
SPECIFICATION; A COMMUNICATION STRATEGY IN THE BUILDING INDUSTRY OF NIGERIA – IMPLICATIONS FOR ARCHITECTS

¹Ayodele, Elijah Olusegun and ²Ayodele, Victoria Omodunbi

¹Department of Quantity Surveying, Rufus Giwa Polytechnic, Owo, Nigeria and ²Department of
LEMS, Communication In English Unit, Rufus Giwa Polytechnic, Owo, Nigeria

ABSTRACT

This study examined specification as a communication strategy in the building industry of Nigeria. It was carried by the use of structured questionnaire distributed to Contractors and Quantity Surveyors and then structured and unstructured questionnaire to Architects who have practiced for at least ten years in the South West of Nigeria. Data collected from sixty-two Contractors and Quantity Surveyors and then forty-three Architects all formed the basis of this study and were analyzed by severity index. The results showed that partial and scanty specifications accompanied building drawings and were caused by Architects assumption that Contractors ought to understand specifications hasty documentation, time consuming and voluminous nature of specifications. The result also showed that partial and scanty utilization of specifications result into the use, by Contractor of sub-standard materials and workmanship and the presence of time and cost overruns. It is therefore recommended that Architects should accompany all building drawings and designs with full specification to avert unpleasant consequences.

KEYWORDS: Specification, Communication, Architect, Sub-standard materials, Sub- standard workmanship, Building, Nigeria

INTRODUCTION

According to Jagboro (1996) drawings present a pictorial representation of the building or part of the building to be erected – they give the size, form, location and arrangement of various constructional elements are shown by lines, dots and symbols. As defined by Scott (1990) with reference to the Oxford Dictionary, specification is an article or particular specified or a detailed statement of particulars especially workmanship and materials to be undertaken or supplied by an Architect, Builder, Manufacturer, etc. It is gathered from Longman Dictionary (2005) that specification is a detailed instruction about how buildings, equipments etc should be made or a detailed description of what a job involves. In the same vein Scott (1990) opines that the object of specification is to communicate to someone how something is to be done, so that the specifiers intention are clearly understood without doubt or ambiguity and there will be no confusion in the mind of the person who is to perform the specified works. In the assertion of Jagboro (1996) specification, breakdown the interrelated information shown on the drawings into separate organized, orderly units of work and generally describe the followings: type of quality of materials, equipments and fixtures, quality of workmanship, methods of fabrication installation and erection, test and requirements of British standard and codes of procedure and catalogue references for manufacturers equipment.

Specification is complementary to drawings and is a written form of communication.

According to Abuya and Ariyo (2005), generally written communication has the following as advantages:

- It is relatively permanent as it can be referred to or used as references
- Alteration of written document is very cumbersome or impossible
- It is difficult or impossible to deny what is written
- It is reliable
- It is can be more under stable as it can be read over and over again
- It can be reproduced especially with photocopying machines or resograph
- It is formal and authoritative
- Record keeping is made possible

Disadvantages of written communication can generally be:

- It can spread errors far and wide
- It can be responsible for delay responses because it lacks instant feedback
- Poor handwriting and typographical errors are part of its weaknesses
- It is time consuming, especially when encoding or decoding
- It can be lost in transit
- Illiterates are at a loss because written communication requires some level of literacy for results.

According to Willis and Willis (1979) and Jagboro (1995) specifically, specification a written form of communication perform the following functions in construction and related contracts:

- Specification clauses prepared by the Architect are used by the Quantity Surveyor in preparing bills of quantities
- Specification clauses in accepted tender documents are used by the Clerk of works, site agents and foreman during the execution of the contracts as part of Architect's instructions for carrying out the work.
- Specification clauses of materials and workmanship prepared by the Quantity Surveyor are used in conjunction with bill items and the drawings by the Contractor to prepare tender bid
- In exceptional cases of maintenance and repair contracts, contractors would normally prepare their tender bids from drawings and specification clauses under such a situation, contractors will prepare their own quantities of work from the drawings and build up their estimates by relying on specification for full description of the quality of material and workmanship.

BACKGROUND TO THE STUDY

It is the opinion of Olotuah (2009) it is either that designer does not possess the knowledge of good detailing principles or choice of materials or that the detailing (specification) was not considered worthy of thought in the early design stages. The prevailing situation then in the United Kingdom made the Aqua Group (1980) commented that "..... Specification has frequently been abandoned...." In other words many designs are not complimented by specifications and according to Olotuah (2009) this has led to the arbitrary use of inferior materials by contractors and this in turn have resulted into building collapses across the country. It has also been observed in Nigeria that many building designs are not accompanied by full specifications. This study is put in place to determine the extent of utilization of specification on building works; the reasons for and effects of scanty or non-use of specification clauses.

OBJECTIVES

The objectives of this research are to:

1. Determine the extent of utilization of specification by Architects on building projects
2. Determine the reasons for partial or non-utilization of specification by Architects.
3. Assess the effects, on building projects of partial or non-utilization of specifications.

METHODOLOGY

This study was carried out (i) by the use of well structured questionnaire administered to Quantity Surveyors and Contractors who have practiced for at least ten years in South West of Nigeria, to determine the extent of utilization of specification by Architects and determine the effects of partial or non-utilization of specification, (ii) by use of structured and unstructured questionnaire and interview to Architects reasons of why specification is partially or not utilized on building projects. The contents that a full specification should possess and as used in this study and contained in the questionnaire are as suggested by Jagboro (1995).

