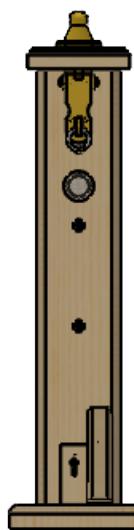
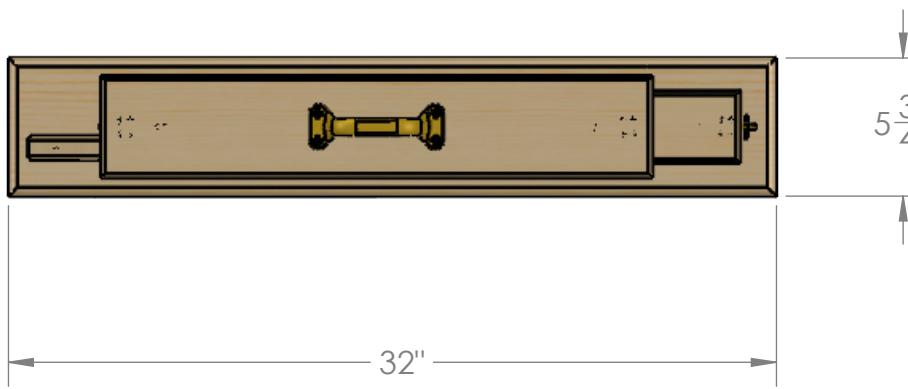


NOTES:

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

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.  
  
CUSTOMER  
BEE KEEPERS  
PROJECT  
HIVE PRODUCTS

THIRD ANGLE PROJECTION



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



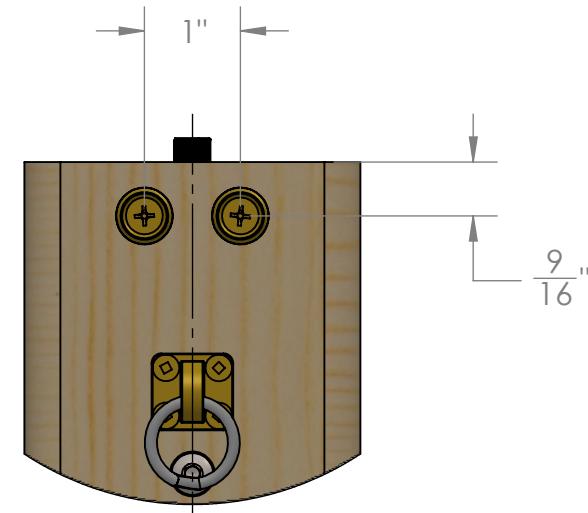
HONEY BEE RESEARCH CENTRE  
THE UNIVERSITY OF GUELPH

## OBSERVATION HIVE

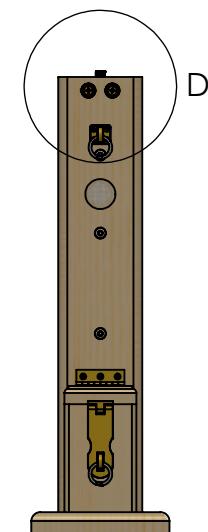
SIZE	DRAWING NO
<b>B</b>	1:8
SCALE	WEIGHT
	17.93 lbs
REVISION	
<b>10050</b> -	
SHEET 1 OF 22	

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.



DETAIL D  
SCALE 1 : 2



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

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.

