**32 31 19
DECORATIVE METAL FENCES AND GATES**

Levanté® Premier Aluminum Fencing

**PART 1- GENERAL**:

1. **SECTION INCLUDES**
	1. Decorative fence system at location indicated on Drawings.
	2. Decorative fence gates at location indicated on Drawings.
2. **RELATED SECTIONS**
	1. Section 01 33 23- Shop Drawings, Product Data, and Samples
	2. Section 01 74 21- Construction/Demolition Waste Management and Disposal
	3. Section 03 30 00- Cast-In-Place Concrete
	4. Section 09 06 00- Schedule for Finishes
	5. Section 31 20 00-Earth Moving
3. **REFERENCES**
	1. American Society for Testing and Materials (ASTM)
		1. ASTM E84- Standard Test Method for Surface Burning Characteristics of Building Materials
		2. ASTM E330/E330M – Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference
		3. ASTM D2244 – Standard Practice for Calculation of Color Tolerances and Color Differences
		4. ASTM F2957 Section 5 – Standard Specifications for Ornamental Aluminum Fence Systems - Structural Testing
		5. ASTM D4214 – Standard Test Methods for Evaluating the Degree of Chalking of Exterior Paint Films
		6. ASTM D5206-13- Standard Test Method for Wind Load Resistance
	2. American Architectural Manufacturers Association (AAMA)
		1. AAMA 615 – Voluntary Specification, Performance Requirements and Test Procedures for Superior Performing Organic Coatings on Plastic Profiles
		2. AAMA 2604-10 Voluntary Specification, Performance Requirements and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels.
	3. American National Standards Institute (ANSI)
		1. Modified FM 4473 – Test Standard of Impact Resistance of Testing of Rigid Roofing Materials by impacting with Freezer Ice Balls
4. **SUBMITTALS**
	1. Submit under provisions of Section 01 33 00.
	2. Manufacturer’s Literature and Data: Submit manufacturer’s printed product literature, specifications, data sheet, and installation instructions.
	3. Product Samples: Submit manufacturer’s 6” product samples of fencing material in color and profile specified.
		1. 1-Way Post, 3-Way Post, standard board, self-mating board
		2. Toasted Marshmallow, Twilight Sun, Moonlight Kiss
	4. Submittal Drawings: show size, configuration, and fabrication and installation details.
	5. Submit manufacturer’s installation instructions.
	6. Manufacturer’s Warranty: Submit manufacturer’s warranty.
5. **QUALITY ASSURANCE**
	1. Manufacturer Qualifications:
		1. Products covered under this section are to be manufactured in an ISO 9001 certified facility.
		2. Provide technical and design support as needed regarding installation requirements and warranty compliance provisions.
	2. Installer Qualifications:
		1. All products listed in this section are to be installed by a single installer trained by manufacturer or representative.
	3. Pre-Installation Meetings:
		1. Prior to beginning installation, conduct conference to verify and discuss substrate conditions, manufacturer’s installation instructions and warranty requirements, and project requirements.
6. **DELIVERY, STORAGE, AND HANDLING**
	1. Deliver products in Manufacturer’s packaging.
	2. Do not stack pallets more than two high.
	3. Pieces should be stored flat and in original packaging until use.
	4. Mark packaging, legibly. Indicate manufacturer’s name, type, and color.
	5. Before installation, inspect products for damaged or defectives.
	6. Scrap material should be recycled.
7. **WARRANTY**
	1. Levanté®, LLC expressly warrants its products are free from manufacturing defects in material and workmanship if installed in accordance with our specifications, properly maintained, and used for their intended purpose for a period of 15 years.
	2. Decoral® expressly warrants for 15 years the color change will be less than five CIE Lab AE units calculated in accordance with AAMA 2604. The surface will exhibit a gloss retention of at least 30% of the original.
	3. Warranty is given to either (1) the original purchaser of the products; or (2) the owner of the property at the time of installation of the product.
	4. See warranty at levantealuminum.com for detailed information on terms, conditions and limitations.

