

GENERAL NOTES FOR TOWER CURTAIN WALL (TOWER 1,2,3) (3/F-R/F; OMIT: 4/F,13/F,14/F,24/F,34/F,44/F)

- 1. DESIGN CODES:**
- BUILDING (CONSTRUCTION) REGULATIONS, HONG KONG.
 - CODE OF PRACTICE FOR THE STRUCTURAL USE OF STEEL 2011, HONG KONG.
 - CODE OF PRACTICE FOR THE STRUCTURAL USE OF CONCRETE 2013, HONG KONG.
 - CODE OF PRACTICE ON WIND EFFECTS IN HONG KONG 2004.
 - CODE OF PRACTICE FOR DEAD AND IMPOSED LOADS 2011.
 - BS 8118 - THE STRUCTURAL USE OF ALUMINIUM, PART 1 - 1991. (WIND LOAD FACTOR COMPLY TO PHAP APP-53)
 - CODE OF PRACTICE FOR STRUCTURAL USE OF GLASS 2018.
 - STRUCTURAL DESIGN FOR STAINLESS STEEL, THE STEEL CONSTRUCTION INSTITUTE PUBLICATION P281 (PUBLISHED 2002).
- 2. DESIGN LOADS:**
- WIND LOAD (TOPOGRAPHIC FACTOR $S_z = 1$):
HEIGHT ABOVE GROUND LEVEL = 151.8 - 5.91 = 145.89m
BASIC WIND LOAD: 3.05 kPa (BELOW 150m) FOR TOWER
DESIGN WIND LOAD ($C_p = +1.0/-1.4$): $3.05 \times (C_p = +1.0/-1.4) = +3.05/-4.27$ kPa (FOR CURTAIN WALL)
DESIGN WIND LOAD ($C_p = -2.2$): $3.05 \times (C_p = -2.2) = -6.71$ kPa (FOR EDGE OF ROOF)
 - IMPOSED LOAD: (FOR PROTECTIVE BARRIER)
HORIZONTAL IMPOSED LOAD SHALL BE COMPLIED WITH CODE OF PRACTICE FOR DEAD & IMPOSED LOADS 2011.
FOR AREAS WHERE CONCENTRATION OF PEOPLE IS NOT EXPECTED:
1) LIVE LOAD TO BE APPLIED AT A HEIGHT OF 1.1m ABOVE F.F.L. = 0.75 kN/m²
2) UNIFORMLY DISTRIBUTED LOAD TO BE APPLIED ON THE INFILL BETWEEN FLOOR AND TOP RAIL = 1.0 kPa
3) CONCENTRATED LOAD TO BE APPLIED ON ANY PART OF THE INFILL BETWEEN FLOOR AND TOP RAIL = 0.5 kN
 - DEAD LOAD:
GLASS WEIGHT: 26 kN/m²
STEEL WEIGHT: 77 kN/m²
ALUMINIUM WEIGHT: 27.2 kN/m²

- 8. FASTENERS**
ALL FASTENERS, SCREWS, BOLTS & NUTS SHALL BE STAINLESS STEEL GRADE A4-70 COMPLYING WITH BS EN ISO 3506:2009.
- MINIMUM YIELD STRENGTH, f_{yk} = 450 MPa
ULTIMATE TENSILE STRENGTH, f_{tk} = 700 MPa
SHEAR STRENGTH, P_{sh} = 311 MPa
TENSILE STRENGTH, F_{ts} = 450 MPa
BEARING STRENGTH, P_{br} = 828 MPa
- UNLESS OTHERWISE SPECIFIED, ALL SCREWS SHALL BE M5 AT 300 C/C GRADE A4-70 STAINLESS STEEL COMPLIED WITH BS EN ISO 3506:2009.

- 9. FIRE STOP AND THERMAL INSULATION:**
- THERMAL INSULATION: "CSR" 110kg/m³ ROCKWOOL ROCKWOOL FIBRETEX-620
 - FIRE STOP: "CSR" FIRE SEAL F560 (KNOWN AS CSR 60kg/M ROCKWOOL FIRESEAL BATT.) SHALL BE 135mm THK., DENSITY=60kg/m³ (BD REF.: BD-FS-011) FOR FIRE RATING OF 2HRS
 - SMOKE SEAL: "MCI ALUMINIUM FABRICATOR LTD" SMOKE SEAL, SHALL BE COMPLY WITH FIRE CODE CLAUSE C10.2
- 10. ANCHOR BOLT (FOR ALUM. CAPPING & GLASS CLADDING ONLY)**
- ALL DRILL-IN ANCHOR BOLTS SHALL BE HLT1 HST3-R AS SHOWN IN THE DRAWINGS, AND SHALL BE DESIGNED
 - THE INSTALLATION OF DRILL-IN ANCHOR BOLTS SHALL BE STRICTLY IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION & RECOMMENDATION.
 - COVER-METER SHOULD BE APPLIED TO PREVENT ANCHOR BOLTS HIT THE EXISTING REINFORCEMENT BARS.

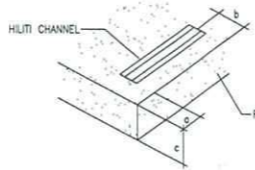
FOR CRACKED CONCRETE TABLE:

ANCHOR TYPE	MINIMUM SPACING (mm)	MINIMUM EDGE DISTANCE (mm)	EFFECTIVE ANCHORAGE LENGTH (mm) TO SOUND CONCRETE	RECOMMENDED LOAD (kN) FOR CRACKED CONCRETE INFLUENCING FACTOR FOR GRADE 800 CONCRETE = 1.55	TENSION TEST LOAD (kN)	BD REF. NO.	MINIMUM BITE MATERIAL THICKNESS (mm)
HLT1 HST3-R M8	35 (50)	40 (50)	47	2.8x1.55 = 4.34	5.2x1.55 = 8.06	6.57	BD-AF151
HLT1 HST3-R M10	40 (55)	45 (60)	60	5x1.55 = 7.75	8.4x1.55 = 13.02	11.63	BD-AF149

(FOR GLASS CLADDING ONLY)
(FOR ALUM. CLADDING ONLY)

INFLUENCING FACTOR FOR GRADE 600 CONCRETE = 1.55. TEST LOAD SHOULD BE 1.5xRECOMMENDED TENSION LOAD.

- 11. ALUMINIUM STUD BY DRAWN ARC STUD WELD**
ALUMINIUM STUD SHALL BE M5 GRADE 5754 AND DESIGNED TO BS 8118-1:1991.
DESIGN AND QUALITY ASSURANCE OF DRAWN ARC STUD WELD SHALL COMPLY WITH BS EN ISO 14550:2017.
ALUMINIUM STUD TYPE SHALL BE THREADED STUD (PT) AND COMPLY WITH BS EN ISO 13918:2018.
MINIMUM 0.2% PROOF STRENGTH: $f_{0.2} = 60$ N/mm²



- 12. CAST-IN CHANNEL (BD REF.: BD-AF132 & BD-AF134)**
- ALL CAST-IN CHANNEL USED TO BE "HLT1" HAC-50, HAC-60 & HAC-70 CHANNEL TO CRACKED CONCRETE
 - THE INSTALLATION OF CHANNEL FIXING SHALL STRICTLY IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION AND LIMITATION INCLUDING CONCRETE GRADE DISTANCE ANCHOR SPACING ETC.
 - USED TO BE HBC-C 8.8-M16x20mm LONG WHICH COMPLY WITH BS 3692, 1967
 - 2 NOS. OF M16 GRADE 8.8 F.T. BOLT SPACING REFER TO EMBED DETAIL (DWG. NO. BD-TOW-ED01)
 - BOTH 350mm, 450mm LENGTH OF HLT1 CAST-IN CHANNEL WILL BE TESTED OF THE TEST LOAD.
 - METHOD STATEMENT OF TEST WILL BE SUBMITTED ONE WEEK BEFORE THE COMMENCEMENT OF THE CAST-IN CHANNEL.

