



Drone Roof Inspections, Measurment's and Accurate Reporting

Collect HD roof imagery and
generate accurate reports 3x faster
than traditional methods

When and Why You Need a Roof Inspection

- **Warranty protection** – Many warranty agreements require property owners to perform roof inspections on a set basis for the warranty to remain in effect
- **Leak assessments** – Leaky roof's are just plain bad
- **Check for weathering** – Deterioration can be a slow process that may not always be visible to the naked-eye. Use a drone to spot problems early before getting hit with a larger repair bill
- **Drainage issues** – Clogged gutters can be devastating to your roof if left unchecked. A buildup of water can travel straight to your ceiling and cause major damage like mold and rot.
- **Maintenance damage** - Faulty work from previous roofing contractors can lead to major water damage is unrepaired or hidden
- **Preemptive checks** - Just because you don't see a problem doesn't mean it's not there. Regular inspections, even those that go beyond your home warranty can help you spot weathering patterns and make aid you in making the right fixes before a problem emerges



Don't wait until you have an unexpected skylight in your roof to request an inspection





5 Reasons Why You Should Use Drones for Roof Inspections

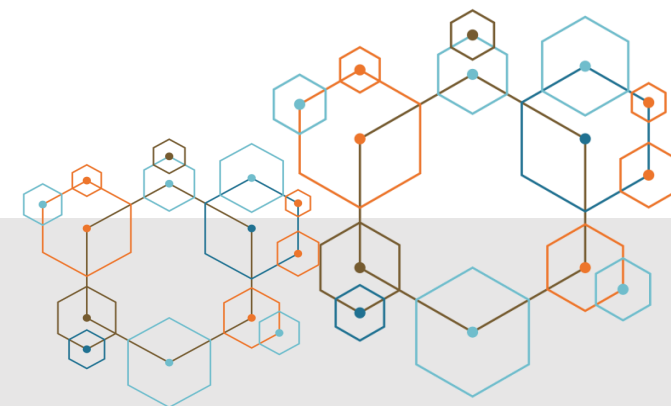
- Drones provides a safer alternative to traditional inspection methods
- Ability to collect in-depth data
- Drone technology helps you get the job done faster
- Drone-based roof inspections are far less costly
- Drones inspections can reduce associated insurance cost and and improve your revenue

Our customers - from solar, real estate, commercial, engineering and construction that utilize our drone service in their daily workflow - are experiencing incredible ROI with AVT's roofing solutions. When paired with our powerful aerial post processing software we help customers achieve greater time and costs savings, improved team efficiency, and accurate data collection. It's truly redefining an industry where accuracy and safety are of equal necessity.

Robert Nicholson-Owner at Aerial Visual Technologies LLC

Safety and Compliance

- Manage safety and roof maintenance issues fast while helping clients comply with regulations
- Reduce working hazards while conducting inspections
- Identify possible weak spots in the roof well before walking around
- Easily identify and plan for slip/trip/fall hazards
- Provide instant documentation for insurance and other regulatory claim agencies



Traditional roof inspections can be risky, from a collapsing base and insect bites to falling off ladders and scaffolding equipment. The use of drones to replace human eye assessments can minimize or completely eliminate most of the risk associated with slip/trip/fall and collapsing flooring under an inspectors feet.

Collecting In-depth Analysis

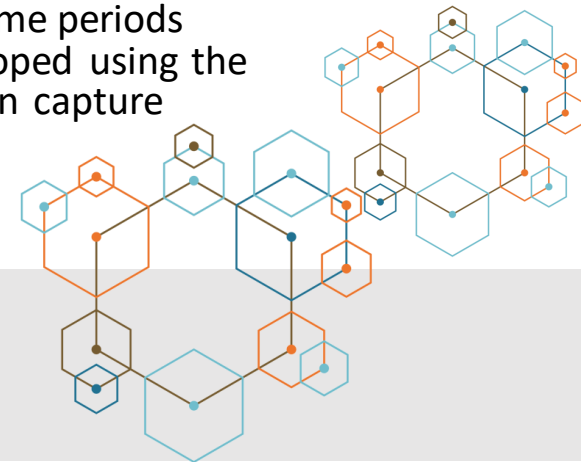
- Drones can reach almost any part of the building and collect HD imagery and 4K video
- Drone based initial inspections are much faster, more efficient and accurate
- Drones can be equipped with thermal cameras for greater in-depth focus
- 3D models and point clouds can be developed and used for accurate measurements and side-by-side comparisons
- Drones are equipped with GPS which means over long project time periods twin pictures can be developed using the exact location and elevation capture every time.



