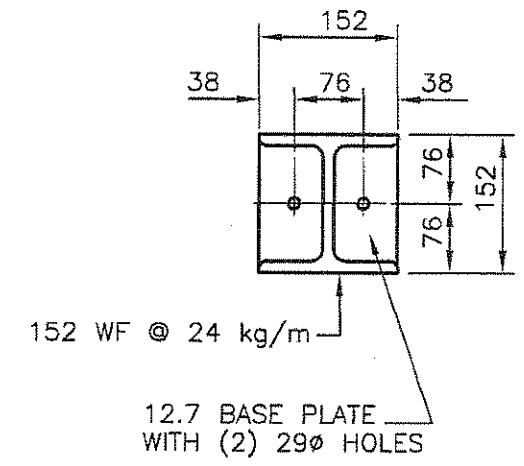
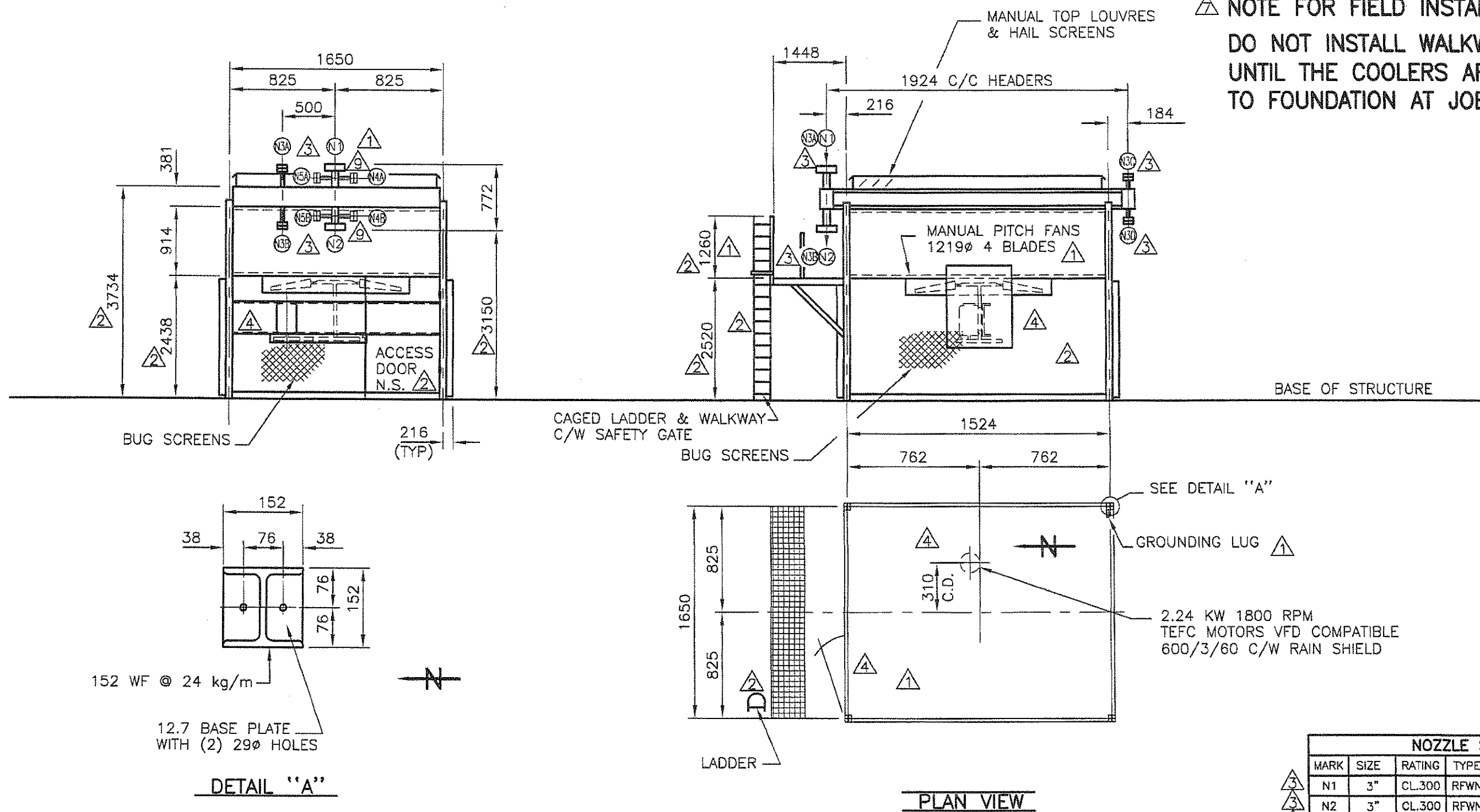


△ NOTE FOR FIELD INSTALLATION:
DO NOT INSTALL WALKWAYS & SECTIONS UNTIL THE COOLERS ARE FASTENED TO FOUNDATION AT JOB SITE




DETAIL "A"

CERTIFIED AS BUILT

NOZZLE SCHEDULE						
MARK	SIZE	RATING	TYPE	SCH.	SERVICE	
N1	3"	CL.300	RFWN	160	INLETS	
N2	3"	CL.300	RFWN	160	OUTLETS	
N3A-D	2"	CL.300	RFLWN	-	VENT/DRAIN C/W BLIND	
N4A/B	2"	CL.300	RFLWN	-	TI CONNECTIONS	
N5A/B	2"	CL.300	RFLWN	-	PI CONNECTIONS	

- REVISION CONTROL BOX ⊙ Denotes DCR & Rev.# Added to This Sheet Only
- ① PER CUST REQUEST OCT 10/2008 (BG)
 - ② PER CUST MARK-UP NOV 26/08 (SF)
 - ③ PER CUST MARK-UP FEB 6/09 (SF)
 - ④ PER E.I. MARCH 20/2009 (BG) DCR-NI-014781
 - ⑤ PER CUST APPR'L MAY 14/09 (SF) DCR-A-014831 ⊙
 - ⑥ PER E.I. JUN 11/09 (SF) DCR-B-014855 ⊙
 - ⑦ PER E.I. JUL 8/09 (SF) DCR-C-014883
 - ⑧ PER CUST AUG 7/09 (SF) ⊙
 - ⑨ PER E.I. (AS BUILT) SEPT 17/09 (SF)

This drawing is the property of Exchanger Industries and shall not be used in any way detrimental to Exchanger Industries nor shall be copied, lent or used for any purpose other than that intended.

DIMENSIONAL OUTLINE & ANCHOR BOLT PLAN		 EXCHANGER INDUSTRIES CALGARY, ALBERTA
CUSTOMER: DPH FOCUS CORP		
P.O. : FCSR-DPH-4001B		
FOR: ENCANA FCCL OIL SANDS LTD.		
PLANT: FOSTER CREEK		
SERVICE: PROCESS GLYCOL COOLER		
ITEM: E-5975A/B/C NO. REQ'D (3) BAYS		DWG NO. 08-5064A-C
DWN SF	CKD BG	SHEET 1 OF 23

GENERAL CONSTRUCTION NOTES

- (1) ALL COLUMNS TO HAVE 25 Ø ANCHOR BOLTS WITH 76 THREAD PROJECTION ABOVE BASE OF STRUCTURE
- (2) MAIN STRUCTURE TO BE OF WELDED CONSTRUCTION
- (3) STRUCTURE TO BE FITTED WITH BUG & HAIL SCREENS
- (4) DELETED
- (5) (1) ONLY VIBRATION TRANSMITTER – METRIX ST58484E-123-020-00 [△] AND CSA APPROVED, INSTALLED FOR SHIPPING
- (6) PAINT: STRUCTURE [△]
 - (a) COMMERCIAL SANDBLAST TO SSPC-SP6
 - (b) ONE COAT CLOVADALE RUSTEX 71024 ALKYD 1.5-2 MIL DFT
 - (c) TWO COATS CLOVADALE INDUSTRIAL ENAMEL 7400, 1.5-3 MIL DFT PER COAT, ICSS #423 WARM GREY
- [△] [△] WALKWAYS (HANDRAILS, KICK PLATE), LADDERS, CAGES
 - (a) SAFETY YELLOW FEDERAL NATIONAL 13591
 - [△] (b) DELETED
- HEADER BOXES
 - (a) NEAR WHITE BLAST TO SSPC-SP10
 - (b) ONE COAT CLOVADALE CLOVA ZINC 3, 2-3 MILS DFT
 - (c) TWO COATS CLOVADALE 83206, 1.5-2 MIL DFT PER COAT, ICSS #423 WARM GREY
- NOTE: 1) ALL EXTERIOR JOINTS TO BE CAULKED AFTER SANDBLASTING & BEFORE PAINTING.
2) WALKWAY GRATING TO BE GALVANIZED.
- (7) N.D.E. EXAMINATION
 - a) MPI ALL BEVELED EDGES OF TUBESHEETS, PLUG SHEETS, ACROSS WRAPPERENDS, AND NOZZLE CUT OUTS.
 - b) FULL UT FOR HEADER BOX WELDS
 - c) FULL MPI AT LEAST TWO CAT. "D" NOZZLE WELDS
 - [△] d) FULL VISUAL TEST ALL CAT. "D" NOZZLE WELDS
 - e) VISUAL TEST ALL NON-RESSURE ATTACHMENTS
 - f) MPI LIFTING LUGS
 - g) MPI EXPOSED CUT EDGES ON TUBESHEETS AND PLUG SHEETS AFTER WELDING.
- (8) FABRICATION TOLERANCES TO API 661. [△] [△]
- (9) BAY TO BE SHIPPED: FULLY ASSEMBLED WITH THE FOLLOWING SHIPPING LOOSE: BUG SCREENS, WALKWAYS, SECTIONS & LADDERS.
- [△] (10) ALL SHIP LOOSE ITEMS TO BE TAGGED (S.S. TAGS) WITH P.O. # AND COOLER TAG#
- [△] (11) STENCIL "NO WELDING ALLOWED" ON HEADER BOXES IN WHITE LETTERS AFTER COMPLETING FABRI ATION.
- [△] (12) SHIP ONE COPY OF QC'S WRAP-UP BOOK WITH THE UNIT.
- [△] (13) ALL EXPOSED FLANGE GASKET SURFACES SHALL BE COATED WITH RUST PREVENTATIVE RUST VETO 344 AND PROTECTED WITH 12.7 mm THK. PLYWOOD.

CERTIFIED AS BUILT

MATERIAL LIST

LINE	PART	MATERIAL
1	TUBES/FINS	SA-179/ALUMINUM
2	HEADER PLATE	SA-516-70N
3	FLANGE	SA-350-LF2 CL 1
4	PIPE	SA-333-6
5	FORGED TRANSITION	-
6	THREDOLET	SA-350-LF2 CL1 [△]
7	SHOULDER PLUGS	SA-350-LF2 CL1
8	SHOULDER GASKETS	C1010/20
9	ANGLE/CHANNEL	CSA G40.21 GR 300W
10	SHEET	ASTM A1011
11	WIDE FLANGES	CSA G40.21 GR 350W or A572 GR 50
12	TUBE SUPPORTS	CSA G40.21 GR 350W
13	STRUCTURE BOLTS	ASTM325M
14	STANDARD BOLTS	ASTM307
15		

DESIGN CONDITIONS

SERVICE	PROCESS GLYCOL COOLER
ITEM NUMBER	E-5975A/B/C
PROCESS DESIGN PRESSURE	2300 kPag & F.V. @ 204°C [△]
MAWP	N/C = 5102 kPa H/C = 4060 kPa [△]
HYDRO TEST PRESSURE	SHOP = 6633 kPag FIELD = 5278 kPa [△]
DESIGN TEMPERATURE	204 °C
MDMT	-45 °C
CORROSION ALLOWANCE	1.600 mm
NUMBER OF PASSES	FOUR
BARE SURFACE (TOTAL)	9.3 SQ. M
STRESS RELIEVE	YES (1 HOUR AT 621°C ± 14°C) [△]
N.D.E. EXAMINATION	SEE NOTE #7
SECTION WEIGHT/SECTION	900 Kgs
CU. FT. CAPACITY/SECTION	0.104 CU. M
NUMBER OF SECTIONS/BAY	ONE
TOTAL EMPTY WEIGHT/BAY	7070 Kgs
WEIGHT FULL OF WATER/BAY	7175 Kgs

COLUMN BASE LOADS (kN) [△]

	VERT	HORIZ
DIRECTION		
MINIMUM LOAD	16.6	—
MAXIMUM LOAD	26.0	0.85
WIND LOAD BASED ON	0.40 kPa	
SNOW LOAD BASED ON	1.70 kPa	

- REVISIONS**
- [△] 1 PER CUST REQUEST OCT 10/2008 (BG)
 - [△] 2 PER CUST MARK-UP NOV 26/08 (SF)
 - [△] 3 PER CUST MARK-UP FEB 6/09 (SF)
 - [△] 5 PER CUST APPR'L MAY 14/09 (SF)
 - [△] 6 PER E.I. JUN 11/09 (SF)
 - [△] 7 PER E.I. JUL 08/09 (SF)
 - [△] 8 PER CUST AUG 7/09 (SF)

MATERIALS & DESIGN CONDITIONS

DWN SF CKD BG



EXCHANGER INDUSTRIES
CALGARY, ALBERTA

DWG NO. 08-5064 A-C

SHEET 1A OF 23

MATERIAL LIST FOR (1) ONE SECTION ONLY

MARK	QUAN'T	DESCRIPTION	MATERIAL
1	4	TUBE AND PLUG SHEETS 25.4 x 264 x 1344	SA-516-70N
2	4	WRAPPER PLATES 12.7 x 96 x 1344	SA-516-70N
3	4	END PLATES 12.7 x 96 x 232	SA-516-70N
4	3	STAY PLATE 12.7 x 99 x 1315	SA-516-70N
5	2	3"-CL.300 RFWN FLG SCH 160	SA-350-LF2 CL1
6	2	3" PIPE SCH 160 (11.13 THK) x 174 LG	SA-333-6
7	8	2"-CL.300 RFLWN 16.76 THK x 229 LG C/W BLIND FLGS	SA-350-LF2 CL1
	64/128	15.88Ø STUDS x 89 LONG / 15.88Ø NUTS	SA-193-B7M/SA-194-2HM
	8	2-CL.300 ANSI STYLE C.G. SPIRAL WOUND STAINLESS STEEL GASKET	
	66	25.4 OD x 13 BWG M/W x 1829 LG STEEL TUBES WITH 15.8 HIGH EMBEDDED TYPE ALUMINUM FINs STAPLE ENDS	SA-179
	132	STEEL SHOULDER PLUGS 29 Ø x 25 U.H.	SA-350-LF2 CL1
	132	STEEL GASKETS	C1010/20

GENERAL NOTES

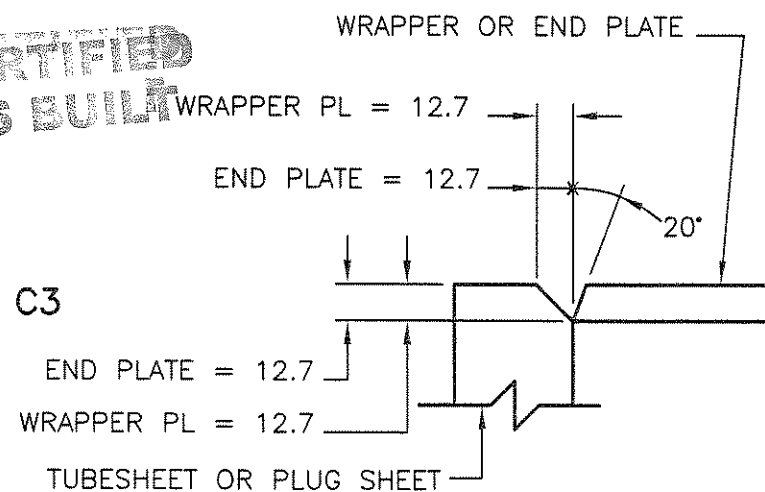
- 1) LEVEL FLANGES FROM TUBE SIDE.
- 2) DRILL AND REAM TUBE SHEET HOLES TO **25.64 ±0.05** DIA WITH 200 FINISH
- 3) DRILL AND TAP PLUG SHEETS FOR 29 x 12 NF. SHOULDER TYPE PLUG
- 4) ROLL TUBES **22** DEEP IN TUBE SHEET
- 5) SPOT FACE PLUG HOLES 36 DIA FOR GASKET SEATING
- 6) FULL PENETRATION WELDS ON ALL WRAPPER, END & STAY PLATES
- 7) STRESS RELIEVE **1** HOUR AT 621°C ± 14°C
- 8) N.D.E. EXAMINATION:
 - a) MPI ALL BEVELED EDGES OF TUBESHEETS, PLUG SHEETS, ACROSS WRAPPER ENDS & NOZZLE CUTOUTS.
 - b) FULL UT FOR HEADER BOX WELDS
 - c) FULL MPI AT LEAST TWO CAT. "D" NOZZLE WELDS
 - d) FULL VISUAL TEST AT LEAST TWO CAT. "D" NOZZLE WELDS
 - e) VISUAL TEST ALL NON-PRESSURE ATTACHMENTS
 - f) MPI LIFTING LUGS
 - g) MPI EXPOSED CUT EDGES ON TUBESHEETS AND PLUG SHEETS AFTER WELDING.
- 9) EACH (INLET/OUTLET) NOZZLE TO HAVE (2) 2 NPS CONNECTIONS
- 10) ALL PLUG SHEETS TO BE TAPPED FULL DEPTH
- 11) ALL BOLT HOLES TO STRADDLE NORMAL CENTER LINES
- 12) CODES: ASME SECTION VIII DIV. 1, 2007 EDITION, APPENDIX 13, API 661, INSPECTION PER UG-93. PLATES IMPACT EXEMPT BY UCS-66(a) TUBES IMPACT EXEMPT BY UCS-66(d) LOW TEMP PIPE/FLANGES EXEMPT BY UCS-66(g); WELD METAL EXEMPT PER UCS 67(a)(2)
- 13) CODE STAMP REQ'D: YES (PROVINCE OF ALBERTA)

WELDING NOTES: (PREHEAT 15°C)

- LONG SEAMS C6
- END PLATES C6
- NOZZLE PIPE TO WRAPPER C6
- NOZZLE FLG TO PIPE C6
- STAY PLATE TO END PLATE & TUBE/PLUG SHEET C3

NOTE: FCAW ALLOWED ON STAY PLATES ONLY.

