



# Universal Design Living Lab, Hasselt, Belgium

## Demonstration House for UD home adaptation

### PARTNERS

**PXL**, University College, Department of Healthcare - **Hasselt University**, Faculty of Architecture  
**INTER**, Flemish center of expertise for accessibility and Universal Design



Architects : SIMONI Architecten (Hasselt),  
and TOKO Architects (Lier)  
Project date : 2013  
Location : Guffenslaan 39, 3500 Hasselt, Belgium  
Website : <http://www.woonlabo.be/en>

### History

The old brick style Maternity Building, built in 1913, was given a different function in 1995 when it became part of the PXL University College Healthcare Campus. More than a decade later the adjacent caretaker's home was transformed into a Universal Design (UD) Living Lab, partly for teaching & research, and partly as a public place to illustrate and to demonstrate UD principles for private homes and for adaptable housing.

The project is a joint initiative of Hasselt University, PXL University College, and TGB Office for Accessibility. It was funded by the European Community, by the federal (Flemish) government and by the provincial government. Over 30 private companies have sponsored the initial project and have contributed innovative solutions.

### Universal Design aspects

The Living Lab is conceived as an experimental and contemporary synthesis of the UD concept. It is genuinely user-centered and favors open innovation. The demonstration part of the UD Living Lab consists of two dwelling units, housed in a renovated typical row house. The ground level apartment is fully conceived and equipped for semi-ambulant and for non-ambulant people, for home-care and for 'Ageing in Place'. Two steps at the entrance have been replaced by an indoor lift platform, the kitchen and bathroom serve a diversity of users, and home automation complements possible functional disabilities.

The second apartment, on the two upper floors, is wheelchair accessible (visitable), but focusses primarily on visual impairments, on mental disabilities, and on families with children with disabilities.

The visitor center offers facilities for training and research, for information and consultation, for exhibitions and for lectures. Toilet spaces include a changing place, a shower toilet, plus facilities for stoma care, and for breastfeeding and baby care.

The emphasis is on elegant and non-stigmatizing design, and on functionality for the widest diversity of users.