CHANNEL TYPE	MIN. EDGE DIM. (a)	MIN. EDGE DIM. (b)	MIN. DEPTH DIM. (c)	RECOMMENDED LOAD FOR CHANNEL (kN)	TENSION (kN)	SHEAR (kN)	TEST LOAD (kN) = RECOMMENDED LOAD x 1.5	BD REF. NO.
HAC-60 W/ 2 NOS. M16 G.M.S.	75mm	100mm	148mm	TENSION: 26.7	SHEAR: 11.1	TENSION: 40.05		BD-AF132
HBC-C T-BOLT (GR. 8.8)	75mm	100mm	175mm	TENSION: 34.0	SHEAR: 11.8	TENSION: 51.00		BD-AF134

- 13. G.M.S. CAST-IN EMBED:**
- CAST-IN EMBED BAR SHALL BE GRADE 500B TO COMPLY WITH CS2-2012. SPECIFIED CHARACTERISTIC STRENGTH = 500 N/mm² (EMBED TYPE: EM03)
 - ALL CAST-IN PLATE SHALL BE GRADE S275 (CLASS 1) TO CODE OF PRACTICE FOR STRUCTURE USE OF STEEL 2011 AND COMPLY TO BS EN 10025:2004 (FOR JO) & BS EN 10210-1:2006 (FOR JDI).
 - USED TO BE HBC-C 8.8-M16x20mm LONG WHICH COMPLY WITH BS 3692, 1967
 - 2 NOS. OF M16 GRADE 8.8 F.T. BOLT SPACING REFER TO EMBED DETAIL (DWG. NO. BD-TOW-ED01)
 - CAST-IN EMBED STEEL ROD (FOR EM09) SHALL BE GRADE S275 JO TO BE COMPLIED WITH BS EN 10025:2004.

- 14. ISOLATION FOR METALS**
APPLIED A LAYER OF BITUMINOUS PAINT (COMPLY WITH BS 3418:1991) FOR PROTECTION AGAINST BI-METALLIC CORROSION FOR BARE ALUMINIUM/STEEL CONTACTED SURFACE & STEEL/CONCRETE INTERFACE.
PLASTIC ISOLATION TYPE (COMPLY WITH BS 70 8484: 1979) TO BE PROVIDED BETWEEN CONTACT SURFACE OF ALUMINIUM AND STEEL TO PREVENT DIRECT CONTACT BETWEEN DISSIMILAR METALS.

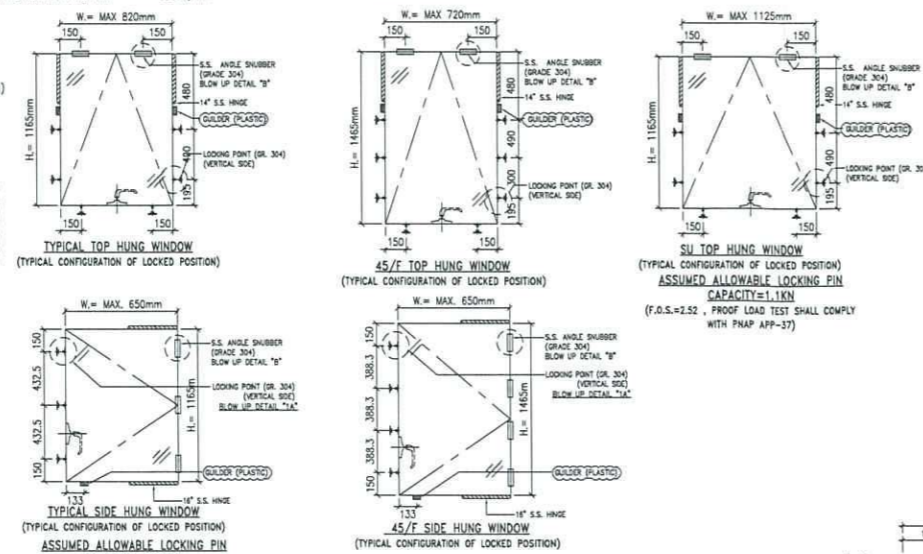
- 15. OPENABLE WINDOW**
ALL OPENABLE WINDOW OF CURTAIN WALL ARE FOR INFORMATION ONLY AND SHOULD BE APPROVED UNDER CLOSED AND LOCKED CONDITION.
- 15a. CONCRETE GRADE (FOR INFORMATION ONLY)**
ALL R.C. STRUCTURE SHOWN IN THE SUBMISSION SHALL BE GRADE C45 COMPLY WITH CODE OF PRACTICE FOR THE STRUCTURAL USE OF CONCRETE, 2013 HONG KONG.

- 16. GBP APPROVAL DATE: 06/12/2018**
SUPERSTRUCTURE APPROVAL DATE: 11/07/2018

- 17. TOLERANCE OF FIXING BRACKET OF CURTAIN WALL SHALL BE**
± 15mm [HORIZONTAL DIRECTION : (PARALLEL / PERPENDICULAR TO CURTAIN WALL & VERTICAL DIRECTION)]

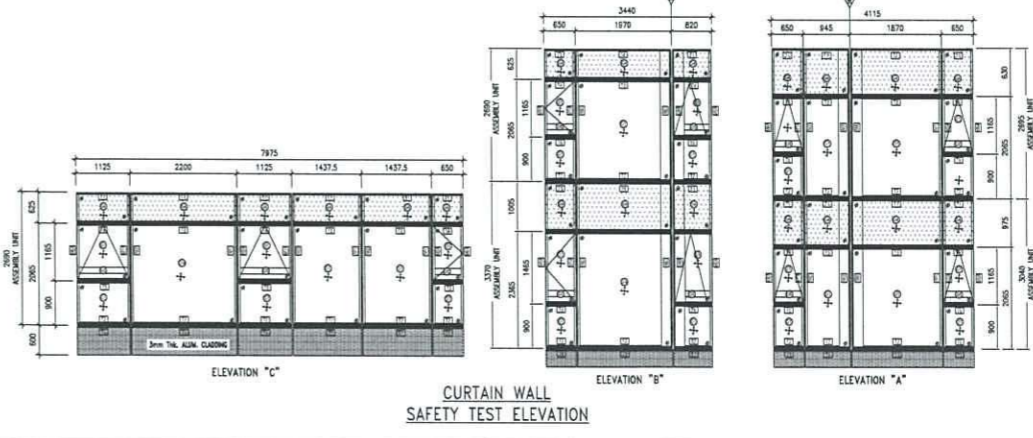
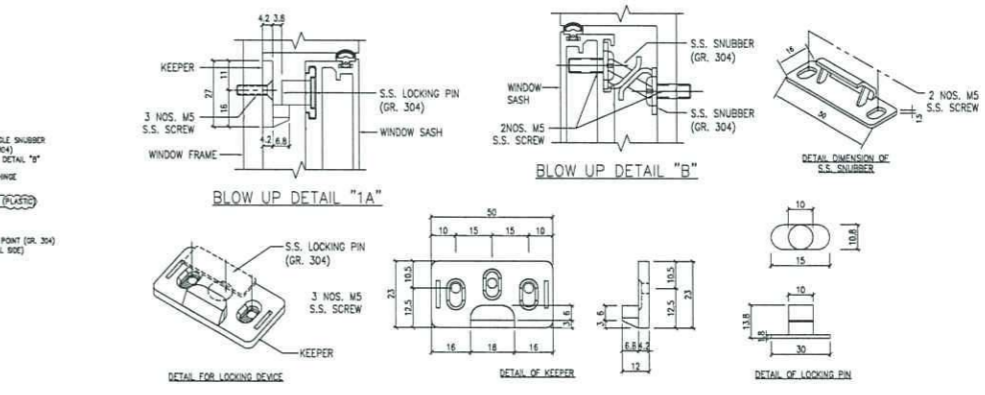
- 18. STAINLESS STEEL:**
ALL STAINLESS STEEL TO BE GRADE 304 (1.4301) AND GRADE 316 (1.4401) TO BS EN 10088-1
YOUNG'S MODULUS: 200,000 N/mm²
DENSITY: 79 KN/m³
MIN. 0.2% PROOF STRENGTH: 210 N/mm² (FOR GRADE 304) 220 N/mm² (FOR GRADE 316)
ULTIMATE TENSILE STRENGTH: 520 N/mm²

- 19. HOLDING DOWN BOLT (FOR EMBED ONLY):**
ALL HOLDING DOWN BOLT SHOULD BE GRADE 8.8 BOLT COMPLY WITH BS 4190:2011 AND DESIGN TO CODE OF PRACTICE FOR THE STRUCTURAL USE OF STEEL 2011

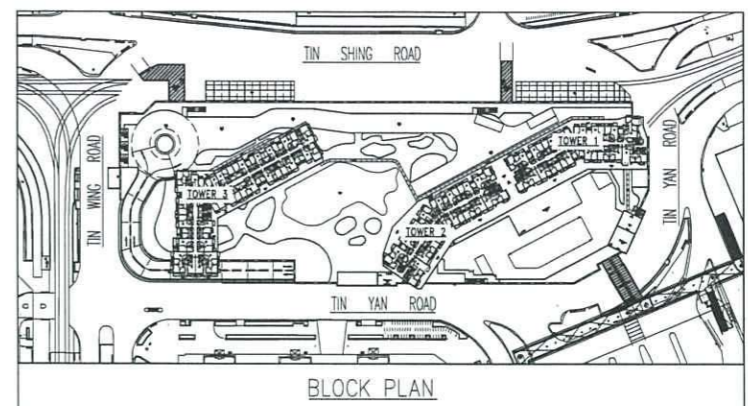


OPENABLE WINDOW HINGE (FOR INFORMATION)

