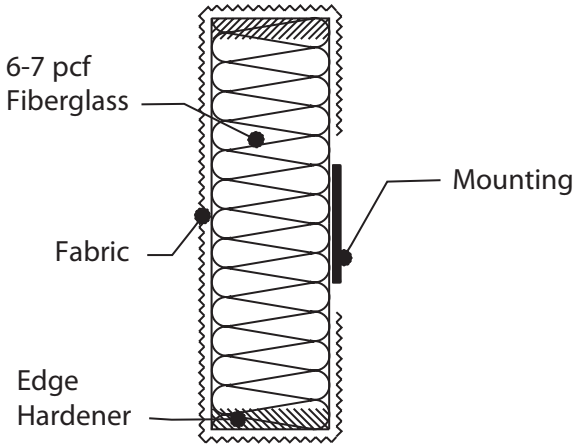
Elite ProPanels™

ProPanels are the most economical, sound-absorbing wall panel products by Auralex. ProPanels create a comfortable environment by reducing noise reverberation. Not only are they durable enough for a gymnasium, ProPanels are beautiful enough for a boardroom.

ProPanels absorb a wide range of sound frequencies. Absorption levels are based on the panel thickness. Review the acoustical performance for each core thickness listed below to make your selection.

Core Section



Core
6-7 PCF fiberglass, 1/2" to 4" thick

Sizes
Custom sizes and shapes up to 4'x12' and 5'x10'

Mounting
Adhesive, impaling clips, two-part Z-clips

Finish
Fabric, vinyl

Edges
Square, beveled, radiused
Chemically hardened

Corners
Square, radiused

Flammability
All components have a Class "A" rating per ASTM E84

Sound Absorption

Hz	125	250	500	1000	2000	4000	N.R.C.
AP .5	.07	.09	.35	.77	.98	1.03	.55
AP .75	.04	.19	.59	.91	1.05	1.02	.70
AP 1	.10	.25	.84	1.08	1.13	1.11	.85
AP 1.5	.31	.58	1.03	1.10	1.05	1.04	.95
AP 2	.42	.89	1.12	1.07	1.10	1.09	1.05
AP 3	.75	.89	1.11	1.21	1.21	1.20	1.10
AP 4	.87	.87	1.24	1.26	1.26	1.25	1.15

Note: Sound absorption is based on using our standard fabric. Results may vary with the use of other materials.

SECTION 09800

Auralex® ProPanels

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Acoustical wall panels.

1.2 RELATED SECTIONS

A. Section 05310 - Steel Decking: Acoustical steel deck.
B. Section 09111 - Non-Loadbearing Metal Framing: Ceiling suspension systems.
C. Section 09260 - Gypsum Board Assemblies.
D. Section 09511 - Suspended Acoustical Ceilings: Conventional grid-supported acoustic ceilings.
E. Section 09512 - Adhesive Applied Acoustical Ceilings.
F. Section 09900 - Paints and Coatings.

1.3 REFERENCES

A. ASTM C 423 - Standard Test Method for Sound Absorption and Coefficients by the Reverberation Room Method; 2000.
B. ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2000a.

1.4 PERFORMANCE REQUIREMENTS

A. Acoustical Absorption: Perform testing in accordance with ASTM C 423, Type A mounting method unless otherwise specified.
B. Flame Spread Rating: Provide all components with Class A flame spread rating in accordance w/ASTM E 84.

1.5 SUBMITTALS

A. Submit under provisions of Section 01300.
B. Product Data: Manufacturer's data sheets on each product to be used, including:
    1. Preparation instructions and recommendations.
    2. Storage and handling requirements and recommendations.
    3. Installation methods.
    4. Independent testing agency test reports.

C. Selection Samples: For each product specified, two complete sets of color samples representing manufacturer's full range of available colors and patterns.

