Technical Issues in Mid Century Architecture

Hinman Research Building
Georgia Institute of Technology
Gaillard Hall
North Georgia College & State University

Jack Pyburn, FAIA
Lord Aeck Sargent, Architecture

Mid-20th Century Buildings Workshop
Facility Officers Conference/ Columbus, Ga./ 26 October 2011
Hinman Research Building

1939/1951
36,000 SF
First Purpose Built Research Building
Composite Construction
Concrete/Steel/Brick/Tile/Block

Concrete Deterioration
Steel Window Differed Maintenance
Single Pane Glass
Code Structural Deficiencies

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Hinman Context

Original Building/ 1939
Addition 1951
Calculator Building/ 1947 (Richard Aeck & Assoc.)

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Hinman/ Construction Characteristics

<table>
<thead>
<tr>
<th>1890</th>
<th>1900</th>
<th>1910</th>
<th>1920</th>
<th>1930</th>
<th>1940</th>
<th>1950</th>
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Concrete
- Structural Concrete
- Architectural Concrete
- Cast in Place
- Precast

Steel
- Structural
- Light Gauge Trusses
- Windows

Masonry
- Structural Clay Tile
- Traditional Brick
- Glazed Tile

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Hinman/Concrete

Cast in Place Structural
Cast In Place Architectural
Precast Architectural

Detail of Deterioration

Precast Architectural Concrete

Cast In Place Architectural Concrete

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Hinman/Concrete

Repair

Reconstruction

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Hinman/ Concrete

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Hinman/ Concrete

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Hinman/ Windows

General Window Condition

Sash Condition

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Hinman/ Windows

Restored Windows w/ Insulated Glass
Hinman/ Structural Code Deficiencies

Inadequate Resistance to Sheer

Diagonal Bracing

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Hinman/ Structural Code Deficiencies

Inadequate Unbraced Length

Supplemental Steel Framing

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Gaillard Hall

Constructed in Two Phases 1951/1959
Richard Aeck & Associates
256 Dormitory Rooms, Gang Bathrooms
3 Levels

New Program
• 166 Beds/ Suite Style
• Added Day Rooms

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Gaillard Hall/ Issues

ADA/ Elevator
Windows
Mechanical System
Original Wall Tile
Positive Byproducts of Changes

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Galliard Hall/ Windows

Replacement Windows

Original Windows

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Gaillard Hall/ Elevator
Gaillard Hall/ Mechanical Systems

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Gaillard Hall/ Tile

Tile Treatment

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Gaillard Hall/ Reuse of Gang Bathrooms

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