

工程指示 / 要求簡箋(E.I.)

工程指示編號：EI / 9582 / 18

修改版次：-

工程編號：J - 837

工程名稱：觀塘裕民坊

工程項目：2018-08-02 上廠會議 確認和回覆事項

收件人：謝永林 / 楊曉玲 發件人：Ant Yeung

日期：03/08/2018

要求提供 / 確認 事項：

- | | | |
|------------------------------------|-------------------------------------|-------------------------------|
| <input type="checkbox"/> 初步鋁料 B.M. | <input type="checkbox"/> 加工拆圖，然後生產 | <input type="checkbox"/> 尺寸表 |
| <input type="checkbox"/> 正式鋁料 B.M. | <input type="checkbox"/> 技術上資料 / 指示 | <input type="checkbox"/> 報價 |
| <input type="checkbox"/> 配件 B.M. | <input type="checkbox"/> 樣辦或貨品說明書 | <input type="checkbox"/> 分判合約 |
| <input type="checkbox"/> 其他：_____ | | |

內容：

有關 2018-08-02 上廠會議，確認和回覆事項。

內容見後頁。 謝謝！

請在 _____ 前完成上列要求。

附：

以上項目為：

- 原合約工程包 原合約工程加 / 減賬 新工程報價

原因：-

分發東莞各部門：

- () 生產技術總監 連附件 () 技術部 連附件 *謝* () 生產部 連附件 () 機械設計部 連附件
 () 採購部 連附件 () 生產統籌部 連附件 *梅, 邱榮宇*
 () 質檢部 連附件 *張* () 會計部 連附件 () 報關組 連附件 () 其他 *楊曉玲* 連附件

分發香港各部門：

- () 行政部 連附件 () 會計部 連附件 () 統籌部 連附件 () 工程部地盤科文 連附件
 () 採購部 連附件 () QS 部 連附件 () 維修部 連附件 () 其他 _____ 連附件

傳遞編號：

發件人簽署：*Ant Yeung*

HK 1200 / 18

項目經理簽署：*[Signature]*

有關 2018-08-02 上廠會議，確認和回覆事項

1. 佛沙窗和後裝窗手柄，現場後裝。
2. 佛沙窗玻璃線，裝齊四邊。地盆現場試水時，才拆開底部，觀察有無漏水。

(膠紙：厚度 0.11mm)

3. 試模窗欠百葉：百葉玉會否扭曲？初步估算不會，因只有 235 和 300 高。

大貨百葉玉安裝送佛沙廠

4. 百葉背板：現場後裝百葉背板。

百葉背板框上螺絲孔不開，拆圖要標明位置和"地盆配鑽"

5. 百葉有 Plenum Box，位置有待大判指出。(有 1 個孔，2 個孔，3 個孔)

6. 底部玻璃線要有木方和膠蓋作保護，底部企向玻璃線也要加上。

7. 拉手位置有獨立膠紙保護，不用撕去所有膠紙去裝拉手

8. 窗玉夾角見光無 2mm 膠；窗框橫碰企見光有膠

9. 窗玉開關要調較好。扇撐(玉) 四粒螺絲全修，扇撐(框) 四粒螺絲全修。

BD 要求：扇撐加力巴，要用不秀鋼 3mm (只用在玉上)；框不用，因已有 5mm 厚

10. 夾巴修長孔，不修中間梗孔。中間梗孔螺絲請改為地盆用 BM。

← 拆圖修補回

11. 新款防水角取代舊款，請啤出(先生產 20 隻)，用 0.5mm 厚度，見尺寸。只用在窗底

左右下角

12. 拉手和鎖點高度

13. 王良：請提供樣板 2 個窗玷蓋，裝玻璃前使用。(舊工程曾用)

14. 王良：請參照 J807 提供保護方案，供大判批核。

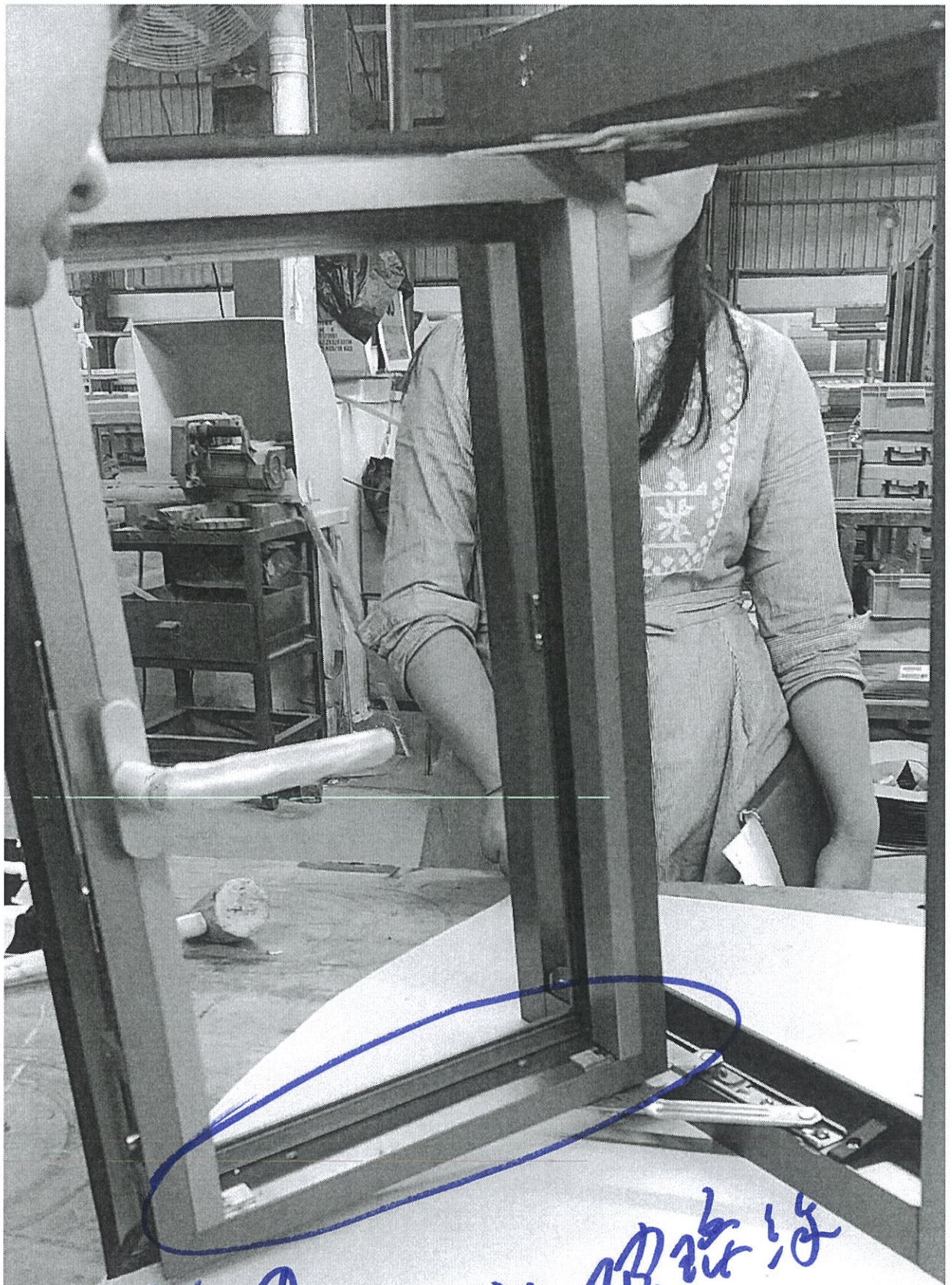
15. 請提供駐佛沙廠聯絡人，姓名，電話。



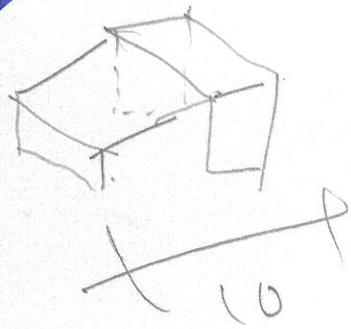
此處
現場後裝

#1

#7 獨立膠紙保護
不阻擋拉手

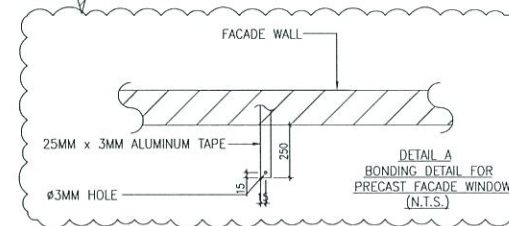
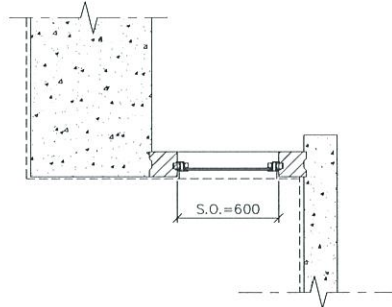
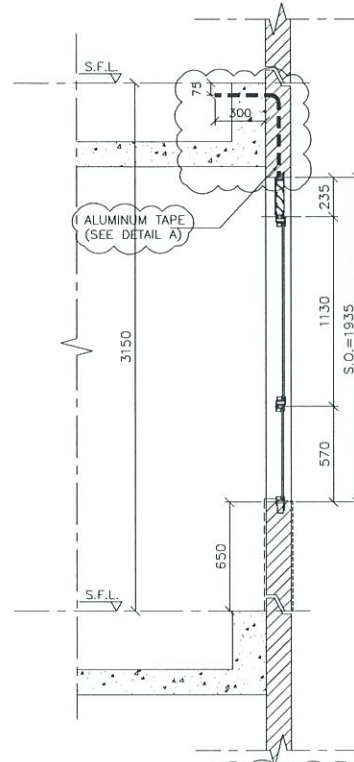
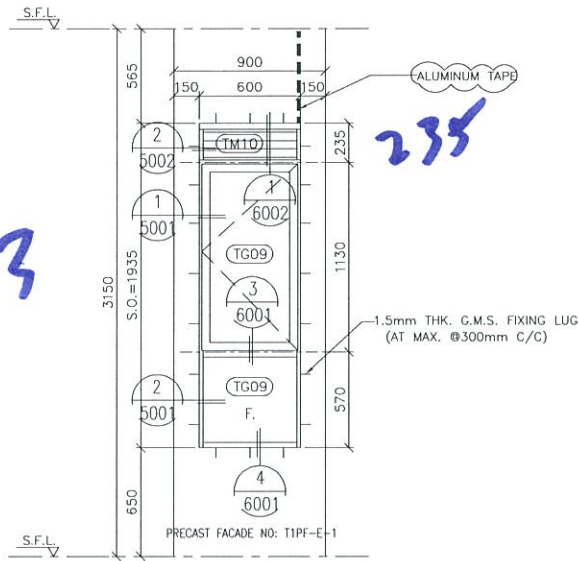


#2 ↑ 觀察各回邊理磁線



ELEVATION

4/3



GLAZING AREA	Required = 0.392 Provided = 0.711
OPENABLE AREA	Required = 0.392 Provided = 0.818

B.D. REF :

CLIENT :
 信和置業有限公司
 Sino Land Company Limited

ARCHITECT :
 WONG TUNG & PARTNERS LIMITED
 ARCHITECTS & PLANNERS

MAIN CONTRACTOR :
 CR Construction Company Limited

STRUCTURAL ENGINEER :
 AECOM

FACADE CONSULTANT:

NOTE:
 1. ALL DIMENSIONS ARE IN mm.
 2. ALL ELEVATIONS ARE VIEWED FROM OUTSIDE.
 3. ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE FABRICATION.

