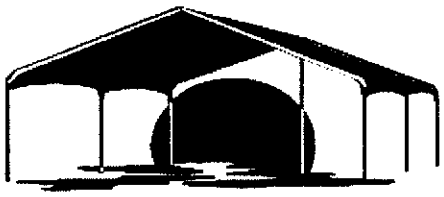


PERFECT EVENT RENTALS

"BEST ON THE BEACH"

Perfect Event Rental staff will always monitor the weather during the set up and take down of the Event. Event Producers (client) will make the call to evacuate if extreme weather is eminent.

If there are forecasted wind gusts of 60mph or more, then Perfect Event Rents and/or client will clear the area. If any lightning is expected within a 20-mile radius, Perfect Event Rentals and/or client will clear the area.

Any prior forecasting of tornado warnings or activity in the path of the event site, the call to continue or tear down the event will be made by the Production Company and Event Coordinator. Perfect Event Rentals will provide a man on-site during the event in case of an emergency.

Perfect Event Rentals Emergency Contact Phone Numbers:

- Scott Cust, Owner/President 757-348-7064
- Jeff Phelps, Operations Manager/Vice President 757-675-6893
- Craig Leap, On-Site Production Manager 757-635-9411
- Marie Simmons, HR, Office, Sales Manager 757-401-0070

If there are forecasted wind gusts of over 60mph, then the stage will have four points of tie down on the left and right of the stage and on the front and back of the stage. The straps will be 1" 2000lbs break load and the stakes will be 24" rebar stakes. Under each foot of stage decks will be a 1'x1'x¾"plywood block. Please see attached diagram.

After reviewing the data provided by Staging Dimensions and Twin City Testing Corporation for gravity loads and prepare preliminary calculations for wind loads, it is apparent that the Staging Dimensions Systems, properly installed, will safely satisfy the Live Load and Dead Load requirements. These appear to be exceptionally good quality systems, and the loading and testing methodologies appear thorough and robust.

Regarding the preliminary wind loads analysis, having applied IBC 2021 methods and an ultimate wind load of 130mph, with the stages at a height of 4'-0" above grade and stage unit weight of 200lb per square foot, perimeter modules will require and added weight of, or a push pin with a tension capacity of 80lb at each leg. This to be worst case scenario. At lower wind speeds and lower heights, this requirement will be lessened. At wind speeds less than 70mph, no hold-down weight or tension pins would be required.

Scott Cust, Owner/President
perfectpartyrent@aol.com

Clark Reder Engineering
10091 Mosteller Lane
West Chester, OH 45069

Phone: (513) 851-1223
Fax: (513) 297-0934
www.clarkreder.com

Alabama	Alaska	Arizona
		
Daniel J. Clark, P.E. P.E. #: 31076	Daniel J. Clark, S.E. P.E. # SE14360	Jeffrey M. Reder, P.E. P.E. # 50654
Arkansas	**California**	**Colorado**
		
Daniel J. Clark, P.E. P.E. # 14355	Daniel J. Clark, S.E. P.E. # S5317	Jeffrey M. Reder, P.E. P.E. # PE0051394
Connecticut	**Delaware**	**District of Columbia**
		
Daniel J. Clark, P.E. P.E. # 27576	Jeffrey M. Reder, P.E. P.E. # 17438	Jeffrey M. Reder, P.E. P.E. # S920119

Project: SD5000 Deck and Guardrail
Client: Staging Dimensions

CRE Project #: 24.1313.02
Date: 2/15/2024

Clark Reder Engineering
10091 Mosteller Lane
West Chester, OH 45069

Phone: (513) 851-1223
Fax: (513) 297-0934
www.clarkreder.com

Florida	Georgia	Hawaii
		
Jeffrey M. Reder, P.E. P.E. # 68622	Jeffrey M. Reder, P.E. P.E. # PE034581	Jeffrey M. Reder, P.E. P.E. # 14362-S
Idaho	**Illinois**	**Indiana**
		
Daniel J. Clark, P.E. P.E. # 14947	Jeffrey M. Reder, S.E. P.E. # 81006866	Jeffrey M. Reder, P.E. P.E. # PE11600603
Iowa	**Kansas**	**Kentucky**
		
Jeffrey M. Reder, P.E. P.E. # 19998	Daniel J. Clark, P.E. P.E. # 21809	Jeffrey M. Reder, P.E. P.E. # 23597

Clark Reder Engineering, Inc. is a professional design firm registered in Illinois #184.006693

Project: SD5000 Deck and Guardrail
Client: Staging Dimensions

CRE Project #: 24.1313.02
Date: 2/15/2024

Clark Reder Engineering
10091 Mosteller Lane
West Chester, OH 45069

CLARK REDER ENGINEERING

Phone: (513) 851-1223
Fax: (513) 297-0934
www.clarkreder.com

Louisiana	Maine	Maryland
		 Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License # 38421 Expiration Date: 01/29/2022
Jeffrey M. Reder, P.E. P.E. # 30304	Daniel J. Clark, P.E. P.E. # 12873	Jeffrey M. Reder, P.E. P.E. # 38421
Massachusetts	**Michigan**	**Minnesota**
		 I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Minnesota. Signature: Typed or Printed Name: JEFFREY M. REDER Date: 2/15/2024 License #: 56104
Jeffrey M. Reder, P.E. P.E. # 48535	Jeffrey M. Reder, P.E. P.E. # 6201056952	Jeffrey M. Reder, P.E. P.E. # 56104
Mississippi	**Missouri**	**Montana**
		