CUSTOMER  
BEE KEEPERS  
PROJECT  
HIVE PRODUCTS

THIRD ANGLE PROJECTION



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

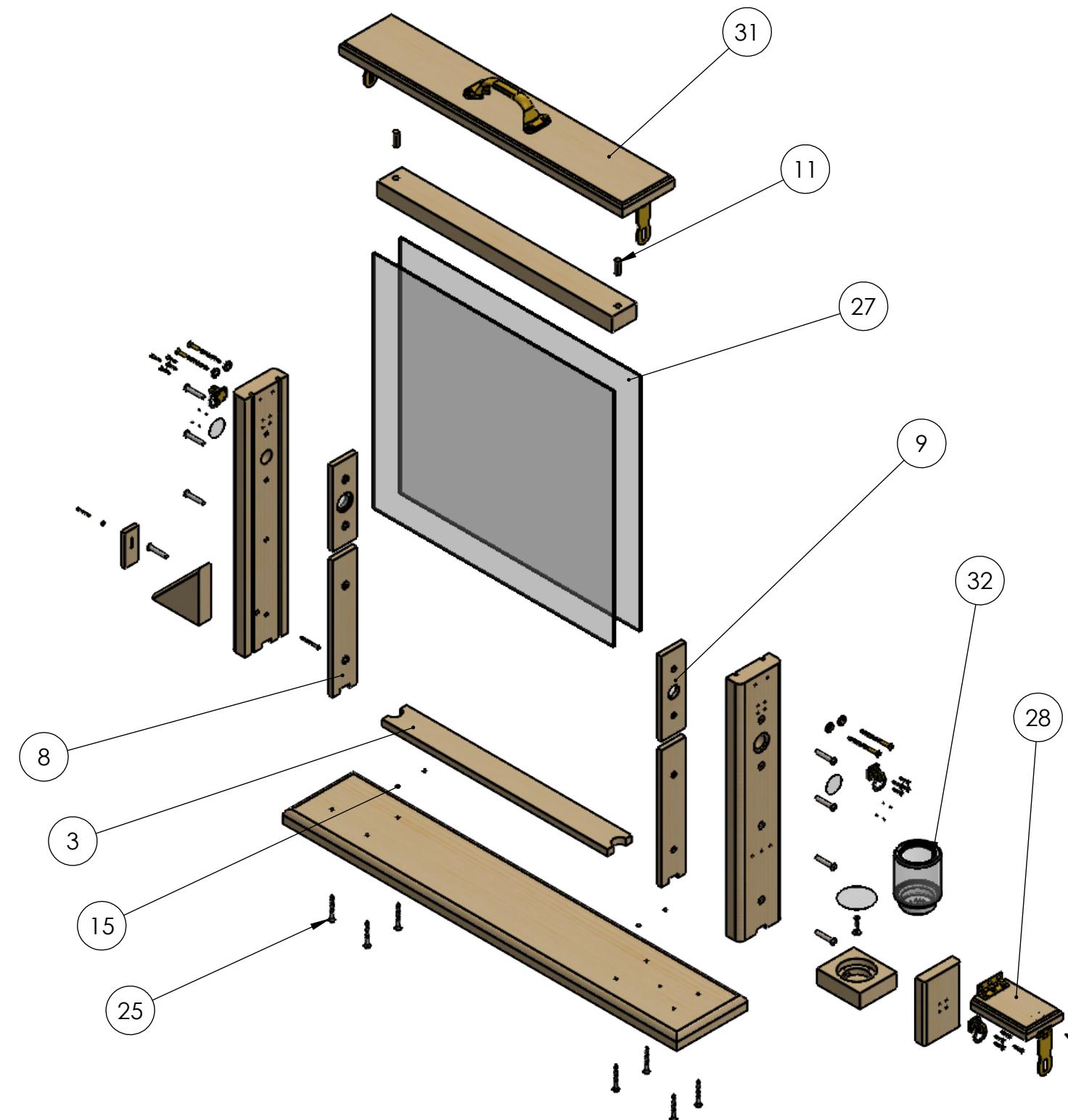


HONEY BEE RESEARCH CENTRE  
THE UNIVERSITY OF GUELPH

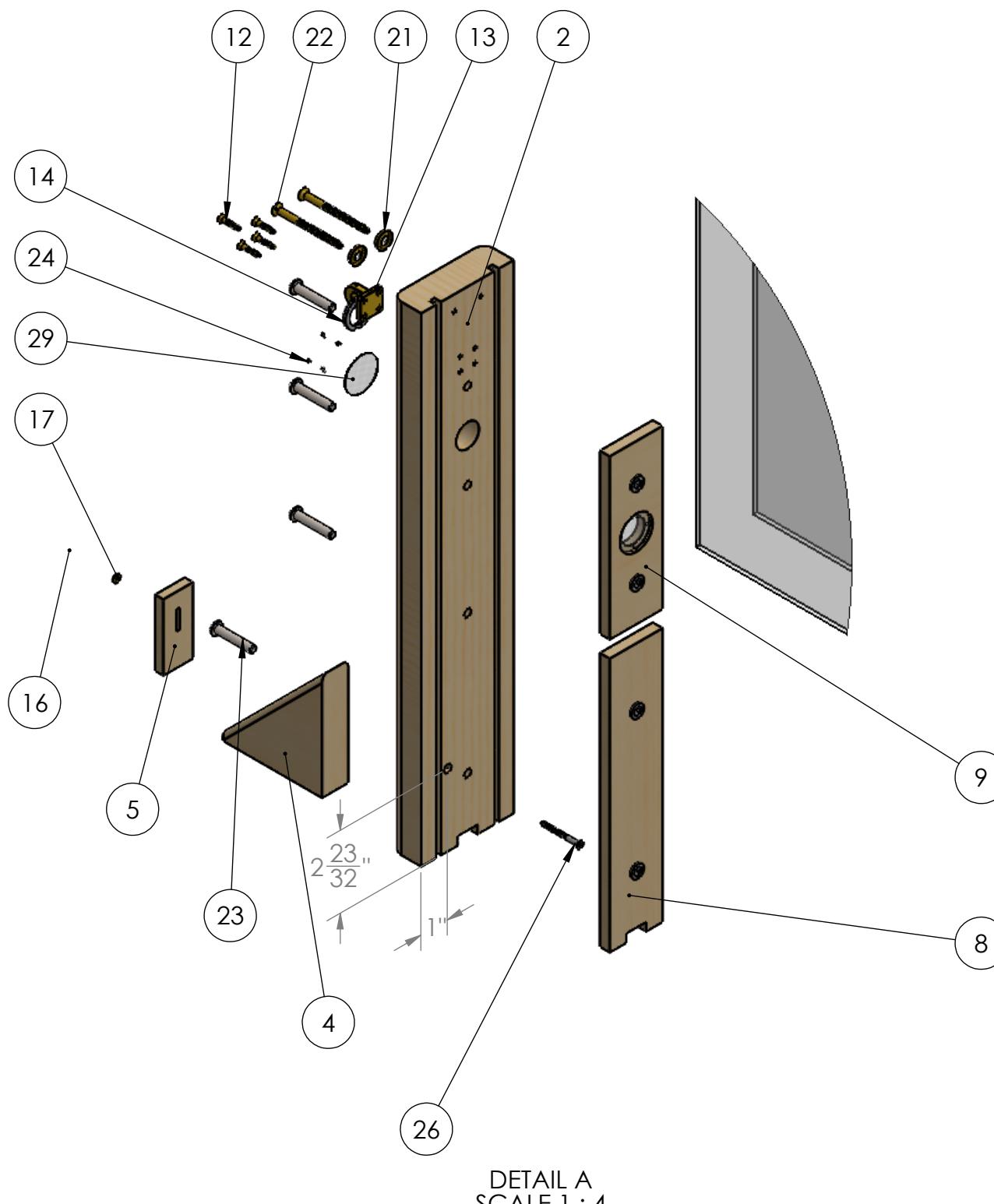
## OBSERVATION HIVE

SIZE	DRAWING NO	10050	REVISION
B			-
SCALE	1:8	WEIGHT	17.93 lbs
		SHEET 2 OF 22	

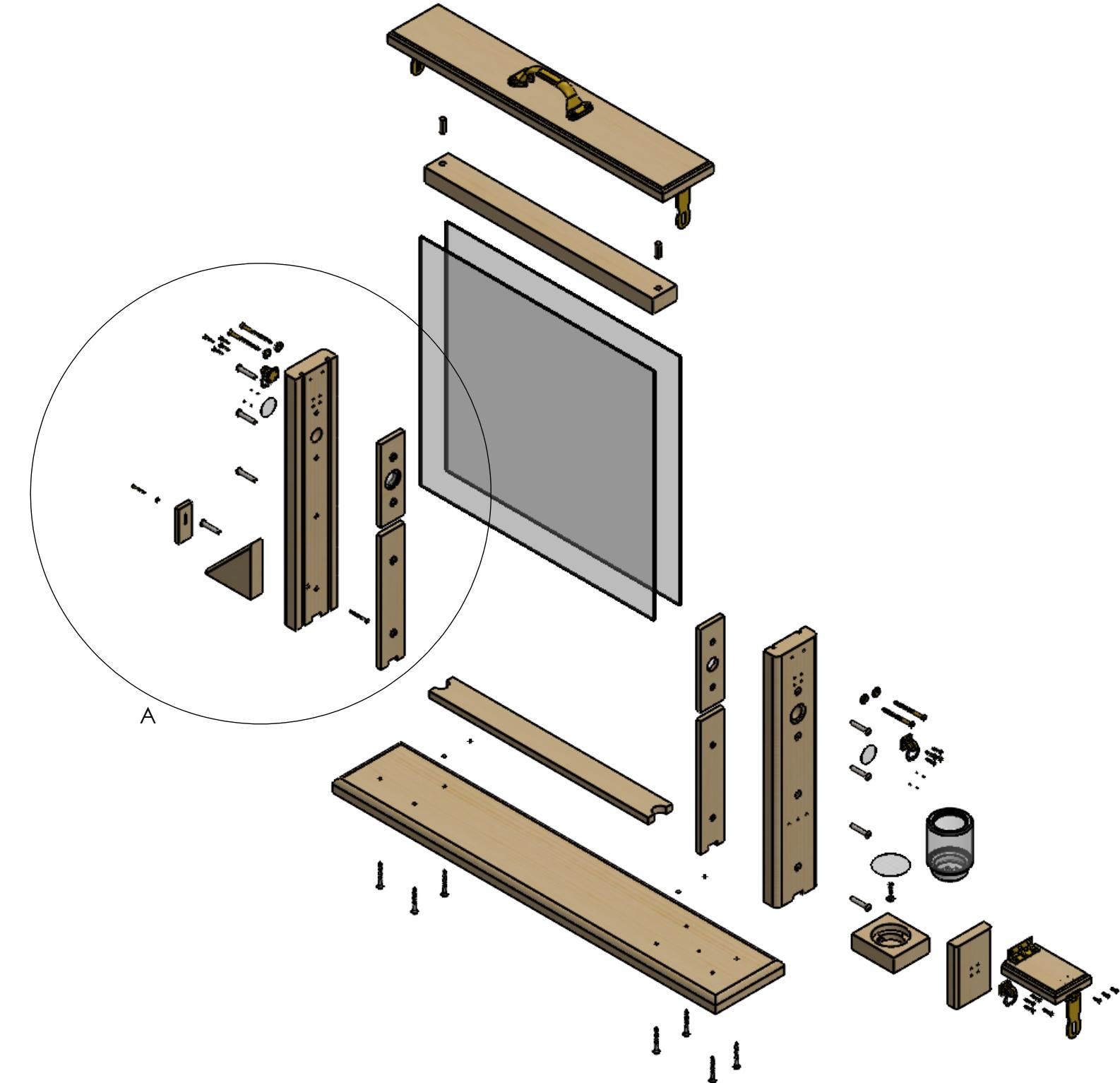
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	2220	BASE	1
2	2221	SIDE	2
3	2228	INNER BASE	1
4	2223	GUSSET	1
5	2227	FEEDER HOLE COVER	1
6	2224	FEEDER BASE	1
7	2225	FEEDER SIDE	1
8	10055	LOWER FRAME REST	2
9	10054	UPPER FRAME REST	2
10	2231	INNER TOP	1
11	97195A109	3/8" Wood Dowel Pins	2
12	95188A310	Brass Square-Drive 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	SBHSCREW 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.	
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	
THIRD ANGLE PROJECTION		SIZE <b>B</b>	DRAWING NO 10050 -
		SCALE 1:8	WEIGHT 17.93 lbs
		SHEET 3 OF 22	



DETAIL A  
SCALE 1 : 4



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.

CUSTOMER  
BEE KEEPERS

PROJECT  
HIVE PRODUCTS

THIRD ANGLE PROJECTION



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

## OBSERVATION HIVE

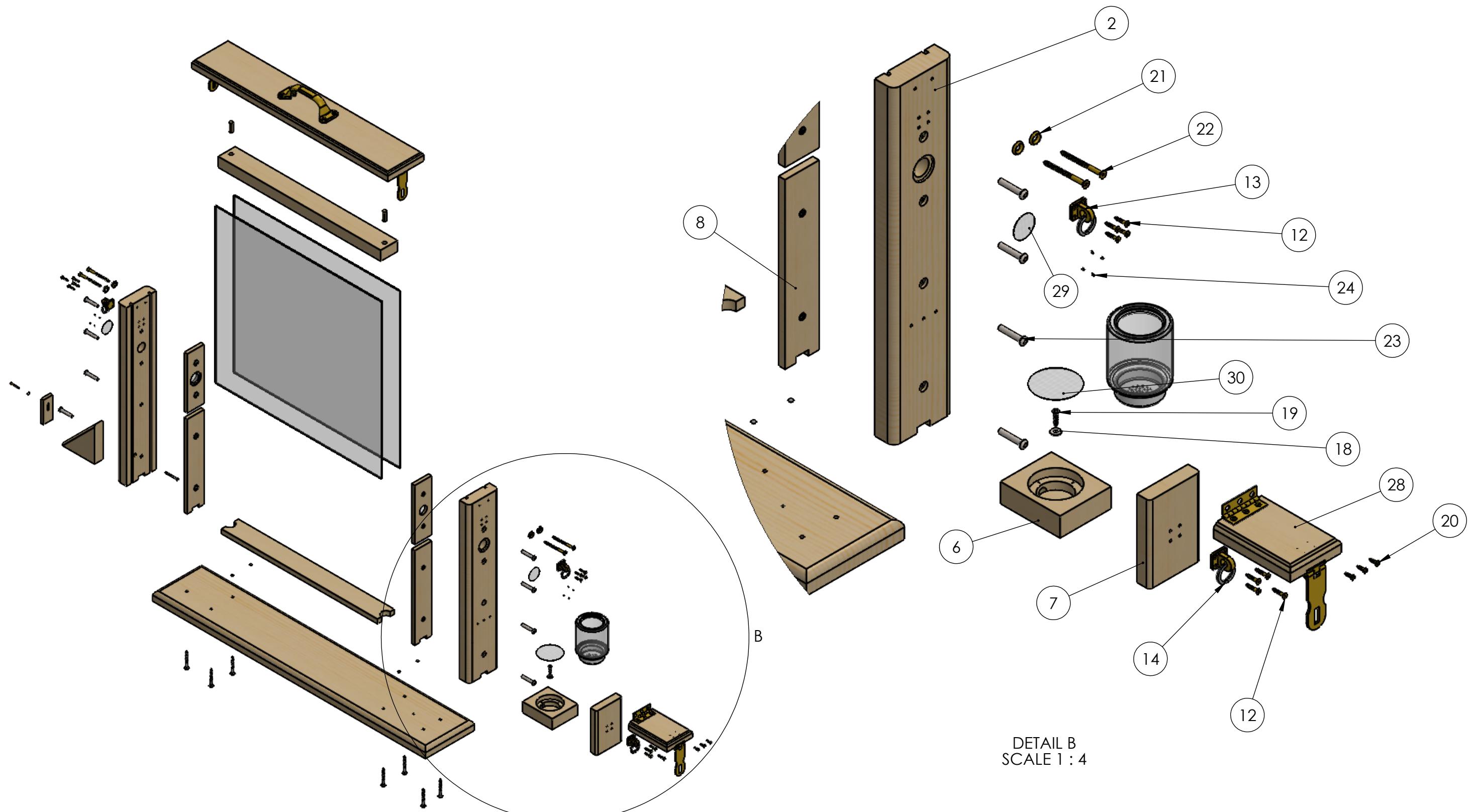
10050 -

B

1:8

WEIGHT 17.93 lbs

SHEET 4 OF 22



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  
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  
  
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

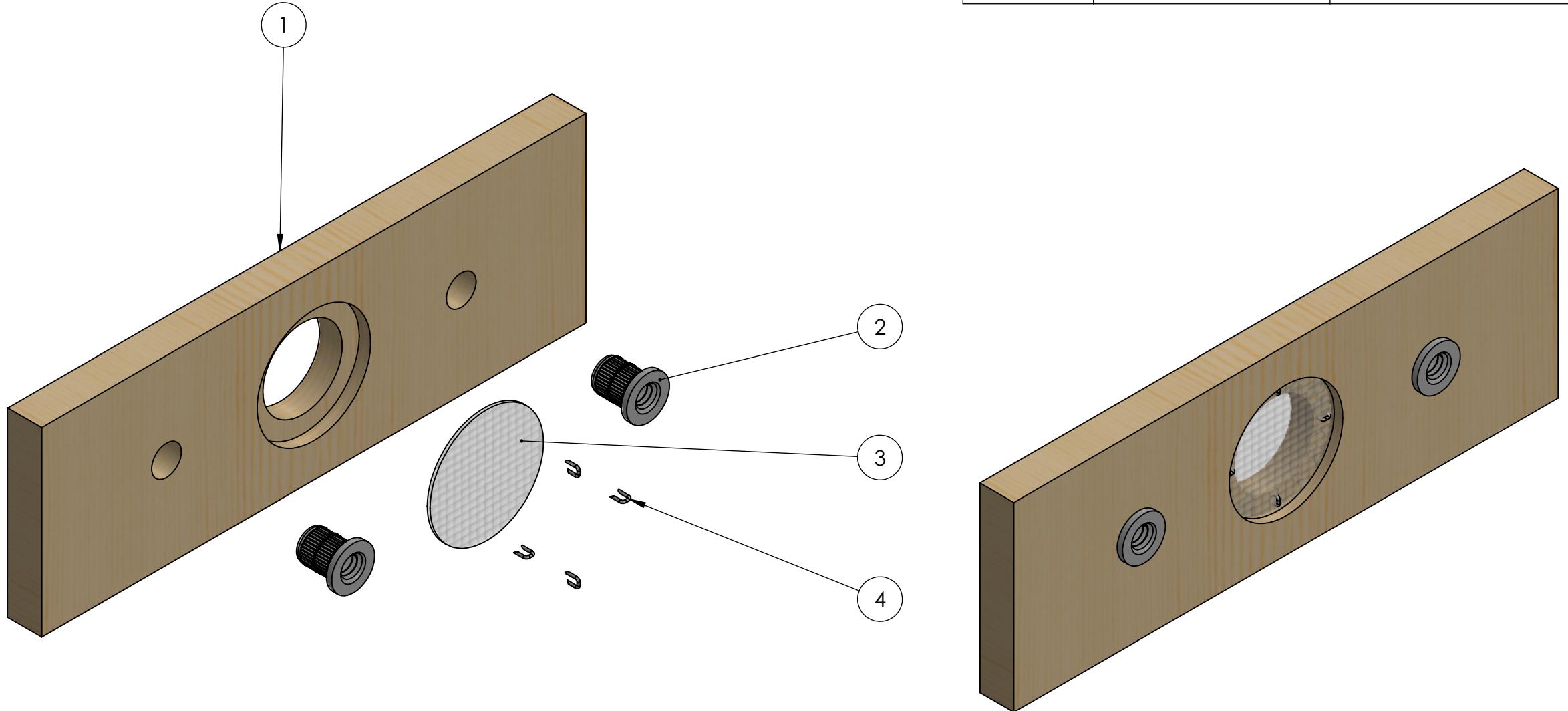
## OBSERVATION HIVE

10050 -

SIZE B DRAWING NO  
SCALE 1:8 WEIGHT 17.93 lbs 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

