

# structurally sound



## STEEL BALLOONS

**STEEL IS A LOT** of things, though inflatable probably isn't one of the first adjectives that comes to mind when describing it.

But inflatable steel is the star of Balloonité, a multistory residential design concept created by Austin Vandepoll and Nathalie Altamirano, both architecture students at the University of North Carolina at Charlotte.

The project is a nod to Unité d'habitation, a mid-century housing design principle focused on communal living, and reimagines the concept using inflatable steel technology.

How do you inflate steel? Simple. First, cut two 18-gauge steel sheets into the desired shape. Next, weld the edges and seams together, making sure to keep the blowhole open. Finally, pump 90-psi air into the cavity. Repeat until you have the desired

number of modules for your building.

The concept was created for the 2017-2018 Steel Design Student Competition. Administered by the Association of Collegiate Schools of Architecture (ACSA) and sponsored by AISC, the competition encourages architecture students from across North America to explore the many functional and aesthetic uses for steel in design and construction. This year's competition included two categories. Category I—for which Balloonité was the winner—focused on affordable housing, and Category II was an open competition. You can learn more about Balloonité, as well as of this year's winners, in next month's issue (you can also view the winners at [www.acsa-arch.org](http://www.acsa-arch.org)). ■