

# Designing Multi-Unit Seniors Housing: Independent Living to Long Term Care, The Canadian Experience

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## Presentation Summary:

Facilities for seniors in Canada can be classified in four categories:

1. Independent Living – For active seniors who need no assistance and choose to live in a community with like-minded people. Suite sizes range from 60 to 86 m<sup>2</sup> for one bedroom suites and 84 to 120 sq. m. for two bedroom suites.
2. Assisted Living – For seniors who are fairly independent but need some assistance with daily activities such as meals and cleaning. Suite sizes tend to be in the range of 60 m<sup>2</sup>. for one bedroom suites and 80 m<sup>2</sup> for two bedroom suites and often have full kitchens.
3. Supportive Living – For seniors with disabilities such as early dementia and who need assistance with daily activities such as meals, bathing, dressing and medication. Rooms tend to be for a single resident, as small as 35 m<sup>2</sup>, with a kitchenette (sink, microwave and raised refrigerator).
4. Long Term Care –For seniors who require 24 hour nursing care because they can no longer perform most daily activities such as walking, eating, dressing, bathing and using the bathroom. Rooms tend to be for a single resident, ranging from 20 to 25 m<sup>2</sup> and are designed for at least two bed and two wardrobe locations, giving the resident choices..

The above descriptions of assisting living and supportive living suggest a significant range of facilities between independent living and long term care. In fact, there are many variants between these extremes with similar variation in names.

Core amenities in Canadian seniors facilities include activity areas, lounges, libraries, games rooms, exercise rooms and guest rooms. As the level of care increases, dining rooms, bathing facilities, 24 hour nursing, nurse call systems and controlled access are provided. Seniors facilities are often free standing but can be connected to other seniors facilities as well as to places of worship, commercial facilities, community centres, and hospitals. Preferred locations are near public transportation and close to areas of activity such as school yards.

Construction systems used in Canada for seniors facilities range from all wood frame to hybrid systems that combine wood with concrete or steel. Wood frame construction is typically about 10 to 15% less costly than concrete or steel construction and contributes to increased energy efficiency and sustainability because it has better insulating value, reduces cold bridges, is rapidly renewable, has low embodied energy and has a low carbon footprint. In Canada, where temperatures range from -35 C to +35 C, energy efficiency is normally increased by using high levels of insulation, triple glazed windows, heat

recovery ventilators, geothermal heating and cooling, and energy efficient lighting. Low flow plumbing fixtures are used to reduce water usage, whereas materials with recycled content and low levels of volatile organic compounds are commonly used to improve sustainability.

Design considerations include the use of orientation techniques for seniors with dementia. These include memory boxes at resident room entrance doors, views of toilets from residents' beds, wandering paths with no dead-ends, and handrails with curved ends. Other design considerations include careful use of contrast in colours and materials for seniors with various types of eye sight deterioration. Wood interior finishes and trim are commonly used to create a feeling of warmth and comfort and to improve wellness and well-being.

Significant progress has been made in Canada the last few decades to de-institutionalize and re-humanize long term care facilities. The elimination of corridors and the grouping of smaller numbers of resident rooms together has been a major contributor to this development.

Friesen Tokar Architects have been instrumental in the development of the 'Chez Nous' (French for 'Our Home') model for long term care. It is based on creating cottages or homes of 10 single resident rooms where residents eat, sleep, bathe and relax in their homes and can do so according to their own schedules. They are tended to by multi-skilled caregivers assigned to that home. These individual homes can be clustered around a common area that accommodates larger social events and can include commercial facilities such as hair salons, shops, etc. that are often referred to as the 'village square' or 'the downtown.' Besides creating a home-like environment this model results in happier, more relaxed and socially active residents, reduces aggressive behaviour and results in significantly less use of suppressants. It, therefore, also reduces stress among staff.

A number of other models have been developed in Canada and the U.S., each with a slightly different approach but with the same goal in mind – to create an environment that is as similar as possible to the resident's previous home.

For more than 35 years Friesen Tokar Architects, with offices in Winnipeg and Calgary, Canada, have been designing various housing and health care projects with special emphasis on seniors facilities, wood frame construction and sustainability. With a staff of 50, including architects, interior designers, landscape architects, and technologists, as well as 14 LEED Accredited Professionals, the firm provides an integrated approach to design. Its office structure is based on an open environment where junior staff sit next to principals. Workstations are grouped in clusters. For each new project the most appropriate team members are selected and relocated to the same cluster. This provides optimum communication and synergy between all team members, resulting in a more successful project.

Friesen Tokar's head office in Winnipeg, Canada, has been LEED Gold certified by the Canada Green Building Council. Factors that contributed to this achievement included water use reduction of 58%, recycling of 98% of construction waste, and daylight and views provided to 90% of workstations. The firm's Integrated Design Process includes workshops involving all stakeholders, at the start of each phase of design work, from an initial visioning workshop to the start of construction workshop.

Mr. Rudy P. Friesen founded the firm of Friesen Tokar Architects in 1975. He holds a degree in Architecture from the University of Manitoba and is a LEED Accredited Professional. He is a Past President of the Royal Architectural Institute of Canada, an Honorary Fellow of the American Institute of Architects, and was the first Practice Committee Chair of the Commonwealth Association of Architects. He is also an architectural historian and author.