

## Mechanical Deficiency Report App

An enterprise app designed for architects, engineers, general contractors, service technicians and professional tradespeople.

This application documents a “correction needed” or “correction completed” to mechanical, plumbing, and electrical systems, the structural infrastructure of a building, or punch list items on construction sites.

It leverages smart phone capabilities with a patent-pending, time-locked, documentation process that includes embedded photos watermarked with time, date and GPS location, as well as E-signature fields.

This App also sorts, stores, and enables instant emailing of completed documents, making it ideal for use in the daily documentation of punch list items and repairs needed or completed on fast-paced construction sites.

The Mechanical Deficiency Utility App offers a sophisticated level of documentation that streamlines the corrections process, ensuring that “corrections needed” and “corrections completed” can be digitally captured and logged by the user with ease. This translates directly into labor hours saved on projects due to fewer project walks needed to view “corrections needed” and “corrections completed”.

This application delivers better archiving and a higher end product to customers at an economical cost.

- Saves time and labor.
- Reduces number of hours and project walks to track work progress.
- Creates secure, digital inspection records in minutes.
- Embeds photos and video – stamped with time, date, ambient temp, GPS location.
- E-signature capture.
- Time-locked, encrypted data fields.
- Easy side-by-side photo comparisons.
- Email completed forms as printable JPGs.
- Save and store files by date, project/system and client.
- Creates detailed proof of work for clients, project managers, etc.
- Work anywhere. No server connection needed. No ads.
- Say goodbye to lost or damaged paperwork.
- Patent-pending, digital documentation process.

## Features and Specifications:

**Supported Devices:** Any Android device with OS 11 or higher. Also all iPhones 4 and up, and all iPads 2 and up with OS 7.0 or higher.

**Device Capability Requirements:** Camera, touchscreen, email account (ambient temperature sensor will be leveraged when present for Androids).

**Application Size:** Under 3 MB

**Internal Memory Usage:** Compressed SQL database and photos. Approx. 250K usage per image. SQL-backed list of certification forms. Standard SQL – can be exported and browsed by a wide range of professional software.

**Multiple E-Signoff Enabled:** Forms can be E-signed right on the device and emailed out as a JPG image that is easy to print out for hardcopy records.

**Organize Mechanical Image Captures:** Photos are date/time/ambient temperature stamped.

**100% Documentation of Certification Process:** From start to signoff.

**Stand-Alone Application:** No ads. No server side component and no Internet access utilized by the App except GPS location services for address look-ups, and to email completed certifications to selected recipients.

**Payment Model:** Free to download and evaluate a limited set of features. Full features can be accessed with a subscription model. Visit our App Store or Google Play sites for details.

Screen Shots

Verizon LTE12:45 PM

Save

Edit Form

Cancel

Sun 1/31/16 12:44 PM

Campbell School District

1029 Hamilton Ave Campbell Ca.

East Gym

Tim Austin D&D Plumbing

P.109

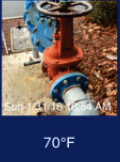
plumbing

Needs Repair

Repaired

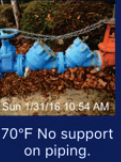
Sun 1/31/16 10:54 AM

70°F



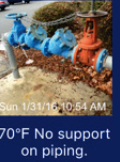
Sun 1/31/16 10:54 AM

70°F No support on piping.




Sun 1/31/16 10:54 AM

70°F No support on piping.




Sun 1/31/16 10:54 AM

70°F




Sun 1/31/16 10:54 AM

70°F Close up of leaking seal.



Sun 1/31/16 10:55 AM

70°F Rusty drain valve.



Leaking seals on building back flow preventer need replacing.

Verizon LTE12:48 PM

Back

Saved Forms

Date	Customer	Project	Status	
Sun 1/31 12:45 PM	Campbell School District		<div></div>	>
Sun 1/31 12:47 PM	Saratoga School District		<div></div>	>
Sun 1/31 12:47 PM	CECC		<div></div>	>
Sun 1/31 12:47 PM	Saratoga School District		<div></div>	>

Verizon LTE12:44 PM

Back

Sign and Email

Email

Sign

Mechanical Deficiency Report

Sun 1/31/16 12:41 PM

Customer: Campbell School District

Location: 1029 Hamilton Ave Campbell Ca.

Project: East Gym

Installer: Tim Austin D&D Plumbing


Plan: P.109

Type: plumbing

Needs Repair: YESRepaired: No


Sun 1/31/16 10:54 AM

70°F




Sun 1/31/16 10:54 AM

70°F No support on piping.




Sun 1/31/16 10:54 AM

70°F No support on piping.




Sun 1/31/16 10:54 AM

70°F




Sun 1/31/16 10:54 AM

70°F Close up of leaking seal.



Sun 1/31/16 10:55 AM

70°F Rusty drain valve.



