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COLUMBIA UNIVERSITY

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ABBREVIATED TEST REPORT

Specimens: Two (2) scaffold assemblies, each consisting of three (3) sets of model WT564HD 5' X 6'4" walk thru frames with slide lock scaffold components together with six (6) pairs of cross braces and four (4) screw jack leg extensions were delivered to the Carleton Laboratory on 28 October 2016. One (1) additional assembly was delivered on 31 October 2016.

Test Method: Three frames high scaffold assemblies with a total height of 19' was erected with two pairs of cross braces in each frame. The screw jacks inserted to four vertical legs were adjusted to 12 inches beyond the frame length on the bottom. The scaffold assemblies were tested in compression in accordance to ANSI/SSFI SC100-5/05 Series A. The load was applied to the four vertical posts via load transfer beams fixed to the cross head of the testing machine at a constant rate of 6000 lb/min to load refusal. The ultimate load and failure mode was documented.

Test Apparatus: Southwark-Emery 600,000 lb Universal Testing Machine in 120,000 lb range

Test Date: 28 and 31 October 2016

Test Results:

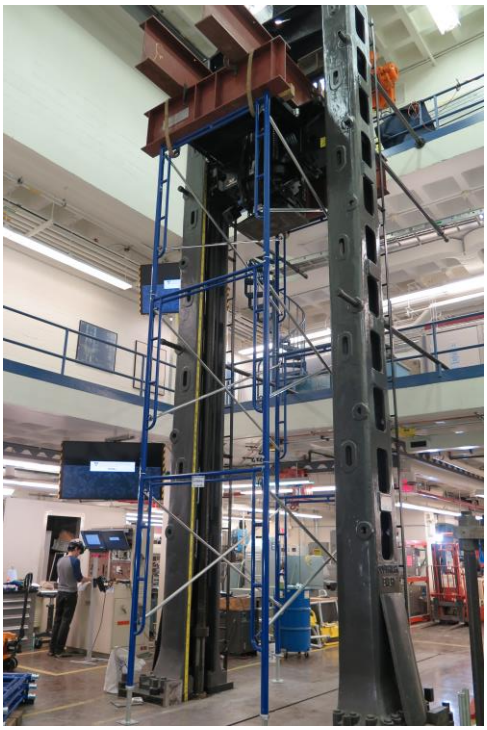
Specimen No.	Length	Ultimate Load (lb)	Ultimate Load per post (lb)	Remark and Failure Mode Description
#1 (5' X 19')	8'	101,600	25,400	Two posts buckled, cross braces and screw jacks intact
#2 (5' X 19')	8'	100,000	25,000	Two posts buckled, cross braces and screw jacks intact
#3 (5' X 19')	8'	92,500	23,125	Two posts buckled, cross braces and screw jacks intact

Average Ultimate Load: 98,033 lb
Maximum Variation: 5.64%
Allowable Leg Load: 24,508 lb

