### **STRUCTURAL NOTES** GENERAL REQUIREMENTS NOTES & DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER THESE GENERAL NOTES.

ALL MATERIALS AND WORK PERFORMED SHALL CONFORM TO THE REQUIREMENTS OF THE 2018 WISCONSIN COMMERCIAL BUILDING CODE INCLUDING LOCAL ORDINANCES, AMENDMENTS, AND EXCEPTIONS.

ALL MATERIAL SHALL BE FURNISHED AS SHOWN HEREIN UNLESS THE OWNER OR ENGINEER APPROVES EQUAL ALTERNATIVES.

NO CHANGES ARE TO BE MADE TO THESE PLANS WITHOUT THE KNOWLEDGE AND WRITTEN CONSENT OF UNITED GREENHOUSE SYSTEMS, INC. AND THE GREENHOUSE DESIGN ENGINEER.

THE CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURE INCLUDING, BUT NOT LIMITED TO BRACING AND SHORING. OBSERVATION VISITS TO SITE BY THE ENGINEER AND/OR THE ENGINEER'S REPRESENTATIVE(S) SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES OR THE CONSTRUCTION PROCEDURES.

### <u>DESIGN LOADS</u>

<u>00F:</u>	GROUND SNO SNOW IMPOR SNOW LOAD ROOF THERM	TANCE FA EXPOSURI	CTOR (Is E FACTOR	a) = 1.0 R (Ce) = 0.85	) = 1.0 (CONTINU	IOUSLY HEATE	
	ROOF SLOPE SLOPED ROO LIVE LOAD = DEAD LOAD ( DEAD MISC. MISC. IS	F/FLAT R 20 PSF (TOP CHO LOAD (BO	OOF SNC (REDUCI RD) = 3 TTOM CH	0.67 )W (Ps) BLE PEI 3 PSF IORD) =	= 16 F R ASCE7) : 5 PSF		_/)
<u>'IND:</u>	WIND SPEED WIND EXPOSI WIND RISK C ENCLOSURE INTERNAL PR COMPONENT	JRE = B ATEGORY CLASSIFIC. ESSURE (	= II ATION = COEFFICIE	ENCLOS	SED pi) = ±(		CC)
EISMIC:	EISMIC: SEISMIC RISK CATEGORY = II SEISMIC SITE CLASS = D SEISMIC DESIGN CATEGORY = A SEISMIC IMPORTANCE FACTOR (I) = 1.0 SPECTRA RESPONSE COEFF. Sds = 0.057 Sd1 = 0.058 FORCE RESISTING SYSTEM: - ORD. MOMENT FRAMES OF STEEL - STEEL CONC. BRACED FRAMES DESIGN BASE SHEAR (W × Cs) = W × 0.017 MAX ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE CHART CC						
CO	MPONENT &	& CLADI				. ,	
BUILD	ING AREA	1			<u>area sc</u> 25	50	
NTERIOF EDGE R CORNER NTERIOF EDGE W	OOF ROOF R WALL	-21 -37 -56 -25 -31	7.9 5.0 5.8	-3 -5 -2	1.0 3.9 1.2 4.4 9.0	$ \begin{array}{r} -20.4 \\ -30.9 \\ -47.6 \\ -23.3 \\ -26.9 \\ \end{array} $	
edge z	one strip wi	DTH (FT)	4.2			1	
	WISCONSIN					REQUIREMENTS	3
	UM COMPRES		ENGTH OF = 3,000		RETE (f'c	) AT 28 DAYS	S SHALL BE:
	AL STEEL (VAL STEEL TUBING			000 PSI	(ASTM A	500, GRADE	C)
STEEL	_ TUBING (SQ					LIED TESTS) LIED TESTS)	
4"H	AT TOP CHOR			000 PSI		1011, GRADE	50)
3" H/	AT PURLINS/G	IRTS	Fy=55,C	00 PSI	(ASTM A	1011, GRADE	55)
WELD	CTURAL PLATE ING ELECTROE E 5 BOLTS	DES		00 PSI (AWS D1 ,000 PS	.1)	572, GRADE 5	50)
BOLTS	ARE TO BE	GRADE 5	OR AST	M A325	(SNUG-	TIGHT INSTALL	ATION).
E: BRACING ASSEMBLIES MUST HAVE A SAFE WORKING LOAD OF HALF THE							

RESPECTIVE CABLE BREAKING STRENGTHS SHOWN BELOW 3/16" DIAM. BRACING CABLE-7X19 STRAND BREAKING STR. = 4200 LBS 1/4" DIAM. BRACING CABLE-7X19 STRAND BREAKING STR. = 7000 LBS 3/8" DIAM. BRACING CABLE-7X19 STRAND BREAKING STR. = 14400 LBS (SEE PLANS FOR BRACE CABLE SIZES AND LOCATIONS)

ALL COLD-FORMED MEMBERS ARE TO BE GALVANIZED SHEET WITH MIN. MATERIAL THICKNESSES OF; 18 GA. = .0516, 16 GA. = .0635, 14 GA. = .0785, 12 GA. = .1084

GREENHOUSE ROOF AND WALL CLADDING (PANEL) IS NOT A DESIGNED ELEMENT. ANY MAINTENANCE MUST BE PERFORMED IN A MANNER THAT DOES NOT SUBJECT CLADDING TO THE CONCENTRATED LOAD OF A MAINTENANCE WORKER.

UNITED GREENHOUSE SYSTEMS, INC. IS A COMPONENT METAL BUILDING/GREENHOUSE MANUFACTURER AND SUPPLIER, AND 4TH DIMENSION DESIGN, INC. IS THE STRUCTURAL ENGINEER FOR THE STEEL STRUCTURE, NEITHER OF WHICH ARE TO BE CONSIDERED TH PROJECT DESIGN PROFESSIONAL OF RECORD. THE DESIGN OF ANY MATERIALS NOT DIRECTLY SUPPLIED BY UNITED GREENHOUSE SYSTEMS, INC. IS NOT PROVIDED UNDER THE SCOPE OF THIS CONTRACT.

UNITED GREENHOUSE SYSTEMS AND 4TH DIMENSION DESIGN TAKE NO RESPONSIBILITY FOR THE EVALUATION OF ANY EXISTING OR ADJACENT STRUCTURES WHOSE CONDITION(S) MAY BE AFFECTED IN ANY WAY BY THE PRESENCE OF THE GREENHOUSE.

DESIGN METHOD

DESI ТН

STF

BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-14)

MANUAL OF STEEL CONSTRUCTION, ALLOWABLE STRESS DESIGN

(AISC 360-10)

COLD FORMED STEEL DESIGN MANUAL (AISI S100-12)

STRUCTURAL STEEL

ALL STRUCTURAL STEEL SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF ASTM AND SHALL BE FABRICATED AND ERECTED ACCORDING TO AISC/AISI SPECIFICATIONS. WELDING SHALL CONFORM TO THE LATEST EDITION OF AWS D1.1. ALL WELDING SHALL

BE PERFORMED BY APPROVED CERTIFIED WELDERS. NO HOLES, OTHER THAN THOSE SPECIFICALLY DETAILED, SHALL BE ALLOWED THROUGH STRUCTURAL STEEL MEMBERS.

ERECTION OF STEEL MEMBERS SHALL NOT COMMENCE UNTIL ALL CONCRETE/MASONRY ELEMENTS HAVE ATTAINED AT LEAST 75% OF THEIR INTENDED MINIMUM COMPRESSIVE STRENGTH.

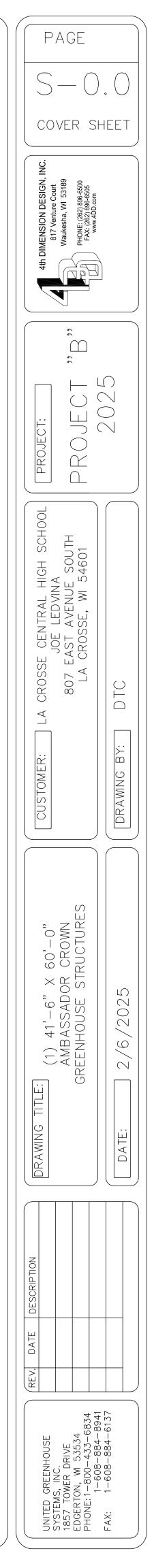
# LA CROSSE CENTRAL HIGH SCHOOL **JOE LEDVINA 807 EAST AVENUE SOUTH LA CROSSE, WI 54601**

