



**DEPARTMENT OF BUILDING
UNIVERSITI TEKNOLOGI MARA
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SKIM COATING

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It is recommended that the report of this practical training provided

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entitled

Skim Coating

be accepted in partial fulfillment of requirement has for obtaining Diploma in Building.

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STUDENT'S DECLARATION

I hereby declare that this report is my own work, except for extract and summaries for which the original references stated herein, prepared during a practical training session that I underwent at BMI Construction Sdn Bhd for duration of 20 weeks starting from 23 August 2021 and ended on 7 January 2022. It is submitted as one of the prerequisite requirements of BGN310 and accepted as a partial fulfillment of the requirements for obtaining the Diploma in Building.

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ABSTRACT

Skim Coating is one of the additional value after the plastering process, therefore, skim coating can be used to smoothen the wall or to repair the drywall.. This report will track down the method of skim coating that were conducted in Ibai Golf and Country Resort Kuala Terengganu for Double Storey Bungalow for Bmi Construction Sdn Bhd . The objective of the report is to identify the factors that should be considered in skim coating, the method of skim coating, and the problem of skim coating. It will focus on the type, advantages and disadvantages of the skim coating that is used for the case study, the material and the tools that are used for the skim coating. In this report, it also shows the details, step by step of skim coating procedure from scratch.

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CHAPTER 1.0

INTRODUCTION

1.1 Background of Study

Skim coating is an additional wall finishes after plastering process. Skim Coating is used to smoothen the plastering texture. Skim Coat can create even and smooth surface on. Skim coating process is usually an additional features for a smooth surface as wall finishes.

Other than that, Skim coating also can make the wall finishes are smooth before the paint work start. Skim coat also can act as compound to fill up the gap and crack on plaster. Skim coating finishes have quietly replaced other option such as smooth plaster.

There are few layers that be applied on to of rough plaster start with based coat and followed by smooth coat. For based coat, applied a least 2 layer of that compound and 1 coat of smooth coat and can be conducted by specialized worker that has the skill for the work.

1.2 Objectives of Skim Coating

- i. To identify the factors that should be considered in skim coating.
- ii. To identify the method of skim coating.
- iii. To determine the problem of skim coating.

1.3 Scope of Study

The scope of study is focusing on the method of skim coating including the materials and tools that be used in this process. In this report, it more focusing at Ibai Golf and Country Resort Kuala Terengganu for Double Storey Bungalow in Kuala Terengganu

1.4 Methods of Study

i. Observation Method

The observation method will include the site visit to see how the wall plastering is done. The site visit is Ibai Golf and Country Resort Kuala Terengganu for Double Storey Bungalow . The observation will be done by taking notes about the method of skim coating to gather more information.

i. Interviews

Interview is one of the method that can be used to gather the information. The interview are being held between the supervisor and workers at site. The interview will be held at the construction site, in Ibai Golf and Country Resort Kuala Terengganu for Double Storey Bungalow

CHAPTER 2.0

COMPANY BACKGROUND

2.1 Introduction to BMI Construction Sdn. Bhd

Bmi Construction Sdn Bhd is a company that have been established in July 2020. The focus of this company is to design and built the house for their client according to their design and budget with their tag line, 'Bina Mahligai Impian'.

Bmi Construction is one of the largest company in Terengganu that provide the design and built in residential house according to customer request. They have a great experience with a customer throughout Peninsular Malaysia especially in Terengganu. They approach every project with an act of responsibility and creatively until they manage to create a themed environment and development concept for the residential house with custom made design

2.2 Company Profile

Bmi Construction has been divided into three department which is Bmi Aluminium Work Sdn Bhd, Bmi Transport Sdn Bhd, and Bmi Steel and Carpentry Sdn Bhd, which all this company have been registered in Kuala Terengganu.. . All the department have their scope of work such as factory of aluminium, the steel and carpentry work and transportation services.

Every company has their own mission and vision. Bmi Construction vision is to be No 1 contractor in Pantai Timur. For their mission they to construct the 'Mampu Milik' house to their client with good quality.