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.  
**CUSTOMER**  
 BEE KEEPERS  
**PROJECT**  
 HIVE PRODUCTS

THIRD ANGLE PROJECTION



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



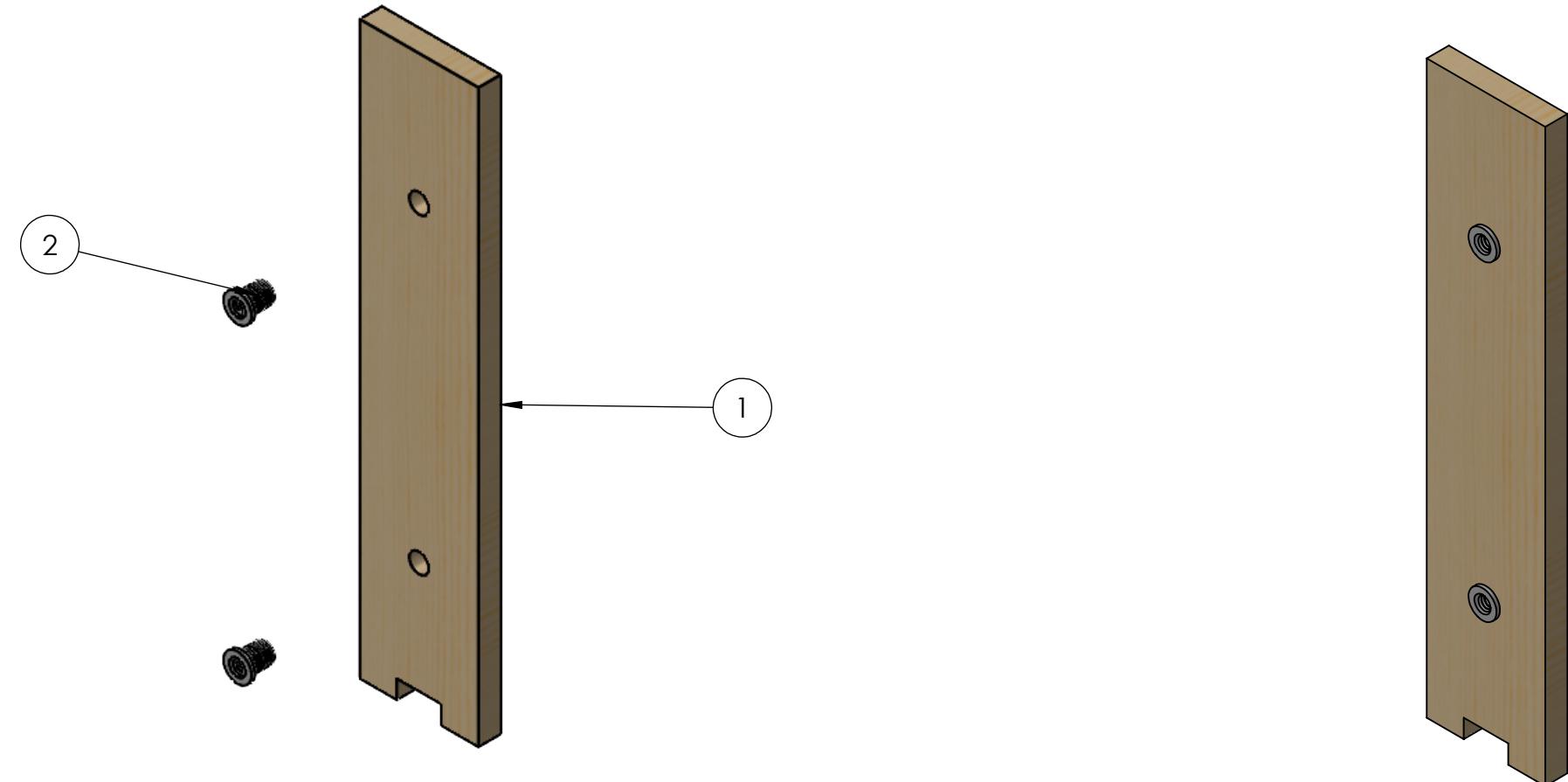
HONEY BEE RESEARCH CENTRE  
 THE UNIVERSITY OF GUELPH

## UPPER FRAME REST

REVISION  
**10050** -  
 DRAWING NO  
**B**  
 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

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.  
  
CUSTOMER  
BEE KEEPERS  
PROJECT  
HIVE PRODUCTS

THIRD ANGLE PROJECTION



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

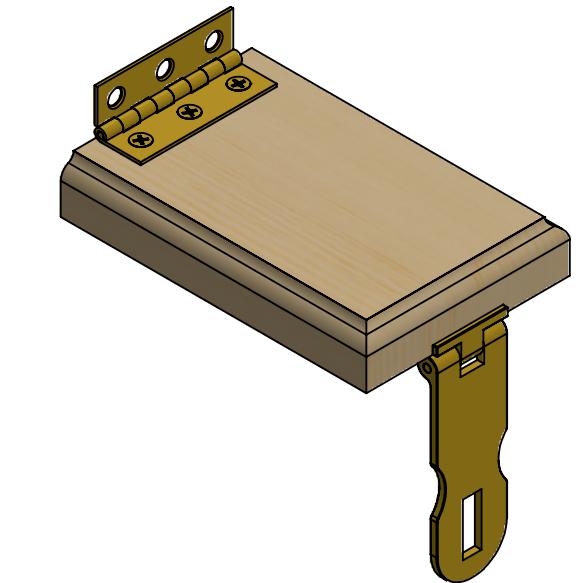
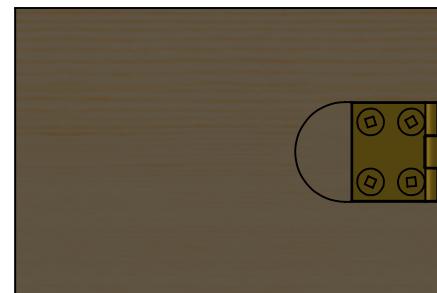
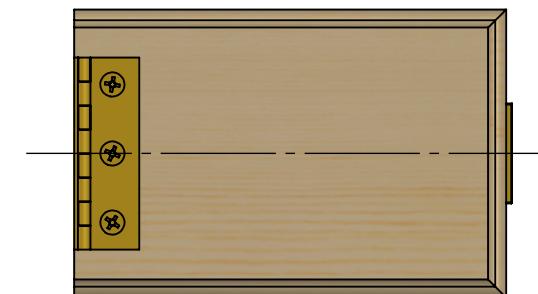
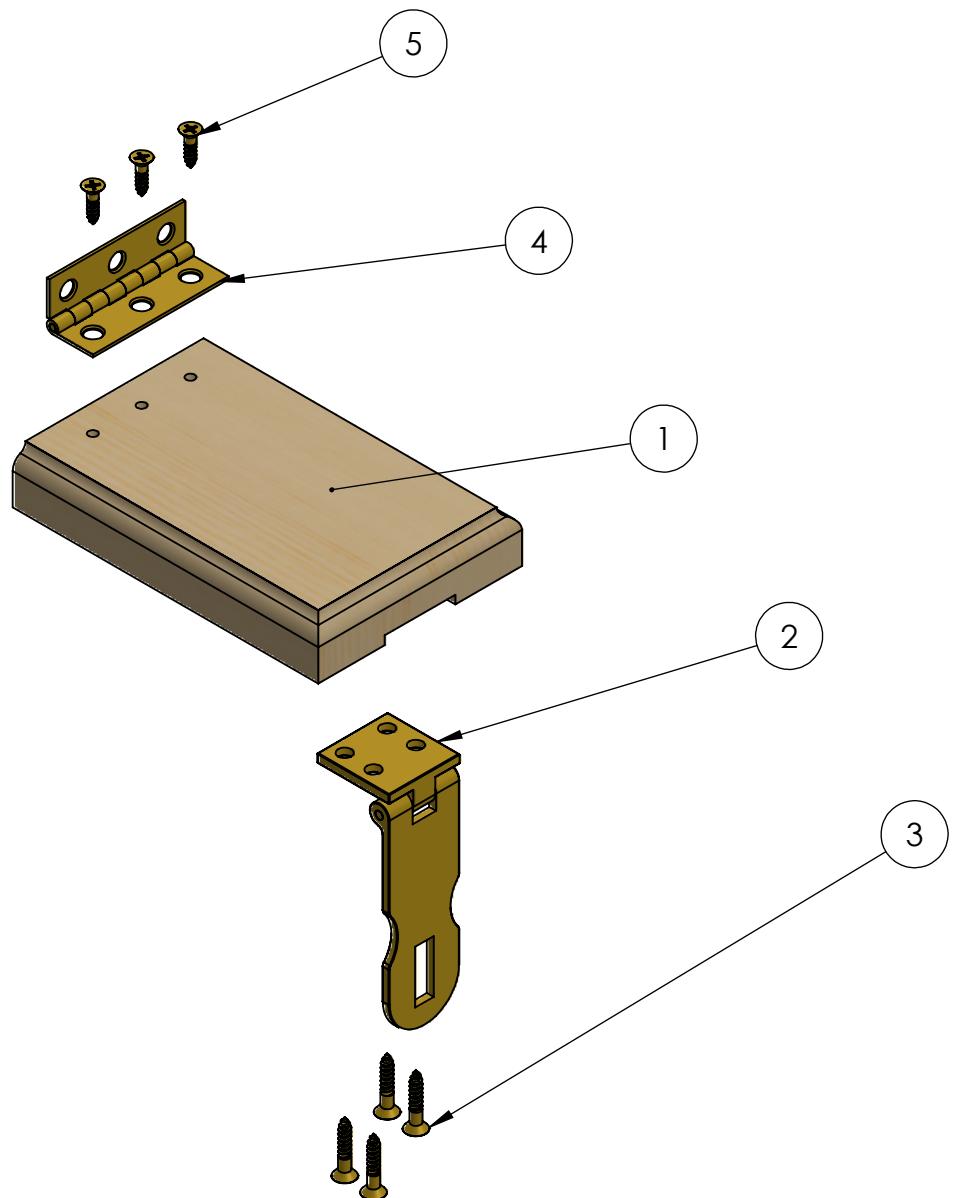


HONEY BEE RESEARCH CENTRE  
THE UNIVERSITY OF GUELPH

## LOWER FRAME REST

SIZE DRAWING NO  
**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

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.  
  
CUSTOMER  
BEE KEEPERS  
PROJECT  
HIVE PRODUCTS

THIRD ANGLE PROJECTION



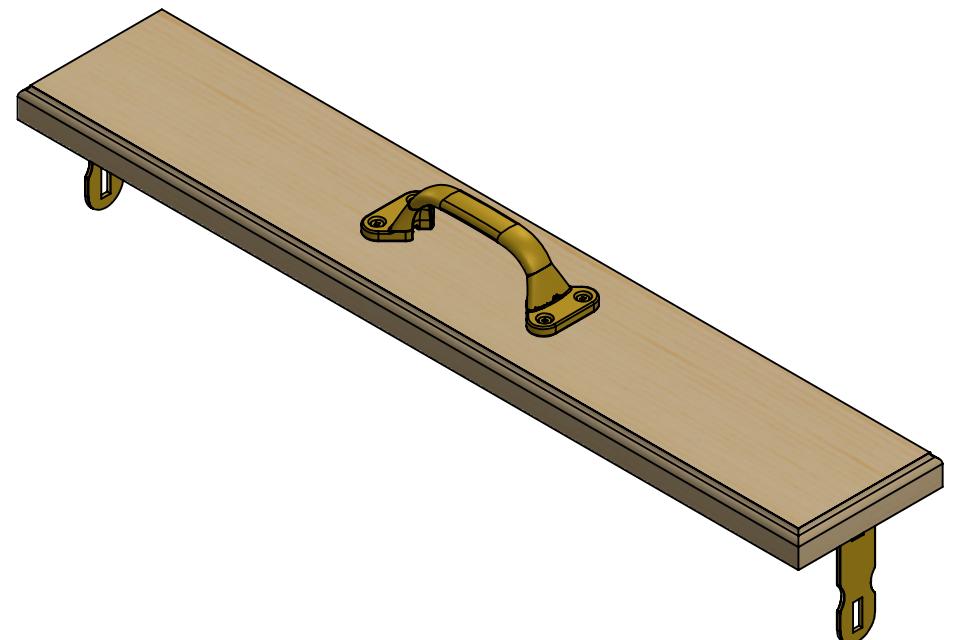
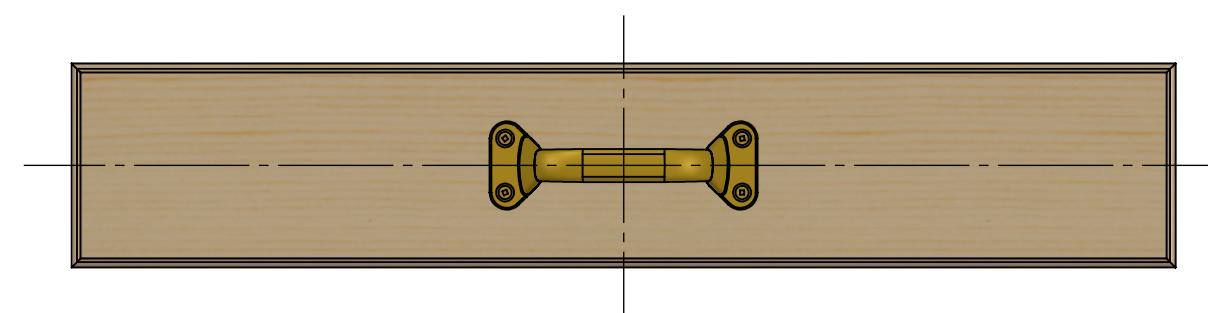
DRAWN BY  
F. FULKERSON  
DATE  
2025-01-27  
CHECKED BY  
P.G. KELLY  
DATE  
2025-01-27  
APPROVED  
P.G. KELLY  
DATE  
2025-01-27



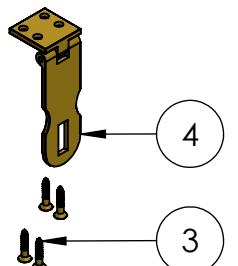
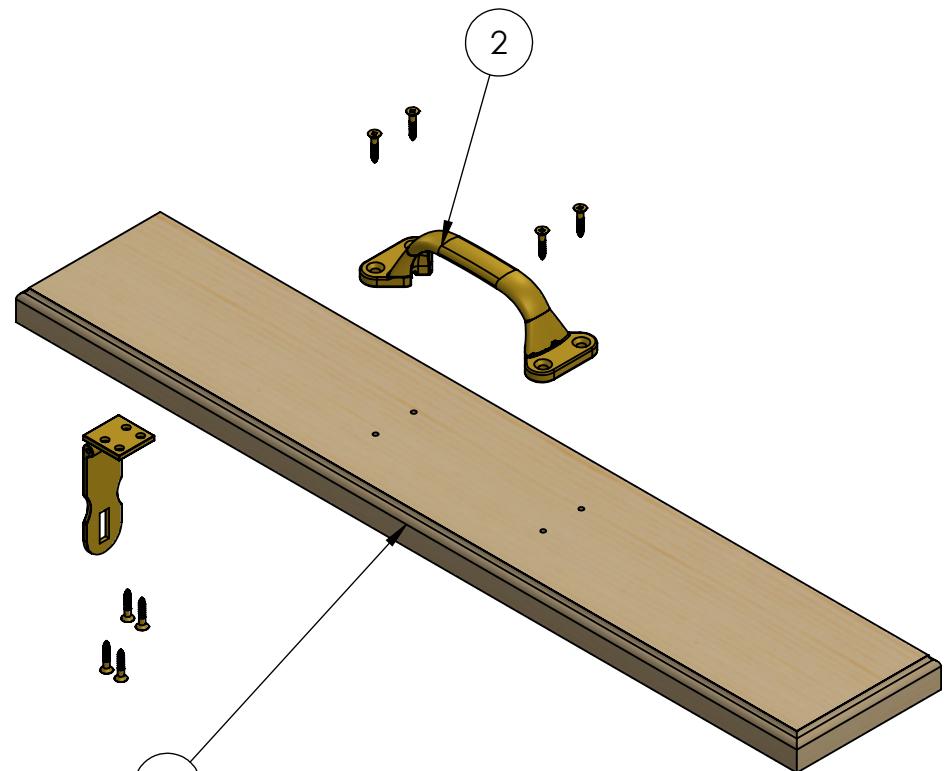
HONEY BEE RESEARCH CENTRE  
THE UNIVERSITY OF GUELPH

## FEEDER LID

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

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.

