## **Feature** The Appeal is in the Limitations ♥

## Making Use of Tiny Spaces "Small" and "Cozy" Really Are Better!

Most of us grow up believing bigger is better. But given the finite availability of land and



Just 3 Counter Seats in 6m<sup>2</sup>!?

# Warm Welcome at a Pocket-sized Sushi Bar

Sushi Dokoro Masa in Tokyo's Shinbashi district is a surprisingly small sushi restaurant, run by a chef truly dedicated to service. Offering meticulously prepared food of outstanding flavor, it is little wonder this place is booked out for the next five years.

ass through the curtain and open the door into a cubelike space completely filled by three chairs and a blond wood counter with a compact set of storage shelves behind it. At just six square meters this small, spartan space would leave any first-time visitor slightly bewildered. Welcome to Sushi Dokoro Masa.

Owner Masaru Suzuki has been running this sushi bar for six years now. His previous restaurant was much larger at just over 46 square meters, seating 30 at the counter and tables. Although business was good, it was a one-man operation. Orders did not go through smoothly, and he says customers often complained about waiting too long. "Whenever a cluster of customers turned up at once, I'd start running behind with the orders, no matter how fast I churned out the sushi. It was hard to do the work properly, and impossible to cater to individual demands. Inevitably I gave off a pretty unfriendly vibe, which as you can imagine didn't do much for the atmosphere. It was frustrating."

Eventually Suzuki began to think he would rather open a sushi restaurant that was smaller in scale but would allow him to serve customers properly, and do the job the way he really wanted.

## Finding Ingenious Ways to Utilize a Confined Space that Take into Account the Customer's Line of Sight

Suzuki has come up with various ingenious ways to optimally use the restaurant's limited space. Most of his customers are couples, and a lot of reservations are for two pairs, or four people. However, there are only three seats in sight. Inquiring after the other one, we were shown an extra wooden chair stowed away upside down below one of the visible seats. The entrance, which originally consisted of a single sliding door, has also been converted into four doors that can slide left and right from the center, eliminating the need for everyone to stand up whenever one person wants to leave to go to the

Clever use of space is not just about overcoming a lack of space, but about consideration for customers.

In such a small dining establishment, objects one wouldn't normally want customers to see, such as dirty dishes, are visible. Light-reflecting stainless steel sinks and cooking utensils are not especially pleasant for customers to look at either. Suzuki therefore devised a three-tiered arrangement in which the sink sits below the chopping board, and the refrigerator below the sink.

Obviously, no matter how skillfully the space is used, it is still cramped. The inconvenience of not having room for every essential remains. There is no landline or fax for bookings. In Japanese cuisine, dishes and plates are switched with the seasons: cooling glass for summer and earthy ceramics in winter, but naturally there is no space to keep these. Suzuki stores the dishes in his garage at home, moving them to the restaurant as needed.

Part 1
Restaurants

## Small Means Efficient but Everything Needs to be Done Solo

Sushi Dokoro Masa may be small, but it is located right next to Shinbashi Station. Rent per square meter is high, on par with street-front premises in Ginza. Meanwhile, Suzuki's establishment only seats four, and has just two sittings a day. It seems like it would be difficult to make a living here, but the small scale means Suzuki can prepare everything himself, and in fact this is his only option. So the labor costs are zero, and food waste is virtually zero as well. Being so popular and difficult to book means only three or four cancellations a year. Even if a customer does cancel, the low numbers minimize the risk. As Suzuki notes, "Any raw ingredients I buy in must be used the same day. This was a real struggle



## Aiming for the Best Service at the World's Smallest Sushi Restaurant



From the top, botan shrimp and aoyagi clam sashimi, bonito sashimi, a selection of the restaurant's finest nigiri, and steamed abalone. Set menus include these plus tofu and grilled dishes prepared the old-fashioned way.

at my previous operation. Whenever it rained, or there was some international sports match on, people would cancel and fish would go to waste, which put a serious strain on the business." He notes that the tiny place he has now is a more efficient and stable business. Obviously he has to do everything himself, from going to the market for ingredients early in the morning, to cleaning the restaurant after closing. Sharpening the knives, an important task, is now a ritual for his days off, but doing so leaves him free to pursue the highest quality within the confines of his budget. "It's busy, but I can now persist until I'm happy with how the job is done, which actually makes it more fun."

## Aiming for Edo-period Street Sushi Authenticity

Suzuki chooses each ingredient with the greatest of care, to make sushi that meets his own strict standards. The rice is sekitori-mai grown in Saitama. This heritage variety has been used for sushi since the Edo period, but its low yield per ear led to a dramatic decline in acreage under cultivation, almost to the point of disappearance, but Suzuki managed to find a farmer still growing it. Sekitori-mai has a chewiness in the white part of the grain but is not especially sticky, allowing air to be incorporated when making the sushi, so the vinegared sushi rice melts in the mouth. The vinegar used in combination with the sekitori-mai is richly-colored red vinegar, which was also used in Edomae sushi.

Suzuki says, "I'm not trying to take everything back to Edo flavors, but if you explore how things tasted in earlier times you often find them to be unexpectedly delicious."

