

T: (512) 663-7461 F: (512) 681-9752

April 25, 2017

Dwayne Gossett Williamson County, Texas 3101 SE Inner Loop Georgetown, TX 78620

Re: North Campus Facilities

Job No: 233901

Subj: Change Proposal No. 233901-0007

Dear Sir or Madam:

We respectfully submit our proposal for an increase to our contract in the amount of \$0 (zero) dollars to provide Added Wall Panels per Reviewed 098114 Acoustical Fiberglass Wall Panel Submittal for the above referenced project.

Our price is valid for Ten (10) days

Please indicate your acceptance of this change proposal by signing and returning one copy of the attached Form B breakdown of our cost.

Very truly yours, VAUGHN CONSTRUCTION

Doug Boram

Attachments:

CC:

# FORM B

**PROJECT: North Campus Facilities** 

CHANGE PROPOSAL NO: 233901-0007

**QUOTATION:** 

Date

<u>ltem</u>	<u>Labor</u>	<u>Materials</u>	<u>Subs</u>	<u>Total</u>
Added Wall Panels per Reviewed 098114 Submittal	\$0.00	\$0.00	\$2,237.00	\$2,237.00
To be Funded by Owners Contingency	\$0.00	\$0.00	\$(2,237.00)	\$(2,237.00)
Totals	\$0.00	\$0.00	\$0.00	\$0.00
	Insurance, Tax, B	enefits on Labor		\$0.00
	Overhead			\$0.00
	Fee on Subs			\$0.00
	Fee on JTV			\$0.00
	Bond			\$0.00
	Remodel Tax			\$0.00
	TOTAL			\$0.00
TIME EXTENSION TO CONTRACT:	0 Days			
Submitted Date: 4/25/2017	·			
Accepted		VAUGH	N CONSTRUCTION	ı
Ву:		By: Doug Bo	De la companya della companya della companya de la companya della	

**Proposal Valid for 10 Days** 



# **Funds Tracking Log**

Change	Change	Time Exten	sion (Days)	GMP Breakdown				OMB	Total Updated	
Proposal No.	Type & No.	Pending	Approved	Cost of Work	CM Contingency	Owner Contingency	General Conditions	Construction Phase Fee	GMP #2339.01	Contract Amount
N/A	GMP	-	-	\$18,195,395	\$406,771	\$406,772	\$1,896,522	\$625,467	\$21,530,927	\$21,530,927
1	OCO	0	-	\$3,659	\$0	(\$3,659)	\$0	\$0	\$0	\$21,530,927
2	OCO	10	10	\$114,186	\$0	(\$114,186)	\$0	\$0	\$0	\$21,530,927
3	OCO	0	-	\$1,727	\$0	(\$1,727)	\$0	\$0	\$0	\$21,530,927
4	OCO	0	-	\$19,494	\$0	(\$19,494)	\$0	\$0	\$0	\$21,530,927
5	OCO	0	-	\$19,676	(\$19,676)	\$0	\$0	\$0	\$0	\$21,530,927
6	OCO	0	-	\$14,465	(\$14,465)	\$0	\$0	\$0	\$0	\$21,530,927
7	OCO	0	-	\$2,237	\$0	(\$2,237)	\$0	\$0	\$0	\$21,530,927
8		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
9		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
10		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
11		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
12		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
13		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
14		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
15		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
16		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
17		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
18		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
19		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
20		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
21		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
22		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
23		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
24		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
25		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
26		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
27		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
28		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
29		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
30		-	-	\$0	\$0	\$0	\$0	\$0	\$0	\$21,530,927
Current	Amounts	10	10	\$18,370,839	\$372,630	\$265,469	\$1,896,522	\$625,467	\$21,530,927	\$21,530,927

# Standard Drywall, Inc.

3900 Drossett drice, Suite C Austin, Texas 78744

# Change Order Proposal

JOB NAME:

North Campus facilities

TO: Doug Boram DATE: April 21, 2017

Vaughn Construction 3920 North IH 35

Austin, Texas 78751

PHONE: 512-663-7461

FAX: - JOB NUMBER: TX6262 -2

Description: Additional acoustical wall panels in Bldg. D from Submittal review process.

