Designation: F2408 – 16

Standard Specification for Ornamental Fences Employing Galvanized Steel Tubular Pickets[1]

This standard is issued under the fixed designation F2408; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This specification establishes the minimum requirements for coated tubular picket ornamental fence systems fabricated from galvanized steel components.

1.2 The requirements of this specification do not apply to vertical bar fence systems utilizing solid bar or wrought iron materials.

1.3 The values stated with in-pound units are to be regarded as standard. The SI values in parentheses are provided for information.

2. Referenced Documents

2.1 *ASTM Standards:*[2]

A239 Practice for Locating the Thinnest Spot in a Zinc (Galvanized) Coating on Iron or Steel Articles

A653/A653M Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process

A1008/A1008M Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable

A1011/A1011M Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength

B117 Practice for Operating Salt Spray (Fog) Apparatus

D523 Test Method for Specular Gloss

D714 Test Method for Evaluating Degree of Blistering of Paints

D822 Practice for Filtered Open-Flame Carbon-Arc Exposures of Paint and Related Coatings

D1654 Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments

D2244 Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates

D2794 Test Method for Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)

D3359 Test Methods for Measuring Adhesion by Tape Test

E4 Practices for Force Verification of Testing Machines

F2814 Guide for Design and Construction of Ornamental Steel Picket Fence Systems for Security Purposes

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 *adhesion*—the bonding integrity of an organic coating to the base metal substrate.

3.1.2 *corrosion resistance*—the ability of an organically coated metal product to resist attack due to the base metal attempting to return to a more passive oxidized state.

3.1.3 *fence panel*—fabricated unit consisting of rails and pickets. Also referred to as a fence section.

3.1.4 *impact resistance*—the measure of an organically coated metal product to resist indention; the ability of a coating to resist cracking or loss of adhesion due to reforming the metal during bending or a shape change from abuse.

3.1.5 *ornamental accessory*—any fitting that adds further decoration to an ornamental metal fence system including items such as finials, caps, picket collars, rings, scrolls, or other ornamental panel inserts.

3.1.6 *post*—vertical fence structural component that supports the panel in the ornamental metal fence system.

3.1.7 *rail*—horizontal structural component of a fence panel.

3.1.8 *tubular picket*—hollow vertical ornamental component of a fence panel.

3.1.9 *tubular picket ornamental metal fence system*—an architectural metal fence system that combines ornamental fence structural components (that is, tubular pickets, rails, and posts) with ornamental accessories and fasteners, assembled and evaluated as a complete installed structure.

[1] This specification is under the jurisdiction of ASTM Committee F14 on Fences and is the direct responsibility of Subcommittee F14.35 on Architectural Metal Fence Systems.

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[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

3.1.10 *weathering resistance*—the ability of an organically coated metal product to resist loss of coating gloss or color change due to excessive humidity or ultra-violet (UV) sunlight exposure.

4. Significance and Use

4.1 The purpose of this specification is to define minimum selection criteria and test procedures to ensure product users that a tubular picket ornamental metal fence system has the strength necessary to withstand reasonable loads and penetration forces, and has the appropriate combination of material and surface protection to withstand the harmful effects of corrosion and weathering for an extended period of time.

4.2 For security applications, more definitive requirements are listed in Guide F2814.

5. Materials and Manufacture

5.1 Steel material for tubular picket ornamental fence system structural components shall be galvanized by the hot-dip process, either after forming (in accordance with 5.1.1), or prior to forming (in accordance with 5.1.2).

5.1.1 Steel material for fence structural components (that is, tubular pickets, rails, and posts), when galvanized after forming, shall conform to the requirements of Specification A1008/A1008M or Specification A1011/A1011M, with a minimum yield strength of 45 000 psi (310 MPa). The exterior shall be hot-dip galvanized with a 0.3 oz/ft^2 (92 g/m^2) minimum zinc weight. The exterior galvanized surface shall be chemical treated or conversion coated to adhere a polymeric coating. A polymeric coating shall be applied and provide a minimum of 95 % surface coverage as disclosed by Practice A239, Procedure 7.1. The interior surface shall be coated with a thermosetting coating containing zinc or other rust inhibitors and have 0.3 mils (0.0076 mm) minimum thickness.

