ROSCOMMON EQUIPMENT CENTER

NewsNote # 19
October, 2015

Fire Prevention "Tree Game"

National Association of State Foresters
in Cooperation with
Michigan's Forest Fire Experiment Station

REC NewsNote No. 19

Fire Prevention "Tree Game"

Table of Contents

Disclaimer.....2

Introduction 3

Design 4

Appendix A 5

Appendix B 6-14

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Disclaimer

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Introduction

REC staff in conjunction with the Michigan Department of Natural Resources (MIDNR) have worked together to create an interactive carnival type game to help communicate the message of fire prevention.

The "Tree Game" explained below gives agencies a tool to be able to better explain causes of forest fire to children and give them a chance to learn how forest fires are extinguished by having them actively participate in putting out a mock fire on the Tree Game.

States across the country have invested much time and resources in developing various programs to help educate the public regarding preventable forest fires. The Smokey Bear program is a good example of this type of educational initiative.

Design

MIDNR approached REC with the intent of developing an apparatus that was easily transportable, setup and operated at indoor or outdoor functions. The apparatus would need to be able to help MIDNR staff interactivley engage children and their parents to communicate the message of fire prevention and to teach them in general terms how forest fire is classically fought.

REC created the Tree Game to fulfill this need.

The Tree Game is shaped like a conifer tree and consists of 2 seperate panels that when assembled is self standing and presents more of a 3D representation. One of the panels has cutouts of various sizes to house the artificial "flames". The flames are installed such that they will stand upright and are hinged to be able to be knocked over or "extinguished" by a child with either a low pressure water spraying device or a small sandbag (for indoor functions).

** Several drawings used for re-creating the game need to be printed full-scale and will be used as a pattern for fabrication.

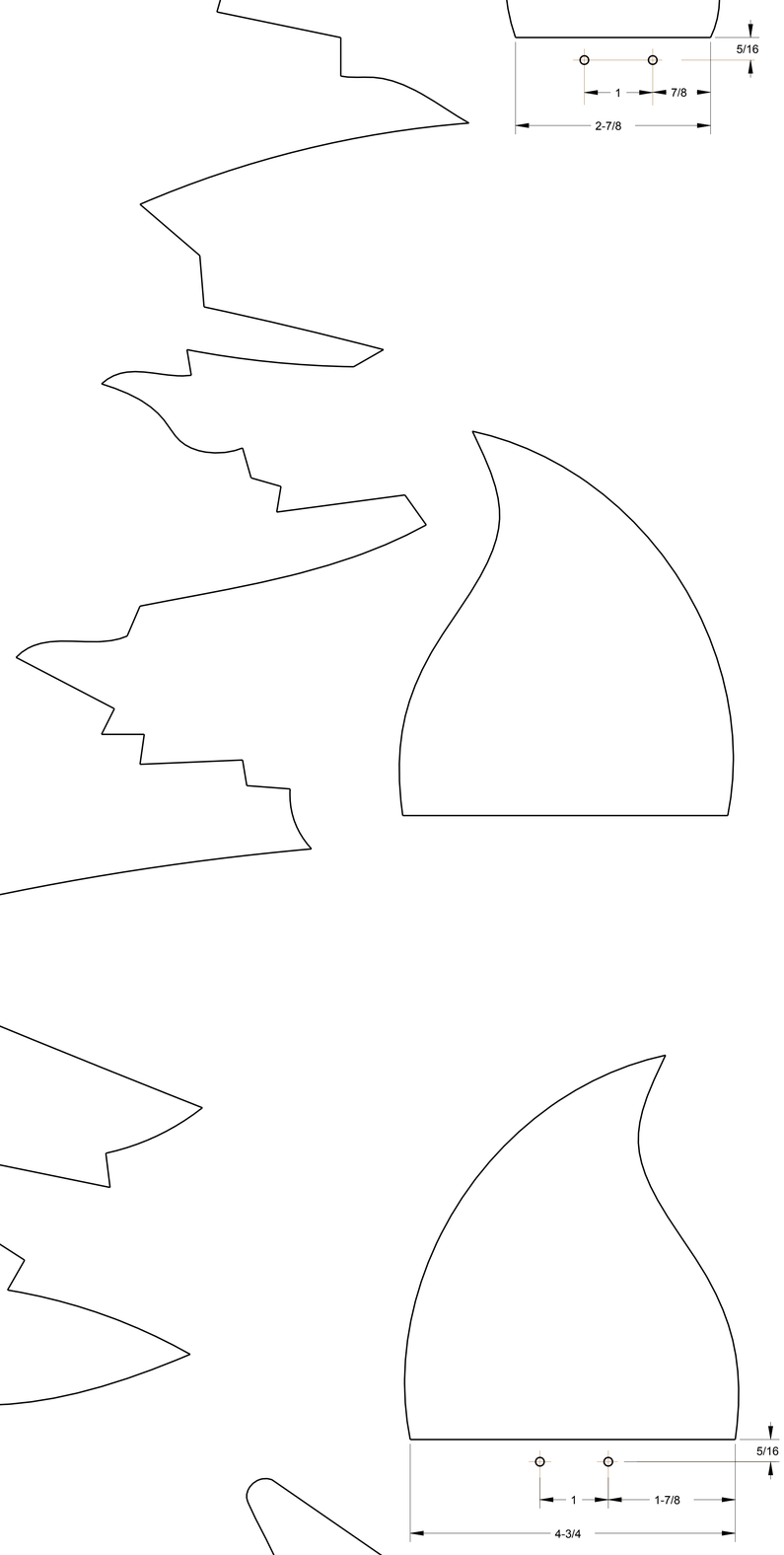
Appendix A .....Photograph of the Tree Game being used
Appendix B .....Construction Drawings

