Functions and Technology to Support a Better Lifestyle

Earthquake-Resistance

Essential to the Land of Earthquakes

We have developed a system in which lateral force exerted by a quake is dissipated throughout the entire house, and a unique quake-absorbing feature. In the Great Hanshin Earthquake of 1995, which had a magnitude of 7.3, this would have reduced the shaking to one-eighth or one-eleventh of the level experienced by residents at the time*. This would not only alleviate the shock of an earthquake itself, but also reduce risk of secondary accidents caused by toppling furniture or damage to the house. As an additional benefit, we have reduced the cost of our quake-absorbing construction system by approximately 30%.

*Value based on quake simulation tests by Daiwa House Industry

Crime Prevention

Becoming Increasingly Important

The number of home break-ins in Japan has increased by a factor of 1.5 over the past five years. With the aim of making our houses more difficult targets, we have now developed our own unique crime-prevention specification by adopting double-glazing (24 times as strong as single-pane windows) for all windows on the first floor, along with a door featuring a pick-resistant lock. We have also combined a sensor light and a video door phone. This equipment comes as standard in our single-family house products.

Energy Conservation

Considering Environment in Our Daily Lives

As environmental protection has been gathering attention, we must consider the environment in our daily lives. Daiwa House has introduced a number of initiatives designed to save energy and conserve resources. For example, we have ensured that our products meet next-generation energy conservation standards. This means that our products can cut heating and air-conditioning costs by half, compared with houses that meet the existing energy saving standard. Also, we are facilitating the use of wind- and solar-power generation systems in our products.

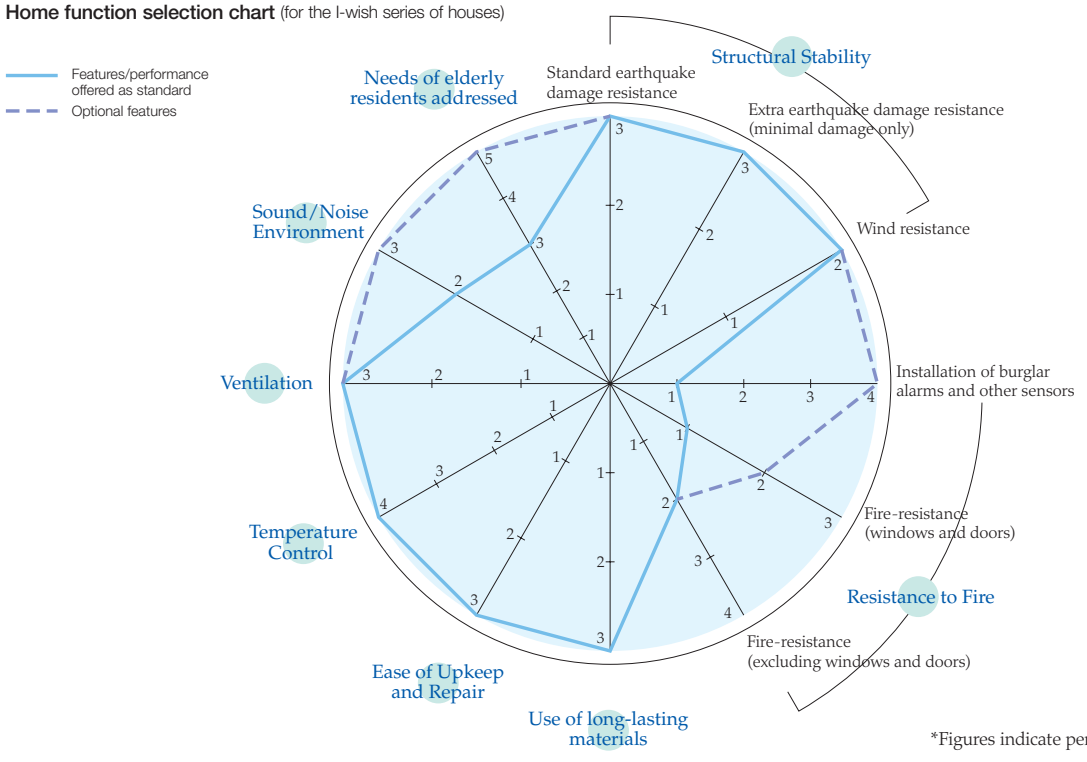
"Sick House" Phenomenon

Realizing a Healthy and Safe Environment

At Daiwa House, we were adopting interior materials that meet the RAL standard* of Germany, the world's highest standard, for our products even before the law to prevent the "sick house" phenomenon was introduced. In the summer of 2003, we took this commitment a step further and set in-house standards that are tougher than those established under the revised Building Standard Law. We select only the highest-grade building materials with extremely low toxic emissions for all of our interior materials including base sheets, which are not regulated in the Law.

* RAL: The German Institute for Product Quality Labeling

Home function selection chart (for the I-wish series of houses)



*Figures indicate performance

R&D for the Future of Home Building in Japan

Living in an Aging Society

Japanese society is now aging extremely quickly, indeed at the fastest pace in the world. The number of people aged 65 or higher accounts for one-fifth of the total population. The population of centenarians has doubled over the past five years. As we age, our senses and physical capabilities decline, leading to a greater risk of accidents in the home.

The Daiwa House group has long anticipated the problems of today's aging society. We not only established the Silver Age Research Center in 1989 but we have also been investigating universal designs for both products and services in our Central Research Laboratory. For example, we are researching a safe circulation line for housework, user-friendly equipment, a full-flat floor for wheelchairs, and space planning designed to facilitate nursing care. Our research uses our experimental house for the elderly and our "Senior Pose"*.

*An aging simulation system

City Living

Japan is increasingly witnessing a return to city center living. This has created demand for single-family houses in urban areas. These houses must feature structure and performance that can overcome restrictions peculiar to cities, such as limited land, difficult natural lighting, noise, and vibration.

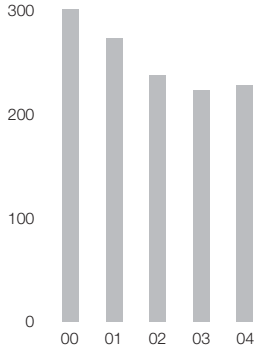
We have developed a shake-control technology that reduces vibration caused by traffic, as well as a load-bearing wall boasting high earthquake resistance that enables small land lots to be effectively utilized. In cooperation with universities, we are also studying natural lighting that employs a top-light.

The effective use of old office buildings is another important issue. Daiwa House is looking at converting these buildings from commercial to residential use, and for this purpose is engaged in extensive research with the aim of developing refurbishment and renovation technologies that meet the required standards.

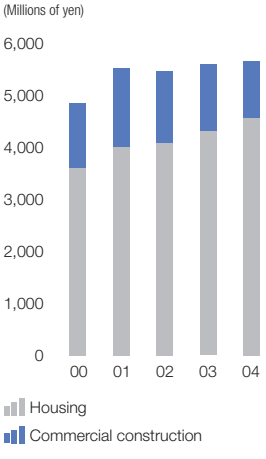
Exploring the Future

We will continue to create better products and services and work towards a brighter future for housing in Japan. In cooperation with other industries, the government and universities, we are developing exciting technologies in a number of fields that will enable us to realize our dream of exploring the future. These include environmentally friendly house construction methods that conserve natural resources, and in which waste materials are recycled as far as possible; next-generation housing equipment that employs information and communications technology (ICT); and the application of fuel cells to home use.

Number of personnel in the R&D division



R&D expenditure



Number of patent applications by Daiwa House (publicly announced, non-consolidated basis)