L (mm)	H (mm)	WEIGHT (kg)	GLASS TYPE (kg)	SH / TH	HINGE MODEL	MAX LOAD BOX LOAD (kg)
650	1165	43.48521	BH5+120p+10T	SH	HYL516 (PAIR)	83
650	1465	53.81541	BH5+120p+10T	SH	HYL516 (PAIR)	83
820/720	1165	53.27874	BH5+120p+10T	TH	HYL516 (PAIR)	92
720	1465	58.79304	BH5+120p+10T	TH	HYL516 (PAIR)	92
1125	1165	70.84838	BH5+120p+10T	TH	HYL14-L & HYL14-R (PAIR)	92
815	1165	52.98070	BH5+120p+10T	TH	(PAIR)	92
900	1165	57.88748	BH5+120p+10T	TH		92



CURTAIN WALL SAFETY TEST ELEVATION



- 3. ALUMINIUM ALLOY:**
- ALUMINIUM SHEET
ALL ALUMINIUM SHEET TO BE ALLOY 3003-H14 TO ALUMINIUM AND ALUMINIUM ALLOYS - SHEET, STRIP AND PLATE, BS EN 485-2:2008 & ALUMINIUM AND ALUMINIUM ALLOYS CHEMICAL COMPOSITION AND FORM OF WROUGHT PRODUCTS, BS EN 573-3:2009.
0.2% PROOF (YIELD) STRENGTH = 125 MPa DENSITY = 27.26kN/m³
MINIMUM ULTIMATE TENSILE STRESS = 145 MPa LIMITING BENDING STRENGTH = 125 MPa
MODULUS OF ELASTICITY (E) = 70000 MPa LIMITING TENSILE STRENGTH = 135 MPa
LIMITING SHEAR STRENGTH = 75 MPa DEFLECTION LIMIT = SPAN/180 OR 20mm
 - ALUMINIUM EXTRUSION : IN ACCORDANCE WITH DESIGN CODE BS 8118-1:1991, COMPLY TO ALUMINIUM AND ALUMINIUM ALLOYS, EXTRUDED ROD/BAR, TUBE AND PROFILES, BS EN 755-2:2008 & ALUMINIUM AND ALUMINIUM ALLOYS CHEMICAL COMPOSITION AND FORM OF WROUGHT PRODUCTS, BS EN 573-3:2009.
MODULUS OF ELASTICITY = 70000 MPa
ALLOY NAME: 6063-T5 6063-T6 6061-T6
MINIMUM 0.2% PROOF STRENGTH: $f_{0.2} = 110$ N/mm² $f_{0.2} = 160$ N/mm² $f_{0.2} = 240$ N/mm²
LIMITING STRESS FOR BENDING AND OVERALL YIELDING: $P_e = 110$ N/mm² $P_e = 160$ N/mm² $P_e = 240$ N/mm²
LIMITING STRESS FOR LOCAL CAPACITY OF THE SECTION IN TENSION OR COMPRESSION: $P_e = 130$ N/mm² $P_e = 175$ N/mm² $P_e = 260$ N/mm²
LIMITING STRESS IN SHEAR: $P_v = 65$ N/mm² $P_v = 95$ N/mm² $P_v = 145$ N/mm²
LIMITING STRESS IN BEARING: $P_{bs} = 135$ N/mm² $P_{bs} = 175$ N/mm² $P_{bs} = 260$ N/mm²

- 4. STRUCTURAL MILD STEEL AND FINISH:**
- ALL MILD STEEL SHALL BE GRADE S275 (CLASS 1) TO CODE OF PRACTICE FOR THE STRUCTURAL USE OF STEEL 2011 AND COMPLY TO BS EN 10025:2004 (FOR JO) & BS EN 10210-1:2006 (FOR JDI).
 - SURFACE TREATMENT SHALL BE HOT-DIP GALVANIZED COMPLIED WITH BS EN ISO 1461:2009. (MIN. THICKNESS = 85 MICRONS)
FOR THICKNESS t : $t \leq 16$ mm (GRADE S275)
YOUNG'S MODULUS: 205,000 N/mm²
DENSITY: 77 kN/m³
YIELD STRENGTH: 275 N/mm²
TENSILE STRENGTH: 475 N/mm²
BENDING STRENGTH: 275 N/mm²
SHEAR STRENGTH: 158.8 N/mm²

- 5. GLASS:**
- GLASS USED TO BE:
10mm THICK HEAT STRENGTHENED GLASS + 12mm THICK AIR + 10mm THICK TEMPERED GLASS
10mm THICK HEAT STRENGTHENED GLASS + 12mm THICK AIR + 12mm THICK TEMPERED GLASS
10mm THICK HEAT STRENGTHENED GLASS
12mm THICK HEAT STRENGTHENED GLASS
12mm THICK TEMPERED GLASS
 - DESIGN OF GLASS SHALL COMPLY TO BS 6262:2005.
-ALLOWABLE BENDING STRENGTH (TEMPERED) = 80 N/mm² (FOR CLEAR GLASS)
-ALLOWABLE BENDING STRENGTH (HEAT STRENGTHENED) = 40 N/mm² (FOR CLEAR GLASS)
-YOUNG'S MODULUS = 70,000 N/mm²
 - GLASS MATERIALS SHALL COMPLY TO BS 952:1995.
 - RESIDUAL SURFACE COMPRESSION FOR TEMPERED GLASS TO BE NOT LESS THAN 89 MPa.
RESIDUAL SURFACE COMPRESSION FOR HEAT STRENGTHENED GLASS TO BE BETWEEN 24 AND 52 MPa.
 - TEMPERED GLASS TO BE 100% HEAT SOAK TESTED IN ACCORDANCE WITH BS EN 14179-1:2016 & COMPLIED WITH PHAP APP-37.

- 6. WELDING FOR STRUCTURAL STEEL:**
- ALL WELDING SHALL BE COMPLIED WITH BS EN 1011-1:2009.
 - ALL WELDS SHALL BE RECEIVED 2 COATS OF ZINC CHROMATE PRIMER TO BS 4652:2003.
 - ALL WELDING SHALL BE CARRIED OUT BY QUALIFIED WELDER, WELDER SHALL BE TESTED TO BS EN ISO 9606-1:2013.
 - ELECTRODES USED IN WELD SHALL BE GRADE E33 COMPLIED WITH BS EN ISO 2560:2009.
 - UNLESS OTHERWISE INDICATED, ALL WELDS SHALL BE 5mm THICK FILLET WELD ALL AROUND.
 - DESIGN WELD STRENGTH: $p_w = 220$ MPa.

- 7. SILICONE SEALANT, GASKET & SETTING BLOCK:**
- "DOW CORNING®" - DC791 SILICONE SEALANT TO BE USED AS WEATHER GLAZING SEALANT.
 - "DOW CORNING®" STRUCTURAL SILICONE SEALANT TYPE 983 TO BE USED AS STRUCTURAL GLAZING SEALANT. (BD REF. NO.: BD-S5001)
ALLOWABLE DESIGN STRENGTH = 1300g FOR WIND LOAD CHECKING ONLY.
 - ALL GASKET USED SHALL BE DENSE EXTRUDED SILICONE WITH A SHORE HARDNESS OF 65±5.
 - SETTING BLOCKS SHALL BE DENSE EXTRUDED SILICONE WITH A SHORE HARDNESS OF 85±5.
DUROMETER SHORE A, MIN. LENGTH OF 100mm & A MIN. WIDTH CORRESPONDING TO THE GLASS THICKNESS & LOCATED AT GLASS QUARTER POINTS.