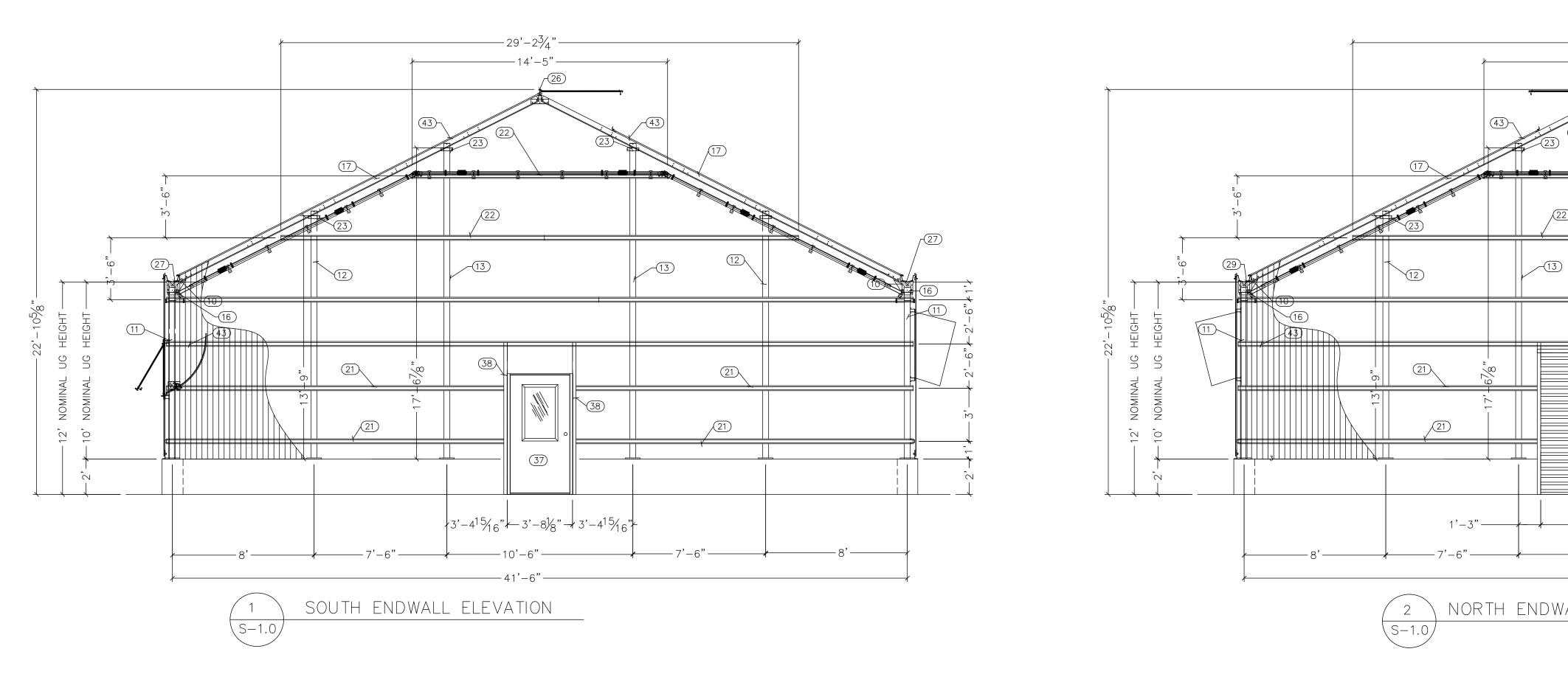
# GREENHOUSE

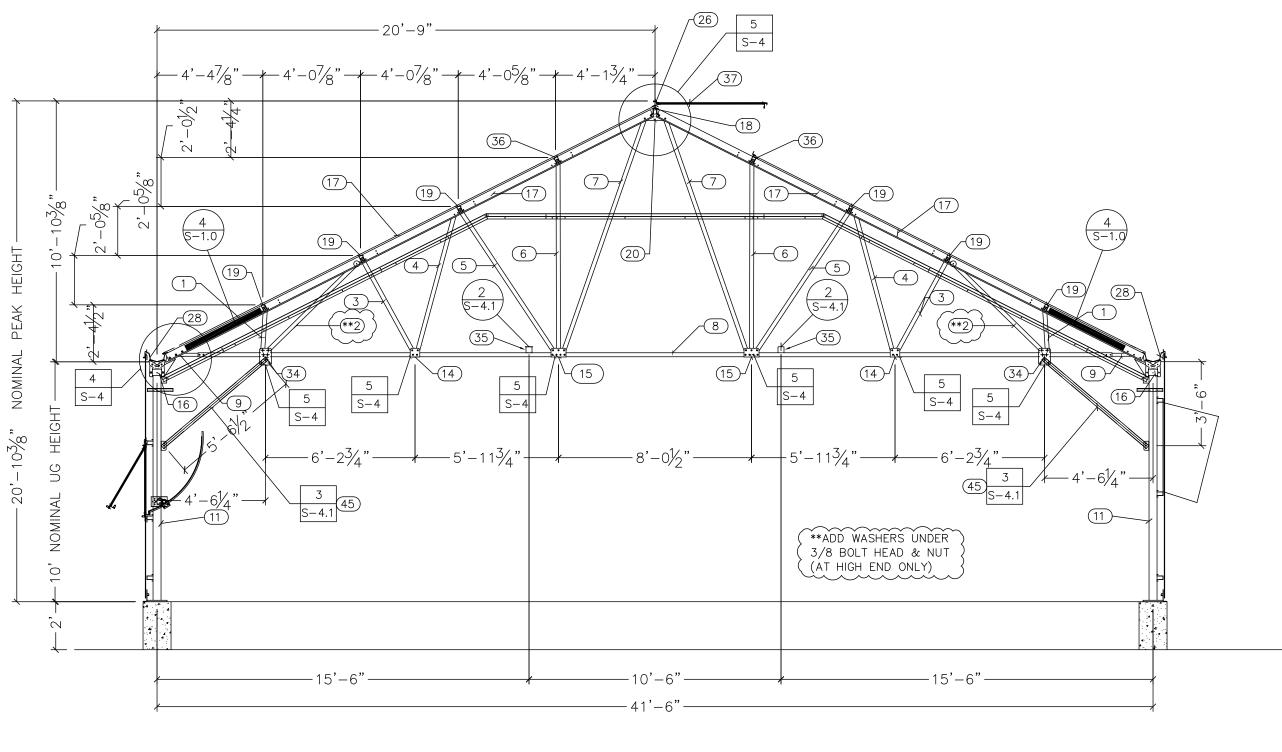
DRAWING SCHEDULE

PAGE NUMBER	DESCRIPTION
S-0.0	COVER SHEET
S-1.0	ELEVATIONS & TRUSS
S-2.0	ELEVATIONS
S-3.0	ROOF FRAMING PLAN
S-3.1	COLUMN PLAN
S-4.0	2D DETAILS
S-4.1	2D DETAILS
S-5.0	3D DETAILS
S-6.0	VENT ASSEMBLY DET
S-6.1	60' ROOF VENT ASSEI
S-6.2	48' SIDE WALL VENT A
S-7.0	FRAMED OPENING DE
S-7.2	SINGLE SWING DOOR
S-8.0	GLAZING DETAILS
S-9.0	HEATER HANGING DE

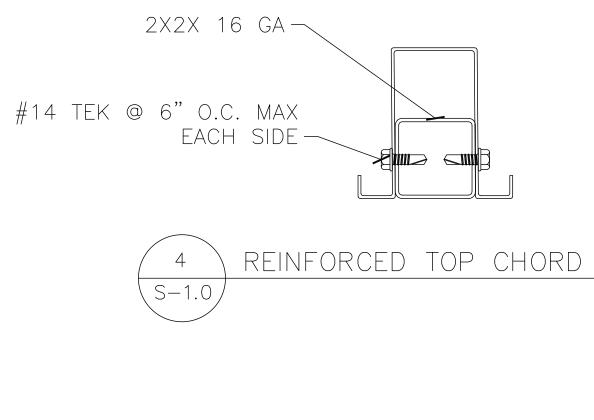






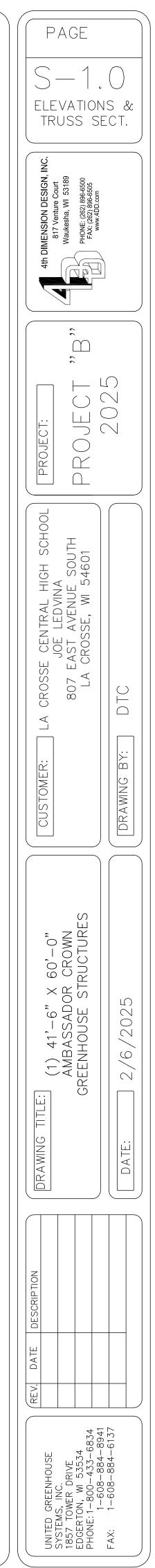


3 TRUSS SECTION S-1.0

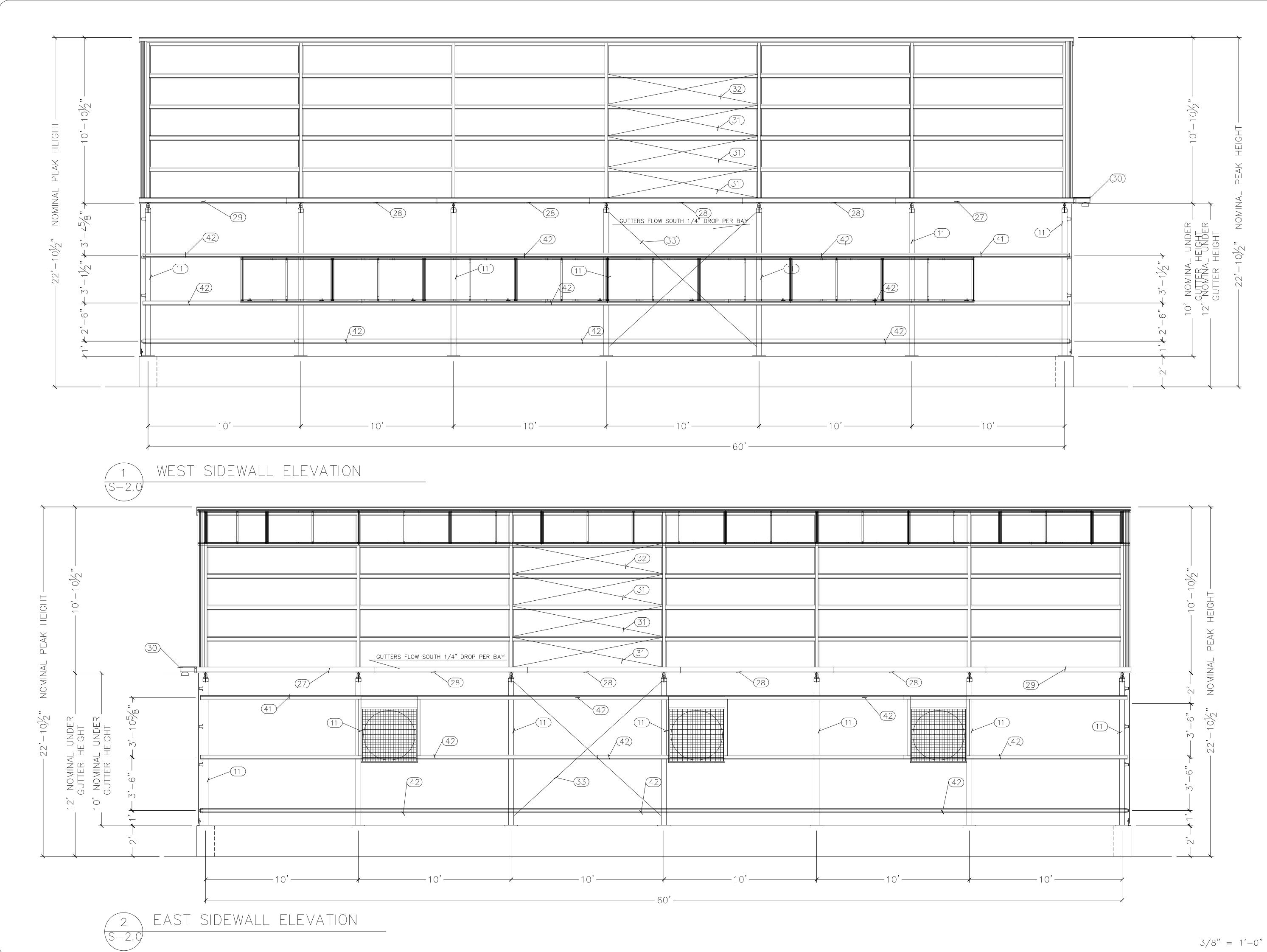


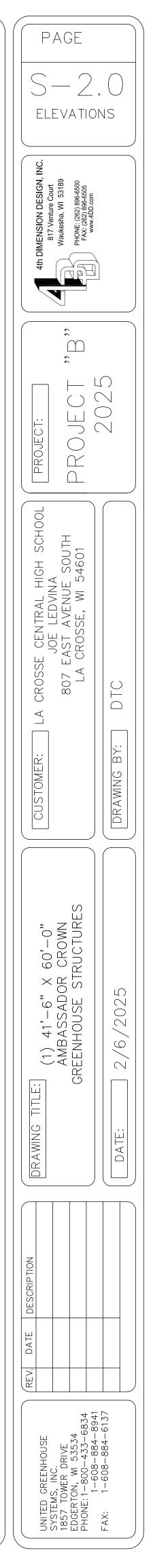
(22)	(43)	
22)		г(29)
)		
	$2'-1^{15}/16"$ $3'$	
— 41'-6"—— VALL ELEVATI		
VALL LLLVAII		
	DESCRIPTION	DADT //
1 2 3	FILL TUBE 2" X 16GA. X 20-1/4 HC FILL TUBE 2" X 16GA. X 61-11/16 HC	PART # F0S3A020.25 F0S3A061.87 F0S3A050.75
5 4 5	FILL       TUBE       2"       X       16GA.       X       50-3/4       HC         FILL       TUBE       2"       X       16GA.       X       70-1/4       HC         FILL       TUBE       2"       X       16GA.       X       82-11/4       HC	F0S3A070.25 F0S3A082.87
6 7	FILL TUBE 2" X 16GA. X 93-3/16 HC FILL TUBE 2" X 12GA. X 122 HC	F0S3A093.19 F4S3A122
8 9	BOTTOM CHORD 2" X 457" X 12GA HEEL PL. 10 GA. W/10GA. GUSSET AC	COS3D457
10 11	HEEL PL. 10 GA. W/10GA. GUSSET EW COL TUBE 4" SQ. X 152" X 11GA.	C9542152
12 13	COL TUBE 4" SQ. X 192" X 13GA. COL TUBE 4" SQ. X 244" X 13GA.	C9542192 C9542244
14	BRACKET LOWER CHORD 2 HOLE	S0001982
15 16	BRACKET LOWER CHORD 3 HOLE GUTTER BRACKET FOR 4" SQ.	S0001980 C0153215
17 18	AC 41'6" TOP CHORD X 16GA. PURLIN RIDGE 9-1/2 X16 GA X 69.375	C012D271.5 P009D069.375R
19	PURLIN 9-1/2 X 69.375 X 16 GA	P009D069.375
20 21	SPLICE CHEVRON ASSY 6/12 GIRT 9-1/2 X 260 X 18GA.	S0000120 G0950260
22	GIRT 9-1/2 X 178.5 X 18GA. 4" SQ. COLUMN TO TOP CHORD	G0950178.5 B0004000
24	+ SQ. CULUMIN IU IUP CHUKU	
25 26	ALUMINUM RIDGE BAR 6/12 (144,151)	A8410144(151)
	DESCRIPTION	DADT #
	DESCRIPTION GUTTER CR 14GA START FOR 10'	PART # TGCR1412145.75

