

STRUCTURAL DESIGN

ENCLOSED BUILDING

MAXIMUM 32'-0" WIDE X 16'- 0" EAVE HEIGHT-BOX EAVE FRAME AND BOW FRAME

1 October 2021 Revision 0 M&A Project No. 21048S

Prepared for:

SteelCraft Structures 1841 Amity Hill Rd. Statesville, NC 28677

Prepared by:

Moore and Associates Engineering and Consulting, Inc.

1009 East Avenue North Augusta, SC 29841

401 S. Main Street, Suite 200 Mount Airy, NC 27030







			T			

					MAY 1	3 2022
					SE S	CAROLANIA SSION AND AND AND AND AND AND AND AND AND AN
MOORE AND ASS NGINEERING AND CO S DOCUMENT IS THE PROPERTY OF HOORE AND ISSULTING, THE UNAUTHORIZED REPRODUCTION, CC S DOCUMENT IS STRICTLY PROHIBITED AND ANY SUBJECT TO LEGAL ACTION.	NSULTING, INC.	PROJECT	BY: PDH MGR: WSM	32'-0"x16	841 AMITY HILL ATESVILLE, NC '-0" ENCLOSED S	RD. 28677

DRAWING INDEX

SHEET 1	PE SEAL COVER SHEET
SHEET 2	DRAWING INDEX
SHEET 3	INSTALLATION NOTES AND SPECIFICATIONS
SHEET 3A	LIST OF APPLICABLE BUILDING CODES
SHEET 4	TYPICAL SIDE AND END ELEVATIONS
SHEET 5	TYPICAL RAFTER/COLUMN FRAME AND SIDE FRAMING SECTION (BOX EAVE RAFTER)
SHEET 6	COLUMN CONNECTION DETAILS (BOX EAVE RAFTER)
SHEET 7	TYPICAL RAFTER/COLUMN FRAME AND SIDE FRAMING SECTION (BOW EAVE RAFTER)
SHEET 8	COLUMN CONNECTION DETAILS (BOW EAVE RAFTER)
SHEET 9	BASE RAIL ANCHORAGE OPTIONS
SHEET 10	TYPICAL END WALL AND SIDE WALL FRAMING SECTIONS (BOX EAVE RAFTER)
SHEET 11	TYPICAL END WALL AND SIDE WALL FRAMING SECTIONS (BOW EAVE RAFTER)
SHEET 12	CONNECTION DETAILS
SHEET 13	CONNECTION DETAILS
SHEET 14	LEAN-TO OPTIONS (BOX EAVE RAFTER)
SHEET 15	LEAN-TO OPTIONS (BOW EAVE RAFTER)
SHEET 16	VERTICAL ROOF/SIDING OPTION END AND SIDE ELEVATION AND SECTION (BOX EAVE RAFTER)
SHEET 17	SIDE WALL AND END WALL HEADER OPTIONS

MAY 1 3 2022



MOORE AND ASSOCIATES	DRAWN BY: LT		EELCRAFT STRU 1841 AMITY HIL	L RD.
	CHECKED BY: PDH	32'-0"x1	TATESVILLE, NO 6'-0" ENCLOSED	C 28677 STRUCTURE
THIS DOCUMENT IS STRICTLY DOCUMENTED AND AND AND THEORY OF THE OF	PROJECT MGR: WSM	DATE: 10-1-21	SCALE: NTS	JDB ND: 21048S
	CLIENT: STEELCRAFT	SHT. 2	DWG, ND: SK-3	REV. 0

INSTALLATION NOTES AND SPECIFICATIONS

- 1. DESIGN IS FOR MAXIMUM 32'-0" WIDE x 16'-0" EAVE HEIGHT ENCLOSED STRUCTURES.
- 2. DESIGN WAS DONE IN ACCORDANCE WITH ALL THE APPLICABLE BUILDING CODES LISTED ON SHEET 3A.
- 3. DESIGN LOADS ARE AS FOLLOWS:

= 1.5 PSF

B) LIVE LOAD

- = 12 PSF
- C) GROUND SNOW LOAD = 20 PSF

NOTE: UNBALANCED LOADING DUE TO SNOW DRIFTING FROM AN ADJACENT TALLER STRUCTURE HAS NOT BEEN EVALUATED.

- 4. 3-SECOND GUST ULTIMATE WIND SPEED (V_{ULT}) = ≤ 140 MPH (NOMINAL WIND SPEED = ≤ 108 MPH).
- 5. MAXIMUM RAFTER/COLUMN AND END COLUMN SPACING = 5.0 FEET (UNLESS NOTED OTHERWISE).
- 6. ENDWALL COLUMNS (POSTS) AND SIDE WALL COLUMNS ARE EQUIVALENT IN SIZE AND SPACING (UNLESS NOTED OTHERWISE).
- 7. RISK CATEGORY I.
- 8. WIND EXPOSURE CATEGORY B.
- 9. SPECIFICATIONS APPLICABLE TO 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 2 1/2" × 2 1/2" 14 GAUGE TUBE STEEL (TS) FRAMING MEMBERS (UNLESS NOTED OTHERWISE). 2 1/4" × 2 1/4" 12 GAUGE TS MAY BE USED AS OPTIONAL FRAMING MEMBERS.
- 10. AVERAGE PANEL SPACING DN-CENTERS = 10 INCHES.
- 11. FASTENERS CONSIST OF #12-14×3/4" SELF-DRILLING FASTENER (SDF), USE CONTROL SEAL WASHER WITH EXTERIOR FASTENERS.

 SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 16 FEET OR LESS, AND ROOF SLOPES OF 14° (3:12 PITCH) OR LESS SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR SLOPES MAY VARY. ROOF SLOPES LESS THAN 3:12 REQUIRE USE OF JOINT SEALANT.
- 12. ANCHORS SHALL BE INSTALLED THROUGH BASE RAIL AT DR WITHIN 6" DF EVERY COLUMN.
- STANDARD GROUND ANCHORS (SOIL NAILS) CONSIST OF #4 REBAR W/ WELDED NUT × 30' LONG AND MAY ONLY BE USED IN SUITABLE SOILS.

 OPTIONAL ANCHORAGE MAY BE USED IN SUITABLE SOILS AND MUST BE USED IN UNSUITABLE SOILS AS NOTED. COORDINATE WITH LOCAL CODES/ORDINANCES REGARDING MINIMUM LENGTH FOR FROST DEPTH PROTECTION.
- 14. WIND FORCES GOVERN OVER SEISMIC FORCES. SEISMIC PARAMETERS ANALYZED ARE:

SDIL SITE CLASS = D

RISK CATEGORY I

R = 3.25

I_E= 1.0 V= CsW

 $S_{DS} = 2.039$ g $S_{D1} = 1.258 \ q$

15. CONTRACTOR TO PROVIDE ADEQUATE BRACING FOR STRUCTURE SO THAT IT WILL BE STABLE DURING ALL STAGES OF CONSTRUCTION. THE STRUCTURE AND FOUNDATION ARE DESIGNED FOR A COMPLETED CONDITION ONLY AND, THEREFORE, REQUIRE ADDITIONAL SUPPORT TO MAINTAIN

MAY 1 3 2022 SEAL 26784

ROCTO!

ROCTO!

ROCTO!

ROCTO!

L RF.

PROCTO!

ROCTO!

L RF.

PROCTO!

L RF.

**PROCTO!*

L RF.

PROCTO!

L RF.

PROCTO!

L RF.

**PROCTO!*

**PROC

I	ENGIN	M IE	O EF	ORE . RING	A] A	ND ND	AS Co	SSOCIATES ONSULTING,	INC.
THIS	DOCUMENT	12 7	HE	DDDDCDTV	ne	MODDE	ANIT	1000011000	

THE PROPERTY IS NOT
THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND
CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERVISE USE OF
THIS DOCUMENT TO CONTROLLED REPRODUCTION, CUPTING, UR DITHERWISE USE OF
THE DOCUMENT IS STRICTLY PRIMIRITY AND ANY INFORMERY THEOREMS MAN
BE SUBJECT TO LEGAL ACTION
The state of the s

CLIENT: STEELCRAFT	SHT. 3	DWG. NO SK-	3	REV.i 0	
PROJECT MGR: WSM	DATE: 10-1-21	SCALE: NTS	JOI	B ND: 21048S	
CHECKED BY: PDH	32'-0">	STATESVILLE, (16'-0" ENCLOSE	NC 28 D STE	677 RUCTURE	
DRAWN BY: LT		TEELCRAFT STI 1841 AMITY H	ILL R	D.	

LIST OF APPLICABLE BUILDING CODES

2018 INTERNATIONAL BUILDING CODE (IBC 2018)

2015 INTERNATIONAL BUILDING CODE (IBC 2015)

2012 INTERNATIONAL BUILDING CODE (IBC 2012)

GEORGIA STATE MINIMUM STANDARD BUILDING CODE (ADDRTS THE IBC 2018 WITH AMENDMENTS)

2018 NORTH CAROLINA BUILDING CODE (ADOPTS THE IBC 2015 WITH AMENDMENTS)

2018 SOUTH CAROLINA BUILDING CODE (ADOPTS THE IBC 2018 WITH AMENDMENTS)

BUILDING CODE 2012 OF TENNESSEE (ADOPTS THE IBC 2012 WITH AMENDMENTS)

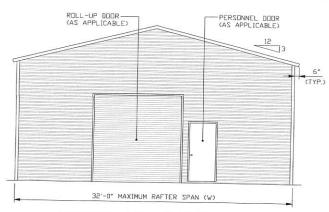


MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.

	ID ASSOCIATES ENGINEERING COPYING, OR OTHERWISE USI NY INFRINGEMENT THEREUPON		PROHIBIT		ENT IS	S DOCUME	THI
--	---	--	----------	--	--------	----------	-----

PROJECT MGR: WSM	DATE: 10-1-21	SCALE: NTS	JDB	ND: 21048S		
		(16'-0" ENCLOSE	ED STR	UCTURE		
DRAWN BY: LT CHECKED BY: PDH	STEELCRAFT STRUCTURES 1841 AMITY HILL RD. STATESVILLE, NC 28677					

BOX EAVE FRAME RAFTER STRUCTURE



LENGTH VARIES DEPENDING DN
NUMBER AND SPACING OF RAFTERS

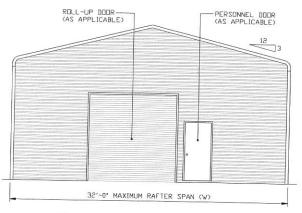
TYPICAL END ELEVATION

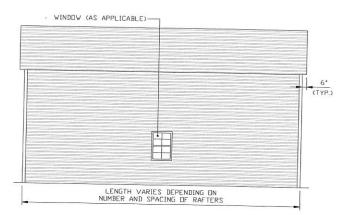
SCALE: NTS

TYPICAL SIDE ELEVATION

SCALE: NTS

BOW EAVE FRAME RAFTER STRUCTURE





TYPICAL END ELEVATION

SCALE: NTS

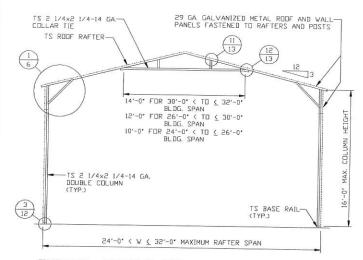
TYPICAL SIDE ELEVATION SCALE: NTS



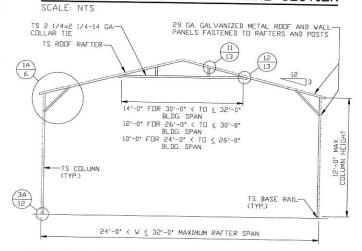
MO	ORE AND ASSOCIATES	,
ENGINEER	RING AND CONSULTIN	G, INC.

THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR DTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

CLIENT: STEELCRAFT	SHT. 4	DWG. NO SK-3	REV. 0	
PROJECT MGR: WSM	DATE: 10-1-21	SCALE: NTS	JDB ND: 21048S	
CHECKED BY: PDH		STATESVILLE, N 16'-0" ENCLOSED		
DRAWN BY: LT	S	TEELCRAFT STR 1841 AMITY HII		

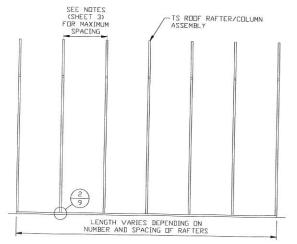


TYPICAL RAFTER/COLUMN FRAME SECTION



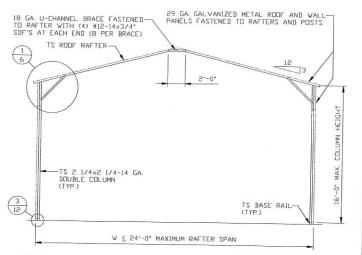
TYPICAL RAFTER/COLUMN FRAME SECTION

SCALE: NTS



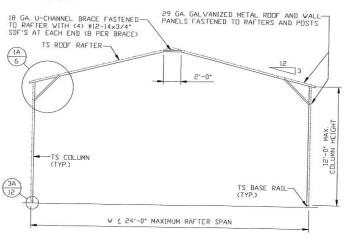
TYPICAL RAFTER/COLUMN SIDE FRAMING SECTION

SCALE: NTS



TYPICAL RAFTER/COLUMN FRAME SECTION

CALE: NTS



TYPICAL RAFTER/COLUMN FRAME SECTION SCALE: NTS

MAY 1 3 2022

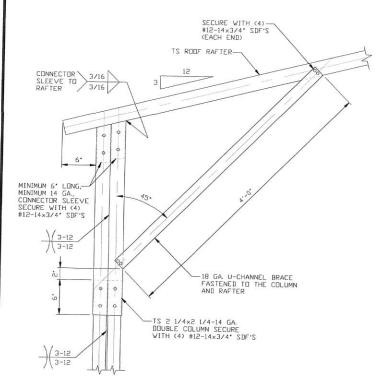
SEAL
26784

MGINEER MONITORINA

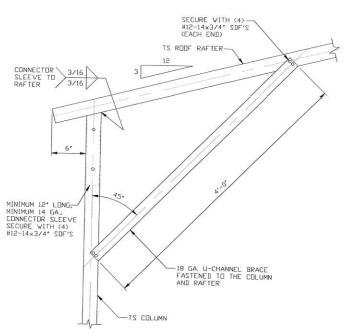
	MOORE AND ASSOCIATES
ENG	INEERING AND CONSULTING, INC.

THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

DRAWN BY: LT	STEELCRAFT STRUCTURES 1841 AMITY HILL RD.				
CHECKED BY: PDH	STATESVILLE, NC 28677 32'-0"x16'-0" ENCLOSED STRUCTURE				
PROJECT MGR: WSM	DATE: 10-1-21	SCALE: NTS	JOB	ND: 21048S	
CLIENT: STEELCRAFT	SHT. 5	DWG. NO: SK-3	3	REV.i 0	

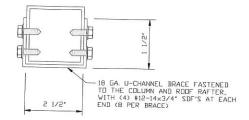


BOX EAVE RAFTER/CORNER COLUMN CONNECTION DETAIL FDR HEIGHTS 12'-0" < TD ≤ 16'-0" 1



BOX EAVE RAFTER/CORNER COLUMN CONNECTION DETAIL FOR HEIGHTS < 12'-0" 1A

SCALE: NTS

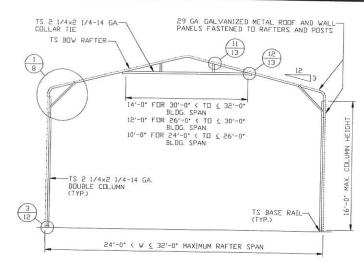


BRACE SECTION

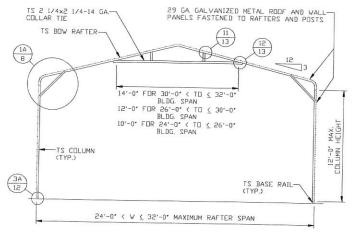
SCALE: NTS



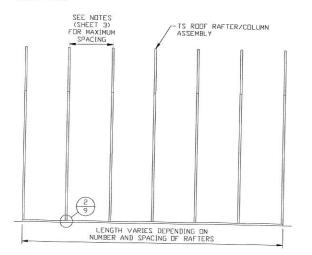
MOORE AND ASSOCIATES	DRAWN BY: LT		EELCRAFT STRU 1841 AMITY HIL	
	CHECKED BY: PDH	32'-0"x1	TATESVILLE, NO 6'-0" ENCLOSED	C 28677 STRUCTURE
THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.	PREJECT MGR: WSM	DATE: 10-1-21	SCALE: NTS	JDB ND: 21048S
	CLIENT: STEELCRAFT	SHT. 6	DWG. ND: SK-3	REV. 0



