

aVOID

TINY HOUSE

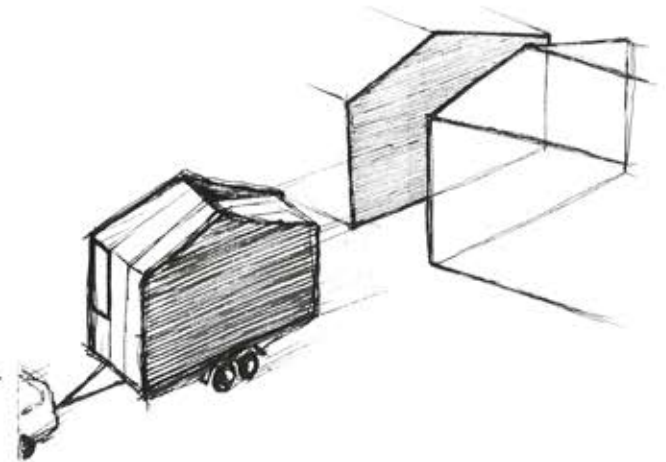
a project by
Leonardo Di Chiara

0 index

- I. aVOID tiny house
- II. the idea
- III. the construction site
- IV. the interior
- V. tiny living
- VI. dimensions and specifications
- VII. details
- VIII. my living experience
- IX. test-living
- X. aVOID on the road
- XI. exhibitions
- XII. optimization
- XIII. press links
- XIV. partners
- XV. Tiny House for future

contacts

aVOID first conceptual sketch
where it is highlighted the row
characteristic of the mobile house.
(Sketch by Leonardo Di Chiara)



◀ The Tiny House "aVOID" traveling
in Bavaria countryside during the
Tiny House Tour (September
2018). © Leonardo Di Chiara



❑ | aVOID tiny house

aVOID is a mobile house model, drawing inspiration from the well-known American 'tiny house' typology.

The 9 sqm living space is equipped with every comfort needed for everyday life and characterized by a strong adhesion to minimalist principles, the 'less is more' movement, and a more sustainable lifestyle.

aVOID is the result of an artistic-architectural research project directed by architect and engineer Leonardo Di Chiara in collaboration with Tinyhouse University and supported by numerous internationally renowned technical partners.

aVOID is the very first 'tiny house' entirely designed and manufactured in Italy, specifically in the very well-known Pesaro "District of Furniture".



aVOID first rendering was posted online 9th february 2017. After six months the tiny house was presented to the public in Pesaro. © Leonardo Di Chiara ▲

□|| the idea

«During all my life I have lived in a very small room in my parents' apartment in Pesaro, Italy. I was forced everyday to learn how to organize my space, fit all of my belongings inside the few cabinets, and to adapt my space to host my friends to play or later to study. I grew up with a minimalistic lifestyle, which certainly influences my design.

During my studies as an architect and engineer at the University of Bologna I decided to put into practice my knowledge and build my first house. Forced by the very little savings I had, I started from almost the same dimensions as my room: 9 sqm. I want to demonstrate to myself and to others that, with a strong adhesion to reductionism, it is possible to live respectably in such a tiny space. From past experience in my room I learnt the importance of emptiness - functionally and physiologically speaking. This is why I started developing transformable furniture where everything can be hidden into the wall surface when it is not in use, having as a result 'a void' ready to be used again.

But it was the meeting with Van Bo Le-Mentzel and his newly founded Tinyhouse University in Berlin that gave me the motivation to turn this dream into reality. Like many fresh graduate students, especially in architecture, I could not imagine setting my life in one place forever. Buying an apartment and renovating it was surely not a possibility for me. In Berlin I got to know the great potential of the American tiny house typology: small living structures on wheels that could fulfil my desire to be a "new generation nomad".

So I didn't waste any more time, I put all my efforts and my savings to build my very first house: aVOID.

Now it is parked in the middle of Berlin inside the garden of Bauhaus-Archiv / Museum of Design. Living inside my tiny house is such an amazing experience and it helps me to improve the quality of the space. I am planning to move soon to Copenhagen, then to the Netherlands and maybe to Paris but I am already dreaming of the time when I will return home: Italy.»

Leonardo Di Chiara

aVOID tiny house as part of a
row-housing system.
(Sketch by Leonardo Di Chiara)





◀ Leonardo Di Chiara inside his aVOID tiny house during the Official Presentation which took place in Pesaro (Italy) the 9th August 2017. © Giacomo Terracciano Photography

