

PARTS LIST		
ITEM	PART NUMBER	DESCRIPTION
1	140003-006	Standard, FS, Ram Post, 72 Cell, 20°, Triangle
2	140004-006	Standard, FS, Foundation, 72 Cell, 20°, Triangle
3	124303-06200	Rail, S1.5, L = 6200 mm
4	129303-000	Splice, S1.5, Kit

DESIGN CRITERIA:
FOR STRUCTURAL DESIGN INFORMATION AND APPLICABLE BUILDING CODES,
REFERENCE ACCOMPANYING LETTER OF ACCEPTANCE AND CALCULATIONS.

LOADS:	SEISMIC LOADS:
MODULE DEAD LOAD = 3.0 PSF, MIN 1.75 PSF	SEISMIC DESIGN CATEGORY: E
SNOW LOAD = SEE TABLE FOR SPECIFIC SNOW LOAD	SOIL SITE CLASS = D
Is = 1.00, Ct= 1.20, Ce = 0.90, Cs = 0.91	Sds = 1.67 SD1 = 1.0
	Ie = 1.0 SS = 2.5
	S1 = 1.0 R = 1.25

WIND DESIGN:
BASIC WIND SPEED = SEE TABLE FOR SPECIFIC WIND SPEED
EXPOSURE: C
RISK CATEGORY = II (ASCE 7-10)
 $I_w = 1.0$ (ASCE 7-05)

INSTALLATION TOLERANCES:
 LATERAL POST PLACEMENT IS $\pm 0.0"$
 TOTAL LATERAL DEVIATION OF POSTS WITHIN AN ARRAY IS $\pm 0.5"$
 POST HEIGHT VARIATION TOLERANCE IS $\pm 0.40"$
 POST VERTICALITY TOLERANCE $< 2.0^\circ$ IN ALL DIRECTIONS
 POST ROTATIONAL TOLERANCE $\leq 7.0^\circ$
 ARRAY TILT ANGULAR TOLERANCE $\pm 1.0^\circ$

GENERAL:

1. THE STRUCTURAL CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OR SEQUENCE OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. THE STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S MEANS, METHODS, TECHNIQUES, SEQUENCES FOR PROCEDURE OF CONSTRUCTION, OR THE SAFETY PRECAUTIONS AND THE PROGRAMS INCIDENT THERE TO (NOR SHALL OBSERVATION VISITS TO THE SITE INCLUDE INSPECTION OF THESE ITEMS). THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF ALL SCAFFOLDING, BRACING AND SHORING.
2. WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDA.

ALUMINUM:

1. ALL ALUMINUM SHALL CONFORM WITH THE LATEST ALUMINUM DESIGN HANDBOOK.
2. ALL ALUMINUM SECTIONS SHALL BE:
 - a. SEMI-HOLLOWES AND HOLLOWES SHALL BE 6105-T5, 6005A-T6, OR 6005-T5
 - b. SOLIDS SHALL BE 6063-T6

STEEL:

1. ALL BOLTS AND WASHERS SHALL BE 304 STAINLESS STEEL CLASS 2 (A2-70).
2. ALL NUTS SHALL BE 316 STAINLESS STEEL CLASS 2 (A4-70)

TORQUE:
TORX BOLT FOR RAPID 2+ MODULE CLAMPS IS 14 N-M (10.5 FT-LBS)
M6 AND 1/4" BOLT TORQUE IS 6 N-M (4.5 FT-LBS)
M8 AND 5/16" BOLT TORQUE IS 14 N-M (10.5 FT-LBS)
M10 AND 3/8" BOLT TORQUE IS 30 N-M (23 FT-LBS)
M12 AND 1/2" BOLT TORQUE IS 50 N-M (37 FT-LBS)
M16 AND 5/8" BOLT TORQUE IS 121 N-M (89 FT-LBS)
M20 AND 3/4" BOLT TORQUE IS 244 N-M (180 FT-LBS)

NOTE: RECOMMENDED SPEED FOR INSTALLATION OF SELF-DRILLING 1/4" DIAMETER SCREWS IS 1200-1800 RPMS.