D. Verification Samples: For each product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications: Minimum 10 years of experience in producing acoustical products of the types specified herein.
B. Installer Qualifications: Acceptable to the manufacturer of the acoustical products being installed.
C. Mock-Up: Provide a mock-up for evaluation of installed appearance.
    1. Install acoustical products in areas designated by Architect.
    2. Do not proceed with remaining work until Architect approves workmanship and appearance.
    3. Approved mock-up may remain as part of the work.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Protect acoustical products from moisture during shipment, storage, and handling.
B. Store products in manufacturer's unopened packaging until ready for installation.
    1. Store materials flat, in dry, well-ventilated space.
    2. Do not stand panels on end.
    3. Protect edges from damage.
C. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.8 PROJECT CONDITIONS

A. Do not begin installation of acoustical products until building has been enclosed and environmental conditions approximate those that will prevail when building is occupied.
B. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.9 EXTRA MATERIALS

A. See Section 01600 - Product Requirements, for additional provisions.
B. Provide 5 percent, but not less than 1 of each type of acoustical unit actually installed, for Owner's use in maintenance.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Manufacturer: Auralex Acoustics, Inc. 6853 Hillsdale Court, Indianapolis, IN 46256.
Tel: (317) 842-2600 or (800) 959-3343. Fax: (317) 842-2760. www.auralex.com.
B. Substitutions: Not permitted.
C. Requests for substitutions will be considered in accordance with provisions of Section 01600.
D. Provide all acoustical products specified herein by a single manufacturer.

2.2 ACOUSTICAL WALL PANELS

A. Wrapped Fiberglass Panels: ProPanels; core of 6 to 7 pcf (96 to 112 kg/cu m) single fiberglass with chemically hardened edges, seamless finish material wrapped and bonded to back side of panels.

1. Thickness: 1/2 inch (13 mm); NRC 0.55.
2. Thickness: 3/4 inch (19 mm); NRC 0.70.
3. Thickness: 1 inch (25.4 mm); NRC 0.80.
4. Thickness: 1.5 inch (38 mm); NRC 0.95.
5. Thickness: 2 inch (51 mm); NRC 1.05.
6. Thickness: 3 inch (76 mm); NRC 1.10.
7. Thickness: 4 inch (101.6 mm); NRC 1.15.
8. Size: As indicated.
9. Size: Provide panels of equal width on each length of wall.
10. Size: _____.
11. Finish Material: Manufacturer's standard polyester fabric.
12. Finish Material: Manufacturer's standard perforated polyvinyl sheet.
13. Finish Material: Custom fabric provided by Owner.
14. Color: As selected from manufacturer's standards.
15. Color: As scheduled for various locations.
16. Color: _____.
17. Edges: Square.
18. Edges: Beveled.
19. Edges: Radiused.
20. Corners: Square.
21. Corners: Radiused.
22. Corners: Custom configuration as indicated on drawings.
23. Mounting: Adhesive.
24. Mounting: Impaling clips.
25. Mounting: Mechanical clips.

2.3 ACCESSORIES

A. Mounting Adhesive: Water-based, heavy-bodied adhesive as recommended by manufacturer of acoustical panels.
B. Impaling Clips. Manufacturer's standard 3 by 4 inches (75 by 100 mm) galvanized mounting clips designed for impaling back side of fiberglass units.
C. Two-Part Z-Clips: Manufacturer's standard mounting bar and matching clips for mounting on rear of acoustical panels.

PART 3 EXECUTION

3.1 EXAMINATION

A. Do not begin installation until substrates have been properly prepared.
B. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

A. Clean surfaces thoroughly prior to installation.
B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

A. Install acoustical units in accordance with manufacturer's instructions.
B. Adhesive Mounting: Size back of panels at 18 inch (450 mm) on center in both directions with thin coating of adhesive in 4 inch (100 mm) squares. Center adhesive dabs the size of a large egg on each sized area, and press panel firmly against substrate, flattening adhesive. Block panel for not less than 24 hours until adhesive has set.
C. Impaling Clips: Fasten clips to wall at 48 inches (1220 mm) on center, with points facing upward. Attach panels by pressing downward and toward the wall, so points of clips are embedded firmly in back of panel.
D. Two-Part Clips: Fasten bars to wall at 48 inches (1220 mm) on center in both directions. Impale matching mechanical clips into back of panels in matching pattern and drop panel into position so clips fully engage into wall-mounted bars.

3.4 PROTECTION

A. Protect installed products until completion of project.
B. Touch-up, repair or replace damaged products before Substantial Completion.

SPINEL
STYLE 3582
This textured crepe weave holds visual interest with its interplay of tones. Named after beautiful gemstones, this product is an excellent solution for upgrading and refreshing a traditional office setting.

