DEPARTMENT OF BUILDING

UNIVERSITI TEKNOLOGI MARA (PERAK)

REPLACEMENT BROKEN TILES

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FEBRUARY 2022

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entitled

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STUDENT'S DECLARATION

I hereby declare that this report is my work, except for extract and summaries for which the original references stated herein, prepared during a practical training session that I underwent at IIA Construction for 20 weeks starting from 23 August 2021 and ended on 07 January 2022. It is submitted as one of the prerequisite requirements of BGN310 and accepted as partial fulfillment of the requirements for obtaining the Diploma in Building.

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ABSTRACT

The practical report titled “Replacement the Broken Tiles” covers the complete operation of IIA Construction. The aim of this report is about all the defects that have been found in the house about the broken tiles and submit them to the contractor to make repair work. The main objective is to identify how to replace the broken tiles and collect more detail of all the defects that have been found in the house. On the site, all the defects have been recorded. To conclude, it is important to do change the broken tiles for the reason of safety and customer feel satisfied to live in his house.

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CHAPTER 1.0

INTRODUCTION

1.1 **Background of the study**

Tiles are a form of furnishing that can be used on interior walls, ceilings, and floors. Tiles can be made from almost any hard substance, and many soft materials too. Some examples of hard tiles include marble, clay, slate, metal, ceramic, stone, or glass. In contrast, soft tiles can be made out of wool, cork, recycled paper, and perlite. Tiles can be both functional and decorative and are available in many styles to suit all budgets and tastes.

One of the most common uses for interior tiles is in the wet room such as bathroom, laundries, and kitchen, where tiles are often applied to floors and walls to protect them from moisture. Some materials (such as ceramic and porcelain) are already water-resistant, while other types of files may need to be sealed. Alternative to tiles in kitchen and bathroom include glass and metal.

Another use for tiles is to help with acoustic and soundproofing. These types of tiles are usually quite large and can be used to line walls as well as ceilings in music rooms and home theatres. Tiles are also highly decorative and can be used to create feature walls or to disguise damaged or ugly interiors.

1.2 **Objective of studies**

i. To determine the installation process of floor finishes.

ii. To identify the equipment and tools used during the installation of floor tiles

iii. To determine the problem in replacing the broken tiles.

1.3 **Scope of the study**

This study is carried out at NO 11 Jalan KS 4/13 Lake Front Kotasas 26050 Kuantan, Pahang. The focus of this study is to replace the broken tiles with new ones. Throughout this report, I will study how to replace the broken tiles and the problem that will arise and also study the equipment and tools used.

1.4 **Method of study**

1) Observation method

The observation method is carried out directly during the site visits. By using the camera to support this observation by taking images at the project site, such as photos of the machine and the building site's progress, and writing down the important notes, will provide more information about the project.

2) Interview method

Interviews are another option to gain more important information about the project. The goal of the interview was to provide more knowledge about the project in-depth. This method is carried out during the site visit by interviewing the person in charge En Ibrahim Idham and his manpower.

3) Document review

This method will be conducted before starting the project and also will conducted in the office or document room. The project manager will manage a meeting with all person that involve in that project. A document like a site plan, site drawing, and company profile will be reviewed to get more information.

CHAPTER 2.0

COMPANY BACKGROUND

2.1 Introduction of Company

IIA RESOURCES is a new company established in 2018. Although IIA RESOURCES is a new company, they already have done renovation of more than 20 houses and built a few houses since 2018. The company's focus is to make the renovation and add on the building and involves in construction based on the skill and technology.

2.2 Company Profile

IIA RESOURSE is located at NO 9 Tingkat 1, Lorong TMJ 1, Taman Mentiga Jaya, Pekan , 26600, Pahang. IIA RESOURCES has been registered by Puan Nur Syafiqah Syahirah binti Indra Gunawan with the Companies Commission of Malaysia (SSM) with registration number CA0310348-U. The owner of the company took the initiative to venture into the field of construction at a higher level and subsequently become a reputable contractor company by registering his company in the Malaysian Construction Industry Development Board (CIDB) under SYARIKAT BINAAN GRED G2.

The mission of IIA RESOURCES is to offer high-quality residential home renovation and construction services and strives to provide efficient services to ensure customer satisfaction.

With the principle of 'We Construct Dreams', IIA RESOURCES is believed to be able to go further in this field as well as become a proactive and viable entrepreneur in the current era of modernization.