**CERTIFIED
AS BUILT**



WELD BEVEL DETAIL

DESIGN CONDITIONS

ITEM NUMBER	E-5975A/B/C
PROCESS DESIGN PRESSURE	2300 kPag & F.V. @ 204 °C
MAWP	N/C = 5102 kPa H/C = 4060 kPa
HYDRO TEST PRESSURE	SHOP = 6633 kPag FIELD = 5278 kPa
DESIGN TEMPERATURE	204 °C
MDMT	-45 °C
CORROSION ALLOWANCE	1.600 mm
NUMBER OF PASSES	FOUR
BARE SURFACE /SECTION	9.3 SQ. M
SECTION WEIGHT / SECTION	900 Kgs
CU m(CU. FT) CAPACITY/SECTION	HEADERS = 0.064 CU. M TUBES = 0.04 CU. M

VISIONS

SECTION MODEL NO. : 66BE4 6 4
NO. OF SECTIONS REQ'D : THREE
ALL HEADER MATERIAL : SA-516-70N
CUSTOMER : DPH FOCUS CORP
P.O. NO. : FCSR-DPH-4001B
ITEM NO. : E-5975A/B/C

MATERIALS & DESIGN
CONDITIONS

DWN SF | CKD BG |



EXCHANGER INDUSTRIES
CALGARY, ALBERTA

DWG NO. 08-5064A-C

SHEET 3 OF 23

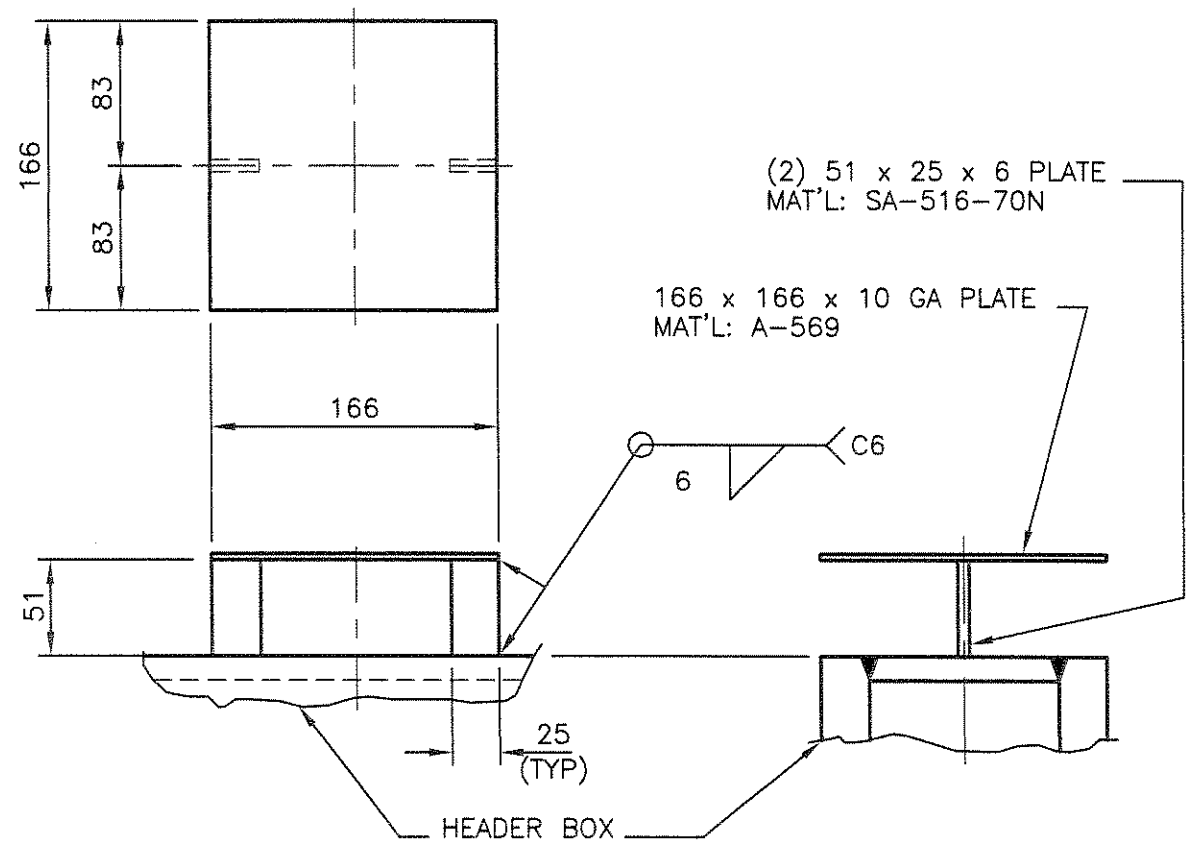
CERTIFIED BY
EXCHANGER INDUSTRIES
 A DIVISION OF PREMETALCO INC.
 CALGARY, ALBERTA, CANADA

U	MAWP:	-	PSI	AT	-	°F
	MAWP:	4060	KPA	AT	204	°C
W	MAEWP:	-	PSI	AT	-	°F
	MAEWP:	-	KPA	AT	-	°C
HT	MDMT:	-	°F	AT	-	PSI
	MDMT:	-45	°C	AT	4060	KPA

SERIAL NO. 08-5064* YEAR MFD. 2009
PROCESS GLYCOL COOLER
P.O.: FCSR-DPH-4001B
ITEM NO.: E-5975*; MODEL NO.: 66BE4 6 4
SECTION CAPACITY: 0.104 CU. M. SECTION WEIGHT: 900 Kg [△]
HYDROTEST PRESSURE: 5278 kPag C.A. : 1.600 mm [△]
[△] SURFACE AREA-BARE/EXTENDED : 9.3 / 198.8 SQ.M
 PROV. REG. CRN

NAME PLATE DETAIL

0.8 x 152 x 152
MAT'L: STAINLESS STEEL



NAME PLATE BRACKET DETAIL

*
A
B
C

**CERTIFIED
AS BUILT**

REVISIONS

[△] PER CUST APPR'L MAY 14/09 (SF)

NAME PLATE DETAIL

ONE REQ'D EACH SECTION
NO. OF SECTIONS REQ'D **THREE**

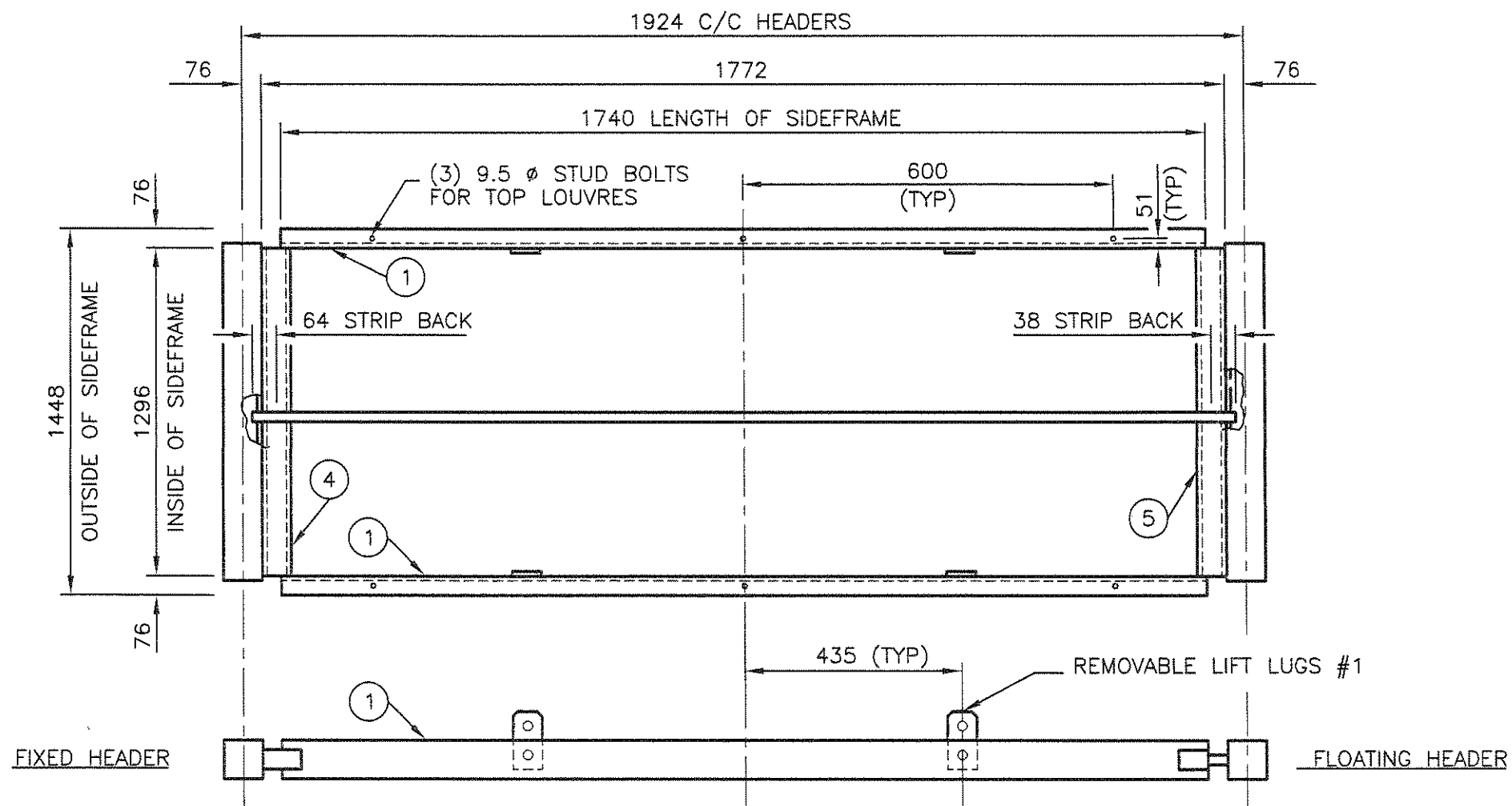


EXCHANGER INDUSTRIES
CALGARY, ALBERTA

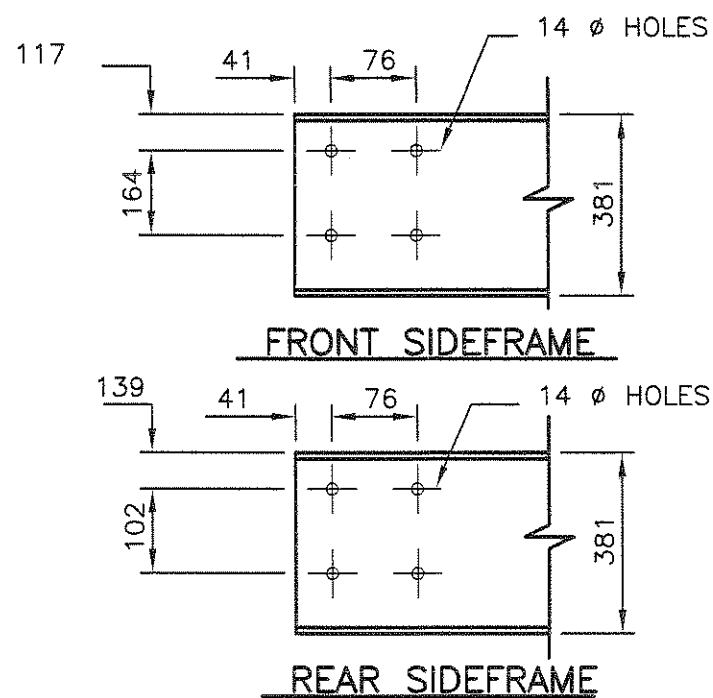
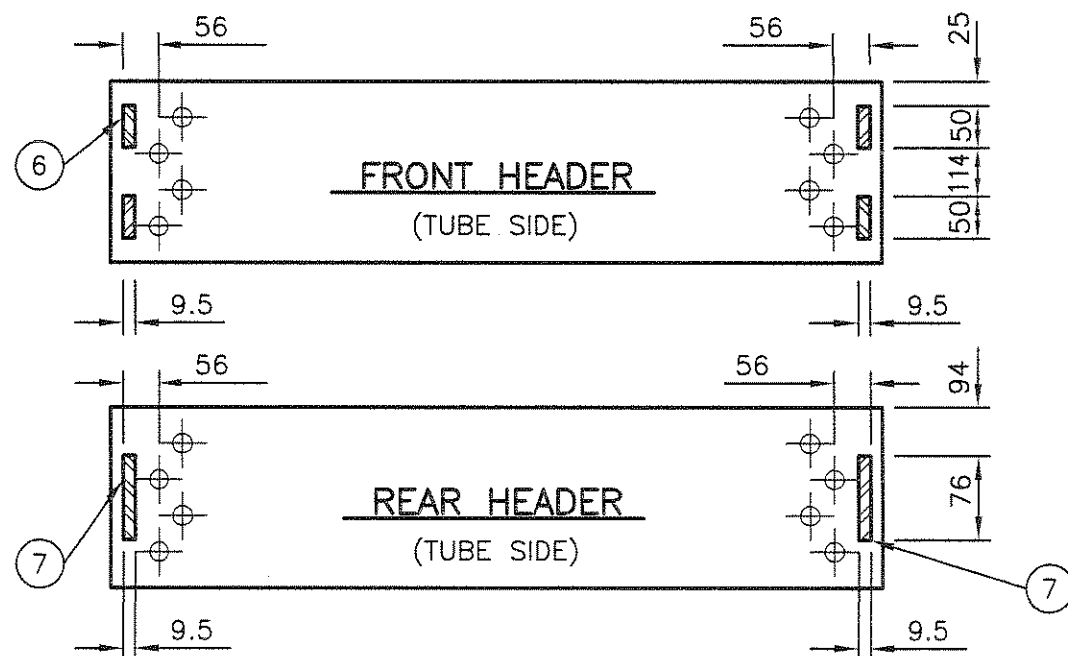
DWG NO. **08-5064A-C**

DWN SF CKD BG

SHEET **4** OF **23**



**CERTIFIED
AS BUILT**



	-	15.8 Ø BOLTS	
	12	25.4 Ø BOLTS	
	12	LIFT LUGS	
	48	12.7 Ø BOLTS	
	-	BOTTOM SUPPORT BKTS	
	-	TOP SUPPORT BKTS.	
	12	25 x 152 x 12.7 PL	
	6	127 x 152 x 6 PL	
7	6	76 x 152 x 9.5 PL	SA-516-70N
6	12	51 x 152 x 9.5 PL	SA-516-70N
5	6	152 SEAL PLATE (GALV)	-
4	6	152 SEAL PLATE (GALV)	-
3	-	76 I BEAM @ 8.5 kg/m	-
2	-	19 THK GALV. PLATE	-
1	6	381 CHANNEL 8 THK 76 FLG	1740
ITEM	NO.	DESCRIPTION	LENGTH
CUT LIST FOR (3) THREE ASSEMBLIES			

GENERAL NOTES

- 1) ALL STRUCTURAL STEEL IS G40.21-44W
- 2) ALL SLOTS ARE 11 x 25
- 3) ALL BOTTOM SEAL PLATES TO HAVE A 6 Ø DRAIN HOLE EVERY 1220