In the Edo period, sushi was a food of the masses, sold on the street. In contrast, the high-end restaurants of

today ooze affluence. The more you spend the better fillings you can buy, and the tastier the result. This is not necessarily a step in the wrong direction, but tracing the roots of sushi reveals that it's also not necessarily the only proper way to do it. In Suzuki's view, supplying delectable sushi from small street stands at an accessible price is probably what sushi shops were originally about.

## A Level of Service Only Made Possible by Engaging Face-to-face with Customers

Yet what if the premises were slightly larger? If he turned to one customer and chatted, he'd have less time to give to another customer. If the chef is unable to keep engaging with a customer, a first-time diner might feel excluded.

"Chatting with the chef is one of the joys of going to a sushi bar. In the place I have here, I can communicate with customers consistently on an almost one-to-one basis. Hopefully this shows them that at this establishment everything I do is for them, including the conversation. This is a no-frills operation: no feeling of high-end luxury here. But I think it offers a different kind of pampering, a different kind of enjoyment absent from more luxurious surroundings."

Close up and personal, offering the best of service: being small allows Sushi Dokoro Masa to offer the kind of true quality time between owner and diner that is only possible when space is at a premium







Just Two Charcoal Grills in a Space of Only 7.26 m2!

## The Mystery of how Strangers can get along so Famously while Grilling Meat

Rokkakai, a stand-up bar and yakiniku restaurant in Tokvo's Kanda district.

is a cozy place where you can have fun grilling meat, drinking sake and getting to know the strangers at your elbow.

nder the railway tracks and next to the entrance to Kanda Station is Rokkakai, a stand-up bar and yakiniku restaurant. Shockingly small on the inside, the restaurant is popular for its reasonably-priced grilled meat, and stays lively from early evening until nearly the last train of the day. Thanks to the great location, the spot commands top rent despite its tiny size (just 2.2 tsubo, or 7.26 m2). So how does it attract enough customers to survive when it doesn't even open until early evening? Owner Hayato Morita explains what led him to choose this tiny space, barely big enough to squeeze in 15 people

"My original plan was for a place that could get by on a few customers. A big space with room for big crowds needs a big staff to run it, and that costs money. And since I was looking for a place customers could get to without getting wet when it rained, this spot, just 30 seconds from the station, was perfect. What I really stuck with, though, was the idea of creating a small space where strangers could grill and eat their own meat, kind of elbow-to-elbow." Before Rokkakai, the space was used by a ticket shop. With its lack of water, gas or toilet facilities, this was the last place someone opening a restaurant

would choose. But Morita, who also happens to be an architect, had the expertise to put the space to good use. He says that the minute he set foot inside, he knew exactly what floor plan would work, including how to stay within Fire Service Act rules governing the minimum space needed per (standing) person. Thanks in part to his experience, the cost of opening was just two million yen.

## Rules for Running a Tiny Place: First, use Everything up Every Day.

Running a restaurant in a small space means that no matter how cleverly you arrange things, there is never enough room for all the equipment and food you'd like. Isn't that an inconvenience? "We break down and sterilize our deliveries of meat and use everything up the day it's delivered. With meat, freshness is paramount. You can't serve leftovers the next day. Our meat is not just a product, it is literally the "meat" of our business, its very life.' Because Morita won't serve any meat that isn't absolutely fresh, he has no need for separate refrigeration. His one small refrigerator is used for sake, another item he doesn't stock up on. He orders six bottles a day, and serves

whatever is delivered. "Like meat, sake has a limited shelf life--once you open the bottle, the flavor only deteriorates. So, like our meat, we carry only as much as we can sell each day. If we were to start offering Hoppy (an inexpensive beer-like brew often served in casual pubs) or the like, we'd need to find room for all the kegs, and we just don't have that kind of space." Morita says that the space limitations affect every aspect of running the restaurant. "Small" tends to be seen as a negative, but having to deal with such inescapable constraints can also reveal where there is waste that can be avoided. Being forced to address the issue can also offer an opportunity to come up with new ideas. Morita's decision to limit beverages mostly to sake had at least something to do with space restrictions, but he took advantage of the situation to come up with a style unique to Rokkakai.

## **Seeking Something** Beyond Just Profit.

The meats Rokkakai orders are the finest available each day. With the exception of certain special cuts, everything is ranked A4 or A5 quality, and yet a plate of assorted meat is just 1,000 yen per portion (and by the way,





Mr. Ishiwatari (a Tokyoite and regular customer)

"I come here about three times a week for the great-tasting meat. It's nice to pay only 400 yen for a glass of sake, too. I know a lot of the other regulars, and you can't beat the atmosphere—even total strangers loosen up right away. I always have a good time here."

> the sake is always just 400 yen a glass). In all, very reasonable prices —but is it profitable? "Our food costs are high—and highly confidential-but when I do tell people they're always surprised," Morita laughs. "Business in pursuit of profit is all well and good, but what I'm really after is the fun, the interesting aspects of it. If I can make enough to keep the place running, I think that's fine. More than

that, though, trust has to come first. If you make keeping your customers happy your first priority, they'll trust you, and that's bound to lead to good things (laughs). I really believe that." This emphasis on the customer has brought Rokkakai a reputation for outstanding customer satisfaction, attracted more business, and resulted

in the opening of five sister shops. "Our affiliates are succeeding because each and every member of our staff continues to mature," says Morita. His modesty, though, is betrayed by the size of his accomplishment—starting from scratch to get a full-blown concept up and running, and then turning that concept into a successful business, is surely no easy feat.

