

ECKEL

NOISE CONTROL TECHNOLOGIES

Acoustic
Panels
Spec Sheets

2019

www.eckelacousticpanels.com

Standard & Custom Engineered Solutions

Reverberation & Noise Control for
Correctional Facilities, Offices,
WWTPs, Industrial Settings
Recreation & more...

Going
Strong

65+

Vital to Industry,
Communication,
Health & Safety
For 65+ Years

Architectural Noise Control Panel Systems

Steel Eckel Correctional Panels Type 2 FE

Toll-free 1-800-563-3574 | International +1-613-543-2967 | www.eckelacousticpanels.com

Section 09511, Section 15840, Section 16510 | ASTM C 423, ASTM E 84, ASTM E 795

ISO 9001:2015 & ISO 14001:2015

Noise + Reverb Control

Eckel Correctional Panel

Simple to install, Correctional Panels effectively and efficiently absorb reverberation and reduce noise in Correctional & High Security Facilities – from federal penitentiaries to county jails, from maximum security to minimum. Durable and versatile Eckel acoustic panels increase the intelligibility of speech; mitigate intolerable auditory conditions; and decrease the risk of personel & inmate harm from excessive exposure to noise.

Standard Features

- ▶ **ECP Type 2:** Formed end style panels with formed perforated ends.
- ▶ **Thickness:** 2 1/8" (54 mm)
- ▶ **Width:** 18" (457 mm)
- ▶ **Length:** 90" (2286 mm)
- ▶ **Average Weight:**
 - 18" x 42" (457mm x 1067mm) 18lb/8kg
 - 18" x 54" (457mm x 1372mm) 22lb/10kg
 - 18" x 66" (457mm x 1676mm) 27lb/13kg
 - 18" x 90" (457mm x 2286mm) 37lb/17kg
- ▶ **Panel Construction:** 16ga Steel, Capped ends
- ▶ **Facings:** 16ga (1.5mm) zinc coated steel, perforated with 3/32" (2mm) holes on 3/16" (4.8mm) staggered centers.
- ▶ **Brackets:** Four 11ga (3 mm) mounting angles with each panel, with 1/4" (6mm) -20 blind threaded inserts for each angle.
- ▶ **Finish:** Polyurethane enamel paint; factory applied
- ▶ **Color:** White, Other colors available
- ▶ **Acoustical Insulation:** 2" (50 mm) thick, fine fibred, fibrous glass, having a density of not less than 1.5 pounds per cubic foot (24 kg/cubic m), encapsulated in a 1.5 mil (0.04 mm) flame guard polyethylene.
- ▶ **Anchors & Fasteners:** Attach panels to mounting angles with 1/4" (6mm)-20 button head socket security cap screws made of 18-8 stainless steel

Panel Performance

- ▶ **Sound Absorption:** Panels are certified to meet the following minimum sound absorption for a 18" x 96" (460mm x 2440mm) panel, encapsulated in a 2 mil (0.05mm) flame guard polyethylene, when tested in accordance with ASTM C 423.

- ▶ 125 Hz: 4.6 sabins.
- ▶ 250 Hz: 9.6 sabins.
- ▶ 500 Hz: 15.2 sabins.
- ▶ 1000 Hz: 14.5 sabins.
- ▶ 2000 Hz: 12.6 sabins.
- ▶ 4000 Hz: 11.1 sabins.

- ▶ **Fire:** Tested in accordance with ASTM E 84
- ▶ **Flame Spread:** 10 maximum
- ▶ **Smoke Density:** 10 maximum