**PART 2- PRODUCTS**:

* 1. **MANUFACTURERS**
	2. Acceptable Manufacturer: Levanté®, LLC, 901 Northview Rd, Suite 100, Waukesha, WI. 53188 [www.levantealuminum.com](http://www.levantealuminum.com)
	3. Acceptable Distributor: Hallmark Building Supplies, Inc., 901 Northview Rd, Suite 100, Waukesha, WI. 53188. Toll Free: 1.800.642.2246, Fax: 1.800.688.7842, [www.hllmark.com](http://www.hllmark.com)
	4. **SYSTEM PERFORMANCE**
1. Minor deviations to details shown on drawings to accommodate manufacturer’s standard products may be acceptable by Architect of Record (AOR) when deviations do not affect design concept and specified performance.
	1. **PRODUCTS**
	2. Basis of Design: Section 09 06 00- Schedule for Finishes
	3. Provide decorative fence and gates from one manufacturer.
	4. DECORATIVE FENCE SYSTEM
		1. Basis of Design Product: Levanté® 1-Way Fence Post
			1. Profile Color: Toasted Marshmallow, Twilight Sun, Moonlight Kiss
			2. Profile: Smooth woodgrain finish
			3. Finish: Semi-gloss
			4. Weight: 0.824 lbs. per ft
		2. Basis of Design Product: Levanté® 3-Way Fence Post
			1. Profile Color: Toasted Marshmallow, Twilight Sun, Moonlight Kiss
			2. Profile: Smooth woodgrain finish
			3. Finish: Semi-gloss
			4. Weight: 1.961 lbs. per ft
			5. Approximate Coverage:
		3. Basis of Design Product: Levanté® Standard Boards
			1. Profile Color: Toasted Marshmallow, Twilight Sun, Moonlight Kiss
			2. Profile: Smooth woodgrain finish
			3. Exposed Dimensions: 2” (50 mm), 4” (100 mm) or 6” (150 mm)
			4. Installed Panel Thickness: .63” (16 mm)
			5. Finish: Semi-gloss
			6. Weight:
				1. 2” – .270 lbs. per ft
				2. 4” – .601 lbs. per ft
				3. 6” – .953 lbs. per ft
			7. Approximate Coverage:
				1. 2” - 3.17 sqft per board
				2. 4” – 6.33 sqft per board
				3. 6” – 9.5 sqft per board
		4. Basis of Design Product: Levanté® Self-mating Boards
			1. Profile Color: Toasted Marshmallow, Twilight Sun, Moonlight Kiss
			2. Profile: Smooth woodgrain finish
			3. Exposed Dimensions: 4” (100 mm) or 6” (150 mm)
			4. Installed Panel Thickness: .63” (16 mm)
			5. Finish: Semi-gloss
			6. Weight:
				1. 4” – .694 lbs. per ft (2 board thickness)
				2. 6” – 1.378 lbs. per ft (2 board thickness)
			7. Approximate Coverage:
				1. 4” - 6.33 sqft per board
				2. 6” – 9.5 sqft per board
		5. Accessory/Components:
			1. Finishing Concealer
			2. Post Base
			3. Post Cap
			4. For a full listing of all components visit [www.levantealuminum.com](http://www.levantealuminum.com)
		6. Substitutions: Post Cap only
		7. Requests for substitutions will be considered in accordance with the guidelines outlined in Section 01 60 00.
	5. **MATERIALS**
	6. Aluminum components manufactured utilizing an extrusion die.
	7. Components are prefinished and machine applied.
	8. Material Variation: It is suggested to lay out several boards at a time to look for material variation. Avoid installing similar material consecutively. If similar grain pattern repetition cannot be avoided, staggering the pattern can be helpful.
	9. **INSTALLATION COMPONENETS**
	10. All installation components are aluminum and have a factory finish matching the finish of the 1-Way Fence Post, 3-Way Fence Post, Self-Mating Boards and Standard Boards
	11. 1-Way Fence Post
	12. 3-Way Fence Post
	13. Standard Boards
	14. Self-Mating Boards
	15. Finishing Concealers
	16. Fence Post Base
	17. Fence Post Cap
	18. Fasteners: Corrosion resistant fasteners, such as hot-dipped galvanized screws appropriate to local building codes and practices must be used. Use Hardened Aluminum fasteners in high humidity and high-moisture regions. Panel manufacturer is not liable for corrosion resistance of fasteners. Do not use fasteners that are not rated or designed for intended use. See manufacturer’s instructions for appropriate fasteners for construction method used.

**PART 3: Execution**

* 1. **EXAMINATION**
1. Verification of Conditions and Substrate
	1. Examine site to ensure substrate conditions are within proper installation tolerances.
	2. Correct substrate deficiencies.
		1. Fill
		2. Level
		3. Grind
	3. Do not begin installation until proper conditions are present.
	4. Do not install components that are either damaged or defective.
	5. **FENCE INSTALLATION**
	6. General: Install products in accordance with the latest installation guidelines of the manufacturer and all applicable building codes and other laws, rules, regulations and ordinances. Review all manufacturer installation, maintenance instructions, and other applicable documents before installation.
	7. Layout fence, with minimum number of joints.
	8. Installation:
		1. Set Posts as indicated on Drawings, in concrete footers minimum 36 inch depth or using post base plates.
		2. Earthwork: As specified in Section 31 20 00- Earth Moving
		3. Concrete: As specified in Section 03 30 00- Cast-In-Place Concrete
		4. Install boards as needed for desired finished design
		5. Insert Finishing Concealers as needed
	9. **GATE INSTALLATION**
2. Install gates according to manufacturer’s instructions.
3. Set posts plumb, as indicated on Drawings.
	1. **CLEANING AND MAINTENANCE**
4. Refer to manufacturer’s guidelines for detailed care instructions.