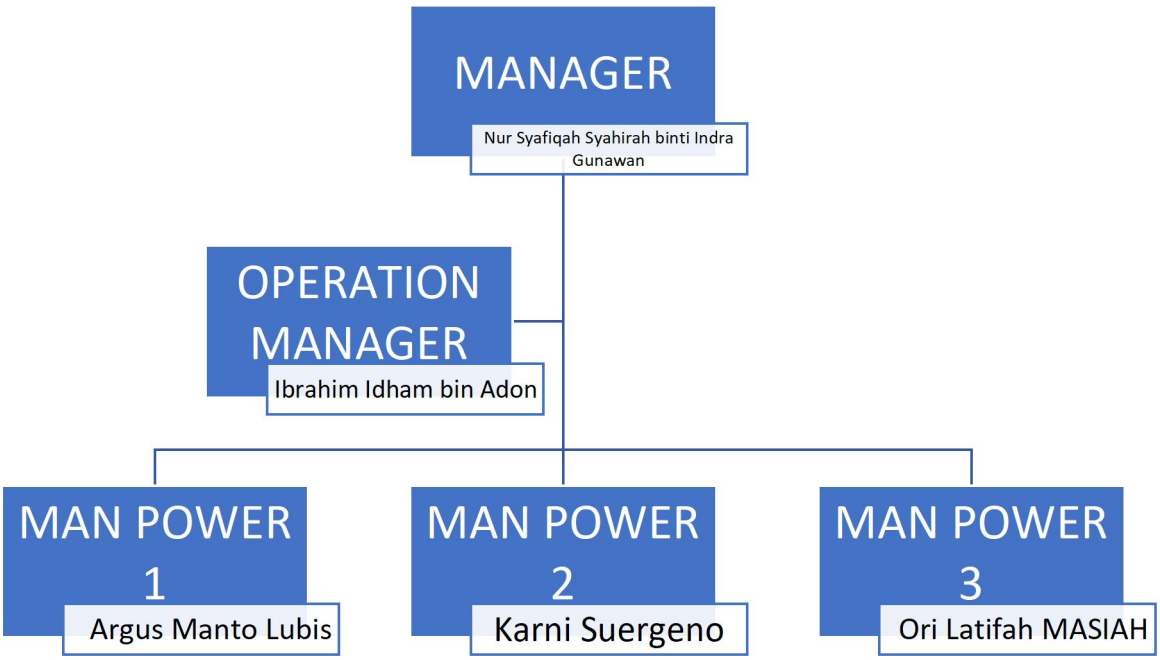

Figure 2.1: Organization chart of IIA Construction

2.4 List of Project

2.4.1- Completed Project

NO.	Project Title	Project Value	Start Date	Complete Date	Client
1.	Projek membina tempat letak kereta dan atap NO 1, Lorong Taman Beserah 28, Taman Beserah, Kuantan Pahang	RM 38 000	1/9/2021	5/10/2021	EN. AZMI BIN TALIB
2.	Projek menambah ruang dapur. (15 X 12) NO 19, Lorong BDK 1/23, Jeram Estate, Kuantan, Pahang.	RM 28 800	14/9/2021	7/10/2021	EN. WAN SHAHRIN

2.4.1- Project in Progress

No.	Project Title	Project Value	Start Date	Client
1.	Projek menambah ruang dapur	RM 45 000	23 /9/2021	PN

	dan membina tempat letak kereta. NO 6 Lorong Cempaka 6/16 Kiara Bay Lot 177 Kampung Cempaka, Sepat 26060 Kuantan, Pahang.			ISMAYUDIN
2.	CSR (community service response) projek menambah ruang bilik. Kuarters balai polis Alor Akar, Kuantan, Pahang.	RM 30 000	28/10/2021	PEJABAT POLIS DAERAH KUANTAN

CHAPTER 3.0

CASE STUDY

3.1 Introduction to Case Study

This project is to replace the broken floor finishes with the new ceramic tiles at NO 11 Jalan KS 4/13 Lake Front Kotasas 26050 Kuantan, Pahang. The value of the project is RM 38000 and the completion is on 25 August

2021.

