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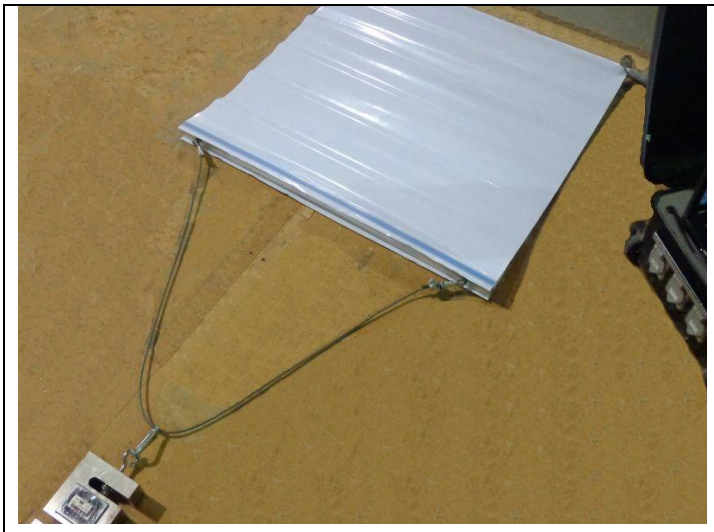
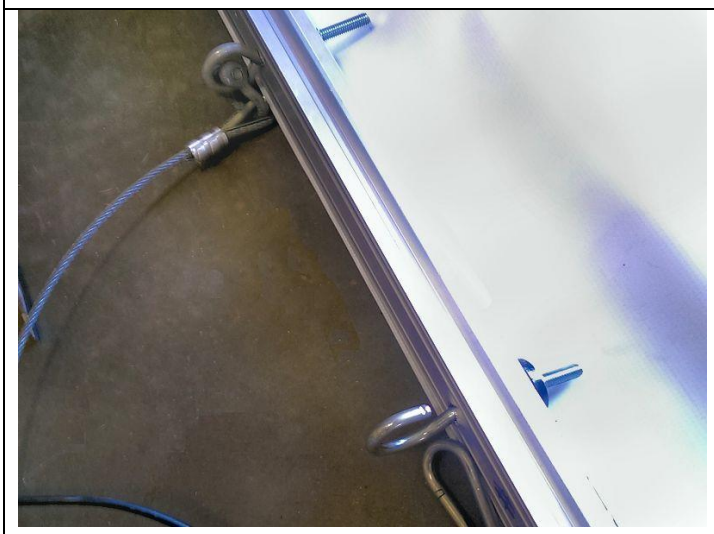
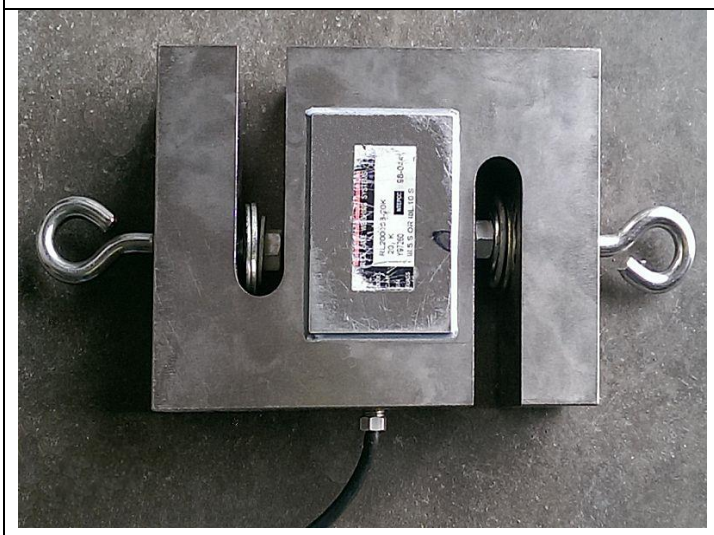
Pulling Tests

	Some prospects and customers were interested to know what would be the maximum pulling force. Or expressed differently how many pounds of pulling exercised by the vinyl before the PVC pops out or the vinyl is torn. We listen to our customers and so we realized these tests.
	The tests consisted of two 36” pieces of different extrusions (TS32 & TS44) on which a 36” x 72” piece of 13 Oz. vinyl was fixed on each facing channels using a PVC locking strip. The tests were done horizontally on a table, as shown on the first photo. Here you can see the cable attachment to the extrusion using two eye bolts.
	Here is the sensor measuring the applied force also called “Sensor Cell”. This sensor is connected to a control equipment incorporating a computer that once calibrated capture the data.