Appendix A

APPENDIX B

STD. TOL.					DRAWN: DGP	DNR
FRACTIONAL: 0 TO 6 IN + - 1/32; 6 IN AND UP + - 1/16					DESIGNED: DGP	
ANGULAR: + - 1 DEG.					APPROVED:	
	NO.	BY	DATE	REVISION		
DECIMAL: 1 PLACE + - 0.05; 2 PLACE + - 0.01; 3 PLACE + - 0.005	FOREST FIRE EXPERIMENT STATION P.O. BOX 68 ROSCOMMON, MICHIGAN 48653				DATE: 02-Jan-2014; SCALE: FULL	FOREST, MINERAL AND FIRE MANAGEMENT
PROJECT NO.: 13-0	TITLE: TREE, FRONT				DWG. NO. 42-0001	SIZE: D

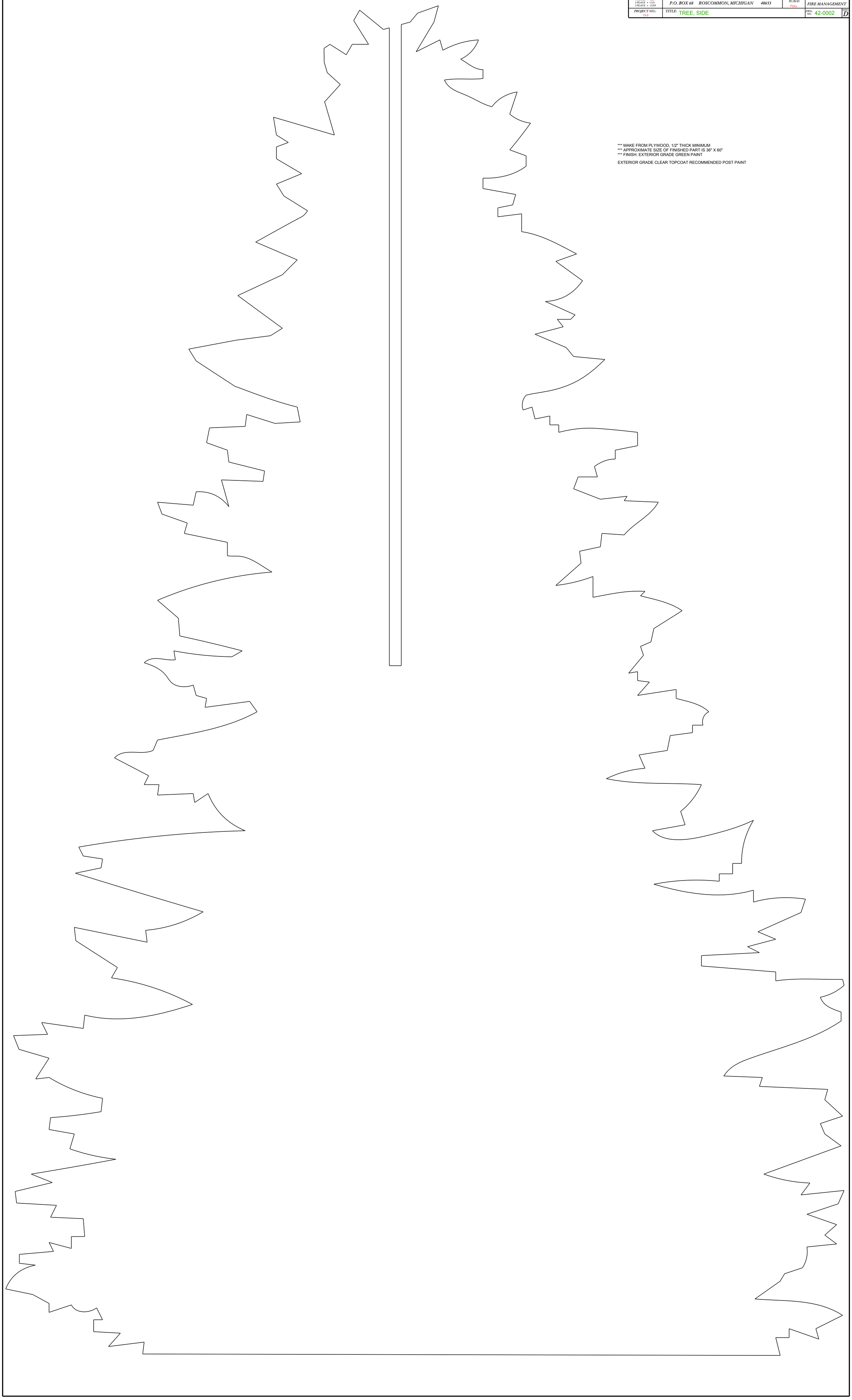
POSITION INDICATORS FOR PANEL GUIDE MOUNTING HOLES



*** MAKE FROM PLYWOOD, 1/2" THICK MINIMUM
*** APPROXIMATE SIZE OF FINISHED PART IS 36" X 60"
*** FINISH: EXTERIOR GRADE GREEN PAINT

