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THIS REPORT PREPARED

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Entitle

INSTALLATION OF ALUMINIUM CLADDING

accepted in partial fulfillment of the requirements 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 Majlis Perbandaran Kuantan (MPK) for duration of 5 months from 12 May 2014 to 29 September 2014. It is submitted as one of the prerequisite requirements of DBN 307 and accepted as a partial fulfillment of the requirements for obtaining a Diploma in Building.

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Alhamdulillah, after a several months gaining knowledge through practical training, author managed to accomplish the course as required to pass in this semester working on site and be a part of builders for quite a long time is not something that come in handy, thus patience and perseverance on duty need to be measured.

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ABSTRACT

This report described about fabrication and installation of aluminium cladding to built a new headquarters of Kuantan Municipal Council. This report was reported based on the observation and experience of five month at the construction project. This report is divided into several of parts beginning with an introduction, company background, case study, conclusion and suggestion. From the observation the maintenance process of fabrication and installation is very simple but only certain person can do it. This report, described about identifying and understanding the equipment, machineries and material used in completing fabrication of aluminium cladding. Beside that to identify the process before installation the aluminium cladding and determine the method of construction for aluminium cladding applied specifically for high rise building.

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LIST OF ABBREVIATION

MPK - Majlis Perbandaran Kuantan

TNB - Tenaga Nasional Berhad

PPE - Personal Protection Equipment

ACP - Aluminium Cladding Panel

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

Nowadays, there have many technologies for method of construction such as the material that used for construction building such as cladding, infill panel, curtain walling and facing. Hence, cladding are one of important design element that numerous country that using in high rise building in construction field in this century. The word cladding came into general use as a description of the external envelope of framed buildings, which clothed or clad the building in protective coating that was hung, supported by of secured to the skeleton or structural frame as a coat or jacket is hung from the shoulders as a protective cladding.

Besides that, the benefit cladding panel is be self-supporting between framed members. Moreover, provide the necessary resistance from the rain penetration, capable of resisting both positive and negative wind pressure and provide the required degree of sound insulation to suit the building type.

There are various types and classification of aluminium cladding such as cladding fixed to a structural backing and cladding to framed structures. In this study will focusing on type of cladding to framed structures that used at site "Proposal To Built New Headquarters of Kuantan Municipal Council" for Kininig Exeton Sdn Bhd. There have 11 floors for complex project under management of Kining Exeton with client Kuantan Municipal Council at Lot 29, Section 30, Jalan Tanah Putih, Mukim Kuala Kuantan, Pahang.

1.2 OBJECTIVE

This report is prepared to provide general information and installations of aluminium cladding for 11 floors complex project. Thus, the following objectives are as follow:

- 1.2.1 To identify the method of installation aluminium cladding for composite panel.
- 1.2.2 To determine machineries & equipment used during installation of aluminium cladding.
- 1.2.3 To determine the operation of construction for aluminium cladding applied specifically for high rise building.

1.3 SCOPE OF STUDY

Scope of study for this report is focuses on method of installing an Aluminium Cladding for composite panel.

The installation of aluminium cladding start from purchasing until the stage of installation of aluminium cladding at the site. The study at “ Cadangan Membina Ibu Pejabat Baru untuk Majlis Perbandaran Kuantan ” under project Kining Exeton Sdn Bhd. There have 11 floors for complex project under management of Kining Exetons with client Kuantan Municipal Council at Lot 29, Section 30, Jalan Tanah Putih, Mukim Kuala Kuantan, Pahang.

For the first stage this study focuses on the work before, during, and after of installation aluminium cladding work. Before installation work start, contractor should do order the material from supplier such as the aluminium cladding panels and structural frame. Besides that, the material arrive from the factory to site construction using the lorry for transportation. After that, do a purchase order for installation and machineries needed. Furthermore, for the second stage, this study focuses on machineries and equipment needed during installation aluminium cladding work.

For the last stage, this study focuses on the operation of construction for aluminium cladding applied specifically for high rise building. For this stage, contractor should take serious about problem while installation work because to ensure that stage can be done followed by site schedule.

1.4 METHOD OF STUDY

Before starting the research, I have identified a several methods that will be used for me to obtain information in details. Therefore, I have used several methods to complete this practical report. Many methodology had been used to ensure this report completed, one of the method are:

1.4.1 Interview

Interview is the first and major method used to get more information about case study. Through the interview method, Author have interviewed the project manager, site engineer and the several workers at construction site. Besides that, with the interview method can increases theoretical knowledge directly of the exact situation. Hence, the interview was using orally methods to get and obtain information. Information obtained shall be kept for future data collection.

1.4.2 Observation

The next method is an observation method to observer visually and physically. The observation method is applied when there is no practical action required. The observation was involved keep on eye the workers when doing the works and monitor the progress when the change occurred.

1.4.3 Book

Book is published information for specific topics through several mediums of reading materials. Therefore the information might be limited to particular year of its establishments, that why the content might be irrelevant in the future. After that, book gives clear ideas and information as it has been patterned in organized way that acts as a summary.

1.4.4 Internet

The method of searching material by using material reading and research such as the online resources from the internet is more useful and helpful. The material and information that obtained from the internet also can be used as it was the latest information compares to book or literature review. Besides that, author also gets knowledge through the internet about related topic such as installation aluminium cladding.

CHAPTER 2: COMPANY BACKGROUND

2.1 INTRODUCTION

COMPANY BACKGROUND FOR KUANTAN MUNICIPAL COUNCIL

Local governing system was implemented in Kuantan on the 1st . August 1913 , with the establishment of the Kuala Lumpur Sanitary Board which is responsible for the control of hygiene , health and development control .



Photo 2.1: Area Colony Kuantan Municipal Council

Source: www.mpk.gov.my(2014)

At this time the actual size of the administration module is 2,065 sq km and covers Mukim Kuala Kuantan , Kuantan PLANE , Mukim Sungai Karang Beserah . This area generally covering 10 % of the actual area of Kuantan District 2,453 square kilometers (1,410.4 square meter) .

2.2 LOGO OF KUANTAN MUNICIPAL COUNCIL



Photo 2.2: Logo of Kuantan Municipal Council

Source: www.mpk.gov.my(2014)

2.2.1 INFORMATION ABOUT MPK LOGO

The letter ' K ' means Kuantan and bounded by a loop that represents the global . This image Kuantan mean moving towards the city and the global nature and will play an important role in the national and international.

The letter ' K ' is also formed as the screen , which means the city of Kuantan Always Moving towards a more rapid growth and development , especially in terms of sustainable economic and social development.

Image logo as a whole also reflects the letter ' Q ' meaning Module as local authorities emphasizing issues of management and quality of service . The word ' Kuantan Municipal Council ' and ' Municipal Council ' is a mix of Malay and English to complement the strong desire MPK toward globalization.

2.2.2 INTERPRETATION OF LOGO COLOR

i) Dark Blues

Symbolizes the unity that exists at all levels of society.

ii) Light blue

Represents Kuantan as a tourist town with a diversity of tourism product in terms of natural resources , cultural heritage and tourism programs implemented .

iii) Green

Symbolize " City in a Garden " with efforts to beautify the city in terms of landscape and a wide variety of colors.

iv) Red

Symbolizes courage and decisive aspect in the principles of conducting an increasingly challenging task .

v) Yellow

Represents ' sovereignty ' ruling Kuantan Pahang which is the state capital . Sovereignty is ' Umbrella Dirgahayu lord allow people to live in peace.

2.2.3 INFORMATION ESTABLISHMENT

On 1 September 1979 once again, Kuantan Municipal Council upgraded to Kuantan Municipal Council (Kuantan Municipal Council) based on the Local Government Act (Act 171), which remains to this day . Area of Kuantan Municipal Council was expanded to 324 sq km covering four districts of Kuala Kuantan , Ulu Kuantan and Sungai Karang Beserah . This area is 10 % of the total area of Kuantan town. Of these, 20 % were given the taxable municipal services while remaining in the area of development.

2.2.4 LIST FOR YDP MPK

There are 9 people MPK President since its inception in 1979 until now , namely :

1. YH. Dato' Haji Abdul Rahim bin Abu Bakar DSAP., SMP., AMN.
2. YH. Dato' Haji Abdul Rashid bin Haji Abdul Rahman SIMP., DSAP., PJM., KMN., AMN., PPN., PJK.
3. YB. Dato' Seri Haji Mohd Najib bin Tun Haji Abdul Razak SSAP., SIMP., DPMS., DSAP., PNBS.
4. YB. Tan Sri Haji Mohd Khalil bin Yaakob SSAP., SIMP., PSM., DSAP., JSM., SMP.
5. Y.H Dato' Mohamad bin Saib DIMP., SMP., ASA., BKT.
6. Y.H Dato' Haji Hashim bin Abdul Wahab DIMP., SMP., KMN., AMP., PJK
7. Y.H Dato' Muhammad Safian bin Ismail DIMP., AAP., AMP.

8. Y.H Dato' Azizan bin Ahmad DIMP., SMP.
9. Y.H Dato' Haji Zulkifli bin Haji Yaacob DSAP., DIMP., AAP., AMP.



Photo 2.3: Y.H Dato' Haji Zulkifli bin Haji Yaacob DSAP., DIMP., AAP., AMP.

Source: www.mpk.gov.my(2014)

2.3 COMPANY OBJECTIVES

MISSION

Municipal Council (MPK) is will ensure Kuantan developed efficiently and effectively through urban development environment, infrastructure complete and high quality, development Kuantan outstanding citizens, preservation and conservation of a sustainable environment and of the best administrative system, integrity and prudence.

VISION

Kuantan as Key Growth Center of the Prosperous East Region by 2014 .

2.5 PROJECT LIST

2.5.1 CURRENT PROJECT

Table 2.2: Shows the ongoing project still under construction

	Title	Location	Cost	Date	Owner
1	Cadangan Membina Stadium Hoki di Bandar Indera Mahkota.	Bandar Indera Mahkota, Kuantan, Pahang.	RM 5.0 million	2011 - 2012	Government
2	Cadangan Membina Terminal Sentral di Bandar Indera Mahkota.	Bandar Indera Mahkota, Kuantan, Pahang.	RM 45.million	2011 - 2013	Government
3	Cadangan Membina Kompleks Ibu Pejabat MPK	Jalan Tanah Putih,Pahang.	RM 65 million	2011 - 2015	MPK
4	Cadangan Menaiktaraf Perumahan Pak Mahat, Kempadang.	Mukim Kempadang, Kuantan, Pahang.	RM 500 thousand	2012 - 2013	MPK
5	Cadangan Menaiktaraf Perumahan Kampung Pandan.	Mukim Pandan, Kuantan, Pahang.	RM 500 thousand	2012 - 2013	MPK

Source: Kuantan Municipal Council(2014)

2.5.2 PAST PROJECTS

Table 2.3: Shows past projects under Kuantan Municipal Council.

	Title	Location	Cost	Date	Owner
1	'Cadangan Hentian R& R di Kuantan, Termerloh, Mersing, dan Muadzam Shah'.		RM 300 thousand	1990 - 1995	Government
2	'Cadangan Membina Kompleks Sukan SUKPA di Bandar Indera Mahkota'.	Bandar Indera Mahkota, Kuantan, Pahang.	RM 47.0 million	1994 - 1997	Government
3	Cadangan Membina Dewan Konvensyen Negeri.	Kuantan, Pahang.	RM 13.0 million	1995 - 1997	Government
4	Cadangan Membina Bangunan Ibu Pejabat MPK Sementara.	Kuantan, Pahang.	RM 7.5 million	1994 - 1996	MPK
5	Cadangan Membina Pasar Borong di Kemunting.	Jalan Kemunting, Kuantan, Pahang.	RM 9.0 million	1997 - 2000	Government
6	Cadangan Jeti Indera Shah Bandar	Jalan Shah Bandar, Kuantan, Pahang.	RM 6.0 million	2003 - 2004	Government

Source: Kuantan Municipal Council(2014)

2.5.3 ANNUAL PROJECTS

Table 2.5: Shows annual projects under Kuantan Municipal Council.

	Title	Location	Cost	Date
1	“Cadangan Pusat Informasi Pelancongan, Kuantan, Pahang”.	Kuantan, Pahang.	RM 500,000 thousand	In 2014
2	Cadangan Membina Dewan Orang Ramai di Dalam Kawasan Perumahan.	Kuantan, Pahang.	RM 300,000 – 3,000,000	In 2014
3	Cadangan Membina Gerai / Food Court di Pusat – Pusat Pertumbuhan.	Kuantan, Pahang.	RM 100,000 – 500,000	In 2014
4	Cadangan Tandas Awam di Sekitar Bandar.	Kuantan, Pahang.	RM 50,000 – 300,000	In 2014
5	Cadangan Membina Pondok Bas di seluruh daerah Kuantan.	Kuantan, Pahang.	According to the size of the scope of work	In 2014
6	Cadangan Menaiktaraf Jalan di Kawasan Perumahan seluruh Kuantan.	Kuantan, Pahang.	According to the size of the scope of work	In 2014

Source: Kuantan Municipal Council(2014)

CHAPTER 3 : CASE STUDY

3.1 INTRODUCTION

The cladding came into general use as a description of the external envelope of framed buildings, which clothed or clad the building in protective coating that was hung, supported by or secured to the skeleton or structural frame as a coat or jacket is hung from the shoulders as a protective cladding. Function of aluminium cladding for composite panel is to provide the necessary resistance from the rain penetration, capable of resisting both positive and negative wind pressure, provide the required degree of sound insulation, aesthetics values and also transfer the load from upper to lower until an underground.