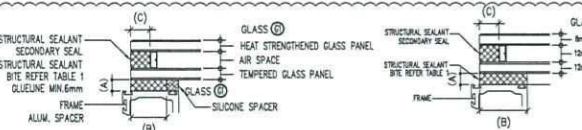


TABLE 1 (FOR VISION GLASS) (A) & (B)

GLASS TYPE	SHORT SIDE, S	SEALANT THICKNESS (A)	SEALANT BITE (B)	SEALANT BITE (C)
(A) (OPENABLE WINDOW)	S ≤ 1200mm	6mm	21mm (MIN)	15mm
(B) (FIX WINDOW)	S ≤ 1200mm	10mm	21mm (MIN)	15mm
(C) (FIX WINDOW)	S ≤ 1970mm	10mm	33mm (MIN)	15mm
(D) (FIX WINDOW)	S ≤ 2065mm	8mm	37mm (MIN:33)	15mm

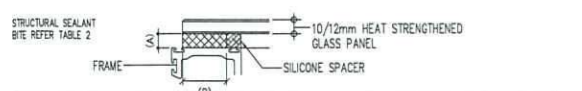
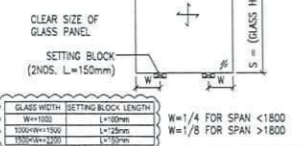


TABLE 2 (FOR GLASS CLADDING (A) & FOR SPANDREL GLASS (B))

GLASS TYPE	SHORT SIDE, S	SEALANT THICKNESS (A)	SEALANT BITE (B)
(A) (GLASS CLADDING)	S ≤ 675mm	8mm	16mm (MIN)
(B) (SPANDREL GLASS) TYPICAL CASE	S ≤ 1005mm	8mm	21mm (MIN)
(C) (SPANDREL GLASS) CORNER CASE	S ≤ 1005mm	6mm	21mm (MIN)



B.D. REF.:

CLIENT: SUN HUNG KAI REAL ESTATE HONG KONG
42/F SUN HUNG KAI CENTRE, WANCHAI, HONGKONG

ARCHITECT: IWK&PARTNERS architects

MAIN CONTRACTOR: Yee Fai Building Contractors Ltd.

STRUCTURAL ENGINEER: ARUP

FAÇADE CONSULTANT: ALPHA CONSULTING LIMITED
Steel Structure & Façade Specialist

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	REVISION	BY
C	27-APR-2023	5TH SUBMISSION	
B	20-FEB-2023	4TH SUBMISSION	CF
A	28-DEC-2022	2ND SUBMISSION	CF

JOB NO.: J-856

PROJECT: PROPOSED DEVELOPMENT ABOVE LIGHT RAIL TIN WING STOP, TSWTL NO.23, AREA 33, TIN SHUI WAI, N.T.

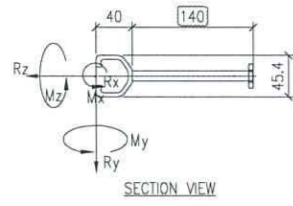
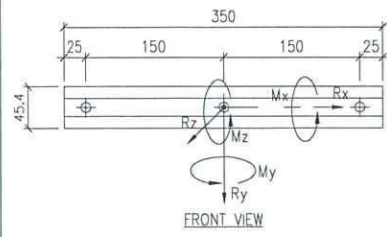
TITLE: GENERAL NOTE FOR CURTAIN WALL

DATE: 31-OCT-21 SCALE: NTS

DRAWN BY: C.F. CHECKED BY:

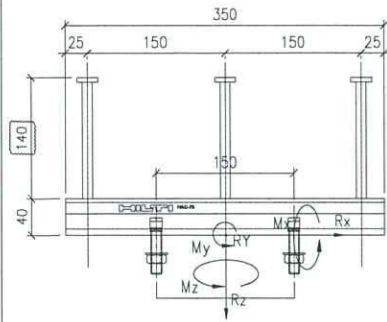
MIDI ALUMINIUM FABRICATOR LTD.
Units 6-8, Sunray Industrial Centre, 1/F
610 Cha Kwo Ling Road, Kowloon
Tel: 23489211-4 Fax: (852) 2727666

DWG NO.: J856-SD-CW-1001 REV.: C



(FOR TYPICAL)

EM01 MAX. UN-FACTORED LOAD			
	DL	WL	LL
Rx (kN)	0	0	0
Ry (kN)	3.314	0	2.207
Rz (kN)	0	±18.602	0
Mx (kNm)	0.396	±0.632	0.075
My (kNm)	0	0	0
Mz (kNm)	0	0	0



(END-BAY SIDE MOUNT : FIXED WINDOW)

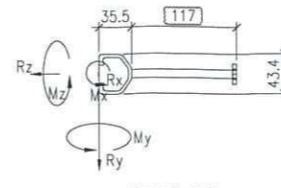
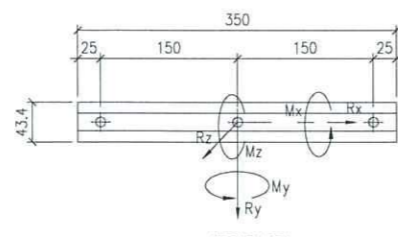
EM01 MAX. UN-FACTORED LOAD			
	DL	WL	LL
Rx (kN)	0	±3.195	0
Ry (kN)	2.818	0	1.877
Rz (kN)	0	±15.815	0
Mx (kNm)	0.337	±0.538	0.064
My (kNm)	0	±2.596	0
Mz (kNm)	0.394	±0.109	0

(END-BAY: SIDE MOUNT : OPEN WINDOW)

EM01 MAX. UN-FACTORED LOAD			
	DL	WL	LL
Rx (kN)	0	±2.059	0
Ry (kN)	1.543	0	1.028
Rz (kN)	0	±8.662	0
Mx (kNm)	0.184	±0.295	0.035
My (kNm)	0	±1.459	0
Mz (kNm)	0.216	±0.07	0

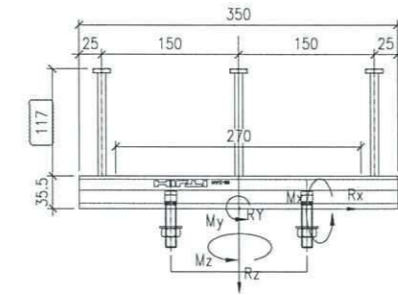
PLAN VIEW
(HILTI HAC-70, L=350mm)

CAST-IN EMBED : EM01



FOR TYPICAL CASE

MAX. UNFACTORED LOAD:			
TYPE A	DL	WL	LL
Fx (kN)	0	0	0
Fy (kN)	2.018	0	1.344
Fz (kN)	0	±11.325	0
Mx (kNm)	0.241	±0.385	0.046
My (kNm)	0	0	0
Mz (kNm)	0	0	0

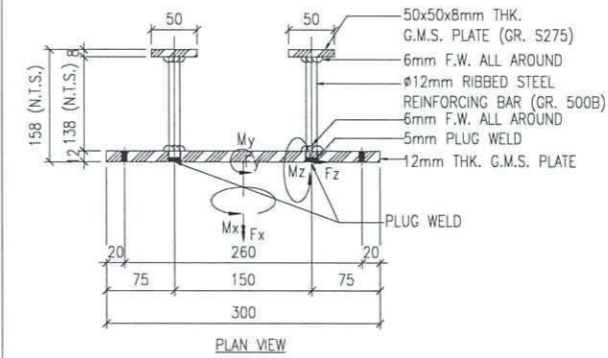
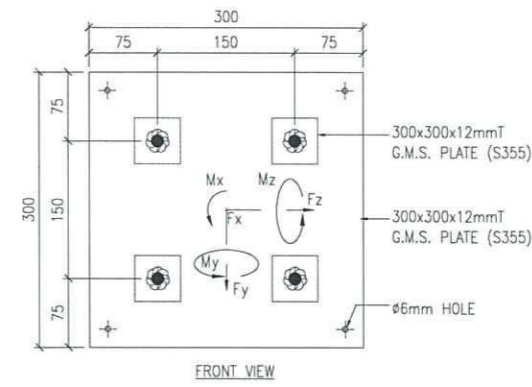


FOR END BAY CASE

MAX. UNFACTORED LOAD:			
TYPE A	DL	WL	LL
Fx (kN)	0	0	0
Fy (kN)	1.025	0	0.682
Fz (kN)	0	±5.751	0
Mx (kNm)	0.122	±0.196	0.023
My (kNm)	0	0	0
Mz (kNm)	0	0	0

PLAN VIEW
(HILTI HAC-60, L=350mm)

CAST-IN EMBED : EM02



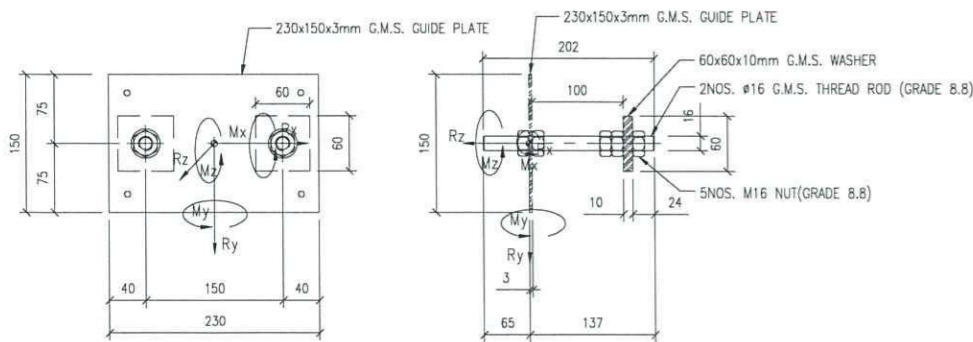
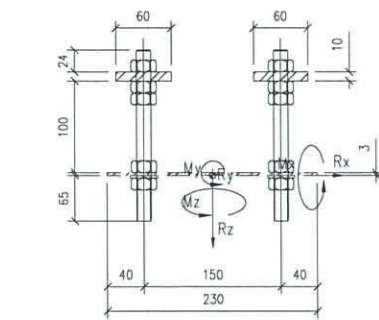
(FOR 3/F TYPICAL)