III the construction site

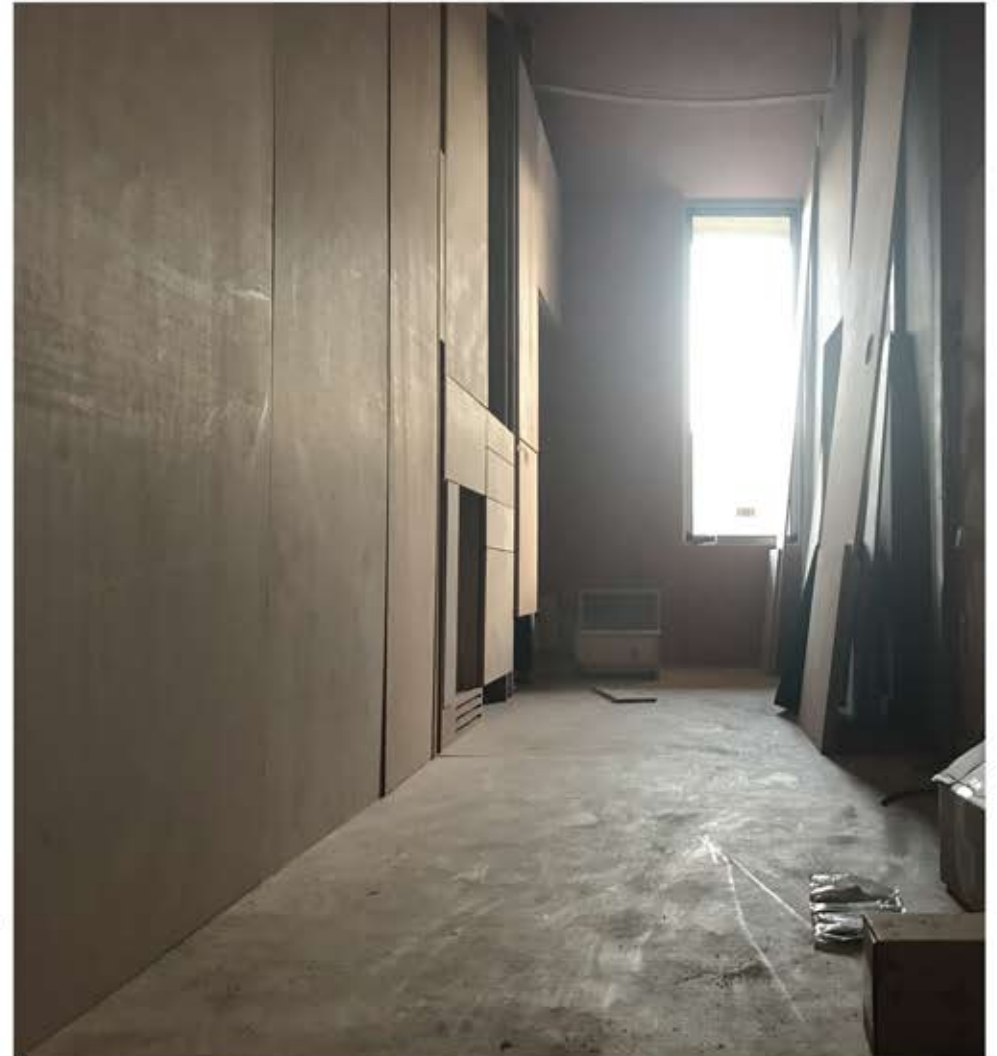
Twenty-five technical supporters, which counts of more than 120 people together, participated in the construction of the prototype. A very big team if you consider that aVOID could be the smallest single house built in Italy.

The mobile apartment was manufactured entirely in Pesaro beginning in may 2017 until the 9th of august of the same year when it was presented for the first time to the public. The construction site literally moved within the house from one company to the next taking advantage from its configuration of wheels: just like a construction site but on wheels.

Starting from the trailer, the bearing frame structure, the insulation, the windows, the interior furniture, the exterior metal covering and all the home appliances were rapidly installed into the house.

The tiny house is built with sustainable materials: wooden/aluminum structure, wood fiber as thermal insulation, marine okumè plywood, stainless steel metal covering. All the coatings are from the serie "bio" by ICA Group.

aVOID tiny house under construction at FG Arredamenti where Federico Luzi and his team realized all the interior space in record time (Fano, july 2017). © Leonardo Di Chiara ▶



◀ The Tiny House “aVOID” as Leonardo’s private residency during his test-living programme in Siena, Tuscany (August, 2018).
© Leonardo Di Chiara



IV the interior

The interior of the small unit is inspired by the balance of emptiness, from which the name aVOID its derived.

The house, composed by a single room lacking of any piece of furniture, is made functional by the activation of wall-mounted mobile devices, which enable different uses of the living space.

The “void” functions as space for meditation where the clear image and the pureness of the room are disturbed only by the spacing between the wooden panels. The homogeneity and the indeterminateness of the grey color are suddenly interrupted by the opening of reclinable devices, such as a murphy bed, tables, chairs, kitchen, a ladder and so on which reveal the domestic warmth of the wooden texture.



▲ The murphy-bed comes out from the “functional” wall: the empty space can be used as a bedroom. © Anna Fontanet Castillo



▲ Two grey doors hide inside a warm wooden kitchen. © Leonardo Di Chiara

av tiny living

The empty room allows different functions of the space. The reclinable bed also works as a sofa which becomes a bench if used in correlation with the foldable table.

The initial aseptic conformation is characterised by the prevalence of the longitudinal dimension of the interior space. This corridor-like image wants to represent the temporariness of the living conditions with a constant reminder of the migratory movement which characterises a "tiny house" on wheels. The activation of the different functional devices, like the double-side table, works instead in the opposite direction: the room expands horizontally and the natural wooden material gives a sense of relaxation in contrast with the anxiety of the initial condition.

