

Creating shared value (CSV) by Daiken businesses

The Daiken Group delivers value to society by operating businesses that utilize our unique industrial materials and technologies to respond to a variety of social issues and needs.

01 Promoting the use of domestic timber



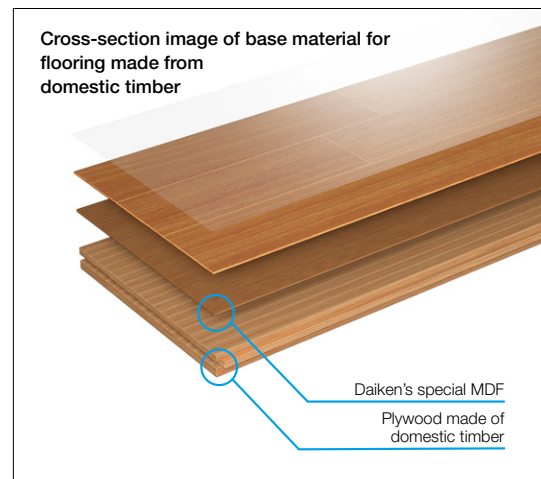
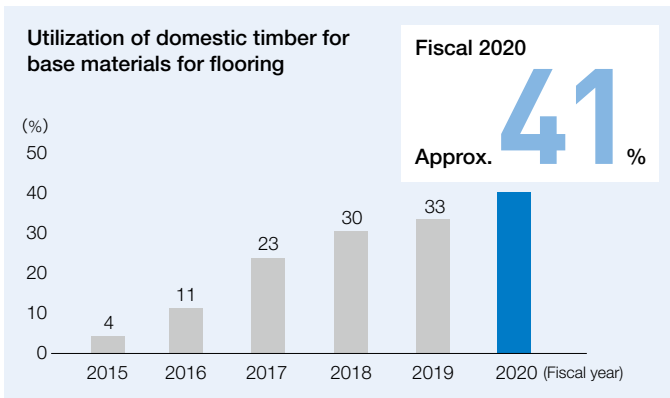
Promote the use of domestic timber with special MDF that offers excellent water resistance

| Social issues and needs |

Japan is one of the world's most forested countries with about two-thirds of the land covered in forest. Therefore, domestic timber should be more actively used in order to foster healthy forests that fulfill various needs, such as absorbing CO₂ and prevention of landslides. The Japanese government is aiming to increase wood self-sufficiency to 50% by 2025.

| Daiken's strengths and value creation 1 |

The Daiken Group took advantage of the expertise cultivated as the leading flooring manufacturer and Daiken's unique MDF technology that offers excellent water resistance and surface smoothness and developed base materials for flooring combined with domestic timber. The group had made many improvements and increased the use of domestic timber for flooring materials, which was approx. 4% in fiscal 2015, to approx. 41% in fiscal 2020. The group will continuously proceed with product development that will draw out the appeal of domestic timber and further promote the use of domestic timber.

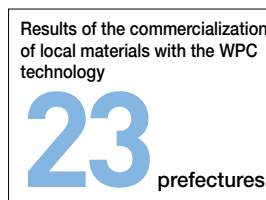


Expanding the scenes to utilize domestic timbers with the wood hardening technology

| Daiken's strengths and value creation 2 |

With Daiken's unique WPC* technology to harden wood tissues by injecting plastic resin into and filling the tissues, it has become possible to offer flooring with excellent surface strength that uses domestic natural wood for decorative surface materials. Because many domestic tree species are soft materials, low durability in using them as flooring was an issue, but by taking advantage of this technology, we will expand the use of domestic timber while meeting the needs of using local materials.