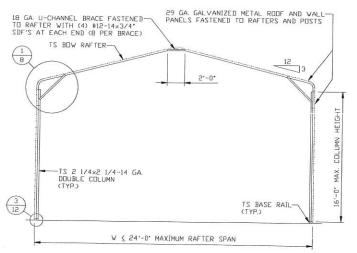
TYPICAL RAFTER/COLUMN FRAME SECTION



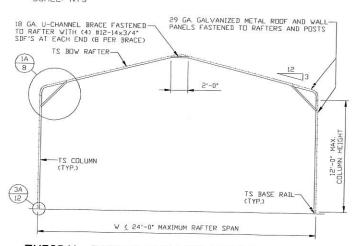
TYPICAL RAFTER/COLUMN FRAME SECTION



TYPICAL RAFTER/COLUMN SIDE FRAMING SECTION



TYPICAL RAFTER/COLUMN FRAME SECTION SCALE: NTS

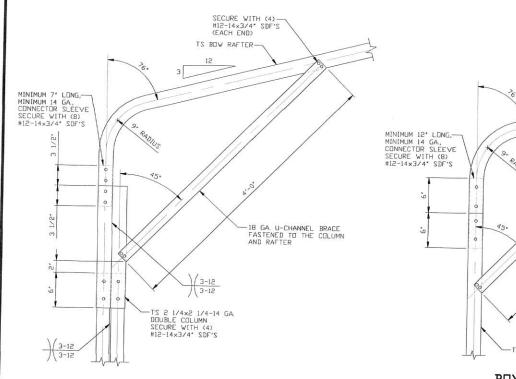


TYPICAL RAFTER/COLUMN FRAME SECTION
SCALE: NTS



MOORE AND ASSOCIATES	DRAWN BY: LT
ENGINEERING AND CONSULTING, IN	IC. CHECKED BY PDH
THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF	
THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MA' BE SUBJECT TO LEGAL ACTION.	CLIENT, STEEL CRAFT

DRAWN BY: LT	S	STEELCRAFT STRUCTURES 1841 AMITY HILL RD				
CHECKED BY: PDH	STATESVILLE, NC 28677 32'-0"x16'-0" ENCLOSED STRUCTURE					
PROJECT MGR: WSM	DATE: 10-1-21	SCALE: NTS	JDB	ND: 21048S		
CLIENT: STEELCRAFT	SHT. 7	DWG. NO: SK-3	3	REV. 0		



BOW EAVE RAFTER/CORNER COLUMN CONNECTION DETAIL FOR HEIGHTS 12'-0" < TO < 16'-0"

18 GA. U-CHANNEL BRACE FASTENED
TO THE COLUMN AND ROOF RAFTER,
WITH (4) HIZ-14-3/4' SDF'S AT EACH
END (9 PER BRACE)

BRACE SECTION

BOX EAVE RAFTER/CORNER COLUMN CONNECTION DETAIL FOR HEIGHTS < 12'-0"

-18 GA. U-CHANNEL BRACE FASTENED TO THE COLUMN AND RAFTER

SECURE WITH (4) — #12-14×3/4" SDF'S (EACH END)

TS BOW RAFTER



STEELCRAFT STRUCTURES 1841 AMITY HILL RD. STATESVILLE, NC 28677 "x16'-0" ENCLOSED STRUCTURE

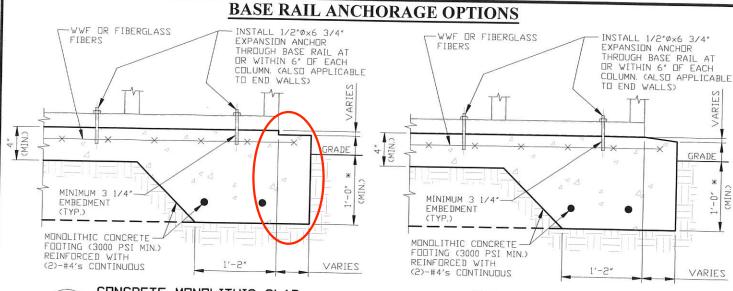
JDB ND: 21048S

REV. 0

SCALE: NTS

DMC ND SK-3

MOORE AND ASS		
ENGINEERING AND CO	NSULTING, INC. CHECKED BY PDH	32'-0"
THIS DOCUMENT IS THE PROPERTY OF MODRE AND AS CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPTHS THIS DOCUMENT IS STRICTLY DEPUTITION.		DATE: 10-1-21
THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY I BE SUBJECT TO LEGAL ACTION.	CLIENT: STEELCRAF	т знт. в



2

CONCRETE MONOLITHIC SLAB BASE RAIL ANCHORAGE

SCALE: NTS MINIMUM ANCHOR EDGE DISTANCE IS 4'.

* COORDINATE WITH LOCAL CODES/ORD.
REGARDING MINIMUM FROST DEPTH REQ.

GENERAL NOTES

NOTE: CONCRETE MONOLITHIC SLAB DESIGN BASED ON MINIMUM SDIL BEARING CAPACITY OF 1,500 PSF.

CONCRETE SHALL HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS

COVER OVER REINFORCING STEEL:

FOR FOUNDATIONS, MINIMUM CONCRETE COVER OVER REINFORCING BARS SHALL BE PER ACI-318:
3' IN FOUNDATIONS WHERE THE CONCRETE IS CAST AGAINST AND PERMANENTLY IN CONTACT WITH THE EARTH OR EXPOSED TO THE EARTH OR WEATHER, AND 1 1/2" ELSEWHERE.

REINFORCING STEEL:

THE TURNDOWN REINFORCING STEEL SHALL BE ASTM A615 GRADE 60. THE SLAB REINFORCEMENT SHALL BE WELDED WIRE FABRIC MEETING ASTM A185 OR FIBERGLASS FIBER REINFORCEMENT.