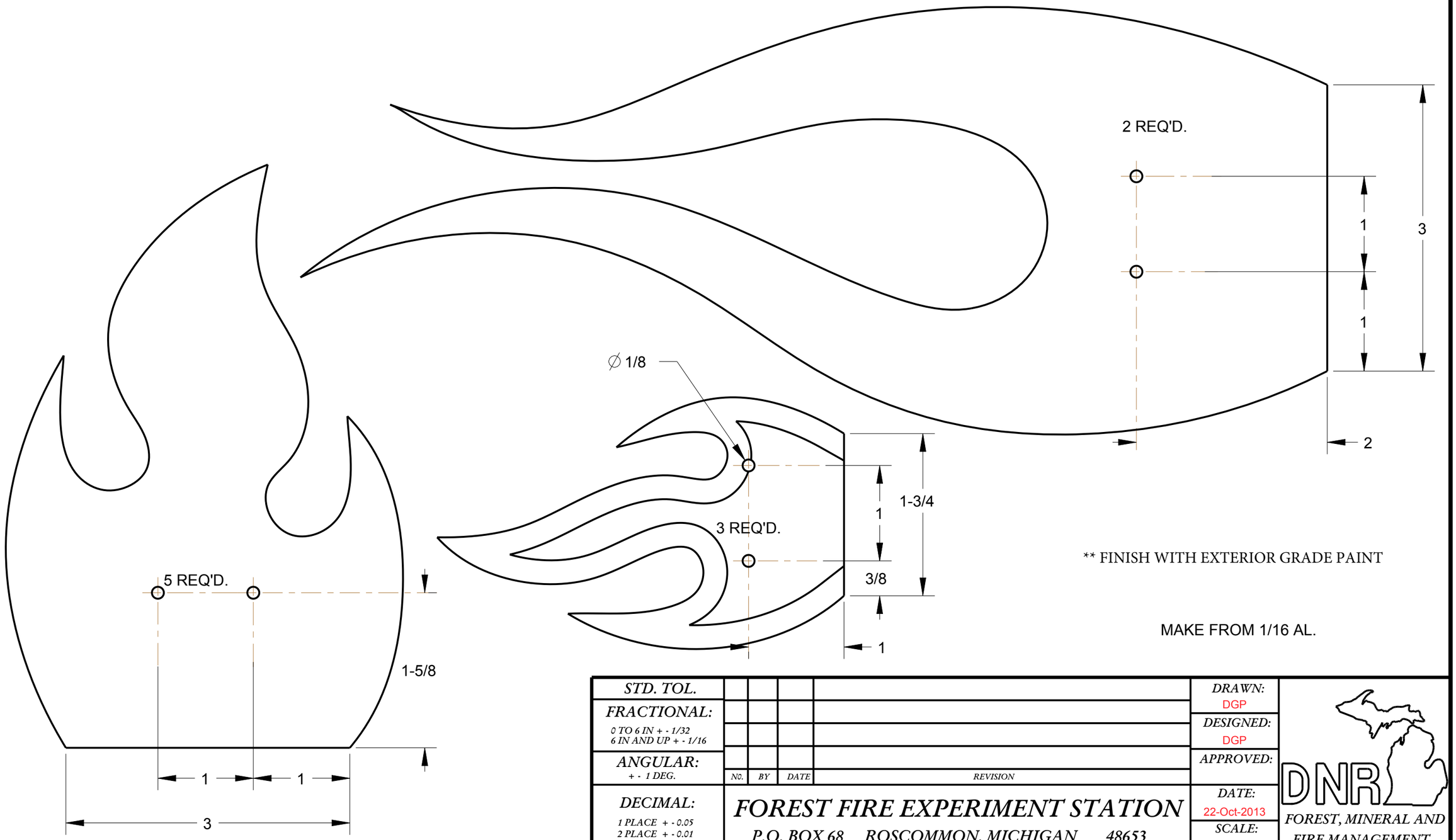
EXTERIOR GRADE CLEAR TOPCOAT RECOMMENDED POST PAINT

STD. TOL.					DRAWN: DGP	DNR FOREST, MINERAL AND FIRE MANAGEMENT
FRACTIONAL: 0 TO 6 IN +- 1/32; 6 IN AND UP +- 1/16					DESIGNED: DGP	
ANGULAR: +- 1 DEG.	NO.	BY	DATE	REVISION	APPROVED:	
DECIMAL: 1 PLACE +-.05; 2 PLACE +-.01; 3 PLACE +-.005				FOREST FIRE EXPERIMENT STATION P.O. BOX 68 ROSCOMMON, MICHIGAN 48653	DATE: 03-Dec-2013 SCALE: FULL	
