***Quick and easy for you - please fill out areas highlighted in green to complete the specification***

# PART 1 GENERAL

## RELATED DOCUMENTS

* + 1. Drawings and general conditions of the contract, including general and supplementary conditions and division 1 specification sections, apply to the work of this section.

## SUMMARY

* + 1. Section includes:
			1. Sound absorptive baffles
		2. Related sections
			1. Section 01350 – Special Environmental Requirements
			2. Section 095300 – Acoustical Ceiling Suspension Systems (by others)
			3. Section 095100 – Acoustical Ceilings
			4. Section 092116 – Gypsum Board Assemblies (by others)
			5. Section 09800 – Acoustical Treatment

## SUBMITTALS

* + 1. Comply with Section 013300 – Submittal Procedures
		2. **Product Data:** Manufacturer’s technical data and installation instructions for each type of ceiling baffle required.
		3. **Certifications:** Certified test reports showing compliance with performance requirements specified.
		4. **Samples:** Submit a minimum of one (1) sample of each panel type and finish type required.
		5. **Shop Drawings:** Submit shop drawings when applicable. When necessary include details, for all ceilings, coordinate ceiling baffle layout, installation and suspension system components, and show overall layout with dimensions and details of penetrations and intersections with other materials or building components.
		6. **LEED Requirements:** Where specified, submit required documentation indicating compliance.
		7. Submit operation and maintenance data for installed products. Include precautions relating to harmful cleaning materials and methods that would affect the service life of the baffles.

## QUALITY ASSURANCE

* + 1. **Single Source Responsibility:** Provide acoustic baffles from a single manufacturer with at least 5 years of prior experience fabricating projects of similar size and complexity.
		2. **Installer:** Installation shall be done by qualified contractors with at least two (2) years experience in the installation of architectural woodwork or acoustical ceilings. Installers should receive training on handling and field finishing the specified product prior to receiving materials on site.
		3. **Fire Performance Characteristics:** Class B as tested by an independent accredited testing facility. Tests: ASTM E84.

### Applicable LEED Credits:

* + - 1. MRc4 Recycled Content
			2. EQ 9 Enhanced Acoustical Performance
		1. **Coordination of Work:** Installing contractor shall organize and conduct a pre-installation survey of temperature, humidity and construction elements attaching, penetrating or concealed behind the acoustic baffles.

## REFERENCES

### Test Methods:

* + - 1. **ASTM C423** Sound absorption and sound absorption coefficients by the reverberation room method performed by an independent testing agency
			2. **ASTM E84** Standard test method for surface burning characteristics of building materials

## DELIVERY, STORAGE AND HANDLING

* + 1. Deliver baffles to the project in original, unopened packages. Inspect containers for visible damage and report any questionable condition to the shipper and manufacturer immediately.
		2. Store products in a fully enclosed, clean, dry space out of direct sunlight and protected from damage with temperature controlled between 50 and 86 degrees F.
		3. Handle products carefully to avoid damaging baffle surfaces or chipping edges. Report any damage immediately. Installation of damaged baffles is not covered by the manufacturer’s warranty.

## PROJECT CONDITIONS

* + 1. Do not install acoustic ceiling baffles until space is enclosed and weather-proofed, wet work is completely dry and ambient temperature and humidity conditions are maintained at the levels indicated for the project when occupied for its intended use.
		2. Permit baffles to reach room temperature, 50 to 86 degrees F, and stabilized moisture content of 25% to 55% RH for at least 72 hours before installation per AWI standards. Building should be enclosed and HVAC systems functioning in continuous operation with relative humidity maintained between 25 and 55 percent.

## WARRANTY

* + 1. Provide manufacturer’s standard **three (3) year written product warranty** per Section 01770 –

Closeout Procedures

* + 1. Manufacturer’s warranty is limited to decorative or acoustical baffle materials only. Other components used in the ceiling system are excluded. Refer to the appropriate provisions in the related specification section.

## MAINTENANCE

* + 1. **Maintenance Instructions:** Provide manufacturer’s standard maintenance and cleaning instructions for finishes provided.