## In an Instant, **Cramped Quarters Turn** Lively and Fun.

The other thing that attracts customers to Rokkakai, aside from its delicious



Inside, there are just two small charcoal grills set up on the table. It makes it a little difficult to grill comfortably, but that slight inconvenience is what gets customers communicating with one another.

and reasonably-priced grilled meat and sake, is that the place truly brings people together. Even during our interview, a regular customer could be seen showing a first-timer the best way to grill a special cut of meat, and apparently this is an everyday occurrence. These solitary urbanites, supposedly so shy and awkward around people, seem to have no problem making friends among strangers at Rokkakai. How could this be?

Morita explains that, "I was always good at talking to strangers, and confident in my ability to bring people together. In such a cramped space, I sometimes end up having to ask customers to pass plates over, but it's just that kind of thing that creates an opportunity for communication, and actually makes for a fun atmosphere. Here, customers share a grill—but they also share conversation as they grill their meat. It only makes sense in a small place like this. Even before I

> opened this place, I knew this was the only concept that worked for me, the idea of bringing people together like this."

Morita is also unfailingly attentive. As customers arrive, he waits for just the right moment to call for a toast to the newcomers, something he does for first-timers and regulars alike. "From our customers to our staff, nothing is more important to me than these connections between people. We've

got a good crowd in tonight, too, and the nice thing is that since we work face-to-face with our customers, we can see that they're having a good time. For me, that's really the best part about running this place. It may be cramped, but in a sense we've got something bigger than shops ten times our size. That's what I think, anyway." From young women to middle-aged men, complete strangers smile and raise their glasses to one another in a cheerful toast, "Kampai!" The tastiest thing about this tiny restaurant may actually be that moment when their glasses come together.



## Rokkakai

Address: 2-13-24 Kajimachi, Chiyoda-ku,Tokyo TEL: 03-3252-8644 Closed: Sundays and Holidays Hours: 17:30 - 24:00