2.3 Bmi Construction Sdn Bhd Organization Chart

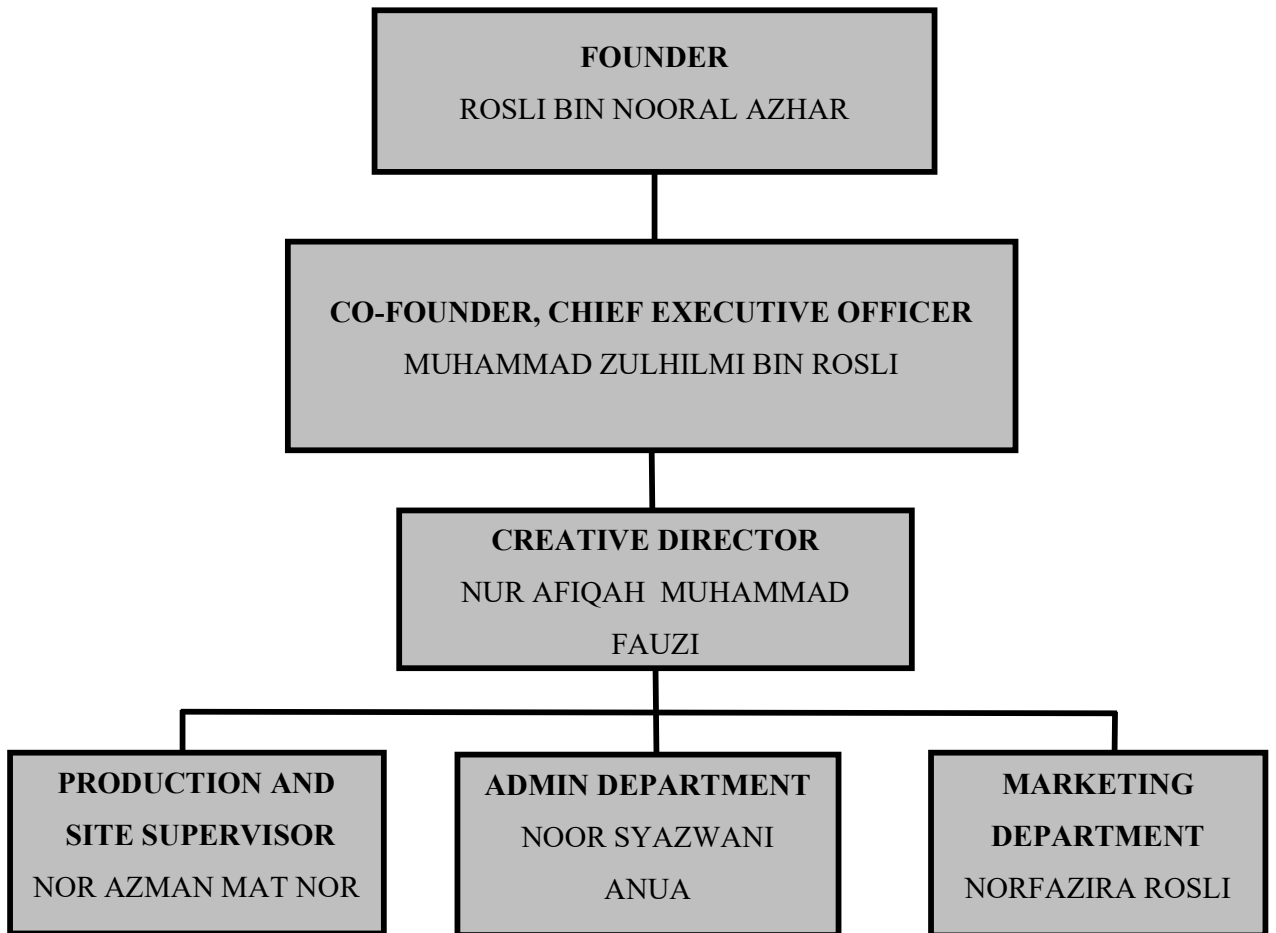


Table 2.1: Organization chart of BMI Construction Sdn Bhd.

2.4 List of Project

2.4.1 Completed Projects

No.	Project Title	Project Value	Start Date	Completion Date	Project Duration	Client
1	Design and Built Single Storey House for Puan Mariana in Seri Bandi Kemaman	RM229,460.00	July 2020	Januari 2021	6 month	Puan Mariana
2	Design and Built Single Storey House for En Julhisham in Binjai Kemaman	RM621,000.00	July 2020	March 2021	8 month	En Julhisham
3	Design and Built Single Storey House for Wan Rustam in Binjai Kemaman	RM220,000.00	September 2020	March 2021	6 month	Wan Rustam
4	Design and Built Double Storey Bungalow House for Dato Wan Azman in Ibai Golf Terengganu	RM1,300,000.00	Disember 2020	September 2021	9 month	Dato Wan Azman

5	Design and Built Single Storey Bunglow House for Nor dhuha in Tebakang	RM300,000.00	February 2021	Ogos 2021	6 month	Nor dhuha
6	Design and Built Double Storey Bunglow House for Cikgu Lina in Ibai Terengganu	RM185,000.00	Mac 2021	Ogos 2021	5 month	Cikgu Lina
7	Design and Built Single storey house for En Syariff at Sentol Patah	RM237,200.00	April 2021	November 2021	7 month	En Syariff

Table 2.2: List of completed project of Bmi Construction Sdn Bhd.

