

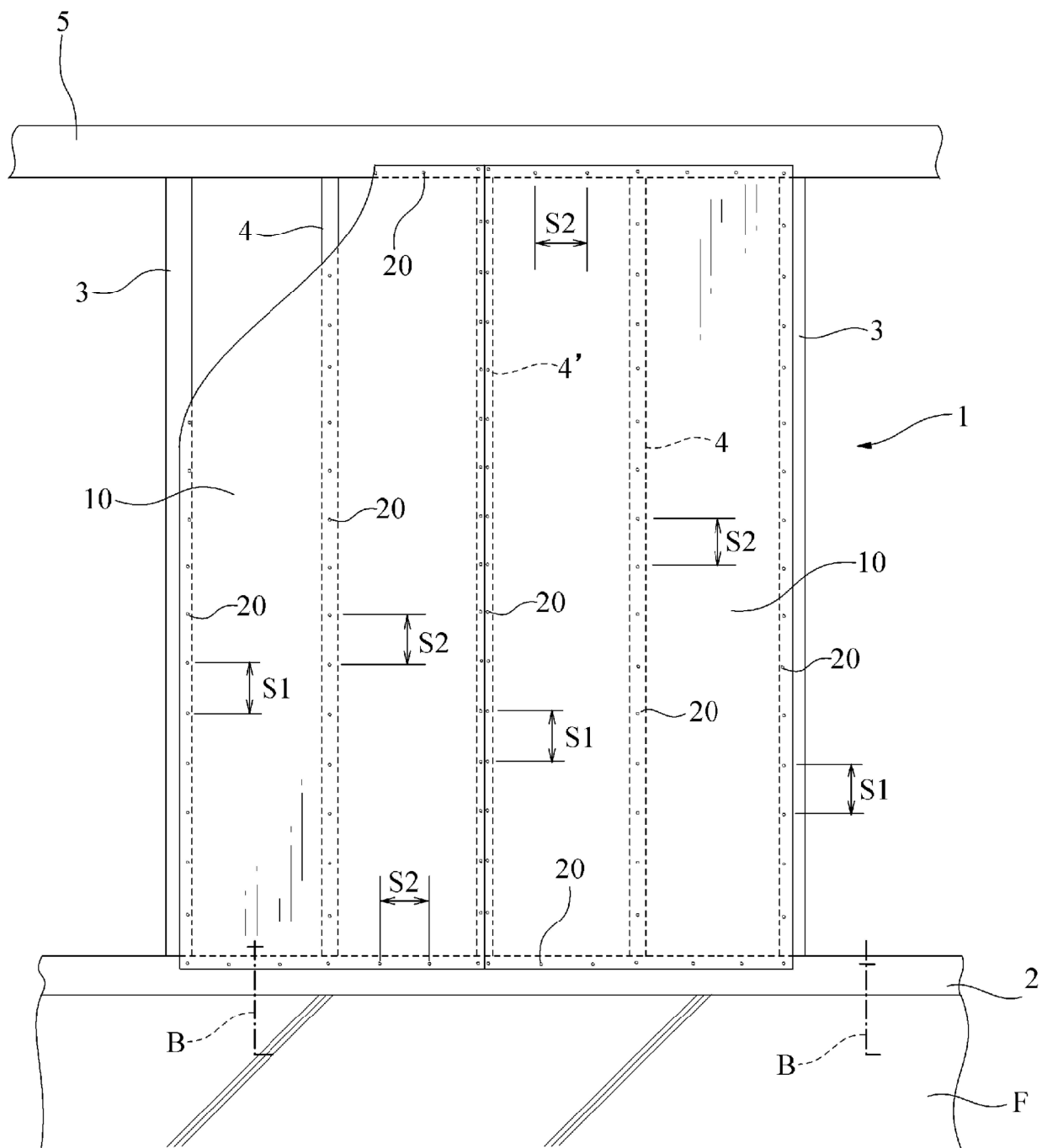


FIG.2



(C)

(B)

