

FTC 2015-2016 DIY Mountain Build Guide



Prints and Bill of Materials

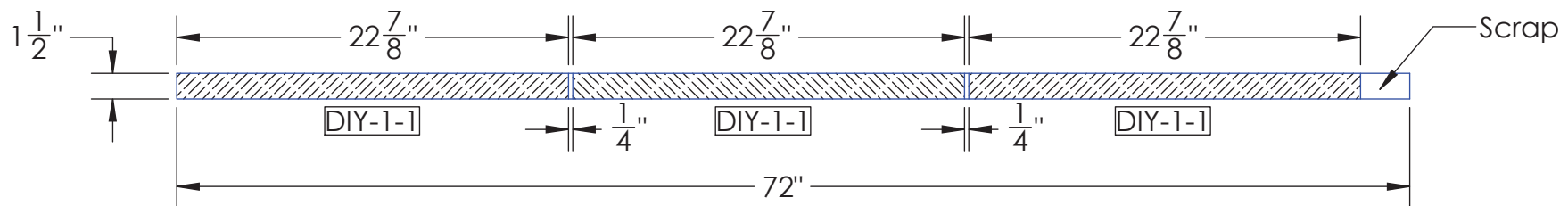
Check out the [DIY2015-2016 Assembly Guide](#) for step by step assembly instructions

Release 1.0 9/10/15

	Raw Parts	Qty for 1 Mountain	parts created	Created Part Name	Qty	board cut length	Competition field counterparts			
	Boards									
-1-1	1x2 x 6ft	2	6	Lower Hurdle	6	22 7/8				
-1-2	1x3 x 6ft	1	1	Lower Mountain Center	1	35 3/4				
-1-3	1x4 x 8ft	4	12	Lower Mountain Side	2	35 3/4				
-2-1				Upper Hurdle	8	22 7/8				
-3-1				Mid Mountain Stay	2	29 3/8				
-2-2	1x6 x 6ft	1	3	Upper Mountain Side	2	20 3/4				
-2-3				Upper Mountain Center	1	20 3/4				
-3-2	2x4 x 8ft	3	6	Arch Support Leg	2	59 3/4				
-3-3				Arch lower cross member	2	48				
-4-1				Outside Connector	2	4				
-4-2				Inside Connector	1	30				
	Scrap									
-5-4				Trigger	3		am-3036			
-5-6				MRM	1		am-3093_holder (qty 2), and am-3093_bracket (qty 1)			
-5-5				Release	3		am-3024			
	Plywood									
-1-4	4ftx4ft x 1/2"	1	3	Lower Mountain Panel	1	35.75 x 48				
-5-3				Ball Fence	2		am-3096			
-2-4	2ftx4ft x 1/4"	1	1	Upper Mountain Panel	1	20.75 x 48				
	Metal Parts									
-5-1	90 L channel 8ft	4	14	Hurdle Armor	14	22 7/8				
	1/2" x 4ft Pipe	1	1	Pull-up Bar	1	N/A	am-3090-2			
	1/2" Base flange	2	2	Pull-up mount	2	N/A				
	Lexan									
-5-2	1/16th x 2ftx2ft	2	2	1/16th Lexan Panel	2	20.875 x 17.5	am-3095			
	Fasteners									
	#8 1-5/8" wood screw	1	box							
	#8 1-1/4" wood screw	1	box							

Button head wood screw		1	box						
1/4-20 x 3.00"		1	each						
1/4-20 x 1.75"		3	each						
1/4-20 x 1.00"		3	each						
1/4-20 x 1-1.5" Eye Lag Screw		1	each						
1/4" washer		9	each						
1/4-20 locknut		7	each						
Paracord		1	spool						
Tool List									
Drill - Cordless or staple gun									
-Screw driver bit (needs to match screw type)									
-Drill bit	7/64" or 3/32"								
	1/4"								
Bar clamp - 12in									
C-Clamps - 4in									
2x Plumbing pliers									
7/16" wrench									
matching wrench for 1/4-20 bolts									
protractor									

Rev	Discription of Changes
1	Original Print

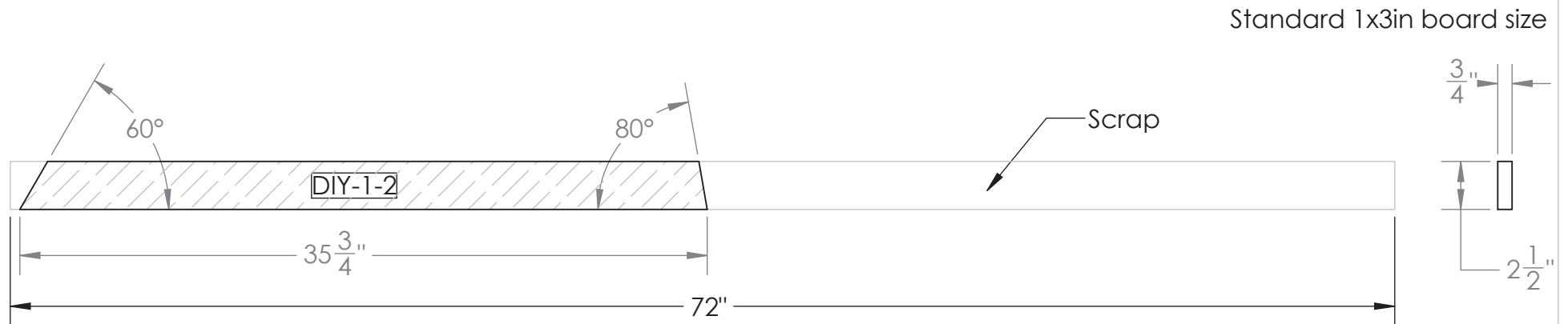


Need 2 sets per Mountain

Standard 1x2in board size

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field	
DIMENSIONS ARE IN INCHES	DRAWN	DB	8/12/15		
TOLERANCES:	CHECKED				
FRACTIONAL $\pm 1/8$	ENG APPR.				
ANGULAR: MACH \pm BEND $\pm 5^\circ$	MFG APPR.			DIY16 - 1x2 x 6ft Board Usage	
TWO PLACE DECIMAL ± 0.010	Q.A.				
THREE PLACE DECIMAL ± 0.005	COMMENTS:			SIZE	REV
INTERPRET GEOMETRIC TOLERANCING PER:				DWG. NO.	
MATERIAL				A 1x2 x 6ft	
FINISH					
Pine economy board				SCALE: 1:10	WEIGHT:
Sanded & Smooth				SHEET 1 OF 1	
DO NOT SCALE DRAWING					

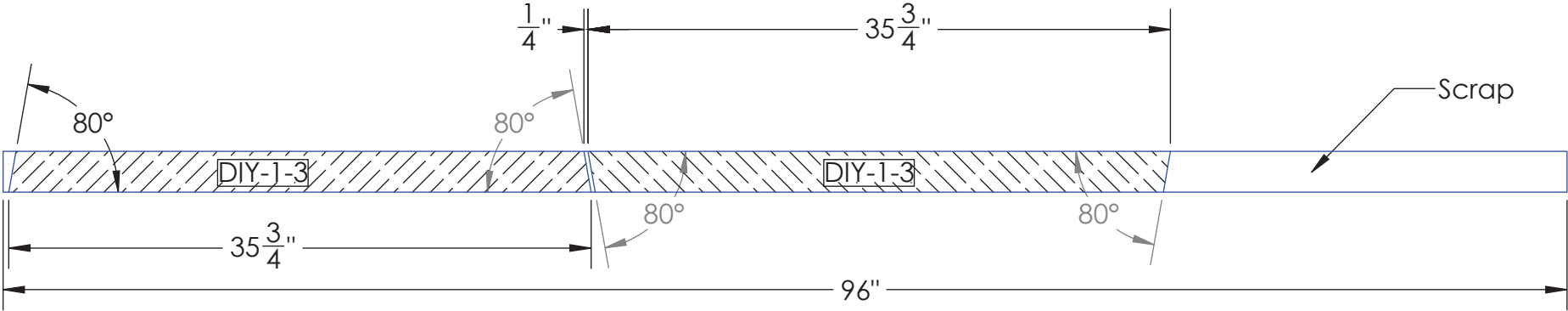
Rev	Discription of Changes
1	Original Print



Need 1 per mountain

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field	
DIMENSIONS ARE IN INCHES		DRAWN	DB		
TOLERANCES:		CHECKED			
FRACTIONAL $\pm 1/8$		ENG APPR.			
ANGULAR: MACH \pm BEND $\pm 5^\circ$		MFG APPR.		DIY16 - 1x3 x 6ft Board Usage	
TWO PLACE DECIMAL ± 0.010		Q.A.			
THREE PLACE DECIMAL ± 0.005		COMMENTS:		SIZE	DWG. NO.
INTERPRET GEOMETRIC TOLERANCING PER:				A	1x3 x 6ft
MATERIAL					REV
Pine economy board					1
FINISH				SCALE: 1:8	WEIGHT:
Sanded & Smooth					SHEET 1 OF 1
DO NOT SCALE DRAWING					

Rev	Discription of Changes
1	Original Print

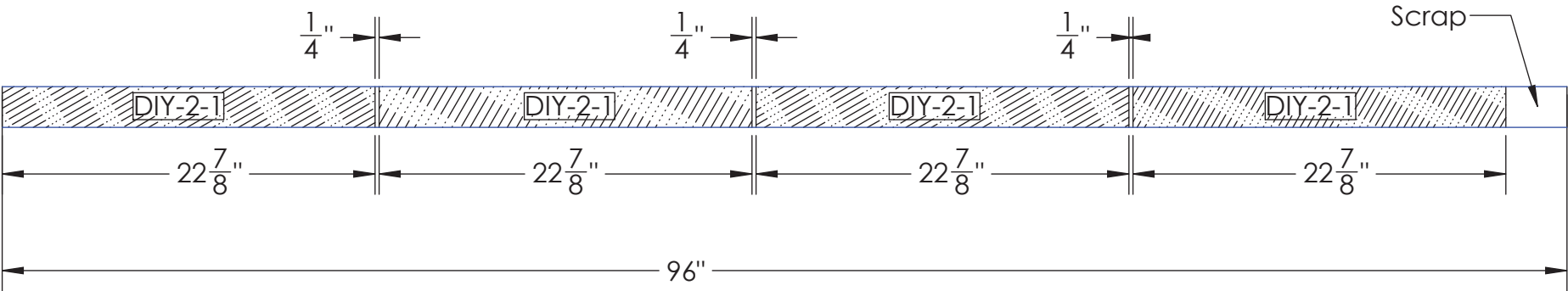


Need 1 set per Mountain

Standard 1x4in board size

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field TITLE: DIY16 - 1x4 x 8ft Board Usage		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/8 ANGULAR: MACH± BEND ±5° TWO PLACE DECIMAL ±0.010 THREE PLACE DECIMAL ±0.005	DRAWN	DB	8/12/15			
	CHECKED					
	ENG APPR.					
	MFG APPR.					
INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.			SIZE DWG. NO. REV A 1x4 x 8ft 1		
MATERIAL Pine economy board	COMMENTS:					
FINISH Sanded & Smooth						
DO NOT SCALE DRAWING						
				SCALE: 1:10	WEIGHT:	SHEET 1 OF 3