Daniel J. Clark, P.E. P.E. # 20589	Jeffrey M. Reder, P.E. P.E. # PE-2010003345	Daniel J. Clark, P.E. P.E. # 28452

Project: SD5000 Deck and Guardrail
Client: Staging Dimensions

CRE Project #: 24.1313.02
Date: 2/15/2024

Clark Reder Engineering
10091 Mosteller Lane
West Chester, OH 45069

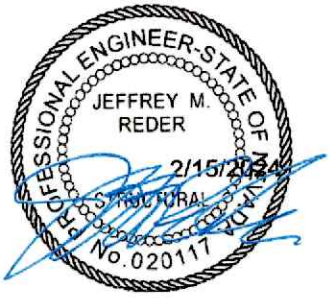
CLARK REDER ENGINEERING

Phone: (513) 851-1223
Fax: (513) 297-0934
www.clarkreder.com

Nebraska

Daniel J. Clark, P.E.
P.E. # E-14098

Nevada



Jeffrey M. Reder, P.E.
P.E. # 020117

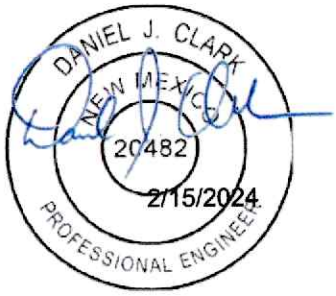
New Hampshire

Daniel J. Clark, P.E.
P.E. # 13605

New Jersey

Jeffrey M. Reder, P.E.
P.E. # 24GE05300600

New Mexico



Daniel J. Clark, P.E.
P.E. # 20482

New York

It is a violation of law for any person, unless acting under the direction of a licensed professional engineer, to alter this document in any way. If any part of this document is altered, the altering engineer shall affix to this document their seal and the notation "altered by" followed by their signature, the date, and description.

Jeffrey M. Reder, P.E.
P.E. # 097763-1

North Carolina

Jeffrey M. Reder, P.E.
P.E. # 046939

North Dakota

Daniel J. Clark, P.E.
P.E. # PE-6586

Ohio

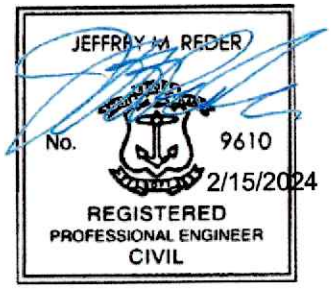
Jeffrey M. Reder, P.E.
P.E. # E-67450

Project: SD5000 Deck and Guardrail
Client: Staging Dimensions

CRE Project #: 24.1313.02
Date: 2/15/2024

Clark Reder Engineering
10091 Mosteller Lane
West Chester, OH 45069

Phone: (513) 851-1223
Fax: (513) 297-0934
www.clarkreder.com

Oklahoma	Oregon	Pennsylvania
		
Jeffrey M. Reder, P.E. P.E. # 24780	Daniel J. Clark, P.E. P.E. # 84375PE	Jeffrey M. Reder, P.E. P.E. # PE77455
Rhode Island	**South Carolina**	**South Carolina**
		
Jeffrey M. Reder, P.E. P.E. # 9610	Jeffrey M. Reder, P.E. P.E. # 35797	Clark Reder Engineering # 4827
South Dakota	**Tennessee**	**Texas**
		
Daniel J. Clark, P.E. P.E. # 10989	Jeffrey M. Reder, P.E. P.E. # 00113846	Jeffrey M. Reder, P.E. P.E. # 124100

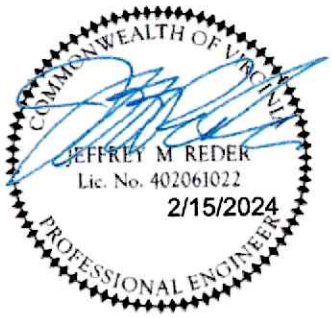
Clark Reder Engineering
F-12154

Project: SD5000 Deck and Guardrail
Client: Staging Dimensions

CRE Project #: 24.1313.02
Date: 2/15/2024

Clark Reder Engineering
10091 Mosteller Lane
West Chester, OH 45069

Phone: (513) 851-1223
Fax: (513) 297-0934
www.clarkreder.com

Utah	Vermont	Virginia
		
Jeffrey M. Reder, P.E. P.E. # 7536302-2203	Daniel J. Clark, P.E. P.E. # 018.0072612	Jeffrey M. Reder, P.E. P.E. # 402061022
Washington	**West Virginia**	**Wisconsin**
		
Jeffrey M. Reder, P.E. P.E. # 56469	Jeffrey M. Reder, P.E. P.E. # 18628	Daniel J. Clark, P.E. P.E. # E-41230
Wyoming		
		
Jeffrey M. Reder, P.E. P.E. # 13434		

Project: SD5000 Deck and Guardrail
Client: Staging Dimensions

CRE Project #: 24.1313.02
Date: 2/15/2024

STAGING DIMENSIONS

Stage Decks

Construction

Features:
- Bolt Construction Of 3-3/4" 6005-T5 Extruded Aluminum Frame & Corners Allows Easy Repair Of Damaged Piece Versus Replacement Of Entire Stage Deck.
- Nylock Nuts Eliminate Vibration and Noise Interference.