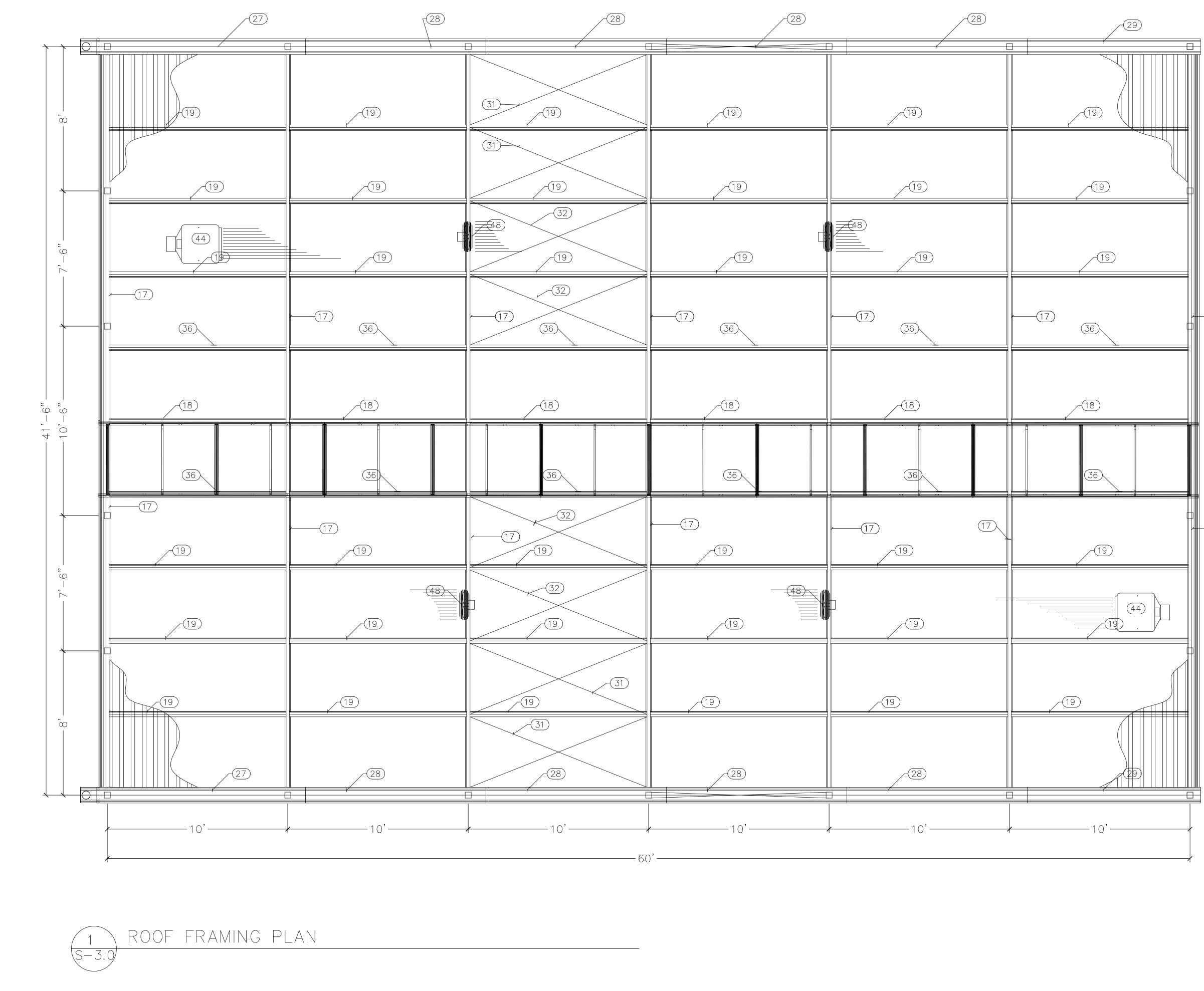


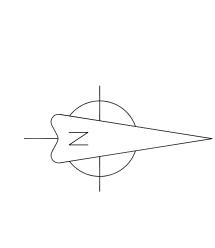


1/4" = 1'-0"