REINFORCEMENT MAY BE BENT IN THE SHOP OR THE FIELD PROVIDED:

- 1. REINFORCEMENT IS BENT COLD.
- THE DIAMETER OF THE BEND, MEASURED ON THE INSIDE OF THE BAR, IS NOT LESS THAN SIX-BAR DIAMETERS.
 REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT
- BE FIELD BENT.

HELIX ANCHOR NOTES:

- FOR VERY DENSE AND/OR CEMENTED SANDS, COARSE GRAVEL AND COBBLES, CALICHE, PRELOADED SILTS AND CLAYS, USE MINIMUM (2) 4" HELICES WITH MINIMUM 30" EMBEDMENT OR SINGLE 6" HELIX WITH MINIMUM 50" EMBEDMENT
- FOR CORAL USE MINIMUM (2) 4" HELICES WITH MINIMUM 30" EMBEDMENT OR SINGLE 6" HELIX WITH MINIMUM 50" EMBEDMENT.
- 3. FOR MEDIUM DENSE COARSE SANDS, SANDY GRAVELS, VERY STIFF SILTS, AND CLAYS USE MINIMUM (2) 4" HELICES WITH MINIMUM 30 INCH EMBEDMENT OR SINGLE 6" HELIX WITH MINIMUM EMBEDMENT
- 4. FOR LOOSE TO MEDIUM DENSE SANDS, FIRM TO STIFF CLAYS AND SILTS ALLUVIAL FILL, USE MINIMUM (2) 6" HELICES WITH MINIMUM 50" EMBEDMENT.
- 5. FOR VERY LOSE TO MEDIUM DENSE SANDS, FIRM TO STIFFER CLAYS AND SILTS, ALLUVIAL FILL, USE MINIMUM (2) 8' HELICES WITH MINIMUM 60' EMBEDMENT.

CONCRETE SLAB BASE RAIL ANCHORAGE

2A

SCALE: NTS MINIMUM ANCHOR EDGE DISTANCE IS 4'.

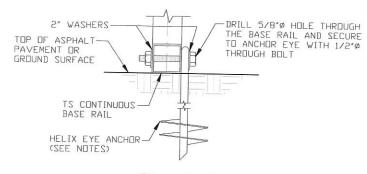
* COORDINATE WITH LOCAL CODES/ORD.
REGARDING MINIMUM FROST DEPTH REQ. VARI

CMIM.)

1,-0"

VARIES

GRADE



GROUND BASE HELIX ANCHORAGE

(CAN BE USED FOR ASPHALT) * COORDINATE WITH LOCAL CODES/ORD. REGARDING MINIMUM FROST DEPTH REQ.

MAY 1 3 2022

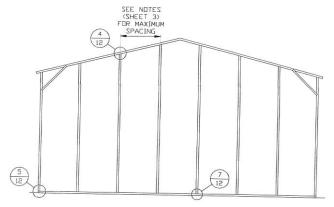


MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.

_							
THIS	DOCUMENT	IS THE PRO	PERTY OF	MODRE A	AND AS	SOCIATES F	NGINEERING AND
# 11143	DUCUMENT	12 2 KILLI	T PRIMIRI	TED AND	ANY I	NFRINGEMENT	THEREUPON MA
DE 3	ORDECT TO	LEGAL ACT	ION.				

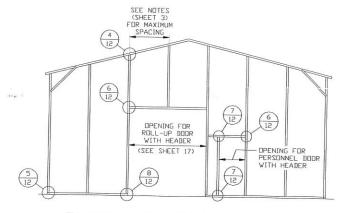
DRAWN E	BY: LT	S	TEELCRAFT STR		
	BY: PDH	1841 AMITY HILL RD. STATESVILLE, NC 28677 32'-0"x16'-0" ENCLOSED STRUCTURE			
PROJECT	MGR: WSM	DATE: 10-1-21	SCALE: NTS JDB ND: 21048S		
CLIENT:	STEELCRAFT	SHT. 9	DWG. NO: SK-3	3	REV.: 0

BOX EAVE RAFTER END WALL AND SIDE WALL FRAMING SECTIONS



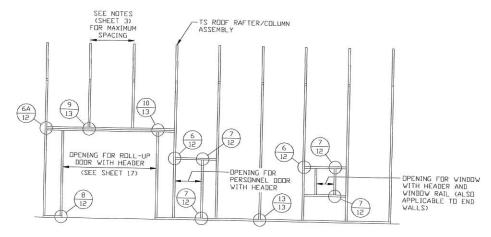
TYPICAL BOX EAVE RAFTER END WALL FRAMING SECTION

SCALE: NTS



TYPICAL BOX EAVE RAFTER END WALL OPENINGS FRAMING SECTION

SCALE: NTS



TYPICAL BOX EAVE RAFTER SIDE WALL OPENINGS FRAMING SECTION

SCALE: NTS

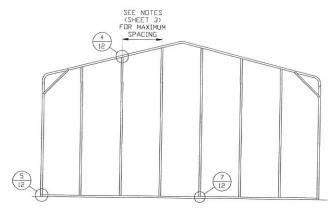
MAY 1 3 2022

CARO
SEAL
26784

SEAL
26784

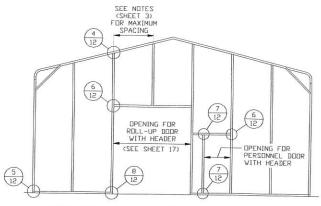
MOORE AND ASSOCIATES	DRAWN BY: LT		EELCRAFT STRU 1841 AMITY HIL	
	CHECKED BY: PDH	32'-0"x1	TATESVILLE, NO 6'-0" ENCLOSED	C 28677 Structure
THIS DOCUMENT IS STRICTLY PROBLEMENT AND AND THERWISE USE IF	PROJECT MGR: WSM	DATE: 10-1-21	SCALE: NTS	JDB ND: 21048S
	CLIENT: STEELCRAFT	SHT. 10	DWG. NO. SK-3	PEV. 0

