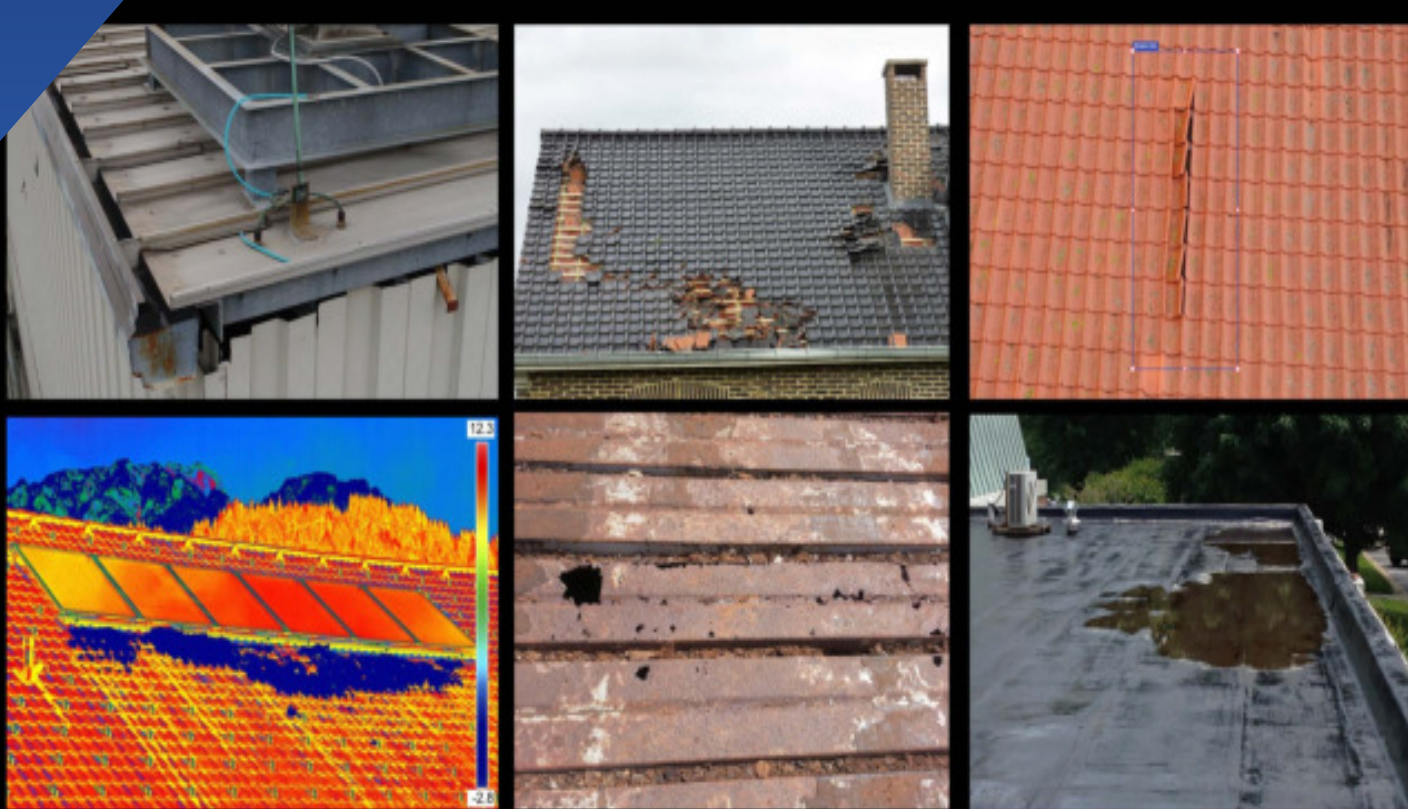




FLY. UPLOAD. ANALYZE. PRESENT.



Aerial UAS Drone Roofing Inspection and Analytics Report

ABOUT CONNEXICORE

MANAGED DRONE FLIGHT SERVICES

ConnexiCore™ is a nationwide Commercial UAS Drone Solutions Provider. With a nationwide network of expert (FAA) licensed pilots in all 50 states who specialize in drone videography and aerial promotional marketing we are positioned to service nearly any commercial industry.