5.1.2 Steel material for fence structural components (that is, tubular pickets, rails, and posts), when galvanized prior to forming, shall conform to the requirements of Specification A653/A653M, with a minimum yield strength of 45 000 psi (310 MPa). For Industrial applications (see Table 1), the steel shall be hot-dip galvanized to meet Specification A653/A653M with a minimum zinc coating weight of 0.9 oz/ft^2 (276 g/m^2), Coating Designation G-90. For Commercial and Residential applications (see Table 1), the steel shall be hot-dip galvanized to meet Specification A653/A653M with a minimum zinc coating weight of 0.6 oz/ft^2 (184 g/m^2), Coating Designation G-60.

5.2 *Organic Coating Materials:*

5.2.1 Powder coatings applied to the exterior surface of fence components shall be polymer material: polyester or epoxy and polyester combinations having a minimum thickness of 3 mils; polyolefin elastomer having a minimum thickness of 7 mils; or PVC having a minimum thickness of 10 mils.

5.2.2 Wet coating applied to the exterior surface of fence components shall be a two-coat paint application system (one coat of epoxy, polyester or polyurethane primer; one coat of polyester, polyurethane, or acrylic liquid) with the total combined coating having a minimum thickness of 2 mils.

5.3 Fittings, fasteners, and decorative accessories for ornamental steel fence systems shall be manufactured with a material and finish coating that meets the same protective coating performance requirements as required for panels and posts.

6. Physical Dimensions

6.1 Cross-section and thickness dimensional requirements for ornamental metal fence structural components shall be as specified by the manufacturer, provided that the performance criteria of Section 8 are met. Table 1 is provided as a guideline to show nominal values typically used for residential, commercial, and industrial applications.

6.2 Fence height and space between rails may vary in accordance with manufacturer's standards, provided local ordinances and building codes do not limit these dimensions for a specific application, such as might be the case for pool safety, gate safety, or structural wind load bearing capacity. No sharply pointed picket tops shall be used on fences less than four ft (1.22 m) in height.

NOTE 1—Fence height is a nominal value and is typically the distance from grade to the top of the fence.

6.3 The spacing between pickets shall be four in. (101.6 mm) or less; however, if applicable local regulations (such as may be applied to pool fencing, child care facility fencing, public railing systems, or fencing adjacent to automated gates, and so forth) have more restrictive spacing requirements, then those local regulations shall govern.

7. Workmanship

7.1 All ornamental metal fence system components shall be produced using materials and finishes specified in Section 5, and shall be free from defects in workmanship.

TABLE 1 Nominal Sizes for Ornamental Fence Structural Components

Application	Component	Typical Cross-Section	Wall Thickness
Residential	Picket	⅝ by ⅝ in. (15.9 by 15.9 mm)	18 Ga.
	Rail	1 by 1 in. (25.4 by 25.4 mm)	18 Ga.
	Post	2 by 2 in. (50.8 by 50.8 mm)	16 Ga.
Commercial	Picket	¾ by ¾ in. (19.0 by 19.0 mm)	16 Ga.
	Rail	1-⅜ by 1-½ in. (34.9 by 38.1 mm) or 1-½ by 1-½ in. (38.1 by 38.1 mm)	14 Ga.
	Post	2-½ by 2-½ in. (63.5 by 63.5 mm)	14 Ga.
Industrial	Picket	1 by 1 in. (25.4 by 25.4 mm)	16 Ga.
	Rail	1-⅜ by 1-½ in. (34.9 by 38.1 mm) or 1-½ by 1-½ in. (38.1 by 38.1 mm)	14 Ga.
	Post	3 by 3 in. (76.2 by 76.2 mm)	12 Ga.

