

Apr. 14, 2023

SEKISUI CHEMICAL CO., LTD.

Nonconformity with building standards in residential complexes and detached houses

SEKISUI CHEMICAL CO., LTD. has issued reports on the two following points to the Ministry of Land, Infrastructure and Transport (MLIT). Going forward, we at SEKISUI CHEMICAL intend to give detailed explanations to our customers and carry out the necessary improvements, based on guidance from MLIT and the relevant specific administrative agencies and administrative bodies. We offer our most sincere apologies for any inconvenience or worry that have been caused for the customers concerned and any other affected parties.

We at SEKISUI CHEMICAL will reflect on this incident with the greatest seriousness, and will carry out corrective work with all speed, as well as doing our utmost across the whole of the company to ensure that such issues do not recur.

I. Nonconformity with the provisions of the Building Standards Act concerning the separating walls of timber-constructed residential complexes

SEKISUI CHEMICAL has reported to MLIT that in the timber-constructed residential complexes sold/constructed by SEKISUI HEIM Group, in spite of the fact that separating walls installed in the attic space and elsewhere of such buildings are required by the Building Standards Act to reach the attic space, there were some cases in which such construction did not take place, meaning that the construction failed to conform with the provisions of this Act.

SEKISUI CHEMICAL likewise reported to MLIT on 5 April 2023 that, when an inspection was carried out of the attic space of a timber-constructed residential complex (Two-U Home Apartment) completed in Osaka in 1993 (sold and constructed by SEKISUI TWO-U Home in Osaka) in response to communications from a resident, inadequacies in the separating wall construction were confirmed. SEKISUI CHEMICAL likewise reported to MLIT on 13 April 2023 that, as a result of the surveys carried of an additional five buildings following directions from MLIT to undertake surveys of timber-constructed residential complexes of a similar type with all speed, inadequacies in the separation wall construction were also confirmed in six buildings (including the one building which was reported on 5 April) as of the present time.

Since there currently exist 147 timber-constructed residential complexes of the same type (buildings sold and constructed between 1987 and 2000 primarily by SEKISUI TWO-U Home in Osaka and SEKISUI TWO-U Home in Tokyo*1) SEKISUI CHEMICAL is currently continuing to carry out surveying of the remaining 141 buildings, excluding the six buildings which have already been surveyed, based on guidance from MLIT and specific administrative agencies. Should we confirm any inadequacies during the surveying process, we will explain these individually to the owners/residents of the buildings in question, and proceed with the improvement work.

*1: SEKISUI TWO-U Home in Osaka, which was a firm specializing the sale of timber-constructed residences, is now merged with SEKISUI HEIM KINKI CO., LTD. In addition, SEKISUI TWO-U Home in Tokyo is now TOKYO SEKISUI HEIM CO., LTD., following a change in business name.

1. Description of the nonconformities

The specifications for the Two-U Home Apartments require gypsum boards in the living area for fire prevention purposes and glass wool + gypsum boards for sound insulation purposes, in the separating walls (separating walls being walls which possess fire prevention and sound insulation purposes). However, when the actual situation at the buildings was confirmed, it became apparent that among the six buildings surveyed, in spite of the fact that separating walls are required by the Building Standards Act to reach the attic space, such construction had not taken place in some of the buildings, meaning that the construction failed to conform with the provisions of this Act.

2. Residences requiring surveying

The following table shows the numbers of buildings in each prefecture requiring surveying (as of 14 April 2023).

Prefecture	No. of buildings constructed	No. of buildings now destroyed, or where separating walls are not required (A)	No. of buildings requiring surveying (after (A) is excluded)	No. of buildings already surveyed	No. of buildings with inadequacies	Remaining no. of buildings yet to be surveyed
Miyagi	1	0	1			1
Tokyo	63	12	51			51
Chiba	29	4	25	2	2	23
Kanagawa	24	6	18			18
Saitama	32	5	27			27
Yamanashi	2	1	1			1
Tochigi	4	0	4			4
Shizuoka	4	1	3	1	1	2
Osaka	6	0	6	2	2	4
Kyoto	2	0	2			2
Hyogo	8	2	6	1	1	5
Nara	2	0	2			2
Shiga	2	1	1			1
Total	179	32	147	6	6	141

3. Responses going forward

As SEKISUI CHEMICAL continues to carry out the surveying of the relevant buildings, we will also undertake the necessary surveying to confirm whether there are any other aspects that are not in conformance with the Building Standards Act, carefully investigate the causes of the issues, and respond appropriately. The sale of Two-U Home Apartments ceased in the year 2000.

II. Nonconformity with the Ministerial Certification concerning fire prevention equipment

At the same time, it was also judged that some of the assembly methods for window materials produced by SEKISUI HEIM Group that serve as fire-prevention equipment used in residential complexes/detached houses do not conform with the specifications certified by MLIT.