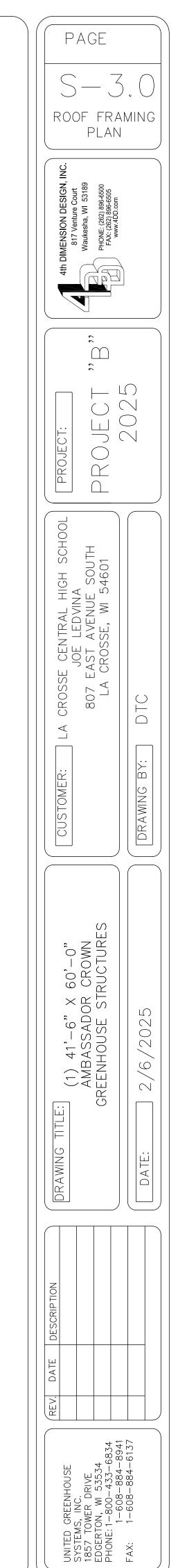


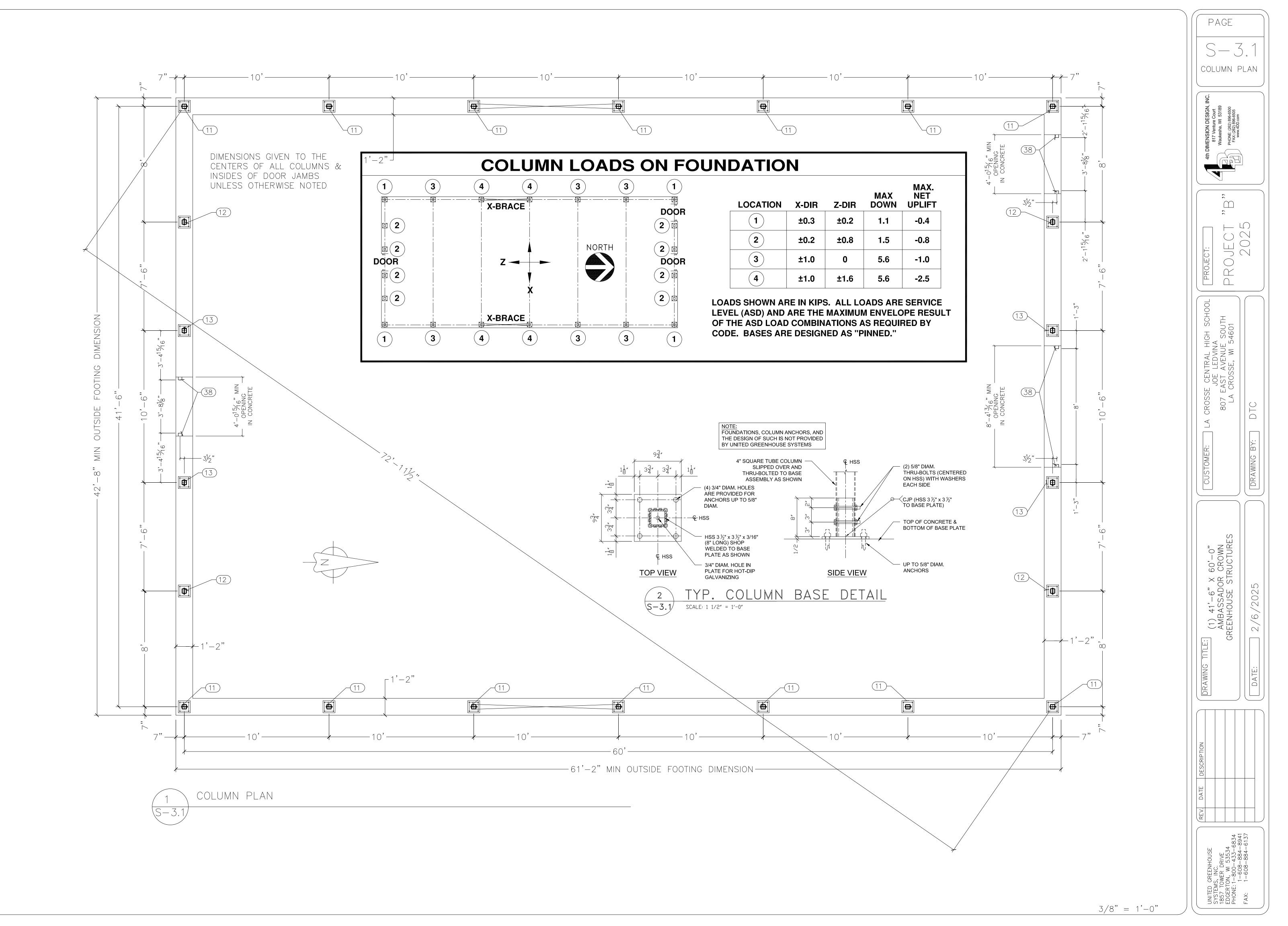


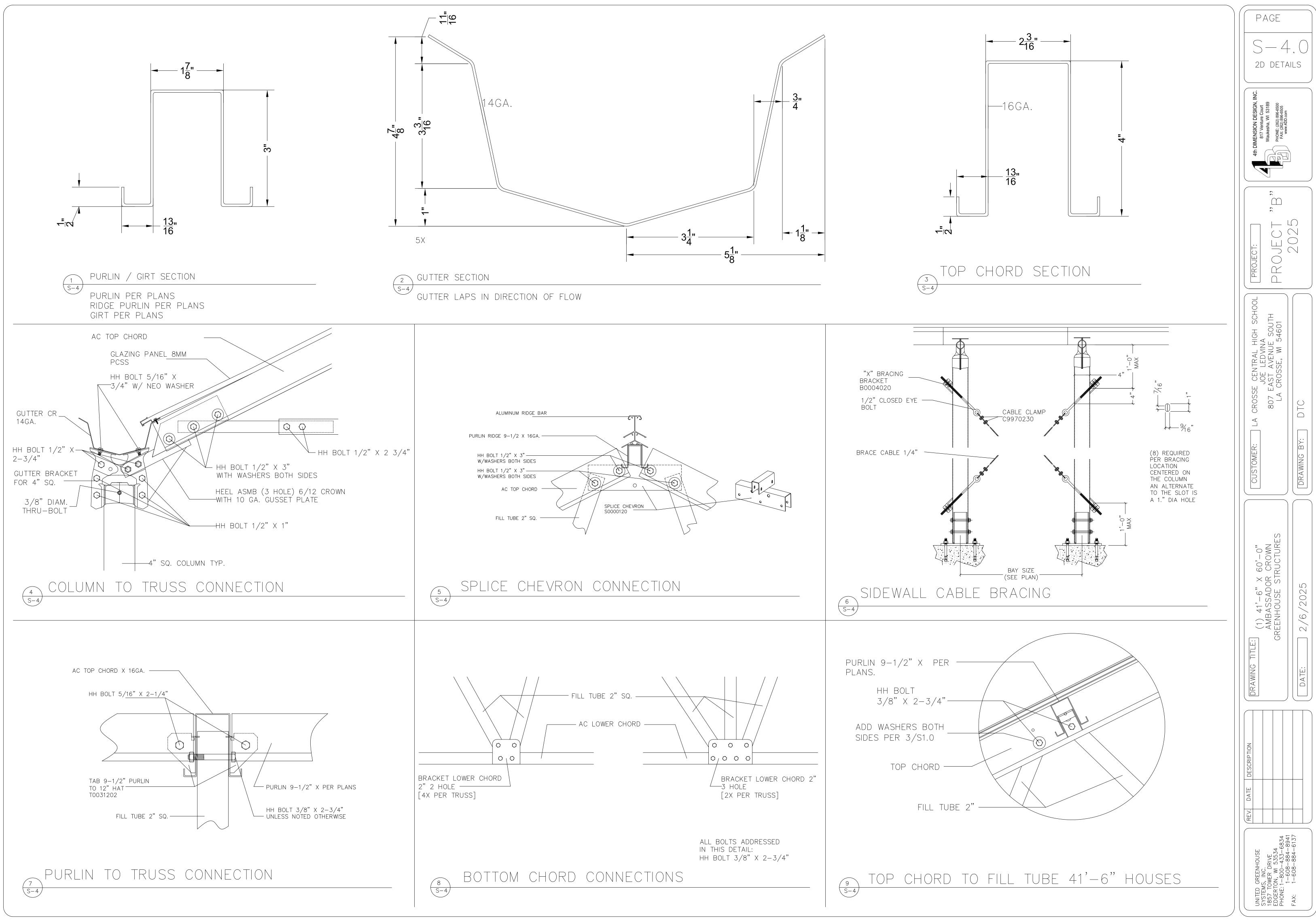


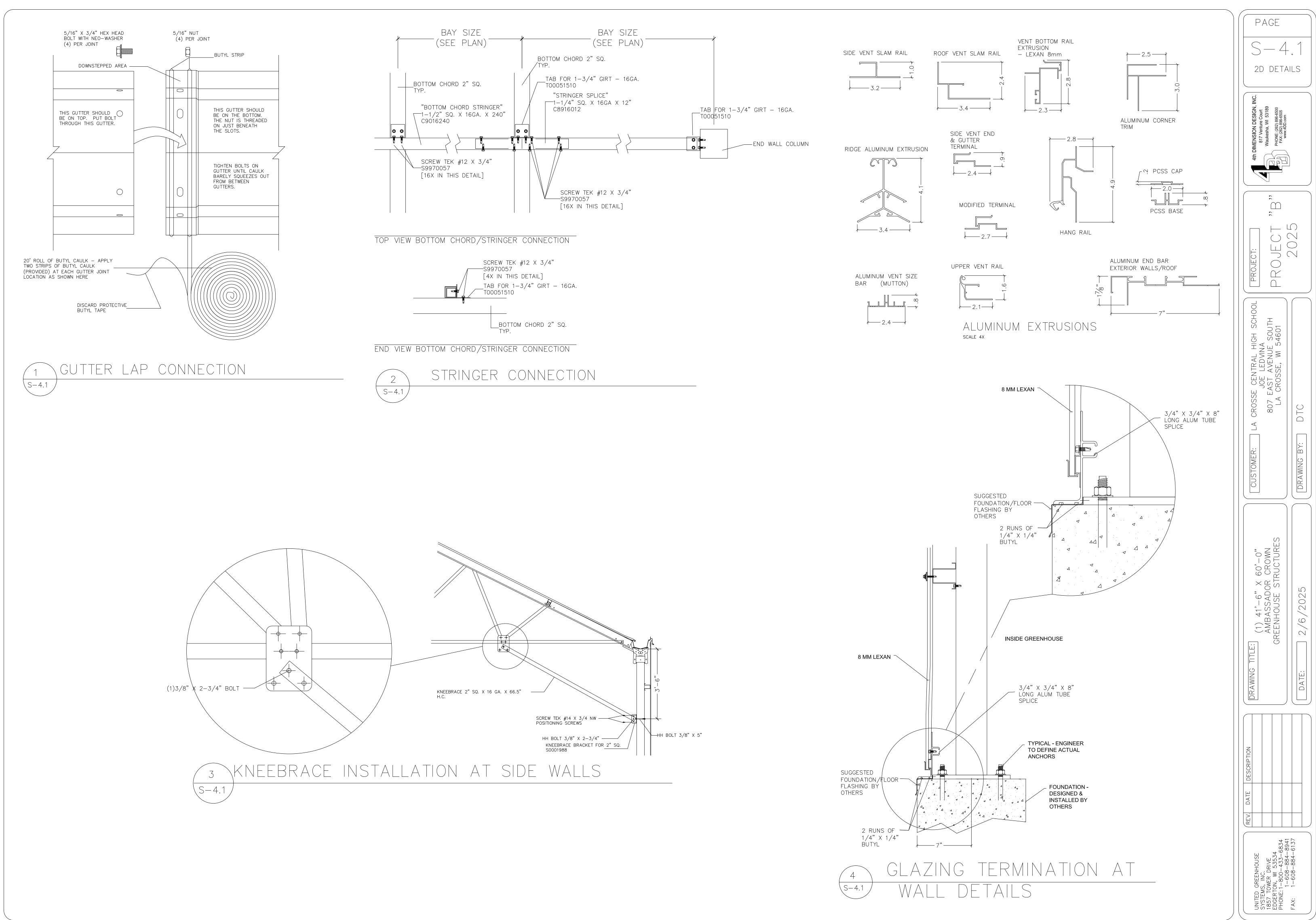


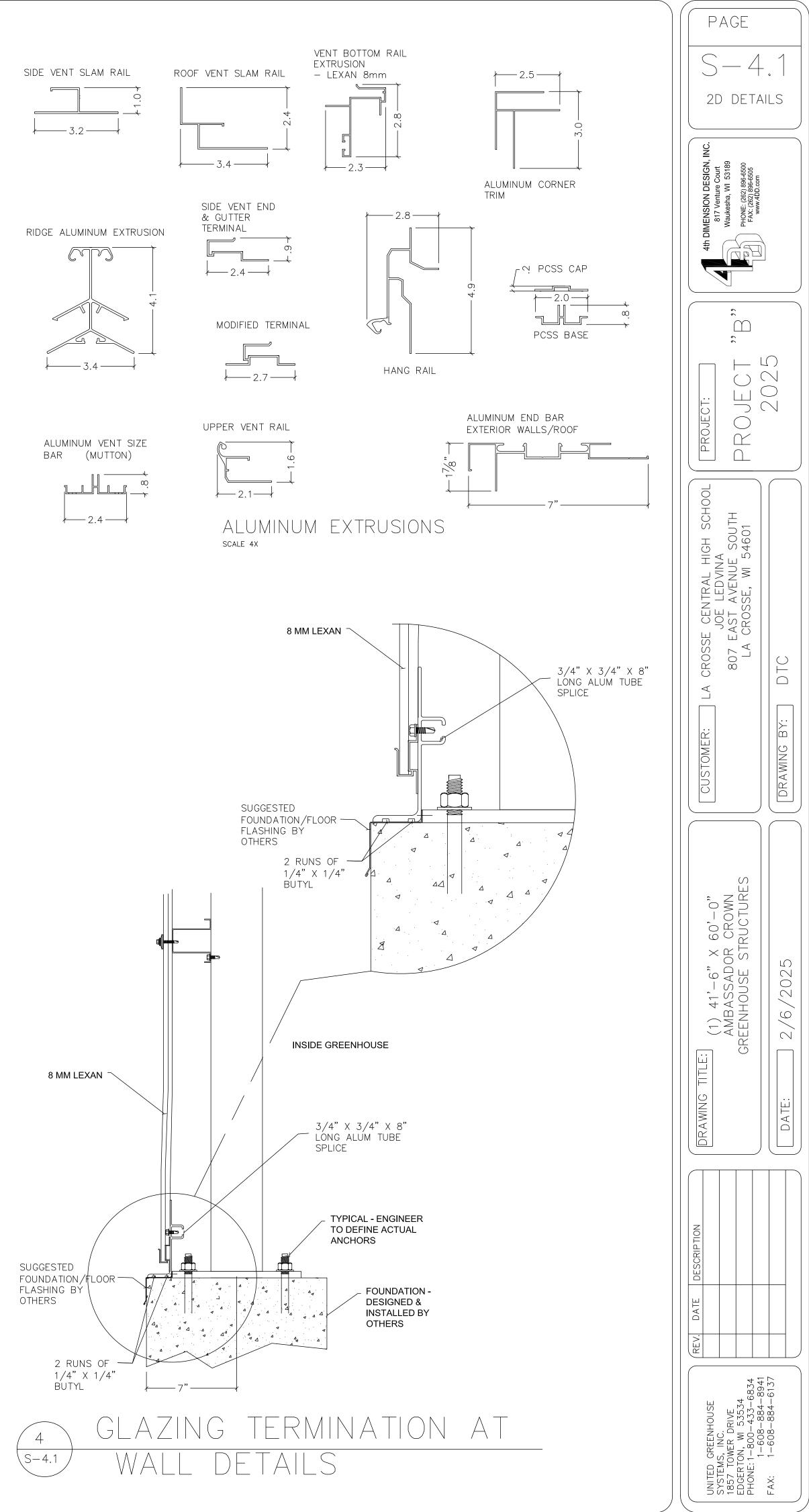
-(17)

