

Recent trends of Seismic Isolation “SI” & Vibration Control “VC” Buildings in Japan

JSSI accumulates these data for SI & VC buildings,

with the cooperation of members.

These data were accumulated until the end of 2023.

A list of the members who cooperated is posted on the last page.

June 10, 2025

The Japan Society of Seismic Isolation

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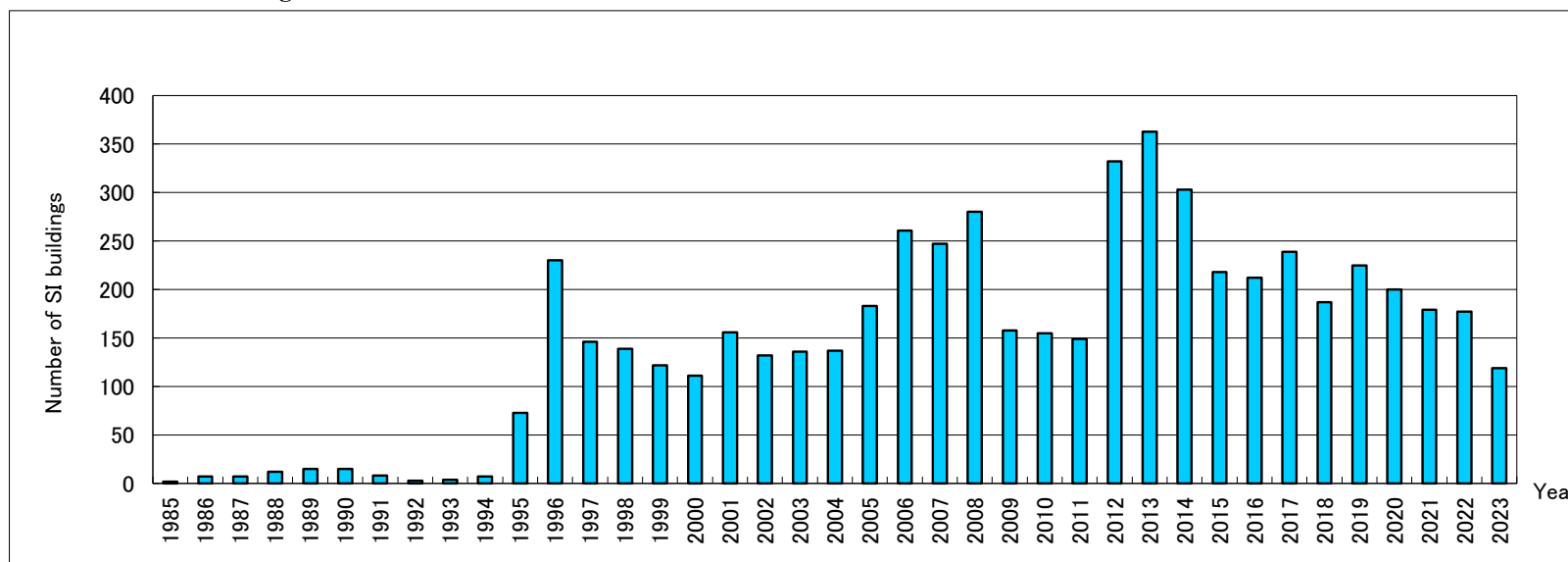
Figures show number of SI buildings, by year.

Data from ① to ④ and ⑥ to ⑫ show the number of buildings, and ⑤ shows the data of houses.

Aggregate results

- | | |
|---|---|
| ①Number of SI buildings | ⑦Usages of SI buildings |
| ②Number of SI buildings - Condominiums | ⑧Number of SI retrofitted buildings |
| ③Number of SI buildings - Hospitals/Clinics | ⑨Number of SI retrofitted buildings - Public/Private |
| ④Number of SI buildings - Public/Private | ⑩Number of SI retrofitted buildings - Construction method |
| ⑤Number of SI Houses | ⑪Number of isolators installed |
| ⑥Number of High-rise SI buildings | ⑫Types of Isolators installed |