Specifications

SPINEL

Style	3582
Contents	100% recycled polyester
Weight	11.8 ± 1.0 oz./lin. yd.
Width	66" useable
Repeat	16 1/2" vertical, 16 1/2" horizontal

Cleaning Code

W-S	Fabric may be cleaned with mild, water-free solvents or water-based cleaning agents or foam.

Performance

Breaking strength (ASTM D 5034)	220 lbs. min. - warp, 90 lbs. min. - fill
Tear (ASTM D 2261)	18 lbs. min. - warp and fill
Moisture regain (ASTM D 2654)	1.0% max.
Colorfastness to light (AATCC 16 Option 3) (formerly AATCC 16E)	40 hrs.
Colorfastness to crocking (AATCC 8)	class 4 min. - dry, class 3 min. - wet

Flammability

ASTM E-84	class 1 or A

Colors may vary slightly between dye lots.

Application testing of this product is recommended.

Spinel is a directional fabric. Note subtle pattern in application to panels.

Guilford and Guilford of Maine are registered trademarks of Interface Fabrics, Inc., an Interface Company.

Terratex® is a registered trademark of Interface Fabrics, Inc., an Interface Company and designates fabrics that are made from 100% recycled or compostable material using increasingly sustainable manufacturing practices to produce a high quality product that is recyclable at the end of its useful life.

100% of the electricity used to make this product is matched BY GREEN-E certified Renewable Energy Certificates (www.green-e.org).

Spinel is included in the underwriters laboratory panel fabric recognition program. Additional testing of this U.L. recognized component fabric is not required on approved panels from participating manufacturers.

printed on recycled paper using soybased ink

Material Safety Data Sheet

Auralex® acoustics

DATE PREPARED: JULY 1, 1991

PRODUCT IDENTIFICATION

SNAP*ON® Pipe Insulation
Standard Duct Wrap
Universal Blanket
Snap*Wrap™ Insulation
OEM Thermal Insulation
OEM Acoustical Board
High Temperature Blanket
850° Insulation Board
Industrial Insulation Board
Wall and Panel Insulation
Ultra Duct™
Insulation for Flexible Duct
Metal Building Insulation 202
Metal Building Panel Insulation
Transportation Insulation
Industrial Fabrication Board

		Health	Fire	Reactivity
Chemical Name:	Mixture			
CAS No:	None Assigned			
Common Name (s):	Fiber Glass Insulation			
NFPA Rating:		0	0	0
HMIS Rating:		1*	0	0

(See Section 8 for acronyms/definitions.)

Degree of Hazard
0 - Minimal (Insignificant)
1 - Slight
2 - Moderate
3 - Serious (High)
4 - Severe (Extreme)
* - Chronic Health Effects(s) See Section 5

1. INGREDIENT INFORMATION:

Chemical Name: Fiber glass
CAS No: None Assigned
Common Name: Fibrous glass wool
Percent in Product: 58-97% By Weight

Exposure Limits:	OSHA PEL	ACGIH TLV-TWA	NIOSH REL
	Total Nuisance Dust: 15 mg/m³ Respirable Nuisance Dust: 5 mg/m³	Total Glass Dust: 10 mg/m³	Total Glass Dust: 5 mg/m³ Respirable Fibers: 3 f/cc

This chemical is listed on: EPA SARA Title III, Section 313 ☐, 302 ☐, California Proposition 65 ☒†, Not Listed ☐

†Listed as glasswool fibers (airborne particles of respirable size).

Chemical Name: Urea, polymer with formaldehyde and phenol (cured)
CAS No: 25104-55-6
Common Name: Phenol formaldehyde urea polymer
Percent in Product: 3-17% By Weight

Exposure Limits:	OSHA PEL	ACGIH TLV-TWA	Other
	None	None	None

This chemical is listed on: EPA SARA Title III, Section 313 ☐, 302 ☐, California Proposition 65 ☐, Not Listed ☒

Chemical Name:	**For ASJ/AWJ jacketed Snap*On* Pipe insulation only, adhesive contains:** Parraffin waxes and hydrocarbon waxes		
CAS No:	8002-74-2		
Common Name:	Chlorinated paraffins		
Percent in Product:	7% By Weight-Maximum		
Exposure Limits:	OSHA PEL	ACGIH TLV-TWA	Other
	None	None	None
This chemical is listed on:	EPA SARA Title III, Section 313 ☐, 302 ☐, California Proposition 65 ☐, Not Listed ☒		