PROJECT NO.: 13-0				TITLE: TREE, SIDE	DWG. NO. 42-0002	SIZE: D



*** MAKE FROM PLYWOOD, 1/2" THICK MINIMUM
*** APPROXIMATE SIZE OF FINISHED PART IS 36" X 60"
*** FINISH: EXTERIOR GRADE GREEN PAINT

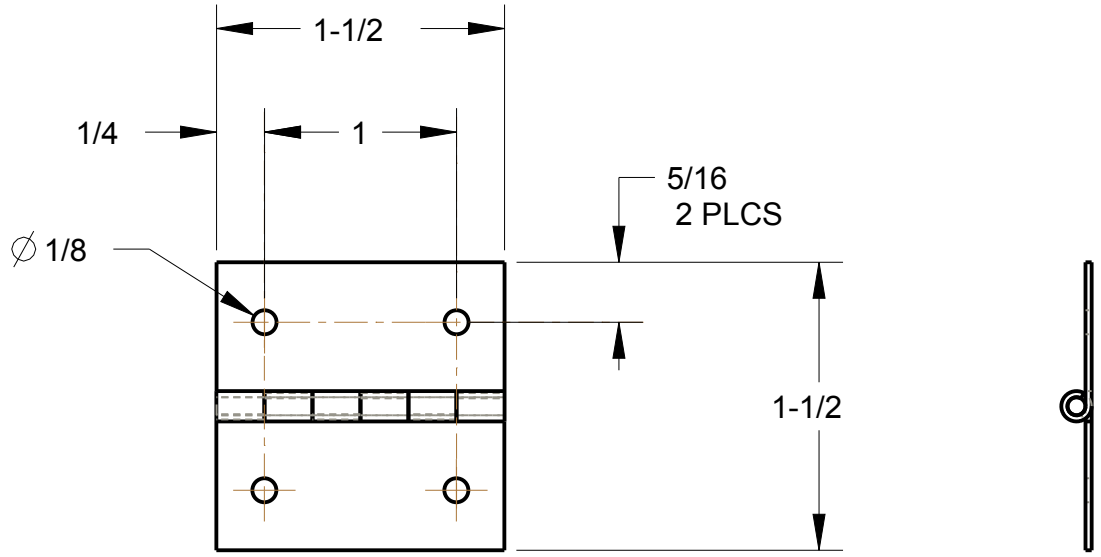
EXTERIOR GRADE CLEAR TOPCOAT RECOMMENDED POST PAINT



** FINISH WITH EXTERIOR GRADE PAINT

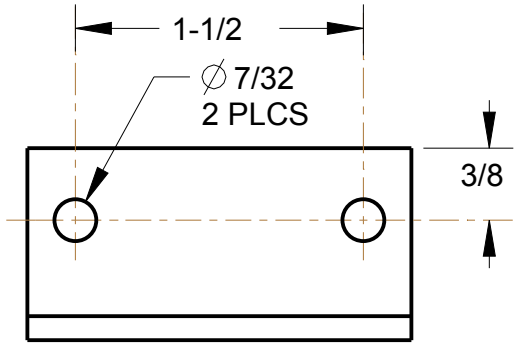
MAKE FROM 1/16 AL.

