

# exoskeleton

Focusing predominantly on the forecast for flooding and shelter for rough sleepers, the project began with the idea of a cocoon/exoskeleton inspired by isopods and the foldable, interlocking nature of their bodies. The aim was to create a protective, comfortable space, which led to ruling This exoskeleton can seal shut in harsher weather but also open up with added screen material for better ventilation in warmer climates.

The exoskeleton was explored to determine the most effective method and shape for transport, space, and comfort. The final design landed on a boat form that can morph around the subject to meet their fundamental needs.

The body shell is able to seal shut at the top to protect for harsh weather. This feature is also vital for the closure and mobile nature of the shelter, sealing along the crown and shift into each segment. The final product in the shape of one full segment of the boat in order to sling over a shoulder to carry as shown below. In order to accommodate for the fear of sinking, the inflatable padding at the bottom of the boat serves as a seal to the bottom and sides of the boat.

Flax fibers are the most sustainable resource for the exterior of the boat. When infused with eco resin, these fibers become more durable. Additionally, creating thinner layers for the sections of the body shell will enhance its lightweight properties, facilitating easier transport.

