

Team 29 Folding Sofa Design 1

A novel furniture manufacturing approach delivers light-weight, durable, pre-assembled, self-folding sofas that compact for easy storage, movability, and replacement in various corporate and retail settings.

Researchers at Purdue University have developed a new approach to manufacturing furniture, including a novel self-folding sofa. Currently, most sofas that can be ordered in the mail or picked up at a store require assembly. It can be quite difficult to move sofas into dorms, apartments, and even homes. In addition, sofas are inconvenient to replace when desiring a change of style for a living space. The Purdue University approach is to pre-assemble a sofa with each of three back and seat cushions that can be compact into a twenty-four by twenty-six by twenty-eight inch box for easy storage and movability. All of the sofa components are light-weight and durable, including interchangeable legs and cushions. The novel sofa design can be integrated into many types of furniture such as for styling office spaces, retail spaces, and even campus spaces.

Advantages:

- Foldable/Compact
- Comfortable
- Stylish
- Customizable
- Light-weight
- Storable

Potential Applications:

- Interior Design
- Furniture Industry

TRL: 3

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Category

Materials Science &
Nanotechnology/Advanced
Functional Materials
Chemicals & Advanced
Materials/Materials Processing &
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