

# STRUCTURAL DESIGN ENCLOSED BUILDING

### MAXIMUM 30'- 0" WIDE X 14'- 0" HEIGHT-BOX EAVE FRAME AND BOW FRAME

22 November 2024 Revision 11 M&A Project No. 17062S/17174S/17254S/18033S/18113S/18246S/19309S/22257S/23335S

Prepared for:

Newmart Builders 1000 Cycle Lane South Hill, VA 23970

Prepared by:

Moore and Associates Engineering and Consulting, Inc.

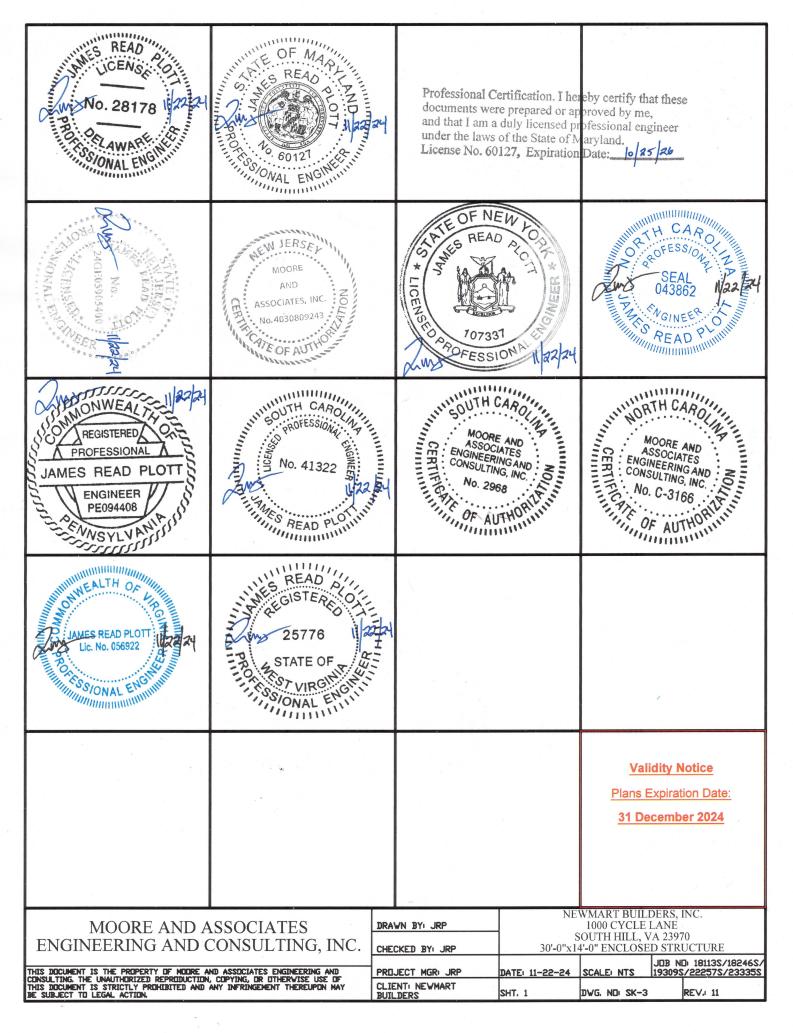
1009 East Avenue North Augusta, SC 29841

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



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ENCINEEDING AND CONCILITING INC	CHECKED BY: JRP		SOUTH HILL, VA 4'-0" ENCLOSEI	
MOORE AND ASSOCIATES	DRAWN BY: JRP	NE'	WMART BUILD 1000 CYCLE L	,

### INSTALLATION NOTES AND SPECIFICATIONS

- 1. DESIGN IS FOR MAXIMUM 30'-0" WIDE x 14'-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:

A) ROOF DEAD LOADS:

SELF-WEIGHT = 1.5 PSF

MEP = 0 PSF

COLLATERAL = 0 PSF

B) ROOF LIVE LOAD = 12 PSF

= 100 PSF (4" CONCRETE SLAB-ON-GRADE) C) FLOOR LIVE LOAD

= 30 PSF (W <u><</u> 24'-0") D) GROUND SNOW LOAD

= 35 PSF  $(18'-0" < W \le 30'-0")$ ,

= 45 PSF @ 4'-0" D.C. MAX. RAFTER/COLUMN AND END COLUMN SPACING (24'-0" < W ≤ 30'-0")

@ 5'-0" D.C. MAX. RAFTER/COLUMN AND END COLUMN SPACING (W < 24'-0")

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

- 4. 3-SECOND GUST ULTIMATE WIND SPEED (LW) 105 TO 130 MPH (NOMINAL WIND SPEED 81 TO 101 MPH).
- 5, MAXIMUM RAFTER/POST AND END COLUMN SPACING = 5.0 FEET (UNLESS NOTED OTHERWISE).
- 6. END WALL COLUMNS (POST) ARE SIMILAR TO SIDE WALL COLUMNS (POSTS) IN SIZE AND SPACING (UNLESS NOTED OTHERWISE).
- 7. RISK CATEGORY I (NOT FOR HUMAN OCCUPANCY).
- 8. WIND EXPOSURE CATEGORY B
- 9. STRUCTURAL ANALYSIS/DESIGN IS BASED ON TS MEETING THE REQUIREMENTS OF ASTM A653 GRADE 50 WITH MINIMUM YIELD STRENGTH (Fy) DF 54 KSI AND GALVANIZING MEETING THE MINIMUM REQUIREMENTS DF G60.
- 10. SPECIFICATIONS APPLICABLE TO 29 GAUGE METAL PANELS FASTENED DIRECTLY TO 2"x3"-14 GAUGE TUBE STEEL (TS) FRAMING MEMBERS FOR (24'-0" < W  $\leq$  30'-0" AND W  $\leq$  24'-0" WITH EAVE HEIGHT 12'-0" < TO  $\leq$  14'-0") 2 1/4"x2 1/4"-14 GAUGE TUBE STEEL (TS) FOR < W  $\leq$  24'-0") (UNLESS NOTED OTHERWISE).
- 11. CONNECTOR SLEEVES ARE MINIMUM 8" LONG, TS 1 3/4"x2 3/4"-14 GAUGE FOR 2"x3"-14 GAUGE AND TS 2"x2"-14 GAUGE FOR 2 1/4"x2 1/4"-14 GAUGE FRAMING MEMBERS (UNLESS NOTED OTHERWISE).
- 12. AVERAGE FASTENER SPACING DN-CENTERS = 10" D.C. (MAX.).
- 13. FASTENERS CONSIST OF 1/4"x3/4" SELF-DRILLING FASTENER (SDF), USE CONTROL SEAL WASHER WITH EXTERIOR FASTENERS. SPECIFICATIONS APPLICABLE ONLY FOR MEAN ROOF HEIGHT OF 20 FEET OR LESS, AND ROOF SLOPES OF 14° (3:12 PITCH) OR LESS SPACING REQUIREMENTS FOR OTHER ROOF HEIGHTS AND/OR SLOPES MAY VARY.
- 14. ANCHORS SHALL BE INSTALLED THROUGH BASE RAIL AT OR WITHIN 6" OF EVERY COLUMN.
- 15. STANDARD GROUND ANCHORS (SDIL NAILS) CONSIST OF #4 REBAR W/ WELDED NUT/FORMED HEAD x 30" LONG AND MAY BE USED IN SUITABLE SDILS. OPTIONAL ANCHORAGE MAY BE USED IN SUITABLE SDILS AND MUST BE USED IN UNSUITABLE SDILS AS NOTED.
- 16. 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 STABILITY BEFORE COMPLETION.
- 17. WIND FORCES GOVERN OVER SEISMIC FORCES, SEISMIC PARAMETERS ANALYZED ARE:

SDIL SITE CLASS = DRISK CATEGORY I

R = 3.25 $I_E = 1.0$ 

 $S_{DS} = 2.625 g$  $V = C^2 M$ 

 $S_{D1} = 2.13 g$ 

- 18. IF MORE THAN 50% OF COLUMNS (LEGS) ARE REMOVED IN ANY LONGITUDINAL (SIDE) WALLS OF A BUILDING, THE ENGINEER IS TO BE NOTIFIED TO DETERMINE WHETHER PORTAL FRAMES OR OTHER LONGITUDINAL STABILITY ELEMENTS WILL BE REQUIRED.
- 19. THIS MASTER DESIGN IS A GENERIC MASTER DESIGN PRIMARILY INTENDED FOR PLANT FABRICATION AND ERECTION AKIN TO SHOP DRAWINGS. THE MASTER DESIGN IS NOT PRIMARILY INTENDED FOR CONSTRUCTION PERMIT. WHEN APPLYING FOR BUILDING PERMIT, THE CERTIFIED BUILDING OFFICIAL MUST BE CONSULTED TO VERIFY WHETHER THE USE OF THE MASTER DESIGN IS ADEQUATE OR IF A SITE-SPECIFIC DESIGN IS REQUIRED FOR BUILDING PERMIT. ANY VARIATION FROM THE ANALYSIS/ DESIGN PARAMETERS OF THE MASTER DESIGN REQUIRES THE DEVELOPMENT OF A SITE-SPECIFIC DESIGN.

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MOORE AND ASSOCIATES
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DRAWN BY: JRP	1000 CYCLE LANÉ			
	SOUTH HILL, VA 23970			
CHECKED BY: JRP	30'-0"x14'-0" ENCLOSED STRUCTURE			
		JOB	ND: 18113S/18246S/	
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### LIST OF APPLICABLE BUILDING CODES

2021 INTERNATIONAL BUILDING CODE (IBC 2021)

2018 INTERNATIONAL BUILDING CODE (IBC 2018)

2015 INTERNATIONAL BUILDING CODE (IBC 2015)

2012 INTERNATIONAL BUILDING CODE (IBC 2012)

2009 INTERNATIONAL BUILDING CODE (IBC 2009)

2006 INTERNATIONAL BUILDING CODE (IBC 2006)

DELAWARE BUILDING CODE (IBC 2012, IBC 2015, IBC 2018 (DEPENDENT UPON LOCAL JURISDICTION))

BUILDING CODE 2018 OF MARYLAND (ADOPTS THE IBC 2018 WITH AMENDMENTS)

BUILDING CODE 2021 OF NEW JERSEY (ADOPTS THE IBC 2021 WITH AMENDMENTS)

2020 BUILDING CODE OF NEW YORK STATE (ADOPTS THE IBC 2018 WITH AMENDMENTS)

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

BUILDING CODE 2018 OF PENNSYLVANIA (ADOPTS THE IBC 2018 WITH AMENDMENTS) PHILADELPHIA BUILDING CODE (ADOPTS THE IBC 2018 WITH AMENDMENTS)

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

2018 VIRGINIA CONSTRUCTION CODE (ADOPTS THE IBC 2018 WITH AMENDMENTS)

BUILDING CODE 2018 OF WEST VIRGINIA (ADOPTS THE IBC 2018 WITH AMENDMENTS)

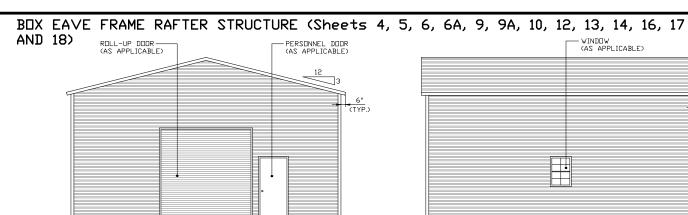
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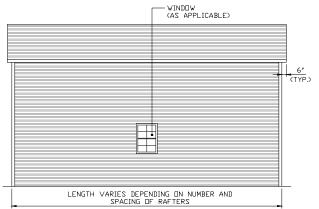
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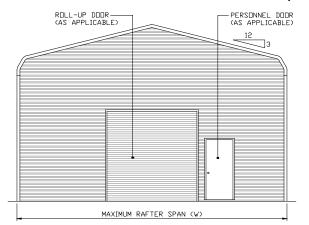


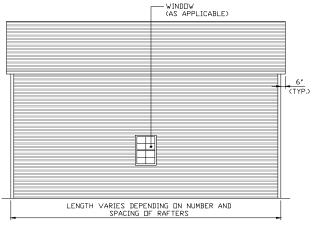
MAXIMUM RAFTER SPAN (W) TYPICAL END ELEVATION

TYPICAL SIDE ELEVATION

SCALE: NTS

BOW FRAME RAFTER STRUCTURE (Sheets 4, 7, 8, 8A, 9, 9A, 11, 12, 13, 15, 17 AND 18)





TYPICAL END ELEVATION SCALE: NTS

TYPICAL SIDE ELEVATION SCALE: NTS

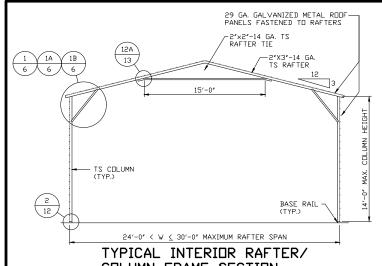
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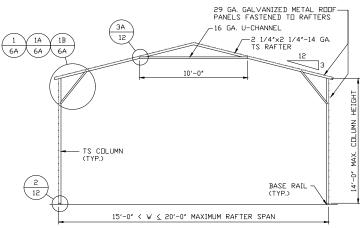
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			JOB NO: 181135/182465/	
PROJECT MGR: JRP	DATE: 11-22-24		193098/222578/233358	
CLIENT: NEWMART BUILDERS	SHT. 4	DWG. NO: SK-3	REV.: 11	



