# Canadian Association of Occupational Therapists Product Recognition Program

# Stander™ Security Pole and Curve Grab Bar



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#### Disclaimers

The information compiled in this report was designed for informational purposes and to communicate the final conclusions of a documented review process. The decision to award a seal of recognition **does not supersede or replace other codes, requirements or regulations** set by authoritative organizations of a specific jurisdiction. CAOT encourages health professionals to act in a responsible manner and according to best practices for the recommendation, assessment, installation and maintenance of this product. It is critical to **follow the recommendations set by the manufacturer and/or distributor** of this product and, when relevant, engage domain expert for training, use, installation, maintenance and repair.

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Specific questions related to this product(s) (including usage, availability, pricing, etc.) should be addressed directly to the manufacturer and/or distributor. Please contact Stander Inc. by email at sales@stander.com or by phone at 1.800.506.9901 extension 126. Also, customers or potential customers are invited to watch the instruction video of the Stander – Security Pole & Curve Grab Bar: https://vimeo.com/234568820. Concerns or questions related to the content of this report should be addressed to Julie Lapointe, Director of Knowledge Translation Programs, at jlapointe@caot.ca or at 1(800) 434-2268 ext. 260

The conclusions presented in the current report are derived from the best information available. In the case that new information becomes available and grants a modification to the conclusions, CAOT reserves the right to update and issue a new report of this product at any time.

#### Acknowledgement

The generation of this report would not have been possible without the contribution of occupational therapists and members of the Canadian Association of Occupational Therapists (CAOT).





# **Executive Summary**

The Stander™ Security Pole and Curve Grab Bar is a device that can provide support to individuals in their home for sit-to-stand and stand-to-sit transfers. The design and maneuverability of the curve grab bar has been found to be a highlight of this product. Reviewers recommended that the Stander™ Security Pole and Curve Grab Bar be accepted for the CAOT Product Recognition Program. Information and recommendations regarding the performance of the product are provided in this report.



Stander™ Security Pole and Curve Grab Bar is recognized by CAOT.





# **Review report**

# The purpose of this product

The Stander™ Security Pole and Curve Grab Bar is a device that can provide support to individuals in their home. This device will support a user with limited balance, lower extremity strength, control and/or endurance to safely transfer from a sitting to a standing position, and vice versa. This security pole is tension mounted so can be installed without any bolts or screws. Installation takes approximately 15 minutes and this product can fit 7- to 10-feet ceilings. This security pole has four hand grips located on the curve grab bar. The curve grab bar can rotate 360 degrees to 8 different positions on the security pole, can lock every 45 degrees and can be adjusted to the desired height.

# Performance of the product (efficacy, usability, safety, reliability, durability)

- Reviewers found this product to be robust as it is made of a rust resistant easily washable zincplated steel.
- The Stander™ Security Pole and Curve Grab Bar can be installed at different strategic areas of the
  house without putting any marks or scratches on the floors and ceilings. This product is ideal for the
  bathroom, which is the most common place for falls. The Security Pole with Grab Bar can also be
  very helpful with assisting users in getting up and down from chairs, couches, and beds.
- This product can only be installed on a hard level surface ceiling as the upper frame is locked in place and has no maneuverability. Therefore, this product cannot be installed if the ceiling is angled, is vaulted or lacks a solid base (such as a suspended ceiling).
- The design of the curve grab bar has been found to be especially advantageous by the reviewers as
  it allows a user to be supported in multiple orientations within space. Specifically, the height of the
  curved grab bar can be adjusted and its design allows users to rotate it and place their hands in 4
  different positions. This aspect has been reported as being a highlight of the Stander™ Security Pole
  and Curve Grab Bar.
- This product has been found by reviewers to effectively assist users with limited balance, lower extremity strength, control and/or endurance to perform sit-to-stand and stand-to-sit transfers and thus reducing the likelihood of falls.
- There is a 300 lb./136 kg weight restriction for this product.
- Two people are required for installation. The reviewers found the 9-step installation instructions
  well-written and easy to follow. An assembly video is available on the product website to
  complement the instructions.
- Once installed, this product requires regular monitoring and tightening of screws and bolts along
  the grab bar as well as monitoring for conditions that could potentially allow the base or the upper
  frame of the product to move, such as surface irregularities or moisture.
- The only physical concern raised by reviewers related to the possibility that the pole base be cumbersome and even a tripping hazard in small areas. The base has a diameter of 19.05 cm (7.5 inches) and a thickness of 0.635 cm (¼ of inch).



