

**TABLE A104.2  
GABLE END RETROFIT ELEMENT SIZING AND FASTENING**

Exposure Category	Maximum 3-Sec Gust Basic Wind Speed (V) <sup>a</sup>	Maximum Height of Gable End Stud <sup>b</sup>			
		8'-0"	11'-3"	14'-9"	16'-0"
C	110	8'-0"	11'-3"	14'-9"	16'-0"
C	120	7'-6"	10'-6"	13'-6"	16'-0"
C	130	7'-0"	10'-0"	12'-3"	16'-0"
C	150	6'-6"	8'-9"	11'-0"	16'-0"
B	110	8'-0"	12'-3"	16'-0"	N/A <sup>c</sup>
B	130	8'-0"	11'-3"	14'-9"	16'-0"
B	140	7'-6"	10'-6"	13'-6"	16'-0"
B	150	7'-0"	10'-0"	12'-3"	16'-0"
		Reference Figures			
		Figures	Figures	Figures	Figures
		1504.2.2 / 1504.2.7	1504.2.3 / 1504.2.8	1504.2.4 / 1504.2.9	1504.2.5 / 1504.2.10
	Retrofit Elements				
1	Minimum Horizontal Brace	2x4	2x4	2x4	2 each 2x4
2	Minimum number of fasteners to connect Horizontal Brace to existing framing # 8 screws or 10d nails 3" long	3	3	3	3
3	Minimum Retrofit Stud	2x4	2x6	2x8	2 each 2x8
4	Minimum Flat Strap Anchor Length <sup>d</sup>	21"	30"	38"	2 straps 30"
5	Minimum number of fasteners to connect Flat Strap to Retrofit Stud 1 1/4" long fasteners 1 1/4" long	6	9	12	8 on each strap
6	Maximum on center spacing of fasteners to connect Retrofit Stud to Existing Stud # 8 screws or 10d nails 3" long	6"	6"	6"	6"
7	Minimum number of fasteners to connect Strap to Retrofit Stud 1 1/4" long fasteners	6	9	12	8 on each strap

	1 1/4" long				
8	Minimum length of Compression Block	11 1/4"	13 3/4"	16 1/4"	17 1/2"
9	Minimum number of fasteners to connect Compression Block to Horizontal Brace # 8 screws or 10d nails 3" long	6	8	10	12

For SI: 1 Inch = 25.4mm, 1 Foot = 304.8mm

a. Interpolation between given wind speeds not permitted.

b. Existing gable end studs less than or equal to 3'-0" in height shall not require retrofitting.

c. N/A = Not Applicable. Exceeds 16'-0" maximum height.