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Common Building Defects in Residential Building Stock of Qasimabad Hyderabad

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***Abstract* - It is observed that many housing schemes and societies have an enormous amount of common building defects after construction. These common defects building decrease the workability, comfort and the causes devaluation of the property. The occupants need to spend a good amount of money on the rework before and after start to live in the houses. The study of common defect is however critical to analyze. There is knowledge gap regarding housing and common building defect. The aim of this study is to identify the existing common defects in residential building stock and their possible causes. Study will provide insights towards common building defects in residential building stock, Furthermore, the study also highlights the current issues, problems related to these defects and possible causes. Raising awareness and dissemination of knowledge.**

Keywords: Common Defects, stock, workability, highlights, Qasimabad.

I. INTRODUCTION

Hyderabad is the second largest city of the province of Sindh, Qasimabad is one of the rapidly growing urban areas of Hyderabad.

(Georgiou, Love, & Smith, 1999) divided defects in three categories: Technical. Defect caused when the materials or building elements do not meet or reduce their functional performance.

Aesthetic. A defect which adversely affects the appearance of the building material or element. Functional. A defect which leads the building failure to function as it was planned and designed.

Problem Statement: Most of the residential buildings including housing schemes and societies have an enormous amount of common building defects after construction, these defects includes cracking, discoloration, moisture, graffiti and so on. These common defects impacts badly on aesthetic appearance, immediate renovation required, effect on human psychology and require huge amount of money for their proper fixation. The workability and thermal comfort of the users is also disturbed on a great extent. These common defects also become a major cause of property devaluation.

A number of high profile cases have revealed that the number of defects and rework, on comparatively small new houses, can be enormous (James, 2007). Seow (1997), Olubodun and mole (1999), analyzed Furthermore translated the factors which influences the building parts Also investigates those associations amongst those fabricating segments numbers shaping An development unit, Yusof et al (2012) investigated What's more examined those essential issues for support administration in the connection from claiming urban lodging. Past investigations need indicated that residents' investment As far as reporting weight deterioration and observing fabricating defects is a paramount perspective. This study suggests fixing these current problems.

II. RESEARCH METHODOLOGY

Research initiated with the problem identification which are common building defects indifferent buildings to approach a proper solution for these defects a step by step methodology was adopted where the factors which are responsible for the common building defects were studied by reviewing the literature and past researcher, in order to gain first-hand knowledge about building defects and their causes various questionnaire, surveys and physical interviews were conducted from the tenants in studied area.

With the reference of the made survey data was analyzed with help of software SPSS and MS excel.

Finally in the light of obtained results in this study recommendations are given in order to avoid/repeat these common defects in newly construction of houses.

Data Analysis: Questionnaires were collected various categories of houses inhabitants to determine and analyze the accurate data and categorized living area, while collecting the information regarding the common defects of residential Building Stock the different the questionnaires were designed in details and charts, frequency tables were generated to obtain more accurate information and results.

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I. Graffiti: is writing, drawing, or images connected should at whatever surface without the consent of the property owner. Graffiti is a sign of urban decay. It need ended up everybody's blemish. Graffiti generates dread of neighborhood wrongdoing Also precariousness.

Figure-1: Showing the graffiti on exterior of the walls

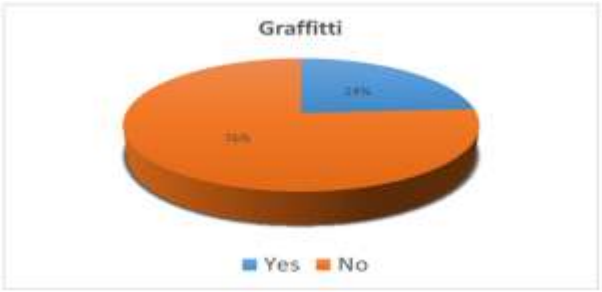

Figure-2: Data analyzed through questionnaires for obtaining results for graffiti level on exterior walls of the houses

II. Discolouring / staining: The abandon for discoloration/staining for a building façade may be tasteful as opposed structural in any case might still a chance to be unreasonable with amend.

Figure-3: showing the Discoloring/staining in exterior or facades of the building

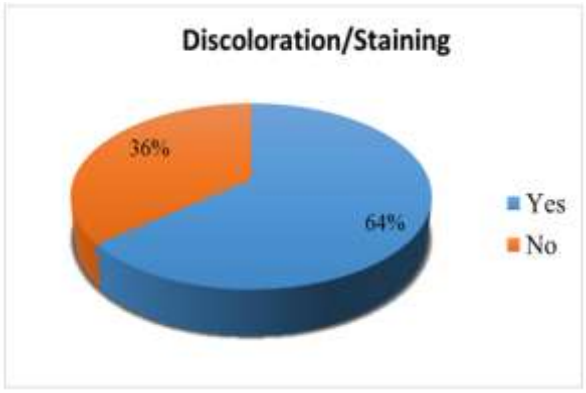

Figure-4: Data analyzed through questionnaires for obtaining results for discoloring/staining

TABLE-I

Shows obtaining the more accurate results for Discoloring/Staining the Frequency table analyzed through questionnaires

Discolouration/Staining

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	16	64.0	64.0	64.0
	No	9	36.0	36.0	100.0
	Total	25	100.0	100.0	

III. Cracks: Cracks result in applied forces greater than those which the building or its part can withstand. These forces may have emerged externally to the building or internally within the building or have been developed in the materials of the building as a result of Chemical changes. There may be a single force or a combination of forces having a single cause or several causes. These transformed cracks infiltrate through finishes under the bricks, in length cracks over width for wall, askew cracks during corners about window alternately entryway also cracks with rust staining.

Figure-5: Showing the cracks in roof of the building

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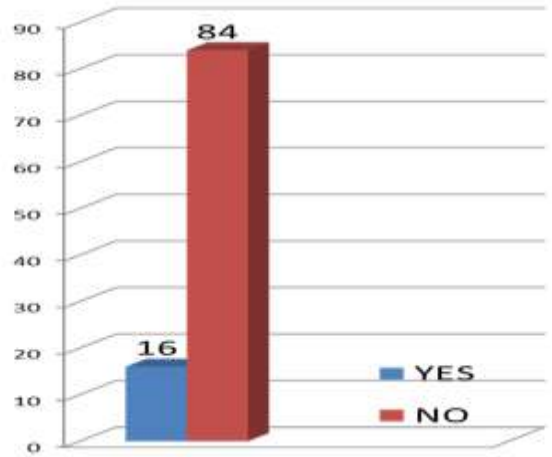

Figure-6: Shows obtaining the more accurate results of Cracks in Chart analyzed through questionnaires

TABLE-II
Shows obtaining the more accurate results for cracking in roof the Frequency table analyzed through questionnaires

Cracks in roof

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	4	16.0	16.0	16.0
	No	21	84.0	84.0	100.0
	Total	25	100.0	100.0	

III. RESULTS AND DISCUSSIONS

Through the analysis obtained data, it was assessed that following are the problems that are created due to defects in houses. Devaluation of property, residents unsatification thermal comfort disturbance, decrease workability, dull aesthetic appearance of building, poor performance, increase maintenance cost.

IV. CONCLUSION

The author suggests that there must proper implementation of local standards (by laws) provided by local authorities to avoid common buildings defects and failures. proper workman ship is highly encouraged for the flawless construction, skilled labour is one of the major requirement, proper following the detailed drawings follow the construction as per given design and specifications of the building, proper specifications of materials, proper supervision by professionals.

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