①Number of SI buildings

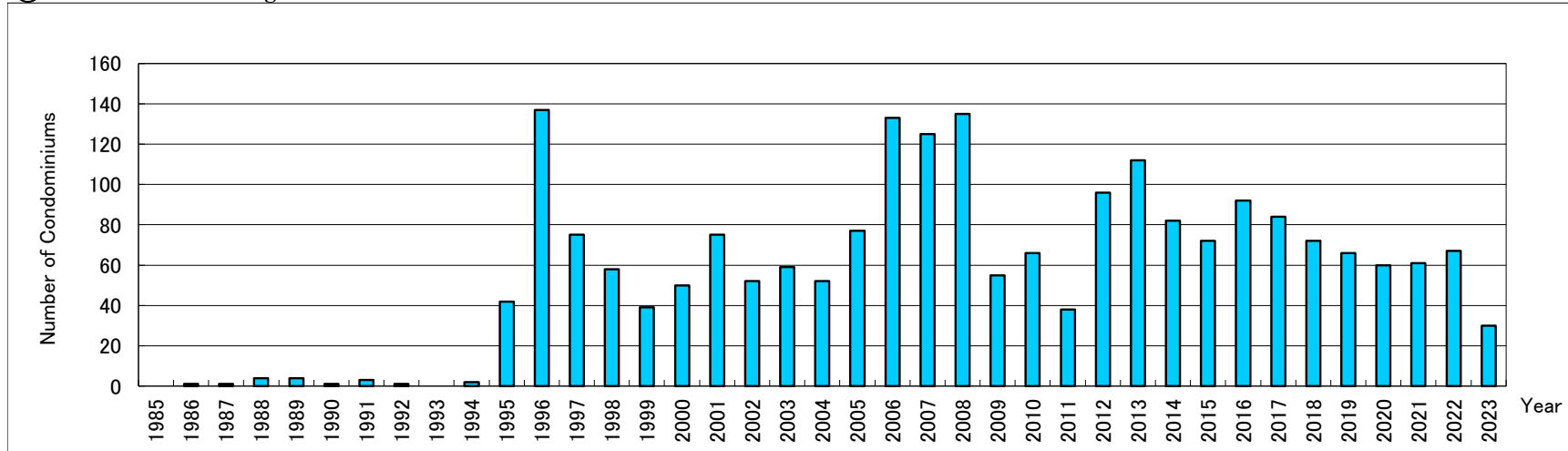


Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
SI buildings	2	7	7	12	15	15	8	3	4	7	73	230	146	139	122	111	156	132	136	137

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
SI buildings	183	261	247	280	158	155	149	332	363	303	218	212	239	187	225	200	179	177	119

