

## Basic Study on Standard Process Model for Defect Consulting in Korea

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**Abstract.** Objective and fair defect consulting is the key to the amicable resolution of the escalating defect disputes about apartment houses, and it requires a precondition, a foundation to carry out the consulting in such a fashion through the standardization. This study suggested a basic model for the standard defect consulting procedure for establishing the basic system of the consulting operation. The future goal of this study is to develop a model for the standard defect consulting procedure to collect extensive data related with defect consulting effectively and develop a system for providing useful information that can assist the court in making a decision for defects.

**Keywords:** Standard Process Model, Defect Consulting

### 1 Introduction

The housing culture of Korea mass produced a peculiar form of residence called apartment housing. Such a social trend which was given birth by the need of the Age of Development and continued until today is now showing growing interest in the efficient use of existing apartment housing than the demand for new ones as the society and economy entered the maturing phase[1]. Also, the trend of considering the apartment housing as assets than living space prevailed, drawing interest into increasing and maintaining its value and amplifying the dispute between producer and consumer on the apartment housing, which is called the defect dispute. Such defect disputes are becoming intensified due to insufficient objective and scientific evidences and clear judgment criteria for defect, so Korea began to establish the Defect Judgment Standard for Calculating Repair Cost on Defect in order to eliminate defect dispute[2]. Still, Korea mostly depends on defect consultants for technical matters relating to defects due to the absence of an objective and rational consulting process for determining defect in various defect issues, repair cost, and so forth. Moreover, judges entrust consultants with professional investigation to supplement their insufficiency of technical expertise. Therefore, the work of the defect consultant is important and the consulting significantly depends on the quality of the defect consultant [3].

### **1.1 Purpose**

Since defect consulting is determined by the professional but subjective judgment of the consultant based on his or her own experience and insight, it is an urgent matter to define defect consulting clearly and developing a rational operating system. This study intended to develop a standard procedure model for consulting as a part of the effort to standardize defect consulting objectively and fairly.

### **1.2 Scope and method**

To develop a standard procedure model for defect consulting, related documents and regulations were examined and a basic model for standard procedure was established accordingly. Also, 12 defect consulting cases were collected and put under matrix comparative analysis to see whether standard procedure for each stage is composed rationally in order to review the basic model for standard procedure.

## **2 Literature Review of Defect Consulting**

### **2.1 Definition and Specification of Defect Consulting**

Consulting is a proving method which orders a third party with special intellectual experience to report the decision obtained from the review of laws, custom, and empirical laws based on academic knowledge in order to supplement judge's knowledge and experience. In defect disputes, the final decision is provided by the judge while the decisions for details are made by consultants. In other words, the consultant must suggest specific evidences through scientific methods for the definition, type, and level of defects [4].

However, the matters related with defect dispute are broad, inclusive and difficult to divide them in a simple and concise manner for discussion. Also, it would cause chaos as the defect has not been defined specifically and the standards related with defect have not been organized firmly.

### **2.2 Review on Research and Regulation**

There are not many academic approaches and studies on defect consulting for it is mostly about practical matters. Recently, researches and studies have increased gradually along with the society's growing interest in it, however, mostly in the legal sphere and not in the technical sphere. The study by Seo & Park(2013), one of typical studies, analyzed defect consulting report, the outcome of defect consulting in formal system and qualitative system. According to the result of the study, the formal system of the defect consulting has many duplicated matters and also has many differences in details as it lacks consistency. Moreover, the consulting is provided while the judgment criteria, investigation method, and so forth about the type and

definition of defects have not been suggested specifically, and as a result, complaints about the result of consulting are continued. In addition, the qualitative system has hardly standardized the subject, data, and reference which are the major elements of consulting, and the issue of low consulting fees and the technical limit of the working-level staff are also discussed as major issues[5].

### 2.3 Standard Process Model of Defect Consulting

This study reviewed major studies on consulting and case data and established the basic model for the standard procedure of defect consulting as follows. The standard procedure of defect consulting comprised 5 stages such as Filing of Lawsuit(A1), Consulting Order (A2), Defect Consulting (A3), Estimating a repairing cost (A4), and Writing a consulting report (A5), and the major details are shown in Table1.

