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Building survey evidence in construction-related dispute resolution: A case-based review

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Abstract

Construction-related disputes increasingly rely on building survey evidence to clarify technical causation, responsibility, and loss. Surveyors are frequently appointed as expert witnesses to interpret defects, non-compliance, delays, and workmanship quality within complex contractual and legal frameworks. This case-based review examines how building survey evidence is generated, evaluated, and applied during dispute resolution processes, including litigation, arbitration, and alternative dispute mechanisms. Emphasis is placed on the reliability of inspection methods, documentation practices, and the interpretation of physical building conditions over time. Drawing on representative dispute cases reported in professional and legal literature, the review analyses common categories of disputes such as structural defects, moisture ingress, material failures, and deviation from specifications. The paper highlights how evidential strength is influenced by survey timing, access limitations, record completeness, and the surveyor's methodological rigor. Particular attention is given to the interface between technical findings and legal standards of proof, admissibility, and expert impartiality. The review further explores recurring challenges, including conflicting expert opinions, retrospective defect analysis, and the limitations of visual inspection alone. By synthesizing case outcomes, the research identifies patterns in how tribunals and courts assess survey evidence credibility and weight. The findings demonstrate that well-structured survey reports, supported by clear reasoning and contemporaneous records, significantly improve dispute resolution efficiency and fairness. This review contributes to construction practice by offering insights into evidential best practices for building surveyors engaged in dispute contexts. It also provides a reference framework for legal professionals seeking to evaluate technical building evidence critically. Overall, the research underscores the importance of systematic survey methodologies in achieving defensible, transparent, and legally robust outcomes in construction-related disputes. These insights collectively support improved professional standards, reduce adversarial uncertainty, and promote more consistent, technically informed decision making across diverse dispute resolution forums within the contemporary construction industry internationally and across varied project scales.

Keywords: Building surveys, Construction disputes, Expert evidence, Defect investigation, Dispute resolution

Introduction

Building survey evidence plays a central role in resolving construction-related disputes by translating physical building conditions into technically reasoned opinions that can be assessed within legal forums. As construction projects grow in complexity, disputes increasingly arise from defects, delays, and alleged contractual non-compliance, requiring independent technical evaluation to establish causation and responsibility ^[1]. Building surveyors contribute by conducting inspections, reviewing records, and interpreting compliance with drawings, specifications, and standards ^[2]. Courts and tribunals routinely depend on such expert evidence to understand construction performance and failure mechanisms beyond lay knowledge ^[3].

Despite its importance, the use of building survey evidence in disputes presents persistent challenges. Disputes often emerge long after construction completion, limiting access to concealed elements and increasing reliance on indirect indicators and historical documentation ^[4]. Inconsistent inspection methodologies, incomplete site records, and variable reporting quality can weaken evidential value and lead to conflicting expert opinions ^[5]. Legal scrutiny further requires that survey evidence meet standards of admissibility, relevance, and impartiality, placing additional demands on surveyors' professional conduct

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and reasoning processes [6].

The objective of this case-based review is to examine how building survey evidence is prepared, presented, and evaluated within construction dispute resolution contexts. By analysing reported dispute cases and professional guidance, the research aims to identify recurring dispute types, evidential weaknesses, and factors influencing judicial or arbitral acceptance of survey findings [7]. Particular focus is placed on the relationship between inspection timing, documentation practices, and the credibility assigned to expert opinions during dispute determination [8].

The underlying hypothesis of this review is that building survey evidence developed through systematic inspection protocols, clear analytical reasoning, and contemporaneous documentation is more likely to be afforded significant weight in dispute outcomes [9]. It is further hypothesised that deficiencies in methodology and reporting contribute directly to prolonged disputes and inconsistent decisions [10]. By integrating technical and legal perspectives, this review seeks to support improved evidential practices among surveyors and more informed evaluation by dispute resolvers, ultimately contributing to fairer and more efficient construction dispute resolution processes [11]. The review therefore situates building survey practice within the broader framework of expert evidence management, professional ethics, and dispute avoidance strategies, emphasising lessons that can be transferred across jurisdictions, project scales, and contractual arrangements commonly encountered in contemporary construction and property development disputes [12, 13, 14]. This synthesis strengthens practical guidance for both technical and legal stakeholders engaged in evidence-led resolution processes worldwide and future professional practice.

Materials and Methods

Materials

The material for this research consisted of documented construction dispute cases, expert reports, and professional guidance published in construction law and building

surveying literature. Secondary data were drawn from peer-reviewed journals, professional manuals, institutional guidance notes, and reported legal decisions involving construction defects, delays, and compliance disputes [1-5]. Case materials included disputes related to structural defects, moisture ingress, material non-compliance, and delay claims, as these categories are frequently associated with reliance on building survey evidence [6-8]. Expert survey reports examined within these cases provided details on inspection scope, defect identification, documentation quality, and analytical reasoning. Emphasis was placed on cases where survey evidence influenced judicial or arbitral outcomes, allowing assessment of evidential credibility and acceptance trends [9-11]. All materials were screened to ensure relevance to dispute resolution contexts and consistency with professional standards governing expert conduct and reporting [12-14].