8. Testing—Structural

8.1 *Structural Test Method A—Application of Horizontal Concentrated Load:*

8.1.1 *Installation of Test Specimen*—One line of fence with a minimum of three panels of the fence system to be tested shall be installed in accordance with the manufacturer's specifications and drawings. Selection of the test specimen should consider the maximum range of styles and sizes to be certified (see Section 10).

8.1.2 *Apparatus:*

8.1.2.1 *Testing Machine*—Any testing machine or loading device, capable of imposing forces accurate to within 1 % (plus or minus), when calibrated in accordance with Practices E4, is suitable and may be used, provided the requirements of specified rate of loading and unloading are met. The testing device shall be of sufficient capacity to prevent yielding of its various components and shall ensure that the applied load remains essentially parallel to the relevant axis of the assembly during testing.

8.1.2.2 *Test System*—A diagrammatic test set-up for applying horizontal tension forces to the assembly is shown in Fig. 1. The bearing plate, normally 6 in. (150 mm) long, shall be of sufficient size to prevent local failure of the surrounding structural members or components. The loading device shall be attached to the assembly by means of pins or a swivel connector to prevent the direct transfer of any flexural forces through the connection.

8.1.2.3 *Deflection Measurements*—Dial gauges, having a smallest division of not more than 0.01 in. (0.25 mm), or any suitable measurement devices or calibrated sensors of at least comparable accuracy and sensitivity shall be used to measure the horizontal displacements of the top rail relative to its original location at each loading point prior to load application. These devices shall have sufficient measurement capability to indicate the displacement throughout the test range.

8.1.3 *Procedure:*

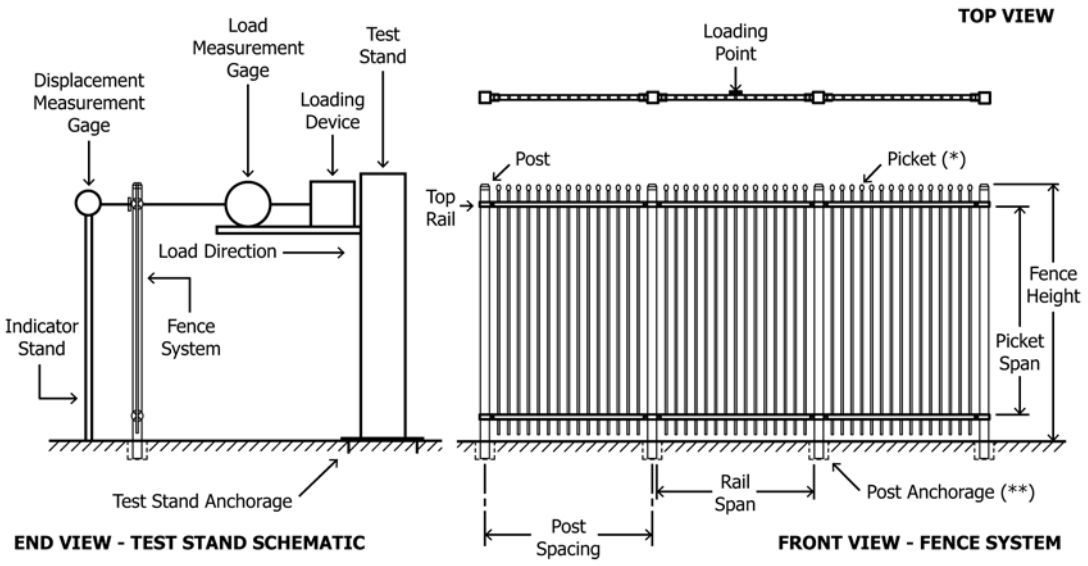
8.1.3.1 *Positioning*—Position the test stand in such a way that the load is applied, as shown in Fig. 1, to the structural member perpendicular to the plane of the fence system without causing any local failure at the point of load application.