Leonardo Di Chiara is hosting his
friends from Ambivalenz for
lunch inside aVOID tiny house.
© Tinyhouse University

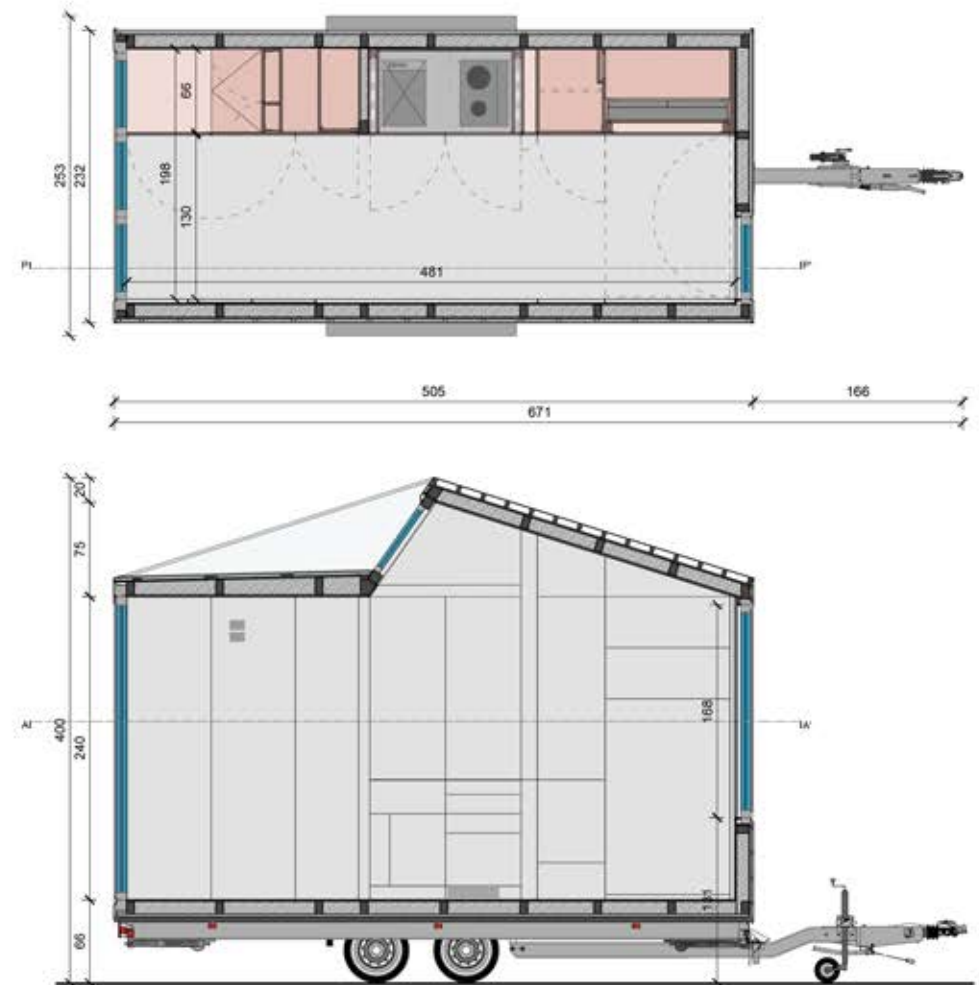


The “void” space where emerges ►
the contrast between the inde-
terminateness of the grey empty
room and the domestic feeling of
the warm wooden texture.
© Leonardo Di Chiara



VI dimensions and specifications

living area	9 sqm
rooftop area	4 sqm
ext dimensions	671 cm x 253 cm x 400 cm
int dimensions	481 cm x 198 cm x 315 cm
tot. weight	3000 kg
max speed	80 km/h (maximum limit)
trailer	aluminium two axis (AL-KO components)
structure	wood / aluminum
insulation	wood fiber / XPS (10 cm)
ext covering	stainless steel / aluminum / wood paneling
furniture	okumè plywood, bio coating by ICA
systems	electric (220 V) with photovoltaic (1 kW), water, mechanical ventilation, heating (electric / gas / diesel)
appliances	gas/induction stove, kitchen hood, LED lights, fridge, audio speakers, webasto diesel heater, electric pump



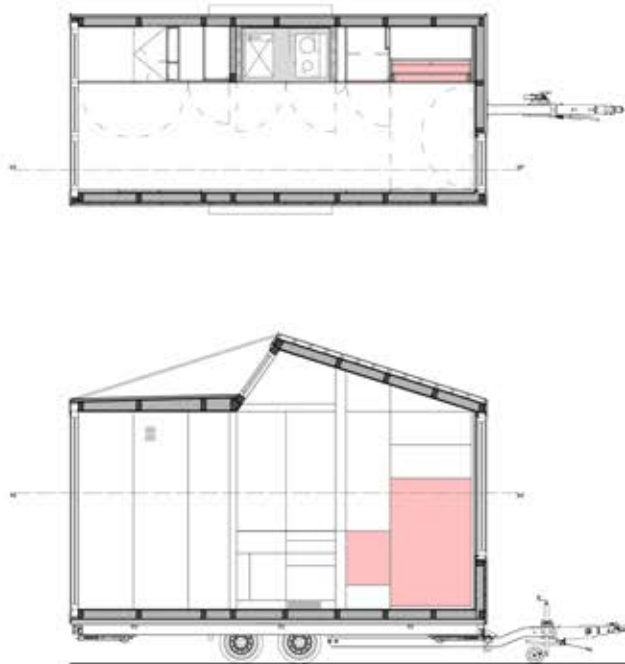
▲ Floorplan and section with general dimensions.

◀ The Tiny House "aVOID" ends its Tiny House Tour in Pesaro, the place where it was built one year before (November, 2018).
© Leonardo Di Chiara



□VII details

The tiny house is equipped with a **murphy-bed** which can be opened at the end of the “void” room. On the side, a draw with a small stool on wheels are used to enlarge the single bed (93 cm) to a double french side bed (135 cm). The mattress is designed by Leonardo Di Chiara and it is produced by Noctis SpA (Pergola, Italia).