CUSTOMER  
BEE KEEPERS  
PROJECT  
HIVE PRODUCTS

THIRD ANGLE PROJECTION



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

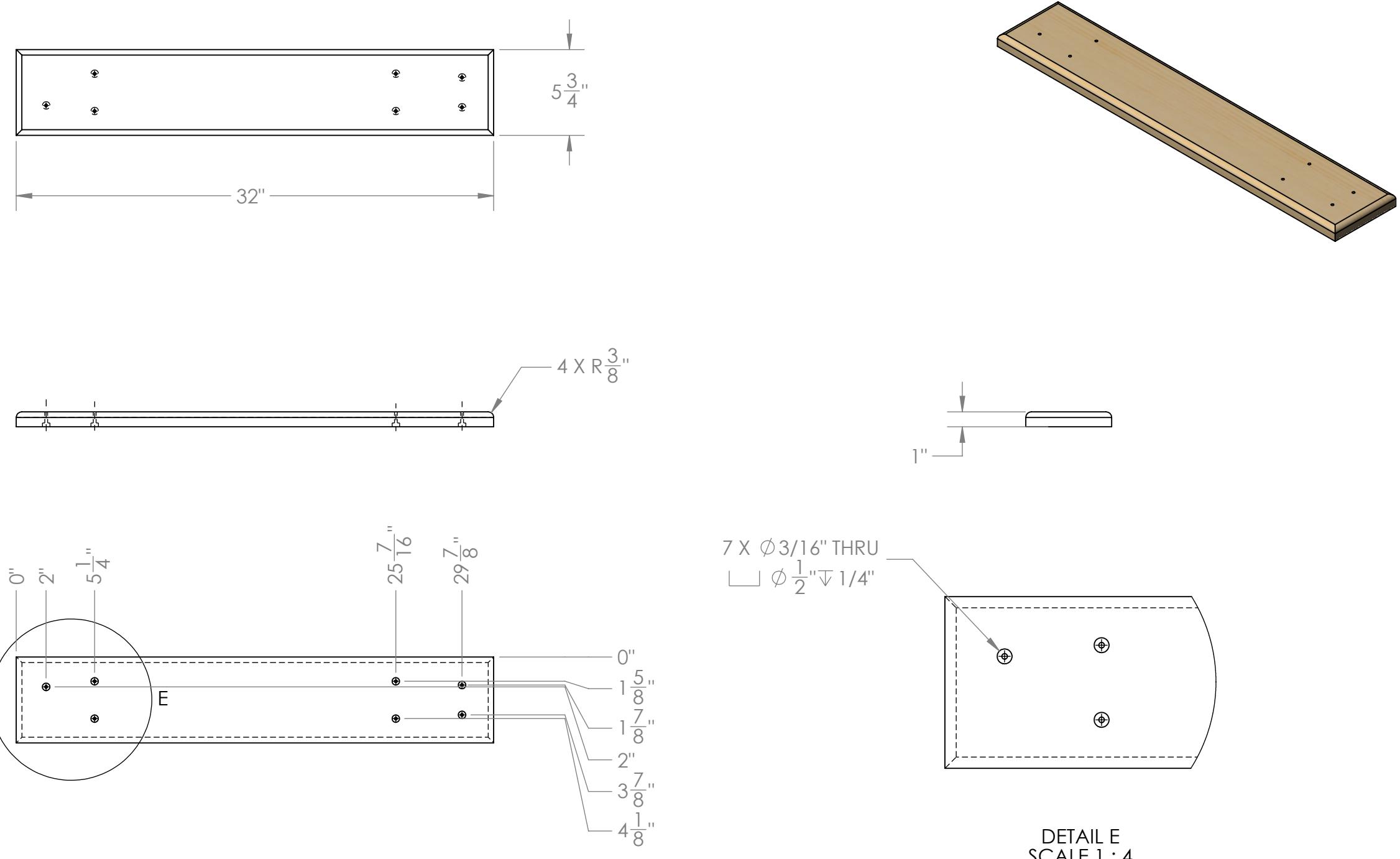


HONEY BEE RESEARCH CENTRE  
THE UNIVERSITY OF GUELPH

**OBSERVATION HIVE TOP**

SIZE	DRAWING NO
<b>B</b>	
SCALE	1:4
WEIGHT	1.81 lbs
SHEET 9 OF 22	

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



2220	-	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  
 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

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

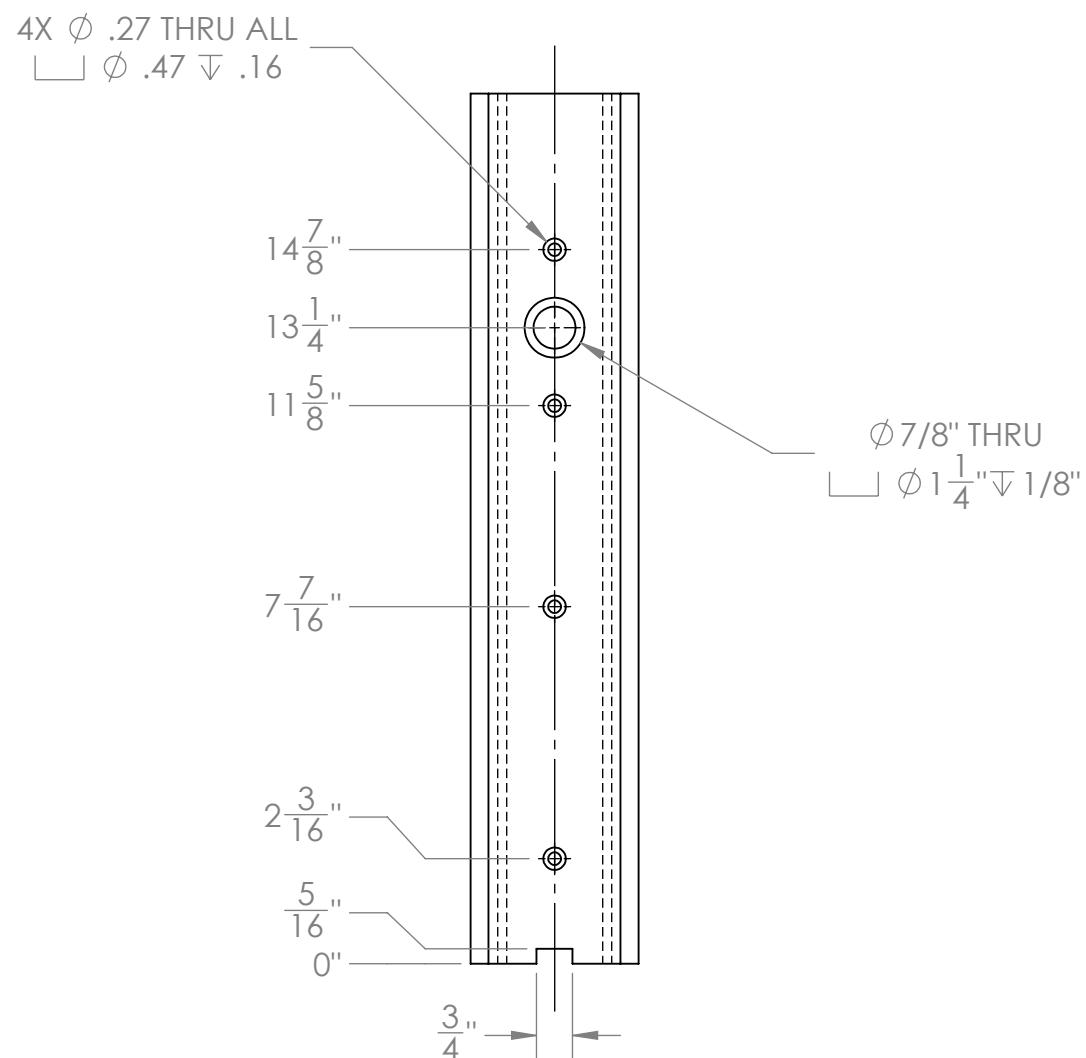
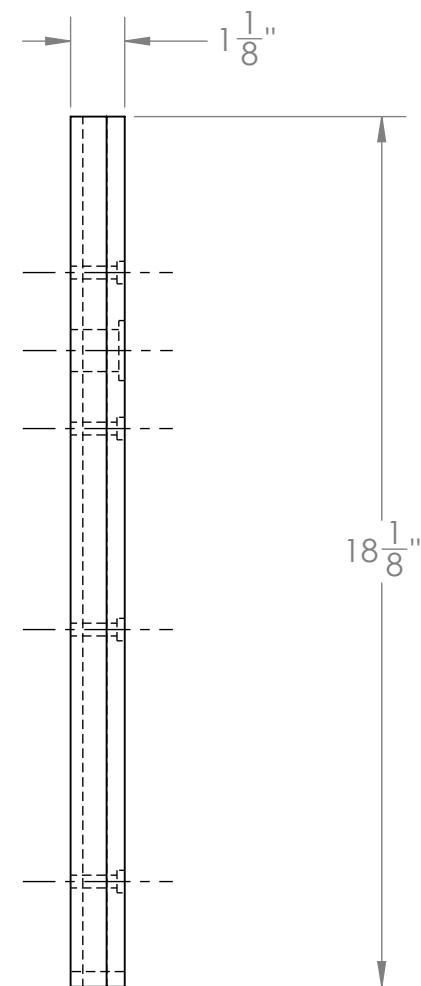
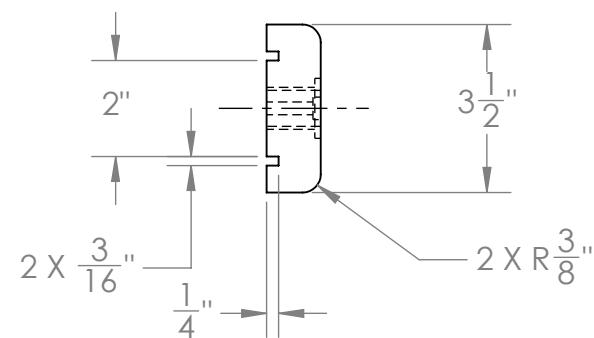