LEGEND:
 — DETAIL MARK NO.
 — REFER SHEET NO.
 1. F.F.L. — FINISHED FLOOR LEVEL
 2. S.F.L. — STRUCTURAL FLOOR LEVEL
 3. (Z) — REVERSED DETAIL

A	2018/07/19	BY ARCHITECT COMMENT	Zeng
NO.	DATE	REVISED	BY

JOB NO. : J-B37
 PROJECT :
 URA KWUN TONG TOWN CENTRE
 REDEVELOPMENT (AREA 2 & 3) AT
 NKIL 6514, KWUN TONG, KOWLOON

TITLE :
 ALUM. WINDOW SCHEDULE
 (FOR T1)

DATE : 04-JUL-18 SCALE : 1:30
 DRAWN BY : Zeng CHECKED BY : DW

美特鋁質有限公司
 MIDI ALUMINIUM FABRICATOR LTD.
 Units 6-8, Sunray Industrial Centre, 1/F
 610 Chi Kwo Ling Road, Kowloon
 Tel:23489211-4 Fax:(852)2727666

DWG NO. : JB37-PW-2112 REV. : A

WINDOW MARK

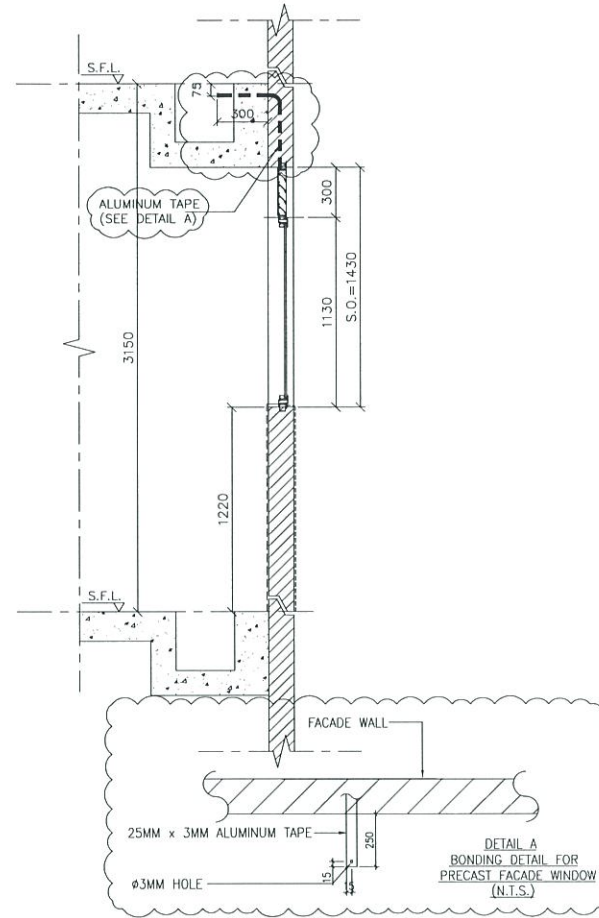
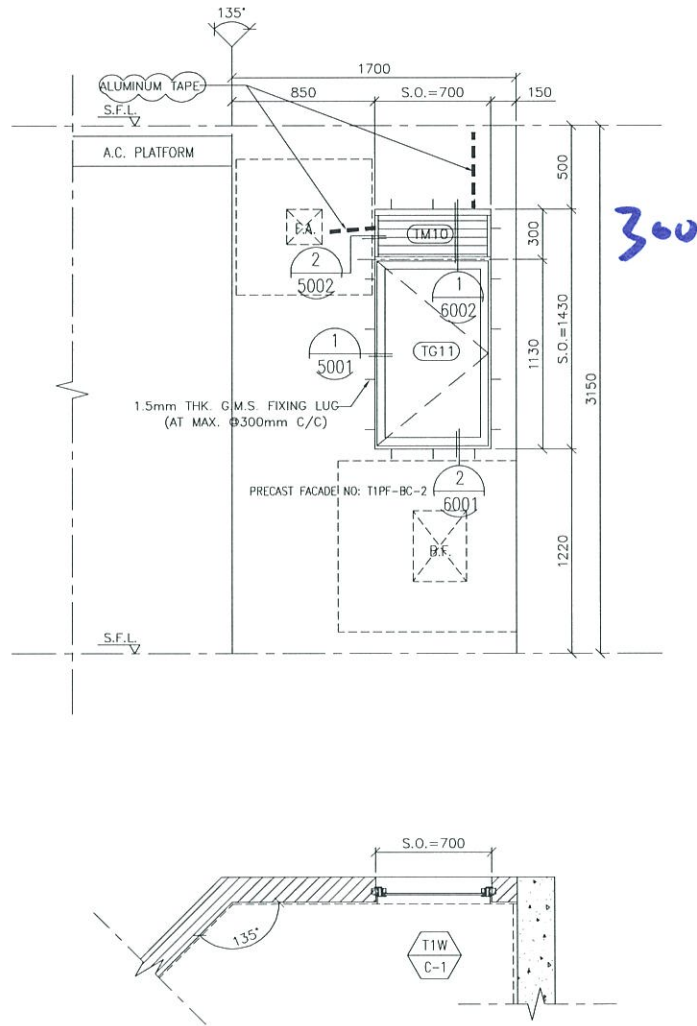
SECTION : 50mm ALUM. SECTION
 39 NOS. (TYPICAL)

LOCATION : 6/F-26/F, 28/F-50/F FLAT E BATHROOMS

GLAZING : 8mm THK ACLD ETCHED FROSTED TEMPERED GLASS

REMARK :

ELEVATION



GLAZING AREA	Required = 0.528 Provided = 0.566
OPENABLE AREA	Required = 0.330 Provided = 0.651

B.D. REF :

CLIENT :
 Sino Land Company Limited

ARCHITECT :
 WONG TUNG & PARTNERS LIMITED ARCHITECTS & PLANNERS

MAIN CONTRACTOR :
 CR Construction Company Limited

STRUCTURAL ENGINEER :
 AECOM

FACADE CONSULTANT:

NOTE:
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 2. ALL ELEVATIONS ARE VIEWED FROM OUTSIDE.
 3. ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE FABRICATION.

LEGEND:

- ① - DETAIL MARK NO.
- ② - REFER SHEET NO.
- 1. F.F.L. - FINISHED FLOOR LEVEL
- 2. S.F.L. - STRUCTURAL FLOOR LEVEL
- 3. (Z) - REVERSED DETAIL

A	2018/07/19	BY ARCHITECT COMMENT	Zeng
NO.	DATE	REVISED	BY

JOB NO. : J-837
 PROJECT : LURA KWUN TONG TOWN CENTRE REDEVELOPMENT (AREA 2 & 3) AT NKIL 6514, KWUN TONG, KOWLOON

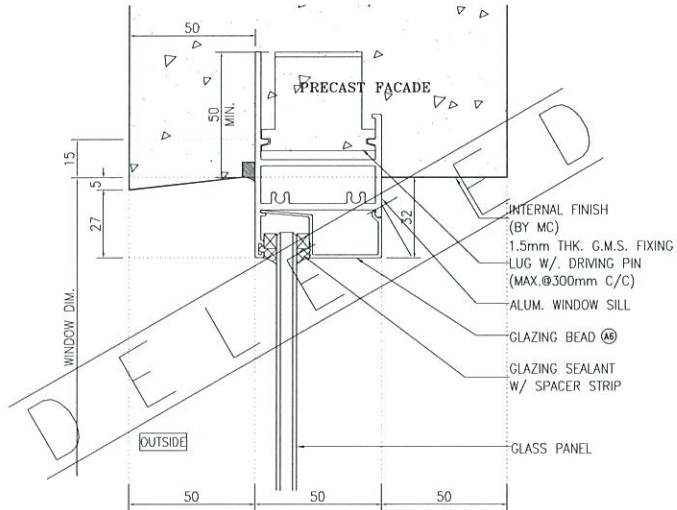
TITLE :
 ALUM. WINDOW SCHEDULE (FOR T1)

DATE : 04-JUL-18 SCALE : 1:30
 DRAWN BY : Zeng CHECKED BY : DW

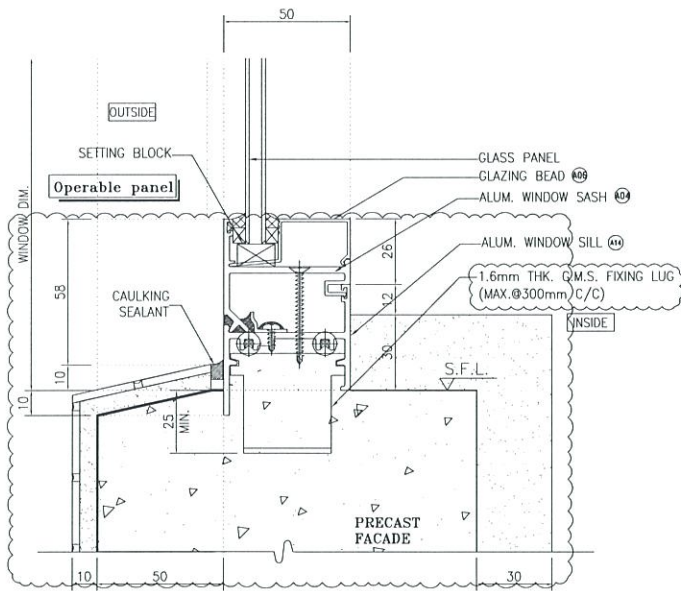
美特鋁質有限公司
 MIDI ALUMINIUM FABRICATOR LTD.
 Units 6-8, Sunny Industrial Centre, 1/F
 810 Che Kwo Ling Road, Kowloon
 Tel: 23489211-4 Fax: (852) 2727656

DWG NO. : JB37-PW-2102 REV. : A

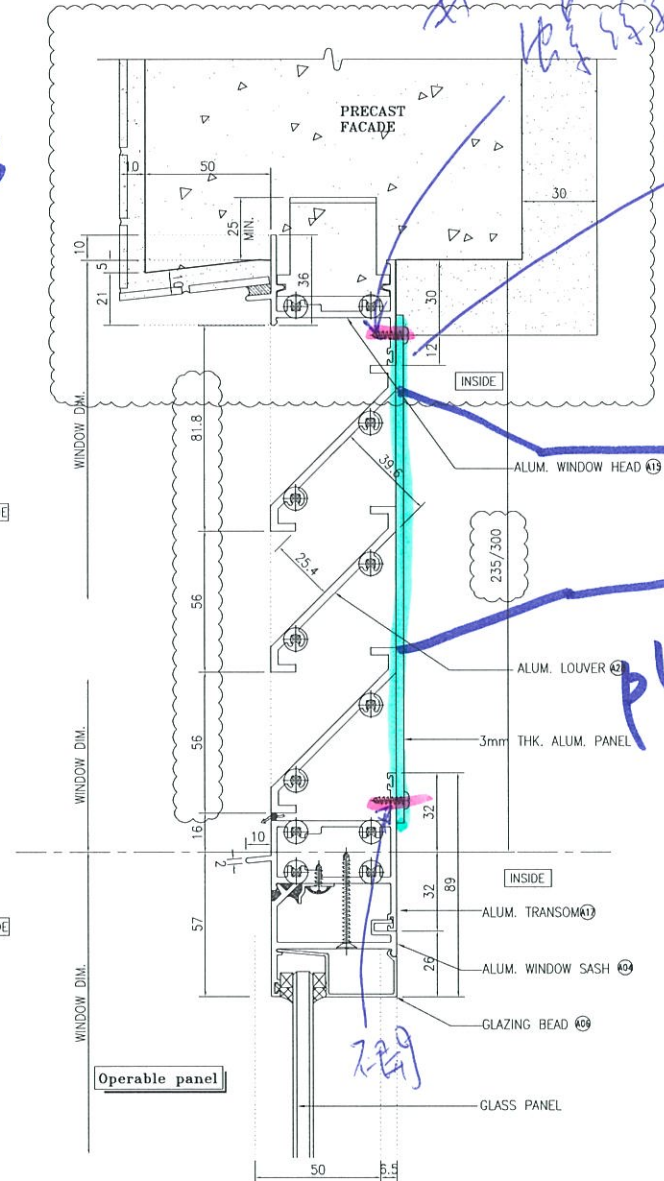
WINDOW MARK	
SECTION :	50mm ALUM. SECTION 39 NOS. (TYPICAL)
LOCATION :	6/F-26/F, 28/F-50/F FLAT C KITCHEN
GLAZING	8mm THK CLEAR TEMPERED GLASS
REMARK :	



1 VERTICAL DETAIL
6003



2 VERTICAL DETAIL
6003



3 VERTICAL DETAIL
6003 For Alum. Louver With 64% Effective Area

#4,5

#4. 推上
玻璃孔洞
#4 玻璃孔洞

plenum
B

#5

B.D. REF :

CLIENT :
Sino Land Company Limited

ARCHITECT :
WONG TUNG & PARTNERS LIMITED
ARCHITECTS & PLANNERS

MAIN CONTRACTOR :
CR Construction Company Limited

STRUCTURAL ENGINEER :
AECOM

FACADE CONSULTANT:

- NOTE:
1. ALL DIMENSIONS ARE IN mm.
 2. ALL ELEVATIONS TO BE VIEWED FROM OUTSIDE.
 3. ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE FABRICATION.
- LEGEND:
- (X1) DETAIL MARK NO.
 - (X001) REFER SHEET NO.
 - 1. F.F.L. FINISHED FLOOR LEVEL
 - 2. S.F.L. STRUCTURAL FLOOR LEVEL
 - 3. (2) REVERSED DETAIL

#	DATE	BY ARCHITECT COMMENT	ENG
1	2018/07/19		Zeng
NO.		REVISED	BY

JOB NO. : J-B37

PROJECT :
URA KWUN TONG TOWN CENTRE
REDEVELOPMENT (AREA 2 & 3) AT
NKIL 6514, KWUN TONG, KOWLOON

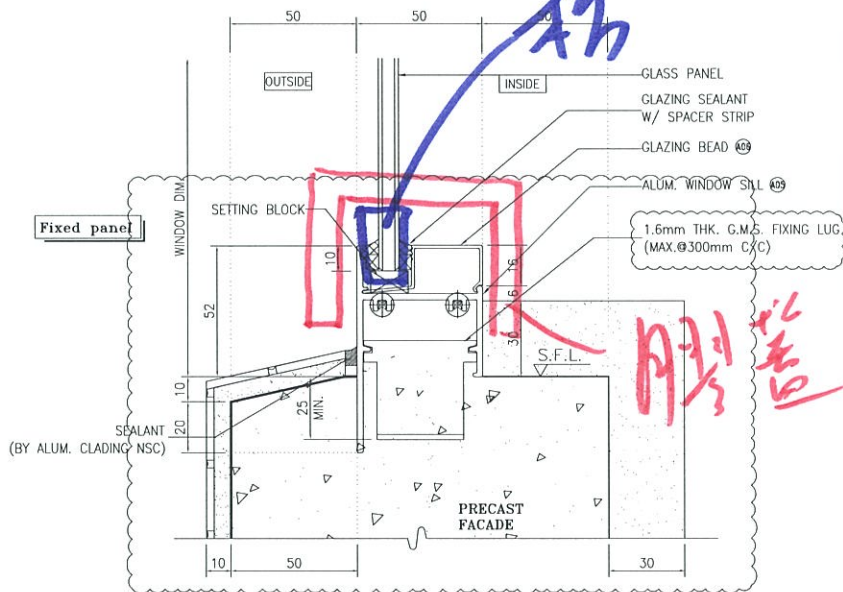
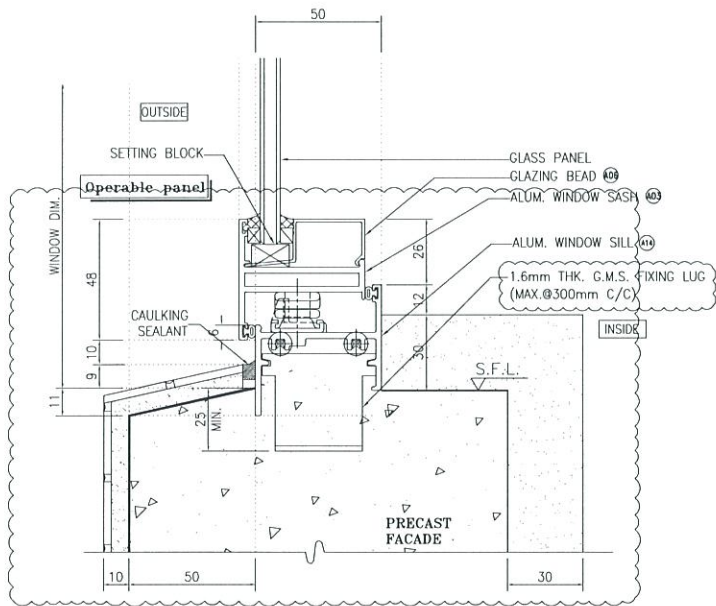
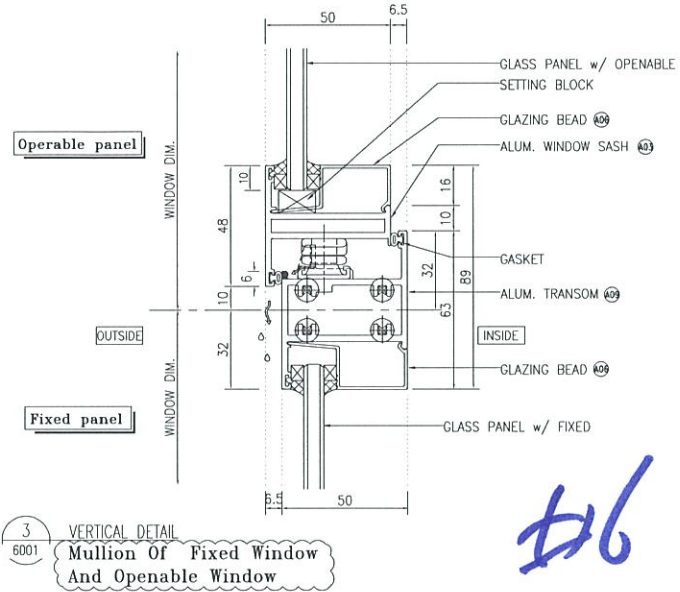
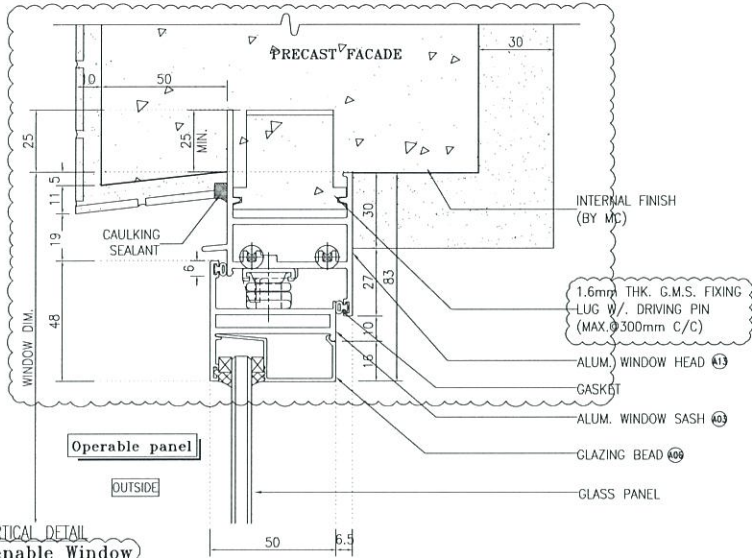
TITLE :
TYPICAL DETAIL FOR
ALUM. WINDOW

DATE : 04-JUL-18 SCALE : 1:##

DRAWN BY : Zeng CHECKED BY : DW

美特鋁質有限公司
MIDI ALUMINIUM FABRICATOR LTD.
Units 6-8, Sunny Industrial Centre, 1/F
610 Che Kwo Ling Road, Kowloon
Tel:23489211-4 Fax:(852)2727666

DWG NO. : JB37-PW-6003 REV. : A



B.D. REF :

CLIENT :
 倍和置業有限公司
 Sino Land Company Limited

ARCHITECT :
 WONG TUNG & PARTNERS LIMITED
 ARCHITECTS & PLANNERS

MAIN CONTRACTOR :
 CR Construction Company Limited

STRUCTURAL ENGINEER :
 AECOM

FACADE CONSULTANT:

NOTE :
 1. ALL DIMENSIONS ARE IN mm.
 2. ALL ELEVATIONS ARE VIEWED FROM OUTSIDE.
 3. ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE FABRICATION.

LEGEND :
 (X1) — DETAIL MARK NO.
 (X001) — REFER SHEET NO.
 1. F.F.L. — FINISHED FLOOR LEVEL
 2. S.F.L. — STRUCTURAL FLOOR LEVEL
 3. (A) — REVERSED DETAIL

A	2018/07/19	BY ARCHITECT COMMENT	Zeng
NO.	DATE	REVISED	BY

JOB NO. : J-837
 PROJECT : LURA KWUN TONG TOWN CENTRE REDEVELOPMENT (AREA 2 & 3) AT NKIL 6514, KWUN TONG, KOWLOON

TITLE : TYPICAL DETAIL FOR ALUM. WINDOW

DATE : 04-JUL-18 SCALE : 1:2
 DRAWN BY : Zeng CHECKED BY : DW

美特鋁質有限公司
 MIDI ALUMINIUM FABRICATOR LTD.
 Units 6-8, Sunny Industrial Centre, 1/F
 870 Che Kwong Road, Kowloon
 Tel: 23489211-4 Fax: (852) 2727656

DWG NO. : JB37-PW-6001 REV. : A

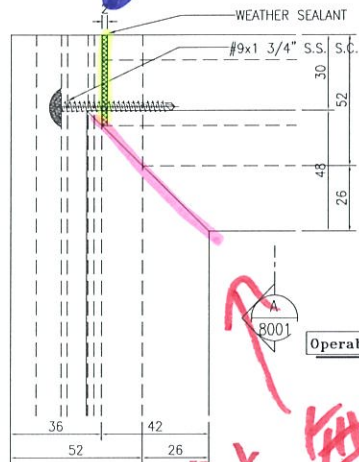
好

目光
有A

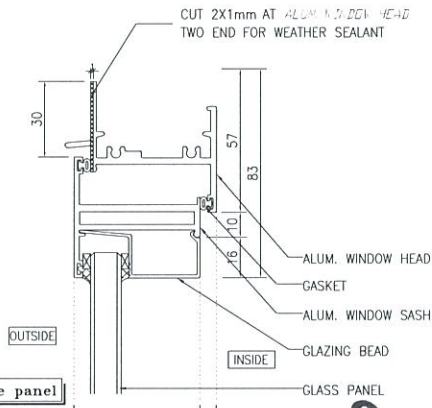


目光

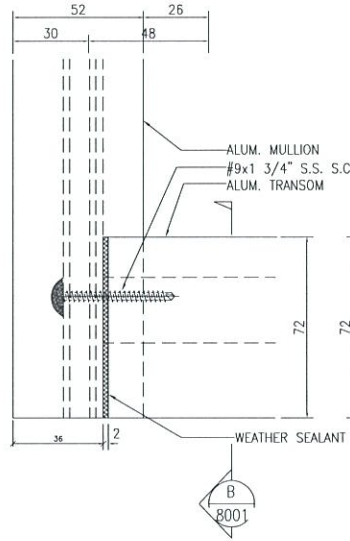
透光有限



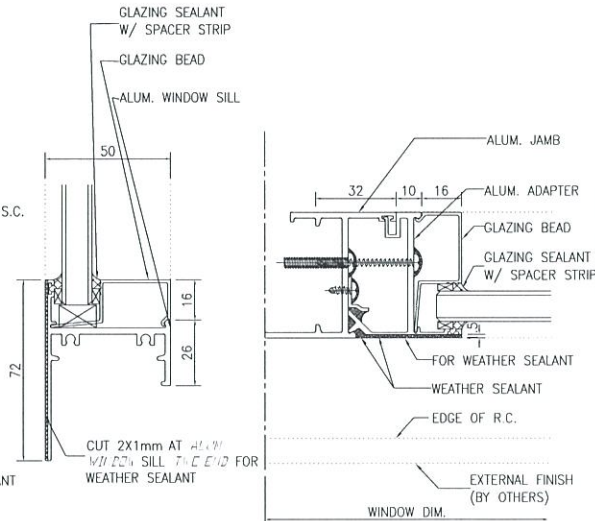
1 HORIZONTAL DETAIL
8001 Mullion & Transom Fixing Detail