Rev	Discription of Changes
1	Original Print

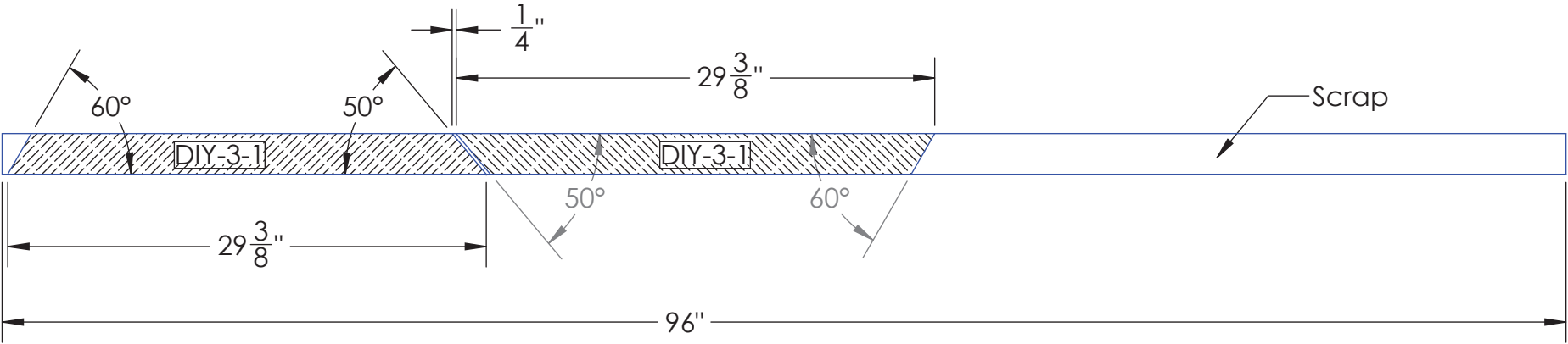


Need 2 sets per Mountain

Standard 1x4in board size

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field	
DIMENSIONS ARE IN INCHES		DRAWN			
TOLERANCES:		CHECKED			
FRACTIONAL ±		ENG APPR.			
ANGULAR: MACH ± BEND ±		MFG APPR.			
TWO PLACE DECIMAL ±		Q.A.		TITLE: DIY16 - 1x4 x 8ft Board Usage	
THREE PLACE DECIMAL ±		COMMENTS:			
INTERPRET GEOMETRIC TOLERANCING PER:					
MATERIAL Pine economy board				SIZE A	DWG. NO. 1x4 x 8ft
FINISH Sanded & Smooth					REV 1
DO NOT SCALE DRAWING				SCALE: 1:10 WEIGHT: SHEET 2 OF 3	

Rev	Discription of Changes
1	Original Print

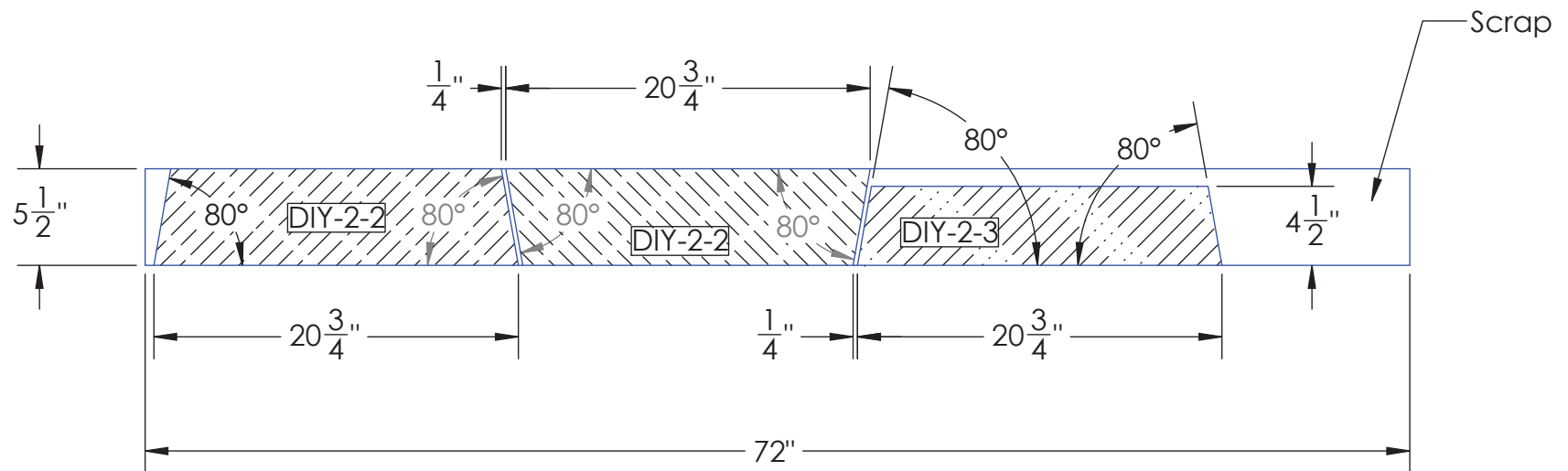


Need 1 set per Mountain

Standard 1x4in board size

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ± INTERPRET GEOMETRIC TOLERANCING PER: MATERIAL Pine economy board FINISH Sanded & Smooth DO NOT SCALE DRAWING		NAME	DATE	15-16 FTC DIY Field TITLE: DIY - 1x4 x 8ft Board Usage		
	DRAWN	DB	8/12/15			
	CHECKED					
	ENG APPR.					
	MFG APPR.					
	Q.A.			SCALE: 1:10 WEIGHT: SHEET 3 OF 3		
	COMMENTS:					
				SIZE A	DWG. NO. 1x4 x 8ft	REV 1

Rev	Discription of Changes
1	Original Print

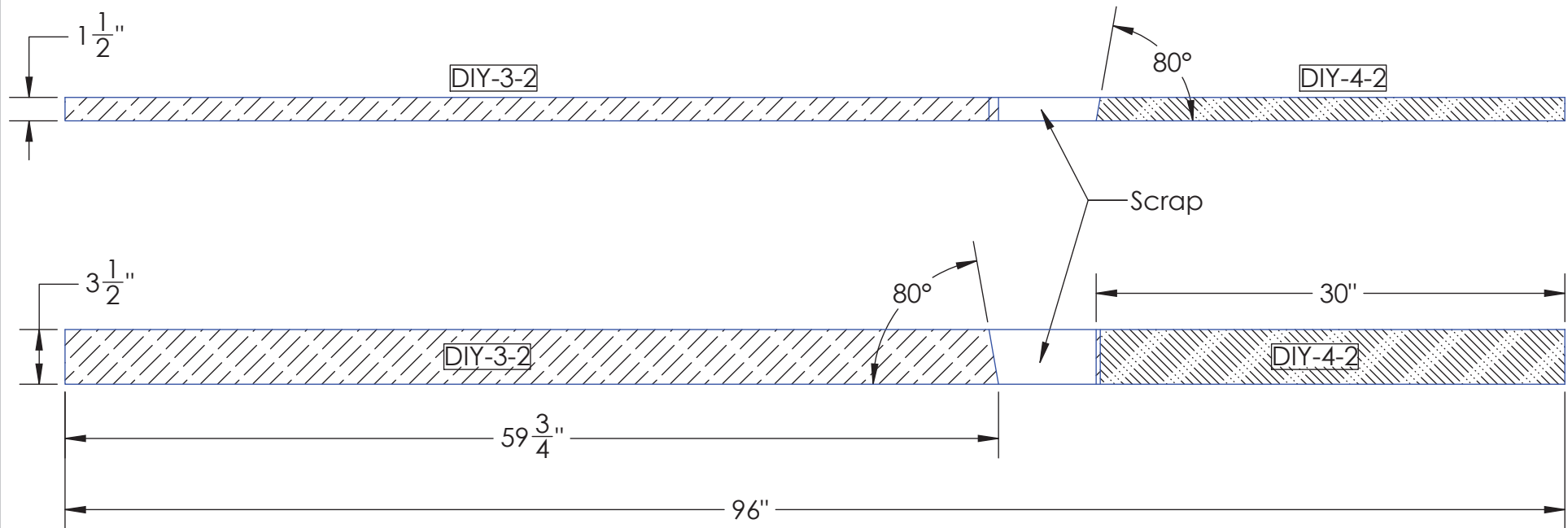


Standard 1x6in board size

Need 1 per mountain

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field TITLE: DIY16 - 1x6 x 6ft Board Usage
DIMENSIONS ARE IN INCHES		DRAWN	DB	
TOLERANCES:		CHECKED		
FRACTIONAL $\pm 1/8$		ENG APPR.		
ANGULAR: MACH \pm BEND $\pm 5^\circ$		MFG APPR.		
TWO PLACE DECIMAL ± 0.010		Q.A.		SIZE DWG. NO. REV A 1x6 x 6ft 1
THREE PLACE DECIMAL ± 0.005		COMMENTS:		
INTERPRET GEOMETRIC TOLERANCING PER:				
MATERIAL Pine economy board				SCALE: 1:10 WEIGHT: SHEET 1 OF 1
FINISH Sanded & Smooth				
DO NOT SCALE DRAWING				

Rev	Discription of Changes
1	Original Print

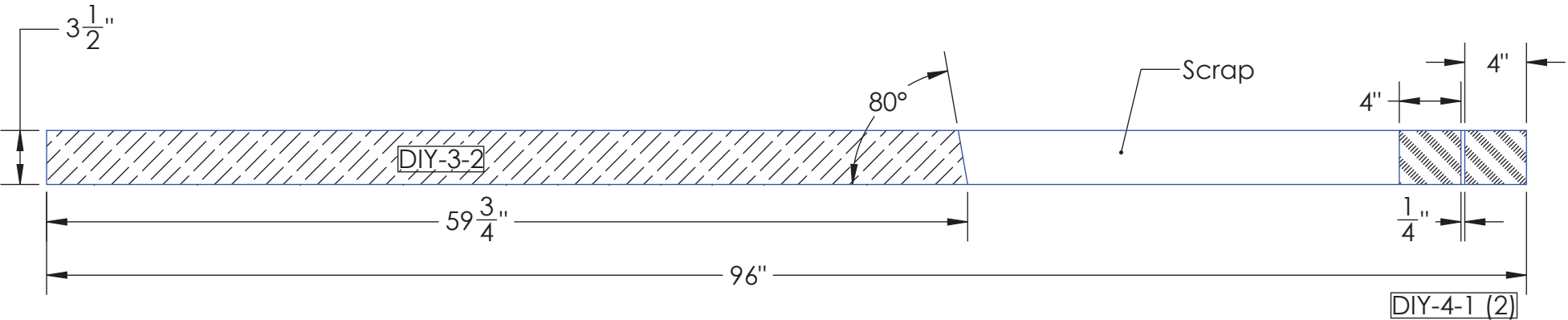


Standard 2x4in board size

Need 1 per mountain

UNLESS OTHERWISE SPECIFIED:		NAME		DATE		15-16 FTC DIY Field TITLE: DIY16 - 2x4 x 8ft Board Usage SIZE DWG. NO. REV A 2x4 x 8ft 1 SCALE: 1:10 WEIGHT: SHEET 1 OF 3	
DIMENSIONS ARE IN INCHES		DRAWN		DB			
TOLERANCES:		CHECKED					
FRACTIONAL ±1/8		ENG APPR.					
ANGULAR: MACH± BEND ±5°		MFG APPR.					
TWO PLACE DECIMAL ±0.010		Q.A.					
THREE PLACE DECIMAL ±0.005		COMMENTS:					
INTERPRET GEOMETRIC TOLERANCING PER:							
MATERIAL							
Pine economy board							
FINISH							
Sanded & Smooth							
DO NOT SCALE DRAWING							