Figure 3.1: Site plan by Developer

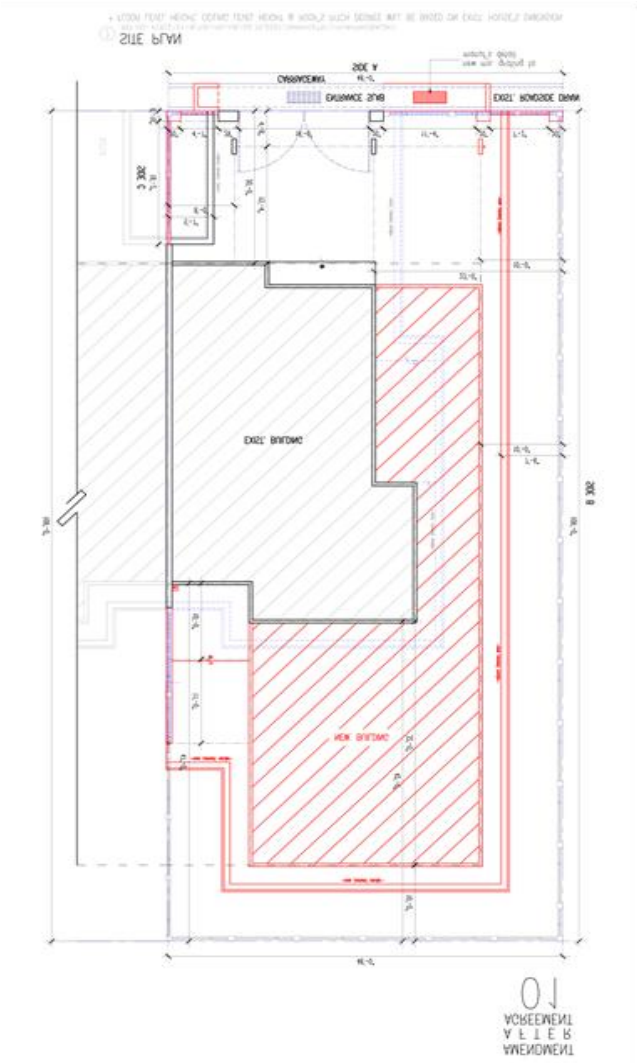

Figure 3.2: House plan by Developer

This project is located at Kotasas a neighborhood near the lake. This is a new housing project because there are still unoccupied houses. The customer has long bought this home and is interested to replace the broken tiles with the new ceramic tiles. It is a little out of the way from town, and the route is often congested with lorries due to its proximity to the industries.

The activities carried out on the site include inspecting the building progress work to observe the craftsmen complete it correctly according to the signed plan. Also, as negotiated with the customer, work to break down the broken tiles to install the new ceramic tiles.