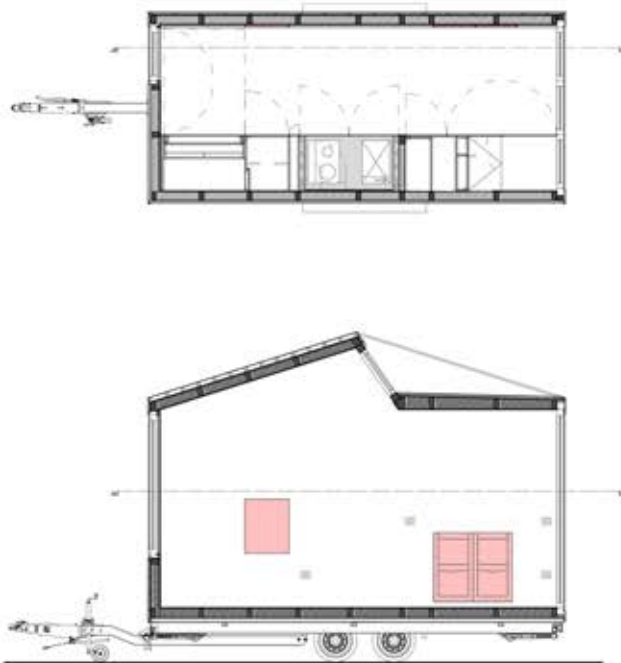


- Double bed configuration.
- ▼ Single bed configuration.



□ VII details

A single or double **table** is hidden inside the thickness of the lateral wall. It is built with marine plywood okumè and Hafele supporting hinges. An additional support takes the load in case it is used for specific purposes. Together with the table are combined two flat foldable **chairs** initially hidden in the front part of the house. They are produced by Ambivalenz GmbH in Berlin (Germany).



Single table configuration as a working desk. ▶



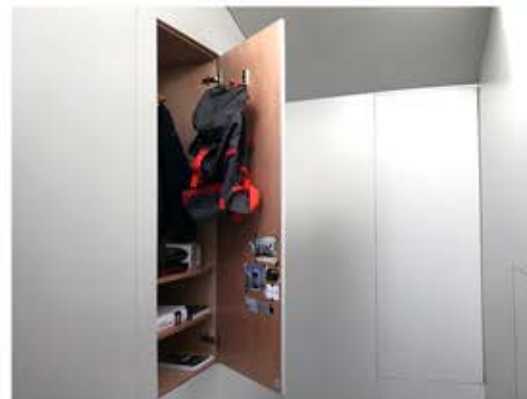
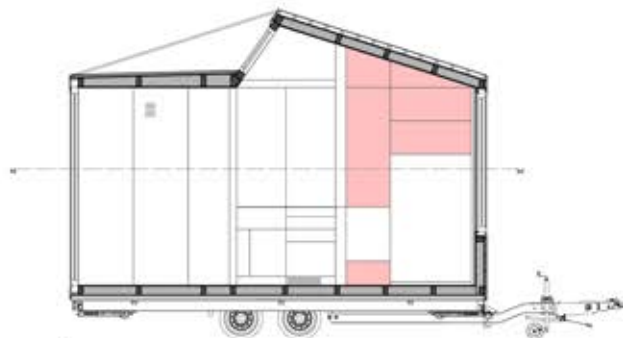
▲ Chairs by Ambivalenz hidden in the thickness of the wall.



▲ Chair by Ambivalenz unfolded.

□VII details

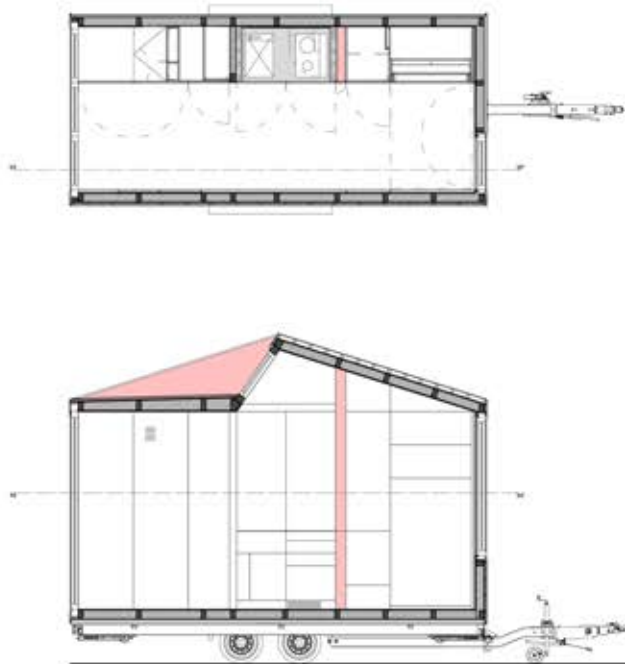
On the left side of the tiny house built-in furniture are placed several **storage** cabinets. Some of them are designed for a daily usage, like a closed for clothes next to the bed, others are located in hidden places like in a old secretaire. For example under the mattress it is possible to storage all the winter blankets during summer time.



- ▲ Storage space above the bed.
- ◀ Wardrobe for everyday clothes.

□VII details

Inside a narrow cabinet, it is kept an aluminum **ladder** which can be used to reach the flat **rooftop**. The inclination of the windows makes this place perfect as a solarium during warm seasons.