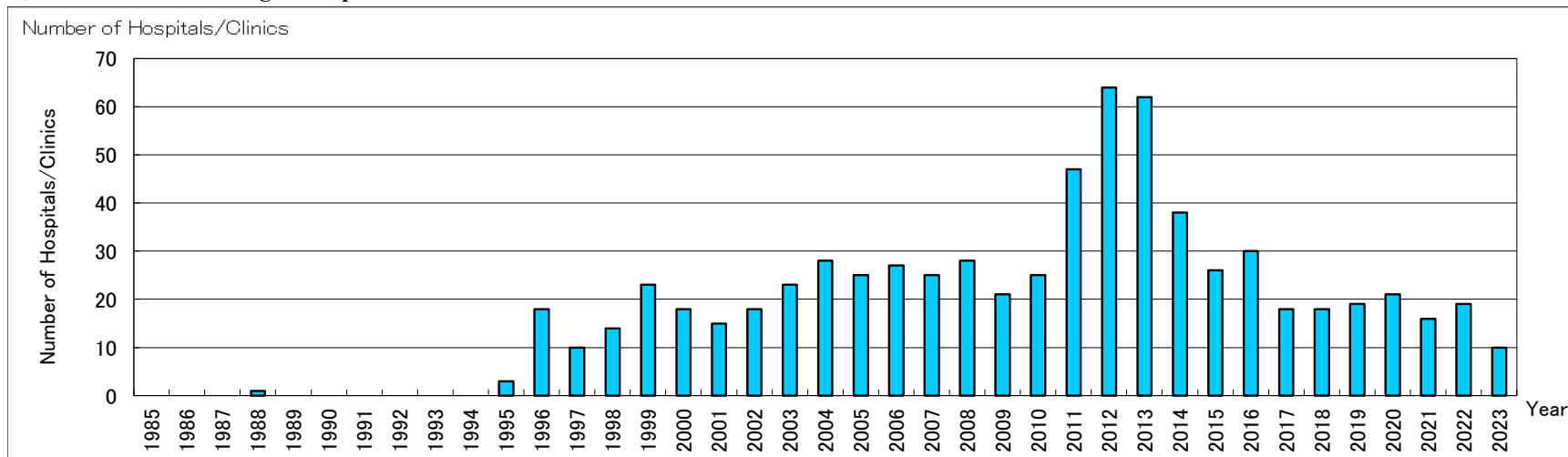
	Total
SI buildings	5649

② Number of SI buildings - Condominiums



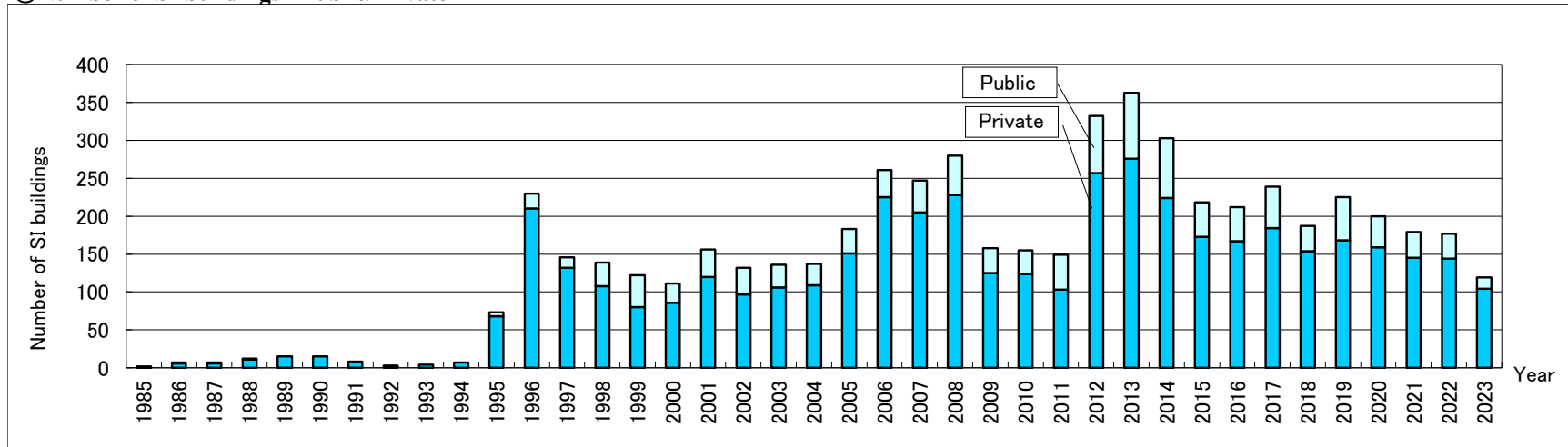
Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Condominiums	0	1	1	4	4	1	3	1	0	2	42	137	75	58	39	50	75	52	59	52
Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Condominiums	77	133	125	135	55	66	38	96	112	82	72	92	84	72	66	60	61	67	30	<u>Condominiums</u> 2179

③ Number of SI buildings - Hospitals/Clinics



Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Hospitals/Clinics	0	0	0	1	0	0	0	0	0	0	3	18	10	14	23	18	15	18	23	28
Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Hospitals/Clinics	25	27	25	28	21	25	47	64	62	38	26	30	18	18	19	21	16	19	10	<u>Hospitals/Clinics</u> 710

④ Number of SI buildings - Public/Private

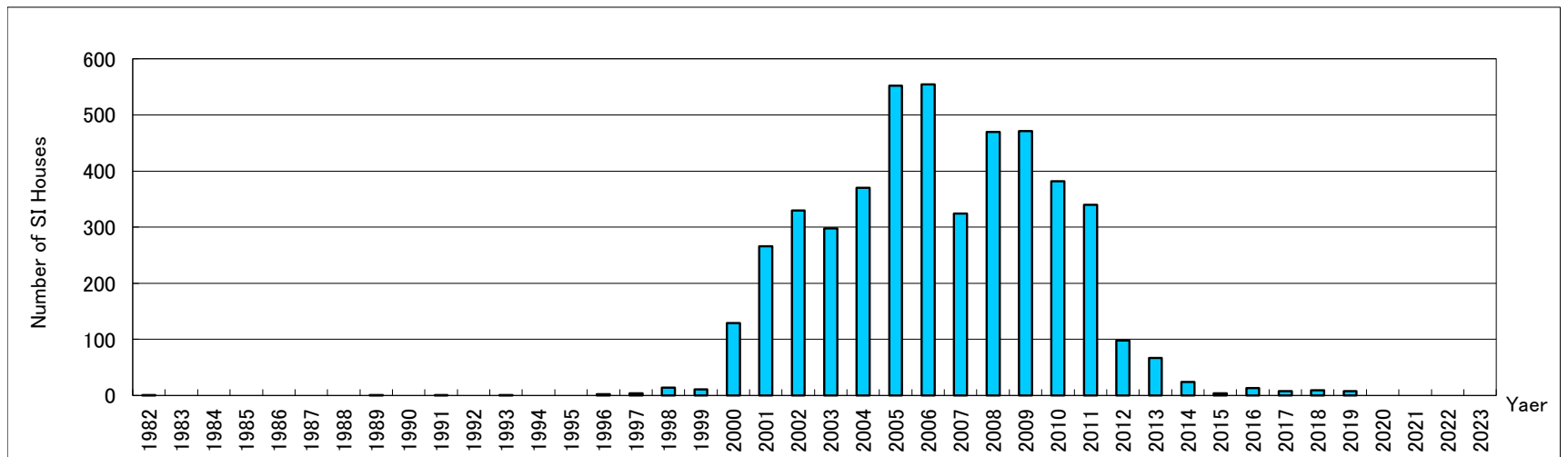


Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Public	0	1	1	1	0	0	0	1	0	0	5	20	14	31	42	25	36	35	30	28
Private	2	6	6	11	15	15	8	2	4	7	68	210	132	108	80	86	120	97	106	109

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Public	32	36	42	52	33	31	46	75	87	79	45	45	55	33	57	41	34	33	15	1141
Private	151	225	205	228	125	124	103	257	276	224	173	167	184	154	168	159	145	144	104	4508

