HT 17: PROMOTE STAIR USE THROUGH SIGNAGE

New York City Building Code
Proposal developed by the Health Committee.

Summary

Issue:
People are insufficiently aware of the health benefits of using stairs.

Recommendation:
Encourage stair use by requiring signs that prompt stair use and that provide floor re-entry information.

Proposed Legislation, Rule or Study

Amendments to the New York City Building Code:

1. Amend Section 1026.3 as follows:

   1026.3 Stairway and elevator identification signs. Stairway floor number and stairway identification signs shall be provided in accordance with Section 1019.1.7. Elevator identification and emergency signs shall be provided in accordance with Section 3002.3. Active living signs that prompt stair use and signs that provide floor re-entry information shall be provided in accordance with Section 3002.3.1.

2. Add a new Section 3002.3.1 as follows:

   3002.3.1 Active living signs. An approved pictorial sign of a standardized design at least 11” x 8.5” in size shall be posted adjacent to each passenger elevator call station on all floors that encourages occupants to use the exit stairways. The sign shall be in accordance with a design developed by the Department of Health and Mental Hygiene.

Supporting Information

Issue – Expanded
For additional background see HT15 “Allow Stairway Use”

Stair climbing is a vigorous form of incidental physical activity, which can easily be incorporated into the daily lives of most able-bodied people. Studies have shown that signage at points of decision, like elevators and escalators, consistently increases stair use. Signs that encourage stair use for health benefits and placed at elevators and escalators have been shown to increase stair use 6-129%, with a median increase of ~50% across multiple studies.1 Weight-specific messages have been found to increase stair use in those who are overweight or obese.2 In NYC, The Department of Health and Mental Hygiene, working with the Department of Design and Construction, GreeNYC, AIANY, and REBNY, launched a “Burn Calories, Not Electricity. Take the Stairs!” Campaign in May 2008. This campaign was evaluated in three New York City buildings, a 10-story affordable housing complex in the South Bronx, an 8-story academic building in Brooklyn, and a 4-floor health center in Manhattan. Increases in stair use were significant at all sites, even in the health center where baseline stair use was already extremely high (70%) likely due to good stair placement and aesthetics. In addition, a significant increase in the proportion of people taking the stairs up (which is classified as ‘vigorous’ activity) was observed. Long-term studies conducted at the 10-story building showed that stair use increases remained elevated at 9 months after simple stair prompt placement at elevator call areas and outside stairs. An Australian study found that employees of a healthcare facility were more likely to use the stairs when stair use was highlighted by signs.3

Environmental & Health Benefits
For additional environment and health benefits see HT15 “Allow Stairway Use”

Cost & Savings
As described in the Executive Summary, Bovis Lend Lease prepared cost estimates for each Task Force proposal in the context of well-defined construction projects in specific buildings. Where possible, members of the Technical Committees prepared savings estimates for some of these projects and buildings. These cost and savings estimates are presented in the February 1st draft version of Appendix A. The innate uncertainty in how construction and operation will vary from one building to another, the complexity of the Task Force proposals, and the wide range of applications in which the proposals may be realized mean these figures are truly estimates.

This proposal is not expected to have any significant impact on capital costs. It was thus categorized as not incurring a capital cost increment.

Precedents
For additional precedents see HT15 “Allow Stairway Use”

Although there are no known precedents for promoting stair use outside of emergency circumstances, precedence for codifying physical-activity promoting design for health purposes exists in building codes elsewhere. The Center for Disease Control found that Point of Decision prompts near elevators influenced people to take the stairs more often, especially when “the prompts [were tailored] to describe specific benefits or to appeal to specific populations.” Point of Decision prompts were found to be effective on their own, without any additional enhancement of stairs.54

LEED
For LEED information see HT15 “Allow Stairway Use”

Implementation & Market Availability
There are no known implementation issues for this proposal. Stair signs are readily available.

ENDNOTES:


