**Price Light Troffer Diffusers**

**Division 23 – Heating, Ventilating, and Air Conditioning**

**Section 23 37 13 – Diffusers, Registers, and Grilles**

The following specification is for a defined application. Price would be pleased to assist in developing a specification for your specific need.

**PART 1 – GENERAL**

* 1. **Section includes**:
1. Light Troffer Diffusers
	1. **Related Requirements**
2. Section 01 30 00 – Administrative Requirements
3. Section 01 40 00 – Quality Requirements
4. Section 01 74 21 – Construction/Demolition Waste Management and Disposal
5. Section 01 78 00 – Closeout Submittals
6. Section 01 79 00 – Demonstration and Training
	1. **Reference Standards**
7. All referenced standards and recommended practices in this section pertain to the most recent publication thereof, including all addenda and errata.
8. ASHRAE 70 – Standard Method of Testing the Performance of Air Outlets and Air Inlets
9. ASTM D610 – Standard Practice for Evaluating Degree of Rusting on Painted Steel Surfaces
10. ASTM D714 – Standard Test Method for Evaluating Degree of Blistering of Paints
11. ASTM D1308 – Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes
12. ASTM D1654 – Standard Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments
13. ASTM D4752 – Standard Practice for Measuring MEK Resistance of Ethyl Silicate (Inorganic) Zinc-Rich Primers by Solvent Rub

**1.04 Submittals**

1. See Section 01 30 00 – Administrative Requirements for submittal procedures.
2. Product Data: Provide data indicating configuration, general assembly, and materials used in fabrication. Include catalog performance ratings that indicate airflow, and NC designation.
3. Shop Drawings: Indicate configuration, general assembly, and materials used in fabrication.
4. Project Record Documents: Record actual locations of units and control components.
5. Operation and Maintenance Data: Include manufacturer's descriptive literature, operating instructions (if applicable), and maintenance and repair data.
6. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner's name and registered with manufacturer.
7. Maintenance Materials: Furnish the following for Owner's use in maintenance of project.

**1.06 Quality Assurance**

1. Manufacturer Qualifications: Company specializing in manufacturing the type of products specified in this section, with minimum ten years of documented experience.

**1.07 Warranty**

1. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.
2. Provide 12 month manufacturer warranty from date of shipment of diffusers.

**PART 2 – PRODUCTS**

**2.01 Manufacturer**

1. Basis of Design: Price Industries, Inc.
2. Adjustable Pattern Controller Light Troffer Diffusers: Model LTA
3. Fixed Pattern Controller Light Troffer Diffusers: Model LTF
4. Light Troffer Diffusers without pattern controllers: Model LTN

**2.02 Adjustable Pattern Controller Light Troffer Diffusers**

1. Description:
	1. Furnish and install Price model LTA series light troffer diffusers in sizes and capacities as shown by the plans and air distribution schedule.
	2. Light troffer to be validated for fit with customer supplied light fixture.
2. Construction:
	1. The light troffer diffusers shall have adjustable pattern controllers to control the discharge airflow from horizontal to vertical and shall provide trim dampering.
	2. The pattern controllers shall be adjustable through the discharge slots of the diffuser-fixture combination.

**2.03 Fixed Pattern Controller Light Troffer Diffusers**

1. Description:
	1. Furnish and install Price model LTF series light troffer diffusers in sizes and capacities as shown by the plans and air distribution schedule.
	2. Light troffer to be validated for fit with customer supplied light fixture
2. Construction:
	1. The light troffer diffusers shall have fixed, aerodynamically curved pattern controllers to provide a horizontal air pattern.

**2.04 Light Troffer Diffusers without Pattern Controller**

1. Description:
	1. Furnish and install Price model LTN series light troffer diffusers in sizes and capacities as shown by the plans and air distribution schedule. The diffuser manufacturer is to ensure compatibility between diffusers and the light fixture.
	2. Light troffer to be validated for fit with customer supplied light fixture
2. Construction:
	1. The light troffer diffusers shall be supplied without pattern controllers, and shall be used in regressed slot light fixtures.
	2. The diffusers inlets shall be (**select one**):
		1. Oval side inlets (on single type units and saddle-type low-profile units).
		2. Round inlets (on saddle-type units only).
	3. The diffusers shall be designed to integrate with the light fixture without the use of screw-type fasteners.
	4. The diffusers shall be coated steel construction.
3. Options:
	1. Insulation:
		1. The diffuser shall be externally insulated with ½ inch foil-backed fiberglass insulation.

**PART 3 – EXECUTION**

**3.01 Examination**

1. Verify that conditions are suitable for installation.
2. Verify that field measurements are as shown on the drawings.

**3.02 Installation**

1. Install in accordance with manufacturer’s instructions.
2. See drawings for the size(s) and locations of diffusers.

**3.03 Field Quality Control**

1. See Section 01 40 00 – Quality Requirements for additional requirements.

**3.05 Cleaning**

1. See Section 01 74 19 – Construction Waste Management and Disposal for additional requirements.

**3.06 Closeout Activities**

1. See Section 01 78 00 – Closeout Submittals for closeout documentation requirements.
2. See Section 01 79 00 – Demonstration and Training for addition.