## 1311.0502 **SECTION 502, ADDITIONS.**

Subpart 1. Section 502.4 Existing structural elements carrying gravity load. IEBC section 502.4 is amended to read as follows:

**502.4 Existing structural elements carrying gravity load.** Any existing gravity load-carrying structural element for which an addition and its related alterations cause an increase in design dead, live, or snow load, including snow drift effects, that increases the demand-capacity ratio to more than 105 percent shall be replaced or altered as needed to carry the gravity loads required by the International Building Code for new structures. The evaluation of demand-capacity ratios and calculation of design gravity loads, forces, and capacities shall account for the cumulative effects of additions and alterations since original construction. Any existing gravity load-carrying structural element whose vertical load-carrying capacity is decreased as a part of the addition and its related alteration shall be considered an altered element subject to the requirements of IEBC section 503.3. Any existing element that will form part of the lateral load path for any part of the addition shall be considered an existing lateral load-carrying structural element subject to the requirements of IEBC section 502.5.

(The exception remains unchanged.)

Subp. 1a. Section 502.5 Existing structural elements carrying lateral load. The first exception to IEBC section 502.5 is amended to read as follows:

1. Any existing lateral load-carrying structural element for which an addition causes an increase in demand-capacity ratio to no more than 110 percent shall be permitted to remain unaltered. For purposes of calculating demand-capacity ratios, the demand shall consider applicable load combinations with design lateral loads or forces in accordance with IBC section 1609. For purposes of this exception, comparisons of demand-capacity ratios and calculation of design lateral loads, forces, and capacities shall account for the cumulative effects of additions and alterations since original construction.

(The second exception remains unchanged.)

Subp. 2. Section 502.6 Smoke alarms in existing portions of a building. IEBC section 502.6 is amended to read as follows:

**502.6** Smoke alarms in existing portions of a building. Where an addition is made to a building or structure of a Group R or I-1 occupancy, the existing building shall be provided with smoke alarms in accordance with the Minnesota Building Code, chapter 1305.

**Statutory Authority:** MS s 326B.02; 326B.101; 326B.106; 326B.13

**History:** 39 SR 95; 44 SR 487

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