Rev	Discription of Changes
1	Original Print

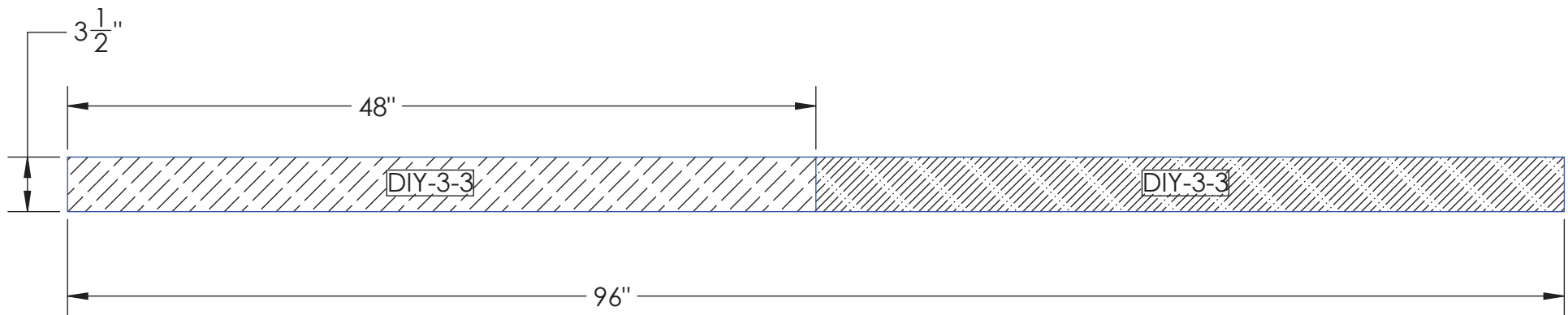


Standard 2x4in board size

Need 1 per mountain

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field TITLE: DIY16 - 2x4 x 8ft Board Usage		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	DB	8/13/15			
	CHECKED					
	ENG APPR.					
	MFG APPR.					
INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.			SIZE A	DWG. NO. 2x4 x 8ft	REV 1
MATERIAL Pine economy board	COMMENTS:					
FINISH Sanded & Smooth						
DO NOT SCALE DRAWING						
				SCALE: 1:10	WEIGHT:	SHEET 2 OF 3

Rev	Discription of Changes
1	Original Print



Standard 2x4in board size

Need 1 per mountain

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field TITLE: DIY16 - 2x4 x 8ft Board Usage		
DIMENSIONS ARE IN INCHES	DRAWN	DB	8/13/15			
TOLERANCES:	CHECKED					
FRACTIONAL ±	ENG APPR.					
ANGULAR: MACH ± BEND ±	MFG APPR.					
TWO PLACE DECIMAL ±	Q.A.			SIZE DWG. NO. REV A 2x4 x 8ft 1		
THREE PLACE DECIMAL ±	COMMENTS:					
INTERPRET GEOMETRIC TOLERANCING PER:						
MATERIAL Pine economy board						
FINISH Sanded & Smooth				SCALE: 1:10 WEIGHT: SHEET 3 OF 3		
DO NOT SCALE DRAWING						

5

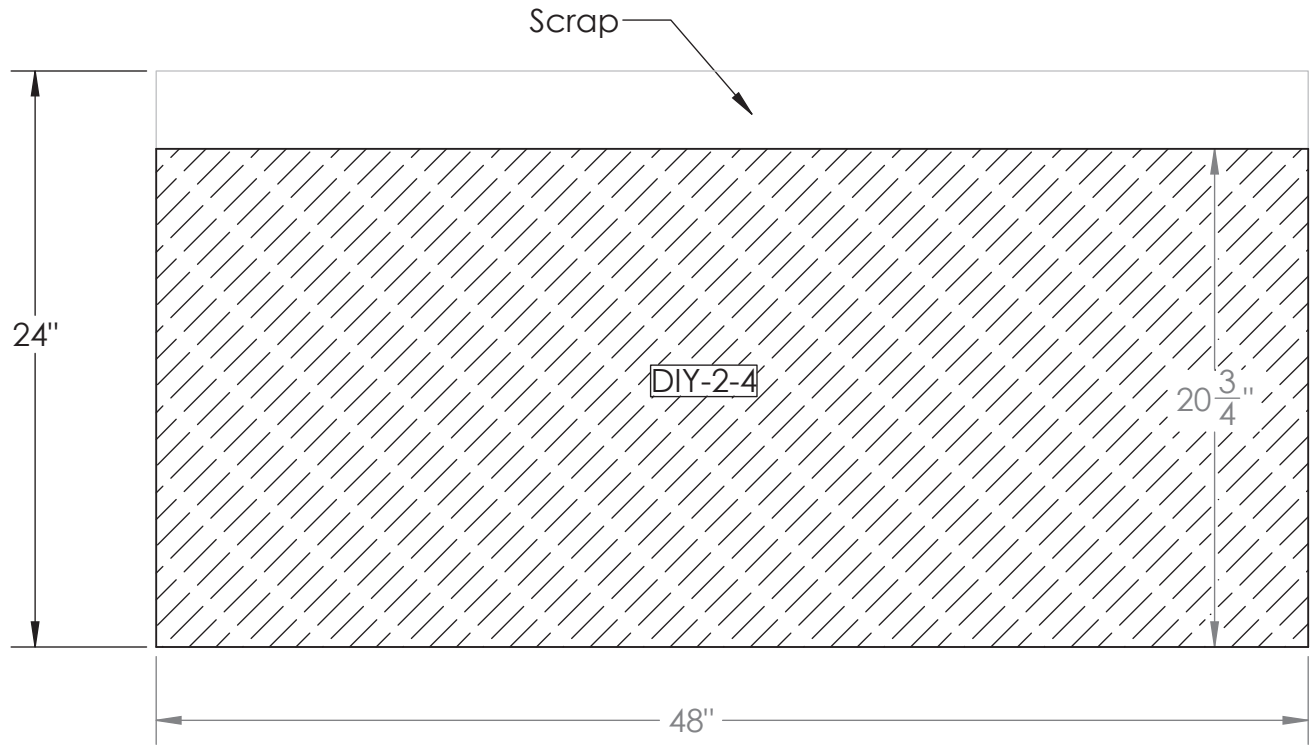
4

3

2

1

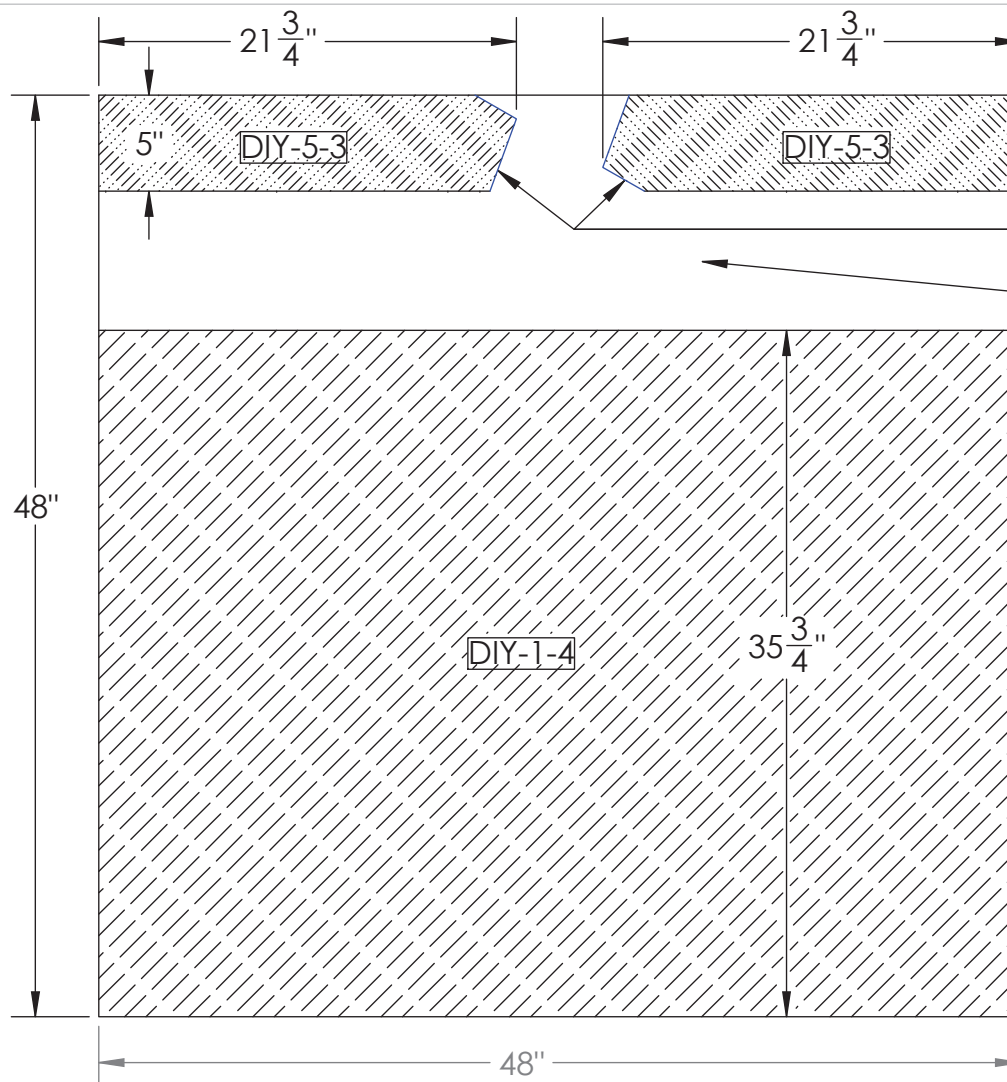
Rev	Discription of Changes
1	Original Print



Standard 24x48x1/4n board size

Need 1 per mountain

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field	
DIMENSIONS ARE IN INCHES	DRAWN	DB	8/14/15		
TOLERANCES:	CHECKED				
FRACTIONAL ±1/8	ENG APPR.				
ANGULAR: MACH± BEND ±5°	MFG APPR.			DIY16 - 24x48x1/4in Panel Usage	
TWO PLACE DECIMAL ±0.010	Q.A.				
THREE PLACE DECIMAL ±0.005	COMMENTS:			SIZE	DWG. NO.
INTERPRET GEOMETRIC TOLERANCING PER:				A	24x48x1/4
MATERIAL					REV
Plywood Handy Panel					1
FINISH				SCALE: 1:8	WEIGHT:
Sanded & Smooth					SHEET 1 OF 1
DO NOT SCALE DRAWING					



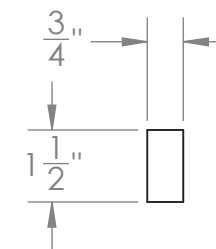
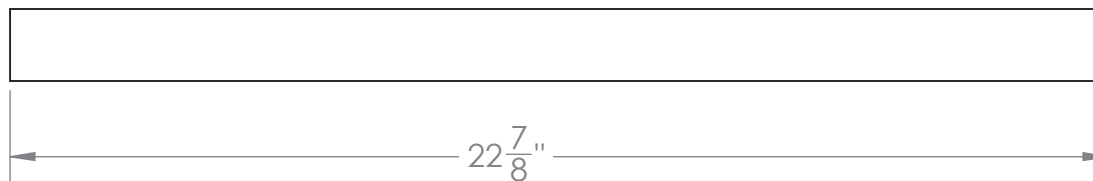
Rev	Discription of Changes
1	Original Print
1.1	Updated Part numbers