Total
Public 1141
Private 4508
5649

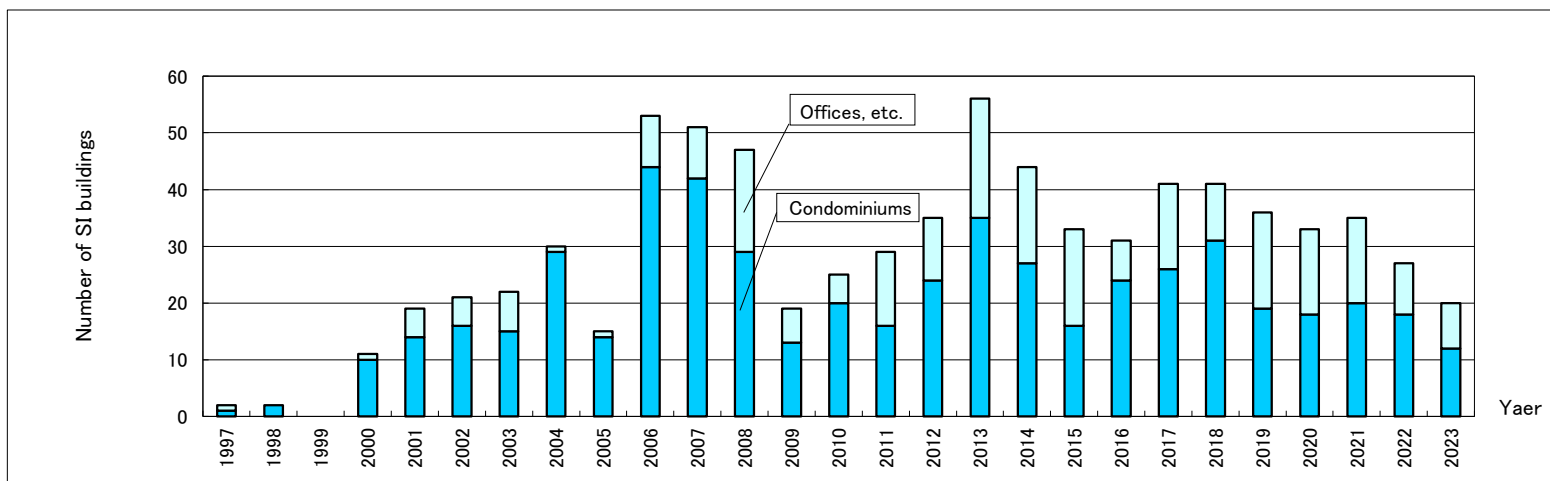
⑤ Number of SI Houses



Year	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Houses	1	0	0	0	0	0	0	1	0	1	0	1	0	0	2	4	14	11	129	266	330

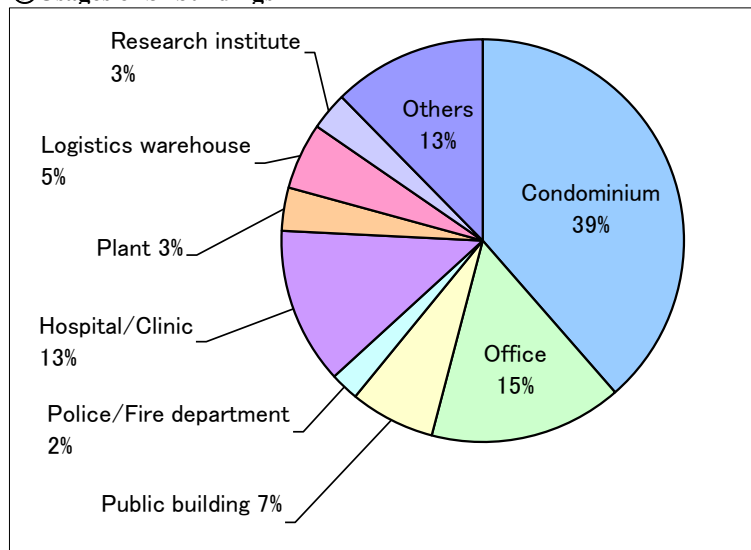
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Houses	298	370	552	554	324	470	471	382	340	98	67	24	4	13	8	9	8	0	0	0	0	4752

⑥Number of High-rise SI buildings

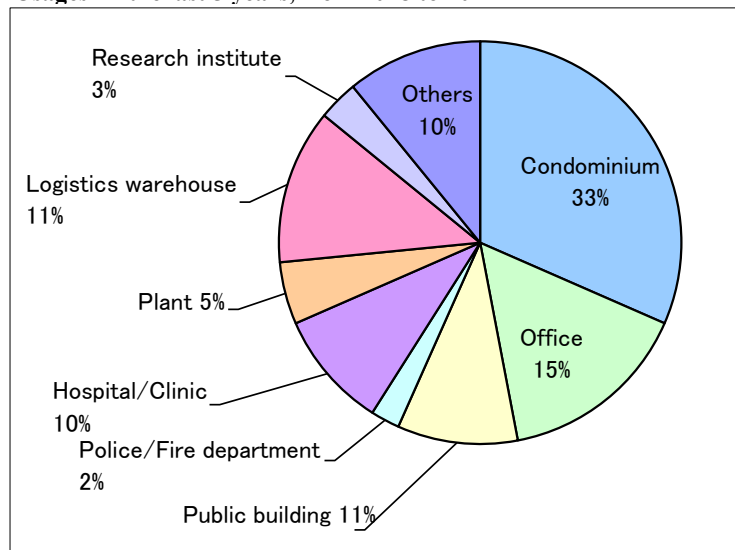


Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Offices, etc.	1	0	0	1	5	5	7	1	1	9	9	18	6	5	13	11	21	17	17	7	15	10	17	15	15	9	8	243
Condominiums	1	2	0	10	14	16	15	29	14	44	42	29	13	20	16	24	35	27	16	24	26	31	19	18	20	18	12	535
Subtotal	2	2	0	11	19	21	22	30	15	53	51	47	19	25	29	35	56	44	33	31	41	41	36	33	35	27	20	778

