2016

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Recommended Citation

Compton, K, and Keaveney, M. (2016) Impact on One-Off Housing Arising From Amended Building Control Regulations in Ireland, *International Virtual Conference, 21-25 March 2016, University of Zilina, Slovakia* doi:10.21427/wccs-r261

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Impacts on One-off Housing Arising from Amended Building Control Regulations in Ireland

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Abstract –

Single rural housing is very common in the Irish countryside. The Irish Central Statistics Office reported that one-off housing represented over a quarter of the total number of households in 2011. One-off houses are defined as occupied detached houses with individual septic tank wastewater treatment systems in rural areas (which include towns with a population of 1,500 or less).

The purpose of this study is to determine the increased cost to the consumer resulting from the introduction of the new Building Control (Amendment) Regulations 2014. In order to achieve the objective, a detailed description of past and current building control systems operating in Ireland is presented.

Phenomenal growth was recorded in the construction industry between 2000 and 2007. This period saw the construction of new housing units peak at 93,000 in 2006. Unfortunately, this increase in output was associated with a decrease in the standard of building work being carried out. Many attribute this fall in standards to the inadequate building control system in place. This system did little by way of protecting the Irish consumer. This sub-standard method of building control led to the reputation of the construction industry being irreparably damaged as builders and other professionals failed to work in a manner of compliance and accountability. This culture of non-compliance resulted in many publicised cases involving defective materials and unsatisfactory workmanship. This led to the introduction of the Building Control (Amendment) Regulations 2014.

For the purpose of gathering information on this topic, the author utilized both quantitative and qualitative methods in the form of questionnaires and interviews.

The revised system of building control should increase the standard of building work in the case of all building types. A series of measures has been implemented, the most important of which is that a registered professional will be employed to monitor the ongoing progress of each project and at the end of the project will have to certify that all Building Regulations have been complied with during the construction process. The

research has revealed the costs that will be borne by the consumer as a consequence of increased design work and ongoing inspection activities.

Keywords: *One-off Housing, Building Control, Ireland*

INTRODUCTION

The history of building control everywhere tends to be one of reaction to failure and disaster, a question of belated slamming of stable doors [1]. As is the case with many systems in Ireland, the Irish method of building control is heavily influenced by British legislation. Building Regulations from 1189 addressed the problems of densely packed housing in London. The Great Fire of London in 1666 wiped out 80% of the city and led to the creation of the London Building Act of 1667 [2]. This act was the first to allow for surveyors to be given the responsibility of enforcing its regulations. Subsequent building acts (1707 and 1709) extended that control to Westminster. Individual towns dealt with their own building regulation through Local Improvement Acts. Between 1805 and 1845 nearly four hundred Improvement Acts were passed for towns in England and Wales. The Local Government Act of 1858 extended the powers of these local authorities to regulate the structure of buildings through by-laws. The introduction of the Public Health Act 1875 consolidated Building Control in Great Britain and a similar act was passed in Ireland in 1878 [3].

In 1934 the Town and Regional Planning Act saw the creation of local planning authorities in Ireland. This act was replaced by the Local Government (Planning and Development) Act 1963, which provided the legislative power to create national Building Regulations [3]. In the aftermath of the Stardust nightclub disaster of 1981, The Fire Services Act was introduced. This Act empowered fire authorities to issue Fire Safety Notices prohibiting the use of a potentially dangerous building for a specified purpose or until the implementation of required safety measures to guard against fire and protect the safety of occupants [3]. The Fire Safety Notice could be served on the person in control of places where people sleep (excluding individual houses), health care institutions, public buildings, and places of recreation, education and training.

The regulation of new construction in Ireland is operated by two parallel systems of regulation: planning control and building control. The system is similar to the structure in the UK, on which the Irish system was originally modelled. The Irish planning and building control systems operate separately

and completely independent of each other with no connection existing between the two. Planning control is concerned with the wider social and physical environment. Building control is concerned with ensuring that all building works are constructed in accordance with the standards and guidelines set down in the Building Regulations [4].

The main purpose of building regulations is to provide for the health, safety and welfare of people in and around buildings”[5]. Building regulations outline the standards upon which all building works should be completed and designed. These standards include areas such as workmanship, energy conservation, accessibility and fire safety, i.e. issues related to the building itself.

With regards to inspections, each application is examined by a local planning authority in advance. Only a small number of buildings are actually inspected by local Building control officers [6]. Inspections such as these can be of plans or on site and can take place at any time during the actual construction of the building or even after completion. Responsibility for compliance with these regulations rests with the designers, owners and builders.