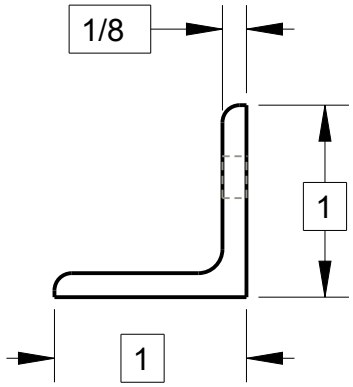
STD. TOL.					DRAWN: DGP	DNR FOREST, MINERAL AND FIRE MANAGEMENT
FRACTIONAL: 0 TO 6 IN + - 1/32; 6 IN AND UP + - 1/16					DESIGNED: DGP	
ANGULAR: + - 1 DEG.	NO.	BY	DATE	REVISION	APPROVED:	
DECIMAL: 1 PLACE + - 0.05; 2 PLACE + - 0.01; 3 PLACE + - 0.005	FOREST FIRE EXPERIMENT STATION P.O. BOX 68 ROSCOMMON, MICHIGAN 48653				DATE: 22-Oct-2013; SCALE: FULL	
PROJECT NO.: 13-0	TITLE: FLAME (S-M-L)				DWG. NO. 42-0004	SIZE: B



PART NO: 42-0005
MAT'L: McMaster Carr Item#: 1581A281
EST WT: 0.65 LBS

STD. TOL.					DRAWN: dgp	DNR FOREST, MINERAL AND FIRE MANAGEMENT
FRACTIONAL 0 TO 6 IN + - 1/32 6 IN AND UP + - 1/16					DESIGNED: DGP	
ANGULAR: + - 1 DEG.	NO.	BY	DATE	REVISION	APPROVED:	
DECIMAL: 1 PLACE + - 0.05 2 PLACE + - 0.01 3 PLACE + - 0.005	FOREST FIRE EXPERIMENT STATION P.O. BOX 68 ROSCOMMON, MICHIGAN 48653				DATE: 13-Nov-2014 SCALE:	
PROJECT NO.:	TITLE: AL. HINGE, 1 1/2 X 1 1/2				DWG. NO. 42-0005	SIZE: A

