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## The suitability of the apartment buildings built between the 1950's and 1980s' for the elderly

## Abstract

This study is part of the research project "Future Senior Living". This research project is joint effort of Department of Architecture of University of Oulu, Department of Nursing Science of University of Tampere, Future Home Institute of University of Industrial Arts, VTT State Technical Research Centre and Automation Technology Laboratory of Helsinki University of Technology. The aim of the research project has been to study the potential of existing housing stock and built milieu to serve as senior citizens' living surroundings supporting independent living as long as possible. The project was primarily funded by Tekes Finnish Technology Agency.

Approximately 94 % of people over 65 years of age are living in ordinary dwellings. The seniors wish to live in their own dwellings as long as possible and be supported by services needed when their coping starts to weaken. Attention should be paid to the quality and suitability of the housing for the elderly, because the appropriate housing and independent coping in daily routines improve the quality of life and decrease need of supporting services and pressure to seek for institutional care. The housing stock is renewing slowly, by somewhat more than one percent per year. Adequate amount of dwellings suitable to the elderly cannot be realized by new construction production only. Hence, the existing housing stock and surroundings need to be suited also for the needs of the elderly.

The study was focused on apartment buildings built between the 1950's and 1980s'. This age distribution of the apartment buildings was chosen, because they make up significant proportion of Finnish apartment housing stock, during their construction legislation has not urged suitability to handicapped and these apartments have reached the age where renovation and repairing are needed. This research was focused on the existing apartment houses situated in population centres and on developing them to suit better to the needs of the elderly. The target was the accessible built milieu, which supports autonomy and independent living.

The method used in the research was the case study. The cases examined were ten apartment houses representing well the chosen age distribution. There were also technical condition analyses available for the cases. Criteria for evaluating the suitability of apartment houses to the needs of the elderly were specially developed for this research.

Three of the case apartment houses were built in the 1950's, three in the 1960's, two in the 1970's and two in the 1980's. The houses were located in the City centre, Karjasilta and Tuira in Oulu as well as in the Centre of Kajaani. There were both lamellar houses and tower blocks. Two out of ten houses did not have a lift.

Typical features and needs for reparation of the apartment houses at certain age were described on the basis of the case houses. Typical deficiencies hindering independent living were also described. Further, the unused resources, such as unused permitted building volume or underutilized spaces, of the case houses were examined.

The suitability of the case houses for the seniors was evaluated both in their present condition and after potential reparations. The steps of reparation were listed combining the actions based condition analyses needed to solve the functional deficiencies found in this study. These case houses were assessed regarding their suitability for different senior groups and possibly also completely other users.