European patent: EP2886737

VeloComfort® is the concept name of a conveyor system for two-wheelers, which supports cyclists to move their bicycle both from the bottom up, and from top to bottom at locations with steep slopes (a.o. steep stairs and ramps).

VeloComfort®GutterBrush: From top to bottom

One side of the stairs is — at the entire length - equipped with a gutter brush. The gutter brush is made from a high quality, durable and low-maintenance aluminum double-sided channel, which is equipped with brush strips on both sides. The friction of the gutter brush ensures that the bike get slowed down, allowing the user to determine his/her own pace during the descent. The entrance and exit of the conveyor are aesthetically, functionally and safely integrated into the system. The VeloComfort®GutterBrush is suitable for all bikes with two wheels behind each other, both for bikes with wide and thin tires as well as for light and heavy bikes.

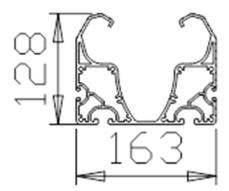
VeloComfort®ConveyorBelt: From bottom to top

The other side of the staircase is equipped with a bicycle conveyor belt. The high quality kevlar-based conveyor belt runs in a durable, low-maintenance aluminum double-sided channel and is powered by an electric motor. The entrance and exit of the conveyor are aesthetically, functionally and safely integrated into the system. The electric motor is positioned on the side of the conveyor belt. The VeloComfort® Conveyor Belt is suitable for all bikes with hand brakes, for bikes with two wheels behind each other, for bikes with wide and thin tires as well as for light and heavy bikes. Bikes without hand brakes will be upwards transported, however require a little more support from the user. The bike conveyor is activated once the integrated sensors detect a bike and automatically stops if the conveyor is completely free of bicycles .

Specifications

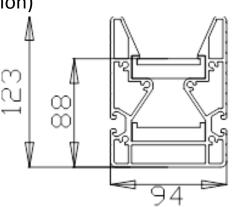
VeloComfort®GutterBrush (from the top down)

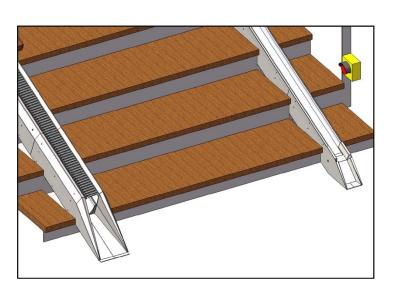
- Gutter: aluminium
- Brushes: synthetic 0,5mm, black, PBI
- Dimensions: width 163mm, height 128mm
- Distance from wall/side to mid of gutter: 350mm (= recommendation)
- Application: slopes up to 50° (directly placed on stairs)



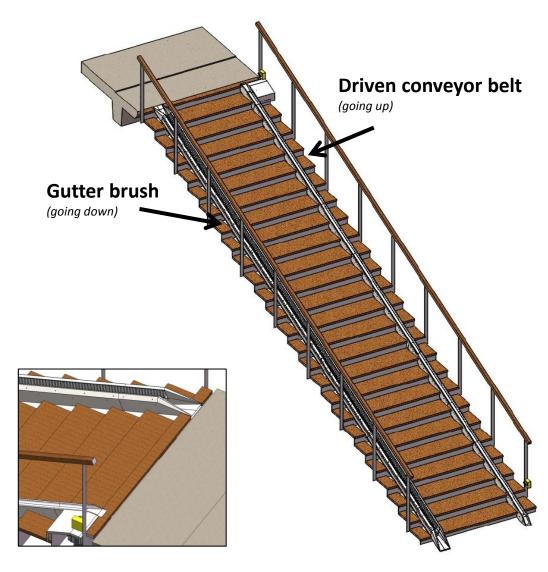
<u>VeloComfort®Conveyor Belt (from bottom to top)</u>