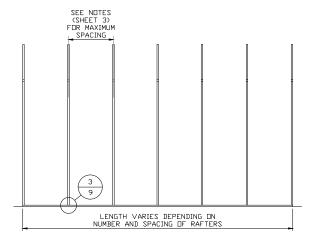
# COLUMN FRAME SECTION

SCALE: NTS

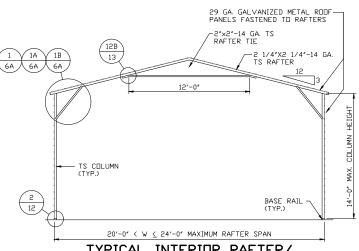


### TYPICAL INTERIOR RAFTER/ COLUMN FRAME SECTION

SCALE: NTS

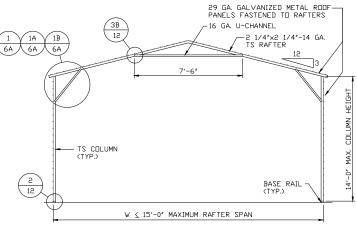


### TYPICAL RAFTER/COLUMN SIDE FRAMING SECTION



### TYPICAL INTERIOR RAFTER/ COLUMN FRAME SECTION

SCALE: NTS



### TYPICAL INTERIOR RAFTER/ COLUMN FRAME SECTION

SCALE: NTS

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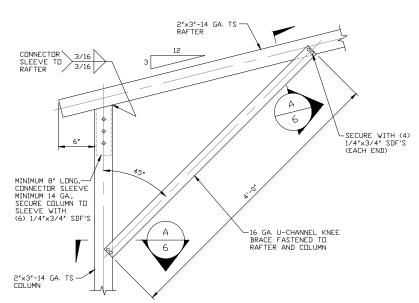
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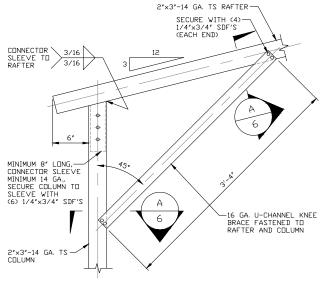
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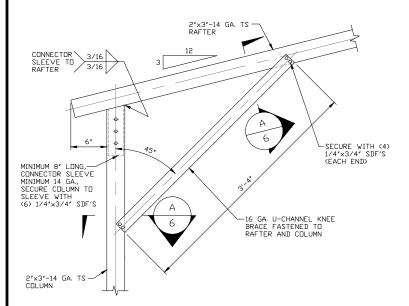
### $24'-0" < W \le 30'-0"$ MAXIMUM RAFTER SPAN

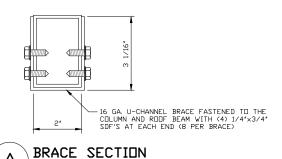




BOX EAVE RAFTER COLUMN
CONNECTION DETAIL
HEIGHTS 12'-0' < TO < 14'-0' @ 3'-0' O.C.
SCALE: NTS

BOX EAVE RAFTER COLUMN CONNECTION DETAIL HEIGHTS < 10'-0" @ 3'-6" O.C.





BOX EAVE RAFTER COLUMN CONNECTION DETAIL HEIGHTS 10'-0" < TO < 12'-0" @ 3'-6" O.C.

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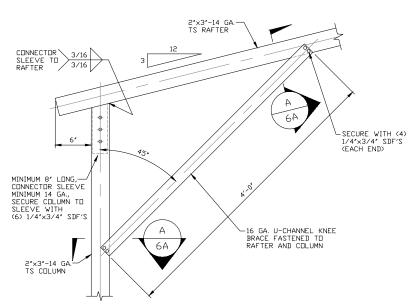
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				JDB N	D: 18113S/18246S/
,	CHECKED BY: JRP	30'-0"x14'-0" ENCLOSED STRUCTURE			
		SOUTH HILL, VA 23970			
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SCALE: NTS

### **W ≤ 24'-0" MAXIMUM RAFTER SPAN**



CONNECTOR 3/16

SECURE WITH (4)

1/4'x3/4' SDF'S

CEACH END)

RAFTER

MINIMUM 8' LONG,
CONNECTOR SLEEVE
MINIMUM 14 GA.,
SECURE COLLUMN TO
SLEEVE WITH
(6) 1/4'x3/4' SDF'S

6A

16 GA. U-CHANNEL KNEE
BRACE FASTENED TO
RAFTER AND COLUMN

TS COLUMN

BOX EAVE RAFTER COLUMN CONNECTION DETAIL

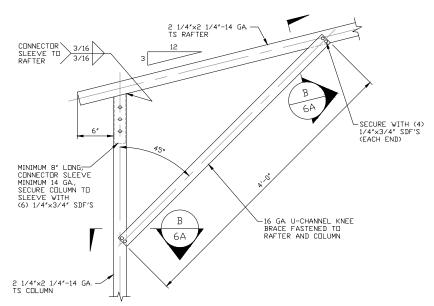
HEIGHTS 12'-0" < T□ < 14'-0" @ 3'-6" □.C.

SCALE: NTS

1

1A

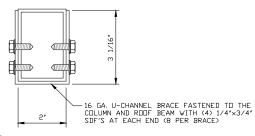
(3'-0" D.C. SPACING FOR WIND SPEEDS = 105 MPH < TO  $\leq$  130 MPH>



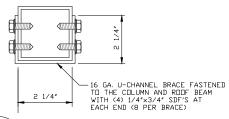
BOX EAVE RAFTER COLUMN CONNECTION DETAIL HEIGHTS 10'-0" < TO < 12'-0" @ 3'-0" □.C.

SCALE: NTS (2'-6" D.C. SPACING FOR WIND SPEEDS = 105 MPH < TO  $\leq$  130 MPH)

BOX EAVE RAFTER COLUMN CONNECTION DETAIL HEIGHTS < 10'-0" @ 4'-0" O.C.