Performance:
- Certified Uniformly Distributed Live Load Of 200 Pounds Per Square Foot.

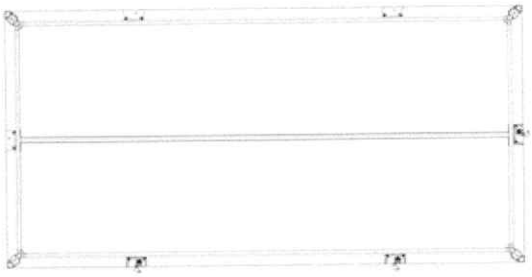
Single Sided Decks:
- Surface Options Are Interchangable.

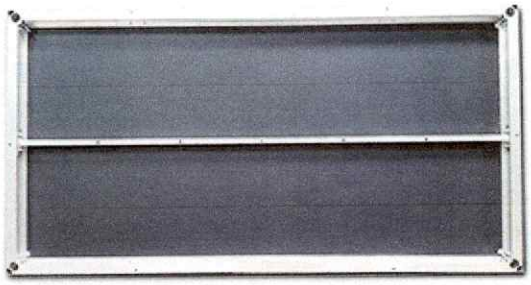
Locking Mechanism:
- (3) Male & (3) Female Dual Locks™ Activated From Top To Bottom Of Decks Provide 2500 Pounds Of Tensile Locking Strength.

Velcro:
- 3/4" Block Male Velcro Installed On All Four Sides Of Deck.
- Velcro Is Inset In Specially Designed Channel On Extrusion To Protect From Damage.

Center Brace:
- 1" x 2" @ 8' Long Aluminum Rectangular Tube.

Leg Storage:
- Leg Clips For Fixed Or Adjustable Height Legs Are Mounted To The Underside Of Each Stage Deck Providing Convenient Storage Of Legs With Deck.

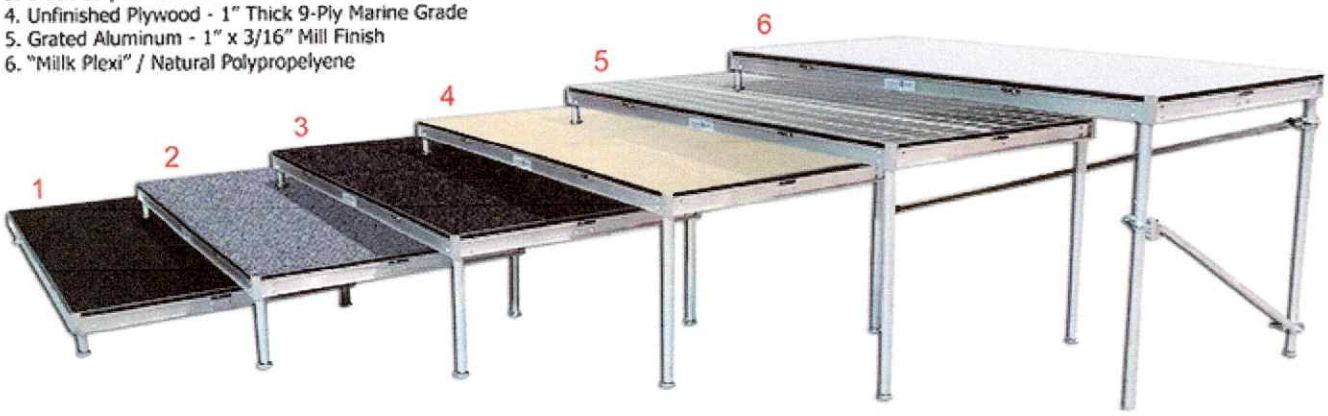




Underside Of Stage Deck

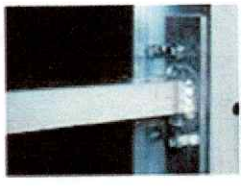
Standard Surface Options

1. Black Haircell Polyvinyl
2. Pepper Grey Carpet - 26 oz.
3. Black Carpet - 31 oz.
4. Unfinished Plywood - 1" Thick 9-Ply Marine Grade
5. Grated Aluminum - 1" x 3/16" Mill Finish
6. "Milk Plexi" / Natural Polypropelyene

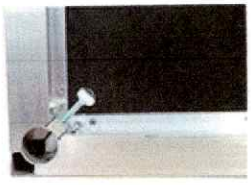


Female Dual Lock

Male Dual Lock



Center Brace



Leg Receiver

Corner Extrusion

STAGING DIMENSIONS

866.591.3471
31 Blevins Drive
New Castle, DE 19720
www.stagingdimensions.com

STORK

Twin City Testing Corporation

662 Cromwell Avenue, St. Paul, MN 55114-1776
(651) 645-3601, Fax: (651) 659-7348

TWIN CITY TESTING CORPORATION
662 Cromwell Avenue
St. Paul, Minnesota 55114

STRUCTURAL PERFORMANCE OF PORTABLE STAGE DECKS MANUFACTURED BY STAGING DIMENSIONS

Prepared for:
STAGING DIMENSIONS
722 Bluecrab Road
Newport News, VA 23606

Client Purchase Order Number: Check #222

Test Conducted By:

Josh L. Jonssen
Engineering Technician
Product Testing Department
Phone: (651) 659-7319

Reviewed By:

Mathew N. Botz
Project Manager
Product Testing Department
Phone: (651) 659-7353

The test results contained in this report pertain only to the samples submitted for testing and not necessarily to all similar products.

