

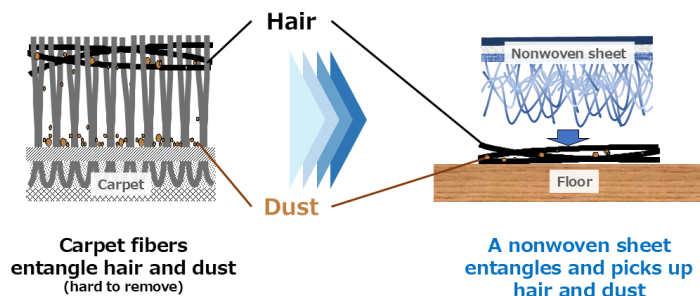
A Lightweight, Easy-to-Handle Tool for Collecting Dirt

A cleaning tool that thoroughly removes hair and dust from floors and other surfaces with just a light motion. By optimizing both the nonwoven sheet that entangles and picks up hair and dust and the structure of the head that holds the sheet in place, it achieves smooth maneuverability and strong dirt-capture performance. Even with light, one-handed operation, it delivers thorough cleaning with minimal residue left behind. The hygienic, replaceable disposable sheets partially use FSC-certified wood and plant-derived resins, and the shift to recycled materials is also underway.

<Unique Points>

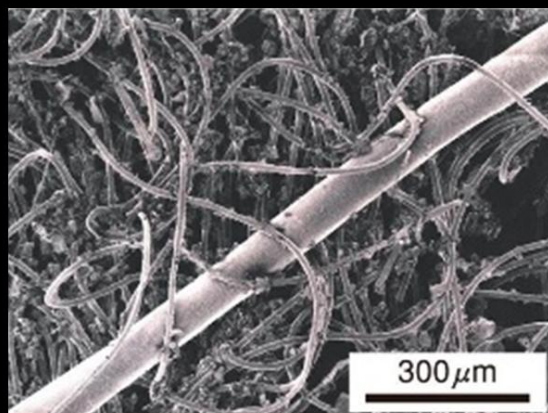
Carpet hair can easily become tangled in the pile and be difficult to remove—an everyday frustration that inspired the development of a “hair and dust capturing device” that uses a nonwoven sheet to entangle and pick up debris.

A Reversal of Thinking—Harnessing the Power of “Entanglement”



With a sheet structure designed to increase the “freedom” (mobility) of the nonwoven fibers, the sheet can entangle and pick up even hard-to-capture debris such as hair and fine dust. By sandwiching a reinforcing mesh within the fiber layer, the sheet’s strength is enhanced, helping prevent slippage, deformation, and tearing during cleaning.

Hair captured by the nonwoven sheet (Magnified image)



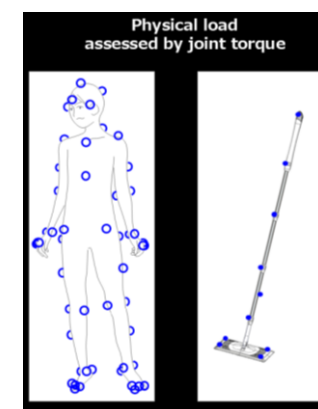
The head that holds the nonwoven sheet is also designed to maximize dirt-capturing performance. By optimizing the thickness of the surface cover, its surface texture, and even the cushioning of the internal structure, it enables hair and dust pickup across the entire cleaning surface.

How the lightweight dirt-capturing device collects hair and dust



<https://www.youtube.com/watch?v=UHV3dMd8SYc>

Ergonomic studies were used to refine cleaning posture and movement. While keeping the sheet in close contact with the floor, the tool is easy to handle even with one hand, enabling operation designed to minimize physical strain.



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<Key Benefits>

- Even older adults who are more likely to experience strain in the lower back or arms can clean without applying much force.
- For dual-income households that can only find time to clean at night, or even while a baby is sleeping, it can be used without worrying about noise—enabling cleaning that fits your daily routine.
- Because it is a cleaning method that is less likely to stir up debris into the air, it also makes it easier to address fine particulate soils such as pollen, viruses, and house dust.

<Link to Other Contents>

- The Story Behind Quickle(Japanese only)
<https://www.kao.co.jp/quickle/quicklestory/>

<Concerned Research Areas>

- Product Development Research:
 - Fabric & Home Care
<https://www.kao.com/global/en/innovation/research-development/product-development/fabric-and-home-care/>
- Fundamental Research:
 - Packaging Technology
<https://www.kao.com/global/en/innovation/research-development/fundamental/packaging-technology/>
- Production Technology
<https://www.kao.com/global/en/innovation/research-development/fundamental/production-technology>