

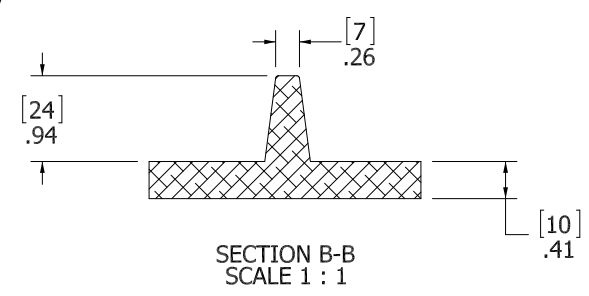
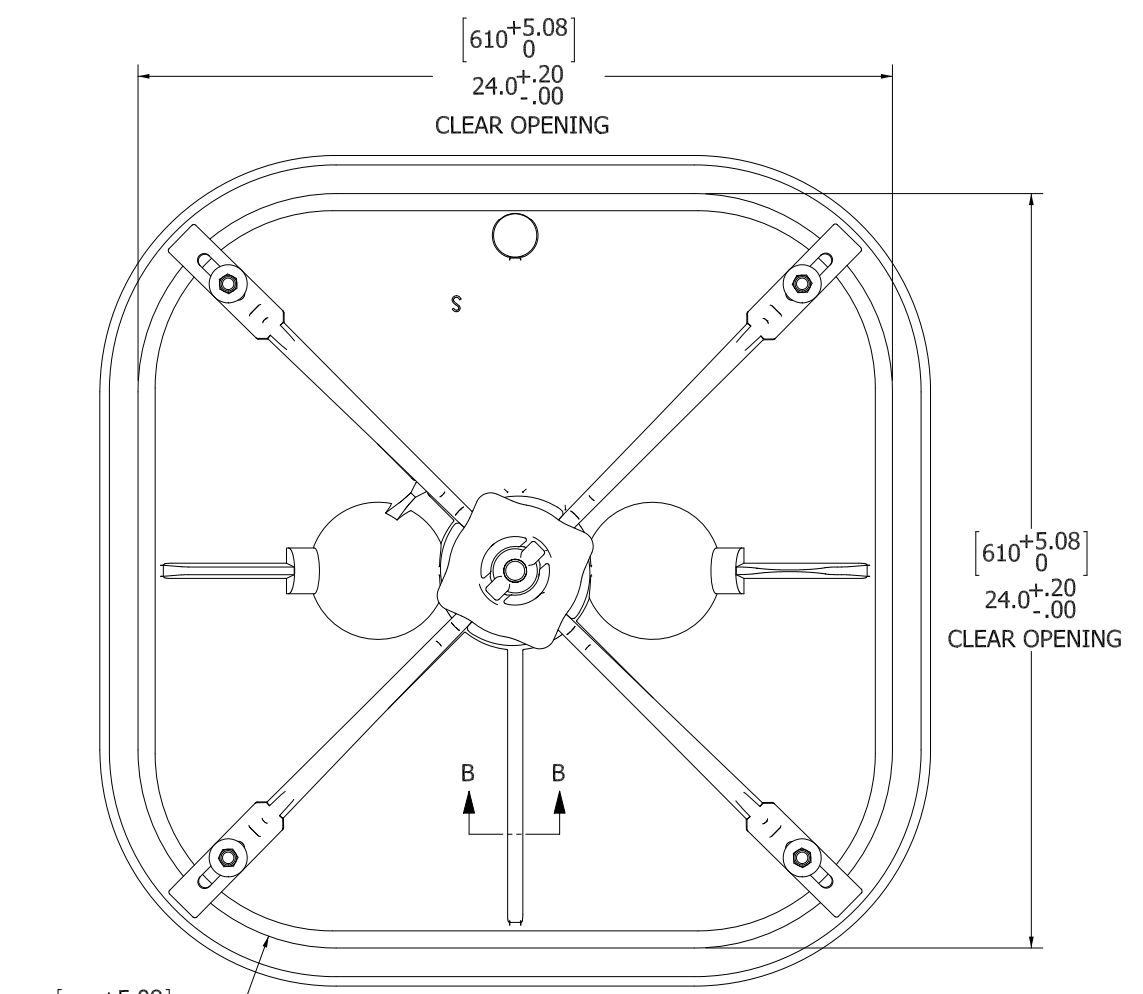
