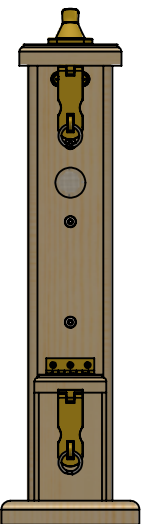
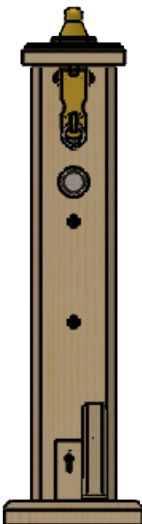
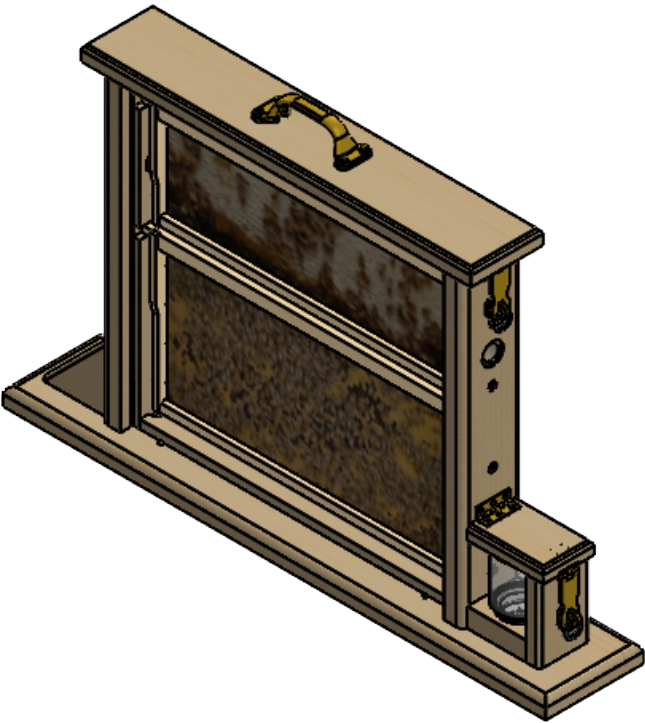
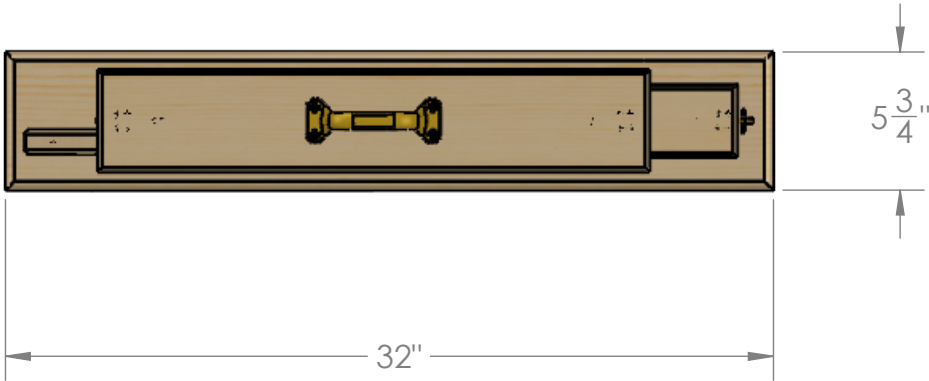


- NOTES:
- 1. SHOWN WITH FEEDER BOTTLE, ONE DEEP AND ONE MEDIUM FRAME.
 - 2. FINISH: STAIN.
 - 3. PREDRILL ALL HOLES.
 - 4. GLUE AND CLAMP SQUARE.
 - 5. POSITION, DRILL AND SCREW HASPS ON COMPLETED ASSEMBLY.
 - 6. STAPLE #8 HARDWARE MESH OVER VENT HOLES.
 - 7. FEEDER BOTTLE SHOULD HAVE A PLASTIC LID, AS METAL WILL RUST.
 - 8. HOLES IN FEEDER BOTTLE LID ARE 0.04 (#60 DRILL BIT).
 - 9. REMOVE ALL SHARP EDGES.



10050	-	OBSERVATION HIVE
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED
DO NOT SCALE DRAWING
INTERPRET DIMENSIONS AND TOLERANCES
PER ASME Y14.5-2018
DIMENSIONS ARE IN INCHES

THIRD ANGLE PROJECTION



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CUSTOMER BEE KEEPERS	
PROJECT HIVE PRODUCTS	
DRAWN BY F. FULKERSON	DATE 2025-01-27
CHECKED BY P.G. KELLY	DATE 2025-01-27
APPROVED P.G. KELLY	DATE 2025-01-27

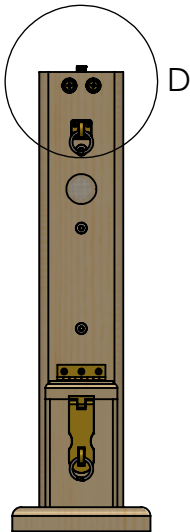
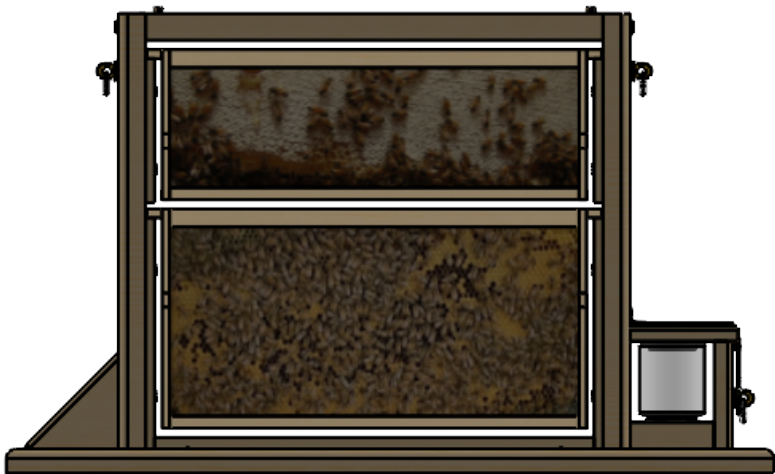
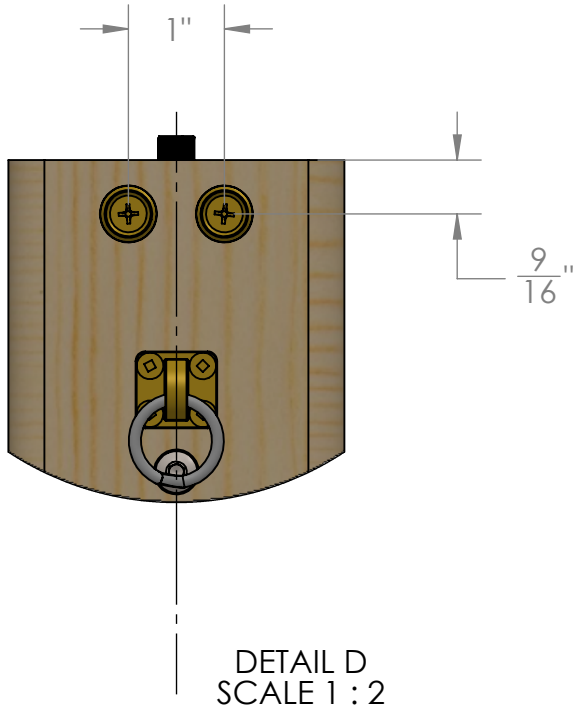


HONEY BEE RESEARCH CENTRE
THE UNIVERSITY OF GUELPH



TITLE
OBSERVATION HIVE

SIZE B	DRAWING NO.	10050	REVISION -
SCALE 1:8	WEIGHT 17.93 lbs	SHEET 1 OF 22	

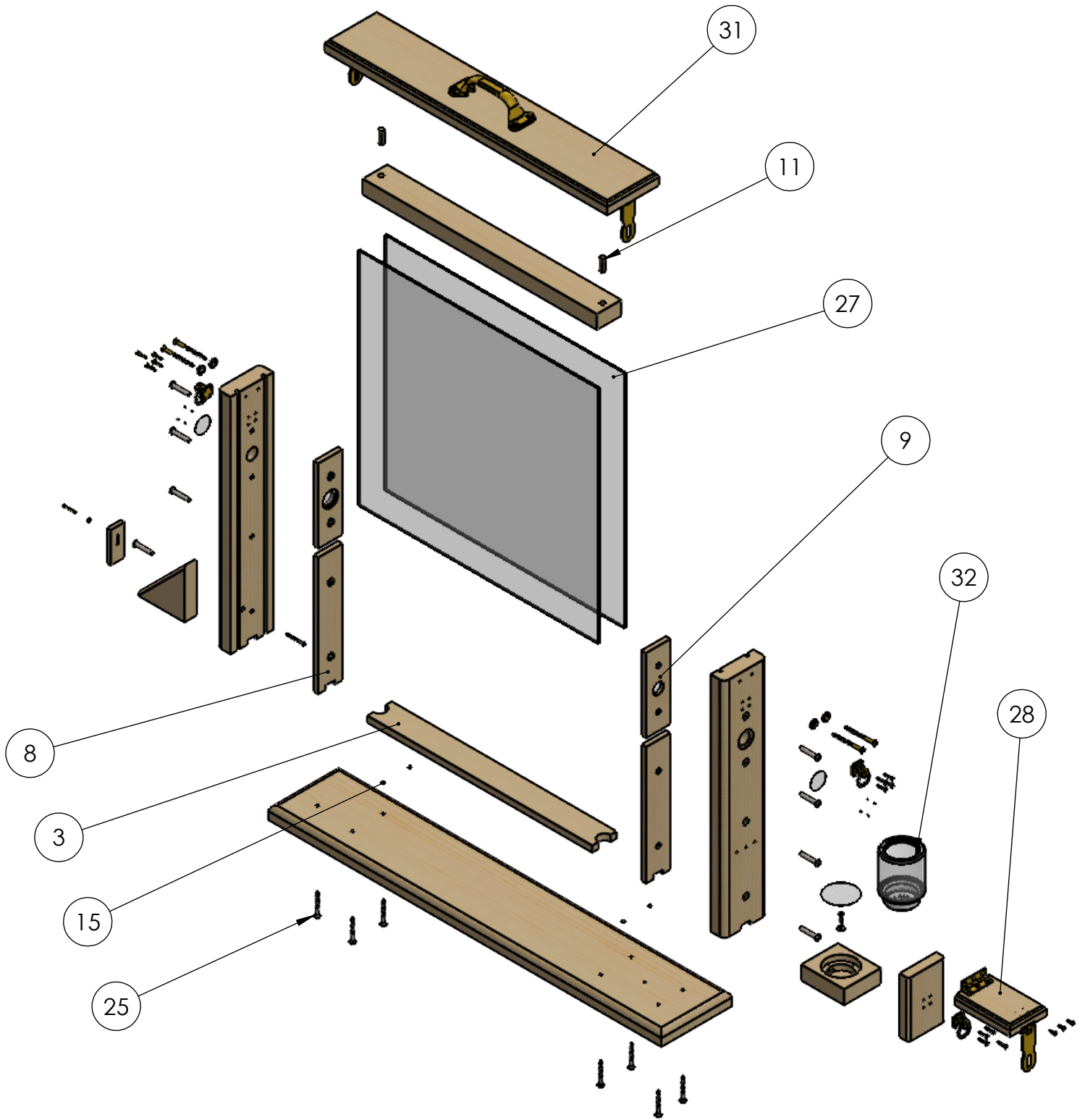
- NOTES:
- 1. SHOWN WITH FEEDER BOTTLE, ONE DEEP AND ONE MEDIUM FRAME.
 - 2. FINISH: STAIN.
 - 3. PREDRILL ALL HOLES.
 - 4. GLUE AND CLAMP SQUARE.
 - 5. POSITION, DRILL AND SCREW HASPS ON COMPLETED ASSEMBLY.
 - 6. REMOVE ALL SHARP EDGES.





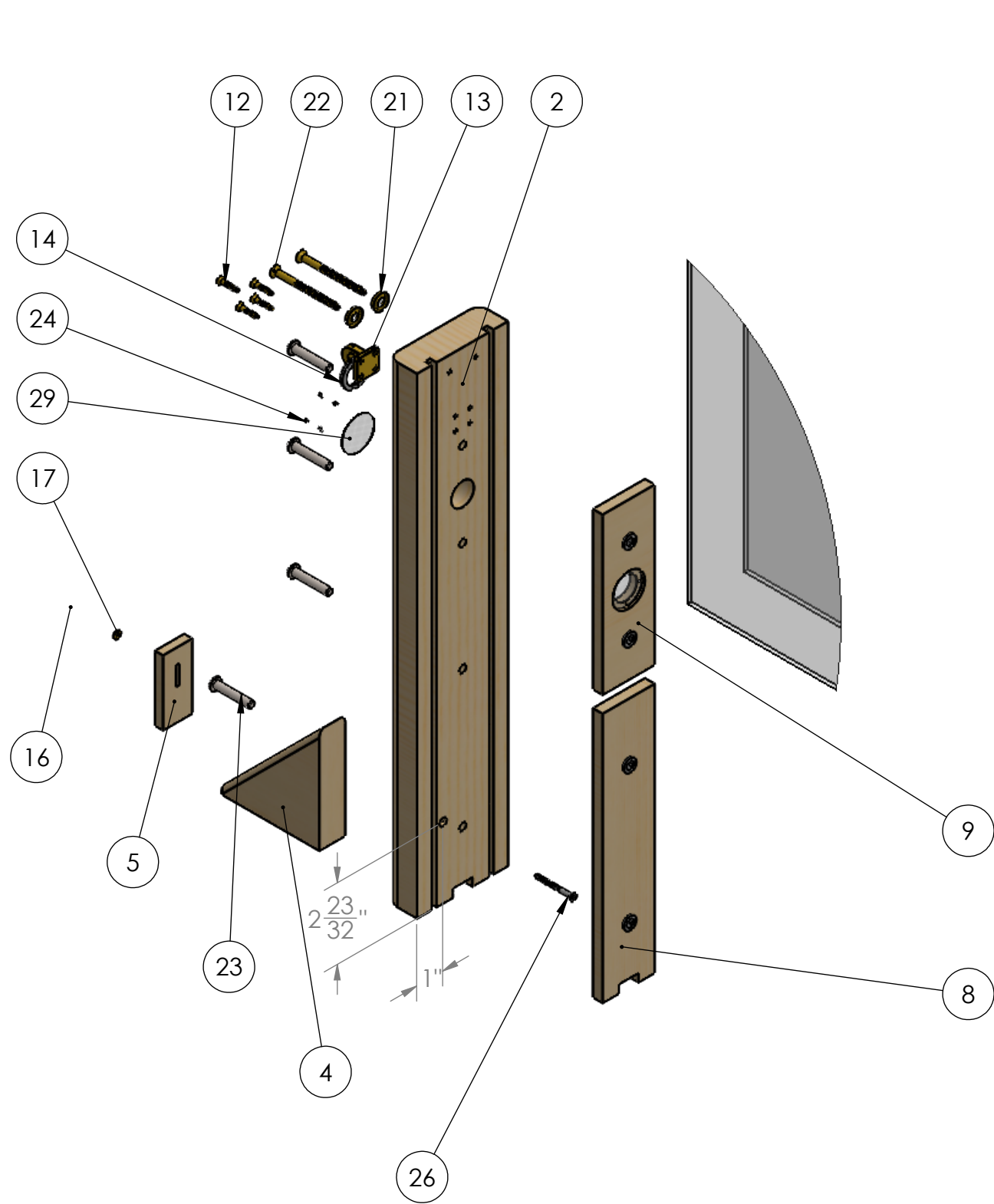
10050	-	OBSERVATION HIVE
PART NUMBER	REV	DESCRIPTION