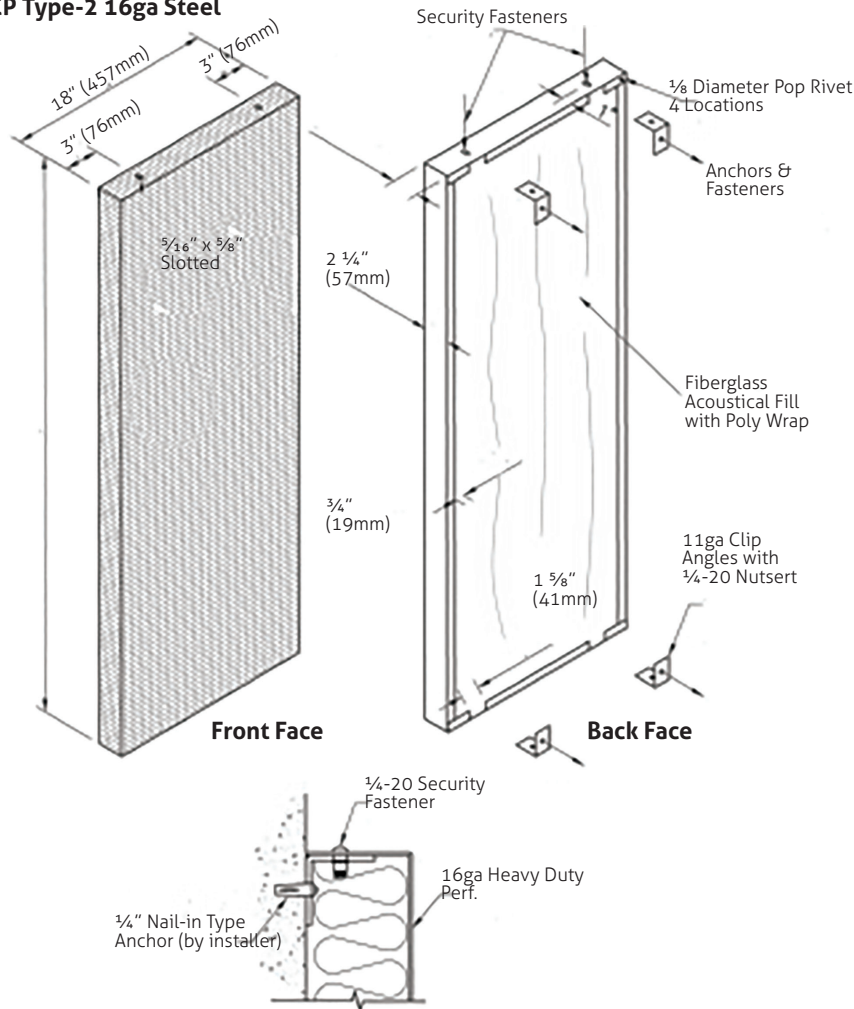
Acoustical Performance

Sound absorption expressed in Sabins.

| Sound Absorption | | | | | |
|--|--------|--------|---------|---------|---------|
| 125 Hz | 250 Hz | 500 Hz | 1000 Hz | 2000 Hz | 4000 Hz |
| <i>Panels with 2 mil flame guard polyethylene wrapped acoustical filter</i> | | | | | |
| 4.6 | 9.6 | 15.2 | 14.5 | 12.6 | 11.1 |
| <i>Panels without 2 mil flame guard polyethylene wrapped acoustical filter</i> | | | | | |
| 1.4 | 10.4 | 16.4 | 17.6 | 16.5 | 15.8 |
| <i>Panels with 2 mil flame guard polyethylene wrapped acoustical filter + wire spacing</i> | | | | | |
| 5.6 | 11.9 | 14.4 | 15.2 | 13.1 | 10.9 |

Average sound absorption coefficient for standard 2.25" (57mm) thick, 18" x 96" (457mm x 2438mm) panel. Based on standard sound absorbing material per ASTM C-423. Detailed architectural specifications available from Eckel Noise Control Technologies or visit www.eckelacousticpanels.com.

ECP Type-2 16ga Steel



EXAMINATION: Examine surfaces to receive work. Do not begin installation until unsatisfactory conditions have been corrected.

INSTALLATION: Install panels on walls and ceilings in locations and in patterns indicated on drawings. Install each unit as indicated on Architect's drawings and in accordance with manufacturer's printed instructions, using approved anchors and fasteners.

ADJUST & CLEAN: After installation of acoustic panels, clean all dirty or discolored surfaces, using cleaning materials and methods acceptable to manufacturer. Replace damaged components as directed by the Architect. Remove debris caused by work on a daily basis. At completion of acoustic panel installation, remove all crates, cartons, packages, and debris from the project site.