2.4.2 Project in Progress

No.	Project Title	Project Value	Start Date	Completion Date	Project Duration	Client
1	Design and Built Single storey house for En Halim at Geliga Kemaman	RM254,000.00	August 2021	-	-	En Halim
2	Design and Built Single storey house for En Hanafiah at Dungun	RM248,000.00	August 2021	-	-	En Hanafiah
3	Design and Built Single storey house for En Yusof at Bukit Tunggal	RM210,000.00	August 2021	-	-	En Syariff

Table 2.3: List of project in progress of Bmi Construction Sdn Bhd.

CHAPTER 3.0

METHOD OF SKIM COATING CASE STUDY

3.1 Introduction to Case Study

The case study will be described based on the Dato Wan Azman Double Storey House that is located at Lot 129, Ibai Golf and Country Resort, Kuala Ibai, Terengganu. Located a stone throw away from Ibai Golf Club. The grand total value after the adjustment is RM1,300,000.00. The duration for this project 9 months start disember 2021 until September 2021. According to the plan, the construction can be completed in 7 month, but because of the lockdown, the project cannot be completed in the estimated duration

The construction project is about the construction of house start from design and built. This bungalow is one of the mega project for company which is over 1 million. All the plan have been redesign for a few times due to satisfy our client. In all of the activities that has been carried out, the case study will determine the whole progress of skim coating.

3.2 The Material and Tools For Skim Coating.

3.2.1 Material of The Skim Coating

i. Based Compound



Figure 3.1: Based Compound for Skim Coat.

Based Compound is the based layer for skim coating process. Based compound is being used to close and fill up all the gap. Based coat is being applied on top of plaster surface. This type of compound usually will built up a rough surface.

ii. Finishing compound



Figure 3.3: Finishing compound

Finishing compound will be used on top of the based coat. Usually it being applied 1 layer according to the needs. Water are being needed to make the solution of this compound. This coat is being used to smoothen the rough surface of based compound and act as finishing surface of the wall.

iii. Water



Figure 3.4: Water used for dilute the compound.

Water is one of the materials that is used to dilute the skim coat compound. It is important to use the right amount of water to get the right consistency of the solution. Hardened properties of skim coat are controlled by the amount of water in it including workability, compressive strengths, permeability, durability, and weathering, drying shrinkage, and cracking potential.

iv. Corner Bead



Figure 3.5: Corner Bead.

Corner Bead is one of the important things that be used in skim coating process. Without used of this material the edge of the wall cannot be trimmed smoothly and can give straight effect. Usually there are several design and size that be used depends on the thickness of skim coat.

3.2.3 Tools That Are Used in Skim Coating

i. Mixing machine



Figure 3.6: Hand mixer machine.

Shovels are one of the hand tools that are used in the plastering work to move the sand, gravel and the concrete that has been produce from one spot to another. Furthermore, it is also used to mix the sand, gravel, cement, and water to produce the concrete. Shovel blades are made from steel that are very strong and the shaft are made from the metal and complete with handle grip that will make it easy to lift the material.

ii. Bucket



Figure 3.8: Bucket used in the plastering work.

Bucket is used to deliver the mixture of skim coat and for mixing the compound. Bucket is also use make ease for the labor to transfer the mixture from place to other place.. It also come with handle grip and it make from pvc.

iii. Trowel



Figure 3.9: Trowel used in skim coating.

The trowel blade is made from steel and also known as point-nosed trowel will make it easy to mix the material of because of the blade shape. Trowels are used in applying the compound.

iv. Finishing Trowel



Figure 3.10: Finishing trowel .

Figure above show the finishing trowel that being used to apply and smooth the skim coat either based compound or finishing compound. Other than than, finishing trowel is also being used to level the skim coat for perfect finishing. This trowel also come with edge of blade will make east to labor to applied the skim coat on the wall.