MODULE SIZE:
RACKING SYSTEM DESIGNED FOR MODULE SIZE: MINIMUM = 1900 X 970
VERTICAL MODULE GAP: 23 mm MAXIMUM = 2000 X 1050
HORIZONTAL MODULE GAP: 5 mm

NOTE:

1. MODULES MUST BE CENTERED ON ARRAY
2. ARRAY LENGTH NOT TO EXCEED 150 FT

RAM POST FOUNDATIONS

1. FOUNDATION DESIGN IS BASED UPON GEOTECHNICAL REPORT/TESTING REQUIREMENTS. ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE GEOTECHNICAL REPORT.
2. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR ANY GEOTECHNICAL ASPECTS OF THIS PROJECT. IF THE INSTALLER NOTICES ANY SOIL THAT HAS DIFFERENT DRIVING CHARACTERISTICS THAN EXISTED FOR TESTED DRIVEN POSTS, CONTACT THE ENGINEER IMMEDIATELY.

NOTE:
THE POST EMBEDMENT DEPTH IS PRELIMINARY AND SHALL BE VERIFIED BY THE STRUCTURAL
ENGINEER OF RECORD PRIOR TO CONSTRUCTION. BASED UPON ON SITE TESTING BY THE
GEOTECHNICAL ENGINEER.

CONCRETE FOUNDATIONS:

1. NO SOILS REPORT PROVIDED. FOUNDATION DESIGN IS BASED ON MINIMUM IBC SOIL BEARING VALUE = 1500 PSF PER IBC TABLE 1804.2 (2003, 2006), & 1806.2 (2009, 2012, 2015). DRILLED SHAFT FOUNDATIONS SHALL BE BUILT IN UNDISTURBED SOIL OR COMPACTED FILL MATERIAL NOT LESS THAN 12" IN DEPTH.
2. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR ANY GEOTECHNICAL ASPECTS OF THIS PROJECT. IT IS RECOMMENDED THAT THE OWNER RETAIN A REGISTERED GEOTECHNICAL ENGINEER TO CONDUCT A GEOTECHNICAL INVESTIGATION AND PREPARE A REPORT WITH RECOMMENDATIONS FOR FOUNDATION AND EARTHWORK PROCEDURES.

CONCRETE:

1. ALL CONCRETE WORK SHALL CONFORM WITH THE REQUIREMENTS OF ACI 301 AND ACI 318. CEMENT PER ASTM C150, TYPE II. AGGREGATE PER ASTM C33. CONCRETE SHALL BE READY MIXED IN ACCORDANCE WITH ASTM C94 AND SHALL BE DESIGNED FOR A MINIMUM 28 DAY COMPRESSIVE STRENGTH AS FOLLOWS:

FOUNDATIONS.....3,000 PSI*

*DESIGNED FOR 2,500 PSI

NO.	DRAWN:	CHECKED:	REVIEWED:	APPROVED:	REVISIONS:
0	BushBr 8/4/2014				New Drawing
1	BushBr 1/14/2015				Update Post Lengths and Embedments
2	BushBr 1/20/2015				Update Post Lengths and Embedments
3	BushBr 2/11/2015				Update Post Lengths
K					

Client:
Schletter Inc.
2201 North Forbes Boulevard
Tucson, AZ 85745



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Standard FS 72 Cell - 20°
Racking Structure
Dimensions and Specifications

