美 特 鋁 質 有 限 公 司
MIDI ALUMINIUM FABRICATOR LTD.

工程指示 / 要求簡箋(E.I.)

工程指示編號：**EI / 10000 / 18**　　修改版次：**-**

工程編號　：**J - 837**　　工程名稱　：觀塘裕民坊

工程項目　：幕牆 隔音要求資料

收件人　：生統 / 永林　　發件人　：**Eric Liu**　　日　期　：**03/12/2018**

☐要求提供 / ☐確認 事項 ：

( ) 初步鋁料 **B.M.**　( ) 加工拆圖，然後生產　( ) 尺寸表

( ) 正式鋁料 **B.M.**　( ) 技術上資料 / 指示　( ) 報價

( ) 配件 **B.M.**　( ) 樣辦或貨品說明書　( ) 分判合約

( ) 其他 ：_____

內容 ：

請留意附件，為幕牆用隔音板資料及使用位置

1) 分兩款: (1) 生窗+吊趟　(2) 門+吊趟

2) 吊趟鋁料及配件由美特提供，永林請按資料先計算趟門輪數量

謝謝！

請在 **2018/ 12 / 14** 前完成上列要求。

附： **39** 頁

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　( )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

( )質檢部　☐連附件　( )會計部　☐連附件　( )報關組　☐連附件　( )其他 楊榮輝 ☐連附件

分發其他分判：

( ) 王禮秋 ☐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：

HK 1846/18　　項目經理簽署：

美 特 鋁 質 有 限 公 司
MIDI ALUMINIUM FABRICATOR LTD.

Our ref. MC/38645/837 21st November 2018

CR Construction Company Limited
Unit No. 1-16, Level 32,
Standard Chartered Tower of Millennium City 1,
No. 388 Kwun Tong Road,
Kwun Tong, Kowloon, Hong Kong

By Email & Hand

Attn.: Mr. Frankie S. W. Cheung

Dear Sir,

Re: Design, Supply and Installation of Curtain Wall, Aluminium Window & Door to Tower for N.K.I.L. 6514, Kwun Tong Town Centre (Development Areas 2 & 3), Kwun Tong, Kowloon.
Submission of Sample and Catalog for Acoustic Materials for Curtain Wall

Regarding the captioned project, we would like to submit the catalog and 1 set of 2 Samples for Acoustic Materials for Curtain Wall for your review and comments.

- Supplier : APAC Company Limited

1. Job Reference by APAC Company Limited (1 page)

- Micro-Perforated absorbed (MPA)

2. Catalog for "Gudi Lasorber 1.5 mm" by APAC Company Limited (8 pages)
3. Standard Size : 1220 x 2440 mm for "Gudi Lasorber" (1 page)

- Infill Material with Cover

4. Catalog for "LAH GlassWool with QuALi Lining System" by APAC Company Limited (4 pages)

- Specification , Location and Detail for Acoustic Materials

5. Specification for Acoustic Materials
6. Location Plan and Details for Acoustic Window, Enhanced Acoustic Bal and Acoustic UP
7. Details shown the Sliding Panel
8. One set of 2 Samples for Acoustic Materials "Gudi Lasorber" (Thickness = 1.5mm)

Remarks:
One set of 2 Samples will be delivered to site office directly.

Thank you for your kind attention.

Yours faithfully,
MIDI ALUMINIUM FABRICATOR LTD.

Marco Tam
Director

Encl - 37 page(s)

EM/MT/JL/JC/AY/EL/BL/yl

九龍荼果嶺道610號生利工業中心1樓6-8號
Units 6-8, 1st Floor, Sunray Industrial Centre, 610 Cha Kwo Ling Road, Kln.
TEL. (電話) : 2348 9211 FAX. (傳真) : 2772 7666 E-mail Address (電郵) : midi@midiltd.com.hk.

HKQAA 068
ISO 9001 : 2008
Certificate No: CC 1795

Contractor's Submission Form

CR Construction Company Limited

浙建集團

Superstructure Main Contract (Tower) for the Proposed Composite Development at N.K.I.L. 6514 Kwun Tong Town Centre (Development Areas 2 & 3)

To: **Wong Tung & Partners Limited**
Attn: **Ms. Kennis Chan**

☐ For Approval
☐ For Information And Record

Part A: to be completed by Contractor

CSF Ref. No. -

Ref. No.

Title of Submission: Submission of Sample and Catalog for Acoustic Materials for curtain wall

Submitted under GCC/SCC/GS/PS Clause:

Details: ☐ Please refer to attachment ☐ Please see below

Parties involved for reply / comment / approval:			
1	Material Name	:	Sample and catalog of Acoustic Materials
2	Material Reference	:	
3	BQ Reference	:	
4	Specification Reference	:	
5	Drawing Reference	:	
6	Use of Location	:	Curtain Wall
7	Brand/ Model	:	APAC Company limited Gudi Lasorber 1.5mm THK. LAH Glasswool with QuALi Lining System
8	Manufacturer	:	APAC Company Limited
9	Supplier	:	APAC Company Limited
10	Country of Origin	:	China
11	Catalogue/Technical Data	:	
12	Enclosure	:	
13	Anticipated date of approval	:	
14	Remarks	:	

Prepared by:

From: Contractor's Representative
CR Construction Company Limited
Name: Kam Kwok Hung
Signature

Date:

Distribution

	w/e	w/o		w/e	w/o	Reply
USI c/o Sino	☐	☐	AECOM-ST	☐	☐	☐
Sino-BW & ST	☐	☐	AECOM-BEAM	☐	☐	☐
Sino-BS	☐	☐	AECOM-RE	☐	☐	☐
Sino-BS (Site)	☐	☐	Meinhardt-E&M	☐	☐	☐
Sino-QS	☐	☐	Urbis-Landscape	☐	☐	☐
Sino-CM	☐	☐	Arcadis-RD	☐	☐	☐
Sino-OSR	☐	☐	Arcadis-QS	☐	☐	☐
Sino-SM & SI	☐	☐	Arcadis-RD RE	☐	☐	☐
URA	☐	☐				

Part B: Comment by Owner's Site Representative (OSR):

(1) ☐ No comment
(2) ☐ Recommended subject to _____
(3) ☐ Not recommended because _____
And resubmission is required _____

Signature: Name: Date:

Part C: Comment by WT / AECOM / Meinhardt / Urbis / Arcadis / AECOM(Beam):

On the basic of the samples and information given, the above sample submitted is:

(1) ☐ No comment

(2) ☐ Approval subject to _____

(3) ☐ Not approved because _____

And resubmission is required _____

_____

_____

Signature: Name: Date:

"APACBA" is your partner in creative solutions for Building Acoustic Materials.
We have wide range of comprehensive solution for every environmental and indoor acoustics.

Major Job Reference List – "Gudi" Façade Absorption Panels (FAP) & Lasorber:

Project:	*Model:*	*Reference:*	*Remarks:*
May Fair by the Sea I & II (逸瓏灣)	**FAP40** (Façade & Bay Windows)	BD Reference: BD3/9014/10	OP: May 2015 CC: Sep 2015
Double Cove Starview (迎海•星灣御)	**FAP50** (Acoustic Balcony)	EPD Reference: A/MOS/82-1 BD Reference: BD3/9058/06(1)(Pt VIII)	OP: Oct 2015 CC: Mar 2016
Parc Inverness (賢文禮士)	**FAP50** (Façade & Architectural Fins)	EPD Reference: EP1/K18/KLT/94/94 (XIV) BD Reference: BD 3/4008/11	OP: Mar 2016 CC: Jun 2016
The Met. Bliss (薈晴)	**FAP50** (Acoustic Balcony Ceiling) **Lasorber** (Balcony Door)	BD Reference: BD 3/9177/14 (Pt II) EPD Reference: (13) in L/M (7)3 in LD DLO/ST/STTL 598/AUC	TBA
The Met. Blossom (薈朗)	**FAP50** (Acoustic Balcony Ceiling) **Lasorber** (Balcony Door)	BD Reference: BD 3/9136/14 (Pt II) EPD Reference: (21) in LD DLO/ST/STTL 599/AUC Pt. 6	TBA

Remarks: OP = Occupation Permit; CC = Certificate of Compliance





APAC
BUILDING ACOUSTICS

ACOUSTIC PRODUCTS & ACOUSTICAL-NOISE CONTROL
Contact Person: Mr. William FUNG M(Proj. Mgt.) FHIOA MIOA MASA MHKIQEP
TEL: +852 2786 5900 **Email:** info@apacba.hk
Web: www.apacba.hk

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b. Gudi Lasorber



GUDI LASORBER®

GUDI ACOUSTICS

b.

- Development
- Counselling
- Transparent
- Acoustic
- Elements

Gudi Lasorber® is developed with leading acoustics specialists, pioneering solutions for the holistic living comfort. Gudi Acoustics is one of the most innovative enterprises in the industry.

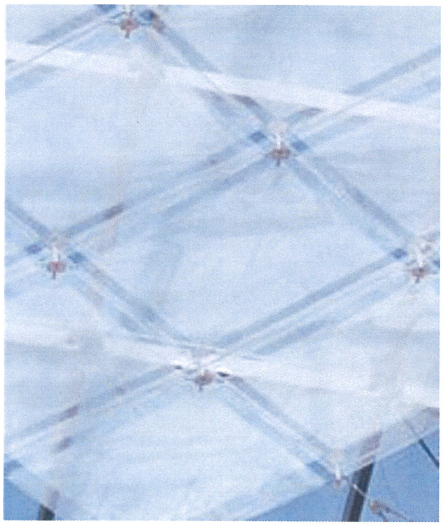
Acosutics treatment and optimisation you can see through. Thanks to Gudi Lasorber®, people in swimming baths, open-plan offices, canteens, factories and conference rooms can now hear what they're saying again. The innovative transparent or printed sheets and plexiglas elements from Gudi are attached by means of a proprietary mounting system and are also available as partitions or roller blinds. Position in front of sound-reflecting ceilings and walls, Gudi Lasorber® reduces echoes, reverberation times and noise levels significantly. It also lets those inside see the architecture at the same time.

GUDI ACOUSTICS



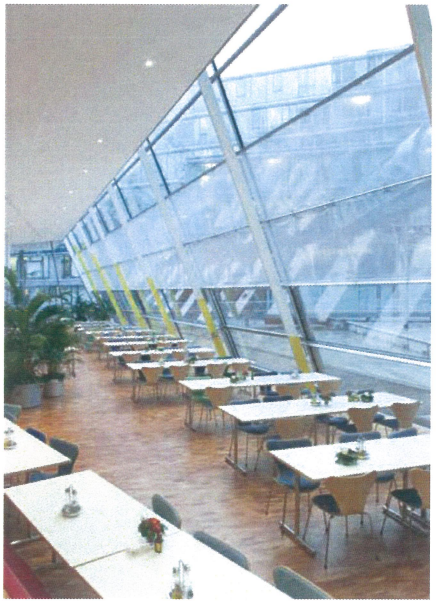






GUDI LASORBER®

GUDI ACOUSTICS



Design for optimum acoustics

Gudi Lasorber® is the ideal solution for optimal acoustic performance, in architecture, design and transparency. The principle of microperforated films and artificial glass plates combines simplicity and efficiency: The sound at the perforations is converted into heat through friction due to vibration, thus reducing significantly the room reverberation and noise. Transparent films and translucent plates, Gudi Lasorber® offer various possibilities to associate an optimal acoustic design to an existing architecture. Finished products such as screens, shades, blinds and acoustic panels Gudi Lasorber® complete the design program. They can be installed temporarily or retrofit to improve the acoustics of the space.

Whether in swimming pools, offices, canteens, churches and galleries, Gudi Lasorber® proven for many years in the most various locations across Europe. The Gudi Lasorber® team has become a partner of choice for architects and building owners. You too can discover the diversity of Gudi Lasorber®!

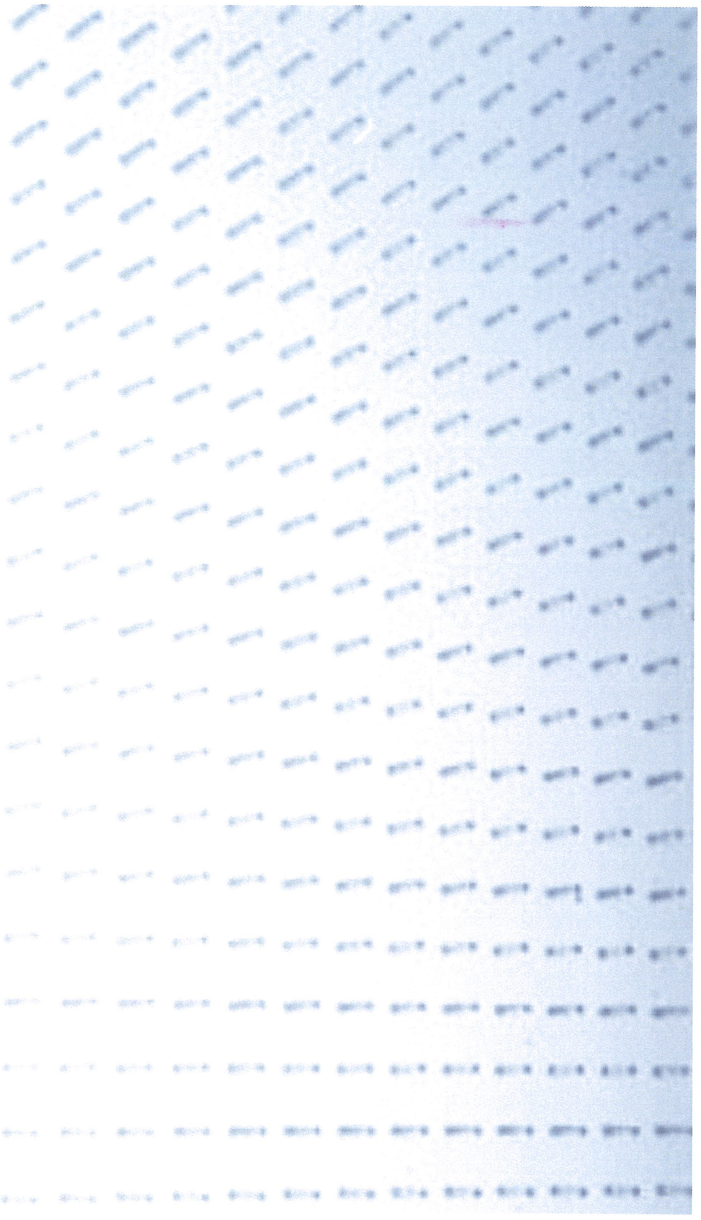
Gudi Lasorber® - Principle

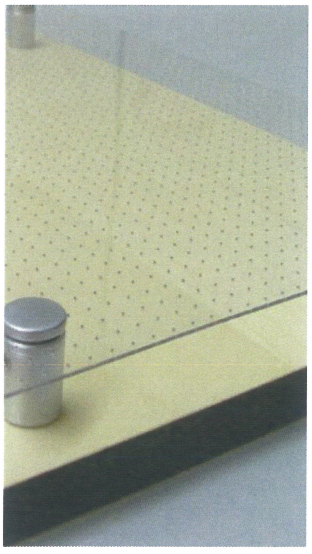
In the modern interior architecture, open spaces constructed of glass, metal and concrete take a predominant place. They are elegant, bright and welcoming, but the acoustics must be of good quality to feel really comfortable. Reverberant surfaces such as glass reflect each sound, and noise resulting harms the atmosphere of the place.

It is particularly important that the atmosphere in the pools, and large offices and galleries enjoyable. How then is it possible to optimise the acoustics without changing the design, lighting and the architectural concept as a whole?

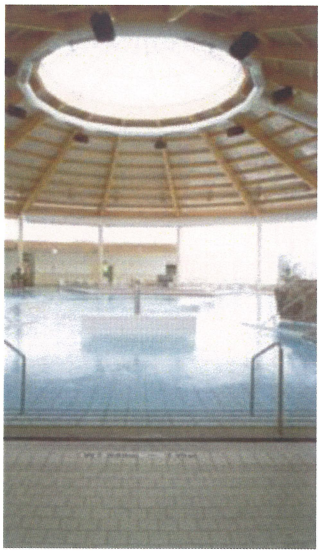
The solution has a name: Gudi Lasorber®. Hanging signs or against walls, transparent films or printed artificial glass plates Gudi Lasorber® offers many design possibilities, that integrate with all concepts.

Gudi Lasorber® is the result of collaboration between the Institute of Energy and Gudi Acoustics. Gudi Lasorber® reduces the reflected energy and reverberation time in buildings.





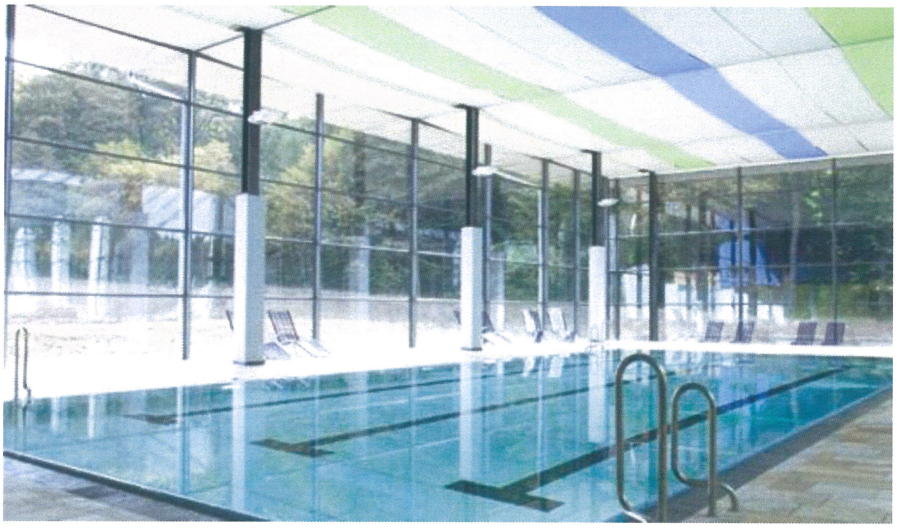














GUDI LASORBER®

GUDI ACOUSTICS

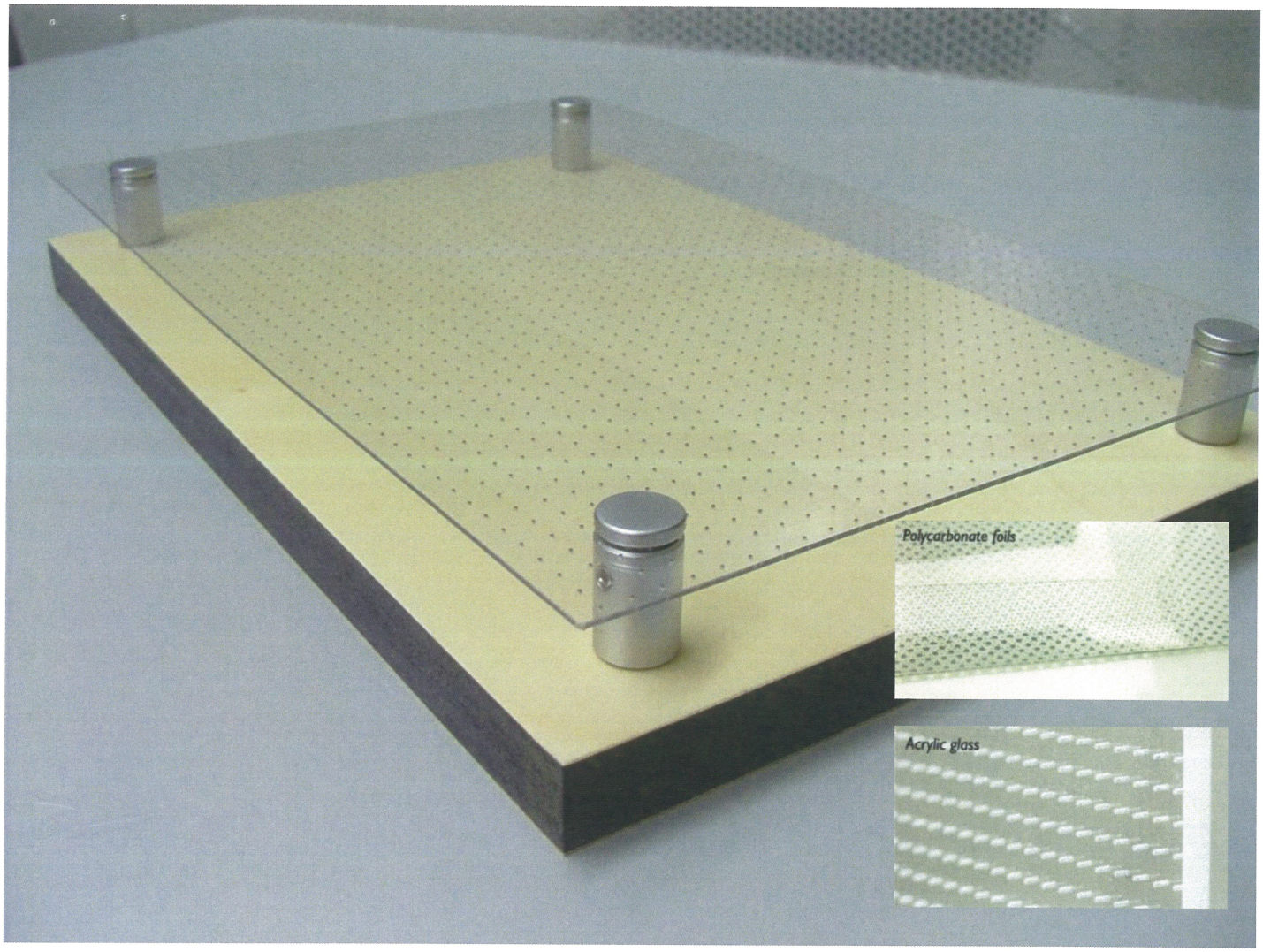


Gudi Lasorber® -
Transparent plates

The transparent film Gudi Lasorber® integrates seamlessly with existing installations without influencing architecture.