Standard 48x48x1/2in board size

Need 1 per mountain

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<div>15-16 FTC DIY Field</div> <div>TITLE:</div> <div>DIY16 - 48x48x1/2in Panel Usage</div>				
DIMENSIONS ARE IN INCHES		DRAWN	DB				8/31/15	
TOLERANCES:		CHECKED						
FRACTIONAL ±1/8		ENG APPR.						
ANGULAR: MACH± BEND ±5°		MFG APPR.						
TWO PLACE DECIMAL ±0.010								
THREE PLACE DECIMAL ±0.005								
INTERPRET GEOMETRIC TOLERANCING PER:		Q.A.		<div>SIZE</div> <div>DWG. NO.</div> <div>REV</div> <div>A48x48x1/21.1</div> <div>SCALE: 1:10</div> <div>WEIGHT:</div> <div>SHEET 1 OF 1</div>				
MATERIAL		COMMENTS:						
Plywood handy panel								
FINISH								
Sanded & Smooth								
DO NOT SCALE DRAWING								

Rev	Discription of Changes
1	Original Print

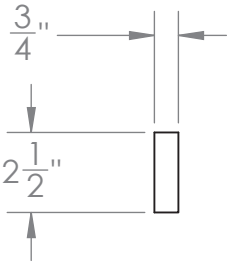
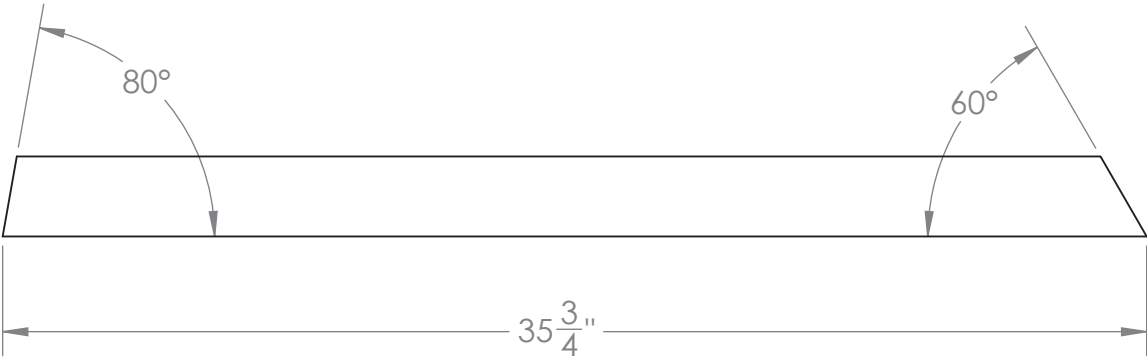


Standard 1x2in board size

Need 6 per mountain

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field	
DIMENSIONS ARE IN INCHES	DRAWN	DB	8/11/15		
TOLERANCES:	CHECKED				
FRACTIONAL $\pm 1/8$	ENG APPR.				
ANGULAR: MACH \pm BEND $\pm 5^\circ$	MFG APPR.			DIY16 - Lower Hurdle	
TWO PLACE DECIMAL ± 0.010					
THREE PLACE DECIMAL ± 0.005	Q.A.			SIZE	DWG. NO.
INTERPRET GEOMETRIC TOLERANCING PER:	COMMENTS:			A	DIY -1-1
MATERIAL					REV
Pine economy board					1
FINISH				SCALE: 1:4	WEIGHT:
Sanded & Smooth					SHEET 1 OF 1
DO NOT SCALE DRAWING					

Rev	Discription of Changes
1	Original Print

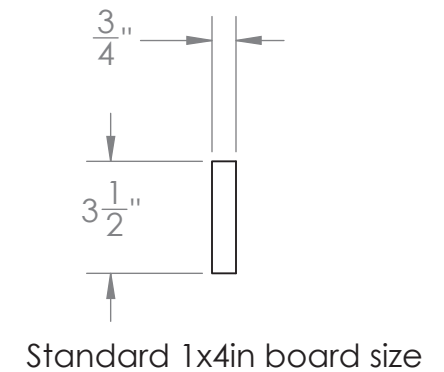
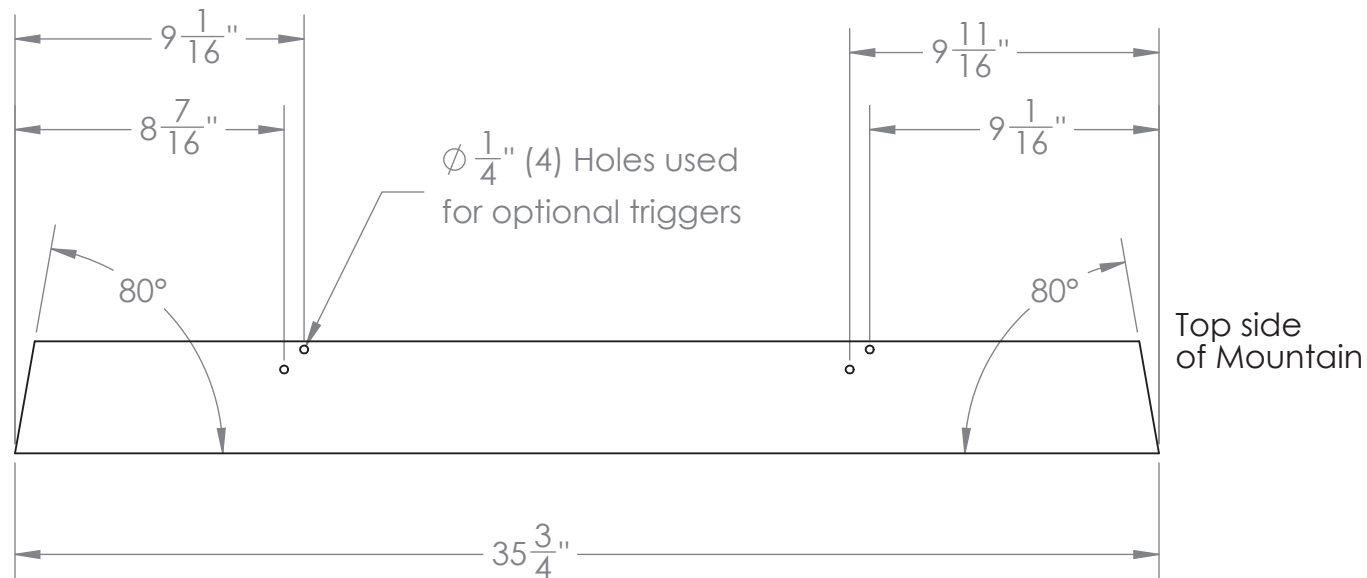


Standard 1x3in board size

Need 1 per mountain

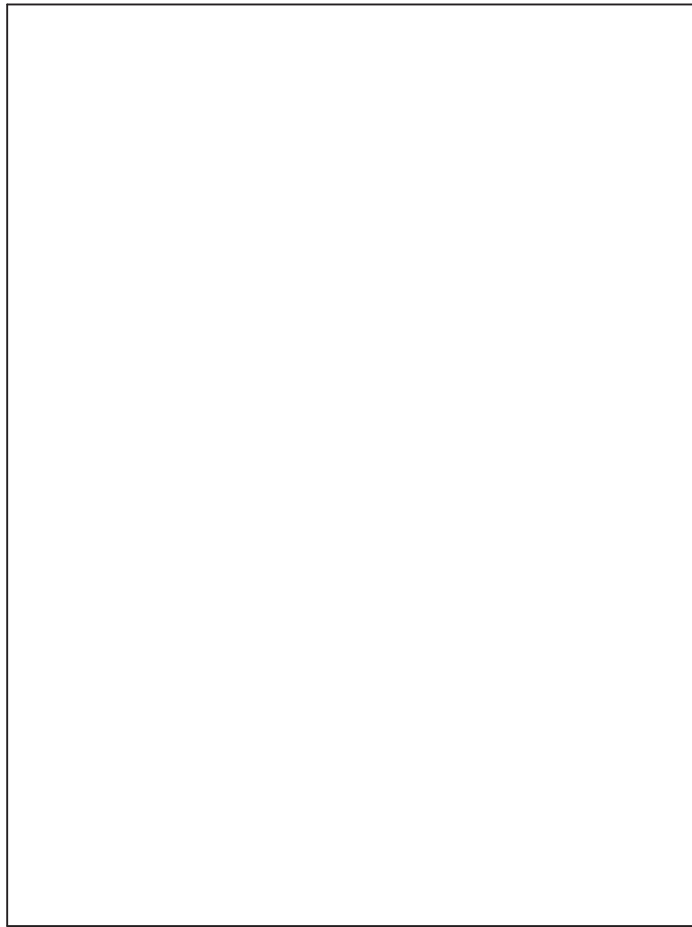
UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field	
DIMENSIONS ARE IN INCHES	DRAWN	DB	8/11/15		
TOLERANCES:	CHECKED				
FRACTIONAL ±1/8	ENG APPR.				
ANGULAR: MACH± BEND ±5°	MFG APPR.			TITLE: DIY16 - Lower Mountain Center	
TWO PLACE DECIMAL ±0.010					
THREE PLACE DECIMAL ±0.005	Q.A.			SIZE	DWG. NO.
INTERPRET GEOMETRIC TOLERANCING PER:	COMMENTS:			A	DIY -1-2
MATERIAL					REV
Pine economy board					1
FINISH				SCALE: 1:6	WEIGHT:
Sanded & Smooth					SHEET 1 OF 1
DO NOT SCALE DRAWING					

Rev	Discription of Changes
1	Original Print
1.1	Addd holes for Zip Line Triggers

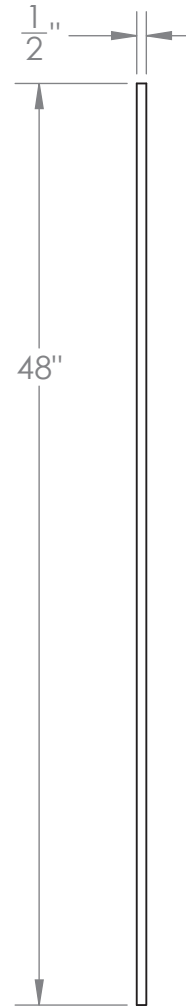


Need 2 per mountain

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field	
DIMENSIONS ARE IN INCHES	DRAWN	DB	8/31/15		
TOLERANCES:	CHECKED				
FRACTIONAL $\pm 1/8$	ENG APPR.				
ANGULAR: MACH \pm BEND $\pm 5^\circ$	MFG APPR.				
TWO PLACE DECIMAL ± 0.010	Q.A.			TITLE: DIY16 - Lower Mountain Side	
THREE PLACE DECIMAL ± 0.005	COMMENTS:				
INTERPRET GEOMETRIC TOLERANCING PER:				SIZE	DWG. NO.
MATERIAL				A	DIY -1-3
FINISH					REV
Sanded & Smooth					1.1
DO NOT SCALE DRAWING				SCALE: 1:6	WEIGHT: SHEET 1 OF 1



35 ³/₄"



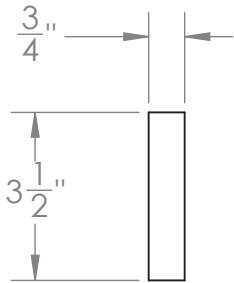
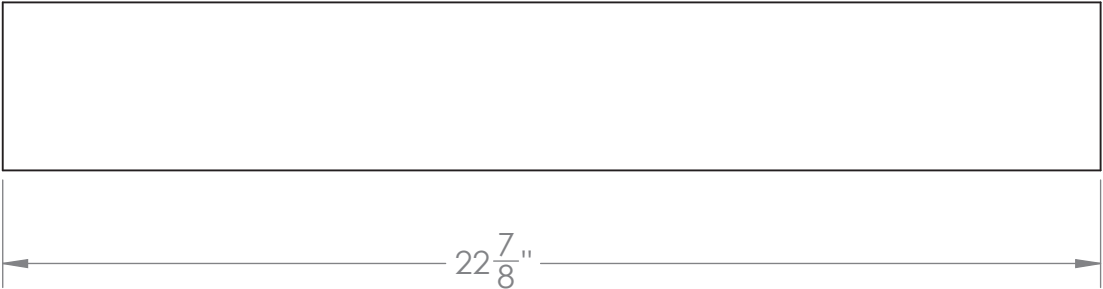
Rev	Discription of Changes
1	Original Print