3.1 Process of installation new ceramic tiles to replace the broken tiles

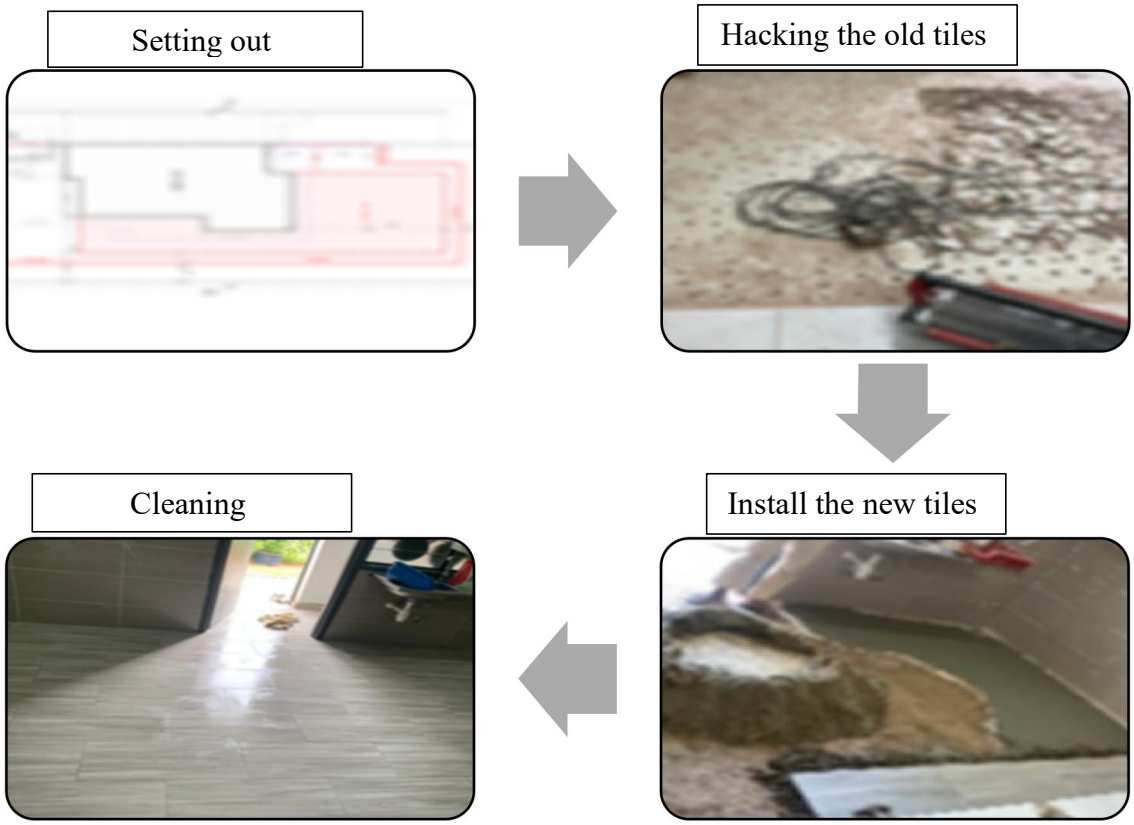

Figure 3.3: Process of installation new tiles

3.1.1 Setting Out

Firstly, the method of the installation of floor tile is set out. Setting out is the establishment of the marks and lines to determine the position and extent of the elements for the installation of floor tile. In the work of setting out, there are a few tools that should be used, such as yarn. In the installation of floor tile, the first thing that must be determined is the length and width of the floor tile required. In this project, the total area of floor tile that needs to be set out is 147.78 m². There are three parties will be involved in the work of setting out, such as employers, engineers, and contractors. Engineers will examine the work of setting out to do, but that will be responsible for the contractor. Purpose of setting out to get the actual dimension of floor tile wants to use before starting the excavation works.

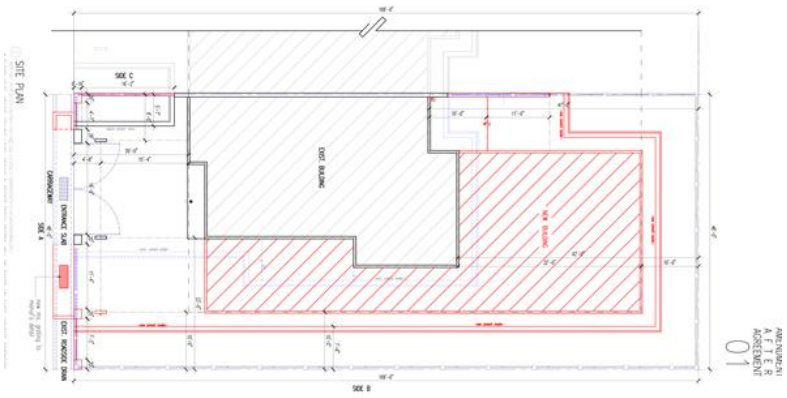

Figure 3.4: Plan area floor plan to do floor tile

3.1.2 Hacking the old tiles.

Secondly, hacking all the old tiles using the hacking machine. Starting hack with the corner of the house to the middle. Collect the broken tiles in one place and throw them in the trash that has been rented. Hammers and shovels are also used to collect broken tiles and during the work carried out the use of gloves is mandatory.

Figure 3.5: Hacking process

3.1.3 Install the new tiles

Before installing the tiles all the workers measure the shape of the tiles and make sure to follow the shape of the floor of the house using the measuring tape and tile cutters. After that, the manpower mixing cements with water and sand using a normal ratio. The manpower started laying the floor with cement and continue installing the new tiles.

Figure 3.6: Installing tiles process

3.1.4 Cleaning

After all, tiles have been installed, the manpower cleaning the surface of tiles using soap and acids tiles. Cleaning the house and rearranging all stuff and furniture after all work has been done.

Figure 3.7 Cleaning process

3.2 Equipment and tools used during the installation of floor tiles

a) Measuring tape

Figure 3.2.1

Using to measure the area of the room and tiles.

b)Hacking machine

Figure 3.2.2

Using to hack the old tiles

c) Shovel

Figure 3.2.3

Use to mix the cement and to pick up the broken tiles.

d) Cement trowel

Figure 3.2.3

Using to lay the cement

3.3 Problem in replacing the broken tiles

a) Problem: Limited Space to Do The Renovation Work

The room space is narrow to do renovation work so the process will take a long time.

Solution: Limited the Workers to The Skilled One

Because of a limited space to do the work so the solution is to limit a worker to a skilled one to avoid a crowded situation

b) Problem: Damaged wall affected by hacking machine

The wall was damaged because of the effect of hacking the old tiles.

Solution: Plaster the wall and paint.

CHAPTER 4.0

CONCLUSION

Overall, the process of installing the tiles is different from the usual ones done before because it must take out the old tiles. In comparison, the installation in this case study is more detailed in terms of safety and comfort. For example, if the owner of the house doesn't want to change the broken tiles, it will harm their family members. Once the tiles are changed to the new one, the owner of the house can live in his house without worries.

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