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		PROPRIETARY NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM, OR TRANSMITTED IN ANY FORM, WITHOUT WRITTEN PERMISSION.					
		CUSTOMER BEE KEEPERS					
<div>THIRD ANGLE PROJECTION</div> <div></div>		PROJECT HIVE PRODUCTS		<div>TITLE</div> <div>OBSERVATION HIVE</div>			
		DRAWN BY F. FULKERSON				DATE 2025-01-27	
		CHECKED BY P.G. KELLY				DATE 2025-01-27	
		APPROVED P.G. KELLY				DATE 2025-01-27	
		SIZE	DRAWING NO			REVISION	
		B					
		SCALE	1:8		WEIGHT	17.93 lbs	10050 -
							SHEET 2 OF 22

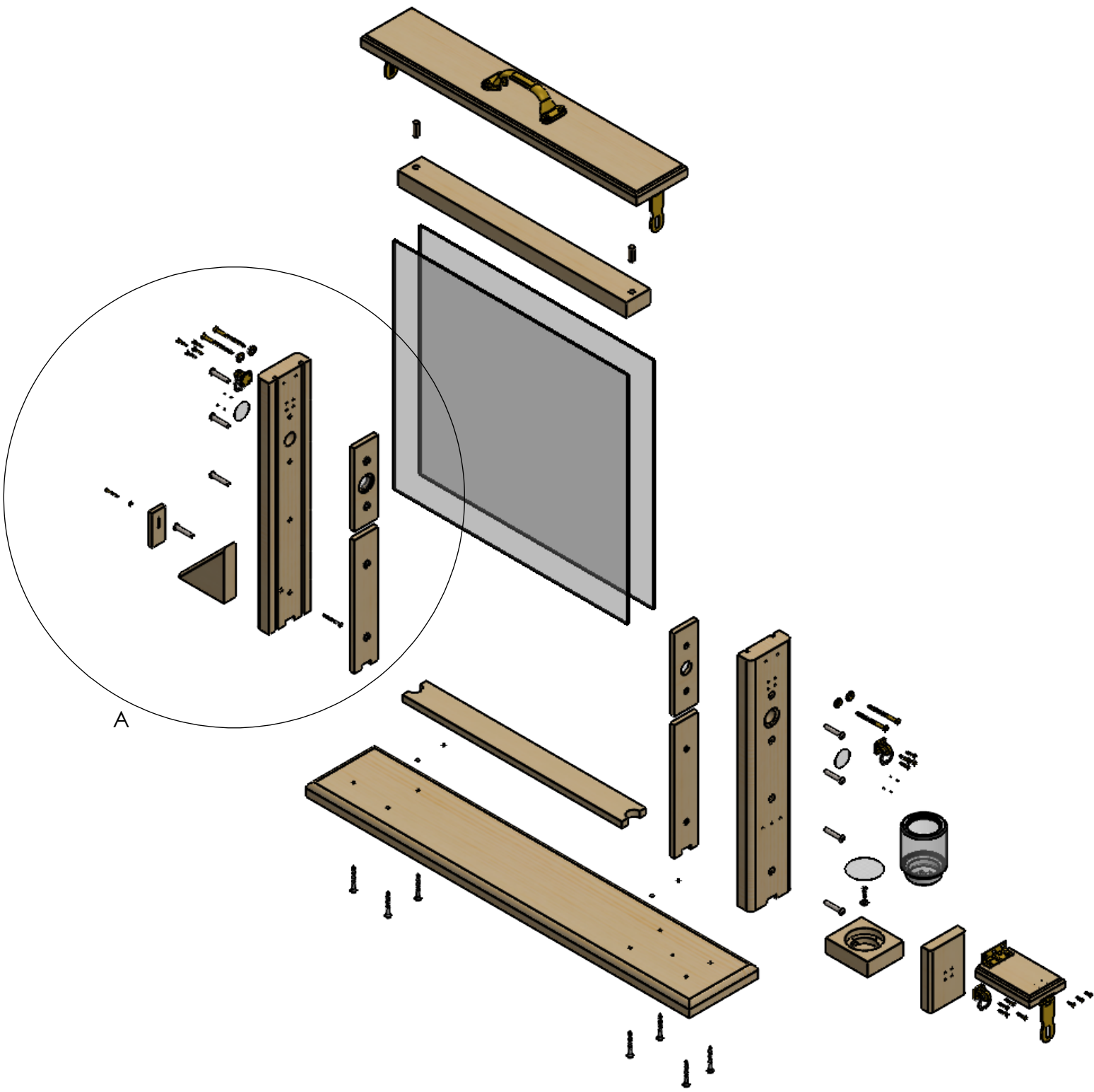
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2220	BASE	1
2	2221	SIDE	2
3	2228	INNER BASE	1
4	2223	GUSSET	1
5	2227	FEEDER HOLE COVER	1
6	2224	FEEDER BASE	1
7	2225	FEEDER SIDE	1
8	10055	LOWER FRAME REST	2
9	10054	UPPER FRAME REST	2
10	2231	INNER TOP	1
11	97195A109	3/8" Wood Dowel Pins	2
12	95188A310	Brass Square-Drive Flat-Head Screws for Wood	12
13	3851N11H	3851N11_Padlockable Hasp	3
14	90177A228	Zinc-Plated Steel Split Rings	3
15	95495K463	Adhesive-Back Bumpers	4
16	98685A560	Brass Phillips Decorative Rounded Head Screws	1
17	92916A320	Brass Washer	1
18	Regular FW 0.164	WASHER FOR #8 SCREW	1
19	91070A254	Rounded Head Screws for Plywood and OSB	1
20	92114A128	Brass Phillips Flat Head Screws for Wood	3
21	92921A011	Brass Countersunk Washer	4
22	92114A255	Brass Phillips Flat Head Screws for Wood	4
23	SBHCSCREW 0.25-20x1.375-HX-N	1/4-20 X 1-3/8 SBHCS	8
24	97900A210	STAPLE	12
25	90396A140	Flanged Rounded Head Screws for Wood	7
26	90610A157	Square-Drive Flat Head Screws for Wood	1
27	2232	TEMPERED GLASS PANEL 19 X 18-1/2 X 3/16	2
28	10052	FEEDER LID	1
29	2236	VENT SCREEN - #8 MESH HARDWARE CLOTH	2
30	2237	FEEDER SCREEN - #8 MESH HARDWARE CLOTH	1
31	10051	OBSERVATION HIVE TOP	1
32	10053	SYRUP BOTTLE	1





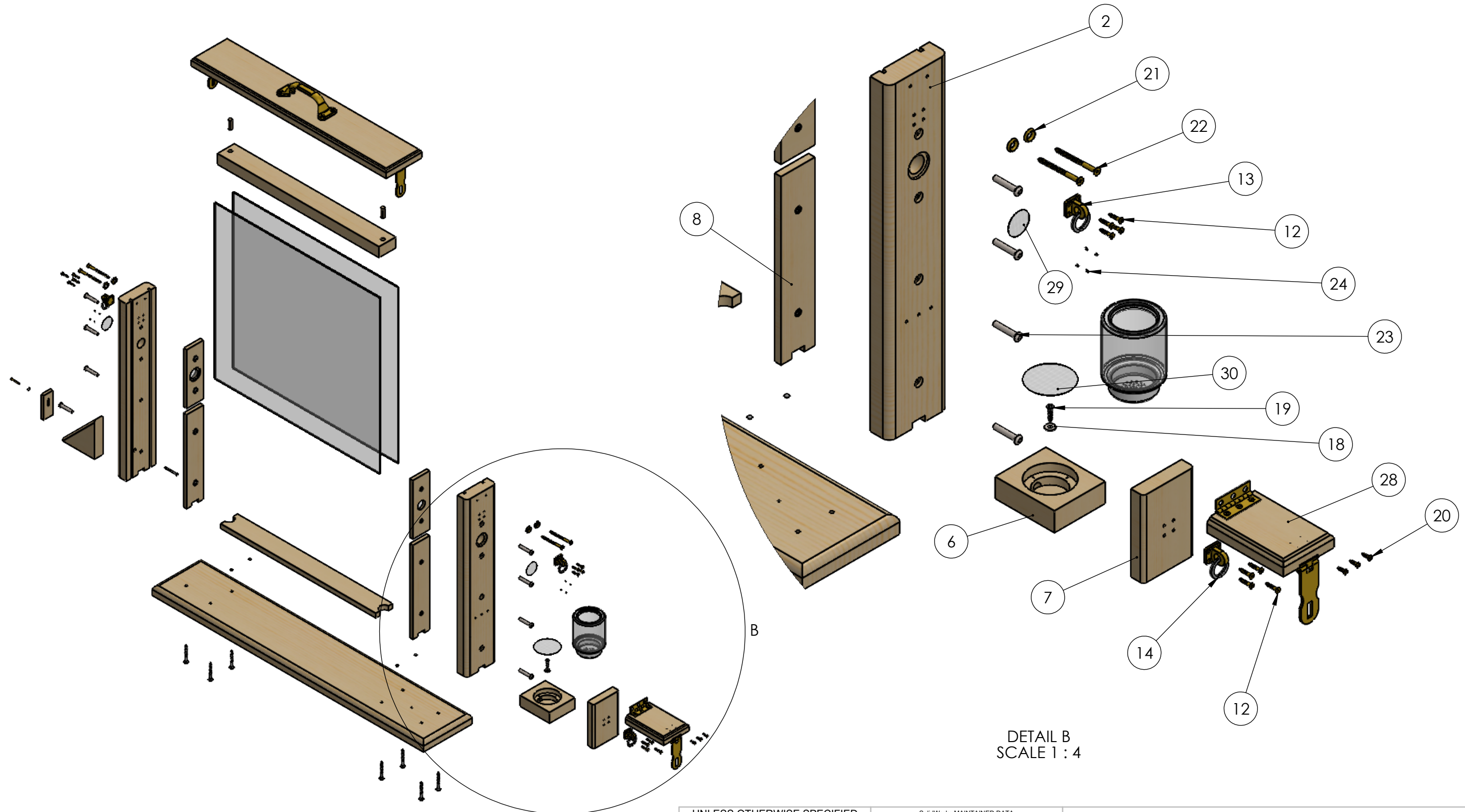
UNLESS OTHERWISE SPECIFIED DO NOT SCALE DRAWING INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-2018 DIMENSIONS ARE IN INCHES		SolidWorks MAINTAINED DATA CHANGES SHALL BE INCORPORATED ELECTRONICALLY BY THE DESIGN ACTIVITY PROPRIETARY NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM, OR TRANSMITTED IN ANY FORM, WITHOUT WRITTEN PERMISSION.		 HONEY BEE RESEARCH CENTRE THE UNIVERSITY OF GUELPH	
THIRD ANGLE PROJECTION 		CUSTOMER BEE KEEPERS PROJECT HIVE PRODUCTS DRAWN BY F. FULKERSON DATE 2025-01-27 CHECKED BY P.G. KELLY DATE 2025-01-27 APPROVED P.G. KELLY DATE 2025-01-27		TITLE OBSERVATION HIVE	
SCALE 1:8		DRAWING NO B		REVISION 10050 -	
WEIGHT 17.93 lbs		SHEET 3 OF 22			





DETAIL A
SCALE 1 : 4



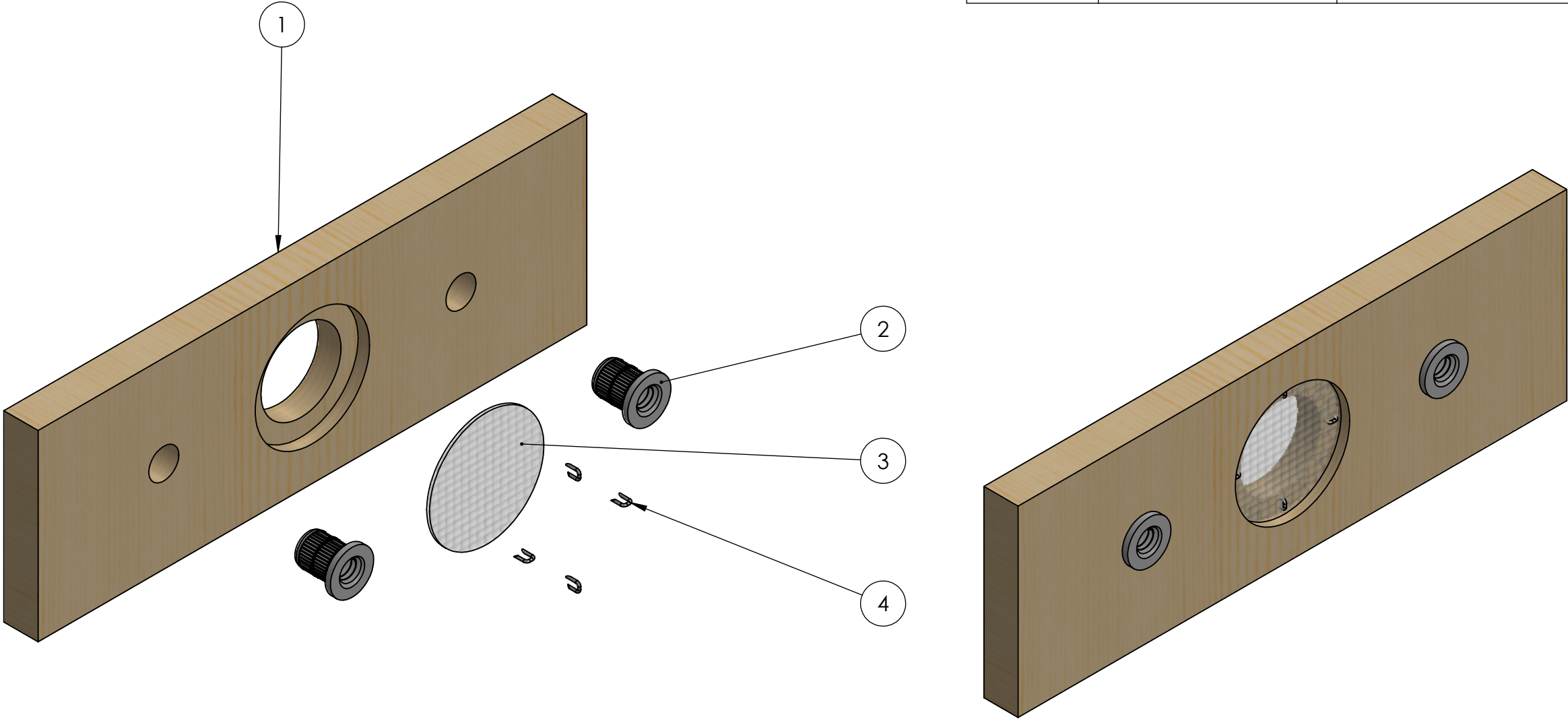
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THIRD ANGLE PROJECTION 		CUSTOMER BEE KEEPERS PROJECT HIVE PRODUCTS		TITLE OBSERVATION HIVE	
DRAWN BY F. FULKERSON CHECKED BY P.G. KELLY APPROVED P.G. KELLY		DATE 2025-01-27 DATE 2025-01-27 DATE 2025-01-27		SIZE B SCALE 1:8	DRAWING NO 10050 WEIGHT 17.93 lbs
				REVISION - SHEET 4 OF 22	