INDUSTRY-FOCUSED DRONE EXPERTISE

- Precision Agriculture
- Architectural Engineering and Construction
- Land Development Marketing

For our industrial inspection clients ConnexiCore delivers and analyzes data efficiently and effectively through our secure cloud-based image analysis and storage platform called ConnexiCore Cloud. Our turn-key systems integration approach starts and ends by managing the entire process for you: from flying the drones, analyzing the data, extracting insights from that data, and delivering measurable and actionable tasks to support decision making

UAS OPERATIONS, TRAINING AND CONSULTING SERVICES

ConnexiCore is acclaimed for working with public safety and commercial organizations across the country, so we know that launching a safe, legal, and efficient commercial drone program can be difficult, time-consuming and costly. ConnexiCore defines and designs a UAS program by carefully adhering to the 3 areas of any commercial drone program:

- Identifying the regulatory framework
- Creating a training regimen
- Purchasing the right equipment and software

Get your organization's drone program off to the right start with our all-inclusive suite of comprehensive courses, including ground school and hours of flight training. Learn what it takes to start or finish your UAV program, determine what UAVs are best for your needs. ConnexiCore UAS Operations consulting packages will propel your drone program further, so you can begin to see value throughout your business as quickly as possible. ConnexiCore will assist your organization in developing a foundation to build on and customize for your specific needs while saving countless hours of work and allowing you to benefit from the experience of others in the industry

How Drones Are Used For Roof Inspections

Whether you are a roofing company, managing a building, working with solar panels, inspecting for an insurance claim, or any other number of reasons, it makes sense to consider using drones for roof inspections for a range of benefits, including safety, cost, and time. Until recent innovations, there was just no way around it. If you wanted to do a proper roof inspection and analysis, you had to:

- Climb up on a ladder
- Walk the roof
- Identify and notate obvious areas of interest
- You might take photographs
- Even take core samples for the final roof report and remediation plan

Drone mission planning

This is no different from the traditional approach roofers and project managers have used for decades, but now it's pinning waypoints, setting altitudes, confirming airspace and more.

Fly the drone

The next stage in the workflow is arriving on site and conducting the flight where possibly hundreds of images are captured before the flight is completed. The flight aspect of the workflow is about minimizing time on the roof, letting you get onsite, collect a high-quality dataset, and then move on.

Collect drone data

Drones can generate a variety of data types. This could include high-resolution roof images that are date and geo-tagged to pinpoint and annotate for expert inspection. Drones can also deploy thermal cameras, which have become a powerful tool for conducting roof inspections. Since wet areas on a roof retain heat longer than dry areas, thermal imagery can detect temperature differences and help inspectors pinpoint areas of concern that warrant a closer look.

Drone data analysis

It's not really about the drones, it's about the data and how to leverage it. But data alone is useless unless it can be processed into actionable business insights. Just having 500 roof images, or even point cloud 3D models doesn't help you achieve your objectives. You need answers based on data. For example,

- How long is this roof edge?
- What is the surface area of this roof plane?
- What are the damages or roof obstructions?

By leveraging sophisticated drone roof inspection software, such as Drone Deploy, these cloud-based software tools allow you to share, collaborate, and answer questions on the data.



Report date:
Jan 27, 2018



Number of annotations



Status:
Published



Type:
Roof



Company:
ConnexiCore



Inspection created:
Jan 27, 2018



Report Images:
8



Report created by:
Curtis Marshall
curtis@connexicore.com

💡 Inspection summary

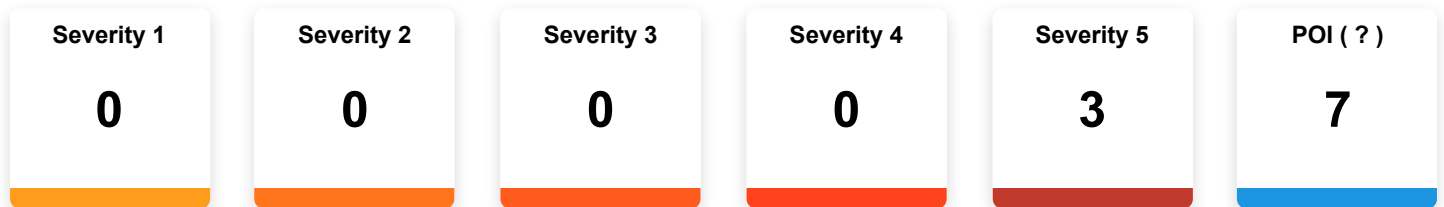
Img. 0009.jpg: Has fractured tiles on roof peak, not displaced yet.

Img. 0114.jpg: Displaced tile, needs attention.

Annotation overview



Severity overview




Id	Severity	Issues	Comments	Page
343194	?	Moss Accumulation		4
343195	?	Moss Accumulation		4
343196	?	Moss Accumulation		5
343197	5	Broken tile		6
343198	5	Broken tile		7
343200	5	Broken tile		8
343722	?	Rusted Chimney Pipe		9
343724	?	Broken tile		10
343728	?	Debris	Causing water flow issue	11
243819	?	Loose tile		12



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Roof Inspection

File name:	0001.jpg	Altitude:	23.6m
Date taken:	Feb 10, 2016 5:49:08 AM	Heading:	Northeast (53.6°)
Position:	 57.0570837, 9.9243285	User tags:	No tags available