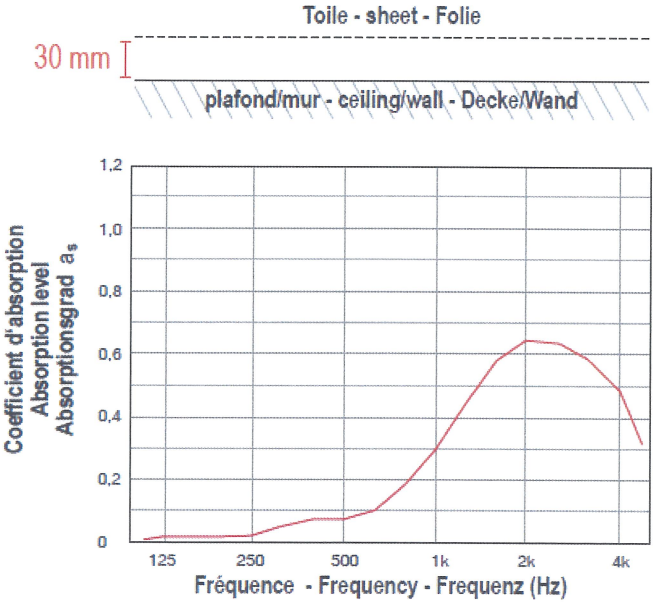
properties:

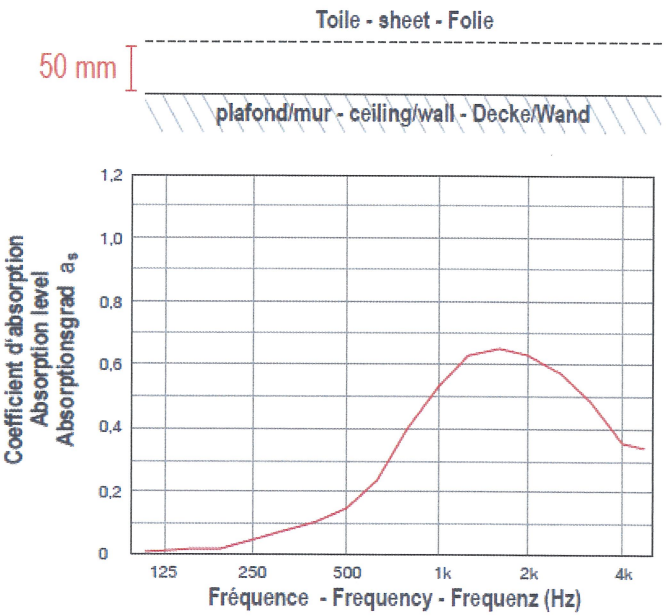
- Low flammability B1 according to DIN 4102
- UV resistant
- 0.5mm diameter holes, 5mm apart
- Neutral behaviour towards static electricity thanks to a relative humidity of at least 40%
- Colourless, clear
- Maximum film width: 1,250 mm

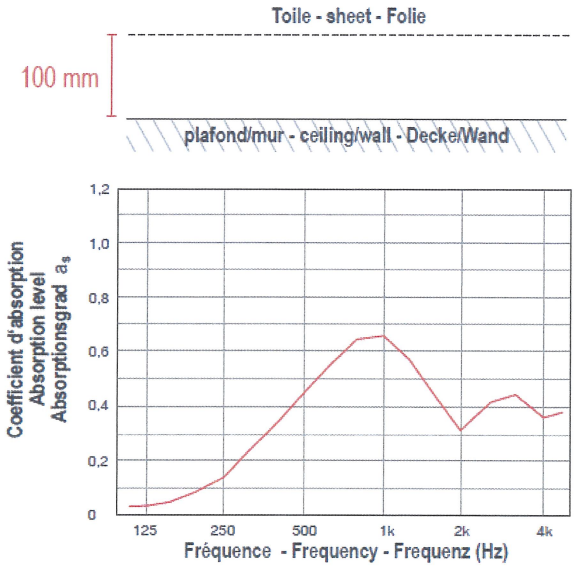


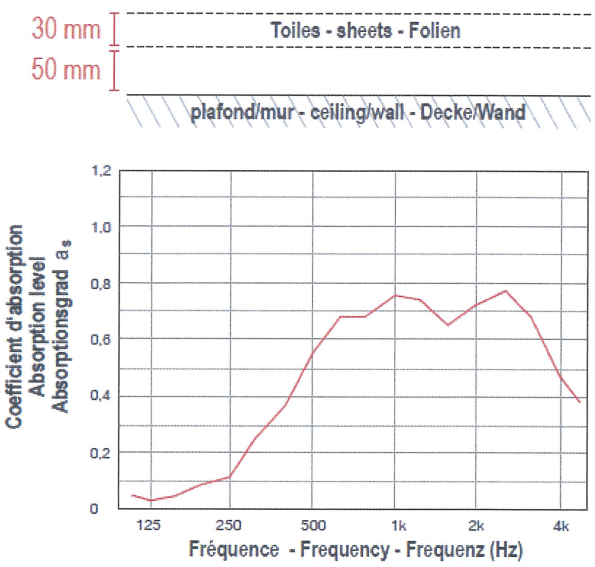
GUDI LASORBER®

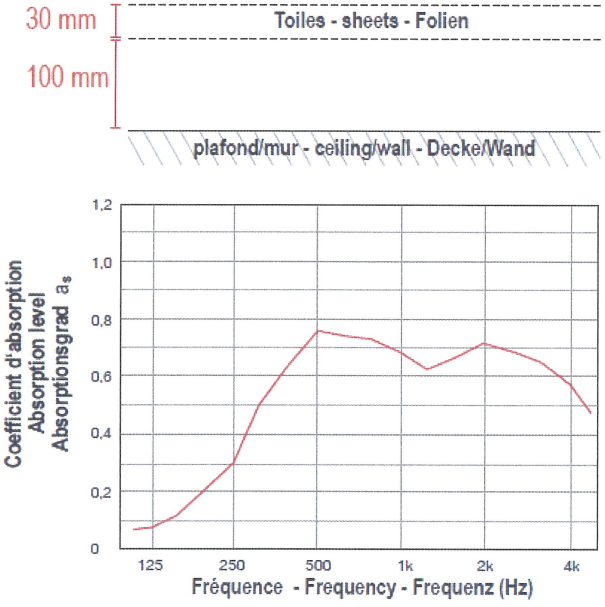
GUDI ACOUSTICS

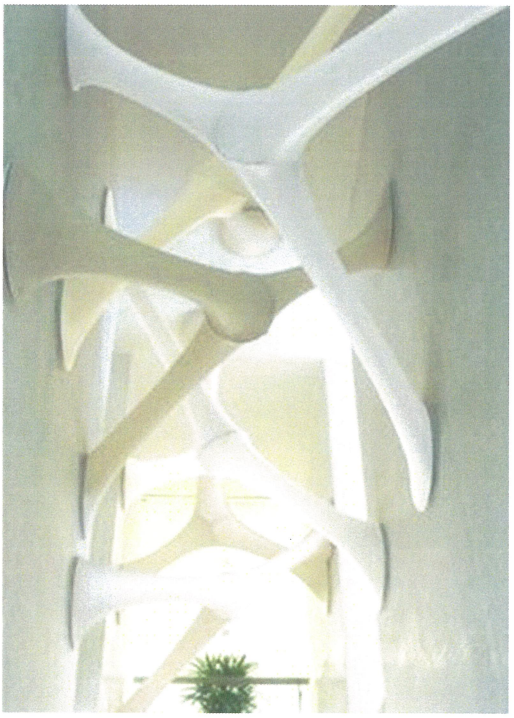












GUDI LASORBER®

GUDI ACOUSTICS

Gudi Lasorber® is an innovative sound absorbing system. The range covers a variety of transparent, translucent and printed foils and acrylic glass panels which reduce reflected sound and reverberation time in buildings.
The high-performance sound insulation effected by Gudi Lasorber® results from its micro-perforation. The foil and acrylic glass elements have holes measuring between 0,2 and 0,8 mm in diameter. As soon as sound waves strike the Gudi Lasorber® a physical reaction takes place: the sound energy is converted into heat through the friction arising at the edges of the holes. This reduces the reverberation times and sound levels significantly. The principle of transparent sound absorption allows creativity in the (re-)design of buildings where room acoustics play a crucial role. Gudi Lasorber® can be adapted to rooms and architectural structures individually or with finished products such as free-standing partitions, rollers blinds and lamella curtains.



Gudi Acoustics is developing and marketing acoustical ceilings and walls, utilizing revolutionary technologies; laser drill and cut acoustic micro holes and slots. Sound absorption by micro tunnels and slotting makes it possible to exploit new indoor areas with smooth surfaces and excellent finish. The technologies also eliminate use of mineral fibres, traditionally used in acoustic absorbers.

Unique Applied Technologies

Gudi Acoustics' technologies are developed with latest CNC machine tools. The technology is based on the well-known acoustic principle Helmholtz resonator. Gudi Acoustics' unique technology utilizes laser cut micro slits to perforate the surface. When sound waves, defined as compressed air, hit the perforated surface an overpressure arises on the front of the panel. To equalize the pressure, the compressed air is forced through the micro holes or slits, and viscous forces between the very narrow slit and the air causes friction. Hence the sound waves are absorbed and transformed into heat without use of any porous fibre-materials.

Excellent Esthetical Properties

Our sound absorbers offer excellent esthetical properties treasured by architects. We offer clean and smooth surfaces and a wide variety of colours and surface finishes. Gudi Acoustics's absorbers can be anodised, painted, engraved or printed on, and because they are fibre free they can be transparent, translucent or coloured. Panels can be mounted in traditional ceiling suspensions, directly on walls, as panel elements in office furniture systems or standalone partition walls.

The Safe and Healthy Alternative

Fibre free sound absorbers ensure a better indoor environment, especially for children and people with respiratory disorders. The products do not emit fibre particles, nor do they collect dust in the slits. They do not absorb moisture, which can lead to fungi and rot, and they are easy to clean with water-based products. These benefits reduce costs related to sick leave, loss of productivity and maintenance of facilities.

Dust from porous materials can be inflammable and create life-threatening hazards because of limited visibility and breathing difficulties in a fire emergency. Gudi Acoustics metal absorbers are made from 100% solid aluminium or steel without the use of porous layers or fibre membranes.

High Light Reflection

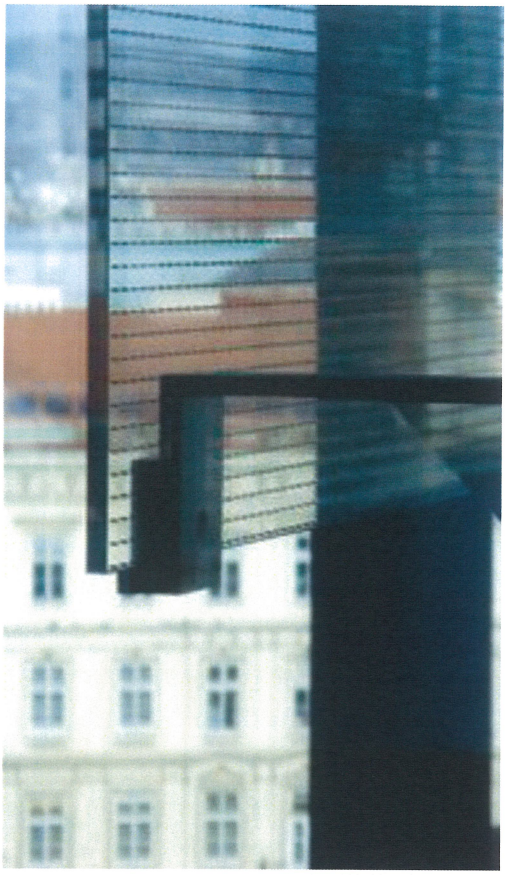
The laser cut micro perforated slits are less than 0.2mm wide and therefore barely visible at a normal distance from the ceiling. They cover less than 1% of the panel surface and consequently over 99% of the material is left as a reflecting area. By utilisation of the reflecting or transparent surfaces, Gudi Acoustics panels can lead the light into the room, something which has been difficult with traditional sound absorbers. Exploitation of daylight reduces lighting costs, and improves the users' well-being.

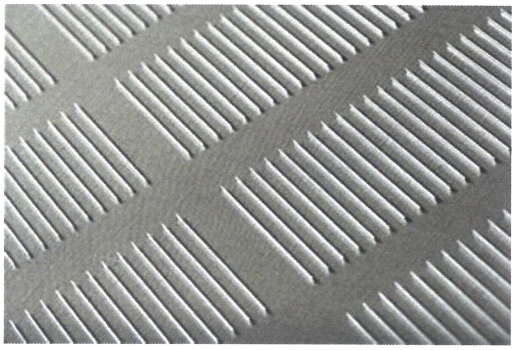
Energy Efficiency

Traditional suspended fibre based ceiling systems, in combination with active cooling in a concrete ceiling, will reduce the performance of the cooling system. The fibres will work as an insulating layer, and hence increase the energy consumption of the cooling system. Scientific reports on the energy efficiency of Gudi Acoustics products, states that this increase can be reduced with 50% by using Gudi Acoustics's aluminium absorbers compared to traditional fibre absorbers. The effect will also be considerable when utilising the thermal inertia of the building materials to keep the temperature at a comfortable and more stable level during the shifting day and night conditions.

Sound Absorption

Compared to the best porous absorbers, micro perforated products perform somewhat poorer in higher frequencies. However, higher frequencies are more easily absorbed by furniture, people and surface elements in the room. Therefore, excellent acoustic conditions can still be achieved based on the high absorption at low and middle frequencies. Scientific measurements from our reference projects show that values are below the required reverberation time for the whole frequency band.





GUDI LASORBER®

GUDI ACOUSTICS

APAC
BUILDING ACOUSTICS

Our Ref.:	L20181108-1/Midi
Date:	08 Nov 2018
Project No.:	N/A

To: Midi Aluminium Fabricator Ltd.
Attn.: Mr YUEN
TEL: 2348 9211 **Fax:** **Email:** midi@midiltd.com.hk

RE: "Gudi" Lasorber for Acoustic Window / Door for NKIL 6514

Dear Mr YUEN,

With reference to the captioned project, we would like to provide the information of ***"Gudi"*** **Lasorber** for your onward submission.

Attachment List: -

1) Catalogue of ***"Gudi"*** **Lasorber**

Thickness:	1.5mm
Standard Size:	1220mm x 2440mm/pc.
Model:	5/0.5C
Perforation Detail:	0.5mm dia. hole at 5mm c/c

2) Job Reference

3) Test Data of ***"Gudi"*** **Lasorber**

Should you have any queries, please don't hesitate to contact the undersigned.

Thank you for your kind attention.

Yours Sincerely,
APAC Building Acoustics Limited

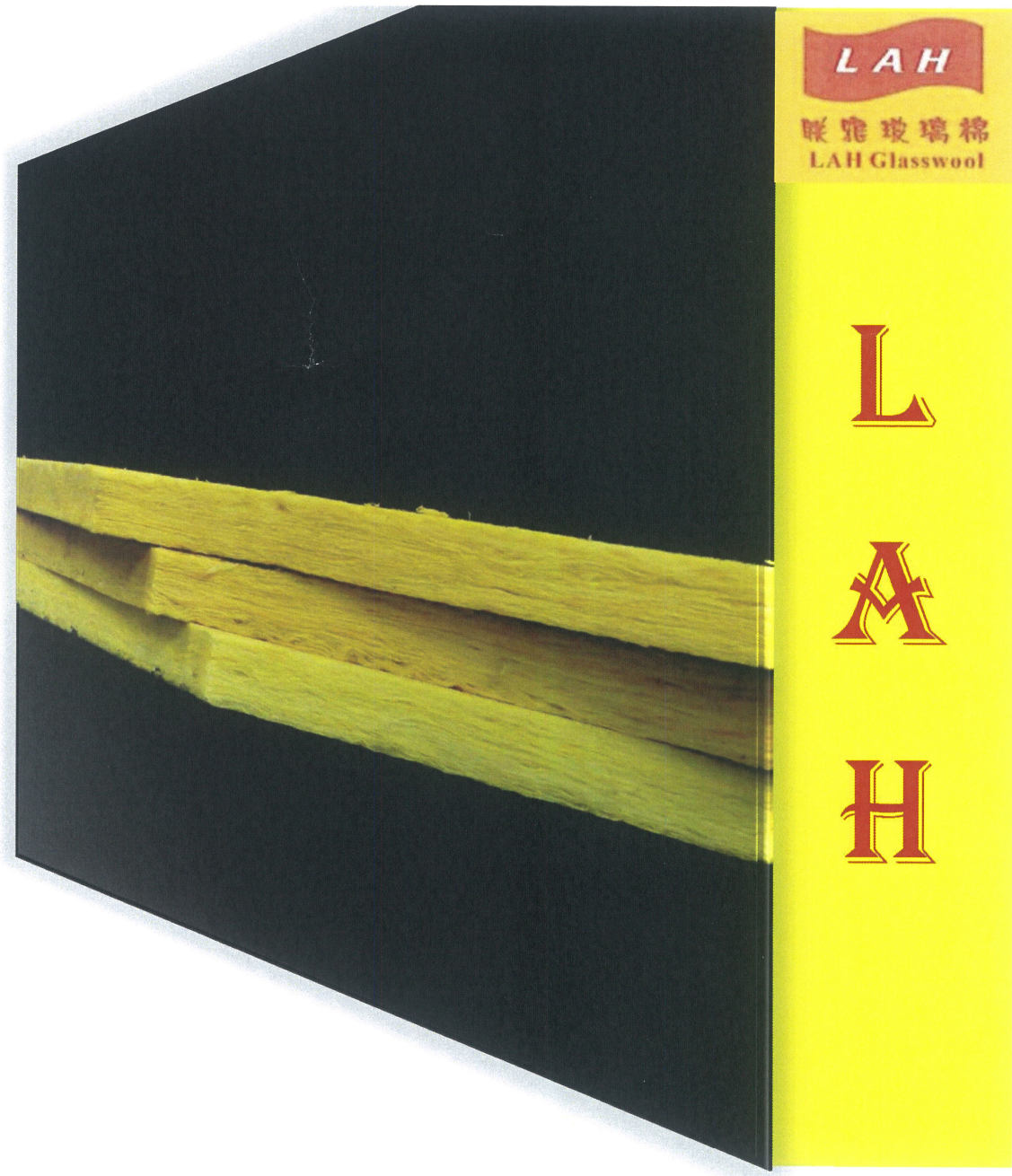
APAC BUILDING ACOUSTICS LIMITED

Paul MOK
Technical Engineer
/KF

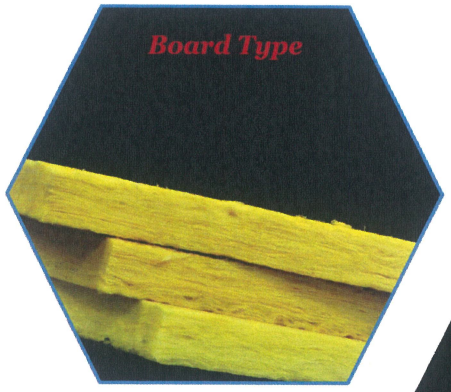
Address: Room 802, Shatin Galleria, 18 - 24 Shan Mei Street, Fotan, N.T.
Tel: (852) 2786-5900 Fax: (852) 2786-5728 Email: info@apacba.hk Web: http://www.apacba.hk

d. Infill.