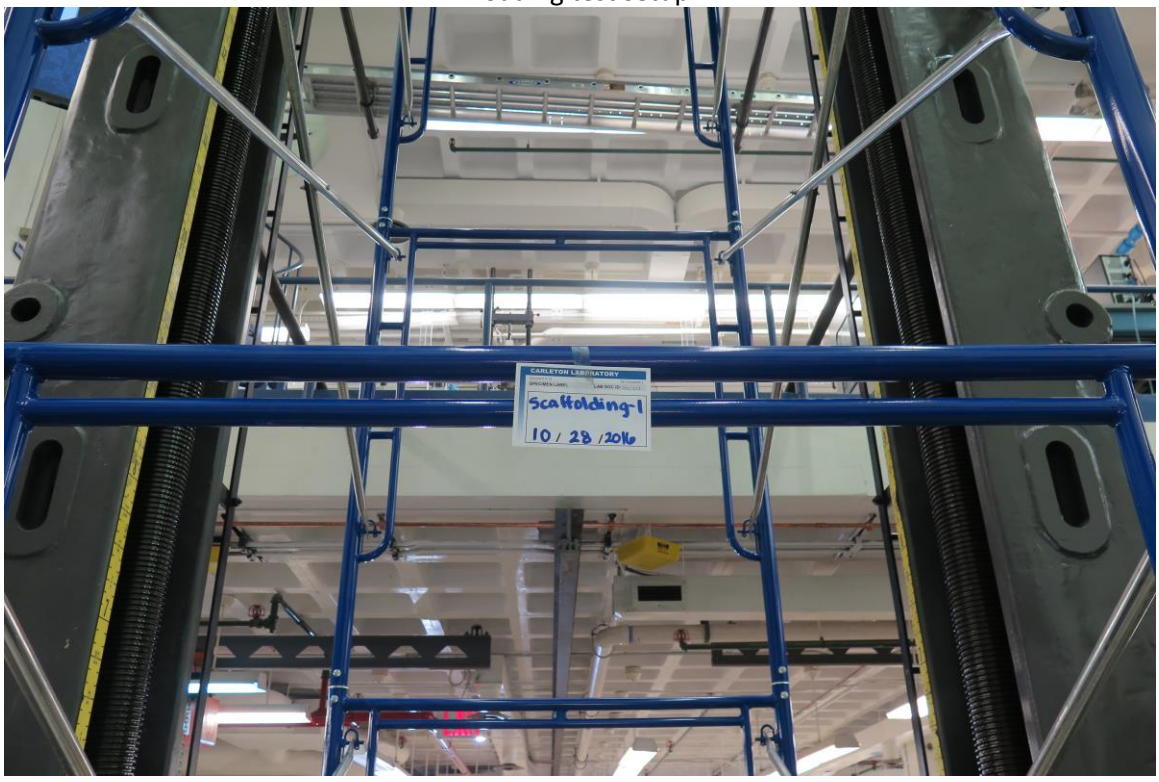
The management of the Carleton Laboratory certifies to the best of its knowledge that the above readings are correct, and that they have been performed on a NIST-traceable/calibrated universal testing machine on the premises of said laboratory.

Adrian Brügger
Manager, Robert A. W. Carleton Strength of Materials Laboratory
Columbia University in the City of New York

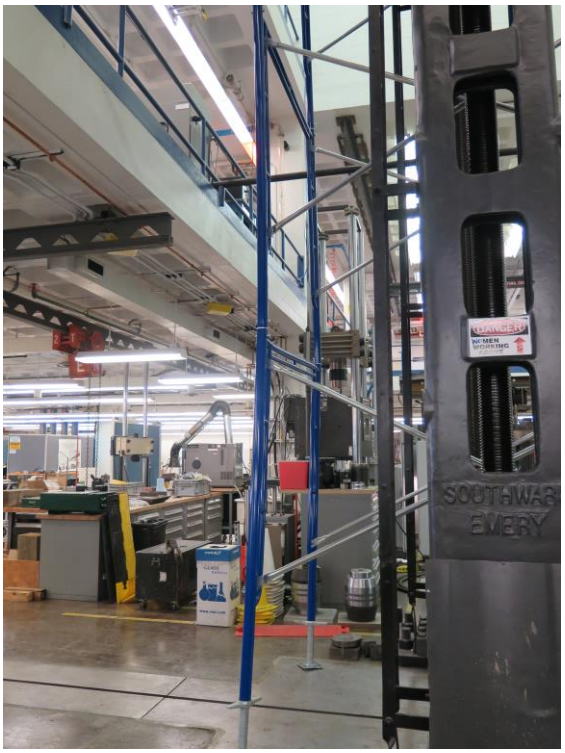
APPENDIX A: Photographic Documentation of Test