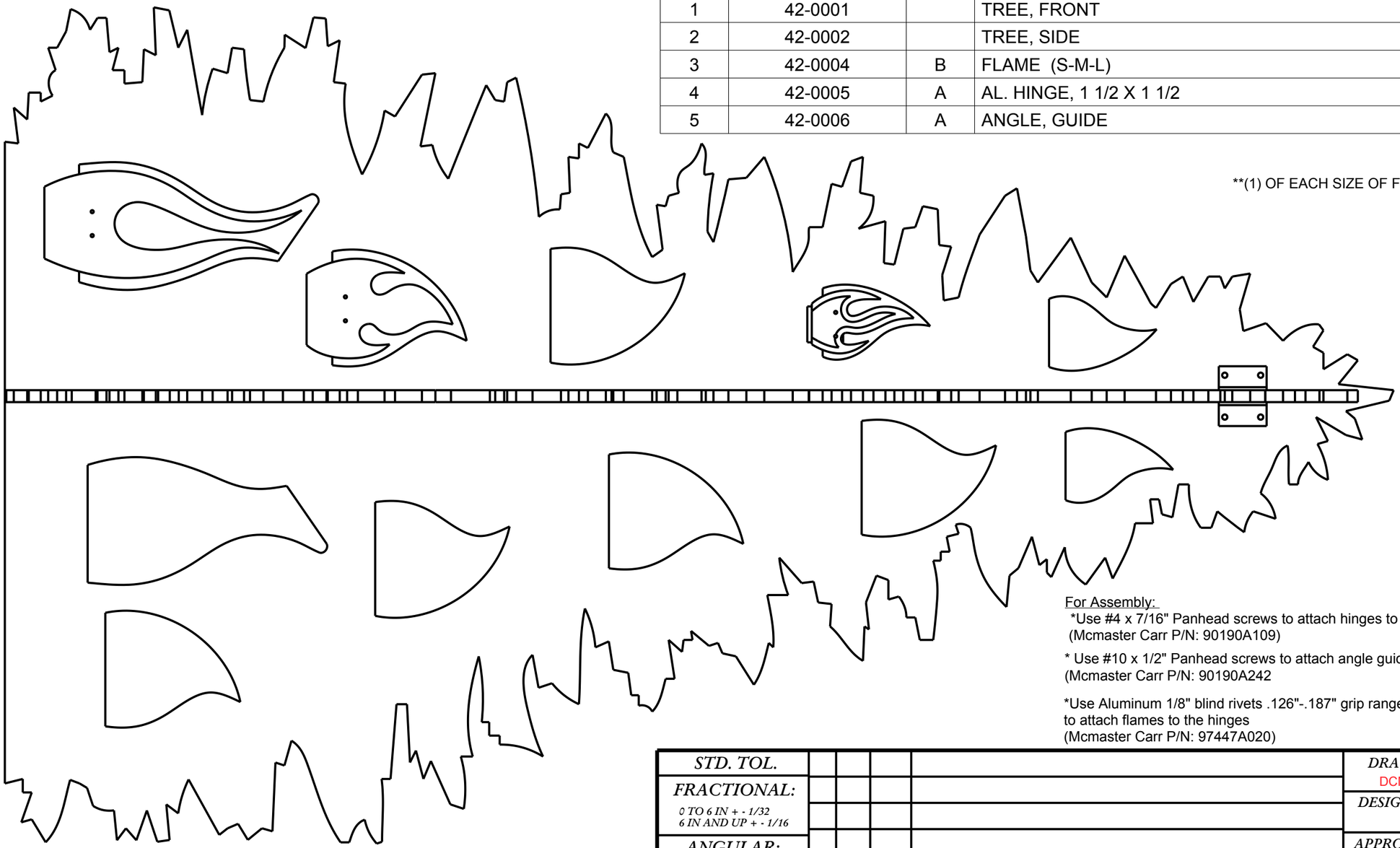




PART NO: 42-0006
MAT'L: AL. ANGLE, 1 X 1 X 1/8
K02600
FFES SPEC NO: AK-20606AG
EST WT: 0.13 LBS

STD. TOL.					DRAWN: DGP	DNR FOREST, MINERAL AND FIRE MANAGEMENT
FRACTIONAL 0 TO 6 IN + - 1/32 6 IN AND UP + - 1/16					DESIGNED: DGP	
ANGULAR: + - 1 DEG.					APPROVED:	
	NO.	BY	DATE	REVISION		
DECIMAL: 1 PLACE + - 0.05 2 PLACE + - 0.01 3 PLACE + - 0.005	FOREST FIRE EXPERIMENT STATION P.O. BOX 68 ROSCOMMON, MICHIGAN 48653				DATE: 22-Oct-2015 SCALE: FULL	
PROJECT NO.:	TITLE: ANGLE, GUIDE				DWG. NO. 42-0006	SIZE: A

ITEM	PART NO.	DWG	DESCRIPTION	QTY
1	42-0001		TREE, FRONT	1
2	42-0002		TREE, SIDE	1
3	42-0004	B	FLAME (S-M-L)	3
4	42-0005	A	AL. HINGE, 1 1/2 X 1 1/2	3
5	42-0006	A	ANGLE, GUIDE	4