	DETAILS OF WORK	Quantity	<u>L</u>	Jnit Cost		<u>Total</u>
<u>Materials</u>						
AWP		1	\$	1,005.80	\$	1,005.80
Flatmetal		1	\$	74.58	\$	74.58
		0	\$	-	\$	-
		0	\$	-	\$	-
		0	\$	-	\$	-
		0	\$	-	\$	-
		0	\$	-	\$	-
		М	ateria	l Subtotal	\$	1,080.38
<u>Labor</u>			_		_	
see attached		1	\$	826.37	\$	826.37
		0	\$	-	\$	-
		0	\$	-	\$	-
		0	\$	-	\$	-
		0	\$	-	\$	-
		Labor	Subt	otal	\$	826.37
				Subtotal	\$	1,906.75
			C	H&P 15%	\$	286.01
				Bond 2%	\$	43.86
		TOTAL AMOU	INT O	F CHANGE:	\$	2,237
		ADDITIONAL DA	YS RE	QUESTED:		

## QUALIFICATIONS:

The above unit pricing includes all required Framing, Drywall, Hollow Core Doors, and Door Hardware.

,	ACCEPTED BY:		SUBMITT	ED BY:
			Trent Patteson	April 21, 2017
Doug	Boram	Date	Trent Patteson	Date Revised: 9/17/2004

## Standard Drywall, Inc.

3900 Drossett Drive, Austin, Texas 78744 Phone: 512-651-5096 Fax: 512-651-5133

# **Job Cost Summary**

# Williamson County N Camp Facility

## Additional AWP from submittal review

Bid No. 18

Selected Sections: 09110 Interior Metal Framing, 09840 Acoustical Wall Treatment Selected Typical Areas:

Selected Areas: (unassigned), D, F, E, B, A, G, H (LEVEL 1, LEVEL 2, ROOF)

Estimator: Job Status:

Job Class: Bid Date/Time: **8/23/2016 2:00:00 PM** 

Wage Type: Union Plans Date: 8/15/2016

Job Site: WILCO N Campus Facility, 3189 S.E. Inner Loop, Georgetown, Texas 78626

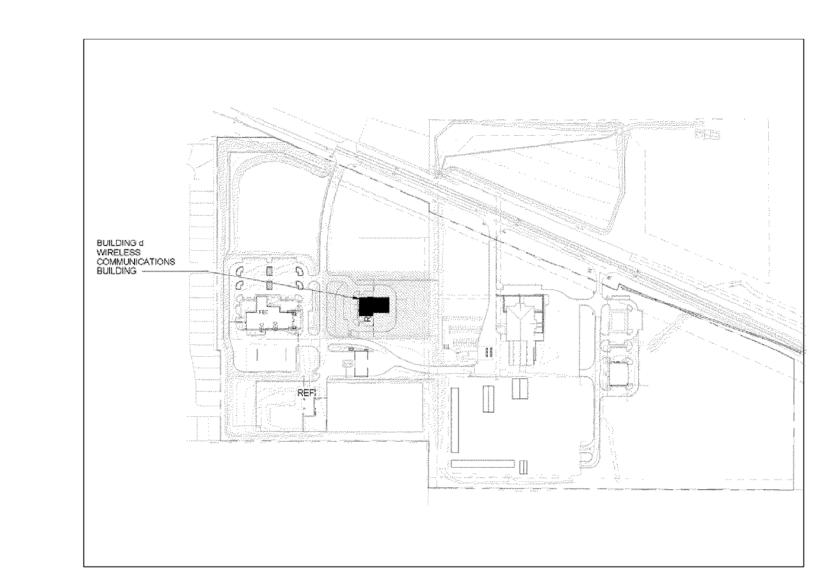
Material Cost Code	Description	Quantity	Unit Cost	Amount			
601	Framing	132.00 LF	0.57	74.58			
609	Architectural finish	168.00 SF	5.99	1,005.80			
			Material Totals	1,080.38			
Labor Cost Code	Description	Quantity	Unit Cost	Amount	Crew Hours	Man Hours	Prod/ Hour
150	layout	168.00 SF	0.75	126.00	3.00	3.00	56.00
164	Backing	132.00 LF	1.90	250.80	6.60	6.60	20.00
229	ACT wall panels	168.00 SF	1.96	329.50	8.67	8.67	19.38
501	Supervision			50.65	1.21	1.21	0.00
507	Cleanup			48.60	1.28	1.28	0.00
508	Stocking			20.83	0.55	0.55	0.00
			Labor Totals	826.37	21.30	21.30	
			Grand Total	1,906.75			

