.
[32] [2022] EWHC 1813 (TCC), para. 147.
[33] [2022] EWHC 1813 (TCC), para. 155.
[34] Ibid."
[35] This standard was established in an English tort law case Bolam v Friern Hospital Management Committee [1957] 1 WLR 582.

The Judge gave his view in the written decision on how the expert witnesses should assist in such cases:

> *(a) to explain technical terms, which are not obvious or adequately explained in the material itself; or*
>
> *(b) to explain how the provisions were understood by those involved in the design and specification of external cladding systems when considering the "professional negligence" aspect of this case.*[36]

The parties' architectural experts agreed the Original Works did not comply with the applicable fire safety standards and guidance. Although ADB 2002 did not contain a specific requirement for the insulated over-cladding to be either *"non-combustible or of limited combustibility"*[37], a reasonably competent architect would have referred to BR 135 (1988) in the circumstances of this case. The fire-engineering experts essentially reached the same conclusion.

CONCLUSION

The following are key points from the Court's decision of specific interest to construction professionals that design and specify materials and systems for external walls in tall buildings:

- The Court found that a specifier / designer should clearly acknowledge a fire risk when prescribing the use of 'combustible' insulation in tall residential buildings and refer to BR 135 for further advice, particularly in the circumstances not covered by ADB.
- While a 'reasonable skill and care' standard is a defence that designers often rely upon, following *Martlet v Mulalley*, a designer must account for all relevant and available guidance existing at the time of the design and construction of a project.
- Singular reliance or acceptance of a BBA Certificate (usually for an industry standard product) to justify variance from the guidance provided by the Requirements of Building Regulations and Approved Documents must be demonstrable by a clear, logical, and rational approach.

These points would be ideally in a designer's scope of considerations going forward when designing and constructing projects.

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[36] [2022] EWHC 1813 (TCC), para. 78.
[37] [2022] EWHC 1813 (TCC), para. 102.

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