



The SAFERhome Standards are a trademarked set of inexpensive building criteria that makes any home inclusive by design.

This is just a simple way of measuring accurately within the existing building code more, than the traditional “minimum building standard”. As a value added and trademarked product you must be registered or certified to be able to use the name SAFERhome.

The following list gives you a home that;

- ✓ Is a “better” real estate investment,
- ✓ Truly works to improve the physical safety of the whole family
- ✓ Can easily be changed to meet the family’s needs both now and in the future,
- ✓ Is pre-wired to give you smart home style electrical options,
- ✓ Is ready to be more energy efficient,
- ✓ Offers one level living lifestyle in a multi-level design,
- ✓ Is age-friendly for the young and old and allows for aging-in-place solutions,
- ✓ Is built to the only measurable and trademarked standard in the world,
- ✓ Promotes multi generational lifestyle options

*Making homes look better,
work better and worth more!*

SAFERhome Standards Society

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The 19 point SAFERhome Standards Overview

(for Single/Multi-Family Family, Multi-Unit Residential Buildings and Multi-Story Residential Towers)

- Criteria 1 Exterior Thresholds**
All exterior thresholds are flush.
- Criteria 2 Interior Thresholds**
All interior thresholds meet minimal code constraints (eg. shower entrance).
- Criteria 3 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.
- Criteria 4 Pressure/Temperature Control Valves** (Canada for renovations only)
Control valves are installed on all shower faucets.
- Criteria 5 Washroom Wall Reinforcements**
Reinforced with 2"x12" solid lumber in all washroom tub, shower, and toilet locations.
- Criteria 6 Waste Pipes**
All pipes are brought in no higher than 14" to the centre of the pipe from floor level.
- Criteria 7 Sink Cabinets**
Cabinets underneath each sink are easily removed.
- Criteria 8 Doors (pinch points)**
All doors and pinch points are a minimum of 34" but ideally 36" wide.
- Criteria 9 Hallways**
All hallways are a minimum of 40" but ideally 42" wide.
- Criteria 10 Light Switch Positioning**
All switches positioned at 42" to the centre of the electrical box from the finished floor.
- Criteria 11 Electrical Outlet Positioning**
All outlets positioned at 18" to the centre of the electrical box from the finished floor.
- Criteria 12 Electrical Outlet Placement Locations**
- Beside windows, especially where draperies or blinds may be installed;
 - Bottom of staircases;
 - Beside the toilet;
 - Above external doors (outside and inside);
 - On front face of kitchen counter;
 - At Node Zero Location (the communications control centre for smart home options) where all the house wiring meets in one place.
- Criteria 13 Electrical Boxes**
All light switches and A/C outlets use Smart electrical boxes.
- Criteria 14 Four-Plex Outlet Locations**
Placed in master bedroom, home office, garage, and recreation room.
- Criteria 15 Telephone Pre-Wiring**
CAT 5E (4 pair) homerun to all areas and return to one central area. (Node Zero)

Criteria 16 RG-6 Coaxial Cable Runs

All homeruns return to one central area. (Node Zero)

Criteria 17 Low-Voltage Runs

All other low-voltage homeruns (eg. door bells, security systems, etc.) return to one central area. (Node Zero)

Criteria 18 Wall Reinforcements (Top of the Stairs)

At the top of all stairs, walls are reinforced with 2"x12" solid lumber at 36" to centre.

Criteria 19 Multi-storey Connection Provision

Either an allowance for an elevator options in stacked closets or build all staircase(s) with to a minimum width of 42".

19-Point SAFERhome Standard, Thumbnail Explanation

Criteria 1: Exterior thresholds: All exterior thresholds are all flush.

"Thresholds" is a term that came from housing hundreds of years ago. In the old days homes used to have dirt floors, they would spread straw or thresh on them for insulation. This created a problem with the farm animals due to the animals always being under foot eating the straw or thresh as it leaked out from under the door. So they put a block of wood under the door to reduce tripping over the animals and to help stop some of the drafts and hold "the thresh" in place and called it a "threshold".