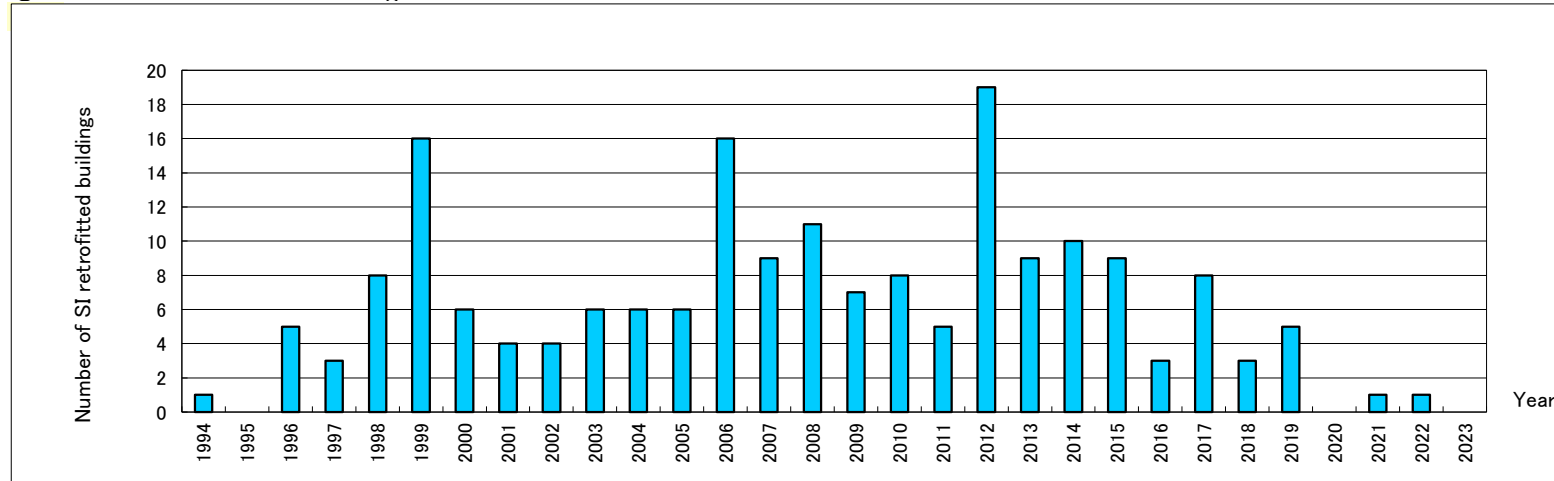
⑦Usages of SI buildings



Usages in the last 5 years, from 2018 to 2022

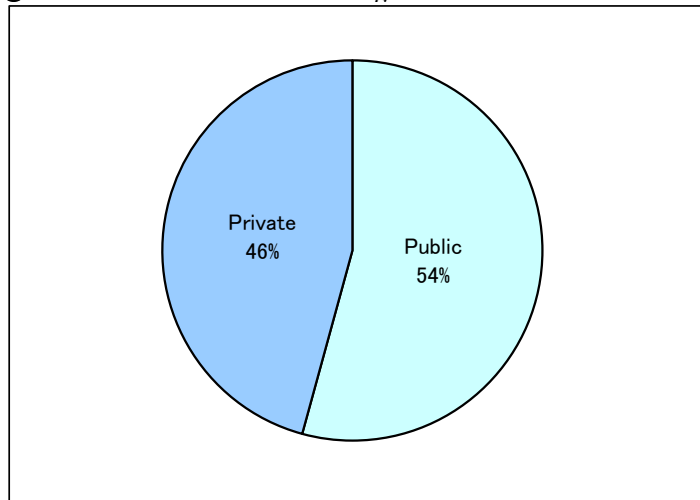


⑧ Number of SI retrofitted buildings



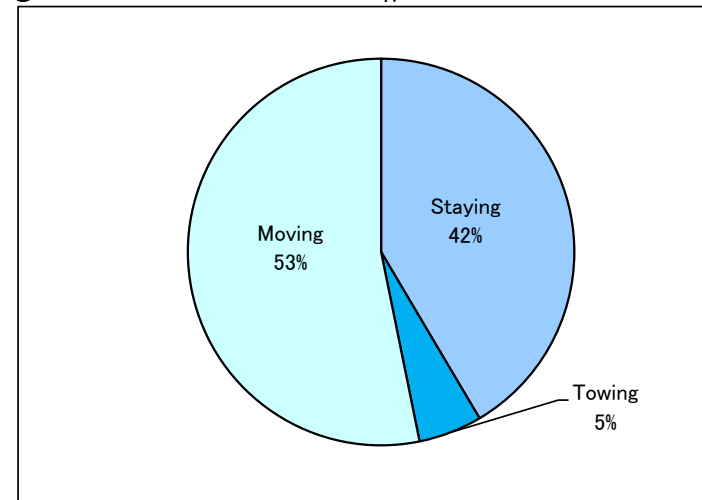
Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Retrofit	1	0	5	3	8	16	6	4	4	6	6	6	16	9	11	7	8	5	19	9	10	9	3	8	3	5	0	1	1	0	189

⑨ Number of SI retrofitted buildings - Public/Private



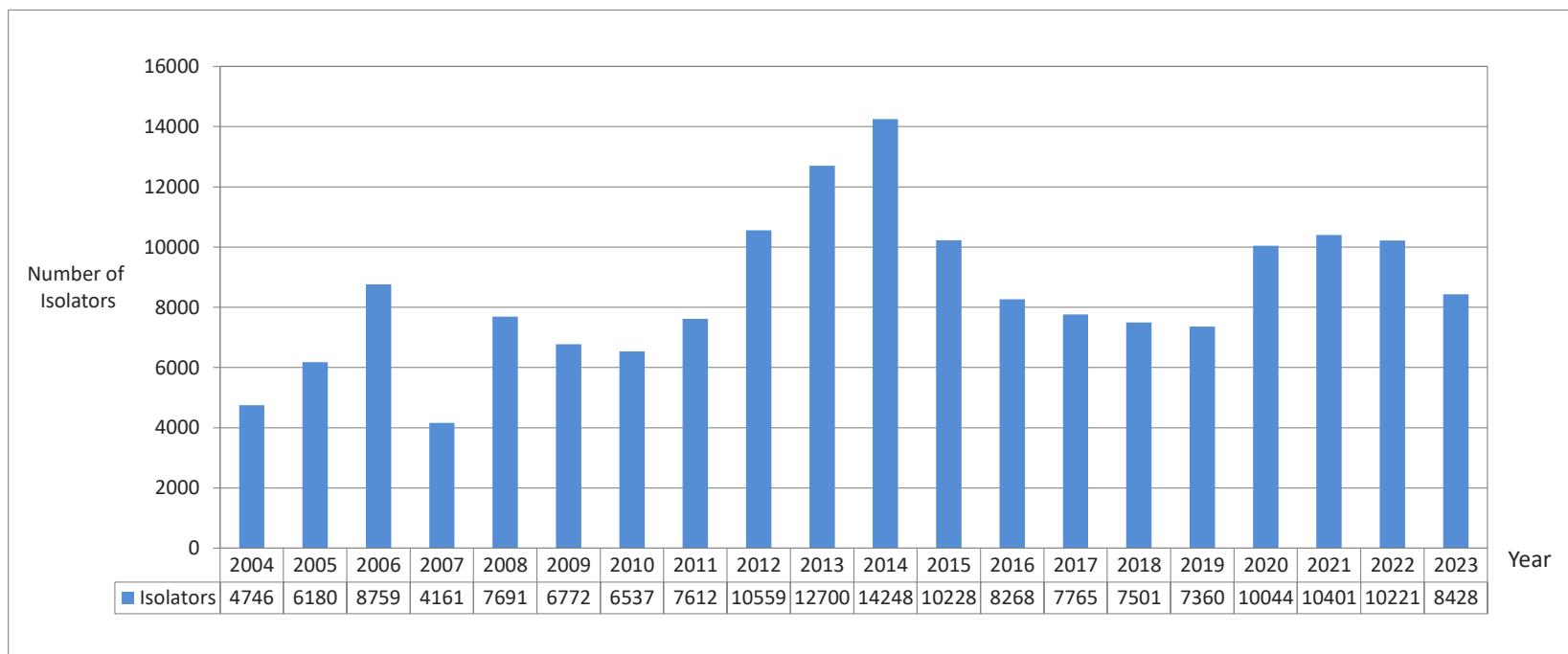
	Bldgs.
Public	103
Private	86
Total	189

⑩ Number of SI retrofitted buildings -Construction method



	Bldgs.
Staying	79
Towing	10
Moving	100

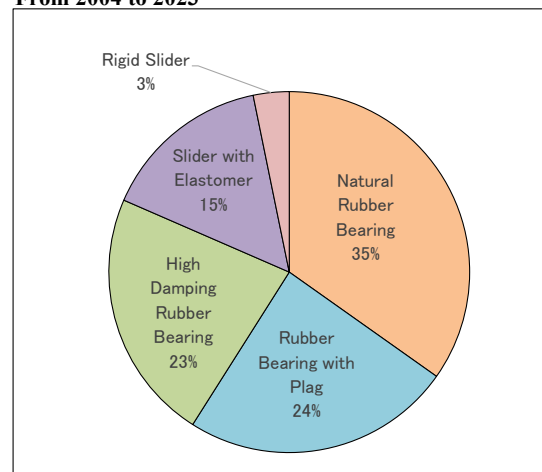
⑪ Number of isolators installed



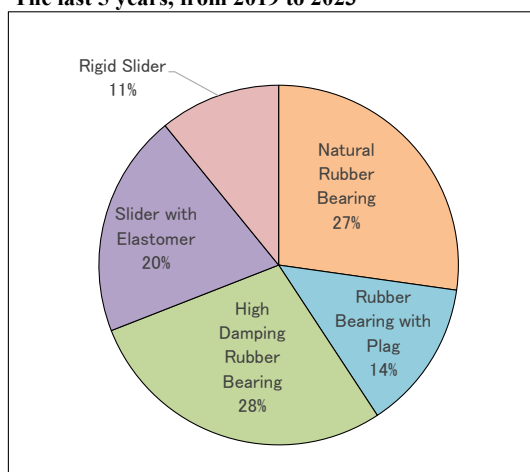
⑫ Types of Isolators installed

※The number of units to be delivered.