# PART 2 – PRODUCTS

## MANUFACTURER

* + 1. Provide baffles utilizing acoustic panels distributed by Surface Materials, 6655 Parkland Blvd, Solon, OH 44139, Ph. (440) 248-0000, email customerservice@surfacematerials.com.

## MATERIALS

### Baffles for Interior Installation: Select

Loda (2.5”), Loda with LED Lighting (2.5”) thick acoustical baffles as follows: Real wood veneer laminated to a fiberglass reinforced surface applied to a light-weight particle wood and Masonite skeleton. Surface skin thickness shall 1.5mm (0.060”). The core of the baffles shall be comprised of Class A 6-7 pcf fiberglass rotated for increased rigidity. Baffle must contain a rigid, acoustically reflective, center barrier. If LED Lighted baffle product selected, LED lighting must be integrated into bottom of baffle with aluminum extrusion not to exceed 85% of length of baffle. LED lighting strips must be continuous to prevent “spotting”. All electrical connections inside baffle must be soldered and use low-smoke flame-retardant heat-shrink tubing to protect all connections.

1. **Perforations:** Baffles will be furnished with perforated faces consisting of 0.55mm (0.022”) diameter holes in an offset pattern. The perforations must be clean. Perforations must maintain consistent diameter through the face material and backer with no tapering or and minimum roughness.
2. **Baffle Weight:** without LED Lighting = 3.2 lbs./ft2, with LED Lighting = 3.5 lbs./ft2
3. **Baffle Sizes: Select** Baffles are available in the following sizes:
	1. Baffle Depth: *(nominal 9”, 12”, 20” or custom)*
	2. Baffle Length: *(48”, 60”, 96” or custom)*
	3. Baffle Width: *(2.5”)*
4. **Flame Resistance:** Our baffles have a Class B rating for surface burning characteristics in building materials.
5. **LED:** Continuous LED strip light utilizes chip on board LEDs to create one diffused line of light. The Continuous LED strip light is UL Listed and can be used in run lengths up to 5 meters when powered from one end. Features a CCT of 3,000K and is easy to control utilizing compatible controllers (ie. MeanWell) and dimmers. A continuous LED strip light for this baffle is designed to be powered by 24 VDC with 18 watts and 1470 lumens per meter.
6. **Acoustic Performance:** To generate the standing sound waves required for resistive absorption, each baffle must contain a rigid, acoustically reflective, center barrier wall that extends the baffle’s full length and height. With the center barrier wall installed, each side of the baffle must achieve minimum NRC test values as stated: **Select**

**-** 2.5” thick - .85 NRC

### Finish for Veneer Faced Baffles: Select

* 1. Species as selected by the architect.
	2. Cut: *(flat cut or quarter cut)*

# PART 3 – EXECUTION

## EXAMINATION

* + 1. Inspect installation area and conditions under which work is to be performed for compliance with all manufacturer’s environmental requirements. All wet work in the installation area must be complete, cured and dry prior to installation. Do not proceed until all unsatisfactory conditions have been corrected.

## INSTALLATION

* + 1. Installation must be done by qualified contractor with 2 years experience in the installation of architectural woodwork or acoustic ceilings. The firm must demonstrate successful experience installing materials of similar type and quality of those required for this project.
		2. Comply with manufacturer’s instruction and recommendations for hanging baffles.
			1. For suspended grid, install adjustable coupler, suspension cable, and choice of grid mounting hardware.
			2. For direct mount, install using direct cable suspension with adjustable coupler, suspension cable, and panel anchors.
		3. Confirm all field dimensions are coordinated with shop drawings.

## ADJUSTING AND CLEANING

* + 1. Clean soiled surfaces of baffles per manufacturer’s instructions.
		2. Remove and replace damaged or discolored materials not in compliance with manufacturer’s tolerances.

**Contact information:**

Surface Materials 6655 Parkland Blvd

Solon, OH 44139

440-248-0000

customerservice@surfacematerials.com

**END OF SECTION**