

FG-Board

World's first soft but tough, flexible incombustible fiber-reinforced gypsum board successfully developed with application of hatschek's method



Six features

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| 1 | Nonflammable | Nonflammable and nonsmoke/toxic-gas-producing due to the use of gypsum and noncombustible fibers as its main raw materials |
| 2 | Tough material | Ductility equaling that of flexible board, strength exceeding that of calcium silicate board, and excellent impact resistance |
| 3 | Surprisingly easy processing and construction | Superb construction execution and workability allowing sawing, planing, and direct nailing. High flexibility enabling construction along gently curved surfaces. Much easier construction on by sprinkling water over curved surfaces. |
| 4 | Stable due to size precision | Superior size stability offering a beautiful, jointless finish with extremely low moisture-induced expansion and contraction. Suitable for base materials of finishing materials used for clean rooms, etc., where adhesive setting is applied. (Refer to the A&A Material Corporation Ceramic Series Catalog.) |
| 5 | Beautiful face finish | Excellent base materials for paint work finish or facing application due to appropriate density surface smoothness, and roughly neutral material. |
| 6 | Excellent sound insulation performance | Sound Insulation superior to calcium silicate or gypsum boards, providing a pleasant living environment. |

Standard

Thickness (mm)	Size (mm)		Standard weight (kg/sheet)			
	Width	Length	5mm	6mm	8mm	10mm
5	910	1,820	15	18	24	30
6	910	2,420	20	24	32	40
8	★ 1,000	2,000	18	22	28	36
10	★ 1,210	2,420	27	32	44	54

Note:

- 1) ★: Products ordered only with prior statement of date of delivery and product quantity
- 2) Weight is based on standard thickness and varies slightly with the range of board thickness tolerance and moisture content.
- 3) Products 4mm and 12mm thick are available upon order.

Properties

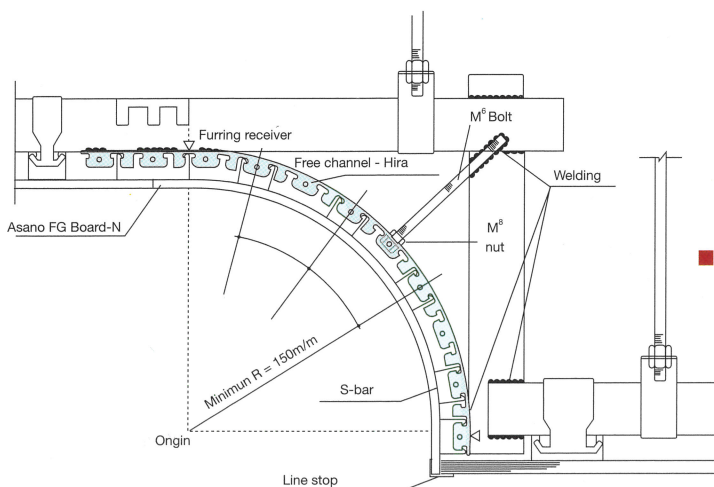
Specific gravity	Bending collapse load N (kgf)		Bending strength N/mm ² (kgf/cm ²)	Sharpy's Impact N mm/mm ² (kgf-cm/cm ²)	Young's modulus N/mm ² (kgf/cm ²)	Change in length (%)	Moisture content(%)	Water absorption rate (%)	Thermal conductivity (Kcal/mh°C)
1.6	5	245 (25 or above)	14.7 (150 or above)	4.9 (5)	1.2 x 10 ⁴ (13 x 10 ⁴)	0.05	2 or below	18 or below	0.18
	6	353 (36 or above)							
	8	627 (64 or above)							
	10	900 (100 or above)							
(JIS A 5430)	(JIS A 140B)		(In-house code)			(JIS A5430)	(JIS A5422)	(JIS A5430)	(JIS A1412)

Note: () : Testing methods. Drying is conducted at 60°C for 24 hours.

Bending

Because of high flexibility, FG-Board can be constructed on gently curved surfaces without special work. Sprinkling using watering can further facilitates easier construction of curved surfaces.

■ Curved ceiling detail (Example)



■ Critical flexibility

Thickness (mm)	Bending radius (mm)	Remark
5	more than 150	When bending at right angles to fiber direction
6	more than 200	

■ Bending processing

Place A&A Material Corporation FG Board-N horizontally and let set for 7 to 8 minutes after spraying water from one side and for 3 minutes after spraying water from both sides. After further spraying of water on the back, let the board set for about 3 minutes and start bending when the center of the board has absorbed sufficient water. To make the board even more beautiful, apply pretreatment using (simple) mold.