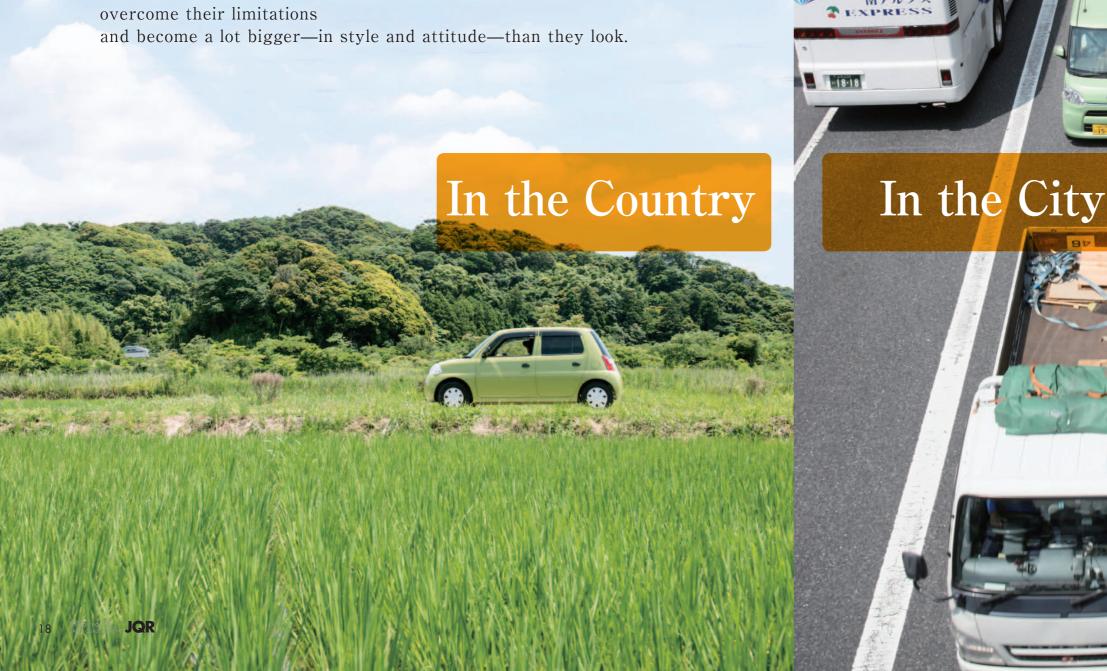


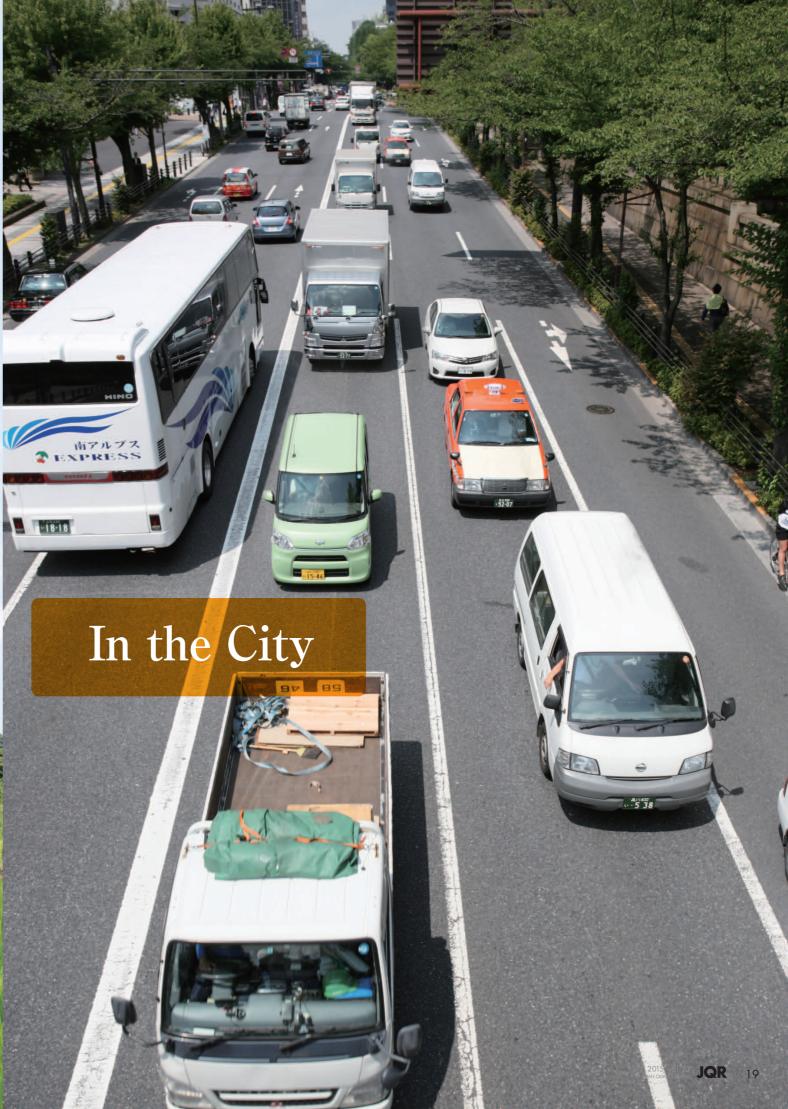
Japan's Small Cars

# The KEI is the Perfect Car

The "Light Four-wheeler" ("Kei") is the smallest among Japan's standards for automobiles. Cramped on the inside, their only advantage used to be their low price.

But the kei has changed dramatically in recent years. Through ingenuity and technology, these small cars have overcome their limitations





## Great mileage! Maneuverable! Roomy!?

## How the Kei Car Rides

The kei car is on a roll! In sales rankings for May 2015, kei cars held seven of the top ten spots. How did these little cars keep evolving to reach such heights of popularity?

ast year marked the first time that the kei car category's share of new vehicle sales in Japan topped 40%. Considering how its popularity has risen, soon the kei car could represent half of all Japanese cars. Lately, we heard, they've shed their former image as tiny, cramped and cheap-looking, with more refined designs and roomier interiors. So we decided to rent one and experience for ourselves the secret to their success. We rented a Daihatsu MOVE, at a rate of 5,832 yen for up to six hours.

After picking up our key, we start out cautiously. Checking both left and right, it's immediately clear that visibility is great. Perhaps because the car is so small, the view in both directions is

excellent. The road feels wider than concept suited to this age of population increase, resource depletion and concern for the environment.

## [Japanese Automobile Standards]

Classification	Displacement	Length	Width	Height
Kei	Less than 660 cc	Less than 3.4 m	Less than 1.48 m	Less than 2.0 m
Small ("five number")	Less than 2000 cc	Less than 4.7 m	Less than 1.7 m	Less than 2.0 m
Normal ("three number")	Greater than 2000 cc	Less than 12.0 m	Less than 2.5 m	Less than 3.8 m

usual, and even in heavy traffic there is plenty of room between cars, making for stress-free driving. With a turning radius of just 4.4 m, turning around was no problem, even on narrow roads. Acceleration was also better than expected, perhaps because the vehicle weighs just 820 kg. The car is also equipped with the latest features, including an idling stop system that turns the engine off when vehicle speed drops below 11 Km/h at traffic lights, helping to achieve energy-sipping mileage of 31 Km/l. Considering all this, the kei car is definitely a vehicle

## **Best-selling New Cars** January - June, 2015

oanaan j	y Garle, 2010	
1st	AQUA (Toyota)	
2nd	N-BOX (Honda)	Kei
3rd	TANTO (Daihatsu)	Kei
4th	DAYZ (Nissan)	Kei
5th	MOVE (Daihatsu)	Kei
6th	Prius (Toyota)	
7th	Fit (Honda)	
8th	Alto (Suzuki)	Kei
9th	Wagon R (Suzuki)	Kei
10th	N-WGN (Honda)	Kei

Rankings as announced by the Japan Automobile Vehicle and Motorcycle Association

### The compact interior offers a wide field of view, and excellent visibility



## Small on the outside, but big on the inside! Technology makes the Keimore comfortable.

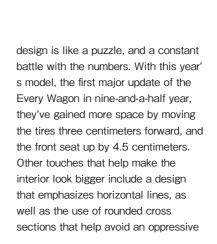
Suzuki Motor Corporation has long worked to advance kei car manufacturing under the limitations of the "small car" standard. We asked Suzuki's chief engineer about the ideas and technologies behind their increased comfort.