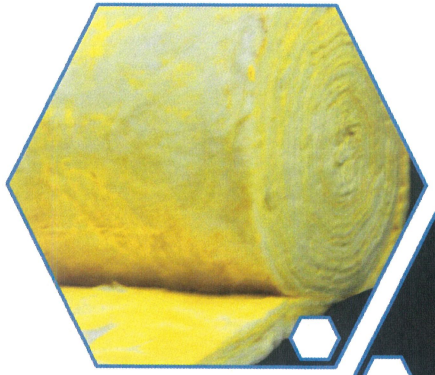
L A H



FIBREGLASS



Board Type 板棉



Roll Type 卷棉

LAH GlassWool

LAH 玻璃棉 LAH Glasswool

Product Information

LAH glass wool is a silk-like material made by spinning molten glass and spraying of thermosetting resin. By further deep processing of thermal setting, this material can be made into series of multi-purpose products. It features numerous advantages: non-combustible, nontoxic, and resistant to corrosion.

Applications

LAH Glasswool is the most economical insulating material. It is mainly applicable to commercial buildings, warehouses, plants, maintains-centre, stadium and etc.

Specification

Normal Density: 12-96kg/m ^{3}
Thickness: 25mm · 50mm · 100mm
Model No. : AHB (Board Type)
Board Size: 1200mm × 600mm
Model No. : AHR (Roll Type)
Roll Size : 1200mm x 5~20m

Physical Property

Thermal Conductivity: 0.035W/m.k at 20℃
Applicable Temperature: -240~650℃
Moistureproof: ≧98%
Fire Performance: Non-combustible
(Test Standard : BS 476 Part 5 · 6 · 7)

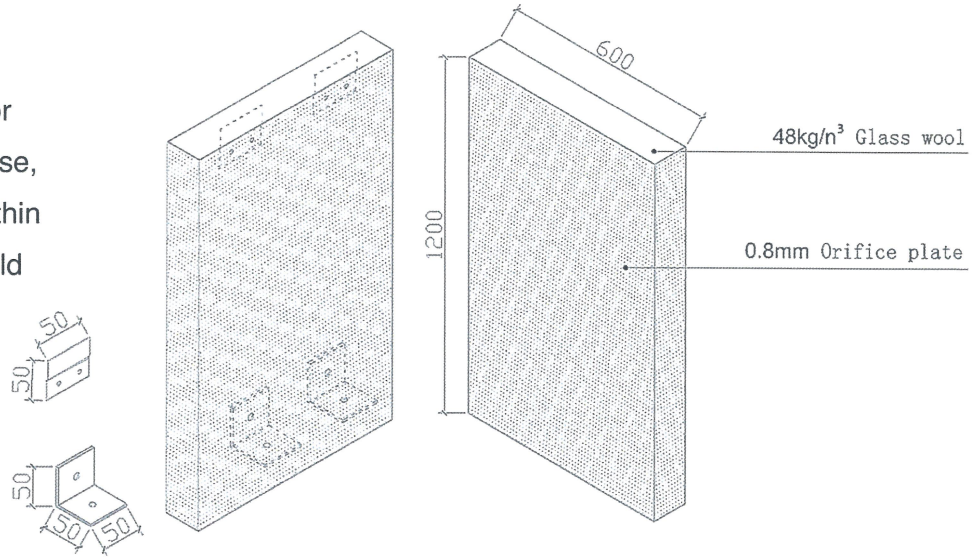
Sound Absorption

Comply with ~ ASTM C423-08a
BS EN ISO 354:2003



"QPlan" QuALi Acoustic Panel & Lining System

QuALi Acoustic Wall Lining is suitable for wall and ceiling fixing which provides a good quality of noise absorption. This system is ideal to add acoustic treatments in industrial premises. For example, the control of industrial noise, speech and reverberation control within buildings and screen barriers to shield plant and equipment noise.

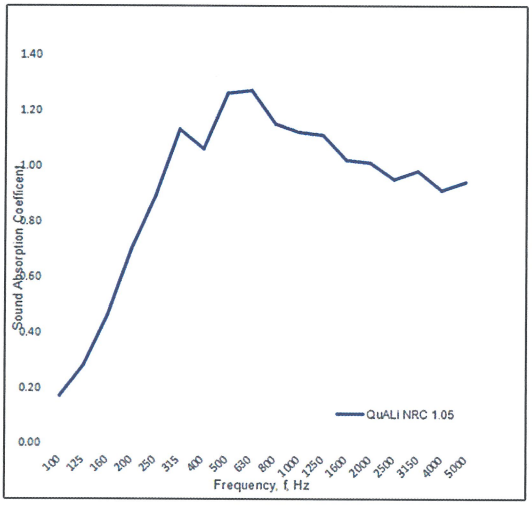


The slim line panels are secured by QPlan Clip (QA #L001), which is firmly fixed to the wall surfaces at 600mm intervals with 50mm fibreglass is used as infill.

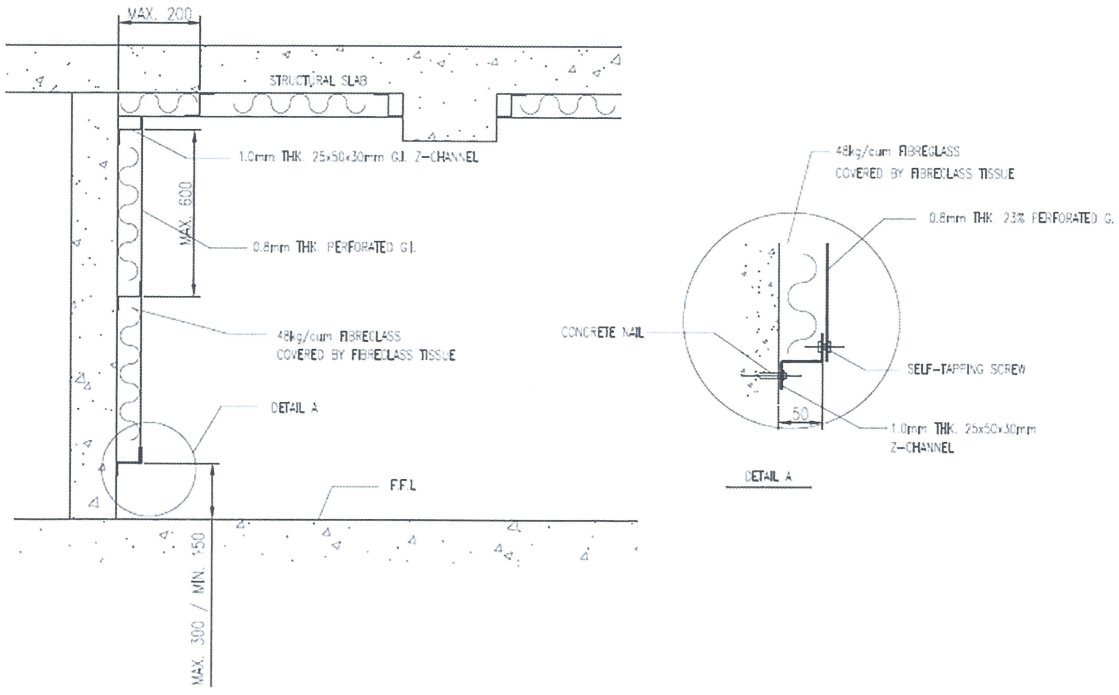
QPlan QuALi Acoustic Panel & Lining System

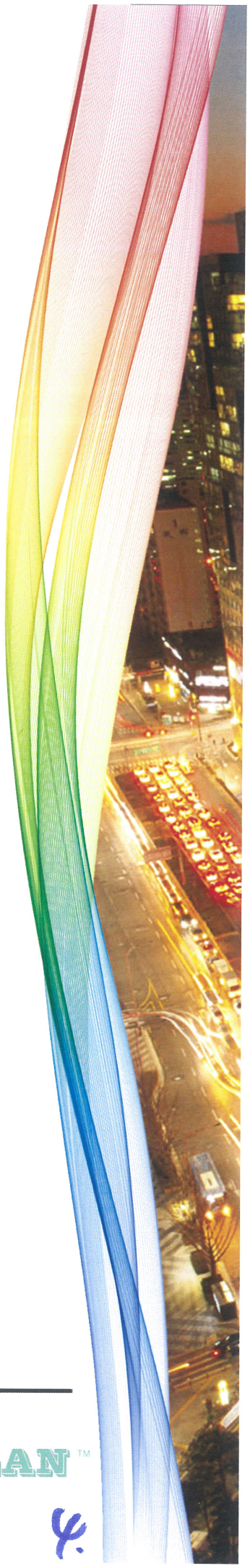
Fibreglass Infill Sound Absorption Coefficient

Freq. (Hz)	100	125	160	200	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	NRC
QuALi	0.30			0.91			1.20			1.13			0.99			0.94			1.05



Installation diagram





APAC BUILDING ACOUSTICS

Acoustic Products & Acoustical-noise Control
web: www.apacba.hk

QPLAN™

N.K.I.L. 6514 KWUN TONG TOWN CENTRE (DEVELOPMENT AREAS 2 & 3)

SPECIFICATION FOR THE TOWER CURTAIN WALL NOMINATED SUB-CONTRACT –

TECHNICAL SPECIFICATION OF ACOUSTIC PROVISION

1. Acoustic Window Systems

"Gudi" Lasorber

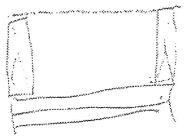
a) Glass windows

- Minimum 8mm thick tempered glass,
- If required by RTTV- 10+9+10mm tempered glass

b) Micro-perforated absorber (MPA) on outer surface of the baffle and / or the inner surface of the side hung window

- Thickness of at least 1.5mm and surface density not less than 0.14kg/sq.m
- Hole diameter = 0.5mm; spacing between holes is 5mm
- Contractor should propose method for rigid mounting of the MPA with mounting box to the windows and should be submitted to client's representative for approval
- Maintain cavity (tentatively 40mm) should be maintained between MPA and window glass panel for installation
- MPA with 40mm air gap should achieve Noise Reduction Coefficient(NRC) of not less than NRC 0.6
- Acoustic performance should be tested by accredited laboratory and the report should be submitted to client's representative for approval

c) MPA mounting box



- The mounting box inner side should be made of a perforated panel (minimum 23% perforation) with polycarbonate/ rock wool infill
- It should achieve NRC of not less than 0.85 and Sound Absorption Coefficient (SAC) of not less than 0.9 at 500Hz
- Noisestop micro-perforated absorber or equivalent
- Acoustic performance should be tested by accredited laboratory and the report should be submitted to client's representative for approval

d Infill.

1.5mm thk. Alum. Perforated Sheet with 23% Open Area.

d) Absorption panel/ Infill absorptive material at sidewall between baffle window and side hung window (absorptive edge)

- density not more than 10kg/cu.m
- 50mm thickness or less
- The absorptive edge should be made of a perforated panel or micro perforated panel (minimum 23% perforation or min 1% micro perforation) with polycarbonate/ rock wool infill
- It should achieve NRC of not less than 1 and SAC of not less than 1.0 at 500Hz and 1000Hz
- SonexAsia Plano 60 absorber or Pomute seamless panel or Noisestop PAC panel or Kinetic KNP panel or equivalent
- Contractor should propose method for rigid mounting of the absorber to the sidewall inside the window cavity
- Acoustic performance should be tested by [illegible] report should be submitted to client's repre[illegible]
- Aesthetic appearance should be submitte[illegible] approval

SonexAsia Plano 60 or 50mm thk. 48kg/cum Fibreglass (alternative)

meet the requirement of NRC and SAC

2. Enhanced Acoustic Balcony Systems

a) Micro-perforated absorber (MPA) on the outer surface of the baffle behind

- Thickness of at least 1.5mm and surface density not less than 0.14kg/sq.m
- Hole diameter = 0.5mm; spacing between holes is 5mm
- Contractor should propose method for rigid mounting of the MPA with mounting box to the windows and should be submitted to client's representative for approval
- Maintain cavity (tentatively 40mm) should be maintained between MPA and window glass panel for installation
- MPA with 40mm air gap should achieve NRC of not less than NRC 0.6
- Acoustic performance should be tested by accredited laboratory and the report should be submitted to client's representative for approval

b) MPA mounting box

- The mounting box inner side should be made of a perforated panel (minimum 23% perforation) with polycarbonate/ rock wool infill
- It should achieve NRC of not less than 0.85 and SAC of not less than 0.9 at 500Hz
- Noisestop micro-perforated absorber or equivalent
- Acoustic performance should be tested by accredited laboratory and the report should be submitted to client's representative for approval

c) Balcony Balustrade

- Minimum 8mm+8mm thick tempered laminated glass
- Should be solid, no gaps or openings

d) Aluminium acoustic panel of balcony ceiling and full height barrier

- Should achieve NRC of not less than 1.05
- Should achieve SAC of not less than 1.19 at 500Hz
- Noisestop PAC panel or Kinetic KNP panel or equivalent
- Acoustic performance should be tested by accredited laboratory and the report should be submitted to client's representative for approval

e) Balcony Full Height Barrier, if required

- Using acoustic panel
- Should achieve NRC of not less than 1.05
- Should achieve SAC of not less than 1.19 at 500Hz
- Acoustic performance should be tested by accredited laboratory and the report should be submitted to client's representative for approval

3. Acoustic Balcony Systems

a) Balcony Dimensions

- Should be of minimum height of 1.1m and minimum depth of 1.2m

b) Balcony Balustrade

- Minimum 8mm+8mm thick tempered laminated glass

- Should be solid, no gaps or openings

c) Aluminium acoustic panel of balcony ceiling

- Should achieve NRC of not less than 1.05
- Should achieve SAC of not less than 1.19 at 500Hz
- Noisestop PAC panel or Kinetic KNP panel or equivalent
- Acoustic performance should be tested by accredited laboratory and the report should be submitted to client's representative for approval

4. Acoustic Fin

a) Fin structure

- Minimum 8mm+8mm thick tempered laminated fritted glass
- Fin structure itself should be solid in nature, with no gaps or openings
- Surface density not less than 20kg/sq.m
- Transmission loss of the material with no gaps should be at least 30dB
- Acoustic performance should be tested by accredited laboratory and the report should be submitted to client's representative for approval

b) Aluminium acoustic panel of acoustic fin

- Should achieve NRC of not less than 1.05
- Should achieve SAC of not less than 1.19 at 500Hz
- Noisestop PAC panel or Kinetic KNP panel or equivalent
- Acoustic performance should be tested by accredited laboratory and the report should be submitted to client's representative for approval

5. Acoustic Utility Platforms

a) Micro-perforated absorber (MPA) on the outer surface of the baffle behind and/ or on the inner side of the openable door

- Thickness of at least 1.5mm and surface density not less than 0.14kg/sq.m
- Hole diameter = 0.5mm; spacing between holes is 5mm

- Contractor should propose method for rigid mounting of the MPA with mounting box to the windows and should be submitted to client's representative for approval
- Maintain cavity (tentatively 40mm) should be maintained between MPA and window glass panel for installation
- MPA with 40mm air gap should achieve NRC of not less than NRC 0.6
- Acoustic performance should be tested by accredited laboratory and the report should be submitted to client's representative for approval

b) MPA mounting box

- The mounting box inner side should be made of a perforated panel (minimum 23% perforation) with polycarbonate/ rock wool infill
- It should achieve NRC of not less than 0.85 and SAC of not less than 0.9 at 500Hz
- Noisestop micro-perforated absorber or equivalent
- Acoustic performance should be tested by accredited laboratory and the report should be submitted to client's representative for approval

c) Aluminium acoustic panel of balcony ceiling and full height barrier

- Should achieve NRC of not less than 1.05
- Should achieve SAC of not less than 1.19 at 500Hz
- Noisestop PAC panel or Kinetic KNP panel or equivalent
- Acoustic performance should be tested by accredited laboratory and the report should be submitted to client's representative for approval

d) Balcony Full Height Barrier, if required

- Using acoustic panel
- Should achieve NRC of not less than 1.05
- Should achieve SAC of not less than 1.19 at 500Hz
- Acoustic performance should be tested by accredited laboratory and the report should be submitted to client's representative for approval

e) Absorptive material/panel at sidewall and ceiling between inner sliding panel and side hung door (absorptive edge)

- The absorptive edge should be made of a perforated panel or micro perforated panel (minimum 23% perforation or min 1% micro perforation) with polycarbonate/ rock wool infill
- It should achieve NRC of not less than 1 and SAC of not less than 1 at 500Hz
- Pomute seamless panel or Noisestop PAC panel or Kinetic KNP panel or equivalent
- Contractor should propose method for rigid mounting of the absorber to the sidewall inside the window cavity
- Acoustic performance should be tested by accredited laboratory and the report should be submitted to client's representative for approval
- Aesthetic appearance should be submitted to client's representative for approval

6. Sound canopy

a) Canopy structure

- Canopy itself should be solid in nature, with no gaps or openings
- Surface density not less than 20kg/sq.m
- Transmission loss of the material with no gaps should be at least 30dB
- Acoustic performance should be tested by accredited laboratory and the report should be submitted to client's representative for approval

2018.10.29

email from WT

	TOWER	FLOORS	FLAT	LOCATION	VERTICAL FIN	SOUND ABSORPTION MATERIAL
1. VERTICAL ACOUSTIC FIN	T1	6F to 50F	B	UP	1.8M LONG VERTICAL FIN	/
	T1	6F to 50F	A	UP	1.8M LONG VERTICAL FIN	/
	T1	6F to 50F	E	UP	1.0M LONG VERTICAL FIN	/
	T1	6F to 50F	G	UP	1.5M LONG VERTICAL FIN	/
	T1	6F to 50F	H	UP	1.5M LONG VERTICAL FIN	/
	T2	6F to 55F	A	UP	1.8M LONG VERTICAL FIN	/
	T2	6F to 55F	B	UP	1.8M LONG VERTICAL FIN	/
	T2	6F to 55F	M	UP	1.5M LONG VERTICAL FIN	/
	T3	6F to 52F	A	UP	1.5M LONG VERTICAL FIN	/
	T3	6F to 52F	B	UP	1.5M LONG VERTICAL FIN	/
	T3	6F to 52F	F	UP	1.5M LONG VERTICAL FIN	/
	T5	6F to 50F	A	BAL	1.5M LONG VERTICAL FIN	INNER SIDE OF WALL
	T5	51F	A	MBATH 2	1.5M LONG VERTICAL FIN	BOTH SIDES OF WALL
	T5	6F to 50F	A	UP	1.5M LONG VERTICAL FIN	
	T5	51F	A	UP	1.5M LONG VERTICAL FIN	
	T5	6F to 21F	B	BAL	1.5M LONG VERTICAL FIN	INNER SIDE OF WALL
	T5	22F to 50F	C	UP	1.5M LONG VERTICAL FIN	INNER SIDE OF WALL
	T5	6F to 50F	L	UP	1.8M LONG VERTICAL FIN	/
	T5	6F to 50F	M	UP	1.8M LONG VERTICAL FIN	/

(已取消) (2B) ~~全身infill~~ +

(2A) 室內窗

2. ACOUSTIC WINDOW

雙層窗

(T1A132/105)

	TOWER	FLOORS	FLAT	LOCATION	MPA AT INNER SIDE OF WINDOW
	T1	6F to 49F	F	BR1	YES
	T1	6F to 49F	F	MBR	YES
	T3	7F to 31F	M	BR1	
	T3	6F to 37F	E	BR1	
	T3	6F to 39F	E	BR2	
	T3	6F to 40F	F	BR2	
	T3	6F to 39F	F	BR1	
	T5	6F to 28F	A	BR2	
	T5	7F to 28F	A	BR1	
	T5	6F to 50F	L	BR2	
	T5	6F to 50F	L	BR1	
	T5	6F to 50F	M	BR1	
	T5	6F to 50F	M	BR2	
	T5	6F to 50F	N	BR2	YES
	T5	6F to 50F	N	BR1	YES