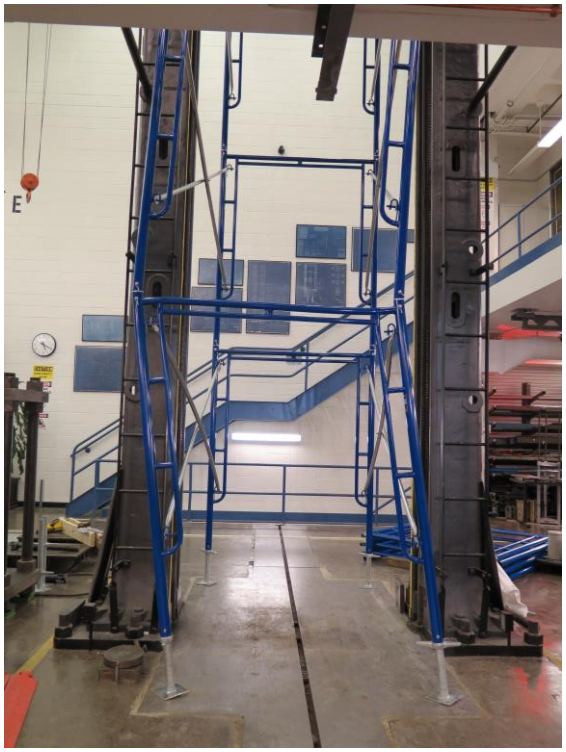


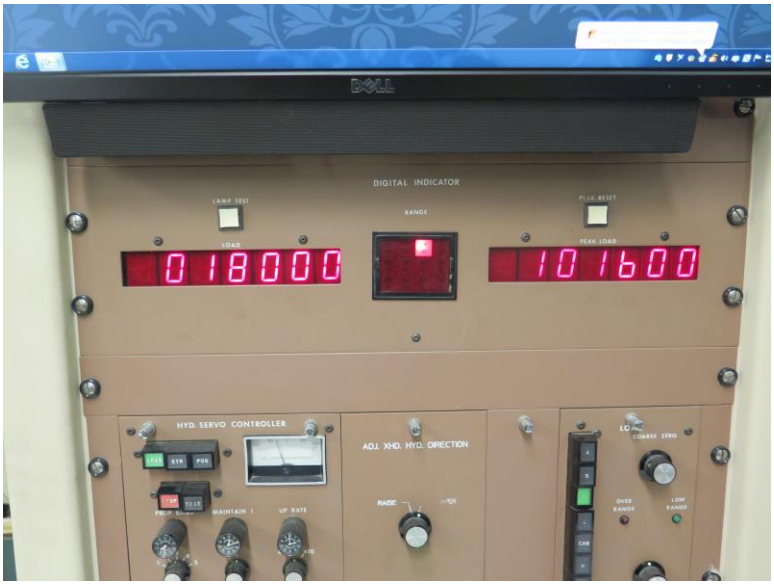
Loading test setup



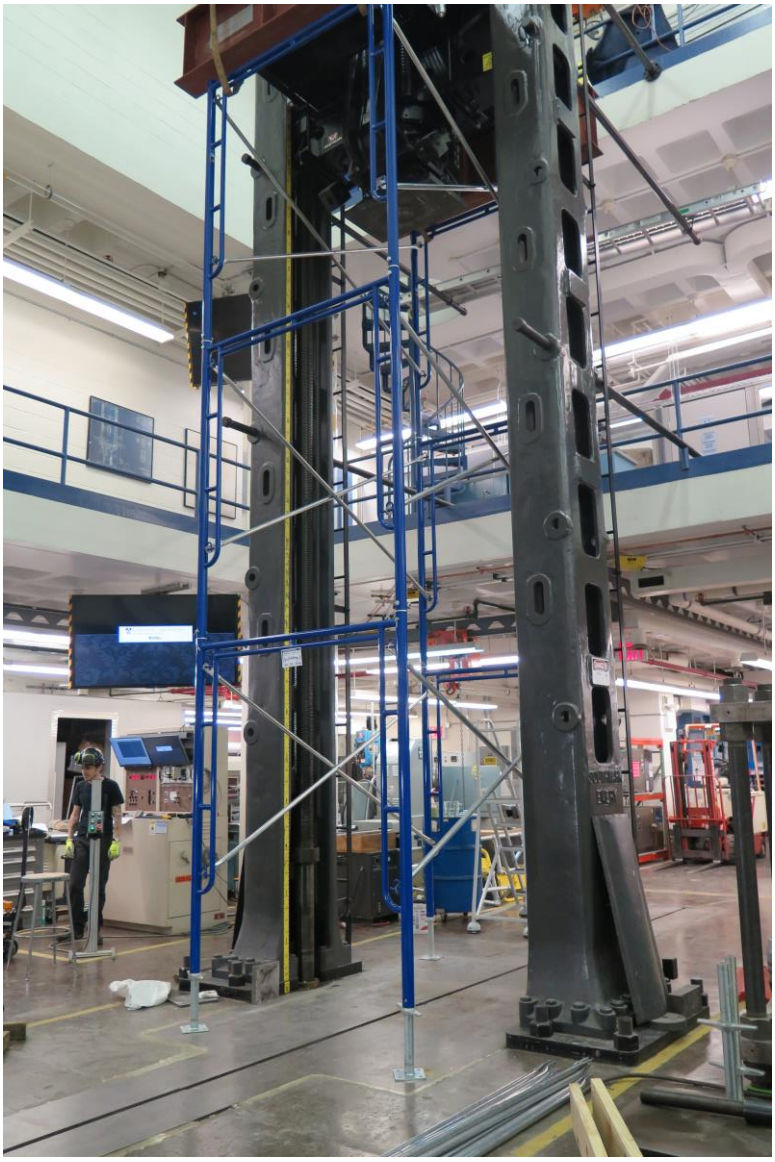
Before test (#1: 5’ X 19’ scaffold assembly)



