

# SUU MULTIPURPOSE BUILDING DANCE STUDIO ACOUSTICAL TREATMENT



State of Utah—Department of Administrative Services

## DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT

4110 State Office Building/Salt Lake City, Utah 84114/538-3018

### DRAWING SHEET INDEX

G1. 01	COVER SHEET AND SHEET INDEX
G1. 10	CODE ANALYSIS - PAGE 1 $\Delta$
G1. 11	CODE ANALYSIS - PAGE 2 $\Delta$
G1. 12	CODE ANALYSIS - PAGE 3 $\Delta$
A1. 01	CEILING TREATMENT LAYOUT
A1. 10	CEILING TREATMENT DETAIL
A2. 01	WALL TREATMENT LAYOUT
A2. 10	WALL TREATMENT DETAIL

### SPECIFICATIONS

SCOPE OF WORK	
06 2001	COMMON FINISH CARPENTRY REQUIREMENTS
09 5113	ACOUSTICAL BANNER
09 8413	FIXED SOUND-ABSORPTIVE BAFFLES

**SARGENT DESIGN GROUP**  
ARCHITECTURE | PLANNING

36 N 300 WEST, SUITE B  
CEDAR CITY, UTAH 84720  
OFFICE: (435) 586-8510 FAX: (435) 586-4873

SHEET TITLE:

**COVER  
SHEET**

SCALE:

**NOT TO  
SCALE**

SHEET NUMBER:

**G1.01**

REVISIONS:

$\Delta$  CODE REVIEW 10.21.08

# CODE ANALYSIS

PAGE ONE

## APPLICABLE CODES

	Year		Year
International Building Code	2004	National Electrical Code	2005
International Mechanical Code	2004	Uniform Code for	
International Plumbing Code	2004	Building Conservation	
International Fire Code	2004	ADA Accessibility	
International Energy		Guidelines	2003
Conservation Code	2004		ANSI FPL 2003

PROJECT: SUU-MULTIPURPOSE BLDG  
ACOUSTICAL TILE UPGRADES  
PROJECT NUMBER: 08112130

A. Occupancy and Group:

**A3 (EXISTING DANCE LAB)**

Change in Use: Yes \_\_\_\_\_ No X\_\_\_\_\_

Mixed Occupancy: Yes \_\_\_\_\_ No X\_\_\_\_\_

Special Use and Occupancy (e.g. High Rise, Covered Mall): N/A

B. Seismic Design Category:

N/A

C. Type of Construction (circle one):

$\frac{I}{A}$     $\frac{I}{B}$     $\frac{II}{A}$     $\frac{II}{B}$     $\frac{III}{A}$     $\frac{III}{B}$     $\frac{IV}{HT}$     $\frac{V}{A}$     $\frac{V}{B}$

D. Fire Resistance Rating

Requirements for the Exterior Walls based on the fire separation distance (in hours):

North: 0\_\_\_\_\_ South: 0\_\_\_\_\_

East: 0\_\_\_\_\_ West: 0\_\_\_\_\_

E. Mixed Occupancies: N/A\_\_\_\_\_

Nonseparated Uses: N/A\_\_\_\_\_

F. Sprinklers:

Required: N/A\_\_\_\_\_ Provided: NO\_\_\_\_\_

Type of Sprinkler System: N/A\_\_\_\_\_

G: Number of Stories: 1\_\_\_\_\_ Building Height: 10 30' 20' SLOPE

H: Actual Area: 6,840 SQUARE FEET

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# CODE ANALYSIS

PAGE 2

I: Tabular Area: N/A - SQUARE FOOTAGE  
DOESN' T CHANGE

J: Area Modifications:

N/A

$$a) A_a = A_t + \left[ \frac{A_t I_f}{100} \right] + \left[ \frac{A_t I_s}{100} \right]$$

Frontage Increase:

$$I_f = 100 \left[ \frac{F}{P} - 0.25 \right] \frac{W}{30}$$

b) Sum of the Ratio Calculations for Mixed Occupancies:

$$\frac{\text{Actual Area}}{\text{Allowable Area}} < 1 \quad \text{N/A}$$

c) Total Allowable Area for:

1) One Story: A (1) N/A \_\_\_\_\_

2) Two Story: A (2) N/A \_\_\_\_\_

3) Three Story: A (3) N/A \_\_\_\_\_

d) Unlimited Area Building: Yes N/A No \_\_\_\_\_

Code Section: N/A \_\_\_\_\_

K. Fire Resistance Rating Requirements for Building Elements (hours).

Element	Hours	Assembly Listing	Element	Hours	Assembly Listing
Exterior Bearing Walls	0		Floors - Ceiling Floors	0	
Interior Bearing Walls	0		Roofs - Ceiling Roofs	0	
Exterior Non-Bearing Walls	0		Exterior Doors and Windows	0	
Structural Frame	0		Shaft Enclosures	0	
	0		Fire Walls	0	
Fire Barriers	0		Fire Partitions	0	
			Smoke Partitions	0	

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# CODE ANALYSIS

PAGE 3

- L. Design Occupant Load: 137 (DANCE LAB)  
Exit Width Required: 27.4 INCHES  
Exit Width Provided: 108 INCHES (3 EXITS)
- M. Minimum Number of Required Plumbing Facilities:  
**NO CHANGE TO RESTROOMS**
- a) Water Closets - Required (m) N/A (f) N/A  
Provided (m) N/A (f) N/A
- b) Lavatories - Required (m) N/A (f) N/A  
Provided (m) N/A (f) N/A
- c) Bath Tubs or Showers: N/A
- d) Drinking Fountains: N/A  
Service Sinks: N/A

## INTERIOR WALL AND CEILING FINISH REQUIREMENTS BY OCCUPANCY

### A3 OCCUPANCY TABLE 803.5, NONSPRINKLERED

REQUIRED - CLASS B FOR ROOMS  
AND ENCLOSED SPACES

PROVIDED - CLASS A  
(SEE ATTACHED MANUFACTURER'S  
DOCUMENTATION)

#### FOOTNOTES:

- 1) IN CASE OF CONFLICT WITH THE U.S. DEPARTMENT OF JUSTICE FEDERAL REGISTERS, ADA GUIDELINES AND SPECIFIC REFERENCE TO THE INTERNATIONAL BUILDING CODE ACCESSIBILITY CHAPTERS, THE MORE RESTRICTIVE REQUIREMENTS SHALL GOVERN.
- 2) ADDITIONAL CODE INFORMATION SHALL BE PROVIDED AT THE DISCRETION OF THE BUILDING OFFICIAL FOR COMPLEX BUILDINGS, INCLUDING, BUT NOT LIMITED TO:
  - A) HIGH RISE REQUIREMENTS.
  - B) ATRIUMS.
  - C) PERFORMANCE BASED CRITERIA.
  - D) MEANS OF EGRESS ANALYSIS.
  - E) FIRE ASSEMBLY LOCATION SHEET.
  - F) EXTERIOR AND INTERIOR ACCESSIBILITY ROUTE.
  - G) FIRE STOPPING. (INCLUDING TESTED DESIGN NUMBER.)

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CODE  
ANALYSIS

SCALE:

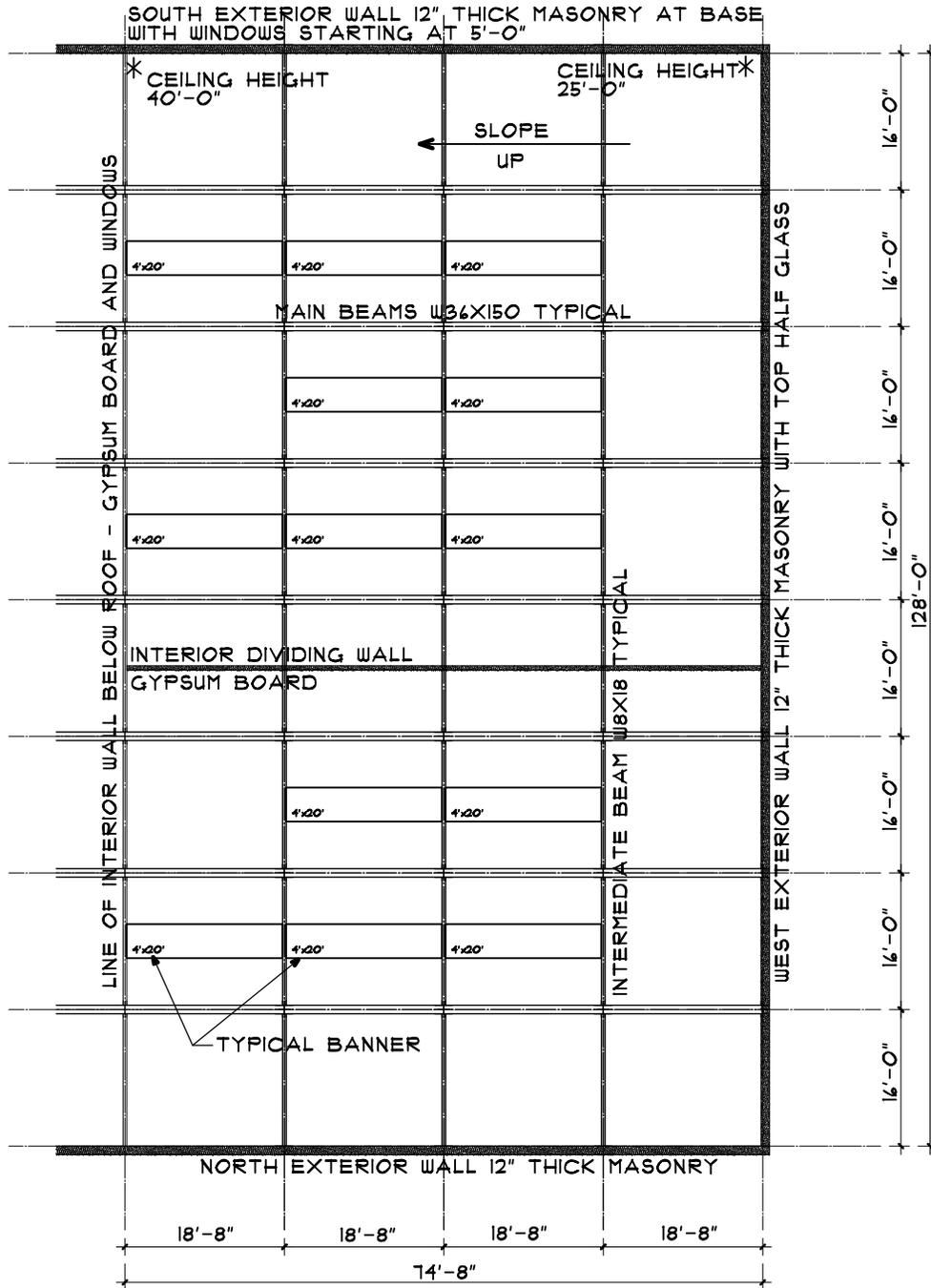
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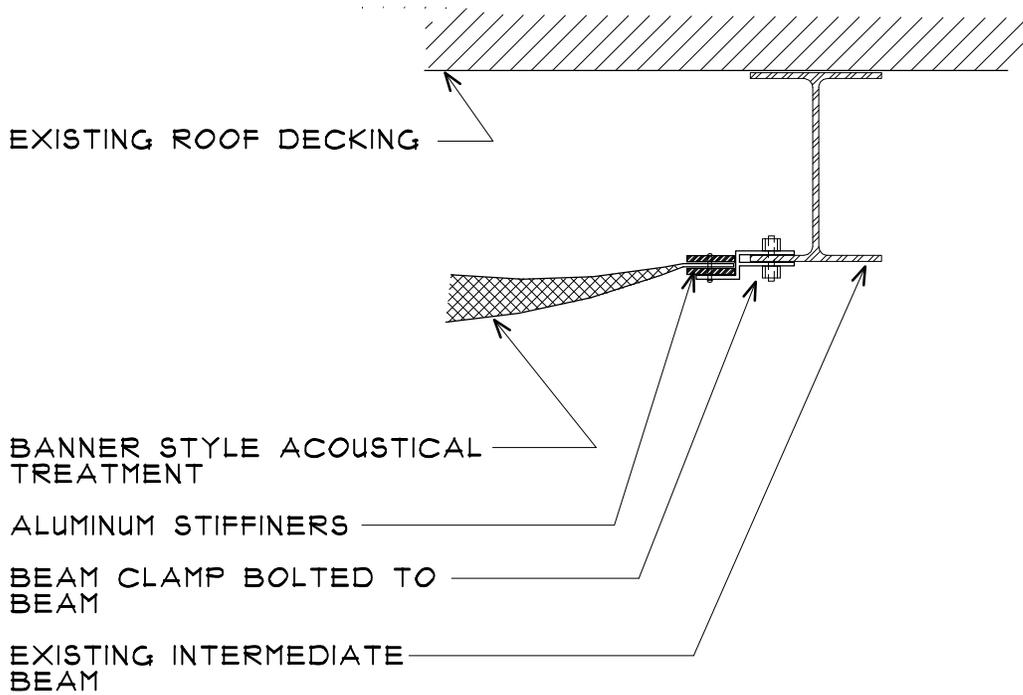
CEILING  
LAYOUT