ISSUED BY: SCHLETTER INC.
 PROPRIETARY AND CONFIDENTIAL

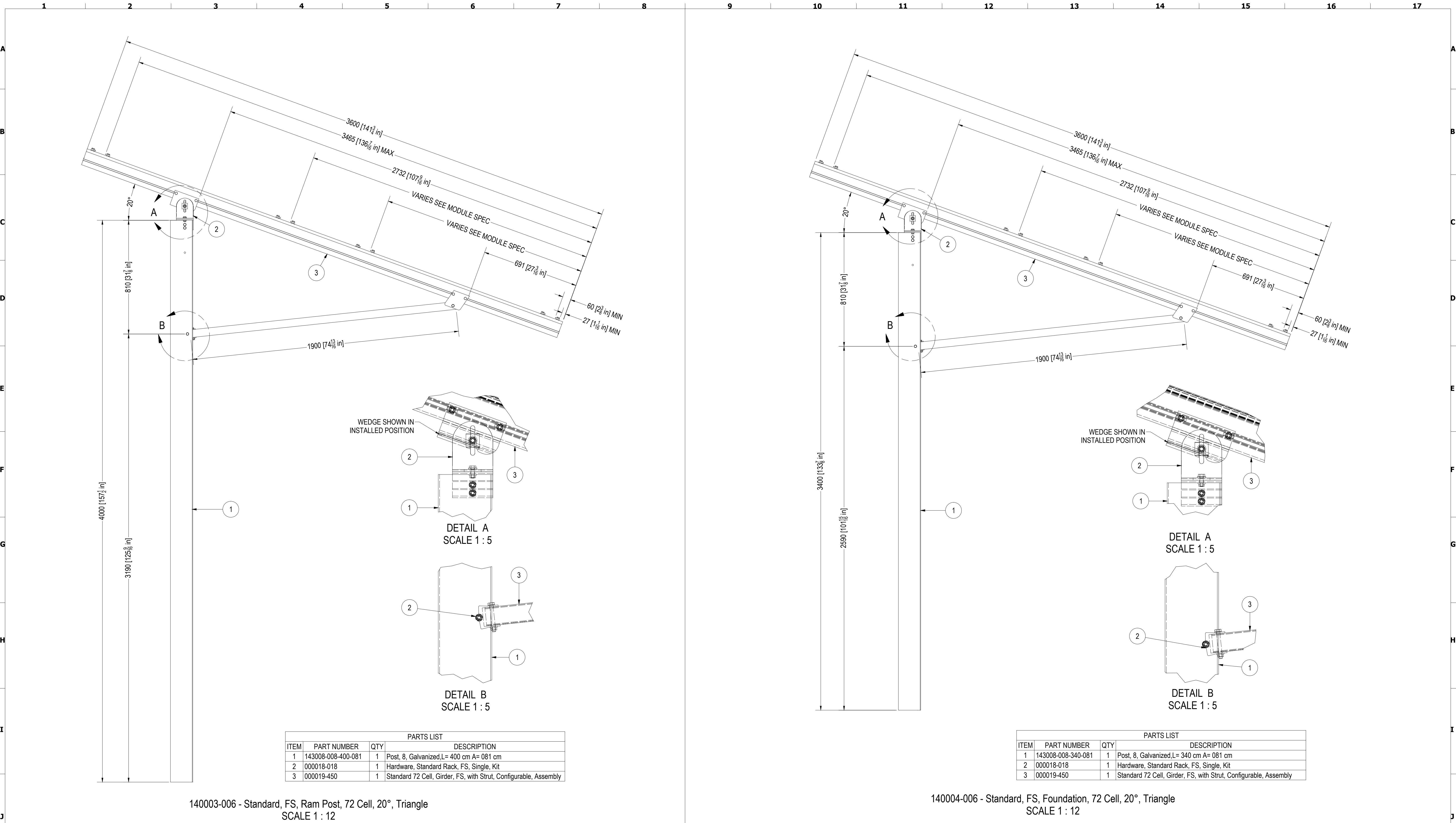
Project Site:
Schletter Inc.
1001 Commerce Center Dr
Shelby, NC 28150

Drawing Number:

v.01

JOB NUMBER:
SHEET: 1 of 3

SCALE:
SEE DRAWING VIEWS



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Racking Structure
Dimensions and Specifications

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Project Site:
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Drawing Number:

v.01

JOB NUMBER: V
SHEET: 2 of 3

SCALE:
SEE DRAWING VIEWS