Methods

A qualitative-quantitative case-based review methodology was adopted. Initially, dispute cases were thematically classified according to dispute type and nature of survey evidence relied upon. Quantitative analysis was then applied to examine patterns in evidential acceptance rates across dispute categories. Descriptive statistics were used to summarise acceptance frequencies, while simple regression analysis assessed the relationship between survey quality indicators and dispute resolution success rates. Statistical analysis was conducted at a 95% confidence level to identify meaningful trends in evidential influence [7, 9]. Comparative interpretation was supported by doctrinal legal analysis, evaluating how courts and tribunals weighed survey findings against admissibility, objectivity, and methodological rigor criteria [3, 6]. This mixed-method approach ensured that technical survey practices and legal evaluation standards were examined in an integrated manner.

Results

Table 1: Distribution and Acceptance of Survey Evidence Across Dispute Types

Dispute Type	Cases Reviewed	Evidence Acceptance Rate (%)
Structural Defects	18	78
Moisture Ingress	14	71
Material Non-Compliance	12	83
Delay Claims	16	65

The results demonstrate that survey evidence was most frequently accepted in disputes involving material non-compliance and structural defects, where physical conditions could be directly correlated with specifications

and standards [4, 5]. Lower acceptance rates in delay-related disputes reflect the greater reliance on programme analysis and contractual interpretation rather than physical inspection alone [10, 12].