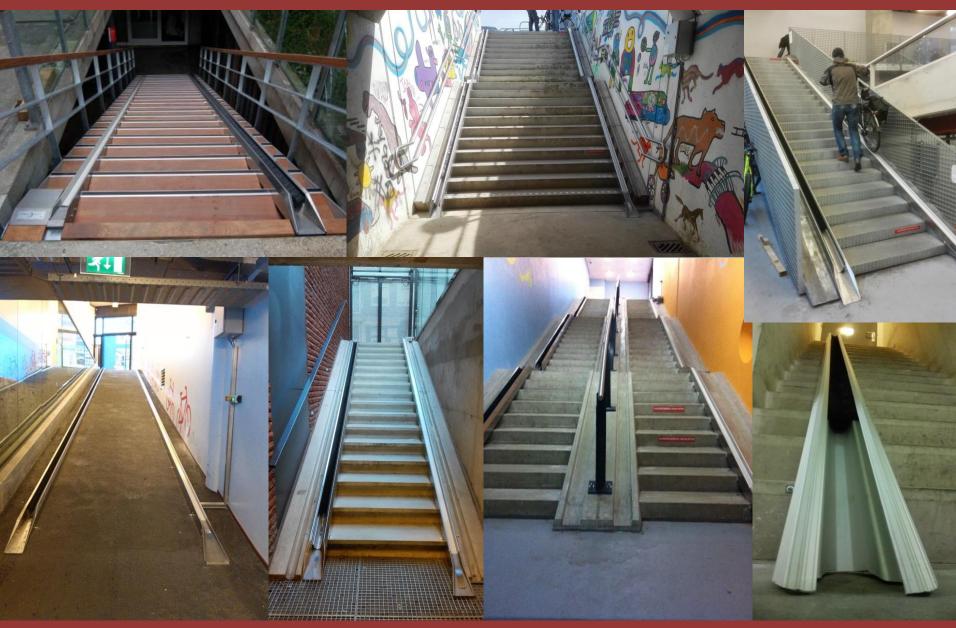
- Gutter: aluminium
- Conveyor belt: kevlar-based polyurethaan
- Dimensions: width 94mm, height 123mm
- Distance from wall/side to mid of conveyor belt: 350mm (= recommendation)
- Motor: ± 0,75 KW, 48,2 Nm
- 230/400V, 16A, 50 Hz
- Conveyor speed: appr. 0,7m
- Application (slopes 0°-35°)
 - Slopes 0°-25°: Directly placed on stairs
 - Slopes 26°-35°: Milled in the stairs