REVISIONS

SIDEFRAME DETAIL

ITEM NO 40



EXCHANGER INDUSTRIES
CALGARY, ALBERTA

DWG NO. 08-5064A-C

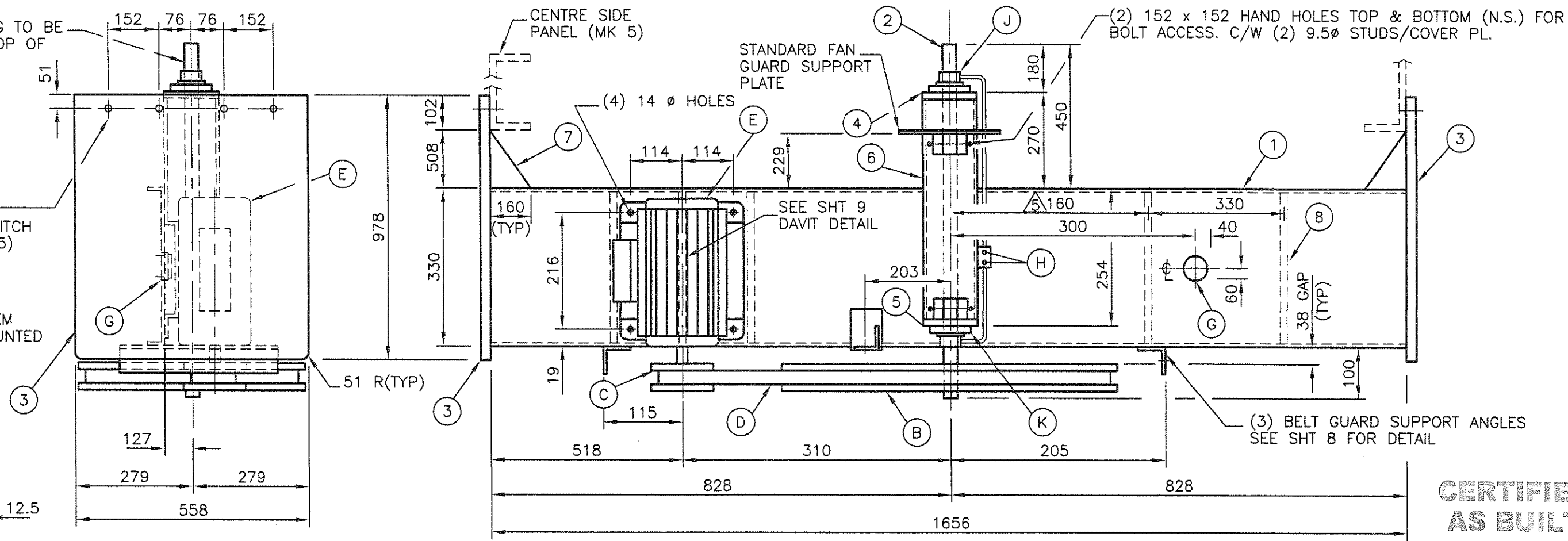
SHEET 5 OF 23

DWN SF CKD BG

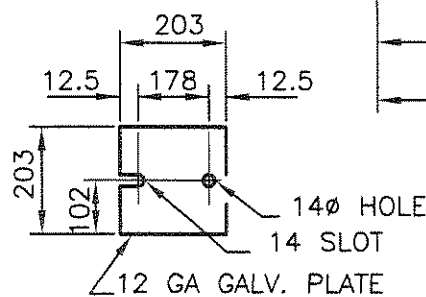
NOTE; FAN BUSHING TO BE FLUSH WITH THE TOP OF FAN SHAFT.

(4) 17Ø HOLES TO LOCATE PLATE.(STITCH WELD PLATE TO MK 5)

NOTE: GREASE FITTINGS (ITEM "H") ARE TO BE MOUNTED ON STANDARD CLIPS WELDED TO TOWER

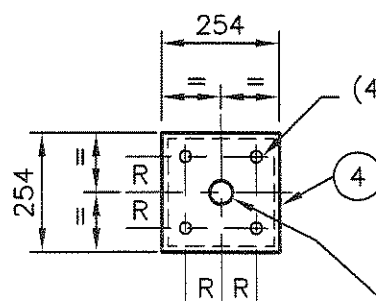


CERTIFIED AS BUILT

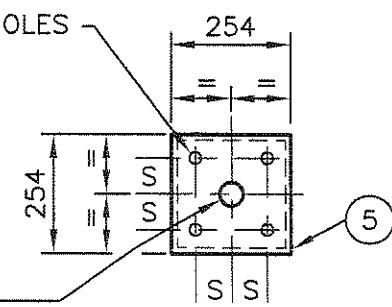


BOTTOM OF FAN BLADE TO BOTTOM OF FAN RING (STOP DROOP) = 124

R = 46
S = 50



TOP BEARING PLATE DETAIL



BOTTOM BEARING PLATE DETAIL

** TEFC VFD COMPATIBLE C/W DRIP COVER
* MANUAL #5419 B4A4

BLADE ANGLE 5.54°

ITEM	NO.	DESCRIPTION	LENGTH
8	12	76 x 12.7 FLAT BAR	308
7	6	9.5 THK PLATE	508 x 160
6	3	254 x 6 THK H.S.S.	498
5	3	BOTTOM BEARING PLATE 12.7 THK	254 x 254
4	3	TOP BEARING PLATE 12.7 THK	254 x 254
3	6	CHANNEL END PLATE 9.5 THK	978 x 558
2	3	FAN SHAFT 36.5 DIA.	880
1	3	330 BRK'N CHANNEL 9.5 THK, 89 FLANGE	1656

CUT LIST FOR (3) THREE ASSEMBLIES

K	3	BOTT. BRG NTN UELF307-107D1 BORE 36.5
J	3	TOP BRG NTN UELFU207-107D1 BORE 36.5
H	6	STD GREASE FITTINGS
G	3	VIBRATION TRANSMITTERS METRIX ST5484E-123-020-00
E	3	ELECTRIC MOTOR TECO-WESTINGHOUSE**
		182T FRAME 2.24 KW 1800 RPM
		ENCL. TEFC 600 VOLTS 3 PHASE 60 CYCLE
		28.6Ø SHAFT 6 x 3 KWY SLIDE BASE 182T
D	6	V BELTS 3VX475 ANTI-STATIC
C	3	SHV. 2 GR. 85 DIA. 28.6 BORE 6 x 3 KWY
B	3	SHV. 2 GR. 269 DIA 36.5 BORE 10 x 5 KWY
A	3	FAN MOORE* 1219 DIA. 4 BLADES
		547 RPM 36.5 Ø BORE 10 x 5 KWY

MECHANICAL EQUIPMENT

GENERAL NOTES
1) ALL STRUCTURAL STEEL IS G40.21-44W
2) WELD (2) LIFT LUGS TO EACH MOTOR SLIDE PLATE.
3) HOLES FOR VIBRATION SWITCHC ARE 10Ø

REVISIONS:
4 PER E.I. MARCH 20/2009 (BG)
5 PER CUST APPR'L MAY 14/09 (SF)

DRIVE SUPPORT DETAIL

ITEM NO 41

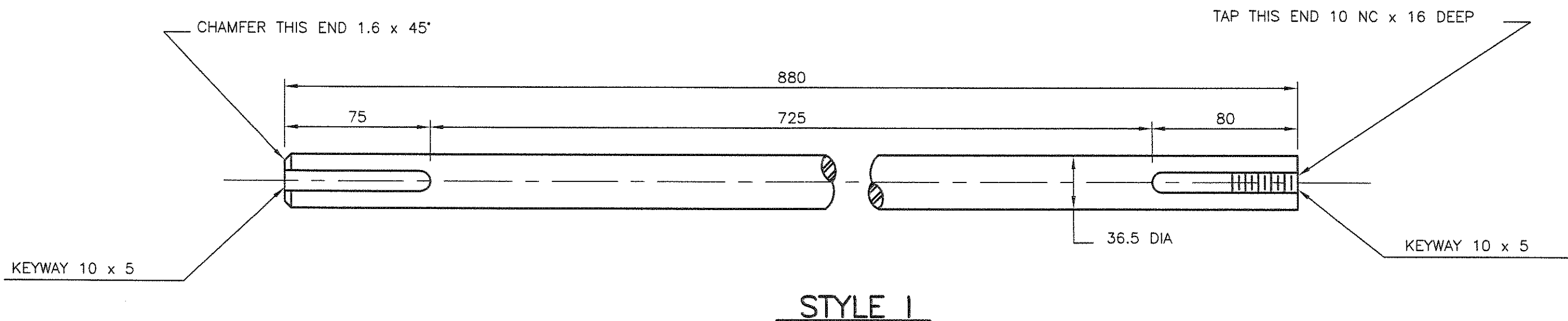
DWN SF CKD BG ITEM



EXCHANGER INDUSTRIES
CALGARY, ALBERTA

DWG NO. 08-5064A-C

SHEET 6 OF 23



NO. REQ'D: THREE

**CERTIFIED
AS BUILT**

GENERAL NOTES

- 1) ALL TOLERANCES +0.00, -0.10 ON DIA
- 2) WIPE ALL SHAFTS WITH OIL AND TAPE KEYWAYS.
- 3) CHECK SHAFTS TO MAINTAIN MAX. 0.381 DEFL.
- 4) SHAFT MATERIAL C-1045 C.S.

REVISIONS

SHAFT DETAIL

ITEM NO. 52

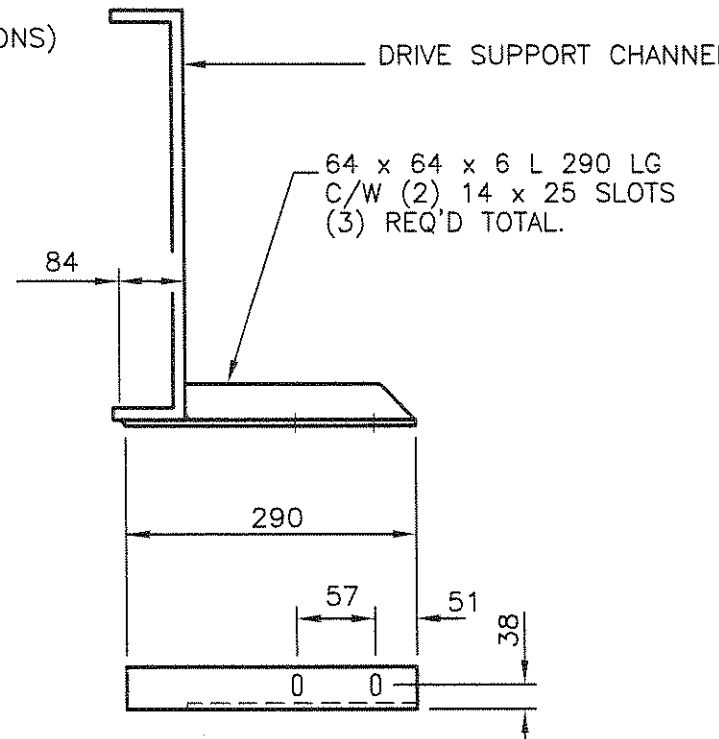
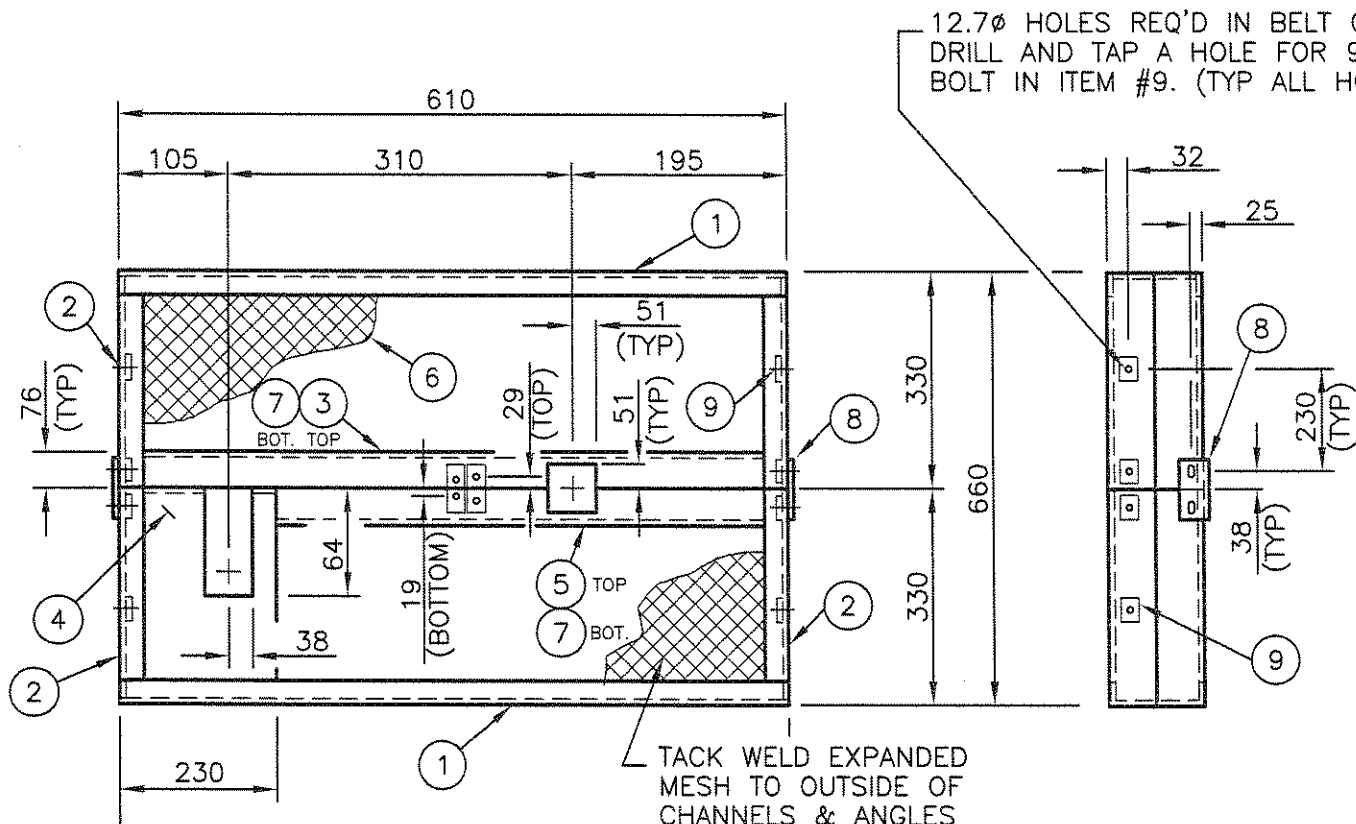


EXCHANGER INDUSTRIES
CALGARY, ALBERTA

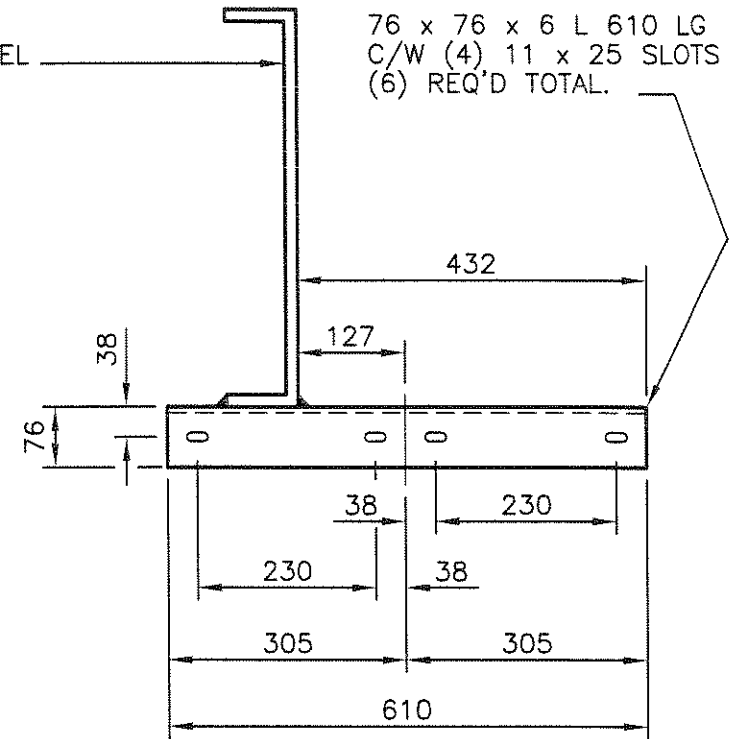
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DWN SF CKD BG

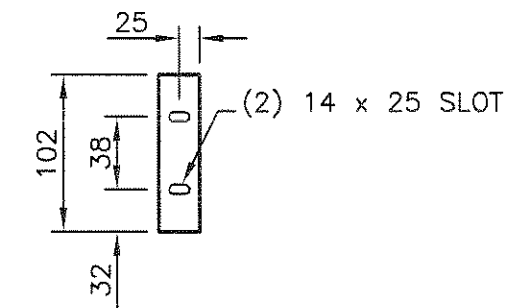
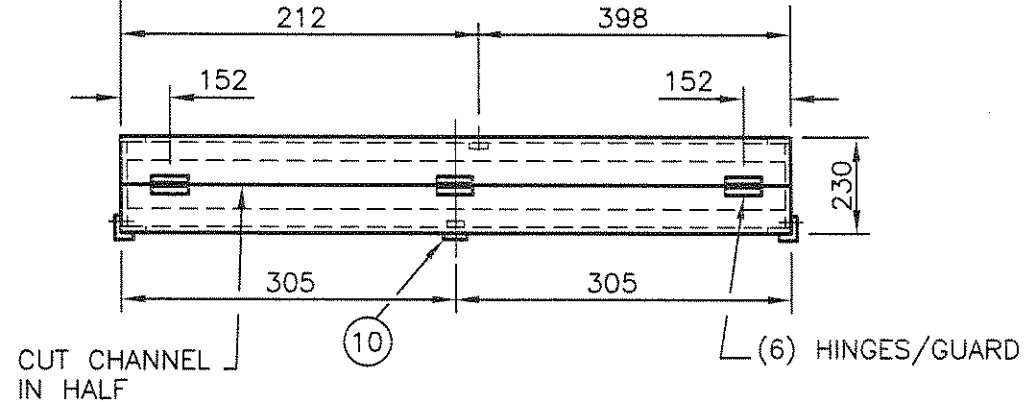
SHEET 7 OF 23