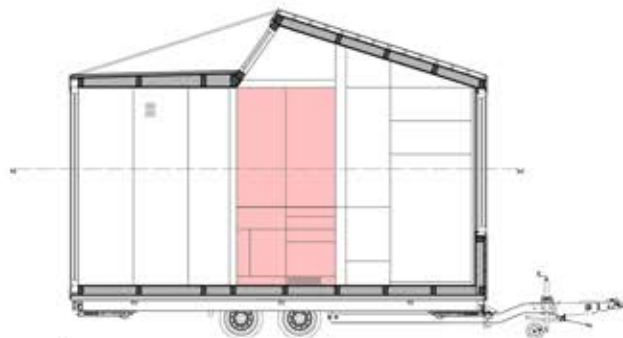
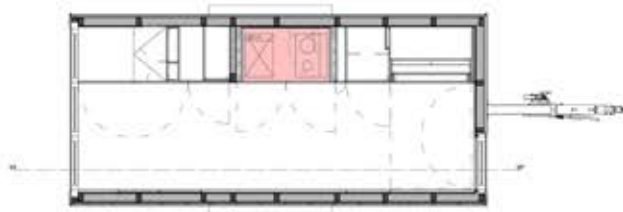


- The ladder is hidden inside a narrow cabinet.
- ▼ The rooftop can be used as a solarium. © Luciana Pezzi



□VII details

The **kitchen** occupies the middle section of the tiny house. The cooking and washing area is hidden behind two removable doors and it is covered by a stainless steel kitchen top. It is equipped with a small fridge by Vitrifrigo, an induction stove and a hood by Faber. Other parts are two draws for cutlery, a sliding spices container, one draw with divided garbage box and a wide and high cabinet in the upper part.



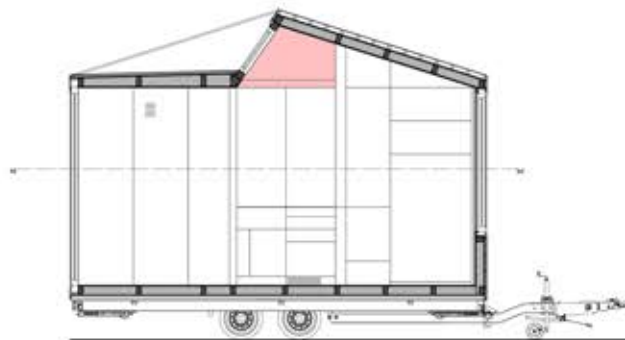
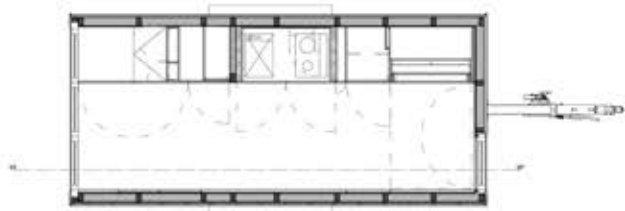
▲ The kitchen unit measures just 105 cm. © TinyHouse360.de

► Tiny-cooking inside aVOID Tiny House. © Alessandro Magalini



□VII details

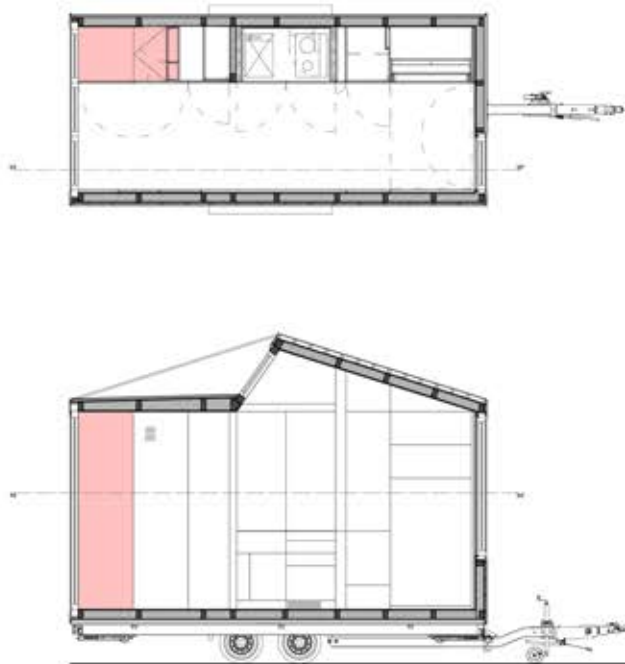
Facing the sun thanks to an openable roof window, there is a small **green house**. With the ladder is possible to grow fresh spieces in the summer time and purifing plants in the winter.



◀ A trapezoidal wooden piece reveals a small green house at the upper part of the tiny house.
© Anna Fontanet Castillo

□ VII details

Entirely made by okumè plywood, the **bathroom** measures only 0,7 sqm. It is equipped with a composting toilet, a foldable sink, a mirror cabinet and a shower hidden behind wooden doors.



◀ Wooden toilet room used a shower.



▲ Foldable sink and mirror cabinet.

□ VIII my living experience

“Living inside aVOID is not, in my case, just a minimalistic challenge measurable in square meters. Rather it seems an intimate relationship that, over the past few months, is getting me in direct contact with my first creation as an architect. It happens often that I stop and think, watching the space in its different functional arrangements. The living experience allows me to verify, test and modify the house, implementing it with new solutions. For this reason I call aVOID an “open” prototype: a work-in-progress construction site. The tiny house is like a short instruction manual to reductionism. By itself, it teaches and pushes you to deprive yourself of unnecessary things, to consume less water and less energy, to put back your clothes in their place and to wash the dishes immediately after eating. The void, which is obtained by closing again all the wall-mounted furniture, is the refuge of my creativity. The absence of any visual distraction caused by personal objects or daily business makes room for my imagination, which is reflected into my future designs.”