## Estimated Time and Labor Savings with Mechanical Deficiency App

Activity	Current Labor Hours without App (in minutes)	Labor Hours with App (in minutes)	Labor Hours Saved with App (in minutes)
Finding and Printing Documents	30 min per job	30 min initial download; 5 min per every additional use	0 min initial; 25 min for additional jobs
Transporting Documentation	30 min	5 min to find phone	25 min
Completing Documentation	15 min	15 min	0 min
*Loss, Incomplete, or Inaccuracies on Documents	120 min finding lost paperwork or recreating docs	15 min find phone and re-email completed documents	105 min
Scanning Documentation	5 min	0 min no scanning needed	5 min
Emailing Documentation	20 min travel to office; find, scan, email document	5 min type in names and send email from field	15 min
* Further Detailed Documentation to Customer	0-120min depending on request	5-15 min to resend or reprint repair report if hard copy requested (App provides all detail and photos customers will need)	Up to 105 min
Multiple Repairs	15 min x number of repairs	5 min (App auto-fills project details from initial repair report)	10 min+
<b>Totals</b>	<b>355+min</b>	<b>95 min</b>	<b>290 min+</b>

- ◆ **Items with Asterisk (\*) don't apply to all jobs, but often occur in the field.**
- ◆ **Total estimated labor hours saved in one repair:** 55 min. minimum, up to 4 hours, 50 min depending on customer and job.
- ◆ **Total estimated labor hours saved on projects with 25+ repairs:** 22.9 hours minimum, up to 120.8 hours.

**If the average cost of labor is \$120 per hour:**

- Estimated cost savings for one repair is \$110 minimum and up to \$580
- Estimated cost savings for large projects with 25+repairs is \$2,748 minimum, up to \$14,498.

## Mechanical Deficiency App Document Quality

Process	Current Documentation Process	Documentation When Using Application
Obtain Documents	Must find correct paper form	Find phone; open App
Secure Picture of Repair Required or Completed	none	Yes-Live Digital Capture; No photo import/export ensures document integrity
Time/Date Stamp	none	Yes-Watermarked
Temperature Stamp	none	Yes-Watermarked
GPS Stamped	none	Where available
Locking Fields	none	Yes-All fields
Signature	Pen/Paper	Real-time E-signature
Secure Filing of Documentation	Transport back to shop, scan, email	Email immediately from field
Company Repair Completion with Digital Documentation	None	Yes-Through patent-pending, time-locked process. Includes E-signed repair form, time-locked data fields, and time and date-stamped photos.
Secure Document	None	Yes-Through patent-pending, time-locked process. Includes E-signed repair form, time-locked data fields and time and date-stamped photos.
Quality of Document to Customer	Handwritten, scanned paper (no embedded photos)	Digital capture of repair with all information typed, E-signed and securely locked

- This App improves the quality of the repair documentation by providing a time-locked, date and GPS-stamped photo documentation that is not editable.
- App documentation offers assurance to inspectors, business owners, customers and tradesmen that the repair was needed, performed, and documented at the highest standard.

## **Mechanical Deficiency Report Application – User Instructions:**

- 1) Open App interface. Tap on “new form” and fill out a new certification form. Type in category of system (electrical, mechanical, controls, plumbing or custom). Check appropriate box to indicate if repair is needed or done.
- 2) Go to camera icon. Tap. Take photo of repair needed (for example, repair needed to mechanical, structural, electrical or plumbing system). Save photo. The photo will be non-editable but you can retake a photo until you are happy with the results. Save each photo you want to keep. You can save up to six photos in total (for example, three repairs needed, three repairs completed, or six repairs needed, and then open another form for the repairs completed).
- 3) Return after repair is completed with administrative authority if necessary. Check that repair has been completed properly and check “repair done” on app. Tap “edit” and take completion photos. Now you should have multiple photos side-by-side stamped with time and date. In comment box, type in details of the repair and save.
- 4) Open saved certification file in interface. Confirm all information on certification form. Tap to sign. At this point, all information that has been typed in, all digital photos that have been saved, and all work that has been confirmed will be non-editable. Tap “sign and email” then “sign” to E-sign. Type in installer’s name and sign document using a stylus or your finger. Tap “sign” again to have administrative authority type in their name and sign. Add additional signatures as required. Once E-signoff is complete, tap “e-mail”, type in recipient email addresses and send.
- 5) You may have multiple repairs on one project in edit mode. You can duplicate all information except the photos each time you open a new inspection form for the same project. Just press the “duplicate” button to auto fill the job details for each new repair on the project. You can edit the duplicated information, such as the type of system being inspected (for example, mechanical, structural, electrical or plumbing) and any other information as needed. You can organize multiple repairs for large projects on the interface in “saved forms” by “system”, “customer”, “date” or “status” to easily track multiple repairs on the same project.
- 6) Open icon. Tap on “send feedback” button to let us know how the App is working or if we can be of any help.

### **FOR MORE INFORMATION, CONTACT:**

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