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 Promotion of the use of domestic timber

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

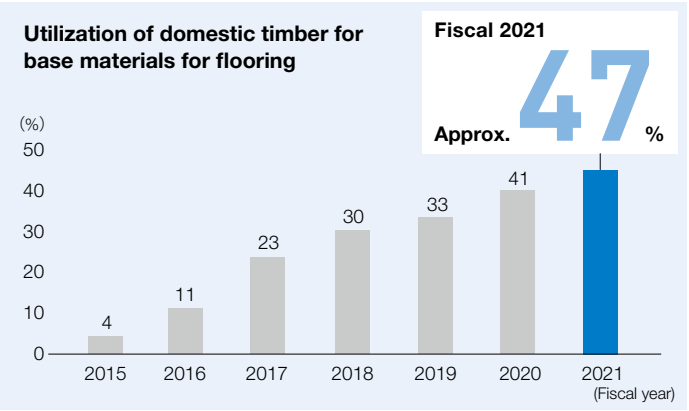
Social issues and needs

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 CO_2 and prevention of landslides. The Japanese government is aiming to increase wood self-sufficiency to 50% by 2025.

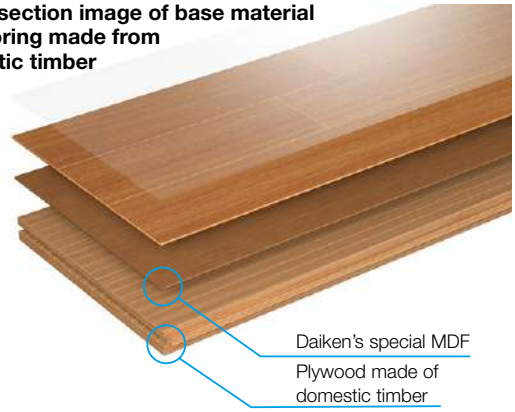
Daiken's strengths and value creation 1

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, proceeded with the development of base materials for flooring combined with domestic timber, and has made many improvements. Because of the shift, we newly promoted for our primary products in the fiscal 2021, utilization of domestic timber for base materials for flooring, which was approx. 4% in the fiscal 2015, increased to approx. 47%. 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.

Utilization of domestic timber for base materials for flooring



Cross-section image of base material for flooring made from 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.

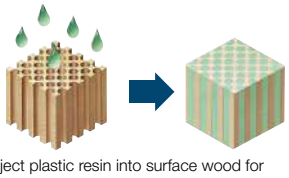
*WPC = The abbreviation for Wood Plastics Combination

Results of the commercialization of local materials with the WPC technology

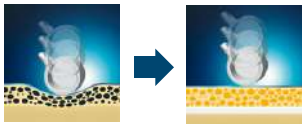
23 prefectures

Case of adopting WPC flooring

Mechanism of the WPC technology



Inject plastic resin into surface wood for flooring and harden it



By filling plastic resin, it demonstrates strength against dents and scratches

02 Recycling of wood resources / 03 Reduction of CO_2 emissions

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

Social issues and needs

Considering the 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 climate change associated with global warming.

