

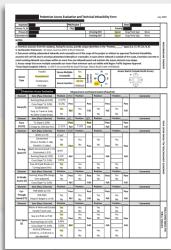
Advanced Data Acquisition & Measurement (ADAM)

RIEKER inc.

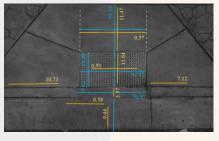
Rieker's Advanced Data Acquisition & Measurement (ADAM) system is a total solution to assure curb ramp compliance with ADA (Americans with Disabilities Act) guidelines. ADAM uses computer vision techniques to accurately capture and measure curb ramps with repeatability and traceability to the National Institute of Standards and Technology (NIST). ADAM provides the following:

1. State Compliance Report

- State specific compliance report -Customizable to meet requirements
 - All measurements accurate to 0.1" and traceable to NIST for irrefutable proof of compliance
- Sites are identified by intersection name and location as well as GPS coordinates for easy identification & retrieval
- All points of measurement on the 3D model are recorded & displayed for forensic documentation & review.



Benert	Item (Pass Criterion)	Position_		Position _		Position_		Position_		Comments
		Polymer		Polymer		Polymer		Folymer		
	Type	Castinos		Cast Iron		Cestilian		Cast Iron		
	100	Precast		Precast		Frecast		Precast		
		Non-570		Non-STD		Non-STD		Non-STD		
	Color Contracts with	Yes	1	Yes	1	Tes	1	Tes	1	
	Samounding Surface (Yes)	No		No		50		No		
	Carb Cut Width (24 R single	Yes	1	Yes	1	Nes	1	1es	1	
Detectable	contract, 2.8.8 multiple)	No	Peris	No	Pess	3.9	Pass	50	Pass	
Warring	OWS Depth (2.2.8: across	365	1	¥85		745		16	1	
Surface	full width of carb-cat)	No		50		59		749		
(01815)	Corners (c2 in from	765	1 441	345	Fail	745	Fail	16	Fail	
	TRC and Base of Curb Curb	No		No		59		No		
	Gap Between Battom of	Yes	1	Yes		Tes		16	1	
	Multiple Panels £2 in.	No		No .		No		No		
	(0 in. preferred)	533		5,08		A/A		N,OA		
	Directional Edge 5 5 ft to	Yes	1	Yes		Tes		Tes	1	
	TBC (straight DWS) or	No.		No		No		No		
	> 5 ft to TIX (angled DWS)	5.18		5,0		A/A		6,04		
Benert	Item (Pass Critwion)		(eft	Position _	Right .	Position_	_	Position_	_	Comments
Pedestrian	Width (2.4.ft)	58.92*	7215	58.84	P215		P265		Pass.	User can use stanced
Access	Cross Sibpe (£ 2.0%)	1.58%		0.52%					Fall	concrete as a passing area
Foute	Pattine Space	Yes	- 141	Yes	Fall	Nes.	Fail	Tes	1.64	per cross slope criteriaof
(FAR)	(5 ft + 5 ft, 5 200 ft aport)	No	N/A	No	N/A	No	A/A	50	80.	0.5N error
Benert	Item (Pass Criterion)	Position		Position	-	Position		Peelson_		Comments
Connexik	Running Slope (± 5.0%)	0.28%	Pass		Pas		Page 1		Pass	
(Marked or			541		541		Fail		Fail	
(Investiged)	Cross Slope* (£ 2.0N)	0.96N	N/A		N/A	I	All A		50.	
Dement	Item (Pass Criterion)	Position .	_	Position .		Position	_	Peulson_	_	Comments
	Height above (T)		_				_		_	
	H2 1 2 in. or 36-46 in if FE	40.57*	Pan		Pen	I	Pass		Pana	
Ped. Pash	(percept						1.000			
Butten			1			<u> </u>				
Butten laggested w	Offset from (T) (£ 50 is., 38 in. max ¥ 82 approved) ork to meet Standards (Sele Intersection and/or roadway		Fail PAPAS	O ferrore	Fall	et structure	Fall	lay .	Fall	onstruct/helocate storm drain
Butten	Offset from (T) (£ 10 in., 18 in. max if RE approved) on to meet Standards (Sele	et all that a sities estrian facili	eerd:	C Relación C Relación	adjace under above	nt structure ground utili r ground utili	or fac) V		0.10	onstruct/relocate storm drain designation of historic facility
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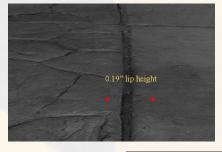




2. A 3D Infrastructure Model

ADAM brings the site to you. The digital twin of the physical site is generated and can be used for scoping and design.

- Obstacles and technical infeasibilities can be seen right away
- Measurements such as distance, slope, elevation, etc., can be made
- The digital twin is provided in multiple formats
- -LAS format for point cloud
 - -Provided in 3 different units (meters, feet, inches) for easy import into designer's workspace
 - -Full and low-resolution LAS files are provided
 - for convenience
 - -OBJ format for textured mesh





Patent Pending: 029313.00114 Curb Inspection Tool - This application claims priority to U.S. Provisional Application No. US 62/899,411, filed September 12, 2019 and U.S. Provisional Application No. US 62/932199, filed November 7, 2019.vv

Call us today at 610-500-2000 or visit www.riekerinc.com/total-solutions/



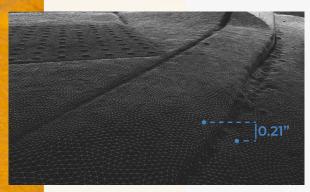
Structure from Motion (SFM) & Photogrammetry

Computer vision techniques such as structure from motion (SFM), photogrammetry, etc., are used to provide an accurate 3D reconstruction of physical space.

Reference to Gravity and Scale

ADAM utilizes high resolution cameras in combination with an Automated Reference Plane (ARP) to reconstruct an accurate 3D space referenced to gravity. Rieker's high accuracy inclinometer provides the foundation of the ARP.

Photo realistic 3D textured mesh brings the site to you.



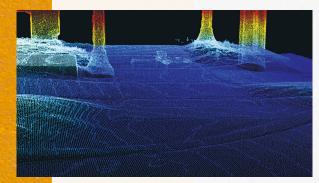
Portal Access & Automated Report Generation

ADAM provides automatic uploads of all inspection data when connected to the internet; a user may geo locate site data, access and customize automated reports, and investigate a 3D model forensically from the office. All data is stored securely on the ADAM Portal and is exportable.

Job Progress Tracker (JPT)

The overall job progress can be easily tracked. The status of each site is updated and displayed through a portal. JPT includes site data capture description, key site attributes, user or state-specific custom fields, acquisition status, flexible prioritization, and reporting capabilities.

High resolution mesh for accurate measurements to 0.1".



The Rieker Advanced Data Acquisition & Measurement (ADAM) is an advanced system delivering uniform accurate measurement and forensic reporting to help ADA compliance coordinators, municipal inspectors, traffic planning personnel, and outside engineering firms meet ADA guidelines - shielding US states, cities, counties, and other municipalities from the legal liability associated with ADA guideline violations.

Variable resolution point cloud for flexible workability.



Call us today at 610-500-2000 or visit www.riekerinc.com/total-solutions/

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