The information collected from the retrieved questionnaires sixty-two and forty-three respectively, formed the data that were used in this study and were analyzed by severity index.

Table 1: Extent of Utilization of Specification

S/N	Contents of Specification	Very unlikely	Unlikely	Likely	Very likely	Severity Index
1	Type and quality of materials	25.81	32.26	17.80	24.20	42.00
2	Type and quality of workmanship	25.81	32.26	17.80	24.20	42.00
3	Methods of fabrication and installation and erection	53.23	40.32	3.23	3.23	6.46
4	Test and requirement of BS and codes of procedure	59.68	40.32	0	0	0
5	Catalogue reference for manufacturers equipment	51.62	48.38	0	0	0

Table 2: Effect of Scanty/Non-Use of Specification on Building Projects

S/N	Effects	Very unlikely	Unlikely	Likely	Very likely	Severity Index
1	Sub-standard Material	0	0	35.48	64.52	100
2	Delay	0	0	43.55	56.45	100
3	Sub-standard Workmanship	1.61	6.45	11.29	80.65	91.94
4	Cost Overrun	8.10	16.13	32.25	43.55	75.80
5	Abandonment	12.90	38.72	12.90	35.48	48.38

Table 3: Reasons for Scanty/Non-use of Specification

S/N	Reasons	Very unlikely	Unlikely	Likely	Very likely	Severity Index
1	Assumption	0	0	7.0	93.0	100
2	Hasty Documentation	2.33	6.98	20.93	69.77	90.70
3	Time consuming	0	13.95	16.20	69.77	85.97
4	Voluminous	0	13.95	16.20	69.77	85.97
5	Non-possession of know how	18.61	46.51	11.63	23.26	34.88

FINDINGS

Table 1 show that out of five items that Architect need to reflect in specification; only two of them i.e. Type and quality of materials and type and quality of workmanship are reflected to a level below average.

From Table 2 it is gathered that effects of partial use of specification are: the use of sub-standard materials, delay, use of substandard workmanship, cost overrun, and possible abandonment.

Table 3: show the reasons for partial utilization of specification are: Architect's assumption that the Contractors should know what to do; hasty documentation, time consuming and voluminous nature of specification.

DISCUSSION

The findings that; drawings are accompanied by: scanty description of type and quality of materials and labour, drawings are accompanied by almost no description of method of fabrication and installation, no description on test and requirement of BS and codes of procedure and no mention of reference for manufacturers equipment are all in disagreement with the assertion of Jagboro (1996) who asserted that full specification should accompany

all building drawings. The findings agree with the comment of the Aqua Group (1980) who mentioned that specification clauses... have frequently been abandoned". Absence of specifications on building works in Nigeria has resulted into the utilization of substandard materials and workmanship which according to Odunlami (2002), Bolaji (2002) are some of the causes of building collapse. Delay in project completion and cost overruns and may lead to project abandonment.

RECOMMENDATION

To curb the negative effects of scanty/non-use of specification i.e. the use of sub-standard materials and labour, delay and cost overruns; which may result into either project abandonment or building collapse, Architects should accompany all their building drawings with full specifications.

CONCLUSION

Majority of building designs in Nigeria are not accompanied by full specification and this had led to the use of sub-standard materials, workmanship, delay and cost overruns.

REFERENCES

- Abuya E.J & Ariyo K.S. (2005) Introduction to Communication Skills. In eds Abuya E.J, Ogunmoyero R.O, Ariyo K.S., Olaopa B.A., *Modern Communication Skills for tertiary institutions* Vol 1
- Aqua Group (1980) *Pre-Contract practice for Architects and Quantity Surveyors*, 6th Edition Ganda Publish Ltd London
- Ashworth A. (1998) *Engineering Contractual Procedures*, Longman England
- Bolaji E.O. (2002) Building Materials Specification and enforcement on site In ed. Ogunsemi D.R., Building Collapse; causes, prevention and remedies Workshop organized by Ondo State Nigerian Institute of Building, Akure Nigeria
- Jagboro G.O. (1996) *Introduction to measurement and specification of building Works* 2nd edition Fancy Publications Ltd. Ile-Ife Nigeria
- Lim E.G. and Alum J (1995) Construction Productivity Issues encountered by Contractor in Singapore. *International Journal of Project Management* 13 (1), 51-58
- Odunlami A.A. (2002) Building materials specification and enforcement on Site. In ed. Ogunsemi D.R., Building Collapse: Causes, prevention and remedies. Workshop organized by Ondo State Nigerian Institute of Building, Akure - Nigeria
- Olotuah A.O. (2009) Building Collapse. Seminar delivered to Environmental Students Association Rufus Giwa Polytechnic, Owo – Nigeria
- Pearson Education Limited (2005) *Dictionary of Contemporary English*. Longman England
- Scott J.J. (1990) Specification an Introduction Butterworth. London
- Wills A.J. & Willis C.J. (1979) *Specification writing for Architects and Surveyors*. 7th edition. Granada Publishing Ltd. London

Received for Publication: 19/06/11

Accepted for Publication: 17/08/11

Corresponding author

Ayodele, Elijah Olusegun

Department of Quantity Surveying, Rufus Giwa Polytechnic, Owo, Nigeria