Sustainable Design
Rinker Hall
University of Florida
College of Architectural Design and
Building Construction
Gainesville, Florida
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Building Facts

• Construction concluded in March 2003
• LEED Certified in 2004
  – Gold Rating (39 points)
  – 1st designed under USGBC LEED System in Florida
• 3-Story
• 47,300 Square Feet
• 450 students and visitors
• Multi-use
  – Classrooms, labs, offices, and other student amenities
Interactive Design Process

• Collaboration
  – Design team, construction team, faculty, and students
  – “Communication from day one”

• Project Management
  – Recent graduates of the program
Features

• Reduced Water consumption
  – Stormwater used for flushing
  – Waterless urinals
  – Reduced irrigation requirements
    • Reclamation of wastewater
    • Tree selection
  – 20% less usage than the requirements of Energy Policy Act of 1992
Features

• **Reduced energy usage**
  – Peak load reduced by 55%
  – Daylighting techniques
    • North-South orientation
    • Natural lighting via atrium
  – Planned for future solar panel installation
  – Shade walls, air filtration, among others
Features

• Optimal Material usage
  – Proximity, recycled content, renewable resource content, longevity, and end of life usability
  – Waste material control

• Efficient Land development
  – “Rock in the stream of students”
  – Easy access to and from other buildings and landmarks
Finances

• Budget Constraints
  – Limited by Florida budget scale

• Delivered for: $6.5 Million
  – $137.50 per sq. ft.
  – Fell below the given constraint

• Cost of “green techniques”: $182,000
  – Utility savings per year: $22,000
  – 8.3-year payback (excluding health and well-being)
Conclusions

• Gold rated building for “normal” price
• Long and short run Benefits
  – Economical
  – Health
  – Well-being
• Standard was set for University
  – All future buildings must be silver rated