A BRACE SECTION SCALE: NTS



B BRACE SECTION

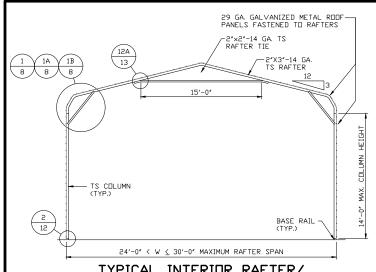
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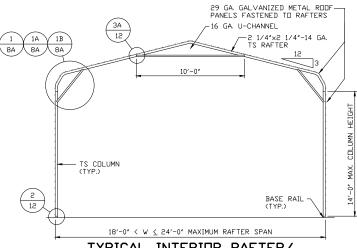
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PROJECT MGR: JRP	DATE: 11-22-24	SCALE: NTS		18113S/18246S/ 22257S/23335S
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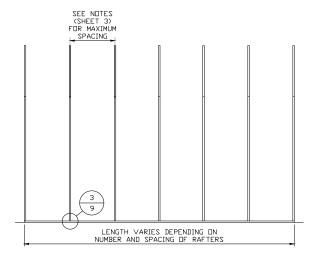
# TYPICAL INTERIOR RAFTER/COLUMN FRAME SECTION

SCALE: NTS



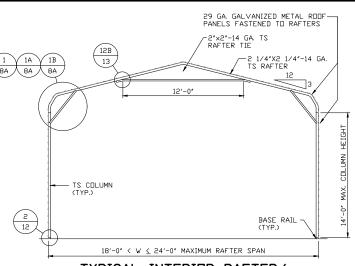
### TYPICAL INTERIOR RAFTER/ COLUMN FRAME SECTION

SCALE: NTS



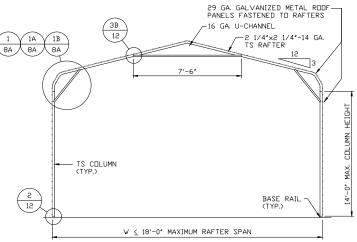
### TYPICAL RAFTER/COLUMN SIDE FRAMING SECTION

SCALE: NTS



# TYPICAL INTERIOR RAFTER/COLUMN FRAME SECTION

SCALE: NTS



### TYPICAL INTERIOR RAFTER/ COLUMN FRAME SECTION

SCALE: NTS

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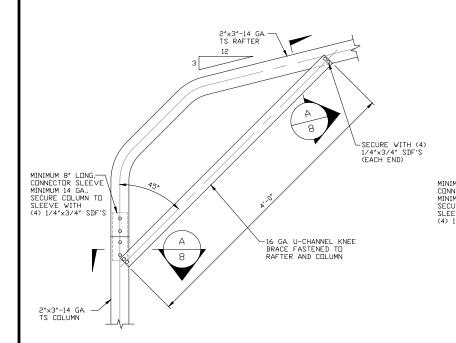
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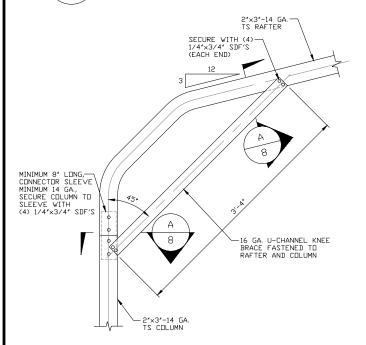
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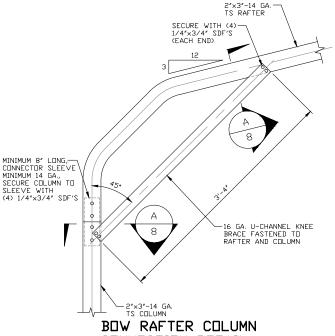
### $24'-0" < W \le 30'-0"$ MAXIMUM RAFTER SPAN



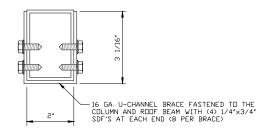
BOW RAFTER COLUMN CONNECTION DETAIL HEIGHTS 12'-0" < TO ≤ 14'-0" @ 3'-0" O.C.



BOW EAVE RAFTER COLUMN CONNECTION DETAIL HEIGHTS 10'-0" < TO < 12'-0" @ 3'-6" O.C.



TB HEIGHTS & 10'-0" @ 3'-6" D.C.



A BRACE SECTION
SCALE: NTS

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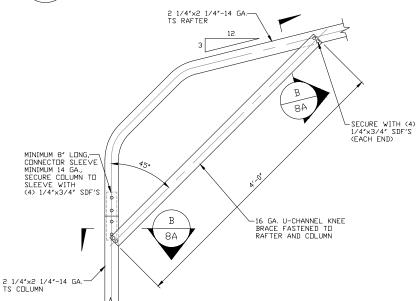
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# W ≤ 24'-0" MAXIMUM RAFTER SPAN 2"x3"-14 GA. TS RAFTER 12 MINIMUM 8' LDNG, CEACH END) MINIMUM 8' LDNG, CEACH END) MINIMUM 19 GA, SECURE CULINN TD SLEEVE WITH (4) 1/4"x3/4" SDF"S A BA BA BA BA BA BBDW CIDNI CIDN

BOW RAFTER COLUMN CONNECTION DETAIL HEIGHTS  $12'-0'' < TO \le 14'-0'' @ 3'-6'' O.C.$ 

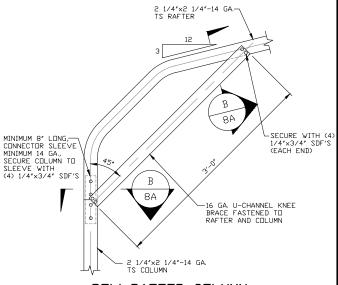
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SCALE: NTS (3'-0" D.C. SPACING FOR WIND SPEEDS = 105 MPH < TO ≤ 130 MPH)



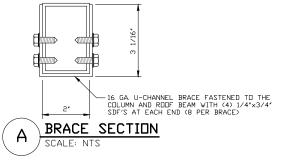
BOW EAVE RAFTER COLUMN CONNECTION DETAIL HEIGHTS 10'-0" < TO < 12'-0" @ 3'-0" O.C.

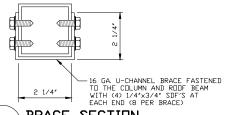
SCALE: NTS (2'-6" D.C. SPACING FOR WIND SPEEDS = 105 MPH < TO  $\leq$  130 MPH)



BOW RAFTER COLUMN
CONNECTION DETAIL

HEIGHTS & 10'-0" @ 4'-0" O.C.





B BRACE SECTION

**Validity Notice** 

Plans Expiration Date:

**31 December 2024** 

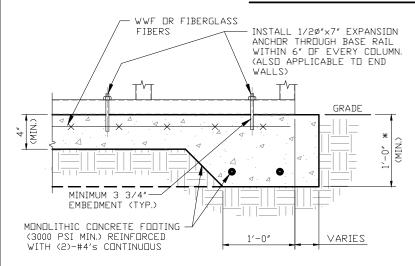
MOORE AND ASSOCIATES
ENGINEERING AND CONSULTING, INC.

