Applying Active Design Guidelines in Affordable Housing

Les Bluestone
Blue Sea Development Company
LEED and Health

Health issues that are addressed by LEED

– Indoor Air Quality

The Eltona- LEED Platinum 2009

Gen. Colin Powell Apts - LEED Platinum 2010
The Melody, Bronx, NY

LEED Platinum 2011 - Received the First ID Credit for Active Design
What is Active Design?

– Locate the stairs so that they are equal or more prominently visible from the entrance lobby and the residential corridors
– Make the stairwells more enticing to use through lighting, music, artwork, and enhanced security
– Slow down elevator speed and increase the time elevator doors stay open
– Add natural daylight and HVAC in the stairs
– Use signage to help encourage and remind residents about the benefits of using the stairs
– Outdoor active recreational facilities
– Readily accessible secure bicycle storage areas
– Locate building where possible, within walking distance of parks, open space, and shopping
– Indoor active recreation space
– Create community garden space
– Offer exercise/fitness training classes and education
The Rear Yard Revisited by Landscape Architect
The Rear Yard Artist Influenced
The Result
Indoor Fitness at The Melody
Use Signage to Promote Use of the Stairs

Burn Calories, Not Electricity

Take the Stairs!
Walking up the stairs just 2 minutes a day helps prevent weight gain. It also helps the environment.

Learn more at www.nyc.gov or call 311.
Another Type of Stair Prompt

A person's health can be judged by which they take two of at a time, pills or stairs.

If your dog is fat, you're not getting enough exercise.

Physical activity will add years to your life, and life to your years.

No waiting, one door over.

I have to exercise in the morning before my brain figures out what I'm doing.

The victory is not always to the swift, but to those who keep moving.

Going down? Gravity assist provided free of charge.

I'm in shape. Round is a shape, isn't it?

-Marsha Doble
Art at The Melody
Forest House, Bronx, NY

LEED Registered – To be Subject of Mt. Sinai Study about the Effects of Active Design on Health
Site Location
Original First Floor Plan
Revised First Floor Plan
Original Community Room

ACCESSORY TENNANT COMMUNITY SPACE
2,251 SF

FREIGHT ELEVATOR
Revised to Active Design
Active Design Outdoor Area
Landscaped Active Design
What are the Stair Use Obstacles?

- Locate the stairs so that they are equal or more prominently visible from the entrance lobby
- This is a reversal of decades of New York City agency design reviews that required elevator visibility from the street for safety reasons; they will need to be informed/educated
- Increase stair width
  - This can be very difficult to achieve, depending on stair location and configuration. Additional width is more important in straight run stairs, as opposed to split run stairs
- Make stairwells more enticing through lighting, music, artwork, and enhanced security
  - Additional lighting can make stairwells more appealing, but creates greater energy usage. Music can be easily installed, but programming? Will that be hip hop, jazz, or oldies with your stair climbing? There may be a lot of artwork needed. Engage local groups for murals? Fire rated glass doors and security cameras are great, but expensive.
- Slow down elevator speed and increase the time elevator doors stay open
  - How fast do you think residents can dial 311 to complain about slow elevators? Nothing in the NYC code about speed, but the State has requirements for projects it funds.
- Add natural daylight and HVAC in the stairs
  - Building layouts and codes often limit the ability to add natural daylight and ventilation into stairwells. Keeping stairs internal will help with space conditioning. “Natural” lighting through Solatubes and fiberoptics are very expensive and have limited capacity.
- Use signage to help encourage and remind residents about the benefits of using the stairs
  - The easiest one to do, though try to make up your own signs. People generally don’t appreciate official signs “suggesting” what they should be doing.
What are the Recreational Obstacles?

- Outdoor active recreational facilities
- Outdoor recreation space is a NYC Building code requirement, so it’s really about your location, the budget and your creativity
- Readily accessible secure bicycle storage areas
- Now part of the NYC Building Code, so they need to be included no matter what
- Locate building where possible, within walking distance of parks, open space, and shopping
- Location, Location, Location! No big news, but sites are few, harder to come by and sometimes there just is no choice
- Indoor active recreation space
- It’s all about the budget. Possible loss of ground floor income producing space along with the expense to furnish and operate it. Exposure to potential liability issues as well.
- Create community garden space
- Sometimes difficult to accomplish with parking requirements and sun exposure issues in an urban environment.
- Offer exercise/fitness training classes and education
- Again, it’s all about the budget. Maybe find a mission driven, publicly funded not for profit to provide these services?
### Cost to Implement Active Design at Forest House

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locate Elevators Away from Lobby/Reduce Speed</td>
<td>$0</td>
</tr>
<tr>
<td>Outdoor Activity /Fitness Area</td>
<td>$110,000</td>
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<tr>
<td>Large Fire Rated Glass Stairwell Doors</td>
<td>$32,000</td>
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<tr>
<td>Enhanced Stairwell Lighting</td>
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<tr>
<td>Stairwell Music and Artwork</td>
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<td>Indoor Activity/Fitness Room</td>
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<tr>
<td>Signage</td>
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<tr>
<td>Bicycle Storage</td>
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<tr>
<td>Security Cameras</td>
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<tr>
<td><strong>Total</strong></td>
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</tr>
<tr>
<td><strong>Total Hard Costs</strong></td>
<td><strong>$27,448,260</strong></td>
</tr>
<tr>
<td><strong>Active Design Guidelines as percentage of hard costs</strong></td>
<td><strong>1.2%</strong></td>
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Blue Sea Development Company