SEKISUI CHEMICAL reported to MLIT on 5 April 2023 that, based on oral interviews held with workers at the time of quality inspections at CHUSHIKOKU SEKISUI HEIM Industry LTD., it was judged that the correct screws were not used when assembling the window materials that serve as the fire-prevention equipment in question. SEKISUI CHEMICAL likewise reported to MLIT on 13 April 2023 that, when the situations at other offices were also confirmed following the above, it was confirmed that similar issues had occurred at the Tokyo and Kinki offices of SEKISUI HEIM INDUSTRY CO., LTD. and at TOHOKU SEKISUI HEIM INDUSTRY CO., LTD. and KYUSHU SEKISUI HEIM INDUSTRY CO., LTD. Since screws not conforming with the certified standards were used in 2,476 buildings in which the screws were installed between 14 February 2015 to 24 March 2023*2 and in a further 164 buildings in which they were used in renovation work between June 2015 to March 2023, totalling 2,640 buildings (number of affected windows: 7,998), there is a risk that such buildings do not possess the flame-shielding performance that is required in the Building Standards Act.

*2: This figure is obtained by multiplying the number of units by the number of lots as the basis (corresponding to conventional timber construction methods).

1. Description of the nonconformities

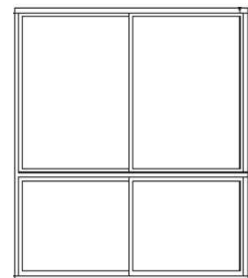
1) Fireproof sash considered nonconforming

Construction product name: Heim steel-framed general products

Name of opening considered nonconforming: Double-sliding window

Drawings of sashes

(left) Double-sliding window (High window)



(right) Double-sliding window (Multi-level window)

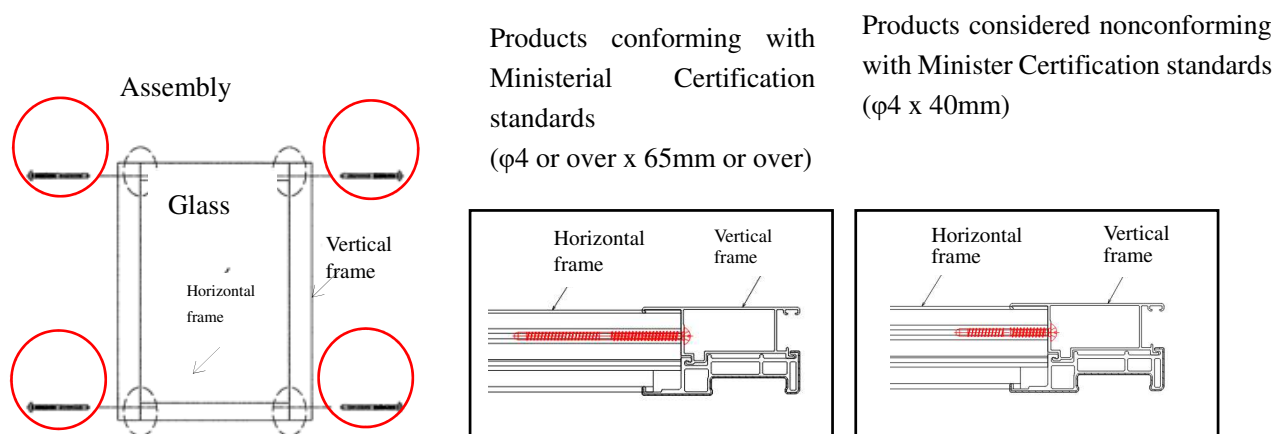
Applicable Ministerial Certification Number:

- A) MLIT Ministerial Certification Number: EB-1396
Period of installation in buildings: February 2015 ~ January 2018
- B) MLIT Ministerial Certification Number: EB-1,398
Period of installation in buildings: February 2015 ~ January 2018
- C) MLIT Ministerial Certification Number: EB-2116
Period of installation in buildings: November 2017 ~ March 2023
- D) MLIT Ministerial Certification Number: EB-2129
Period of installation in buildings: November 2017 ~ December 2018
- E) MLIT Ministerial Certification Number: EB-2362
Period of installation in buildings: November 2018 ~ November 2022

2) Description of nonconformities in construction

Screws considered nonconforming: Screws for assembling the vertical and horizontal window frames of the double-sliding sashes

Screws ($\phi 4 \times 40\text{mm}$) which do not conform with Minister Certification standards for screws ($\phi 4$ or over $\times 65\text{mm}$ or over) were affixed.



