

APPENDIX: BUILDING CODES for SIGNS

IDENTIFICATION

Every sign regulated under the *Jersey County Billboard & Sign Ordinance* hereafter erected, constructed or maintained, for which a permit is required shall be plainly marked with the *name of the person, firm or corporation erecting and maintaining such sign* and shall have affixed on the front thereof the permit number tag issued for said sign or other method of identification approved by the County Code Administrator.

DESIGN AND CONSTRUCTION

General: Signs shall be designed and constructed to comply with the provisions of the 2018 International Building Code (IBC) in determining use of materials, loads and stresses. **Permits, Drawings and Specifications:** Where a permit is required, as provided in

(IBC), construction documents shall be required. These documents shall show the dimensions, materials and required details of construction, including loads, stresses and anchors.

Wind Load: Signs shall be designed and constructed to withstand wind pressure as provided for in (IBC).

Seismic Load: Signs designed to withstand wind pressures shall be considered capable of withstanding earthquake loads, except as provided for in (IBC).

Working Stresses: For signs regulated under the *Jersey County Billboard & Sign Ordinance*, the allowable working stresses shall conform to the requirements of the (IBC). The working stresses of wire rope and its fastenings shall not exceed 25 percent of the ultimate strength of the rope or fasteners.

Exceptions:

The allowable working stresses for steel and wood shall be in accordance with the

provisions of the (IBC). The working strength of chains, cables, guys or steel rods shall not exceed one-fifth of the ultimate strength of such chains, cables, guys or steel.

Attachment: Signs attached to masonry, concrete or steel shall be safely and securely fastened by means of metal anchors, bolts or approved expansion screws of sufficient size and anchorage to safely support the loads applied.

ELECTRICAL

Illumination: A sign shall not be illuminated by other than electrical means, and electrical devices and wiring shall be installed in accordance with the requirements of the 2017 National Electrical Code (NEC). Any open spark or flame shall not be used for display purposes unless specifically approved.

Electrical service: Signs that require electrical service shall comply with the 2017 National Electrical Code (NEC).

GROUND SIGNS

Wooden anchors and supports: Where wood anchors or supports are embedded in the soil, the wood shall be pressure treated with an approved preservative.

WALL SIGNS

Exterior wall mounting details: Wall signs attached to exterior walls of solid masonry, concrete or stone, shall be safely and securely attached by means of metal anchors, bolts or expansion screws of not less than 3/8-inch (9.5 mm) diameter and shall be embedded at 5 inches (127 mm). Wood blocks shall not be used for anchorage, except in the case of wall signs attached to buildings with walls of wood. A wall sign shall not be supported by anchorages secured to an un-braced parapet wall.

PROJECTING SIGNS

General: Projecting signs shall be constructed entirely of metal or other noncombustible material and securely attached to a building or structure by metal supports such as bolts, anchors, supports, chains, guys or steel rods. Staples or nails shall not be used to secure any projecting sign to any building or structure. The dead load of projecting signs not parallel to the building or structure and the load due to wind pressure shall be supported with chains, guys or steel rods having net cross-sectional dimension of not less than 3/8 inch (9.5 mm) diameter. Such supports shall be erected

or maintained at an angle of at least 45 percent (0.78 rad) with the horizontal to resist the dead load and at angle of 45 percent (0.78 rad) or more with the face of the sign to resist the specified wind pressure. If such projecting sign exceeds 30 square feet (2.8 m²) in one facial area, there shall be provided at least two such supports on each side not more than 8 feet (2438 mm) apart to resist the wind pressure.

Attachment of supports: Supports shall be secured to a bolt or expansion screw that will develop the strength of the supporting chains, guys or steel rods, with a minimum 5/8-inch (15.9-mm) bolt or lag screw, by an expansion shield. Turnbuckles shall be placed in chains, guys or steel rods supporting projecting signs.

Wall mounting details: Chains, cables, guys or steel rods used to support the live or dead load of projecting signs are permitted to be fastened to solid masonry walls with expansion bolts or by machine screws in iron supports, but such supports shall not be attached to an un-braced parapet wall. Where the supports must be fastened to walls made of wood, the supporting anchor bolts must go through the wall and be plated or fastened on the inside in a secure manner.

Additional loads: Projecting sign structures which will be used to support an individual on a ladder or other servicing device, whether or not specifically designed for the servicing device, shall be capable of supporting the anticipated additional load, but not less than a 100-pound (445 N) concentrated horizontal load and a 300-pound (1334N) concentrated vertical load applied at the point of assumed or most eccentric loading. The building component to which the projecting sign is attached shall also be designed to support the additional loads.