This report is about installation work on aluminium cladding. This report is provide some detail material, equipment and machineries to installation of aluminium cladding for composite panel. Example of material is screw, hand drill, and then many equipment will use for installation work such as measurement tape, aluminium cutting machines and gloves. Moreover the machineries also have been provided to installation work that to make this work is done proper and follow the schedule. Furthermore, in this report also complete the method statement to installation of aluminium cladding for composite panel.

3.2 PROJECT BACKGROUND



Photo 3.1: The illustration of Kuantan Municipal Council

Source: Kuantan Municipal Council(2014)

The development of new office towers to Kuantan Municipal Council (MPK). The project took place strategically in has an area of 238.200 square feet and 5.4 acres adjacent to the existing of Sungai Kuantan. There have 4 quarters old bungalow was demolished and a long water pipeline has been moved. This project is RM 56,973,413.12for contract sum that consist as high as 11 floors with a sub-basement for parking which is equipped with a lobby, One Stop Center (OSC) as main center, office space and room for YDP. Besides that, there consist the hall auditorium, main meeting hall, 1 unit sub-station for TNB (Tenaga Nasional Berhad), 1 unit Treatment Sewerage Plant (STP) and also public hall.

The leader parties involved were Kining Exeton Sdn. Bhd. as the main contractor and Kuantan Municipal Council (MPK) as the client. The project was expected to complete within 2 years given based on the contract agreement. However, for some reasons the project exceeded the due date until 2015.

This building was designed based on client requirement and the modern concept and features chosen to suit with the surrounding of Kuantan city. The construction in addition implements green building method.

3.3 INSTALLATION OF ALUMINIUM CLADDING

A aluminium claddings is an external envelope of framed buildings, which clothed or clad the building in protective coating that was hung, supported by of secured to the skeleton or structural frame as a coat or jacket is hung from the shoulders as a protective cladding. C door is the most popular because it is simple and eases to use and also when slide the panel sliding door it move smoothly.

For this report is about installation of all the aluminium profile is provided to fabricate it. The code of aluminium profile for Aluminium Cladding for Composite Panel is #ACP 516.

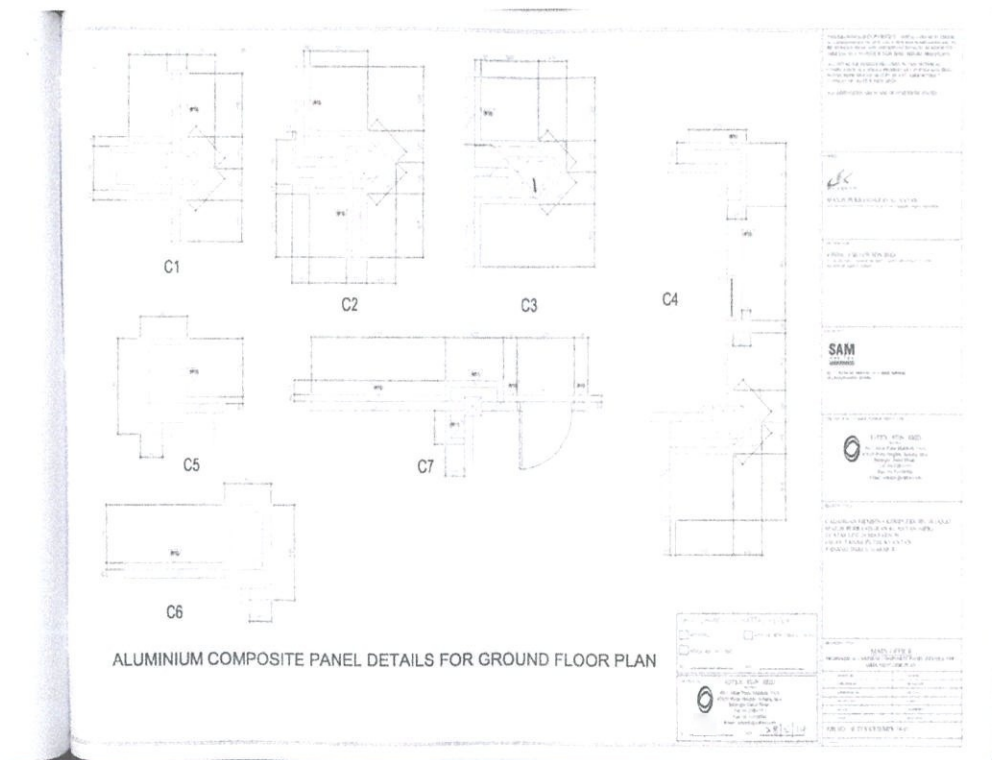


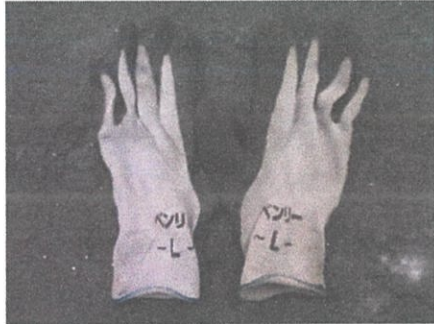

Photo 3.3.1: Aluminium composite panel detail for Ground Floor Plan.




Sources: Kining Exeton Sdn. Bhd(2014).

3.4 EQUIPMENT, MACHINERIES AND MATERIAL OF ALUMINIUM CLADDING

3.4.1 The equipment to installation aluminium cladding.




Table 3.4.1: List of equipment installation aluminium cladding.


No	Equipment	Function	Photo
1.	Glove	The safety gloves are needed for most work. There have different types of safety gloves for different jobs of work. The safety gloves give protection to hand such as from the metal dust when cutting the aluminium cladding and sharp object.	 <p>Photo 3.4.1 : Safety Glove</p>
2.	The pump air pressure for silicone	For the pump air pressure for silicone to pull out the silicone to extra tight seals around aluminium cladding panel.	 <p>Photo 3.4.2 : The pump air pressure for silicone</p>

No	Equipment	Function	Photo
3.	Measurement tape	To measure the distance in mm, cm and inch for the size and length that wanted for aluminium cladding panel.	 <p data-bbox="735 759 1155 797">Photo 3.4.3 : Measurement Tape</p>
4.	Cutter	Cutters are hand-tools used to cut gasket. The blade of the cutters are available in different configurations, including flush cutters, bevel cutters, end cutters. They are used to cut specific lengths.	 <p data-bbox="735 1238 986 1272">Photo 3.4.4 : Cutter</p>
5.	Screwdriver	The function of screwdriver is use as a lever to twist or rotate a screw either clockwise or counterclockwise for tighten and loose a screw.	 <p data-bbox="735 1514 1062 1547">Photo 3.4.5 : Screwdriver</p>

3.4.2 THE MATERIAL USED TO INSTALLATION ALUMINIUM CLADDING PANEL

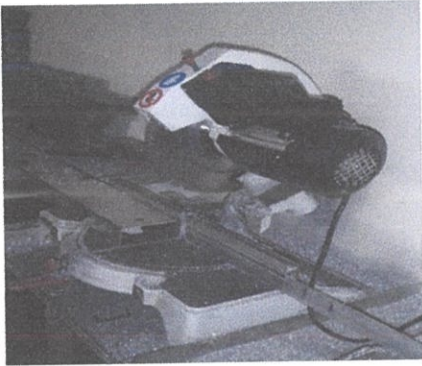

Table 3.4.2: The material used to installation aluminium cladding panel.

No	Material	Function	Photo
1.	Screw	The function is to retaining or holding things together. There are two type of screw will use to install on aluminium cladding composite panel is flat head screw and bold head screw .	 <p>Photo 3.4.6 : Screw.</p>
2.	Aluminium cladding composite panel	The aluminium cladding panels arrive from the factory to site construction using the lorry for transportation. The aluminium cladding panel was arrived in 100 pieces.	 <p>Photo3.4.7: Aluminium cladding composite panel.</p>
3.	Structural frame	The structural frames arrive from the factory to site construction using the lorry for transportation. The structural frame was arrived in 100 pieces.	 <p>Photo 3.4.8 : Structural frame.</p>

No	Material	Function	Photo
4.	Silicone	<p>The silicone provides extra tight seals around aluminium cladding panel. This multi-purpose, paintable sealant can be used indoors or outdoors and helps increase energy efficiency by reducing drafts and cold spots. It also provides a barrier to the entry of dirt, insects and other pests.(if not use gasket).</p>	 <p>Photo 3.4.9 : Silicone.</p>


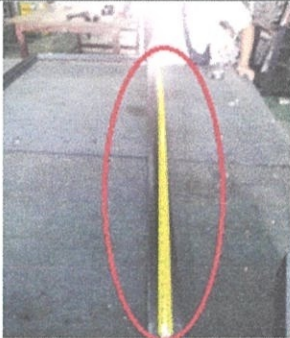
3.4.3 THE MACHINERIES USED TO INSTALLATION ALUMINIUM CLADDING PANEL



Table 3.4.3: The machine used to installation aluminium cladding panel.



No	Machine	Function	Photo
1.	Aluminium Cutting Machine.	For the cutting work must do careful, focus and cut safely to avoid accidents cases that will happen.	 <p>Photo 3.4.10 : Aluminium Cutting Machine</p>
2.	Electric hand drill.	Similar to the rotary drill but with a greater torque, allowing the user to drive and remove screws as well as drill through materials at a more rapid rate. Again, these can be either mains-operated or battery-operated (cordless).	 <p>Photo 3.4.11 : Electric hand drill</p>




3.5 METHOD STATEMENT FOR INSTALLATION OF ALUMINIUM CLADDING COMPOSITE PANEL.




Table 3.5.1: Method statement for installation of aluminium cladding.

No	Method statement	Photo of fabrication work	Equipment	Labor	Duration
1.	Before start clean the table and take the aluminium cladding panel and structural frame using gloves.	 <p>Photo 3.5.1: Aluminium Cladding Panel</p>	-Gloves	-2 Skilled labor	-10 minutes
2.	Firstly, the work for cutting the aluminium cladding panel should measure the length and size that wanted. Then marking at aluminium cladding panel to get easier for cutting work.	 <p>Photo 3.5.2: Measure Aluminium Cladding Panel.</p>	-Measurement tape	-1 Skilled labor	-5 minutes

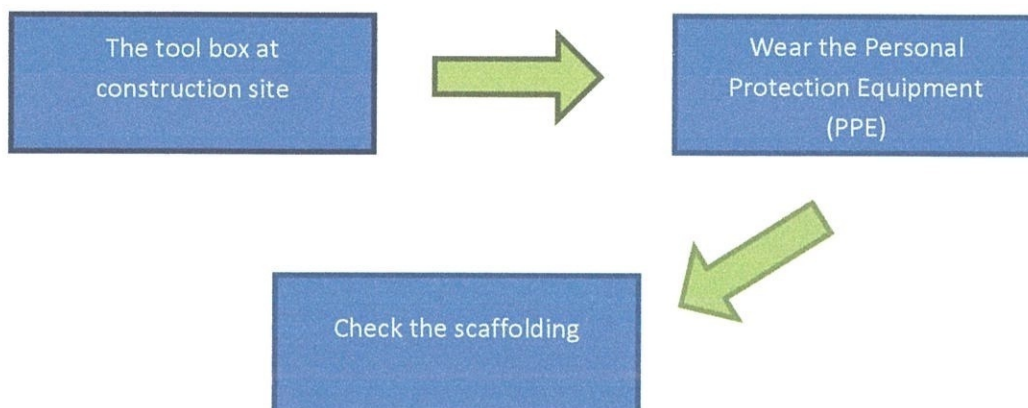
No	Method statement	Photo of fabrication work	Equipment	Labor	Duration
3.	Second method is cutting work the aluminium profile that marking using measuring tape. For cutting work we used machine cutting aluminium to get accurate cutting.	 <p>Photo 3.5.3: Aluminium Cutting Machine.</p>	-Aluminium cutting machine	-1 Skilled labor	-10minutes
4.	After cutting work is done then connect the aluminium panel using screw and hand drill. Connect all the aluminium that outer for aluminium cladding panel.	 <p>Photo 3.5.4:The Aluminium Cladding that was screw by hand drill</p>	-Aluminium cladding panel -Screw -Hand drill	-1 Skilled labor	-10minutes

No	Method statement	Photo of fabrication work	Equipment	Labor	Duration
5.	Drill the wall by using the machine drill and put the anchor by fix the bolt that length and area that needed. Put the structural frame and fix it tighten by using screw.	 <p>Photo 3.5.5:The frame structure that mounted on the outer surface of the structure.</p>	<ul style="list-style-type: none"> -Drill machine -Bolt -Anchor -Frame Structure - Screw 	-1 Skilled labor	-15minutes
6.	The installation of scaffolding must do it scaffold inspector and tag the scaffolding that safe with green tag.	 <p>Photo 3.5.6 : The installation of scaffolding</p>	-Tool for scaffolding	-1 Skilled labor	-5 minutes