From 2004 to 2023



The last 5 years, from 2019 to 2023



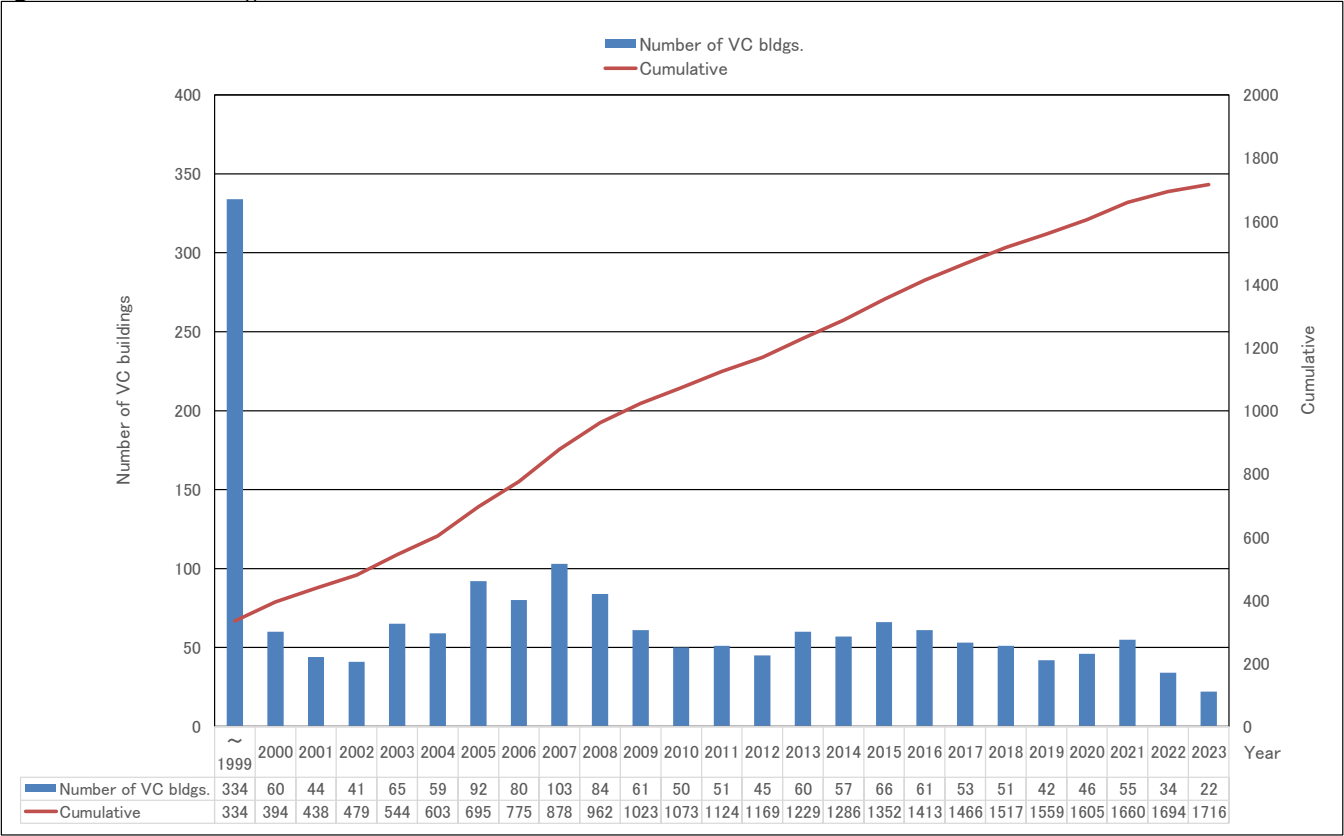
Recent trends of Vibration Control “VC” Buildings in Japan

JSSI accumulates these data for VC buildings with the cooperation of members.
These data were accumulated until the end of 2023.
Figures show number of VC buildings, by year.