This old building habit has been carried over into new housing with no benefits. This legacy of building that still prevails today is one of the more hazardous areas for tripping in the home.

Criteria 2: Interior thresholds: All interior thresholds meet minimal code constraints.

This means – the tripping hazard threshold to the shower should be removed or lowered.

SAFERhome believes that showers should meet the same standard as the bathroom sink and the bathtub. Both the tub and sink have overflow drains required in their design. The SAFERhome approved shower threshold with a trench drain brings an overflow drain into the shower enclosure design.

SAFERhome certification would require a less than 1 inch high speed bump or a trench drain at the threshold to the shower.

Criteria 3: 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

Old fashioned bath and shower controls are always put directly under the shower head in the middle of the shower stall wall. In a normal home this means that when you go to turn the shower on in the bathtub, you have to put your foot between the toilet and the tub and lean into the shower area to turn on the taps.

With offset controls you do not need to lean in as far and you avoid a potential falling accident.

Ideally in a SAFERhome the tub should be turned around and these controls are positioned at the opposite end away from the toilet or any obstacles that would be in the way of stepping more safely into a bathtub.

Criteria 4: Pressure/temperature Control Valves: Controls valves are installed on all shower faucets

For safety reasons, pressure control valves on shower controls already exist in most Canadian homes. This feature is now a Canadian basic building code requirement. But should be included in any renovations. SAFERhome is applying these guidelines in areas outside Canada like Barbados's where they do not have the same controls and building bylaws.

Criteria 5: Washroom Wall Reinforcements: Reinforced with 2" x 12" solid lumber in all washroom tub, shower, and toilet locations

Installation of 2x12 solid lumber backing in the walls at 36 inches to centre, around the bath and shower areas. This allows for proper installation of grab/safety bars in the future. This backing location works for 95% of all people.

Criteria 6: Waste Pipes: All pipes are brought no higher than 14" to the centre of the pipe from floor level

With the waste pipes being installed lower, this makes adjusting the counter height in the future easy, without having to open the walls and incur larger renovation costs. Being able adjust the home for the option of sitting at a bathroom or kitchen sink to perform chores is an "aging in place soft solution", extending the home occupants independence, dignity and comfort.

Criteria 7: Sink Cabinets: Cabinets underneath each sink are easily removed.

We embraced the simple building philosophy that "if the sink cabinet was the last cabinet installed then it should be the first and only cabinet to uninstall if you want a lower sink". If your sink cabinet ever needs to be removed then this area is simple to work with. Changing the counter top to meet your new needs and create an optional sitting place at the sink location is now simple and easily achieved.

It's easy to tell if a sink cabinet was the last one installed by just looking at the screws inside the cabinet. If you cannot see the screws then it hasn't been installed correctly. This directly controls all future changes and their costs.

Criteria 8: Doors (pinch points): All doors and pinch points are a minimum of 34" but ideally 36" wide.

The cost of a larger standards door is only about \$10 per door in new construction. The cost of enlarging a door after the fact is about \$1500. With larger doors people and things work much better in the home.

Criteria 9: Hallways: All hallways are a minimum of 40" but ideally 42" wide.

Hallways work in concert with the door sizes; with wider halls the home is able to accommodate many products and people. With the growing number of seniors using scooters and walkers this is becoming a more important issue. This also works well for baby carriages.

Criteria 10: Light Switch Positioning: All switches positioned at 42" to the centre of the electrical box from the finished floor.

The light switch height standard of 48 inches came from over 100 years ago at the turn of the century when electricity was first being introduced into housing. Due to chair rails and wainscoting the interior designers always insisted that the switch be put above the wainscoting. That ended up being the standard. Since then Universal design has proven that 42 inches works ergonomically better for everyone.

Criteria 11: Electrical Outlet Positioning: All outlets positioned at 18" to the centre of the electrical box from the finished floor.