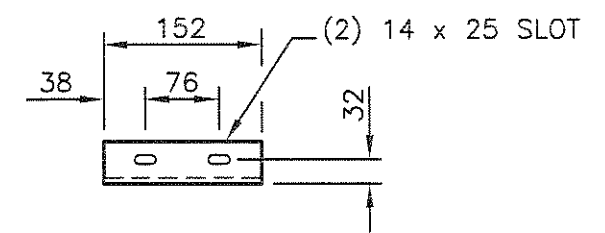
BELT GUARD CENTRE SUPPORT DETAIL



BELT GUARD SUPPORT ANGLE DETAIL



ITEM 10 DETAIL

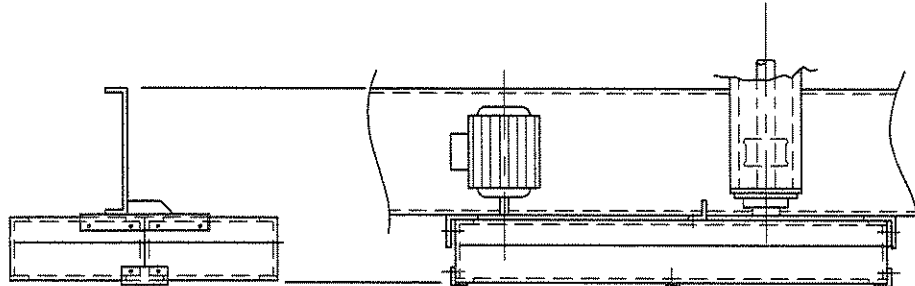


ITEM 8 DETAIL

*ITEM #3,4,5 REQ'D ON TOP SIDE ONLY
**ITEM #7 REQ'D ON BOTTOM SIDE ONLY

ITEM NO.	DESCRIPTION	LENGTH
10	3 51 x 6 FLAT	102
9	48 25 x 6 FLAT BAR	38
8	6 51 x 51 x 6 L	152
7	6** 25 x 25 x 3 L	558
6	12 0.75 - 3mm ALUMINUM EXPANDED MESH	305 x 584 CUT AS REQ'D
5	3* 76 x 25 x 3 L	356
4	3* 12 GA x 25 x 305 L	203
3	3* 76 x 25 x 3 L	558
2	12 #12 GA. PL. x 230 HIGH BRK'N CHAN. C/W 25 FLG.	327
1	6 #12 GA. PL. x 230 HIGH BRK'N CHAN. C/W 25 FLG.	610

CUT LIST FOR (3) THREE ASSEMBLIES



BELT GUARD MOUNTING

CERTIFIED AS BUILT

GENERAL NOTE:
ALL MATERIAL TO BE ALUMINUM

REVISIONS

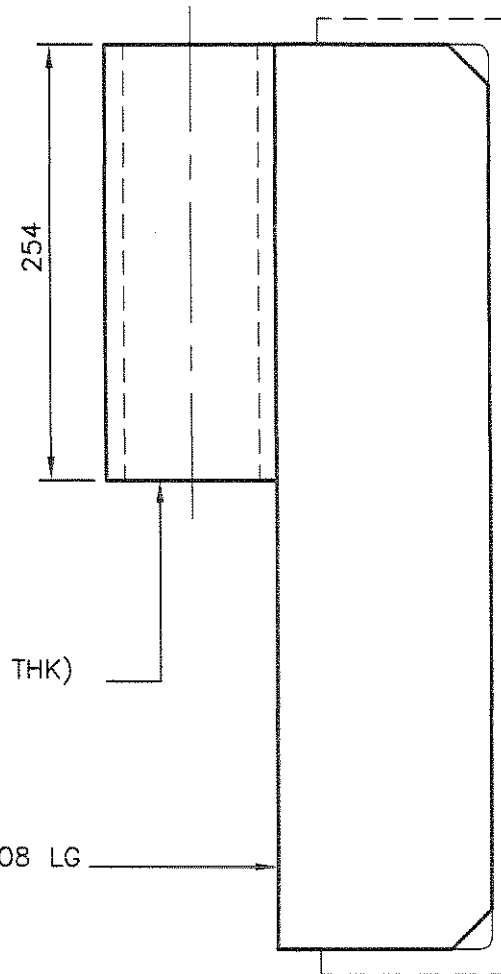
BELT GUARD DETAIL

DWN SF | CKD BG

EXCHANGER INDUSTRIES
CALGARY, ALBERTA

DWG NO. 08-5064A-C

SHEET 8 OF 23



DAVIT POCKET 76 -SCH STD (5.49 THK)
PIPE 254 LG MAT'L: SA-106-B

GUSSET PLATE
102 x 12.7 FLAT x 308 LG

DRIVE SUPPORT CHANNEL
SEE SHEET 9

NOTE: DAVIT POCKET TO BE WELDED
TO DRIVE SUPPORT CHANNEL
ON MOTOR CTR. LINE.

DAVIT POCKET DETAIL
(3) REQ'D

**CERTIFIED
AS BUILT**

GENERAL NOTES

) ALL STRUCTURAL STEEL IS G40.21-44W

REVISIONS

MOTOR DAVIT ARM DETAIL
(MAX LOAD 548 Kgs)

DWN SF CKD BG



EXCHANGER INDUSTRIES

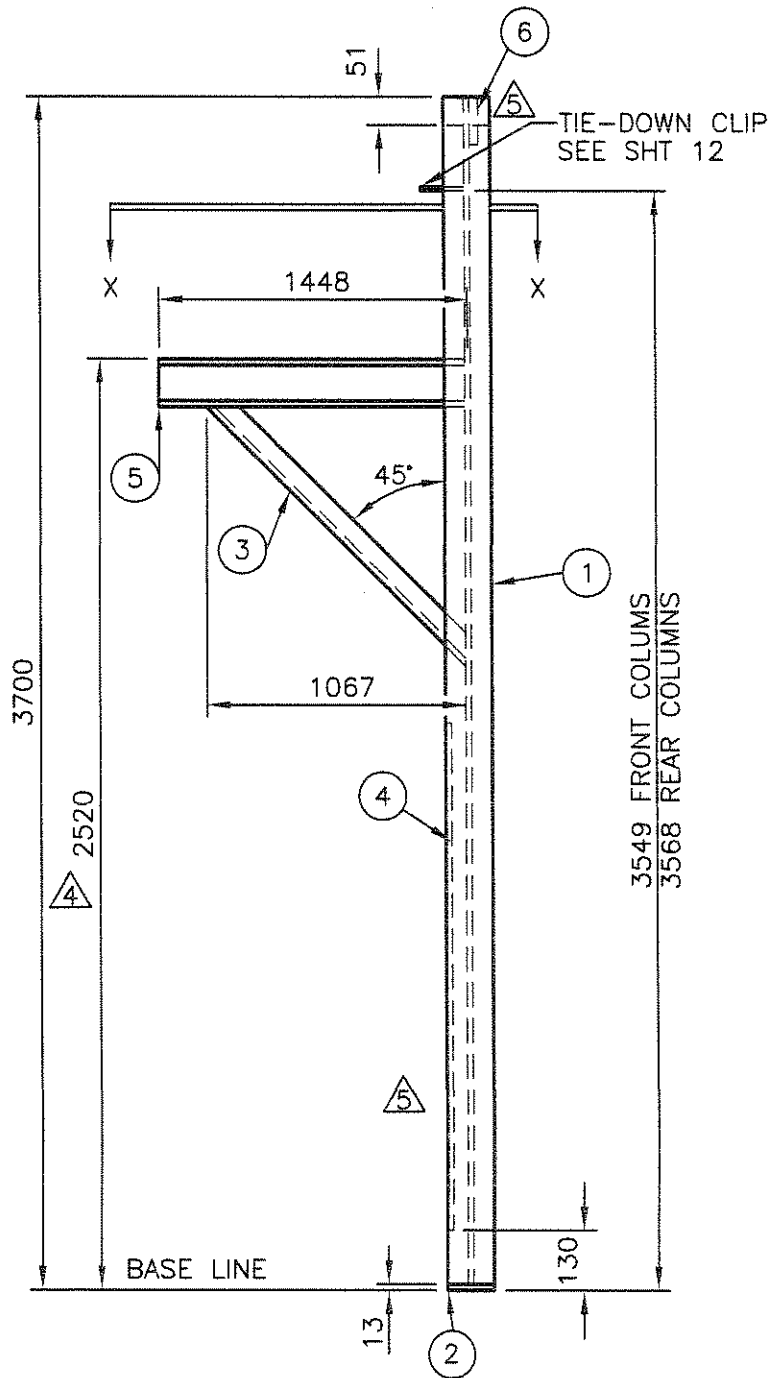
CALGARY, ALBERTA

DWG NO. 08-5064A-C

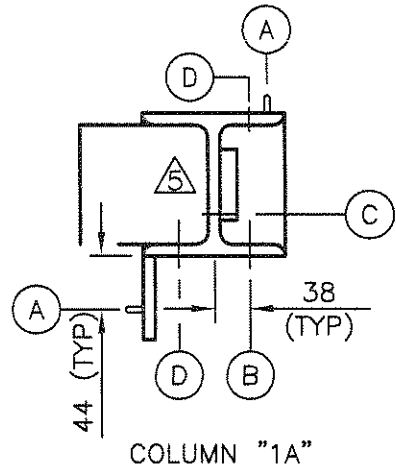
SHEET 9 OF 23

HT OF COLUMN 3700 \triangle

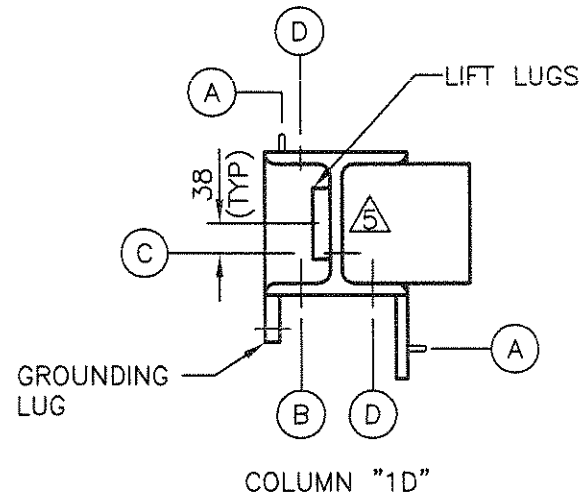
FRONT ORIENTATION



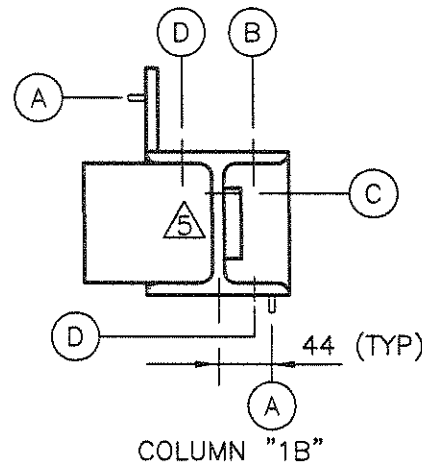
3549 FRONT COLUMNS
3568 REAR COLUMNS



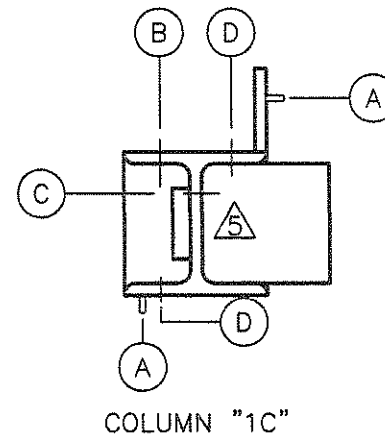
COLUMN "1A"



COLUMN "1D"

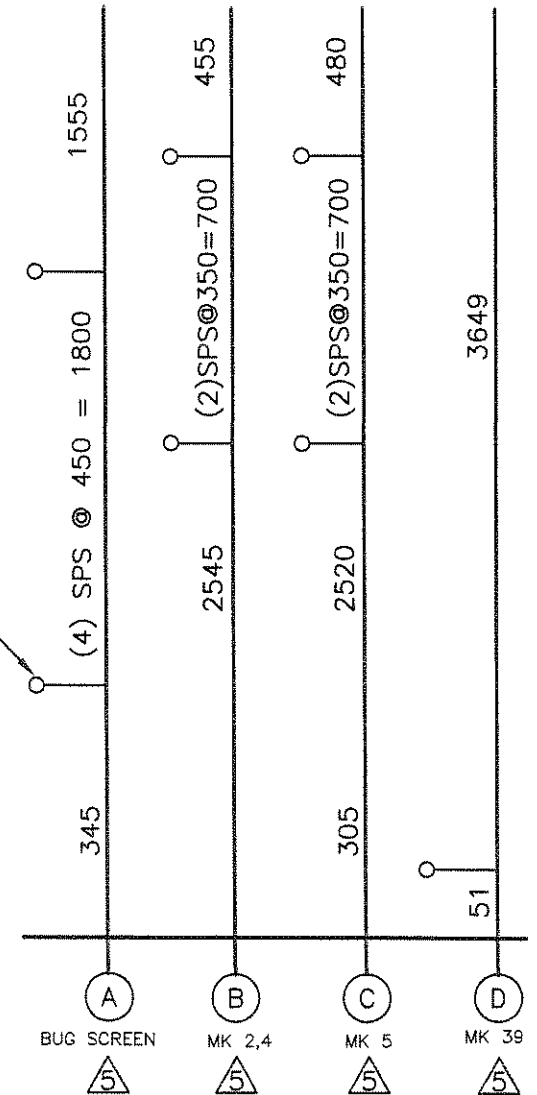


COLUMN "1B"

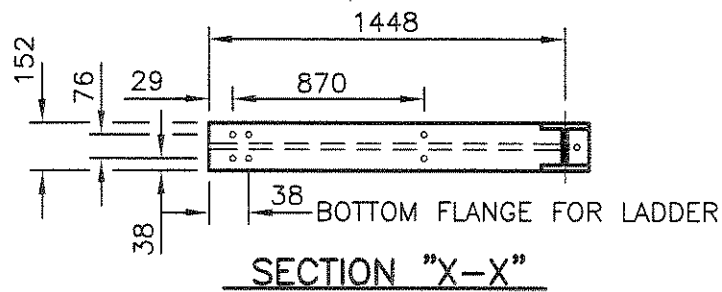


COLUMN "1C"

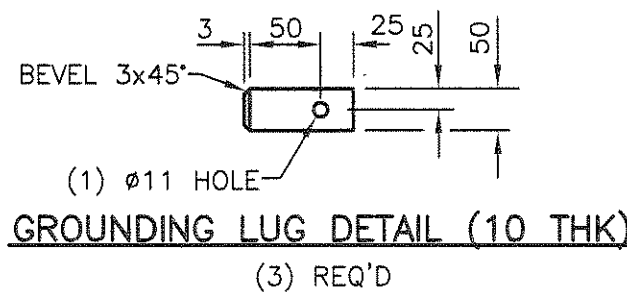
9.5 ϕ STUDS
FOR BUG SCREENS



**CERTIFIED
AS BUILT**



SECTION "X-X"



GROUNDING LUG DETAIL (10 THK)

(3) REQ'D

ITEM	NO.	DESCRIPTION	LENGTH
\triangle	6	102 x 127 x 12.7 PL C/W 38 ϕ HOLE	
	5	152 WF @ 23 kg/m	1445
\triangle	4	76 x 6 FLAT	2235
	3	64 x 64 x 6 L	1508
	2	152 x 152 x 12.7 PL	
\triangle	1	152 WF AT 23 kg/m	3687
CUT LIST FOR (3) THREE ASSEMBLIES			

GENERAL NOTES

- 1) ALL STRUCTURAL STEEL IS G40.21-50W & G40.21-44W
- 2) ALL HOLES ARE 17 ϕ
- 3) ALL SLOTS ARE 11 x 25

REVISIONS

- \triangle PER E.I. MARCH 20/2009 (BG)
- \triangle PER E.I. (AS BUILT) MAY 14/2009 (SF)

COLUMN DETAIL

ITEM NO. 1

DWN SF CKD BG



EXCHANGER INDUSTRIES

CALGARY, ALBERTA

DWG NO. 08-5064A-C

SHEET 10 OF 23

△ DRAWING DELETED

CERTIFIED
AS BUILT

GENERAL NOTES

1) ALL STRUCTURAL STEEL IS G40.21-44W

REVISIONS

△ PER E.I. (AS BUILT) MAY 14/09 (SF)