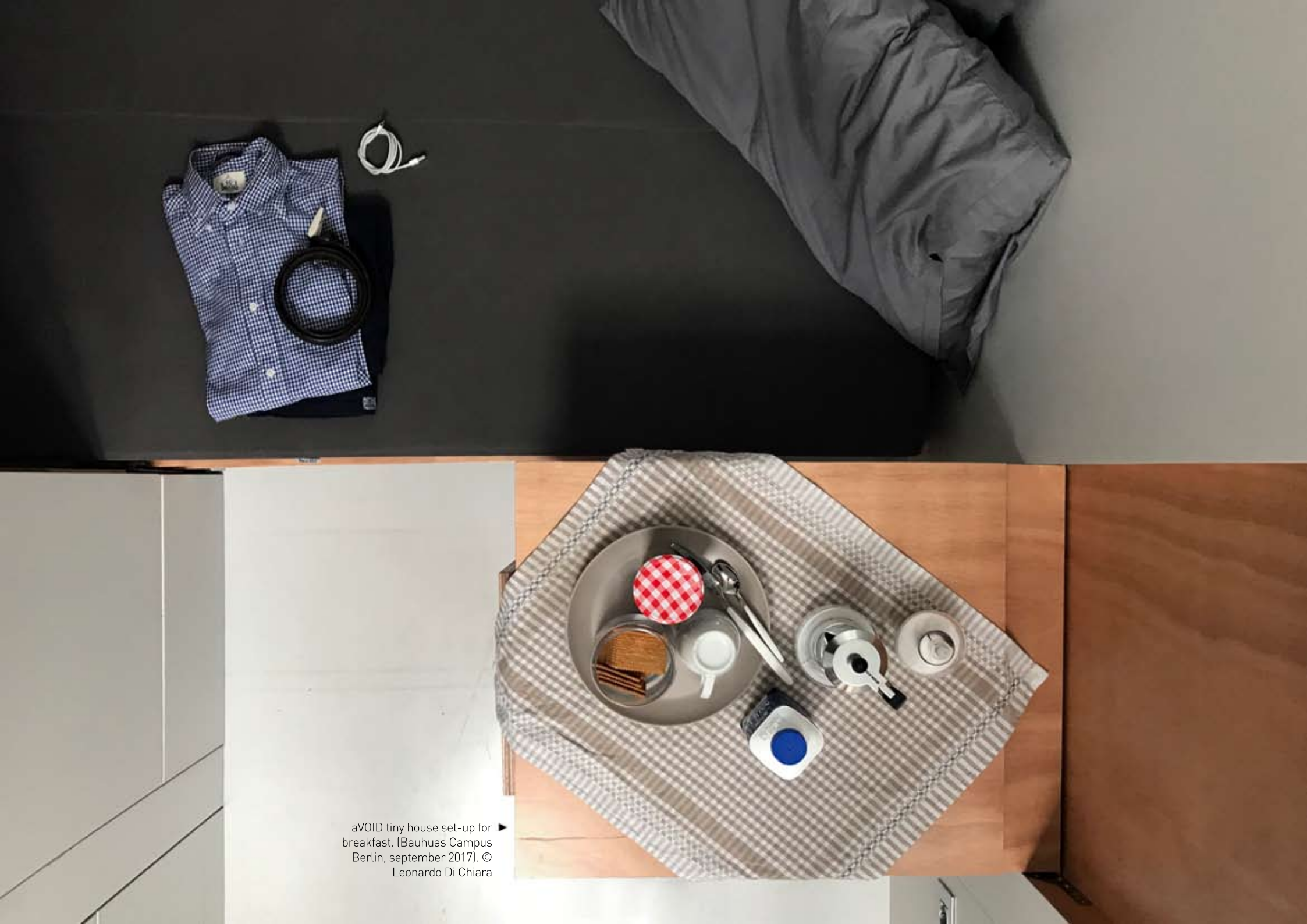
Leonardo Di Chiara

Leonardo Di Chiara is a 27-years-old architect and engineer graduated at the University of Bologna. His fascination for human scale architecture and experimental living spaces brought him to join the Tinyhouse University in July 2016. His design “aVOID Tiny House” has earned him the Premio Berlino 2017, a prestigious award by Italian Ministry for young talented architects. Leonardo will live in and experiment his “tiny house” for one year as part of his professional research.



