



# Aerial Imaging Resources

Envelope Maintenance Imaging | Project Performance Imaging

Drone imaging services for: Safety, Perspective, Performance, and Information

Brighton Solutions, Inc. is proud to introduce a new, exciting and innovative service to our portfolio! This is a service that is cutting edge and in some respects will revolutionize the way our industry conducts inspections and investigations in the future. Federal regulations have been relaxed in this service sector to allow for more innovation with this technology. Brighton Solutions, Inc. (BSI) quickly saw the enormous potential benefits and the effectiveness that this could have on our clients and have embraced this developing technology with enthusiasm and excitement!

On August 29, 2016, the Federal Aviation Administration's (FAA) new drone regulations, [14CFR107](#), went into effect and have allowed this revolutionary technology to be more accessible to companies in the United States by relaxing the previous regulations that required a licensed pilot to command drone flights. Though pilot ground training and FAA authorization is still required by the regulations to acquire a certificate to use the drone technology commercially, these new regulations made it more accessible for companies to harness the power of this technology and offer it to its clients. The possibilities are endless!

Introducing Brighton Aerial Imaging Resources or **Brighton AIR!**



## Introduction

Welcome to **Brighton AIR**. Initially, BSI will start our service offerings through 2 options.

1. EMI (Envelope Maintenance Imaging) – With EMI, BSI supplies our clients with perspectives of the building envelope through ultra hi-definition video, digital images, and in some cases infrared thermographs. Weathering can slowly impact a building’s performance. The goal of EMI is to document the building envelope components through both baseline imaging and periodic imaging to help monitor the building performance. Early detection of exterior building issues can mean a significant savings over the life of a building. Weather events can also wreak havoc on a building and its components. Exterior building components observed include but are not limited to:

Canopy	Mullion
Chimney and chimney cap	Parapet walls
Columns	Podium
Coping	Portico
Cornice	Quoin
Curtain wall	Roof penetration
Dormers	Roof ridge
Downspout	Roof top units (RTU)
Eaves	RTU curb
Entabular	Soffits
Exhaust fan	Spandrel panel
Expansion Joints	Stringcourse
Façade	Vaneer
Fascia	Voussoir
Flue pipe	Wall penetrations
Fluting	Window glazing and caulking
Frieze	Window sash
Gables	
Guttering	
Keystone	
Molding	

2. PPI (Project Performance Imaging) – BSI offers a partnership with general contractors, developers, and property owners to document their projects’ progress through stunning 4K video and images. PPI will allow our clients to capture every aspect of their facility, new construction project, or property and use that imagery any way they want to do so. This high resolution, 4K data and information could prove to be invaluable to our clients. For general contractors, the possibility of viewing the progress of new construction from ground breaking to

final turnover in 4K video allows for baseline imaging of the Site from start to finish. For property owners or facility managers, the ability to see the exterior details of their building could offer astonishing help in diagnosing some building envelope problems in the future.

### **Advantages of Using Drones for Building Inspections**

Drones can significantly reduce the time and expense of commercial building inspections when compared to conventional methods. Using software, a trained person can easily fly a small, camera-equipped drone over a building to capture imagery. The footage can then be used to make a high-resolution map or 3-D model of the building for inspection.

The costs to deploy drones is significantly less than conventional methods. Depending on equipment and location, rates range from \$100 to \$450 per hour. Typically, rates for the drone pilot are less than what it would cost you to insure the person who would have been hanging off the side of your large commercial building.

The drone can also be deployed very quickly and capture footage in hard-to-reach places much faster and much safer than a human could.

The images and video captured can be easily shared and interpret, and they provide an overview of the building that many prefer rather than a manual inspection. In some cases, live streaming what the drone sees in real-time, could potentially allow several trades to assess building conditions concurrently.

Using drones can be an invaluable supplement to building due diligence and maintenance programs as well as an excellent marketing tool.

### **Limitations and Liabilities of Drone Inspections**

Keep in mind that drone inspections do come with limitations as well.

No technology is perfect, and drones are no exception. It can be difficult to capture necessary video or imagery of structures with overhangs, utility lines, phone lines, radio interference, landscaping items, or other obstructions, etc.

Drone propellers are extremely durable and operate at high speeds. Imagine a flying blender base and you will get the picture: The blades can easily slice through wood or bone. BSI is adamant about using bumper guards on our drones to minimize any structural damage.

Risks include damage to your property, serious injury to people and, potentially, a lawsuit if the pilot hurts someone—especially if the pilot is uninsured. For this reason, hiring an experienced drone service provider is a more prudent option for most property managers than trying to do drone inspections in-house. According to FAA Part 107 ([14CFR107](#)), special permission is required to fly over crowds and in other certain existing conditions. BSI utilized a drone management software equipped with the [LAANC](#) (Low Altitude Authorization and Notification Capability) system which grants instant authorization in certain circumstances. Otherwise, BSI adheres to the FAA waiver authorization system when required.

**Ready to get some AIR?**

**Call us now at 940.206.35492!**

**Check us out on the web at [www.bsi-ntexas.com](http://www.bsi-ntexas.com)!**