SPLIT COLUMN
CONNECTOR PLATE DETAIL



EXCHANGER INDUSTRIES

CALGARY, ALBERTA

DWG NO. 08-5064A-C

DWN SF CKD BG

SHEET 11 OF 23

DELETED

CERTIFIED
AS BUILT

REVISIONS

△ PER E.I. JUL 08/09 (SF)
(DRAWING BEING DELETED)

STANDARD SECTION TIE-DOWN

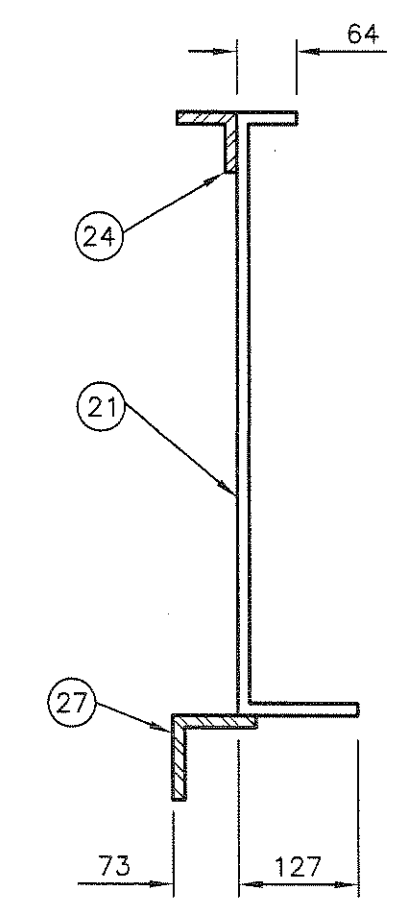
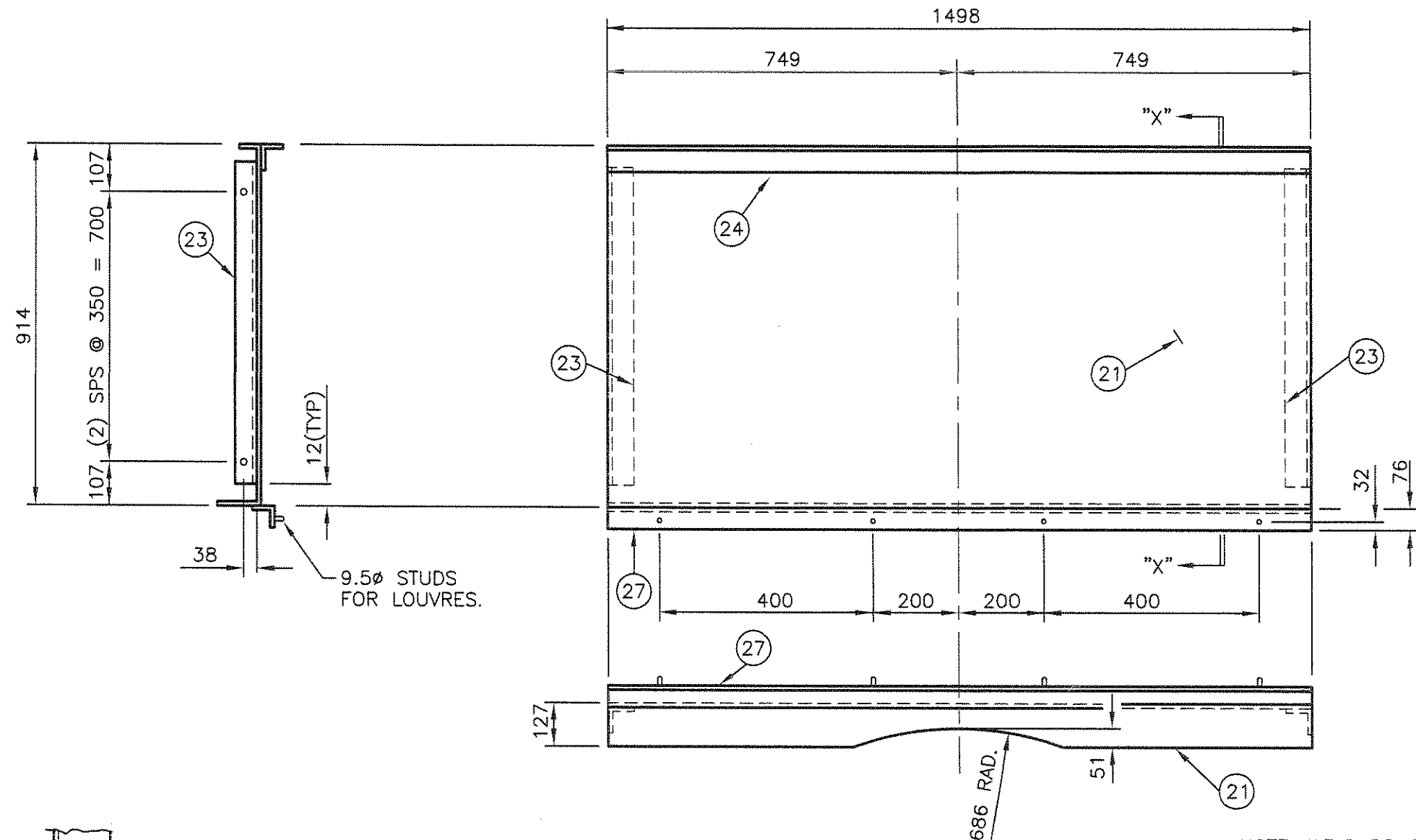


EXCHANGER INDUSTRIES
CALGARY, ALBERTA

DWG NO. 08-5064A-C

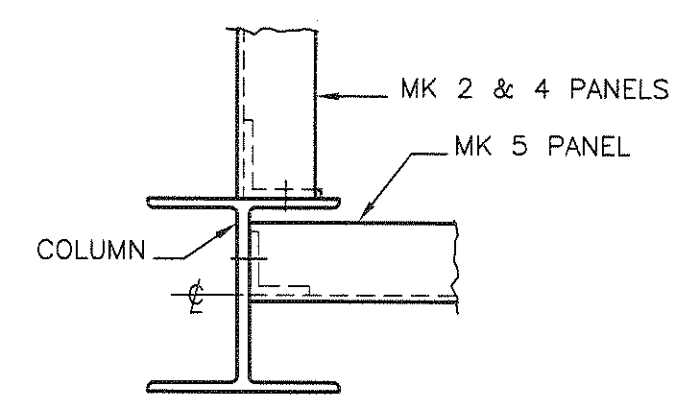
DWN SF CKD BG

SHEET 12 OF 23

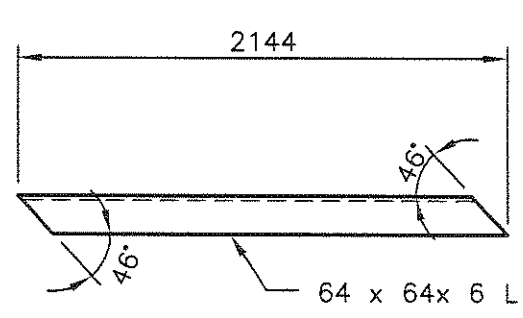


CERTIFIED AS BUILT

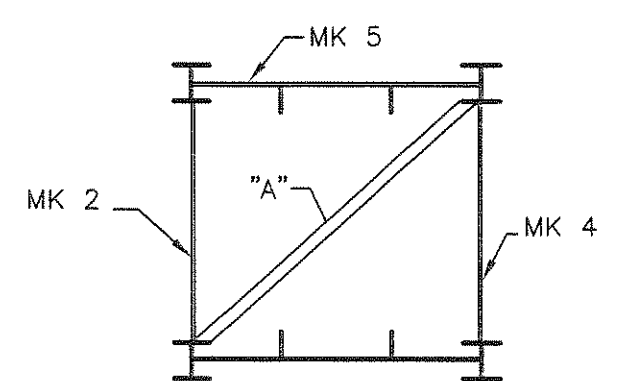
NOTE: WELD BRACE IN PLACE (25 DOWN FROM TOP OF PANELS) AFTER FAN DECKS ARE INSTALLED



PANEL LOCATION ON COLUMNS



BRACE "A"
(3) REQ'D



PLAN VIEW

ITEM	NO.	DESCRIPTION	LENGTH
27	6	76 x 76 x 6 L	1498
26	-	152 CHANNEL @ 12.2kg/m	-
25	-	51 x 12.7 FLAT BAR	-
24	6	64 x 64 x 6 L	1498
23	12	64 x 64 x 6 L	890
22	-	BRK'N [GA THK 64 FLG	-
21	6	914 BRK'N [10 GA THK 127/64 FLG	1498

CUT LIST FOR (6) SIX ASSEMBLIES

GENERAL NOTES
 1) ALL HOLES ARE 17Ø
 2) ALL SLOTS ARE 11 x 25
 3) ALL STRUCTURAL STEEL IS G40.21-44W & ASTM A1011
 4) WELD TOP AND BOTTOM FLANGES OF PANEL TO COLUMNS

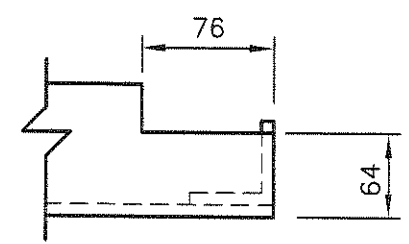
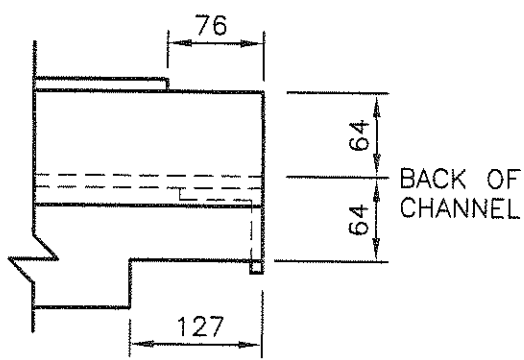
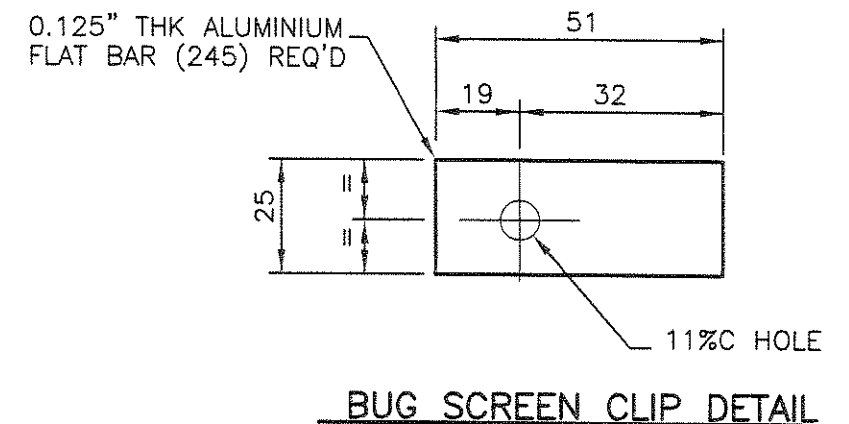
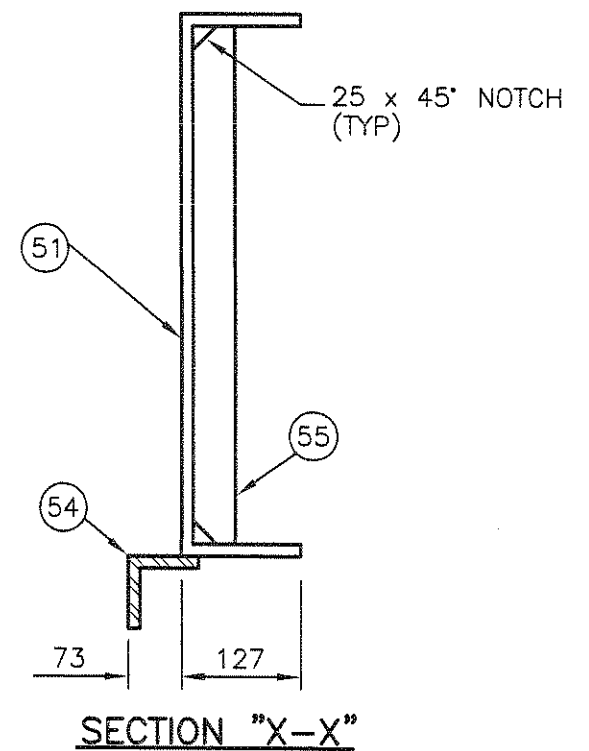
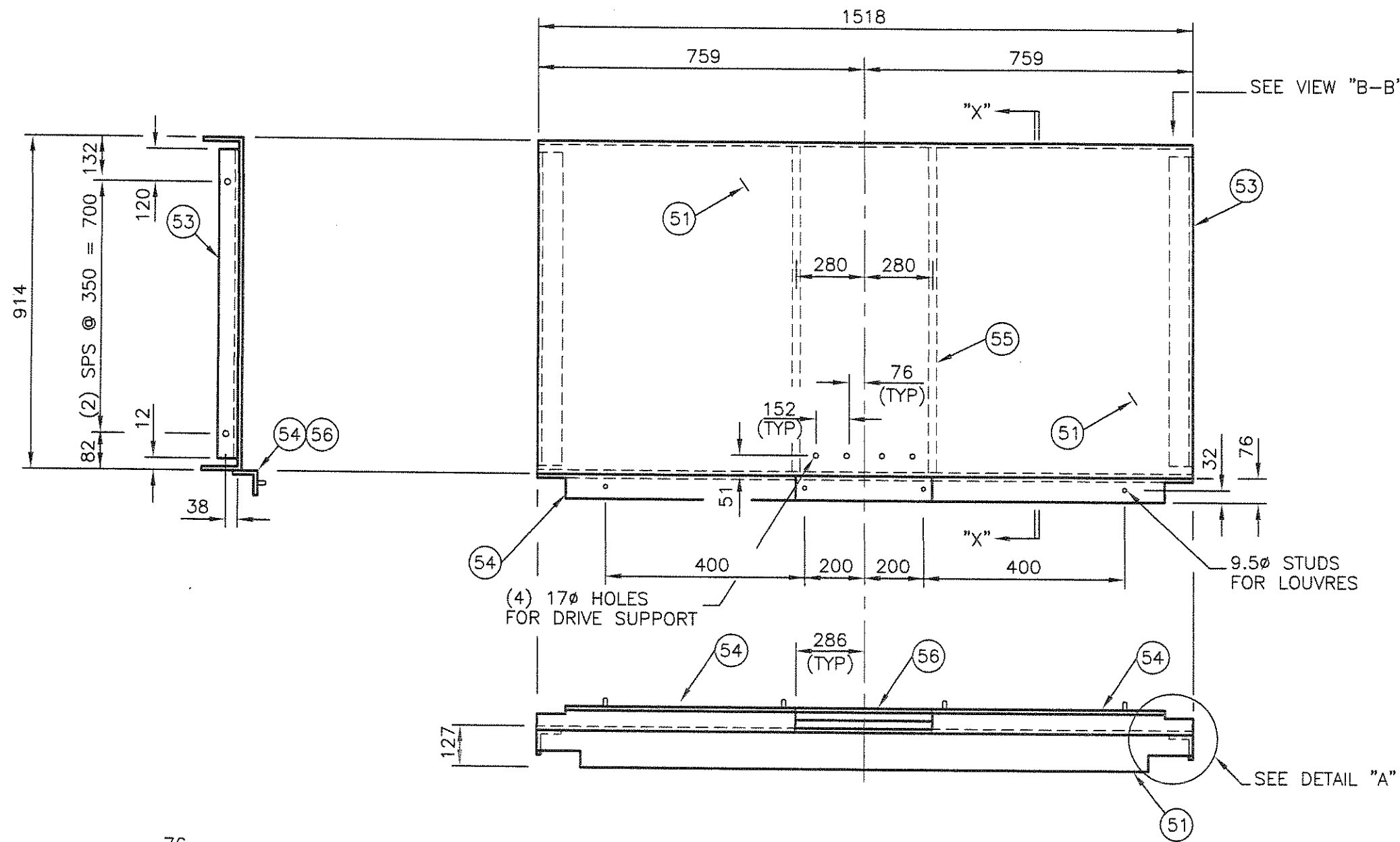
REVISIONS

CENTRE FRONT AND REAR PANELS
 ITEM NO 2 & 4


EXCHANGER INDUSTRIES
 CALGARY, ALBERTA

DWN SF | CKD BG |

DWG NO. 08-5064A-C
 SHEET 13 OF 23



**CERTIFIED
AS BUILT**

56	6	76 x 51 x 5 L	572
55	-	51 x 12.7 FLAT BAR	-
54	12	76 x 76 x 6 L	473
53	12	64 x 64 x 6 L	890
52	-	64 x 64 x 6 L	-
51	6	914 BRK'N CHANNEL 10 GA THK 127/152 FLG	1518
ITEM	NO.	DESCRIPTION	LENGTH