In mid-April, I visited Suzuki' s headquarters in Hamamatsu and arranged to test-drive their popular Every Wagon kei car. The first surprise was how roomy the interior is, and not just the high ceiling--plenty of leg room means never feeling cramped. "The back seat is especially comfortable -much roomier than a liter car (a car displacing 1000 cc)," noted chief engineer Masahiko Mizushima. Just because it follows a smaller standard doesn't mean the kei car is simply a downsized version of a normal passenger car; the kei is designed as a kei from the ground up. The biggest difference from a normal passenger car lies in the short hood. "Because the Every Wagon was designed to be roomier on the inside for a kei car, the hood is shorter and we've placed the engine under the floor. Also, because the tires are another factor in creating a narrower interior, our design pushes them out to the front and back of the vehicle. This creates a wheelbase (the distance between the front and back tires) that is considerably longer than a normal passenger car," explained Mr. Mizushima.

In pursuit of more space, a process of trial and error resulted in a shorter hood, which in turn makes it easier for the driver to determine the distance from the car ahead. Also, with the tires at the four corners, turning radius is smaller, which has the benefit of making it easy to drive even on narrow roads. This is why even people who are not particularly good drivers find kei cars easier to drive.

## Ingenious Design Touches Make the Interior Look Bigger

To create the roomiest interior possible, not even a millimeter of space can go to waste. Mr. Mizushima says car



feel, explained Yuki Irite, in charge of the car's interior design. Putting lids on storage spaces takes up space, so most of the storage is open, balancing design concerns and practicality. Coming up with user-friendly designs involved going out in the market, seeing how people actually use their cars, and listening to their opinions. Ms. Irite continued, "For example, people who enjoy camping will actually drill holes in their cars to install hooks and shelves







## Suzuki Every Wagon

Interior length: 2,240 mm Interior width: 1,355 mm Interior height: 1,420 mm, top in its class for interior space. MSRP from \1,425,600 (including consumption tax)

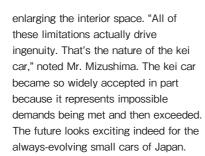
so that more luggages can be loaded inside. You also see this a lot with people who use their cars for workthey'll make all kinds of clever modifications so that they can better arrange their tools and equipment. After seeing that, I thought 'Wouldn't it be easier if we just provided the holes and the grooves for hooks and shelves from the start?' And in fact, that's what we did with this model. These screw holes are very popular."

The kei car is more than just a means of transportation; it's also become a part of enjoying one's hobbies. The wide range of design options is also behind its popularity.

## **Providing More Room** While Ensuring Safety

To enlarge the interior, seats were moved forward and walls (sheet metal) made thinner, but that makes safety a question.

Mr. Mizushima explained that, "By building a more robust frame and using stronger sheet metal, we are able to meet collision safety standards. In the old days, we'd build a prototype, actually test its strength, and then go back and reinforce areas that lacked sufficient strength. Today, computer technology as advanced to the point where we can run a wide range of simulation analyses and build more precise prototypes. Still, that doesn't make our conflicting tasks any easier, whether we're making side panels thinner but stronger, or trying to improve mileage while making the car lighter." The reason the kei car standard was revised in the first place was to make the cars a little larger to ensure they would meet stricter safety standards. Not all that added size has gone solely to safety measures; once safety was ensured, they were able to look at





This storage pocket was added to the instrument panel next to the speedometer. It's convenient for quick access to keys, mints or other small

Thinner but stronger sheet steel was used to enlarge the interior space. It meets all safety standards.





Vehicle height makes getting in and out easy. Abundant legroom means even adult men can sit in back without feeling cramped.



Holes for attaching accessory shelving, nets, etc. are standard. The luggage compartment is easy to use.



An overhead shelf above the driver's seat can hold A4 files and thinner tissue boxes within easy reach. (Equipment on the Every)

## A Kei Car May be Small on the Inside, But it Holds a **Surprising Amount**

Even a kei car needs to be able to hold a lot if it's being used as a commercial vehicle. During the update of the Every, a great deal of attention was paid to how many boxes it could hold. That focus resulted in a luggage compartmen with room for 69 boxes of tangerine 40 cases of beer, or 46 small cardboard boxes. Its small size makes the kei car a perfect luggage hauler, ideal for parking on narrow roads to load and unload cargo without getting in the way.



A 27-inch bicycle can easily fit fully upright





Fits up to 17 medium-sized boxes (319 x 669 x 432 mm). Easily handles larger luggage and longer items like carpets



## Suzuki Every

Luggage compartment size is top in its class (when configured for two passengers). Length: 1,910 mm Width: 1,385 mm

Height: 1,240 mm

Fold down the passenger seat to increase

floor length to 2,640 mm. MSRP from \923,400 (consumption tax

included)

## One ride and you'll be hooked, too!

## We V Kei Cars!

In the city or the country, for personal use or business, kei cars are a hit. We asked four people in love with their kei cars what makes them so attractive.



