

SAFERhome Standards Society



BUILDEX
VANCOUVER

- Wednesday, Feb. 15
10:00am - 11:30am
- Aging in Place
Universal and Inclusive
Design Standards and
Best Practices

SAFERhome Standards Society



A better standard of living™

- SAFERhome Standards Society
- Non-profit
- BC Housing
- Education & market awareness
- Meeting demand
- 19-point standards

SAFERhome Standards Society

Partnerships

Government

Non Profit

Professionals



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SAFERhome Standards

Mission

- To promote the adoption and use of housing standards and practices
- Which are safer, healthier, and more sustainable
- 19-point SAFERhome Standards
- Advocating a safer home environment
- Better standard of living through the application of their certified building standards
- Inclusive housing design
- Aging in Place

SAFERHOME
STANDARDS
SOCIETY



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SAFERHOME STANDARDS

In order to attain sustainable communities, homes must be designed to be both safe and adaptable. SAFERhome provides the only certification program in Canada that addresses the issues of human sustainability in the application of universal design.



STRUCTURAL & DESIGN

Exterior & Interior Thresholds, Hallways Ideally 42", Doors Ideally 36", Washroom Wall Reinforcements, Staircases Ideally 42", Wall Reinforcements, Multistory Connection Provision, Sink Cabinets
(8 Standards)



ELECTRICAL & TELECOM

Light Switch Positioning, Electric Receptacle Positioning, Electrical Receptacle Placement Locations, Four-Plex Receptacles, RG-6 Coaxial Runs, Telephone Pre-Wiring, Low-Voltage Runs, Electrical Boxes,
(8 Standards)



PLUMBING

Bath and Shower Control Positioning, Waste Pipes Positioning, Pressure/Temperature Control Valves,
(3 Standards)

SENIORS' FALLS IN CANADA

FALLS are the LEADING CAUSE OF INJURY among older Canadians

20-30% of seniors experience **1+** falls each year.

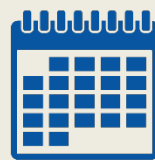
FALLS CAUSE:

85% of seniors' injury-related hospitalizations

95% of all hip fractures

\$2Billion a year in direct healthcare costs

over **1/3** of seniors are admitted to **LONG-TERM CARE** following hospitalization for a fall



The average Canadian senior stays in hospital **10 DAYS longer** for falls than for any other cause



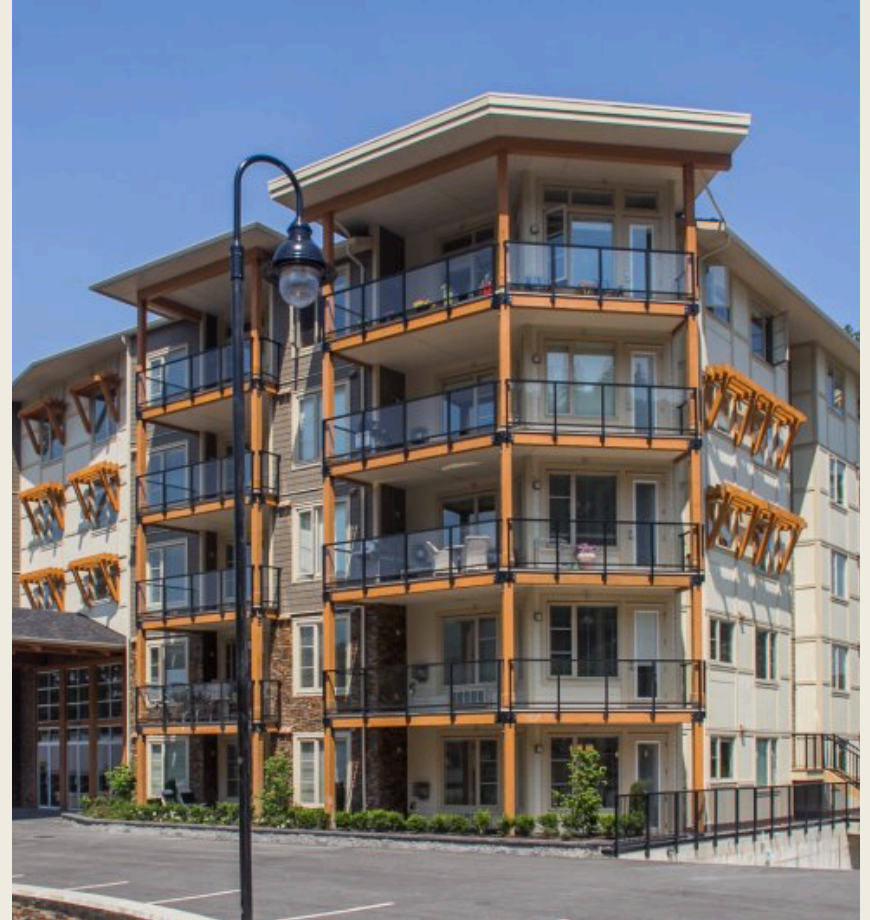
Falls **can result** in chronic pain, reduced mobility, loss of independence and even death