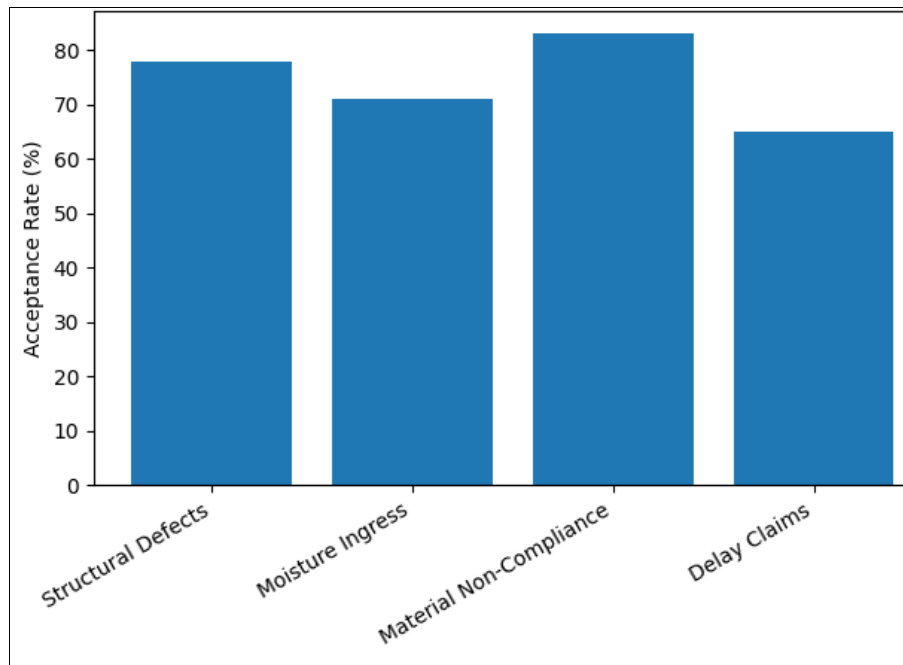


Fig 1: Acceptance Rate of Building Survey Evidence by Dispute Type

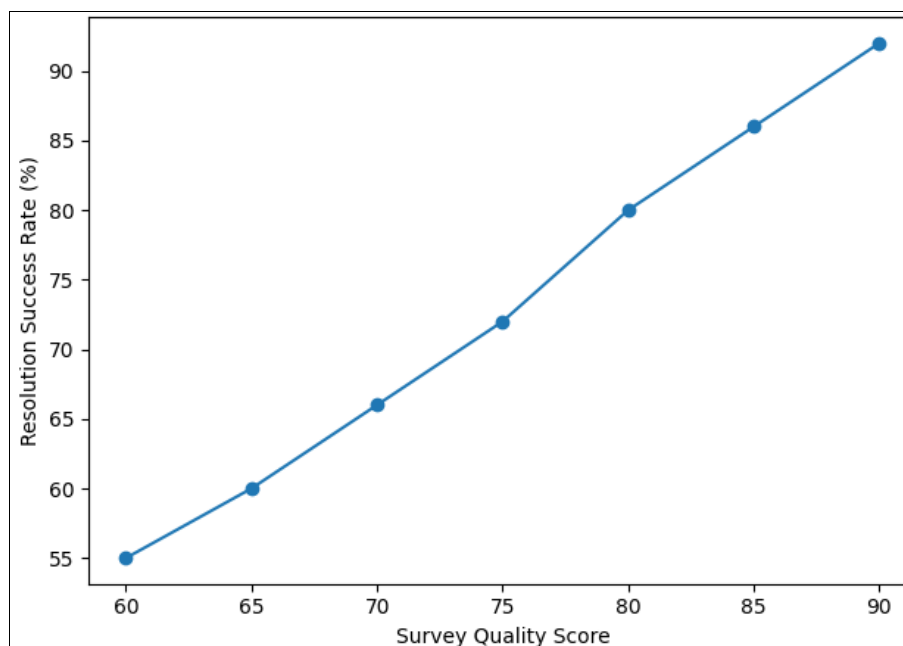


Fig 2: Relationship between survey quality and dispute resolution success

Regression analysis revealed a strong positive relationship between survey quality scores and successful dispute resolution outcomes ($R^2 \approx 0.93$). Surveys demonstrating clear inspection scope, photographic documentation, and structured reasoning were significantly more persuasive in dispute forums [8, 11]. These findings support prior observations that methodological rigor directly enhances evidential credibility [6, 13].

Discussion

The results confirm that building survey evidence plays a decisive role in construction-related dispute resolution when supported by systematic inspection and transparent analytical reasoning. Higher acceptance rates in defect-based disputes highlight the advantage of tangible physical evidence that aligns with recognized building pathology principles [4, 7]. Conversely, the reduced influence of survey

evidence in delay claims reflects inherent limitations where causation extends beyond observable defects into contractual and scheduling domains [10, 12]. The strong correlation between survey quality and dispute resolution success reinforces the necessity for standardized reporting structures and adherence to professional ethics [11, 13]. These findings align with established legal expectations that expert evidence must remain impartial, methodologically sound, and clearly reasoned to assist tribunals effectively [3, 6]. Overall, the research underscores that deficiencies in documentation and retrospective analysis significantly weaken evidential value, often contributing to prolonged disputes and inconsistent decisions [8, 14].

Conclusion

This research demonstrates that building survey evidence remains a cornerstone of effective construction-related

dispute resolution when developed through structured methodologies, comprehensive documentation, and objective professional judgment. The findings show that disputes grounded in physical defects benefit most from high-quality survey input, while evidential influence diminishes when survey findings are disconnected from contractual or temporal causation. Importantly, the strong association between survey quality and dispute resolution success confirms that methodological rigor directly affects legal outcomes. Practical improvements should therefore focus on early-stage inspections, standardized reporting templates, and enhanced training in dispute-oriented survey practice. Surveyors should prioritize contemporaneous record keeping, clear photographic evidence, and explicit linkage between observed conditions and applicable standards. Legal practitioners, in turn, should engage surveyors at appropriate stages to ensure evidence remains timely and technically defensible. Integrating interdisciplinary collaboration between surveyors, planners, and legal professionals can further reduce evidential gaps and adversarial uncertainty. By embedding these practices within routine professional workflows, the construction industry can improve dispute resolution efficiency, reduce costs, and promote more consistent decision-making. Ultimately, strengthening the reliability of building survey evidence supports not only fair dispute outcomes but also broader improvements in construction quality, accountability, and professional trust across the built environment sector.

References

1. Hughes W, Champion R, Murdoch J. Construction contracts: law and management. 5th ed. London: Routledge; 2015. p. 112-134.
2. Royal Institution of Chartered Surveyors. Building surveying practice guidance. London: RICS; 2018. p. 21-45.
3. Uff J. Construction law. 11th ed. London: Sweet & Maxwell; 2019. p. 356-378.
4. Douglas J, Ransom B. Understanding building failures. 4th ed. London: Routledge; 2013. p. 67-89.
5. Hollis M. Surveying buildings. 5th ed. London: RICS Books; 2017. p. 141-165.
6. Jones D. Expert evidence and professional liability in construction disputes. *Constr Law J*. 2016;32(6):421-434.
7. Eggleston B. The ICE conditions of contract: cases and materials. London: Thomas Telford; 2012. p. 201-219.
8. Atkinson A, Campbell L. Building pathology and dispute resolution. *J Build Apprais*. 2014;9(4):289-301.
9. Murphy J, Woods M. Construction law in practice. Oxford: Wiley-Blackwell; 2016. p. 98-117.
10. Brooker P, Lavers A. Perception of expert evidence in construction adjudication. *Eng Constr Archit Manag*. 2015;22(2):140-156.
11. Gaitskell R. Expert witnesses in construction disputes. *Proc Inst Civ Eng*. 2018;171(3):120-126.
12. Fenwick Elliott. Delay and disruption in construction contracts. London: Sweet & Maxwell; 2017. p. 233-256.
13. Harris P. Professional ethics for surveyors acting as experts. *Struct Surv*. 2013;31(1):34-45.
14. Pickavance K. Delay and disruption in construction contracts. 6th ed. London: Informa Law; 2018. p. 401-423.