Photo Studio Employee Kaori Takata

Kei car ownership: Seven years

## What do you like about it?

## Wide visibility and maneuverability make it easy to drive.

aori Takata's life work is photographing the four seasons in Karuizawa. Her choice of kei car is the Suzuki Jimny. She bought it immediately after getting her driver's license, which she needed to travel to Karuizawa, where she was taking photographs for her college thesis project. She'd seen many residents of Karuizawa driving kei cars, and after trying one found it very nimble. The Jimny has the power to handle sudden hills, so she thought it would be a safer ride for a beginning driver like herself. "The Jimny has a wide field of view, and I like that I can enjoy the scenery in the hills as I drive," says Ms. Takata. On the weekends, she enjoys packing her cameras and driving from Tokyo to Karuizawa.

### Favorite car: Suzuki Jimny



Length: 3,395 mm Width: 1,475 mm Minimum turning radius: 4.8 m



Liquor Store Owner

## Toshihiko Nishimura

Kei car ownership: 18 years

## What do you like about it?

## It's nimble enough to make deliveries efficiently.

oshihiko Nishimura owns a liquor store. When he has a lot to carry he'll use his truck, but for smalllot deliveries he relies on his kei car. "Streets in residential neighborhoods can narrow suddenly, and space for parking is limited, so it's great that the kei doesn't take up much room and is so maneuverable," he says. He also points out that, "This car can actually carry quite a bit. I can load as many as 20 cases of beer (20 large bottles to a case)." With its great mileage and enough power to maintain speed even when fully loaded, his kei car is indispensable. Mr. Nishimura's current Honda Acty is his fifth kei car.

### Favorite car: Honda Acty



Length: 3,395 mm Width: 1,475 mm Height: 1,880 mm Vehicle weight: 960 Kg Minimum turning radius: 4.5 m



## Sumiko Fukatsu

Kei car ownership: Five years

## What do you like about it?

## It handles shortcuts with ease.

okyo-based performer Junko Fukatsu likes to spend her weekends at her studio in Tateyama, Chiba Prefecture. Ms. Fukatsu notes that, "I get here from Tokyo by train and bus, then use this car to get around the neighborhood while I'm here. Isn't that more eco-friendly?" She laughs as she mentions that she's named her Daihatsu Esse "Pyon-kichi." Working as a goodwill ambassador for Tateyama City, Ms. Fukatsu also performs live with other musician friends and manages a community garden. "My car is convenient for hauling gardening supplies, and only a kei car could handle shortcuts through farm roads and narrow alleys," she says. Her busy weekends wouldn't be the same without Pyon-kichi.

### Favorite car: Daihatsu Esse Custom'



Length: 3,395 mm Width: 1,475 mm Height: 1,470 mm Vehicle weight: 780 Kg Minimum turning radius: 4.4 m \*This car is no longer produced or sold.



## Hiroshi Deguchi

Kei car ownership: Six years

## What do you like about it?

## It holds a lot, and cargo is easy to load and unload.

iroshi Deguchi makes full use of his van-style kei car, loading and unloading his work, shopping for work or everyday items, and even for going surfing. Ten years ago, he returned to his family home in Minami Boso, and set out on career as an engraver. He likes that his kei car is convenient for getting around just about anywhere, and doesn't cost much in taxes or maintenance. It's so convenient, in fact, that Mr. Deguchi doesn't hesitate to call the Japanese kei car a world-class accomplishment. "Living in the country, the kei car is like a horse. Every household has one," says Mr. Deguchi. Indispensable to everyday life, the kei is as much partner as it is car.

### Favorite Car: Suzuki Every



Length: 3,395 mm Width: 1,475 mm Height: 1,815 mm Vehicle weight: 970 Kg Minimum turning radius: 4.5 m

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## Making the Right Choice

## How One Family Built a Tiny but Comfortable Home

Living in a spacious house in the suburbs would have meant a tiring 2.5 hour commute every day for Mr. K, but property in the city was expensive and hard to find. Building a house in the city seemed impossible. We asked the K family how they managed to build their dream home on a mere 59.49 square meters of inner city land.

he K family built their home in a quiet, affluent neighborhood ten minutes' walk from Shibuya Station. From the outside the house appears to be extremely small, but once inside the view from the entrance opens up, preventing any impression of a cramped space. The compact design and high quality construction make this house feel very livable, even when compared to bigger, more spacious houses.

When Mr. K began thinking about owning a home, he spent a lot of time debating whether it would be better to have a large house in the suburbs, or a tiny inner city residence.

"I'm a workaholic who always gets home late. If we had chosen to live in the suburbs I would have started arriving home even later, in the middle of the night. Since my wife waits up for me every night it would have placed an even greater burden on her, so I decided we should live in the city. I wanted to live somewhere in the vicinity of Shibuya if possible, because it's an exciting place that's always producing new culture and trends. But with the price of land there, it seemed beyond my wildest dreams. I never imagined it would be possible at all."

