INCLUSIVE HOUSING – A pattern book

- Design for Diversity and Equality
- Co-authors:
  - Edward Steinfeld, Arch.D., AIA (Presenter)
  - Jonathan White, M. Arch

The Center for Inclusive Design & Environmental Access
School of Architecture & Planning
University at Buffalo, the State University of New York

INCLUSIVE DESIGN + Urbanism

- Diverse neighborhood use and population
- Communities designed for the pedestrian as well as the car
- Easy access to the community for all
- Mixed-use neighborhoods that promote social integration
- Solve problems at the neighborhood level
ABOUT INCLUSIVE DESIGN

- Design that does not discriminate
- Increase usability, safety, and health for all
- Not synonymous with accessible design
- Levels of access to address social context, population and market
- Integrates usability with important design concerns like aesthetics, sustainable design and urbanism

PURPOSE OF THE BOOK

- Act as a resource for design professionals
- Encourage equitable housing practices that benefit everyone
- Take a step towards change in housing design, putting an end to …
PATTERN BOOK AS A TOOL

- Familiar Tool of Planners and Urban Designers

THE NEIGHBORHOOD SCALE

- Based on Transect Zones
- Focus on T3, T4, and T5 zones
BOOK CONTENTS

- The Neighborly House - Sustainability, Marketability, Social Interaction, Security, & Affordability
- Levels of Access - Visitability, Lifespan, & Inclusive
- Block, Lot, & House Components
- Architectural Applications
- Details

THE NEIGHBORLY HOUSE

Small setbacks and raised porches in front provide a traditional character. The alleys not only provide better vehicle access, a marketable feature for all, but can also provide a no-step entry at the back of the houses.

City of Austin, TX, AHFC S.M.A.R.T Housing™
LEVELS OF ACCESS

Visitability and Lifespan design criteria

BLOCK COMPONENTS

Providing continuity of access for a diverse public is fundamental to ensuring access to services and amenities for everyone.

In the figure above, there are three possible paths from the highlighted house to a local service site. The first is a more scenic route (1), the second runs along main roads only (2), and the third is a combination of scenic, roadside, and shortcut routes (3).

- Street planning should provide options and choices for access to community resources for everyone.

Proximity to Services

Social Integration

The opportunity for neighborhood social integration for all residents should be facilitated and supported by planning decisions.

Centrally located green spaces promote social interaction and outdoor recreation.

In this example, there are five different lot sizes, all close to each other and different types of green space.

- Provide sufficient variety in housing types to accommodate a wide range of households and living arrangements. Variety in lot size can ensure that there will be variety in house types.
**BLOCK COMPONENTS**

**LOT COMPONENTS**

The grade can slope from an alley to the house to provide an accessible entry at the rear. The example problem below demonstrates a practical application of this grading option.

Eliminating steps between the front porch and the interior makes the porch accessible even though the accessible entry may be elsewhere.

**Problem:**
What is the minimum depth of the back yard to avoid the need for a ramp to the rear entry for a rowhouse with a front porch 15" [380 mm] above grade?

**Solution:**
Use the formula from page 48 for a sloped walkway (no railing).

\[ x + y \geq 20 \]
\[ x \geq 20y \]
\[ x \geq 20\times 15" \quad [x \geq 20\times 380 \text{ mm}] \]
\[ x \geq 30" \quad \text{or} \quad 25' \quad [x \geq 76 \text{ m}] \]

Therefore, the minimum depth of the rear lot is 25' (300") [76 m] between the alley and house.
LOT COMPONENTS

Combination of steep and shallow slopes

Locating an accessible entry at the side or rear instead of the front often provides the flexibility to include more livability features overall. For example, an accessible side entry may provide more usable space in the front yard and space for wider front steps.

Side entries can serve two houses at once.

HOUSE COMPONENTS

Slotted boards

Low-threshold door to porch or deck
ARCHITECTURAL APPLICATIONS

Single Family Detached House  |  American Craftsman Bungalow

1370 sf habitable interior space
910 sf building footprint
3 bedroom, 2 bath

Wide, centralized circulation space
Large, accessible closet
Turn-around and door approach clearance space
Turn-around and knee clearance space
Enough space for roll-in shower
INCLUSIVE HOUSING
A Pattern Book
Design for Diversity and Equality

Available from:
W.W. Norton & Co.
Fall 2009

Check our website for an announcement on the exact release date. http://www.ap.buffalo.edu/idea

INCLUSIVE HOUSING
A Pattern Book
Design for Diversity and Equality

Also available for free download:
Visitability Booklet
A 10-page booklet on this inclusive approach to housing

Available for free on our website and at: http://www.udeworld.com/visbooklet/visitabilitybooklet.pdf
INCLUSIVE HOUSING
A Pattern Book

Design for Diversity and Equality

Authors:
Edward Steinfeld: arced@buffalo.edu
Jonathan White: jwhite2@buffalo.edu

IDEA Center
378 Hayes Hall | University at Buffalo School of Architecture
3435 Main St. | Buffalo, NY 14214-3087

Tel: 716-829-3485 ext. 329 | Fax: 716-829-3861

http://www.ap.buffalo.edu/idea

ACHIEVING ACCESSIBILITY IN THE BUILT ENVIRONMENT FOR ALL

Inclusive housing – A pattern book

- Design for Diversity and Equality
- Co-authors:
  - Edward Steinfeld, Arch.D., AIA (Presenter)
  - Jonathan White, M. Arch

The Center for Inclusive Design & Environmental Access
School of Architecture & Planning
University at Buffalo, The State University of New York