8.1.3.2 *Mounting of Instruments*—Mount the dial gauge, measurement device, or sensor at the loading point as is shown in Fig. 1. Place the sensing element of the instrument in contact with and normal to the surface or an extension of the surface of the top rail of the fence system being tested in such a way as to measure displacement in the direction of the applied load.

8.1.4 *Load Application:*

8.1.4.1 *Initial Load Application*—Apply an initial load corresponding to 50 % of the required test load (see Table 2) for a minimum of two minutes in order to bring all members into full bearing. Reduce load to 25 % of the required test load (50 % of the preload), and observe the initial deflection. The deflection at this initial test load shall be the base point for subsequent deflection readings.

8.1.4.2 *Step Load Application*—Once the initial deflection point has been established, load application shall proceed at a uniform rate (see 8.1.4.3) to the required test load, held for a minimum of one minute, and released to the initial load, where the final deflection shall be determined (by subtracting the deflection reading at initial test load from the deflection reading at the required test load) for comparison with the maximum allowable residual deflection in Table 2. If more detailed information on deformation rate versus load application is desired, the load may be applied in constant-level steps to the required test load instead of the single step load application. For multiple step loads, each step (equal to approximately



* Note 1 - Any picket point style is acceptable on tested system; pickets may extend through the rails (as shown) or may terminate at the rails. Range of qualification is based on maximum picket span.

** Note 2 - Anchorage should be to concrete surface using core-drilled holes filled with grout or welded base plates and anchor bolts. Anchorage is not intended to be part of the structural test; failure of the anchorage system will void the test.

FIG. 1 Test Set-Up for Application of Horizontal Concentrated Load

TABLE 2 Required Test Load Capabilities

Class	Required Test Load—Method A (Based on Residual Deflection Less Than ½ in. (12.7 mm)	Required Test Load—Method B (Based on Residual Deflection Less Than ½ in. (12.7 mm)	Required Test Load—Method C (Based on Residual Deflection Less Than ¼ in. (6.4 mm)	Required Test Load—Method D (Based on Residual Deflection Less Than ¼ in. (6.4 mm)[A]
Industrial	300 lbf (1330 N)	400 lbf (1780 N)	100 lbf (440 N)	100 lbf (440 N)
Commercial	200 lbf (890 N)	300 lbf (1330 N)	75 lbf (330 N)	75 lbf (330 N)
Residential	100 lbf (440 N)	200 lbf (890 N)	50 lbf (220 N)	50 lbf (220 N)

[A] Test Method D Capability also requires that the test cone never penetrates beyond the tapered portion during any step load increment including the required test load.

15 % of the required test load) should be released to the initial test load for observation of the corresponding residual deflection. The initial and incremental readings of the force and deflection gauges at each load point can then be recorded in the form of load-deformation curves.

8.1.4.3 *Rate of Loading*—The rate of loading to the required test load (or between increments if multiple steps are chosen) shall be uniform throughout the test and such that the load is applied at a constant rate of deformation of 0.20 in. ± 0.10 in. (5.0 mm ± 2.5 mm) per minute. If this rate of loading cannot be achieved because of the type of testing machine used or the equipment available, the rate of loading shall be as near to that required in this subsection.