50% of all falls causing hospitalization **HAPPEN AT HOME**

SAFERhome Standards

Certified Project – 40 units

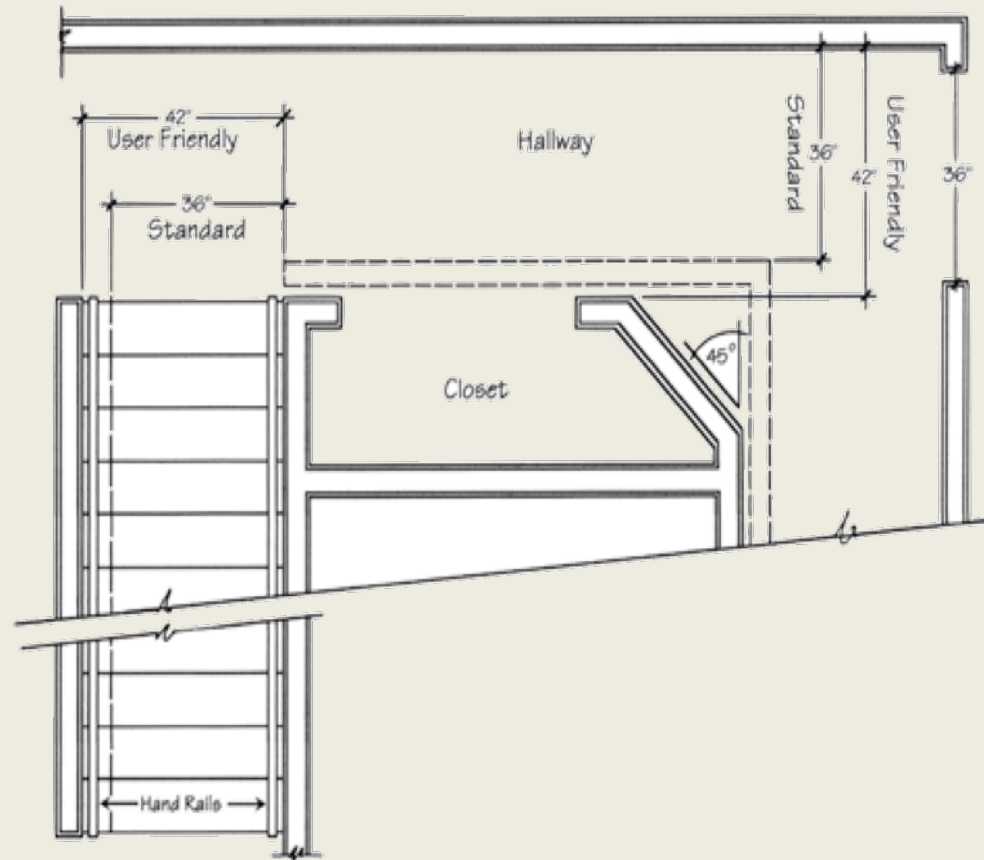




SAFERhome Standards

Structural & Design - Doors & Pinch Points

- Doors & Pinch Points
minimum 34" ideally 36" wide
- Hallways
minimum 40" ideally 42" wide
- Additional Material \$2.50/door
- Additional Labour \$0.00/door
- Total Additional Cost \$2.50/door
- *The need for future expensive retrofits has been avoided*