04/21/2017 3:24 pm Page 1

# **FLOOR PLAN GENERAL NOTES**

- 1. ALL INTERIOR PARTITIONS ARE DIMENSIONED TO THE FACE OF STUD UNLESS OTHERWISE NOTED. REFER TO SHEET G1.01 FOR PARTITION TYPES. 3. INSTALL VERTICAL WALL CONTROL JOINTS IN ALL GYP. BD. PARTITIONS THAT EXCEED 30'-0" IN
- 4. AT GYP. BD. PARTITIONS, DOOR FRAMES SHALL BE HELD 4 INCHES FROM BACKBEND OF FRAME TO ADJACENT WALLS AT HINGE JAMB UNLESS NOTED OTHERWISE.
- 5. EXTEND FURRING 6" ABOVE CEILING, BRACE STUDS TO COLUMN OR WALL AT TOP AND AT MID-SPAN WHERE SPAN EXCEEDS 12'-0". WHEN FURRING FORMS A PART OF A FIRE RATED ASSEMBLY, EXTEND
- FURRING TO STRUCTURE AND FINISH THE SAME AS THE DESIGNATED ASSEMBLY. SLOPE FLOORS TO FLOOR DRAINS 1/4" PER FOOT FOR A 3'-0" RADIUS UNLESS NOTED OTHERWISE. 7. DIMENSIONS NOTED "VERIFY" SHALL BE CONFIRMED IN THE FIELD. REPORT VARIATIONS TO THE
- ARCHITECT FOR RESOLUTION BEFORE PROCEEDING WITH WORK AFFECTED. 8. DIMENSIONS NOTED "CLEAR" ARE MEASURED FROM THE FACE OF FINISH MATERIAL TO THE FACE OF
- FINISH MATERIAL. 9. ALIGN DIFFERENT WALL TYPES SO THAT CONTINUOUS FACES OF WALLS ARE FLUSH.
- 10. ELECT. PANELS, FIRE EXTINGUISHERS AND OTHER ITEMS IN WALLS SHALL BE BACKED WITH DRYWALL TO MAINTAIN REQUIRED RATINGS. 11. REFER TO ACCESSIBILITY INFORMATION SHEETS FOR INFORMATION RELATED TO ACCESSIBILITY,
- INCLUDING CLEARANCES, MOUNTING HEIGHTS AND OTHER REQUIREMENTS. REFER TO APPLICABLE ACCESSIBILITY STANDARDS FOR ADDITIONAL ACCESSIBILITY INFORMATION NOT SHOWN ON THE ACCESSIBILITY INFORMATION SHEETS.
- 12. ROOM NAMES AND NUMBERS SHOWN ARE FOR PURPOSES OF COORDINATION DURING CONSTRUCTION AND DO NOT NECESSARILY REPRESENT FINAL ROOM NAMES OR NUMBERS. 13. FINISH FLOOR ELEVATIONS OR DIMENSIONS ARE TO THE TOP OF CONCRETE SLAB UNLESS