SCALE:

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SHEET NUMBER:

A1.01



**GENERAL NOTES:**

1. CEILING BANNER TO BE MOUNTED PER MANUFACTURE' S STANDARD MOUNTING DETAILS.
2. CONTRACTOR TO VERIFY EXISTING CONDITIONS ARE READY FOR THE MOUNTING OF CEILING BANNER.

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CEILING  
DETAIL

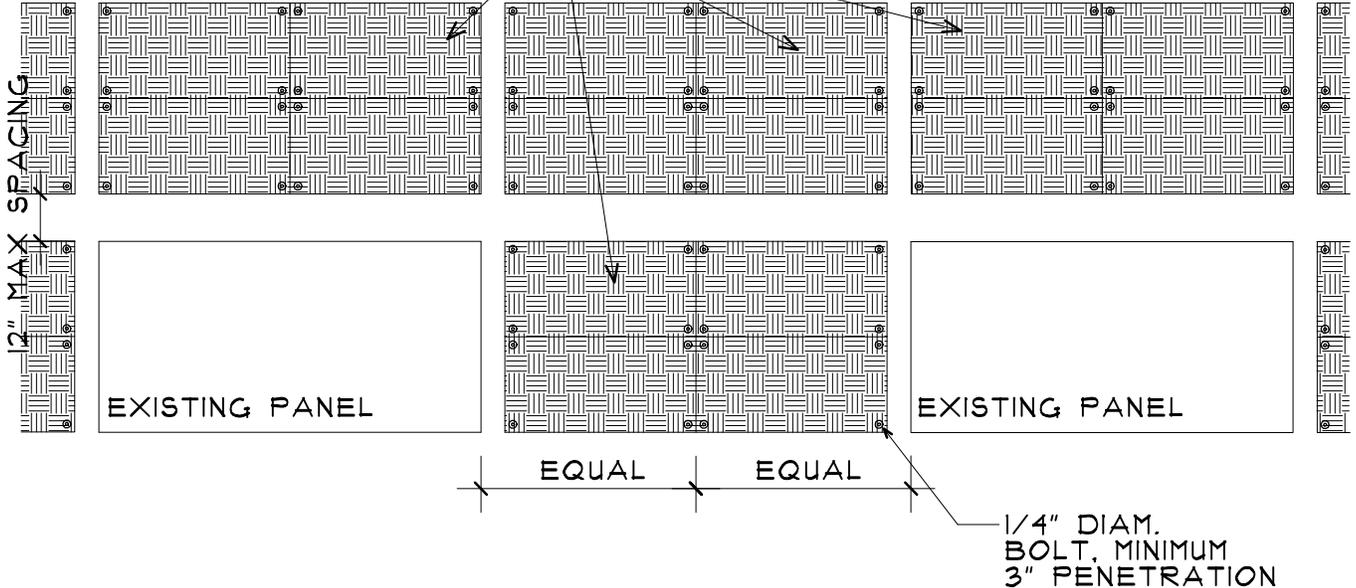
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**A1.10**

(4) 24"X48" BAFFLE  
PANELS - TYPICAL



**GENERAL NOTES:**

1. ABSORPTION COEFFICIENT - NRC .75 MINIMUM
2. WHERE SPACE ALLOWS MOUNT
- (4) NEW 24"X48" BAFFLE PANELS
3. ALINE NEW BAFFLE PANELS WITH EXISTING.
4. WHERE SPACING DOES NOT ALLOW
- (4) NEW PANELS PROVIDE (2) NEW BAFFLE
- PANELS TO MAKE 24"X96" PANEL.
5. ALONG EAST WALL WHERE EXISTING
- PANELS ARE LOCATED PROVIDE NEW BAFFLE
- PANEL PATTERN THAT FITS.