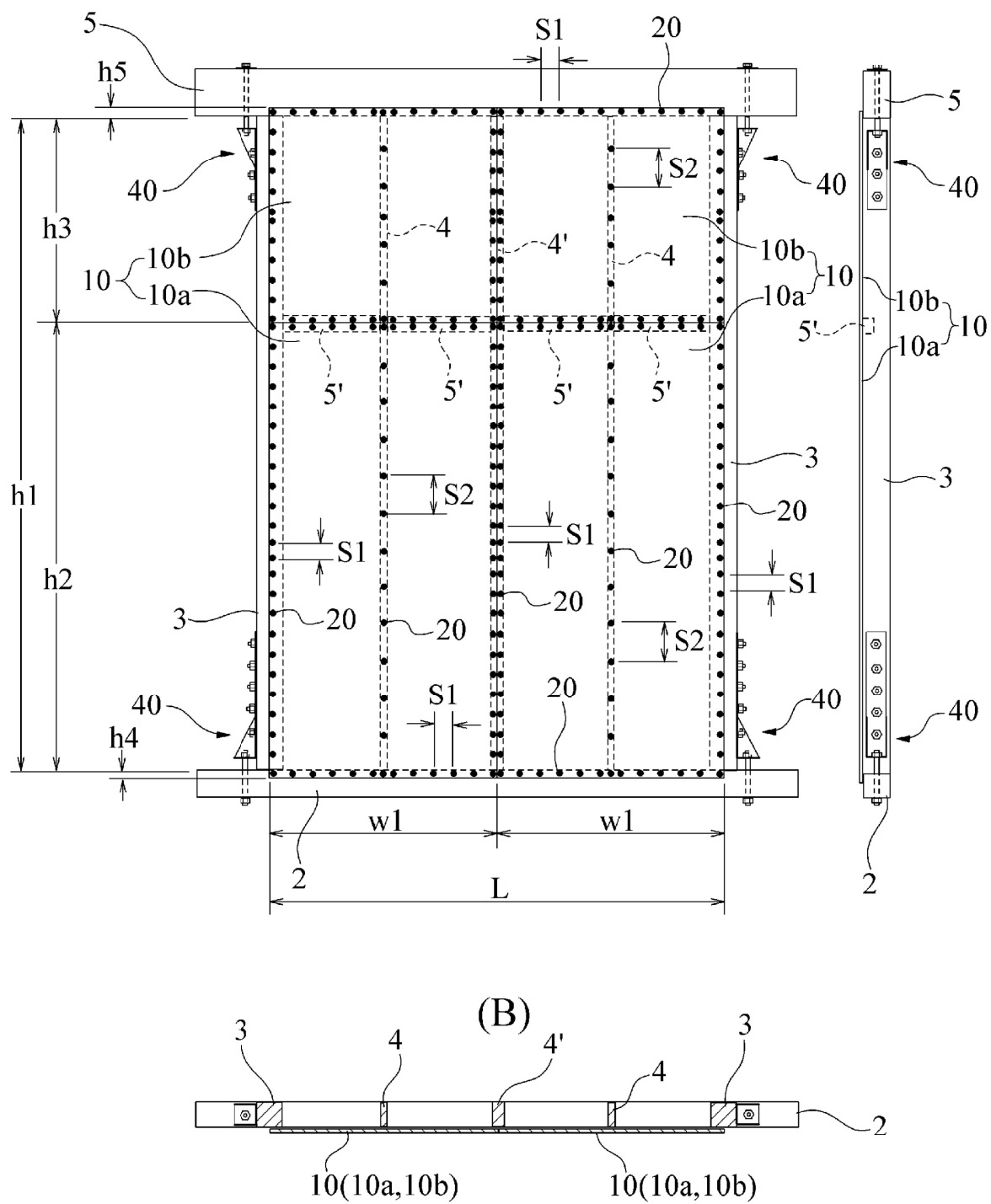


FIG.3

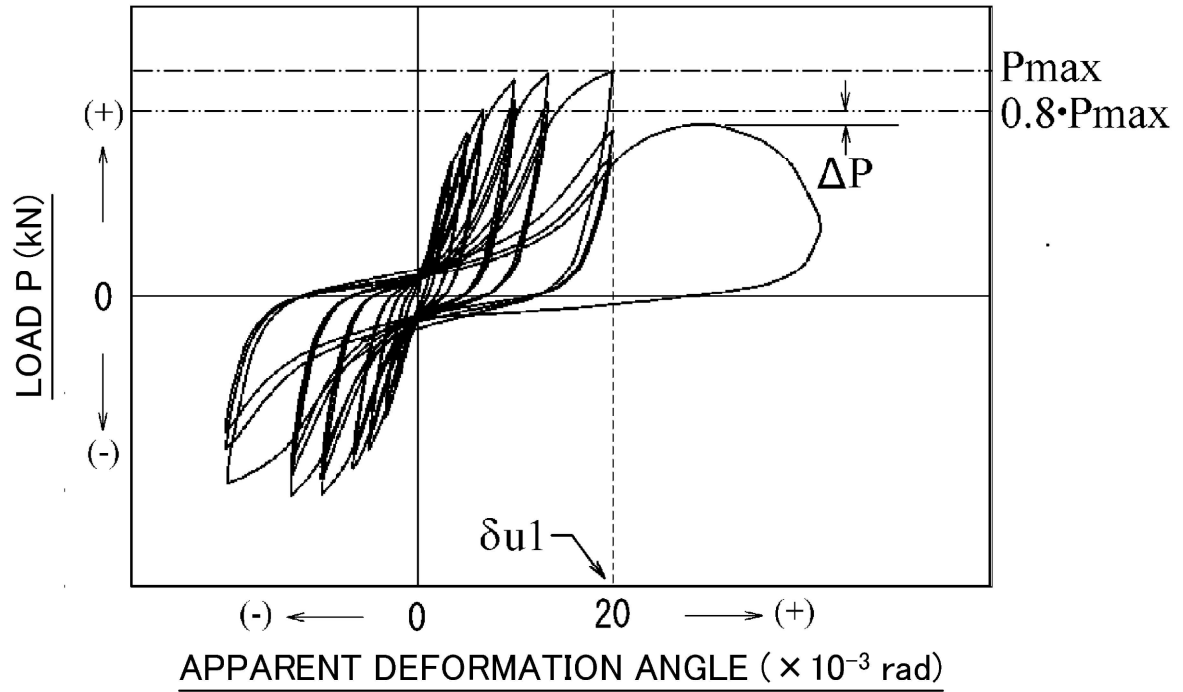
	EXAMPLE 1	EXAMPLE 2	EXAMPLE 3	EXAMPLE 4	EXAMPLE 5	COMPARATIVE EXAMPLE
SURFACE DENSITY OR SURFACE WEIGHT (kg/m ²)	7.7	7.7	8.7	7.3	7.9	9.8
SPECIFIC GRAVITY	0.79	0.78	0.89	0.74	0.96	1.00
THICKNESS	9.73	9.84	9.73	9.84	8.20	9.78
ORGANIC STRENGTH ENHANCER (CALCINED GYPSUM RATIO) PARTS BY MASS	2.4	2.4	1.5	11.8	1.5	0.8
INORGANIC FIBER (CALCINED GYPSUM RATIO) PARTS BY MASS	4.0	4.0	3.0	3.6	1.5	1.5
LATERAL NAIL RESISTANCE (N)	631	598	750	593	504	985
YIELD STRENGTH Py (kN)	11.1	10.3	12.0	9.0	8.6	10.4
ULTIMATE STRENGTH (CORRECTION VALUE) Pu' (kN)	10.7	9.9	10.4	8.7	8.0	7.6
ULTIMATE DISPLACEMENT δu_2 ($\times 10^{-3}$ rad)	33.1	36.0	28.1	32.3	26.8	20.0