By providing our clients with the ability to reach tight spaces or otherwise inaccessible areas with drones, we can capture more information than an inspector would using traditional means



Drone roofing reports help teams collaborate and share ideas that address issues, budgets and progress in sharable digital formats that are easy accessible and understandable



Accurate Models and Instant Detection Equals Immediate ROI

- Take high-accuracy roof measurements and detect anomalies and mitigate risk
- Generate same-day PDF reports, 3D models, DXF files and dense point clouds
- Maintain prioritization of which properties in your workflow need the most attention
- Share and communicate accurate roofing data with the entire team throughout the life of the project.



Produce high-precision roof reports, 3D models, point clouds and DXF files in just a few hours vs days or weeks using traditional methods



Detect roof anomalies that easily overlooked with the naked-eye using thermal processing



Keep your entire team safe on the ground while the drone does the work. Stop climbing dangerous ladders and walking roofs without being fully informed of pre-existing conditions



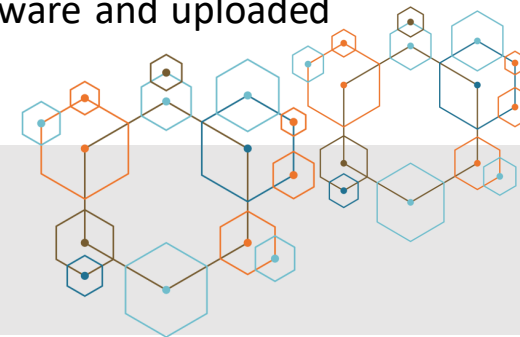
Help clients better manage compliance and workflows with faster data turnaround times. Get the job done 3x faster

Drone Technology Equals 3x The Completion Speed

- Drones take only a short time to carry out an inspection once a client makes a request
- Drones can inspect with photo capture and video capture a full 22acre facility (example) in just a few hours
- Drone inspections don't require being tied off, climbing or mounting heavy equipment to complete the inspection
- Drones can live-stream the entire inspection process to PM's, owners and stakeholders from anywhere
- Drone photos can be processed through photogrammetry software and uploaded to CAD



Integrate your roofing report with our powerful software add-ons



Drone-based Roof Inspections are Less Costly

- Drone services can help in reducing traditional inspection cost significantly
- No need to acquire and transport costly scaffolding, lifts, ladders and other climbing gear
- Not as many people required to inspect which is an automatic cost savings
- Multiple facility roofing inspections can be completed in a single day
- Inspectors can monitor and communicate with the drone pilot from a remote location and still maintain site awareness



The roof of your structure can be easy to ignore — until suddenly it's not. Small damage caused by weathering and aging are less subtle than storms. However they can still slowly eat away at the performance and stability of your roof, until one day you wake up in need of emergency repairs, and end up stuck with a far larger bill than you ever expected.



Conclusion

AVT offers multiple commercial drones that meet the specifications and challenges of your roof inspection. UAVs like our DJI Phantom 4 Pro V2.0 and Matrice M-210 are designed with low-altitude mapping and inspection in mind. Of course, the right drone will only get you so far on its own. Our aerial imagery is uploaded for post processing in top-notch software like Autodesk Recap Pro/Revit and CAD which in our opinion is essential to any inspection job.

With our platform, we can create 2D and 3D models with pinpoint accuracy for any mapping job, be it mission planning, area mapping, or anything in between. Take the next step and reach out to us, we want to help you plan your next project today.