A HORIZONTAL DETAIL
8001



2 HORIZONTAL DETAIL
8001 Mullion & Transom Fixing Detail

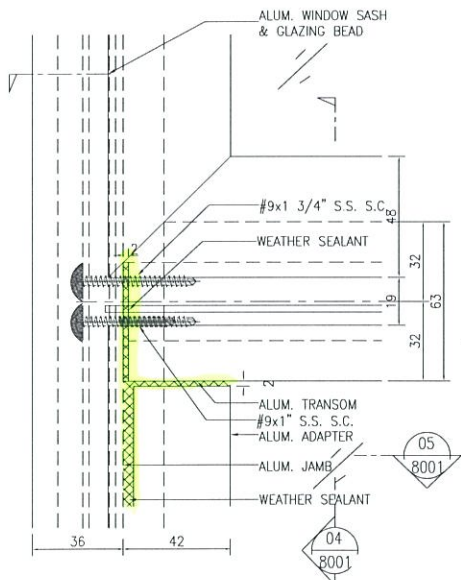


B HORIZONTAL DETAIL
8001

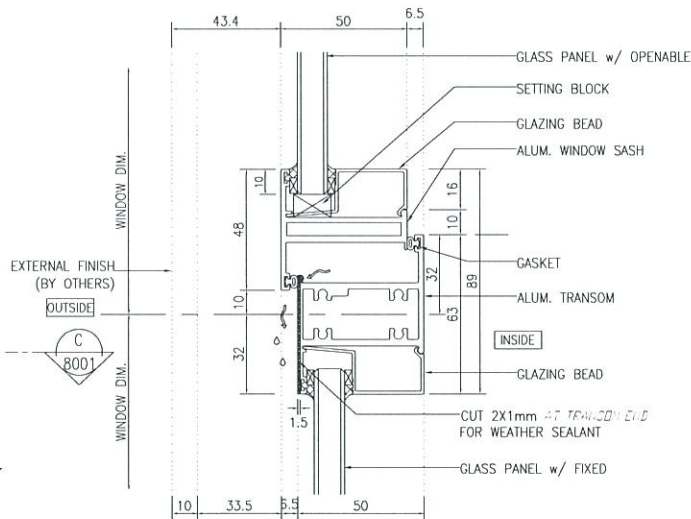
5 VERTICAL DETAIL
8001

透光無膠

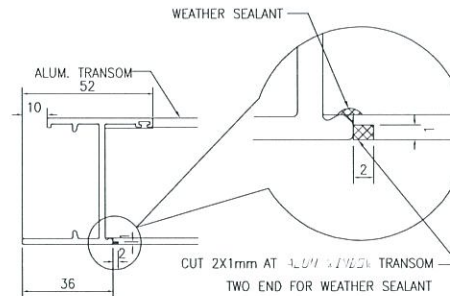
封



3 FRONT VIEW
8001 Mullion & Transom Fixing Detail



4 FRONT VIEW
8001



C VERTICAL DETAIL
8001

B.D. REF :

CLIENT :
信和置業有限公司
Sino Land Company Limited

ARCHITECT :
WONG TUNG & PARTNERS LIMITED
ARCHITECTS & PLANNERS

MAIN CONTRACTOR :
CR Construction Company Limited

STRUCTURAL ENGINEER :
A-ZCOM

FAÇADE CONSULTANT :

NOTE :
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LEGEND :
X1 - DETAIL MARK NO.
X001 - REFER SHEET NO.
1. F.F.L -- FINISHED FLOOR LEVEL
2. S.F.L -- STRUCTURAL FLOOR LEVEL
3. (Z) -- REVERSED DETAIL

NO.	DATE	REVISED	BY

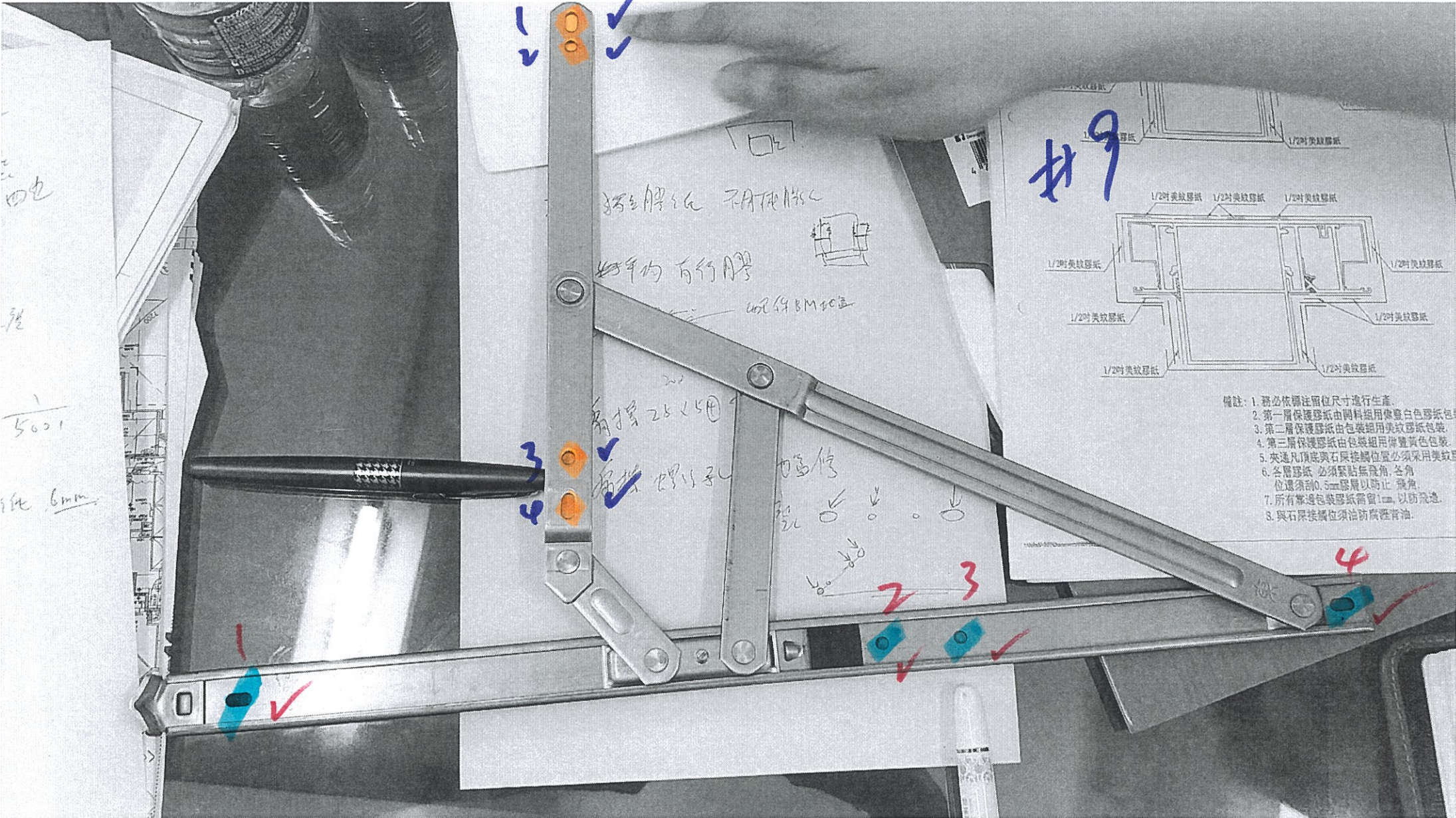
JOB NO. : J-837
PROJECT : LURA KWUN TONG TOWN CENTRE REDEVELOPMENT (AREA 2 & 3) AT NKIL 6514, KWUN TONG, KOWLOON

TITLE : ALUM. WINDOW SECTION FIXING DETAIL

DATE : 04-JUL-18 SCALE : 1:2
DRAWN BY : Zeng CHECKED BY : DW

美特鋁質有限公司
MIDI ALUMINIUM FABRICATOR LTD.
Units 6-8, Sunny Industrial Centre, 1/F
610 Che Kwo Ling Road, Kowloon
Tel: 23489211-4 Fax: (852) 2727656

DWG NO. : JB37-PW-8001 REV. : -



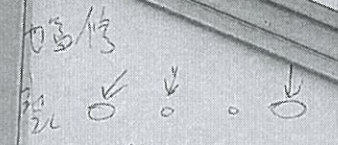
四包
 3包
 5001
 此 6mm

1 ✓

3 ✓
4 ✓

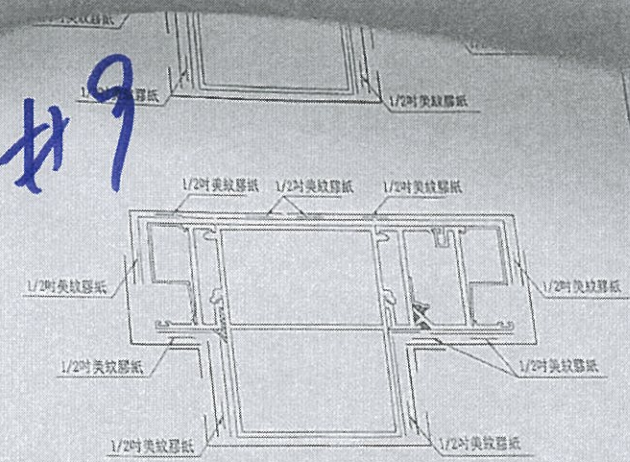
鑄膠紙 不附A11紙
 好年約 有行A2
 用 49 BM 和區

扇撐 25x150
 扇撐 螺絲孔



2 3

此 9



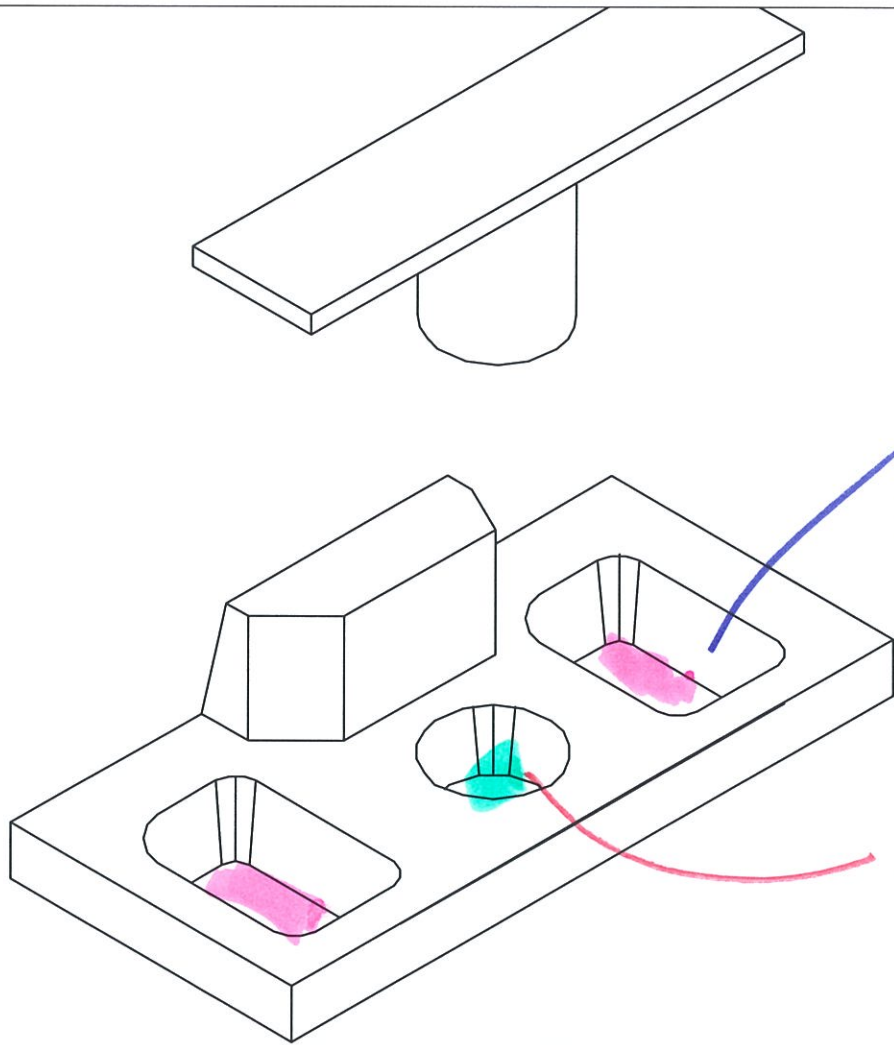
- 備註:
- 務必依標註兩位尺寸進行生產。
 - 第一層保護膠紙由材料組用卷裝白色膠紙包裝。
 - 第二層保護膠紙由包裝組用美紋膠紙包裝。
 - 第三層保護膠紙由包裝組用捲裝黃色包裝。
 - 夾邊凡頂底與石屎接觸位置必須採用美紋膠紙。
 - 各層膠紙 必須緊貼無飛角, 各角位還須割0.5mm膠層以防止飛角。
 - 所有靠邊包裝膠紙需留1cm, 以防飛邊。
 - 與石屎接觸位須塗防腐性牛油。