*WPC = The abbreviation for Wood Plastics Combination



Mechanism of the WPC technology



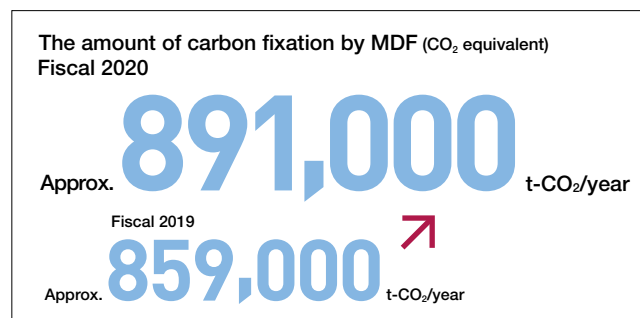
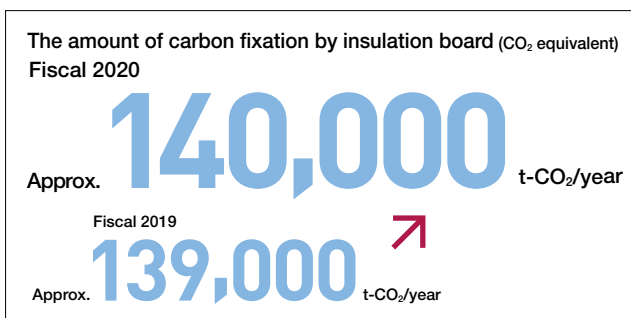
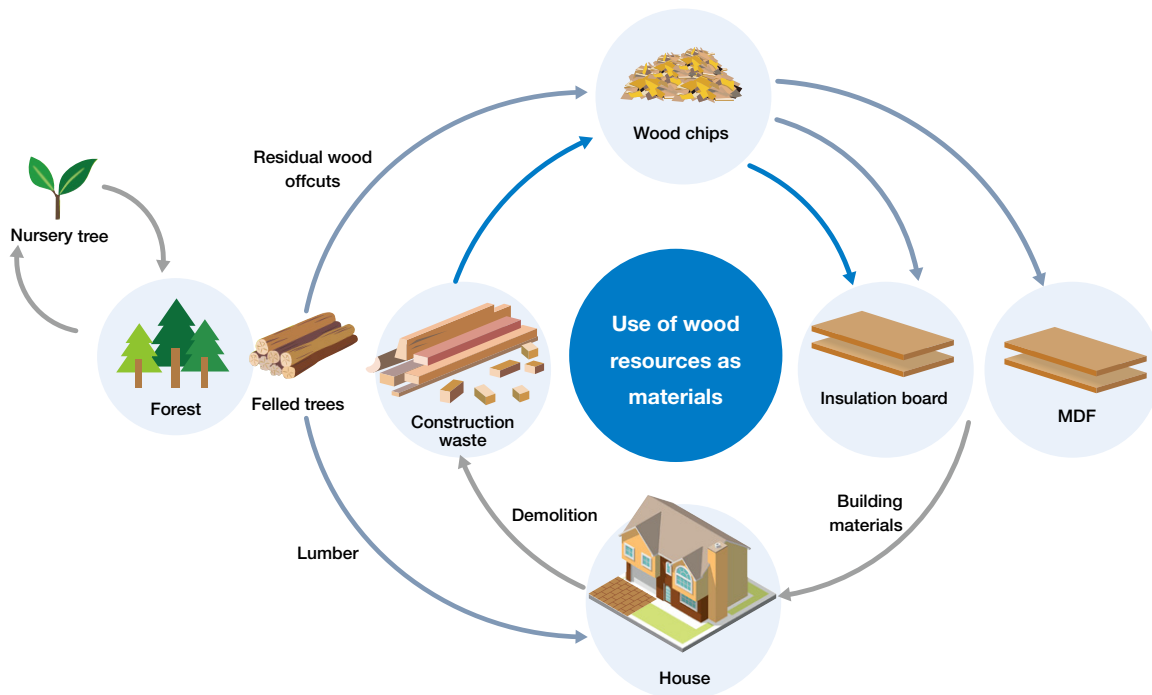
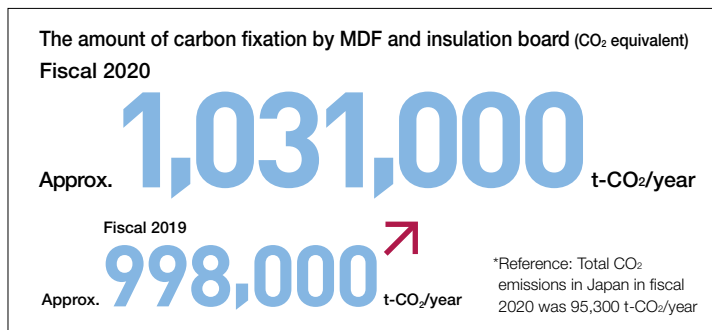
Prolongation of the carbon fixation period by using wood resources for materials

| Social issues and needs |

Considering the adaption of two closely linked SDGs and the Paris Climate Agreement, the crucial challenge for the world is to create a recycling-oriented society that effectively uses limited resources and to promote measures against the climate change associated with global warming.