Standard 48x48x1/2in board size

Need 1 per mountain

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field TITLE: DIY16 - Lower Mountain Panel		
DIMENSIONS ARE IN INCHES		DRAWN	DB			8/11/15
TOLERANCES:		CHECKED				
FRACTIONAL ±1/8		ENG APPR.				
ANGULAR: MACH± BEND ±5°		MFG APPR.				
TWO PLACE DECIMAL ±0.010					SIZE DWG. NO. REV A DIY -1-4 1	
THREE PLACE DECIMAL ±0.005						
INTERPRET GEOMETRIC TOLERANCING PER:		Q.A.				
MATERIAL		COMMENTS:				
Pine economy board						
FINISH						
Sanded & Smooth						
DO NOT SCALE DRAWING					SCALE: 1:10 WEIGHT:	SHEET 1 OF 1

Rev	Discription of Changes
1	Original Print

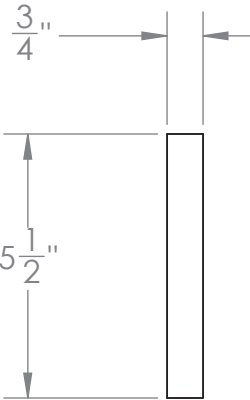
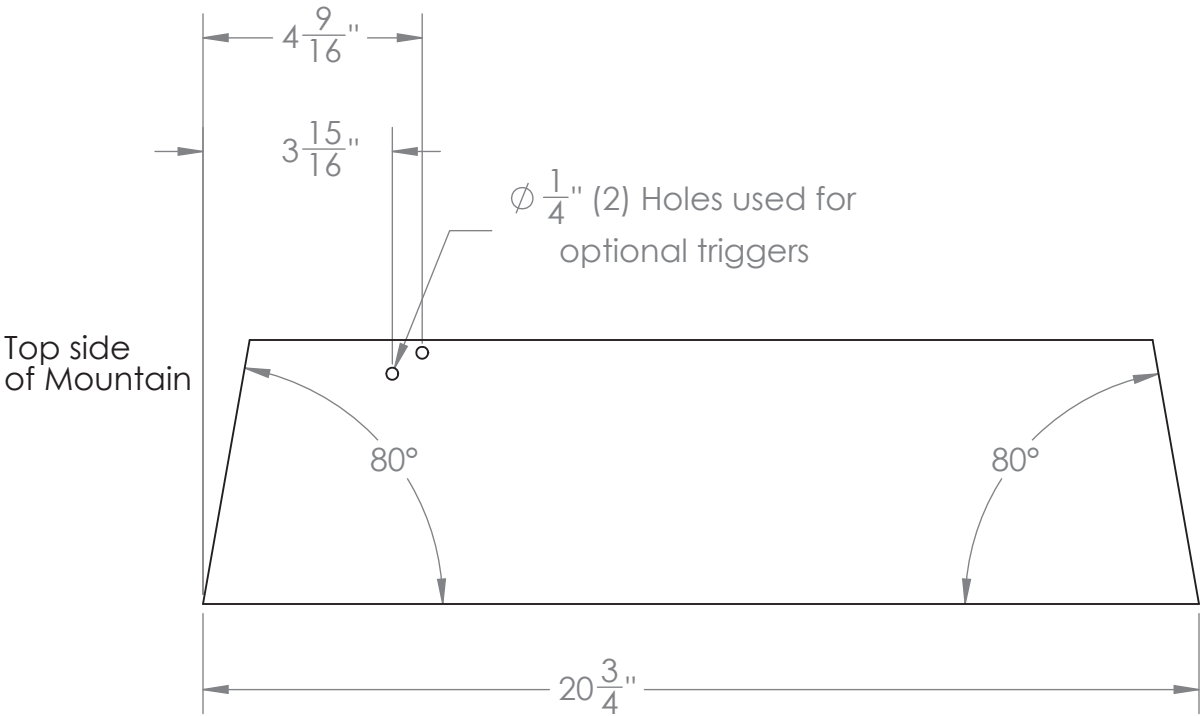


Standard 1x4in board size

Need 8 per mountain

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/8 ANGULAR: MACH± BEND ±5° TWO PLACE DECIMAL ±0.010 THREE PLACE DECIMAL ±0.005	DRAWN	DB	8/11/15			
	CHECKED					
	ENG APPR.					
	MFG APPR.					
INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.			TITLE: DIY16 - Upper Hurdle		
MATERIAL Pine economy board	COMMENTS:					
FINISH Sanded & Smooth				SIZE A	DWG. NO. DIY -2-1	REV 1
DO NOT SCALE DRAWING				SCALE: 1:4	WEIGHT:	SHEET 1 OF 1

Rev	Discription of Changes
1	Original Print
1.1	Added holes for Zip Line Triggers

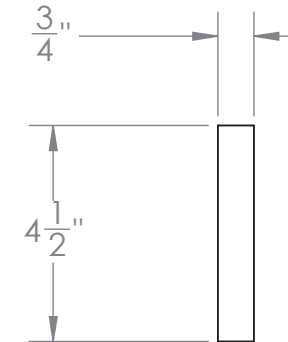
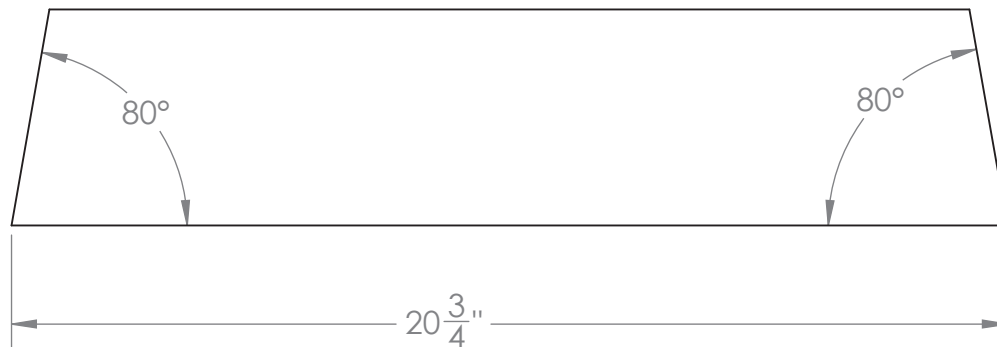


Standard 1x6in board size

Need 2 per mountain

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field	
DIMENSIONS ARE IN INCHES	DRAWN	DB	8/31/15		
TOLERANCES:	CHECKED				
FRACTIONAL ±1/8	ENG APPR.				
ANGULAR: MACH ± BEND ±5°	MFG APPR.				
TWO PLACE DECIMAL ±0.010				TITLE: DIY16 - Upper Mountain Side	
THREE PLACE DECIMAL ±0.005					
INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.			SIZE	DWG. NO.
MATERIAL	COMMENTS:			A	DIY -2-2
Pine economy board					
FINISH					
Sanded & Smooth					
DO NOT SCALE DRAWING				SCALE: 1:4	WEIGHT:
					SHEET 1 OF 1

Rev	Discription of Changes
1	Original Print

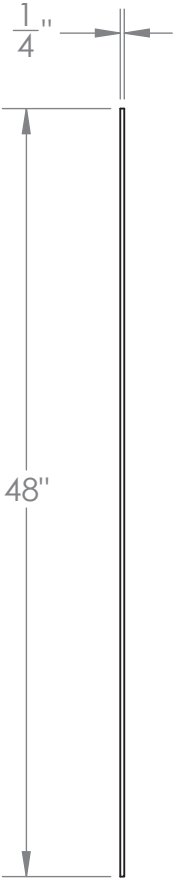
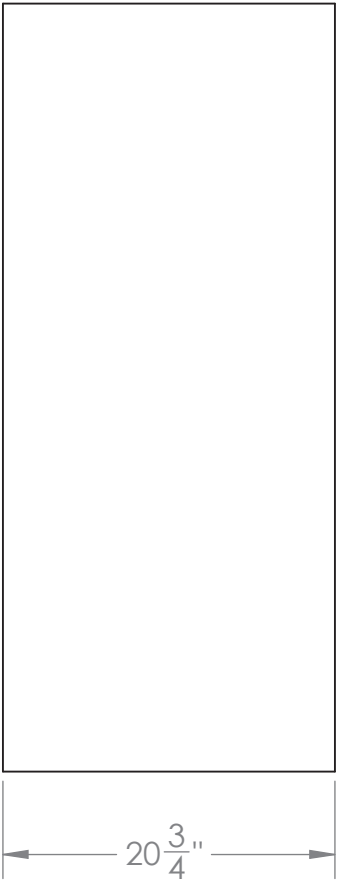


Cut down from 1x6in board size

Need 1 per mountain

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field	
DIMENSIONS ARE IN INCHES	DRAWN	DB	8/11/15		
TOLERANCES:	CHECKED				
FRACTIONAL $\pm 1/8$	ENG APPR.				
ANGULAR: MACH \pm BEND $\pm 5^\circ$	MFG APPR.				
TWO PLACE DECIMAL ± 0.010				TITLE: DIY16 - Upper Mountain Center	
THREE PLACE DECIMAL ± 0.005					
INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.			SIZE	DWG. NO.
MATERIAL	COMMENTS:			A	DIY -2-3
Pine economy board					REV 1
FINISH					
Sanded & Smooth				SCALE: 1:4	WEIGHT:
DO NOT SCALE DRAWING					SHEET 1 OF 1