BOW EAVE RAFTER END WALL AND SIDE WALL FRAMING SECTIONS



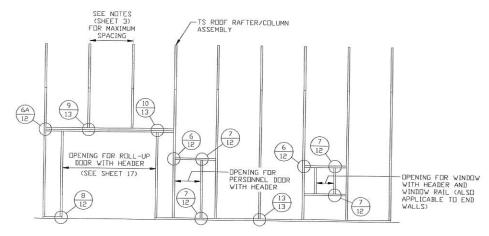
TYPICAL BOW EAVE RAFTER END WALL FRAMING SECTION

SCALE: NTS



TYPICAL BOW EAVE RAFTER END WALL OPENINGS FRAMING SECTION

SCALE: NTS



TYPICAL BOW EAVE RAFTER SIDE WALL OPENINGS FRAMING SECTION

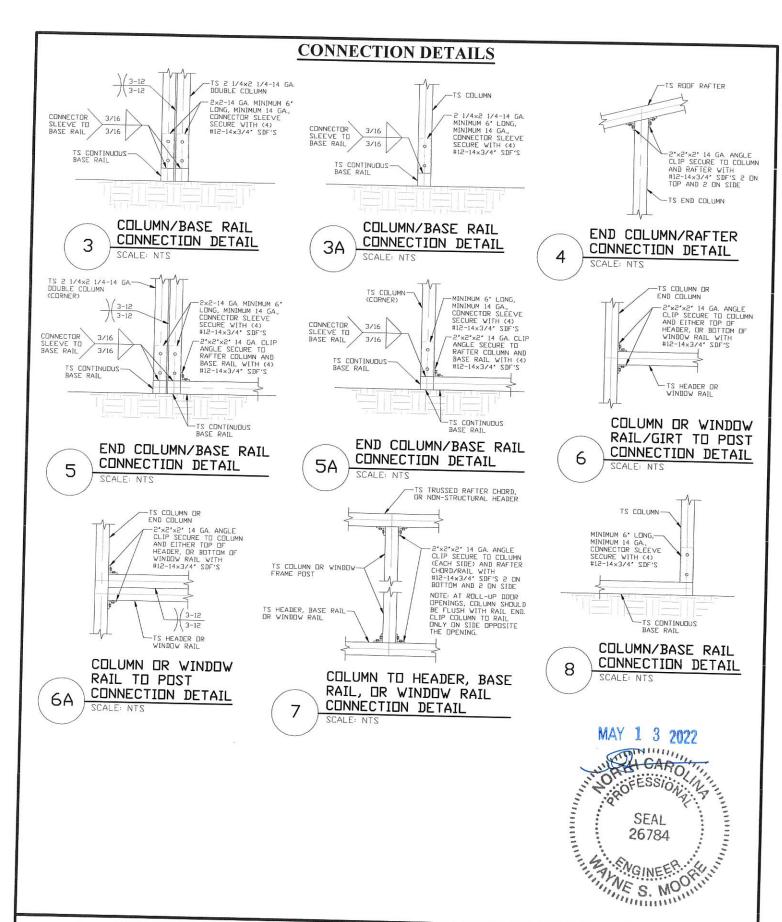
SCALE: NTS

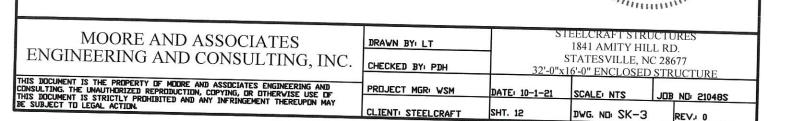
MAY 1 3 2022

SEAL
26784

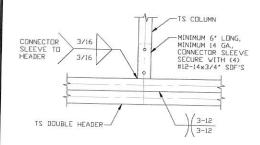
NGINEER

MOORE AND ASSOCIATES	DRAWN BY: LT		EELCRAFT STRU 1841 AMITY HIL	
ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH		TATES VILLE, NO 6'-0" ENCLOSED	
THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFORMEMENT THEORYPORT	PROJECT MGR: WSM	DATE: 10-1-21	SCALE: NTS	JDB ND: 21048S
BE SUBJECT TO LEGAL ACTION.	CLIENT: STEELCRAFT	SHT. 11	DWG. NO: SK-3	REV. 0

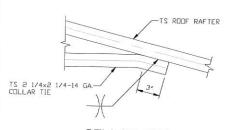




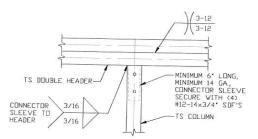
CONNECTION DETAILS



9 COLUMN/DOUBLE HEADER
CONNECTION DETAIL
SCALE: NTS

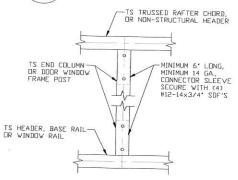


12 COLLAR TIE CONNECTION DETAIL
SCALE: NTS

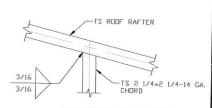


10 DOUBLE HEADER/COLUMN CONNECTION DETAIL

SCALE: NTS



COLUMN TO HEADER
OR BASE RAIL
CONNECTION DETAIL
SCALE: NTS



RAFTER TO CHORD CONNECTION DETAIL SCALE: NTS

MAY 1 3 2022

CARO
SEAL
26784

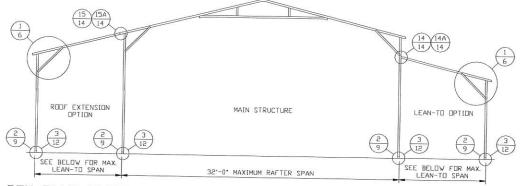
VINEER OR

MOORE AND ASSOCIATES ENGINEERING AND CONSULTING, INC.

THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND
THIS DUCUMENT IS THE PROPERTY OF MODDE AND ASSOCIATES EMERGEORIS AND
CONSILITING THE INVALITHEDITY PROPERTY AND HISBORIES ENGINEERING AND
THIS DUCUMENT IS STRICTLY PROHIBITED AND ANY INCOMENT THERE
THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.
DE SUBSECT TO LEGAL ACTION.

CLIENT: STEELCRAFT	SHT. 13	DWG. NO: SK-			
PROJECT MGR: WSM	DATE: 10-1-21	SCALE: NTS	JDB ND: 21048S		
CHECKED BY: PDH	STATESVILLE, NC 28677 32'-0"x16'-0" ENCLOSED STRUCTURE				
DRAWN BY: LT	STEELCRAFT STRUCTURES 1841 AMITY HILL RD.				

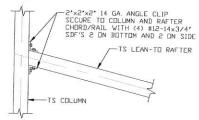
BOX EAVE RAFTER LEAN-TO OPTIONS



TYPICAL BOX EAVE RAFTER LEAN-TO OPTIONS FRAMING SECTION (BOTH OPTIONS SHOWN)

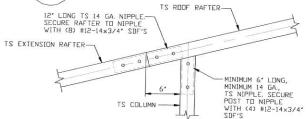
MAXIMUM WIDTH OF SINGLE MEMBER RAFTER ROOF EXTENSION AND LEAN-TO IS 12'-0".
MAXIMUM WIDTH OF DOUBLE MEMBER RAFTER ROOF EXTENSION AND LEAN-TO IS 16'-0'. MAIN BUILDING COLUMNS WITH LEAN-TO OR ROOF EXTENSION ATTACHED ARE REQUIRED TO BE DOUBLE COLUMNS FOR EAVE HEIGHTS 12'-0' < TO < 16'-0".

MAIN BUILDING COLUMNS WITH LEAN-TO OR ROOF EXTENSION ATTACHED ARE REQUIRED TO BE SINGLE COLUMN FOR EAVE HEIGHTS < 12'-0".



LEAN-TO RAFTER TO RAFTER COLUMN CONNECTION DETAIL FOR RAFTER SPANS < 12'-0"

SCALE: NTS



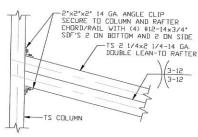
14

SIDE EXTENSION RAFTER COLUMN DETAIL FOR SPANS < 12'-0" SCALE: NTS

TS ROOF RAFTER-12" LONG TS 14 GA. NIPPLE.— SECURE RAFTER TO NIPPLE WITH (8) #12-14x3/4" SDF'S 3-15 3-12 -MINIMUM 6' LUNG, MINIMUM 14 GA., TS NIPPLE. SECURE POST TO NIPPLE WITH (4) #12-14×3/4' SDF'S 6 TS 2 1/4×2 1/4-14 GA.— DOUBLE EXTENSION RAFTER TS COLUMN 2'x2'x2' 14 GA. ANGLE CLIP— SECURE TO COLUMN AND RAFTER WITH (4) #12-14x3/4' SDF'S

SIDE EXTENSION RAFTER COLUMN DETAIL FOR SPANS 12'-0" < TO ≤ 16'-0"

SCALE: NTS



LEAN-TO RAFTER TO RAFTER COLUMN CONNECTION DETAIL FOR RAFTER SPANS 12'-0" < T□ < 16'-0" 14A

SCALE: NTS

MAY 1 3 2022

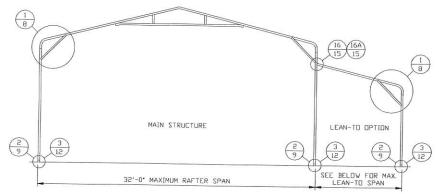


MOORE AND ASSOCIATES	
ENGINEERING AND CONSULTING, INC	٦.

THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES	FACINEEDING AND
CONSOCITING, THE UNAUTHURIZED PEPPHHINITTING CHOVING HO	THEN MOR HOR WA
11/1/2 DOCOMENT IS STRICTLY PRIMIBILED AND ANY INFORMATION	NT THEOFINDIN MAY
BE SUBJECT TO LEGAL ACTION.	THEREOF BR PINT

DRAWN BY: LT CHECKED BY: PDH	STEELCRAFT STRUCTURES 1841 AMITY HILL RD. STATESVILLE, NC 28677 32'-0"x16'-0" ENCLOSED STRUCTURE				
PROJECT MGR: WSM	DATE: 10-1-21	SCALE: NTS	JDB	3 ND: 21048S	
CLIENT: STEELCRAFT	SHT. 14	DWG. NO: SK-3	3	REV. 0	

BOW EAVE RAFTER LEAN-TO OPTIONS



TYPICAL BOW EAVE RAFTER LEAN-TO OPTIONS FRAMING SECTION

SCALE: NTS

MAXIMUM WIDTH OF SINGLE MEMBER RAFTER ROOF EXTENSION AND LEAN-TO IS 12'-0".

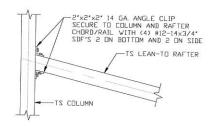
MAXIMUM WIDTH OF DOUBLE MEMBER RAFTER ROOF EXTENSION AND LEAN-TO IS 16'-0".

MAIN BUILDING COLUMNS WITH LEAN-TO OR ROOF EXTENSION ATTACHED ARE REQUIRED TO BE DOUBLE COLUMNS

FOR EAVE HEIGHTS 12'-0".