- OTHERWISE NOTED. 14. REFER TO FINISH PLANS FOR FINISH FLOORING PATTERNS AND EXTENT OF SPECIAL WALL FINISHES.
- 15. ALL CONCEALED BLOCKING IS TO BE FIRE TREATED. VERIFY BLOCKING REQUIREMENTS FOR OWNER
- PROVIDED EQUIPMENT WITH OWNER. 16. GENERAL CONTRACTOR IS TO COORDINATE AND INSTALL ALL OWNER-PROVIDED ITEMS.
- 17. PROVIDE TRANSITION STRIPS AT DISSIMILAR FLOORING MATERIAL JOINTS. 18. ALL FURNITURE, FIXTURES AND EQUIPMENT SHOWN ARE FOR COORDINATION PURPOSES ONLY.
- 19. KEYNOTES AND LEGENDS ARE TYPICAL FOR ALL FLOOR PLAN SHEETS, AND MAY NOT APPLY TO EACH 20. SEE ENLARGED FLOOR PLANS AND DETAILS FOR SPECIFIC LOCATIONS OF TOILET ROOM PLUMBING
- 21. REFER TO CIVIL DRAWINGS FOR SITE WORK.
- 22. REFERENCE STRUCTURAL, MECHANICAL, ELECTRICAL AND PLUMBING FOR ITEMS NOT SHOWN. COORDINATE AS REQUIRED INCLUDING NECESSARY FRAMING, BLOCKING, ETC.
- 23. FIELD VERIFY ALL DIMENSIONS PRIOR TO FABRICATION OF ANY CABINETRY, FRAMES, STRUCTURAL
- 24. COORDINATE CLEAR OPENINGS AND DIMENSIONS AS REQUIRED AT EQUIPMENT TO ACCOMODATE INDIVIDUAL MANUFACTURER'S REQUIREMENTS. NOTIFY ARCHITECT AND SUBMIT PROPOSED REVISIONS PRIOR TO ANY MODIFICATIONS.
- 25. ALL DOORS IN FIRE RATED WALLS SHALL BE RATED. SEE DOOR SCHEDULE FOR SPECIFIC RATING REQUIREMENTS.
- 26. REFERENCE ROOF PLAN FOR LOCATIONS OF ROOF HATCHES AND EXTERIOR LADDERS. 27. PROVIDE AND INSTALL HORIZONTAL LOUVER BLINDS AT ALL INTERIOR AND EXTERIOR WINDOWS.
- COLOR TO BE SELECTED BY ARCHITECT.
- 28 ALL PARTITIONS ARE TYPE "Ss" UNLESS NOTED OTHERWISE. 29 PROVIDE AND INSTALL DEFIBRILLATOR AS SPECIFIED. INSTALL LOCATION TO BE DETERMINED BY
- 30 EXACT INSTALL LOCATION OF 4-POST LIFT TO BE DETERMINED BY OWNER.
- 31 REFER TO ELEVATIONS FOR WINDOW DESIGNATIONS. 32 INSTALL MASONRY CONTROL JOINTS AT ALL INSIDE MASONRY CORNERS. REFER TO BUILDING ELEVATIONS FOR ADDITIONAL LOCATIONS.