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1A

	NEV	VMAKI BUILD	EKS,	INC.
DRAWN BY: JRP	1000 CYCLE LANE			
	SOUTH HILL, VA 23970			
CHECKED BY: JRP	30'-0"x14'-0" ENCLOSED STRUCTURE			
			JDB V	D: 18113S/18246S/
PROJECT MGR: JRP	DATE: 11-22-24			\$/22257\$/23335\$
CLIENT: NEWMART BUILDERS	SHT. 8A	DWG. ND: SK-3		REV.: 11

### BASE RAIL ANCHORAGE OPTIONS





### CONCRETE MONOLITHIC SLAB BASE RAIL ANCHORAGE

SCALE: NTS
NOTE: MIN. ANCHOR EDGE DISTANCE IS 4"
\* COORDINATE WITH LOCAL BUILDING CODES/ORD. REGARDING REQUIRED FOOTING DEPTH.

### GENERAL NOTES

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

### CONCRETE:

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:

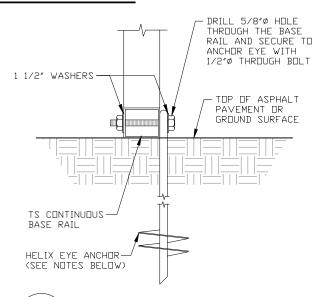
THE TURNDOWN REINFORCING STEEL SHALL BE ASTM A615 GRADE 60. THE SLAB REINFORCEMENT SHALL BE WELDED WIRE FABRIC MEETING ASTM A185 OR FIBERGLASS FIBER REINFORCEMENT.

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

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

### HELIX ANCHOR NOTES:

- 1. 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
- 2. 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 50" EMBEDMENT.
- 4. FOR LODSE TO MEDIUM DENSE SANDS, FIRM TO STIFF CLAYS AND SILTS ALLUVIAL FILL, USE MINIMUM (2) 6" HELICES WITH MINIMUM 50" EMBEDMENT.
- 5. FOR VERY LODSE TO MEDIUM DENSE SANDS, FIRM TO STIFFER CLAYS AND SILTS, ALLUVIAL FILL, USE MINIMUM (2) 8" HELICES WITH MINIMUM 60" EMBEDMENT.



3B

### GROUND BASE HELIX ANCHORAGE

SCALE: NTS (CAN BE USED FOR ASPHALT) \* COORDINATE WITH LOCAL CODES/ORD. REGARDING REQUIRED ANCHOR LENGTH.

### **Validity Notice**

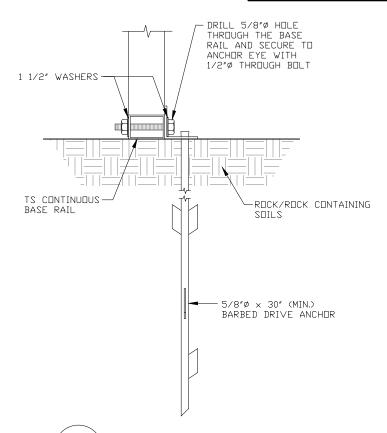
Plans Expiration Date:

**31 December 2024** 

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	NE	NEWMART BUILDERS, INC.				
DRAWN BY: JRP		1000 CYCLE LANE				
	7	SOUTH HILL, VA 23970				
CHECKED BY: JRP	30'-0"x1	30'-0"x14'-0" ENCLOSED STRUCTURE				
	JOB NO: 18113S/182					
PROJECT MGR: JRP	DATE: 11-22-24	SCALE: NTS		3/22257\$/23335		
CLIENT: NEWMART BUILDERS	SHT. 9	DWG. ND: SK-3		REV.: 11		

### **BASE RAIL ANCHORAGE OPTION**



### BARBED DRIVE ANCHORAGE

3C

SCALE: NTS \* COORDINATE WITH LOCAL CODES/ORD. REGARDING REQUIRED ANCHOR LENGTH.

### **Validity Notice**

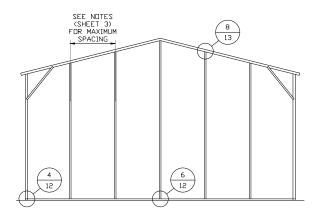
Plans Expiration Date:

31 December 2024

MOORE AND ASSOCIATES
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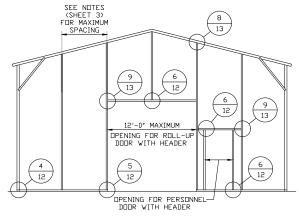
	NEWMART BUILDERS, INC.				
DRAWN BY: JRP	1000 CYCLE LANÉ				
	SOUTH HILL, VA 23970				
CHECKED BY: JRP	30'-0"x14'-0" ENCLOSED STRUCTURE				
			JDB N	D: 18113S/18246S/	
PROJECT MGR: JRP	DATE: 11-22-24			\$/22257\$/23335\$	
CLIENT: NEWMART BUILDERS	SHT. 9A	DWG. ND: SK-3		REV.: 11	

### BOX EAVE RAFTER END WALL AND SIDE WALL OPENINGS



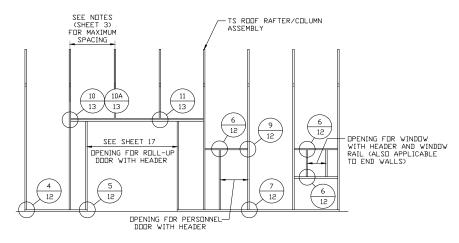
TYPICAL BOX EAVE RAFTER END WALL FRAMING SECTION

SCALE: NTS



TYPICAL BOX EAVE RAFTER END WALL OPENING FRAMING SECTION

SCALE: NTS



TYPICAL BOX EAVE RAFTER SIDE WALL OPENINGS FRAMING SECTION

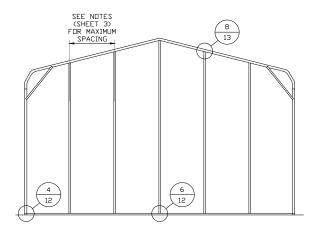
SCALE: NTS

### **Validity Notice**

Plans Expiration Date:

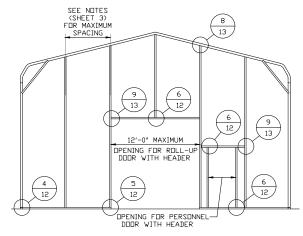
MOORE AND ASSOCIATES	DRAWN BY: JRP	NE	WMART BUILI 1000 CYCLE I	
ENGINEERING AND CONSULTING, INC.	CHECKED BY: JRP		SOUTH HILL, V 4'-0" ENCLOSE	A 23970 D STRUCTURE
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### BOW EAVE RAFTER END WALL AND SIDE WALL OPENINGS