EM03 MAX. UN-FACTORED LOAD			
	DL	WL	LL
Fx (kN)	0	±7	±1.5
Fy (kN)	-1	0	0
Fz (kN)	0	0	0
Mx (kNm)	±0.1	0	0
My (kNm)	0	0	0
Mz (kNm)	0	±3.5	0.75

(FOR 3/F END BAY)

EM03 MAX. UN-FACTORED LOAD			
	DL	WL	LL
Fx (kN)	0	±4	0.6
Fy (kN)	-1	0	0
Fz (kN)	0	±0.5	0
Mx (kNm)	±0.15	±0.15	0
My (kNm)	0	±0.1	±0.2
Mz (kNm)	±0.1	±2	+0.45

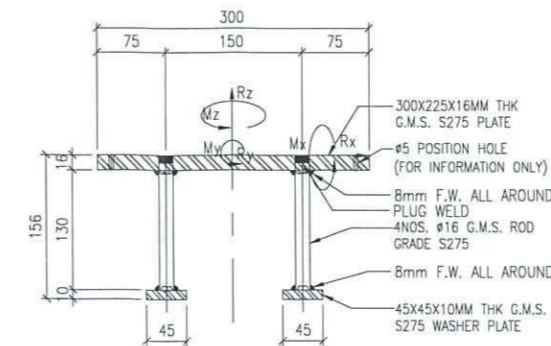
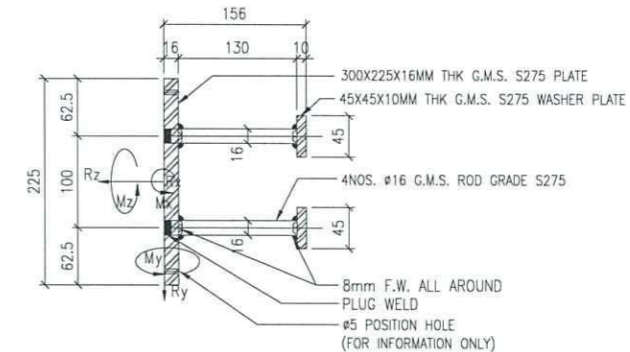
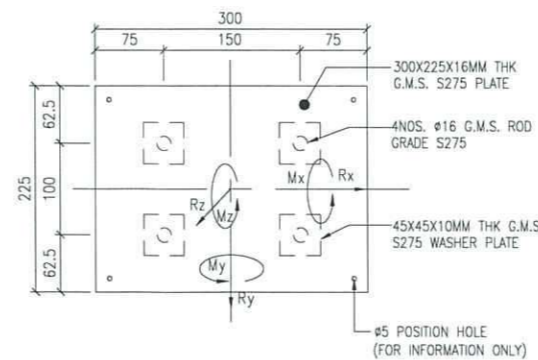
CAST-IN EMBED : EM03



(FOR TYPICAL)

EM08 UN-FACTORED LOAD			
	DL	WL	LL
Rx (kN)	0	0	0
Ry (kN)	2.5	0	1.645
Rz (kN)	0	±14	0
Mx (kNm)	0.30	±0.48	0.056
My (kNm)	0	±2.7	0
Mz (kNm)	0.48	0	0

CAST-IN EMBED : EM08



(FOR 46/F SU)

EM09 MAX. UN-FACTORED LOAD			
	DL	WL	LL
Rx (kN)	0	0	0
Ry (kN)	0.7	±1.06	0
Rz (kN)	0	±10.208	2.594
Mx (kNm)	0.064	±4.675	1.200
My (kNm)	0	0	0
Mz (kNm)	0	0	0

CAST-IN EMBED : EM09

B.D. REF :

CLIENT :

SUN HUNG KAI
REAL ESTATE AGENCY LTD.
42/F SUN HUNG KAI CENTRE, WANCHAI, HONGKONG

ARCHITECT :

lwk&partners
architects

MAIN CONTRACTOR :

怡輝建築有限公司
Yee Fal Building Contractors Ltd.

STRUCTURAL ENGINEER :

ARUP

FACADE CONSULTANT:

ALPHA CONSULTING LIMITED
Steel Structure & Facade Specialist

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	REVISION	BY
B	27-APR-2023	2ND SUBMISSION	CF
A	22-DEC-2022	2ND SUBMISSION	CF

JOB NO. : J-856

PROJECT :
PROPOSED DEVELOPMENT ABOVE
LIGHT RAIL TIN WING STOP, TSWTL
NO.23, AREA 33, TIN SHUI WAI, N.T.

TITLE :
CAST-IN EMBED DETAIL
FOR CURTAIN WALL

DATE : 31-OCT-21 SCALE : 1:8

DRAWN BY : C.F. 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) 2727666

DWG NO. : J856-SD-CW-2001 REV. : B

GENERAL NOTES FOR TOWER CURTAIN WALL (TOWER 1,2,3) (3/F-R/F; OMIT: 4/F,13/F,14/F,24/F,34/F,44/F)

- 1. DESIGN CODES :**
- BUILDING (CONSTRUCTION) REGULATIONS, HONG KONG.
 - CODE OF PRACTICE FOR THE STRUCTURAL USE OF STEEL 2011, HONG KONG.
 - CODE OF PRACTICE FOR THE STRUCTURAL USE OF CONCRETE 2013, HONG KONG.
 - CODE OF PRACTICE ON WIND EFFECTS IN HONG KONG 2004.
 - CODE OF PRACTICE FOR DEAD AND IMPOSED LOADS 2011.
 - BS 8118 - THE STRUCTURAL USE OF ALUMINIUM, PART 1 - 1991. (WIND LOAD FACTOR COMPLY TO PNAP APP-53)
 - CODE OF PRACTICE FOR STRUCTURAL USE OF GLASS 2018.
 - STRUCTURAL DESIGN FOR OF STAINLESS STEEL, THE STEEL CONSTRUCTION INSTITUTE PUBLICATION P291 (PUBLISHED 2002).

- 2. DESIGN LOADS :**
- WIND LOAD (TOPOGRAPHIC FACTOR $S_o = 1$):
 - HEIGHT ABOVE GROUND LEVEL = 151.8 - 5.91 = 145.89m
 - BASIC WIND LOAD: 3.05 kPa (BELOW 150m) FOR TOWER
 - DESIGN WIND LOAD ($C_{pe} = +1.0/-1.4$): $3.05 \times (C_{pe} = +1.0/-1.4) = +3.05/-4.27$ kPa (FOR CURTAIN WALL)
 - DESIGN WIND LOAD ($C_{pe} = -2.2$): $3.05 \times (C_{pe} = -2.2) = -6.71$ kPa (FOR EDGE OF ROOF)
 - IMPOSED LOAD : (FOR PROTECTIVE BARRIER)
 - HORIZONTAL IMPOSED LOAD SHALL BE COMPLIED WITH CODE OF PRACTICE FOR DEAD & IMPOSED LOADS 2011, FOR AREAS (WHERE CONCENTRATION OF PEOPLE IS NOT EXPECTED):
 - 1) LIVE LOAD TO BE APPLIED AT A HEIGHT OF 1.1m ABOVE F.F.L. = 0.75 kN/m
 - 2) UNFORMALLY DISTRIBUTED LOAD TO BE APPLIED ON THE INFILL BETWEEN FLOOR AND TOP RAIL = 1.0 kPa
 - 3) CONCENTRATED LOAD TO BE APPLIED ON ANY PART OF THE INFILL BETWEEN FLOOR AND TOP RAIL = 0.5 kN
 - DEAD LOAD :
 - GLASS WEIGHT: 26 kN/m²
 - STEEL WEIGHT: 77 kN/m²
 - ALUMINIUM WEIGHT: 27.2 kN/m²