HONEY BEE RESEARCH CENTRE  
 THE UNIVERSITY OF GUELPH

**BASE**

SIZE	DRAWING NO	REVISION
<b>B</b>		-
1:8	2.23 lbs	SHEET 10 OF 22

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



2221	-	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

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.  
**CUSTOMER**  
 BEE KEEPERS  
**PROJECT**  
 HIVE PRODUCTS

THIRD ANGLE PROJECTION



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

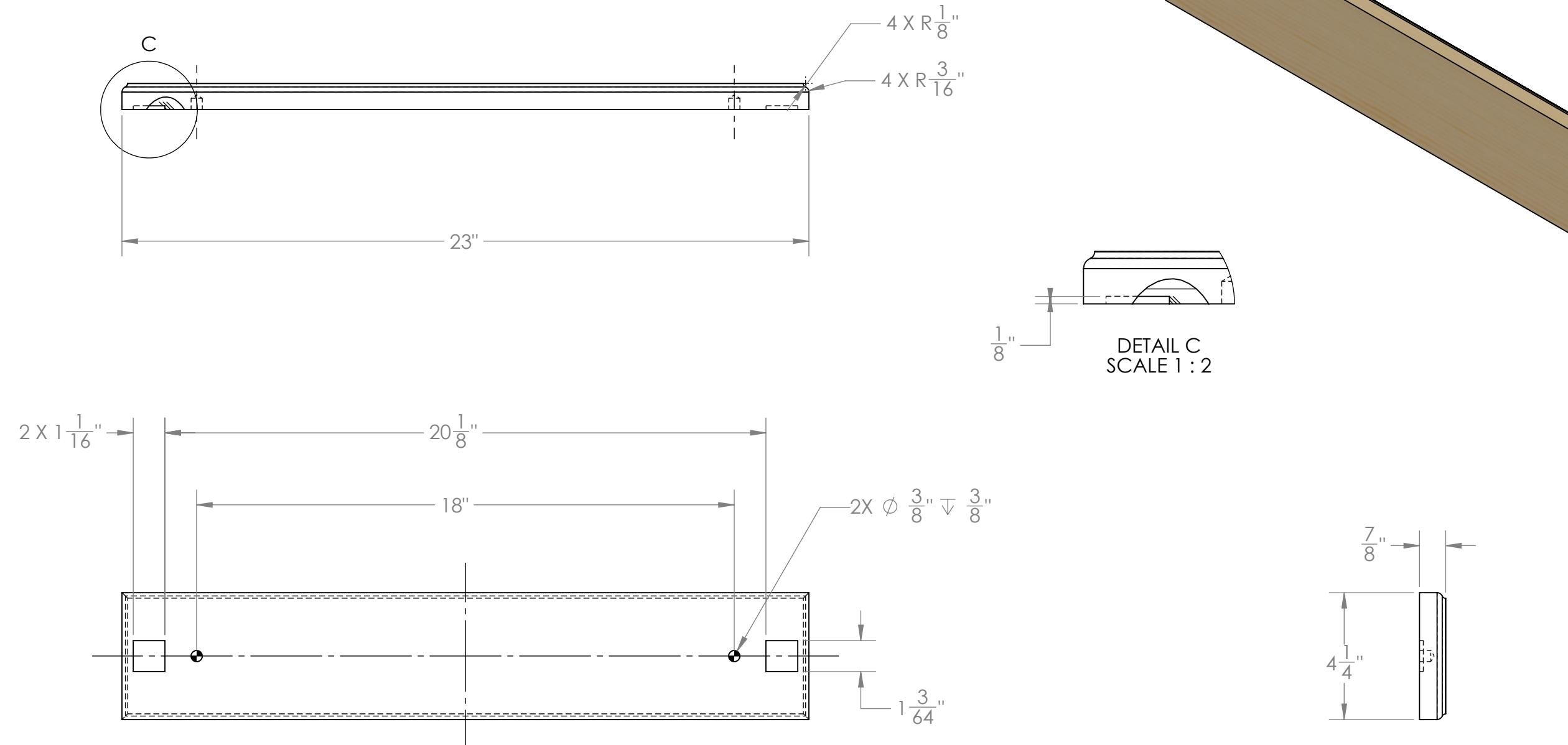


HONEY BEE RESEARCH CENTRE  
 THE UNIVERSITY OF GUELPH

**SIDE**

SIZE	DRAWING NO
<b>B</b>	10050 -
SCALE	1:4
WEIGHT	0.83 lbs
SHEET 11 OF 22	

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



2222	-	TOP PANEL
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**  
 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

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

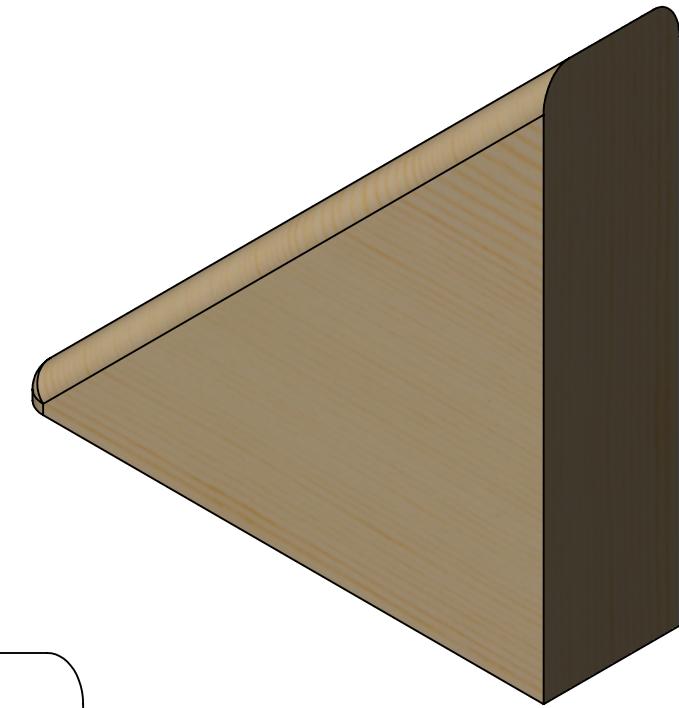
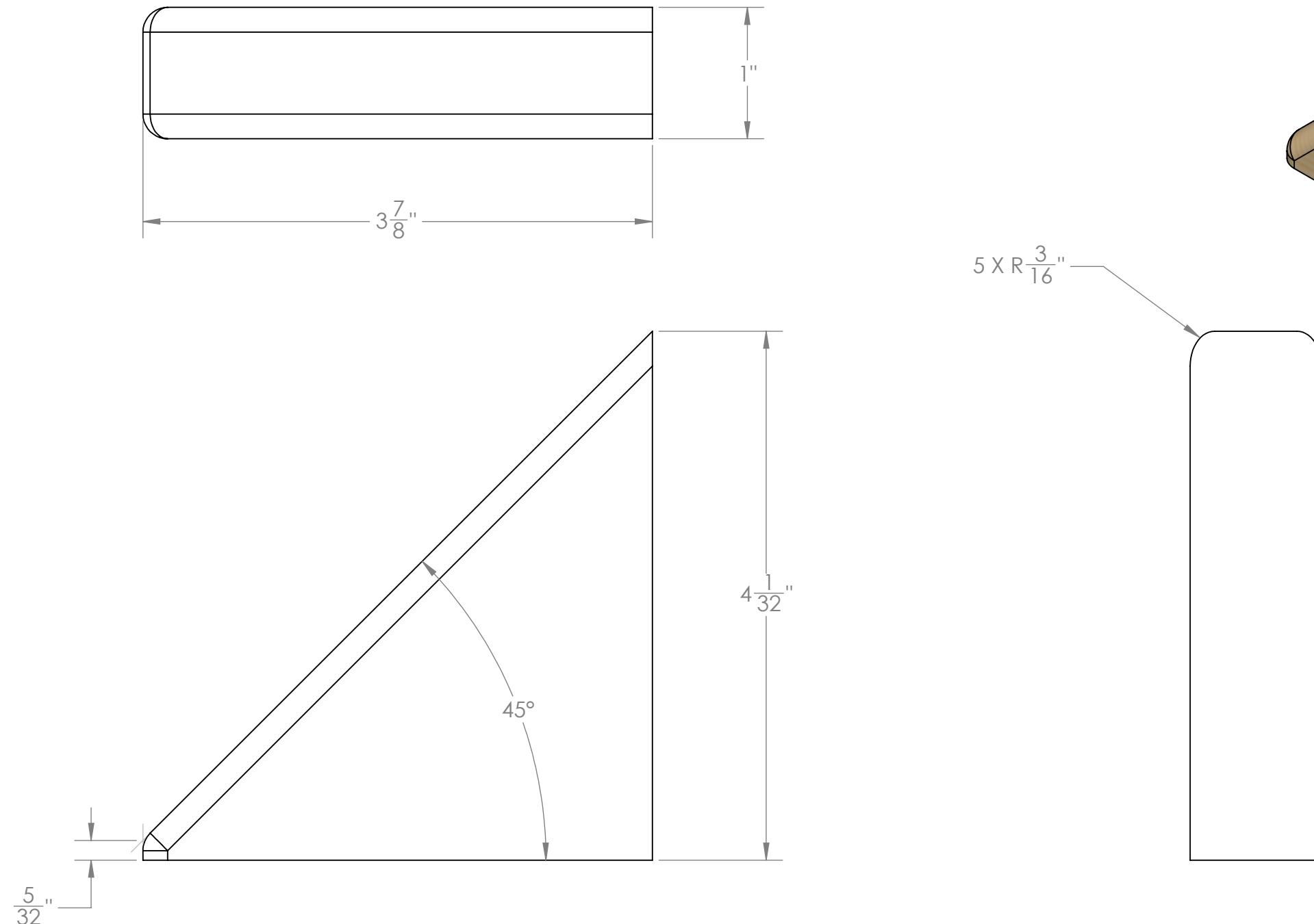


HONEY BEE RESEARCH CENTRE  
 THE UNIVERSITY OF GUELPH

## TOP PANEL

SIZE DRAWING NO  
**B** 10050 -  
 REVISION  
 1:4 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**  
 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

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



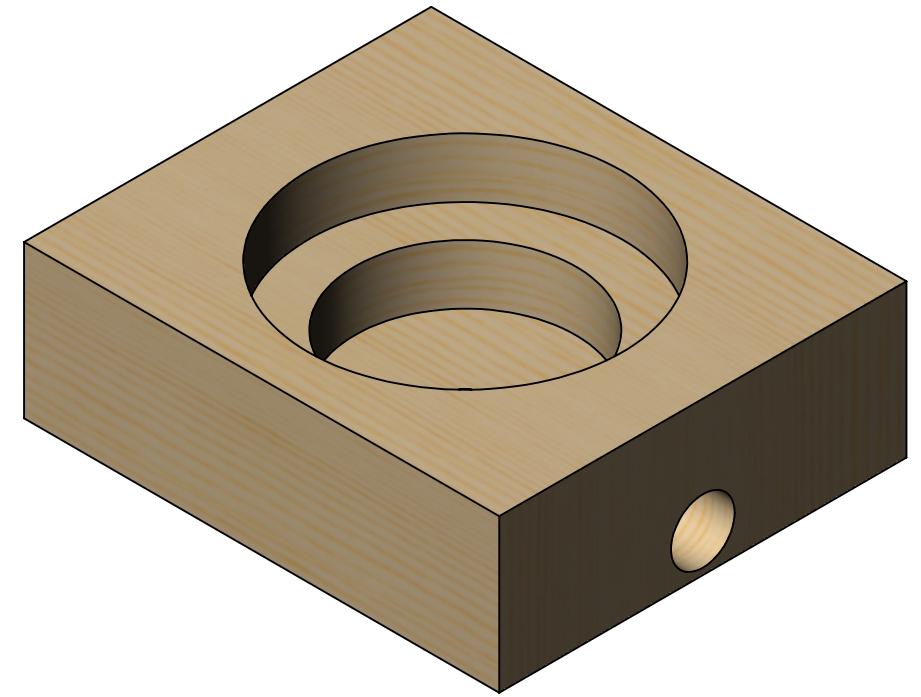
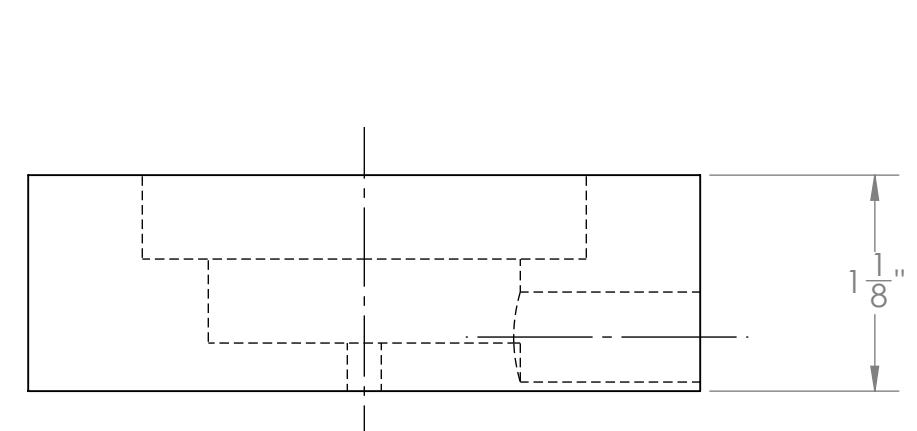
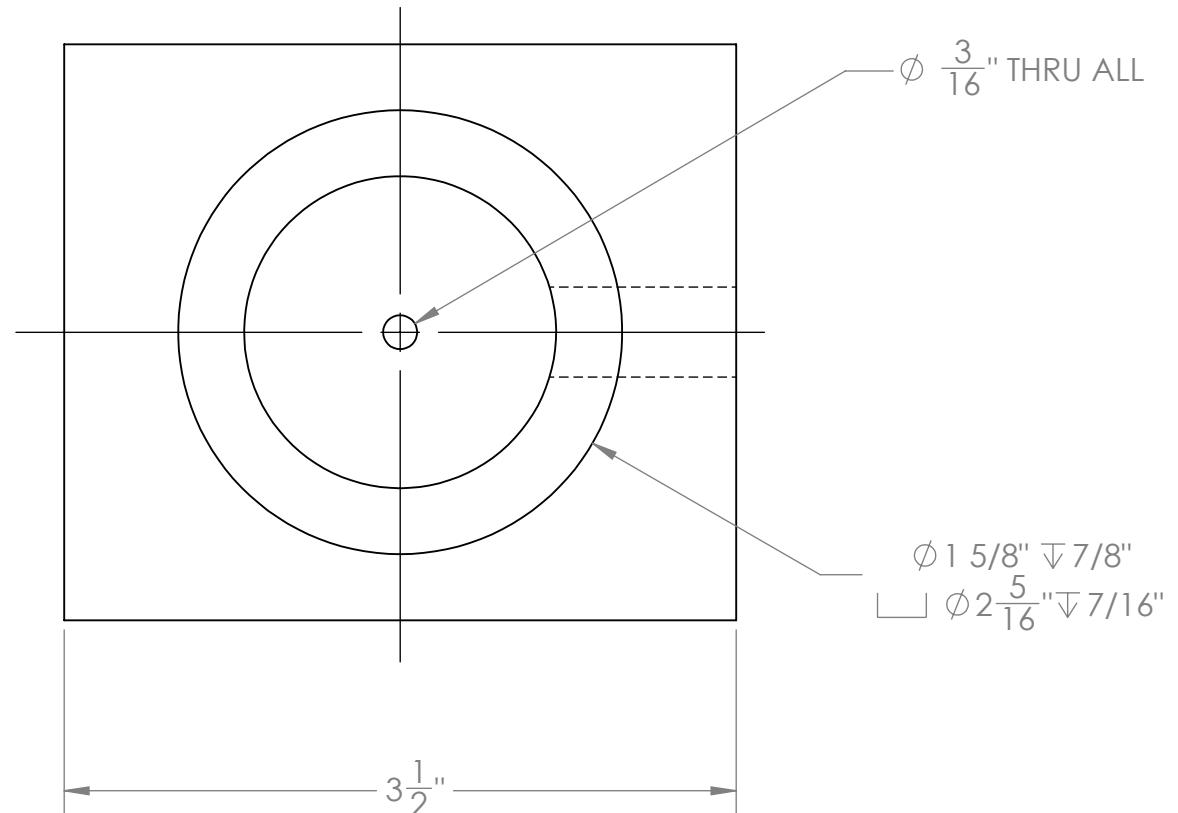
HONEY BEE RESEARCH CENTRE  
 THE UNIVERSITY OF GUELPH