Rev	Discription of Changes
1	Original Print

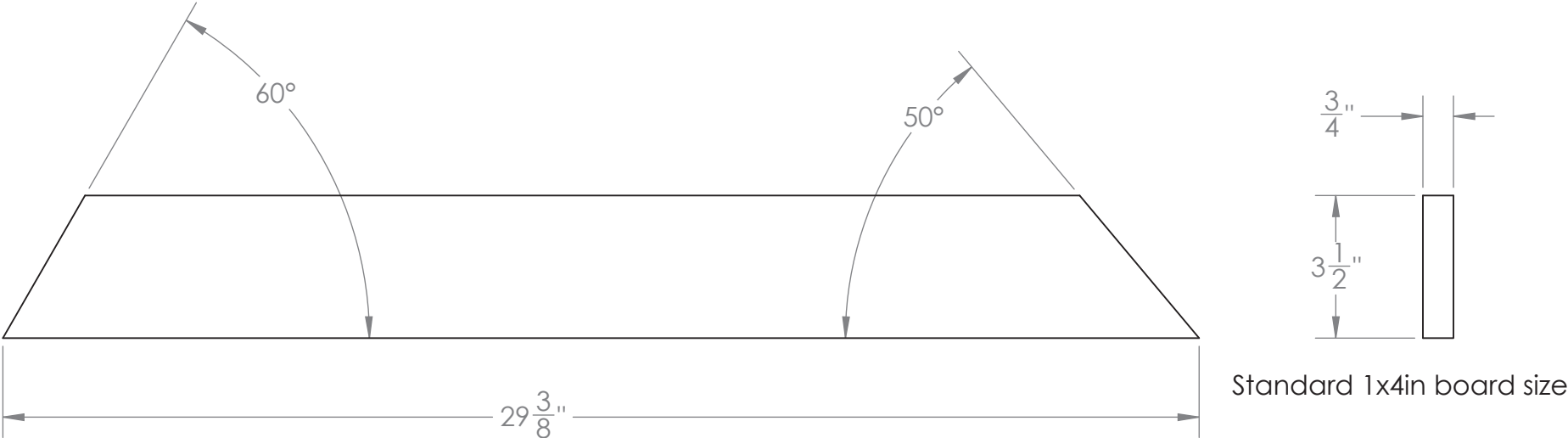


Standard 24x48x1/4in board size

Need 1 per mountain

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	<div>15-16 FTC DIY Field</div> <div>TITLE:</div> <div>DIY16 - Upper Mountain Panel</div> <div> <div>SIZE</div> <div>DWG. NO.</div> <div>REV</div> </div> <div> <div>A</div> <div>DIY -2-4</div> <div>1</div> </div> <div> <div>SCALE: 1:12</div> <div>WEIGHT:</div> <div>SHEET 1 OF 1</div> </div>		
DIMENSIONS ARE IN INCHES	DRAWN	DB	8/11/15			
TOLERANCES:	CHECKED					
FRACTIONAL $\pm 1/8$	ENG APPR.					
ANGULAR: MACH \pm BEND $\pm 5^\circ$	MFG APPR.					
TWO PLACE DECIMAL ± 0.010	Q.A.			COMMENTS:		
THREE PLACE DECIMAL ± 0.005						
INTERPRET GEOMETRIC TOLERANCING PER:						
MATERIAL						
Pine economy board						
FINISH						
Sanded & Smooth						
DO NOT SCALE DRAWING						

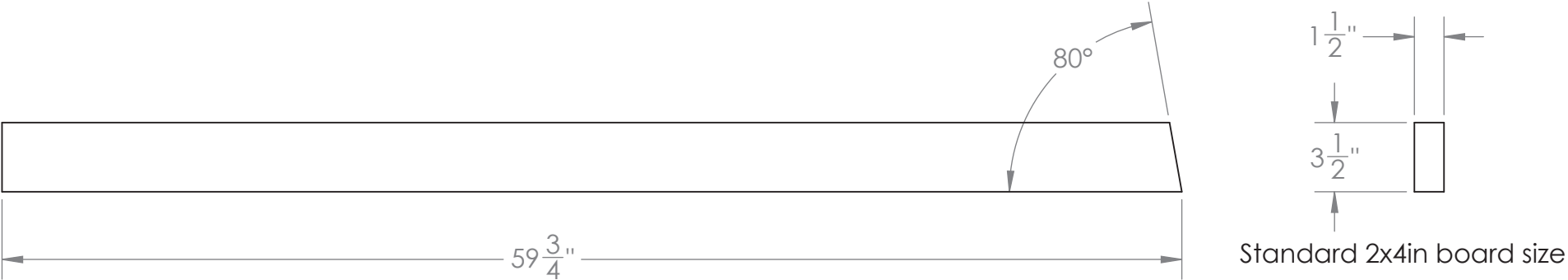
Rev	Discription of Changes
1	Original Print



Need 2 per mountain

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/8 ANGULAR: MACH± BEND ±5° TWO PLACE DECIMAL ±0.010 THREE PLACE DECIMAL ±0.005	DRAWN	DB	8/11/15			
	CHECKED					
	ENG APPR.					
	MFG APPR.					
INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.			TITLE: DIY16 - Mid Mountain Stay		
MATERIAL Pine economy board	COMMENTS:					
FINISH Sanded & Smooth				SIZE	DWG. NO.	REV
				A	DIY -3-1	1
DO NOT SCALE DRAWING				SCALE: 1:4	WEIGHT:	SHEET 1 OF 1

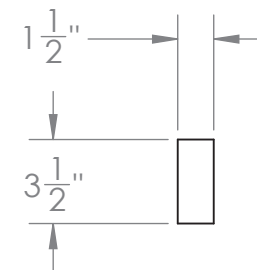
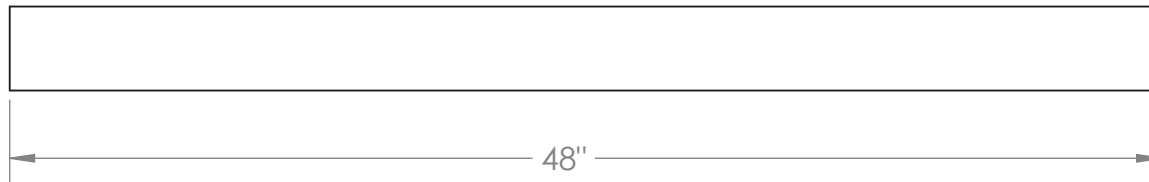
Rev	Discription of Changes
1	Original Print



Need 2 per mountain

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field	
DIMENSIONS ARE IN INCHES	DRAWN	DB	8/11/15		
TOLERANCES:	CHECKED				
FRACTIONAL $\pm 1/8$	ENG APPR.				
ANGULAR: MACH \pm	MFG APPR.			DIY16 - Arch Support Leg	
BEND $\pm 5^\circ$					
TWO PLACE DECIMAL ± 0.010	Q.A.			SIZE	DWG. NO.
THREE PLACE DECIMAL ± 0.005	COMMENTS:			A	DIY -3-2
INTERPRET GEOMETRIC TOLERANCING PER:					REV
MATERIAL					1
Pine economy board					
FINISH					
Sanded & Smooth					
DO NOT SCALE DRAWING				SCALE: 1:8	WEIGHT:
					SHEET 1 OF 1

Rev	Discription of Changes
1	Original Print

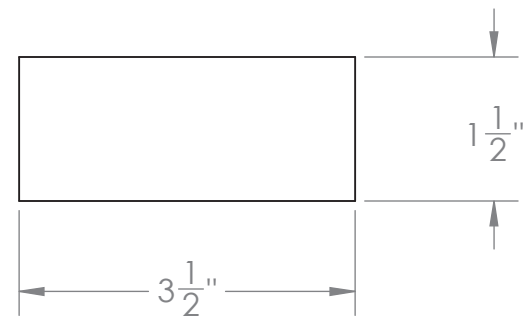
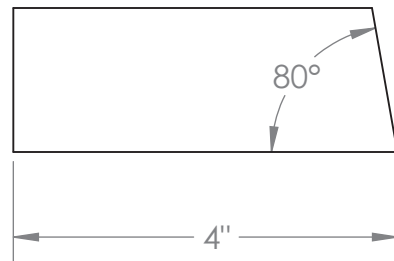


Standard 2x4in board size

Need 2 per mountain

UNLESS OTHERWISE SPECIFIED:		NAME		DATE		15-16 FTC DIY Field							
DIMENSIONS ARE IN INCHES		DRAWN		DB						8/11/15			
TOLERANCES:		CHECKED											
FRACTIONAL ±1/8		ENG APPR.											
ANGULAR: MACH± BEND ±5°		MFG APPR.											
TWO PLACE DECIMAL ±0.010								TITLE: DIY16 - Arch Lower Cross Member					
THREE PLACE DECIMAL ±0.005													
INTERPRET GEOMETRIC TOLERANCING PER:		Q.A.											
MATERIAL		COMMENTS:											
Pine economy board													
FINISH								SIZE		DWG. NO.		REV	
Sanded & Smooth								A		DIY -3-3		1	
DO NOT SCALE DRAWING								SCALE: 1:8		WEIGHT:		SHEET 1 OF 1	

Rev	Discription of Changes
1	Original Print

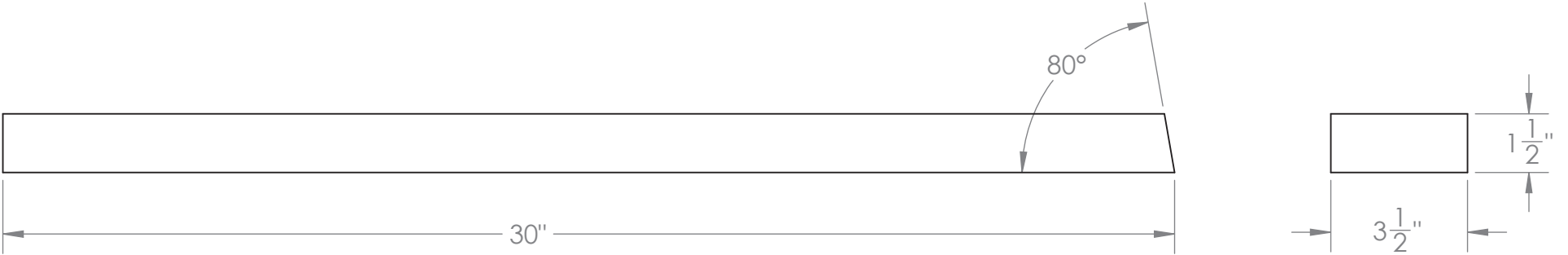


Standard 2x4in board size

Need 2 per mountain

UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field	
DIMENSIONS ARE IN INCHES	DRAWN	DB	8/11/15		
TOLERANCES:	CHECKED				
FRACTIONAL $\pm 1/8$	ENG APPR.				
ANGULAR: MACH \pm BEND $\pm 5^\circ$	MFG APPR.			DIY16 - Outside Connector	
TWO PLACE DECIMAL ± 0.010					
THREE PLACE DECIMAL ± 0.005				TITLE:	
INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.				
MATERIAL	COMMENTS:			SIZE	DWG. NO.
Pine economy board				A	DIY -4-1
FINISH					
Sanded & Smooth					
DO NOT SCALE DRAWING				SCALE: 1:2	WEIGHT:
					SHEET 1 OF 1