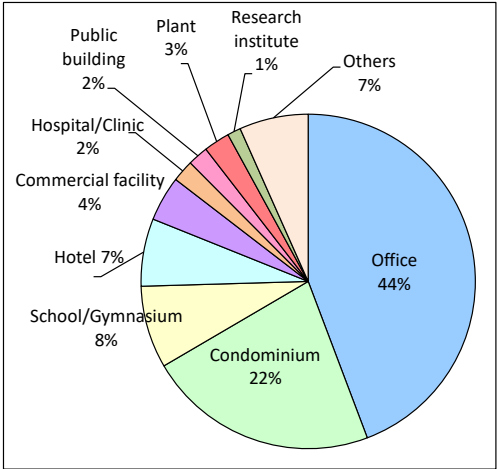
Aggregate results

- ①Number of VC buildings
- ②Usages of VC buildings
- ③Types of VC devices installed

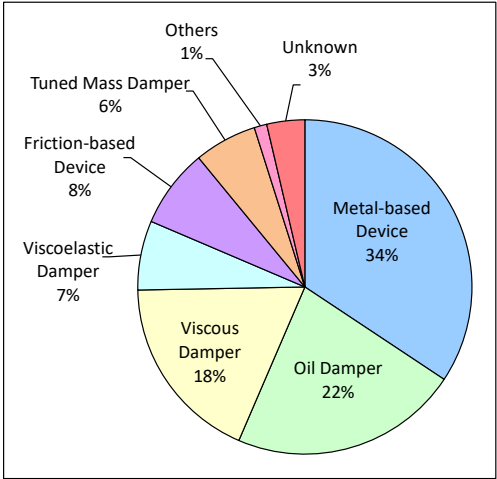
①Number of VC buildings



②Usages of VC buildings



③Types of VC devices installed



The ratio is based on the number of buildings, and when multiple devices are installed in one building, it is the main device.

Names of members who cooperated for accumulated data until the end of 2023

(96 companies)

ARTES CORPORATION	Isolator Techno Support	MHS Planners, Architects & Engineers	Shikoku Electric Power Company, Incorporated
ASANUMA CORPORATION	Japan Atomic Energy Agency	Mitsubishi Heavy Industries Machinery Systems, Ltd.	SHIMIZU CORPORATION
AXS SATOW Inc.	JFE Civil Engineering Construction Corporation	Mitsubishi Jisho Design Inc.	SHINMEI-KOUMUTEN Ltd.
Azusa Sekkei Co., Ltd.	JR East Design Corporation	Naito Architects Co., Ltd.	Sumitomo Mitsui Construction Co., Ltd.
BBM Co., Ltd.	JUST NISHINIHON Co., Ltd	NAKANO CORPORATION	Sumitomo Riko Company Limited
Bridgestone Corporation	K. ITO Architects & Engineers Inc.	NCU Structural Design, Inc.	SWCC Corporation
b-techno systems inc.	KAJIMA CORPORATION	NIHON SEKKEI, INC.	TAISEI CORPORATION
Constec Engi, Co.	KAMIKOUCHI SEKKEI LTD	NIHON SEKKEI, INC.	Takenaka Corporation
Dai Nippon Construction Co.,Ltd.	Kiuchi Construction Co., Ltd.	NIKKEN HOUSING SYSTEM LTD.	TEKKEN CORPORATION
DAIKEN SEKKEI, INC.	KMEW SIPOREX Co., Ltd.	NIPPON STEEL ENGINEERING CO., LTD.	The Chugoku Electric Power Co., Inc.
DAISUE CONSTRUCTION CO., LTD.	KONOIKE CONSTRUCTION CO., LTD.	Nishimatsu Construction Co., Ltd.	The Japan Atomic Power Company
Daiwa House Industry Co., Ltd.	KOSAKA KOMUTEN Co., Ltd.	Nitta Corporation	TOA CORPORATION
Dynamic Design Inc.	KOUKEN Structural Engineers Co., Ltd.	NTT FACILITIES, INC.	TOBISHIMA CORPORATION
Electric Power Development Co., Ltd.	KozoSoft Co., LTD.	OBAYASHI CORPORATION	TODA CORPORATION
Fujita Corporation	Kumagai Gumi Co., Ltd.	OILES CORPORATION	Tohata Architects & Engineers, Inc.
Fukuda Corporation	Kume Sekkei Co., Ltd.	OKUMURA CORPORATION	TOKYO ELECTRIC POWER SERVICES CO., LTD.
HASEKO Corporation	KURASHIKI KAKO CO., LTD.	ORIMOTO STRUCTURAL ENGINEERS INC.	Tokyo Kenchiku Structural Engineers Inc.
HAZAMA ANDO CORPORATION	KUROSAWA CONSTRUCTION CO., LTD.	Ove Arup & Partners Japan Ltd.	Tokyu Construction Co., Ltd.
HIRAI FACTORY COMPANY LTD.	MAEDA CORPORATION	P.S. Mitsubishi Construction Co., Ltd.	TOMOE Corporation
Hokkaido Electric Power Company	Matsui Construction Co., Ltd.	PENTA-OCEAN CONSTRUCTION CO., LTD.	TOYO CONSTRUCTION CO., LTD.
i2S2 co., ltd.	MATSUMURA-GUMI CORPORATION	RIA (Research Institute of Architecture)	Toyo Tire Corporation
ICHIJO CO., LTD.	MATSUO Corporation	SATO KOGYO CO.,LTD	YAHAGI CONSTRUCTION CO., LTD.
ISHIKAWA KENSETSU CO., LTD.	MEIKÔ CONSTRUCTIN CO., LTD.	SEIBU CONSTRUCTION CO., LTD.	Yamashita Sekkei, Inc.
Ishimoto Architectural & Engineering Firm, Inc.	MENSHIN ENGINEERING CO., LTD.	SENQCIA CORPORATION	Yasui Architects & Engineers, Inc.