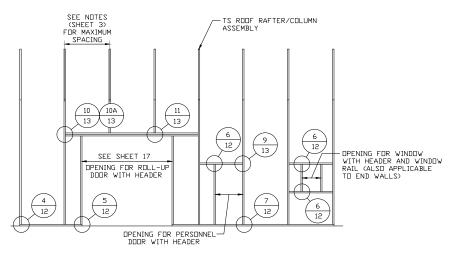
# TYPICAL BOW EAVE RAFTER END WALL FRAMING SECTION

SCALE: NTS



# TYPICAL BOW EAVE RAFTER END WALL OPENING FRAMING SECTION

SCALE: NTS



# TYPICAL BOW EAVE RAFTER SIDE WALL OPENINGS FRAMING SECTION

SCALE: NTS

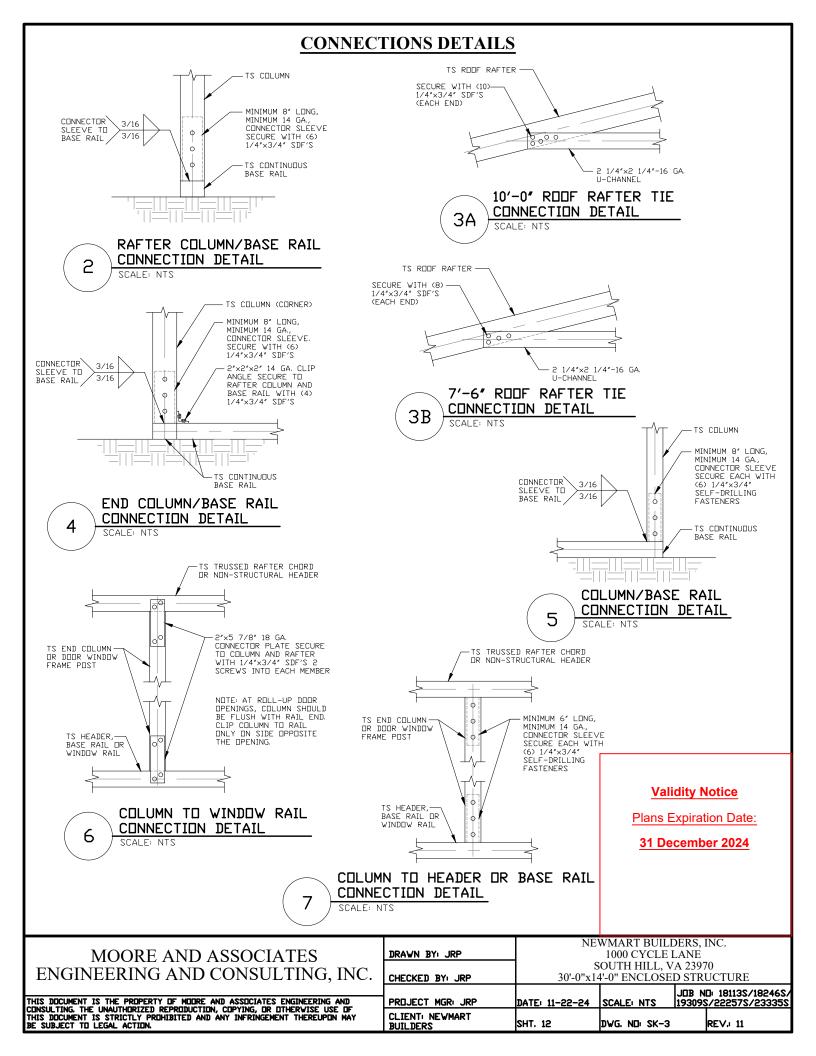
### **Validity Notice**

Plans Expiration Date:

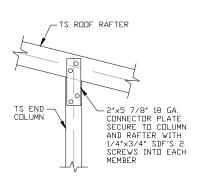
31 December 2024

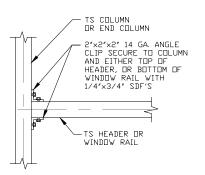
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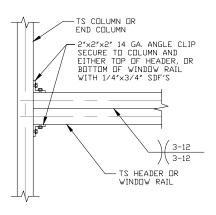
	NE	NEWMART BUILDERS, INC.			
DRAWN BY: JRP		1000 CYCLE LANE			
	5	SOUTH HILL, VA 23970			
CHECKED BY: JRP	30'-0"x1	30'-0"x14'-0" ENCLOSED STRUCTURE			
		JOB NO: 18113S/18246S/			
PROJECT MGR: JRP	DATE: 11-22-24	SCALE: NTS		/22257\$/23335\$	
CLIENT: NEWMART BUILDERS	SHT. 11	DWG. NO: SK-3		REV.₁ 11	



### **CONNECTIONS DETAILS**







RAFTER TO CHORD CONNECTION DETAIL

COLUMN OR WINDOW RAIL TO POST CONNECTION DETAIL 9 SCALE: NTS

DOUBLE HEADER TO COLUMN CONNECTION DETAIL 10 SCALE: NTS

SCALE: NTS

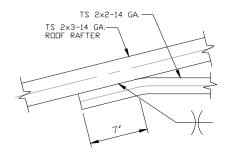
8

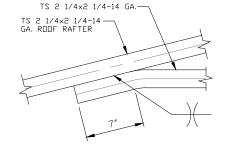
TS COLUMN OR END COLUMN -MINIMUM 6" LONG, MINIMUM 14 GA., CONNECTOR SLEEVE SECURE EACH WITH (6) 1/4"x3/4" SDF'S 0 -0 0 0 0 3-12 3-12 TS HEADER OR WINDOW RAIL CONNECTOR 3/16 SLEEVE TO HEADER TYP 3/16

TS COLUMN CONNECTOR \ 3/16 MINIMUM 8" LONG MINIMUM 14 GA. CONNECTOR SLEEVE SLEEVE 3/16 TO HEADER SECURE WITH (6) 1/4"x3/4" Ó TS DOUBLE HEADER 3-12 3-12