(2C) 1.5mm 吸收板 在生窗

	TOWER	FLOORS	FLAT
3. ACOUSTIC BALCONY	T3	7F to 31F	M
	T3	6F to 40F	E
	T3	6F to 40F	F
	T5	8F to 26F	A

T1A132/105b

	TOWER	FLOORS	FLAT	MPA ON INNER SIDE OF SWING DOOR
4. ENHANCED ACOUSTIC BALCONY	T1	6F to 49F	F	
	T5	6F to 50F	J	YES
	T5	6F to 50F	K	
(4A) 室內走廊牆地	T5	6F to 50F	L	
	T5	6F to 50F	M	
	T5	6F to 50F	N	

(4B) F.D門 加 1.5mm 吸收板

(4C) ~~全身連天花 Infill~~ ×

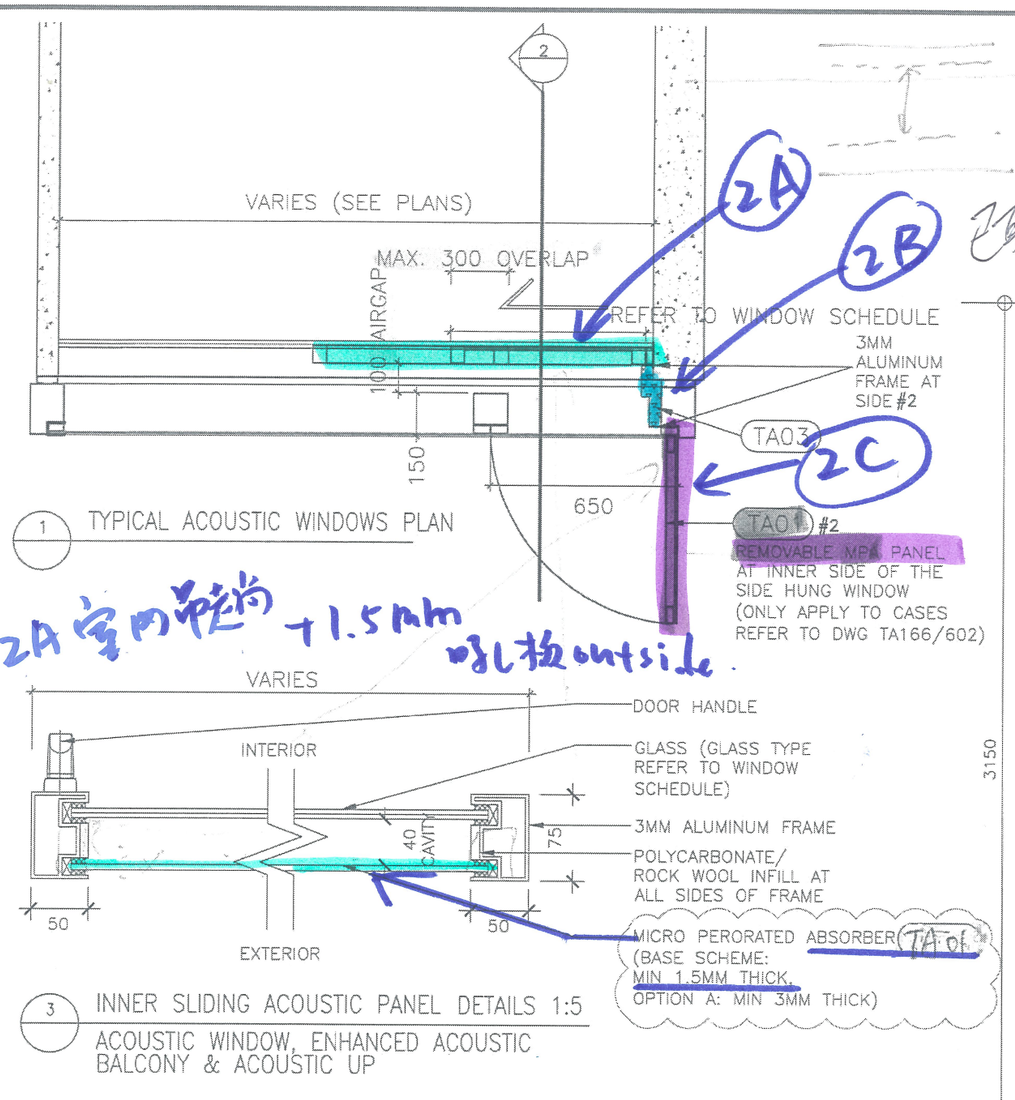
已取消

T1A132/105c

	TOWER	FLOORS	FLAT	WITH ABSORPTIVE EDGE BETWEEN INNER SLIDING PANEL AND SWING DOOR
5. ACOUSTIC UP	T3	6F to 36F	E	
	T3	6F to 28F	F	
	T3	7F to 30F	M	
(5A) 室內趟牆地	T5	6F to 21F	A	
	T5	10F to 21F	B	
	T5	6F to 50F	J	
	T5	6F to 50F	K	
	T5	6F to 50F	L	
	T5	6F to 50F	M	YES
	T5	6F to 50F	N	YES

(5B) F.D門 加 1.5mm 吸收板

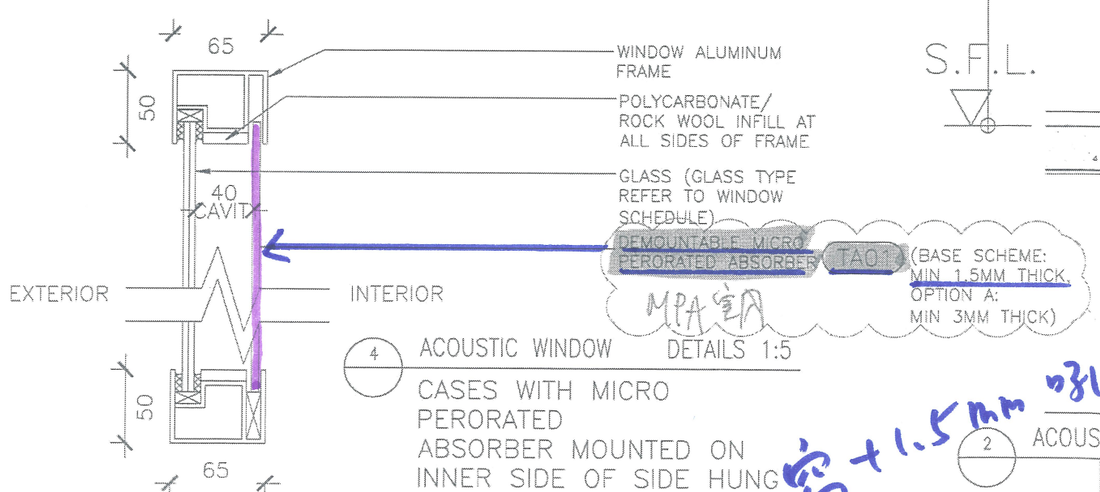
(5C) 全身連天花 Infill



1 TYPICAL ACOUSTIC WINDOWS PLAN

3 INNER SLIDING ACOUSTIC PANEL DETAILS 1:5

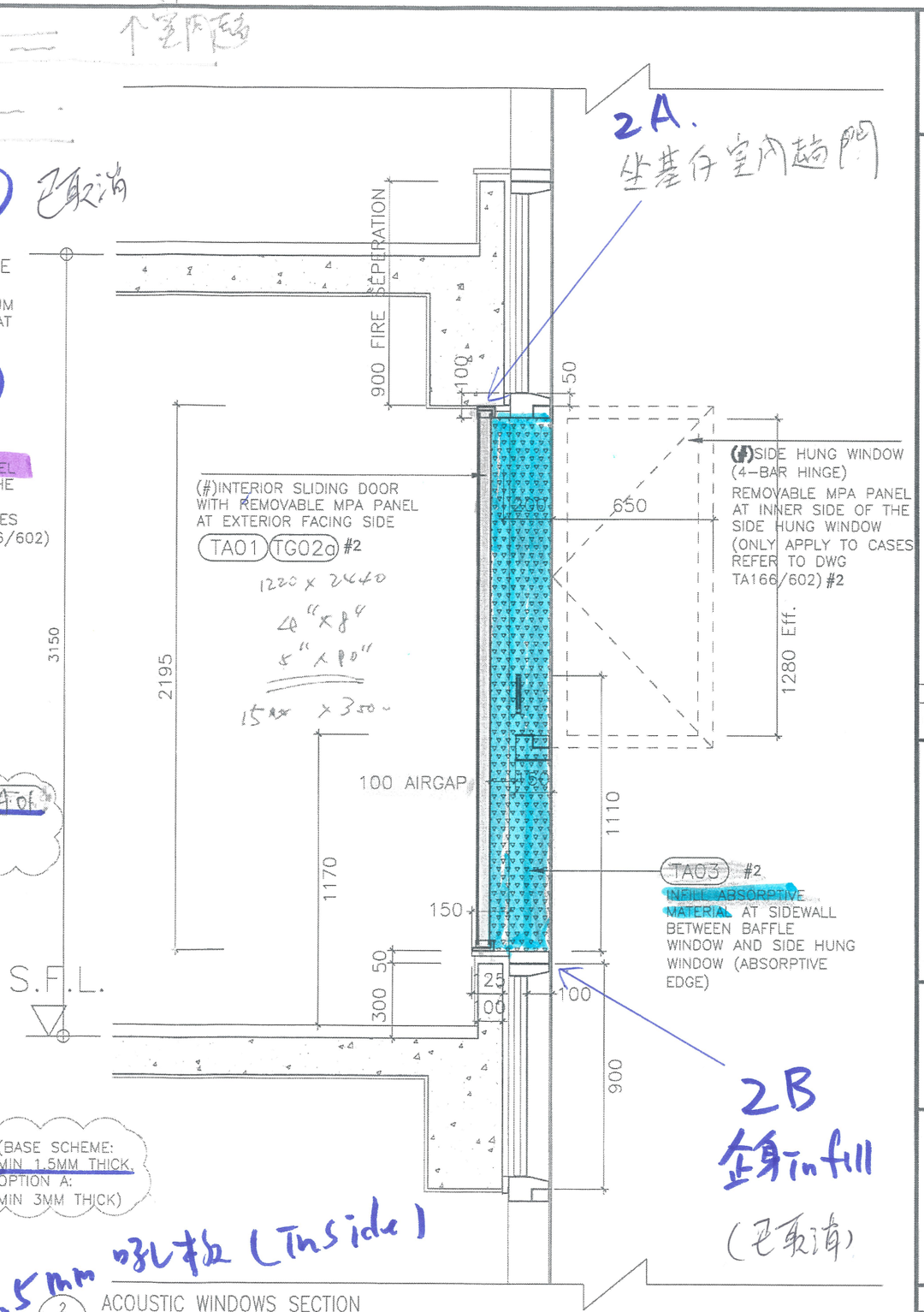
ACOUSTIC WINDOW, ENHANCED ACOUSTIC BALCONY & ACOUSTIC UP



4 ACOUSTIC WINDOW DETAILS 1:5

CASES WITH MICRO PERORATED ABSORBER MOUNTED ON INNER SIDE OF SIDE HUNG WINDOW

2C 窗 +1.5mm 吸拉 (Inside)



2 ACOUSTIC WINDOWS SECTION

TENDER ADDENDUM NO.3 (POST-TENDER)

NOTES
DO NOT SCALE DRAWING, FIGURED DIMENSIONS ARE TO BE FOLLOWED.
READ THIS DRAWING IN CONNECTION WITH GENERAL ARCHITECTURAL PLANS, STRUCTURAL PLANS, AND OTHER RELATED DRAWINGS. THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCY FOUND THEREIN.
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GENERAL NOTES:
1. THE EXACT LOCATION AND TYPE OF ACOUSTIC WINDOW/BALCONY/UP SHOULD REFER TO DWG T/A166/602.
2. THE OVERLAPPING LENGTH OF INNER SLIDING DOOR SHALL SUBJECT TO LAB TEST RESULT.
3. THE SIZE OF GLAZING MATERIALS SHALL REFER TO WINDOW SCHEDULE.
4. EFFECTIVE OPENING SHALL COMPLY WITH BD STATUTORY REQUIREMENT OF LIGHTING AND VENTILATION.
5. SHOP DRAWING SHALL BE SUBMITTED FOR ARCHITECT'S APPROVAL.
6. UNLESS OTHERWISE SPECIFIED, DETAILS SHALL REFER TO TYPICAL WINDOW/BALCONY/UP DWG.

NOTE:
#1 BY AL CLADDING/ BALUSTRADE/ CEILING NSC
#2 BY CURTAIN WALL(TOWER) NSC
#3 BY MAIN CONTRACTOR
#4 BY ELE. NSC

Tender Drawings

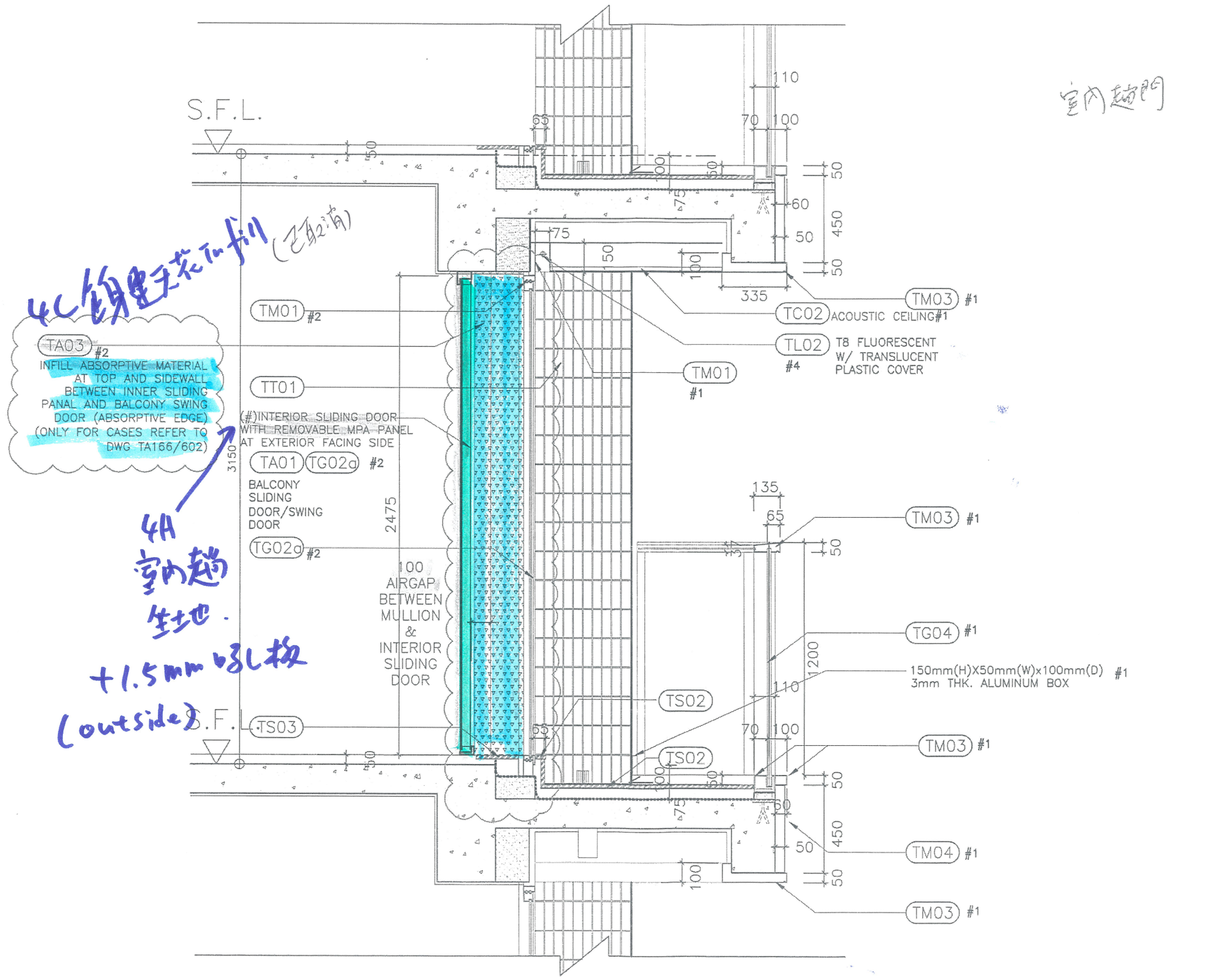
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WONG TUNG & PARTNERS LIMITED
ARCHITECTS & PLANNERS
18th Floor, Cityplaza 3, Taikoo Shing, Hong Kong
T 852-2803 8888 F 852-2513 1728 www.wongtung.com

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

TITLE:
TOWER EXTERNAL TYPICAL WALL SECTION 5 (ACOUSTIC WINDOW)

DATE: 11/2017		SCALE: 1:20	
DRAFTED: (HPC)	CHECKED: (CLC)	DESIGNED: (PYC)	REVIEWED: (DT)
JOB NO. 31690	DRAWING NO. T/A132/105	REV. NO. (12)	



1 TYPICAL SECTION B
ENHANCED ACOUSTIC BALCONY

TENDER ADDENDUM NO.3
(POST-TENDER)

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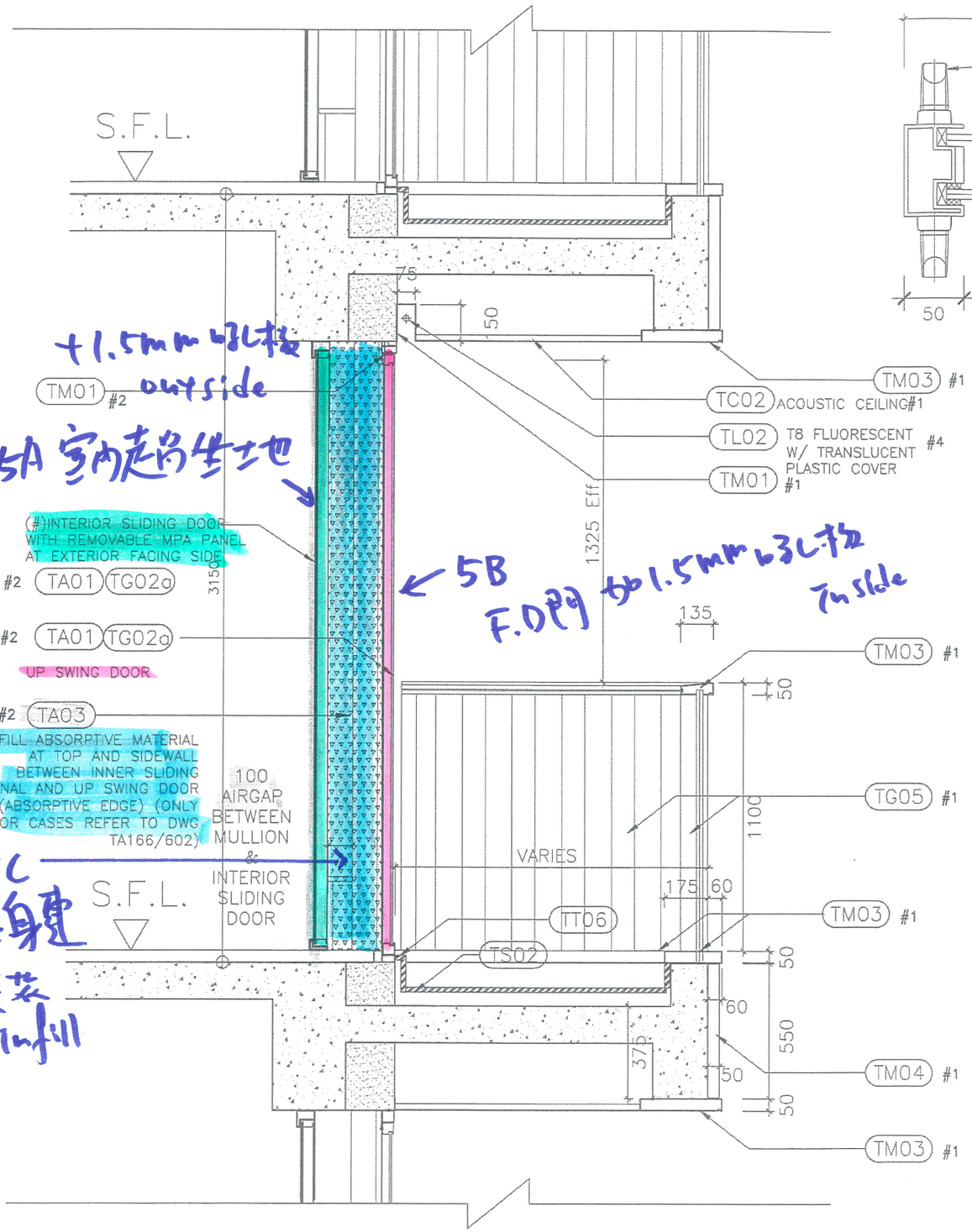
NO.	DATE	REVISIONS	DRAFTED	CHECKED	DESIGNED	REVIEWED