**Table1.** Main steps and detailed works of defect consulting

Main step	Detailed works
A1. Filing of Lawsuit	A11.Receipt A12.Scrutiny A13.Pretial
A2. Consulting Order	A21.Consultant selection A22.Commission A23. Consultant 's Oath A24.Consulting Order
A3. Defect consulting	A31.Preliminary investigation A32.Field investigation A33.Additional investigation A34.Result analysis
A4. Estimating a repairing cost	A41.Quantity count A42.Estimate for repairing cost A43.Total cost
A5. Writing a consulting report	A51.Consulting report A52.Detailed statement A53.Field investigation report
A6. Submitting a consulting report	A61.Submitting a report

## 3 Case Study

### 3.1 Outline

12 case data were collected and analyzed from recent defect consulting reports (2011~2013) for the verification of the standard procedure model in Paragraph 2.3(Table 2). Basic analysis showed that the consulting report hardly included the information about the operations took place in the stages of Filling Lawsuit and Consulting Order.

**Table2.** Information of defect consulting case

No	Case number	Handled court
1	2011gahap10346	Seoul central district court
2	2012gahap528936	Seoul central district court
3	2012gahap82775	Seoul central district court
4	2012gahap95771	Seoul central district court
5	2012gahap21879	Seoul central district court
6	2012gahap50358	Seoul central district court
7	2012gahap24274	Seoul central district court
8	2011gahap74418	Seoul central district court
9	2012gahap35045	Seoul central district court
10	2012gahap11351	Suwon district court
11	2012gahap55025	Seoul central district court
12	2011gahap6577	Incheon district court

### 3.2 Comparison

Matters related with each stage from Filing of Law Suit to Report Preparation were compared according to the result of the basic analysis in Paragraph 3.1. The result of comparing the standard process for defect consulting for 12 cases is shown in Table 3.

**Table 3.** Comparison by defect consulting cases

No	A 11	A 12	A 13	A 21	A 22	A 23	A 24	A 31	A 32	A 33	A 34	A 41	A 42	A 43	A 44	A 51	A 52	A 53	A 61
1	×	×	×	×	×	×	●	△	△	×	●	●	△	●	●	●	●	●	●
2	×	×	×	×	×	△	●	△	△	●	●	●	●	●	●	●	●	●	●
3	×	×	×	×	×	△	●	●	●	△	●	●	●	●	●	●	●	●	●
4	×	×	×	×	×	△	●	●	●	△	●	●	●	●	●	●	●	●	●
5	×	×	×	×	×	△	●	△	△	△	●	●	●	●	●	●	●	●	●
6	×	×	×	×	×	△	●	△	△	△	●	●	●	●	●	●	●	●	●
7	×	×	×	×	×	△	●	△	△	△	●	●	●	●	●	●	●	●	●
8	×	×	×	×	×	△	●	●	△	●	●	●	●	●	●	●	●	●	●
9	×	×	×	×	×	△	●	△	△	×	●	●	●	●	●	●	●	●	●
10	×	×	×	×	●	●	●	△	△	×	●	●	●	●	●	△	△	△	●
11	×	×	×	×	●	△	●	△	△	●	●	●	●	●	●	△	△	△	●
12	×	×	×	×	×	△	●	△	△	×	●	●	●	●	●	●	●	●	●

### 3.3 Result and Implication

The result of analysis showed that the matters related with the Filing of Lawsuit Stage (A11~A13) and Consultant Selection (A21~A22) were hardly mentioned. There were some cases where Consultant's Oath (A23) was recorded in the procedure, and Consulting Order (A24) was recorded in the procedure.

In the Defect Consulting (A31~A34), Preliminary Investigation (A31), Field Investigation (A32), and Additional Investigation (A33) showed differences for matters, however, indicated them partly in most cases, and Result Analysis (A34) was found in all cases.

Estimating a repairing cost(A41~A44) was indicated as an item in all cases while there were differences in each case in the details.

Writing a consulting report (A51~A53) was found in all cases except Case No. 11, however, similarly to Estimating a repairing cost part(A41~A44), there showed differences in each case in the details.

Finally, Submitting a consulting report(A61) is the stage for formally submitting the consulting report to the court. It was confirmed by the existence of submitted report and was found in all cases.

In summary, it appeared that most operation stages matched the standard procedure model and it is necessary to obligate the specific indication of said items that more or less show difference in the consulting report preparation guide for standardization. Also, there were great differences in the details (order, terms, analysis system, etc.), which need to be studied further through intensive analysis in the future.

This study only reviewed the formal system of each operation stage and could not review the qualitative system. For this, the future goal of the study includes the relevance to the specifically required information, necessary manpower, and cost information of each stage in order to probe into the qualitative system.

## 4 Conclusion

Objective and fair defect consulting is the key to the amicable resolution of defect disputes, and it requires a foundation to carry out the consulting through the standardization of defect consulting. The basic model for the standard defect consulting procedure suggested in this study could establish the basic system of the consulting operation. The future goal of this study is to develop a method for collecting extensive data related with defect consulting effectively and processing them into high quality information.

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