No	Method statement	Photo of fabrication work	Equipment	Labor	Duration
7.	<p>Before the installation the aluminium cladding, checks the scaffolding it safe or not by the scaffold inspector. Using the body harness when working at height places. Wear the safety helmet and safety boot. After that, take the aluminium cladding panel and screw at the structural frame with fix tighten.</p>	 <p>Photo 3.5.7:The workers using body harness for installation aluminium cladding panel.</p>  <p>Photo 3.5.8:The aluminium cladding panel screw at structural frame.</p>	<p>-Safety Helmet</p> <p>-Body hardness</p> <p>- Aluminium Cladding Panel</p>	<p>-2 Skilled labor</p>	<p>-30minutes</p>
8.	<p>The aluminium cladding panel and screw at the structural frame with fix tighten.</p>	 <p>Photo 3.5.9: The aluminium cladding panel screw at structural frame.</p>	<p>-Safety Helmet</p> <p>-Body hardness</p> <p>- Aluminium Cladding Panel</p>	<p>-2 Skilled labor</p>	<p>-30minutes</p>

No	Method statement	Photo of fabrication work	Equipment	Labor	Duration
9.	After that, take the aluminium cladding panel and screw at the structural frame with fix tighten.	 <p>Photo 3.5.10: The aluminium cladding panel screw at structural frame.</p>	<ul style="list-style-type: none"> -Safety Helmet -Body hardness - Aluminium Cladding Panel 	-2 Skilled labor	-30minutes
10.	The safety netting must to install when involving the high rise building construction.	 <p>Photo 3.5.11:The safety netting that install when involved the high building construction.</p>	<ul style="list-style-type: none"> -Safety Helmet -Body hardness -Safety Netting 	-2 Skilled labor	
11.	When the aluminium cladding complete install, by using the pump air pressure for silicone to sealant the aluminium cladding.	 <p>Photo 3.5.12: The workers sealant the aluminium cladding panel by using silicone.</p>			

3.6 OPERATION OF BEFORE INSTALLATION THE ALUMINIUM CLADDING



3.6.1 TOOL BOX MEETING

The tool box meeting must have in construction site that one of the alternative to reduce risk of harm and the annual of accident. This is because in the construction site have low for accident but in the rate of death is higher. Besides that, the tool box meeting as a reminder to employees to be preferred security before, current, or after doing some work. The tool box meeting given by safety officer before the workers doing the work at the morning. The topic for tool box meeting is the workers work at high rise building such as when installation the aluminium cladding panel, rate of hygiene at home partner workers, housekeeping and mosquito breeding at potential place.

3.6.2 WEAR THE PERSONAL PROTECTION EQUIPMENT (PPE)

The workers must wear the full of Personal Protection equipment (PPE) in construction site. If the sum of workers do not flow the rule will be penalized or compound by the main contractor. The worker must wear the safety helmet, safety boot, hand glove, goggle and body harness when working at height places. The main contractor and supervisor at site must take their responsibility to monitor the worker that flow the rule to wearing the personal protection equipment (PPE). If the workers have wear the full of Personal Protection equipment (PPE) it can doing their works such as the work for installation the aluminium cladding must wear the body harness. This factor must take seriously because it can cause the hazard and an accident towards the workers at site, and also the public people.

3.6.3 CHECK THE SCAFFOLDING

Before the installation the aluminium cladding, checks the scaffolding it safe or not by the scaffold inspector. The installing of scaffolding is do that job in group and made properly procedures, advance an employee should know his role in the group, as well as confidence in the task assigned to him. In Addition, the factor safety and quality is always a priority. For this project “Cadangan Membina Ibu Pejabat Baru for Kuantan Municipal Council ” used the type of scaffolding is a frame scaffolds.

The component are used consist of a main frame, lining, rembat bar, and pin connection. The installation of the first frame to be given more attention because it will affect the strength of the scaffold. After that, packing fixed or bushing jacket socket located on the board site with same a distance. The main section will be examined using the pedestral level if different level section can corrected by turning the adjustable jack rows.

Furthermore, if the scaffolding installed in the crowd site construction must have the safety features like the canopy to protect the construction material from fall. The scaffolding must have check at least 7 day or form the bad weather; it may occur the stability and strength of the scaffolding.

CHAPTER 4: CONCLUSION

As a conclusion, from this case study author will know more details deeper knowledge about the installation of aluminium cladding . This report describes the installation method, material, equipment and machineries.

Besides that, in this 20 century, the aluminium cladding most popular at numerous country at residential area and also popular for modern building such as Kuala Lumpur Convention Center (KLCC), and more building in Malaysia.

Next, there are several stages involved for before to installations the aluminium cladding to function properly. Stages begin when the site officer give tool box to the workers at site construction before start their work. Basically, the tool box gave the reminder to workers to take the safety as priority. Next, the workers must wear the full of Personal Protection equipment (PPE) in construction site. If the sum of workers do not flow the rule will be penalized or compound by the main contractor.

The conclusion in this report, author know how to installation the aluminium cladding. Moreover, in this report author also provided the method statement of material, equipment, machineries, operation before the process installations of aluminium cladding.

REFERENCES

1. Prof. Madhuri K. Rathi, Mr.Ajinkya K. Patil, (2014), “Use of Aluminium In Building Construction”, retrieved from <http://www.engineeringcivil.com/use-of-aluminium-in-building-construction.html>.
2. GDA., (2006), “Aluminium Building Material of the Modern Age.
3. Mazzolani., (2004), F.M. “Structural use of Aluminium Alloys in Civil Engineering.
4. CAB, (2009), Council for Aluminium in Building Aluminium and Sustainability.
6. Joe Simpson, (1999). Alluminium, Rev. 2.
7. Jyi Shyang Industrial Co., Ltd. **ALUCOMAT® Aluminium Composite Panel**, (2009) available from [.http://www.alucomat.com/installation.html](http://www.alucomat.com/installation.html).
8. Wikipedia (1 June 2014) available from http://werzalit.com/img/downloads/dat/produkte/balkon/MA_square_EN.pdf.
9. (1991), Building Construction Regulation.
10. (1994), Building Construction for Occupational Safety and Health Act (OSHA).