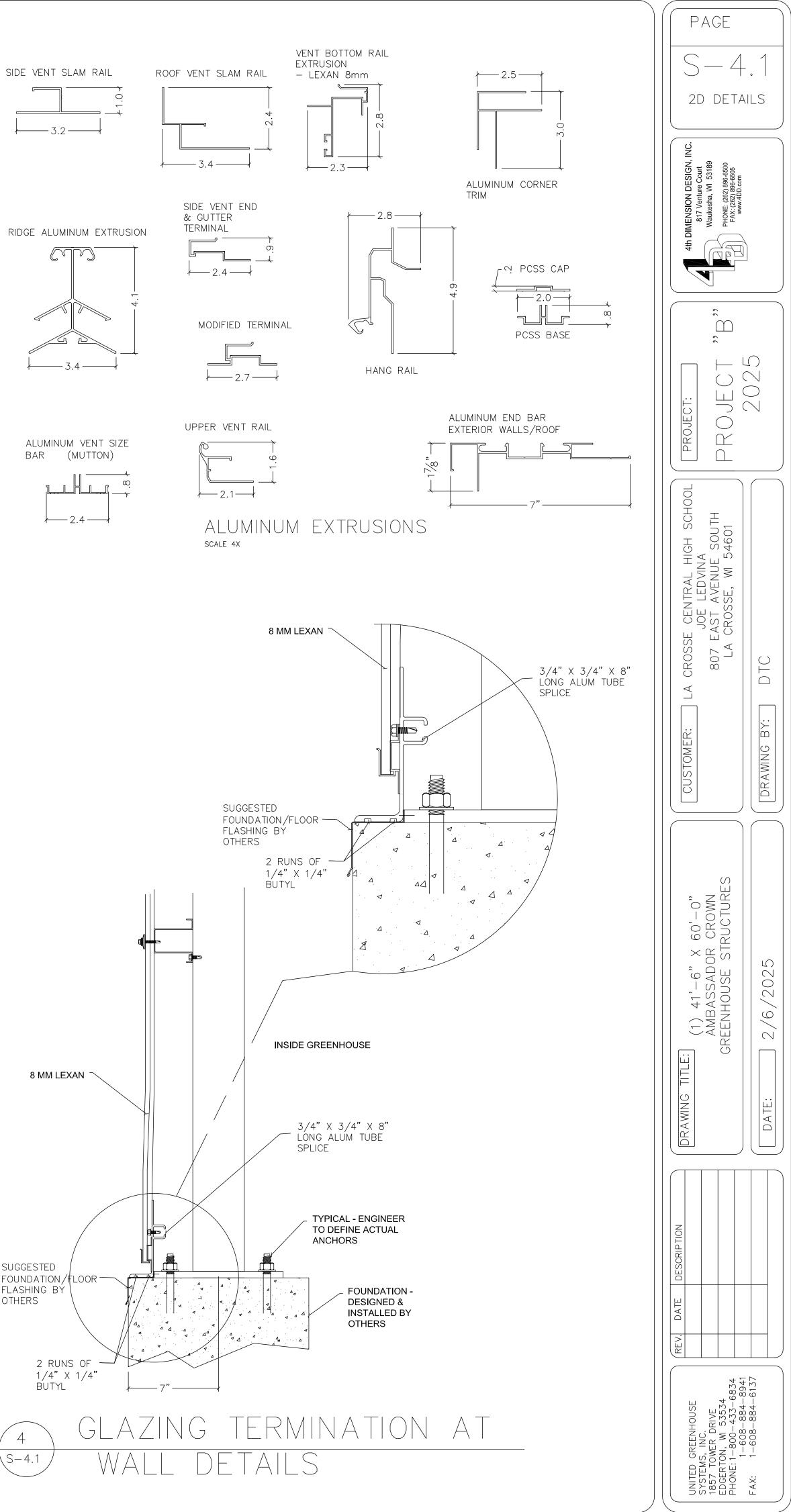


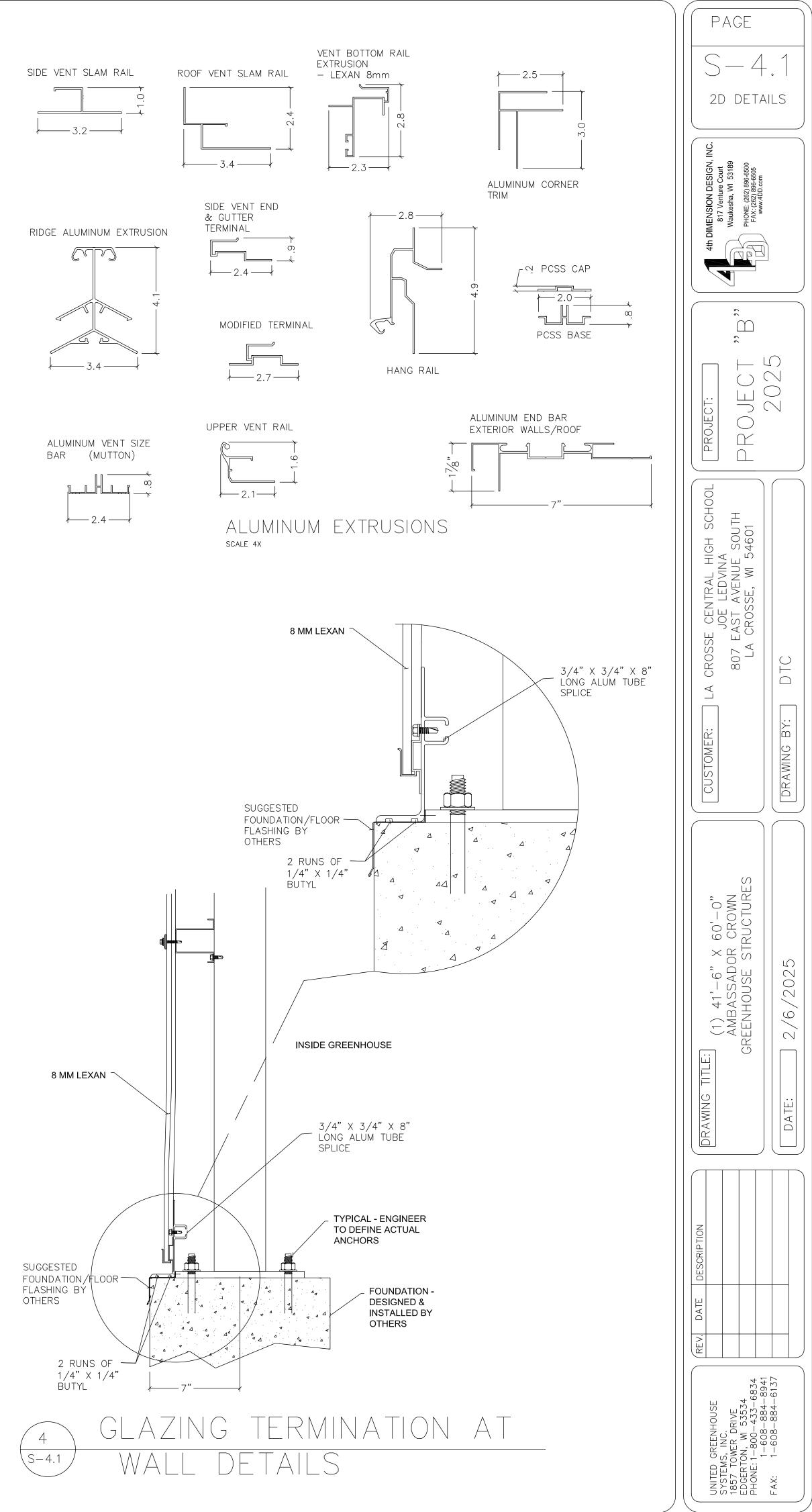


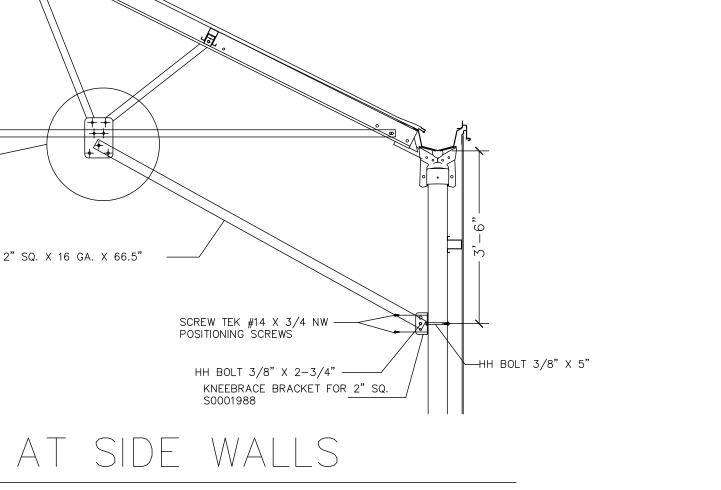


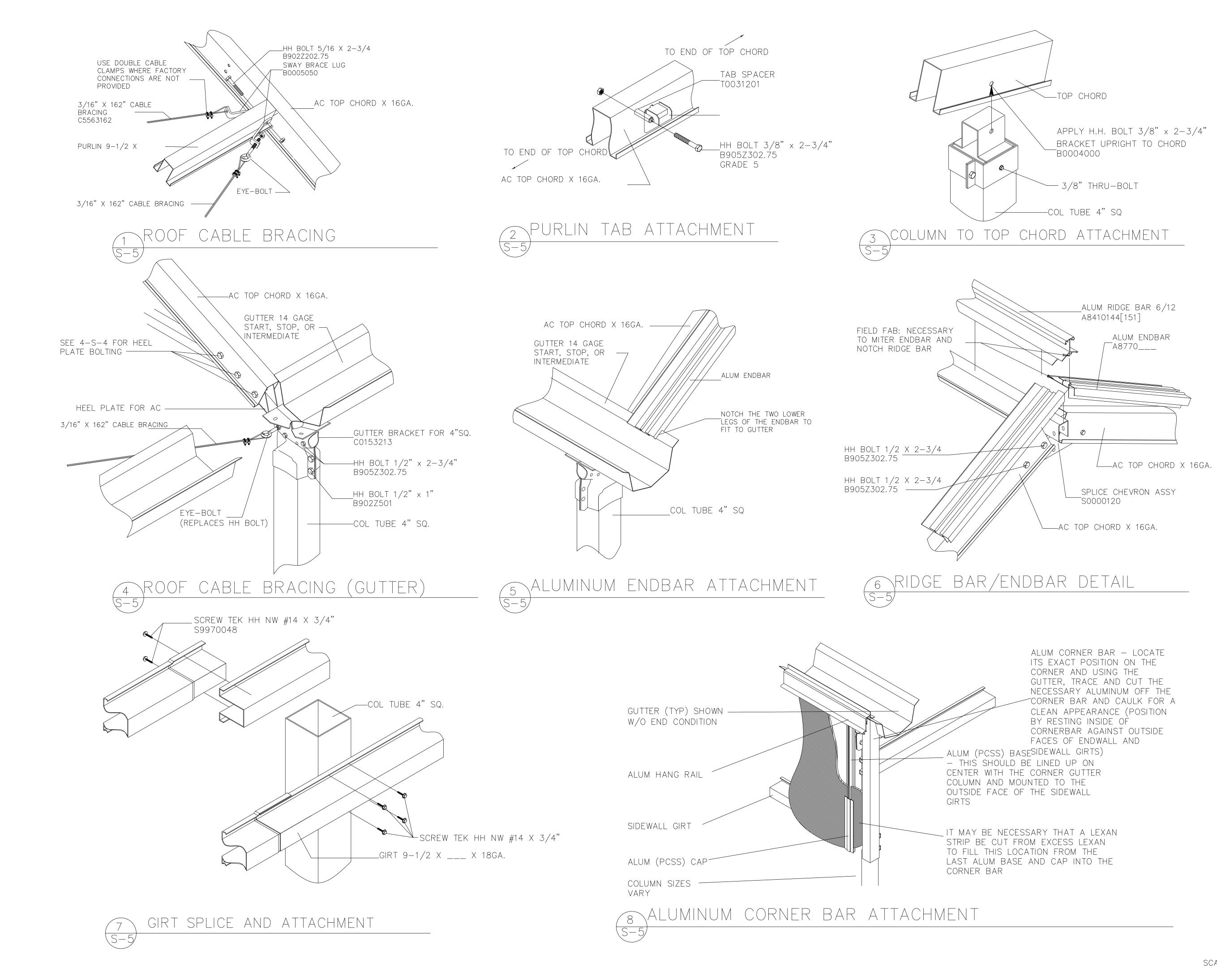


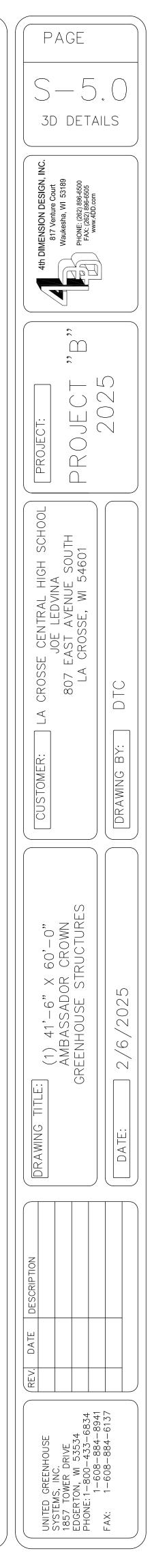








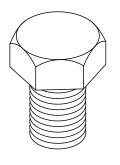




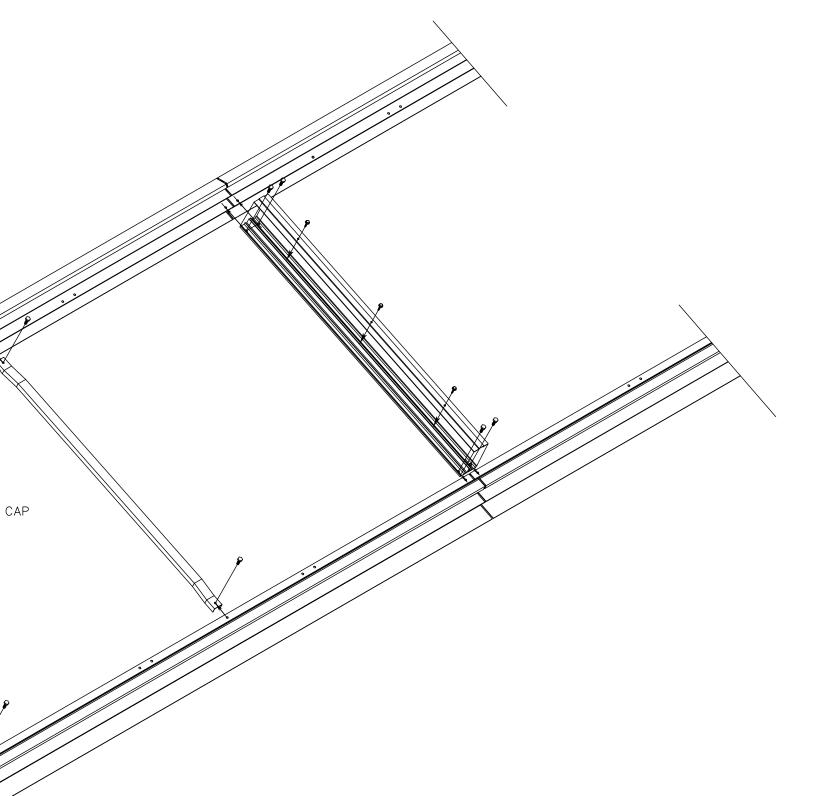
SCALE NONE

### RIDGE VENTASSEMBLY ALUMINUM CAP vent size bar — SCREW ALUMINUM CAP TOOWN TO BASE VENT SIZE BAR CENTER SUPPORT ALUMINUM RIDGE BAR ASSEMBLE WITH 1/4" X 3/8"\_\_\_\_ STAINLESS BOLTS THE TOP RAIL COULD