Chemical Name:	**For Vinyl/FSK/AWJ/ASJ faced products only, adhesive contains:** Acetic acid ethenyl ester, polymer with ethene		
CAS No:	24937-78-8		
Common Name:	Ethene-vinyl acetate copolymer		
Percent in Product:	11% By Weight-Maximum		
Exposure Limits:	OSHA PEL	ACGIH TLV-TWA	Other
	None	None	None
This chemical is listed on:	EPA SARA Title III, Section 313 ☐, 302 ☐, California Proposition 65 ☐, Not Listed ☒		

2. PHYSICAL DATA

Boiling Point (°F):>2550° (glass)
Melting Point (°F): 2550° (glass)
Softening Point (°F):>1200°
Odor: Faint resin odor
Color: Yellow

Vapor Density (Air=1): N/A
Specific Gravity (H20=1): Glass=2.5
Evaporative Rate (ethyl ether=1): N/A
Vapor Pressure (mmHg @ 20°C): N/A
% Volatile by Volume: N/A
% Solubility: Small

Appearance: Fibers assembled into tubes, blankets or boards. The products may be faced with kraft, aluminum foil, vinyl or a combination thereof. Some products may have a coating.

3. FIRE AND EXPLOSION HAZARD DATA

Flash Point (°F) and Method: Does not support combustion.

Flammable Limits: LEL: N/A UEL: N/A

Autoignition Temperature: N/A

Extinguishing Media: Use that which is applicable to surrounding fire.

Special Fire-Fighting Procedures: Treat as residential building materials.

Unusual Fire and Explosion Hazard: Facings on these products may burn. Care should be taken to not leave facing exposed when working close to an open flame. These products contain a cured phenolic-based binder. The binder and kraft facing in a fire situation may emit toxic fumes and smoke containing carbon dioxide, carbon monoxide and molecular fragments of hydrocarbon particulates, carbon-hydrogen-nitrogen and nitrogen-oxygen compounds. Vinyl facings may thermally decompose at about 260°C (500°F) and release hydrogen chloride. The AWJ jacketing on pipe insulation will begin to thermally decompose at about 175°C-200°C (350-400°F) releasing hydrogen chloride and at about 300°C-350°C (570-660°F) release hydrogen fluoride. In a fire situation, carbon monoxide, carbon dioxide, hydrogen chloride, hydrogen fluoride and sulfur dioxide may also be formed.

4. REACTIVITY DATA

Stability: Material is stable.
Corrosivity: None
Incompatibility: Hydrofluoric Acid

5. HEALTH HAZARD DATA

Primary Routes of Entry: Inhalation, skin and eye contact.

Acute: Exposure to fiber glass may cause temporary skin, eye and upper respiratory irritation.

Medical Conditions Which May Be Aggravated: Pre-existing conditions which may be aggravated by mechanical irritants upon inhalation or skin contact.

Information for Medical Practitioners: Skin irritation responds well to mild hydrocortisone cream.

Chronic: Extensive medical-scientific research has been conducted regarding the health aspects of fiber glass over the past 50 years. The International Agency for Research on Cancer (IARC), an agency of the World Health Organization (WHO), at a meeting in June 1987, reviewed all of the significant research on the health effects attributed to fiber glass.

IARC also reviewed animal studies involving exposure to fiber glass. In comprehensive studies, where laboratory animals were forced to inhale fibers (in far greater concentrations than human exposure), there was no evidence of cancer or other respiratory disease. However, in other animal experiments in which glass wool fibers were artificially injected or surgically implanted in the animals' lungs, tumors were produced. Such procedures by-passed normal body defense mechanisms. One of the researchers, responsible for extensive work in surgical implantation, stated that, "Our experiments are inappropriate for evaluating many aspects of the environmental hazard, since they circumvent those factors that might inhibit or enhance exposure through natural routes."

A July 1990 update of an epidemiology study of 11,380 man-made vitreous workers revealed a small statistical significant excess in respiratory cancer (SMR 112.1) for the total period 1946-1985. The authors stated that "the 12% excess in respiratory cancer mortality is of little practical significance"...and was supported by their analysis of duration of employment and exposure to the man-made vitreous fiber.

A small study of Canadian glass wool plant workers reported a statistically significant increase in lung cancer deaths. The authors concluded that the interpretation of the information on this increase was difficult since there was no relationship between the excess lung cancer and length of time since first exposure. Such a relationship would be expected if the excess is related to any factors in the work environment.