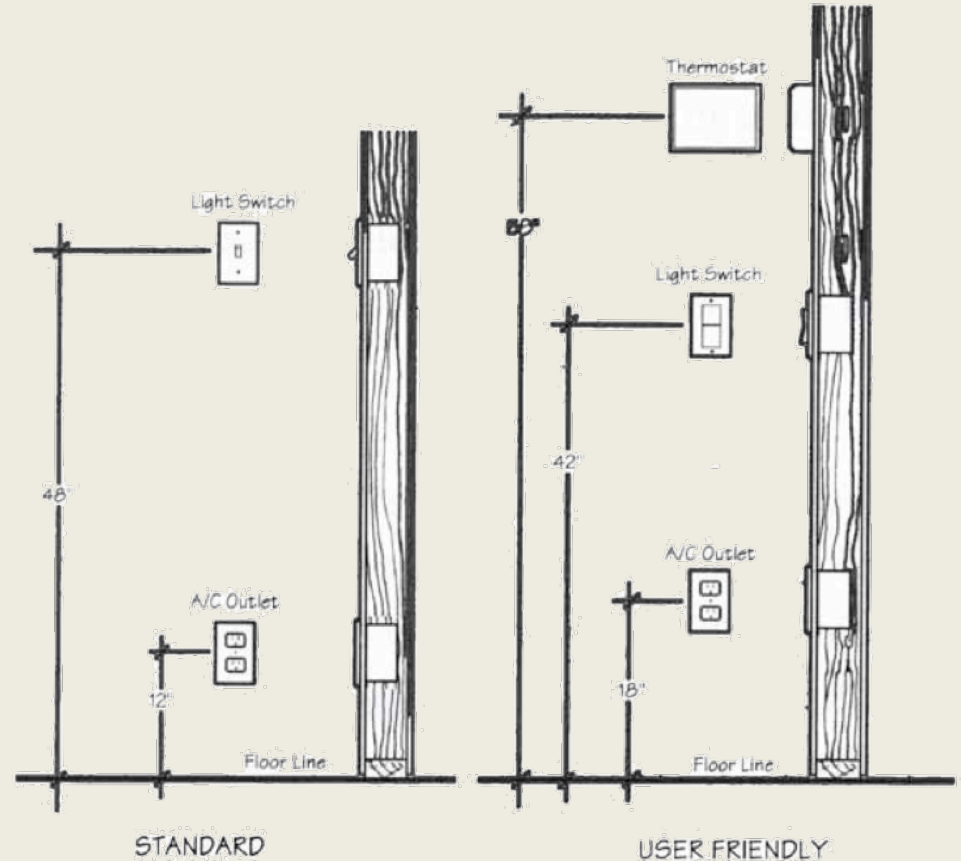




SAFERhome Standards

Electrical & Telecom - Switch Positioning

- Positioning of Light Switches & Electrical Outlets
- All switches positioned at 42" to the centre of the electrical box from the finished floor
- All outlets positioned at 18" to the centre of the electrical box from the finished floor.
- Additional Time 0 minutes
- Additional Material \$0
- Additional Labour \$0
- Total Additional Cost \$0
- *The need for future expensive wiring has been avoided*





SAFERhome Standards

Plumbing - Bath & Shower Controls

- Positioning of Bath and Shower Controls
- All controls are offset from centre, roughly halfway between the centre and the outside edge of the shower or bathtub enclosure
- Additional Time 10 minutes
- Additional Material \$5
- Additional Labour \$15
- Total Additional Cost \$20
- *The need for future expensive retrofits has been avoided*



SAFERhome Standards

Total Costs Per One Bedroom Strata Unit



Standard Category	SAFERhome Standard	Costs
Structural & Design	Doors & Hallways	\$ 10
	Wall Reinforcement	40
Electrical & Telecom	Positioning Switches & Outlets	0
	Placement Electrical Outlets	175
	Low Voltage	175
Plumbing	Positioning Bath Control	20
	Waste Pipes	0
	Subtotal	\$ 420
	Pre Registration & Certification	199
	Total	\$ 619



SAFERhome Standards

Structural & Design - 8 Standards

- 1. Exterior Thresholds** - All exterior thresholds are flush.
- 2. Interior Thresholds** - All interior thresholds meet minimal code constraints (eg. shower entrance).
- 3. Doors** - All doors are a minimum of 34" but ideally 36" wide.
- 4. Hallways** (passage ways and pinch points) - All hallways are a minimum of 40" but ideally 42" wide. (Passage ways and pinch points like doors are a minimum of 36".)
- 5. Washroom Wall Reinforcements** - Reinforced with 2x12" block lumber in all washroom tub, shower, and toilet locations.
- 6. Wall Reinforcements** (Top of the Stairs) - At the top of all stairs walls are reinforced with 2x12" at 36" to centre.
- 7. Multistory Connection Provision** - Elevator options in stacked closets or staircase(s) with a minimum width of 42".
- 8. Sink Cabinets** - Cabinets underneath each sink are easily removed.



SAFERhome Standards

Electrical & Telecom - 8 Standards

9. **Light Switch Positioning** - All switches positioned at 42" to the centre of the electrical box from the finished floor.
10. **Electric Receptacle Positioning** - All receptacles positioned at 18" to the centre of the electrical box from the finished floor.
11. **Electrical Receptacle Placement Locations** - Beside windows, especially where draperies may be installed, Bottom of stairways; Above external doors (outside and inside); At Node Zero Location where all the house wiring meets.
12. **Four-Plex Receptacles** - Master bedroom, home office, garage, utility room, & recreation room
13. **RG-6 Coaxial Cables Runs** - All runs return to one central area. (Node Zero)
14. **Telephone Pre-Wiring** - Level 5 (4 pair) to all areas return to one central area. (Node Zero).
15. **Low-Voltage Runs** - All runs return to one central area. (Node Zero)
16. **Electrical Boxes** - All light switches and A/C receptacles use larger electrical boxes



SAFERhome Standards

Plumbing - 3 Standards

17. Bath and Shower Control

Positioning - All controls are offset from centre, roughly 1/2 way between the historic centre location and the outside edge of the shower or tub enclosure.

18. Waste Pipes - All pipes are brought in at 12-14" to the centre of the pipe from floor level.

19. Pressure/Temperature Control Valves - Control valves are installed on all shower faucets

- **Important Considerations**

- Cost of incorporating all 19 Criteria of the SAFERhome Standards during construction is less than \$1,200 for the average single family home and less than \$600 for multi-family,
- Cost of retrofitting a single family home to the standards at a later date would cost at minimum upwards of \$100,000.

SAFERhome Standards

Future Updates

- **Renovations**
- To develop new SAFERhome Standards relative to renovating a home
- *Specialized* SAFERhome certification for when all of the existing standards may not be possible
- Things such as widening certain interior pathways, plumbing and electrical updates will have to find a work around
- Wireless technology may be one of our answers

Thank You



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- Questions
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