# 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 ceiling systems
    2. Related sections
       1. Section 01350 – Special Environmental Requirements
       2. Section 092116 – Gypsum Board Assemblies (by others)
       3. Section 098000 – Acoustical Treatment

## SUBMITTALS

* + 1. Comply with Section 013300 – Submittal Procedures
    2. **Product Data:** Manufacturer’s technical data and installation instructions for each type of acoustic panel 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 panel layout, installation and hardware 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 panels.

## QUALITY ASSURANCE

* + 1. **Single Source Responsibility:** Provide acoustic panels 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 acoustic specialty applications. Installers should receive training on handling and field finishing the specified product prior to receiving materials on site.
    3. **Fire Performance Characteristics:** Class A as tested by an independent accredited testing facility. Tests: ASTM E84. Flame spread: 25 or less. Smoke developed: 450 or less as specified by state or local codes.

### 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 panels.

## 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 panels 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 panel surfaces or damaging corner edges. Report any damage immediately. Installation of damaged panels is not covered by the manufacturer’s warranty.

## PROJECT CONDITIONS

* + 1. Do not install acoustic panels 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. Building should be enclosed and HVAC systems functioning in continuous operation at 60-80 degrees F (16-27 degrees C) and with relative humidity maintained between 25 and 55 percent.

## WARRANTY

* + 1. Provide manufacturer’s standard **ten (10) year written product warranty** per Section 01770 –

Closeout Procedures

* + 1. Manufacturer’s warranty is limited to decorative or acoustical panel materials only. Other components used in the wall or 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 acoustic ceiling system utilizing felt acoustic systems distributed by Surface Materials, 6655 Parkland Blvd, Solon, OH 44139, Ph. (440) 248-0000, email [customerservice@surfacematerials.com](mailto:sales@sonusna.com).
    2. Substitutions: Not Permitted without written approval.

## PRODUCT

### Ceiling mounted acoustic system for interior installation:

* + - 1. Basis of design: Serial Box
      2. [Materials: 100% Polyester (PET) with a minimum of](https://www.sonusna.com/products/serial-box-led) 60% recycled content
      3. Environmental: Low VOC emissions, formaldehyde and phenol-free. Red List free.
      4. Warranty: Ten (10) year product warranty
      5. Sizes:
         1. Length: 47.5”, 59.5”(not offered with LED), 71.5”, 95.5”
         2. Height: 6”, 8.5”, and 10.5”
         3. Width: 1.125” or 2.125” (LED only offered in 2.125”)
      6. Thickness: 12mm
      7. Felt Finish: As selected from manufacturer's standard colors
    1. **Flame Resistance:** Our felt baffles have a Class 1(A) rating based on ASTM E84 standard test method for surface burning characteristics in building materials.
    2. **Acoustic Performance:** To generate the standing sound waves required for resistive absorption, each panel must contain a rigid, acoustically absorptive face and sides.
       1. Each panel section must achieve minimum NRC value: 1.00
    3. **Edge Detail:** Exposed felt
    4. **LED Option Details:** Fixture is a high output linear light source suitable for general lighting applications.

1. Conveniently select from (3) standard color temperatures best suited to your space: 3000K (Warm White), 4000K (Natural White), 5000K (Bright White).
2. Integral driver technology allows these fixtures to accept universal 120-277VAC input voltage within the compact aluminum housing.
3. Universal 120-277VAC Input.
4. 0-10V Dimmable.
5. 80+ CRI Standard, 1,210 lumens/ft.
6. Made in the USA • UL-Listed
   * 1. **Hardware Options:**
7. Suspension cable using cable grippers
8. Direct mount to Unistrut

# 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.
    2. Do not begin installation until substrates have been properly prepared. If substrate preparation is the responsibility of another installer, notify Architect or Designer of any unsatisfactory preparation before proceeding.

## INSTALLATION

* + 1. Install as per General Contractor’s provisions and specifications
    2. Installation must be done by qualified contractor with 2 years experience in the installation of acoustic treatment or acoustic ceilings. The firm must demonstrate successful experience installing materials of similar type and quality of those required for this project.
    3. Comply with manufacturer’s instruction and recommendations for hanging panels.
    4. Confirm all field dimensions are coordinated with shop drawings.

## ADJUSTING AND CLEANING

* + 1. Adjust units for proper position, uniform appearance and operation.
    2. Clean exposed and semi-exposed surfaces using materials acceptable to manufacturer.
    3. Remove and replace damaged or discolored materials not in compliance with manufacturer’s tolerances.

**End of Section**

**Contact information:**