However, in 2009 an unexpected opportunity arose when an acquaintance introduced them to a landowner in Shibuya and they had the chance to enter into sales negotiations.

"We talked to the landowner and told him about our dream and the kind of



The entrance features a direct view of the courtyard. Thanks to this there is no sense of cramped space.

life we wanted to lead here. Our passion was enough to convince him

to sell, in the hope that the land would be useful to someone." The flagpole shaped plot of land was less than sixty square meters in size, which meant it was relatively cheap. Purchasing the land made it possible for the Ks to achieve their dream of owning a home in an upmarket city neighborhood.

Part 3

Housing

Meeting the Right Architect Revives Their Dream

"Once the land purchase was settled we talked about the kind of house we wanted to build. Both of us wanted something functional yet separate from ordinary life, with a resort feel." Mr. K put together a summary of the concept and Mrs. K., an interior designer, drew up plans. Armed with these they visited a construction company, but were met with nothing but disappointment.

"After hearing what we wanted, the sales rep's expression went dark and he told us it was impossible. The company would make no profit from such a project so they couldn't do it." Instead they were shown the company's own plans. They looked at these, and ask for detailed modifications, but in response the sales person only pulled out a list of



options to show them.

The dreams inspired by obtaining the land seemed to be tumbling down all at once. The couple decided to build a house independently and set about looking for an architect. They discovered Denso Sugiura, an architect with considerable experience in designing small, narrow houses, and went to consult him.

"When handed Mr. Sugiura our concept and designs, he said it was the first time he'd seen anyone so well prepared with such a concrete vision. The flagpole shaped plot of land, being so unusual, was a challenge that seemed to fire up his enthusiasm as an architect. When he told us he was very keen to work with us, we were so happy we could've jumped for joy."

## Denso Sugiura's Three Principles for Utilizing Space in Tiny Houses

The K's house makes full use of Sugiura's "Three Principles for Space in a Tiny House." These are: omission, transparency, and multi-functionality. First, the omission of a dividing wall between the first-floor entrance and the LDK (living/dining area/kitchen) room maximizes the sense of space. At the same time, the entrance is

positioned so as to not give a direct view into the LDK, so that anyone relaxing in the living area need not worry about being seen by visitors at the door. The living room doubles as a dining area, with a switchover in functions possible in an instant since the kitchen is concealed by a semi-transparent door. Guests passing through the living area are also spared from seeing the kitchen sink. A courtyard facing onto the LDK is walled off by glass, a transparency which creates an impression of space. This also reduces the need for lighting and ventilation, in line with the principles of omission and multi-functionality.

The underground floor also contains Mr. K's study and his daughter's room, plus storage space and a play area with a hammock.

"We had insufficient total floor space with just two floors, but couldn't build a three story house because of local building height regulations. However, Mr. Sugiura suggested we add a semi underground floor up to 1.4 meters deep, which wouldn't be a problem legally and would also reduce property taxes."

Light filtering in from upstairs and through windows into the semi-basement floor prevents it from feeling dark and oppressive. The concrete walls also provide effective soundproofing, which means the family can play the piano and not attract complaints from neighbors. Large objects such as surfboards and skis can be kept in the spacious storage area.

"It was suggested that since we were living in a city center, we should take advantage of city services and use the car park space for something else, letting us build an even more comfortable home. But we stuck with our preference for a car parking space."

The second floor bathroom is filled with soft, gentle light, and has a spacious feel reminiscent of a resort. Privacy is a concern when building a semi open air bath in a residential area, but Sugiura solved this by utilizing the principle of transparency and fitting louvers so that nothing can be seen from the outside.

## A Comfortable Home Close to Nature

Every room is well ventilated with natural air blowing through, as well as extremely bright thanks to natural light. Even though they are in the middle of a big city, the couple are awakened in their second floor bedroom every morning by the sun and the sound of birds perched on the bamboo growing in the courtyard. The power of nature is harnessed to make this house even more pleasant and comfortable. With such a high degree of perfection, you would naturally wonder about the cost.

"We stayed within the budget that we first proposed when we consulted Mr. Sugiura. We really did not expect to come as close to achieving our ideal home as we have, so when we moved in we were extremely pleased." Finally, we asked Miroku, the K's daughter, what she thought of the

"We have fun having barbecues or making oil fondue in the courtyard. I also do my homework in there sometimes for a change. I feel really good here, spending every day with the cats. I love this house."



A semi-transparent partition conceals the kitchen and creates a sense of depth. Not visible in the photograph is a large screen on the right hand wall and a sofa and sound system on the left.



The Architect who Makes Dreams Come True

# Designing Ideal Homes on Small Plots of Land

Architect Denso Sugiura came up with three principles for designing small houses in order to create functional, highly livable homes within the confines of cramped city spaces, and make his clients' dreams a reality.

ighteen years ago a commission landed on Sugiura's desk to build a house on a plot of land that measured only 31.2 square meters. Sugiura had never considered building a house in such a small space before, and so he decided to make a study of this challenge.

"Creating a comfortable space within a limited area is difficult. I thought through the challenges and came up with what I call 'Three Principles for Space in Small Houses.' These are omission, transparency and multifunctionality." Drawing on these three principles enabled me to design comfortable houses even when working with limited space."