1 - 4'x7' panels - 168 SF



PLAN TRUE NORTH NORTH

FLOOR PLAN
1/8" = 1'-0"

**KEY PLAN** 



BLGY ARCHITECTURE 2204 FORBES DRIVE SUITE 101 AUSTIN, TX 78754 (512) 977-0390



ASSOCIATE ARCHITECT FUSE ARCHITECTURE STUDIO 702 SAN ANTONIO ST.

AUSTIN, TX 78701 512-992-1520 CIVIL

HALFF ASSOCIATES 4030 W BREAKER LN. SUITE 450 AUSTIN, TX 78759 512-777-4600

STRUCTURAL JASTER-QUINTANILLA & ASSOC. 1608 W. 6TH SUITE 100

AUSTIN, TX 78703 512-474-9094

HENDRIX CONSULTING ENGINEERS 115 E. MAIN ST. ROUND ROCK, TX 78664 512-218-0060

LANDSCAPE COLEMAN & ASSOCIATES 9890 SILVER MOUNTAIN DR. AUSTIN, TX 78737

512-476-2090 **FUELING** 17041 EL CAMINO REAL SUITE 200

HOUSTON, TX 77058 281-486-1943 F F & E
TECHCENTER DESIGN
P.O. BOX 91705 AUSTIN, TX 78709

4006 SPEEDWAY AUSTIN, TX 78751 512-476-3464

TRUE NORTH CONSULTING GROUP P.O. BOX 2169 HEWITT, TX 76643 254-229-0099 ROOFING/WATERPROOFING

TECHNOLOGY & SECURITY

4705 PINEHURST DR. S AUSTIN, TX 78747 512-415-3411

PROJECT NO.: 15-2800 ISSUE DATE 07/14/2016

ADDENDUM 1 - 08.08.2016 ADDENDUM 2 - 08.15.2016

WIRELESS COMM. BLDG. FLOOR PLAN

Ad-2.01

# RETURN SUBMITTAL COVER SHEET



Date: 4/13/2017

Transmitted To: Trent Patteson

3900 Drossett Drive, Suite C

Austin TX 78744

Phone: (512) 651-5096 Fax: (512) 651-5133 Re: North Campus Facilities

Job No: 233901

From:

VAUGHN CONSTRUCTION 3171 SE Inner Loop Georgetown, TX 78626

T: (512) 663-7461 F: (512) 681-9752

TRANSMITTING:

(One ) 1 Copies of submittals as detailed below

SUBMITTAL NO(S):

98114-1-0

SUBMITTAL DESCRIPTION(S):

ACOUST. FIBERGLASS WALL PANELS - Product Data

ACTIONS TAKEN
Approved As Noted

- \* All material safety data sheets for any product, consumables or otherwise, must be given to Vaughn's superintendent prior to use on or arrival at the jobsite.
- \*\* Submittal approval shall not relieve subcontractor or supplier from responsibility for errors or deviation from the contract documents.

This submittal has been reviewed only as to general design and requirements of the contract documents of this project. SubContractor/Vendor to verify dimensions, quantities and field conditions for proper and complete installation of this work.

By:

Camille Carpenter

CC:

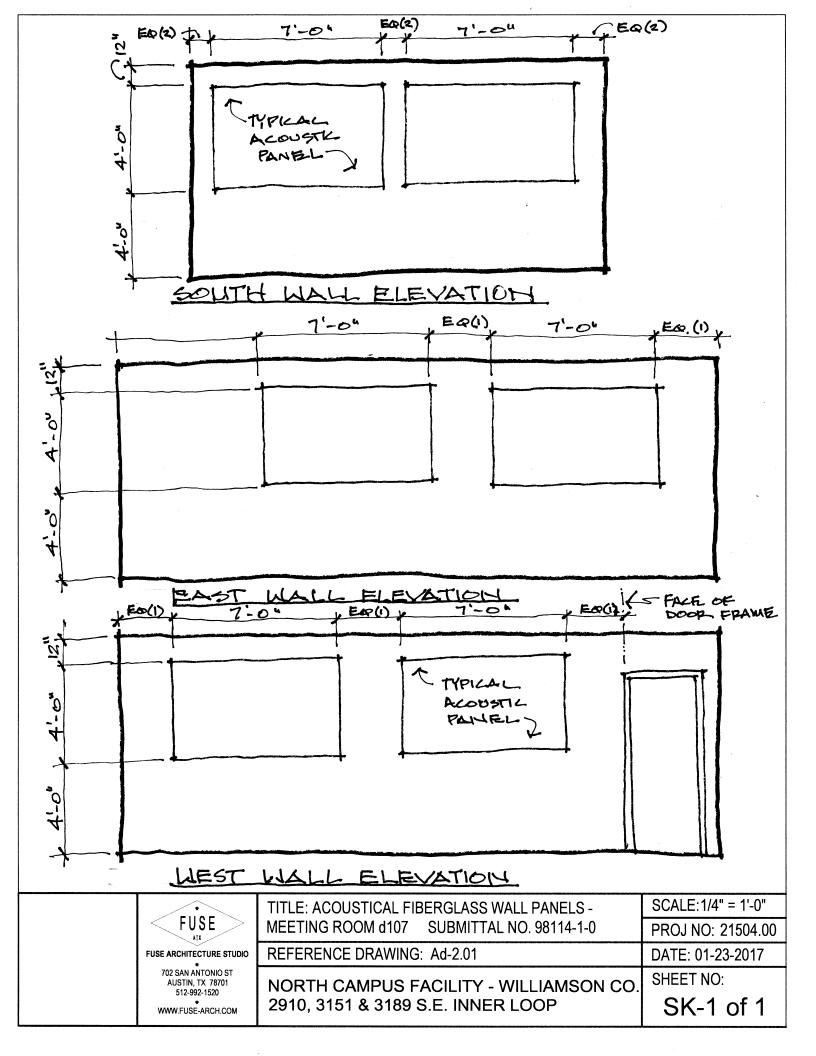
Doug Boram - JTV Stuart Baker - JTV Thomas Morrill - JTV



