## Carlson Testing, Inc.

Bend Office Geotechnical Office Eugene Office Salem Office Tigard Office (541) 330-9155 (503) 601-8250 (541) 345-0289 (503) 589-1252 (503) 684-3460

June 6, 2019 T1805260

Permit No.

Not Applicable

PO No.

Verbal DB 9.17.18

FIELD INSPECTION REPORT

**DATES COVERED:** 

October 16 – 18, 2018

PROJECT:

**EVERFAB - SHOWER BAR TESTING** 

ADDRESS:

X

INSPECTOR: Sam Whatley

10/19 - 18/2018 - Load Test

CTI performed load testing on (2) two EverFab units to comply with the 2010 ADA Standards for Accessible Design subsections 609.8 Structural Strength of Grab Bars and 610.4 Structural Strength of Seat.

### Standards to be tested:

**609.8 Structural Strength of Grab Bars.** Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of **250 pounds** (1112 N) is applied at any point on the grab bar, fastener, mounting device, or supporting structure.

**610.4 Structural Strength of Seat.** Allowable stresses shall not be exceeded for materials used when a vertical or horizontal force of **250 pounds** (1112 N) is applied at any point on the seat, fastener, mounting device, or supporting structure.

### Results of test:

| 609.8 Structural Strength of Grab Bars | Х | PASS | FAIL |
|--|---|------|------|
| 610.4 Structural Strength of Seat      | Х | PASS | FAIL |

CTI performed load testing on the grab bars as requested on (2) two showers submitted to our lab on October 10, 2018. CTI tested the factory-installed grab bars & seat on the ADA Compliant Shower (S3839A) and factory-installed grab bars on the ADA Compliant Tub Shower (TS6032A). A simulated field-installed grab bar was also tested on the ADA Compliant Tub Shower (TS6032A).

The scope of the test was as follows:

### Factory-Installed Grab Bars & Seat (\$3839A)

#### Horizontal L-Shaped bar with 3 anchor points

- 1. Horizontal pull to 250 lbs. at midpoint
- 2. Vertical pull to 250 lbs. at midpoint
- 3. Horizontal pull to 500 lbs. at midpoint (after successful test at 250 lbs.)
- 4. Vertical pull to 500 lbs. at midpoint (after successful test at 250 lbs.)
- 5. Horizontal pull to failure at midpoint

#### **Folding seat**

6. First load to 250 lbs. then up to 1000 lbs. at 250 lb. increments

### Factory-Installed Grab Bars (TS6032A)

### Horizontal bar with 2 anchor points

- 1. Horizontal pull to 250 lbs. at midpoint
- 2. Vertical pull to 250 lbs. at midpoint

### Field-Installed Grab Bars (TS6032A)

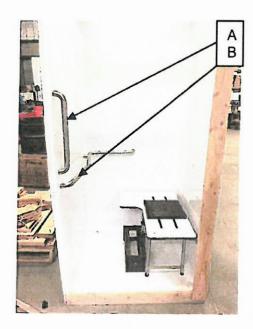
### Horizontal bar with 2 anchor points

- 1. Horizontal pull to 250 lbs. at midpoint
- 2. Vertical pull to 250 lbs. at midpoint

Specimen fabrication was by EverFab in general accordance with the attached shop drawings. Tables of results are presented and locations are described in attached photographs.

### ADA Compliant Shower (\$3839A)

Factory-Installed Grab Bars & Seat



|          |              | <b>Grab Bars</b> |            |           |
|----------|--------------|------------------|------------|-----------|
| Location | Bar Type     | Pull Direction   | Load (lb.) | Pass/Fail |
| Α        | Vertical bar | Horizontal       | 250        | Pass      |
| Α        | Vertical bar | Horizontal       | 500        | Pass      |
| Α        | Vertical bar | Vertical         | 250        | Pass      |
| Α        | Vertical bar | Vertical         | 500        | Pass      |
| В        | L-Shaped bar | Horizontal       | 250        | Pass      |
| В        | L-Shaped bar | Horizontal       | 500        | Pass      |
| В        | L-Shaped bar | Vertical         | 250        | Pass      |
| В        | L-Shaped bar | Vertical         | 500        | Pass      |

The L-Shaped bar was subjected to horizontal pull at location B to determine maximum load before failure:

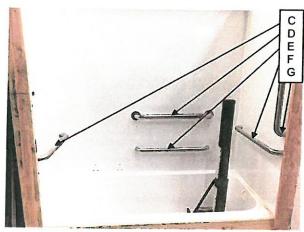
| <b>Maximum Load</b> | at Location | <b>B</b> Before Failure |
|---------------------|-------------|-------------------------|
|                     | 1505        |                         |

| Foldin     | g Seat    |
|------------|-----------|
| Load (lb.) | Pass/Fail |
| 250        | Pass      |
| 500        | Pass      |
| 750        | Pass      |
| 1000       | Pass      |

Page 4 of 5

## **ADA Compliant Tub Shower (TS6032A)**

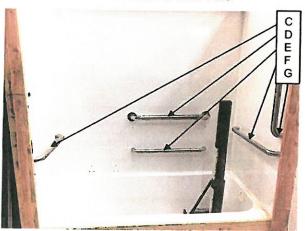
### **Factory-Installed Grab Bars**



|          | Fa             | ctory-Installed Grab Ba | rs         |          |
|----------|----------------|-------------------------|------------|----------|
| Location | Bar Type       | Pull Direction          | Load (lb.) | Pass/Fai |
| С        | Horizontal bar | Horizontal              | 250        | Pass     |
| С        | Horizontal bar | Vertical                | 250        | Pass     |
| E        | Horizontal bar | Horizontal              | 250        | Pass     |
| E        | Horizontal bar | Vertical                | 250        | Pass     |
| F        | Horizontal bar | Horizontal              | 250        | Pass     |
| F        | Horizontal bar | Vertical                | 250        | Pass     |
| G        | Vertical bar   | Horizontal              | 250        | NR       |
| G        | Vertical bar   | Vertical                | 250        | Pass     |

NR = Not Reported (limited space for indicator)

## ADA Compliant Tub Shower (TS6032A) Field-Installed Grab Bars



|          | F              | ield-Installed Grab Bar |            |           |
|----------|----------------|-------------------------|------------|-----------|
| Location | Bar Type       | Pull Direction          | Load (lb.) | Pass/Fail |
| D        | Horizontal bar | Horizontal              | 250        | Pass      |
| D        | Horizontal bar | Vertical                | 250        | Pass      |

<sup>\* &</sup>quot;Simulated field-installation was done by securing grab bar from shower interior using type 'A' pan heads screws".

Our reports pertain to the material tested/inspected only. Information contained herein is not to be reproduced, except in full, without prior authorization from this office. Under all circumstances, the information contained in this report is provided subject to all terms and conditions of CTI's General Conditions in effect at the time this report is prepared. No party other than those to whom CTI has distributed this report shall be entitled to use or rely upon the information contained in this document.

If there are any questions regarding this matter, please do not hesitate to contact this office.

Respectfully submitted, CARLSON TESTING, INC.

Jay A. Hathaway Project Manager

SW/ck

Attachment: Photographs and Shop Drawings

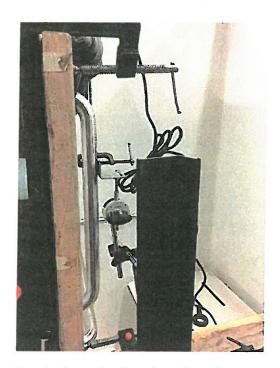
cc: Everfab - Daniel Bryan

DAN@EVERFABBATH.COM

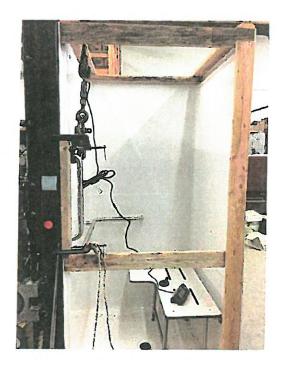
# ADA Compliant Shower (S3839A) Factory-Installed Grab Bars & Seat



Horizontal test for bar A.



Vertical test for bar A with indicator.



Vertical test for bar A.

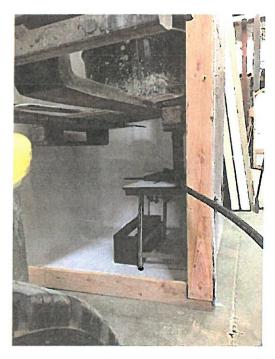


Vertical test for bar B.

## ADA Compliant Shower (S3839A) Factory-Installed Grab Bars & Seat



Horizontal test for bar B.