Appendixes A :Aluminium cladding detail drawing

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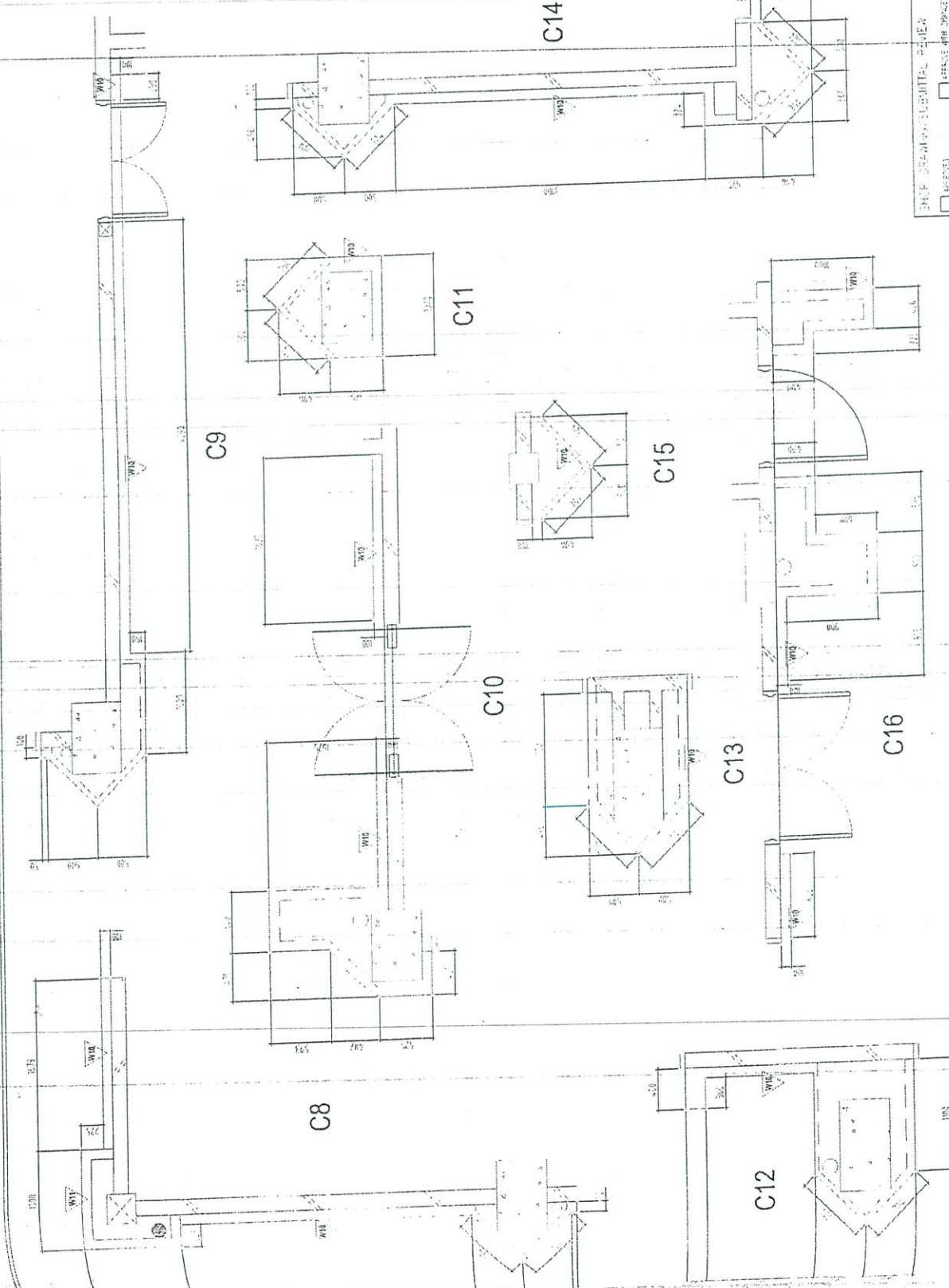
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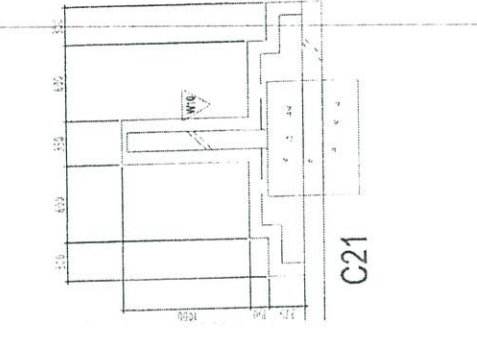
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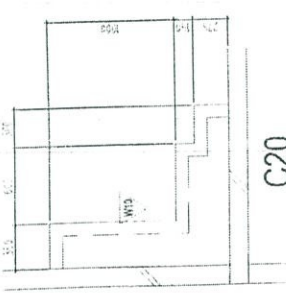
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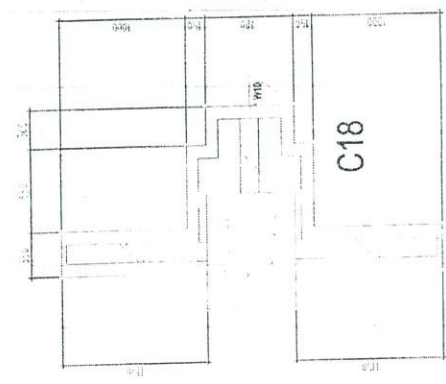
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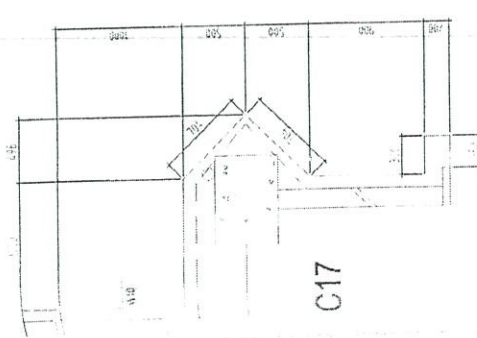
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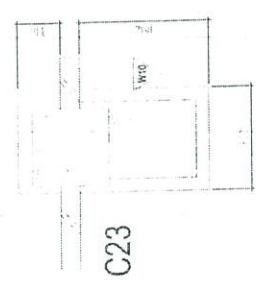
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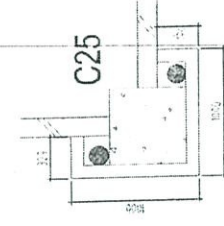
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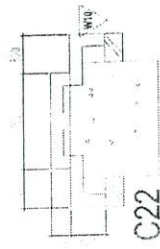
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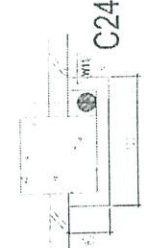
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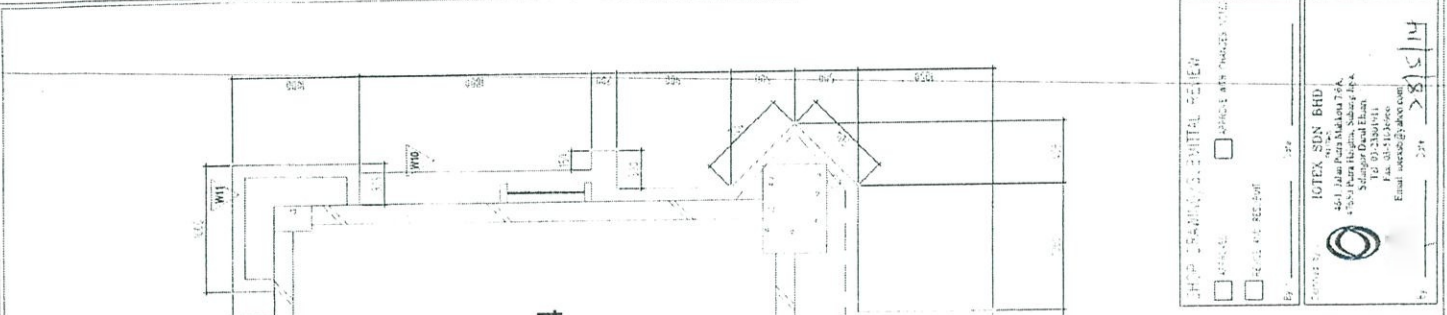
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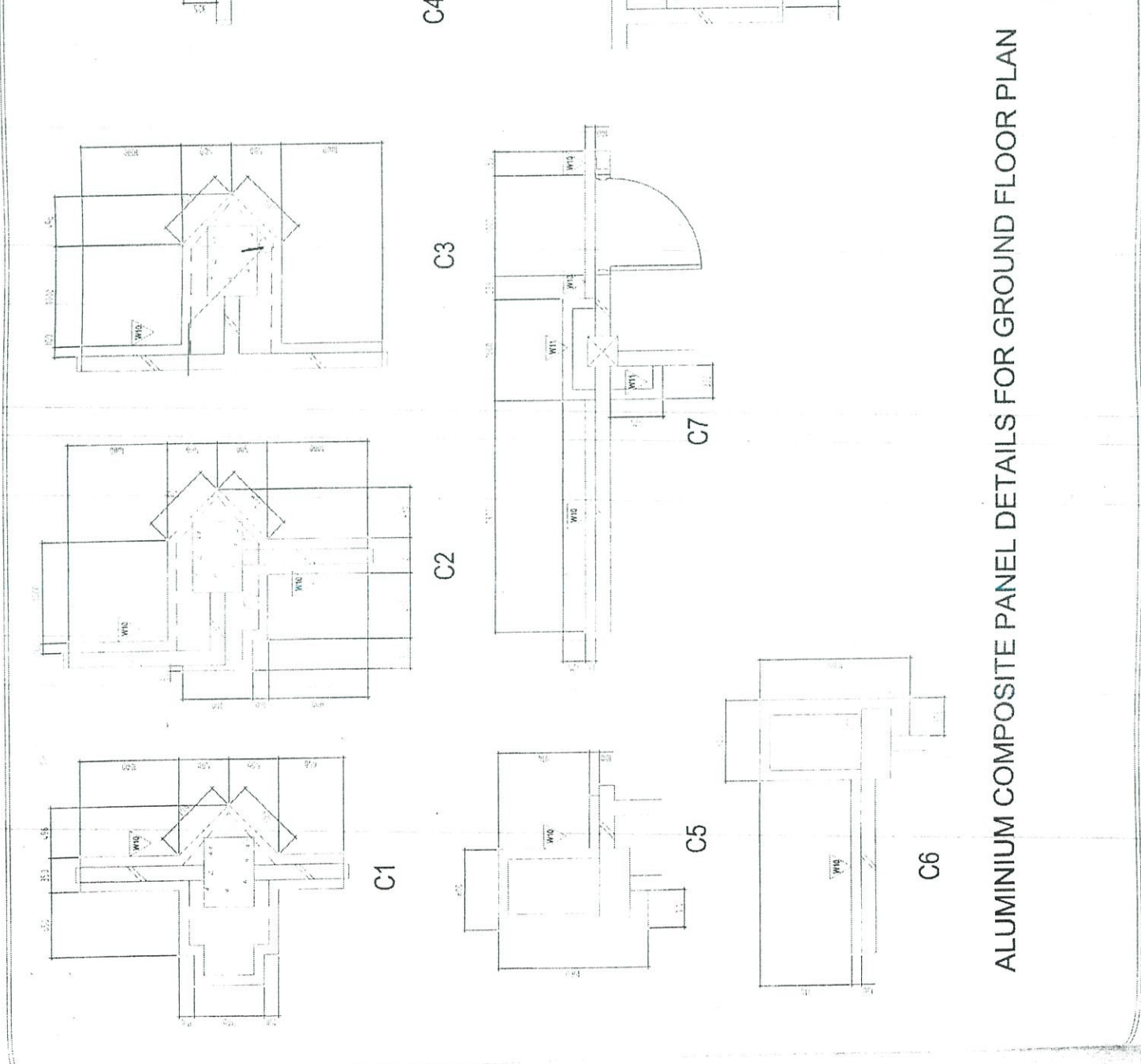
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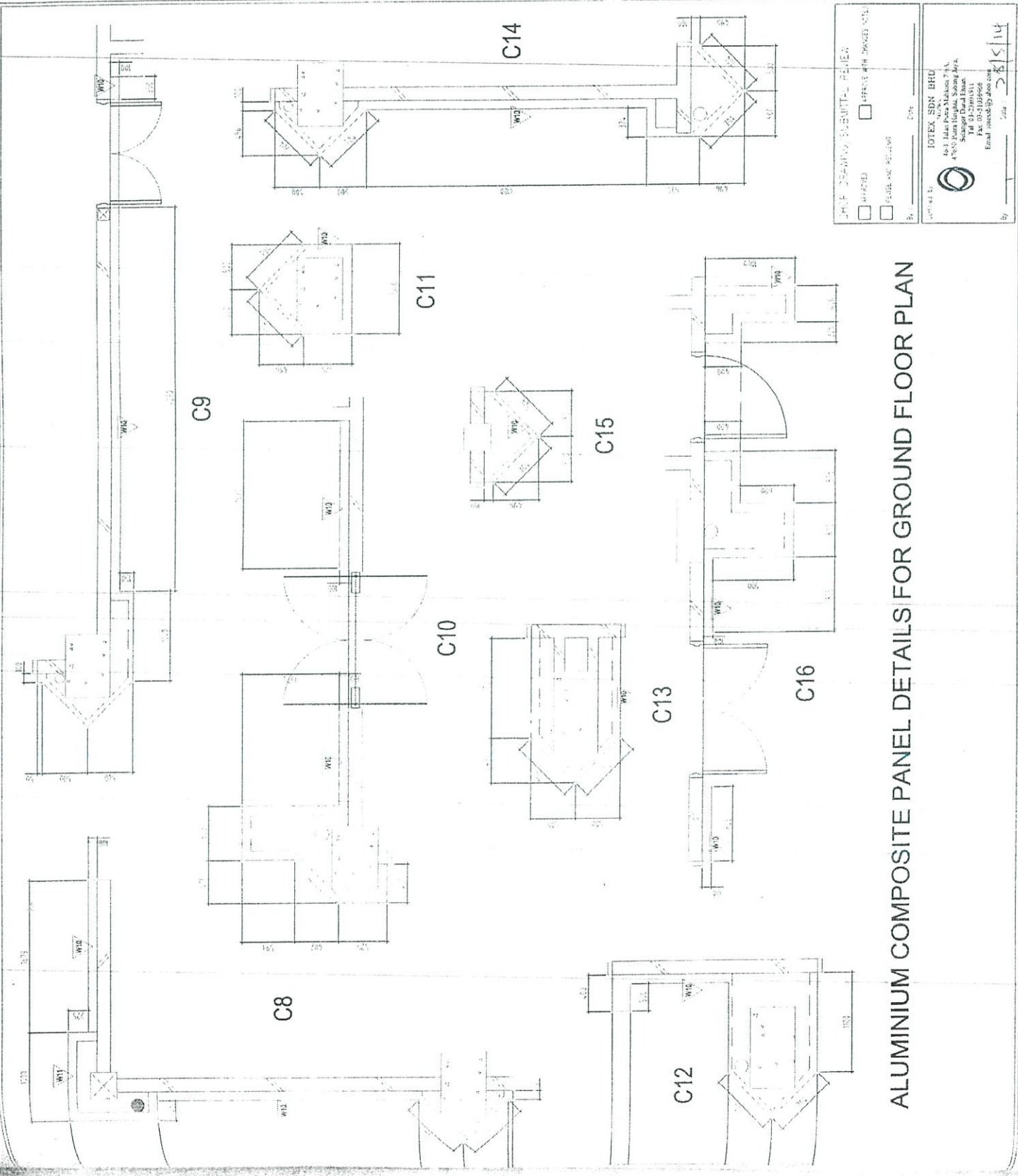
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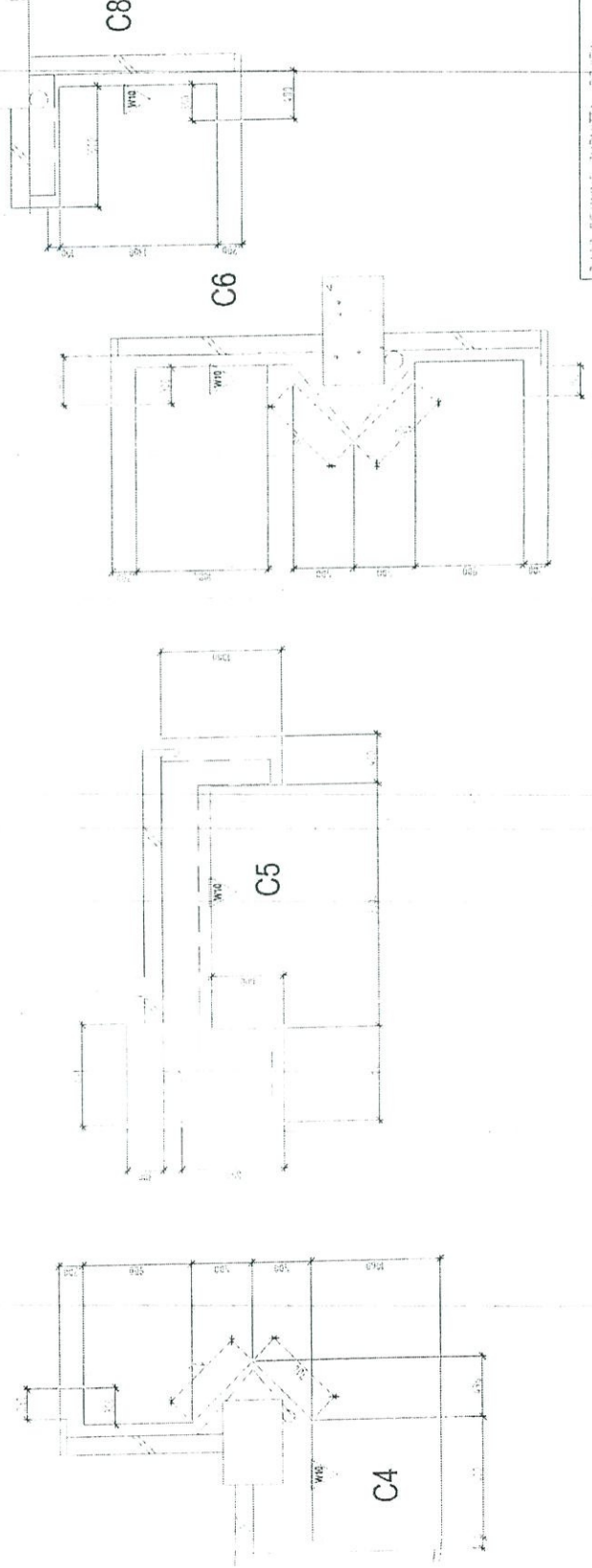
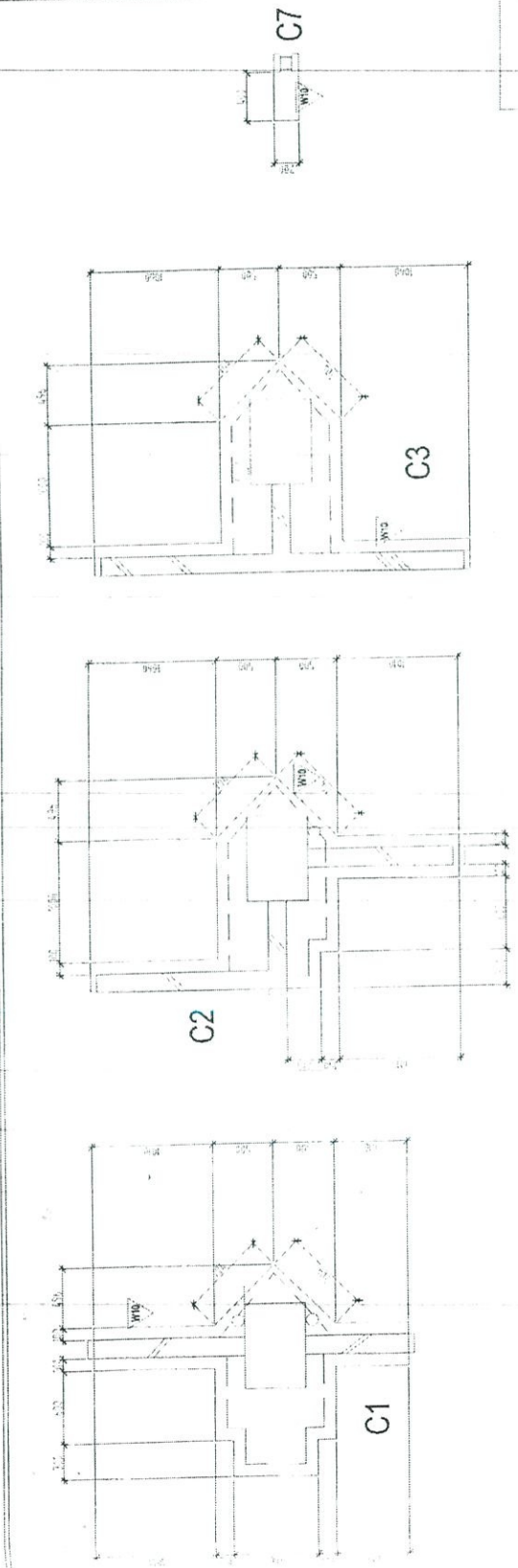
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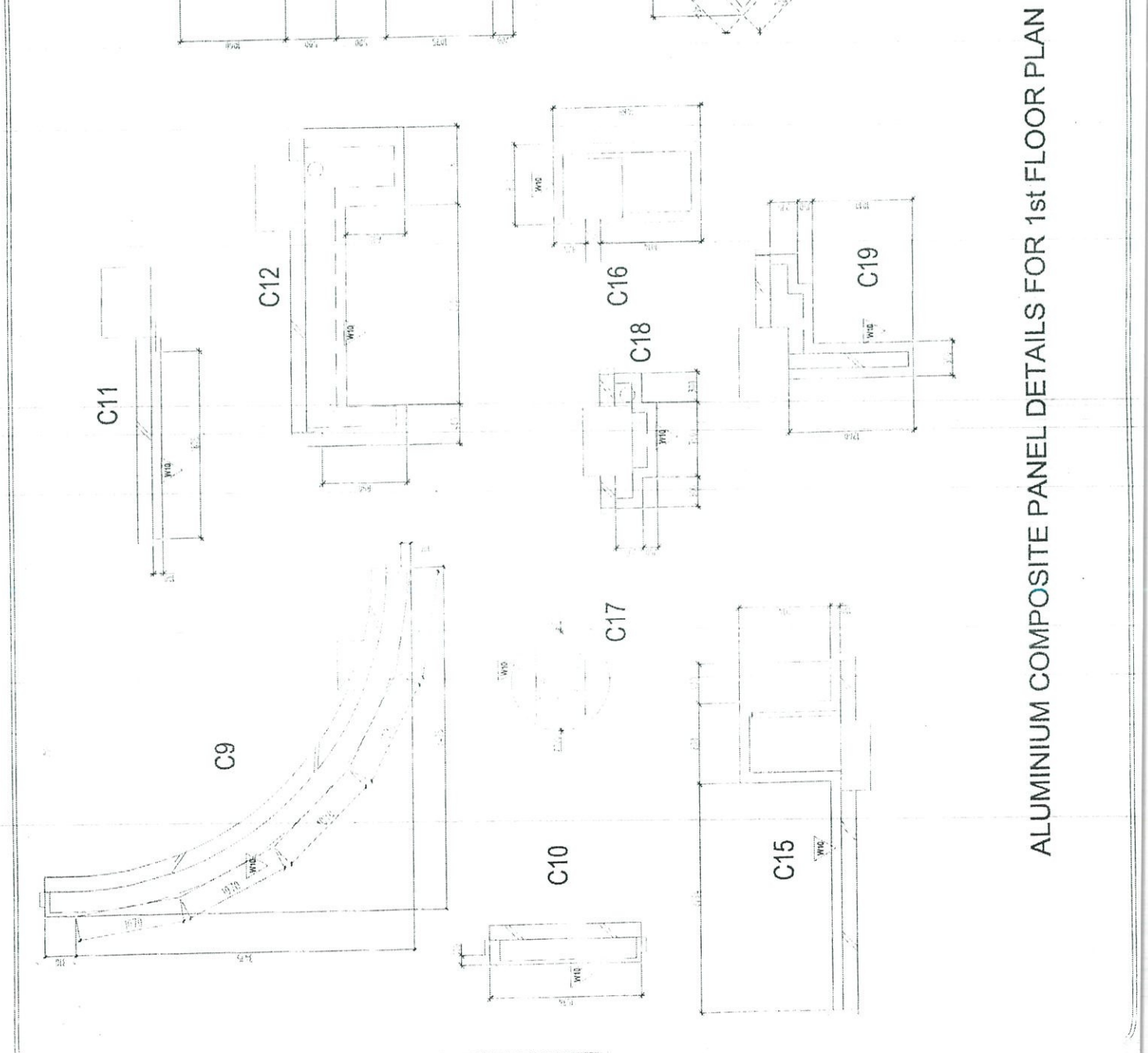
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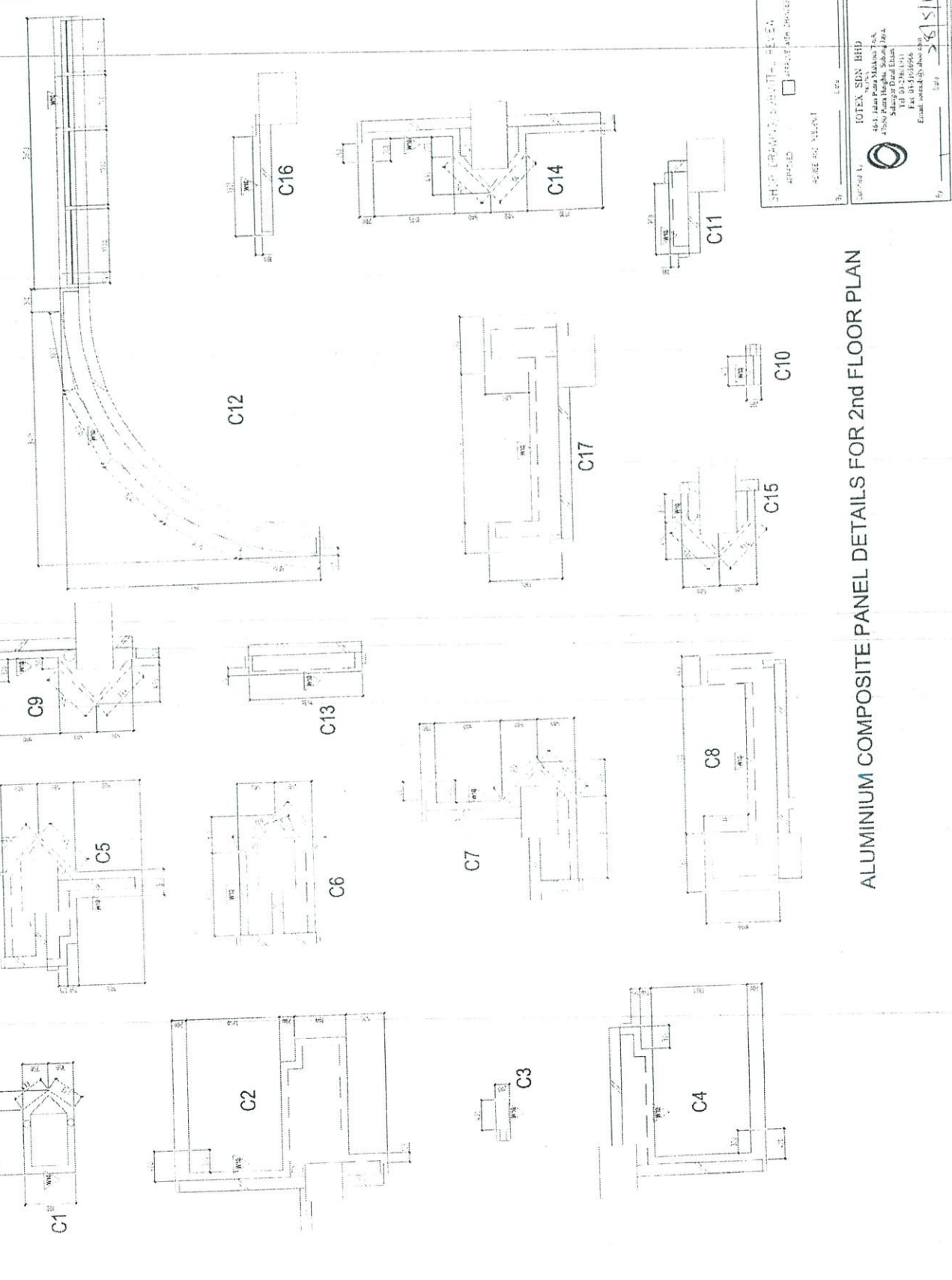
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Kedah Darul Aman, Malaysia
Tel: 015-2818151
Fax: 015-2818152
Email: info@ioitek.com.my