| Daiken's strengths and value creation |

The Daiken Group has been manufacturing materials that effectively use wood resources, such as MDF using cutoff materials from sawmills, and insulation boards reusing construction waste that used to be discarded or used as fuel. Trees function to absorb CO₂ in the atmosphere during the growth process and to keep storing it by fixing it as carbon. Using wood as materials as long as possible instead of burning will not only reduce waste but also keep storing carbon in wood, and as a result, it will lead to reducing CO₂ emissions into the atmosphere. Our group focuses on this function, continues to use wood resources in a wide variety of scenes as materials with zero waste, and contributes to the formation of a recycling-oriented society and the prevention of global warming.



04 Creating a safe, secure, healthy, and comfortable space



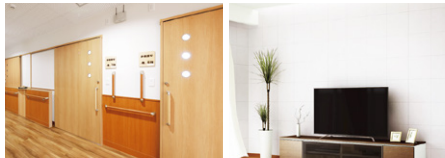
Creating a safe spaces to live together with the elderly

| Social issues and needs |

Japanese society is more rapidly aging than other developed countries and becoming a super-aging society with one in four people aged 65 or over. It is expected that the elderly population will reach about 40% by 2060. There is also concern about social problems with elderly people providing care for elderly people. So, the living environment of the future must be safe, secure, healthy, and comfortable.

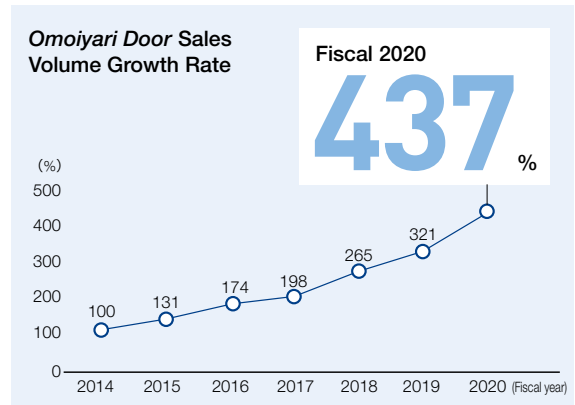
| Daiken's strengths and value creation 1 |

Based on our ideas and technologies for living spaces proven through our work, Daiken is committed to manufacturing from the perspective of all users, including elderly people, their families, and caregivers. In recent year, by improving the mechanism that can finely respond to the needs that vary according to facilities, such as elderly facilities, houses that are considerate of home care, etc., and having comprehensive product lines, our products have been widely adopted. Daiken pursues the creation of excellent and pleasant spaces using products that are safe and secure for people's lives and have functionality, such as indoor moisture conditioning, making it easy to listen to conversations, etc.



Cases of adopting the building materials from the *Omoiari Series* for the living spaces where elderly people live

Moisture conditioning wall material that creates a comfortable indoor environment



Calculated on the basis of the *Omoiari door* sales volume in fiscal 2014

Creating spaces where children can spend the time safely

| Social issues and needs |

While cases of leaving children aged 0 to 3 in childcare facilities have been increasing more than ever with the increase in the female employment rate in recent years, a design that is more considerate of safety and the environmental aspect is required for these facilities. Lack of human resources engaged in childcare is considered one of the major causes of the problem of children on the waiting list, and it is imperative to reduce nursery teachers' burden and create a pleasant working environment.

| Daiken's strengths and value creation 2 |

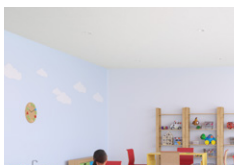
We thoroughly examined the performance required for the area around a door in a childcare facility where the risk of injury is particularly high and developed the door dedicated to kindergartens and childcare facilities, while taking advantage of the expertise in door manufacturing cultivated from past houses and elderly facilities. We also provide spaces where children who are in the auditory and linguistic developmental stage can optimally spend time through our products having the sound absorbing feature that can reduce noises. We will support a wide variety of problem solutions required for childcare facilities, such as improvement of safety and comfort and further reduction in the nursery teachers' burden by using Daiken's unique technologies and diverse products.