INTRODUCTION:

This report presents the results of Structural Performance Tests conducted on two (2) samples of Portable Stage Deck assemblies. The test samples were submitted by Staging Dimensions on August 6, 2001 with testing completed on August 23, 2001.

The scope of work was limited to conducting Uniform Load and Concentrated Load Tests on the samples submitted.

SUMMARY:

Uniform Load Test

The portable stage deck deflected 4.9" while applying a uniform load of 500-psf, resulting in a permanent set of 0.92". No visible cracks or deformation were apparent.

Concentrated Load Test

The portable stage deck reached 2260 lbf before audible cracking was heard. A load of 3784 lbf was reached before the decking panel cracked below the load plate.

See TEST DATA section for detailed results

SPECIMEN DESCRIPTION

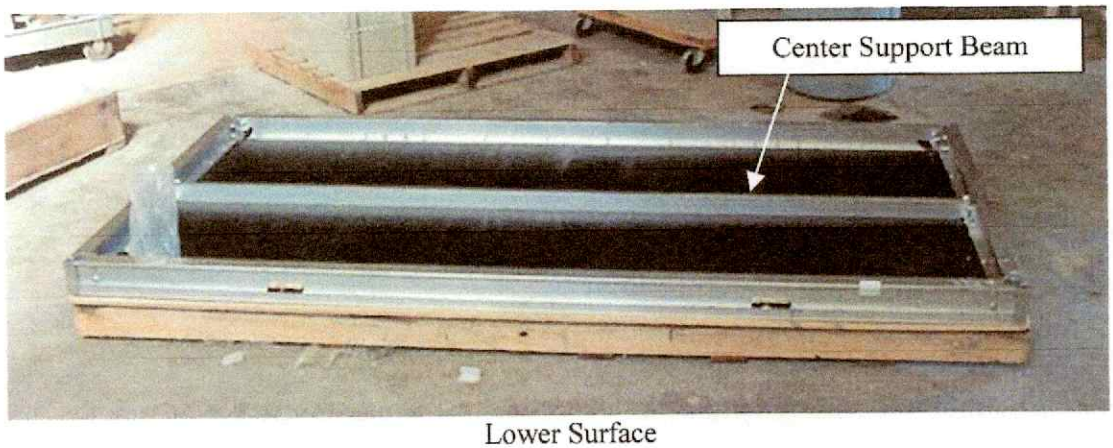
The specimens were described as Portable Stage Decks manufactured by Staging Dimensions measuring 4' x 8' and weighing 145-lbs without the 1-¼ Schedule 40 6061-T6 Aluminum legs. The following specifications were supplied by the client and were not verified by TCT.

Stage Deck Specifications (not verified):

Manufactured By:	Staging Dimensions 722 C Blue Crab Road Newport News, VA 23606
Panel construction:	31/32 7-Ply Douglas Fir Plywood 0.050 Haircell Polypropylene Deck Surface 0.020 Polypropylene Backer
Edge Extrusion:	6105-T5 Structural Extruded Aluminum
Corner Extrusion:	6105-T5 Structural Extruded Aluminum
Center Brace:	1" x 2" x 125" – 6063-T52 Aluminum Extruded Tube
Bolts:	3/8-16 x 2-1/2" Hex Head Grade 5 Zinc Plated 4 per corner

SPECIMEN DESCRIPTION: Continued

Bolts:	3/8-16 x 2-1/2" Hex Head Grade 5 Zinc Plated 2 per center brace
Screws:	#10 x 1" Serrated Head Indented Hex Alloy Zinc Plated Pont Screws Spaced Every 8-inches
Legs:	Four, One per corner per deck. Leg material is 1-1/4" schedule 40 6061-T6 Aluminum Straight Pipe 1.667 Outer diameter, 1.38" Inner diameter



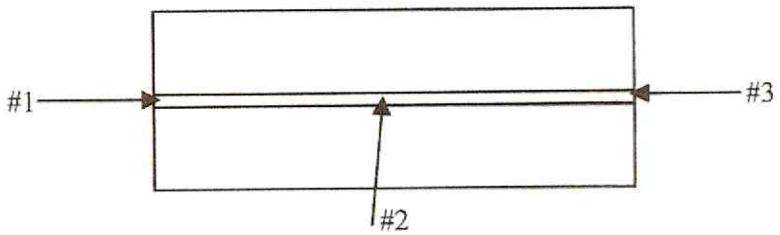
Lower Surface

TEST METHOD:

These tests were performed in accordance with a customized test procedure provided by Staging Dimensions.

Uniform Load Structural Test

Panels were supported in accordance with manufacturer's instructions. Three deflection measuring devices were positioned centrally at the center-span and at the supports (See diagram).