# Important recommendations

Warnings for the Stander™ Security Pole and Curve Grab Bar are clearly outlined in the instructions by the manufacturer. The reviewers found 2 important warnings to highlight: The following potential risks have been mentioned by reviewers:

- 1. This product clearly outlines that there is a 300 lb. / 136 kg weight restriction. Therefore, the reviewers recommend that this product not be recommended for persons close or above that weight.
- 2. A safety concern exists for users who may not have the core or upper extremity strength to remain stable while holding onto the grab bar during a transfer as it can move 45 degrees before locking.

## **Economic considerations**

The reviewers found that the Stander™ Security Pole and Curve Grab Bar was easily available for users to purchase online or in person as the website offers a list of dealers. The price of this product was found to be reasonable for users who are on a limited budget and was suggested by reviewers to provide good value for the investment.

## Scientific evidence

A literature search was conducted but no scientific publications were found regarding the efficacy of floor-to-ceiling security poles. Research suggests that grab bars are one of the most common home modifications and are often installed in bathrooms where majority of falls occur in the home (Guitard, Sveistrup, Edwards, & Lockett, 2011; Stark et al., 2009). According to Vena, Novak, King, Dutta and Fernier (2015), a vertical pole positioned centrally between both shoulders results in lower physical demands than other positions. Vertical grab bars rather than horizontal ones are more often used when entering and exiting a bathtub and have been shown to reduce the likelihood of falls and promote functional independence (Guitard et al., 2011).

## **Review committee**

The Stander™ Security Pole and Curve Grab Bar was reviewed by three occupational therapists who all have experience working with clients in a community setting. They developed their expertise through continued exposure to numerous types of equipment and devices available for modifying environments.



# **Final recommendation**

Reviewers were unanimous and recommended that the Stander™ Security Pole and Curve Grab Bar be accepted for the CAOT Product Recognition Program. An occupational therapist may recommend the use of this product for individuals who are at risk of falls, such as those who with limitations in balance, mobility and lower extremity strength. Reviewers of this product have suggested that various populations can benefit from this Security Pole including the elderly, those who have recently undergone knee/hip surgery, and those with progressive health conditions such as multiple sclerosis and muscular dystrophy. A follow-up process should be in place to ensure that the product has been installed as recommended in order to avoid a client falling because the product not properly installed. The Stander™ Security Pole and Curve Grab Bar has the potential to promote "aging in place", enabling individuals to maintain independence in their own homes for as long as possible.

## References

- Guitard, P., Sveistrup, H., Edwards, N., & Lockett, D. (2011). Use of different bath grab bar configurations following a balance perturbation. *Assist Technol*, 23(4), 205-215; quiz 216-207. doi:10.1080/10400435.2011.614674
- Stark, S., Landsbaum, A., Palmer, J. L., Somerville, E. K., Morris, J. C., Harvey, A., & Friedman, D. H. (2009). Client-centred home modifications improve daily activity performance of older adults. *Canadian Journal of Occupational Therapy,* 76(1\_suppl), 235-245. doi:10.1177/000841740907600s09
- Vena, D., Novak, A. C., King, E. C., Dutta, T., & Fernie, G. R. (2015). The evaluation of vertical pole configuration and location on assisting the sit-to-stand movement in older adults with mobility limitations. *Assistive Technology*, 27(4), 208-218.