3.3 The Method of Skim Coating

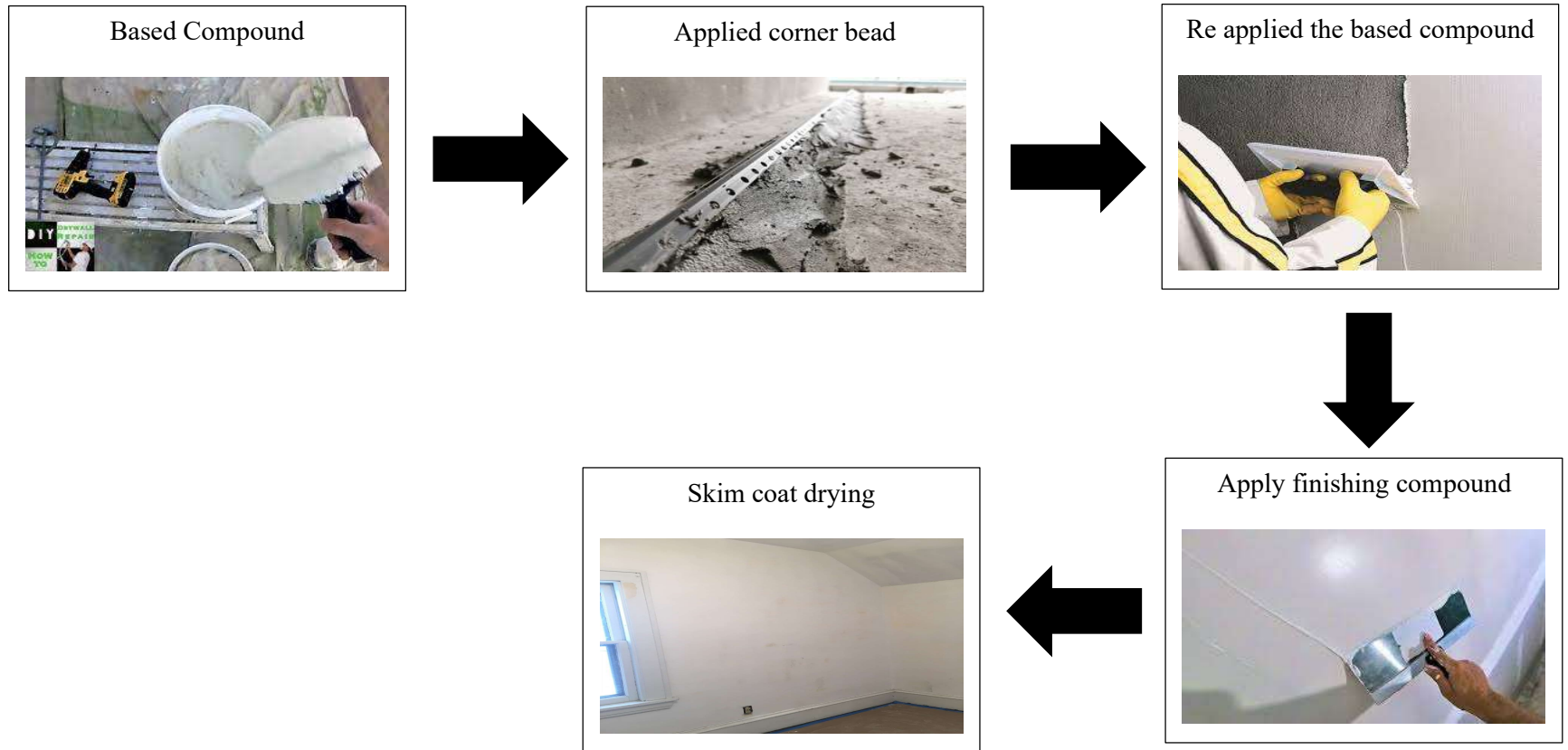


Table 3.1: The method of skim coating.

Firstly, mixture the based compound. The ratio for this compound is 1:2 which is one part of based compound and two part of water. After that, with the trowel, applied corner bead binding with based compound at every edge of the wall. Let the corner bead dry for a few minutes before re applied the based skim coat.

Applied the first layer of based compound on top of the plaster. Let the layer dry in few minutes before applied the second layer of based compound. Let the second layer dry. After that, applied one layer of finishing compound according to 1:1 ratio. Then let the layer dry before the painting process or other process.

3.4 The Problem and Solution of Skim Coating

There are two common problems in skim coating which is skim coating layers crack and uneven surface and premature drying . The first problem is loose plaster. It cause when the wall plaster cracks. It can cause the skimming compound lumpy ad marring the smooth finish. This problem can cause the compound tend to peel out from the wall. To solve this problem, re plaster the wall before re skimming the skim coat from scratch.

The second common problem is premature drying that cause from the compound there are not fully dry from a layer to other layers. It can cause uneven skim layer. To avoid this problem, let the layers dry before applied the others layer on top of them.

CHAPTER 4.0

CONCLUSION

4.1 Conclusion

The conclusion is, skim coating is one of additional value in wall plastering and it one of the easiest work. But it needs a professional worker to get better result and smooth finishes. The objectives of this case study is to identify the factor that should be considered in skim coating. The second factor, which is the materials that be used in this skimming process. The third factor is the right tools because all tools have its own function. The tools that be choose to need to be suitable for skimming process. The right tools can lead to the better result. According to this report, all the skim coating are be done by the professional workers. It can avoid the common problem such as palstering crack and premature drying

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