4 ✓

1 ✓

✓ ✓ ✓

好！

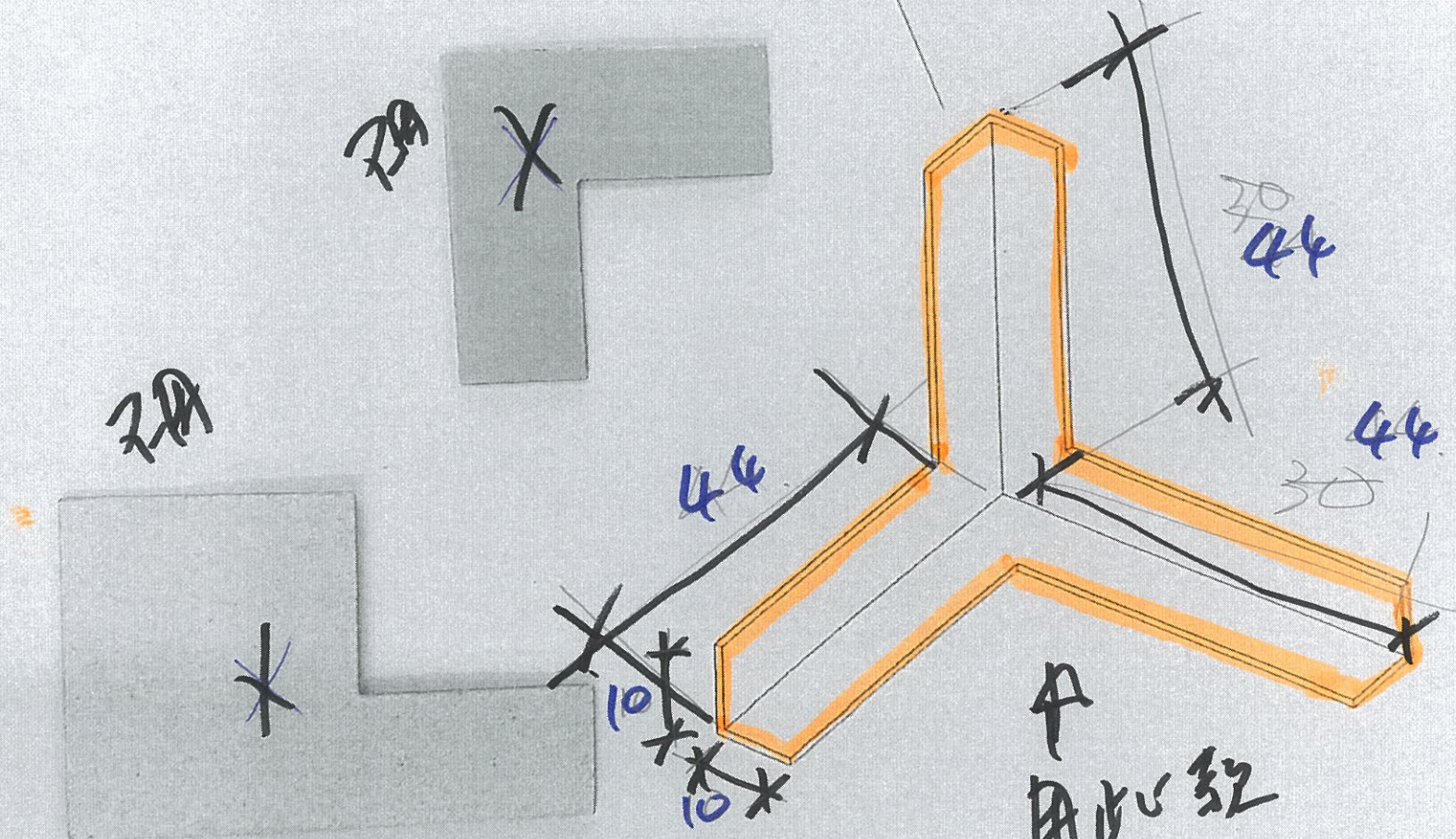


做修

加高修

18.5
5.4

部份不要



用此型

此

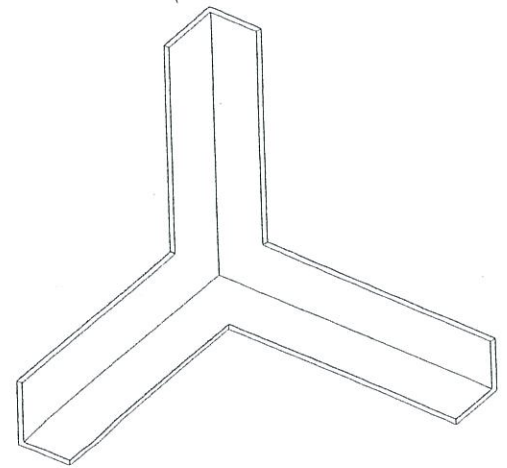
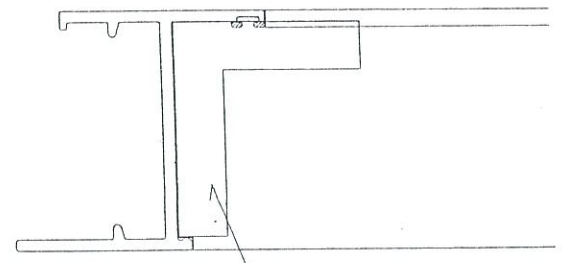
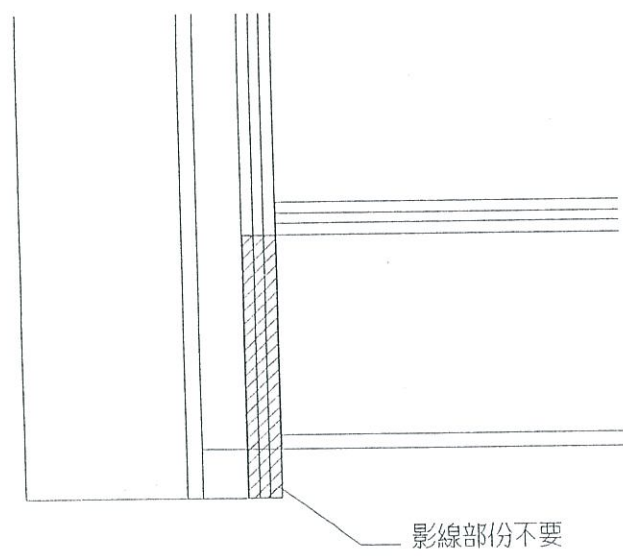
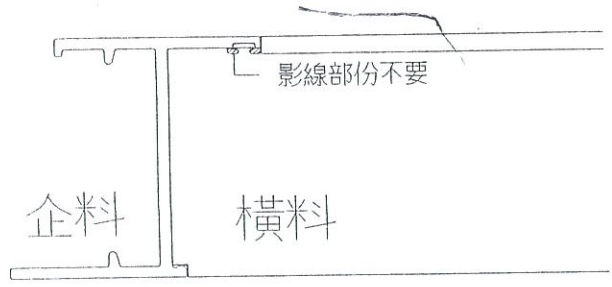
0.5mm

2.14

吳忠

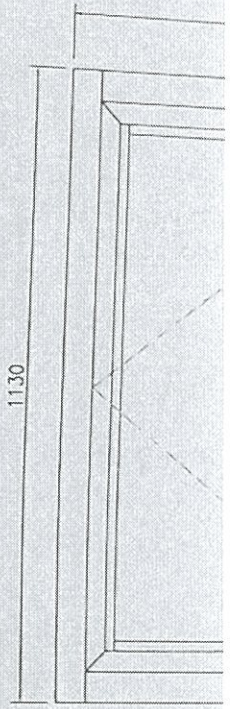
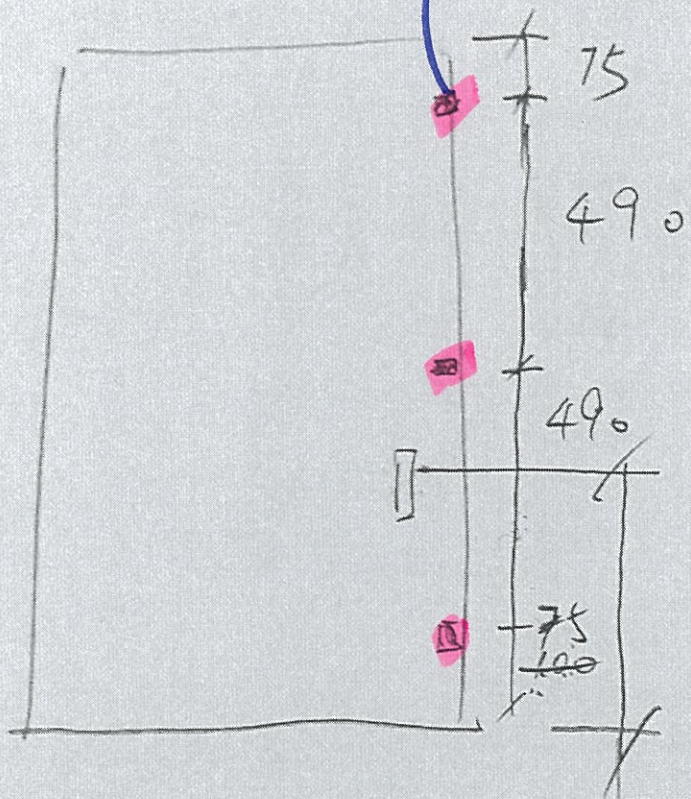
Beau