8.2 *Structural Test Method B—Application of Vertical Concentrated Load:*

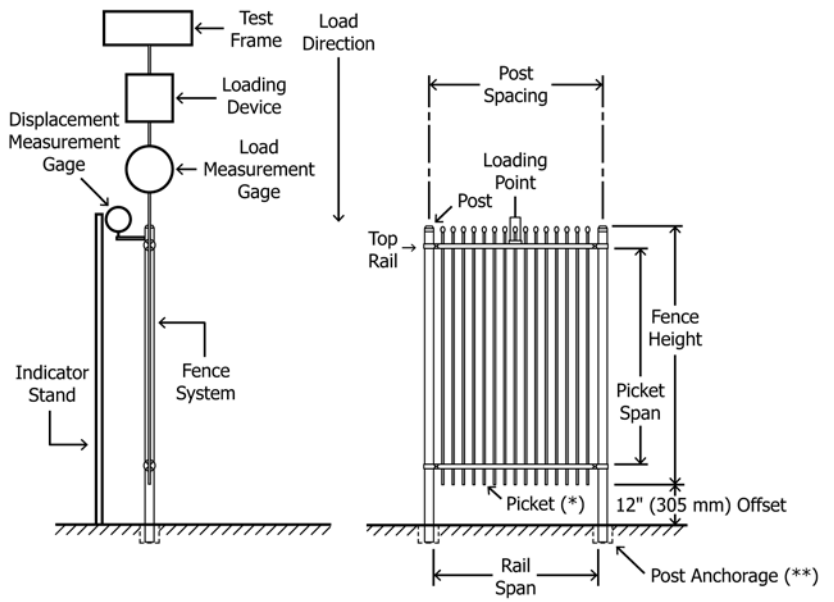
8.2.1 *Installation of Test Specimen*—A minimum of one panel of the fence system to be tested shall be installed in accordance with the manufacturer's specifications and drawings. Selection of the test specimen should consider the maximum range of styles and sizes to be certified (see Section 10). The bottom of the fence panel shall be elevated by an offset distance of approximately 12 in. (305 mm) to allow for downward elastic deformation during test load application.

8.2.2 *Apparatus:*

8.2.2.1 *Testing Machine*—Any testing machine or loading device, capable of imposing forces accurate to within 1 % (plus or minus), when calibrated in accordance with Practices E4, is suitable and may be used, provided the requirements of specified rate of loading and unloading are met. The testing device shall be of sufficient capacity to prevent yielding of its various components and shall ensure that the applied load remains essentially parallel to the relevant axis of the assembly during testing.

8.2.2.2 *Test System*—A diagrammatic test set-up for applying vertical forces to the assembly is shown in Fig. 2. The bearing plate, normally 4 in. (101.6 mm) long, shall be of sufficient size to prevent local failure of the surrounding structural members or components. The bearing plate shall be positioned flush to the top rail and shall have a hole at its center sufficiently sized to fit over a picket if the style being tested has pickets that extend above the top rail. The loading device shall be attached to the assembly by means of pins or a swivel connector to prevent the direct transfer of any flexural forces through the connection.

8.2.2.3 *Deflection Measurements*—One dial gauge, having a smallest division of not more than 0.01 in. (0.25 mm), or any



* Note 1 - Any picket point style is acceptable on tested system; pickets may extend through the rails (as shown) or may terminate at the rails. Range of qualification is based on maximum picket span.

** Note 2 - Anchorage should be to concrete surface using core-drilled holes filled with grout or welded base plates and anchor bolts. Anchorage is not intended to be part of the structural test; failure of the anchorage system will void the test.

FIG. 2 Test Set-Up for Application of Vertical Concentrated Load

suitable measurement device or calibrated sensor of at least comparable accuracy and sensitivity shall be used to measure the vertical displacements of the top rail relative to the original location at the loading point after release of the preload.

8.2.3 *Procedure:*

8.2.3.1 *Positioning*—Position the test frame (or moveable head of testing machine) in such a way that the load is applied, as shown in Fig. 2, to the structural member parallel to the plane of the fence system and normal to it without causing any local failure at the point of load application.

8.2.3.2 *Mounting of Instruments*—Mount the dial gauge, measurement device, or sensor at each loading point as is shown in Fig. 2. Place the sensing element of the instruments in contact with the surface or an extension of the surface of the top rail of the fence panel being tested in such a way as to measure displacement in the direction of the applied load.

8.2.4 *Load Application*—Initial load application, step load application and rate of loading shall be in accordance with 8.1.4.

8.3 *Structural Test Method C—Application of Horizontal Thrust Load to Infill Areas:*

8.3.1 *Installation of Test Specimen*—A minimum of one panel of the fence system to be tested shall be installed in accordance with the manufacturer's specifications and drawings. Selection of the test specimen should consider the maximum range of styles and sizes to be certified (see Section 10). Test specimens used for Test Methods A or B may be used again to perform Test Method C, provided the pickets have not been damaged during previous testing.