Front door, with two steps removed



Entrance Hall. Integrated Lift Platform



Ground floor kitchen with adjustable worktop



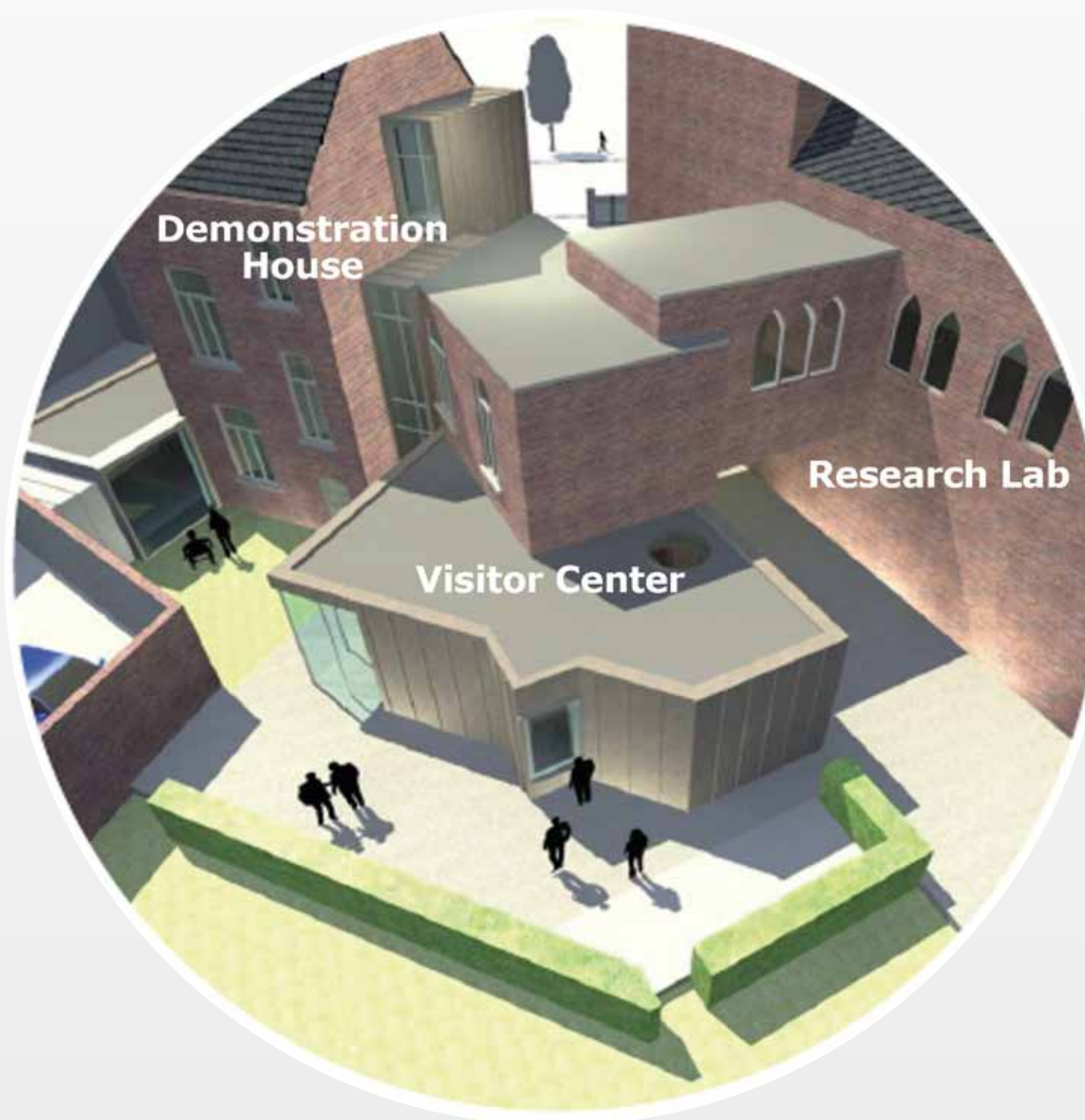
Ground floor kitchen



Testing bathroom grab rails



Installed bathroom grab rails



Upper floor apartment. Visual and tactile contrast



Upper floor apartment. Kitchen



Visitor Center. Entrance Hall



Visitor Center. Entrance Hall with desk



Visitor Center. Double swing rotating door



Visitor Center. Adaptable toilet spaces



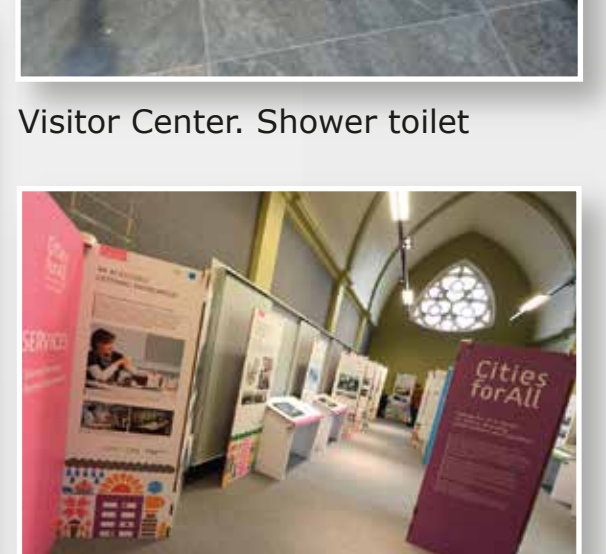
Visitor Center. Changing Place



Visitor Center. Shower toilet



Visitor Center. Small Lecture & Exhibit Room



Visitor Center. Large Lecture & Exhibit Room



Test dummy handrail



Installed handrail



Home Automation System