BE LEFT LONG, BUT NOT LONGER<sup>--</sup> THAN THE ALUM. RIDGE ALUMINUM VENT BOTTOM RAIL \_\_\_\_ ALUMINUM BASE ROOF VENT END (TOP) ALUMINUM ROOF VENT END (BOTTOM) STEEL, UNEVEN LEGS – LONGER LEG TO OUTSIDE OF HOUSE (TEK SCREW TO TOP AND BOTTOM RAIL WITH 3/4" LONC SCREŴ SELF DRILLER WITH 3/4" LONG CREWS SCREW SELF DRILLER SCREW SELF DRILLER \_ALUMINUM ENDBAR GREENHOUSE TOP CHORD RIDGE VENT MUST HANG OVER THE END OF THE HOUSE

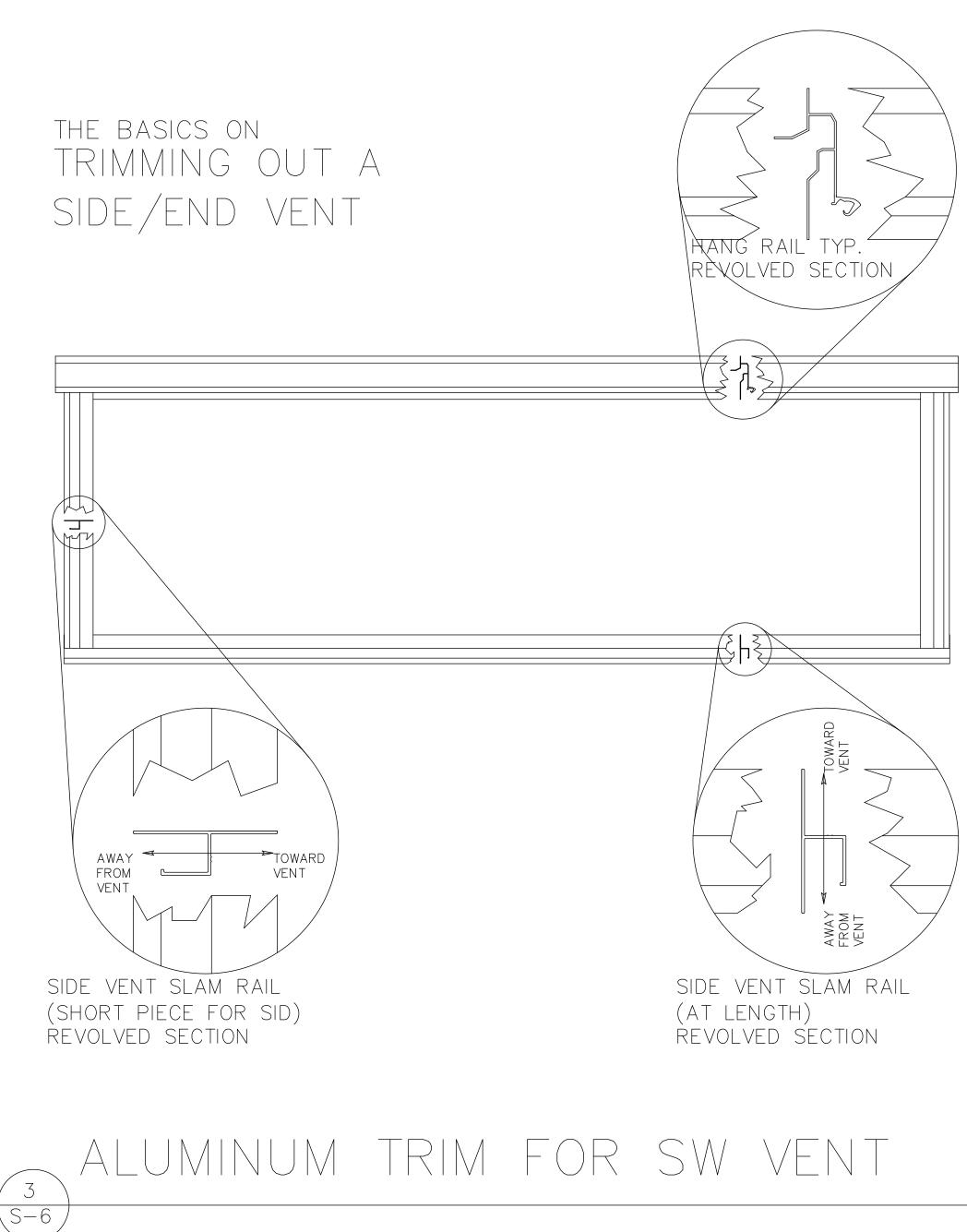
VENT FRAMEWORK ASSEMBY INSTRUCTIONS 1 5-6.1