At the end of the 19th century when the new idea of electricity was being introduced into existing housing, the electricians found out very quickly that if all the outlets were not at the same height the clients would complain about the lack of neatness. So the electrical industry started a training program with all the apprentices that introduced the process of using their hammer to set the height of all the outlet boxes. When you check your home you may find height variations around the 12 inch height mark and that is due to different electricians and different sized hammers. Universal design discovered that 18 inches worked ergonomically better for everyone especially seniors with back problems.

Criteria 12: Electrical Outlet Placement Locations.

- Beside windows, especially where draperies may be installed, for future curtain controls.
- Bottom of staircases, for future stair gliders and to use for the vacuum
- Beside the toilet, for future automated type of toilet seats and lifting technologies (GFI outlet)
- Above external doors (outside and inside), for future door openers and other technologies
- On front face of kitchen cabinet, for one easy-to-reach outlet in the kitchen area
- At Node Zero Location where all the house wiring meets in one place, the communications control centre for smart home options including using electricity for senior's independence while aging in place and energy conservation, control and management.

With these wiring and electrical outlet placements, the house is also 'smart' ready for energy saving technology.

Criteria 13: Electrical Boxes: All light switches and A/C outlets use Smart electrical boxes.

By installing Smart electrical boxes, introducing technologies, eg. automated light control, in the future is made easy.

Criteria 14: Four-Plex Outlets: Placed in master bedroom, home office, garage, and recreation room.

All these locations have a history of being loaded up with lots of electrical devices. By increasing the number of outlets in these areas, issues such as electrical overloads and the potential fire hazards are significantly reduced. This especially helps seniors in the bedroom location with independence through technology options.

Criteria 15: Telephone Pre-Wiring: Cat 5E (4 pair) homeruns to all areas and return to one central area. (Node Zero)

This is the minimum quality of wire needed to deliver high-speed communications throughout the home. This is the same standard, inexpensive wires as offices use for their phone systems. The telephone wire is the backbone to letting all the systems in the home communicate and increase seniors' independence through electrical devices and support. The SAFERhome Standards recommend and measure for at least one telephone line to the front door bell position. This same wire can also deliver significant energy savings by cross communication of the home heating, lighting, and water systems. Better communications directly relates to energy savings. Placement and the number of outlets are based on the homes design.

Criteria 16: RG-6 Coaxial Cable Runs: All homeruns return to one central area. (Node Zero)

This is the minimum quality of cable needed to deliver a high-speed communication throughout the home of the future.

Criteria 17: Low-Voltage Runs: All homeruns return to one central area. (Node Zero)

When all the low-voltage homeruns meet in one place they make the home smart ready. This open wiring network design gives the homeowner the ability to use electricity not only for energy savings but also for independent seniors aging-in-place lifestyle needs. The other benefit is that the house has the ability to cross-communicate with any current/future or proprietary technology.

Criteria 18: Wall Reinforcements: At the top of all stairs, walls are reinforced with 2"x12" solid lumber at 36" to centre.

This gives the home the ability to have a proper and solid gate installed at the top of a set of stairs in the future that will protect children and seniors from falling.

Criteria 19: Multi-storey Connection Provisions: Either an allowance for an elevator shaft in stacked closets or staircase(s) with a minimum width of 42".

This gives the home the ability to easily accommodate technology that will connect one floor to another and keep anyone independent in the home for longer. The same benefits as one-level living - but with more home design choices. The cost of installing a future elevator shaft is only a few hundred dollars during new construction and about \$80,000 on average if a retrofit or renovation is needed.

The cost of making your staircase wider is only \$40 worth of materials and about four square feet of additional space to accommodate the design.



Important Considerations:

The cost of incorporating all 19 Criteria of the SAFERhome Standards into a home at the time of construction is less than \$1000 for the average single family home and less than \$500 for multi-family, yet the cost of retrofitting a single family home to the standards at a later date would cost at minimum upwards of \$100,000.00 dollars.

SAFERhome Standards making homes look better, work better and worth way more!

For more information visit the SAFERhome web site or talk to your local planning and building department.

www.SAFERhomesociety.com