TEST METHODS: Continued

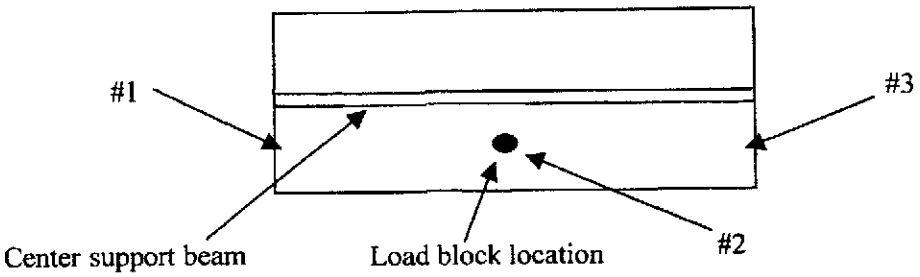
Uniform Loading was applied by means of an air bladder placed over the upper panel surface. The specimen was loaded in the following manner:

0-psf to 150-psf to 0-psf
0-psf to 250-psf to 0-psf
0-psf to 500-psf

Deflection measurements were recorded before, during and after the loading to determine 'loaded' deflection and permanent deformation.

Concentrated Live Loading Structural Proof Test

The panels shall be supported in accordance with manufacturer's instructions. The concentrated load test was conducted on one portable stage deck. Loading was applied through a 2"x2" load plate positioned at mid-point of length and at quarter point of center. Three deflection measuring devices were positioned at the center-span and at the supports (See diagram). The panel was then loaded in 100 lb increments until failure was achieved.



REMARKS:

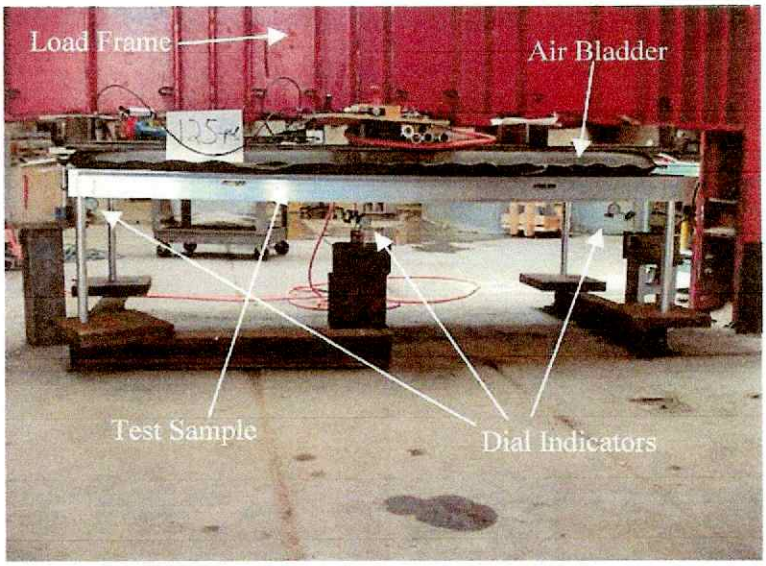
The test samples will be returned to the client by client's shipping service. Staging Dimensions was present for the testing conducted on 8/23/01.

MMFILES\jlj\Staging30879

TEST DATA: **Load Tests**

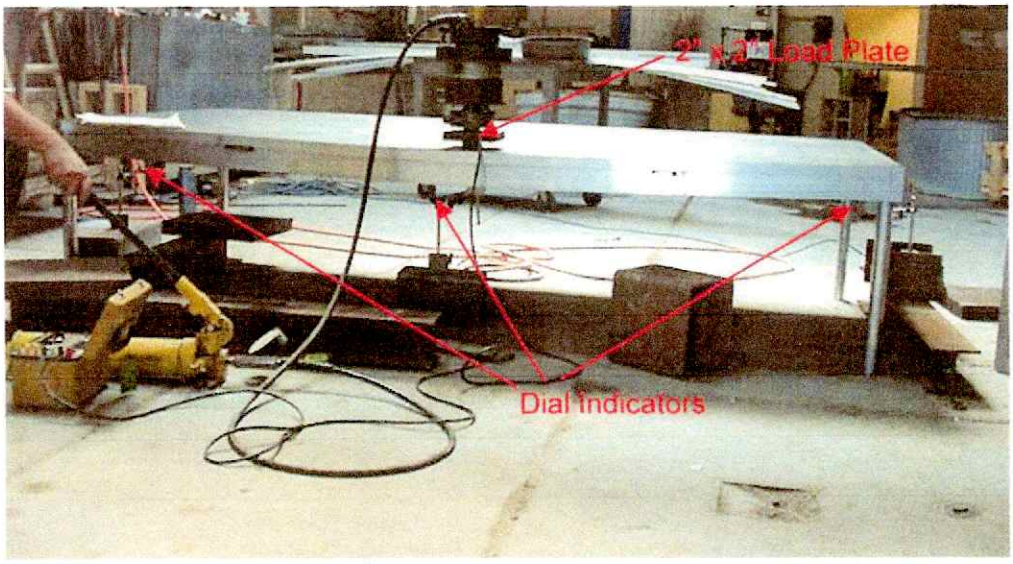
UNIFORM LOADING

Pressure (psf)	East Deflection (Dial #1)	Center Deflection (Dial #2)	West Deflection (Dial #3)
0	0.000	0.000	0.000
50	0.027	0.481	0.024
100	0.057	0.858	0.064
150	0.078	1.673	0.098
0	0.010	0.816	0.028
50	0.039	1.242	0.056
100	0.065	1.678	0.082
161	0.100	2.180	0.118
175	0.113	2.448	0.128
200	0.123	2.612	0.142
225	0.135	2.691	0.156
250	0.153	2.916	0.174
0	0.013	0.916	0.033
300	0.183	3.434	0.208
400	0.233	4.330	0.270
500	0.262	4.881	0.312
0	0.023	0.924	0.049