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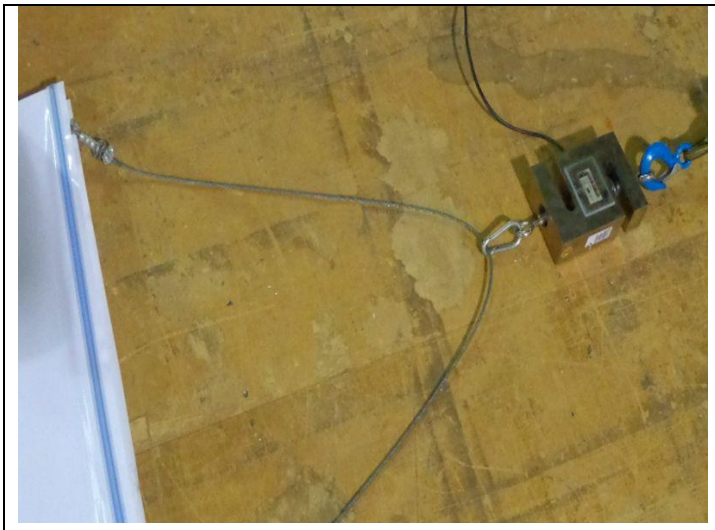
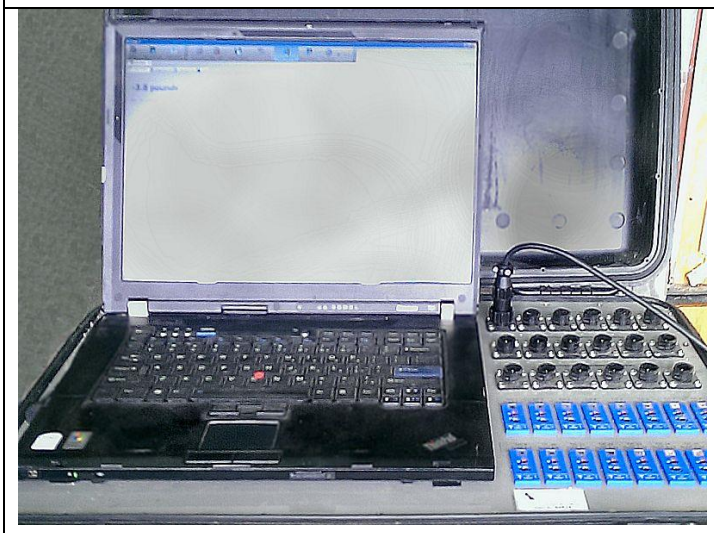
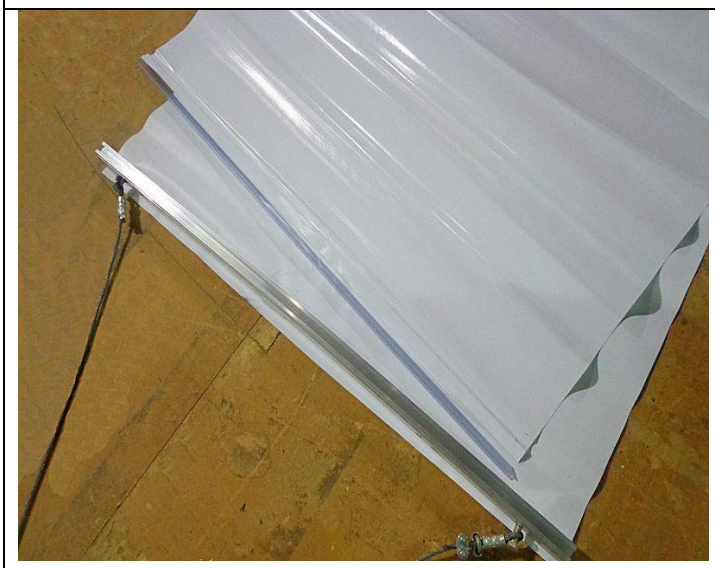
	The test configuration is ready for the experiment.
	View of the equipment to be calibrated and then measuring in pounds the force applied to the test configuration
	The pulling stopped when the PVC strip popped out due to the force exercised on the test configuration. Notice that the vinyl was not torn (See technical specifications about the vinyl used during these tests.) Hereafter find the official results in Pounds and Kilograms for the different configurations.

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Results Letter from Intertek mailed to Tensioning Solutions

November 6, 2015

Mr. Michael Cormon
Tensioning Solutions
16571 Lake Heather Dr.
Tampa, FL 33618

RE: Test Results

Dear Mr. Cormon,

Testing was recently performed by Architectural Testing, Inc., an Intertek company ("Intertek-ATI") on four specimens (pull test) at the ATI/ Intertek test facility in Tampa, Florida.
The test specimen was tested as an R&D Testing/Develop pull tensioning test.

Results are as follows:

	Frame	Achieving Weight	Failure Mode
Specimen # 1	Extrusion TS44 (White Inserts)	1425.9 lbs/ 647.3 kg	Vinyl release from insert
Specimen # 2	Extrusion TS44 (Clear Inserts)	1270.4 lbs/ 576.7 kg	
Specimen # 3	Extrusion TS32 (Clear Inserts)	826.5 lbs/ 375.2 kg	
Specimen # 4	Extrusion TS32 (White Inserts)	817.5 lbs/ 371.1 kg	

Sincerely,

ARCHITECTURAL TESTING, INC.

Wilferson U. Simbert
Technician

WUS/jah
cc: F2083.01-401-36-LOR

2250 Massaro Boulevard
Tampa, FL 33619

www.archtest.com - www.intertek.com/building

p. 813.628.4300
f. 717.764.4129

Results are as follows:

	Frame	Achieving Weight	Failure Mode
Specimen # 1	Extrusion TS44 (White Inserts)	1425.9 lbs/ 647.3 kg	Vinyl release from insert
Specimen # 2	Extrusion TS44 (Clear Inserts)	1270.4 lbs/ 576.7 kg	
Specimen # 3	Extrusion TS32 (Clear Inserts)	826.5 lbs/ 375.2 kg	
Specimen # 4	Extrusion TS32 (White Inserts)	817.5 lbs/ 371.1 kg	

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Description of the Vinyl Banner Used for these Tests

Product Name: Forward Banner

Description:

- 13 oz. Forward Banner, single-sided digital banner material
- 1000 x 1000 denier, 9 x 9 scrim
- Fire retardant, meets NFPA 701
- Matte & gloss finishes available
- Perfect for indoor or outdoor use
- Printable with Solvent, Eco-Solvent, Latex and UV inks
- Available in 31" to 74" wide rolls
- Forward Wound
- Ideal for use on Roland printers
- Were you previously using Tru-Stock Banner? Forward Banner will meet your needs. Even use the same profiles!
- All banner 60" width and above are subject to additional shipping and handling fees when shipping small parcel and may require motor freight shipment.