## GUSSET

SIZE	DRAWING NO
<b>B</b>	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.



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**  
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

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

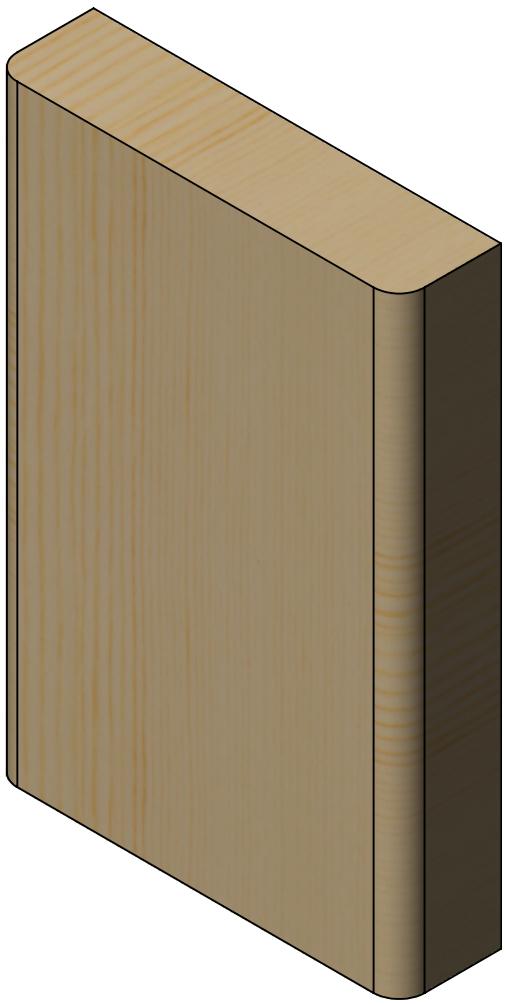
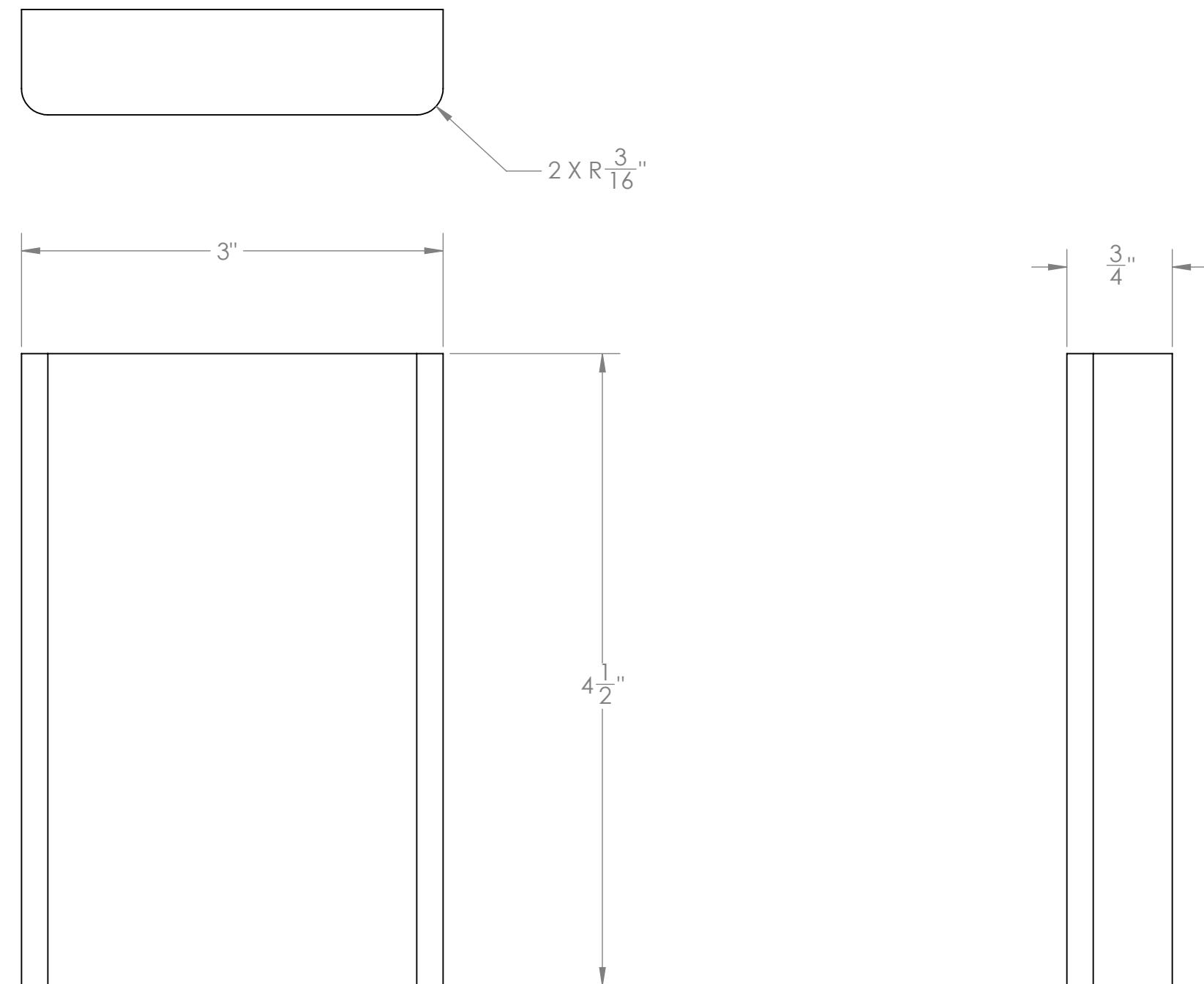
## FEEDER BASE

2224	-	FEEDER BASE
PART NUMBER	REV	DESCRIPTION

SIZE	DRAWING NO	REVISION
<b>B</b>		<b>10050</b> -
SCALE	1:1	WEIGHT 0.11 lbs

## 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

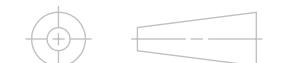
UNLESS OTHERWISE SPECIFIED  
DO NOT SCALE DRAWING  
INTERPRET DIMENSIONS AND TOLERANCES  
PER ASME Y14.5-2018  
DIMENSIONS ARE IN INCHES

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.

CUSTOMER  
BEE KEEPERS

PROJECT  
HIVE PRODUCTS

THIRD ANGLE PROJECTION



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



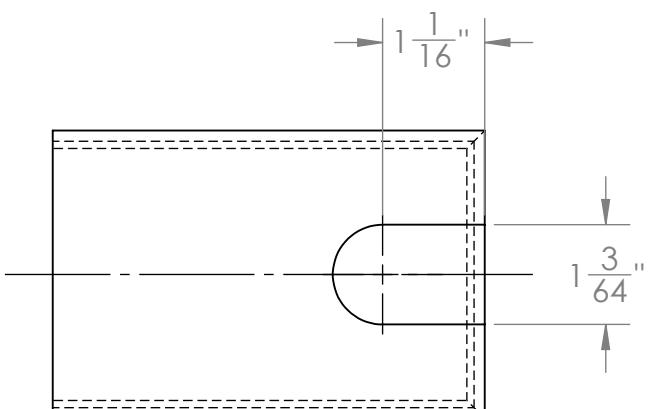
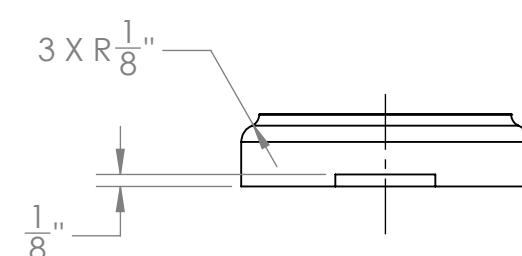
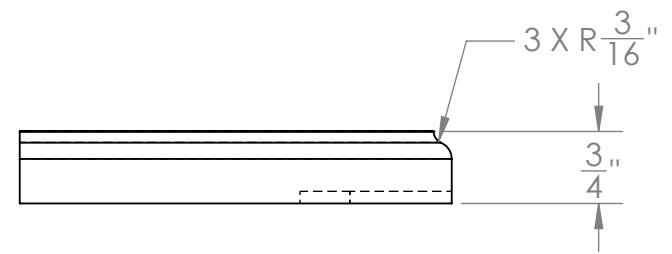
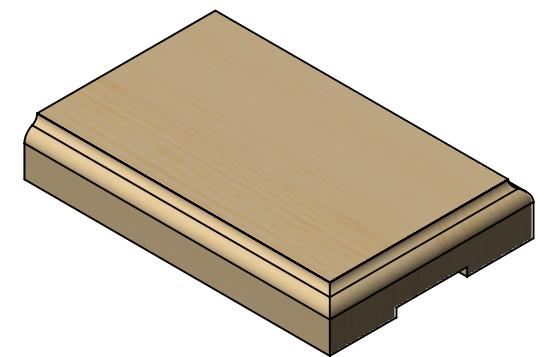
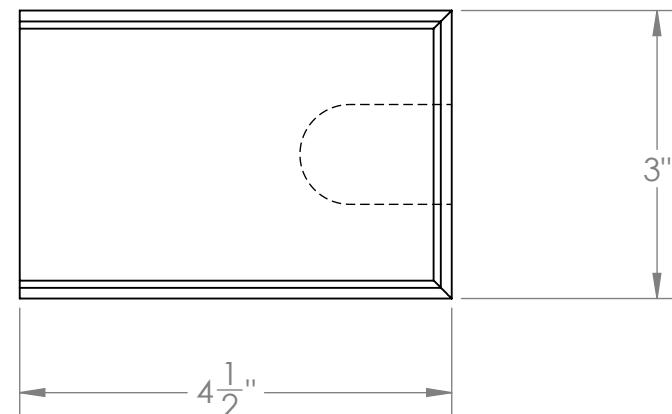
HONEY BEE RESEARCH CENTRE  
THE UNIVERSITY OF GUELPH

**FEEDER SIDE**

SIZE	DRAWING NO
<b>B</b>	10050
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.