Prefecture	Aomori	Iwate	Miyagi	Akita	Yamagata	Fukushima	Ibaraki	Tochigi	Gunma	Saitama	Chiba	Tokyo
No. of buildings	12	61	158	31	43	122	13	13	10	63	10	237
Prefecture	Kanagawa	Niigata	Toyama	Ishikawa	Fukui	Yamanashi	Nagano	Gifu	Aichi	Mie	Shiga	Kyoto
No. of buildings	142	48	3	6	10	2	38	54	14	20	1	191
Prefecture	Osaka	Hyogo	Nara	Wakayama	Tottori	Shimane	Okayama	Hiroshima	Yamaguchi	Tokushima	Kagawa	Ehime
No. of buildings	594	146	21	8	13	1	37	112	49	2	8	26
Prefecture	Kochi	Fukuoka	Saga	Nagasaki	Kumamoto	Oita	Miyazaki	Kagoshima	Total			
No. of buildings	4	136	18	62	60	24	2	15	2,640			

2. No. of buildings covered (by prefecture; includes renovated buildings)

3. Response going forward

SEKISUI CHEMICAL will give detailed explanations to our customers and carry out the necessary corrective work to the 2,640 buildings, based on guidance from MLIT and the relevant specific administrative agencies. Furthermore, we intend to undertake flame-shielding performance testing of the fireproof resin sashes via a third-party performance assessment organization under conditions which recreate those of the nonconforming construction in question, and confirm whether these possess the necessary functions required under the Building Standards Act and do not impede safety.

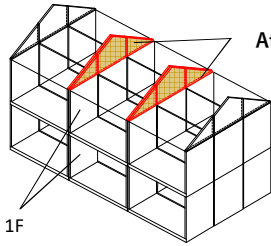
Going forward, we will work to bolster our quality system in order to prevent recurrence of these issues, and will do our utmost to regain the trust of our customers.

Inquiries about this announcement

Corporate Communication Department

SEKISUI CHEMICAL CO., LTD.

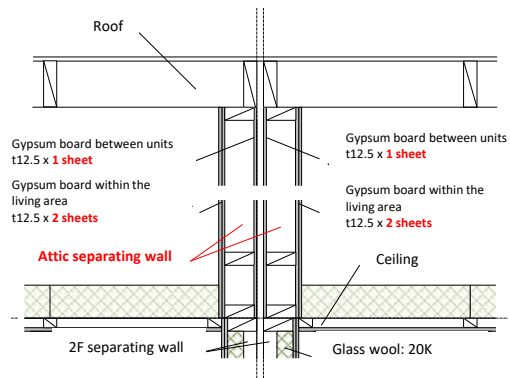
E-mail: kouhou@sekisui.com



Attic separating wall

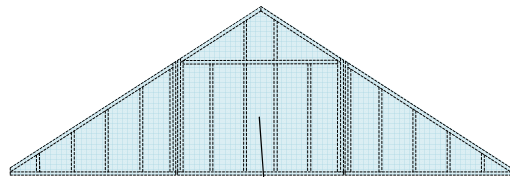
Separating wall for 1F and 2F

Design drawings and specifications



Cross section of attic separating

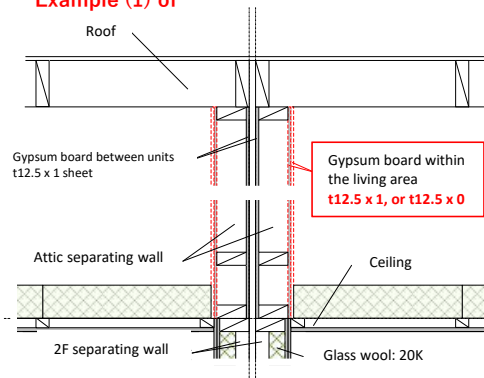
Living area



Gypsum board: t 12.5 x 2 sheets

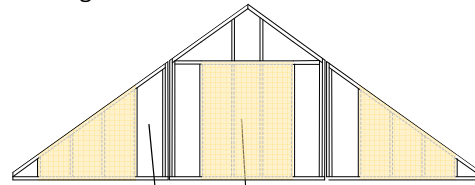
Erroneous construction specifications

Example (1) of



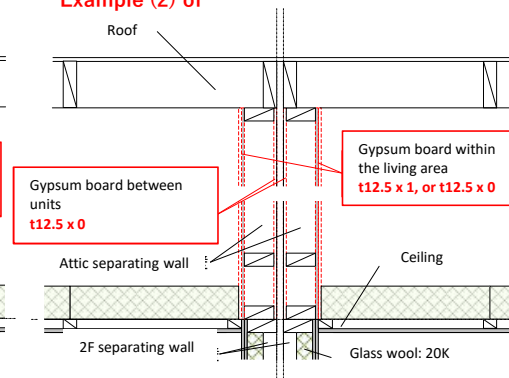
Cross section of attic separating wall

Living area



Gypsum board: t 12.5 x 1 sheet
Gypsum board: t 12.5 x 0

Example (2) of



Example (1) of nonconformity with specifications

Within the living area:
Gypsum board x 1 sheet



Living area

Between units: Gypsum board installed
Within the living area: **Gypsum board not installed**

Example (2) of nonconformity with specifications

Between units: Gypsum board not installed

Within the living area: **Gypsum board not installed**



Living area

Within the living area:
Gypsum board x 1 sheet