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		PROPRIETARY NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM, OR TRANSMITTED IN ANY FORM, WITHOUT WRITTEN PERMISSION.						
		CUSTOMER BEE KEEPERS						
THIRD ANGLE PROJECTION 		PROJECT HIVE PRODUCTS		TITLE OBSERVATION HIVE				
		DRAWN BY F. FULKERSON						DATE 2025-01-27
		CHECKED BY P.G. KELLY						DATE 2025-01-27
		APPROVED P.G. KELLY						DATE 2025-01-27
		SIZE B	DRAWING NO			REVISION		
		SCALE 1:8	WEIGHT 17.93 lbs		10050 -			
		SHEET 5 OF 22						

NOTES:
1. PRESS THREADED INSERTS INTO 21/64 HOLES.
2. STAPLE #8 HARDWARE MESH INTO HOLE.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2230	UPPER FRAME SUPPORT	1
2	94738A310	Zinc-Plated Steel Knurled Inserts for Hardwood	2
3	2236	VENT SCREEN - #8 MESH HARDWARE CLOTH	1
4	97900A210	STAPLE	4



10054	-	UPPER FRAME REST
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED

DO NOT SCALE DRAWING

INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-2018

DIMENSIONS ARE IN INCHES

THIRD ANGLE PROJECTION

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PROPRIETARY

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CUSTOMER
BEE KEEPERS

PROJECT
HIVE PRODUCTS

DRAWN BY F. FULKERSON	DATE 2025-01-27
CHECKED BY P.G. KELLY	DATE 2025-01-27
APPROVED P.G. KELLY	DATE 2025-01-27

HONEY BEE RESEARCH CENTRE
THE UNIVERSITY OF GUELPH

TITLE

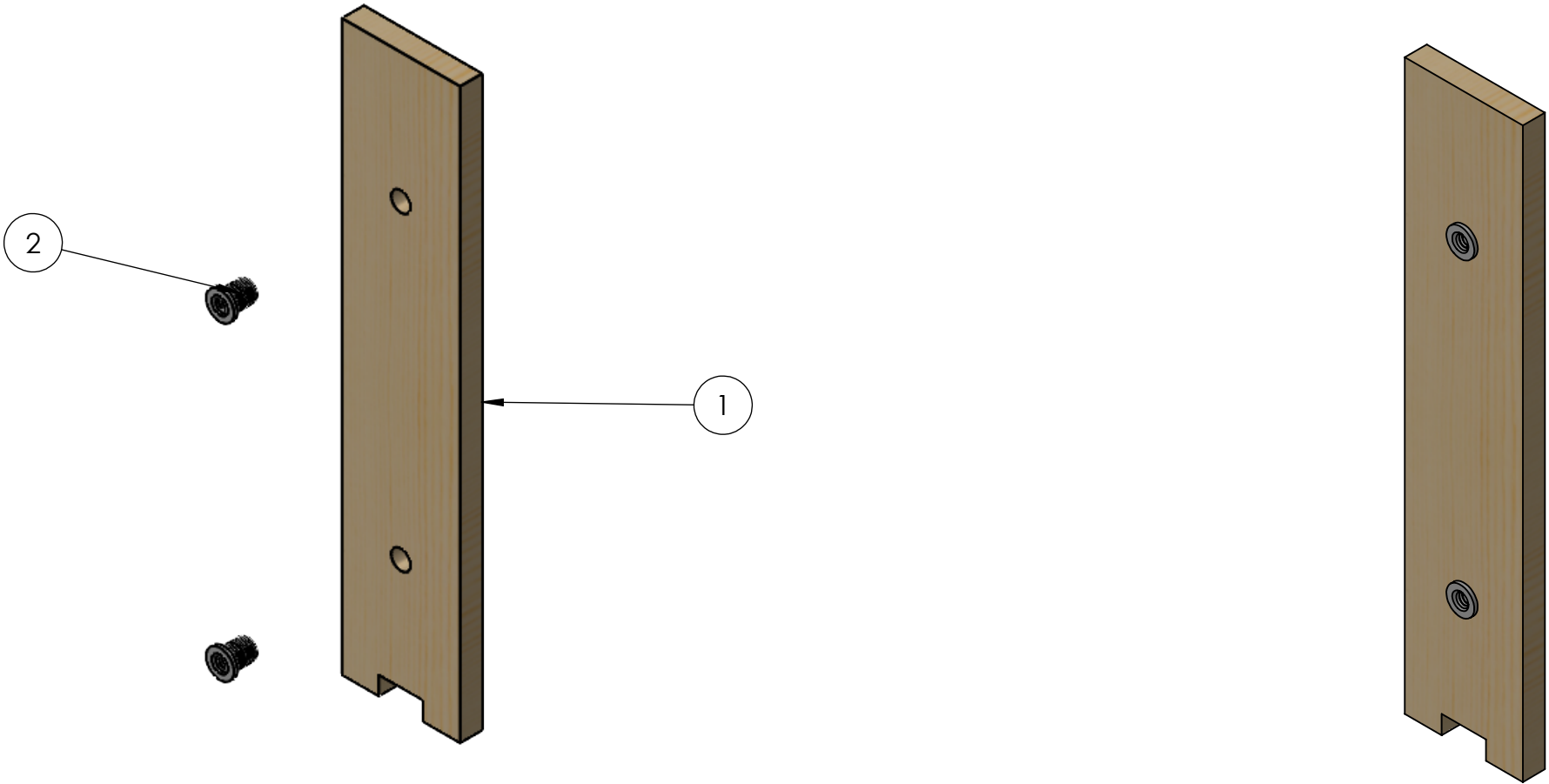
UPPER FRAME REST

SIZE	DRAWING NO	REVISION
B		10050 -
SCALE	1:1	WEIGHT 0.06 lbs

SHEET 6 OF 22

NOTES:
1. PRESS THREADED INSERTS INTO 21/64 HOLES.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2229	INNER LOWER SIDE	1
2	94738A310	Zinc-Plated Steel Knurled Inserts for Hardwood	2



10055	-	LOWER FRAME REST
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED

DO NOT SCALE DRAWING

INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-2018

DIMENSIONS ARE IN INCHES

THIRD ANGLE PROJECTION

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CUSTOMER
BEE KEEPERS

PROJECT
HIVE PRODUCTS

DRAWN BY F. FULKERSON	DATE 2025-01-27
CHECKED BY P.G. KELLY	DATE 2025-01-27
APPROVED P.G. KELLY	DATE 2025-01-27

HONEY BEE RESEARCH CENTRE
THE UNIVERSITY OF GUELPH

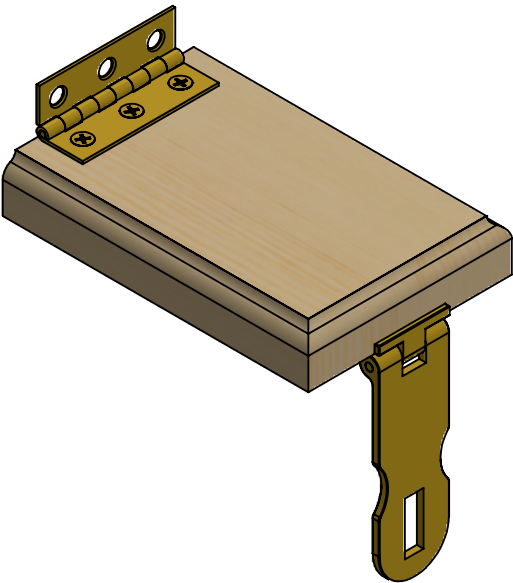
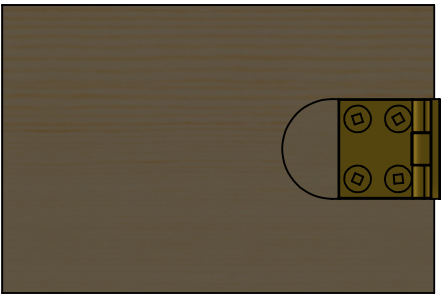
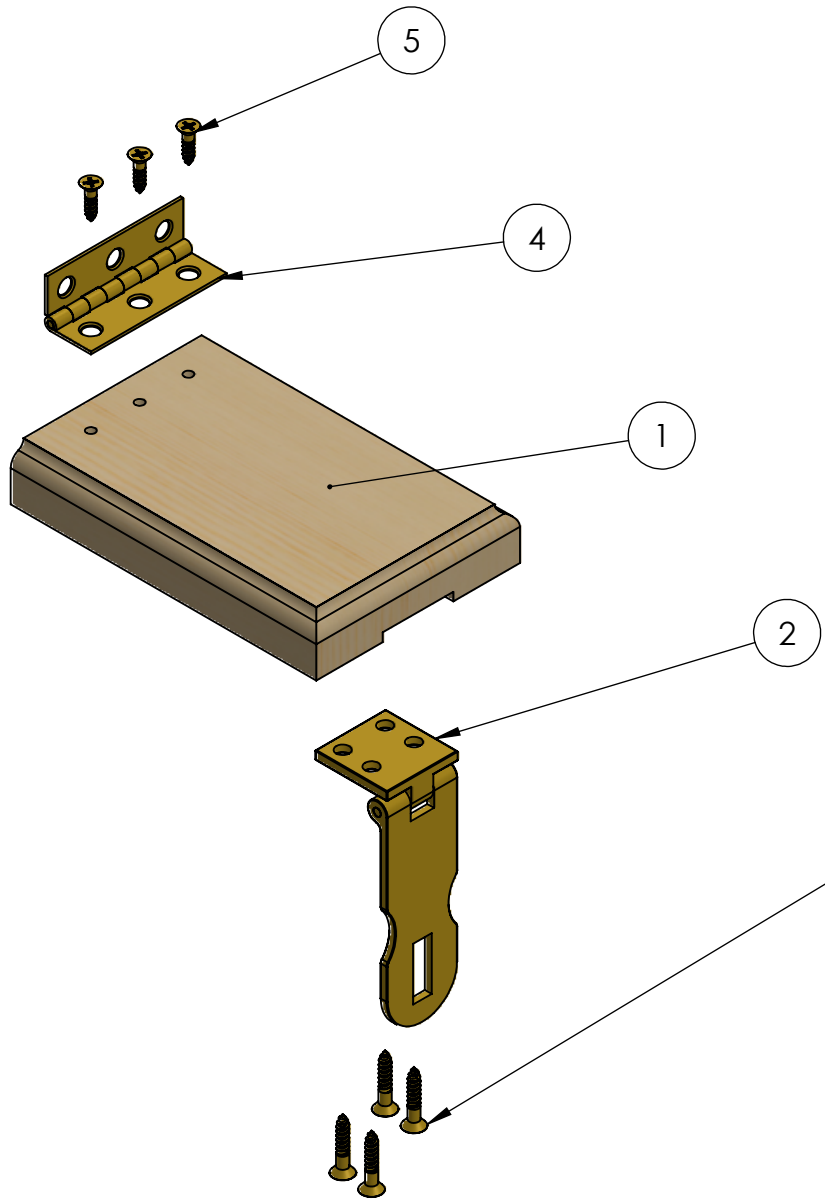
TITLE

LOWER FRAME REST

SIZE	DRAWING NO	REVISION
B		10050 -
SCALE	1:2	WEIGHT 0.09 lbs

SHEET 7 OF 22

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2226	FEEDER TOP	1
2	3851N11	PADLOCKABLE HASP	1
3	95188A310	Brass Square-Drive Flat-Head Screws for Wood	4
4	1603A24	2" SURFACE MOUNT HINGE	1
5	92114A128	Brass Phillips Flat Head Screws for Wood	3



10052	-	FEEDER LID
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED

DO NOT SCALE DRAWING

INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-2018

DIMENSIONS ARE IN INCHES

THIRD ANGLE PROJECTION

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CUSTOMER BEE KEEPERS	
PROJECT HIVE PRODUCTS	
DRAWN BY F. FULKERSON	DATE 2025-01-27
CHECKED BY P.G. KELLY	DATE 2025-01-27
APPROVED P.G. KELLY	DATE 2025-01-27

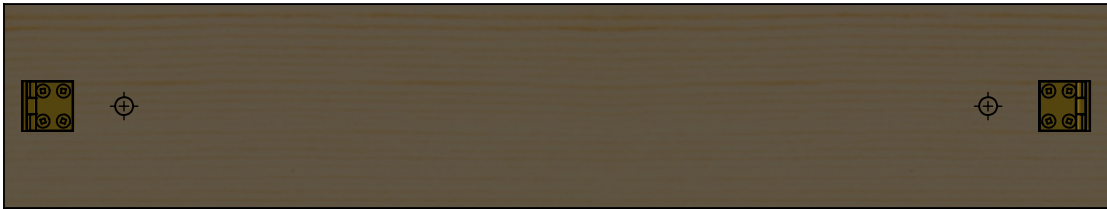
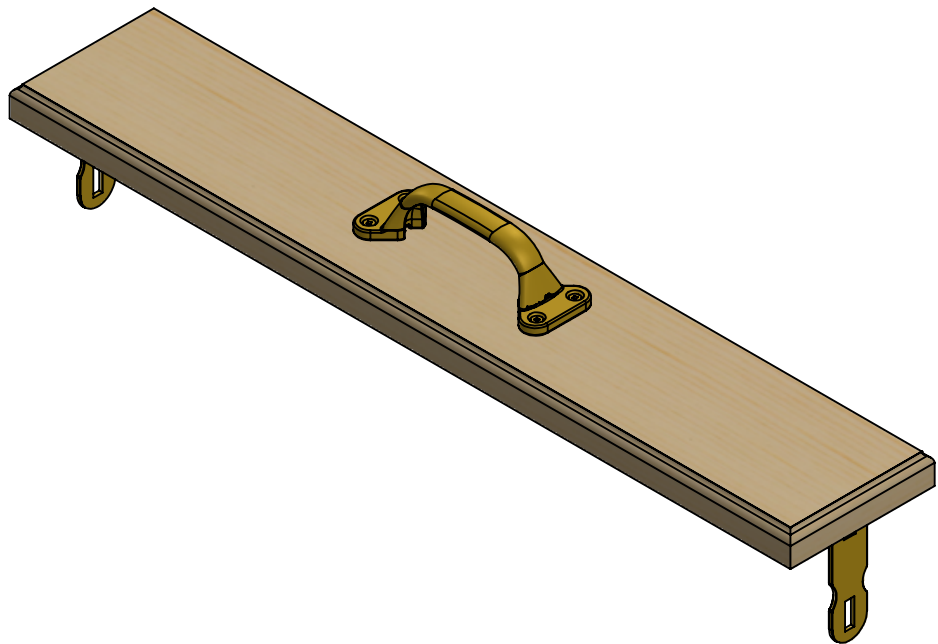
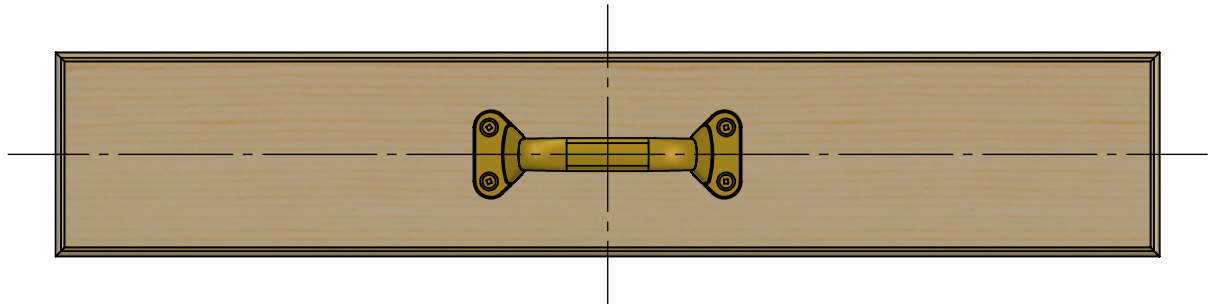
HONEY BEE RESEARCH CENTRE
THE UNIVERSITY OF GUELPH

