

Today's architects, project managers, contractors and end-users require more than product specifications from manufacturers. If that was sufficient, Blue Ember Technologies (BET) more than already satisfies client needs. Today's demand for public accountability, however, requires compliance with a growing tripartite family of codes, voluntary standards, and performance-based measures. It is here that BET, consistent with its educational commitment, assists customers to increase compliance and successful bidding. BET will provide one-on-one help to apply the three sectors to your project. BET's bollards are in compliance with each of these and, upon your request, we provide mill production certificates or project design scenarios.

CODES

Codes have the force of law when they have been incorporated into a contract. They typically are revised every three years, and a code can be amended relative to jurisdictional decisions to make it more usable for a local area to comply with other ordinances. Building codes are the law applied to buildings. Codes can incorporate standards or even performance-based measures (see next sections), but for the most part, model codes are prescriptive in nature. BET has incorporated design and construction specification into its bollards to meet the conditions of the:

- International Fire Code (IFC) Section 503
- International Building Code (IBC) Section 1607.7.3
- Florida Building Code (FBC) Section 1618.5.3 — Applies to hurricane zones
- American Association of State Highway and Transportation Officials (AASHTO) Section 2.7
- US Department of State (DOS) SD-STD-02.01 Vehicle Crash Standards
- American Society for Testing and Materials (ASTM) F2656-07 Vehicle Crash Standards

STANDARDS

Standards are arrived at by a consensus of experts for whose industry they are written and set the benchmark to which everything else is measured, thereby providing confidence, reliability, and compatibility in the marketplace. In the construction industry (as applied to BET's bollards) standards address quality of materials, installation methods, classification, and design criteria. Standards may be voluntary or compulsory, such as when they are incorporated in a code or contract. Those to which BET is often responsive include the following:



The American Recovery and Reinvestment Act (ARRA) of 2009, 48 CFR Part 5, subpart 25.6 — Buy American Act — relates to Solicitation Provisions and Contract Clauses, and requires that iron, steel and other manufactured goods used for a project for the construction, alteration, maintenance or repair of a public work must be produced or manufactured in the United States.



The Federal Public Transportation Law, 49 U.S.C. Chapter 53, Title 49, part 661 — Buy America Requirements — requires that grantee funds from the Federal Transportation Administration for the purchase of steel and iron be restricted to components and manufacturing processes having their origin in the United States.



American Society for Testing and Materials — ASTM documentation of bollard steel/iron content as well as steel mill published certificates and test reports verifying the integrity of the steel (as required by the various ASTM steel standards noted in the product specifications) are available upon request.

To learn more about our products visit www.maxiforcebollards.com

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Codes & Standards Compliance

MAXIFORCE'S COMMITMENT TO OUR CLIENT'S COMPLIANCE WITH
CONSTRUCTION CODES, STANDARDS, AND PERFORMANCE-BASED MEASURES
MAXIFORCEBOLLARDS.COM • BLUE EMBER TECHNOLOGIES, LLC.



LEED Certification — For projects seeking LEED Certification, one Material Resource MR Credit 4.1 is awarded when 10 % of building materials are recycled based on total value of the project's materials, and a second Material Resource MR Credit 4.2 is awarded when 20% of recycled materials are based on the total value of the project's materials. In each case the recycled material content shall be composed of the sum of post-consumer content, and one-half of the pre-consumer content.

LEED credits also are awarded based on the proximity of the project to the point of manufacture. One MR Credit 5.1 is awarded when 10% of building materials are manufactured regionally, within 500 miles of the project. A second MR Credit 5.2 is awarded when 20% of the building materials are manufactured, within 500 miles of the project.

LEED credits are awarded for a number of Sustainable Site (SS) qualities. These in turn have been coordinated with the 22 Department of Defense's Minimum Antiterrorism Standards for Buildings (UFC 4-010-01). BET's bollards often contribute to fulfilling the requirements of both Sustainable Sites and DoD site protection. Our staff will advise clients on how best to use bollards to meet LEED and DoD site-related standards.



Whole Building Design Guide — The National Institute of Building Science's remarkable WBDG Internet portal has now become the construction industry's titular standard for private firms and government agencies. And BET has led the industry in applying WBDG standards to bollard applications, from concept to performance-based design. So, when a customer purchases a BET bollard, we stand ready to show its systemic application to all eight Design Objectives of the WBDG.

PERFORMANCE-BASED DESIGN

Performance-based design (PBD) is the new kid on the block when it comes to product design. It differs from the "prescriptive" qualities of a code in that it requires measurement of the outcome of a code for those affected by it. As in the case of BET's apparatus-collapsible bollards, "time-to-access" a fire lane expedites compliance with NFPA's standard of a two-minute set-up time.

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