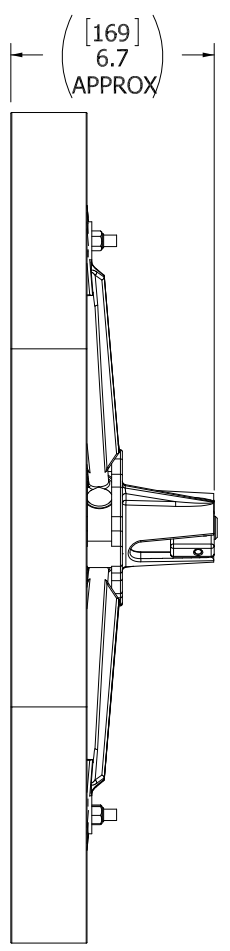
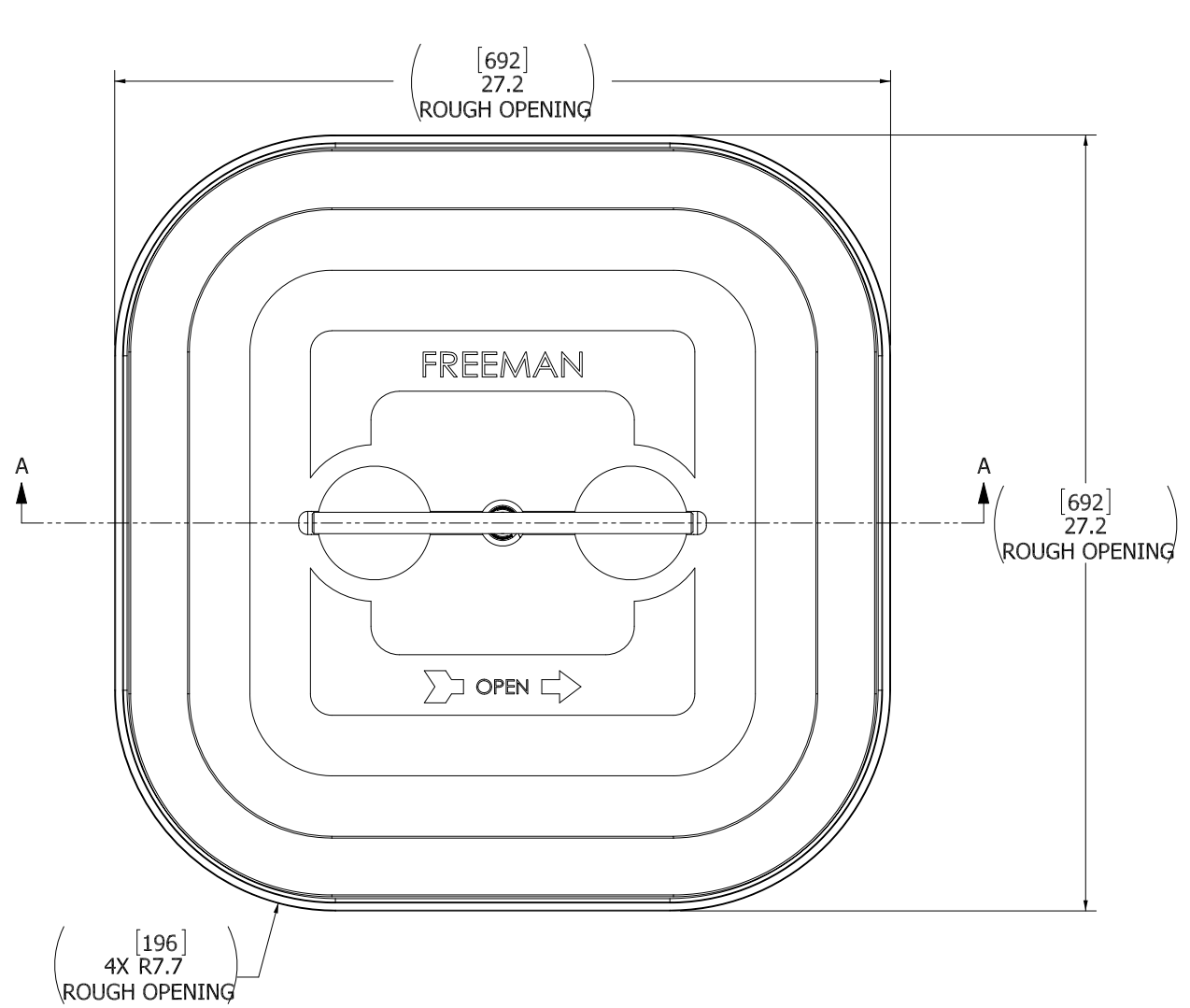
8 7 6 5 4 3 2 1