TITLE

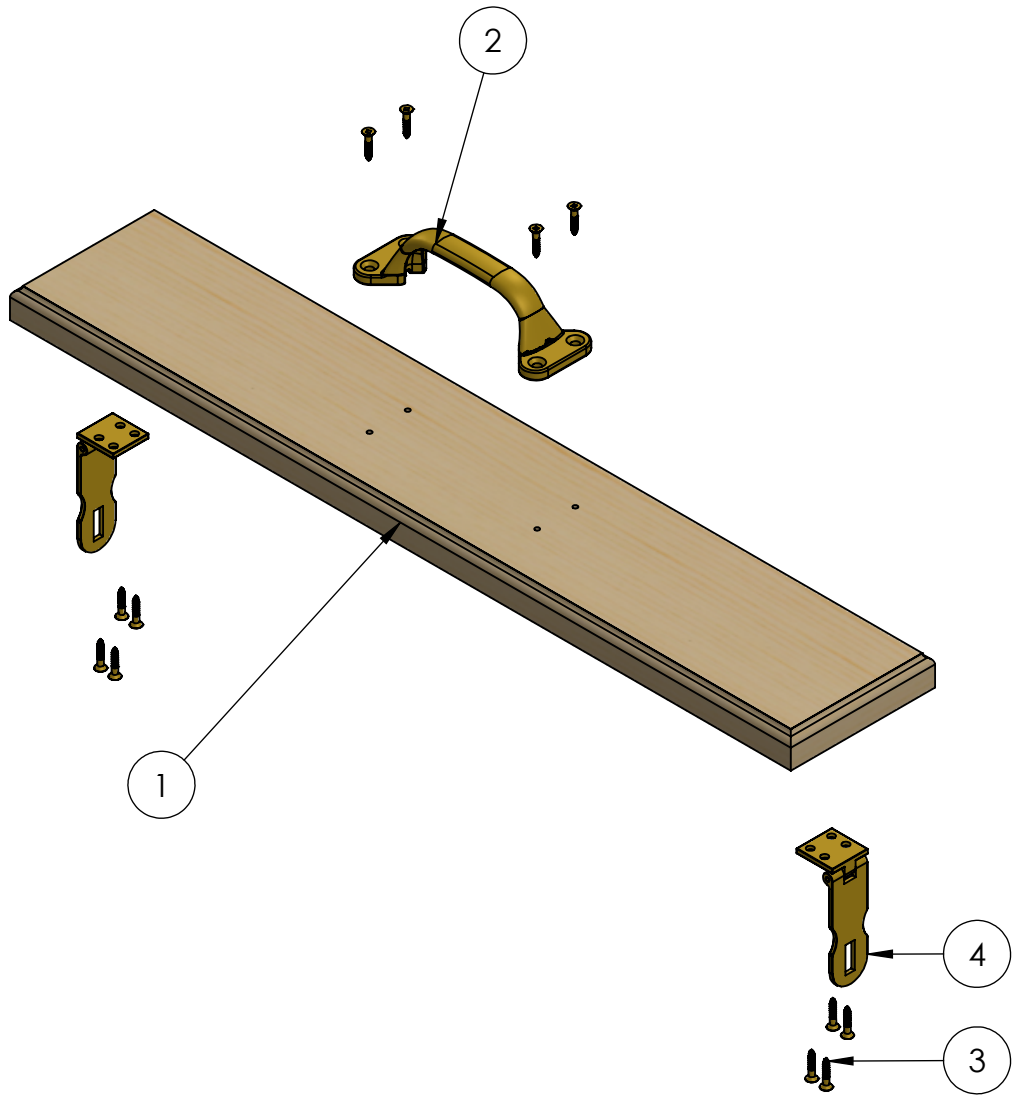
FEEDER LID

SIZE	DRAWING NO	REVISION
B		10050 -
SCALE	1:2	WEIGHT 0.31 lbs

SHEET 8 OF 22



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2222	TOP PANEL	1
2	1646A35	Unthreaded-Hole Oval Pull Handle	1
3	95188A310	Brass Square-Drive Flat-Head Screws for Wood	12
4	3851N11	PADLOCKABLE HASP	2



10051	-	OBSERVATION HIVE TOP
PART NUMBER	REV	DESCRIPTION

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PER ASME Y14.5-2018
DIMENSIONS ARE IN INCHES

THIRD ANGLE PROJECTION



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CUSTOMER BEE KEEPERS	
PROJECT HIVE PRODUCTS	
DRAWN BY F. FULKERSON	DATE 2025-01-27
CHECKED BY P.G. KELLY	DATE 2025-01-27
APPROVED P.G. KELLY	DATE 2025-01-27

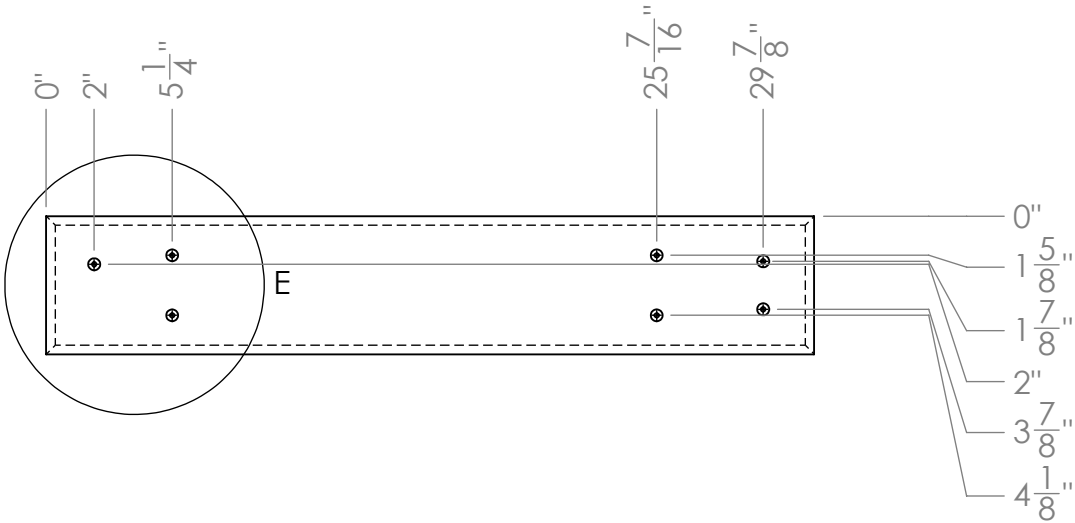
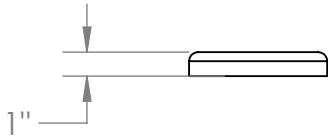
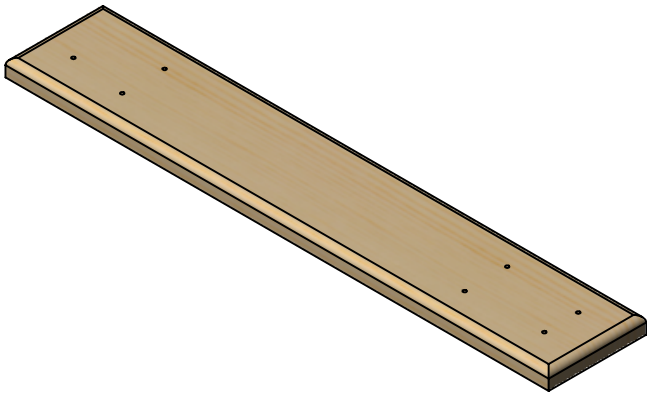
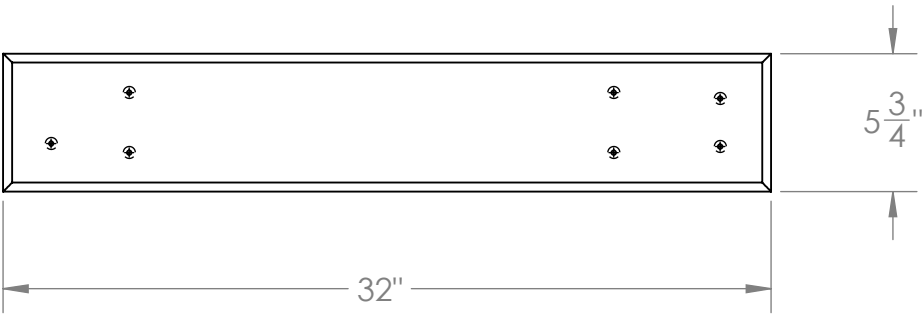


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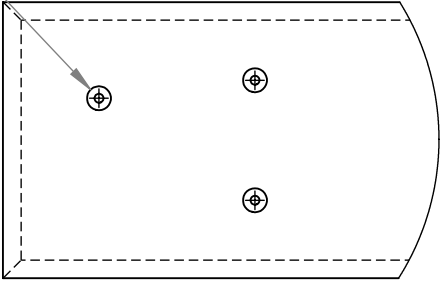
TITLE
OBSERVATION HIVE TOP

SIZE B	DRAWING NO.	REVISION 10050 -
SCALE 1:4	WEIGHT 1.81 lbs	SHEET 9 OF 22

- NOTES:
- 1. MATERIAL: Pine.
 - 2. FINISH: STAIN.
 - 3. REMOVE ALL SHARP EDGES.





7 X Ø 3/16" THRU
□ Ø 1/2" ∇ 1/4"

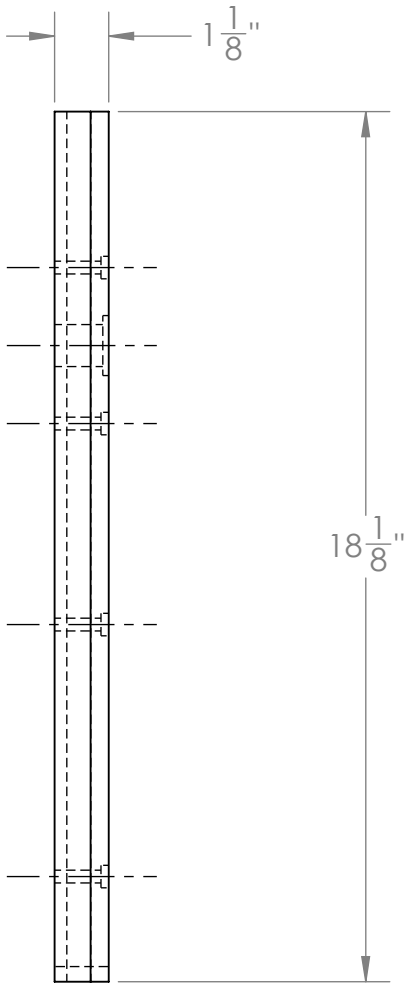
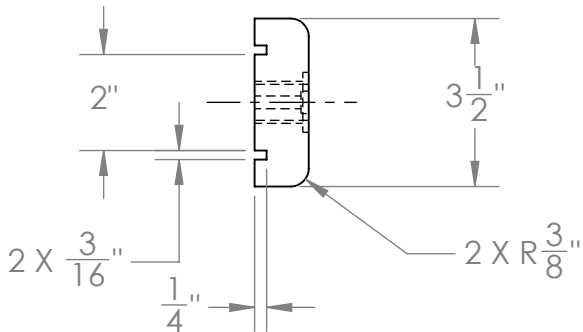


DETAIL E
SCALE 1 : 4

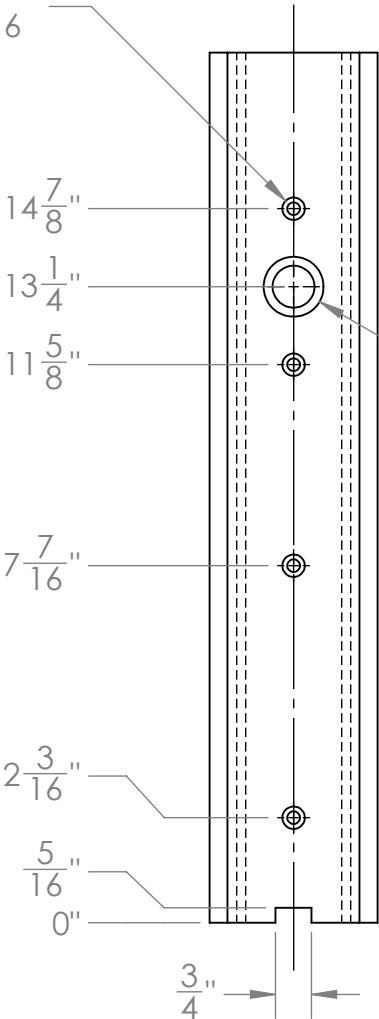
2220	-	BASE
PART NUMBER	REV	DESCRIPTION

<div>UNLESS OTHERWISE SPECIFIED</div> <div>DO NOT SCALE DRAWING</div> <div>INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-2018</div> <div>DIMENSIONS ARE IN INCHES</div>		<div>SolidWorks MAINTAINED DATA CHANGES SHALL BE INCORPORATED ELECTRONICALLY BY THE DESIGN ACTIVITY</div>		<div></div> <div>HONEY BEE RESEARCH CENTRE THE UNIVERSITY OF GUELPH</div>			
		<div>PROPRIETARY</div> <div>NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM, OR TRANSMITTED IN ANY FORM, WITHOUT WRITTEN PERMISSION.</div>					
		<div>CUSTOMER BEE KEEPERS</div> <div>PROJECT HIVE PRODUCTS</div>					
<div>THIRD ANGLE PROJECTION</div> <div></div>		<div>DRAWN BY F. FULKERSON</div>	<div>DATE 2025-01-27</div>	<div>SIZE</div> <div>B</div>	<div>DRAWING NO</div>	<div>REVISION</div>	
		<div>CHECKED BY P.G. KELLY</div>	<div>DATE 2025-01-27</div>			10050	-
		<div>APPROVED P.G. KELLY</div>	<div>DATE 2025-01-27</div>	<div>SCALE</div> <div>1:8</div>	<div>WEIGHT</div> <div>2.23 lbs</div>	<div>SHEET 10 OF 22</div>	

- NOTES:
1. MATERIAL: Pine.
2. FINISH: STAIN.
3. REMOVE ALL SHARP EDGES.



