A.A.M. van Vliet. Dwelling features that facilitate ageing-in-time. Gerontechnology 2008; 7(2):233. Ageing-in-place in non-residential housing offers an opportunity for ageing well without extreme rising costs for protracted assistive care and social security[1]. Chronic disabilities however are deminishing the possibility to live independent in non-residential housing without losing an appropriate level of quality of life (QOL). As a result of good medical care, aging persons are more often surviving with chronic disabilities, even with co-morbidity. Avoiding barriers for extended independent housing results in changing housing demands for individual persons, each with their own occurring set of chronic disabilities. For many ageing inhabitants in the rapidly grey growing European societies, an extended independent living is foreseen despite occurring disabilities. Repair of the misfit between the changed housing demands of elderly inhabitants and the offered dwelling quality is needed. However, the existing house stock has frozen its technical features in stone and concrete. The brief program for new built dwellings has to involve several features that can facilitate assistive care, compensate or prevent for a wide spread of disabilities. For each separate disability environmental objectives are to be formed. Since such a brief program doesn't exist, it lacks a solid starting point for a large scale building program that repairs the misfit between the housing demands of the third generation and the available house stock. In this paper the outcomes of a Dutch thesis-study[2] are discussed that assessed a set of objectives for engineering the design of dwellings, appropriate for ageing in place. **Methods** Sub-determinants for Physics of Building Environment (PBE) were retrieved from literature. Desktop literature research was done on the potential of intervention (weighted in DALY) in exogenous determinants of the PBE. The relative weight of separate sub-determinants PBE was constructed from public health data in the Netherlands[3]. The potentially prevented burden of disease was reasoned toward separate sub-determinants PBE. Building-physics gave the data for relating intervention in a sub-determinant PBE with an application of a specific building feature. Decisions belonging to the sub-determinants were situated in the design process. **Results and discussion** Intervention in disabilities, physics of the living environment, building physics and building-technology were situated in a generic model. Nine separate sub-determinants PBE were retrieved. Decision making is positioned along both initial design phase and building material-specification phase (*Figure 1*). Four levels of application indicate the level of health-supportive building above the building standards. The 9 sub-determinants PBE were connected to application of specific building-features. The constructed method was used in desktop case studies, but underlying public health data require further validation in medical practice. Value evaluation of dwelling design is thus becoming a check of applied dwelling features for the 9 sub-determinants PBE. It eases the communication of required quality of living environment between medicine, patients/ inhabitants and building constructors/ architects.

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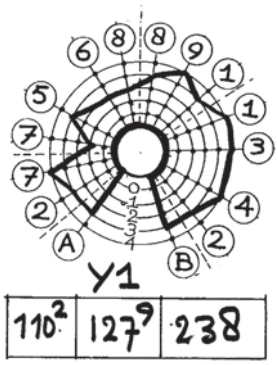

1. Ergonomics layout;
2. Visibility;
3. (Social) Security;
4. Sunlight exposure;
5. Stabile warmth;
6. Emissions from building materials;
7. Acoustics;
8. Biologic agents;
9. Air-refreshment

A. city-provisions
B. functional design
C. joints

Figure 1 Typical Windrose 9 sub-determinants of PBE for a dwelling type Y1 , score 238