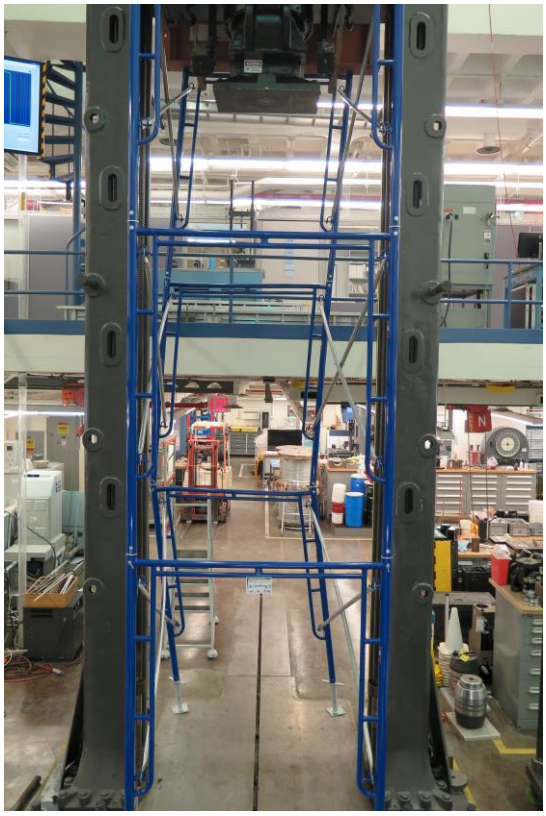


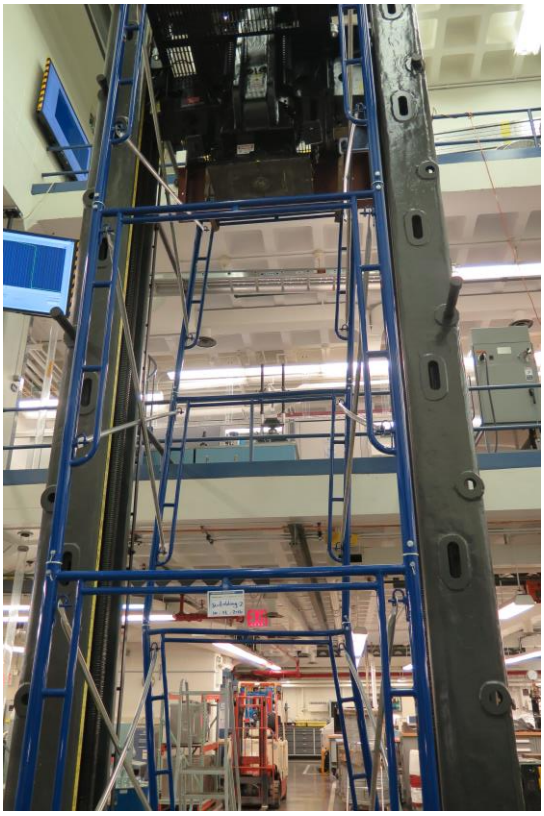


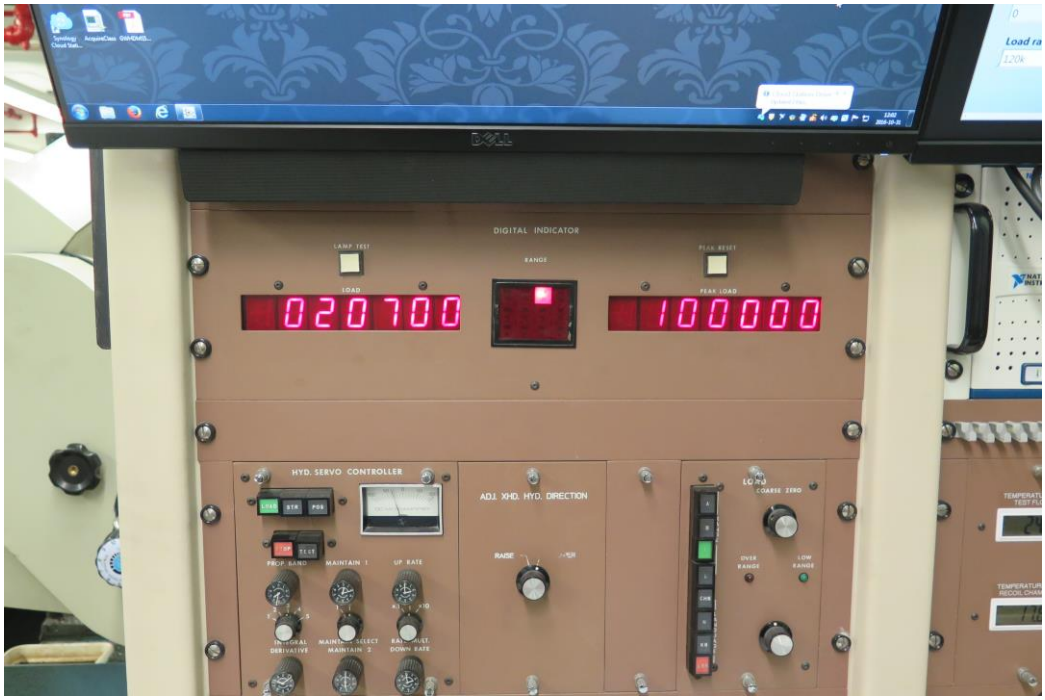