4X $\phi .27$ THRU ALL
 $\sqcup \phi .47 \nabla .16$



$\phi 7/8$ " THRU
 $\sqcup \phi 1 1/4$ " $\nabla 1/8$ "



2221	-	SIDE
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED
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THIRD ANGLE PROJECTION



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CUSTOMER
BEE KEEPERS

PROJECT
HIVE PRODUCTS

DRAWN BY
F. FULKERSON

DATE
2025-01-27

CHECKED BY
P.G. KELLY

DATE
2025-01-27

APPROVED
P.G. KELLY

DATE
2025-01-27



HONEY BEE RESEARCH CENTRE
THE UNIVERSITY OF GUELPH

TITLE

SIDE

SIZE

DRAWING NO

B

SCALE

1:4

WEIGHT

0.83 lbs

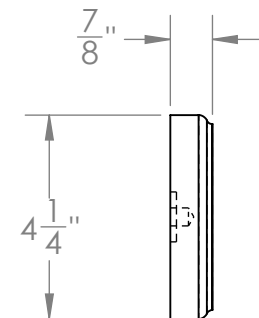
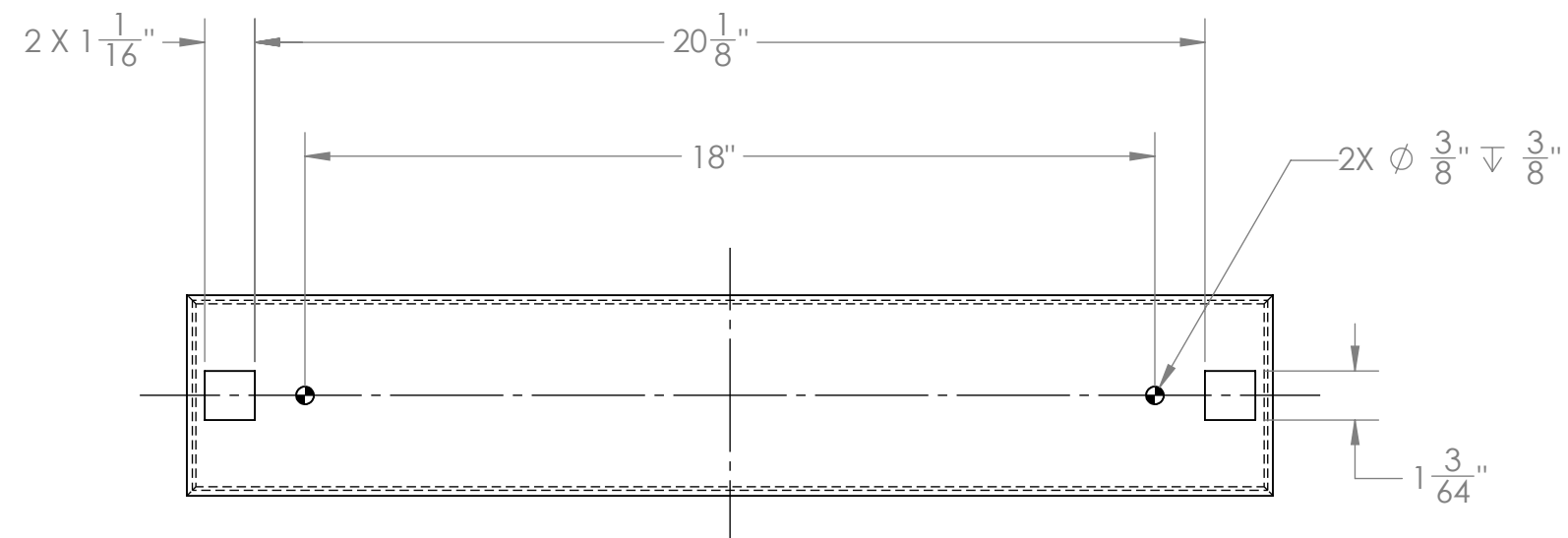
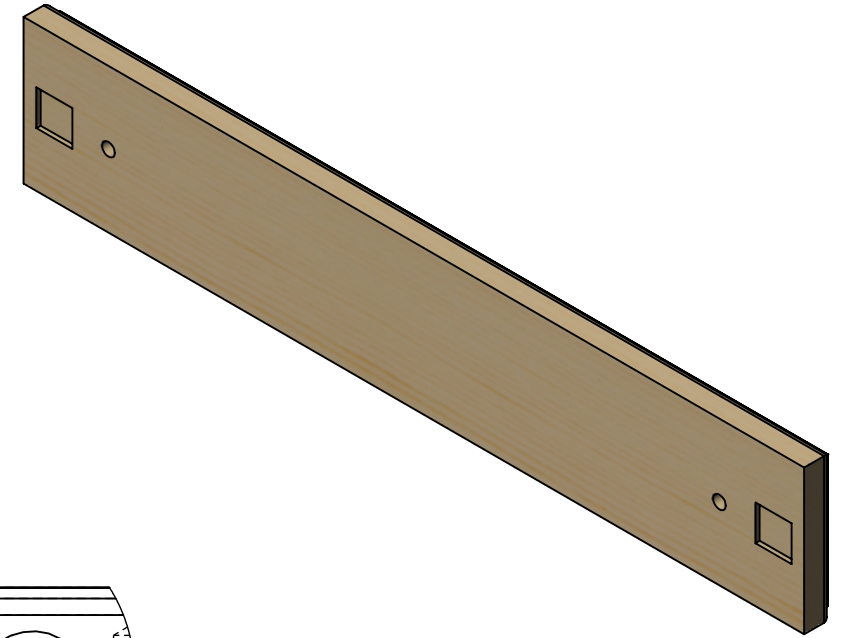
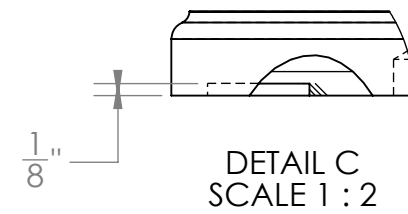
REVISION



10050

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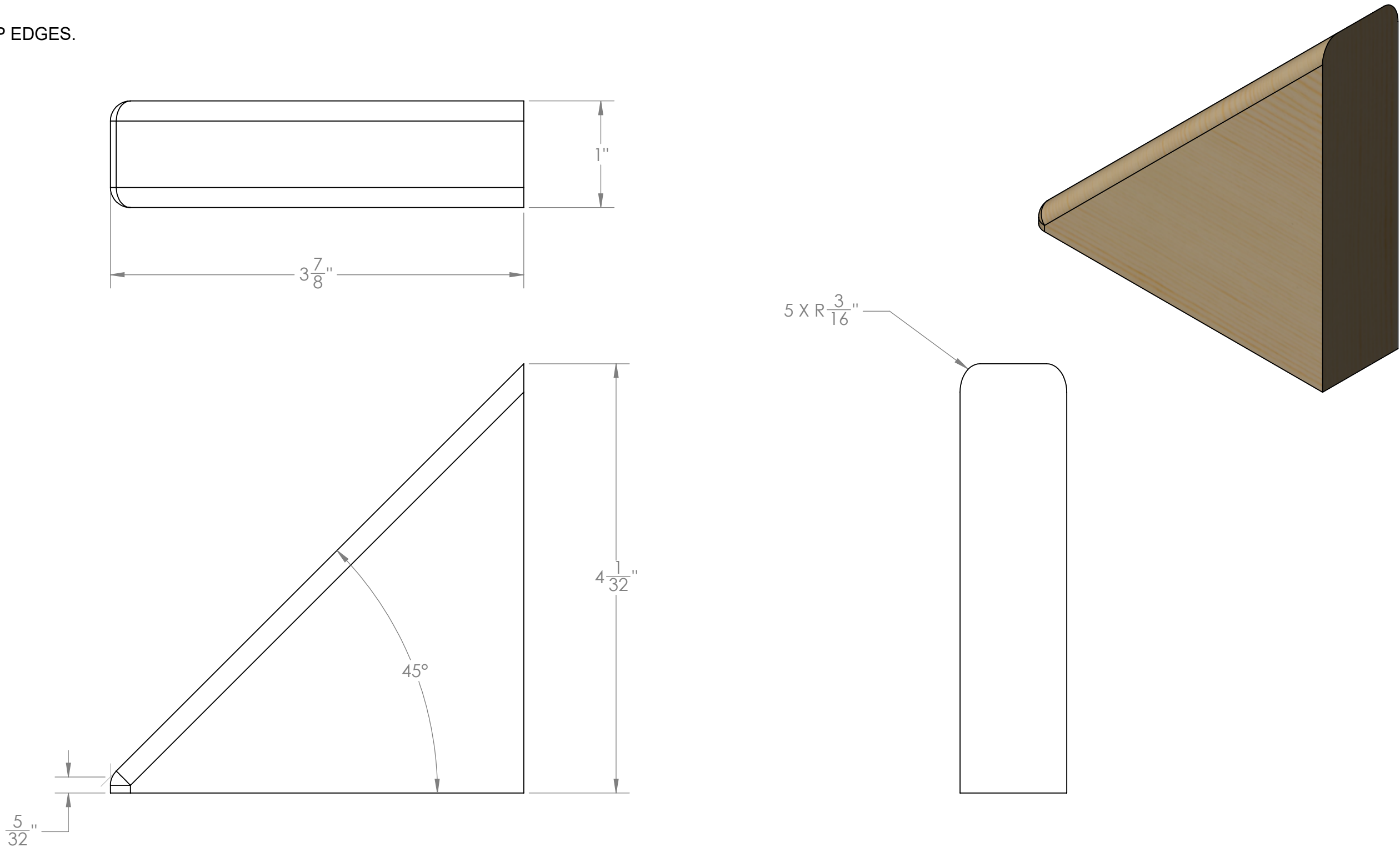
SHEET 11 OF 22

1. MATERIAL: Pine.
2. FINISH: STAIN.
3. REMOVE ALL SHARP EDGES.



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DO NOT SCALE DRAWING		PROPRIETARY NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM, OR TRANSMITTED IN ANY FORM, WITHOUT WRITTEN PERMISSION.											
INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-2018		CUSTOMER BEE KEEPERS											
DIMENSIONS ARE IN INCHES		PROJECT HIVE PRODUCTS		<div>SIZE</div> <div>B</div> <div>DRAWING NO</div> <div>10050</div> <div>REVISION</div> <div>-</div>									
THIRD ANGLE PROJECTION		DRAWN BY F. FULKERSON						DATE 2025-01-27					
<div></div>		CHECKED BY P.G. KELLY						DATE 2025-01-27					
		APPROVED P.G. KELLY						DATE 2025-01-27					
				SCALE		1:4		WEIGHT		1.03 lbs		SHEET 12 OF 22	

- NOTES:
- 1. MATERIAL: Pine.
 - 2. FINISH: STAIN.
 - 3. REMOVE ALL SHARP EDGES.



2223	-	GUSSET
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED

DO NOT SCALE DRAWING

INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-2018

DIMENSIONS ARE IN INCHES

THIRD ANGLE PROJECTION

SolidWorks MAINTAINED DATA
CHANGES SHALL BE INCORPORATED
ELECTRONICALLY BY THE DESIGN ACTIVITY

PROPRIETARY

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CUSTOMER
BEE KEEPERS

PROJECT
HIVE PRODUCTS

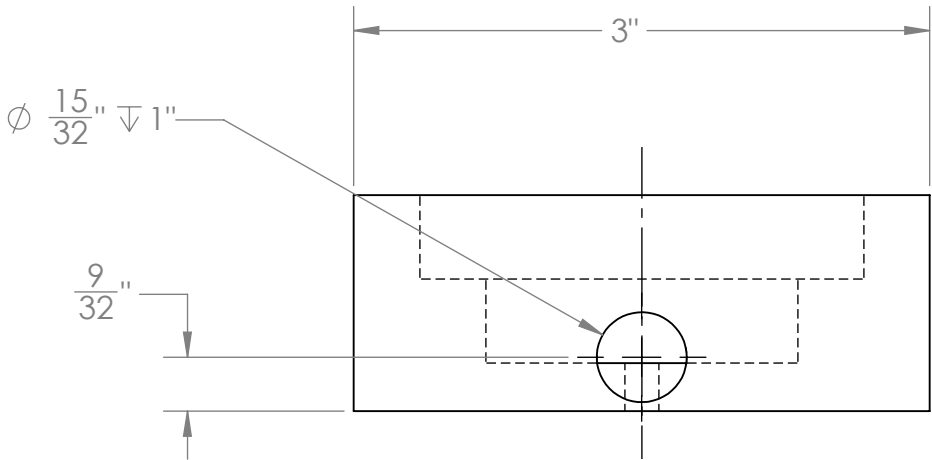
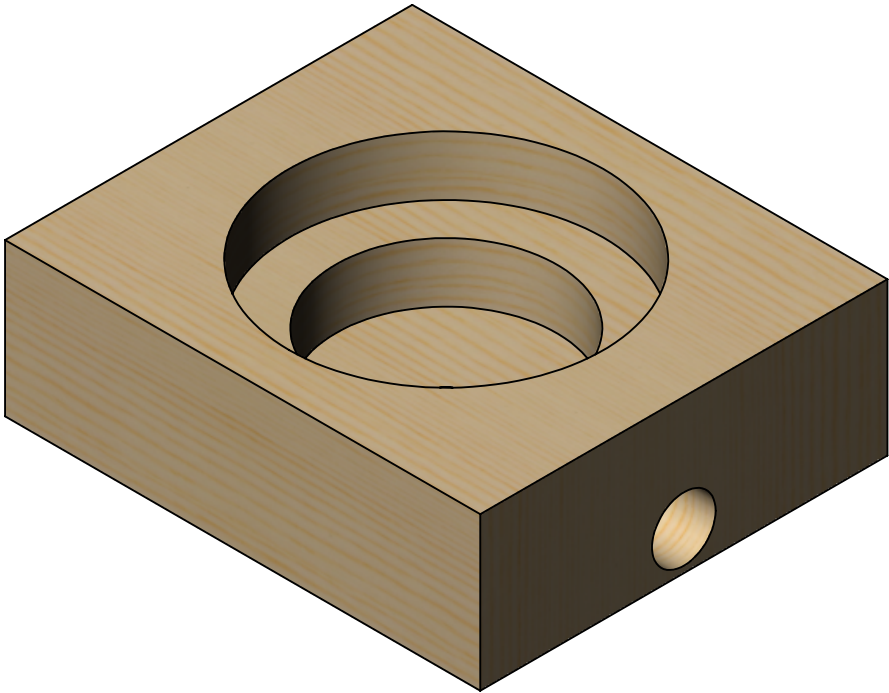
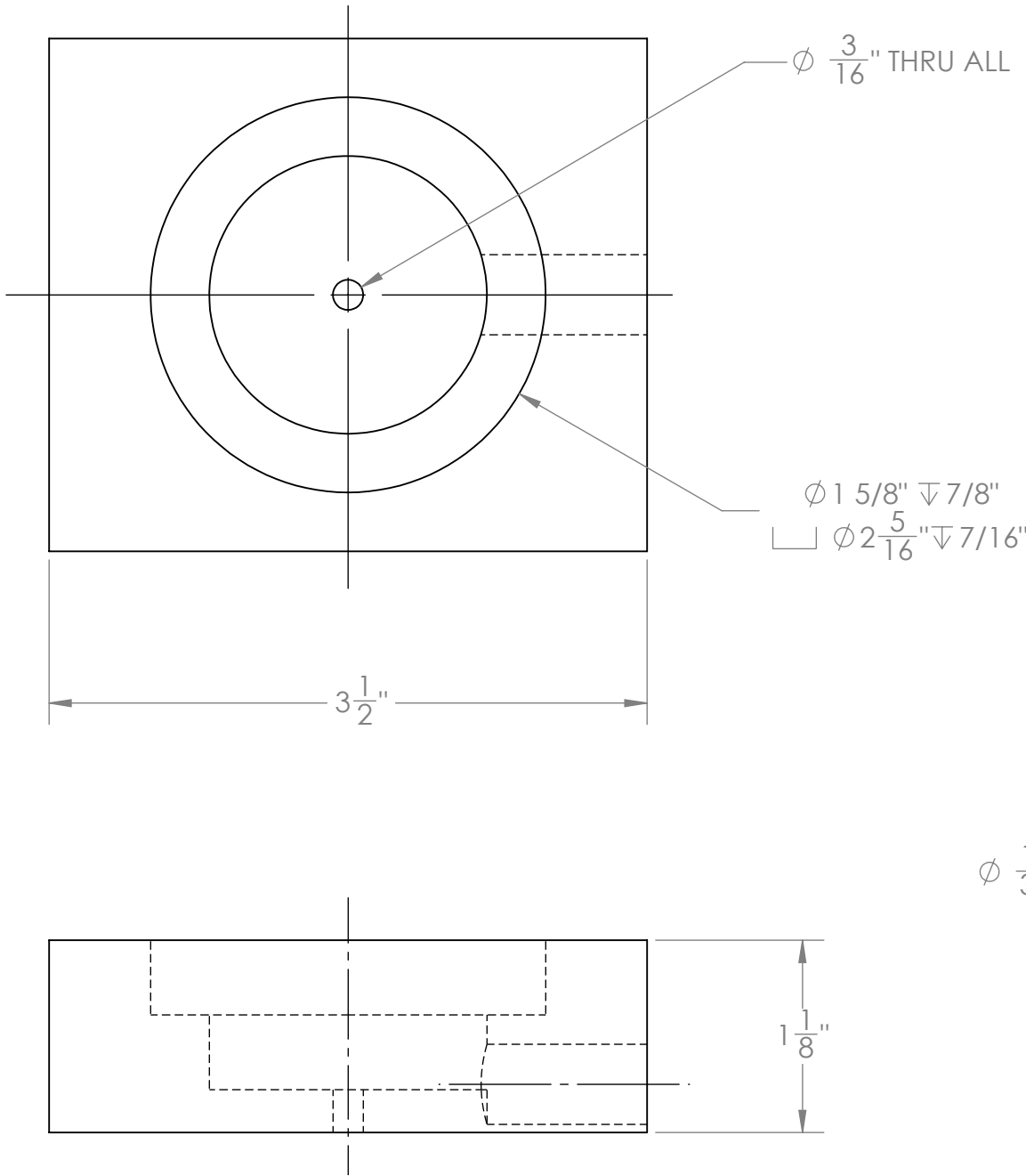
DRAWN BY F. FULKERSON	DATE 2025-01-27
CHECKED BY P.G. KELLY	DATE 2025-01-27
APPROVED P.G. KELLY	DATE 2025-01-27