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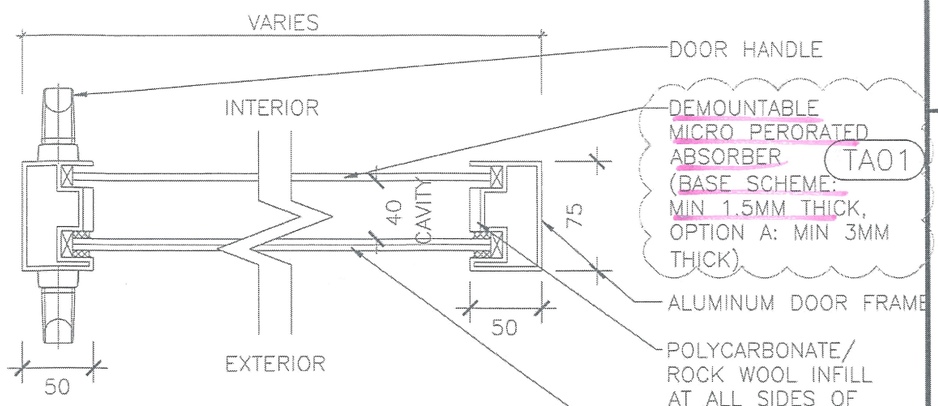
PROJECT:
URA KWUN TONG TOWN CENTRE REDEVELOPMENT (AREA 2 & 3) AT NKIL 6514, KWUN TONG, KOWLOON

TITLE:
TOWER EXTERNAL WALL SECTION 5B (ENHANCED ACOUSTIC BALCONY)

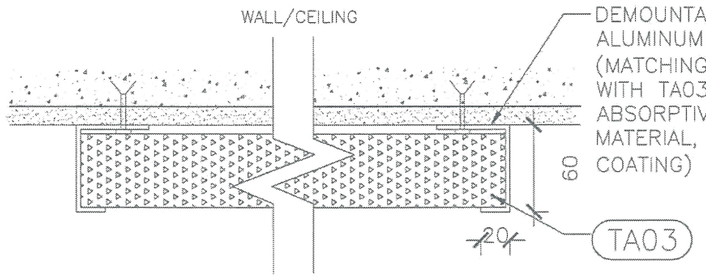
DATE: 11/2017		SCALE: 1:20	
DRAFTED: (HPC)	CHECKED: (CLC)	DESIGNED: (PYC)	REVIEWED: (GT)
JOB NO. 31690	DRAWING NO. T/A132/105b		REV. NO. (05)



1 TYPICAL SECTION C
ACOUSTIC UP



2 ACOUSTIC UP SWING DOOR
DETAILS 1:5



3 ABSORPTIVE MATERIAL FIXING DETAILS
(ACOUSTIC UP & ACOUSTIC WINDOW)
DETAILS 1:5

NRC spec. index

NOTES
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NOTE:
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#3 BY MAIN CONTRACTOR
#4 BY ELE. NSC

NO.	DATE	REVISIONS	DRAFTED	CHECKED	DESIGNED	REVIEWED

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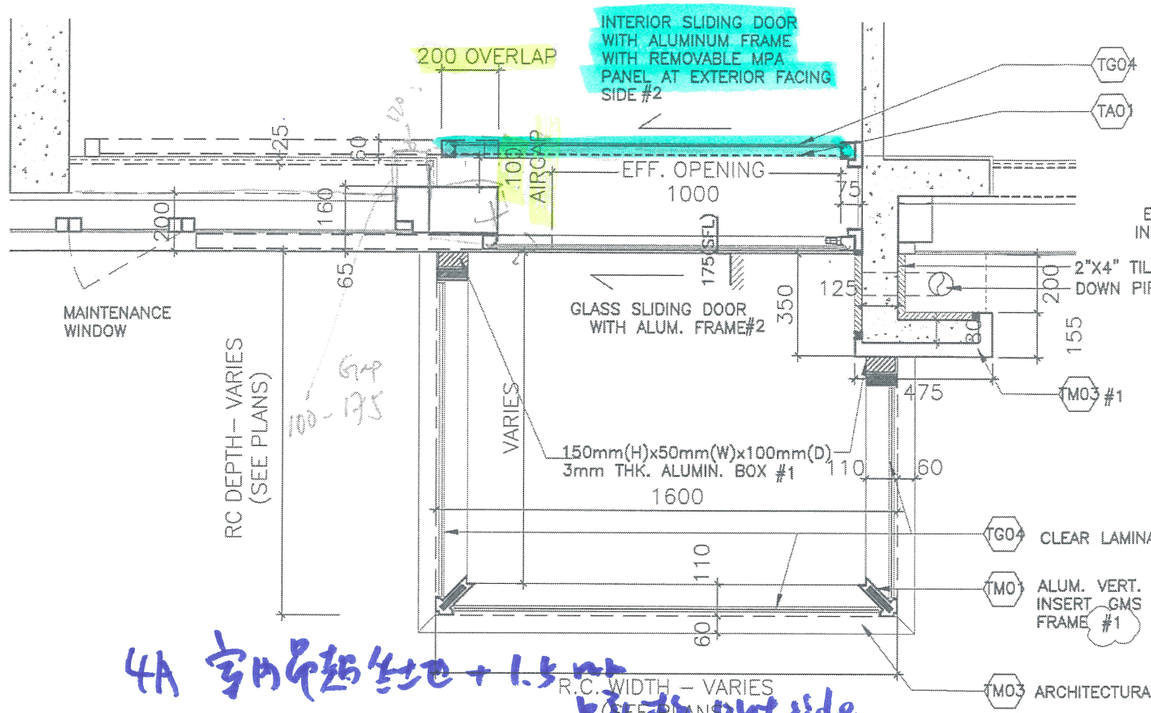
PROJECT:
URA KWUN TONG TOWN CENTRE REDEVELOPMENT (AREA 2 & 3) AT NKIL 6514, KWUN TONG, KOWLOON

TITLE:
TOWER EXTERNAL TYPICAL WALL SECTION 5C (ACOUSTIC UP)

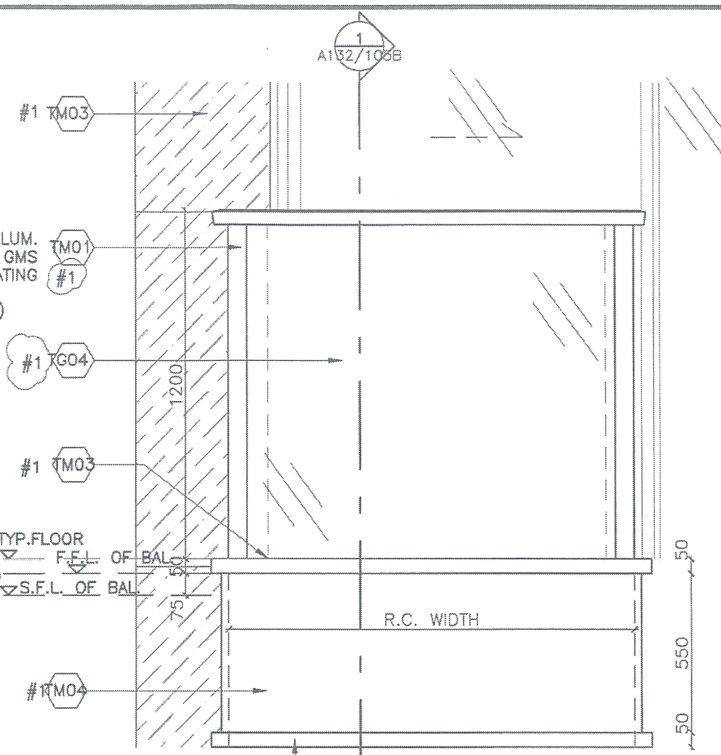
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DATE: 11/2017		SCALE: 1:20	
DRAFTED: (HPC)	CHECKED: (CLC)	DESIGNED: (PYC)	REVIEWED: (OT)
JOB NO. 31690	DRAWING NO. T/A132/105c	REV. NO. (07)	

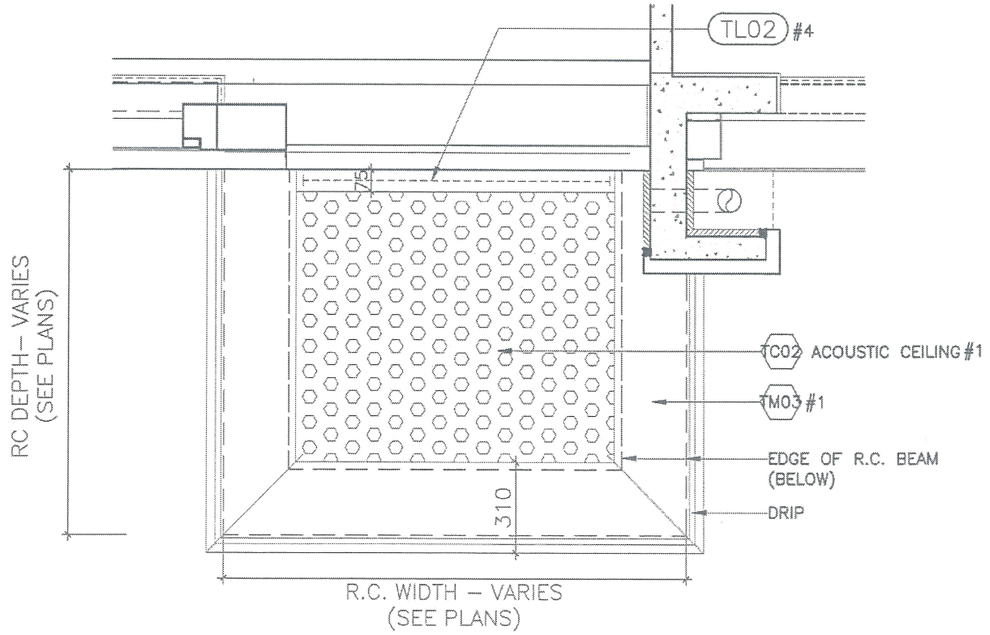
TENDER ADDENDUM NO.3 (POST-TENDER)



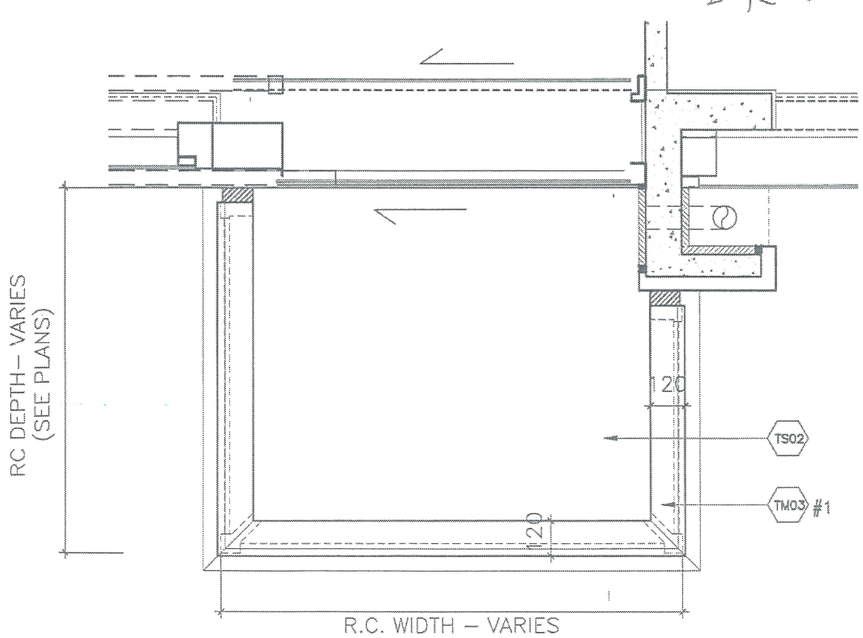
1 TYPICAL ENHANCED ACOUSTIC BALCONY PLAN WITH SLIDING DOOR
CASES FOR T1 UNIT F, T5 UNIT L/M/N LIV.



4 TYP. PART ELEVATION



2 TYPICAL ACOUSTIC BALCONY /ENHANCED ACOUSTIC BALCONY REFLECTED CEILING PLAN WITH SLIDING DOOR
CASES FOR T1 UNIT F, T5 UNIT L/M/N LIV.



3 TYPICAL ENHANCED ACOUSTIC BALCONY TOP PLAN WITH SLIDING DOOR
CASES FOR T1 UNIT F, T5 UNIT L/M/N LIV.

NOTES
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#2 BY CURTAIN WALL(TOWER) NSC
#3 BY MAIN CONTRACTOR
#4 BY ELE. NSC

GENERAL NOTES:
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3. THE SIZE OF GLAZING MATERIALS SHALL REFER TO WINDOW SCHEDULE.
4. EFFECTIVE OPENING SHALL COMPLY WITH BD STATUTORY REQUIREMENT OF LIGHTING AND VENTILATION.
5. SHOP DRAWING SHALL BE SUBMITTED FOR ARCHITECT'S APPROVAL.
6. UNLESS OTHERWISE SPECIFIED, DETAILS SHALL REFER TO TYPICAL WINDOW/BALCONY/UP DWG.

NO.	DATE	REVISIONS	DRAFTED	CHECKED	DESIGNED	REVIEWED

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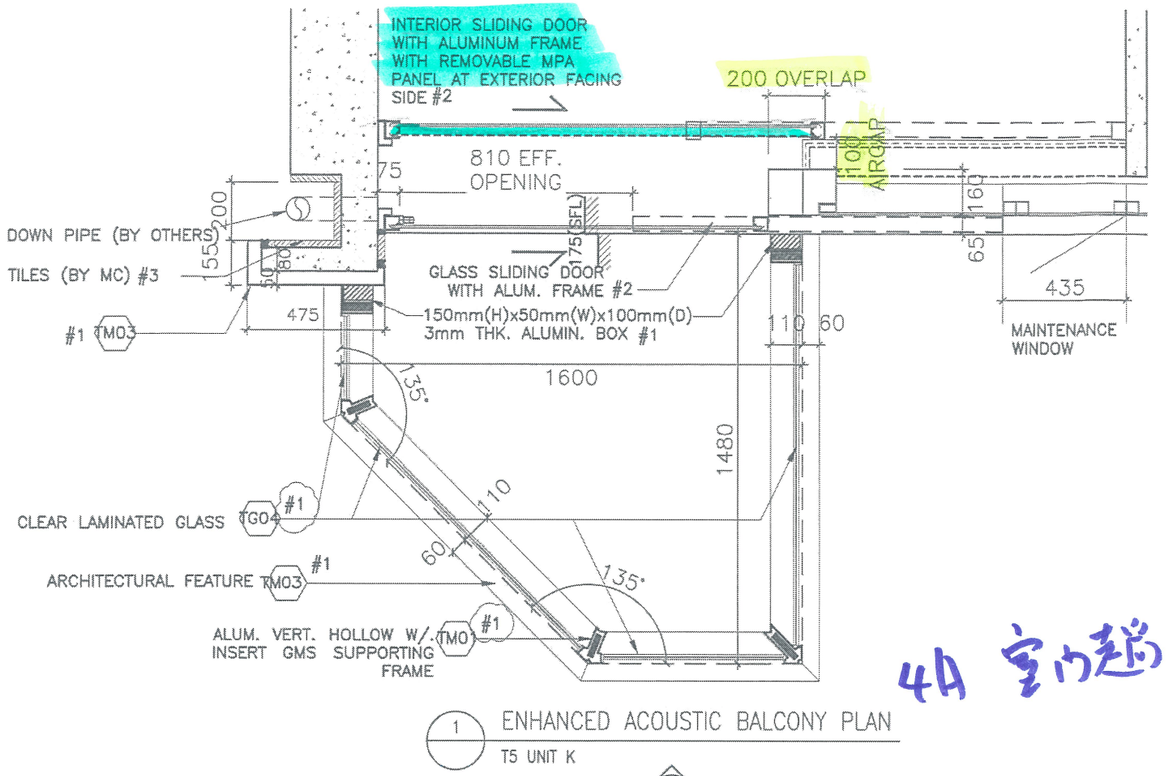
PROJECT:
URA KWUN TONG TOWN CENTRE REDEVELOPMENT (AREA 2 & 3) AT NKIL 6514, KWUN TONG, KOWLOON

TITLE:
TYPICAL ENHANCED ACOUSTIC BALCONY 1 DETAILS PART PLAN & ELEVATION

DATE:	SCALE:
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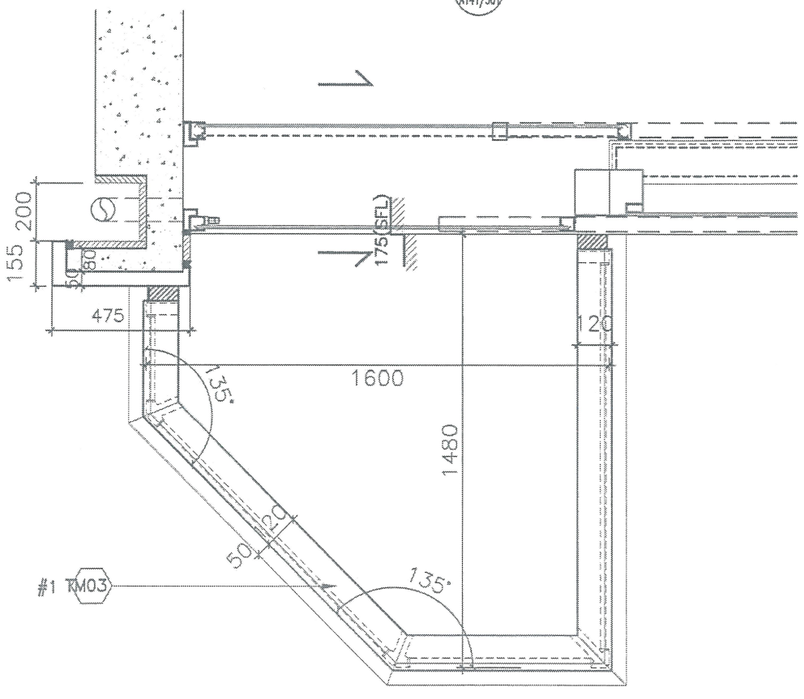
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JOB NO.	DRAWING NO.	REV. NO.
31690	T/A141/301	(01)

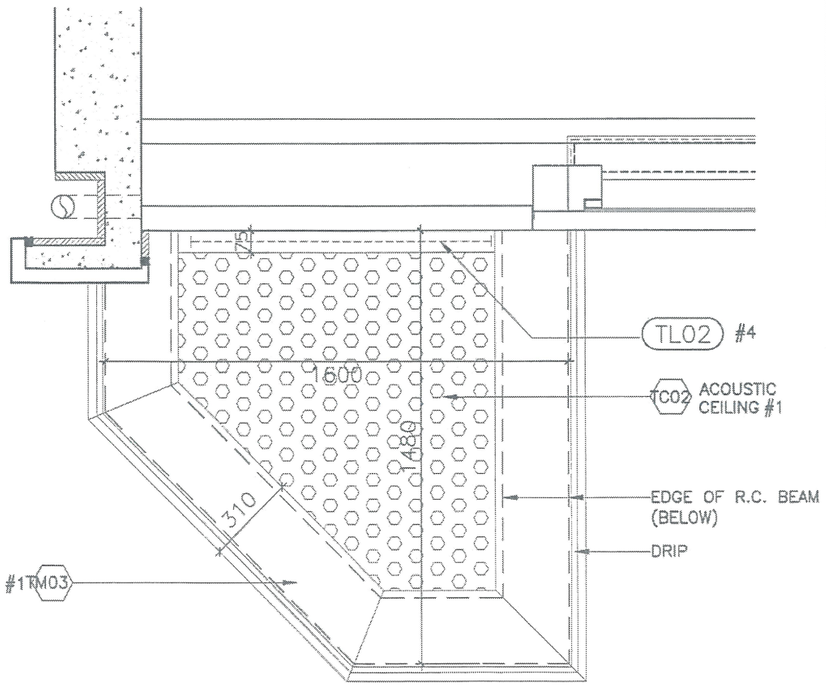


1 ENHANCED ACOUSTIC BALCONY PLAN
T5 UNIT K

4 A141/301



2 ENHANCED ACOUSTIC BALCONY TOP PLAN
T5 UNIT K



3 ENHANCED ACOUSTIC BALCONY REFLECTED CEILING PLAN
T5 UNIT K

4A 室內踢生土地 +1.5mm 吸水板 outside.