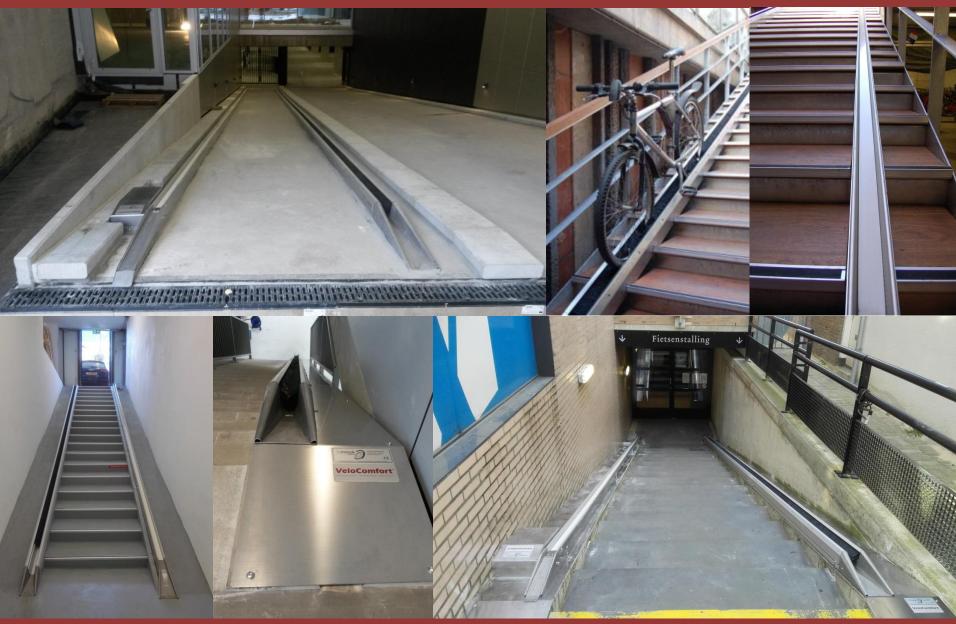














Variable in length



←1,3m

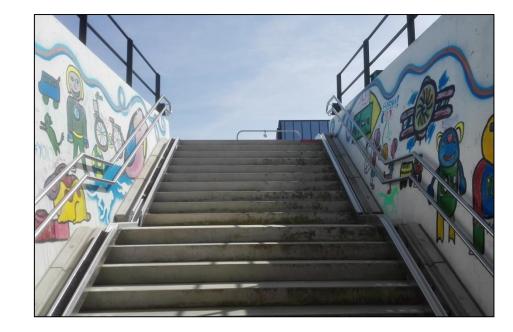
21,5m →

Indoor & Outdoor

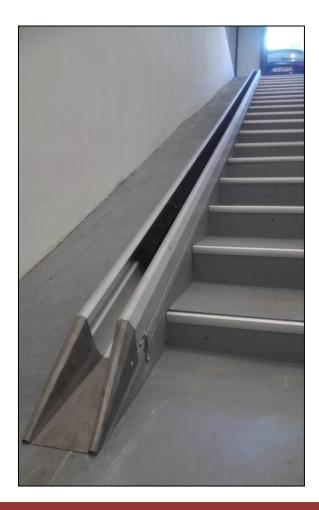


←Indoor

Outdoor→



On stairs & Milled



←Direct on stairs

Milled into stairs→



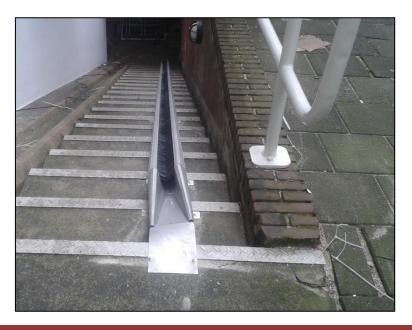
Straight & Angled



←Straight

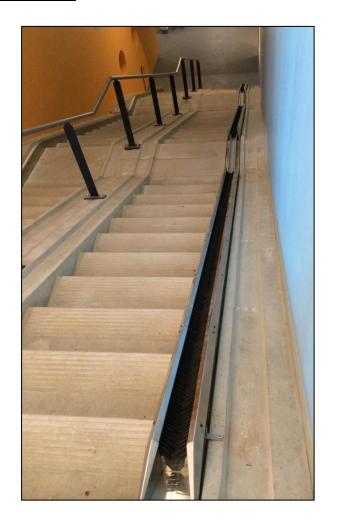


Angled→



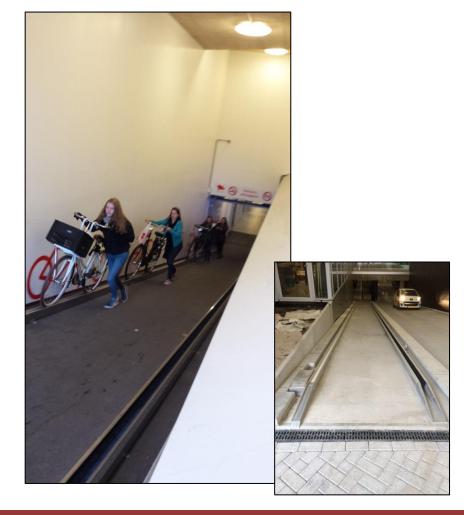
Platforms





Stairs and ramps





Slopes up to 50°



11° slope



26° slope



45° slope



50° slope