Doors that consider safety by assuming that children use them



Meshed cushion on the back of flooring disperses the impact and reduces the risk of getting injured



High-performance ceiling materials having excellent sound absorbing, moisture conditioning, and formaldehyde absorbing features



Sound absorbing panel for ceiling of which the color and shape can be specially ordered

The door dedicated to kindergartens and childcare facilities won the Kids Design Award* (Fiscal 2018)



*Design category that will contribute to the safety and security of children

05 Effective utilization of untapped resources

06 Promotion of anti-seismic performance



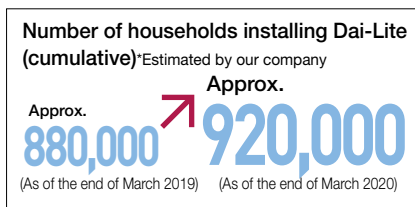
Promotion of anti-seismic performance of wooden houses using non-combustible materials that offer excellent durability

Social issues and needs

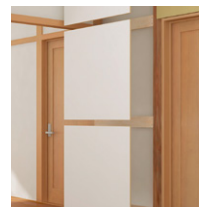
Japan has been devastated by earthquakes many times, including the Great Hanshin-Awaji Earthquake and the Great East Japan Earthquake. Large earthquakes, such as the Tokyo metropolitan earthquake and the Nankai trough earthquake, are predicted with high probability to occur in the near future, and the Japanese government has set a target or seismic resistance ratios and promotes the upgrading of houses and buildings.

Daiken's strengths and value creation

Daiken developed Dai-Lite, the world's first new industrial material using an unused resource, *shirasu* (volcanic ash) as the major raw material. It has all of the performance required for an inorganic bearing surface, such as lightweight, high strength, high durability, fireproof, and workability, that could not be realized with conventional inorganic materials. Daiken has contributed to a recycling-oriented society by finding value in a resource that was untapped, by expanding applications as the product, and by becoming popular as the leading brand for an inorganic bearing surface for houses, and it has contributed to improving the aseismic performance of Japanese wooden houses. By expanding the anti-seismic products for existing houses, it promotes further upgrading of the anti-seismic performance of wooden housing.



Dai-Lite



Anti-seismic wall



Shirasu, an unused resource available in the natural world

07 Saving construction time and work



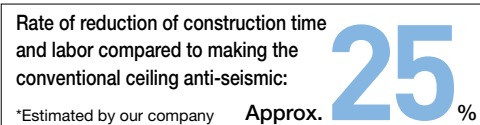
Contributing to the anti-seismic ceiling by developing the labor-saving construction technique

Social issues and needs

Because of the special demand for the restoration projects and various redevelopment projects, in addition to decreasing productive-age population ratio associated with the low birthrate and longevity, a shortage of workers has become an aggravated problem in the construction industry. While the Building Standards Act revised after the Great East Japan Earthquake requires higher aseismic performance of the ceilings of large public buildings, there was an issue that it requires much time and labor in making existing ceiling anti-seismic.

Daiken's strengths and value creation

To particularly respond to the needs of making the ceilings of large public facilities anti-seismic after the Great East Japan Earthquake, Daiken developed a unique ceiling construction technique that makes it possible to make the ceiling anti-seismic with the saving construction time and work. With this construction technique, we reduced the construction time and labor by approx. 25% compared to making the conventional ceiling anti-seismic. We will aim to further realize the saving construction time and work for not only ceilings but also building materials for renovation from the perspective of a new construction technique.



Our own anti-seismic ceiling construction technique



Flooring for renovation that can be easily constructed in a short construction period



Wall cabinet corresponding to the on-board construction technique that can omit substrate work and shorten the construction period