

PERFORMANCE

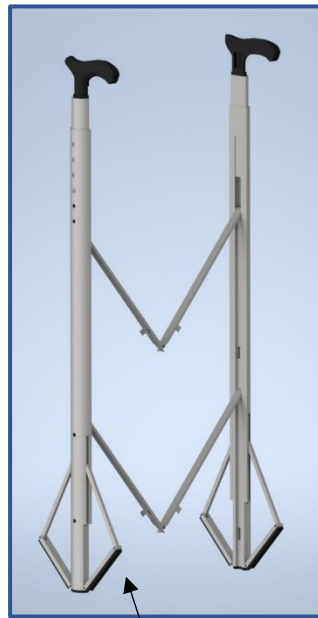
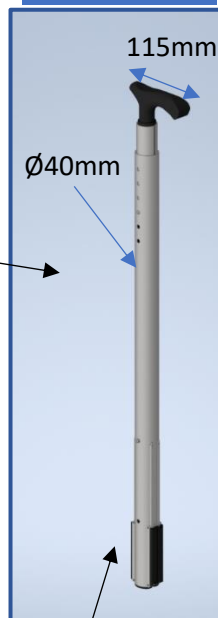
Many **elderly** people, especially those with **joint pain** and **muscle weakness**, struggle to stand for long periods of time, and have difficulty moving between the seated and standing positions. The final design is a **portable walking stick** that can be deployed into a **standing frame** by splitting apart into two halves. This frame aids the user in standing up from a seated position or supports them while they are standing.

COLLAPSED

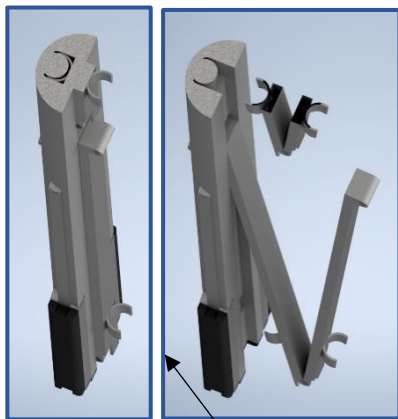
DEPLOYED

MATERIALS +
ERGONOMICS

To ensure **comfort**, the handles have an **ergonomic shape** and are made from **rubber**. The main parts of the device are made from **sturdy aluminium**.



ATTACHMENT OF TWO HALVES



GEOMETRY

When not deployed as a frame, the device can be **transported easily** as a walking stick.

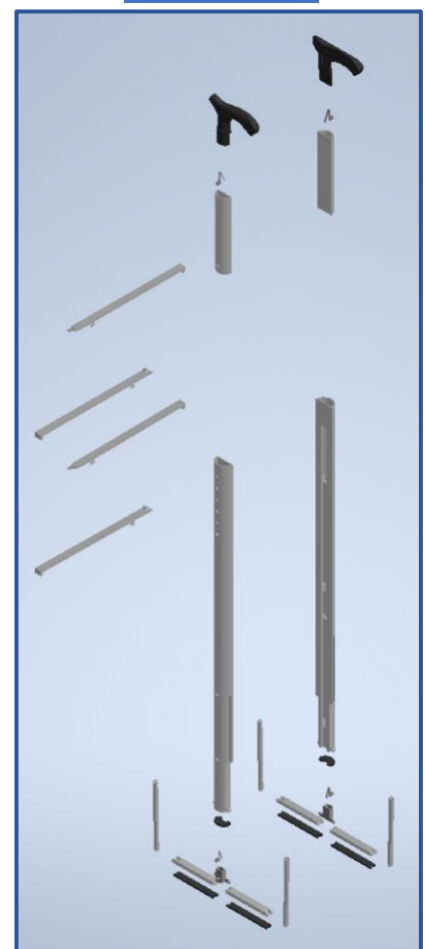
OPERATION

Rubber grips to improve usage, especially when **outdoors**.

PERFORMANCE

Wide base to **support** user while standing.

EXPLODED VIEW



SAFETY

The device has no exposed sharp edges.

GEOMETRY + ERGONOMICS

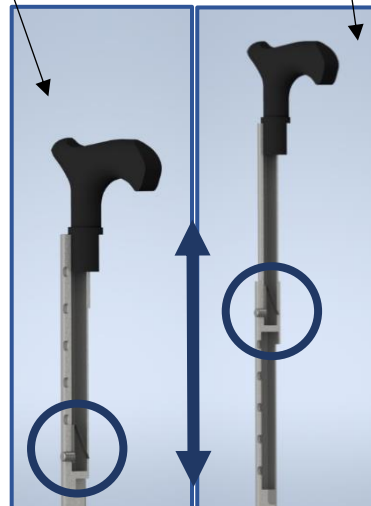
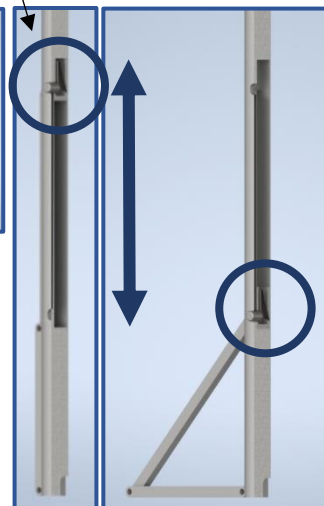
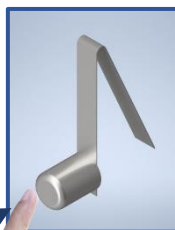
The device is **adjustable** in 5 increments of 2.5cm for users of **heights of 158cm – 183cm**. (1) Future alterations could be made in the design to allow for a wider range of adjustment to fit the requirements list.

OPERATION

The device is **uncomplicated** to use and requires **minimal force** to operate. The adjustments in height, and the deployment of the base, are done by a **simple spring push button** and sliding the tube. The two halves of the device are held by friction with some clips and are separated by **pulling** the sides apart.

BASE DEPLOYMENT

HEIGHT ADJUSTMENT



1) Art Walking Sticks. How to measure your walking cane, stick size. Accessed 2023, December 14". <https://artwalkingsticks.com/en-gb/blogs/blog/how-to-measure-your-walking-cane-stick-size>