FIG.4

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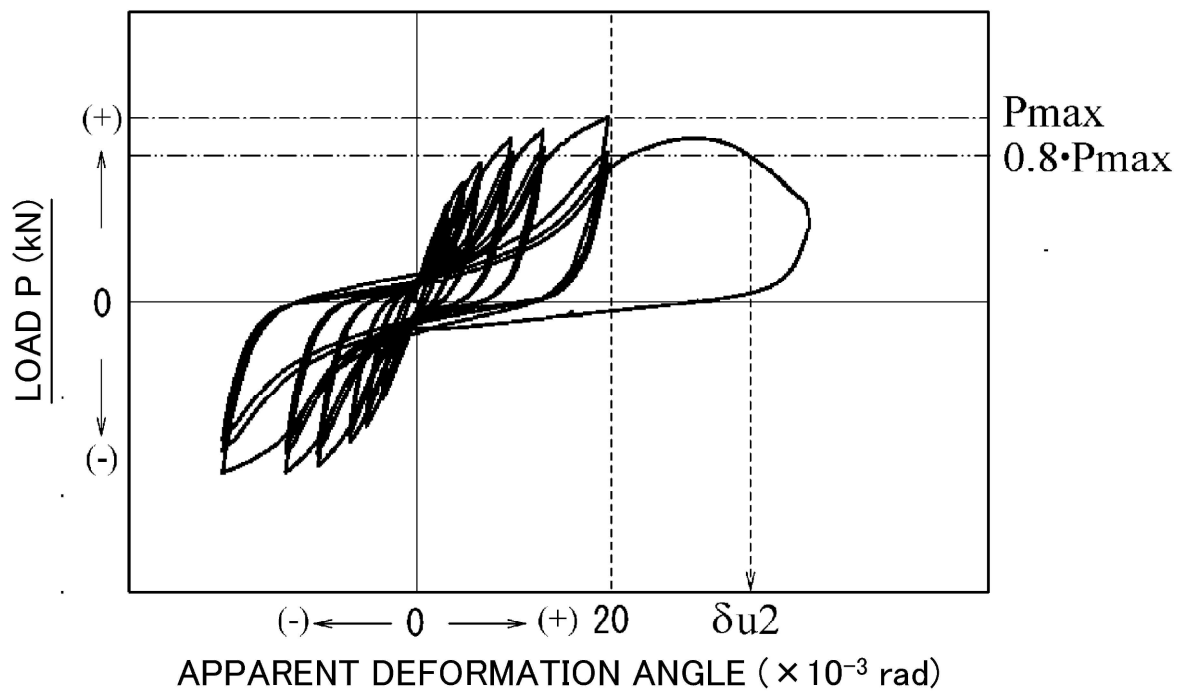
(A)

(COMPARATIVE EXAMPLE)