2204 Forbes Drive Suite 101 Austin, TX 78754 512.977.0390 t 512.977.0838 f www.blgy.com

# SUBMITTAL REVIEW SHEET

PROJECT NAME		unty North Campus Fa	cility	
PROJECT NUMBER	21504.00			
	SUBMITTAL NUMBI		-1- 0	0
		Spec Section No.		Times revised
SUBMITTAL DES	CRIPTION	Acoustical Fiberglass V	Vall Panels - S	amples
Architect's review is for general confo or comments shall not be construed as project plans and specifications, or for	relieving the Contractor			_
The Contractor remains responsible fo dimensions, for selecting fabrication p construction, and for performing the W	rocesses, for techniques		0 1	
Architects Review				
No Exceptions	Taken			
X Note Markings				
Rejected				
X Comments Atta	ached			
Response Required by Contractor				
Confirmation Le	etter			
Resubmit				
Submit Reques	sted Product Data and S	amples		
DATE 01/25/17	BY	Brody I	Harris	
COMMENTS				
Refer to attached Fuse SK-1 for wall p				
Change 1"thick to 2" thick panels in T Refer to finish plans, schedules, and el				
Finishes will be provided with sample		-		
coordinated and approved by owner.				



# SUBMITTAL COVER SHEET



\_ DATE: 25 Jan 2017

BAi, LLC AUSTIN, TX

Date: 1/19/2017	Owner:	Williamson County, Texas	
	VCC#:	233901	
	Re:	North Campus Facilities 3171 SE Inner Loop Georgetown, TX 78626	
Transmitted To: Brody Harris 2204 Forbes Dr., Suite 101 Georgetown, TX 78754 Phone: (512) 977-0390 Fax:	3171 SE		
Vaughn Construction has reviewed this Submittal only as to g this project. SubContractor/Vendor to verify dimensions, quant this work. Approval shall not relieve subcontractor or vendor documents.	tities and fiel	d conditions for proper and complete installation	C
TRANSMITTING: ( One ) 1 Copies of submittals as detailed below	BY:	Thomas Morrill	_
AS SUBMITTED BY: Standard Drywall, Inc.		(	
<b>SUBMITTAL NO(S):</b> 98114-1-0			
SUBMITTAL DESCRIPTION: ACOUST. FIBERGLASS WALL PANELS - Product Data			
CC: Dwayne Gossett File Vaughn Construction has reviewed the subcontractor's certificincluded within the scope of the submittal, and based upon our			
PLEASE RETURN 1 COPIES WITH COMMENTS TO VAUGH	IN CONSTR	UCTION	
A/E COMMENTS:	A/E STAI	MP:	
BAI: USE 2" THICK PANELS IN TRAINING ROOM (H107). 1" THICK PANELS ACCEPTABLE IN ALL OTHER SPACES.	APPRO' REVISE SUBMITTA GENERAL THE COI CORRELA CLEARAN	P DRAWING / SUBMITTAL REVIEW  VED XXAPPROVED WITH CHANGES NOTED  AND RESUBMIT REJECTED  AL WAS REVIEWED FOR DESIGN CONFORMITY AND  CONFORMANCE TO CONTRACT DOCUMENTS ONLY.  NITRACTOR IS RESPONSIBLE FOR CONFIRMING AND  ATING DIMENSIONS AT JOBSITE FOR TOLERANCE,  ICE, QUANTITIES, FABRICATION PROCESSES AND  UES OF CONSTRUCTION, AS WELL AS FOR	

<sub>BY:</sub> Dan Hemme



# **SUBMITTAL**

PROJECT: North Campus Facilities
Architect: BLGY Architecture
Contractor: Vaughn Construction

			Date:	01/06/17
			AS	AS
SECTION:	09 81 14	Acoustical Fiberglass Wall Panels	SPECIFIED	<b>EQUAL</b>
Item#	Sub Section	Description		
1	1.3.A	Product Data		
		AVL systems, Inc.	X	
			<del>-  </del>	

In every company we often work in such a rush that we forget a seemingly small, but most important matter.

