

## Daiwa House tackles the four main themes for 21st century living—environmentally friendly; safe & healthy; barrier-free; and energy-saving

### Company-wide effort to confront environmental problems

In October 1997, Daiwa House established the Environmental Technology Division to promote environmental protection activities across the whole Company. We also set up the Environmental Promotion Committee to lead vigorous Company-wide environmental protection efforts. Six subcommittees were also established to specialize in the areas of energy consumption, waste products, environmental pollutants, lifestyle information, the workplace, and environmental assessment. These subcommittees draw up medium-to-long-term policies, in accordance with which each division drafts and implements an environmental action plan every year. The Environmental Promotion Committee checks the results of the whole Company's environmental activities and exerts its full efforts to ensure the achievement of the plans. For example, the Residential Homes Division is setting up a recycling system for waste products on building sites in an effort to reduce the volume of waste that needs to be disposed of, while at the same time they are introducing a system of recycling usable materials from houses that have been demolished.

### Safety and health are the main themes

Daiwa House was the first company in the housing industry to formulate measures to deal with the problem of formaldehyde, a harmful organic compound. Our "Healthy Housing Specifications," which address this problem, are applied to all products, and are eloquent testimony to the emphasis placed on environmental and health issues in the housing that we offer. "Basia 21," the first house model built according to the "Healthy Housing Specifications," utilizes materials that give off very little formaldehyde. In addition, each room is fitted with a heat-exchanger fan that expels VOC (Volatile Organic Compounds) into the outside air without lowering the efficiency of heaters and air-conditioners. Furthermore, almost all internal fittings and fixtures, including "unit baths," combined wash-hand basins and cosmetic cabinets, kitchen counters, toilets, interior door handles, and colored flooring materials are all treated with antibacterial agents.

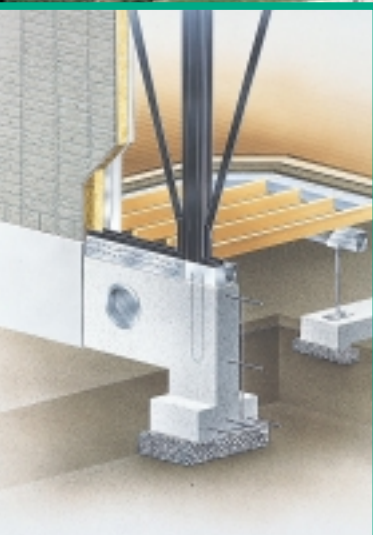
The careful attention we pay to safety is also one of the major distinguishing features of our housing products. Our "Triple United System" steel framework, in which three beams are joined together as one unit, is

Based on its concept of the "industrialization" of construction, Daiwa House has developed an extensive series of new technologies and construction methods, applied to the construction of both houses and office buildings, that lead to labor saving, energy conservation, and high product quality. As we move into the 21st century, the whole Company is directing its efforts toward environmental protection activities focused on those environmental problems that affect all mankind. Simultaneously, the Company's staff are aiming to achieve an overall technological revolution in pursuit of the functions that will be demanded of housing in the future—safety and health, barrier-free living space, and energy saving.

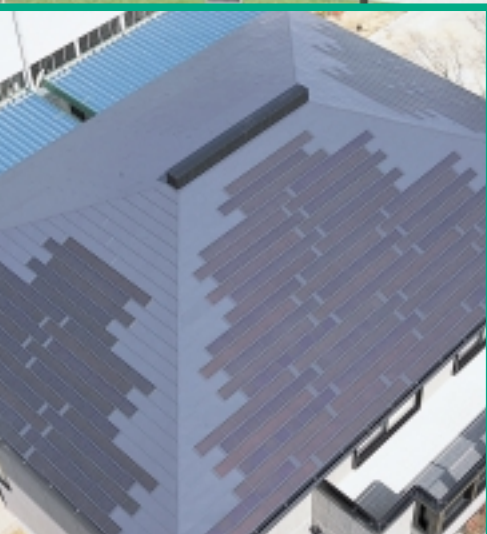


*Our research into the needs of the aging society enables us to offer housing that takes into consideration the problems, such as moving in and out of bed, encountered by aged and disabled people as well as care workers.*





*In our unique Triple United System, the steel columns that form the core of a building's structural framework are joined to two load-resistant panels, one on each side, making an extremely strong single unit.*



*Our amorphous thin-film solar energy cells have a maximum power output of 4.75 kw, and can supply the full needs of the average family. On sunny days, when power output is high, surplus power can be sold to utility companies.*

extremely strong and durable, and vividly demonstrated its ability to withstand earthquakes in the Great Hanshin Earthquake in January 1995.

### **Barrier-free housing helps elderly and disabled people**

Thanks to our research into housing that meets the needs of a graying society, we are able to offer housing that takes into consideration the problems encountered by aged and disabled people, as well as care workers. These housing units feature wheelchair-accessible system kitchens, extra-large handles that make it easier for elderly people to open and close doors, "kick plates," which lessen the shock when a wheelchair bangs against a wall, and many other items of equipment. Moreover, these houses, whether 2-story or 3-story, are provided with a space measuring 3.3m<sup>2</sup> in which an elevator large enough for wheelchair access can be installed.

In October 1998, Daiwa House and a partner company jointly developed a system, dubbed "Senior Pose," which simulates the infirmities associated with old age. While assisting us in our development of housing for the elderly, this product is also being sold to care and welfare facilities for use in training and research, as well as to other housing makers and housing equipment manufacturers for use as a product development support tool.

### **Energy conservation**

Daiwa House is promoting the reduction of energy consumption in its offices and factories, and on its building sites, and is also tackling the problems associated with energy saving in the home. Beginning with insulation measures that easily clear Housing Loan Corporation's insulation work standards, we offer a wide range of products that help to save energy, including solar power generation systems and equipment designed to use less water. In addition, we employ materials that are easily recyclable. Our "Whole-Roof Solar Energy System," which has been on sale since August 1998, attached to single-family houses, is the most representative example of our range of energy-saving products. This system, which is a unique type that comes already fixed to the steel roofing material, uses thin-film solar cells made from amorphous materials, which are environmentally friendly. The system can supply a household with all the electric power it needs.

In February 1999, Daiwa House began testing a pilot "all-electric house" in Niigata Prefecture. This new model of house utilizes surplus night-time electricity to supply hot water for central heating, and as a new approach to "ecological coexistence" in housing, is attracting considerable interest.