After test (#1: 5’ X 19’ scaffold assembly)



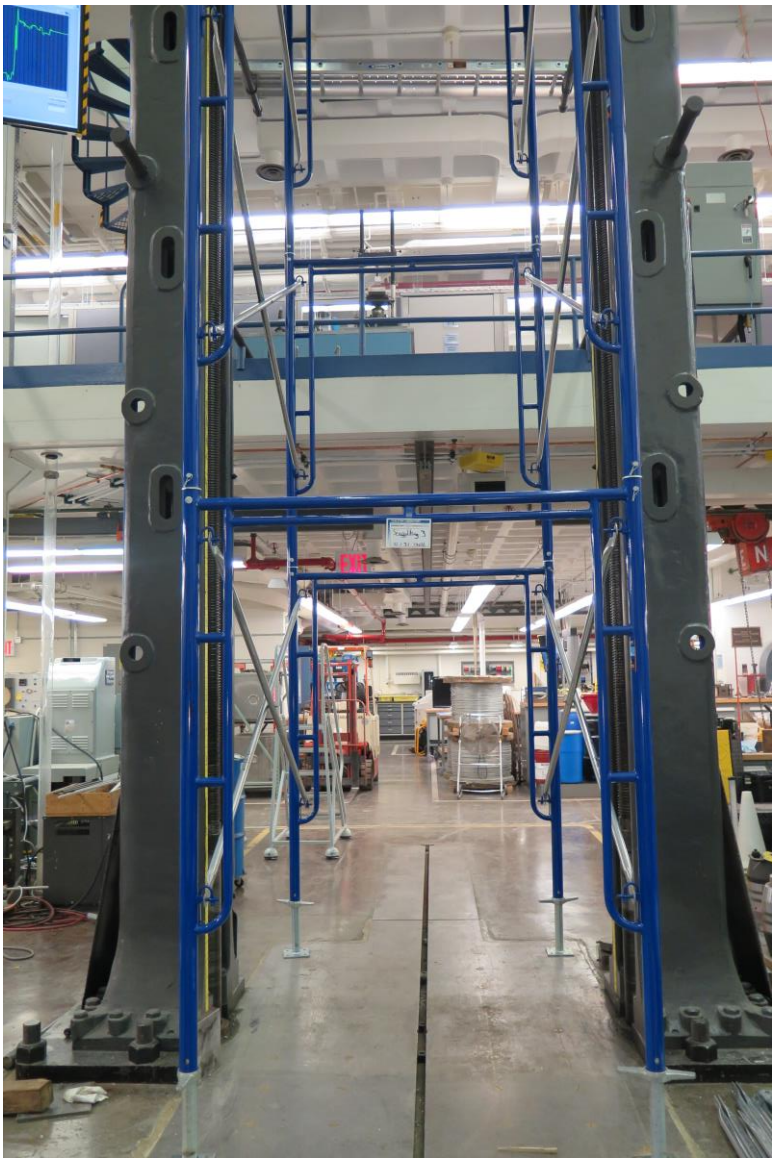
Before test (#2: 5’ X 19’ scaffold assembly)