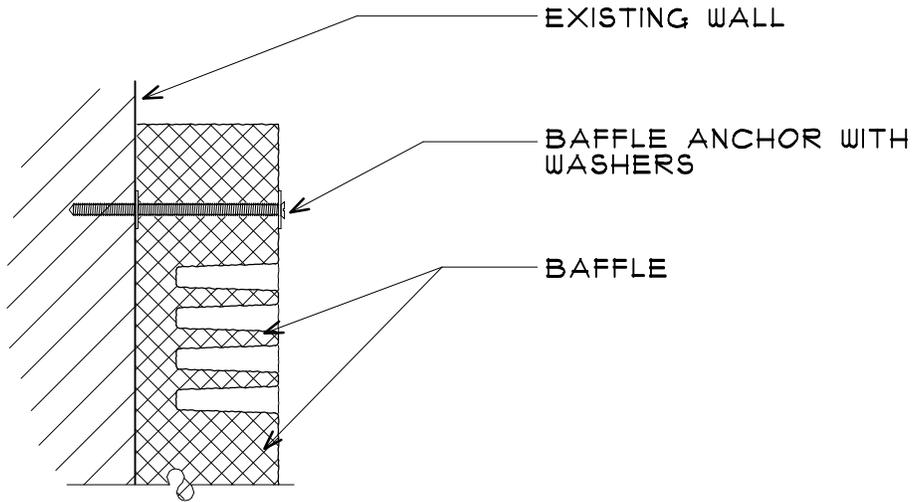
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**WALL  
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**GENERAL NOTES:**

1. BAFFLE TO BE MOUNTED PER MANUFACTURER'S STANDARD PRACTICE.

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**A2.10**



SUU Multipurpose Building Dance Studio Acoustical Treatment  
DFCM

Architect's Project Number: 08524

Scope of Work

1. Ceiling Treatment:
  - a. Install high quality acoustical "Banner" type ceiling treatment (absorption coefficient minimum NRC 0.85).
  - b. Acoustical "Banner" size: 4' wide by 20' long and 2" thick.
  - c. PVC Covering.
  - d. Color selected from manufacturer's standard color palate.
  - e. Provide installation clamps per manufacturer's standard installation methods.
2. Wall Treatment:
  - a. Install high quality acoustical "Baffle" type wall treatment (absorption coefficient minimum NRC 0.85).
  - b. Acoustical "Baffle" size 24" wide by 48" long and 3" thick.
  - c. Color to match existing acoustic panels.
  - d. Provide manufacturer's standard installation materials.

See attached drawings and specification for installation patterns, recommended installation methods and product information.

## SECTION 06 2001

### COMMON FINISH CARPENTRY REQUIREMENTS

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. Includes But Not Limited To:
  - 1. Furnish and install following items as described in Contract Documents:
    - a. Acoustical Banners.
    - b. Fixed Sound-Absorptive Baffles.
- B. Products Installed But Not Supplied Under This Section:
  - 1. Acoustical Banners.
  - 2. Fixed Sound-Absorptive Baffles.
- C. Related Sections:
  - 1. Section 09 5113: Acoustical Banner.
  - 2. Section 09 8413: Fixed Sound-Absorptive Baffles.

#### PART 2 - PRODUCTS

##### 2.1 MATERIALS

- A. Provide all Manufacturers' required installation materials.

#### PART 3 - EXECUTION

##### 3.1 EXAMINATION

- A. Site Verification of Conditions: Verify walls and ceilings are plumb, straight, in-line, and square before installation. Report conditions that are not in compliance to Architect before starting installation.

##### 3.2 INSTALLATION

- A. General Installation:
  - 1. Install work in accordance with measurements taken on Project site.
  - 2. Scribe, miter, and join accurately and neatly to conform to details.
- B. Items Installed But Not Supplied Under This Section: Install in accordance with requirements specified in Section supplying item.