HONEY BEE RESEARCH CENTRE
THE UNIVERSITY OF GUELPH



TITLE
GUSSET

SIZE B	DRAWING NO	REVISION 10050 -
SCALE 1:1	WEIGHT 0.10 lbs	SHEET 13 OF 22

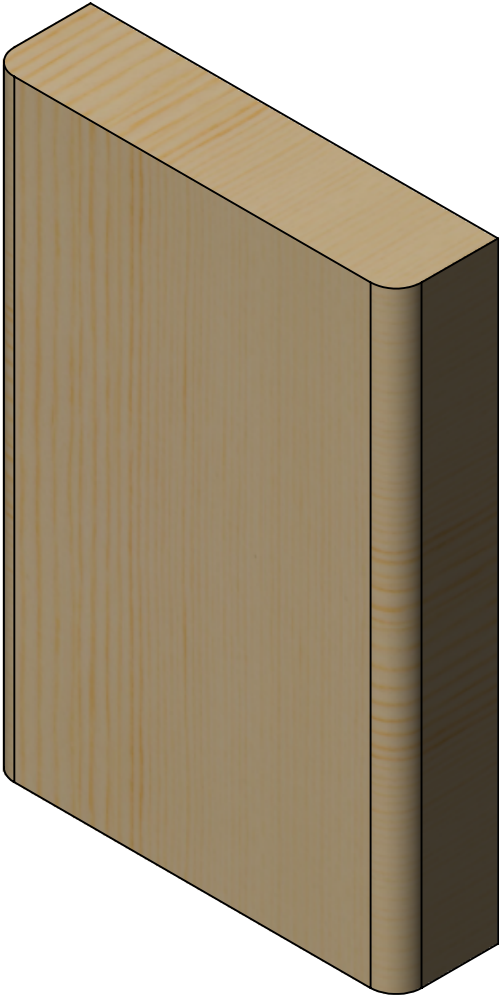
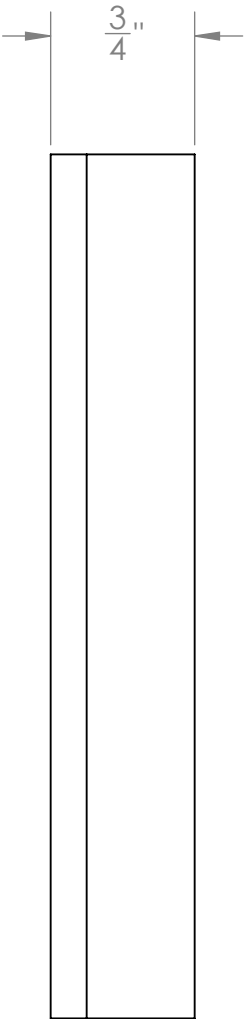
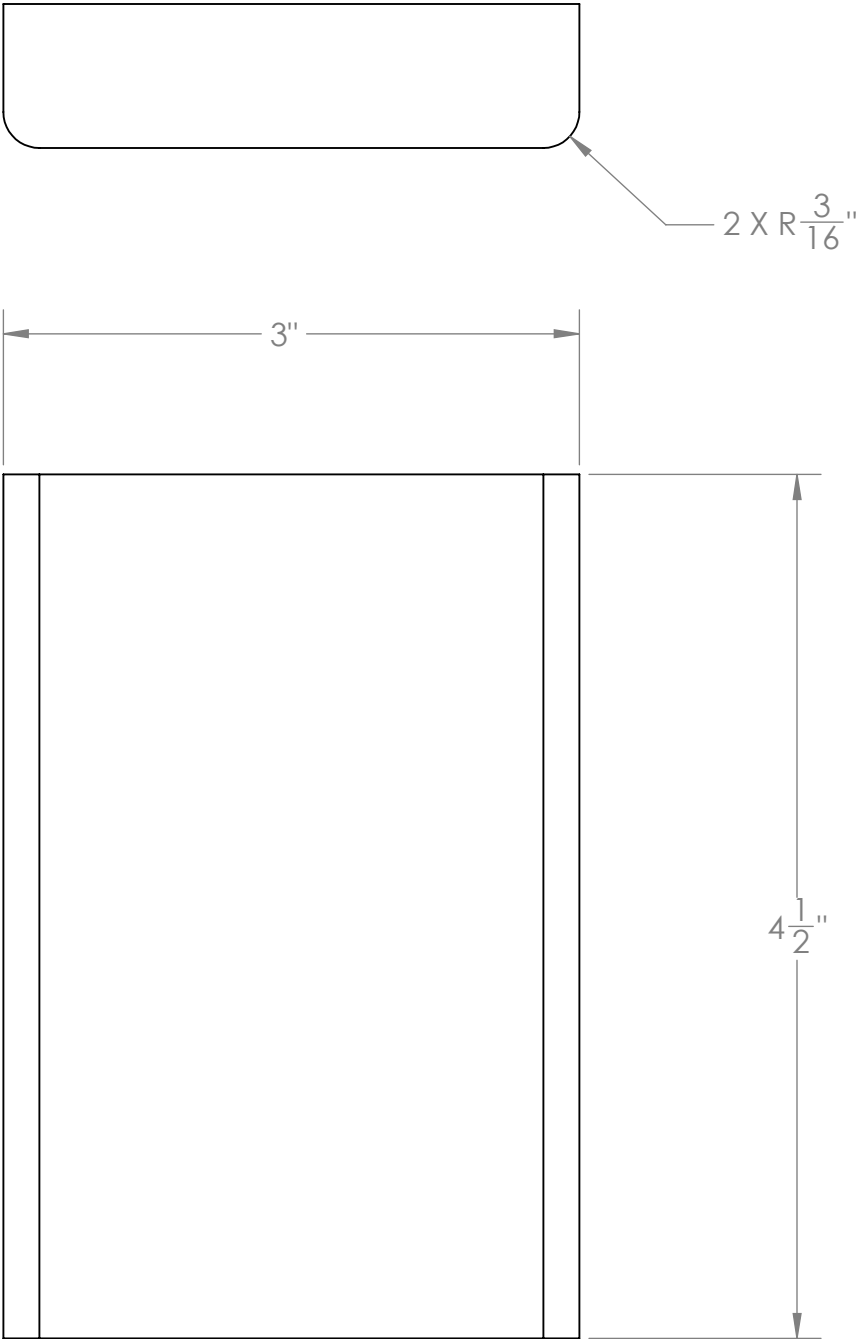
- NOTES:
- 1. MATERIAL: Pine.
 - 2. FINISH: STAIN.
 - 3. SIZES MAY NEED TO BE ALTERED TO SUIT YOUR FEEDER JAR.
 - 4. REMOVE ALL SHARP EDGES.



2224	-	FEEDER BASE
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED DO NOT SCALE DRAWING INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-2018 DIMENSIONS ARE IN INCHES		SolidWorks MAINTAINED DATA CHANGES SHALL BE INCORPORATED ELECTRONICALLY BY THE DESIGN ACTIVITY		 HONEY BEE RESEARCH CENTRE THE UNIVERSITY OF GUELPH				
		PROPRIETARY NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM, OR TRANSMITTED IN ANY FORM, WITHOUT WRITTEN PERMISSION.						
<div>THIRD ANGLE PROJECTION</div> 		CUSTOMER BEE KEEPERS		TITLE <div>FEEDER BASE</div>				
		PROJECT HIVE PRODUCTS						
		DRAWN BY F. FULKERSON	DATE 2025-01-27			SIZE <div>B</div>	DRAWING NO	REVISION
		CHECKED BY P.G. KELLY	DATE 2025-01-27			SCALE 1:1	WEIGHT 0.11 lbs	10050 -
		APPROVED P.G. KELLY	DATE 2025-01-27	SHEET 14 OF 22				

- NOTES:
- 1. MATERIAL: Pine.
 - 2. FINISH: STAIN.
 - 3. SIZES MAY NEED TO BE ALTERED TO SUIT YOUR FEEDER JAR.
 - 4. REMOVE ALL SHARP EDGES.



2225	-	FEEDER SIDE
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED

DO NOT SCALE DRAWING

INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-2018

DIMENSIONS ARE IN INCHES

THIRD ANGLE PROJECTION

SolidWorks MAINTAINED DATA

CHANGES SHALL BE INCORPORATED ELECTRONICALLY BY THE DESIGN ACTIVITY

PROPRIETARY

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CUSTOMER

BEE KEEPERS

PROJECT

HIVE PRODUCTS

DRAWN BY

F. FULKERSON

DATE

2025-01-27

CHECKED BY

P.G. KELLY

DATE

2025-01-27

APPROVED

P.G. KELLY

DATE

2025-01-27

HONEY BEE RESEARCH CENTRE

THE UNIVERSITY OF GUELPH

TITLE

FEEDER SIDE

SIZE

DRAWING NO

10050

REVISION

-

SCALE

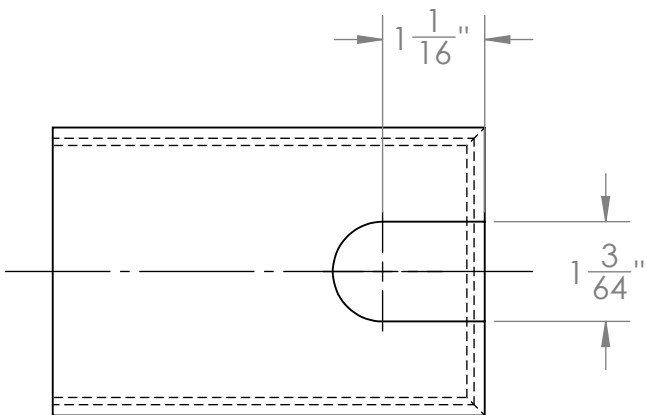
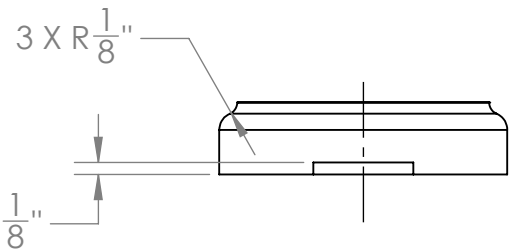
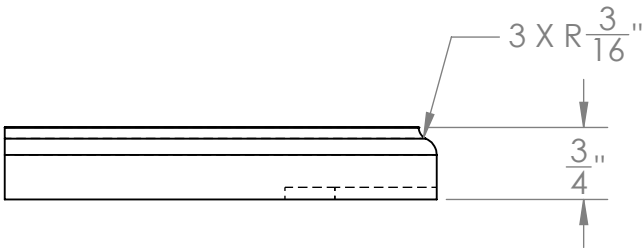
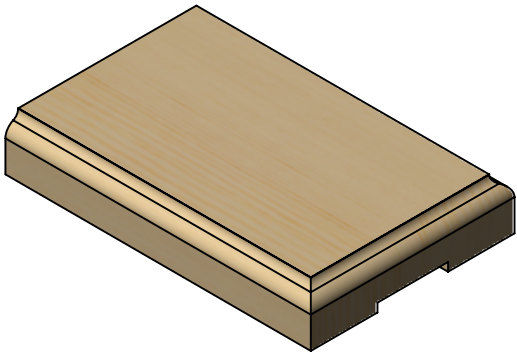
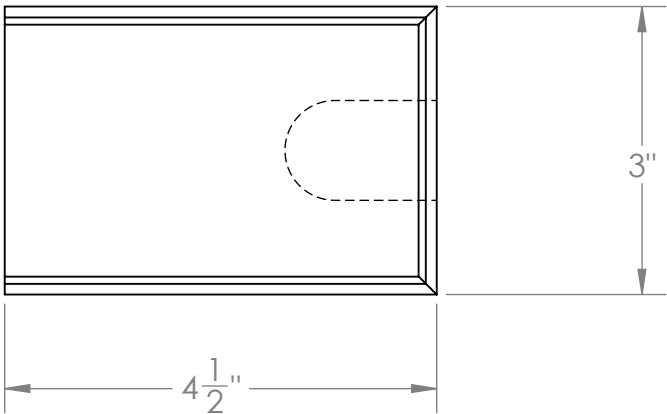
1:1

WEIGHT

0.12 lbs

SHEET 15 OF 22

- NOTES:
- 1. MATERIAL: Pine.
 - 2. FINISH: STAIN.
 - 3. SIZES MAY NEED TO BE ALTERED TO SUIT YOUR FEEDER JAR.
 - 4. REMOVE ALL SHARP EDGES.