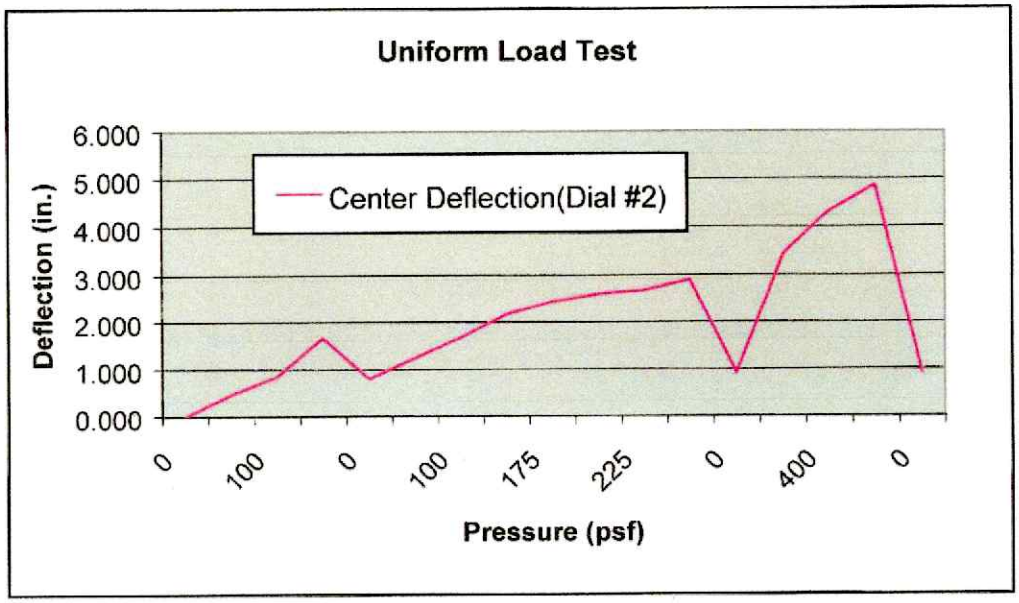


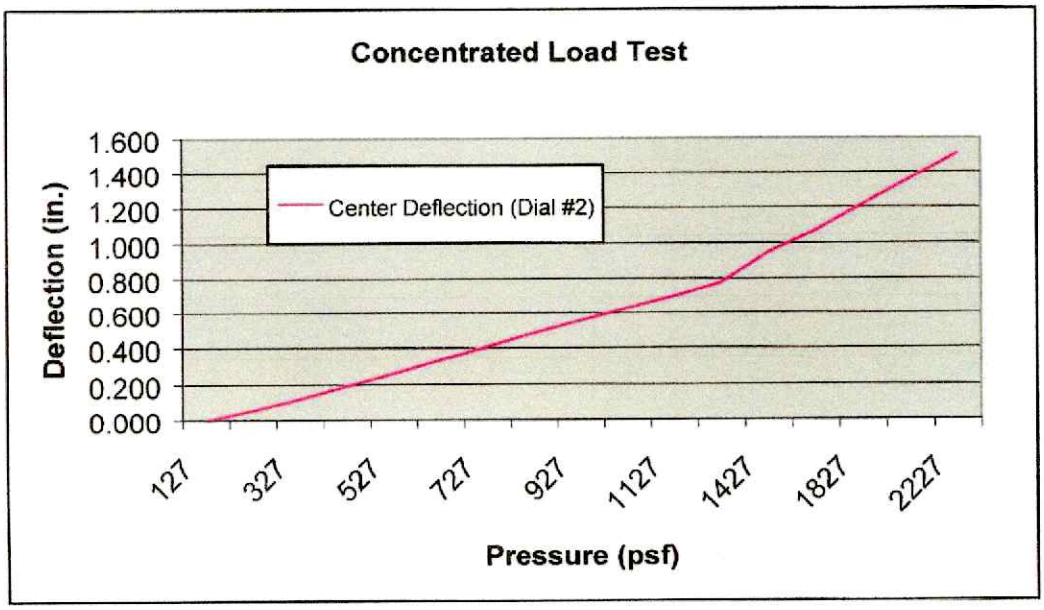
CONCENTRATED LOAD

Pressure (psf)	East Deflection (Dial #1)	Center Deflection (Dial #2)	West Deflection (Dial #3)
127	0.000	0.000	0.000
227	0.001	0.059	0.003
327	0.001	0.123	0.004
427	0.002	0.194	0.004
527	0.003	0.264	0.005
627	0.003	0.338	0.005
727	0.004	0.408	0.005
827	0.005	0.482	0.006
927	0.005	0.556	0.007
1027	0.006	0.628	0.008
1127	0.006	0.700	0.010
1227	0.007	0.777	0.010
1427	0.008	0.949	0.012
1627	0.003	1.070	0.013
1827	0.002	1.217	0.016
2027	0.002	1.364	0.020
2227	0.002	1.511	0.022
2260	Cracking Noise		
2320	Cracking Noise		
2327	0.002	1.616	0.023
2427	0.002	1.699	0.024
2670	Distinct Cracking Noise		
2800	Rapid pressure drop to 2600		
3784	Visible cracks on lower surface and platform deformation on both surfaces (See Photographs)		