Based largely on the animal implantation experiments and following its mandatory classification protocol, IARC classified glass wool as category 2B, "possibly carcinogenic to humans." IARC regards it as prudent to treat a material for which there is sufficient evidence of carcinogenicity in animals as if it is a possible carcinogen to humans.

Carcinogenicity:

Ingredient: Fibrous glass wool

NTP: Not Listed
IARC: Classified as 2B
OSHA: Not Listed

Emergency and First Aid Procedures:

Inhalation: Remove from exposure. Get medical help if irritation persists.

Eye Contact: Flush well with running water for at least 15 minutes. Get medical help if irritation persists.

Skin Contact: Cleanse with soap and water. Get medical help if irritation persists.

Ingestion: Unlikely. Consult physician if unusual reaction is noted.

Fires: Remove to fresh air, administer oxygen and get medical help.

6. SPILL, LEAK, STORAGE AND DISPOSAL INFORMATION

Spills: Vacuum dust deposits.

Accidental or Unplanned Releases: Clean area with vacuum or wet methods.

Storage: Store under cover to protect product.

Waste Disposal Information: Scrap material should be disposed of in a sanitary landfill in accordance with federal, state and local regulations. Waste is not hazardous as defined by RCRA (40 CFR 261).

7. SPECIAL INFORMATION

Personal Protective Equipment:

Respirators: Wear NIOSH/MSHA approved respirators when handling and applying fiber glass insulation products in accordance with the following NIOSH-based exposure guidelines.

Exposure	Respirator (or equivalent)
Less than 10 times NIOSH REL	3M 8710 or 3M 9900
Less than 50 times NIOSH REL	MSA Ultra Twin Full Face Respirator with type H filter (HEPA)

Product Package Label:

WARNING: Contains fiber glass wool, a possible cause of cancer if inhaled.

This fiber glass wool insulation may cause skin, eye and respiratory irritation.

When handling and/or applying this insulation:

- Wear long sleeves, gloves and cap.
- Wear eye protection (goggles, safety glasses or face mask).
- Use a NIOSH/MSHA approved dust respirator such as a 3M model #8710 or #9900 or equivalent.

After handling and/or applying this insulation:

- Bathe with soap and warm water.
- Wash work clothes separately and rinse washer after use.

For additional product safety information, including dust respirator data and Material Safety Data Sheets (MSDS), call (215)341-7677.

Work Practices and Engineering Controls: Avoid spread of fiber glass dust. Provide general and/or local exhaust ventilation to control airborne dust levels below exposure limits.

8. ADDITIONAL COMMENTS

Acronyms/definitions used in this MSDS:

ACGIH:	American Conference of Governmental Industrial Hygienists
CAS No:	Chemical Abstracts Service Number
EPA:	Environmental Protection Agency (USA)
f/cc:	Fibers per cubic centimeter
HMIS:	Hazardous Material Identification System
IARC:	International Agency for Research on Cancer
LEL:	Lower Explosive Limit
MSHA:	Mine Safety and Health Administration
mg/m^3:	Milligrams per cubic meter
N/A:	Not applicable
NFPA:	National Fire Protection Association
NIOSH:	National Institute for Occupational Safety and Health
NTP:	National Toxicology Program
OSHA:	Occupational Safety and Health Administration
PEL:	Permissible Exposure Limit
RCRA:	Resource Conservation & Recovery Act
REL:	Recommended Exposure Limit
SARA:	Superfund Amendments and Reauthorization Act
SMR:	Standard Mortality Ratio
Title III:	Emergency Planning and Community Right to Know Act Section 302 - Extremely Hazardous Substances Section 313 - Toxic Chemicals
TLV:	Threshold Limit Value
UEL:	Upper Explosive Limit

California Proposition 65: California Safe Drinking Water and Toxic Enforcement Act of 1986.

Total Dust: Suspended airborne particles of "nuisance" dusts including those of non-respirable size.

Total Glass Dust: Suspended airborne particles of dust composed of glass only, including those of non-respirable size.

Respirable Fibers: Suspended airborne particulates with diameters of 3.5 micrometers or less, lengths of 5 micrometers or more and 5:1 length to width aspect ratio.

Respirable Dust: The respirable fraction of suspended airborne particulates.