室內地門

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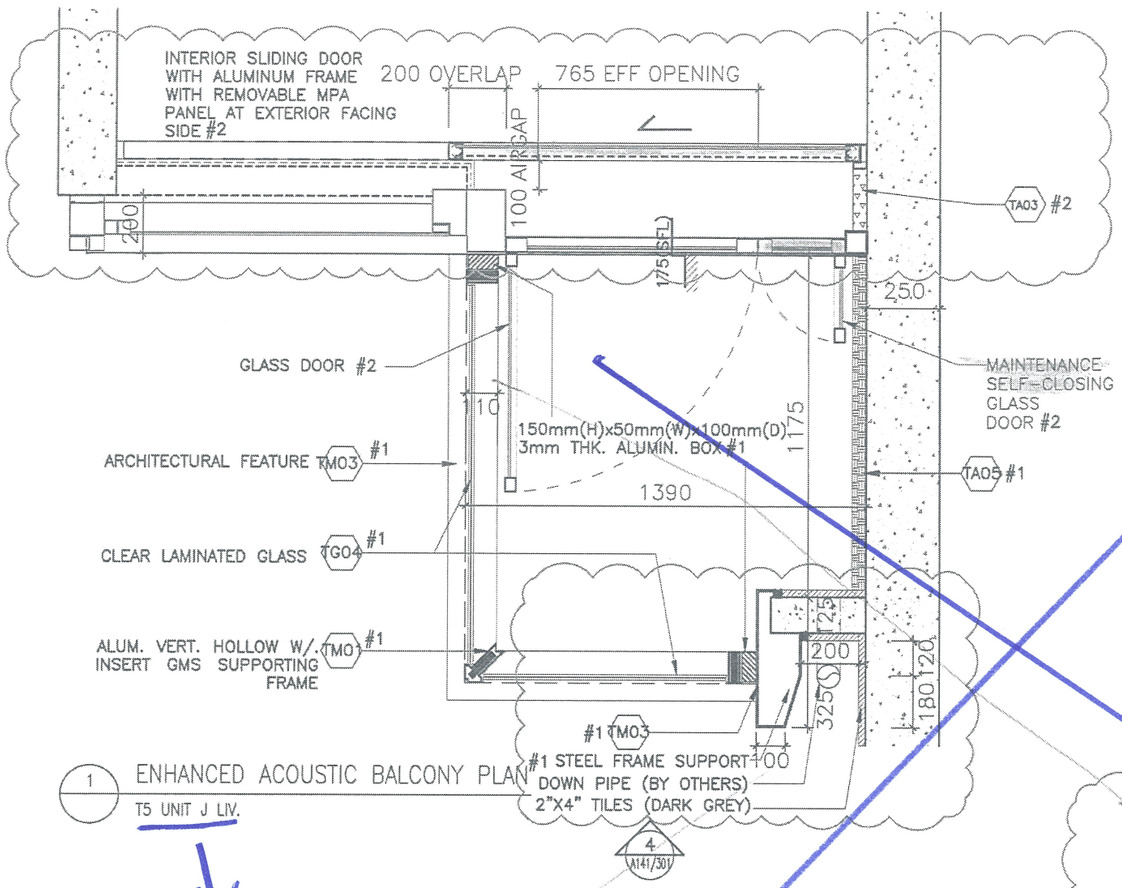
PROJECT:
URA KWUN TONG TOWN CENTRE REDEVELOPMENT (AREA 2 & 3) AT NKIL 6514, KWUN TONG, KOWLOON

TITLE:
TYPICAL ENHANCED ACOUSTIC BALCONY 2 DETAILS
PART PLAN & ELEVATION

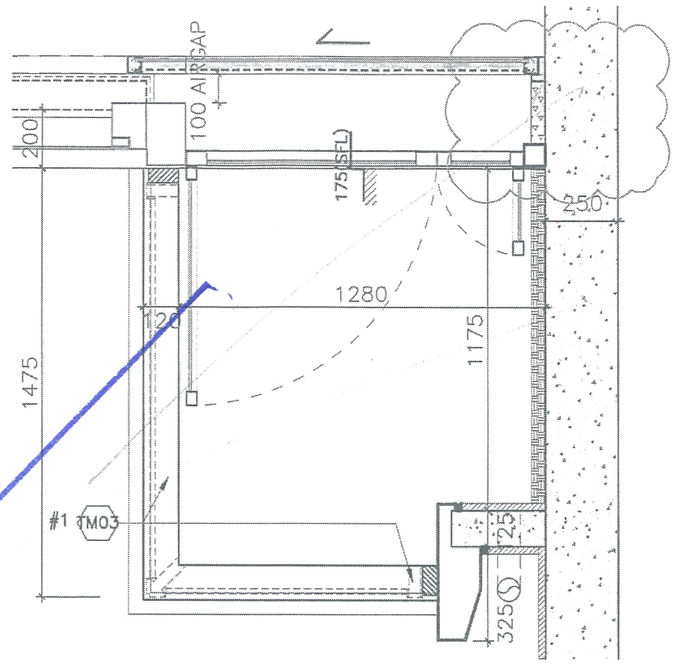
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DATE:	SCALE:		
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JOB NO.	DRAWING NO.	REV. NO.	
31690	T/A141/302	(01)	

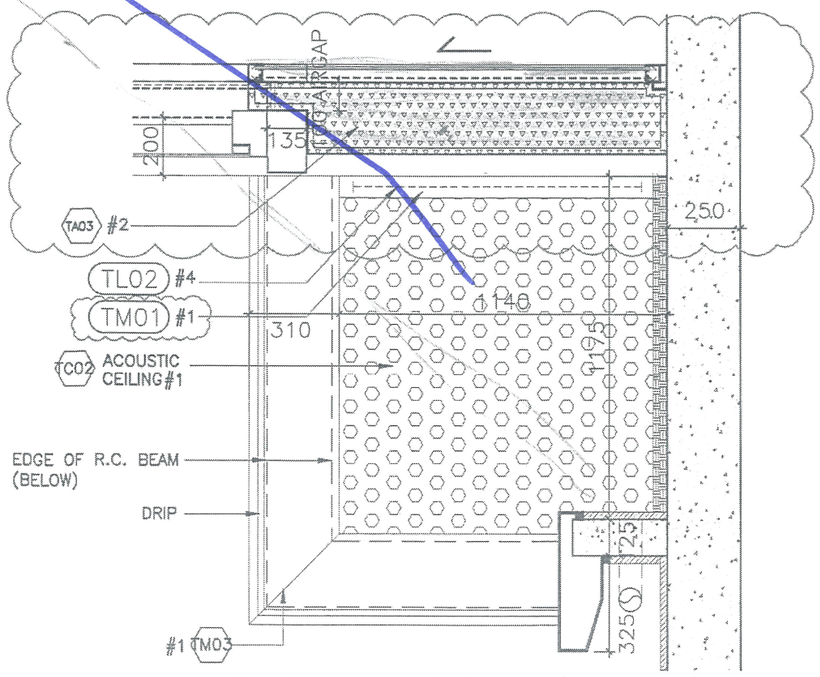
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1 ENHANCED ACOUSTIC BALCONY PLAN
T5 UNIT J LIV.



2 ENHANCED ACOUSTIC BALCONY TOP PLAN
T5 UNIT J LIV.



2 ENHANCED ACOUSTIC BALCONY REFLECTED CEILING PLAN
T5 UNIT J LIV.

TENDER ADDENDUM NO.3 (POST-TENDER)

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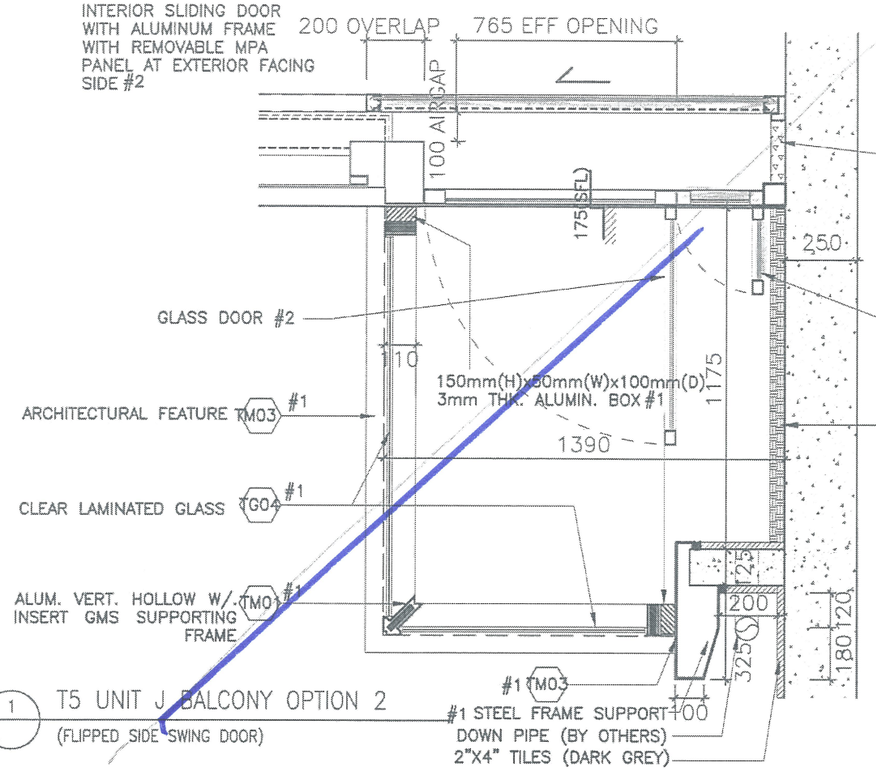
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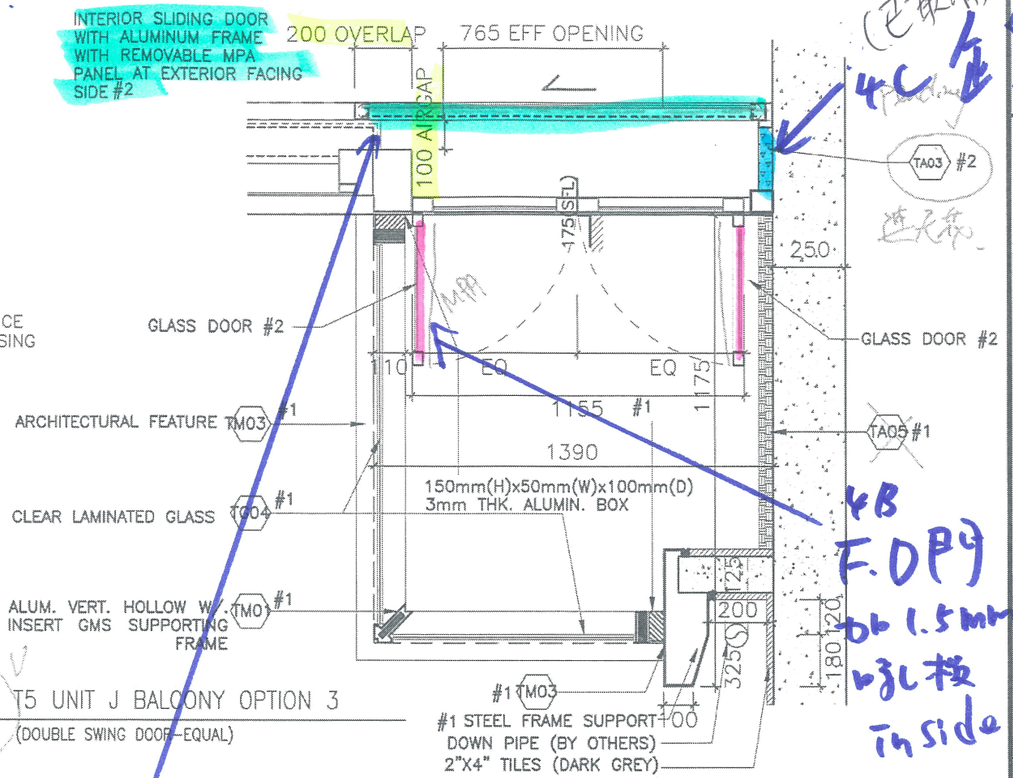
TITLE:
TYPICAL ENHANCED ACOUSTIC BALCONY 3 DETAILS PART PLAN & ELEVATION

DATE:	SCALE:		
11/2017	1:20		
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31690	T/A141/303	(02)	

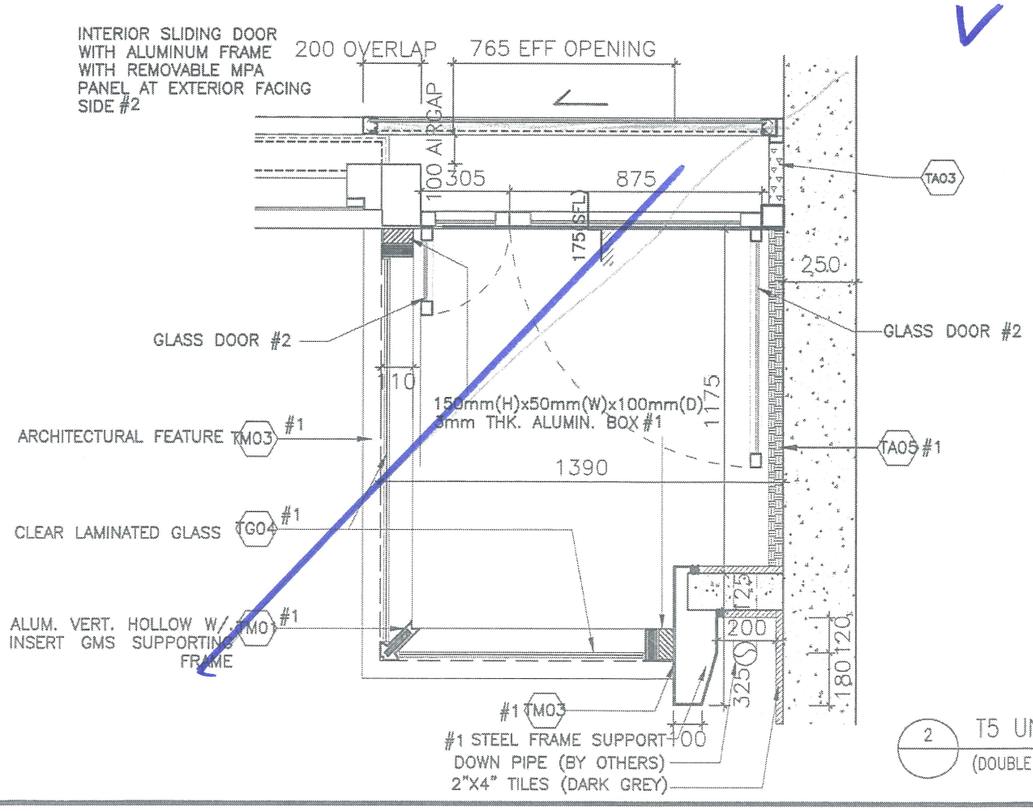
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1 T5 UNIT J BALCONY OPTION 2
(FLIPPED SIDE SWING DOOR)



3 T5 UNIT J BALCONY OPTION 3
(DOUBLE SWING DOOR-EQUAL)



2 T5 UNIT J BALCONY OPTION 4
(DOUBLE SWING DOOR-UNEQUAL)

TENDER ADDENDUM NO.3 (POST-TENDER)

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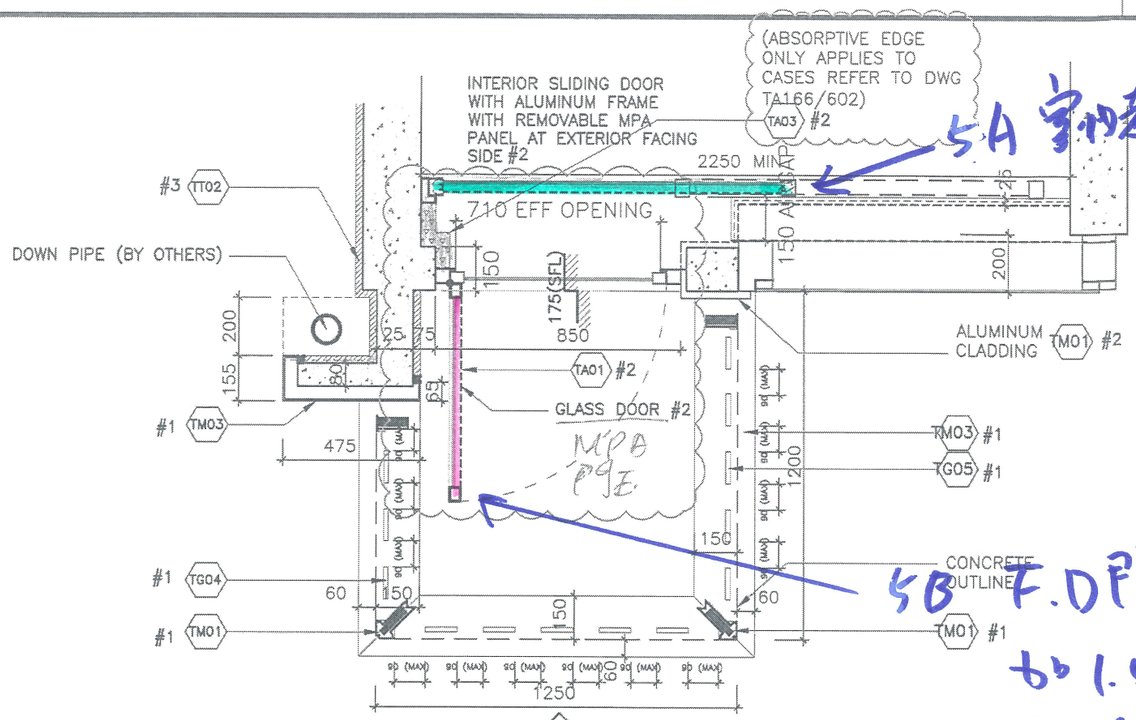
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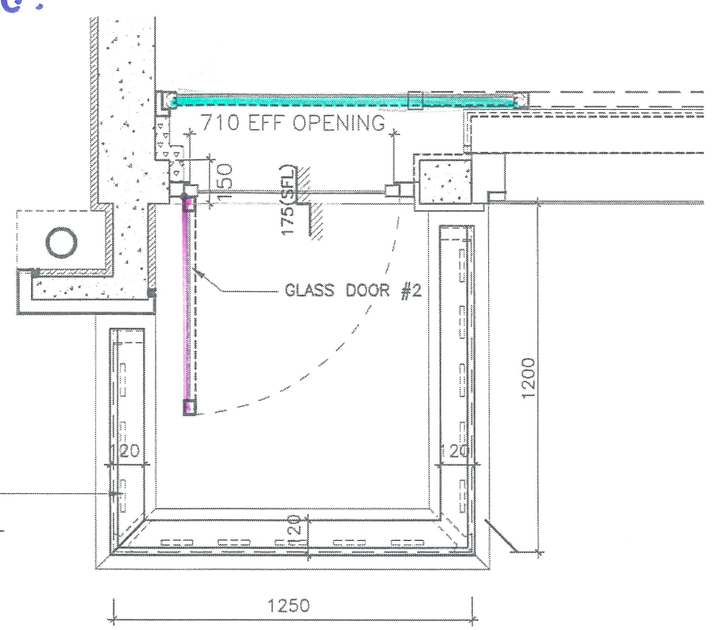
PROJECT:
URA KWUN TONG TOWN CENTRE REDEVELOPMENT (AREA 2 & 3) AT NKIL 6514, KWUN TONG, KOWLOON