CUT LIST FOR (6) SIX ASSEMBLIES

GENERAL NOTES
 1) ALL HOLES ARE 17Ø
 2) ALL SLOTS ARE 11 x 25
 3) ALL STRUCTURAL STEEL IS G40.21-44W & ASTM A1011
 4) WELD TOP AND BOTTOM FLANGES OF PANEL TO COLUMNS

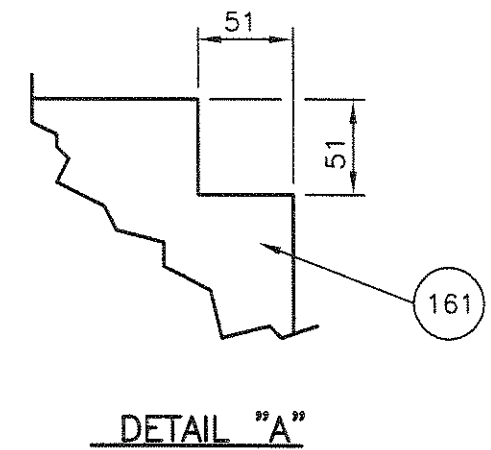
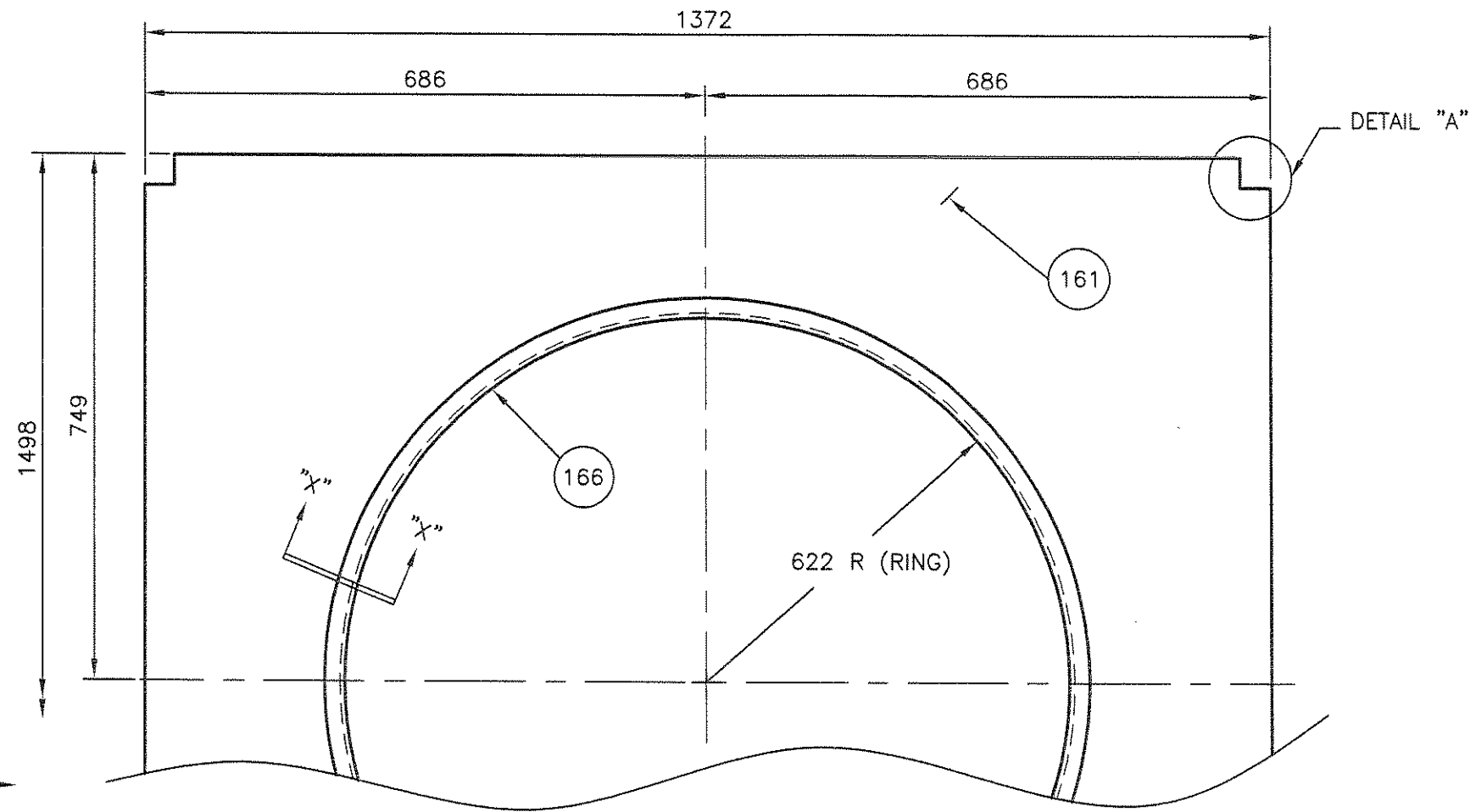
REVISIONS

CENTRE SIDE PANEL
 ITEM NO 5

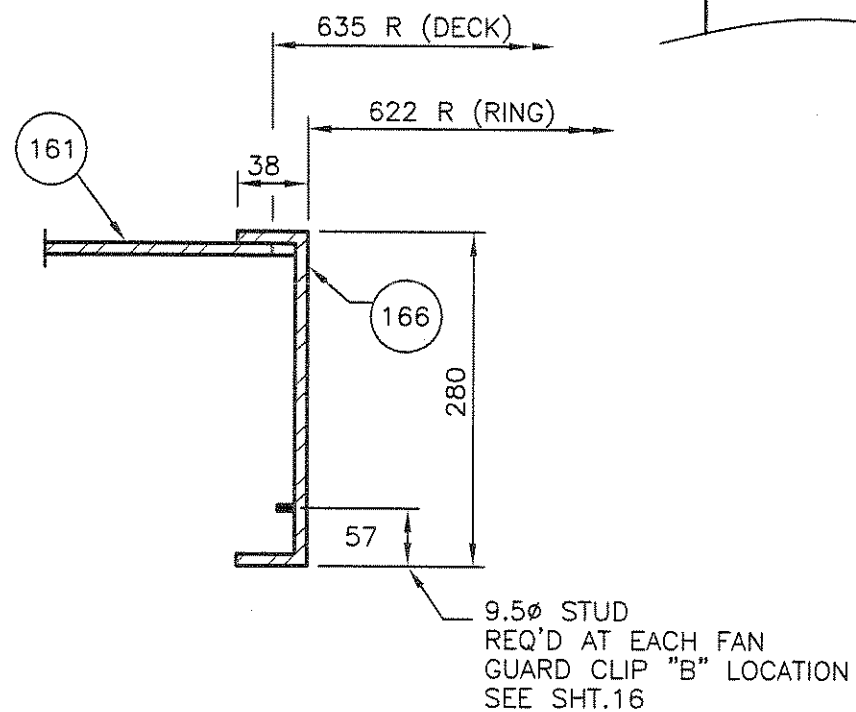

EXCHANGER INDUSTRIES
 CALGARY, ALBERTA

DWN SF CKD BG

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 SHFT 14 OF 23



**CERTIFIED
AS BUILT**



SECTION "X-X"

166	3	280 BRK'N CHANNEL 5 THK / 38 FLANGE	4028
165	-	38 x 6 FLAT BAR	-
164	-	51 x 51 x 6 L	-
163	-	51 x 51 x 6 L	-
162	-	51 x 51 x 6 L	-
161	3	12 GA. SHEET (1.2x2.4)	8.9 SQ. M
ITEM	NO.	DESCRIPTION	LENGTH
CUT LIST FOR (3) THREE WHOLE DECKS			

- GENERAL NOTES**
- 1) ALL STRUCTURAL STEEL IS G40.21-44W & ASTM A1011
 - 2) STITCH WELD FAN DECK TO FAN RING
 - 3) ALL SEAMS WELDED BOTH SIDES
 - 4) ALL HOLES ARE 11 DIA.

REVISIONS

FAN DECK DETAIL

ITEM NO. 16



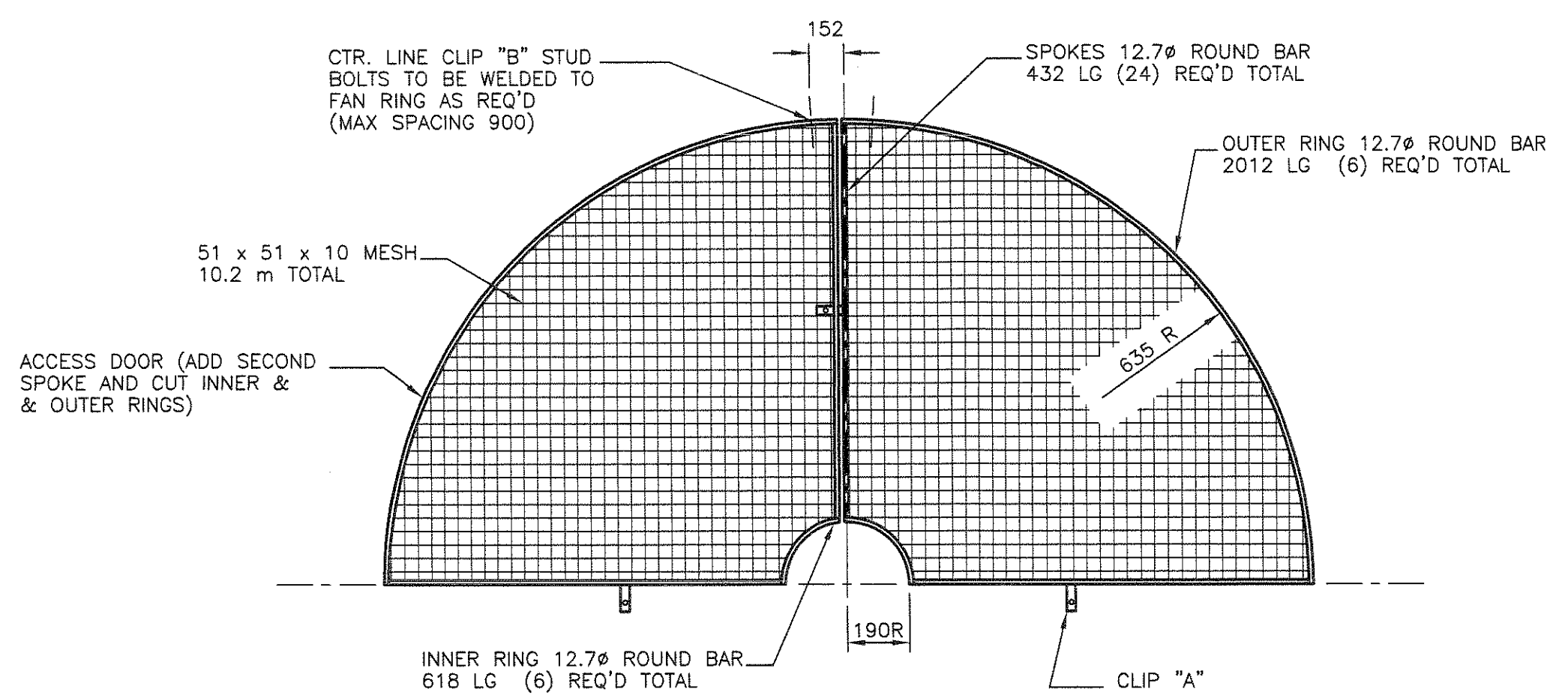
EXCHANGER INDUSTRIES
CALGARY, ALBERTA

DWG NO. 08-5064A-C

SHEET 15 OF 23

DWN SF CKD BG

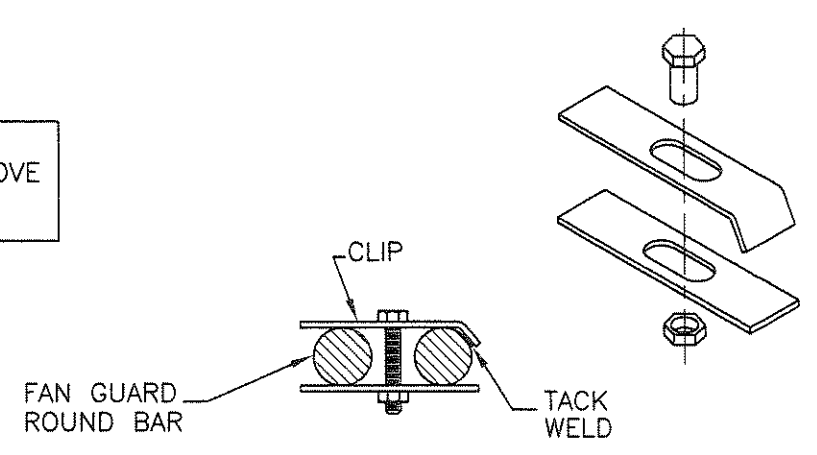
NOTE: ALL COMPONENTS TO BE GALVANIZED AFTER FABRICATION (CUT DOOR BEFORE GALVANIZING)



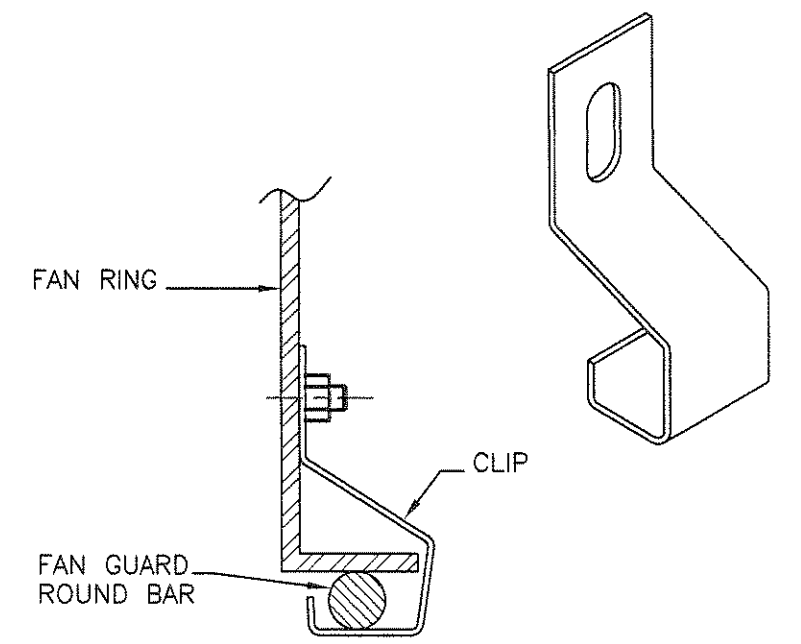
FAN GUARD DETAIL
(6) REQ'D

CERTIFIED
AS BUILT

NOTE: ACCESS DOORS SHOULD BE LOCATED ABOVE DAVIT ARM POCKET AND MOTOR.