D

C

B

A



10. FOR SPECIFIC INFORMATION CONTACT SALES.
9. COMPLETE ASSEMBLY WEIGHT W/ DECK RING, 73.7LBS/ 33.4K.
8. DOGGING PRESSURE FULLY ADJUSTABLE.
7. HANDLE POSITION TOPSIDE INDICATES WHETHER DOGGING MECHANISM IS IN OPEN OR CLOSED POSITION.
6. ALUMINUM ALLOY MECHANISM SHOWN.
5. FLUSH, WATERTIGHT CONSTRUCTION.
4. INTEGRAL TOPSIDE "T" HANDLE STANDARD, OTHER TOPSIDE ACTUATION AVAILABLE.
3. STAINLESS STEEL COAMING FOR WELD IN DECK APPLICATIONS.
2. QUICK-ACTING, MECHANISM ENGAGES OR DISENGAGES IN QUARTER-TURN OF CENTER SPINDLE.
1. 24.7 X 24.7 CLEAR OPENING, ALL DIMENSIONS SHOWN SUBJECT TO CASTING VARIATION AND ARE REFERENCE ONLY.

NOTES: UNLESS OTHERWISE SPECIFIED.

CUSTOMER APPROVAL

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

IMPORTANT! THIS DRAWING SUPERSEDES ALL OTHER DOCUMENTS. By signing this approval you accept and agree that the dimensions and details shown are correct and properly fit your application, regardless of any differences between this drawing and any contract specifications. Should you see any errors in the drawing, or have any questions, please contact your Freeman Marine sales engineer for clarification.

|                                                                                                                          |                    |
|--------------------------------------------------------------------------------------------------------------------------|--------------------|
| SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.                                                                         |                    |
| PROJECTION                                                                                                               |                    |
| UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES FOR ROUGH AND CLEAR OPENINGS: .125 INCH. ALL OTHERS ARE: |                    |
| .X                                                                                                                       | .XX .XXX ANGLES    |
| ±.1                                                                                                                      | ±.03 ±.010 ±2°     |
| DO NOT SCALE DRAWING                                                                                                     |                    |
| REV.                                                                                                                     | DESCRIPTION        |
| A                                                                                                                        | PRODUCTION RELEASE |
|                                                                                                                          | DATE: 29MAY13      |
|                                                                                                                          | DRAWN: ZIC         |