- 3. ALUMINIUM ALLOY :**
- ALUMINIUM SHEET :
 - ALL ALUMINIUM SHEET TO BE ALLOY 3003-H14 TO ALUMINIUM AND ALUMINIUM ALLOYS - SHEET, STRIP AND PLATE, BS EN 485-2:2008 & ALUMINIUM AND ALUMINIUM ALLOYS CHEMICAL COMPOSITION AND FORM OF WROUGHT PRODUCTS, BS EN 573-3:2009.
 - 0.2% PROOF (YIELD) STRENGTH = 125 MPa DENSITY = 27.2kN/m³
 - MINIMUM ULTIMATE TENSILE STRESS = 145 MPa LIMITING BENDING STRENGTH = 125 MPa
 - MODULUS OF ELASTICITY (E) = 70000 MPa LIMITING TENSILE STRENGTH = 135 MPa
 - LIMITING SHEAR STRENGTH = 75 MPa DEFLECTION LIMIT = SPAN/180 OR 20mm
 - ALUMINIUM EXTRUSION : IN ACCORDANCE WITH DESIGN CODE BS 8118-1:1991, COMPLY TO ALUMINIUM AND ALUMINIUM ALLOYS EXTRUDED BIRD/BAR, TUBE AND PROFILES, BS EN 755-2:2008 & ALUMINIUM AND ALUMINIUM ALLOYS CHEMICAL COMPOSITION AND FORM OF WROUGHT PRODUCTS, BS EN 573-3:2009.
 - MODULUS OF ELASTICITY = 70000 MPa
 - ALLOY NAME: 6063-T5 6063-T6 6063-T6
 - MINIMUM 0.2% PROOF STRENGTH: $f_{0.2} = 110$ N/mm² $f_{0.2} = 160$ N/mm² $f_{0.2} = 240$ N/mm²
 - LIMITING STRESS FOR BENDING AND OVERALL YIELDING: $P_o = 110$ N/mm² $P_o = 160$ N/mm² $P_o = 240$ N/mm²
 - LIMITING STRESS FOR LOCAL CAPACITY OF THE SECTION IN TENSION OR COMPRESSION: $P_o = 130$ N/mm² $P_o = 175$ N/mm² $P_o = 260$ N/mm²
 - LIMITING STRESS IN SHEAR: $P_o = 65$ N/mm² $P_o = 95$ N/mm² $P_o = 145$ N/mm²
 - LIMITING STRESS IN BEARING: $P_o = 130$ N/mm² $P_o = 175$ N/mm² $P_o = 260$ N/mm²

- 4. STRUCTURAL MILD STEEL AND FINISH :**
- ALL MILD STEEL SHALL BE GRADE S275 (CLASS 1) TO CODE OF PRACTICE FOR THE STRUCTURAL USE OF STEEL 2011 AND COMPLY TO BS EN 10025:2004 (FOR JO) & BS EN 10210-1:2006 (FOR JOH).
 - SURFACE TREATMENT SHALL BE HOT-DIP GALVANIZED COMPLIED WITH BS EN 1541:2009. (MIN. THICKNESS = 85 MICRONS)
 - FOR THICKNESS "T" : T516mm (GRADE S275)
 - YOUNG'S MODULUS = 205,000 N/mm²
 - DENSITY = 77 kN/m³
 - YIELD STRENGTH = 275 N/mm²
 - TENSILE STRENGTH = 275 N/mm²
 - BENDING STRENGTH = 275 N/mm²
 - SHEAR STRENGTH = 158.8 N/mm²

- 5. GLASS :**
- GLASS USED TO BE :
 - 10mm THICK HEAT STRENGTHENED GLASS + 12mm THICK AIR + 10mm THICK TEMPERED GLASS
 - 10mm THICK HEAT STRENGTHENED GLASS + 12mm THICK AIR + 12mm THICK TEMPERED GLASS
 - 10mm THICK HEAT STRENGTHENED GLASS
 - 12mm THICK HEAT STRENGTHENED GLASS
 - 12mm THICK TEMPERED GLASS
 - DESIGN OF GLASS SHALL COMPLY TO BS 6262:2005.
 - ALLOWABLE BENDING STRENGTH (TEMPERED) = 80 N/mm² (FOR CLEAR GLASS)
 - ALLOWABLE BENDING STRENGTH (HEAT STRENGTHENED) = 40 N/mm² (FOR CLEAR GLASS)
 - YOUNG'S MODULUS = 70,000 N/mm²
 - GLASS MATERIALS SHALL COMPLY TO BS 652:1995.
 - RESIDUAL SURFACE COMPRESSION FOR TEMPERED GLASS TO BE NOT LESS THAN 69 MPa.
 - RESIDUAL SURFACE COMPRESSION FOR HEAT STRENGTHENED GLASS TO BETWEEN 24 AND 52 MPa.
 - FULLY TEMPERED GLASS TO BE 100% HEAT SOAK TESTED IN ACCORDANCE WITH BS EN 14179-1:2016 & COMPLIED WITH PNAP APP-37.

- 6. WELDING FOR STRUCTURAL STEEL :**
- ALL WELDING SHALL BE COMPLIED WITH BS EN 1011-1:2009.
 - ALL WELDS SHALL BE RECEIVED 2 COATS OF ZINC CHROMATE PRIMER TO BS 4652:2003.
 - ALL WELDING SHALL BE CARRIED OUT BY QUALIFIED WELDER, WELDER SHALL BE TESTED TO BS EN ISO 9606-1:2013.
 - ELECTRODES USED IN WELD SHALL BE GRADE E35 COMPLIED WITH BS EN ISO 2560:2009.
 - UNLESS OTHERWISE INDICATED, ALL WELDS SHALL BE 5mm THICK FILLET WELD ALL AROUND.
 - DESIGN WELD STRENGTH: $p_w = 220$ MPa.

- 7. SILICONE SEALANT, GASKET & SETTING BLOCK :**
- "DOW CORNING(R) - DCT91" SILICONE SEALANT TO BE USED AS WEATHER GLAZING SEALANT.
 - "DOW CORNING(R) STRUCTURAL SILICONE SEALANT TYPE 983" TO BE USED AS STRUCTURAL GLAZING SEALANT. (BD REF. NO: BD-SS001) ALLOWABLE DESIGN STRENGTH = 138kPa FOR WIND LOAD CHECKING ONLY.
 - ALL GASKET USED SHALL BE DENSE EXTRUDED SILICONE WITH A SHORE HARDNESS OF 65±5.
 - SETTING BLOCKS SHALL BE 30% DENSE EXTRUDED SILICONE WITH A SHORE HARDNESS OF 85±5. DIAMETER SHORE A, A MAX LENGTH OF 100mm & A MIN. WIDTH CORRESPONDING TO THE GLASS THICKNESS & LOCATED AT GLASS QUARTER POINTS.

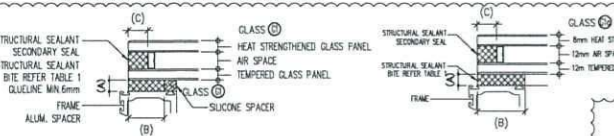


TABLE 1 (FOR VISION GLASS) (A) & (B)

GLASS TYPE	SHORT SIDE, S	SEALANT THICKNESS (A)	SEALANT BITE (B)	SEALANT BITE (C)
(A) (OPENABLE WINDOW)	S ≤ 1200mm	6mm	21mm (MIN)	15mm
(B) (FIX WINDOW)	S ≤ 1200mm	10mm	21mm (MIN)	15mm
(A) (FIX WINDOW)	S ≤ 1970mm	10mm	33mm (MIN)	15mm
(B) (FIX WINDOW)	S ≤ 2065mm	8mm	37mm (MIN:33)	15mm

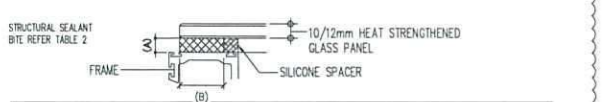
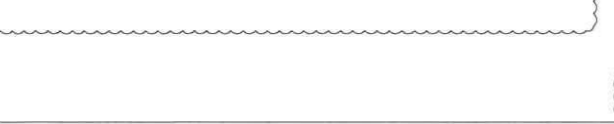


TABLE 2 (FOR GLASS CLADDING (A) & FOR SPANREL GLASS (B))

GLASS TYPE	SHORT SIDE, S	SEALANT THICKNESS (A)	SEALANT BITE (B)
(A) (GLASS CLADDING)	S ≤ 675mm	8mm	16mm (MIN)
(B) (SPANREL GLASS) TYPICAL CASE	S ≤ 1005mm	8mm	21mm (MIN)
(B) (SPANREL GLASS) CORNER CASE	S ≤ 1005mm	6mm	21mm (MIN)



8. FASTENERS

- ALL FASTENERS, SCREWS, BOLTS & NUTS SHALL BE STAINLESS STEEL GRADE A4-70 COMPLYING WITH BS EN ISO 3506:2009.
- MINIMUM YIELD STRENGTH, Y_{td} = 450 MPa
 ULTIMATE TENSILE STRENGTH, U_{ts} = 700 MPa
 SHEAR STRENGTH, P_{sh} = 311 MPa
 TENSILE STRENGTH, P_{th} = 450 MPa
 BEARING STRENGTH, P_{bh} = 828 MPa
- UNLESS OTHER SPECIFIED, ALL SCREWS SHALL BE M5 AT 300 C/C GRADE A4-70 STAINLESS STEEL COMPLIED WITH BS EN ISO 3506:2009.

