

# ICC Model Code Content Involving Automated Vehicular Gate Systems

## Introduction

The gate and gate operator industry has worked diligently to address automated vehicular gate system safety by creating and maintaining standards intended to be referenced in job specifications. Since it is more beneficial to have such specifications be based on requirements found in International Code Council (ICC) model codes, the industry has worked to include information related to automated vehicular gate systems in the model code publications where appropriate. This Technical Data Sheet includes descriptions of the codes and code sections of interest as well as a brief background behind development of the standards now referenced in ICC model codes.

## Background Behind Development of Standards

Up until the mid-1990s, automated vehicular gate systems installed without adequate concern for pedestrians resulted in some injuries and deaths. The Consumer Product Safety Commission (CPSC) collected data on these accidents, and the industry concluded that the existing standards required strengthening. As a result, UL 325, a gate and door operator standard that had been in existence since the early 1970s, was substantially revised in the late 1990s. The version of UL 325 that became effective in March 2000 brought significant changes, perhaps most importantly, a requirement that two levels of entrapment protection be provided.

Meanwhile, in 1998, representatives of the American Fence Association (AFA), the National Ornamental & Miscellaneous Metals Association (NOMMA), and the Door & Access Systems Manufacturers Association (DASMA) first envisioned the inclusion of requirements in the ICC model codes. They believed that codes should reference not only UL 325, but also an additional standard that would govern gate design and installation. These groups formed a coalition to develop and maintain the content of a gate construction standard, known as ASTM F2200, which was first published in 2002.

## Codes and Code Sections of Interest

After nearly 10 years of effort on the part of DASMA, provisions addressing automated vehicular gate systems began appearing in ICC model codes. Where automated vehicular gate systems language is used, reference to compliance to UL 325 and ASTM F2200 is noted.

- Beginning with the 2009 edition of the *International Building Code*® (IBC), Section 3110 requires compliance for automated vehicular gate systems installed in buildings, facilities and portions thereof.
- Beginning with the 2009 edition of the *International Fire Code*® (IFC), both Section 503 and Appendix D of the 2009 IFC require compliance for automated vehicular gate systems installed across "fire apparatus access roads". Such roads are defined as providing fire apparatus access from a fire station to a facility, building or portion thereof, and are inclusive of fire lanes, public roads, private roads, parking lot lanes and access roadways.
- Beginning with the 2012 *International Residential Code*® (IRC), Appendix O governs automated vehicular gate systems installed on the lots of one- and two-family dwellings.
- Also, beginning with the 2012 *International Property Maintenance Code*® (TPMC), language for gates was updated. Section 304.19 note that all exterior gates, gate assemblies, and operator systems if provided, shall be maintained in good condition.

## Conclusion

The gate and gate operator industry believes that these actions complete the task of referencing automated vehicular gate systems in all pertinent ICC model codes. ICC model codes are updated every three years, and the industry, through DASMA, is committed to monitoring developments on an ongoing basis to preserve and strengthen the requirements in the name of safety.