曾知 楊 下



#11

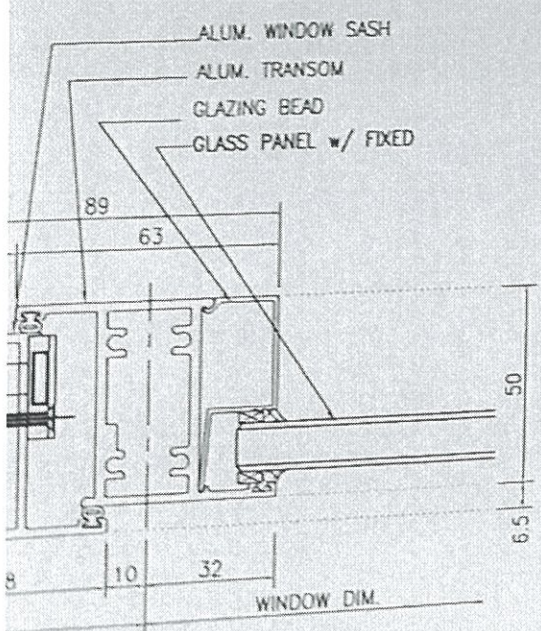
鎖點

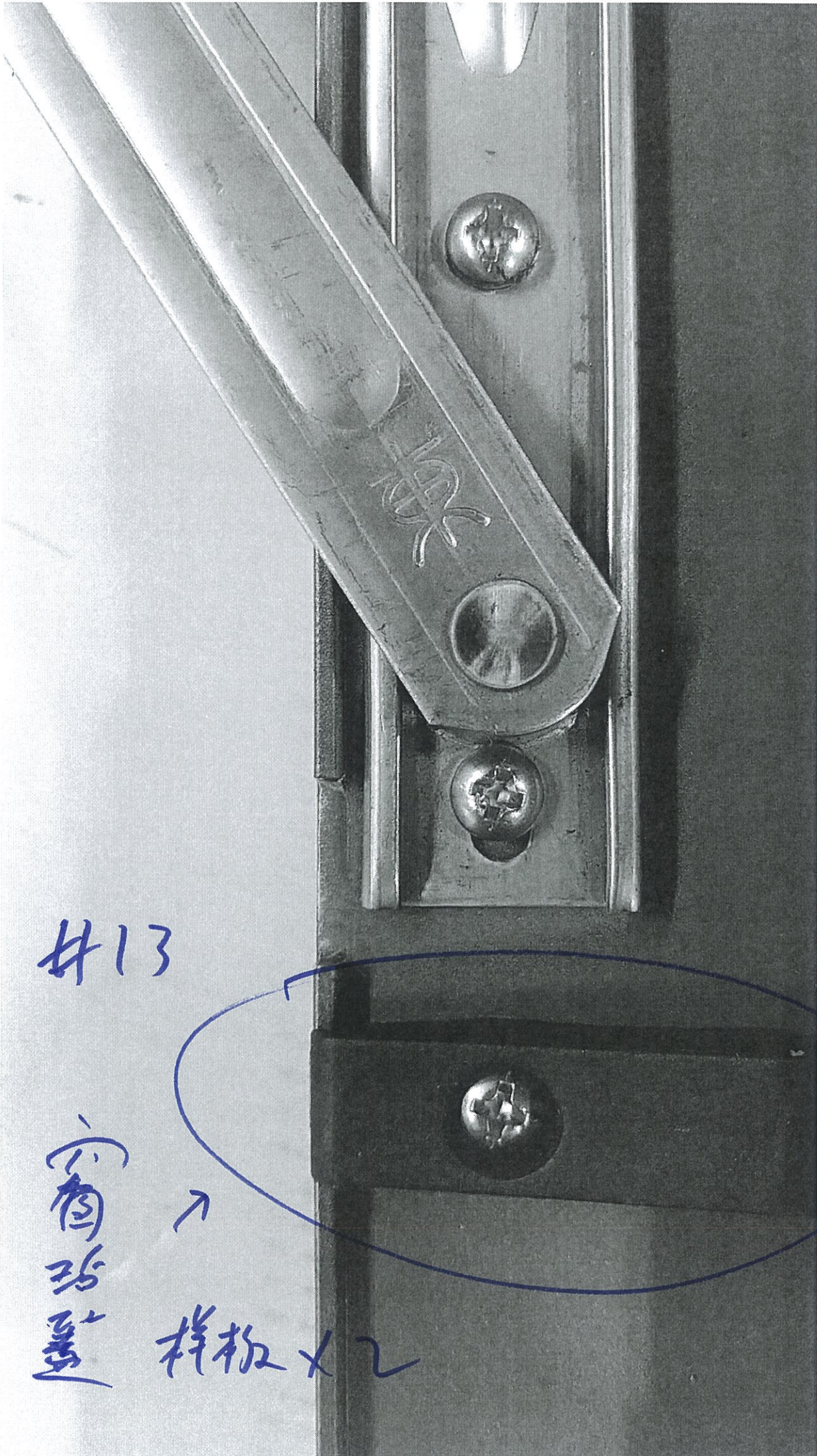


1200

91

H12





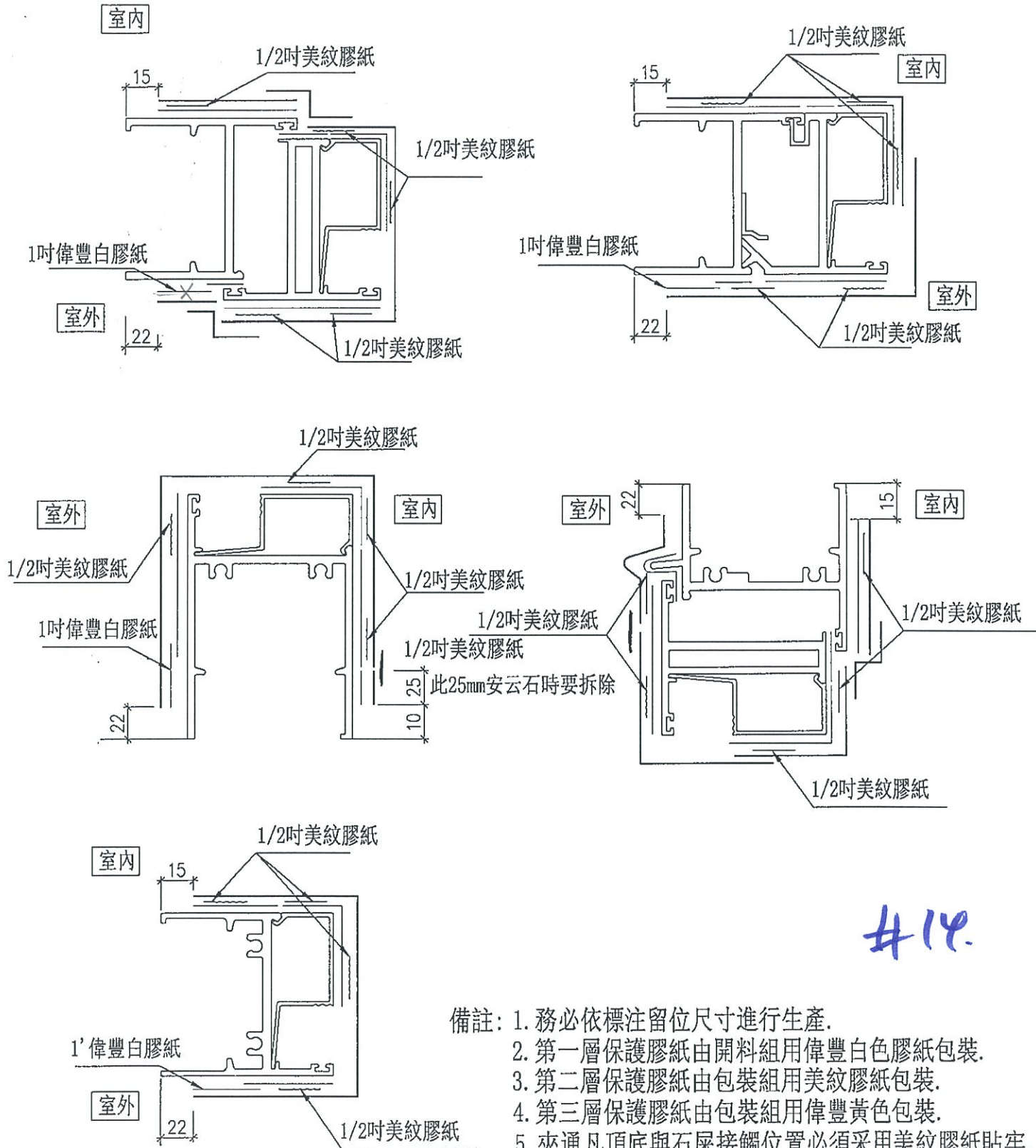
#13

有
巧
蓋



樣板 x 2

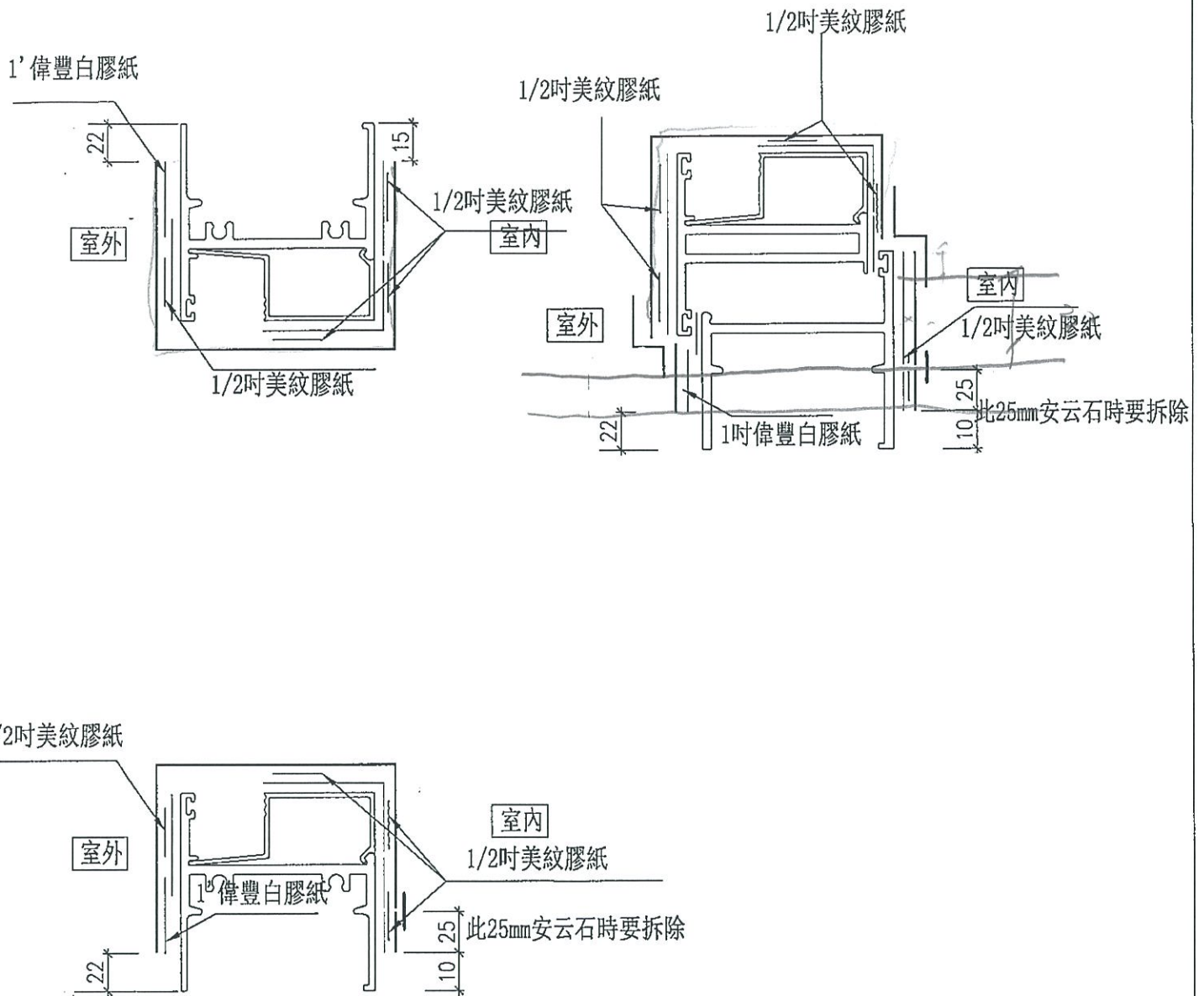
J-807 筲箕灣預製窗包裝保護示意圖



#14

- 備註：
1. 務必依標注留位尺寸進行生產。
 2. 第一層保護膠紙由開料組用偉豐白色膠紙包裝。
 3. 第二層保護膠紙由包裝組用美紋膠紙包裝。
 4. 第三層保護膠紙由包裝組用偉豐黃色包裝。
 5. 夾通凡頂底與石屎接觸位置必須採用美紋膠紙貼牢。
 6. 各層膠紙 必須緊貼無飛角，各角位還須刮0.5mm膠層以防止 飛角。
 7. 所有靠邊包裝膠紙需留1mm，以防飛邊。
 8. 與石屎接觸位須油防腐瀝青油。

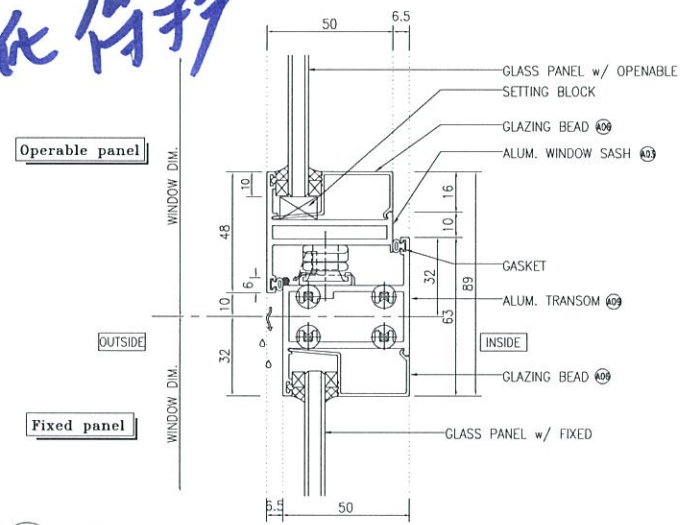
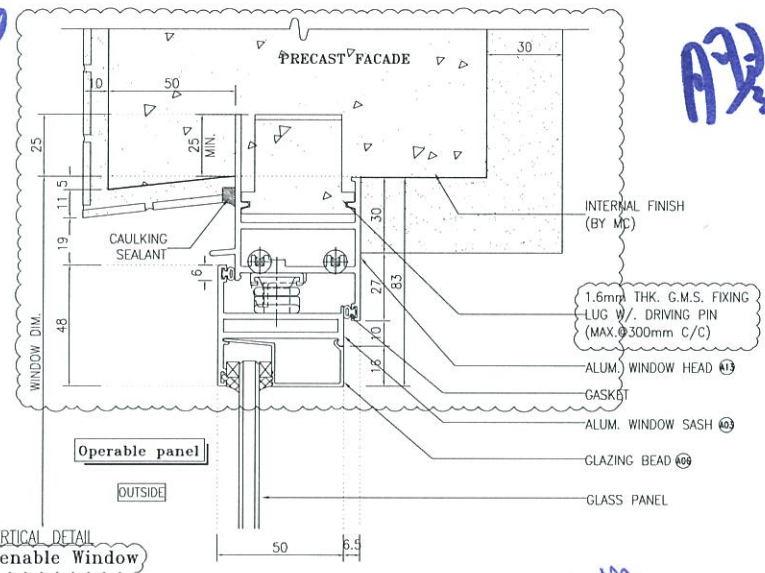
J-807 筒箕灣預製窗包裝保護示意圖