Modern building control legislation in Ireland dates back to the Building Control Act 1990. This Act concerned new buildings, extensions, material alterations and changes of use in commercial and residential property [7]. The 1990 Act saw the introduction and development of building regulations, Building Control Regulations and Building Control Authorities.

- *Building Regulations*: Set performance standards for the design and construction of buildings.
- *Building Control Regulations*: Ensures the proper implementation of the Building Regulations.
- *Building Control Authorities*: Designated City and County Councils in Ireland who are responsible for building control in their geographical area.

Immediately following the introduction of the Building Control Act 1990, building regulations came into operation. However, the system of enforcement of these regulations (building control) was a much more gradual and slower process leading to the nationwide system of building control authorities. These authorities, designated by the Minister for the Environment, Heritage and Local Government are each of the city and county councils in Ireland with each council in charge of the enforcement of the building regulations in its geographical area. The Building Control Act 2007 was introduced to amend and extend the Building Control Act 1990.

In the early 1990’s in Ireland, the CCMA (City and Council Managers Association) agreed non-statutory guidelines for

building control inspections which set a target inspection level of 12-15% of all developments [3]. The obvious concern to note from this inspection regime is that 85% of new dwellings do not receive inspections and no form of assurance can be provided to these consumers. Up until March 2014, the system in place in Ireland to regulate buildings was not one which included statutory certificates of compliance issued by local authorities but one which provided an opinion on compliance by the designer employed by the consumer. Opinions on compliance are not based on an agreed number of site inspections which should be carried out at all of the critical stages during the course of construction and do not require certificates from builders or sub-contractors.

The Building Control (Amendment) Regulations 2014 came into effect on the 1st of March, 2014 and have brought about significant changes to the building control regime in Ireland. Compliance with the provisions of the new regulations is of great importance for building owners, purchasers, or prospective tenants because the regulations prohibit the opening, occupation or use of a building until a Certificate of Compliance on Completion has been filed and registered by the Building Control Authority. The new regulations have a considerable effect on the way building design and construction is managed and executed. Competent professionals now have greater control of inspections and provide a chain of responsibility throughout the design and construction process [7]

Key changes introduced by the revised regulations include mandatory design certification by a Design Certifier, compulsory inspection by an appointed Assigned Certifier, building supervision and certification and submission of plans and particulars. It is important to note is that the building regulations themselves have not changed but rather the process by which compliance or more importantly non-compliance with the regulations is controlled [8]. A key factor for the building owner to note when appointing the Design Certifier and Assigned Certifier is that they are either one or a combination of the following:

- A Chartered Engineer
- A Registered Architect
- A Registered Building Surveyor.

AIMS AND OBJECTIVES

The aim of this research project is to establish what additional costs will be incurred as a result of the implementation of the Building Control (Amendment) Regulations, 2014.

The objectives of the investigation are:

- to analyse the previous Building Control Regulations in Ireland and highlight the key areas of concern.

- to describe the operation of and roles involved in the new regulatory system.
- to identify and discuss any extra costs incurred throughout the building project by each party involved i.e. architect, building contractor, engineer and ultimately the customer.

METHODOLOGY

For this study, the author adopted a mixed method approach. This was chosen as it was considered to be the most appropriate strategy for achieving the research objectives. The quantitative research component involved the use of a questionnaire survey directed at architects, engineers and quantity surveyors practicing in Ireland. This allowed the author to gain objective information on industry specialists' perspectives and knowledge of the revised regulations and their opinion on what additional costs would be incurred. Interviews were conducted which allowed the author to gain more in depth knowledge on the participants attitudes to and understanding of the new regulations. A sequential design was adopted as quantitative data was collected and then expanded on by following up with interviews. The author considered such methods to be invaluable in this research project. The methods adopted allowed for objective and factual data to be obtained. However; combining both quantitative and qualitative strategies enabled the author to gain a greater understanding of industry professionals' knowledge and awareness of the Building Control (Amendment) Regulations, 2014 that quantitative methods, if used alone, may not achieve.

The questionnaire used in this research project consisted of both open and closed-ended questions as the author considered a combination of questions to be the most effective. The questions used in the questionnaire had set responses. However, the participants were also given the opportunity to elaborate further on the questions if they so wished. Convenience sampling was used as only those who made their email addresses publically available online were contacted about the study. The questionnaire was distributed to a target sample of 80 participants. A total of 20 people replied resulting in a response rate of 25%. Semi-structured interviews were arranged with six respondents. The interviewees were all well-established and experienced professionals in the construction industry in Ireland. Five of the interviewees came from the private sector and included engineers, an architect, a quantity surveyor and the chairman of a building development company. The public sector respondent was an employee in the building control department of a county council. The author had a list of pre-determined questions, however these were used as a guideline for discussion rather than a strict protocol to be followed in each interview. The questions used in the interviews were designed with the goal of describing the participant's personal

experience with past and current Building Control Regulations in Ireland.