CLIP "A" CONCEPT DRAWING




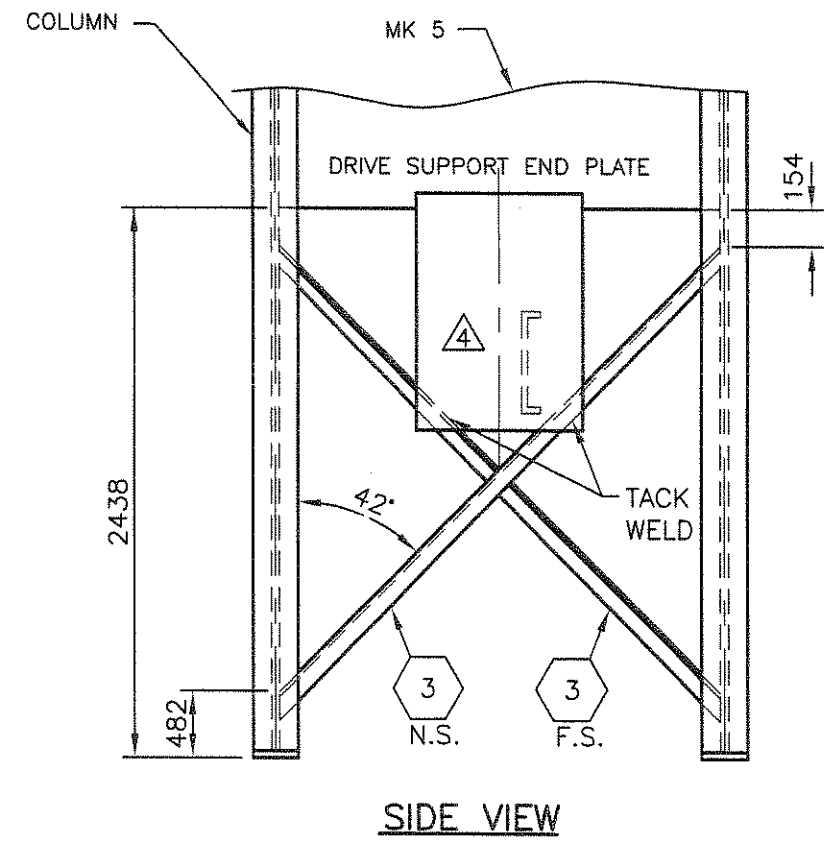
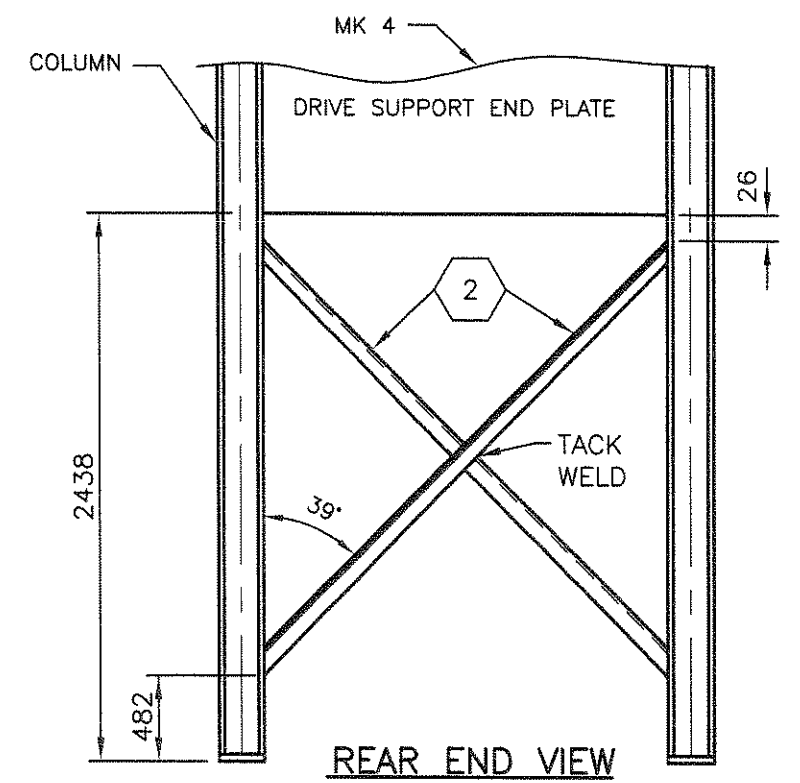
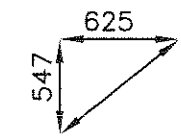
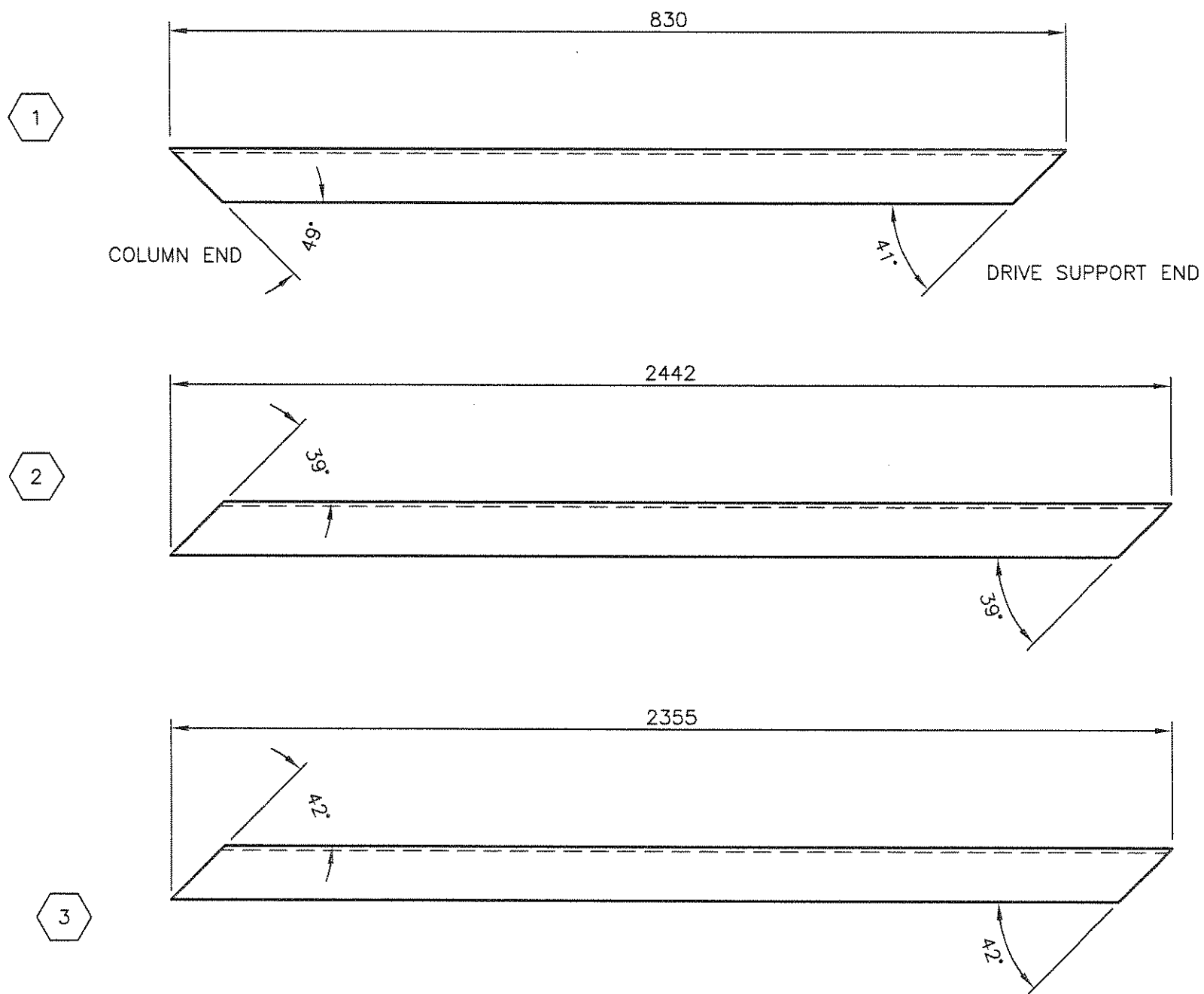
CLIP "B" CONCEPT DRAWING

GENERAL NOTES
1) ALL STRUCTURAL STEEL IS A-36 QUALITY OR BETTER

REVISIONS

FAN GUARD DETAIL
ITEM NO. 17
DWN SF CKD BG


EXCHANGER INDUSTRIES
CALGARY, ALBERTA
DWG NO. 08-5064A-C
SHEET 16 OF 23



**CERTIFIED
AS BUILT**

MATERIAL: 64 x 64 x 9.5 L

STD. NO.	NO. REQ'D	LOCATION
1	12	COLUMNS TO DRIVE SUPPORT
2	6	COLUMNS TO PANELS (MK 4)
3	6	COLUMN TO COLUMN

GENERAL NOTES
1) ALL STRUCTURAL STEEL IS G40.21-44W

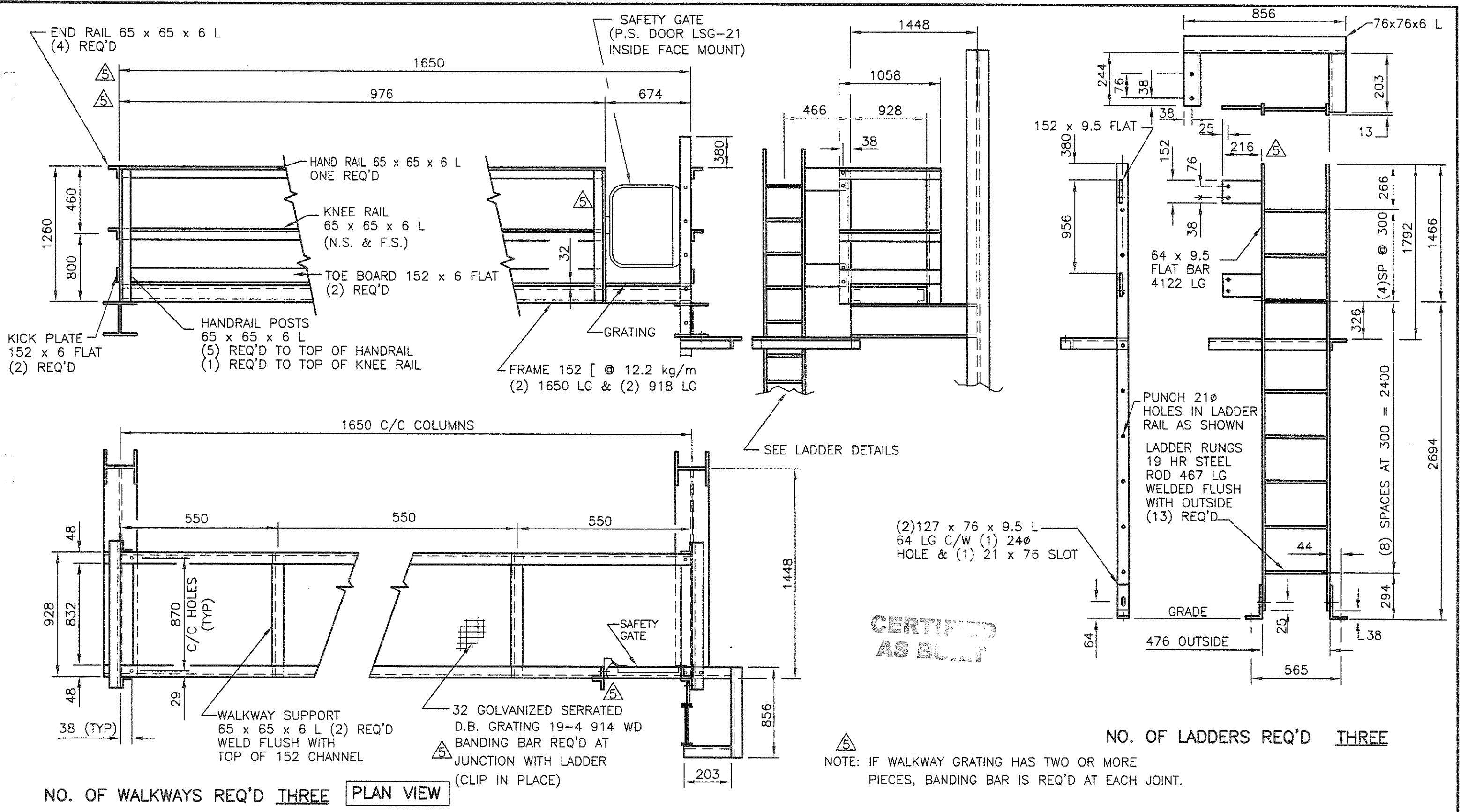
REVISIONS
4 PER E.I. MARCH 20/2009 (BG)

SWAY BRACE DETAIL
ITEM NO. 33

EXCHANGER INDUSTRIES
CALGARY, ALBERTA
DWG NO. 08-5064

DWN SF CKD BG

SHEET 17 OF 23



GENERAL NOTES

- ALL HOLES ARE 17φ
- ALL STRUCTURAL STEEL IS G40.21-44W
- BEARING BARS TO RUN LENGTHWISE

REVISIONS

⚠ PER CUST APPR'L MAY 14/09 (SF)

LADDER AND WALKWAY DETAIL

ITEM NO. 34 & 35

DWN SF CKD BG

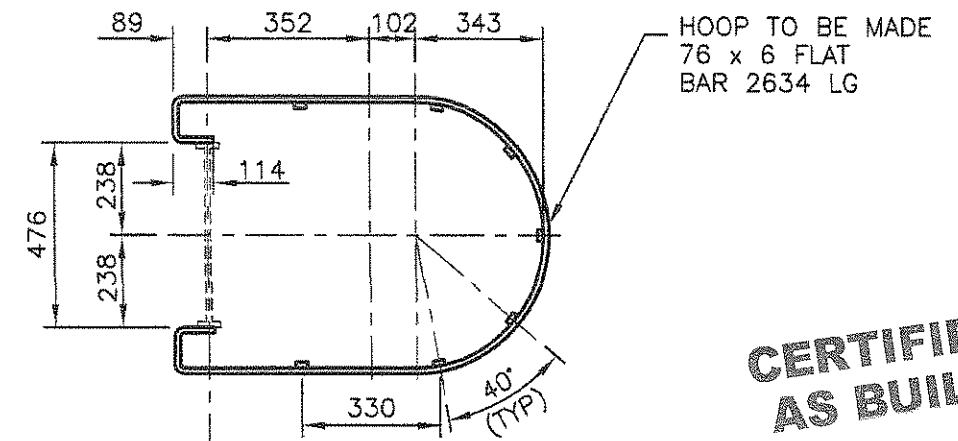
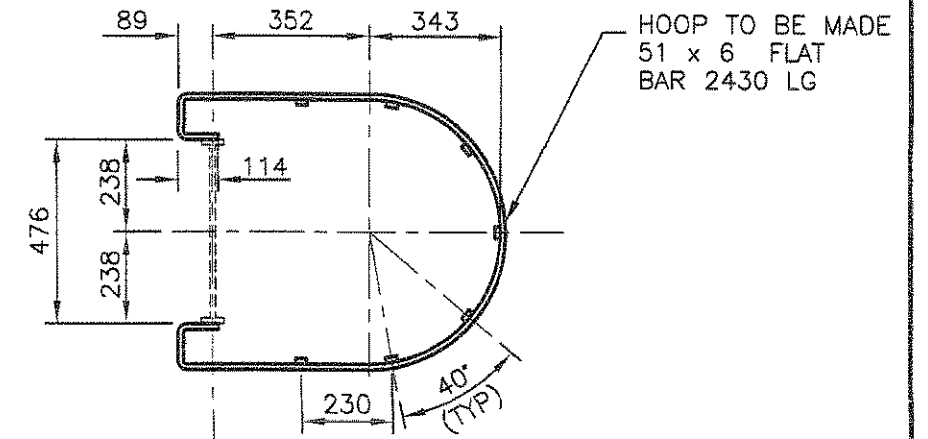
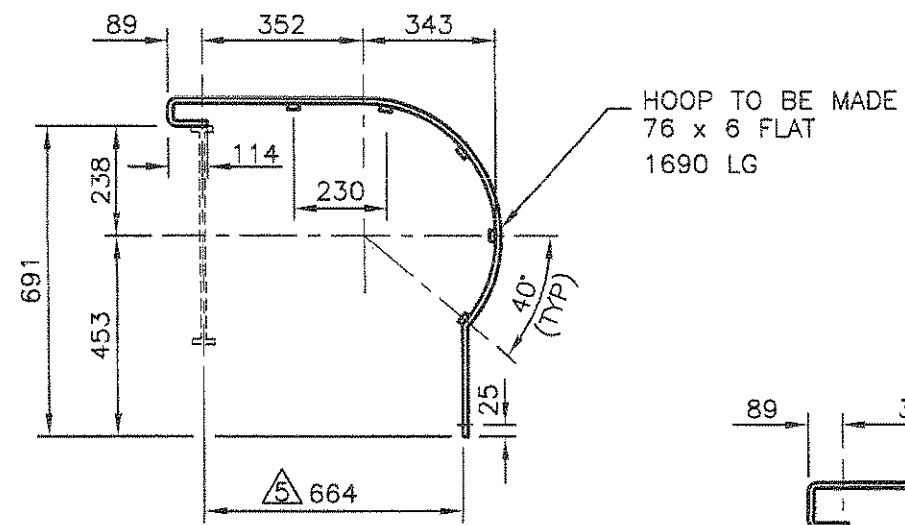
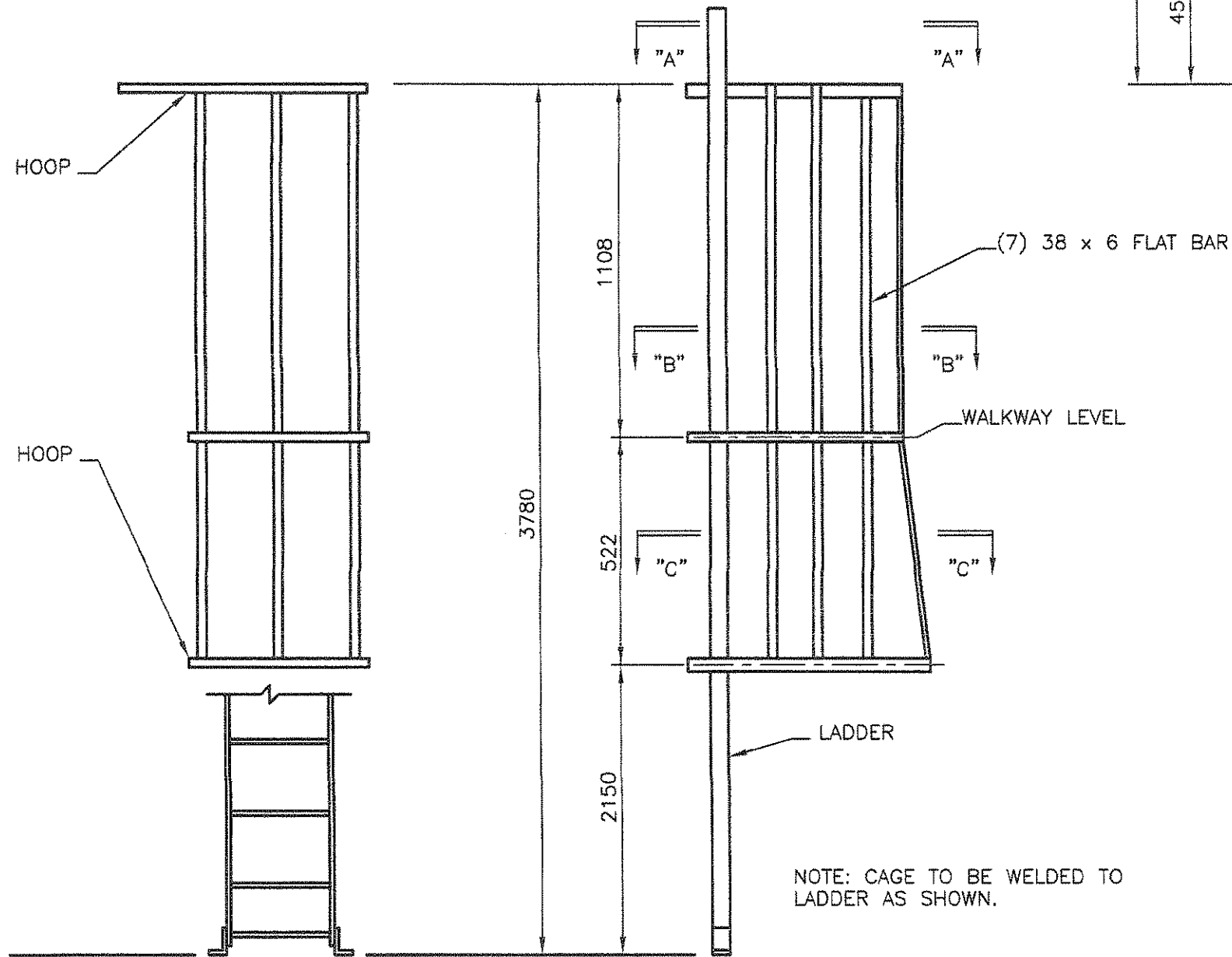
EXCHANGER INDUSTRIES
CALGARY, ALBERTA

DWG NO. 08-5064A-C

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MATERIAL REQ'D FOR ONE LADDER CAGE

76 x 6 FLAT	(1) REQ'D	1642 LG	⚠
51 x 6 FLAT	(1) REQ'D	2370 LG	⚠
76 x 6 FLAT	(1) REQ'D	2574 LG	⚠
38 x 6 FLAT	(5)/(2) REQ'D	1667/586 LG	
NO. OF CAGES REQ'D (3)			



NOTE: CAGE TO BE WELDED TO LADDER AS SHOWN.