Load test for folding seat with fork lift as counter weight.



Load test for folding seat with 40 lb. steel plate.



Load test for folding seat with fork lift as counter weight.

## ADA Compliant Shower (S3839A) Factory-Installed Grab Bars & Seat



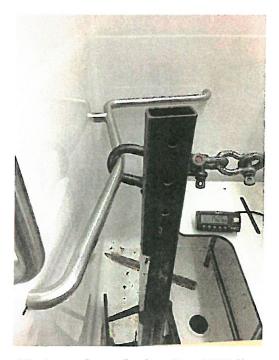
Horizontal test for bar B at 820 lbs.



Horizontal test for bar B at 998 lbs.



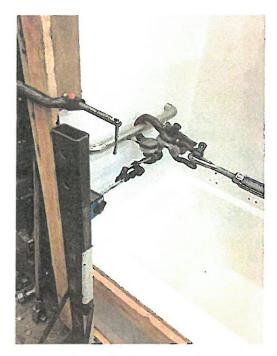
Horizontal test for bar B at 1315 lbs.



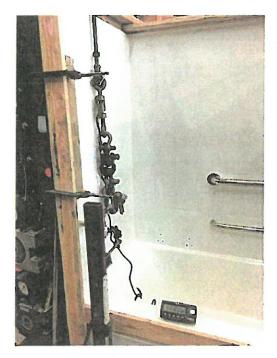
Horizontal test for bar B at 1505 lbs.

10/16-18/2018 T1805260 3 of 6

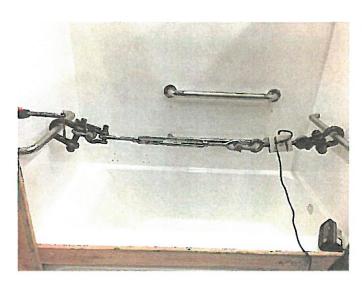
### ADA Compliant Tub Shower (TS6032A) Factory-Installed Grab Bars



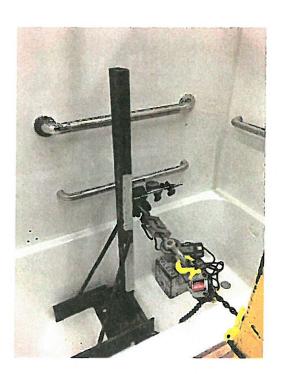
Horizontal test for bar C with indicator.



Vertical test for bar C.



Horizontal test for bar C and F.



Horizontal test for bar E.

# ADA Compliant Tub Shower (TS6032A) Factory-Installed Grab Bars



Vertical test for bar E.



Horizontal test for bar G.



Horizontal test for bar F.

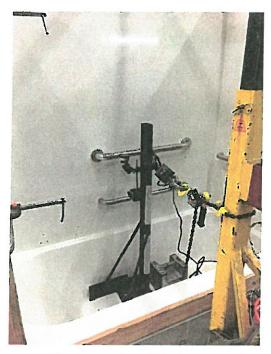


Vertical test for bar G.

### ADA Compliant Tub Shower (TS6032A) Field-Installed Grab Bars



Vertical test for bar D.



Horizontal test for bar D.



## S3839A Submittal Sheet

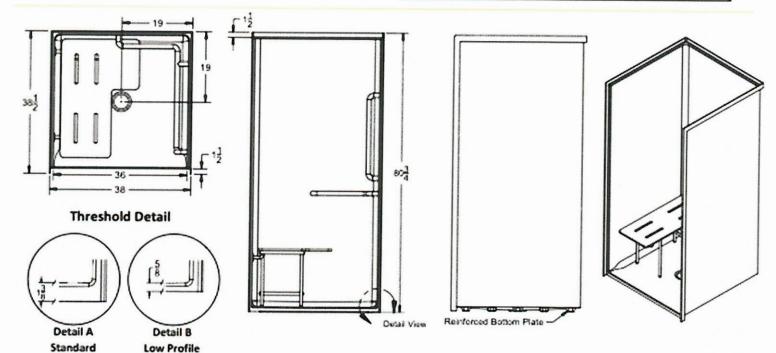
**&** ADA Compliant

| Project Name:            | Customer:                         | Date:            |  |
|--------------------------|-----------------------------------|------------------|--|
| Quote Number:            | Model Number (select from below): | Seat Placement*: |  |
| Customization Requested: |                                   |                  |  |