Rev	Discription of Changes
1	Original Print

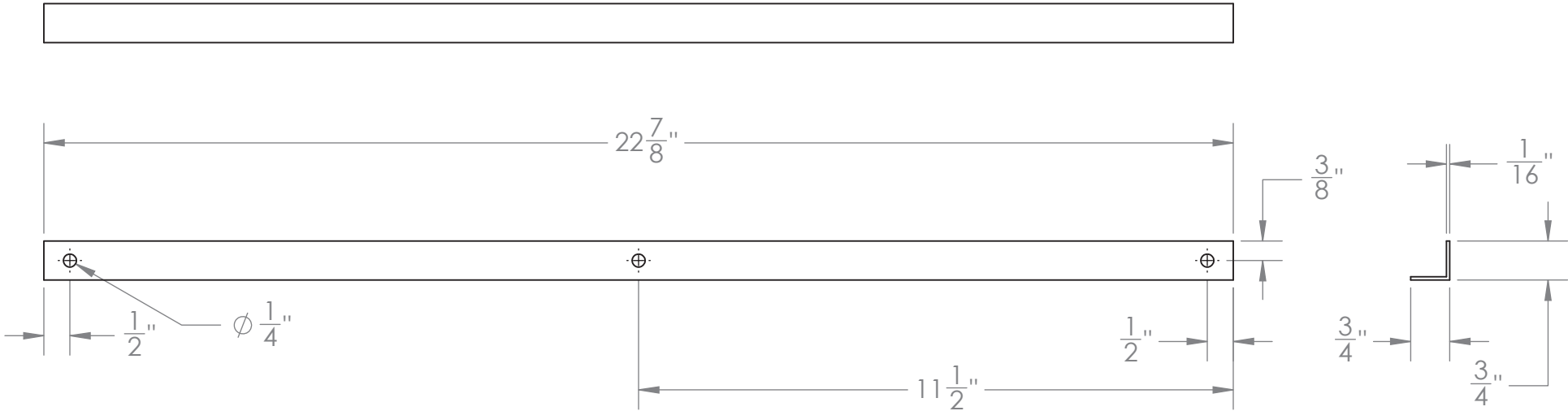


Standard 2x4in board size

Need 1 per mountain

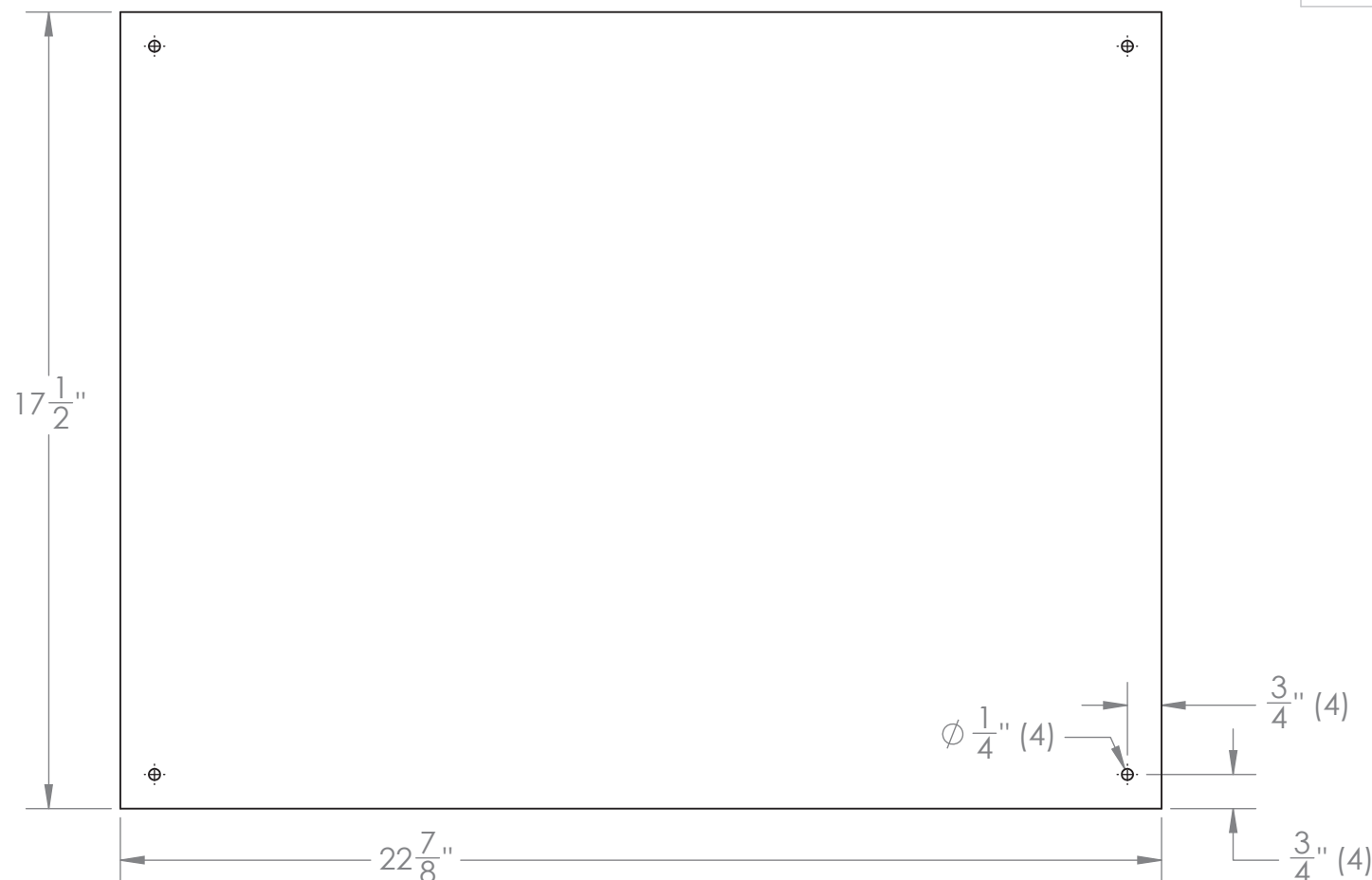
UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field		
DIMENSIONS ARE IN INCHES	DRAWN	DB	8/11/15	TITLE:		
TOLERANCES:	CHECKED			DIY16 - Inside		
FRACTIONAL ±1/8	ENG APPR.			Connector		
ANGULAR: MACH± BEND ±5°	MFG APPR.					
TWO PLACE DECIMAL ±0.010	Q.A.			SIZE		
THREE PLACE DECIMAL ±0.005	COMMENTS:			DWG. NO.		REV
INTERPRET GEOMETRIC TOLERANCING PER:				A		DIY -4-2
MATERIAL						1
Pine economy board						
FINISH						
Sanded & Smooth					SCALE: 1:4	
DO NOT SCALE DRAWING					WEIGHT:	SHEET 1 OF 1

Rev	Discription of Changes
1	Original Print
1.1	Updated part number



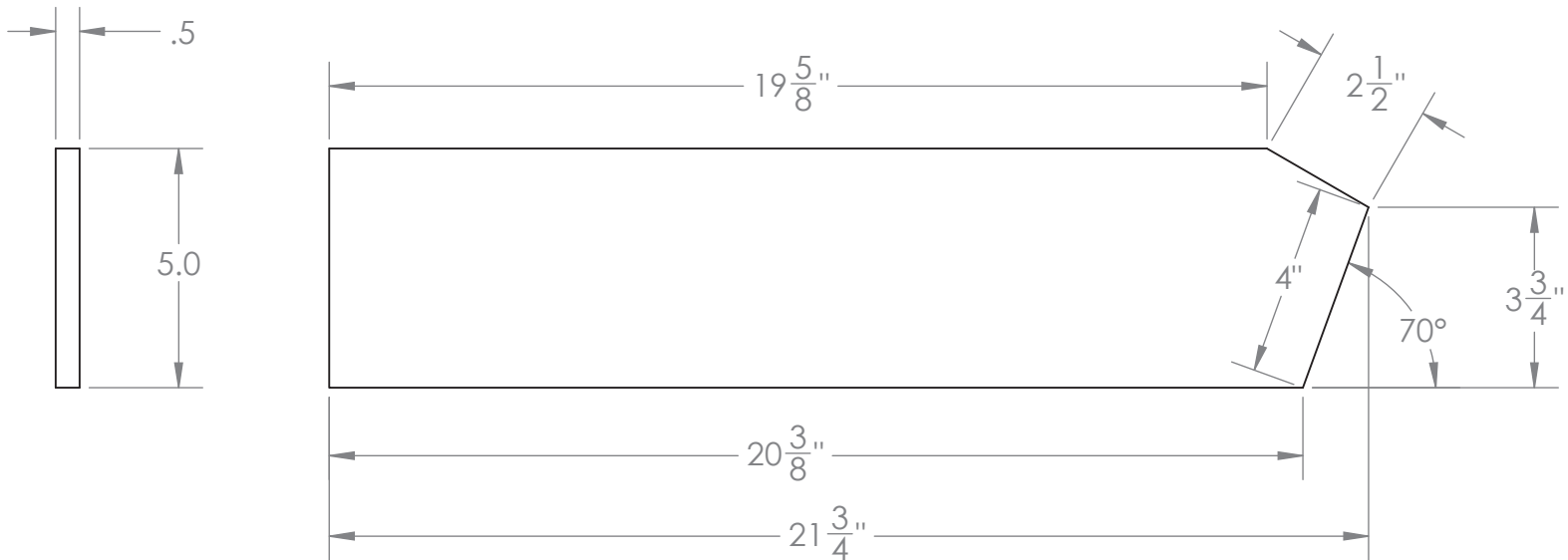
UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/8 ANGULAR: MACH± BEND ±5° TWO PLACE DECIMAL ±0.010 THREE PLACE DECIMAL ±0.005	DRAWN	DB	8/27/15	TITLE:		
	CHECKED			DIY16 - Hurdle		
	ENG APPR.			Armor		
	MFG APPR.					
INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.					
MATERIAL Aluminum	COMMENTS:			SIZE	DWG. NO.	REV
FINISH Debured				A	DIY -5-1	1.1
DO NOT SCALE DRAWING				SCALE: 1:3	WEIGHT:	SHEET 1 OF 1

Rev	Discription of Changes
1	Original Print



UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field						
DIMENSIONS ARE IN INCHES		DRAWN	DB				8/28/15			
TOLERANCES:		CHECKED								
FRACTIONAL ±1/8		ENG APPR.								
ANGULAR: MACH± BEND ±5°		MFG APPR.								
TWO PLACE DECIMAL ±0.010					TITLE: DIY16 - 1/16" Lexan Panel					
THREE PLACE DECIMAL ±0.005										
INTERPRET GEOMETRIC TOLERANCING PER:		Q.A.								
MATERIAL		COMMENTS:								
1/16" thick Lexan										
FINISH		Lexan is a specific brand name for Polycarbonate, and PC will work for this part.			SIZE		DWG. NO.		REV	
Sanded & Smooth					A		DIY -5-2		1	
DO NOT SCALE DRAWING					SCALE: 1:4		WEIGHT:		SHEET 1 OF 1	