- 9. FIRE STOP AND THERMAL INSULATION :**
- THERMAL INSULATION : "CSR" 110kg/m³ ROCKWOOL FIBERTEK-B20
 - FIRE STOP : "CSR" FIRE SEAL F560 (KNOWN AS CSR 60kg/m³ ROCKWOOL FIRESEAL BATT.) SHALL BE 135mm THK., DENSITY=60kg/m³ (BD REF. : BD-TS-011) FOR FIRE RATING OF 2HRS
 - SMOKE SEAL : "MIDI ALUMINIUM FABRICATOR LTD" SMOKE SEAL SHALL BE COMPLY WITH FIRE CODE CLAUSE C10.2

- 10. ANCHOR BOLT (FOR ALUM. CAPPING & GLASS CLADDING ONLY)**
- ALL DRILL-IN ANCHOR BOLTS SHALL BE HLT1 H513-R AS SHOWN IN THE DRAWINGS AND SHALL BE DESIGNED
 - THE INSTALLATION OF DRILL-IN ANCHOR BOLTS SHALL BE STRICTLY IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION & RECOMMENDATION.
 - COVER-METER SHOULD BE APPLIED TO PREVENT ANCHOR BOLTS HIT THE EXISTING REINFORCEMENT BARS.

FOR CRACKED CONCRETE TABLE:

ANCHOR TYPE	MINIMUM SPACING (mm)	MINIMUM EDGE DISTANCE (mm)	EFFECTIVE ANCHORAGE LENGTH (mm) TO SOUND CONCRETE	RECOMMENDED LOAD (kN) FOR CRACKED CONCRETE	TENSION TEST LOAD (kN)	BD REF. NO.	MINIMUM BASE WIDTH THICKNESS (mm)
HLT1 H513-R M8	35 (50)	40 (50)	47	2.8x1.55 = 4.34	5.2x1.55 = 8.06	6.57	BD-AT151
HLT1 H513-R M10	40 (55)	45 (60)	60	5.4x1.55 = 7.75	8.4x1.55 = 13.02	11.83	BD-AT149

INFLUENCING FACTOR FOR GRADE 600 CONCRETE = 1.55, TEST LOAD SHOULD BE 1.5xRECOMMENDED TENSION LOAD.

- 11. ALUMINIUM STUD BY DRAWN ARC STUD WELD**
- ALUMINIUM STUD SHALL BE W6 GRADE 5754 AND DESIGNED TO BS 8118-1:1991. DESIGN AND QUALITY ASSURANCE OF DRAWN ARC STUD WELD SHALL COMPLY WITH BS EN ISO 14555:2017. ALUMINIUM STUD TYPE SHALL BE THREADED STUD (P1) AND COMPLY WITH BS EN ISO 13918:2018. MINIMUM 0.2% PROOF STRENGTH: $f_{0.2} = 60$ N/mm²

- 12. CAST-IN CHANNEL (BD Ref. : BD-AF132 & BD-AF134)**
- ALL CAST-IN CHANNEL USED TO BE "HLT1" HAC-50, HAC-60 & HAC-70 CHANNEL TO CRACKED CONCRETE
 - THE INSTALLATION OF CHANNEL FIXING SHALL STRICTLY IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION AND LIMITATION INCLUDING CONCRETE GRADE EDGE DISTANCE AND ANCHOR SPACING ETC.
 - USED TO BE HBC-C 8.8-M16x50mm LONG WHICH COMPLY WITH BS 3692:1967
 - 2 NOS. OF M16 GRADE 8.8 F.T. BOLT SPACING REFER TO EMBED DETAIL (DWG. NO. BD-TOW-ED01)
 - BOTH 350mm, 450mm LENGTH OF HLT1 CAST-IN CHANNEL WILL BE TESTED OF THE TEST LOAD.
 - METHOD STATEMENT OF TEST WILL BE SUBMITTED ONE WEEK BEFORE THE COMMER CEMENT OF THE CAST-IN CHANNEL.

CHANNEL TYPE	MIN. EDGE DIA. (a) (mm)	MIN. EDGE DIA. (b) (mm)	MIN. DEPTH DIA. (c) (mm)	RECOMMENDED LOAD FOR CHANNEL (kN)	TENSION TEST LOAD (kN)	BD REF. NO.
HAC-60 W/ 2 NOS. M16 G.M.S.	75mm	150mm	148mm	TENSION : 32.7	SHEAR : 17.4	BD-AF132
HBC-C 1-BOLT (GR. 8.8)	75mm	150mm	175mm	TENSION : 41.7	SHEAR : 22.8	BD-AF134

- 13. G.M.S. CAST-IN EMBED :**
- CAST-IN EMBED BAR SHALL BE GRADE 500B TO COMPLIED WITH CS2-2012. SPECIFIED CHARACTERISTIC STRENGTH = 500 N/mm² (EMBED TYPE: EM03)
 - ALL CAST-IN PLATE SHALL BE GRADE S275 (CLASS 1) TO CODE OF PRACTICE FOR STRUCTURE USE OF STEEL 2011 AND COMPLY TO BS EN 10025:2004 (FOR JO) & BS EN 10210-1:2006 (FOR JOH). YIELD STRENGTH = 275 N/mm²
 - SURFACE TREATMENT SHALL BE HOT-DIP GALVANIZED COMPLIED WITH BS EN ISO 1461:2008. (MIN. THICKNESS = 85 MICRONS)
 - CAST-IN EMBED STEEL ROD (FOR EM09) SHALL BE GRADE S275 JO TO BE COMPLIED WITH BS EN 10025:2004.

- 14. ISOLATION FOR METALS**
- APPLIED A LAYER OF BITUMINOUS PAINT (COMPLY WITH BS 3416:1991) FOR PROTECTION AGAINST BI-METALLIC CORROSION FOR BARE ALUMINIUM/STEEL CONTACTED SURFACE & STEEL/CONCRETE INTERFACE. PLASTIC ISOLATION TYPE (COMPLY WITH BS PD 6484:1979) TO BE PROVIDED BETWEEN CONTACT SURFACE OF ALUMINIUM AND STEEL TO PREVENT DIRECT CONTACT BETWEEN DISSIMILAR METALS

- 15. OPENABLE WINDOW**
- ALL OPENABLE WINDOW CURTAIN WALL ARE FOR INFORMATION ONLY AND SHOULD BE APPROVED UNDER CLOSED AND LOCKED CONDITION.

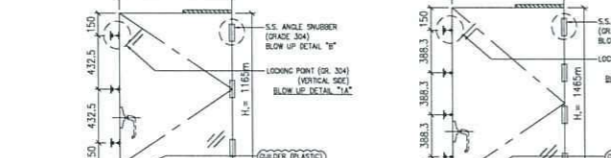
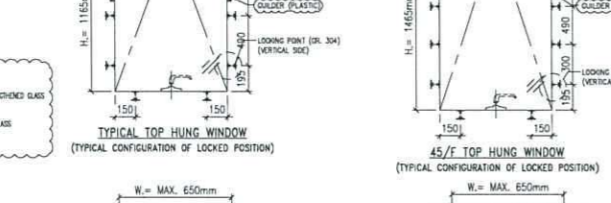
- 15a. CONCRETE GRADE (FOR INFORMATION ONLY)**
- ALL R.C. STRUCTURE SHOWN IN THE SUBMISSION SHALL BE GRADE C45 COMPLY WITH CODE OF PRACTICE FOR THE STRUCTURAL USE OF CONCRETE, 2013 HONG KONG.