DOUBLE HEADER TO COLUMN CONNECTION DETAIL 10A SCALE: NTS

COLUMN/DOUBLE HEADER CONNECTION DETAIL 11 SCALE: NTS





15'-0" ROOF RAFTER TIE CONNECTION DETAIL 12A SCALE: NTS

12'-0" ROOF RAFTER TIE CONNECTION DETAIL 12B SCALE: NTS

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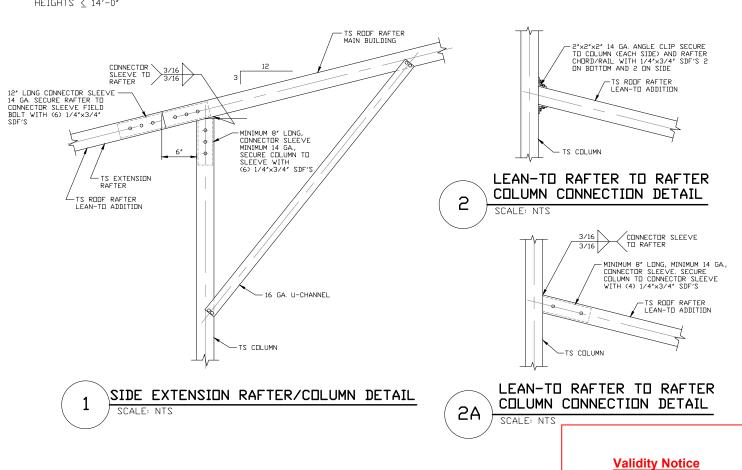
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CHECKED BY: JRP	30'-0"x14'-0" ENCLOSED STRUCTURE			
			JDB N	D: 18113S/18246S/
PROJECT MGR: JRP	DATE: 11-22-24			\$/22257\$/23335\$
CLIENT: NEWMART BUILDERS	SHT. 13	DWG. ND: SK-3		REV.: 11

### **BOX EAVE RAFTER LEAN-TO OPTIONS** 1 14 ROOF EXTENSION OPTION MAIN STRUCTURE STANDARD LEAN-TO OPTION 12 9 12 12 9 12 9 SEE BELOW FOR MAX. LEAN-TO SPAN SEE BELOW W ≤ 30'-0" MAXIMUM RAFTER SPAN LEAN-TO SPAN **TYPICAL** BOX EAVE RAFTER LEAN-TO OPTIONS FRAMING SECTION (BOTH OPTIONS SHOWN) SCALE: NTS MAXIMUM WIDTH OF SINGLE TUBE MEMBER (RAFTER AND COLUMN) ROOF EXTENSION AND LEAN-TO IS 12'-0". MAIN BUILDING COLUMNS WITH LEAN-TO OR ROOF EXTENSION ATTACHED ARE REQUIRED TO BE SINGLE COLUMNS FOR EAVE

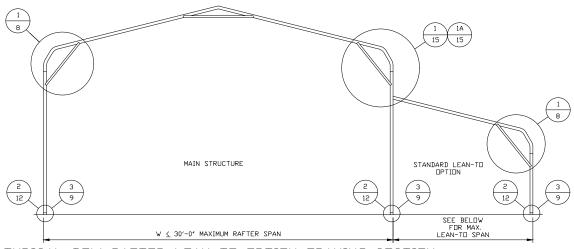


Plans Expiration Date:

31 December 2024

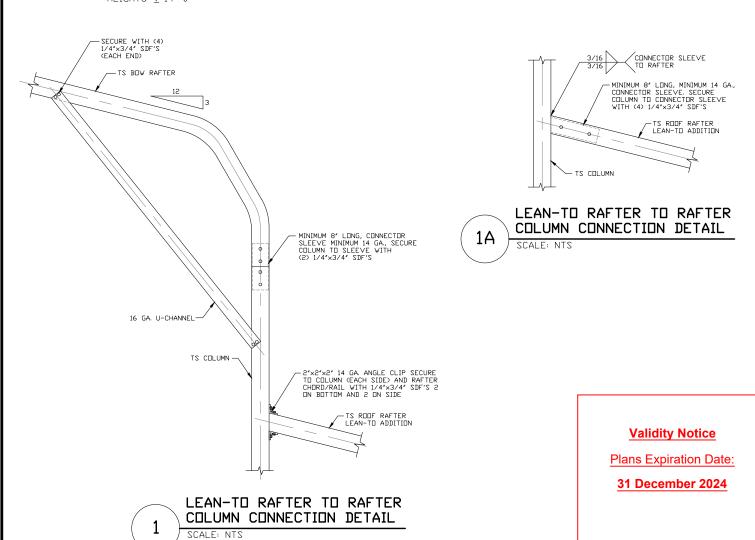
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ENCINEEDING AND CONCILITING INC	CHECKED BY: JRP	SOUTH HILL, VA 23970 30'-0"x14'-0" ENCLOSED STRUCTURE		
MOORE AND ASSOCIATES	DRAWN BY: JRP	NE'	WMART BUILD 1000 CYCLE I	,

## **BOW RAFTER LEAN-TO OPTIONS**



### TYPICAL BOW RAFTER LEAN-TO OPTION FRAMING SECTION

SCALE: NTS
MAXIMUM WIDTH OF SINGLE TUBE MEMBER (RAFTER AND COLUMN) ROOF EXTENSION AND LEAN-TO IS 12'-0".
MAIN BUILDING COLUMNS WITH LEAN-TO OR ROOF EXTENSION ATTACHED ARE REQUIRED TO BE SINGLE COLUMNS FOR EAVE HEIGHTS ≤ 14'-0"



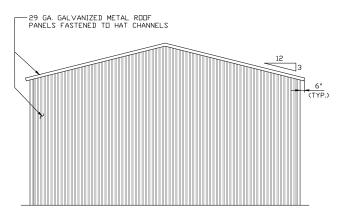
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	SOUTH HILL, VA 23970				
CHECKED BY: JRP	30'-0"x14'-0" ENCLOSED STRUCTURE				

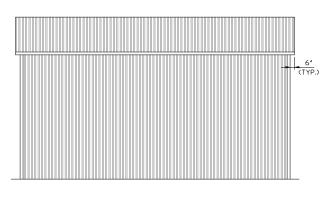
CI JDB ND: 181135/182465/193095/222575/233355 SCALE: NTS PROJECT MGR: JRP DATE: 11-22-24 CLIENT: NEWMART SHT. 15 DWG. ND: SK-3 REV.: 11 BUILDERS

### **BOX EAVE RAFTER VERTICAL ROOF/SIDING OPTION**



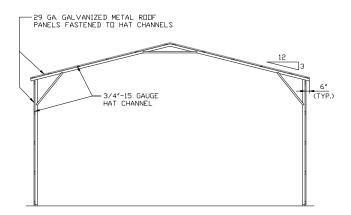
TYPICAL END ELEVATION VERTICAL ROOF/SIDING

2CALF: N12



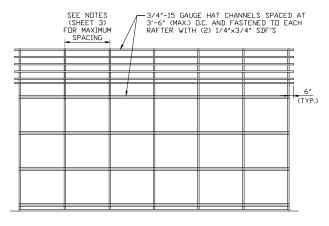
TYPICAL SIDE ELEVATION VERTICAL ROOF/SIDING OPTION

SCALE: NTS



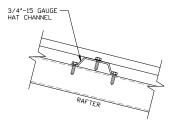
TYPICAL SECTION
VERTICAL ROOF/SIDING OPTION