SHIP DRAWING SHEET

APPROVED: _____

REVISED: _____

DATE: _____

IOITEK Sdn Bhd
48-1 Jalan Petai Makong 704,
Petai, 70400 Alor Star,
Kedah Darul Aman, Malaysia
Tel: 015-2818151
Fax: 015-2818152
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ALUMINIUM COMPOSITE PANEL DETAILS FOR 2nd FLOOR PLAN

MAIN OFFICE

PROPOSED ALUMINIUM COMPOSITE PANEL DETAILS FOR 2nd FLOOR PLAN

NO.	DESCRIPTION	DATE
01	ISSUED	2024/05/10
02	REVISION	
03	REVISION	
04	REVISION	
05	REVISION	

JOB NO: IOITEK-CP-D/MPK-14-06

ALL DIMENSIONS AND TOLERANCES ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
 ALL DIMENSIONS ARE IN MM OR OTHERWISE STATED.
 ALL DIMENSIONS AND TOLERANCES ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
 ALL DIMENSIONS ARE IN MM OR OTHERWISE STATED.

OWNER
 MAMPU BERKUALITI
 MAMPU BERKUALITI
 MAMPU BERKUALITI

DESIGNER
 HING SENG SON BHD
 HING SENG SON BHD
 HING SENG SON BHD

CLIENT
 SAM
 SAM
 SAM

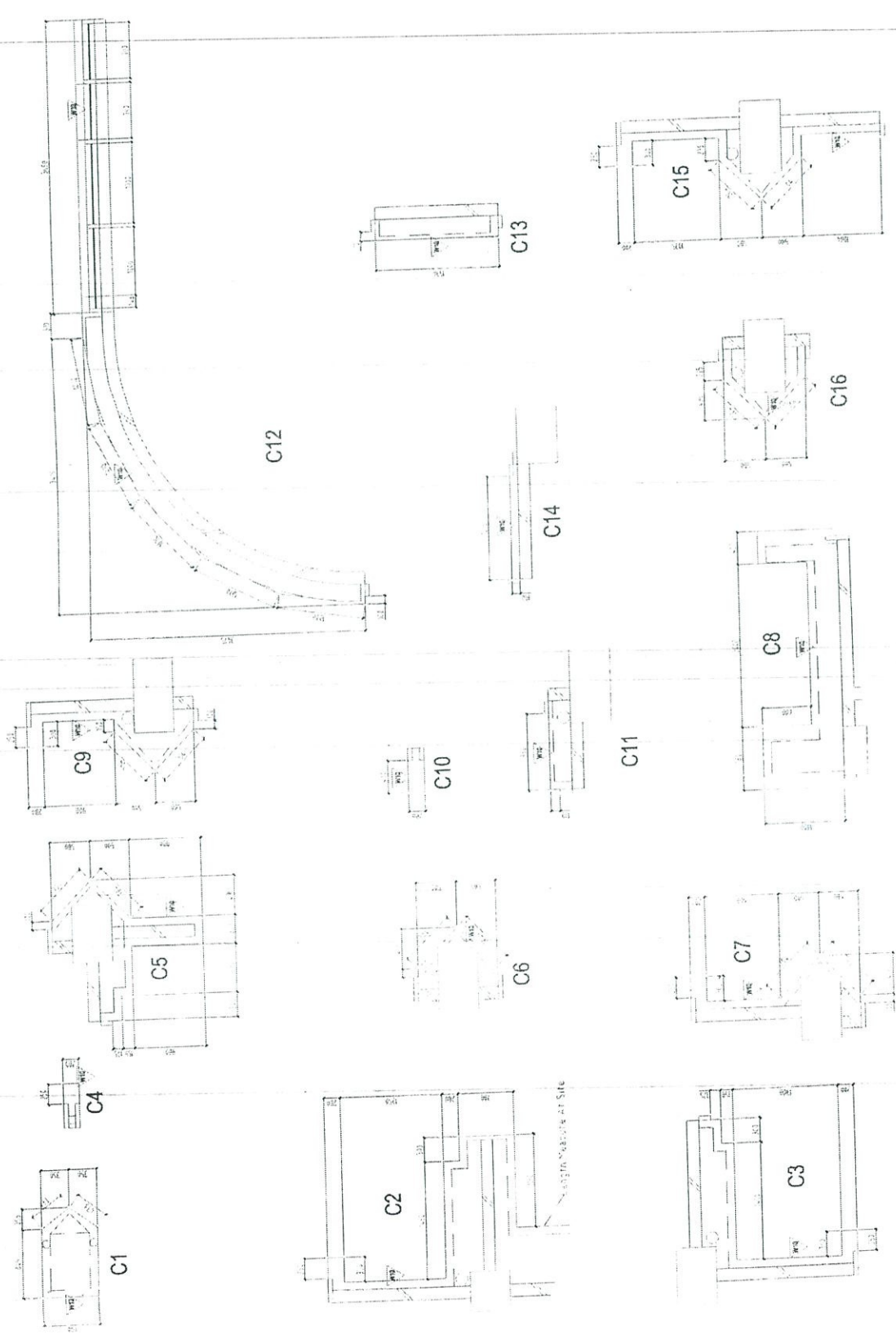
PROJECT TITLE
 LOTEX SDN BHD
 LOTEX SDN BHD
 LOTEX SDN BHD

PROJECT TITLE
 CADANGAN MEMBINA KOMPLEKS BIVV PEJABAT
 CADANGAN MEMBINA KOMPLEKS BIVV PEJABAT
 CADANGAN MEMBINA KOMPLEKS BIVV PEJABAT