**FREEMAN MARINE EQUIPMENT, INC.**

28336 HUNTER CREEK ROAD  
GOLD BEACH, OR 97444 U.S.A.  
PHONE: 541-247-7078 FAX: 541-247-2114  
www.freemanmarine.com

CLIENT: FREEMAN MARINE

TITLE: HATCH, 2424, (K), SQUARE

SIZE: D

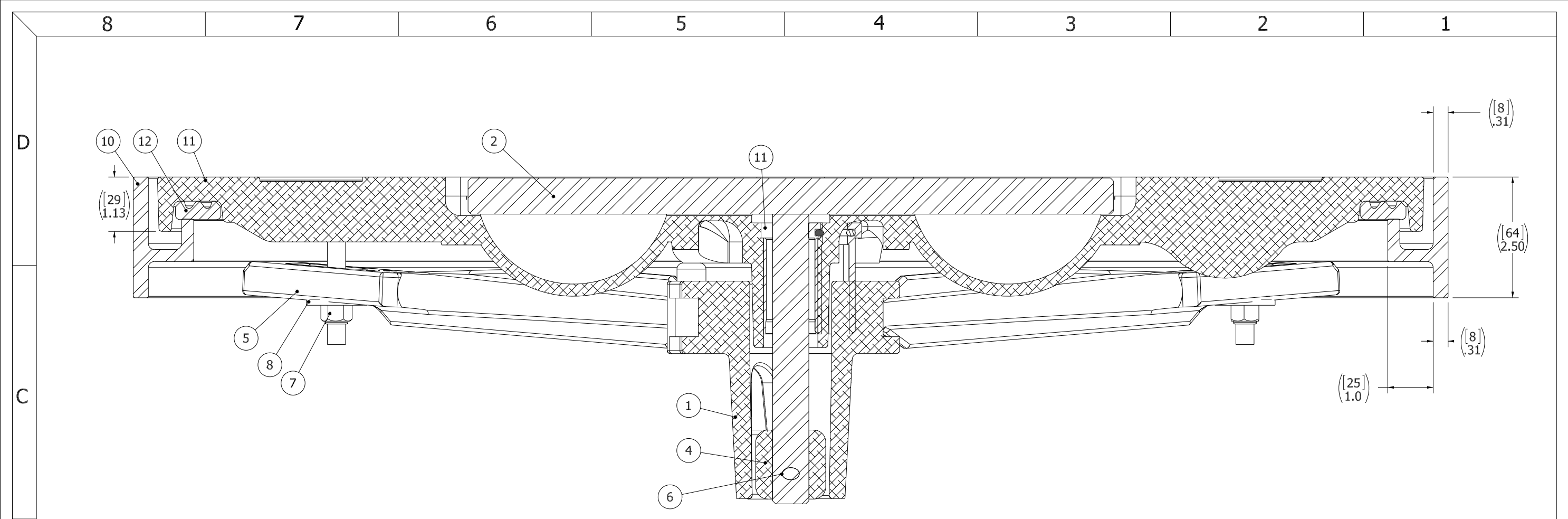
CAGE CODE: 64747

DRAWING NUMBER: 2424-0005

SCALE: 1:4

ACT. WT.

SHEET 1 OF 3



SECTION A-A  
SCALE 1 : 1

| ITEM NO. | QTY. | PART NUMBER | DESCRIPTION                        | MATERIAL             |
|----------|------|-------------|------------------------------------|----------------------|
| 12       | 1    | 9885-2002   | GASKET, 2424 (7.33' OF 0631-9885)  | NEOPRENE             |
| 11       | 1    | 2424-3001   | COVER, 2424 AL, FINISHED CASTING   | ALUMINUM, A356       |
| 10       | 1    | 2424-1005   | RING 2424 K                        | STAINLESS STEEL 316  |
| 9        | 4    | 0413-2005   | WASHER, .406 X 1.250 X .062 NYLON  | NYLON                |
| 8        | 4    | 0411-2033   | WASHER .406 X 1.25 X .125IN SS 316 | SS 316/316L          |
| 7        | 4    | 0411-2032   | NUT .375IN-16 SS 316 NYLOCK        | SS 316/316L          |
| 6        | 1    | 0411-2004   | PIN KNURLED .25 X 2.25IN SS 316    | SS 316/316L          |
| 5        | 4    | 0211-2013   | DOG, LOCKING ARM                   | ALUMINUM, 535.2-F    |
| 4        | 1    | 0112-2001   | ACTUATOR, AL                       | ALUMINUM, 535        |
| 3        | 1    | 0031-2058   | BUSHING ASSY, W/O-RING, NO SLEEVE  | ACETRON/RUBBER       |
| 2        | 1    | 0021-2005   | HANDLE, S/S, ROUND BAR             | STAINLESS STEEL, 316 |
| 1        | 1    | 0011-2002   | HUB, AL, 4 HOLE                    | ALUMINUM, 535.2-F    |

- 3. FINISH: 125 RMS MAX.
- 2. BREAK SHARP EDGES AND DEBURR.
- 1. MATERIAL: REF. S/A - B.O.M.

NOTES: UNLESS OTHERWISE SPECIFIED.