▲ Leonardo Di Chiara working inside aVOID Tiny House at Bauhaus Campus (Berlin, september 2017). © Stefan Dauth

◀ First “good morning” inside aVOID, parked in Piazzale Collenuccio. (Pesaro, 10th august 2017). © Leonardo Di Chiara



aVOID tiny house set-up for
breakfast. (Bauhuas Campus
Berlin, september 2017). ©
Leonardo Di Chiara

IX test-living

The “test-living” programme aims at creating a basis knowledge which can drive optimisation processes and design improvements. Since now, the programme involved a group of nearly 40 “testers” which were asked to write a report on their personal living experience. Luise Louè is a young mother, a professional project manager in Munich and a talented artist. She lived for two days inside the aVOID Tiny House at Bauhaus-Archiv in Berlin. After this experience she decided to build her own tiny house too:

“I entered the aVOID Tiny house of 9 sqm...and left it...one week later. What? Yes! Believe it or not: This was my wish when I had slept there for one night. I’m the kind of person who does five projects at one time; in my home I have stack of papers “Things to do”, and files of projects everywhere. But for creativity and recreation I need - a void - in the proper sense of the word: nothing to do, no plans, ennui, loneliness but opportunity to connect to the outside. So retreats are my base of being, working, health. I basically long for them all the time. So this week within “a void”, I would meditate, watch outside the window front for hours, eat good food, read in books, do yoga, work on my laptop, watch outside again, have a chat with some interesting people passing by, invite somebody, sleep. Nothing more. Marvelous.”

Luise Louè

aVOID tiny house “test-living” programme is always looking for new testers. If you also want to be part of the experience, please send an e-mail to avoid@leonardodichiara.it

Artist Luise Louè entering for the first time into aVOID tiny house. (Bauhaus Campus Berlin, september 2017). © Leonardo Di Chiara



❑X aVOID on the road

The aVOID Tiny House is designed as a mobile home on four wheels. All its structure is assembled on a trailer which can be towed by almost any common SUV car.

The exterior maximum dimensions (L x W x H = 671 x 253 x 400 cm) and the total weight (3000 kg) are within the limits given by the European traffic code so it is not necessary any extraordinary transporting procedure. The tiny house can be driven by any driver which is provided with a BE driving license ("E" for extension of the most common B driving license) at a maximum speed of 80 km/h.

The aVOID Tiny House prototype was tested on the road. It was the protagonist of the so-called "aVOID on Tour". The Tiny House travelled in one year for more than 8000 km from Pesaro (Italy) to Berlin. During summer 2018 it was placed on a hill in Tuscany and then moved again to the Munich city center through the Alps.



aVOID on Tour in Tuscany ▲
© Leonardo Di Chiara



aVOID Tiny House in ►
Pesaro in November 2018.
© Leonardo Di Chiara

▼ aVOID tiny house driving through
Munich city center. (Odeonsplatz,
17th september 2018) ©
Leonardo Di Chiara



❏ XI exhibitions

aVOID was part of Bauhaus Campus, an experimental tiny house village hosted inside the Bauhaus-Archiv / Museum of Design in Berlin from august 2017 until march 2018. Twenty designers, innovators, refugees as well as individuals from the cultural scene and the startup community are invited to create together a new model for a more equal society. Living inside their own designed tiny houses, they have the chance to test it in reality. aVOID was the only Italian structure which was selected to participate to the exhibition.

The artistic experiment is curated by architect Van Bo Le-Mentzel and developed in collaboration with Tinyhouse University, an heterogeneous collective based in the same city which aims at rethinking social neighbourhood in a creative way.

aVOID marks in the context of Bauhaus Campus a new typology in the "tiny house movement": the row house. The small mobile home only opens windows to the gable ends and therefore enables the use of tiny houses in a row, which opens the possibility for new temporary city planning strategies.

aVOID was also exhibited at AEDES Berlin, Pinakothek der Moderne Munich, Odeonsplatz Munich, Bauzentrum Munich, Hochschule fur Gestaltung Ulm, ZHDK Zurich, Oesterreicherplatz in Stuttgart, Milano Design Week at Piazza Castello, MAXXI Rome, Università Roma Tre Rome, Goethe-Institut Rome, Podere Sant'Anna in Radi (Siena), Salone del Camper Parma, Centro Arti Visive Pescheria Pesaro, Piazzale Collenuccio Pesaro.



▲ Open tinyHouse events taking place at Bauhaus Campus every monday. (Berlin, august 2017)
© Raphael Behr



◀ aVOID tiny house exhibited at MAXXI in Rome (Rome, may 2018) © Leonardo Di Chiara



▲
View of Bauhaus Campus and
aVOID tiny house. (Berlin, august
2017) © Leonardo Di Chiara

Interior Design students visiting
aVOID as a School trip. (Berlin,
october 2017) © Leonardo Di
Chiara



aVOID Tiny House at
Goethe-Institut in Rome (may
2018) © Gianluca Fiore





◀ Leonardo Di Chiara introducing aVOID tiny house and its mobile devices to the new generation of "tiny housers". (Pesaro, 11th august 2017) © Solidea Vitali Rosati

□XII optimization

How can tiny houses reach the society? How to solve the contradiction which links tiny houses to an high construction costs for sqm? What could be the balance between standardization and customisation?

aVOID project involved companies, private homebuilders, carpenters, architects and designers to collect ideas which address to the topic of tiny house optimization. Taking inspiration from Bauhaus, which aimed at bringing to the society high quality design pieces combining art and industry, Leonardo Di Chiara put together a wide group of stakeholders to develop a cost reduction process to create the highest quality and more affordable tiny house on the market.

aVOID tiny house devices as
result of a customised and
artisanal process. © Anna
Fontanet Castillo



□ XIII press links



"SWISS CHARMY LIFE Inside the £35k single-room house" - [29/01/18]

[read here](#)



"Ganz aus dem Häuschen" - [03/09/17]

[read here](#)



"aVOID tiny house by Italian architect Leonardo Di Chiara" - [30/01/18]

[read here](#)



"This tiny house hides everything in its walls" - [10/01/18]

[read here](#)



"Tiny Houses: Wie neun Quadratmeter alle Stückln spielen" - [18/01/18]