8.3.2 *Apparatus:*

8.3.2.1 *Testing Machine*—Any testing machine or loading device, capable of imposing forces accurate to within ±1 %, when calibrated in accordance with Practices E4, is suitable and may be used, provided the requirements of specified rate of loading and unloading are met. The testing device shall be of sufficient capacity to prevent yielding of its various components and shall ensure that the applied load remains essentially parallel to the relevant axis of the assembly during testing.

8.3.2.2 *Test System*—The test system shall be in accordance with 8.1.2.2 except that the horizontal force shall be applied to the picket infill midway between top and bottom rails using a round or square bearing plate 1 ft^2 in area (see Fig. 3).

8.3.2.3 *Deflection Measurements*—One dial gauge, having a smallest division of not more than 0.01 in. (0.25 mm), or any suitable measurement device or calibrated sensor of at least comparable accuracy and sensitivity shall be used to measure the displacements of the fence pickets relative to the original location at the loading point after release of the preload.

8.3.3 *Procedure:*

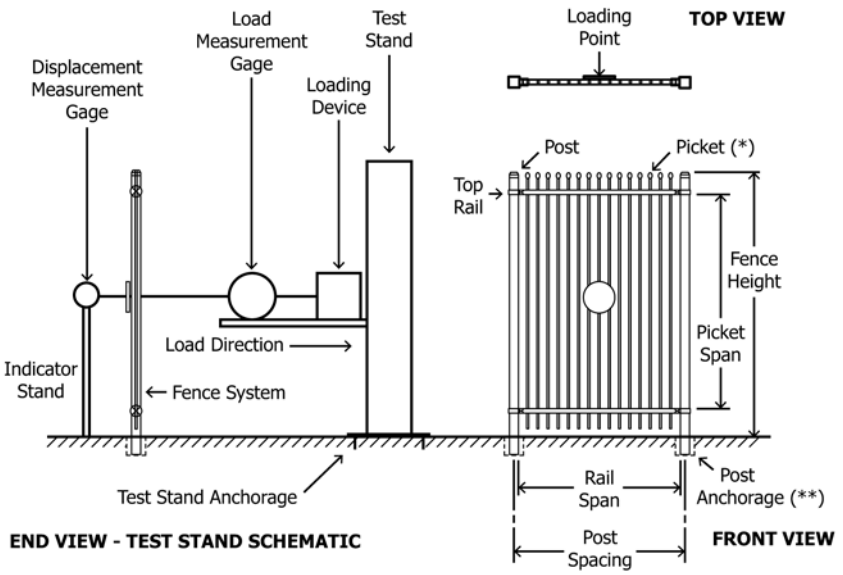
8.3.3.1 *Positioning*—Position the bearing plate with respect to the pickets in such a way that the load is applied horizontally, as shown in Fig. 3, at the most critical location without causing any local failure at the point of load application.

8.3.3.2 *Mounting of Instruments*—Mount the dial gauge, measurement device, or sensor at each loading point as is shown in Fig. 3, in such a way as to permit measurement of the maximum displacement which can be anticipated normal to the surface of the test specimen.

8.3.4 *Load Application*—Initial load application, step load application and rate of loading shall be in accordance with 8.1.4.

8.4 *Structural Test Method D—Application of Horizontal Cone Penetration Load:*

8.4.1 *Installation of Test Specimen*—A minimum of one panel of the fence system to be tested shall be installed in accordance with the manufacturer's specifications and drawings. Selection of the test specimen should consider the



* Note 1 - Any picket point style is acceptable on tested system; pickets may extend through the rails (as shown) or may terminate at the rails. Range of qualification is based on maximum picket span.