**AVL SYSTEMS, INC.** 

wishes to sincerely

**THANK YOU** 

for the opportunity to do business for you, our

**VALUED CUSTOMER.** 

# **SUBMITTAL PRESENTATION INDEX**

AVL SYSTEMS, INC. SWEETS BROCHURE	
ACOUSTECH PANEL SERIES	1.1
FIELD MEASUREMENTS & CUT-OUTS	5.1
MAINTENANCE & CLEANING	6.2
STAIN REMOVAL CHART	6.3
WHITE AND LIGHT NOTIFICATION	8.1
FABRIC FINISHES	F.1



# **AVL Systems Product Guide**

# AcousTech<sup>™</sup> Wall & Ceiling Panel Systems

### **APPLICATION**

AVL Systems AcousTech<sup>TM</sup> Wall & Ceiling Panels feature beauty, durability, high-performance and exceptional value where decorative acoustical products are desired. These products are designed for both wall and ceiling applications.

## CONSTRUCTION

The core construction is a dimensionally stable 6-7 PCF glass fiberboard laminated with a 1/8" molded high-density glass fiber sheet. Edges are reinforced and protected by hardening to a minimum of 1/8" and hardness level of .42 Barcol. The acoustically transparent finishes that are available completely cover the face and exposed edges.

### SIZE AVAILABILITY

Standard available thicknesses are listed below. Maximum recommended sizes are 48" 'x 120". Panels larger than this are susceptible to damage during handling and installation. Consult AVL Systems for larger size availability for specific applications.

#### **EDGE DETAIL**

Standard shapes include: square, radius, and bevel. Custom profiles are available as an option.

#### FINISH

AVL Systems AcousTech<sup>TM</sup> Walls & Ceilings come factory-finished from a wide assortment of standard finishes. Custom finishes and colors are also offered to precisely match any interior design palette.

### **MOUNTING**

Standard mountings are factory installed and totally concealed. Specifier may choose z-clip mechanical fasteners, magnetic, adhesive, or lay-in for ceiling applications.

### **ACOUSTICAL PERFORMANCE**

AVL Systems AcousTech<sup>TM</sup> Walls & Ceilings provide excellent acoustical performance for new construction and renovation such as auditoriums, conference areas, libraries, schools, offices, public buildings, or any area where acoustics, aesthetics, and value are a consideration.

AcousTech Product	Thickness	NRC
ATP 1.0	1" (25.0 mm)	0.90
ATP 1.1 High Impact	1-1/8" (26.5 mm)	0.95
ATP 1.5	1-1/2" (37.5 mm)	1.05
ATP 1.6 High Impact	1-5/8" (39.0 mm)	1.05
ATP 2.0	2" (50.0 mm) USE ATP 2.0 IN TRAINING ROOM	1.10
ATP 2.1 High Impact	2-1/8" (51.5 mm)	1.10
ATP 3.0	3" (75.0 mm)	1.10
ATP 4.0	4" (100.0 mm)	1.15

Noise reduction coefficients (N.R.C.)were derived from tests conducted according to ASTM C 423 by NVLAP accredited laboratories.

## **FIRE PERFORMANCE**

Assembled, composite panels have been tested according to ASTM E 84\* and have a Class I/A rating.

1

### LEED RATING INFORMATION

As a Member of the U.S. Green Building Council, AVL Systems is an active participant in the leadership and support of LEED initiatives. Through this affiliation, AVL continues a 25 year commitment to our employees, customers and friends, and the environment, for a sustainable and environmentally friendly workplace, "green" products and public environmental stewardship. LEED Certification and the awarding of credits are based on the overall project design. AVL Systems Products contribute to the categories listed below. Other LEED categories may apply or benefit depending on products and project requirements.