The principle of 'transparency' involves regulating the view from both inside and outside the house. The use of transparent materials for partitions to divide up the space ensures a path for light, air and sight.

"If you use material such as wire mesh panels, woven wire cloth or expanded metal for partitions, the outside is visible from the house interior, but the interior is not visible from the outside. Light and air pass through the rooms, and the line of sight extends to the

outside. This preserves privacy while also creating a feeling of spaciousness."

The second principle of 'omission' involves the removal of wall and floor sections to expand the space. Small, narrow houses often have three stories because of the limited absolute floor space. Sugiura will therefore choose things like mesh material for the stairs.

"Mesh stairways create a very pleasant chimney effect in summer, when upper floor windows are open and the air flows upwards. They also allow light coming though skylights to illuminate lower floors, making the interior light and bright."

The third principle of 'multifunctionality' means to have one space perform several functions, such as the entrance way and garden.

"Normally a house occupies 60% of the site area, leaving 40% for gardens or parking spaces. If you locate the entrance inside the residence it becomes that much narrower, but if the entrance doubles as a garden area it means you can utilize the space more effectively. Melding the inside with the outside is what makes a small house viable."

The three principles work together to

create a sense of spaciousness inside a limited area.

Making the Most of Traditional Culture in Modern Homes

According to Sugiura, the Three Principles for Space in Small Houses were actually used in traditional Japanese homes.

"For example, they always had an enclosed veranda along one side, and when guests came you could sit there and talk while looking at the garden. This unity of the exterior and interior is something that Japanese houses used to have."

Sugiura always includes a tree in the first floor of his house designs, no matter how small the building. The purpose is to add depth to the space, but it also has the aim of enabling enjoyment of the outside environment, or in other words, nature.

"Leaves rustle when the wind blows, and the tree's shadow shifts as the sun gets higher. I usually plant deciduous trees, so in spring there are buds, and flowers blooming in summer or berries that come out in autumn, and when



## Smallness is a homebuyer's greatest weapon for keeping costs down

winter arrives the leaves fall. In this way residents get a sense of the seasons. Living in harmony with nature is the essence of Japanese culture."

## The Increasing Popularity of Small Houses and Average Budgets

The majority of Japanese houses were not necessarily small. According to Sugiura, a number of social conditions are behind the increasing demand for small houses since the 1990s. There is a preference for free standing houses over condominiums

because of concern about disasters, the declining birth rate and other changes to the family structure mean less need for large houses, diversification of lifestyles has stimulated demand for individualized houses, and with the progress of women in society there are more working couples who prefer inner city living.

"For a long time it was believed that the minimum land size requirement for building

a house was roughly a hundred square meters. But people have come to realize that with some adjustments, you can live quite comfortably even in a small house."

Most people who find their way to the Arts and Crafts Architectural Design Associates are couples in their late thirties to forties, with an average loan size of ¥55 million. To buy land and build an inner city house with this amount of money necessitates that the size of the lot will be roughly between 33 and 60 square meters, and no

larger. The average plot size for which Sugiura has designed his small houses is about 56 square meters, with an average total floor space of around 89 square meters. The average building price was ¥890,000\*, and the cost of construction approximately ¥24 million, but these are averages based on old data. In recent years the price of land and the cost of construction have been rising.

"Nowadays the construction cost for a small house is approximately ¥30 million. On top of that you have consumption taxes and design fees,



"Light, wind, temperature and the texture of the materials are all important," says Sugiura, "A range of factors besides size are involved in the comfort of a space."

\*\*as well the land price. Inner city land is expensive, but can be purchased cheaply if buyers are willing to accept an irregularly shaped plot, and in the course of making adjustments to fit a house on such land, all kinds of interesting houses are born."

The Merits of Small Houses
Small houses help to reduce land and building costs. Their compactness is conducive to greater energy efficiency in cooling and heating, plus maintenance and cleaning is simple.

We asked Sugiura what he considered

to be the merits of small houses.

"Of course if you picture a lot of people inside, a small house seems crowded and cramped. But the merit of houses cannot be judged on whether they are big or small. I believe that what is important is how you use the house, and if it suits your purpose and lifestyle. A house in the suburbs and an inner city house represent two different lifestyles that require completely different functions. For example, with a city house you don't have to invite guests into your home, because if you

have a favorite restaurant in the area you can take them there instead. A city lifestyle allows you to make use of the conveniences of a city. Therefore, when designing a house, it works best if you think of it mainly as a place for the family to enjoy themselves."

The families who live in the houses Sugiura has designed appear to be extremely satisfied, in spite of the fact that they are living in a limited space.

"When I see the happy faces of clients who say that they enjoy living in the houses I design, I feel really glad I have this job."

Anything is possible. If you have only a small piece of land, don't give up, a comfortable home may be possible if you ask the right person.

- \* Tax not included
- \*\* Figures are as of May 2015

and produces ideas Sugiura's office in Aoyama Minato ward. Over the las 18 years he has designed countless small houses.
The smallest site he has ever designed a house for was 23.17 square meters (smallest floor space: 14.23 square meters) 2015 vol.23 JOR

Every day the challenge of designing for small areas

stimulates the creative urge

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