SURVEY RESULTS

85% of the respondents agreed that the introduction of the new regulations will improve the standard of construction in Ireland. The majority of respondents commented that the reason for these improved standards will be primarily due to "better supervision and inspection" with greater "responsibility and accountability" by all the main parties involved in the construction process. Under the new system, inspections of building work will now take place at all critical stages of work during the building process.

For any relationship to work, be it personal or in the business world, trust must exist between all parties involved. The questionnaire results demonstrate that less than half of the respondents (45%) believe the new regulations will help foster a more trusting relationship between the client and the builder. Many of the respondents identified that "the relationship is related to quality of work" and "as quality of work increases, a better relationship between the client and builder will develop." Many of the respondents suggested that "clients will have more assurance that their work will be completed to a reasonable standard" and this was identified as a reason for improving the relationship between the consumer and builder.

When questioned as to whether the liability attaching to the new regulations would discourage owners from carrying out their own building work (i.e. self-build), 80% of respondents believed that the regulations would act as a disincentive. One of the respondents commented: "assigned certifiers will not take on the extra risk of signing off on a collection of different sub-contractors" involved on a building project. When a building project is complete both the Assigned Certifier and Builder must sign the compliance certificate. On a self-build project the client assumes the role of builder but as suggested by one respondent in this survey a person carrying out a self-build may not have the "competence and experience" to co-ordinate sub-contractors.

Three quarters of those surveyed agreed that clients would be dissatisfied or very dissatisfied to pay for the extra costs likely to arise from compliance with the new regulations. One respondent claimed that on "small domestic projects, clients do not have the finances to cover the requirements for mandatory increased professional services required." Another respondent noted that the main issue is that "professionals are unsure [of] what to tell their clients [in regard to what] these extra costs will be [for]." It was pointed out that "from the client's perspective all that is being increased is red tape and there is no obvious measurable gain or advantage to the project, just boxes of somewhat irrelevant documents."

The research revealed that 50% of the respondents considered that construction costs would increase by 4-5% because of the imposition of the new regulations, with 30% believing costs would increase by 2-3%.

Figure 1 - By how much is the construction cost of one-off housing likely to increase as a result of the new regulations?

Almost two-thirds of those surveyed estimated that more than 30 additional hours compared to the previous system would be required to produce fully compliant drawings and specifications for planning permission requirements for a hypothetical 200m² house. 37% expected that up to 50 hours additional time would be required to complete inspections and documentations up to and including submission of final compliance certificate. A lot of factors will have to be taken account of in determining the hours required such as:

- Size of project;
- Complexity of construction involved;
- Experience and professionalism of builder responsible for project;
- Work programme for project.

CONCLUSIONS

As shown in the literature review, enforcement of building control regulations was inadequate as the inspection regime adopted by the authorities resulted in 85% of new dwellings not undergoing an inspection process. Another area of weakness shown to be evident in the building control system and incorrectly regarded by some parties as 'self – certification', was the system in place before 2014 whereby an architect or engineer issued an opinion on compliance with regard to a specific building. This form of certification had no statutory basis and was not issued to or by a building control authority. This system therefore offered no protection to the customer. This system of building control lacked a clear chain of responsibility and accountability and resulted in the image of the construction industry being tarnished.

The checks put in place by the new regulations should restore consumer confidence in the construction industry and provide customers with the protection they need. A positive view was expressed by a majority of the respondents in regard to the introduction of the new regulations.

Some concern was raised as to the cost implications to the customer of introducing the new control measures. Half of those who participated in the survey indicated that construction costs could increase by between 4-5% with a further 30% who thought the increase would be between 2-3%. Therefore a hypothetical 200m² house at a cost of €1,050/m² to construct by the builder would amount to €210,000 and the regulation compliance costs would add between €8,400 and €10,500 to that cost for the 4-5% increase and between €4,200 and €6,300 in the case where the increase is between 2-3%. In recognition of these extra costs and after a period of consultation, the Government issued new regulations in late 2015 which provided for an opt-out of statutory certification in the case of one-off houses. It is expected that the cost of complying with the regulations will be more reasonable in the future. The Government has also stated that the inspection capacity of local authorities will be enhanced from the current low level of inspections to ensure that standards do not decline as a consequence of the opt-out provision.

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