** Note 2 - Anchorage should be to concrete surface using core-drilled holes filled with grout or welded base plates and anchor bolts. Anchorage is not intended to be part of the structural test; failure of the anchorage system will void the test.

FIG. 3 Test Set-Up for Application of Horizontal Infill Thrust Load

maximum range of styles and sizes to be certified (see Section 10). Test specimens used for Test Methods A or B may be used again to perform Test Method D, provided the pickets have not been damaged during previous testing.

8.4.2 *Apparatus:*

8.4.2.1 *Testing Machine*—Any testing machine or loading device, capable of imposing forces accurate to within ±1 %, when calibrated in accordance with Practices E4, is suitable and may be used, provided the requirements of specified rate of loading and unloading are met. The testing device shall be of sufficient capacity to prevent yielding of its various components and shall ensure that the applied load remains essentially parallel to the relevant axis of the assembly during testing.

8.4.2.2 *Test System*—– A diagrammatic test set-up for applying horizontal penetration forces to the assembly is shown in Fig. 4. This is for application of the static horizontal cone-penetration forces to the picket infill area at the most critical location. Cone diameter shall be 25 % larger than the maximum permissible spacing between pickets.

8.4.2.3 *Deflection Measurements*—One measurement device, having a smallest division of not more than 0.01 in. (0.25 mm) shall be used to measure the separation spaces between pickets on both sides of the space being penetrated at the loading point after release of the preload.

8.4.3 *Procedure*—Position the penetration cone with respect to the pickets in such a way that the load is applied horizontally, as shown in Fig. 4. Position at a height of 30 in. (762 mm) above the bottom rail or halfway between the two consecutive rails with the greatest span, whichever is the lowest elevation.

8.4.4 *Load Application*—Initial load application, step load application and rate of loading shall be in accordance with 8.1.4.

8.5 *Structural Test Performance Criteria*—Required Performance Test Load Capability shall be in accordance with the requirements of Table 2.

8.6 *Structural Test Report:*

8.6.1 The following information shall be contained in the test report for each test method conducted:

8.6.1.1 Relevant physical-strength properties of the rail material used for the test specimens,

8.6.1.2 Description of the procedure used for assembly and installation of the fence system,

8.6.1.3 Description of the anchoring system,

8.6.1.4 Incremental rate of loading (if load was applied in multiple steps), and

8.6.1.5 Load-deformation curves (if load was applied in multiple steps).

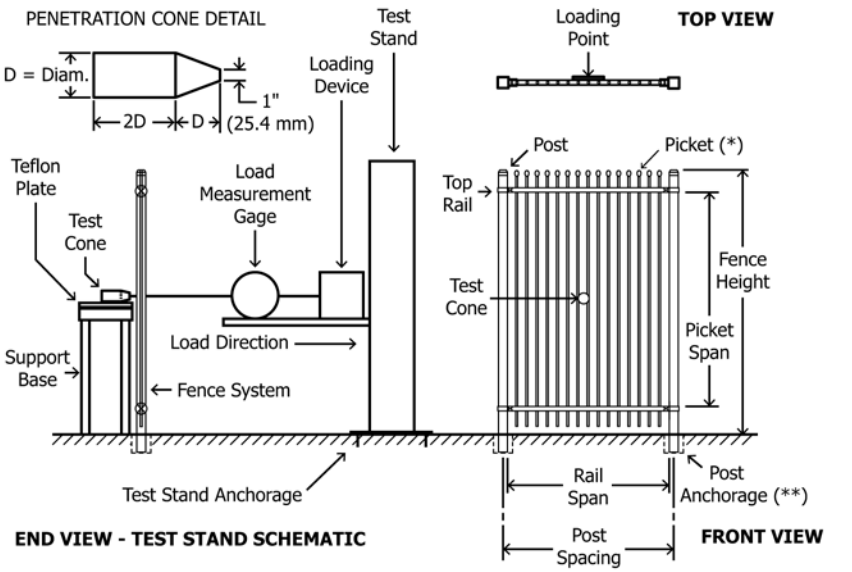
9. Testing—Surface Finish

9.1 *Test Methods:*

9.1.1 *Adhesion*—Adhesion testing shall be in accordance with Test Method D3359, Method A to be used on all PVC and polyolefin elastomer coatings. Method B is to be used on all polyester, polyester/epoxy combinations, and wet coating applications.