2226	-	FEEDER TOP
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED

DO NOT SCALE DRAWING

INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-2018

DIMENSIONS ARE IN INCHES

THIRD ANGLE PROJECTION

SolidWorks MAINTAINED DATA
CHANGES SHALL BE INCORPORATED
ELECTRONICALLY BY THE DESIGN ACTIVITY

PROPRIETARY

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CUSTOMER
BEE KEEPERS

PROJECT
HIVE PRODUCTS

DRAWN BY F. FULKERSON	DATE 2025-01-27
CHECKED BY P.G. KELLY	DATE 2025-01-27
APPROVED P.G. KELLY	DATE 2025-01-27

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THE UNIVERSITY OF GUELPH

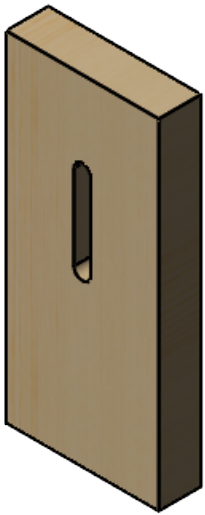
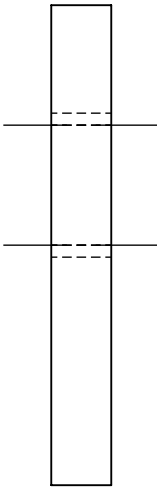
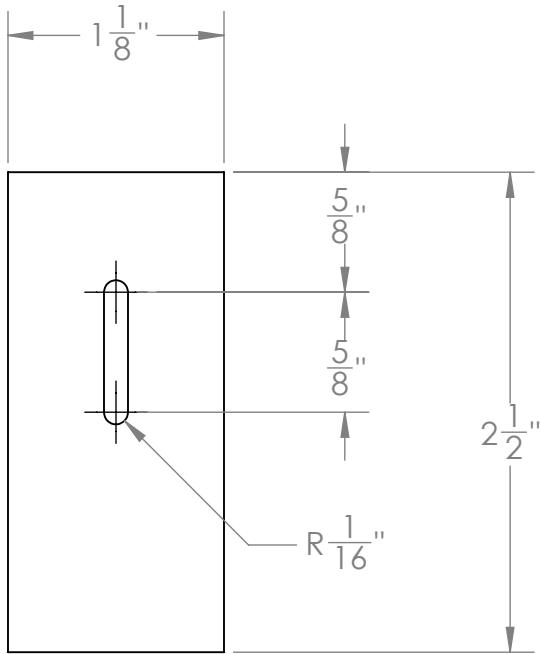
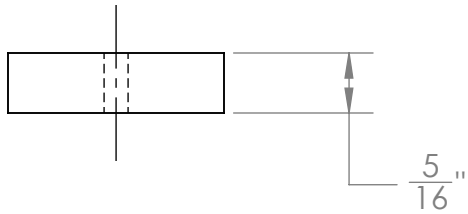
TITLE

FEEDER TOP



SIZE	DRAWING NO	REVISION
B		10050 -
SCALE	1:2	WEIGHT 0.12 lbs

SHEET 16 OF 22

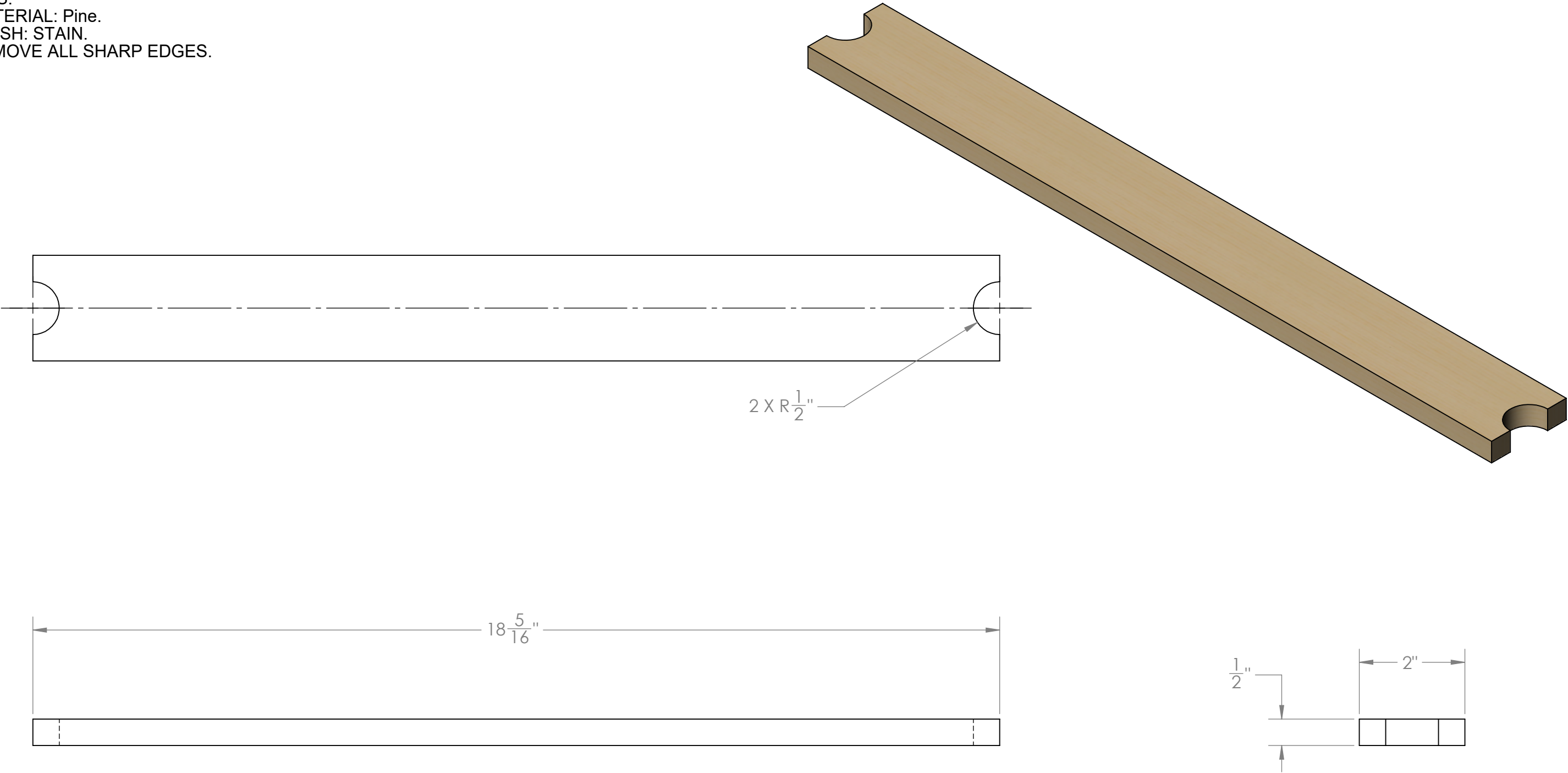
- NOTES:
- 1. MATERIAL: Pine.
 - 2. FINISH: STAIN.
 - 3. REMOVE ALL SHARP EDGES.



2227	-	FEEDER HOLE COVER
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED DO NOT SCALE DRAWING INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-2018 DIMENSIONS ARE IN INCHES		SolidWorks MAINTAINED DATA CHANGES SHALL BE INCORPORATED ELECTRONICALLY BY THE DESIGN ACTIVITY		<div></div> <div>HONEY BEE RESEARCH CENTRE THE UNIVERSITY OF GUELPH</div>		
		PROPRIETARY NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM, OR TRANSMITTED IN ANY FORM, WITHOUT WRITTEN PERMISSION.				
		CUSTOMER BEE KEEPERS PROJECT HIVE PRODUCTS				
<div>THIRD ANGLE PROJECTION</div> <div></div>		DRAWN BY F. FULKERSON	DATE 2025-01-27	SIZE <div>B</div>	DRAWING NO	
		CHECKED BY P.G. KELLY	DATE 2025-01-27	<div>10050</div> <div>-</div>		
		APPROVED P.G. KELLY	DATE 2025-01-27	SCALE 1:1	WEIGHT 0.01 lbs	SHEET 17 OF 22
		TITLE <div>FEEDER HOLE COVER</div>				

- NOTES:
- 1. MATERIAL: Pine.
 - 2. FINISH: STAIN.
 - 3. REMOVE ALL SHARP EDGES.



2228	-	INNER BASE
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED

DO NOT SCALE DRAWING

INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-2018

DIMENSIONS ARE IN INCHES

THIRD ANGLE PROJECTION

SolidWorks MAINTAINED DATA
CHANGES SHALL BE INCORPORATED
ELECTRONICALLY BY THE DESIGN ACTIVITY

PROPRIETARY

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CUSTOMER
BEE KEEPERS

PROJECT
HIVE PRODUCTS

DRAWN BY F. FULKERSON	DATE 2025-01-27
CHECKED BY P.G. KELLY	DATE 2025-01-27
APPROVED P.G. KELLY	DATE 2025-01-27

HONEY BEE RESEARCH CENTRE
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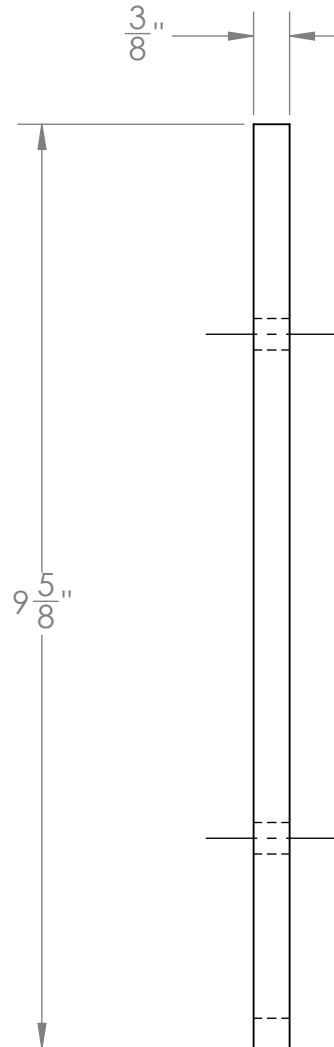
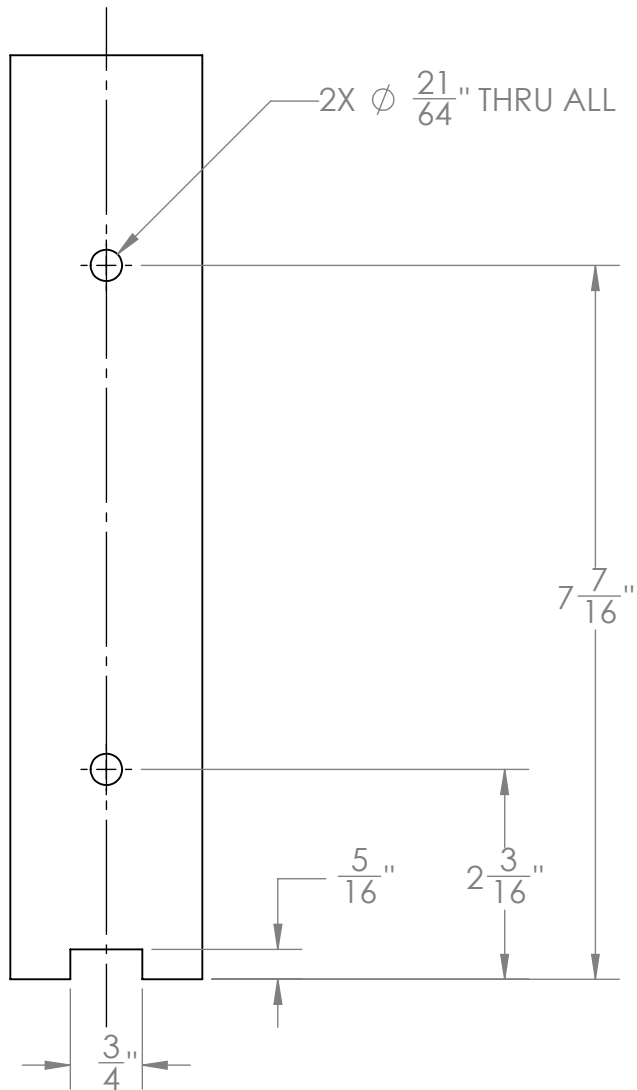
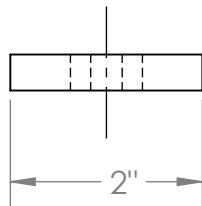
TITLE

INNER BASE

SIZE B	DRAWING NO	REVISION
SCALE 1:2	WEIGHT 0.22 lbs	10050 -

SHEET 18 OF 22

- NOTES:
- 1. MATERIAL: Pine.
 - 2. FINISH: STAIN.
 - 3. REMOVE ALL SHARP EDGES.



2229	-	INNER LOWER SIDE
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED

DO NOT SCALE DRAWING

INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-2018

DIMENSIONS ARE IN INCHES

THIRD ANGLE PROJECTION

SolidWorks MAINTAINED DATA
CHANGES SHALL BE INCORPORATED
ELECTRONICALLY BY THE DESIGN ACTIVITY

PROPRIETARY

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CUSTOMER
BEE KEEPERS

PROJECT
HIVE PRODUCTS

DRAWN BY F. FULKERSON	DATE 2025-01-27
CHECKED BY P.G. KELLY	DATE 2025-01-27
APPROVED P.G. KELLY	DATE 2025-01-27

HONEY BEE RESEARCH CENTRE
THE UNIVERSITY OF GUELPH

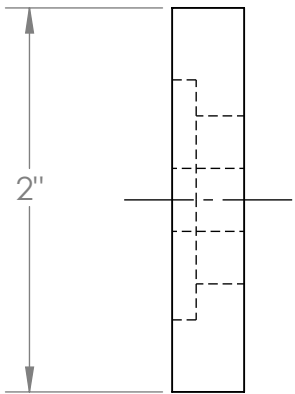
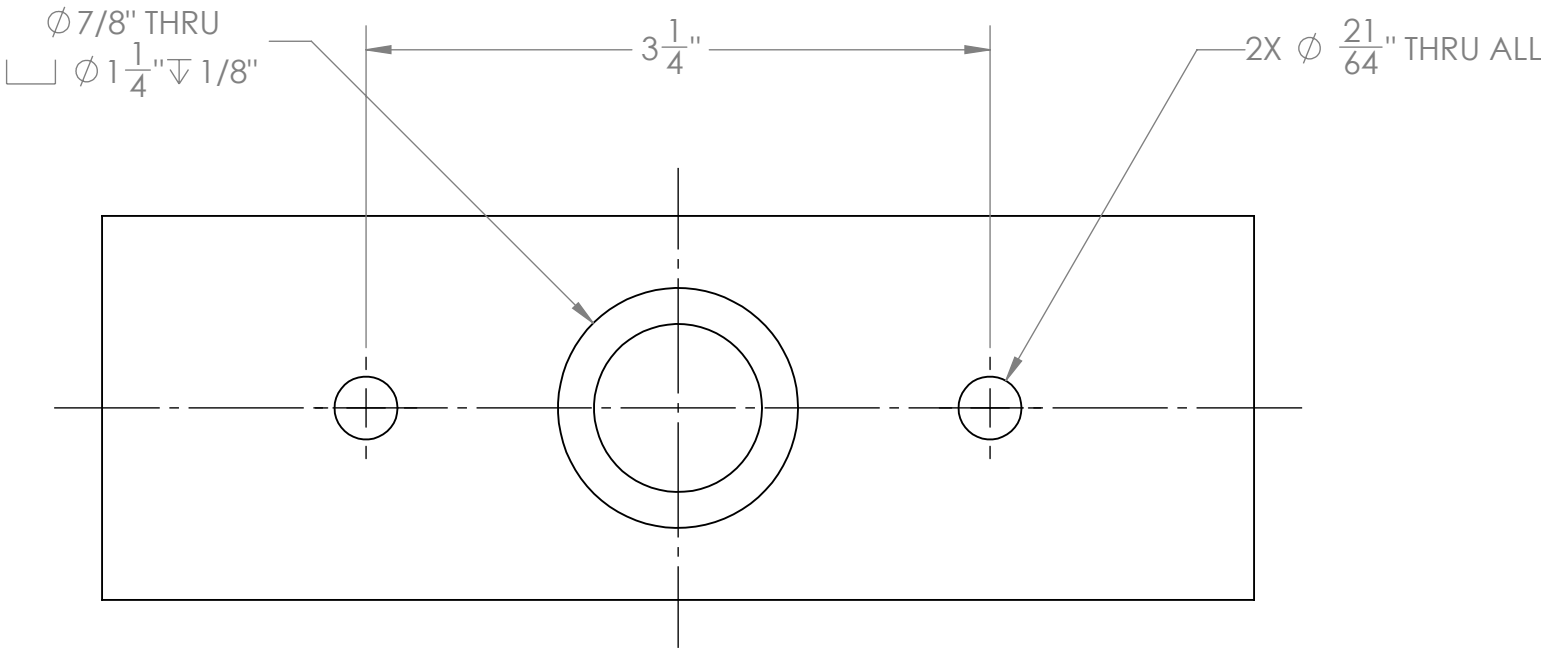
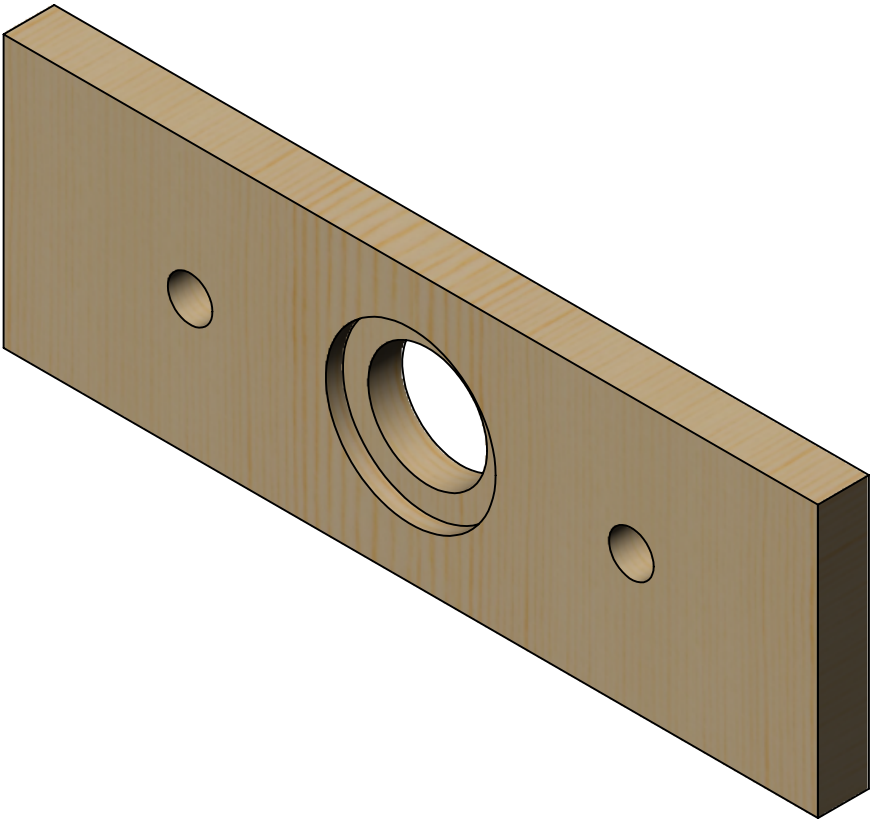
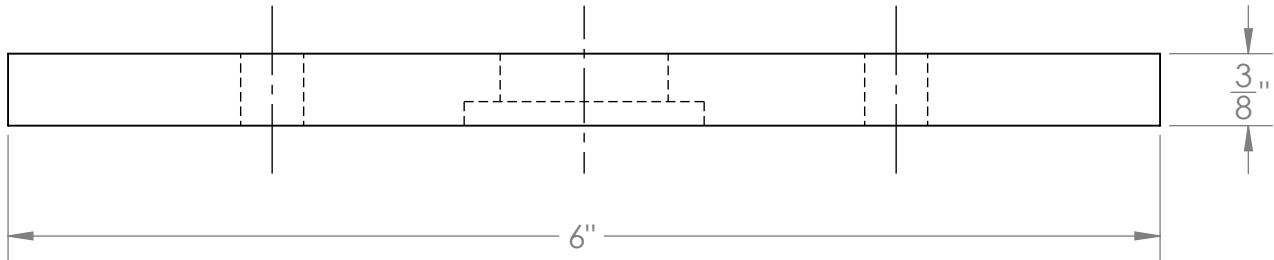
TITLE

