

# BUFFALO

---

## AIR HANDLING

*Specialty*



Begun in 1930 and completed in 1932, the Duke University Chapel is a Christian church "with a tradition of stirring music, faithful preaching, rich liturgy and a calling to cross boundaries and walk with marginalized people".

The Chapel can seat 1,500 in the nave and transepts, has an interior height of 291 feet and has 77 stained glass windows depicting Biblical characters and stories.

It is a center of worship, community engagement and interfaith engagement and bridges the lives of students, the university, Durham and the Triangle communities.

Renovating and refurbishing from roof to basement included two new air handling units to condition the facility. Located in the basement, they were designed to fit through limited access points and to be assembled in place.

Buffalo Air Handling units were chosen because they could meet these constraints and meet a 1/2% leakage rate requirement.

### Duke University Chapel Durham, NC

#### **Equipment:**

Buffalo Air Handling supplied two 25,000 cfm, knockdown replacement air handling units as part of the chapel's restoration and renovation project.

#### **Project Engineers:**

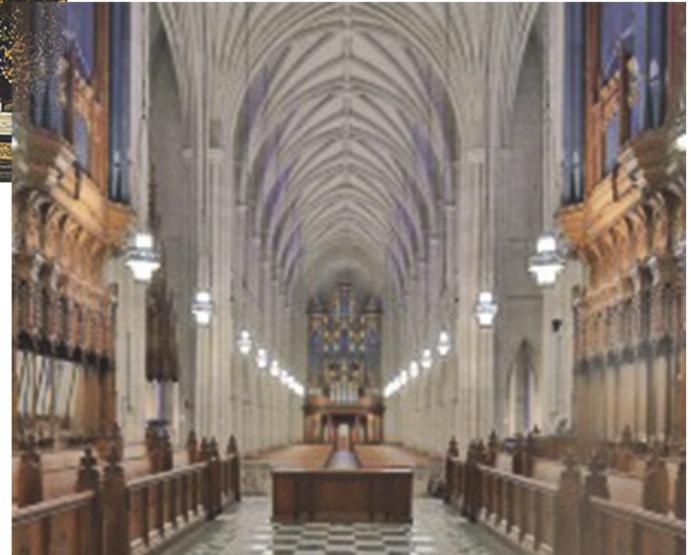
Dewberry

#### **Construction Manager:**

Romeo Guest Construction

#### **Mechanical Contractor:**

Comfort Engineers, Inc.



*Sales Engineers in cities  
throughout North America.*

*For the nearest office, contact:*

*Telephone: (434) 946-7455  
Fax: (434) 946-0226*

*467 Zane Snead Drive  
Amherst, VA 24521  
[www.buffaloair.com](http://www.buffaloair.com)  
[sales@buffaloair.com](mailto:sales@buffaloair.com)*

### ***Big Buffalo*** ***Knockdown Construction***

#### **Sizes:**

- (2) 25,000 cfm

#### **Construction:**

- 3" walls
- Injected polyurethane foam
- .050" stucco aluminum exterior
- .040" smooth aluminum interior
- 6" structural aluminum base; 3/16" aluminum treadplate floor

#### **Components:**

- Four (4) plenum supply fans in parallel
- Premium efficient, TEFC motors
- One (1) NEMA 12 VFD per motor
- Aerofin "HD" heating coils, .0095" aluminum fins, .035" copper tubes
- Aerofin "W" cooling coils, .0095" aluminum fins, .035" copper tubes
- UV lights
- MERV 8 pre-filters
- MERV 14 final filters
- Blenders
- Parallel blade dampers
- Access doors with 12"x12" thermal pane windows, chrome handles, and test ports
- Lights, receptacles, and switches
- Motor, lighting, and UV disconnects
- 120V and 460V single point wiring