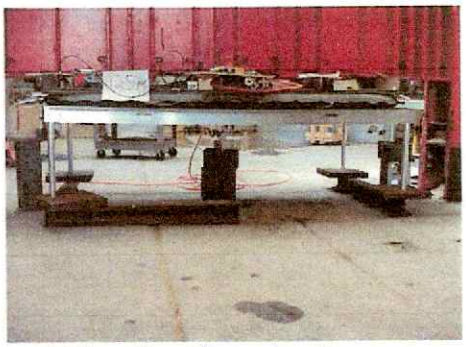


Graphs





Photographs



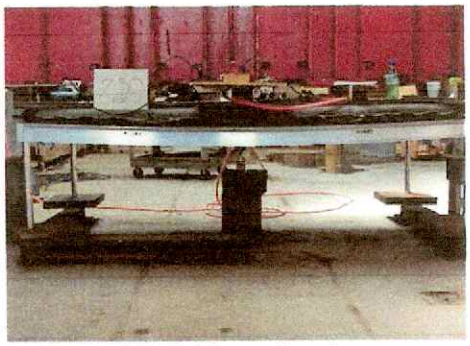
125-psf uniform load

140-psf uniform load

175-psf uniform load

200-psf uniform load

225-psf uniform load



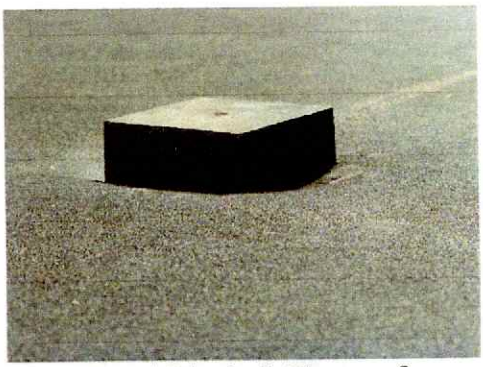
250-psf uniform load

300-psf uniform load

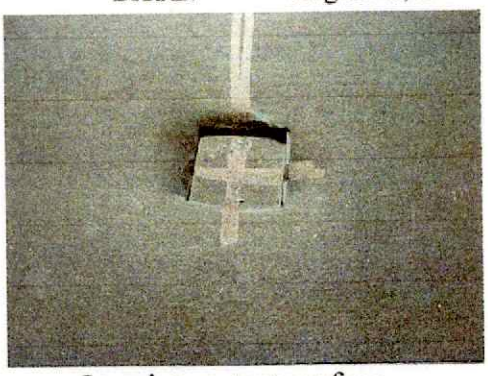
400-psf uniform load

500-psf uniform load

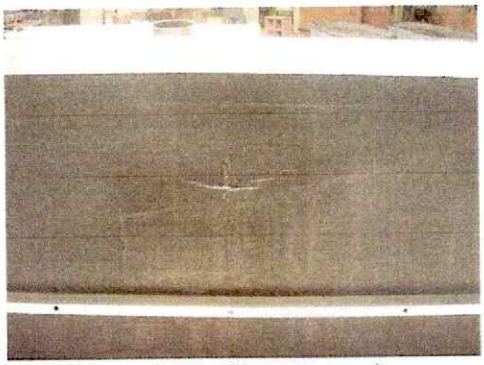
Concentrated load test



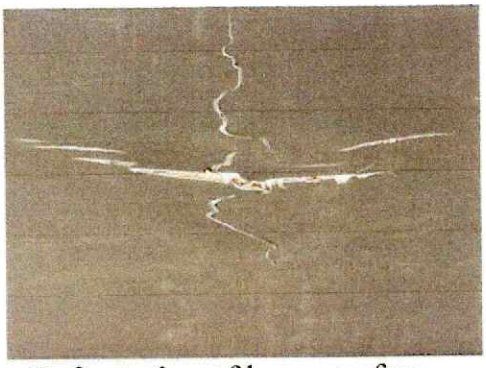
Load Block & Test surface
after concentrated loading



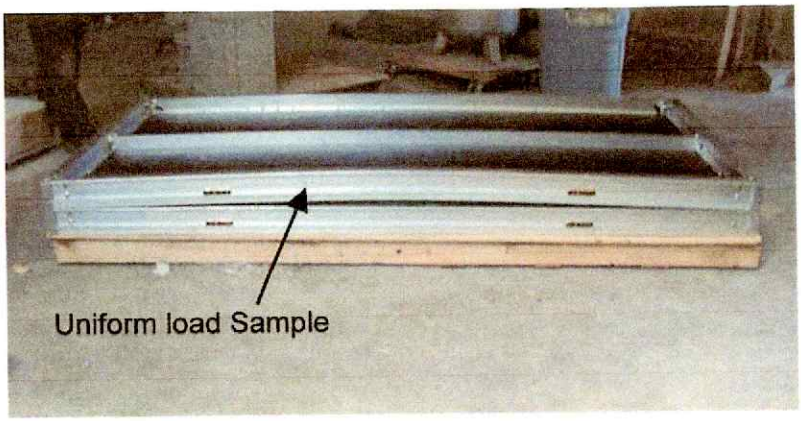
Imprint on test surface
caused by load plate



Deformation of lower surface
after concentrated loading



Deformation of lower surface
after concentrated loading



Test Samples after testing

GENRAL ASSEMBLY SPECIFICATIONS FOR STANDARD AND CUSTOM DECK FABRICATIONS:(UNLESS OTHERWISE SPECIFIED)