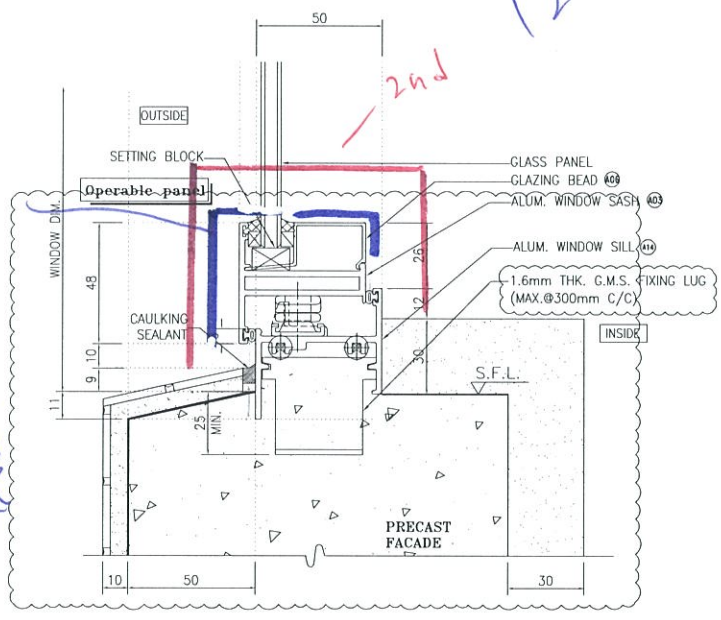
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#14

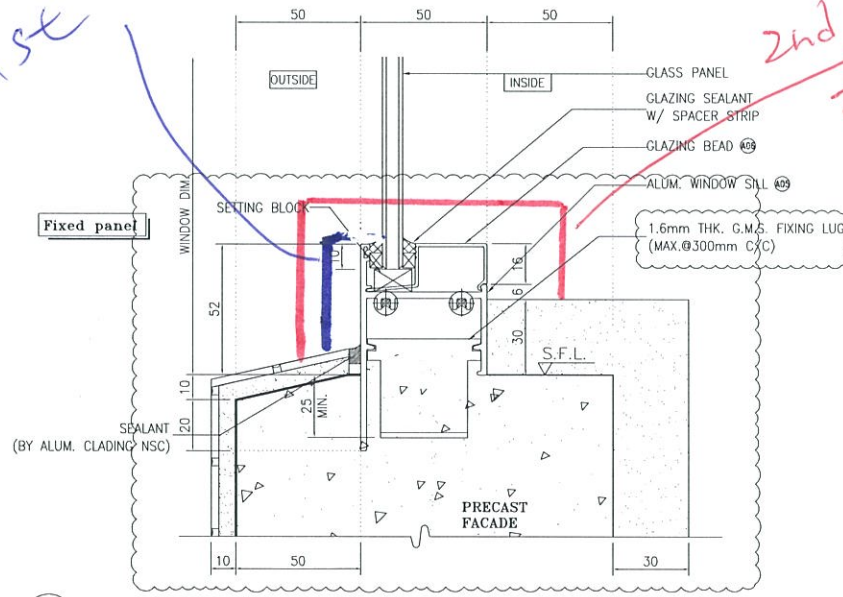
膠紙作矽



1st
原
窗
框
料
膠
紙
作
矽



1st



模

B.D. REF :

CLIENT : 信和置業有限公司 Sino Land Company Limited

ARCHITECT : WONG TUNG & PARTNERS LIMITED ARCHITECTS & PLANNERS

MAIN CONTRACTOR : CR Construction Company Limited

STRUCTURAL ENGINEER : ACOM

FACADE CONSULTANT :

NOTE :

- ALL DIMENSIONS ARE IN mm.
- ALL ELEVATIONS ARE VIEWED FROM OUTSIDE.
- ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE FABRICATION.

LEGEND :

X1 - DETAIL MARK NO.
6001 - REFER SHEET NO.

- F.F.L. -- FINISHED FLOOR LEVEL
- S.F.L. -- STRUCTURAL FLOOR LEVEL
- (2) -- REVERSED DETAIL

REVISED DETAIL

NO.	DATE	BY ARCHITECT COMMENT	REVISD	BY
A	2018/07/19			Zeng

JOB NO. : J-837

PROJECT : LURA KWUN TONG TOWN CENTRE REDEVELOPMENT (AREA 2 & 3) AT NKIL 6514, KWUN TONG, KOWLOON

TITLE : TYPICAL DETAIL FOR ALUM. WINDOW

DATE : 04-JUL-18 SCALE : 1:2

DRAWN BY : Zeng CHECKED BY : DW

美特鋁質有限公司
MIDI ALUMINIUM FABRICATOR LTD.
Units 6-8, Sunny Industrial Centre, 1/F
610 Cho Kwo Ling Road, Kowloon
Tel: 23489211-4 Fax: (852) 2727656

DWG NO. : JB37-PW-6001 REV. : A

#15

J. Protection

駐場沙盤聯絡人

Protection to glazing...

K. Assembly and jointing at Façade Precasting Yard

- The main contractor shall provide to window contractor with reasonable adequate space for assembly, jointing and etc. at the façade precasting yard. Minimum area for assembly and jointing workshop not less than 120m², while the storage area shall be of reasonable size to suit the supply meeting site progress.
- The window contractor shall delegate his own supervisor to the façade precasting yard to ensure the quality of window installation during the precast façade manufacturing process.
- The window contractor shall provide supervision at the façade precasting yard to ensure that the builder's work including any testing executed by the main contractor/the precast façade supplier are carried out to his requirements.

A 9

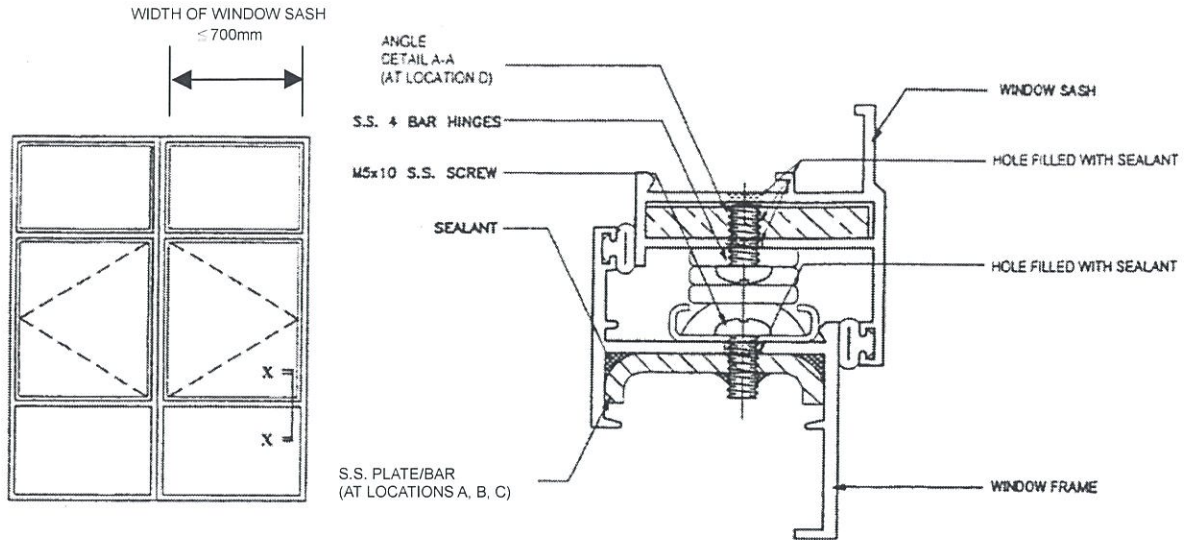
Guidelines on Fixing of 4-bar Hinges

4-bar hinges shall be manufactured from stainless steel with adjustable friction shoe, and all stainless steel bars of the hinge shall have a minimum thickness of 2.5mm. For better corrosion resistance, stainless steel rivets/screws shall be used for the fixing of hinges and aluminium rivets shall not be used as they tend to corrode. At least 3 Nos. of 4.8mm diameter stainless steel rivets or 5mm diameter stainless steel screws shall be used to fix each bottom and top bars of the hinge to the window frame and the openable sash.

2. As stainless steel hinges and rivets/screws are used in aluminium window installation, due consideration and measures should be taken to prevent contact between dissimilar metals.

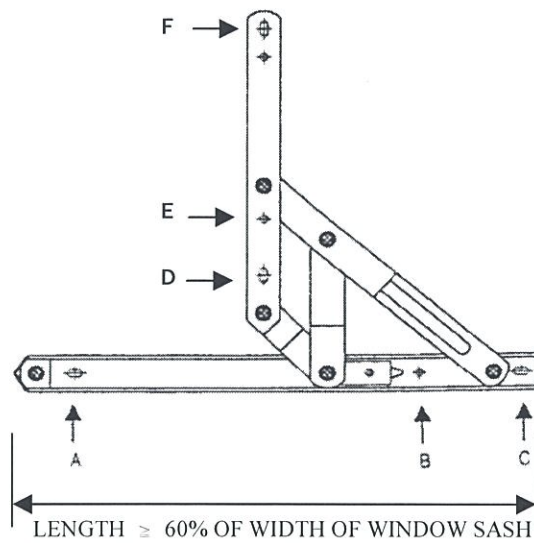
3. To provide sufficient anchorage for the stainless steel rivet or screw to fasten the hinge to the window frame and the openable sash, a positive mechanical fixing, for example by inserting a stainless steel or hot dip galvanized steel plate or bar/angle of not less than 3mm thick inside the section to provide sufficient threads for the screw(s) shall be adopted. A typical example of this arrangement is at Annex I. As an alternative, the window sections for fixing the hinge may be thickened locally to not less than 5mm. A typical example is at Annex II. When insertion of an extra piece of stainless steel or hot dip galvanized steel bar/angle inside the section or local thickening to 5mm is not adopted, the thickness of aluminium sections for fixing the 4-bar hinge shall be substantiated by calculations that it could provide sufficient anchorage for the stainless steel rivet or screw.

4. The length of the 4-bar hinge should be at least 60% of the width of the side hung casement window.



ELEVATION

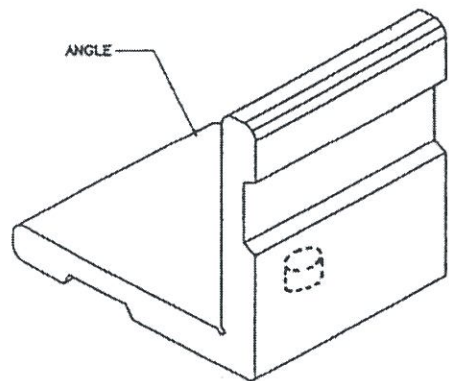
**SECTION X-X
SIDE HUNG WINDOW WITH S.S. PLATE/BAR AND
ALUMINIUM ANGLE INSERTED FOR FIXING SCREWS**



A, B, C, E, F – LOCATION FOR SCREW TO WINDOW FRAME/SASH
(LOCAL THICKENING BY S.S. PLATE/BAR)

D – LOCATION FOR SCREW TO WINDOW SASH
(LOCAL THICKENING BY ANGLE)

