

- DESIGN CRITERIA - 2012 IBC**
1. DESIGN LOADS PER ASCE 7-10
 2. CODE REQUIREMENT FOR STEEL - AISC 360
 3. ROOF LIVE LOAD = 20 PSF
 4. DEAD LOAD = 6 PSF
 5. DESIGN WIND SPEED = 105 MPH
 6. BUILDING CATEGORY I
 7. WIND EXPOSURE CATEGORY B
 8. IMPORTANCE FACTOR = 1.0
 9. GROUND SNOW LOAD = 10 PSF

BILL OF MATERIALS

MARK	DESCRIPTION	LENGTH	NUMBER REQUIRED	MATERIAL
A1	TOP CHORD LL 1.5 x 1.5 x 3/16	19'- 3"	1	A36
A2	BOTTOM CHORD LL 1.5 x 1.5 x 3/16	19'- 3"	1	A36
A3	VERTICAL L 1.5 x 1.5 x 3/16	1' 5-1/2"	3	A36
A4	VERTICAL END LL 1.5 x 1.5 x 3/16	1'- 5"	3	A36
W1	WEB L 1-1/4x1-1/4x1/8	1' 5-5/8"	2	A36
W2	WEB L 1-1/4x1-1/4x1/8	1' 7-1/2"	18	A36

NOTES:

1. THIS DESIGN IS FOR TRUSS ONLY. THE SUPPORT POST IS ASSUMED TO BE 8" BUT THE POST IS NOT A PART OF THIS DESIGN.
2. THIS DESIGN IS FOR TRUSS FABRICATION ONLY. CONTRACTOR RESPONSIBLE FOR TEMPORARY CONSTRUCTION BRACING.
3. FABRICATOR SHALL VERIFY ALL DIMENSIONS BEFORE PURCHASE AND/OR FABRICATION.
4. THIS DESIGN MAY ALSO BE USED FOR 16', 18' LONG JOIST TRUSS.
5. THIS DESIGN MAY BE USED TO SUPPORT CONNECTING TRUSS CONFIGURATIONS SHOWN IN THE TABLE TO THE LEFT. TRUSS MEMBER SIZES AND LENGTHS MUST BE ADJUSTED ACCORDINGLY.

THE FOLLOWING LOADING CONDITIONS CAN BE USED WITH THIS BAR JOIST

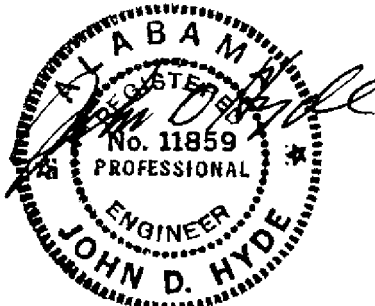
20 FT BAR JOIST TRUSS TO SUPPORT CONNECTING TRUSSES						
CONNECTING TRUSSES			JOIST TRUSS - SHOWN ON THIS DRAWING			
LENGTH (FT)	SPACING (FT)	LOAD** (PSF)	DEPTH (IN)	BC/TC ANGLES	WEB ANGLE	
20	10	26	18	L1.5x1.5x.1875	L1.25x1.25x.125	
24	10	26	18	L2x2x.1875	L1.25x1.25x.125	
28	10	26	18	LL1.5x1.5x.1875	L1.25x1.25x.125	
30	10	26	18	LL1.5x1.5x.1875	L1.25x1.25x.125	
36	10	26	18	LL1.5x1.5x.1875	L1.25x1.25x.125	
40	10	26	18	LL1.5x1.5x.1875	L1.25x1.25x.125	

**LOAD: 20 PSF ROOF LIVE LOAD PLUS 6 PSF DEAD LOAD

BOLT TABLE FOR 20' BAR JOIST						
CONNECTING TRUSS LENGTH (FT)	"A" BOLTS		"B" BOLTS		BOLT MATERIAL	
	NUM REQ'D		NUM REQ'D		"A"	"B"
20	3	1/2" Ø	2	1/2" Ø	-- ALL "A" BOLTS TO BE MIN A307	
24	3	1/2" Ø	2	1/2" Ø		
28	3	1/2" Ø	4	3/8" Ø		
30	3	1/2" Ø	4	3/8" Ø	-- ALL "B" BOLTS TO BE MIN A307	
36	4	1/2" Ø	4	3/8" Ø		
40	4	1/2" Ø	4	1/2" Ø	GALVANIZED	

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BY:
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AGCOR STEEL, LLC.			
20' STEEL BAR JOIST TRUSS			
SCALE AS NOTED	DATE 1-5-2018	DRAWN BY J. HYDE	DRAWING NO. 18-0105-20
BAR JOIST DETAIL			SHEET NO. 1 OF 1