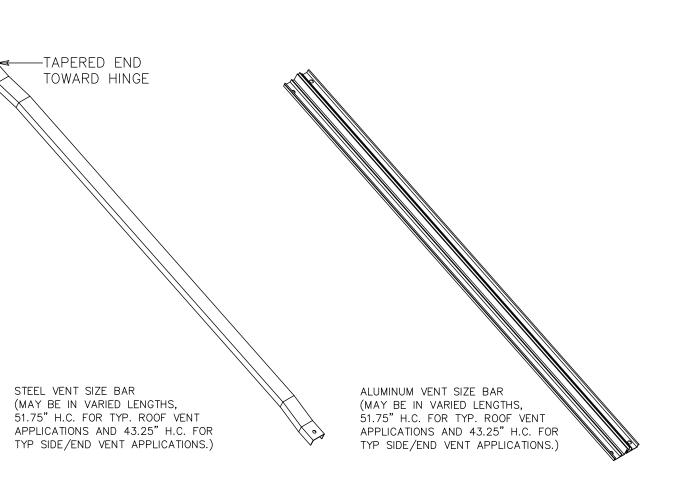


VENTS ARE ALWAYS ASSEMBLED WITH STAINLESS STEEL 1/4" X 3/8" HH BOLTS WITH 1/4" STAINLESS STEEL LOCK NUTS

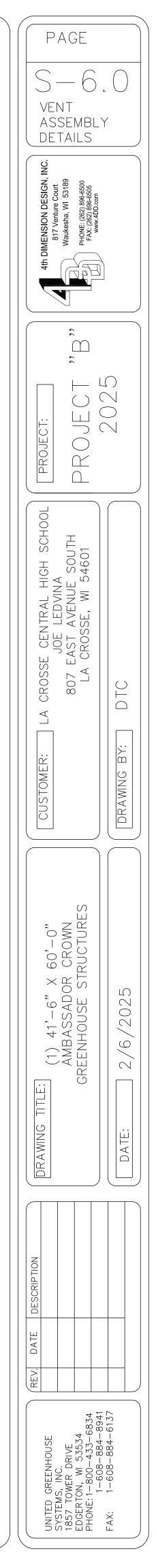


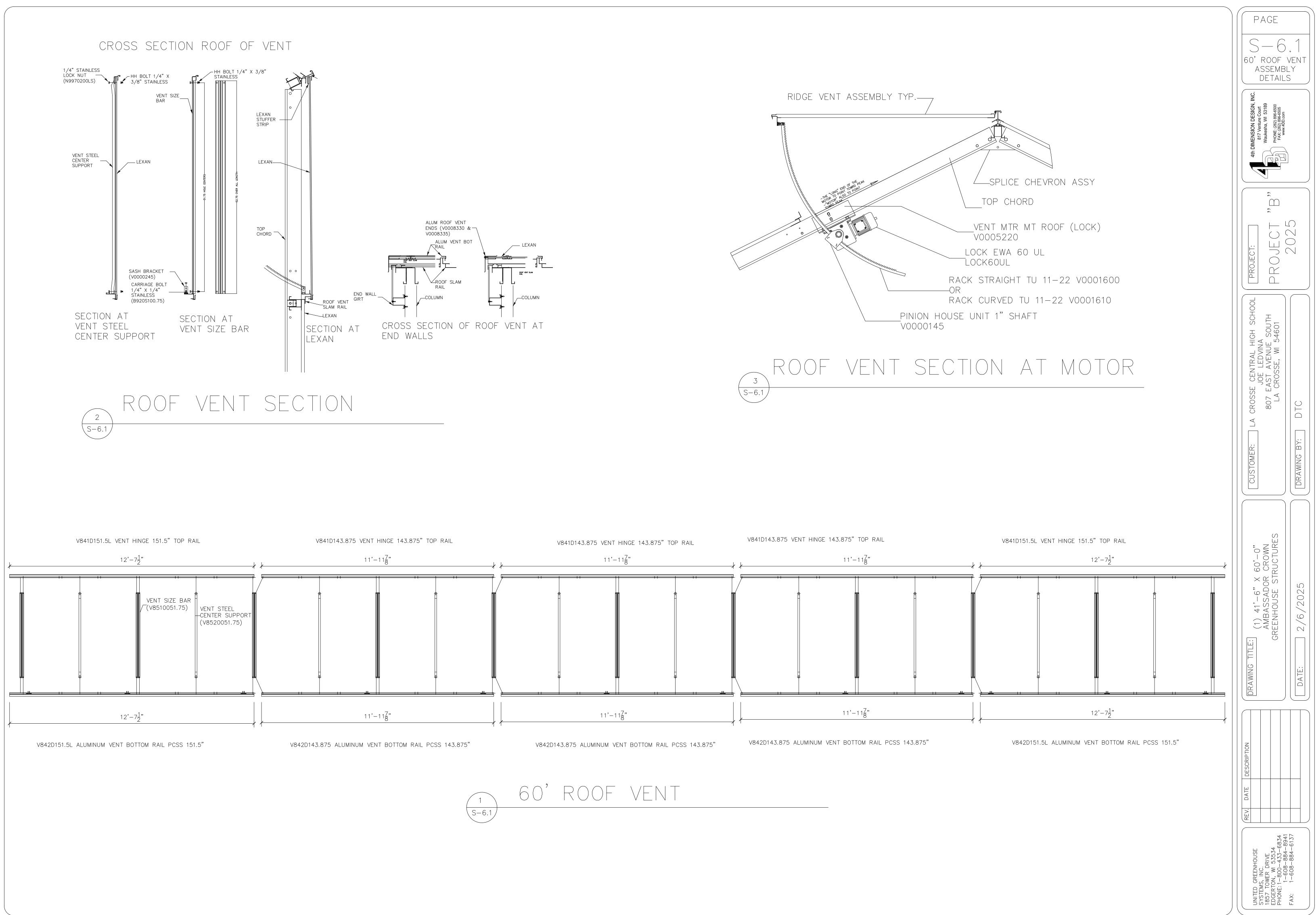






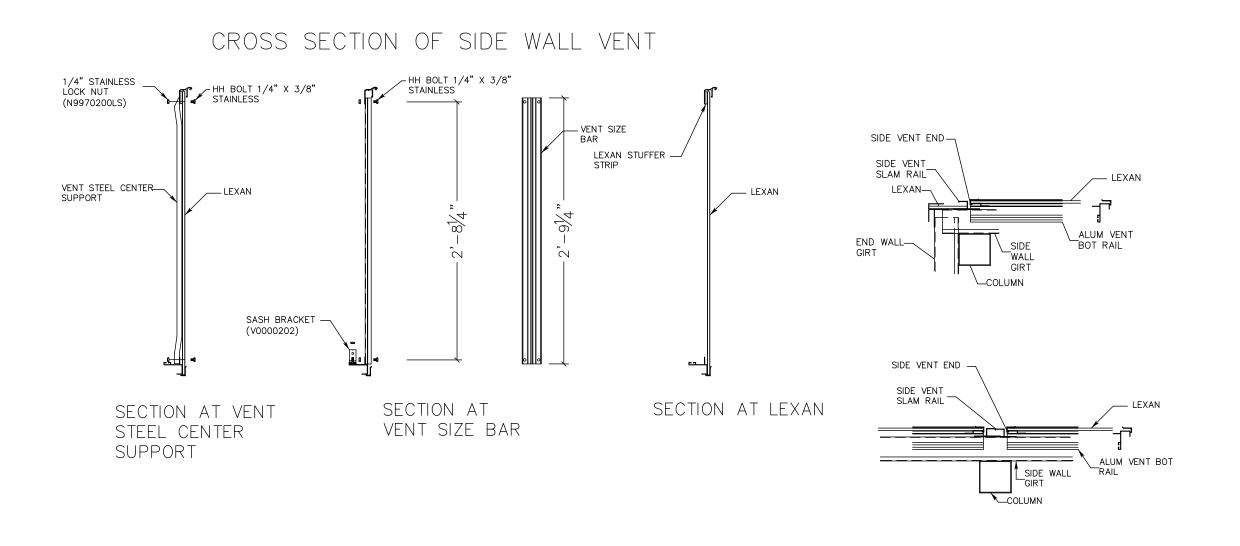
### VENT SIZE BARS & CENTER SUPPTS



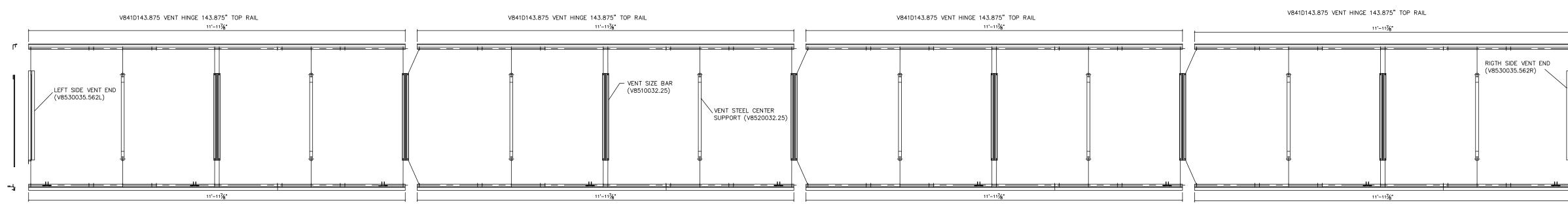




CROSS SECTION SIDE WALL VENT

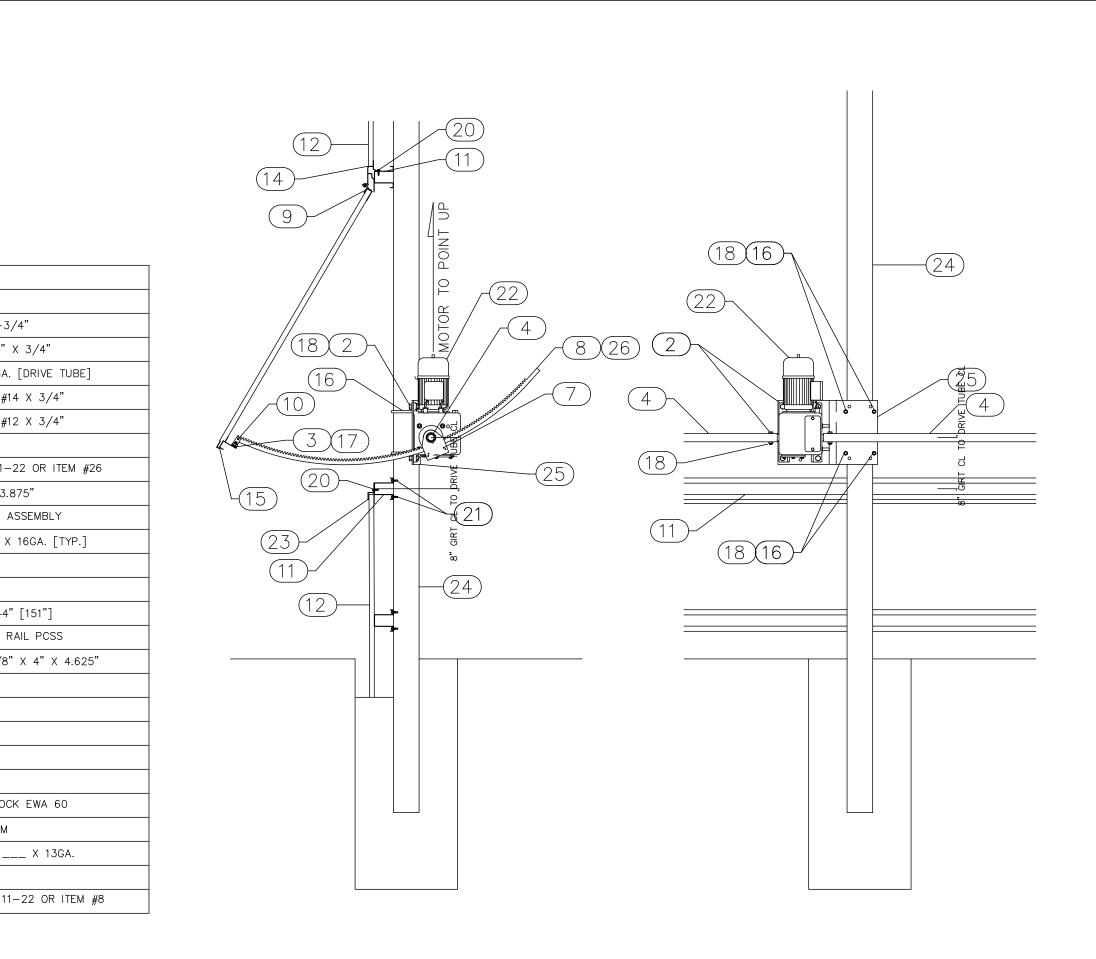






V842D143.875 ALUMINUM VENT BOTTOM RAIL PCSS 143.875"

	PART NO.	DESCRIPTION
1	NA	NA
2	B902Z301.75	HH BOLT 3/8" X 1-3/4"
3	B920S100.75	CARRAIGE BOLT 1/4" X 3/
4	C6014288	1.315 X 288" X 14GA. [DR
5	S9970048	SCREW TEK HH NW #14 X
6	S9970057	SCREW TEK HH NW #12 X
7	V0000145	PINION HOUSE UNIT
8	V0001610	RACK CURVED TU 11-22 C
9	V8410143.875	VENT TOP HINGE 143.875"
10	V0000245	WINDOW CONNECTOR ASSEM
11	G0950	GIRT 9-1/2 X X 16G
12	LEX86	LEXAN 8MM PCSS
13	GCR141	GUTTER CR 14GA.
14	A8780144[151]	ALUM HANG RAIL 144" [15
15	V8420143.875	ALUM VENT BOTTOM RAIL
16	B313Z4X4.625	SQUARE U-BOLT 3/8" X 4
17	N910S001	1/4" LOCK NUT
18	N902Z003	3/8" NUT
19	NA	NA
20	NA	NA
21	NA	NA
22	LOCK62 / LOCK60	LOCK EWA 62 OR LOCK EW
23	A8750288	SIDE/END VENT SLAM
24	C8312	COL TUBE 4" SQ X X
25	V0005230	SIDE DRIVE MT.
26	V0001600	RACK STRAIGHT TU 11-22



3 S-6.2

48' X 3' SIDE WALL VENT

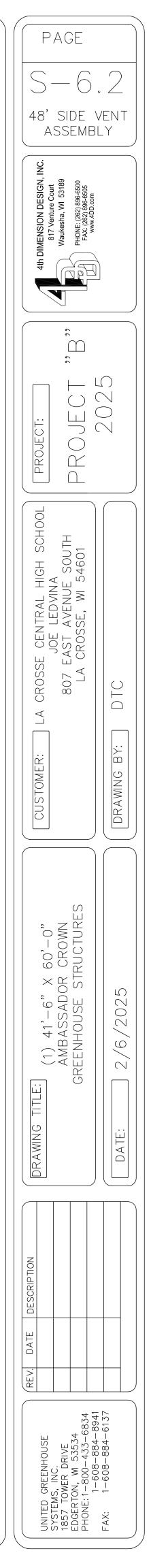
V842D143.875 ALUMINUM VENT BOTTOM RAIL PCSS 143.875"