1. DECK ASSEMBLY SHALL BE FREE FROM SHARP EDGES BURRS AND DEFECTS IN WORKMANSHIP
2. DIMENSIONAL INSPECTION SHALL BE CONDUCTED PRIOR TO SHIPMENT TO ASSURE ACCUMULATED TOLERANCES DO NOT EXCEED FINAL ASS'Y TOLERANCES
3. LOCK PERFORMANCE SHALL BE INSPECTED PRIOR TO SHIPMENT TO ASSURE LOCKS OPERATE FREELY AND ARE IN THE PROPER ORIENTATION
4. DECK SURFACE MATERIAL SHALL BE CUT AND INSTALLED SO AS TO PRESENT NO GAPS BETWEEN EXTRUSION AND SIDE OF DECK SURFACE
5. DECK SURFACE SHALL BE SHIMMED USING 1MM X25MM ABS PLASTIC SHIM CONTINUOUSLY AROUND PERIMETER PRIOR TO ATTACHMENT BY SCREWS
6. DECK SURFACE MATERIAL SHALL BE COATED WITH THE APPROPRIATE MATERIAL PER W/O SPECIFCATION AND ALLOWED TO DRY ACCORDING TO THE MANUFACTURERS RECCOMENDATIONS
7. DECK SHALL BE SECURED WITH #10X1 HEX DRIVE WOOD SCREWS TO 35IN-LB (DO NOT TEAR OUT)
8. ALL MACHINE SCREW THREADED FASTENERS SHALL BE GR5 STEEL AND CLEAR ZINC PLATED
9. ALL NUTS SHALL BE OF A NYLON INSERT TYPE AND CLEAR ZINC PLATED
10. 3/8-16 FASTENERS ON HOLLOW SECTIONS SHALL BE TORQUED TO 22 LB-FT AND NYLON LOCKNUT VISUALLY INSPECTED FOR PROPER SEATING
11. 1/4-20 FASTENERS ON SOLID SECTIONS RETAINING THE SOUTHCO DUAL-LOCKS SHALL BE TORQUED TO 6 LB-F AND INSPECTED FOR PROPER SEATING

GENERAL MATERIALS SPECIFICATIONSFOR STANDARD AND CUSTOM DECK FABRICATIONS:(UNLESS OTHERWISE SPECIFIED)

1. ALUMINUM PERIMETER AND CORNER EXTRUSIONS SHALL BE OF TYPE 6105-T5 (MINIMUM TENSILE STERENGTH 30KPSI- MODULUS APPROX. 10E6 PSI) FOR SECTIONS REFER TO .PDF DWG SW-06425 REV B AND SW-06424 REV-A
2. ALUMINUM CENTER BRACE AND END PLATES SHALL BE OF 6005-T5 OR 6061-T6 (6063 IS NOT AN ACCEPTABLE ALTERNATIVE MATERIAL)
3. WELDING ROD IF USED SHALL BE ER4043 AND WELDING CONDUCTED WITH APPLICABLE AWS STANDARDS FOR PENETRATION AND CLEANLINESS
4. DECK SURFACE MATERIALS SHALL BE IN ACCORDANCE WITH WORK ORDER OR DRAWING SPECIFICATION
5. ALL STEEL FORMED BRACKETS SHALL BE CONSTRUCTED FROM H.R.S. OR H.R.P.O. NO COLD ROLLED MATERIALS SHALL BE USED UNLESS PRIOR NORMALIZING HAS BEEN PERFORMED

CUSTOM DECK SPECIFIC GENERAL SPECIFICATIONS: (THESE SPECIFICATIONS ARE IN ADDITION TO THE PREVIOUS GENERAL SPECIFICATIONS)

1. ALL WELDED CORNER FABRICATIONS SHALL BE IN ACCORDANCE WITH AWS WELDING PROCEDURES FOR 6005-T5 MATERIAL
2. ALL WELDED CORNER CONSTRUCTIONS SHALL RECIEVE EITHER A REINFORCAMENT BRACKET OR A LEG SOCKET CORNER REINFORCING BRACKET (SEE WELDED DECK DETAILS FOR TYPICAL CONSTRUCTION)
3. EITHER THE CORNER REINFORCEMENT BRACKET OR THE LEG SOCKET REINFORCING BRACKET MUST BE BOLTED THRU THE PERIMETER EXTRUSION WITH 4 3/8-16X2.25" GR5 HHCS AND NYLON INSERT NUTS
4. OUTSIDE CORNERS OF WELDED JOINTS MUST BE DEBURRED AND ALL SPATTER REMOVED FROM LEG SOCKET REINFORCEMENT BRACKETS PRIOR TO FINISHING OPERATIONS
5. SIDE LEG SOCKET ADAPTERS SHALL BE BOLTED THRU PERIMITER EXTRUSION 4 PLACES WITH 3/8-16X2.25" GR5 HHCS AND NYLON INSERT NUTS (SEE WELDED DECK DETAILS FOR TYPICAL CONSTRUCTION))

DECK SECTIONS AND GENERAL SPECIFICATIONS REV-B

STAGING DIMENSIONS INC.

TITLE:
DECK SECTIONS AND STANDARDS

SIZE D | DWG NO SD_DSS | REV B

SCALE: 1:1 WEIGHT: SHEET 1 OF 3