



Omni Plane Diffuser Direct-Attach Wall Panels

Omni Plane Diffuser Panels used for walls and ceilings combines absorption and diffusion into one sound panel. Used in any critical listening environment, the product is often combined with **Respond®** acoustic panels which are similar in appearance.

Project architect responsibility

This is a general specification guide, intended to be used by experienced construction professionals, in conjunction with good construction practice and professional judgment. This guide is to aid in the creation of a complete building specification that is to be fully reviewed and edited by the architect of record (specifier). Sections of this guide should be included, edited, or omitted based on the requirements of a specific project. It is the responsibility of both the specifier and the purchaser to determine if a product or system is suitable for its intended use. Neither Conwed, nor any of its subsidiary or affiliated companies, assume any responsibility for the content of this specification guide relative to actual projects and specifically disclaim any and all liability for any errors or omissions in design, detail, structural capability, attachment details, shop drawings or other construction related details, whether based upon the information provided by Conwed or otherwise.

SECTION 098413 – Fixed Sound-Absorptive Panels

PART 1 - General

1.1 — SUMMARY

A. Section includes:

Fixed sound-absorptive panels.

B. Related work:

The following items are not included in this Section and are specified under the designated Sections:

Section 092100 – PLASTER AND GYPSUM BOARD ASSEMBLIES for plaster and gypsum board walls and ceilings.

1.2 — SUBMITTALS

A. Product data:

Submit manufacturer's product data including certified laboratory test reports and other data required to show compliance with these specifications.

B. Samples:

Submit 8 ¾ x 11 inch (for thicknesses up to 1 ½ inches) or 11 ½ x 11 ½ inch (for thicknesses larger than 1 ½ inches) samples of representative panel with factory detailed edge, and representative samples of mounting devices.

1.3 — QUALITY ASSURANCE

A. Pre-installation conference:

Conduct conference at Project site to comply with requirements in Division 01.

1.4 — DELIVERY, STORAGE, AND HANDLING

A. Project conditions:

Protect system components from excessive moisture in shipment, storage, and handling. Deliver in unopened bundles and store in a dry place with adequate air circulation. Do not deliver material to building until wet conditions such as concrete, plaster, paint, and adhesives have been completed and cured to a condition of equilibrium.

1.5 — LIMITED WARRANTY

A. Limited warranty:

Provide manufacturer's standard limited 3-year warranty against manufacturing defects in material or workmanship.

PART 2 - Products

2.1 — SOUND DIFFUSERS:

A. Basis-of-Design: Conwed Omni Plane Diffuser Panels.

1. **Construction:** Composite core construction with two layers of dimensionally stable rigid fiberglass separated by a barrier septum.
2. **Fiberglass Density:** 6 – 7 pcf.
3. **Recycled content:** For fiberglass, 52 percent pre-consumer and 5 percent post-consumer recycled content.
4. **Core thickness:** 1 inch.
5. **Core thickness:** 2 inches.
6. **Width:** Max of 48 inches and custom.
7. **Length:** Max of 96 inches and custom.
8. **Corners:** Square.
9. **Edge profile:** Square.
10. **Edge treatment:** Resin hardened.
11. **Fabric finish:** Manufacturer, pattern and color as selected; applied directly over face and edges of panels to provide full finished edge, fully tailored corners.
12. **Mounting type:** Impaling clips/perimeter adhesive.
13. **Mounting type:** Z-Clips to Z-Bar.
14. **Flammability (ASTM E 84):** Panel components shall have a Class "A" rating per ASTM E 84.
15. **Resistivity to heat or cold:** R-factor of 4.16 per inch of thickness.
16. **Acoustical performance:** Values below are for panels mounted in accordance with ASTM C 423 (Type A and E400 Mounting) and vary by panel thickness and finish.
 - a. **Noise reduction coefficient (NRC)** for 1 inch thickness (A Mounting): 0.65.
 - b. **Noise reduction coefficient (NRC)** for 1 inch thickness (E400 Mounting): 0.65.
 - c. **Noise reduction coefficient (NRC)** for 2 inch thickness (A Mounting): 0.90.
 - d. **Noise reduction coefficient (NRC)** for 2 inch thickness (E400 Mounting): —.

PART 3 - Execution

3.1 — INSTALLATION:

A. Verify wet work such as plastering and concrete is complete and dry. Verify building is enclosed and under standard occupancy conditions (60 - 85°F and not more than 70% relative humidity) prior to start of installation. Commencement of installation constitutes Installer's acceptance of surfaces and conditions.

B. Install products in accordance with manufacturer's written instructions and in proper relationship with adjacent construction.

1. For adhesive installation to substrate, provide temporary support to prevent panel slippage. Note: Impaling clips are designed to help hold panels in place until adhesive dries.

C. Touch-up, repair or replace damaged units until satisfactory results are obtained.

— End of Section —