Rev	Discription of Changes
1	Original Print
1.1	Updated part number

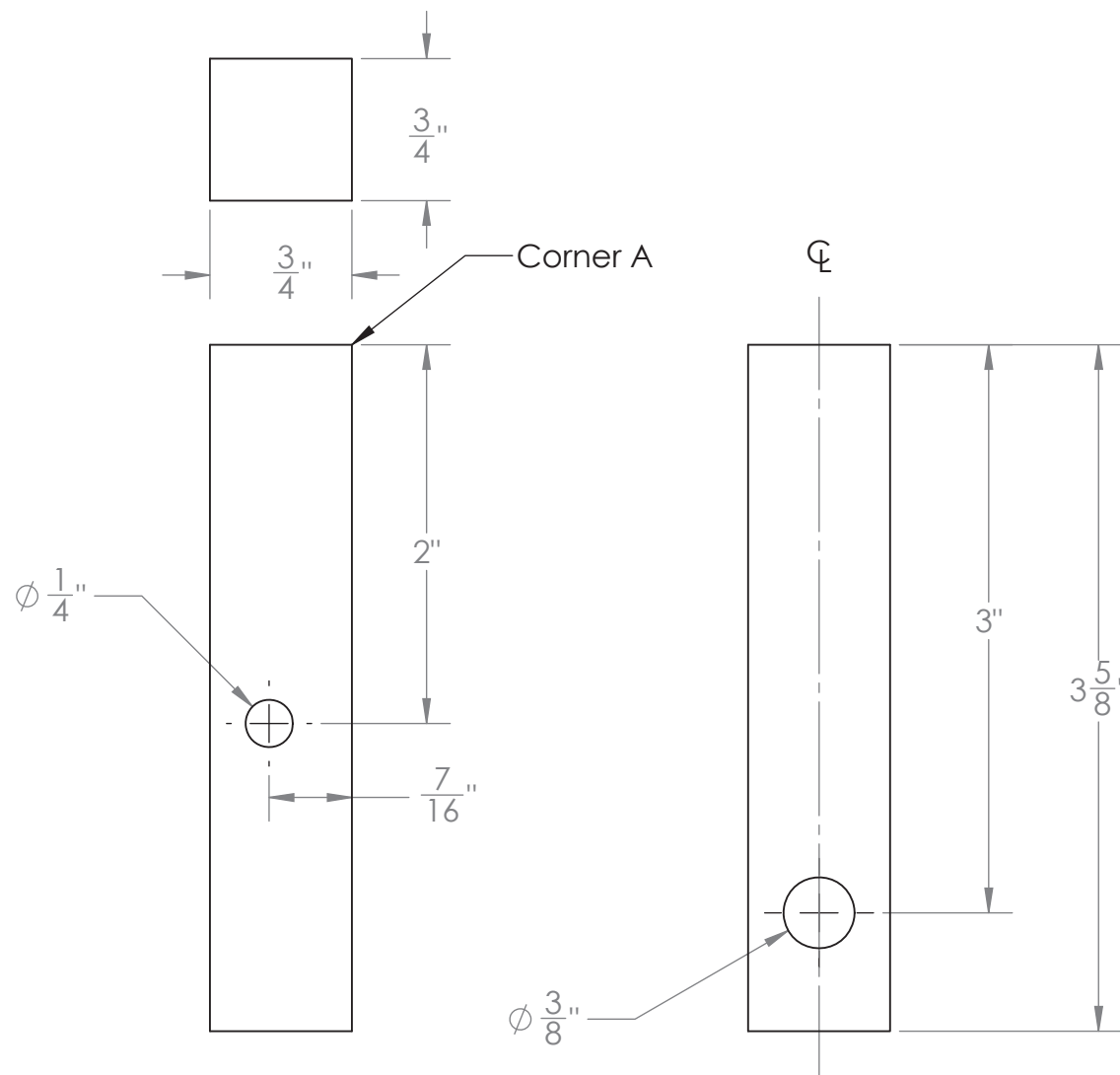


Cut from Standard 1/2in Plywood

Need 2 per mountain

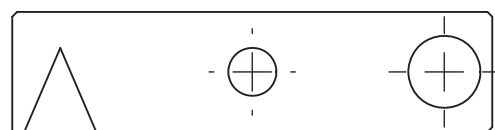
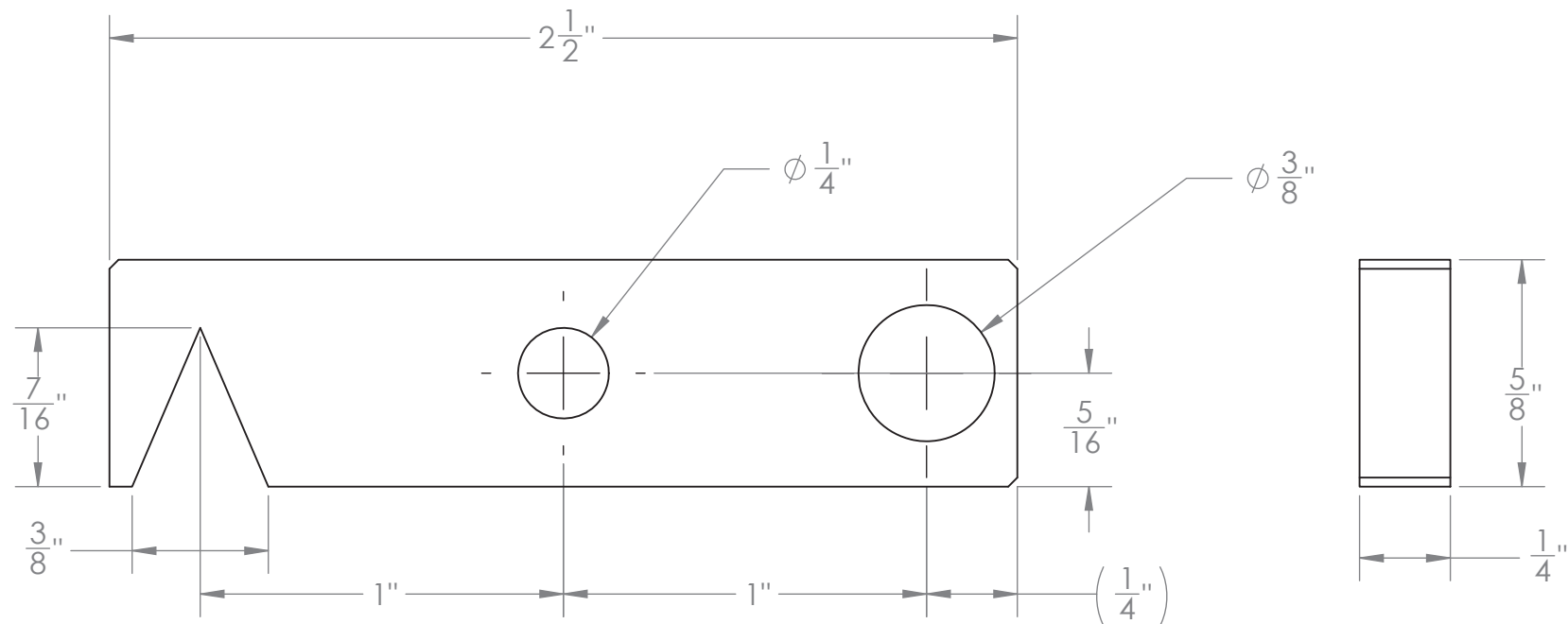
UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field		
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/8 ANGULAR: MACH± BEND ±5° TWO PLACE DECIMAL ±0.010 THREE PLACE DECIMAL ±0.005		DRAWN	DB	8/31/15	TITLE:	
		CHECKED			DIY16 - Ball Fence	
		ENG APPR.				
		MFG APPR.				
		INTERPRET GEOMETRIC TOLERANCING PER:	Q.A.			
MATERIAL	COMMENTS:					
Pine economy board						
FINISH						
Sanded & Smooth						
DO NOT SCALE DRAWING		SCALE: 1:4			WEIGHT:	SHEET 1 OF 1

Rev	Discription of Changes
1	Original Print
1.1	Added hole for Trigger line



UNLESS OTHERWISE SPECIFIED:		NAME		DATE		15-16 FTC DIY Field							
DIMENSIONS ARE IN INCHES		DRAWN		DB						9/4/15			
TOLERANCES:		CHECKED											
FRACTIONAL ±1/8		ENG APPR.											
ANGULAR: MACH± BEND ±5°		MFG APPR.											
TWO PLACE DECIMAL ±0.010								TITLE: DIY16 - Trigger					
THREE PLACE DECIMAL ±0.005													
INTERPRET GEOMETRIC TOLERANCING PER:		Q.A.											
MATERIAL		COMMENTS:											
Scrap Pine Board													
FINISH								SIZE		DWG. NO.		REV	
Sanded & Smooth								A		DIY -5-4		1.1	
DO NOT SCALE DRAWING								SCALE: 1:1		WEIGHT:		SHEET 1 OF 1	

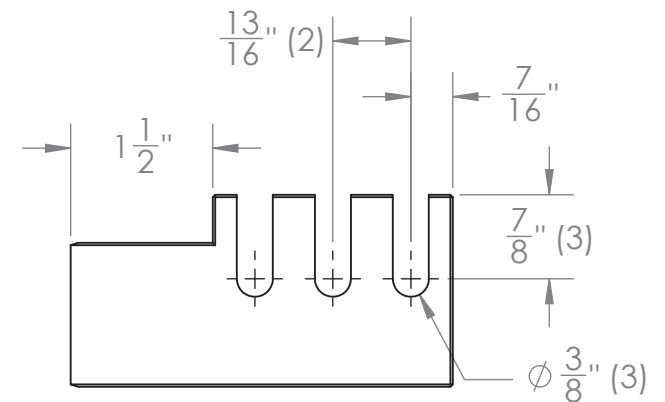
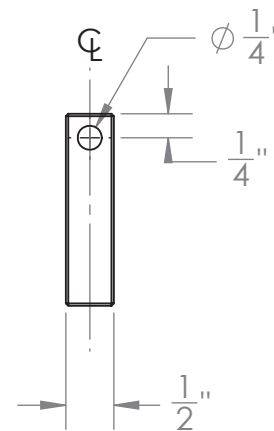
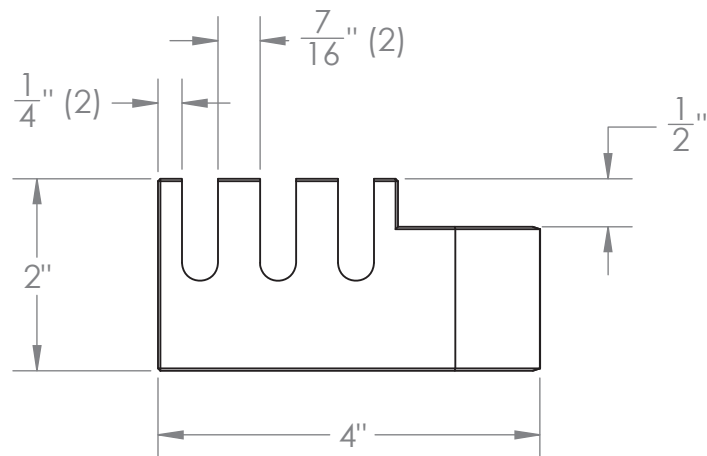
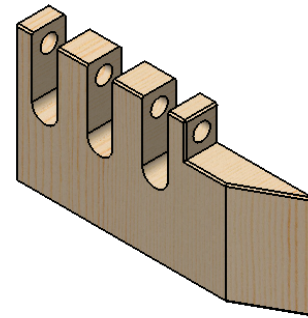
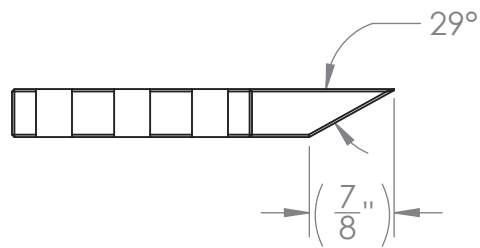
Rev	Discription of Changes
1	Original Print



1:1 Scale

UNLESS OTHERWISE SPECIFIED:		NAME		DATE		15-16 FTC DIY Field					
DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ±1/8 ANGULAR: MACH± BEND ±5° TWO PLACE DECIMAL ±0.010 THREE PLACE DECIMAL ±0.005		DRAWN		DB						9/3/15	
INTERPRET GEOMETRIC TOLERANCING PER:		CHECKED				TITLE: DIY16 - Zip Line Release					
		ENG APPR.									
		MFG APPR.									
		Q.A.									
MATERIAL Scrap Plywood		COMMENTS:				SIZE		DWG. NO.		REV	
FINISH Sanded & Smooth						A		DIY -5-5		1	
DO NOT SCALE DRAWING						SCALE: 2:1		WEIGHT:		SHEET 1 OF 1	

Rev	Discription of Changes
1	Original Print



UNLESS OTHERWISE SPECIFIED:		NAME	DATE	15-16 FTC DIY Field	
DIMENSIONS ARE IN INCHES		DRAWN	DB		
TOLERANCES:		CHECKED			
FRACTIONAL $\pm 1/8$		ENG APPR.			
ANGULAR: MACH \pm BEND $\pm 5^\circ$		MFG APPR.		DIY16 - Main Release Mount	
TWO PLACE DECIMAL ± 0.010		Q.A.			
THREE PLACE DECIMAL ± 0.005		COMMENTS:		SIZE	DWG. NO.
INTERPRET GEOMETRIC TOLERANCING PER:				A	DIY -5-6
MATERIAL					REV
Scrap Plywood					1
FINISH					
Sanded & Smooth					
DO NOT SCALE DRAWING				SCALE: 1:2	WEIGHT:
					SHEET 1 OF 1