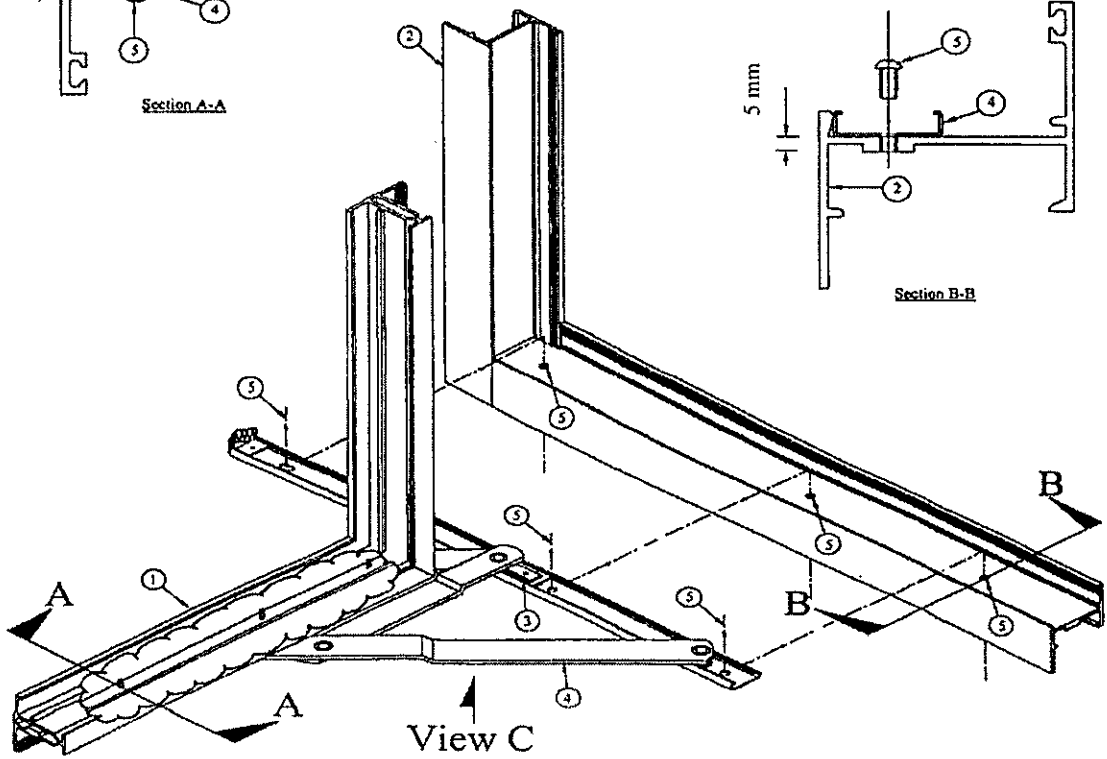
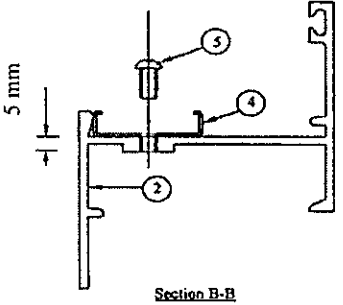
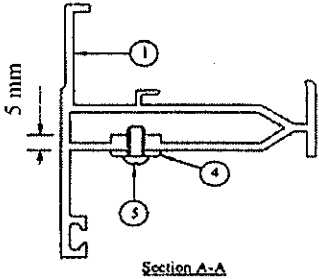
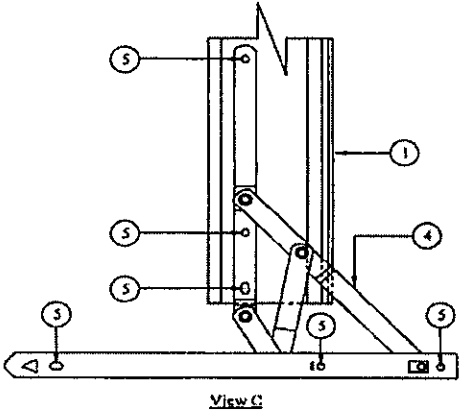
S.S. 4-BAR HINGE



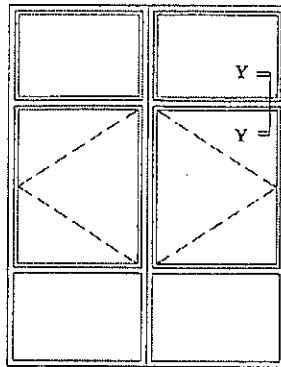
DETAIL A-A

Annex II to Appendix B
(PNRC 47)

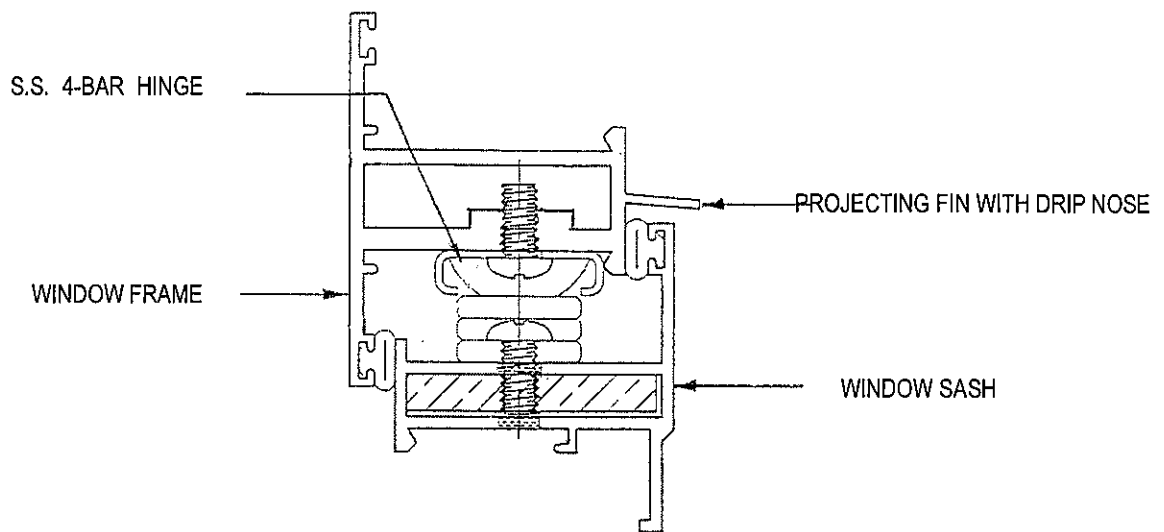
ITEM	DESCRIPTION	MATERIAL
1	WINDOW SASH	ALUMINIUM
2	WINDOW FRAME	ALUMINIUM
3	BRASS PLATE	BRASS </td
4	4-BAR HINGE	STAINLESS STEEL
5	M5 x 16mm PAN HEAD MACHINE SCREW, PITCH 0.8mm	STAINLESS STEEL



WINDOW FIXING



ELEVATION



SECTION Y-Y
TOP MEMBER OF WINDOW FRAME
WITH BUILT-IN PROJECTING FIN

Appendix D
(PNRC 47)

Standard	Description
ASTM E330	Test Method for Structural Performance of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference
ASTM E331	Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference
ASTM E547	Test Method for Water Penetration of Exterior Windows, Curtain Walls and Doors by Cyclic Static Air Pressure Differential
AAMA 501.1	Standard Test Method for Exterior Windows, Curtain Walls and Doors for Water Penetration using Dynamic Pressure
AAMA 501.2	Specification for Field Check of Metal Shop Fronts, Curtain Walls and Sloped Glazing Systems for Water Leakage
AAMA 501.3	Specifications for Field Check of Water and Air Leakage Through Installed Exterior Windows, Curtain Walls and Doors by Uniform Air Pressure Difference.

Aluminium Windows

Introduction

Aluminium windows have become popular in new developments and as replacement of steel windows in existing buildings. Recent incidents of failure of aluminium windows, however, have aroused safety concern as falling of a dislodged casement from a height can be catastrophic in densely populated areas.

2. Building (Construction) Regulation 3 stipulates that materials used in any building works or street works shall be of a suitable nature and quality for the purposes for which they are used; adequately mixed or prepared; and applied, used or fixed so as to perform adequately the functions for which they are designed. Obviously such requirement is applicable to aluminium windows to be installed in any buildings. This practice note specifies requirements on the design and installation of aluminium windows and on the prevention of water seepage. Compliance with the design and installation requirements of aluminium windows described in para. 3 to 7 of this PNR will be accepted by the Building Authority (BA) as meeting the provisions of Building (Construction) Regulation 3. Any deviations from these requirements have to be separately substantiated for acceptance.

Design and Installation Requirements

3. Where aluminium windows are proposed, Registered Contractors (RC) should ensure that aluminium windows used in their projects are properly designed and installed to meet the performance requirements and the safety standards in the Building (Construction) Regulations. They should have experienced and skilled supervisors and workers as well as suitable quality assurance procedures in place to ensure the proper installation of the windows. Some relevant standards, specifications and codes of practice on materials, design and installation of aluminium windows are given in Appendix A for reference and information. RC could also make reference to other national or international standards.

4. Window members, transoms and mullions together with the glass panes should be of adequate size and strength taking into consideration the location, height and orientation of the windows. Window frames should be securely and rigidly fixed in place to window openings in walls. Where fixing lugs are adopted, they shall be of stainless steel or hot dip galvanized steel having a minimum material thickness of 1.5mm and be placed at 300mm centres maximum. Where a spacing greater than 300mm is proposed, the AP/RSE should satisfy that the performance of the windows including structural stability and waterproofing would not be compromised. Adequate site supervision should be provided to check that all the fixing lugs are properly fixed.

5. All structural members of a window section shall have a minimum aluminium thickness of 2mm and the depth of the mullion section shall not be less than 38mm. Particular attention shall be paid to the fixing details of the hinges. All hinges and fastening mechanisms adopted in the installation shall be able to withstand the positive and negative pressures due to the designed wind conditions when the window is closed and shall be of adequate size and strength commensurate with the size of the window.

6. To ensure the strength and rigidity of side hung casement windows as well as the safety of the occupants operating the casements, the maximum width of the sash should be 700mm.

7. Where 4-bar hinges are adopted, reference should be made to the Guidelines on Fixing of 4-bar Hinges at Appendix B.

Cleaning

8. Corrosive agent should not be used for the cleaning of external walls and windows of buildings upon the completion of building works unless it is thoroughly washed with clean water immediately after application.

Window Stay

9. Suitably designed window stay can minimize the effect of strong wind on the durability of hinges and casements.

Water Seepage

10. Besides safety consideration, water leakage from windows poses undue nuisance to the occupants. RC are reminded that poor workmanship is a major cause of the problem. Reference may be made to the *Guidelines on Prevention of Water Seepage in New Buildings* issued by the Buildings Department in March 2005.

11. In order to ensure the durability of windows, it is recommended that the top member of a window frame should have a built-in projecting fin with a drip nose to prevent water ingress into the window frame/casement so as to minimize the possibility of corrosion due to accumulation of water. A typical section of the projecting fin is at Appendix C.

Water Tightness Test

12. It is advisable to perform field water test on the installed aluminium window to ensure water tightness and quality of the completed window unit. Some national standard testing methods are given in Appendix D for reference.

/General

General

13. A similar practice note has been issued to Authorised Persons and Registered Structural Engineers.

(CHEUNG Hau-wai)
Building Authority

Ref. : BD GP/BORD/105 (II)
BD GP/BREG/P/38 (II)

First issue July 2001

Last revision March 2005

This revision March 2006 (AD/NB1) – paras 2, 3, 5, 12 and Appendix B amended,
paras 6, 8, 9, 11 and Appendix C & D
added

Index under : Aluminium Windows
Windows
Water Seepage

**Standards and Codes of Practice
On Aluminium Window in Building Works**

The various standards and codes of practice on aluminium window in building works as listed below are intended to provide reference information for the purpose of specifying materials and design for aluminium windows and the lists are not exhaustive.

BS EN ISO 1461	: Hot dip galvanizing
BS 952: Part 1	: Glass for glazing
BS 1161	: Aluminium alloy sections for structural purposes
BS 1449: Part 2	: Stainless and heat resisting steel plate, sheet and strip
BS 1470	: Aluminium plate, sheet and strip
BS 1471	: Aluminium drawn tube
BS 1474	: Aluminium bars and extrusions
BS 1615	: Anodic oxidation coatings on aluminium and its alloys
BS 3111	: Stainless steel fasteners
BS 3987	: Anodic oxidation coatings on wrought aluminium
BS 4479	: Recommendations for the design of metal articles that are to be coated
BS 4873	: Aluminium alloy windows
BS 5889	: Sealants
BS 6105	: Corrosion-resistant stainless steel fasteners
BS 6262	: Code of Practice for glazing for buildings
BS 6375: Part 1 and Part 2	: Performance of windows
BS 8118	: Structural use of aluminium
CP 3012	: Cleaning and preparation of metal surfaces
PD 6484	: Commentary on corrosion at bimetallic contacts and its alleviation

2. RC may also make reference to other national or international standards and specifications.