SCALE: NTS



TYPICAL FRAMING SECTION VERTICAL ROOF/SIDING OPTION

SCALE: NTS



PANEL ATTACHMENT
(ALTERNATE FOR VERTICAL ROOF PANELS)
SCALE: NTS

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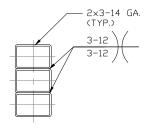
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DKHWN DII JKF	1000 CYCLE LANE					
	SOUTH HILL, VA 23970					
CHECKED BY: JRP	30'-0"x14'-0" ENCLOSED STRUCTURE  JUB ND 18113S/18246S/					
PROJECT MGR: JRP	DATE: 11-22-24			\$/22257\$/23335\$		
CLIENT: NEWMART BUILDERS	SHT. 16	DWG. ND: SK-3		REV₁ 11		

### SIDE WALL HEADER OPTIONS

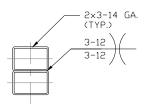
NOTE: HEADER DESIGN DOES NOT TAKE IN TO ACCOUNT ADDITIONAL ROOF LOADING FROM ATTACHED LEAN-TO STRUCTURES.

### **FOR 35 PSF < TO ≤ 45 PSF GROUND SNOW LOAD**



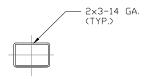
HEADER DETAIL FOR SIDE WALL DOOR OPENINGS 8'-0" < TO < 12'-0" WIDE

SCALE: NTS



HEADER DETAIL FOR SIDE WALL DOOR OPENINGS 5'-0" < TO  $\leq$  8'-0" WIDE

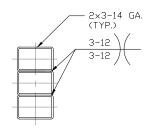
SCALE: NTS



HEADER DETAIL FOR SIDE WALL DOOR OPENINGS  $\leq$  5'-0" WIDE

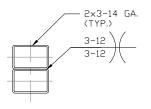
SCALE: NTS

### **FOR ≤ 35 PSF GROUND SNOW LOAD**



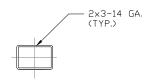
HEADER DETAIL FOR SIDE WALL DOOR OPENINGS 10'-0" < TO ≤ 12'-0" WIDE

SCALE: NTS



HEADER DETAIL FOR SIDE WALL DOOR OPENINGS 6'-0" < TO ≤ 10'-0" WIDE

SCALE: NTS



HEADER DETAIL FOR SIDE WALL DOOR OPENINGS ≤ 6'-0" WIDE

SCALE: NTS

Validity Notice
Plans Expiration Date:

**31 December 2024** 

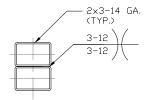
MOORE AND ASSOCIATES
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	NEWMART BUILDERS, INC.					
DRAWN BY: JRP	1000 CYCLE LANE					
	SOUTH HILL, VA 23970					
CHECKED BY: JRP	30'-0"x14'-0" ENCLOSED STRUCTURE					
			JDB N	D: 18113S/18246S/		
PROJECT MGR: JRP	DATE: 11-22-24			\$/22257\$/23335\$		
CLIENT: NEWMART BUILDERS	SHT. 17	DWG. NO: SK-3		REV.₁ 11		

### END WALL HEADER OPTIONS

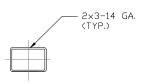
NOTE: HEADER DESIGN DOES NOT TAKE IN TO ACCOUNT ADDITIONAL ROOF LOADING FROM ATTACHED LEAN-TO STRUCTURES.

### **FOR 35 PSF < TO ≤ 45 PSF GROUND SNOW LOAD**



HEADER DETAIL FOR END WALL DOOR OPENINGS 7'-0" < TO < 12'-0" WIDE

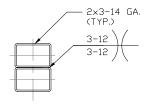
SCALE: NTS



HEADER DETAIL FOR END WALL DOOR OPENINGS ≤ 7'-0" WIDE

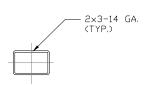
SCALE: NTS

### **FOR ≤ 35 PSF GROUND SNOW LOAD**



HEADER DETAIL FOR END WALL DOOR OPENINGS 8'-0" < TO ≤ 12'-0" WIDE

SCALE: NTS



HEADER DETAIL FOR END WALL DOOR OPENINGS ≤ 8'-0" WIDE

SCALE: NTS

**Validity Notice** 

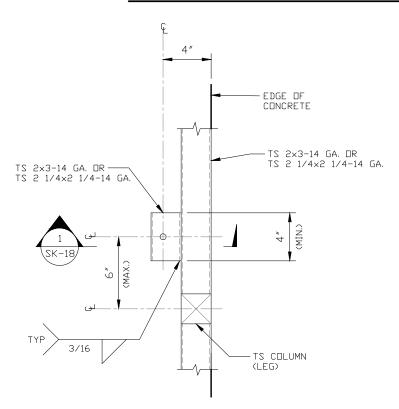
Plans Expiration Date:

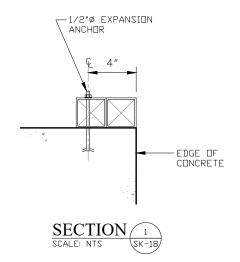
**31 December 2024** 

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	NE'	NEWMART BUILDERS, INC.					
DRAWN BY: JRP	1000 CYCLE LANÉ						
	SOUTH HILL, VA 23970						
CHECKED BY: JRP	30'-0"x14'-0" ENCLOSED STRUCTURE						
	JDB ND: 18113S/18246						
PROJECT MGR: JRP	DATE: 11-22-24			\$/22257\$/23335\$			
CLIENT: NEWMART	SHT. 17A	DWG. ND: SK-3		REV.⊢ 11			

### ADDITIONAL BASE RAIL ANCHORAGE OPTION





TYPICAL ANCHOR DETAIL WHEN BASE RAIL IS NEAR EDGE OF CONCRETE

SCALE: NTS

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Plans Expiration Date:

**31 December 2024** 

NEWMART BUILDERS, INC.

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	SOUTH HILL, VA 23970					
CHECKED BY: JRP	30'-0"x14'-0" ENCLOSED STRUCTURE					
			JDB NI	D: 18113S/18246S/		
PROJECT MGR: JRP	DATE: 11-22-24			/22257\$/23335\$		
CLIENT: NEWMART	SHT. 18	DWG. ND: SK-3		RE√.: 11		