**(1) OF EACH SIZE OF FLAME SHOWN FOR CLARITY

SCALE 7/32

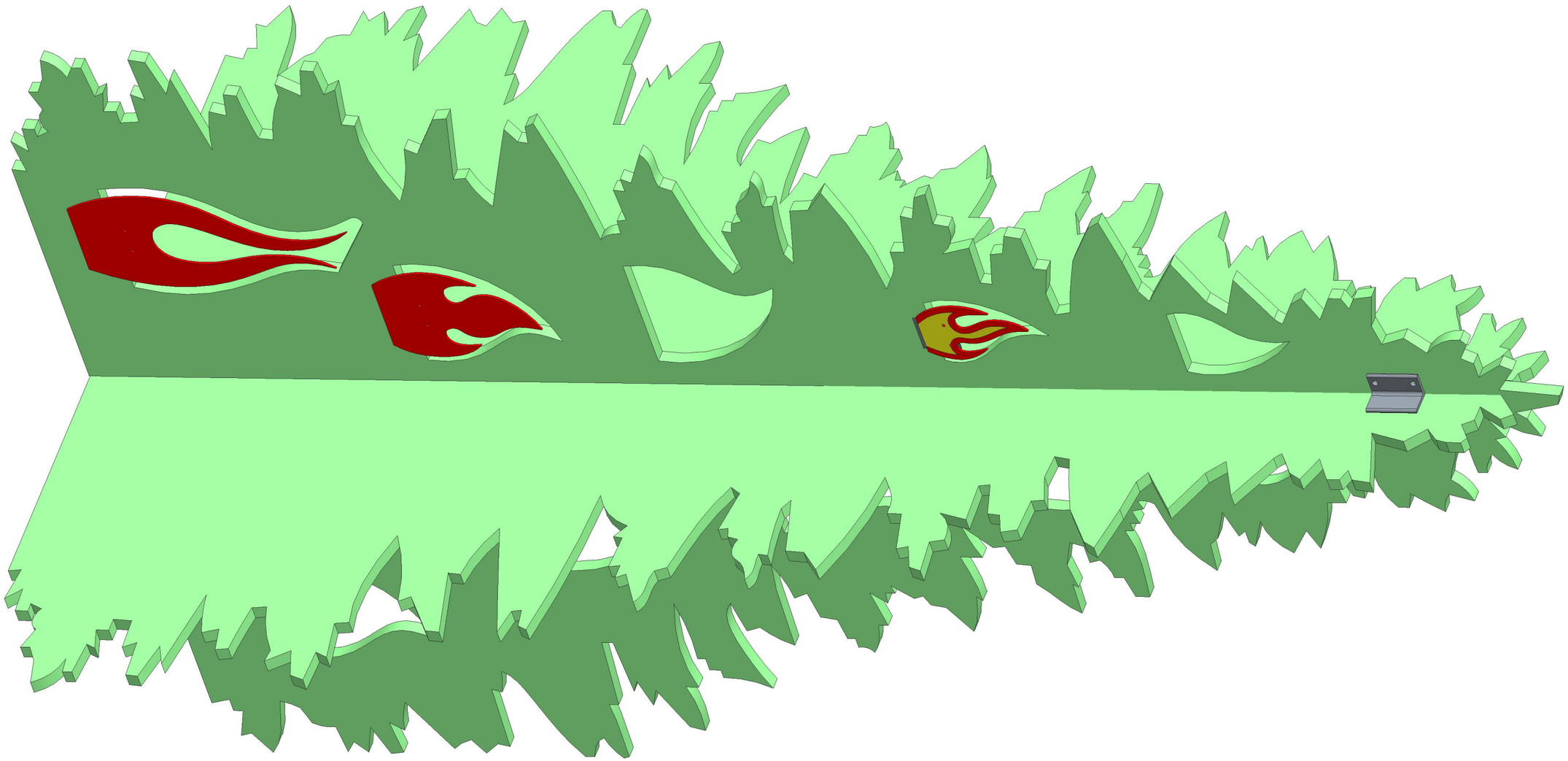
For Assembly:

*Use #4 x 7/16" Panhead screws to attach hinges to the tree panel (Mcmaster Carr P/N: 90190A109)

* Use #10 x 1/2" Panhead screws to attach angle guides to the tree panel (Mcmaster Carr P/N: 90190A242