CERTIFIED AS BUILT

GENERAL NOTES

- 1) ALL STRUCTURAL STEEL IS G40.21-44W
- 2) ALL HOLES ARE 17 ϕ

REVISIONS

⚠ PER CUST APPR'L MAY 14/09 (SF)

CAGE DETAIL



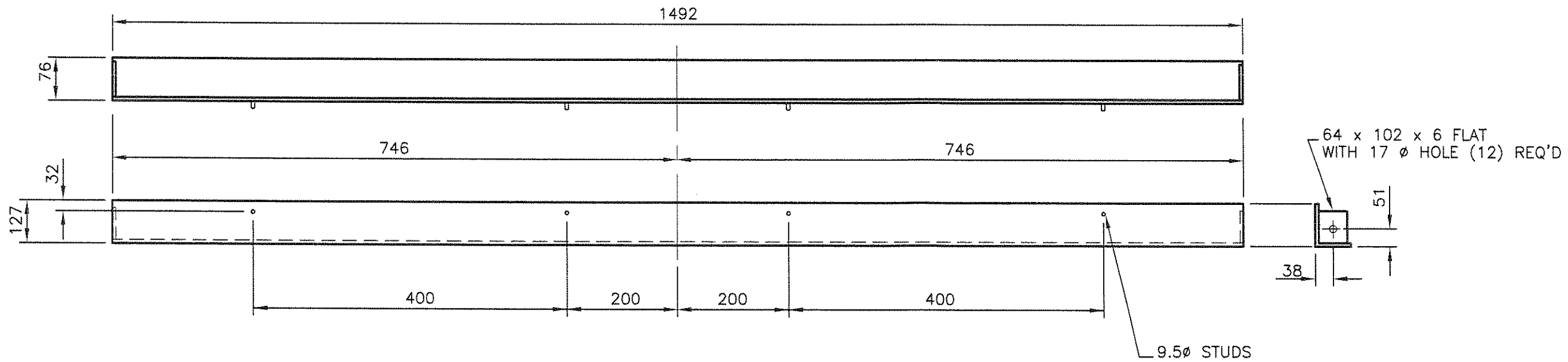
EXCHANGER INDUSTRIES

CALGARY, ALBERTA

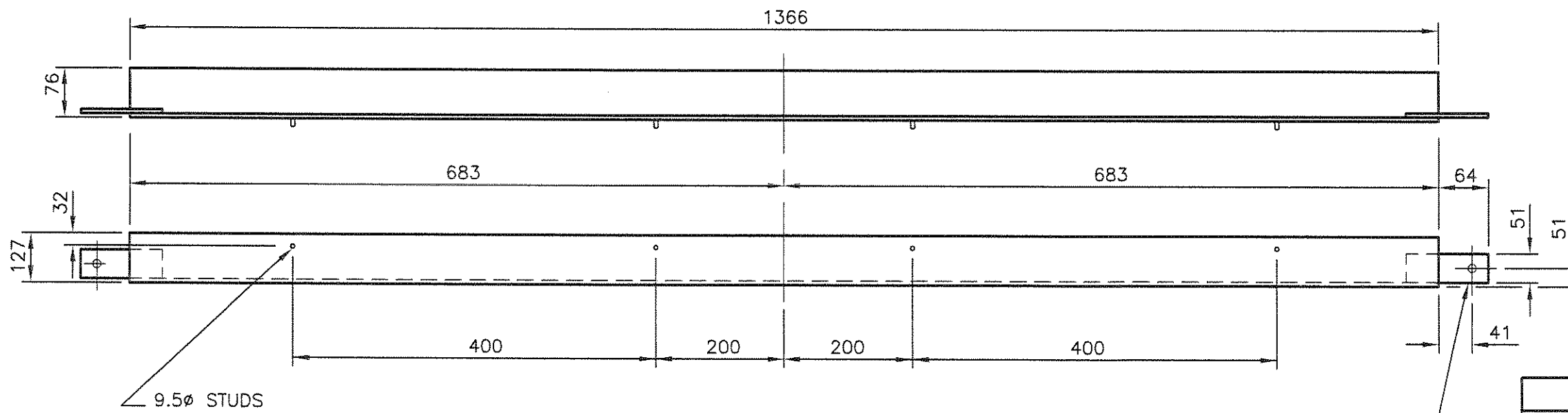
DWG NO. 08-5064A-C

SHEET 19 OF 23

DWN SF CKD BG



FRONT AND REAR BUG SCREEN SUPPORT
MK 39 NO. REQ'D (6)



SIDE BUG SCREENS SUPPORT
MK 39A NO. REQ'D (6)

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AS BUILT**

ITEM	NO.	DESCRIPTION	LENGTH
39A	6	127 x 76 x 6 L	1366
39	6	127 x 76 x 6 L	1492

CUT LIST FOR (3) ASSEMBLIES

GENERAL NOTES
1) ALL STRUCTURAL STEEL IS G40.21-44W
2) ALL SLOTS ARE 11 x 25

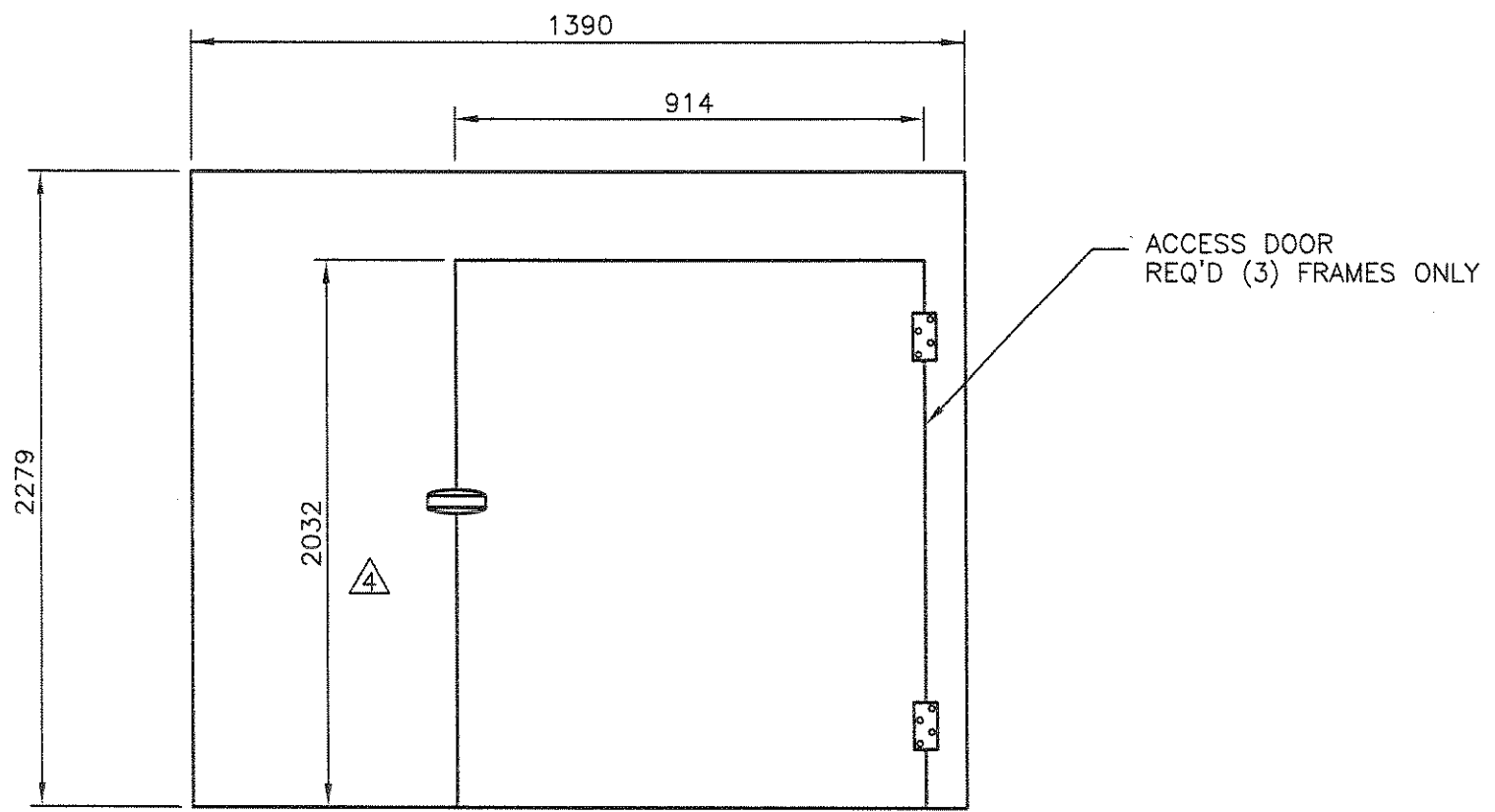
REVISIONS

BUG SCREEN SUPPORTS
ITEM NO. 39


EXCHANGER INDUSTRIES
 CALGARY, ALBERTA

DWN SF CKD BG

DWG NO. 08-5064A-C
SHEET 20 OF 23




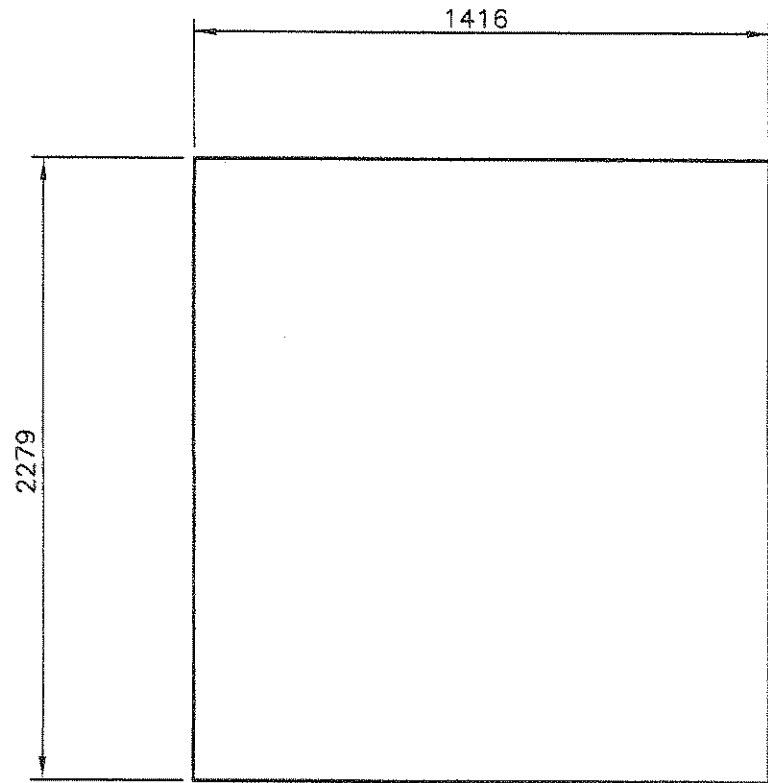
MK 22

(6) REQ'D TOTAL (3) AS SHOWN C/W DOOR (3) WITHOUT DOORS
 #8 x 0.016 GALV. MESH

NOTE: 1) ALL MATERIAL TO BE ALUMINUM
 2) BUG SCREEN TO SHIP LOOSE

**CERTIFIED
 AS BUILT**

REVISIONS 4 PER E.I. MARCH 20/2009 (BG)	FRONT/REAR BUG SCREEN	 EXCHANGER INDUSTRIES CALGARY, ALBERTA DWG NO. 08-5064A-C SHEET 21 OF 23
	DWN SF CKD BG	



**CERTIFIED
AS BUILT**

MK 24
(6) REQ'D TOTAL
8 x 0.016 GALV. MESH

NOTE: BUG SCREEN TO SHIP LOOSE

REVISIONS
1) ALL MATERIAL TO BE ALUMINUM

SIDE BUG SCREEN

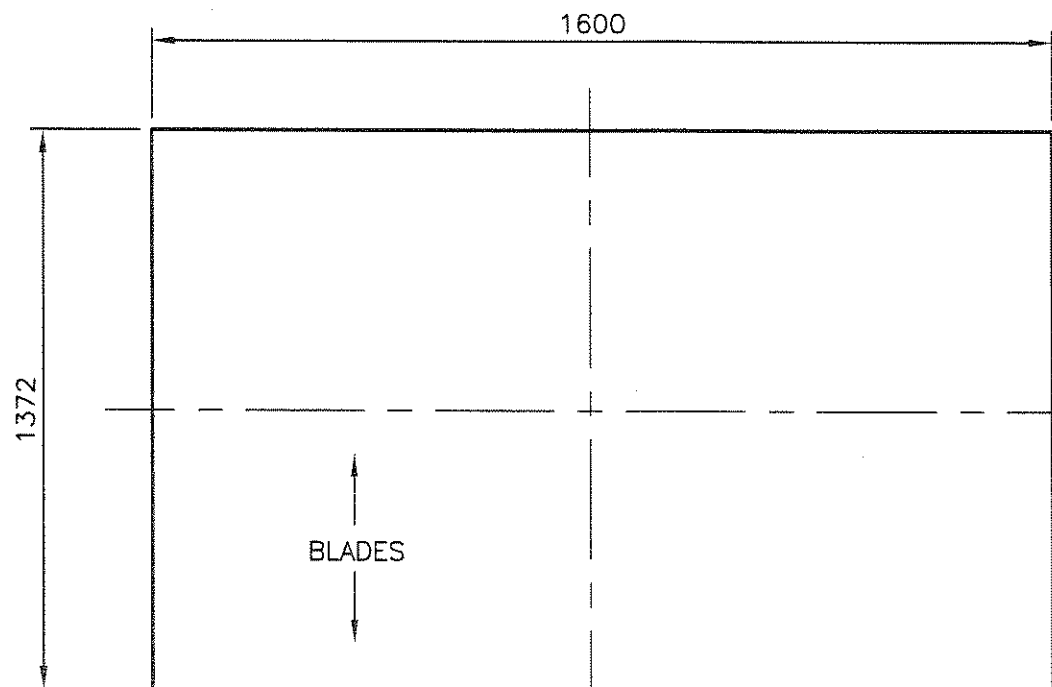


EXCHANGER INDUSTRIES
CALGARY, ALBERTA

DWG NO. 08-5064A-C

DWN SF CKD BG


SHEET 22 OF 23



MK 25
 (3) REQ'D TOTAL

NOTE: 1) LOUVRES TO API 661 5th EDITION.
 2) LOUVRES C/W HAIL SCREENS

**CERTIFIED
 AS BUILT**

REVISIONS	AUTOMATIC TOP LOUVRES				 EXCHANGER INDUSTRIES CALGARY, ALBERTA	
					DWG NO. 08-5064A-C	
	DWN	SF	CKD	BG	SHEET 23 OF 23	