**

**SECTION 09 80 00
dB3
Three Part Specification**

**PART 1.0 – GENERAL**

1.1 SUMMARY

1. This section includes the dB3
2. Related Sections:
3. Division 7 Section: Basic Thermal and Moisture Protection Materials and Methods (07050)
4. Division 13 Section: Sound Conditioned Rooms (13034)
5. Division 13 Section: Sound, Vibration and Seismic Control (13080)

1.2 REFERENCES

1. Standards listed by reference, including revisions by issuing authority, form a part of this specification section to extent indicated. Standards listed are identified by issuing authority, authority abbreviation, designation number, title or other designation established by issuing authority. Standards subsequently referenced herein are referred to by issuing authority abbreviation and standard designation.
2. American Society for Testing and Materials (ASTM):
3. ASTM E90-02 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions.
4. ASTM E989-89 Standard Classification for Determination of Impact Insulation Class (IIC).
5. ASTM E413-87 Classification for Rating Sound Insulation.
6. ASTM E-84 Rev A Standard Test Method for Surface Burning Characteristics of Building Materials.
7. ASTM E-119-08 Fire Tests of Building Construction and Materials.
8. UL 263 Fire Tests of Building Construction and Materials – Thirteenth Edition.
9. ASTM D3273 Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
10. ASTM G 21 Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi.
11. Leadership in Energy and Environmental Design – LEED®
12. International Organization for Standardization® document, ISO 14021 - Provides guidance on the terminology, symbols, testing and verification methodologies that an organization should use for self-declaration of the environmental aspects of its products and services.

1.3 SYSTEM DESCRIPTION

1. Performance Requirements: Provide dB3, which has been manufactured and installed to maintain performance criteria stated by manufacturer without defects, damage or failure.

1.4 SUBMITTALS

1. General: Submit listed submittals in accordance with Conditions of the Contract.
2. LEED: Provide documentation of how the requirements for credit will be met.
3. List of proposed materials with recycled content. Indicate pre-consumer and post-consumer content.
4. Product data and certification letter indicating percentage of recycled content for pre-consumer and post-consumer content.
5. Recycled content is defined in accordance with the International Organization for Standardization document, ISO 14021 Environmental labels and declarations.
6. Post-consumer material - waste materials diverted from the waste stream after consumer or commercial use.
7. Pre-consumer material - materials diverted from the waste stream during the manufacturing process.
8. Product Data: Submit manufacturer’s product specification sheet.
9. Samples: Submit 12”x12” verification samples of the supplied product.
10. Quality Assurance Submittals: Submit the following:
11. Test Reports: Provide test reports showing compliance with specified performance characteristics and physical properties.
12. Certificates: Product certificates signed by manufacturer or Product Data sheets certifying materials comply with specified requirements. 3. Manufacturer’s Instructions: Manufacturer’s installation instructions.

F. Closeout Submittals: Submit the following:

1. Warranty: Manufacturer’s warranty documents specified herein.

1.5 QUALITY ASSURANCE

A. Qualifications:

1. Installer Qualifications: Installer experienced in performing work of this section who has specialized in installation of work like that required for this project.

a. Certificate: When requested, submit certificate indicating qualification.

1. Manufacturer’s Qualifications: Manufacturer capable of manufacturing suitable products and approving application method.

B. Regulatory Requirements: [specify applicable requirements of regulatory agencies].

1.6 DELIVERY, STORAGE & HANDLING

1. Ordering: Comply with manufacturer’s ordering instructions and lead time requirements to avoid construction delays.
2. Delivery: Deliver materials in manufacturer’s original, unopened, undamaged containers with identification labels intact.
3. Receiving: Verify quantity, condition and dimensions comply with specifications ordered.
4. Storage and Protection: Store materials at temperature and humidity conditions recommended by manufacturer and protect from exposure to harmful weather conditions.

1.7 PROJECT CONDITIONS

A. Maintain environmental conditions (temperature, humidity and ventilation) within limits recommended by manufacturer. Do not install products under environmental conditions outside manufacturer’s recommendations.

1.8 WARRANTY

A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.

1. United Plastic Corporations liability and responsibility in the event of damages are limited to the extent defined in our General Terms and Conditions of Sale.

**PART 2.0 – MANUFACTURER / PRODUCTS**

2.1 MANUFACTURER: United Plastics Corporation

511 Hay Street, Mt. Airy, NC 27030 Telephone: (336) 786-2127;

Fax: (336) 786-6966 Web address; <http://www.unitedplastics.com>

2.2 PRODUCT(S)

1. dB3.
2. Material: Made with Acoustical Grade Polymer.

C. Sheet Dimensions:

4’ by 8’ sheet size

4’ by 10’ sheet size

4’ by 25’ sheet size

(Thickness).010”

D. Sheet Weight: 1.0 lb/ft2 nominal; other weights and thicknesses available

1. Standard Tolerances: width: + 0.5” - 0” length: +1% - 0” thickness: ±.0.010”

F. Product Performance:

1. Minimum STC 26 per ASTM E 90-02 or SAE j1400
2. Flammability rating of class 1 per ASTM E 84 Rev. A, behind
3. minimum 3/8” drywall
4. No fungal or algal growth and no visible disfigurement per ASTM D3273 and ASTM G 21.
5. R-Value.28 per inch using Nanoflash method.

2.3 INSTALLATION ACCESSORIES

1. Fasteners: Staples, nails, or screws should be of sufficient size and length to hold materials in place until wall board can be installed.
2. Adhesives: When necessary use premium urethane adhesives and acoustical sealants. Please be environmentally conscious when selecting these products choosing “Green” products when available.

2.4 PRODUCT SUBSTITUTIONS

A. Substitutions: No substitutions permitted.

**PART 3.0 – EXECUTION**

3.1 MANUFACTURER’S INSTRUCTIONS

A. Compliance: Comply with manufacturer’s product data, including product technical bulletins, product catalog installation instructions and product carton instructions for installation.

3.2 EXAMINATION

A. Site Verification of Conditions: Verify substrate conditions are acceptable for product installation in accordance with manufacturer’s instructions.

3.3 PREPARATION

A. Surface Preparation: Surfaces to receive dB3 Sound, Air and Moisture Barrier shall be clean and reasonably dry at time of installation.

3.4 INSTALLATION/APPLICATION

1. Install in accordance with manufacturers recommendations.
2. Installers shall utilize acoustical sealant, tape, sound rated putty and sound isolation materials as necessary to preserve the wall assembly’s acoustical integrity. This includes all electrical openings, boxes, switches, plumbing, and HVAC components.
3. Install on wall or floor / ceiling assemblies, dB3 can be installed on wall framing before the gypsum is installed, on top of floor joists, on top of sub-floor, or attached to joists from below.
4. Do not use dB3 to surround any light fixture due to possible high temperatures and air flow requirements.
5. A T-bar or drywall jack may be needed to support dB3 during overhead installation.

D. Installation should not begin until all other trades are finished in the area.

E. It is recommended that areas to receive the dB3 should be weather tight and maintained at a minimum average temperature of 65°F (18°C) for 48 hours before, during and after the installation.

3.5 FINISHING

1. Once dB3 is in place, install wall, floor or ceiling as designed in accordance with industry standards.

3.6 PROTECTION

A. Protection: Protect installed product and finish surfaces from damage during construction.

3.7 SCHEDULES

A. Schedules: [Specify reference to applicable contract schedules].

**END OF SECTION**