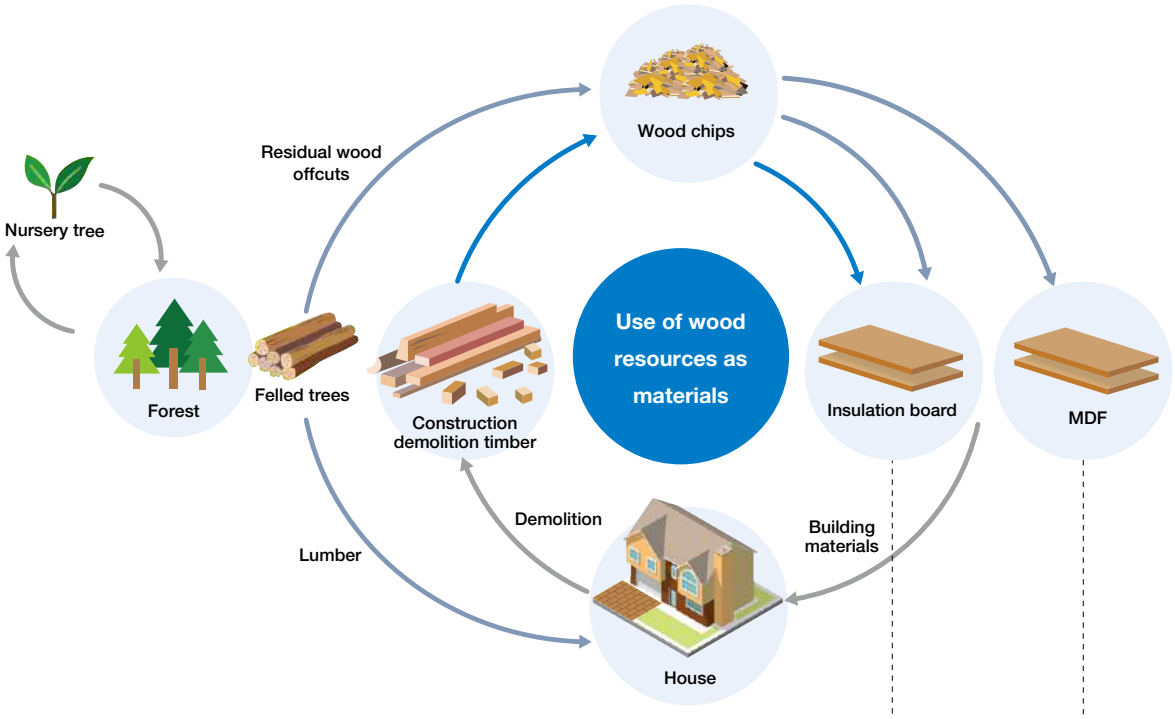
Daiken's strengths and value creation

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 demolition timber that used to be discarded or used as fuel. 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 CO_2 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.

The amount of carbon fixation by MDF and insulation board (CO_2 equivalent)

Fiscal 2020: Approx. 1,031,000 t-CO_2/year → Fiscal 2021: Approx. 996,000 t-CO_2/year

*Reference: Total CO_2 emissions in Japan in the fiscal 2021 was 82,500 t-CO_2/year



The amount of carbon fixation by insulation board (CO_2 equivalent)

Fiscal 2020: Approx. 140,000 t-CO_2/year → Fiscal 2021: Approx. 136,000 t-CO_2/year

The amount of carbon fixation by MDF (CO_2 equivalent)

Fiscal 2020: Approx. 891,000 t-CO_2/year → Fiscal 2021: Approx. 859,000 t-CO_2/year

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

Creating a safe space 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 years, 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., we have been deploying comprehensive product lines. Daiken pursues the creation of excellent and pleasant spaces that are safe and secure for people's lives and have functionality, such as making it easy to listen to conversations, the response to the antiviral function for which the needs have been increasing, etc.

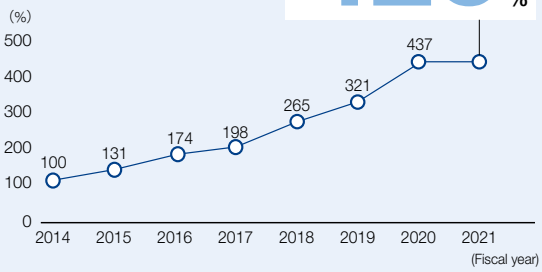
Cases of adopting the building materials from the Omoiyari Series for the living spaces where elderly people live

Moisture conditioning wall material that creates a comfortable indoor environment

Omoiyari Door Sales Volume Growth Rate

Fiscal 2021

425%



Calculated on the basis of the Omoiyari 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 noise. 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

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

Won the Kids Design Award

(Fiscal 2018)

(Fiscal 2017)

KIDS DESIGN AWARD

* Designs to contribute to the safety and security from 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.

Number of households installing Dai-Lite (cumulative) *Estimated by our company

Approx. 960,000 (As of the end of March 2021)

Approx. 920,000 (As of the end of March 2020)

Dai-Lite MS

Anti-seismic wall

Shirasu, an unused resource available in the natural world

07 Development of labor saving type products and techniques

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 also developed a ceiling system exclusively for hallways, which will become the evacuation route at the time of disaster.
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.

Rate of reduction of construction time and labor compared to making the conventional ceiling anti-seismic: *Estimated by our company

Approx. 25%

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