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  
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

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

## FEEDER TOP

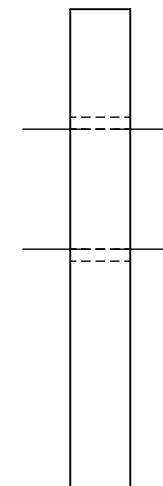
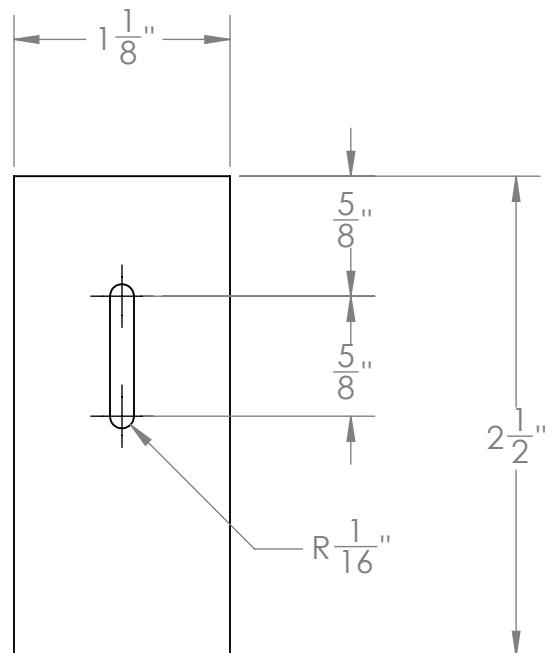
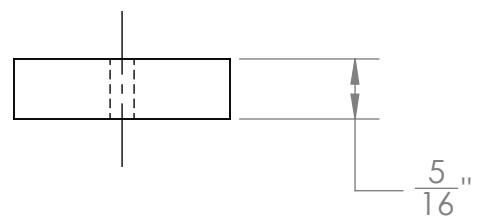
2226	-	FEEDER TOP
PART NUMBER	REV	DESCRIPTION

THIRD ANGLE PROJECTION		
------------------------	--	--

SIZE	DRAWING NO
<b>B</b>	<b>10050</b>

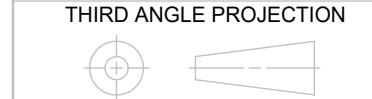
REVISION	<b>-</b>
SCALE	<b>1:2</b>
WEIGHT	<b>0.12 lbs</b>
SHEET 16 OF 22	

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  
**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

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

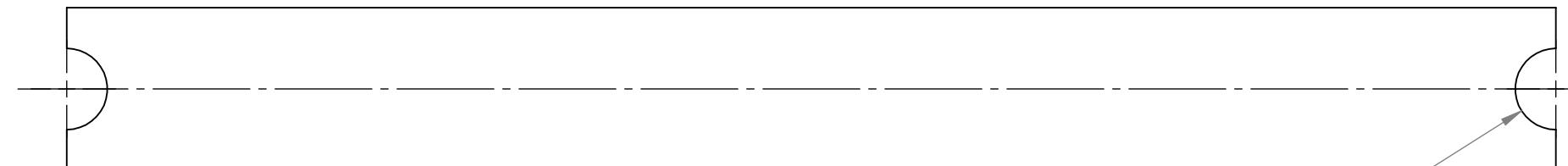


HONEY BEE RESEARCH CENTRE  
 THE UNIVERSITY OF GUELPH

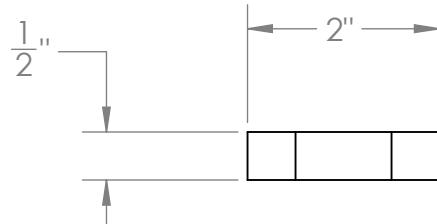
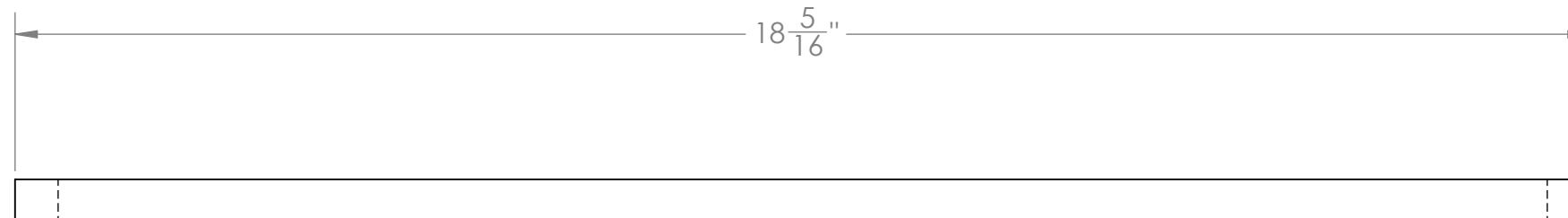
## FEEDER HOLE COVER

SIZE	DRAWING NO
<b>B</b>	10050
SCALE	1:1
WEIGHT	0.01 lbs
SHEET 17 OF 22	

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



2 X R  $\frac{1}{2}$ "



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**  
 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

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

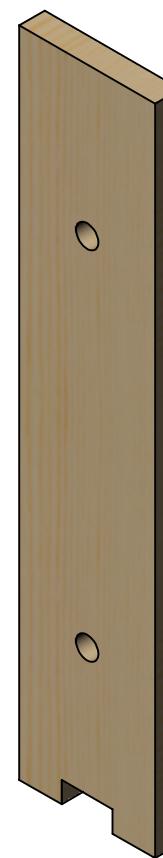
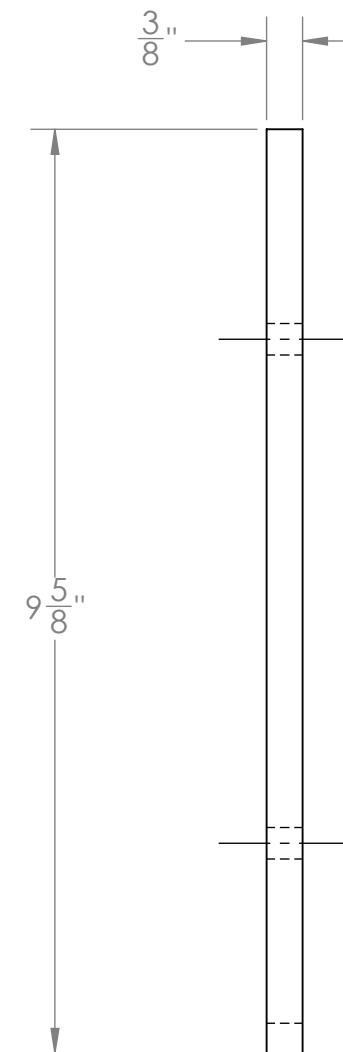
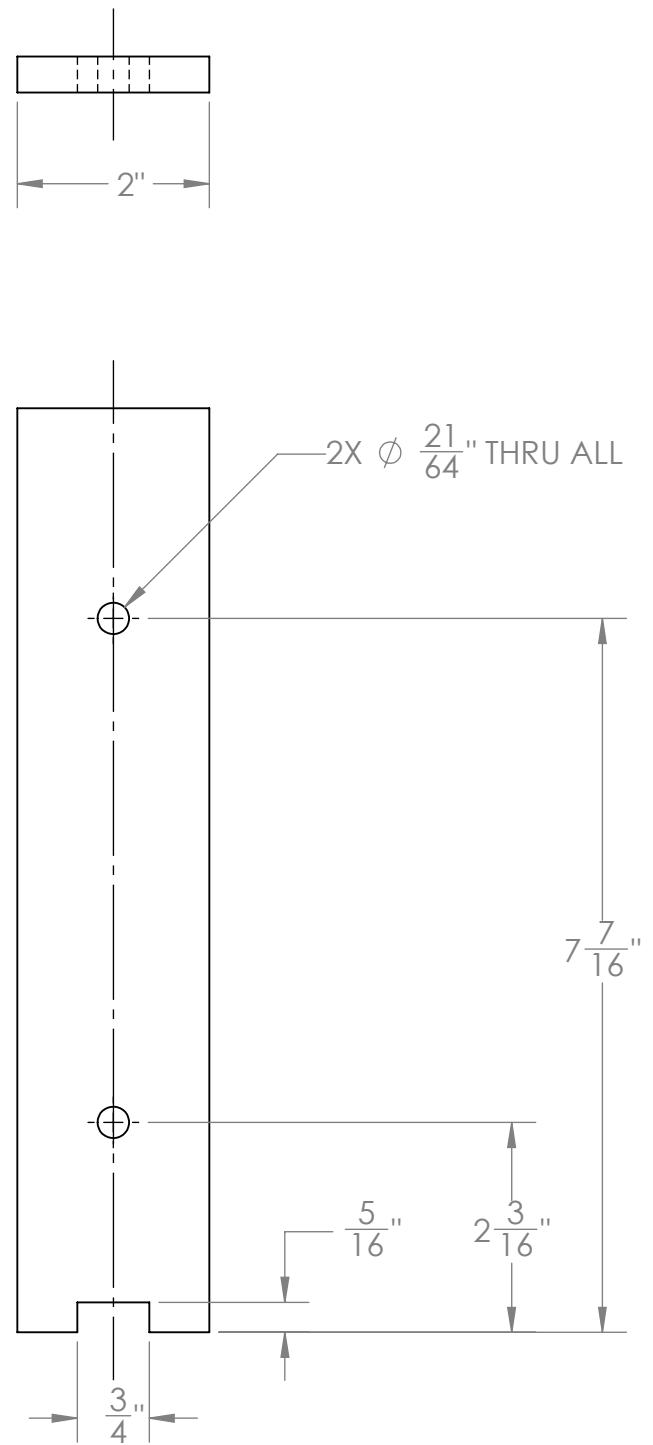


HONEY BEE RESEARCH CENTRE  
 THE UNIVERSITY OF GUELPH

## INNER BASE

SIZE DRAWING NO  
**B** 1:2  
 SCALE  
 WEIGHT 0.22 lbs  
 SHEET 18 OF 22

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



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.