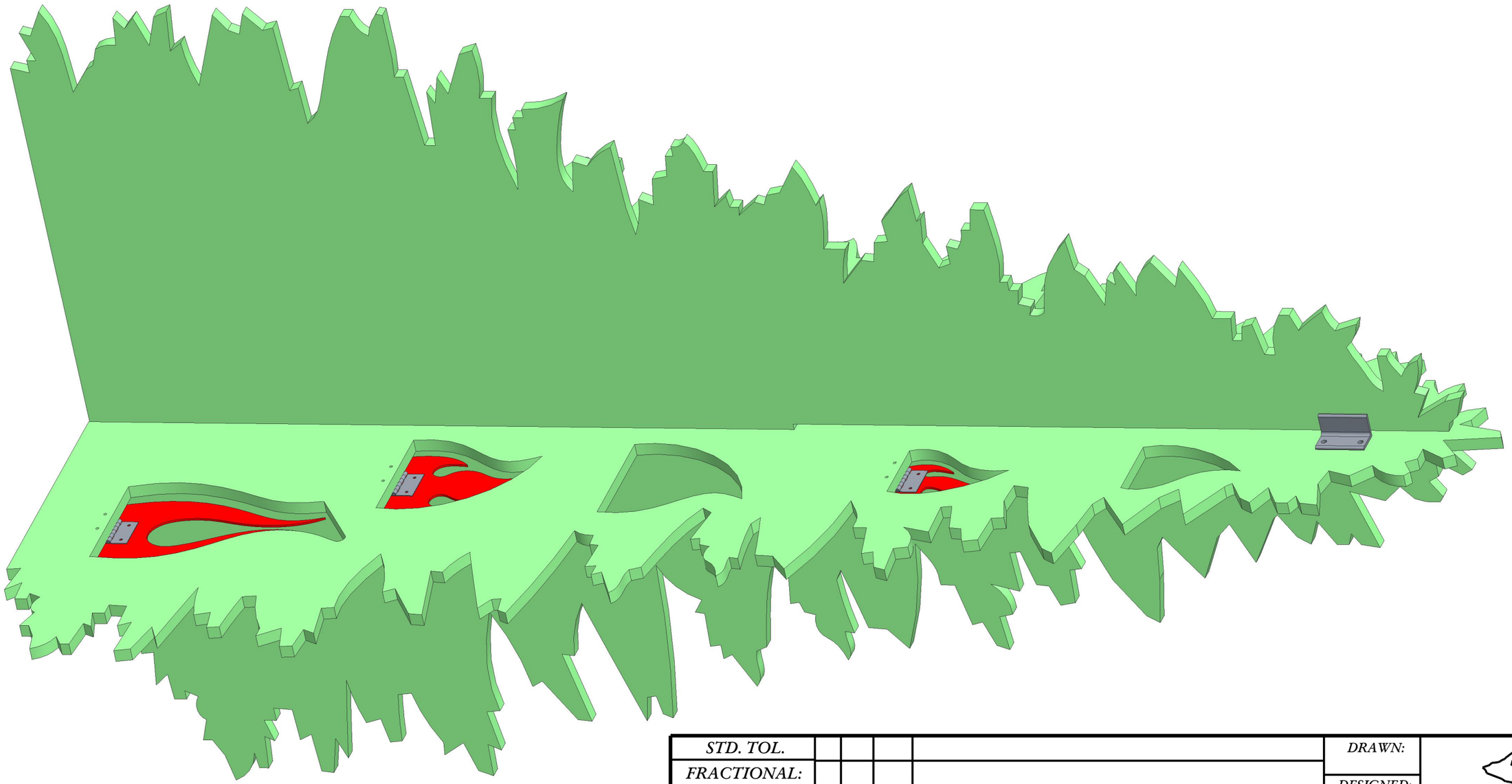
*Use Aluminum 1/8" blind rivets .126"-.187" grip range to attach flames to the hinges (Mcmaster Carr P/N: 97447A020)

STD. TOL.					DRAWN: DCM	DNR FOREST, MINERAL AND FIRE MANAGEMENT
FRACTIONAL: 0 TO 6 IN + - 1/32; 6 IN AND UP + - 1/16					DESIGNED:	
ANGULAR: + - 1 DEG.	NO.	BY	DATE	REVISION	APPROVED: DCM	
DECIMAL: 1 PLACE + - 0.05; 2 PLACE + - 0.01; 3 PLACE + - 0.005	FOREST FIRE EXPERIMENT STATION P.O. BOX 68 ROSCOMMON, MICHIGAN 48653				DATE: 22-Oct-2015; SCALE:	
PROJECT NO.:	TITLE: FIRE TREE ISOMETRIC				DWG. NO.	SIZE: B



STD. TOL.					DRAWN:	DNR
FRACTIONAL: 0 TO 6 IN + - 1/32; 6 IN AND UP + - 1/16					DESIGNED:	
ANGULAR: + - 1 DEG.					APPROVED:	
	NO.	BY	DATE	REVISION		
DECIMAL: 1 PLACE + - 0.05; 2 PLACE + - 0.01; 3 PLACE + - 0.005	FOREST FIRE EXPERIMENT STATION P.O. BOX 68 ROSCOMMON, MICHIGAN 48653				DATE: 22-Oct-2015 SCALE:	FOREST, MINERAL AND FIRE MANAGEMENT
PROJECT NO.:	TITLE: FIRE TREE ISOMETRIC				DWG. NO.	SIZE: B

SCALE 1/4



SCALE 1/4

STD. TOL.					DRAWN:	DNR
FRACTIONAL: 0 TO 6 IN + - 1/32; 6 IN AND UP + - 1/16					DESIGNED:	FOREST, MINERAL AND FIRE MANAGEMENT
ANGULAR: + - 1 DEG.	NO.	BY	DATE	REVISION	APPROVED:	
DECIMAL: 1 PLACE + - 0.05; 2 PLACE + - 0.01; 3 PLACE + - 0.005	FOREST FIRE EXPERIMENT STATION P.O. BOX 68 ROSCOMMON, MICHIGAN 48653				DATE: 22-Oct-2015 SCALE:	
PROJECT NO.:	TITLE: FIRE TREE ISOMETRIC				DWG. NO.	SIZE: B

Further Information

For further information regarding this or any other REC product , please contact the REC Program Administrator at:

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