- 16. GBP APPROVAL DATE: 06/12/2018**
- SUPERSTRUCTURE APPROVAL DATE: 11/07/2018**

- 17. TOLERANCE OF FIXING BRACKET OF CURTAIN WALL SHALL BE**
- ± 15mm (HORIZONTAL DIRECTION : PARALLEL / PERPENDICULAR TO CURTAIN WALL & VERTICAL DIRECTION)

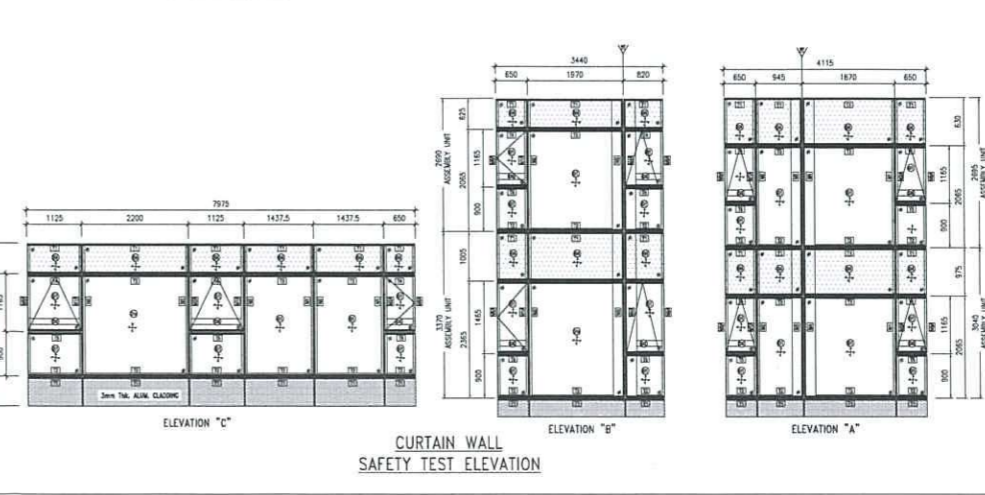
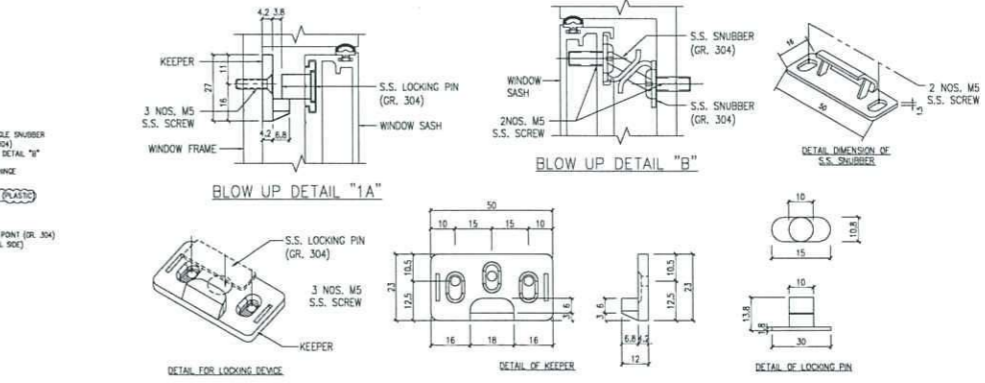
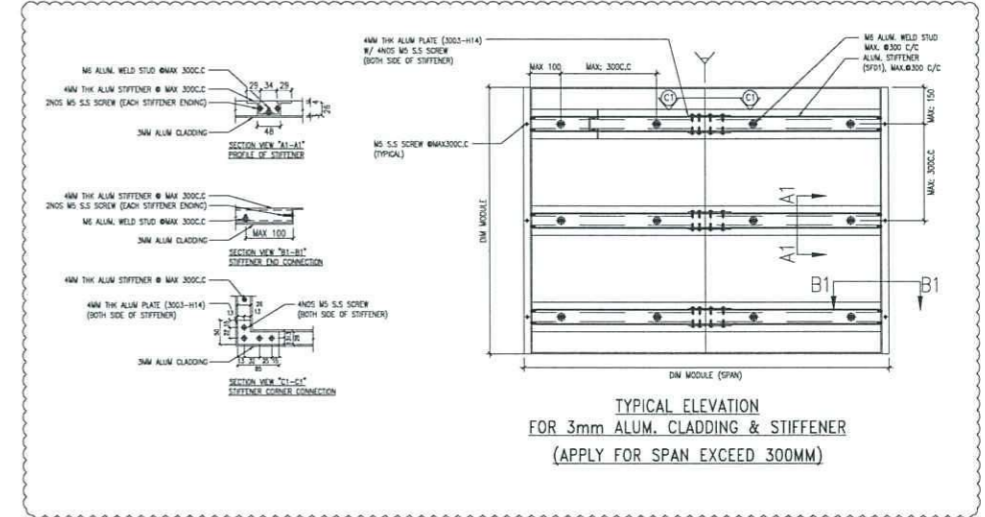
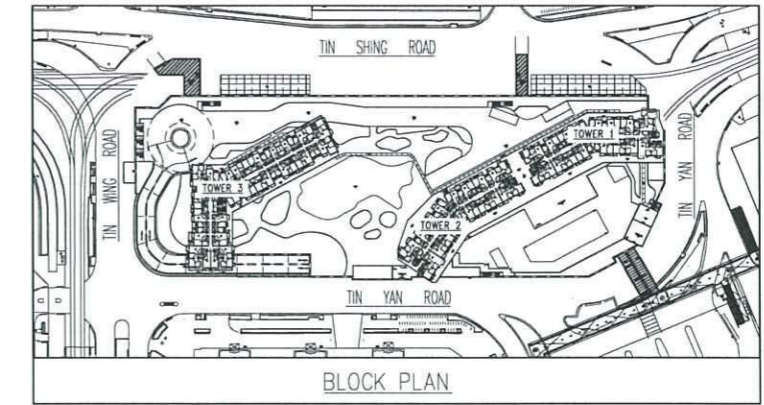
- 18. STAINLESS STEEL :**
- ALL STAINLESS STEEL TO BE GRADE 304 (1.4301) AND GRADE 316 (1.4401) TO BS EN 10088-1 AND DESIGN TO CODE OF PRACTICE FOR THE STRUCTURAL USE OF STEEL 2011
- GRADE 8.8: SHEAR STRENGTH 375 N/mm², TENSILE STRENGTH 560 N/mm², BEARING STRENGTH 1000 N/mm²
- MIN. D.2% PROOF STRENGTH: 210 N/mm² (FOR GRADE 304), 220 N/mm² (FOR GRADE 316)
- DENSITY: 79 kN/m³
- YOUNG'S MODULUS: 200,000 N/mm²
- ULTIMATE TENSILE STRENGTH: 520 N/mm²

- 19. HOLDING DOWN BOLT (FOR EMBED ONLY) :**
- ALL HOLDING DOWN BOLT SHOULD BE GRADE 8.8 BOLT COMPLY WITH BS 4190:2011 AND DESIGN TO CODE OF PRACTICE FOR THE STRUCTURAL USE OF STEEL 2011



OPENABLE WINDOW HINGE (FOR INFORMATION)

L (mm)	H (mm)	WEIGHT (MAX) (kg)	CLASS TYPE	SH/TH	HINGE MODEL	MAX LOAD (kg)	50% LOAD (kg)
650	1165	43.48521	BHS+120+101	SH	HYL516 (PAIR)	83	65
650	1465	53.81541	BHS+120+101	SH	HYL516 (PAIR)	83	65
820/720	1165	53.27874	BHS+120+101	TH	HYL516 (PAIR)	92	74
720	1465	58.79304	BHS+120+101	TH	HYL516 (PAIR)	92	74
1125	1165	70.84836	BHS+120+101	TH	HYL14-L + HYL-P-14R (PAIR)	92	74
815	1165	52.99070	BHS+120+101	TH	HYL516 (PAIR)	92	74
800	1165	57.88746	BHS+120+101	TH	HYL516 (PAIR)	92	74



B.D. REF. :

CLIENT : SUN HUNG KAI REAL ESTATE AGENCY LTD. 42/F SUN HUNG KAI CENTRE, WANCHAI, HONGKONG

ARCHITECT : IWK&PARTNERS architects

MAIN CONTRACTOR : 怡輝建築有限公司 Yee Fai Building Contractors Ltd.

STRUCTURAL ENGINEER : ARUP

FAÇADE CONSULTANT : ALPHA CONSULTING LIMITED Steel Structure & Façade Specialist

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.
 X001 --- REFER SHEET NO.

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

NO.	DATE	REVISED	BY
C	27-APR-2023	5TH SUBMISSION	
B	20-FEB-2023	4TH SUBMISSION	CF
A	28-DEC-2022	2ND SUBMISSION	CF

JOB NO. : J-856

PROJECT : PROPOSED DEVELOPMENT ABOVE LIGHT RAIL TIN WING STOP, TSWL NO.23, AREA 33, TIN SHUI WAI, N.T.

TITLE : GENERAL NOTE FOR CURTAIN WALL

DATE : 31-OCT-21 SCALE : NTS

DRAWN BY : C.F. 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) 2727666

DWG NO. : J856-SD-CW-1001 REV. : C