### **Standard Features and Measurements**

- Meets ADA requirements when installed correctly
- One-piece shower stall
- Reinforced bottom plate
- Anti-slip floor
- Clear floor space of 36" x 36"

| Color:              | White                      |
|---------------------|----------------------------|
| Ext. Dimensions:    | 38"W x 38 1/2"D x 80 1/4"H |
| Warranty:           | 10 Year Limited Warranty   |
| Material:           | Gelcoat/Fiberglass         |
| Approximate Weight: | 115 lbs.                   |



### **Available Configurations**



| Model Number | Pre-Installed 1-1/4" L-<br>Shaped Grab Bar | Pre-Installed 1-1/4"<br>Straight Grab Bar | Pre-Installed<br>Folding Seat | Threshold | Block Out<br>Around Drain |
|--------------|--|---|-------------------------------|-----------|---------------------------|
| S3839A0      | No   | No  | No                            | Detail A  | N/A                       |
| S3839A1*     | Yes  | Yes                                       | Yes                           | Detail A  | N/A                       |
| S3839A0LP    | No   | No  | No                            | Detail B  | 10" x 10"                 |
| S3839A1LP    | Yes  | Yes                                       | Yes                           | Detail B  | 10" x 10"                 |

<sup>\*</sup>Shown in drawing above

| Architect          | /_/_<br>Date | Engineer   | //<br>Date |
|--------------------|--------------|--|------------|
|                    |              | MATERIAL CONTROL CONTR |            |
| General Contractor | Date         | Plumbing Contractor  | Date       |

Please email or fax a signed submittal sheet to the EverFab office to purchase.

Email: info@everfabbath.com | Fax: 503.743.8153 | Phone: 503.303.3300 | www.everfabbath.com | PO Box 490, Aumsville, OR 97325

<sup>\*</sup>Specify right or left seat placement as determined from looking outside into the unit



## TS6032A Submittal Sheet

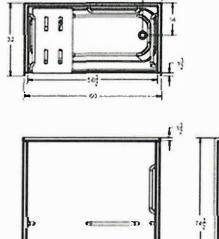
**&** ADA Compliant

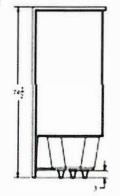
| Project Name:            | Customer:     | Date:       |  |
|--------------------------|---------------|-------------|--|
| Quote Number:            | Model Number: | Drain       |  |
|                          |               | Placement*: |  |
| Customization Requested: |               |             |  |

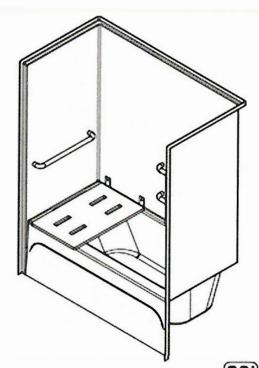
#### **Standard Features and Measurements**

- One-piece tub/shower stall
- Reinforced bottom plate
- Anti-slip floor
- Reinforced with core material to add bars and folding seat pre or post installation of unit
- Meets ADA requirements when installed correctly
- 39-gallon tub capacity

| Color:              | White                    |
|---------------------|--------------------------|
| Ext. Dimensions:    | 60"W x 32"D x 74 %"H     |
| Warranty:           | 10 Year Limited Warranty |
| Material:           | Gelcoat/Fiberglass       |
| Approximate Weight: | 130 lbs.                 |







### **Available Configurations**

| Model Number | Pre-installed 1-1/4" Grab Bars (Qty. 5) | Pre-installed Folding Seat  No  Yes |  |
|--------------|---|-------------------------------------|--|
| TS6032A0     | No                                      |                                     |  |
| TS6032A1*    | Yes                                     |                                     |  |

<sup>\*</sup>Shown in drawing

|                    | _/_/_ |                     | /_/_ |
|--------------------|-------|---------------------|------|
| Architect          | Date  | Engineer            | Date |
|                    |       |                     |      |
| General Contractor | Date  | Plumbing Contractor | Date |

Please email or fax a signed submittal sheet to the EverFab office to purchase.

Email: Info@everfabbath.com | Fax: 503.743.8153 | Phone: 503.303.3300 | www.everfabbath.com | PO Box 490, Aumswile, OR 97325

<sup>\*</sup>Specify right or left drain placement as determined from looking outside into the unit