END OF SECTION

**SECTION 09 5113**  
**ACOUSTICAL BANNER**

**PART 1 - GENERAL**

**1.1 SUMMARY**

- A. Includes But Not Limited To:
  - 1. Furnish and install acoustical banners for ceiling installation as described in Contract Documents.

**1.2 SUBMITTALS**

- A. Product Data:
  - 1. Manufacturer's literature.
  - 2. Color and pattern selection.

**1.3 DELIVERY, STORAGE, AND HANDLING**

- A. Store materials where protected from moisture and damage.
- B. Use no soiled, scratched, or broken material in the Work.

**1.4 PROJECT CONDITIONS**

- A. Project Environmental Requirements: Building shall be enclosed, mechanical system operating with proper filters in place, and temperature and humidity conditions stabilized within limits under which Project will operate before, during, and after installation until Substantial Completion.

**1.5 MAINTENANCE**

- A. Extra Materials:
  - 1. Provide Owner with 5% of banners of each pattern and color used on Project for future use.

**PART 2 - PRODUCTS**

**2.1 MATERIALS**

- A. Acoustic Banners:
  - 1. Finish: PVC Covering.
  - 2. Color: select from manufacturer's standard color palate.
  - 3. Rating: Minimum NRC rating 0.85.
  - 4. Fire resistant.
  - 5. Thickness: 2"
  - 6. Size: 4' wide by 20' long.

## **2.2 MANUFACTURERS**

- A. Contact Information:
  - 1. Unger Technologies, Inc., (317) 774-1900
  - 2. OR Approved Equal.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Inspect for defects in support that are not acceptable. Report defects to Architect in writing. Do not install ceiling banners until defects in support are corrected.

### **3.2 INSTALLATION**

- A. Materials shall be dry and clean at time of application.
- B. If recommended by Manufacturer, use banner one at a time from at least four open boxes to avoid creating any pattern due to slight variations from box to box.
- C. Mount per Manufacturer's recommendations.

### **3.3 ADJUSTING**

- A. 'Touch-up' minor abraded surfaces.
- B. Remove and replace damaged banners at no additional cost to Owner.

### **3.4 CLEANING**

- A. Remove from site all debris connected with work of this Section.

**END OF SECTION**

## SECTION 09 8413

### FIXED SOUND-ABSORPTIVE BAFFLES

#### PART 1 - GENERAL

##### 1.1 SUMMARY

- A. Products Supplied But Not Installed Under This Section:
  - 1. Factory-built acoustic wall baffles.
- B. Related Sections:
  - 1. Section 06 2001: Installation.

##### 1.2 SUBMITTALS

- A. Product Data:
  - 1. Manufacturer's literature showing compliance with Contract Document requirements.
  - 2. Color selection.
- B. Quality Assurance / Control: Written copy of Manufacturer's installation instructions.

##### 1.3 Maintenance

- A. Extra Materials: Provide Owner with 5% of baffles of each pattern and color used on Project for future use.

#### PART 2 - PRODUCTS

##### 2.1 MANUFACTURED UNITS

- A. Acoustic Wall Baffles:
  - 1. Factory-built baffles.
  - 2. Rating: minimum NRC rating 0.85.
  - 3. Fire resistant.
  - 4. Nominal 3" thick.
  - 5. Baffle size – 24"x48", minimum
  - 6. Manufacturers
    - a. ArtUSA Industries, (888) 454-6973, [www.artusaindustries.us](http://www.artusaindustries.us)
    - b. OR Approved Equal.

##### 2.2 ACCESSORIES

- B. Mounting Hardware: Supply proper mounting hardware for substrate on which panels are to be mounted.

#### PART 3 - EXECUTION:

##### 3.1 EXAMINATION

- A. Inspect for defects in support that are not acceptable. Report defects to Architect in writing. Do not install baffles until defects in support are corrected.

### **3.2 INSTALLATION**

- A. Materials shall be dry and clean at time of application.
- B. Install per Manufacturer's recommendations.

### **3.3 ADJUSTING**

- A. "Touch-up" minor abraded surfaces.
- B. Remove and replace damaged baffles at no additional cost to Owner.

### **3.4 CLEANING**

- A. Remove from site all debris connected with work of this section.

**END OF SECTION**