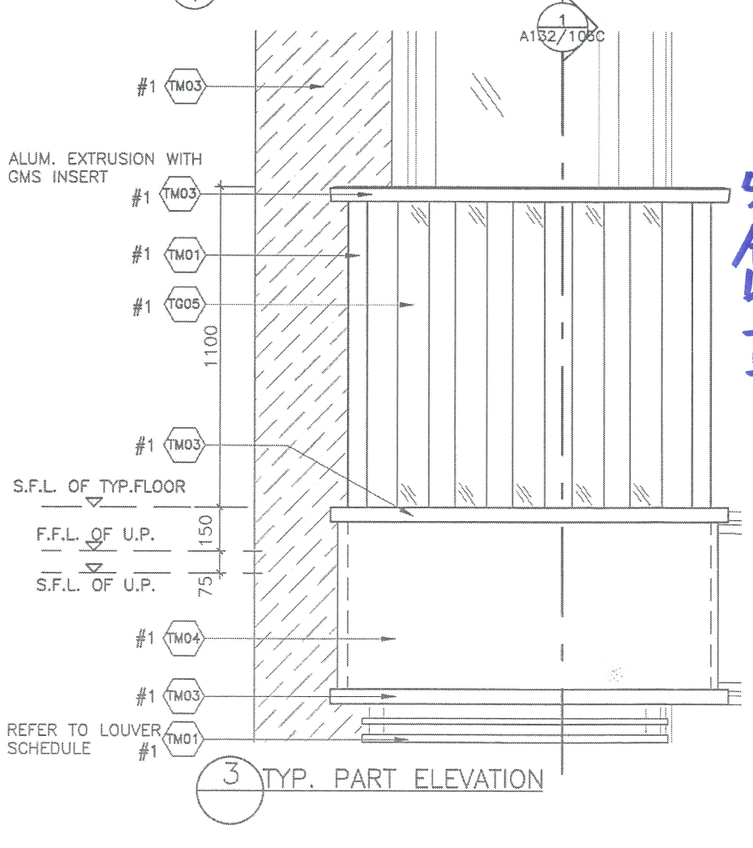
TITLE:
TYPICAL ENHANCED ACOUSTIC BALCONY 3 DETAILS PART PLAN OPTIONS

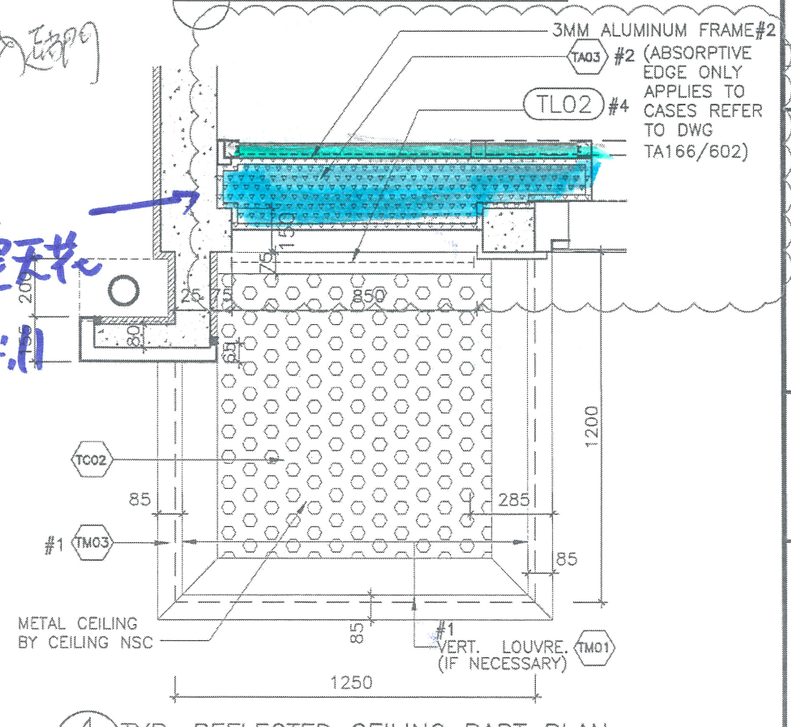
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JOB NO.	DRAWING NO.	REV. NO.	
31690	T/A141/303A	(00)	

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TENDER ADDENDUM NO.2

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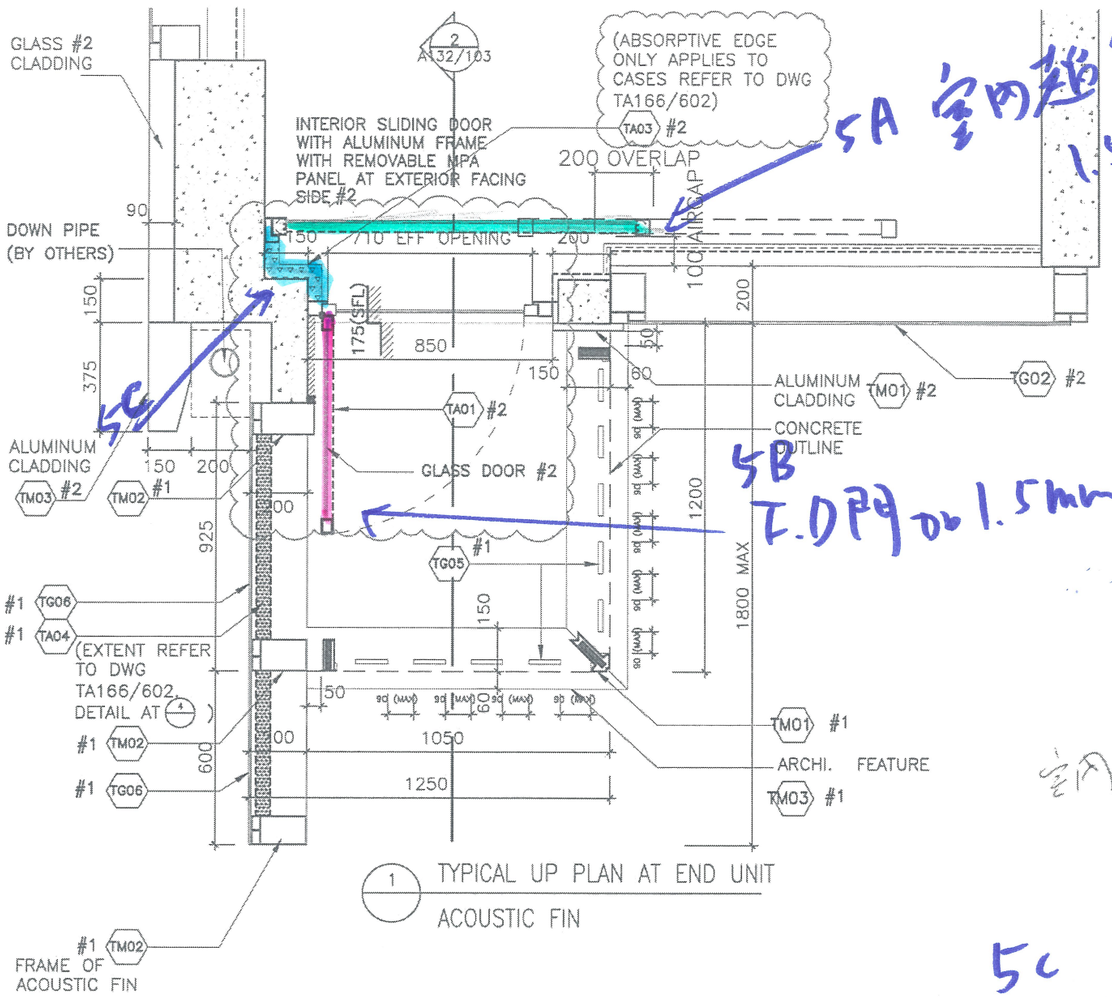
PROJECT:
URA KWUN TONG TOWN CENTRE REDEVELOPMENT (AREA 2 & 3) AT NKIL 6514, KWUN TONG, KOWLOON

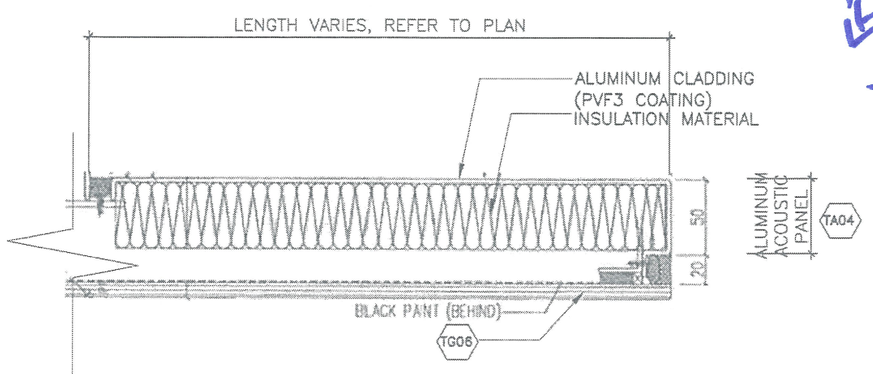
TITLE:
ACOUSTIC UP 1
DETAILS
PART PLAN & ELEVATION

5

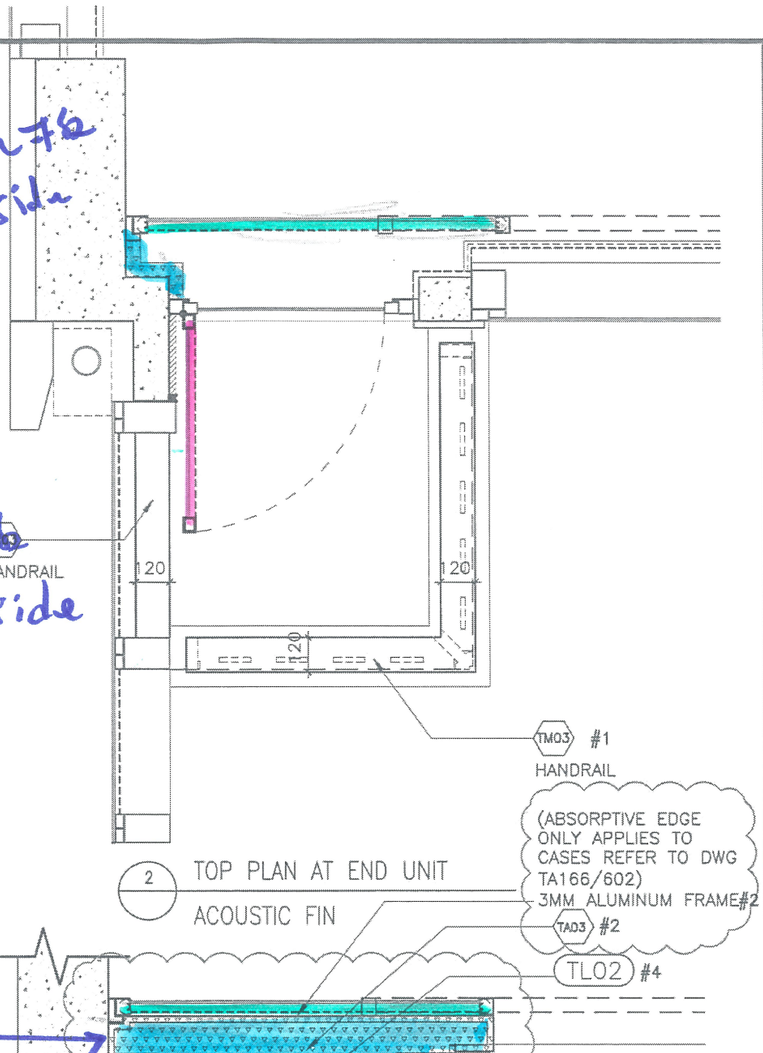
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JOB NO. 31690	DRAWING NO. T/A141/401	REV. NO. (04)	

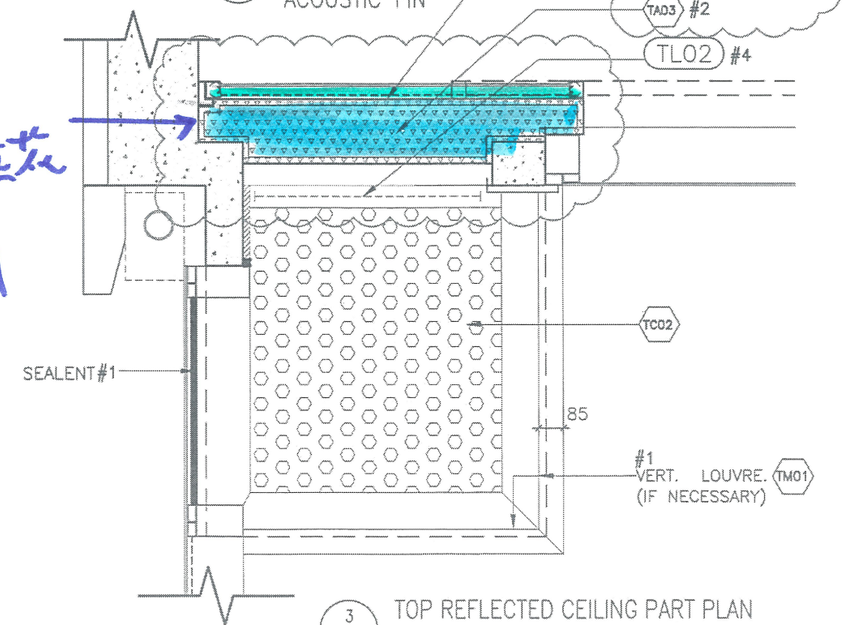
9





4 DETAIL OF ACOUSTIC FIN
SCALE 1:5





3 TOP REFLECTED CEILING PART PLAN
ACOUSTIC FIN

TENDER ADDENDUM NO.2

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

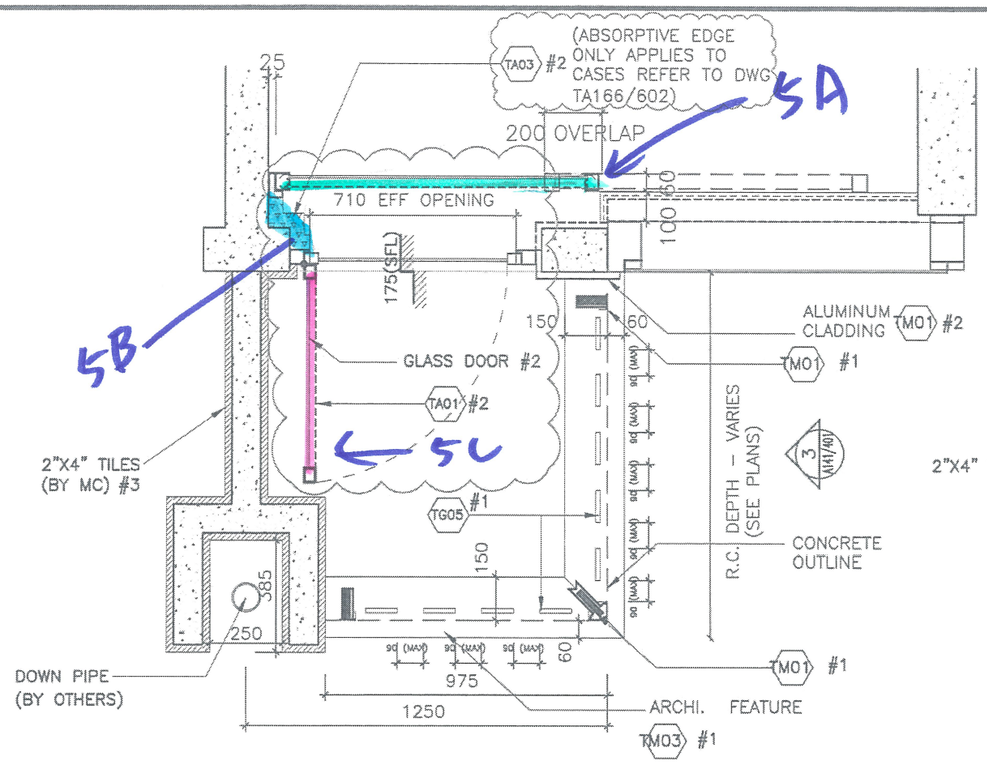
TITLE:
ACOUSTIC UP 2
DETAILS
PART PLAN & ELEVATION

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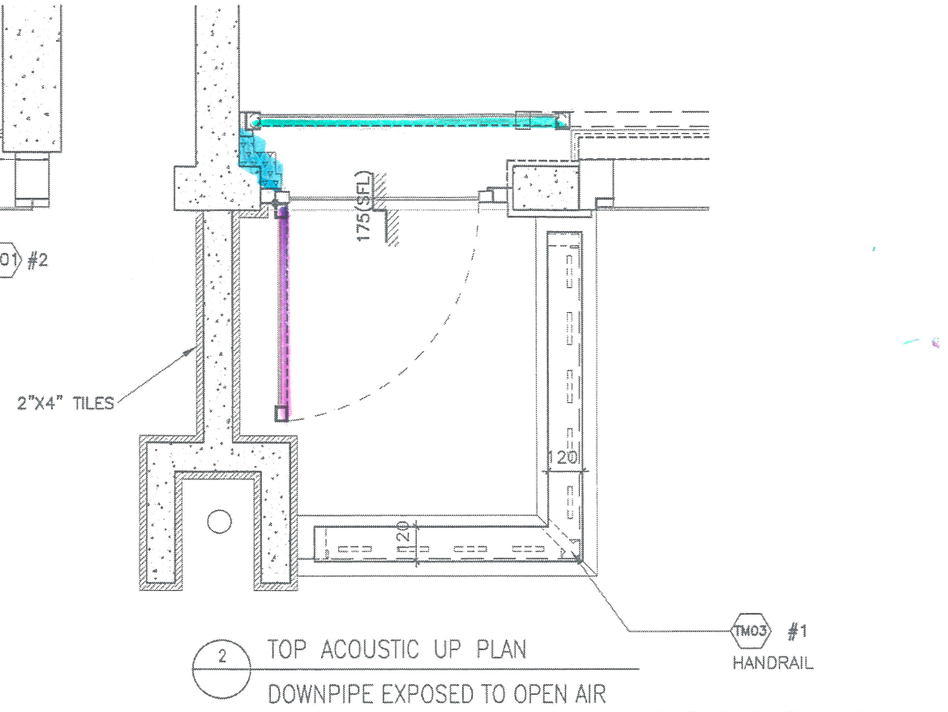
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JOB NO. 31690	DRAWING NO. T/A141/402	REV. NO. (03)	

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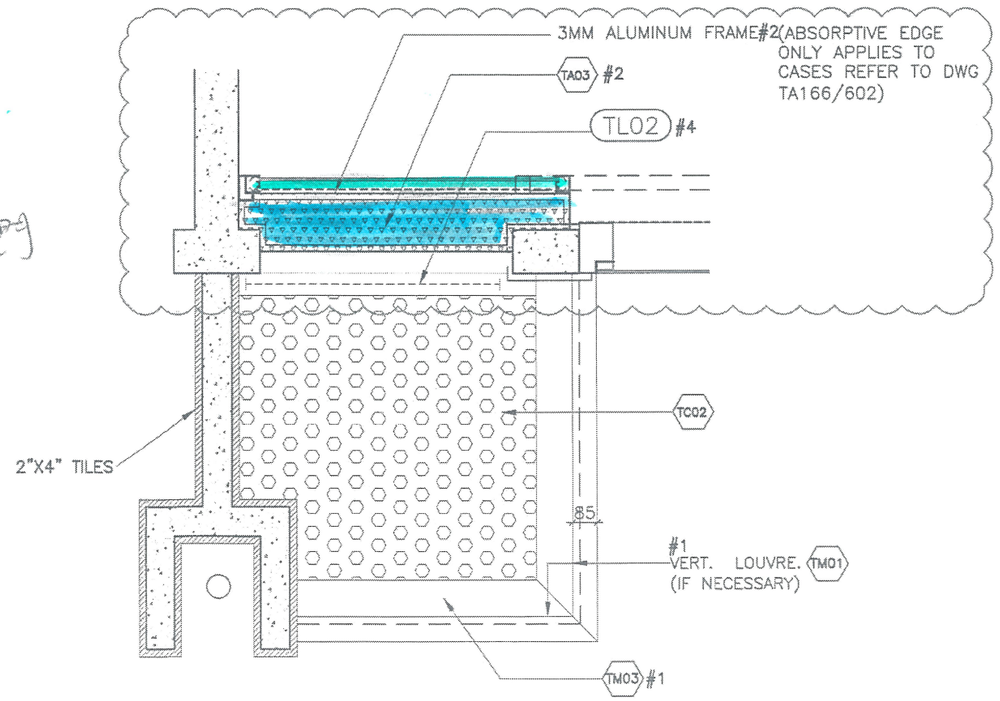
10