CUSTOMER APPROVAL

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

IMPORTANT! THIS DRAWING SUPERSEDES ALL OTHER DOCUMENTS. By signing this approval you accept and agree that the dimensions and details shown are correct and properly fit your application, regardless of any differences between this drawing and any contract specifications. Should you see any errors in the drawing, or have any questions, please contact your Freeman Marine sales engineer for clarification.

| REV. | DESCRIPTION        | DATE    | DRAWN |
|------|--------------------|---------|-------|
| A    | PRODUCTION RELEASE | 29MAY13 | ZIC   |

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

PROJECTION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES FOR ROUGH AND CLEAR OPENINGS: .125 INCH. ALL OTHERS ARE:

|     |      |       |        |
|-----|------|-------|--------|
| .X  | .XX  | .XXX  | ANGLES |
| ±.1 | ±.03 | ±.010 | ±2°    |

DO NOT SCALE DRAWING

**FREEMAN MARINE EQUIPMENT, INC.**

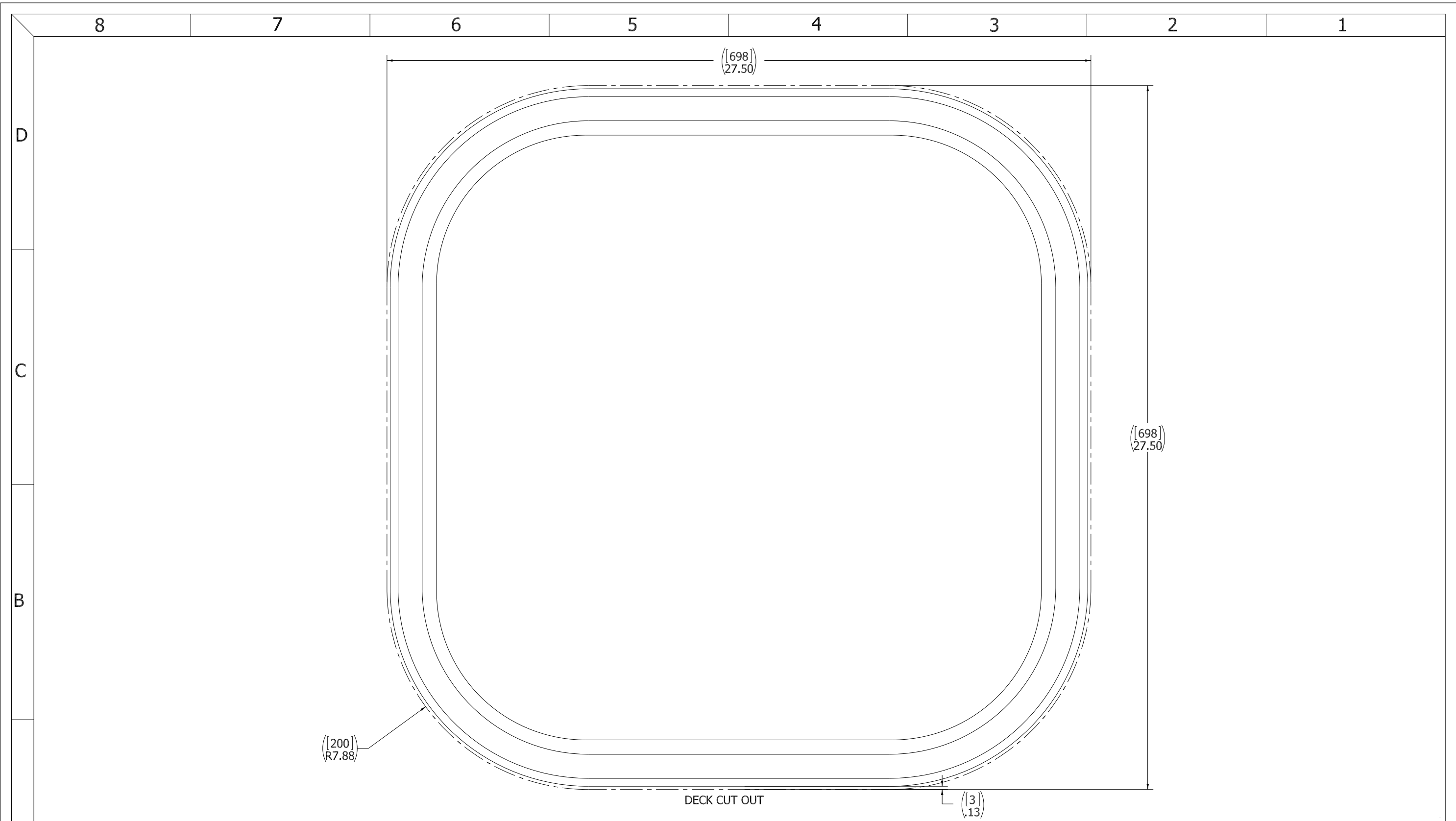
28336 HUNTER CREEK ROAD  
GOLD BEACH, OR 97444 U.S.A.  
PHONE: 541-247-7078 FAX: 541-247-2114  
www.freemanmarine.com