INNER LOWER SIDE

SIZE	DRAWING NO	REVISION
B		10050 -
SCALE	1:2	WEIGHT 0.09 lbs

SHEET 19 OF 22

- NOTES:
- 1. MATERIAL: Pine.
 - 2. FINISH: STAIN.
 - 3. REMOVE ALL SHARP EDGES.



2230	-	UPPER FRAME SUPPORT
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED

DO NOT SCALE DRAWING

INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-2018

DIMENSIONS ARE IN INCHES

THIRD ANGLE PROJECTION

SolidWorks MAINTAINED DATA
CHANGES SHALL BE INCORPORATED
ELECTRONICALLY BY THE DESIGN ACTIVITY

PROPRIETARY

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CUSTOMER	BEE KEEPERS
PROJECT	HIVE PRODUCTS
DRAWN BY	F. FULKERSON
DATE	2025-01-27
CHECKED BY	P.G. KELLY
DATE	2025-01-27
APPROVED	P.G. KELLY
DATE	2025-01-27

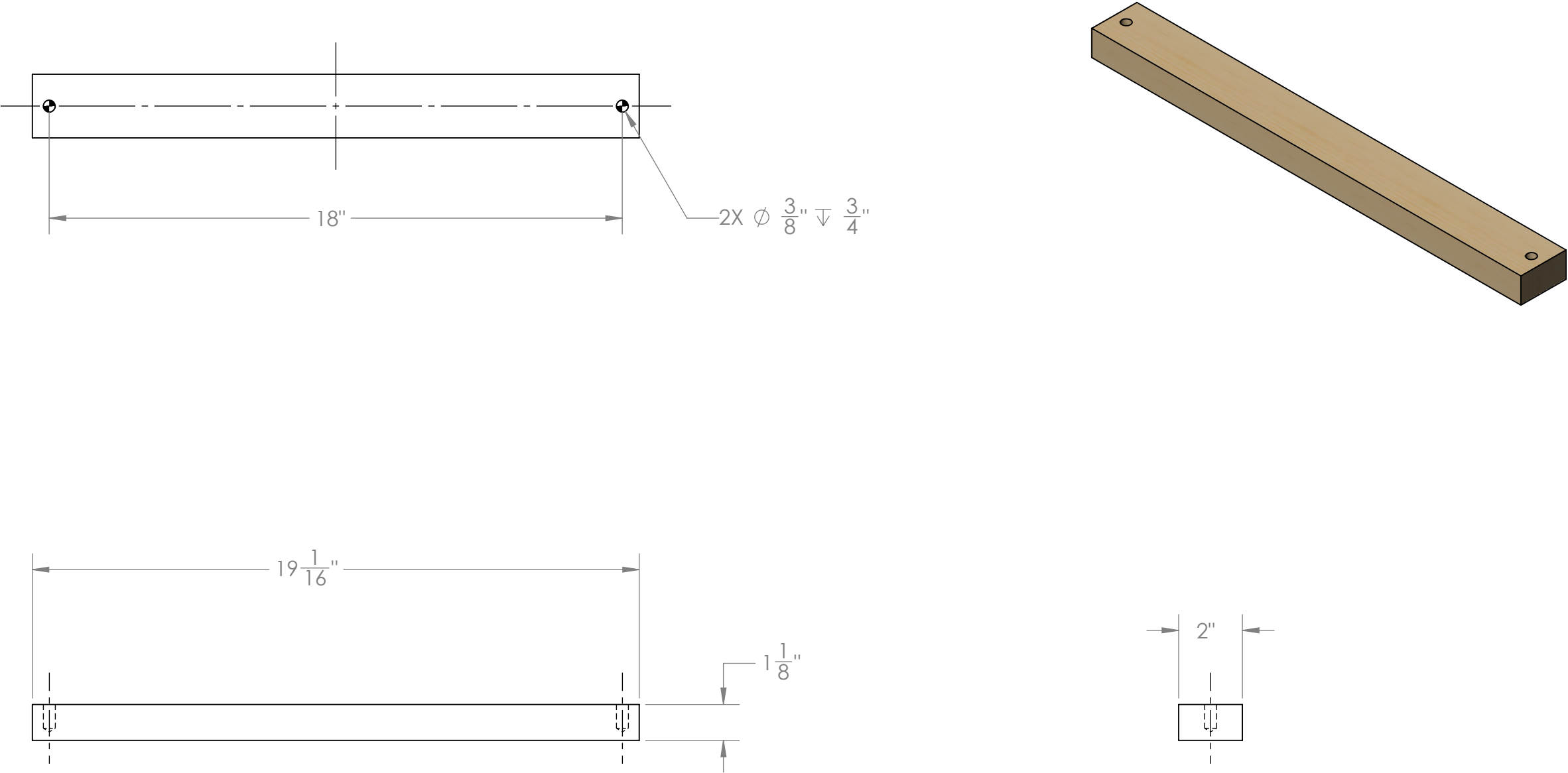
HONEY BEE RESEARCH CENTRE
THE UNIVERSITY OF GUELPH

TITLE

UPPER FRAME SUPPORT

SIZE	DRAWING NO	REVISION
B		10050 -
SCALE	1:1	WEIGHT 0.05 lbs
SHEET 20 OF 22		

- NOTES:
- 1. MATERIAL: Pine.
 - 2. FINISH: STAIN.
 - 3. REMOVE ALL SHARP EDGES.



2231	-	INNER TOP
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED

DO NOT SCALE DRAWING

INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-2018

DIMENSIONS ARE IN INCHES

THIRD ANGLE PROJECTION

SolidWorks MAINTAINED DATA
CHANGES SHALL BE INCORPORATED
ELECTRONICALLY BY THE DESIGN ACTIVITY

PROPRIETARY

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CUSTOMER
BEE KEEPERS

PROJECT
HIVE PRODUCTS

DRAWN BY F. FULKERSON	DATE 2025-01-27
CHECKED BY P.G. KELLY	DATE 2025-01-27
APPROVED P.G. KELLY	DATE 2025-01-27

HONEY BEE RESEARCH CENTRE
THE UNIVERSITY OF GUELPH

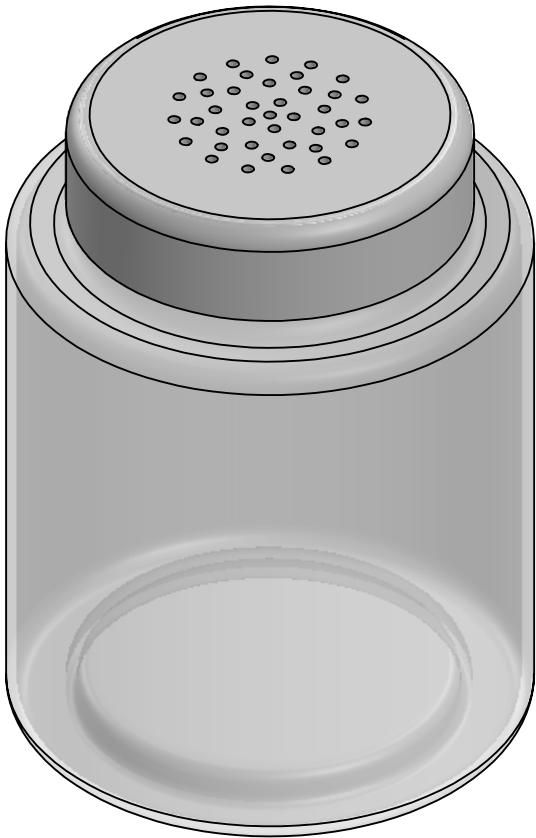
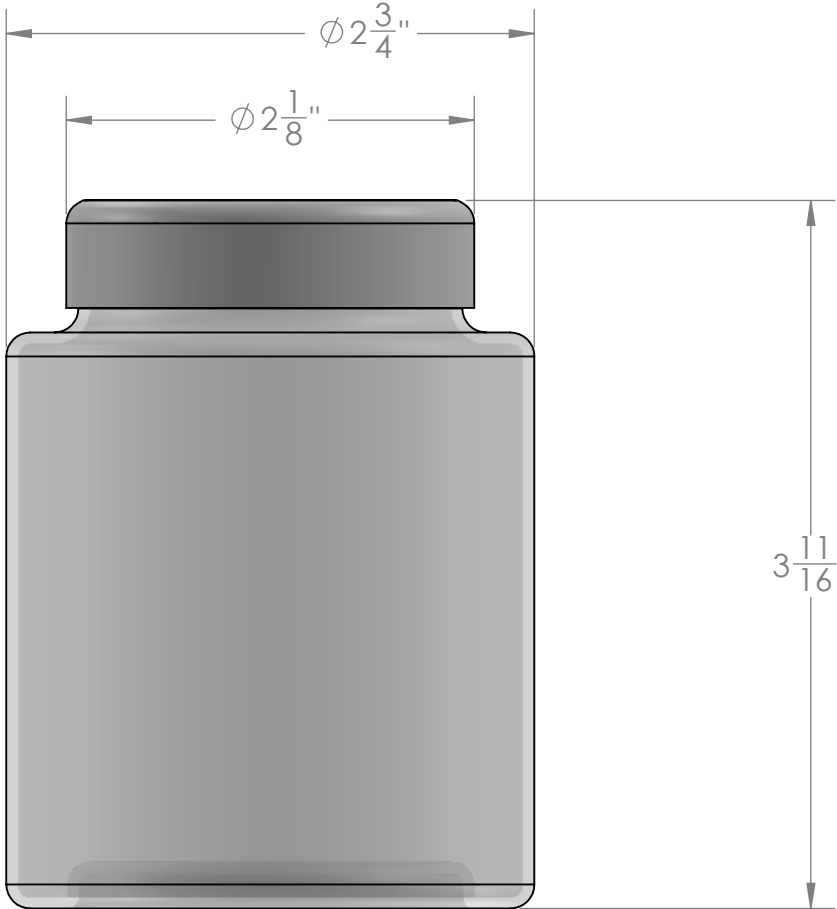
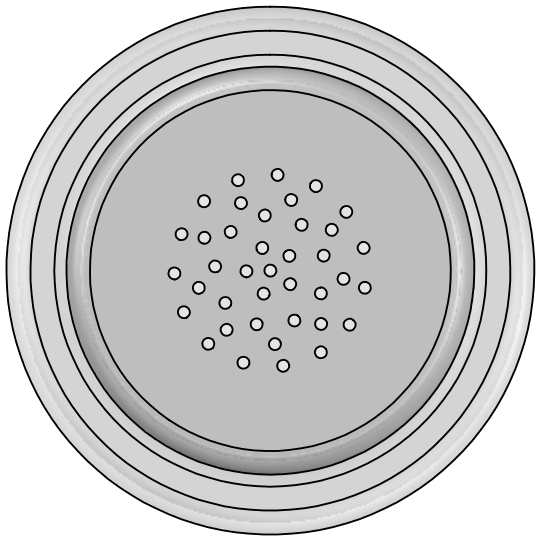
TITLE

INNER TOP

SIZE B	DRAWING NO	REVISION
SCALE 1:4	WEIGHT 0.52 lbs	10050 -

SHEET 21 OF 22

- NOTES:
- 1. MATERIAL: PLASTIC.
 - 2. FINISH: NONE.
 - 3. DRILL 0.04" (#60) HOLES IN LID.
 - 4. REMOVE ALL SHARP EDGES.



10053		SYRUP BOTTLE
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED

DO NOT SCALE DRAWING

INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-2018

DIMENSIONS ARE IN INCHES

THIRD ANGLE PROJECTION

SolidWorks MAINTAINED DATA
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PROPRIETARY

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CUSTOMER
BEE KEEPERS

PROJECT
HIVE PRODUCTS

DRAWN BY F. FULKERSON	DATE 2025-01-27
CHECKED BY P.G. KELLY	DATE 2025-01-27
APPROVED P.G. KELLY	DATE 2025-01-27

HONEY BEE RESEARCH CENTRE
THE UNIVERSITY OF GUELPH

TITLE

SYRUP BOTTLE

SIZE	DRAWING NO	REVISION
B		10050 -
SCALE	1:1	WEIGHT 0.101 lbs

SHEET 22 OF 22