1 TYPICAL ACOUSTIC UP PLAN
DOWNPIPE EXPOSED TO OPEN AIR



2 TOP ACOUSTIC UP PLAN
DOWNPIPE EXPOSED TO OPEN AIR



3 ACOUSTIC UP REFLECTED CEILING PLAN
DOWNPIPE EXPOSED TO OPEN AIR

TENDER ADDENDUM NO.2

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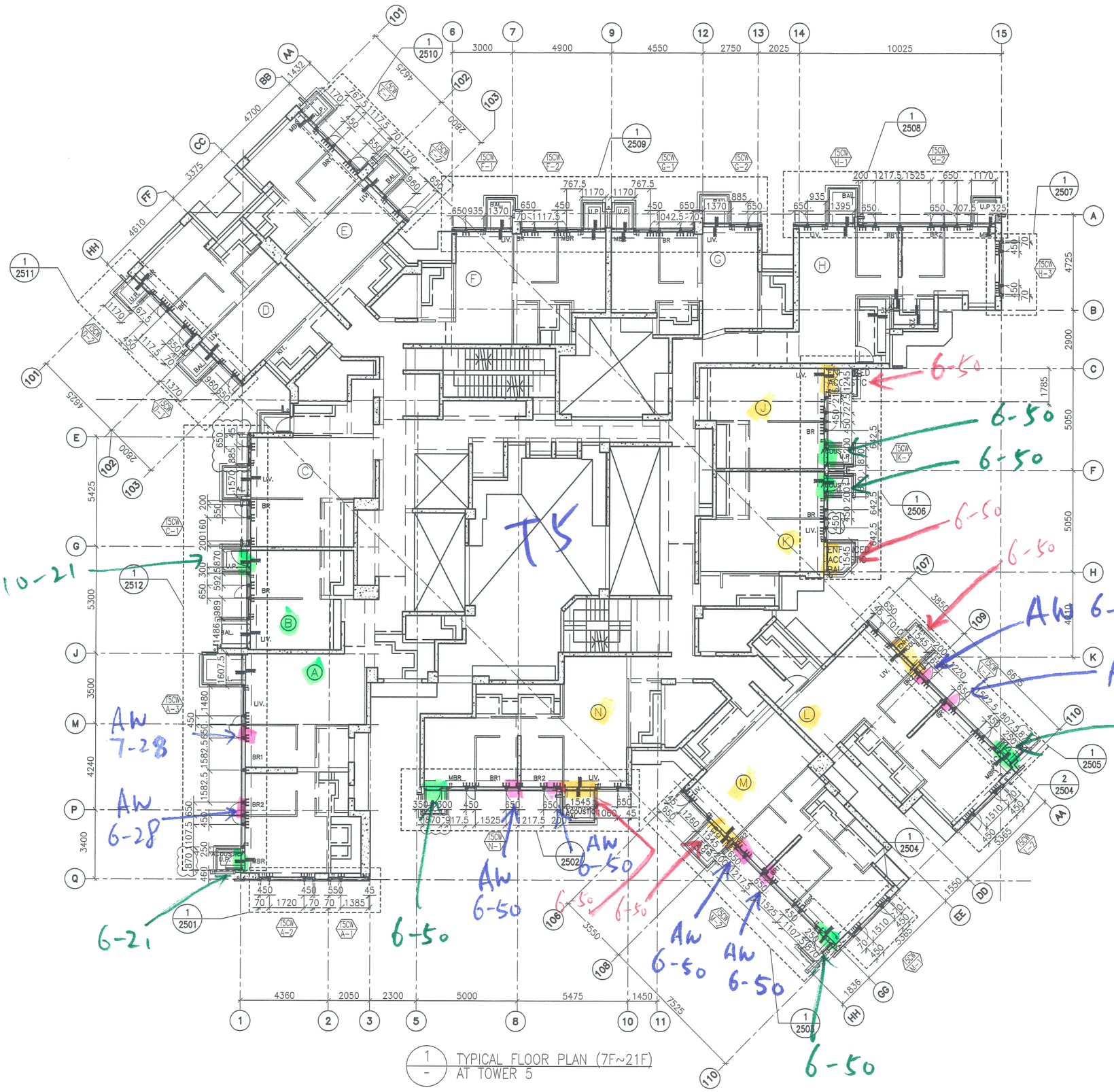
PROJECT:
URA KWUN TONG TOWN CENTRE REDEVELOPMENT (AREA 2 & 3) AT NKIL 6514, KWUN TONG, KOWLOON

TITLE:
ACOUSTIC UP 3
DETAILS
PART PLAN & ELEVATION

5

DATE: 11/2017	SCALE: 1:20		
DRAFTED: (HPC)	CHECKED: (CLC)	DESIGNED: (PYC)	REVIEWED: (CT)
JOB NO. 31690	DRAWING NO. T/A141/403	REV. NO. (03)	

4. Enhanced Acoustic BAL
5. Acoustic UP
2. AW = Acoustic Window.



FLOOR LEVEL (S.F.L.)(TS)

FLOOR NUMBERING	LEVEL (mPD)
7F	42.400
8F	45.550
9F	48.700
10F	51.850
11F	55.000
12F	58.150
15F	61.300
16F	64.450
17F	67.600
18F	70.750
19F	73.900
20F	77.050
21F	80.200

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: AECOM

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 / X001 — DETAIL MARK NO. / REFER SHEET NO.
1. F.F.L. --FINISHED FLOOR LEVEL
2. S.F.L. --STRUCTURAL FLOOR LEVEL
3. (/R) --REVERSED DETAIL

NO.	DATE	REVISED	BY
A	10/9/2018	GENERAL REVISED	

TS

JOB NO. : J-837

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

TITLE : TYPICAL FLOOR PLAN (7F~21F) OF CURTAIN WALL AT TOWER 5

DATE : 04-JUL-18 | SCALE : 1:100 (A1)

DRAWN BY : ASING | CHECKED BY : -

美特鋁質有限公司 MIDI ALUMINIUM FABRICATOR LTD.
Units 6-8, Sunray Industrial Centre, 1/F
610 Cha Kwo Ling Road, Kowloon
Tel:23489211-4 Fax:(852)27727666

DWG NO. : J837-CW-3502 | REV. : A

4 Enhanced Acoustic BAL

5. Acoustic UP

2. AW= Acoustic window



1 / - TYPICAL FLOOR PLAN AT TOWER 3

FLOOR LEVEL (S.F.L.)(T3)

FLOOR NUMBERING	LEVEL (mPD)
7F	42.400
8F	45.550
9F	48.700
10F	51.850
11F	55.000
12F	58.150
15F	61.300
16F	64.450
17F	67.600
18F	70.750
19F	73.900
20F	77.050
21F	80.200
22F	83.350
23F	86.500
25F	89.650
26F	92.800
28F	99.250
29F	102.250
30F	105.400
31F	108.550
32F	111.700
33F	114.850
35F	118.000
36F	121.150
37F	124.300
38F	127.450
39F	130.600
40F	133.750
41F	136.900
42F	140.050
43F	143.100
45F	146.350
46F	149.500
47F	152.650
48F	155.800
49F	158.950
50F	162.100
51F	165.250

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:
AECOM

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 / X001 — DETAIL MARK NO. / REFER SHEET NO.
1. F.F.L. --FINISHED FLOOR LEVEL
2. S.F.L. --STRUCTURAL FLOOR LEVEL
3. /R --REVERSED DETAIL

NO.	DATE	REVISED	BY
A	10/9/2018	GENERAL REVISED	

JOB NO. : J-837

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

TITLE :
TYPICAL FLOOR PLAN OF CURTAIN WALL AT TOWER 3

DATE : 04-JUL-18 | SCALE : 1:100 (A1)

DRAWN BY : ASING | CHECKED BY : -

美特鋁製有限公司
MIDI ALUMINIUM FABRICATOR LTD.
Units 6-8, Sunray Industrial Centre, 1/F
610 Cha Kwo Ling Road, Kowloon
Tel:23489211-4 Fax:(852)27727666

DWG NO. : J837-CW-3302 | REV. : A

4. Enhanced Acoustic BAL
5. Acoustic UP
2. Acoustic Window
=AW

T1

6-49

AW 6-49

1 / - TYPICAL FLOOR PLAN AT TOWER 1

FLOOR LEVEL (S.F.L.)(T1)

FLOOR NUMBERING	LEVEL (mPD)
7F	42.400
8F	45.550
9F	48.700
10F	51.850
11F	55.000
12F	58.150
15F	61.300
16F	64.450
17F	67.600
18F	70.750
19F	73.900
20F	77.050
21F	80.200
22F	83.350
23F	86.500
25F	89.650
26F	92.800
28F	99.250
29F	102.250
30F	105.400
31F	108.550
32F	111.700
33F	114.850
35F	118.000
36F	121.150
37F	124.300
38F	127.450
39F	130.600
40F	133.750
41F	136.900
42F	140.050
43F	143.100
45F	146.350
46F	149.500
47F	152.650
48F	155.800
49F	158.950

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:
AECOM

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 / X001 — DETAIL MARK NO. / REFER SHEET NO.
1. F.F.L. --FINISHED FLOOR LEVEL
2. S.F.L. --STRUCTURAL FLOOR LEVEL
3. (/R) --REVERSED DETAIL

NO.	DATE	REVISED	BY
A	10/9/2018	GENERAL REVISED	

JOB NO. : J-837

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

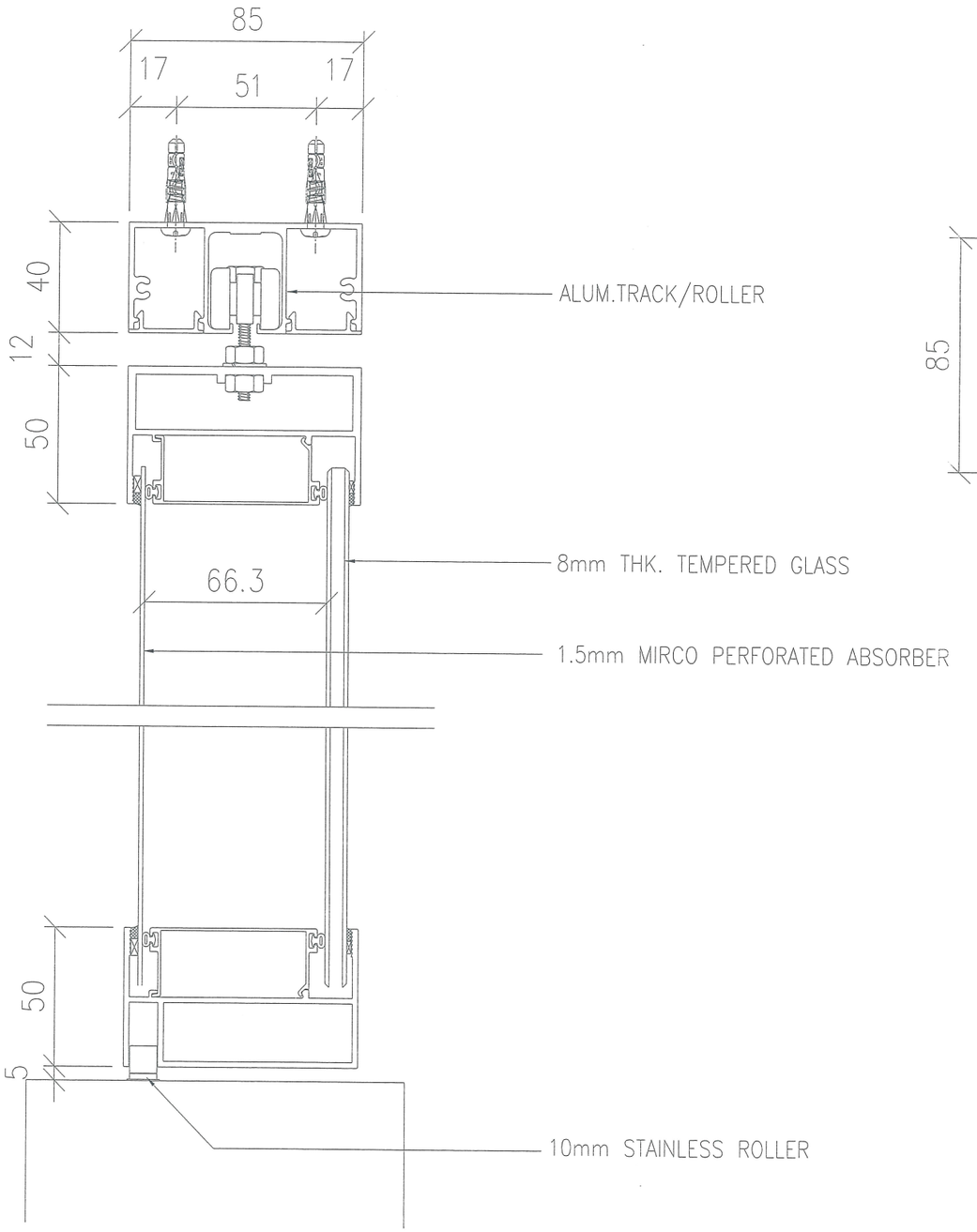
TITLE :
TYPICAL FLOOR PLAN OF CURTAIN WALL AT TOWER 1

DATE : 04-JUL-18 | SCALE : 1:100 (A1)

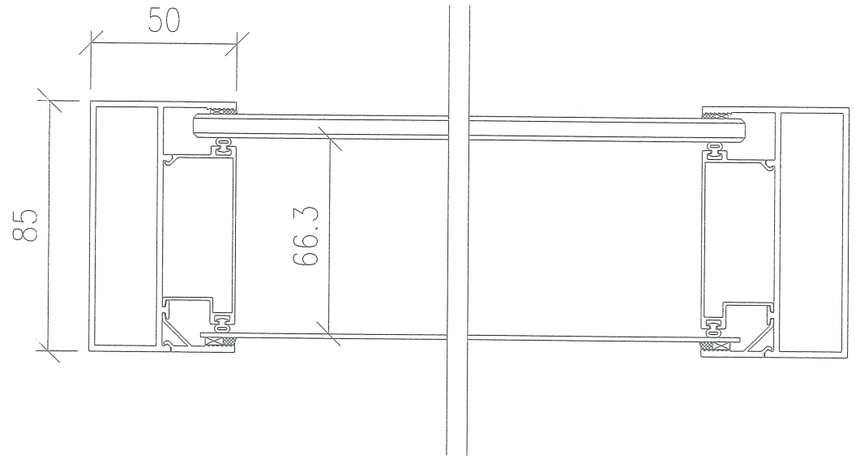
DRAWN BY : ASING | CHECKED BY : -

美特鋁質有限公司
MIDI ALUMINIUM FABRICATOR LTD.
Units 6-8, Sunray Industrial Centre, 1/F
610 Cha Kwo Ling Road, Kowloon
Tel:23489211-4 Fax:(852)27727666

DWG NO. : J837-CW-3102 | REV. : A



SECTION VIEW



PLAN VIEW

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:
AECOM

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. (/R) --REVERSED DETAIL

NO.	DATE	REVISED	BY

JOB NO. : J-837

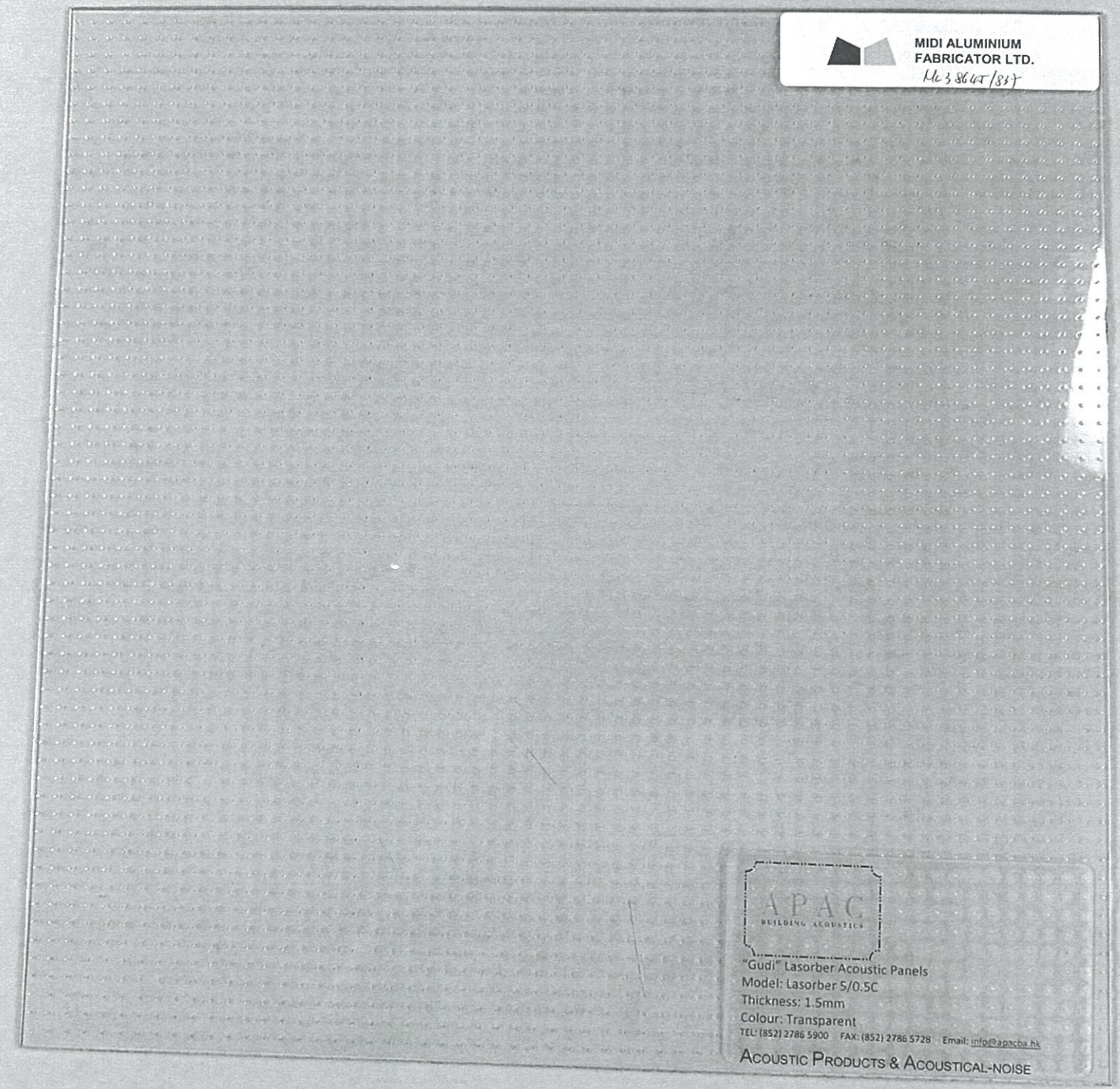
PROJECT :
URA KWUN TONG TOWN CENTRE REDEVELOPMENT (AREA 2 & 3) AT NKIL 6514, KWUN TONG, KWLOON

TITLE :
TYPICAL DETAIL FOR ACOUSTIC WINDOW AND S.D.

DATE : 13-JUL-18	SCALE : 1:2 (A1)
DRAWN BY : ASING	CHECKED BY : -

美特鋁質有限公司
MIDI ALUMINIUM FABRICATOR LTD.
Units 6-8, Sunray Industrial Centre, 1/F
610 Cha Kwo Ling Road, Kowloon
Tel:23489211-4 Fax:(852)27727666

DWG NO. : J837-Acoustic-5001 | REV. : -


MIDI ALUMINIUM
FABRICATOR LTD.
APAC
BUILDING ACOUSTICS
"Gudi" Lasorber Acoustic Panels
Model: Lasorber S/0.5C
Thickness: 1.5mm
Colour: Transparent
TEL: (852) 2786 5900 FAX: (852) 2786 5728 Email: info@apacba.hk
ACOUSTIC PRODUCTS & ACOUSTICAL-NOISE