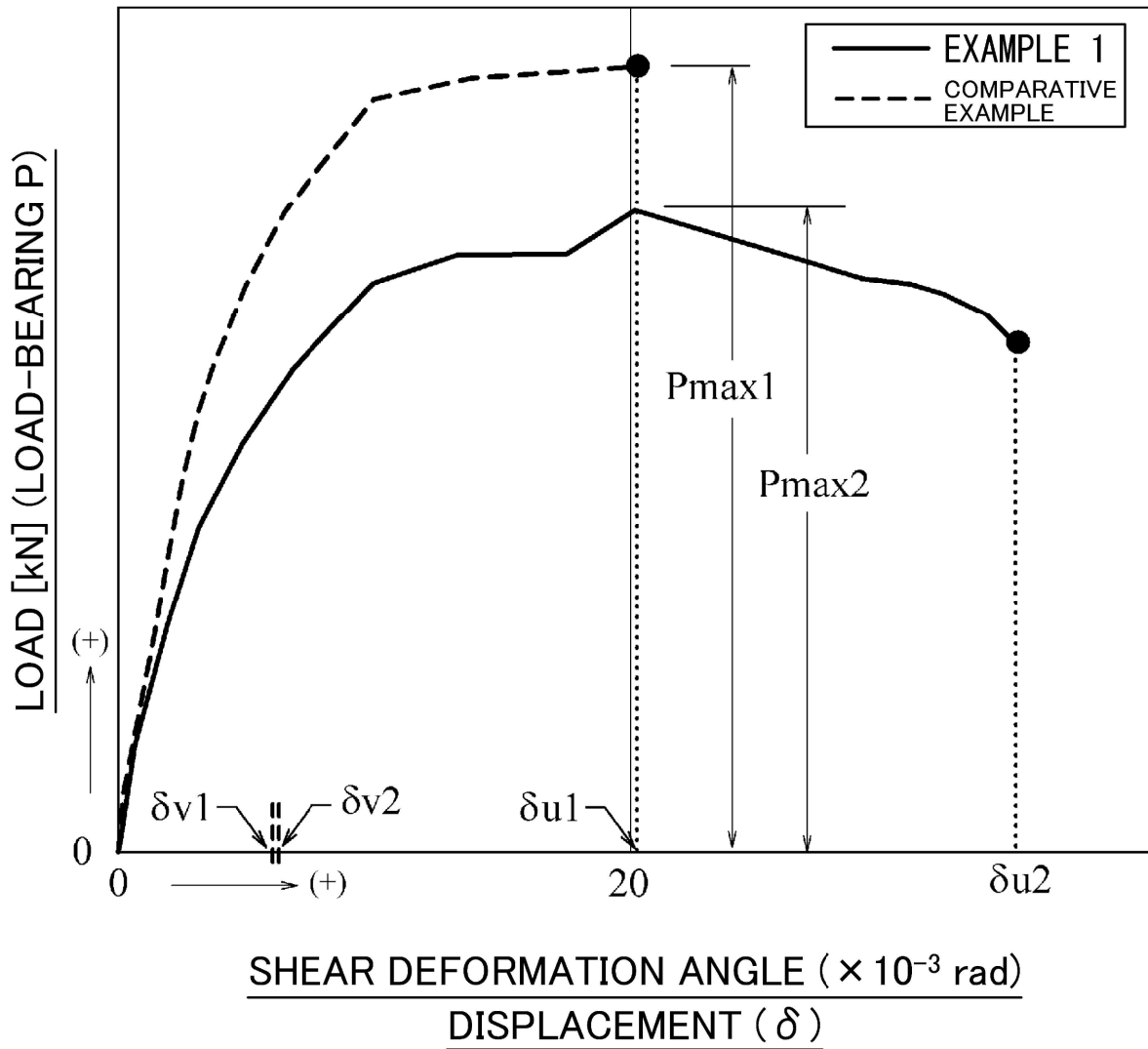


(B)

(EXAMPLE 1)



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FIG.5



	SURFACE DENSITY	ULTIMATE DISPLACEMENT	SHORT-TERM REFERENCE SHEAR STRENGTH	CO-EFFICIENT OF EFFECTIVE WALL LENGTH
EXAMPLE 1	7.7 kg/m ²	δu2=33.1	P ₀ =10.7 kN	2.25
COMPARATIVE EXAMPLE	10.0 kg/m ²	δu1=20.0	P ₀ = 7.6 kN	1.60

$$P_0 = \beta \times P_u'$$

$$P_u' = P_u \times 0.2 \sqrt{2\mu - 1}$$

$$\mu = \frac{\delta u}{\delta v}$$

$$P_a = P_0 \times \alpha$$

$$\text{CO-EFFICIENT OF EFFECTIVE WALL LENGTH} = \frac{P_a}{L \times 1.96 \text{ (kN/m)}}$$

*ASSUME REDUCTION COEFFICIENT $\alpha = 0.75$.

*ASSUME VARIATION COEFFICIENT $\beta = 1.0$.

P_a: SHORT-TERM ALLOWABLE SHEAR STRENGTH

P₀: SHORT-TERM REFERENCE SHEAR STRENGTH

P_u': ULTIMATE STRENGTH (CORRECTION VALUE)

P_u: ULTIMATE STRENGTH

μ: PLASTICITY

δu: ULTIMATE DISPLACEMENT (×10⁻³ rad)

δv: YIELD POINT DISPLACEMENT (×10⁻³ rad)

α: REDUCTION COEFFICIENT

β: VARIATION COEFFICIENT

L: LENGTH OF TEST PIECE (TEST WALL) (m)

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FIG.6