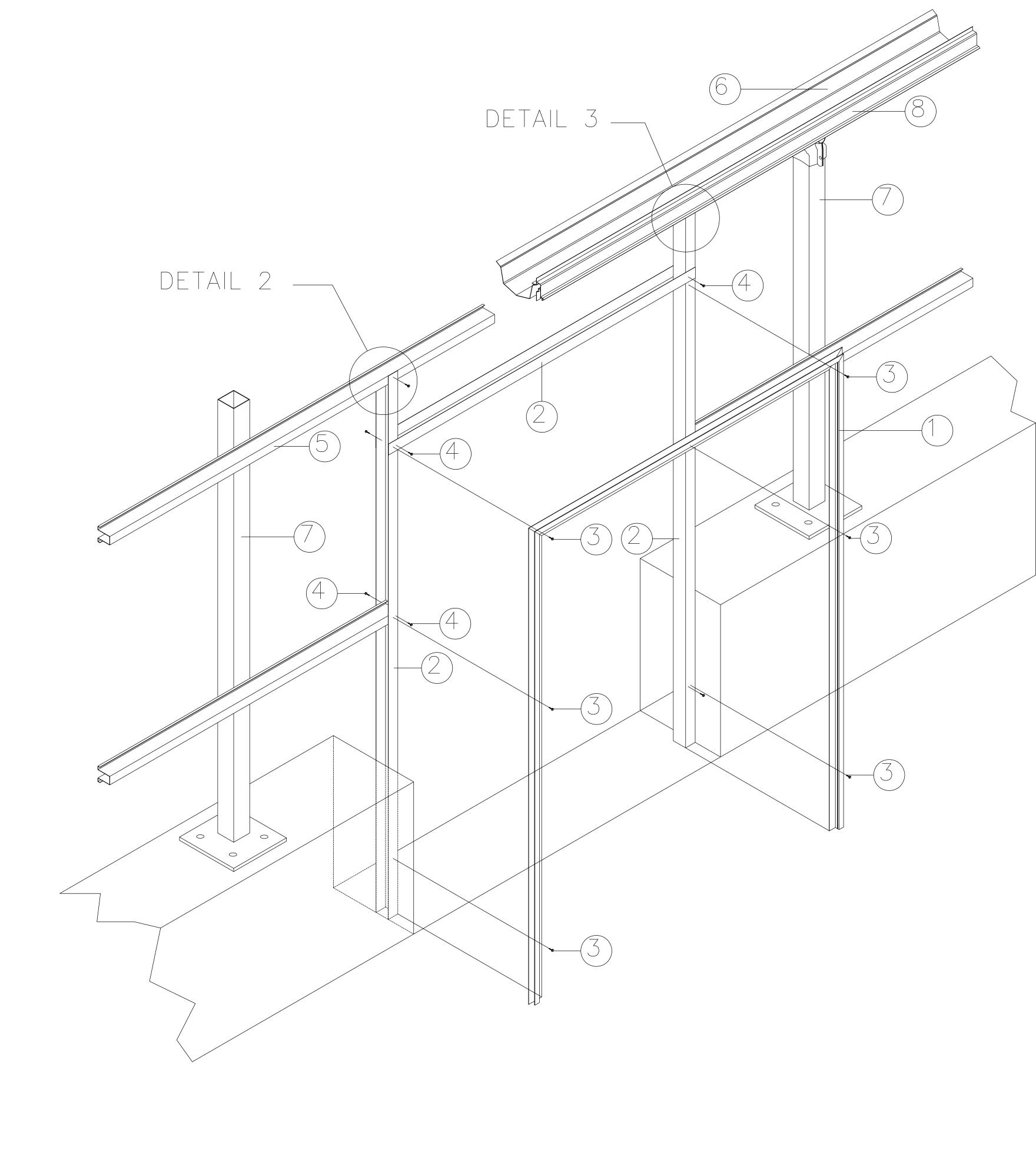
V842D143.875 ALUMINUM VENT BOTTOM RAIL PCSS 143.875"

## SIDE VENT SECTION AT MOTOR

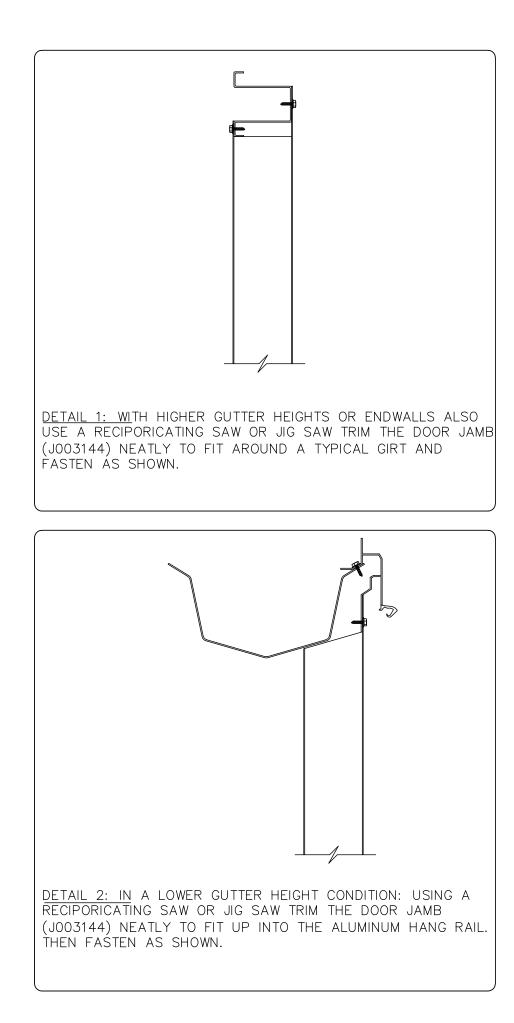
V841D143.875 VENT HINGE 143.875" TOP RAIL 11'-11% RIGTH SIDE VENT END (V8530035.562R) 11'-117%"

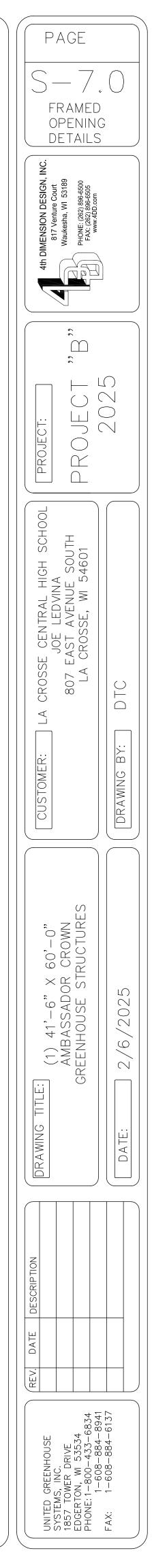
V842D143.875 ALUMINUM VENT BOTTOM RAIL PCSS 143.875"

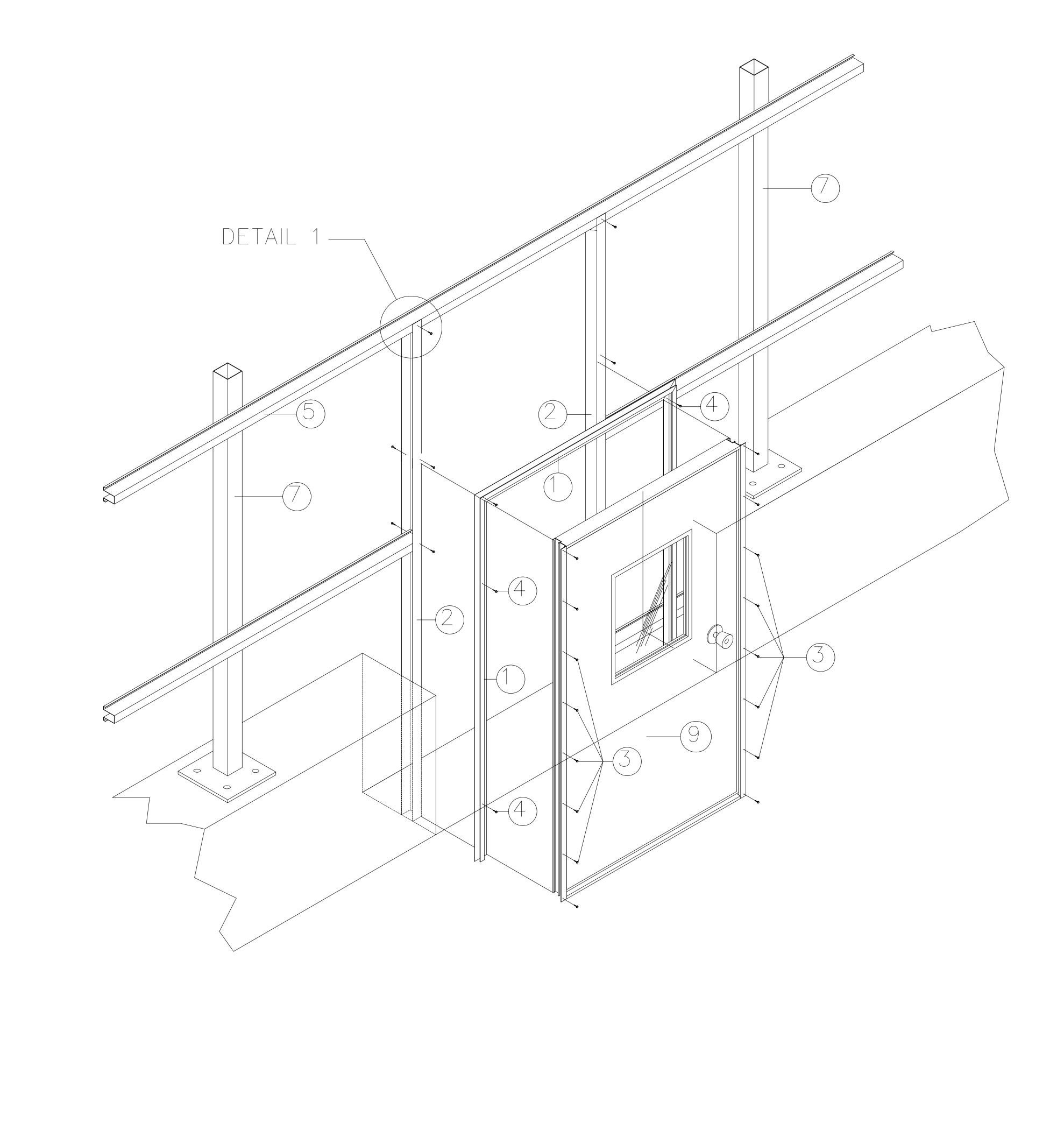




	PART DESCRIPTION	PART NUMBER
1	SIDE VENT SLAM RAIL	A8750288
2	JAMB FOR SLIDING DOOR 12'	J003144
3	TEK SCREW #10 X 3/4" NW	S9970010
4	TEK SCREW #14 X 3/4" NW	S9970048
5	TYP. GIRT (3" HAT SECTION X 16GA.)	G0950 (SIZES VARY)
6	TYP. GUTTER 14GA.	GCR141 (SIZES VARY)
7	4" SQ. COLUMN X 13GA.	C9413168 (SIZES VARY)
8	TYP. ALUMINUM HANG RAIL	A9970
9	PLYCO DOUBLE SWING DOOR	DS0







	PART DESCRIPTION	PART NUMBER
1	SIDE VENT SLAM RAIL	A8750288
2	JAMB FOR SLIDING DOOR 12'	J0030144
3	TEK SCREW #10 X 3/4" NW	S9970010
4	TEK SCREW #14 X 3/4" NW	S9970048
5	TYP. GIRT (3" HAT SECTION X 16GA.)	G0950 (SIZES VARY)
6	TYP. GUTTER 14GA.	GCR141 (SIZES VARY)
7	4" SQ. COLUMN X 13GA.	C9413168 (SIZES VARY)
8	TYP. ALUMINUM HANG RAIL	A9970
9	PLYCO DOUBLE SWING DOOR	DS0