343194 Point of interest Moss Accumulation

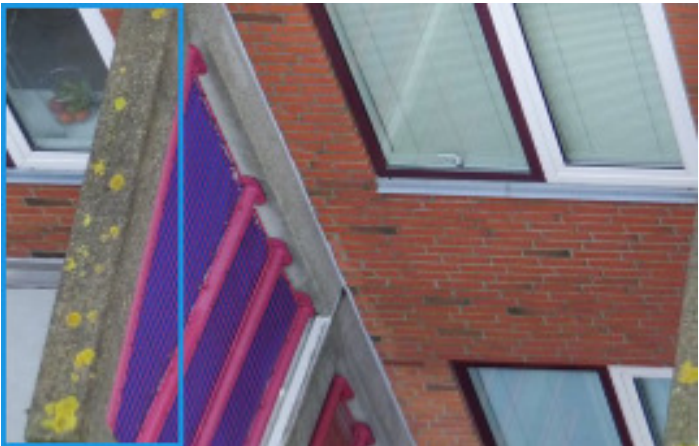


For a more detailed overview go to cloud.connexicore.com/#/inspection/2790?image=304688




343195 Point of interest Moss Accumulation

343196 Point of interest Moss Accumulation



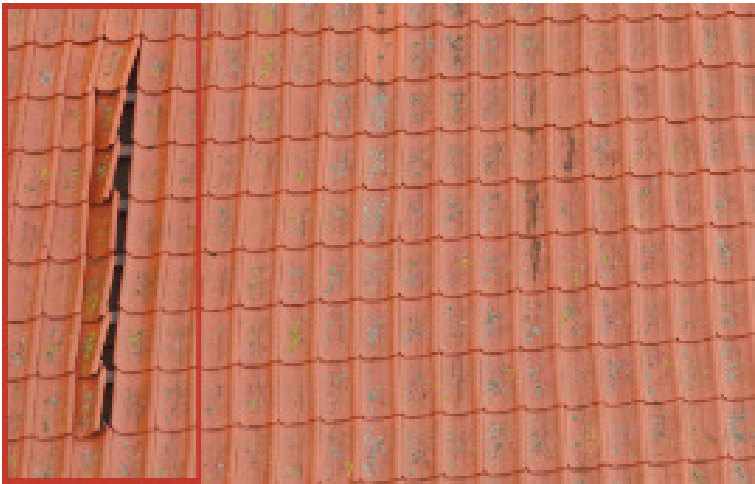
Roof Inspection

File name:	0008.jpg	Altitude:	23.5m
Date taken:	Feb 10, 2016 5:49:53 AM	Heading:	Northeast (57.9°)
Position:	 57.0571417, 9.9243375	User tags:	No tags available




For a more detailed overview go to cloud.connexicore.com/#/inspection/2790?image=304698

343197 Severity: 5 Broken tile



Roof Inspection

File name:	0010.jpg	Altitude:	23.5m
Date taken:	Feb 10, 2016 5:50:03 AM	Heading:	Northeast (47.9°)
Position:	 57.0571534, 9.9242912	User tags:	No tags available




For a more detailed overview go to cloud.connexicore.com/#/inspection/2790?image=304687



343198 Severity: 5 Broken tile

Roof Inspection

File name:	0009.jpg	Altitude:	23.4m
Date taken:	Feb 10, 2016 5:50:11 AM	Heading:	Northeast (55.4°)
Position:	 57.0571953, 9.9243301	User tags:	No tags available




For a more detailed overview go to cloud.connexicore.com/#!/inspection/2790?image=304709



343200 Severity: 5 Broken tile

Roof Inspection

File name:	0022.jpg	Altitude:	23.1m
Date taken:	Feb 10, 2016 5:51:37 AM	Heading:	Northeast (52.6°)
Position:	 57.0572544, 9.9242972	User tags:	No tags available




For a more detailed overview go to cloud.connexicore.com/#/inspection/2790?image=304711



343722 Point of interest Rusted Chimney Pipe

Roof Inspection

File name:	0021.jpg	Altitude:	23.2m
Date taken:	Feb 10, 2016 5:51:41 AM	Heading:	Northeast (52.6°)
Position:	 57.0572302, 9.9242451	User tags:	No tags available




For a more detailed overview go to cloud.connexicore.com/#/inspection/2790?image=304700



343724 Point of interest Broken tile

Roof Inspection

File name:	0023.jpg	Altitude:	23.2m
Date taken:	Feb 10, 2016 5:51:44 AM	Heading:	Northeast (52.6°)
Position:	 57.0572254, 9.9242246	User tags:	No tags available




For a more detailed overview go to cloud.connexicore.com/#/inspection/2790?image=304690



343728 Point of interest Debris

Curtis Marshall:
Causing water flow issue

Roof Inspection

File name:	0114.jpg	Altitude:	25.1m
Date taken:	Feb 10, 2016 6:10:17 AM	Heading:	Northwest (326.2°)
Position:	 57.0572529, 9.9237874	User tags:	No tags available



For a more detailed overview go to cloud.connexicore.com/#/inspection/2790?image=304696



243819 Point of interest Loose tile