

## COMMISSIONING & GREEN BUILDING SOLUTIONS, INC.

## BUILDING FORENSIC SERVICES

Building forensics is the science and art of identifying the root causes of problems impacting the buildings. Some common threats such as material deterioration, mold, moisture intrusion, poor indoor environmental quality, equipment failure, and high utility consumption can do major damage to your building. CxGBS has extensive experience evaluating existing conditions, documenting the root cause of a problem, developing suggested corrective actions, and testing to confirm permanent problem resolution.

Further, CxGBS assists the building owner in identifying who is responsible for each of the contributing factors associated with the root causes of a specific problem and their financial share to achieve problem resolution. Liability may fall on one or more persons. For example, suppose design and construction professionals are required for building modifications. In that case, CxGBS typically remains involved in reviewing contract documents. If needed, CxGBS assists the design team with design solution development and establishes contractor assistance in requirements needed to help ensure the modifications perform as required for building problem resolution.

## **CXGBS PROJECT EXPERIENCE**



Vivian M. Presley Academic Building Coahoma Community College Clarksdale, MS | **Size:** 20,000 SF

\* Building Enclosure Forensics



State of Mississippi Central Crime Lab Mississippi Department of Public Safety Whitfield, MS | **Size:** 92,000 SF

\* HVAC Control Forensics



Grand Hyatt Hotel in Buckhead Confidential Client Atlanta, GA | **Size:** 325,000 SF

Mechanical Systems Forensics



Atwood Chemistry Building

**Emory University** 

Atlanta, GA | Size: 20,000 SF

- \* Mechanical Systems
- \* Building Enclosure Forensics



Sam Gibbons Building
General Services Administration
Tampa, FL | **Size:** 92,000 SF

Building Enclosure Forensics



Price Gilbert Library Building Georgia Tech University Atlanta, GA | Size: 235,000 SF

Building Enclosure Forensics

PROJECT NAME, LOCATION, &	REPORTED BUILDING	
BUILDING SIZE	ISSUES	CxGBS SERVICES
Sutton Hall Administration Building Mississippi Valley State University Itta Bena, MS   119,000 SF	Poor Indoor Air Quality & Moisture Intrusion	Building enclosure forensics services revealed the causes for the mold and mildew. The damage was so extensive that a significant renovation of the building was required to address all issues within the facility.
Fort Lauderdale Federal Courthouse General Services Administration Fort Lauderdale, FL   123,000 SF	Poor Indoor Air Quality & Moisture Intrusion	Mechanical systems and building enclosure forensics services identified issues with the building stormwater system, building enclosure, and HVAC system.
Lloyd Ricks Watson Building Mississippi State University Starkville, MS   66,000 SF	Moisture Intrusion	Building enclosure forensics services of the existing building envelope of the historic facility to determine the cause of moisture intrusion into the facility.
Dobbins ARB Building #554 U.S. Army National Guard Marietta, GA   33,000 SF	Poor Indoor Air Quality	Mechanical systems forensics services to identify the source of excessive moisture content of indoor air following a recent HVAC renovation.
Naples Bank of America Bank of America Naples, FL   5,500 SF	Poor Indoor Air Quality	Mechanical systems forensics services to identify the source of indoor air quality problems, including the excessive moisture content of indoor air.
Fire Stations & Community Buildings Cherokee County Government Canton, GA   50,000 SF	Poor Indoor Air Quality & Moisture Intrusion	Mechanical systems and building enclosure forensics services to identify the cause of moisture intrusion leading to mold and mildew in the buildings.
County Justice Center Cherokee County Government Canton, GA   135,000 SF	Poor Indoor Air Quality	Mechanical systems forensics services to provide a forensic investigation of indoor air quality, which was due primarily to unwanted outdoor air entering through automatic sliding doors, leading to occupant discomfort.
Poindexter Hall Mississippi Women's University Columbus, MS   26,000 SF	Moisture Intrusion	Building enclosure forensics services of the existing building envelope of the historic facility to determine the cause of moisture intrusion into the facility.
Hospice Ministries Offices Hospice Ministries Ridgeland, MS   110,000 SF	Poor Indoor Air Quality & Moisture Intrusion	Mechanical systems and building enclosure forensics services for eight campus buildings exhibiting water intrusion resulting in mold, mildew, and compromised structure.
Unit 29 Mississippi State Penitentiary Parchman, MS   922,000 SF	Moisture Intrusion	CxGBS Services included building enclosure forensics services of cell blocks A and B within the facility. Moisture intrusion was identified in many areas, including windows, precast panels, roofs, louvers, and joint sealants.
Tides IV Rinnai America Corporation Charleston, SC	Moisture Intrusion	Building enclosure forensics services to determine water source coming through the tankless water heaters in this condominium complex. The cause was negative pressurization, and CxGBS made recommendations to solve the problem.
Thompson Health Lab Jackson, MS	Moisture Intrusion	Building enclosure forensics services involved the thermal imaging of the main roof to determine whether the roof system was the point of moisture intrusion.
First Presbyterian Church Tupelo, MS	Moisture Intrusion	Building enclosure forensics services included investigating and testing the building enclosure, roof, attic area, plaster walls, etc. In addition, CxGBS made recommendations on how to repair and seal plaster walls, spraying foam on brick wall areas, and tuckpointing mortar joints in the brick wall.
Toyota and Nissan Buildings Brandon, MS	Moisture Intrusion	Building enclosure forensics services included investigation of the exterior façade, fenestration, and roof assemblies. In addition, CxGBS observed asphalt pavement lots that were pooling water and had deteriorated due to soil movement and expansion and recommended solutions for issues.