MAIN OFFICE
 PROPOSED ALUMINIUM COMPOSITE PANEL DETAILS FOR
 3RD FLOOR PLAN


DESIGNED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE
SCALE	DATE
DATE	DATE

JOB NO.: LOTEX-CPD/MPK-14-07



DESIGNING / SUBMITTER REVIEW

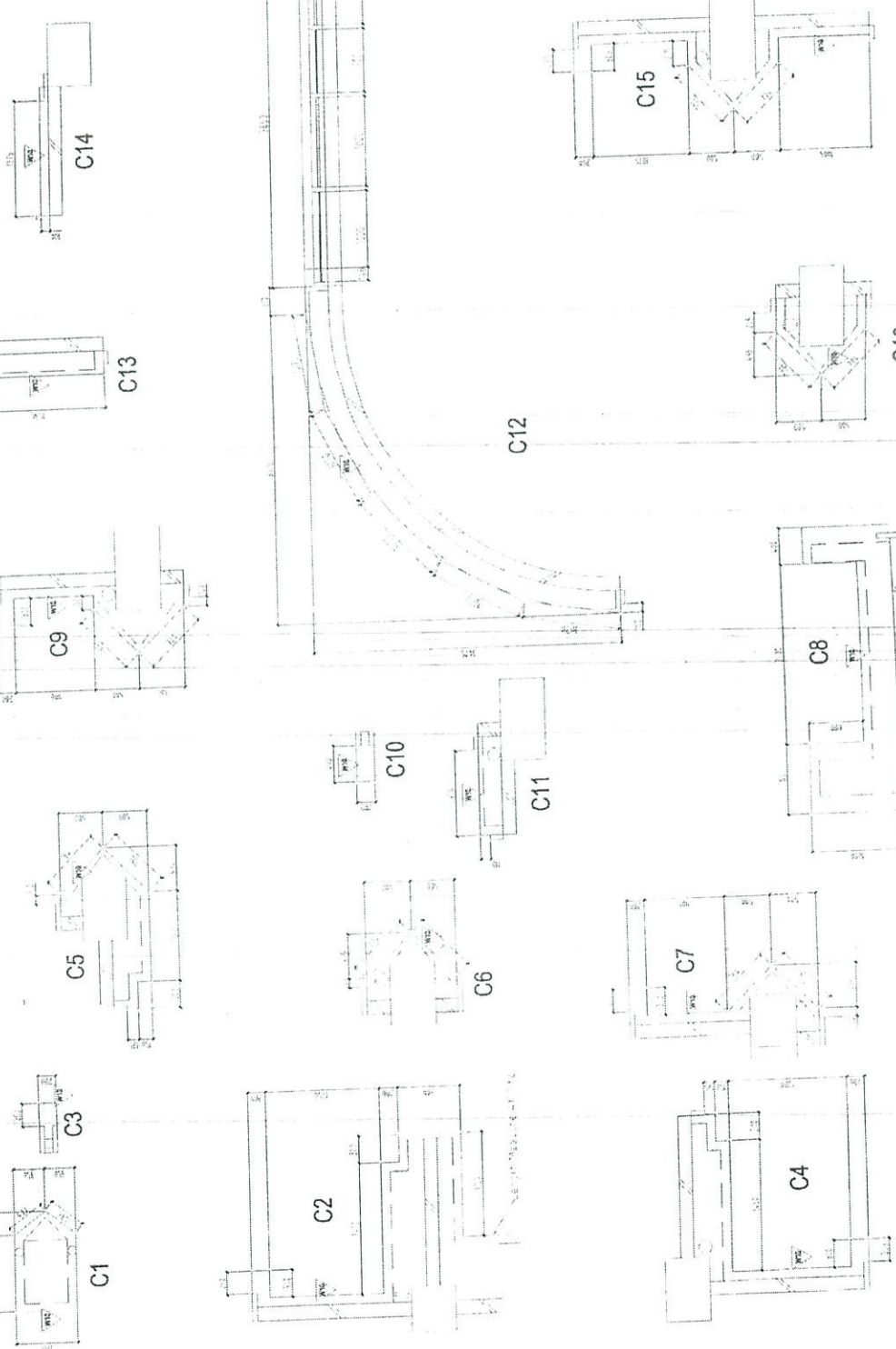
APPROVED
 REVISIONS REQUIRED
 REVISIONS REQUIRED

Drawn by: 
 HING SENG SON BHD
 46-1, Jalan Para Mahkota 7/A,
 47500 Para Mahkota, Subang Jaya,
 Selangor Darul Ehsan,
 Malaysia
 Tel: 03-23401811
 Fax: 03-23401806
 Email: info@hsb.com.my

Date: 28/11/14

ALUMINIUM COMPOSITE PANEL DETAILS FOR 3RD FLOOR PLAN

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
 ALL DIMENSIONS MUST BE CHECKED BEFORE PROCEEDING.
 DIMENSIONS MUST BE CHECKED BEFORE PROCEEDING.
 ALL DIMENSIONS MUST BE CHECKED BEFORE PROCEEDING.
 ALL DIMENSIONS MUST BE CHECKED BEFORE PROCEEDING.



SAM
 SURVEYING & ARCHITECTURE
 101, JALAN PERAK, 50050 KUALA LUMPUR
 TEL: 03-23888811
 FAX: 03-23888811
 EMAIL: sam@sam.com.my

LOTEX SDN BHD
 483, Jalan Peta Melaka 706
 70300 Seremban, Negeri Sembilan
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 Fax: 05-62588911
 Email: lotex@lotex.com

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 70300 Seremban, Negeri Sembilan
 Tel: 05-62588911
 Fax: 05-62588911
 Email: lotex@lotex.com

**CADANGAN MEMBINA KOMPLEKS BIL. PEJABAT
 MALIS PERBANDARAN KUALANTAN (MPPK)
 DI FAS LOT 29 SEKSYEN 29
 JALAN TANAPUTIL KUALANTAN,
 PAHANG DARUL MUKSUR**

SAM SURVEYING & ARCHITECTURE
 APPROVED
 NOT APPROVED
 DATE: 11/11/2011
 TIME: 10:30 AM

LOTEX SDN BHD
 483, Jalan Peta Melaka 706
 70300 Seremban, Negeri Sembilan
 Tel: 05-62588911
 Fax: 05-62588911
 Email: lotex@lotex.com

MAIN OFFICE
 PROPOSED ALUMINIUM COMPOSITE PANEL DETAILS FOR
 4th, 6th & 8th FLOOR PLAN

DATE: 11/11/2011	SCALE: 1:100
PROJECT: ALUMINIUM COMPOSITE PANEL DETAILS FOR 4th, 6th & 8th FLOOR PLAN	CLIENT: MPPK
DESIGNER: SAM SURVEYING & ARCHITECTURE	APPROVED: [Signature]
DRAWN: [Signature]	CHECKED: [Signature]
DATE: 11/11/2011	TIME: 10:30 AM

ALUMINIUM COMPOSITE PANEL DETAILS FOR 4th, 6th & 8th FLOOR PLAN

ALL DIMENSIONS IN CASE ONE UNLESS OTHERWISE SPECIFIED ARE TO CENTERLINE UNLESS OTHERWISE SPECIFIED. DIMENSIONS NOT REPORTED TO IOTEX SDA BHD BEFORE PROCEEDING WITH FABRICATION SHALL BE THE RESPONSIBILITY OF THE CLIENT. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.

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MAJLIS PERBANDARAN KUALANTAN
 PUSAT PERBANDARAN KUALANTAN
 KUALANTAN

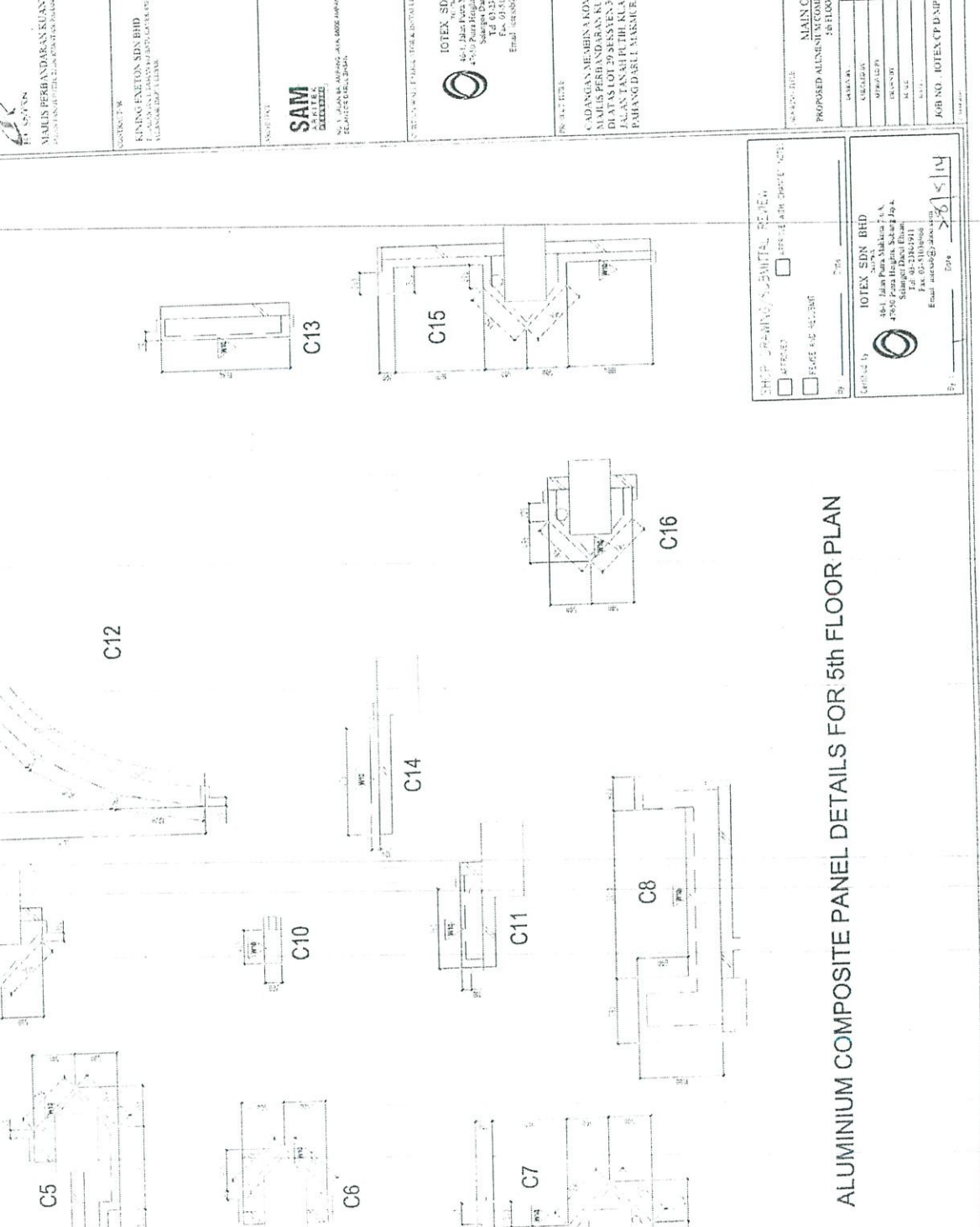
KINING FAEYON SDA BHD
 NO. 1, JALAN BUKIT MURNI, 41000 KUALANTAN
 KUALANTAN

SAM
 ARCHITECTURE
 NO. 1, JALAN BUKIT MURNI, 41000 KUALANTAN
 KUALANTAN

IOTEX SDA BHD
 49-1, Jalan Pagar Mahkota, 75000
 Seremban, Negeri Sembilan
 Tel: 01-32323181
 Fax: 01-31323268
 Email: iotex@iotex.com

PERKAMPARAN PERUMAHAN KUALANTAN
 MAJLIS PERBANDARAN KUALANTAN (MPK)
 DUA TINGKATAN 29 BERSASARAN
 JALAN TANAH BUKIT KLANTAN,
 PARANG PAKSI MARUHE

NO. 1, JALAN BUKIT MURNI, 41000 KUALANTAN
 KUALANTAN



ALUMINIUM COMPOSITE PANEL DETAILS FOR 5th FLOOR PLAN

NO. 1, JALAN BUKIT MURNI, 41000 KUALANTAN
 KUALANTAN

NO. 1, JALAN BUKIT MURNI, 41000 KUALANTAN
 KUALANTAN

IOTEX SDA BHD
 49-1, Jalan Pagar Mahkota, 75000
 Seremban, Negeri Sembilan
 Tel: 01-32323181
 Fax: 01-31323268
 Email: iotex@iotex.com

NO. 1, JALAN BUKIT MURNI, 41000 KUALANTAN
 KUALANTAN

NO. 1, JALAN BUKIT MURNI, 41000 KUALANTAN
 KUALANTAN

IOTEX SDA BHD
 49-1, Jalan Pagar Mahkota, 75000
 Seremban, Negeri Sembilan
 Tel: 01-32323181
 Fax: 01-31323268
 Email: iotex@iotex.com