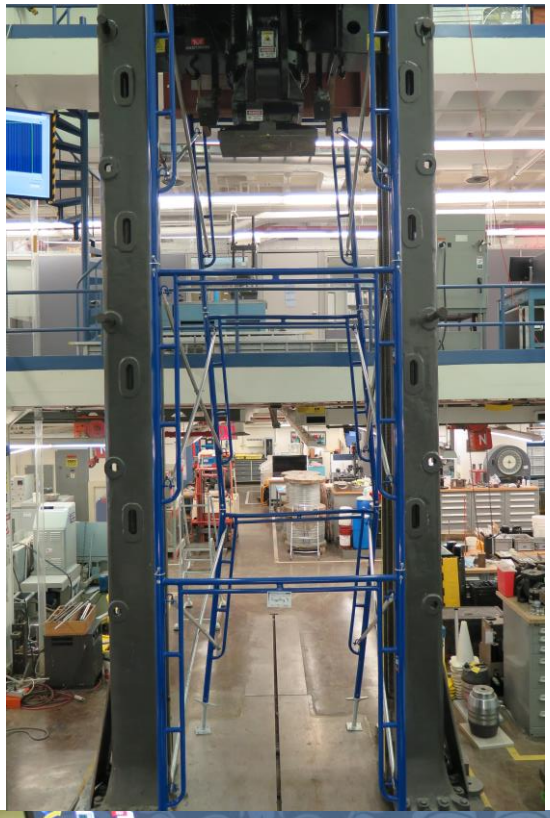


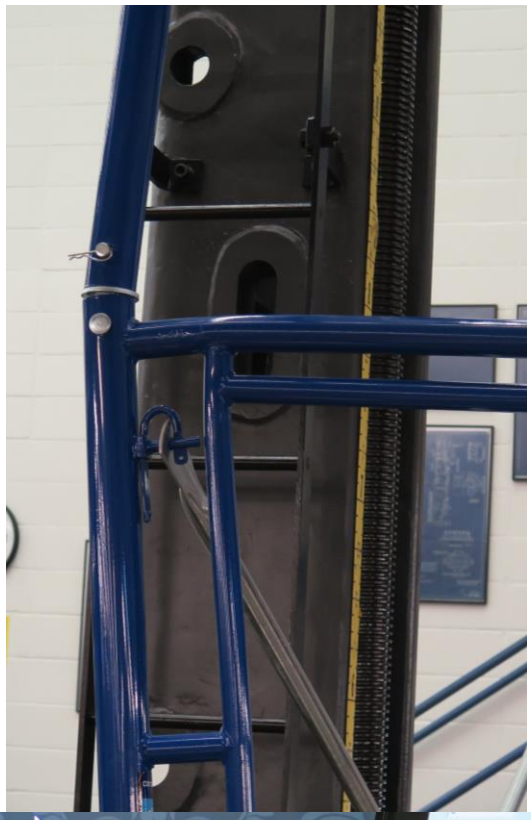


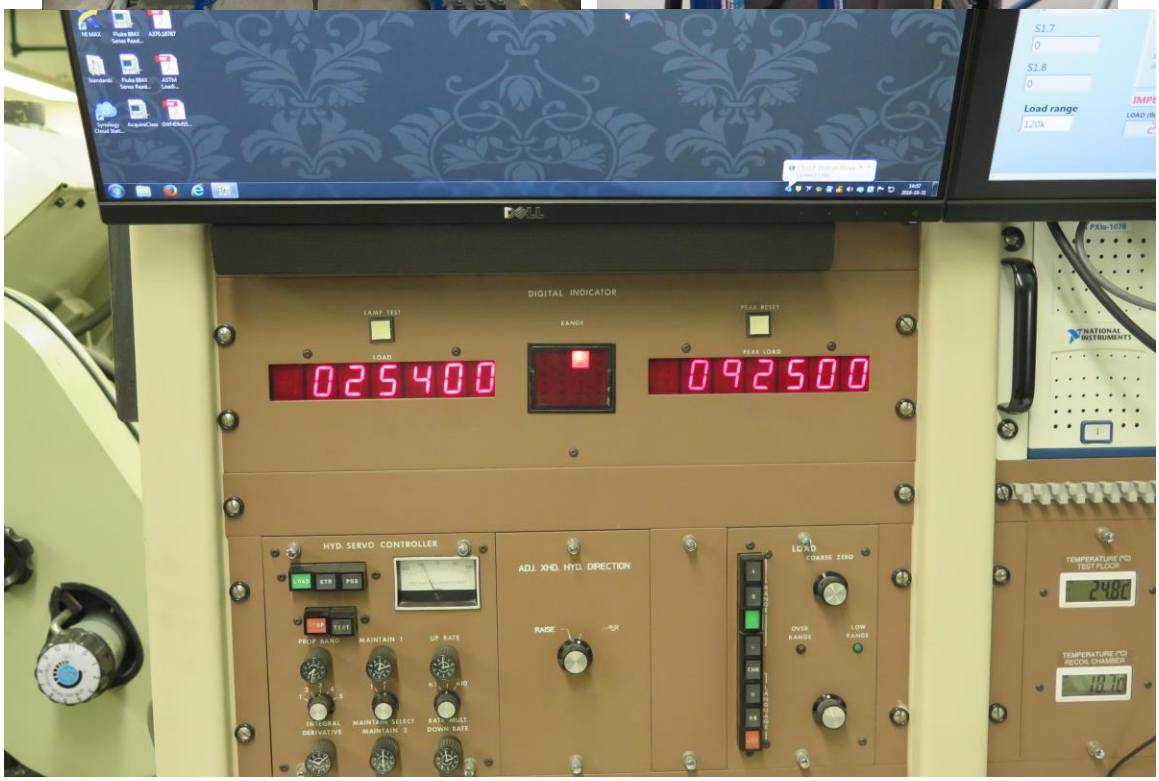
After test (#2: 5’ X 19’ scaffold assembly)



Before test (#3: 5’ X 19’ scaffold assembly)







After test (#3: 5’ X 19’ scaffold assembly)

APPENDIX B: ANSI/SSFI SC100-5/05 Test Report Form, Series A

Appendix B

WELDED FRAME SCAFFOLD ASSEMBLY TEST REPORT FORM, SERIES A

Manufacturer: Cornwell Scaffold			Model #/Product Identification: WT5644HD			
Test Date: 10/28-31/2016	Test #:		Test Location: Carleton Laboratory		Factor of Safety (FS):	
Series A Readings						
	Leg 1 Load	Leg 2 Load	Leg 3 Load	Leg 4 Load	Total Ultimate Load	Failure Mode (Use "Notes" if needed)
Test 1	25,400	25,400	25,400	25,000	101,600	Buckled Legs
Test 2	25,000	25,000	25,000	25,000	100,000	Buckled Legs
Test 3	23,125	23,125	23,125	23,125	92,500	Buckled Legs
Test 4 (if needed)						
Test 5(if needed)						

Series A Rating

	Tests 1-3	Tests 1-4 (if needed)	4 Out of 5 Tests (if needed)
Average Ultimate Load	98,033		
Maximum Variation	5.564 % for Test # 3	___% for Test #___	___% for Test #___
Allowable Leg Load Rating (Avg / FS)	24,508		

Sketch: Attach Sketch of Test, Graphs (if applicable), and list of components

Notes:______________________________

Witnesses

Name	**Company**	**Signature**	**Title**

Certification

I certify that I am a qualified engineer or a representative of an independent testing laboratory as defined in the SC100 standard. I also certify that the above described tests were performed in accordance with the applicable provisions of the Methods for Testing and Rating Welded Frame Scaffold Assemblies, as published by the Scaffolding, Shoring & Forming Institute in the SSFI SC100 standard, and that the stated results and values are accurate.

Eric Spörer	[signature]	Columbia University	11/1/2016
(Name)	(Signature)	(Company)	(Date)
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(Address/city/state/zip)		(Phone)	(e-mail)

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