CLIENT: **FREEMAN MARINE**

TITLE: **HATCH, 2424, ( K ), SQUARE**

|      |           |                |      |
|------|-----------|----------------|------|
| SIZE | CAGE CODE | DRAWING NUMBER | REV. |
| D    | 64747     | 2424-0005      | A    |

SCALE: 1:4    CALC. WT.    ACT. WT.    SHEET 2 OF 3



- 3. FINISH: 125 RMS MAX.
- 2. BREAK SHARP EDGES AND DEBURR.
- 1. MATERIAL: REF. S/A - B.O.M.

NOTES: UNLESS OTHERWISE SPECIFIED.

CUSTOMER APPROVAL

Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_

IMPORTANT! THIS DRAWING SUPERSEDES ALL OTHER DOCUMENTS. By signing this approval you accept and agree that the dimensions and details shown are correct and properly fit your application, regardless of any differences between this drawing and any contract specifications. Should you see any errors in the drawing, or have any questions, please contact your Freeman Marine sales engineer for clarification.

| REV. | DESCRIPTION        | DATE    | DRAWN |
|------|--------------------|---------|-------|
| A    | PRODUCTION RELEASE | 29MAY13 | ZIC   |

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

PROJECTION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES FOR ROUGH AND CLEAR OPENINGS: .125 INCH. ALL OTHERS ARE:  
 .X .XX .XXX ANGLES  
 ±.1 ±.03 ±.010 ±2°

DO NOT SCALE DRAWING

|                                                                                                                                                                                                                                                                                                                                                                     |           |                                                                                                                          |                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------------------------------------------------------------------------------------------------------------------------|----------------|
| <b>FREEMAN MARINE EQUIPMENT, INC.</b><br><small>CONFIDENTIAL PROPERTY OF FREEMAN MARINE EQUIPMENT, INC. UNLESS OTHERWISE SPECIFIED. ALL RIGHTS RESERVED. THE REPRODUCTION OR DISTRIBUTION OF THIS DRAWING WITHOUT THE WRITTEN PERMISSION OF FREEMAN MARINE EQUIPMENT, INC. IS STRICTLY PROHIBITED. ALL RIGHTS RESERVED 2012, FREEMAN MARINE EQUIPMENT, INC.</small> |           | 28336 HUNTER CREEK ROAD<br>GOLD BEACH, OR 97444 U.S.A.<br>PHONE: 541-247-7078 FAX: 541-247-2114<br>www.freemanmarine.com |                |
|                                                                                                                                                                                                                                                                                                                                                                     |           | CLIENT:                                                                                                                  | FREEMAN MARINE |
| DRAWN: Z. CARPENTER                                                                                                                                                                                                                                                                                                                                                 |           | DATE:                                                                                                                    | 29MAY13        |
| CHECKED: D. YOES                                                                                                                                                                                                                                                                                                                                                    |           | DATE:                                                                                                                    | 29MAY13        |
| ENGR:                                                                                                                                                                                                                                                                                                                                                               |           | DATE:                                                                                                                    |                |
| DESIGN ACTIVITY:                                                                                                                                                                                                                                                                                                                                                    |           | DATE:                                                                                                                    |                |
| CONTRACT NO.:                                                                                                                                                                                                                                                                                                                                                       |           |                                                                                                                          |                |
| SIZE                                                                                                                                                                                                                                                                                                                                                                | CAGE CODE | DRAWING NUMBER                                                                                                           | REV.           |
| D                                                                                                                                                                                                                                                                                                                                                                   | 64747     | 2424-0005                                                                                                                | A              |
| SCALE: 1:1.75                                                                                                                                                                                                                                                                                                                                                       | CALC. WT. | ACT. WT.                                                                                                                 | SHEET 3 OF 3   |