[read here](#)



"The Swiss army house: Tiny building has furniture folded into its walls" - [29/01/18]

[read here](#)



"Ambienti mobili e arredi a scomparsa per vivere in 9 mq più terrazzo" - [11/09/17]

[read here](#)



"Ganz aus dem Häuschen" - [03/09/17]

[read here](#)



"La casa con le ruote dell'architetto marchigiano al museo di Berlino" - [23/06/17]

[read here](#)



"aVOID: tiny house made in Italy" - [22/09/17]

[read here](#)



"aVOID. Vivere in 9 metri quadrati" - [11/11/17]

[read here](#)



"Auf zehn Quadratmetern ist alles möglich" - [29/08/17]

[read here](#)



"La casa del futuro" - [17/04/18]

[read here](#)



"TOP tutto fa tendenza, la casa del futuro" - [21/04/17]

[read here](#)



"Wohnen auf 9 Quadratmetern" - [14/04/18]

[read here](#)



"ABITARE MINIMO" - [April 2018]

[read here](#)



"Raum ist in der kleinsten Hütte" - [05/04/18]

[read here](#)



"aVOID on TG2 Motori" - [22/09/18]

[read here](#)

XIV partners

_institutional partners



_technical partners



□ XV Tiny House for future

It is hard to distinguish the times when the Tiny House project was for Leonardo a professional research or a personal life experience. A test-living period which was truly real, became necessary for a meaningful experimentation and the researching approach gave him incredible opportunities for precious encounters.

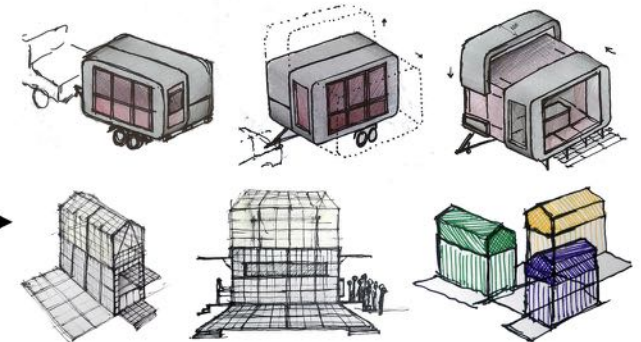
What happened under the 9 square-meters roof and around the Tiny House represents now a solid knowledge for exciting future developments. Leonardo is currently involved in many projects for public and private clients which share his vision of a society on the move. Together with partner Company specialized in the construction of special vehicles he designed and built a radio station on wheels and a transformable kitchen which promotes urban revitalisation.

In the mean time he is designing a new Tiny House model with the aim of going from the construction of a prototype to the creation of a new optimized product.

For collaborations write at mail@leonardodichiara.it.



▲ Leonardo's Test-Living period in his Tiny House "aVOID" at Bauhaus-Archiv in Berlin (october 2017) © Lena Johnson

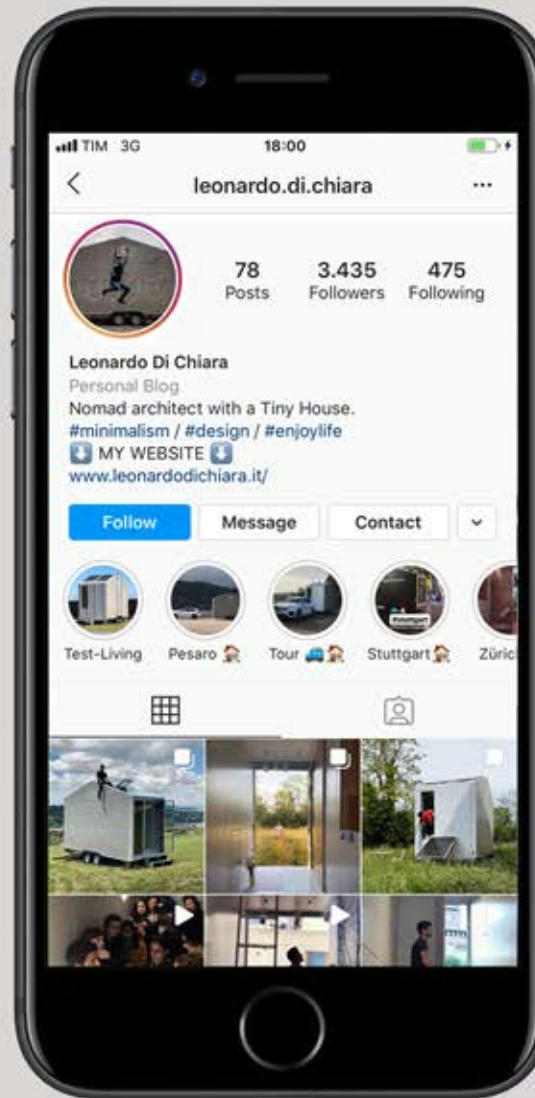


► New design studies by Leonardo Di Chiara for a Radio Station on wheels and for a very special urban foodtrailer © Leonardo Di Chiara



aVOID
TINY HOUSE

◀ The Tiny House "aVOID" as
Leonardo's private residency
during his test-living programme
in Siena, Tuscany (August, 2018).
© Luciana Petti



contact

Leonardo Di Chiara architect | engineer

t	+39 329 3127905
www	leonardodichiara.it
@	mail@leonardodichiara.it
f	facebook.com/avoidtinyhouse
ig	@leonardo.di.chiara