9.1.2 *Corrosion Resistance*—Corrosion resistance testing shall be conducted in accordance with Practice B117. The prepared specimen shall be scribed as directed by Test Method D1654.

9.1.3 *Impact Resistance*—Impact resistance testing shall be conducted in accordance with Test Method D2794. A 0.625 in. (16 mm) diameter ball shall be dropped from scaled markings on the test apparatus.



* Note 1 - Any picket point style is acceptable on tested system; pickets may extend through the rails (as shown) or may terminate at the rails. Range of qualification is based on maximum picket span.

** Note 2 - Anchorage should be to concrete surface using core-drilled holes filled with grout or welded base plates and anchor bolts. Anchorage is not intended to be part of the structural test; failure of the anchorage system will void the test.

FIG. 4 Test Set-Up for Application of Horizontal Cone Penetration Load

TABLE 3 Coatings Performance Requirements

Quality Characteristic	ASTM Test Method	Minimum Performance Requirements
Adhesion	D3359	Retention of film over 90 % of scribed surface.
Corrosion Resistance	B117 D714 D1654	1000 h without failure. Failure mode is defined as ⅛ in. (3.2 mm) coating loss from scribe or Medium #8 blisters.
Impact Resistance	D2794	60 in.-lbf impact resistance. Forward impact when using a 0.625 in. (16 mm) diameter ball. Testing to be performed on both 32°F and 73°F substrate (± 4°F).
Weathering Resistance	D822 D523 D2244	1000 h test duration with gloss retention of 40 % and color maintenance within 3.0 delta E color units.

9.1.4 *Weathering Resistance*—Accelerated weathering resistance testing shall be conducted using the method prescribed in Practice D822. Prior to, during (at designated intervals), and after exposure, the gloss shall be measured in accordance with Test Method D523, 60 degree angle method. Prior to, during (at designated intervals), and after exposure, the color shall be determined from instrumentally measured coordinates and color differences (from prior to start of testing) shall be calculated in accordance with Test Method D2244.

9.2 *Performance Requirements*—The requirements for performance of protective coatings for galvanized steel ornamental fence systems shall conform to the requirements listed in Table 3 for each quality characteristic shown.

10. Certification

10.1 When specified in the purchase order or contract, the purchaser shall be provided with certification from an independent testing laboratory that a representative sample of the manufacturer's fence system of specified material, color, height, span, rail spacing, picket spacing, and component dimensions has been tested in accordance with this standard and the requirements have been met. Individual coating performance certification is required for each color used. If the specifier requires a color other than one that the fence manufacturer had previously tested and certified in accordance with this standard, the coating performance certification requirement may be fulfilled by the certified test report for one of the fence manufacturer's standard colors, supplemented by the coating material supplier's published data or certified test reports showing that the coating material of the specified color has the capability to comply with the coating performance requirements in Table 3. Structural performance certifications are acceptable for any height, span, rail spacing, and picket spacing up to the maximum tested and certified in the independent laboratory's report.

NOTE 2—Since manufacturers have numerous size and style options, it is recommended that certification testing be on the style that has the minimum number of rails, the maximum vertical span between rails, and the maximum panel length between posts.

10.2 Recertification is required every six years or whenever there is a change in the manufacturing process, material, color, height, span, rail spacing, picket spacing, or component dimensions of the fence system being certified. When specified in the purchase order or contract, a report of the independent test results shall be furnished.

11. Keywords

11.1 architectural metal fence; iron fence; ornamental fence system; ornamental iron fence; ornamental metal fence; ornamental steel fence; picket fence; steel picket fence; tubular picket fence; vertical tube fence; wrought iron fence