CUSTOMER  
 BEE KEEPERS

PROJECT

HIVE PRODUCTS

THIRD ANGLE PROJECTION



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



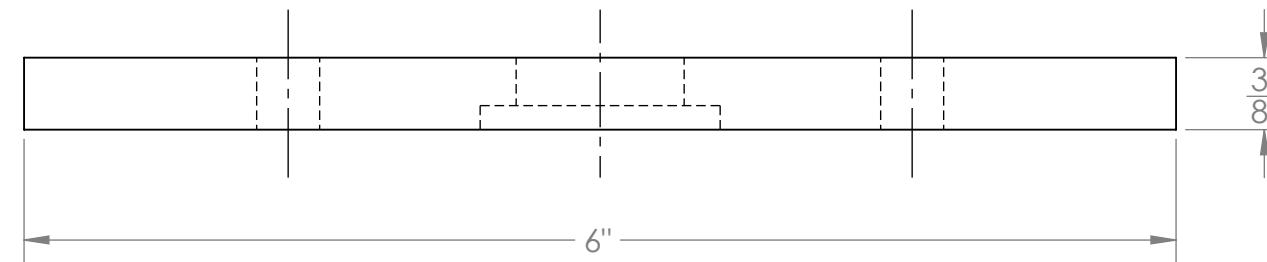
HONEY BEE RESEARCH CENTRE  
 THE UNIVERSITY OF GUELPH

**INNER LOWER SIDE**

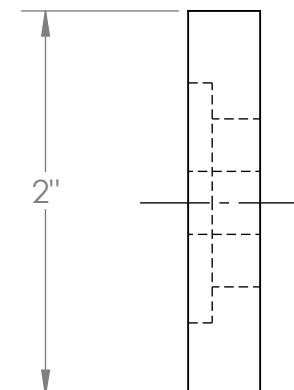
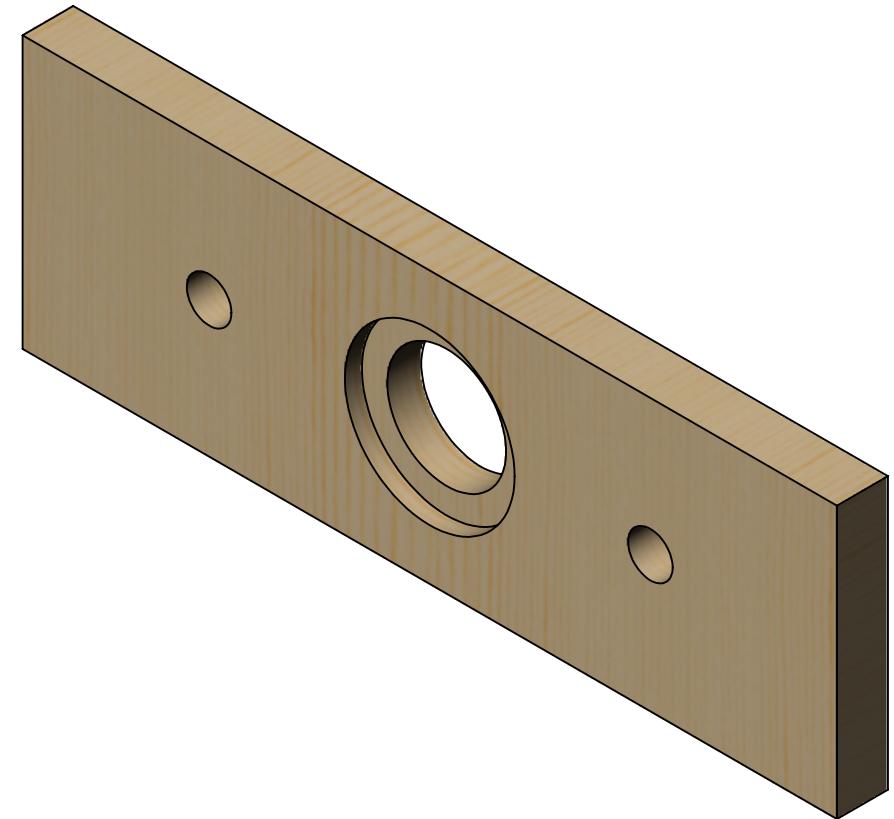
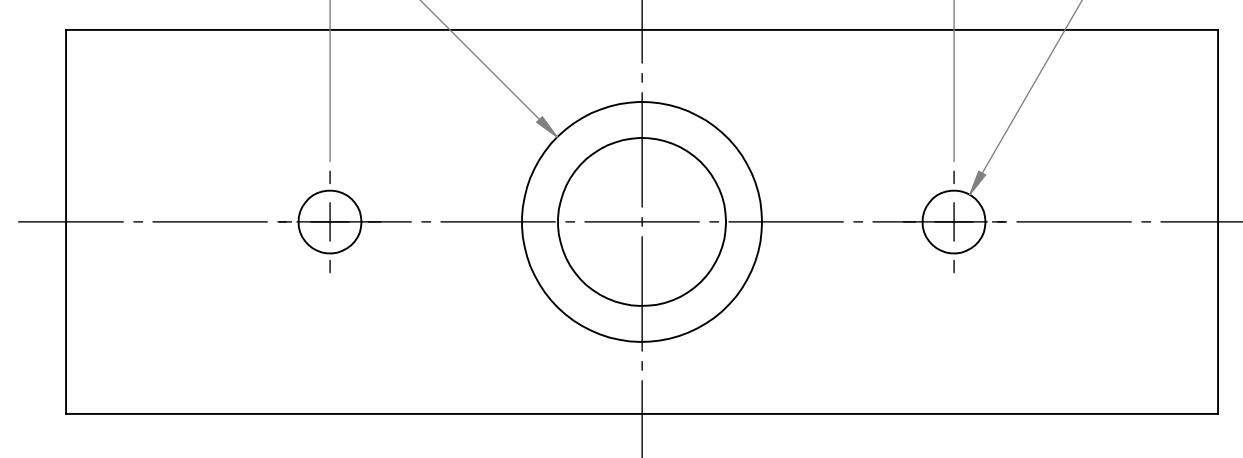
2229	-	INNER LOWER SIDE
PART NUMBER	REV	DESCRIPTION

SIZE	DRAWING NO	REVISION
<b>B</b>	1:2	-
SCALE	WEIGHT 0.09 lbs	SHEET 19 OF 22

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



$\phi 7/8$ " THRU  
 $\phi 1\frac{1}{4}$ "  $\downarrow 1/8$ "      3 $\frac{1}{4}$ "      2X  $\phi \frac{21}{64}$ " THRU ALL



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**  
 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

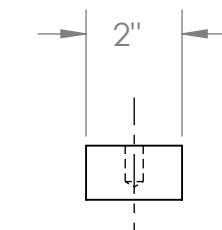
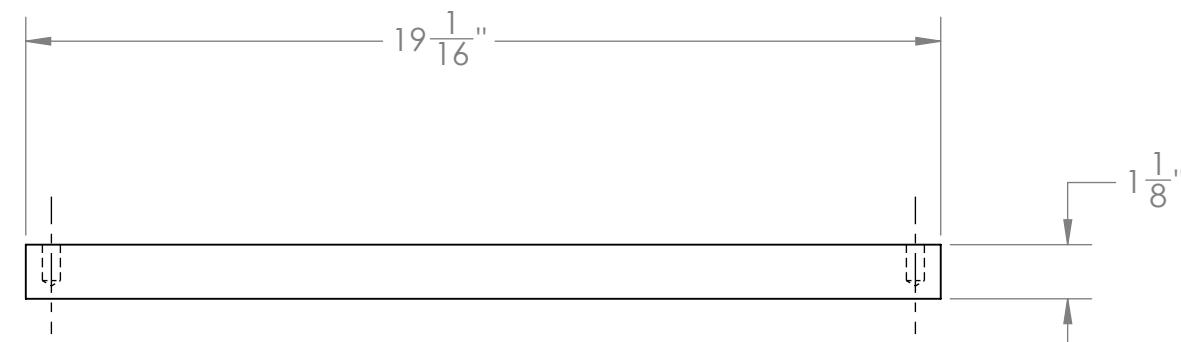
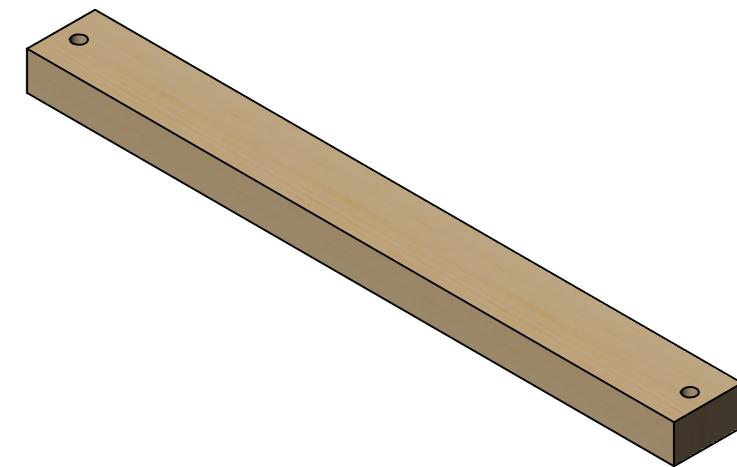
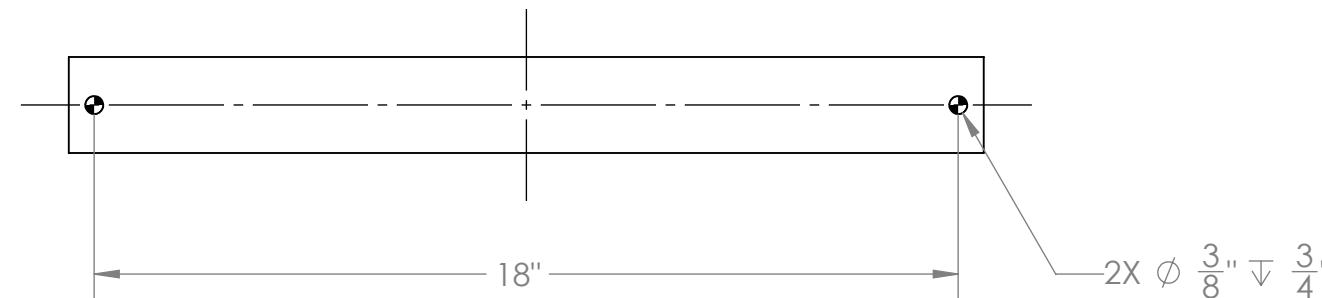
DRAWN BY  
 F. FULKERSON      DATE  
 2025-01-27  
 CHECKED BY  
 P.G. KELLY      DATE  
 2025-01-27  
 APPROVED  
 P.G. KELLY      DATE  
 2025-01-27



HONEY BEE RESEARCH CENTRE  
 THE UNIVERSITY OF GUELPH

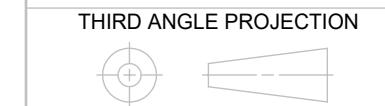
**UPPER FRAME SUPPORT**  
 SIZE      DRAWING NO  
**B**      10050      -  
 REVISION  
 SCALE      1:1      WEIGHT      0.05 lbs      SHEET 20 OF 22

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



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.

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

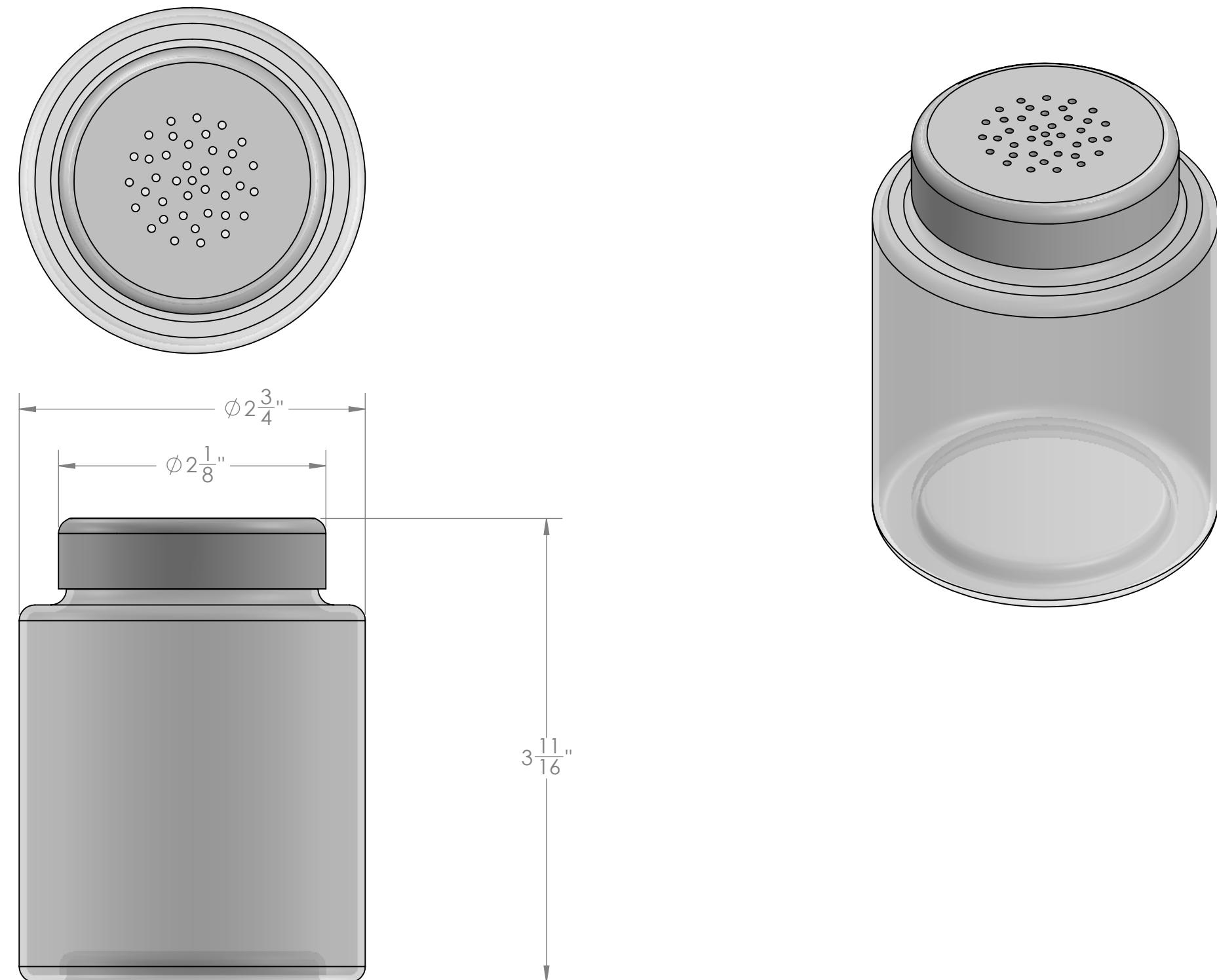


HONEY BEE RESEARCH CENTRE  
 THE UNIVERSITY OF GUELPH

**INNER TOP**

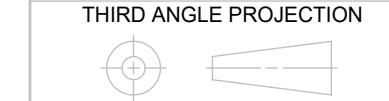
SIZE	DRAWING NO
<b>B</b>	10050
SCALE	1:4
WEIGHT	0.52 lbs
SHEET 21 OF 22	

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



10053	REV	SYRUP BOTTLE
PART NUMBER		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  
**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

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

## SYRUP BOTTLE

SIZE	DRAWING NO
<b>B</b>	10050
SCALE	1:1
WEIGHT	0.101 lbs
SHEET 22 OF 22	