MAIN BUILDING COLUMNS WITH LEAN-TO OR ROOF EXTENSION ATTACHED ARE REQUIRED TO BE SINGLE COLUMNS

FOR EAVE HEIGHTS \(\) 12'-0".



LEAN-TO RAFTER TO RAFTER COLUMN CONNECTION DETAIL FOR RAFTER SPANS \(\leq 12'-0'\)

2'x2'x2' 14 GA. ANGLE CLIP
SECURE TO COLUMN AND RAFTER
CHORD/RAIL WITH (4) #12-14x3/4'
SDF'S 2 ON BOTTOM AND 2 ON SIDE
TS 2 1/4x2 1/4-14 GA.
DOUBLE LEAN-TO RAFTER

3-12

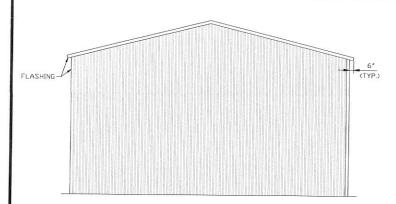
3-12

LEAN-TO RAFTER TO RAFTER
COLUMN CONNECTION DETAIL FOR
RAFTER SPANS 12'-0" < TO < 16'-0"

16A) SCALE: NTS

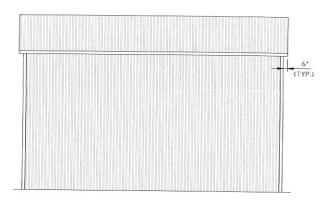
MOORE AND ASSOCIATES	DRAWN BY: LT		EELCRAFT STRU 1841 AMITY HIL		
ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH	STATESVILLE, NC 28677 32'-0"x16'-0" ENCLOSED STRUCTURE			
	PRDJECT MGR: WSM	DATE: 10-1-21	SCALE: NTS	JDB ND: 21048S	
THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.	CLIENT: STEELCRAFT	SHT. 15	DWG. NO: SK-3	REV. n	

BOX EAVE RAFTER VERTICAL ROOF/SIDING OPTION



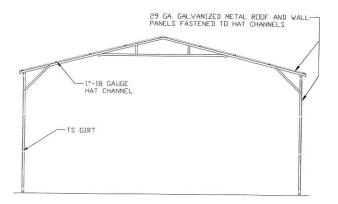
TYPICAL END ELEVATION VERTICAL ROOF/SIDING

SCALE: NTS



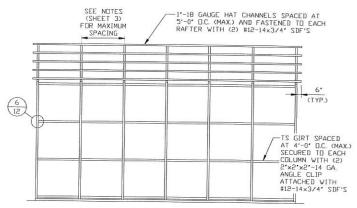
TYPICAL SIDE ELEVATION VERTICAL ROOF/SIDING

SCALE: NTS



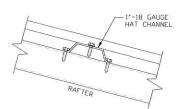
TYPICAL SECTION VERTICAL ROOF/SIDING OPTION

SCALE: NTS



TYPICAL FRAMING SECTION VERTICAL ROOF/SIDING OPTION

SCALE: NTS



PANEL ATTACHMENT

(ALTERNATE FOR VERTICAL ROOF PANELS)

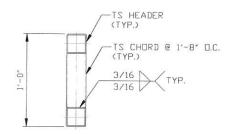


MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.

THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.

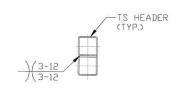
DRAWN BY: LT	STEELCRAFT STRUCTURES 1841 AMITY HILL RD.				
CHECKED BY: PDH	STATESVILLE, NC 28677 32'-0"x16'-0" ENCLOSED STRUCTURE				
PRDJECT MGR: WSM	DATE: 10-1-21	SCALE: NTS	JDF	8 ND: 21048S	
CLIENT: STEELCRAFT	SHT. 16	DWG. NO SK-3	3	REV. 0	

SIDE WALL HEADER OPTIONS



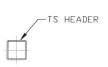
HEADER DETAIL FOR SIDE WALL DOOR OPENINGS 14'-0" < LENGTH < 16'-0"

SCALE: NTS



HEADER DETAIL FOR SIDE WALL DOOR OPENINGS 8'-0" < LENGTH ≤ 14'-0"

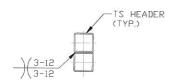
SCALE: NTS



HEADER DETAIL FOR SIDE WALL DOOR OPENINGS < 8'-0"

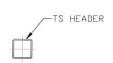
SCALE: NTS

END WALL HEADER OPTIONS



HEADER DETAIL FOR SIDE WALL DOOR OPENINGS 13'-0" < LENGTH \(\) 16'-0"

SCALE: NTS



HEADER DETAIL FOR END WALL DOOR OPENINGS ≤ 13'-0"

SCALE: NTS



THIS DOCUMENT IS STRICTLY PROHIBITED AND ANY INFRINGEMENT THEREUPON MAY BE SUBJECT TO LEGAL ACTION.	CLIENTI STEEL CRAFT	SHT. 17	DWG. NO SK-	3 REVIN		
THIS DOCUMENT IS THE PROPERTY OF MODRE AND ASSOCIATES ENGINEERING AND CONSULTING. THE UNAUTHORIZED REPRODUCTION, COPYING, OR OTHERWISE USE OF	PROJECT MGR: WSM	DATE: 10-1-21	SCALE: NTS	JDB ND: 21048S		
ENGINEERING AND CONSULTING, INC.	CHECKED BY: PDH	The state of the s	STATESVILLE, NC 28677 32'-0"x16'-0" ENCLOSED STRUCTURE			
MOORE AND ASSOCIATES	DRAWN BY: LT		STEELCRAFT STRUCTURES 1841 AMITY HILL RD.			