



# Adaptive Reuse of Historic Buildings

The King's Daughters Inn  
204 N Buchanan Blvd  
Durham, NC





# Who We Are

17-room luxury Inn in Durham, NC

20,000 sq ft building built in 1925 and 1956

Fully restored in 2009

## Our Philosophy:

Implementing sustainable technologies doesn't limit function or design

## Awards

- Triangle Business Journal Green Renovation of the Year
  - NC Urban Conservationist of the Year
- Green Plus N.A. Sustainable Enterprise of the Year
  - NC Historic Preservation Award
  - Best of the Triangle Bed & Breakfast

# Before Construction



# After Construction





# Common Myths

- Historic Tax Credits prevent use of green technologies
  - Best green technology is in the systems
  - HTC concerns visual building aspects
- New windows are better than old ones
  - Intrinsic energy of the original window
  - Lifespan of original windows much longer
  - Original windows + storms = U-value of new
    - *Measured winter performance of storm windows. [Klems, Joseph H.](#) 08-23-2002. Lawrence Berkeley National Laboratory*



# Easy Green Tech to Incorporate

- Outdoor:
  - Cisterns and Rain Barrels
  - Rain Garden
  - Pervious pavers
  - Storm Windows



- Plumbing
  - Gray water system
  - Low-flow fixtures and toilets
  - Solar hot water





# Easy Green Tech to Incorporate

- Electrical / HVAC
  - CFLs and LEDs
  - Motion sensor lights
  - Energy Management System
    - New wireless systems for residential and commercial





# Costs & Savings

- The complete set of systems cost \$100,000
- They increased project costs by 2.5%
- We are saving between \$1700-\$2000 per month in utility bills because of the system
- That's an approx **FOUR YEAR** payback period

**Thanks to the Reuse Alliance!**

**- The King's Daughters Inn Crew**



*It's important to get them started young!*