NO. 1, JALAN BUKIT MURNI, 41000 KUALANTAN
 KUALANTAN

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 49-1, Jalan Pagar Mahkota, 75000
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NO. 1, JALAN BUKIT MURNI, 41000 KUALANTAN
 KUALANTAN

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NO. 1, JALAN BUKIT MURNI, 41000 KUALANTAN
 KUALANTAN

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 KUALANTAN

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 Seremban, Negeri Sembilan
 Tel: 01-32323181
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PROJ 22

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 MAHLIS PERBANDARAN KUANTAN
 100, Jalan Sultan Abdul Halim, 25100 Kuantan, Pahang

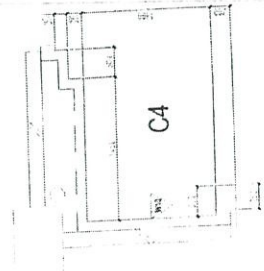
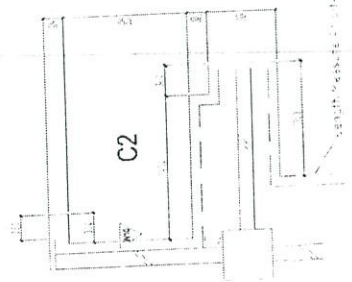
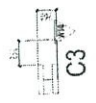
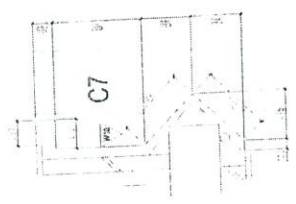
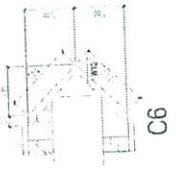
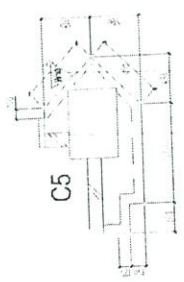
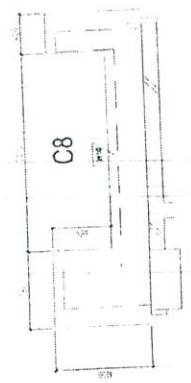
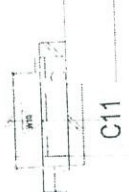
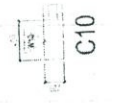
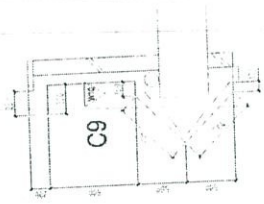
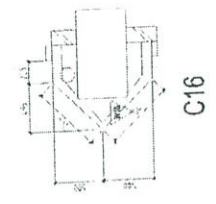
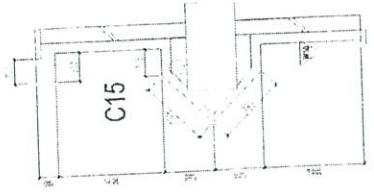
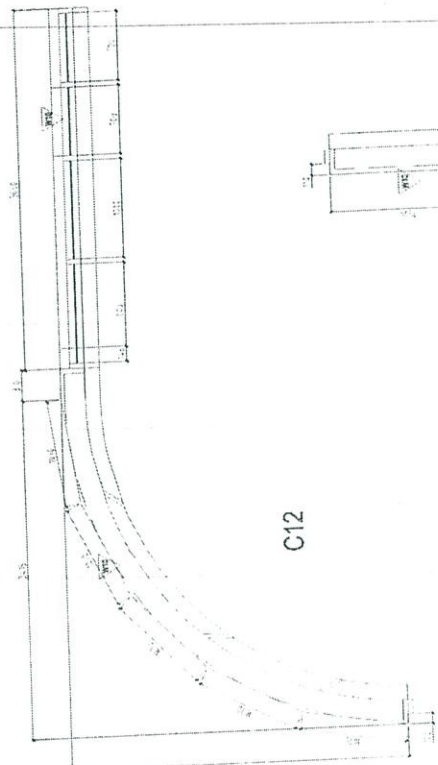
CONTRACTOR
KINING EMATON Sdn Bhd
 11, Jalan Pagar Utama, 25100 Kuantan, Pahang

QUALITY CHECK
SAM
 JAAALITEK
 102-1, Jalan Ds. Ampang, 40000 Kuala Lumpur

IOTEX Sdn Bhd
 46-1, Jalan Pagar Utama, 25100 Kuantan, Pahang
 Tel: 01-22800011
 Fax: 01-22800066
 Email: iotex@iotex.com

NO. 102/2019
 CADANGAN MEMBINA KOMPLEKS IBU PEJABAT MAHLIS PERBANDARAN KUANTAN (MPKN) DI ATAS LOT 29 SENYEN 30, JALAN TANJUNGPETRA, KUANTAN, PAHANG DARUL MAHAJIR

PROPOSED TITLE	MAIN OFFICE
PROPOSED ALUMINIUM COMPOSITE PANEL DETAIL FOR	30 FLOOR PLAN
DATE	2019
BY	2019
CHECKED BY	2019
APPROVED BY	2019
SCALE	1:1
JOB NO.	IOTEX CP DMBK-14-10



GROUP DRAWING SUBMITTAL REVIEW

APPROVED BY: _____ DATE: _____

REVIEWED BY: _____ DATE: _____

DATE: _____

IOTEX Sdn Bhd
 46-1, Jalan Pagar Utama, 25100 Kuantan, Pahang
 Tel: 01-22800011
 Fax: 01-22800066
 Email: iotex@iotex.com

ALUMINIUM COMPOSITE PANEL DETAILS FOR 7th FLOOR PLAN

UNAPPROVED TO IOTEX SDN BHD REFERENCE 1904-24-00000
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 (KUALANTAN DEVELOPMENT)
 45-1 Jalan Perumahan Kuantan, Kuantan
 25100 Kuantan, Pahang, Malaysia
 Tel: 023761111
 Fax: 023761111
 Email: info@iotex.com.my

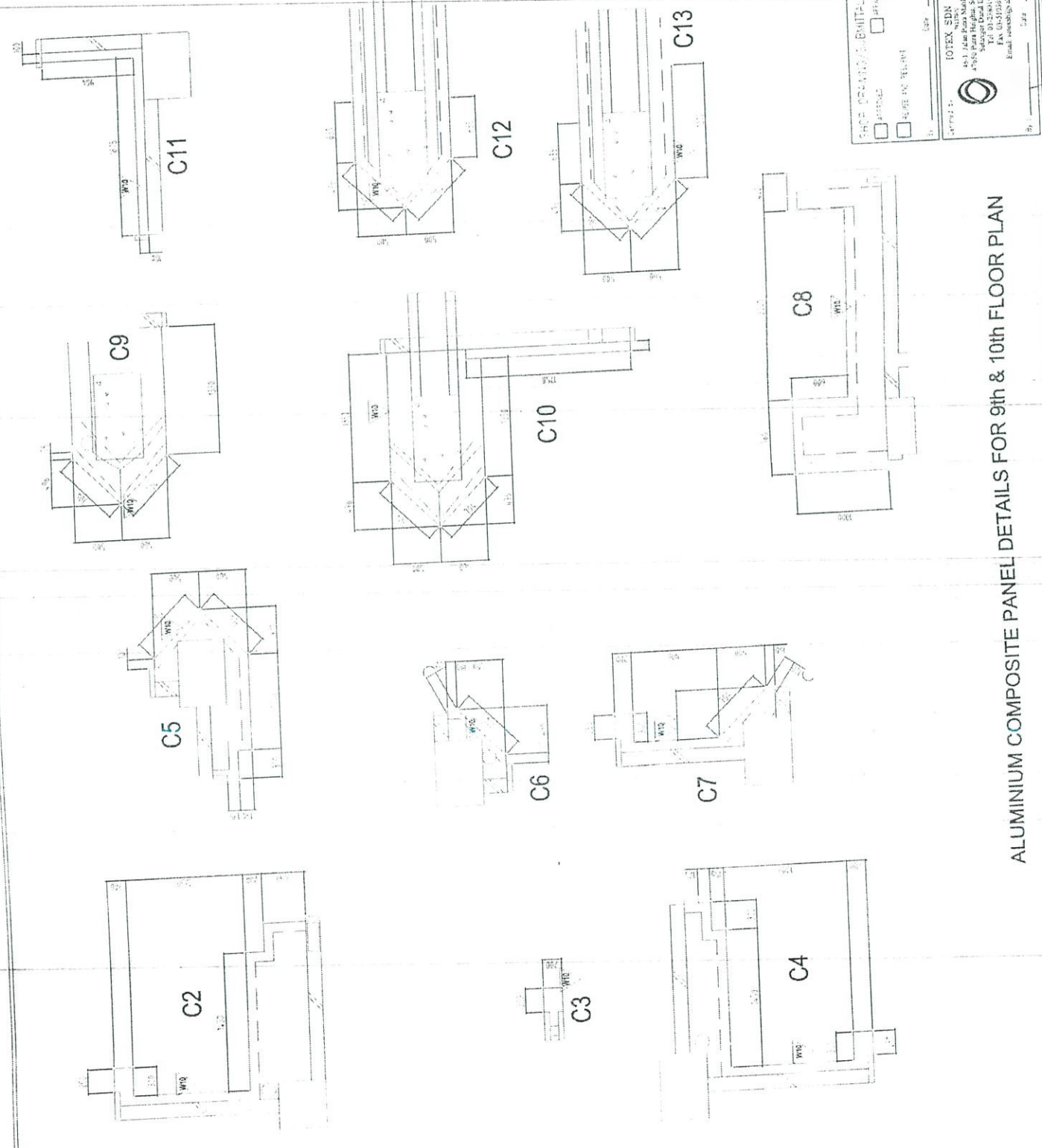
KINING FENETON SDN BHD
 2, JALAN SUNGAI MUDA 1/2, TAMAN SUNGAI MUDA
 50100 KUALA SELAYANG, SELANGOR
 MALAYSIA
 Tel: 03-27191111
 Fax: 03-27191111
 Email: info@kining.com.my

SAM
 SANGAT AMBING MUDA
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 50100 KUALA SELAYANG, SELANGOR
 MALAYSIA
 Tel: 03-27191111
 Fax: 03-27191111
 Email: info@sangat.com.my

IOTEX SDN BHD
 45-1 Jalan Perumahan Kuantan, Kuantan
 25100 Kuantan, Pahang, Malaysia
 Tel: 023761111
 Fax: 023761111
 Email: info@iotex.com.my

CADANGAN MEMBINA KOMPLEKS BLOK PEJABAT
 MAJLIS PERBANDARAN KUALANTAN (MPPK)
 DI ATAS LOTS 29 SEKSYEN 23
 JALAN TANAH PUTIH, KUALANTAN
 PAHANG 26100 MUKOH MUKOH

DRAWING TITLE	
PROPOSED ALUMINIUM COMPOSITE PANEL DETAIL FOR	
NO. OF SHEETS	1
DATE	12/12/2018
DESIGNED BY	WONG SENG HOON
CHECKED BY	WONG SENG HOON
APPROVED BY	WONG SENG HOON
SCALE	AS SHOWN
PROJECT NO.	1904-24-00000
JOB NO.	1904-24-00000



ALUMINIUM COMPOSITE PANEL DETAILS FOR 9th & 10th FLOOR PLAN

IOTEX SDN BHD
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 25100 Kuantan, Pahang, Malaysia
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 Fax: 023761111
 Email: info@iotex.com.my

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 50100 KUALA SELAYANG, SELANGOR
 MALAYSIA
 Tel: 03-27191111
 Fax: 03-27191111
 Email: info@sangat.com.my

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MAMSI PERBADARAN ANTAN
 MAIN OFFICE: 11, JALAN TUN ABU BAKAR, 10450, SELANGOR.
 TEL: 03-8858 9800, FAX: 03-8858 9801

KINNO FENIXON Sdn BHD
 22, JALAN SUNGAI BUKIT, 43000, SEREMBAN, NEGERI SEMBILAN.
 TEL: 06-7568 9999, FAX: 06-7568 9999



SAM AKRATER ENGINEERING
 12, JALAN AIR PUTIH, 10460, SELANGOR.
 TEL: 03-8858 9999, FAX: 03-8858 9999



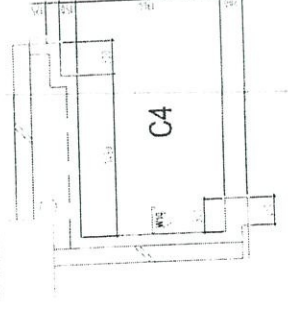
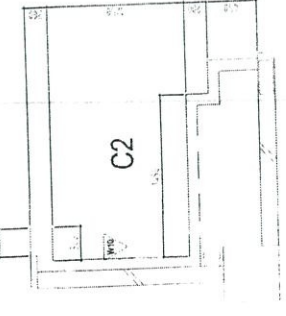
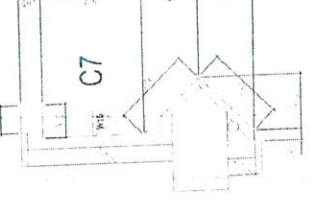
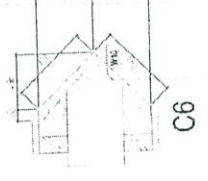
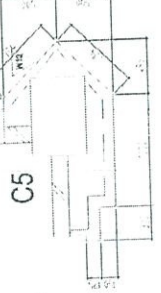
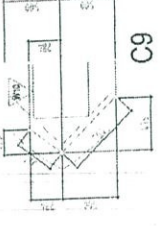
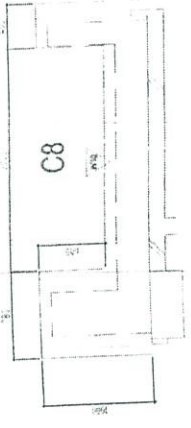
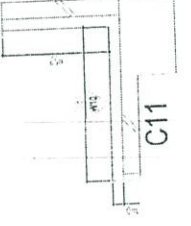
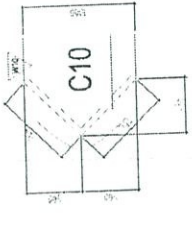
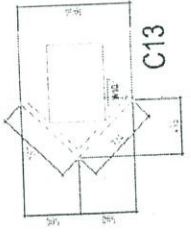
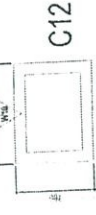
IOTEX SUN BHD
 401, Jalan Pagar Mankata 1, S.A.
 47000, Pagar Mankata, Selangor, JAYA.
 TEL: 03-8858 9999, FAX: 03-8858 9999
 Email: iotex@iotex.com.my

LOT 11, JALAN AIR PUTIH, 10460, SELANGOR.
 TEL: 03-8858 9999, FAX: 03-8858 9999

MAIN OFFICE
 11, JALAN TUN ABU BAKAR, 10450, SELANGOR.

NO	REVISION	DATE	DESCRIPTION
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

JOB NO: IOTEX CPD/NPRC/1412



PROJECT REVISION CONTROL SHEET

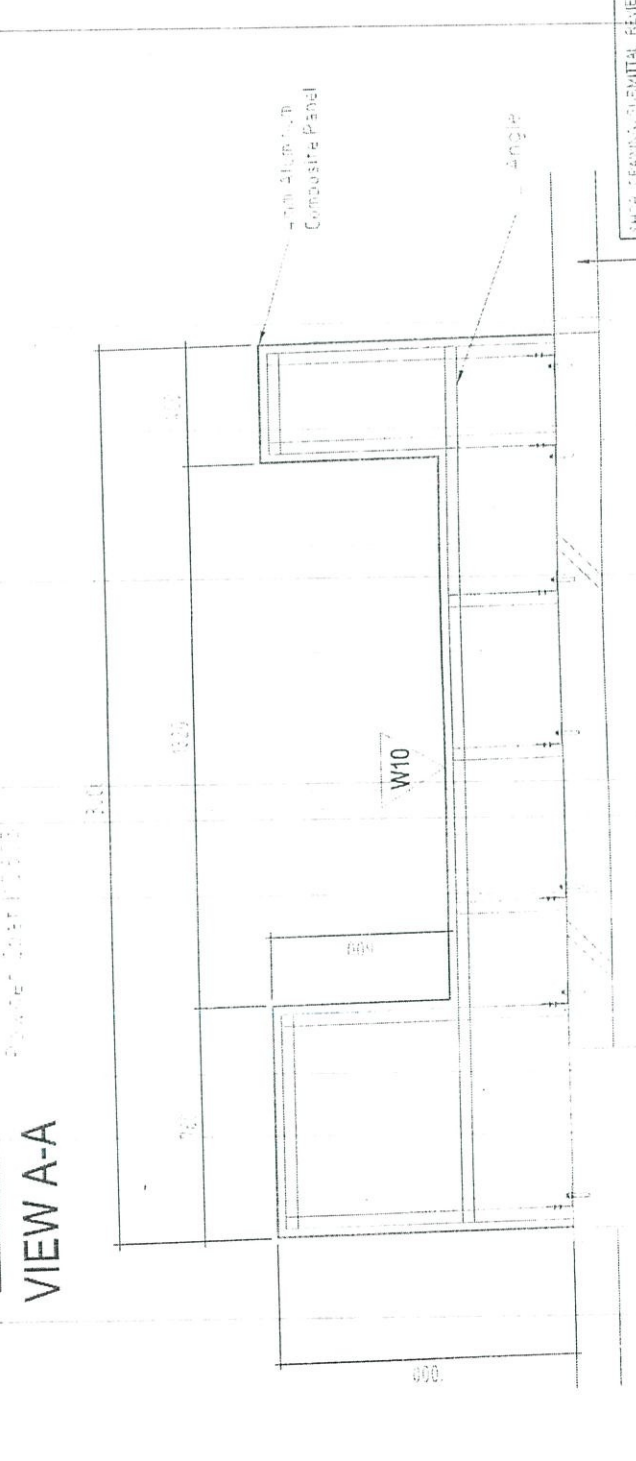
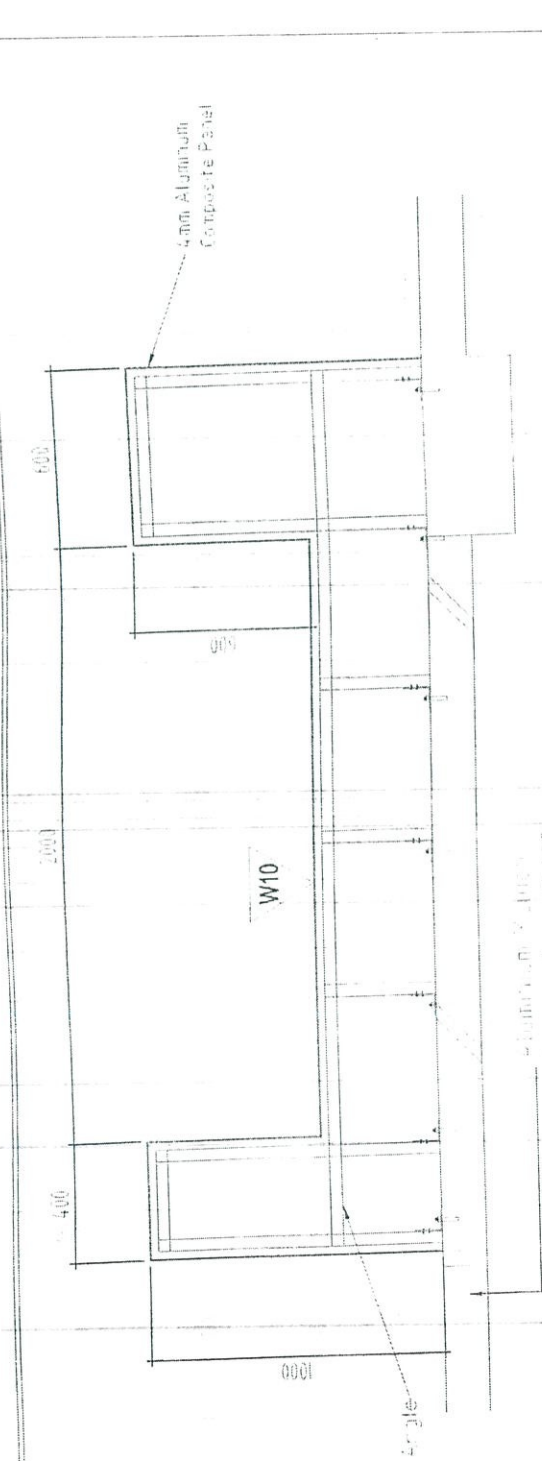
APPROVED BY: DATE: _____

DATE: _____

IOTEX SUN BHD
 401, Jalan Pagar Mankata 1, S.A.
 47000, Pagar Mankata, Selangor, JAYA.
 TEL: 03-8858 9999, FAX: 03-8858 9999
 Email: iotex@iotex.com.my

ALUMINIUM COMPOSITE PANEL DETAILS FOR 11th & ROOF FLOOR PLAN

ALL DIMENSIONS ON SITE SHALL BE THE RESPONSIBILITY OF THE CLIENT. ANY DISCREPANCIES MUST BE REPORTED IMMEDIATELY TO JOTEX SDN BHD BEFORE PROCEEDING. ALL DETAILS & DESIGNS PROVIDED IN THIS TECHNICAL COMPLIANCE IS A SINGLE PROPRIETARY SYSTEM AND SHALL NOT BE REPRODUCED OR COPIED IN ANY FORM WITHOUT CONSENT OF JOTEX SDN BHD. ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE STATED.



VIEW A-A

VIEW B-B

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SARAWAK ARCHITECTS
101, JALAN DAHAR, KUCHING, SARAWAK, MALAYSIA
TEL: 082-2341111

JOTEX SDN BHD
499-1, Jalan Petai, Mukoh, 764,
47500, Petai, Mukoh, Sarawak,
Malaysia
Tel: 082-2341111
Fax: 082-2341111
Email: jotex@jotex.com.my

MALIS PERBANDARAN KUALAN
KUALAN KUALAN, MALAYSIA

KINSENG EAST COAST SDN BHD
KINSENG EAST COAST SDN BHD
KINSENG, MALAYSIA

JOTEX SDN BHD
499-1, Jalan Petai, Mukoh, 764,
47500, Petai, Mukoh, Sarawak,
Malaysia
Tel: 082-2341111
Fax: 082-2341111
Email: jotex@jotex.com.my

CADANGAN MEMBINA KOMPLEKS BLOK PEABAT
MAJLIS PERBANDARAN KUALAN KUALAN
DI ATAS LOT 29 SELATAN 30
JALAN TANGKAPUTER, KUALAN
PANGGARAN, SARAWAK

MAIN OFFICE
PROPOSED CURTAINS WALL ALUMINIUM
COMPOSITE PANEL DETAILS

REVISION	DATE
01	15/05/2024
02	15/05/2024
03	15/05/2024
04	15/05/2024
05	15/05/2024

JOB NO. - JOTEX-CPD-MEK-14-13

STEP: CHECKING SUBMITTAL REVIEW

DATE: 15/05/2024

REVIEWER: [Signature]

DATE: 15/05/2024

BY: [Signature]

JOTEX SDN BHD
499-1, Jalan Petai, Mukoh, 764,
47500, Petai, Mukoh, Sarawak,
Malaysia
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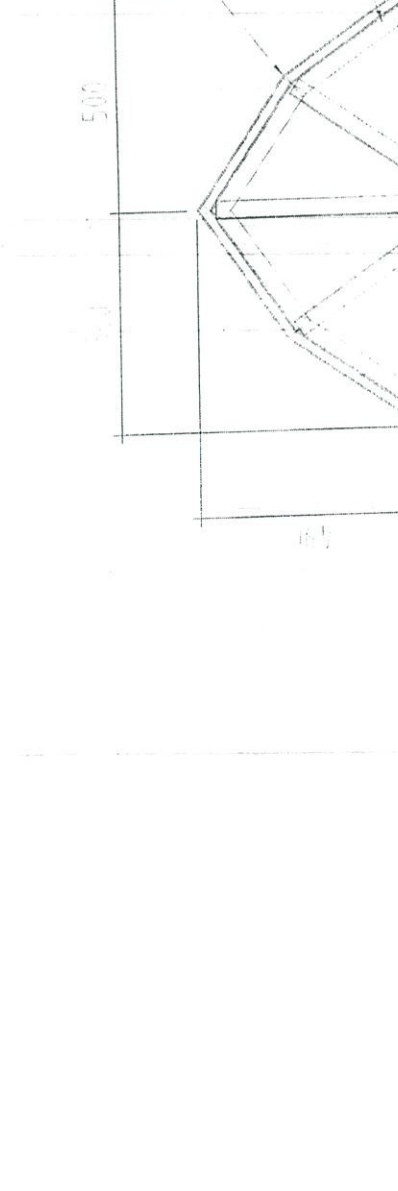
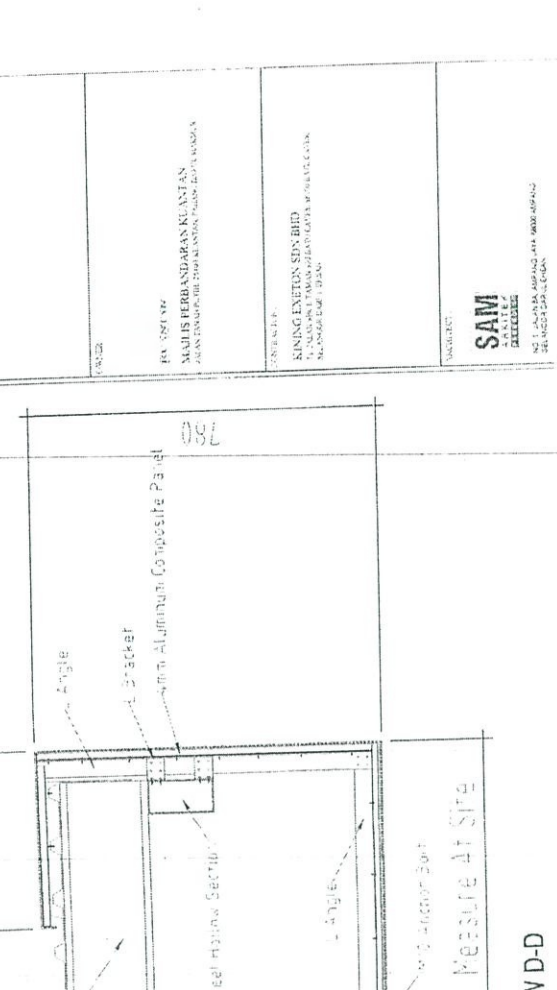
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PROJEN: KAMPUS BARU KININGEN
 PROJEK: KURSI ALUMINIUM
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