Schools EQ Prerequisite 3 & Credit 9: Minimum Acoustical Performance Required

Product Name	Reverberation Times	Background Noise Level	STC Ratings Between Spaces	STC Ratings Of Windows	Points Available
1 AcousTech™ Wall & Ceiling Panels	1 Point	1-2 Points	1 Point	Contribute	1-4
2 AcousTech™ High Impact Panels	1 Point	1-2 Points	1 Point	Contribute	1-4

MR 4.1 & 4.2 Recycled Content (% by weight): 1 – 2 Points

	. , ,			
Product Name	Post Consumer Recycled Content (%)	Pre Consumer Recycled Content (%)	Material Cost (\$)	Recycled Content Information Source
1 AcousTech <sup>™</sup> Wall & Ceiling Panels	43	36		AVL Systems, Inc
2 AcousTech™ High Impact Panels	43	36		AVL Systems, Inc

MR 5.1 & 5.2 Regional Materials: 1 – 2 Points

Product Name	Origin from Ocala, FL 34474 to Site Material Cost (\$) (miles)		Harvest/Manufacturer Location Information Source		
1 AcousTech™ Wall & Ceiling Panels			Ocala, FL / AVL Systems, Inc.		
2 AcousTech™ High Impact Panels			Ocala, FL / AVL Systems, Inc.		

IEQ 4.1 & 4.2 Low VOC Materials, Adhesives, Paints & Sealants

Product Name	Total VOC's Meet GREENGUARD Indoor Air Quality	REENGUARD GREENGUARD		Information Source	
AcousTech™ Wall & Ceiling Panels	YES, ≤0.22 mg/m³	YES, ≤0.22 mg/m³	< 50grams/liter	Saint-Gobain AVL Systems, Inc.	

Innovation in Design (ID): 1 - 4 Points

Product Name	
1 AcousTech <sup>™</sup> Wall & Ceiling Panels	Credit can be achieved through any combination of the Innovation in Design and Exemplary Performance.
2 AcousTech <sup>™</sup> High Impact Panels	Credit can be achieved through any combination of the Innovation in Design and Exemplary Performance.

## **VOC & FORMALDEHYDE EMISSIONS**

AVL Systems AcousTech<sup>TM</sup> Wall & Ceiling Panels meet California Department of Health Services Standard Practice for the testing of VOC Emissions, GREENGUARD Indoor Air Quality standards, and GREENGUARD Children & School requirements

## **ANTI-MOLD, MILDEW & BACTERIA**

AVL Systems AcousTech<sup>TM</sup> Wall & Ceiling Panels are constructed of non-organic materials and do not support mold, mildew or bacteria.

## **1-YEAR WARRANTY**

AVL Systems AcousTech<sup>TM</sup> Wall & Ceiling Panels have a standard 1-year Limited Warranty. The panels are warranted to be free from defects in material and workmanship for a period of one year from the date of purchase. See product warranty for full details and limitations.

2

<sup>\*</sup> The ASTM E 84 standard should be used to measure and describe the properties of materials, products or assemblies in response to heat and flame under controlled laboratory conditions and should not be used to describe or appraise the fire hazard or fire risk of materials, products or assemblies under actual fire conditions. However, results of this test may be used as elements of a fire risk assessment, which takes into, account all of the factors, which are pertinent to an assessment of the fire hazard of a particular end use. Values are reported to the nearest 5 rating.

# AcousTech

# High Performance Acoustical Wall & Ceiling Panels



AVL AcousTech™ Sound Absorption Products are extremely effective wall and ceiling panel treatments for the control of excessive reverberation and echoes that interfere with the intended use of interior spaces. AVL Systems' custom manufactured AcousTech™ panel

cores are designed to provide the highest levels of sound absorption, product strength and rigidity, indoor air health quality, and purchase value.

## AVL Systems' GreenSafe™ Technologies

AcousTech™ Products are manufactured from naturally occurring and/ or recycled materials using rapidly-renewable raw materials and bio-based technology. The recycle content of AVL products are inert, non-combustible, do not support mold or mildew, and are dimensionally stable with hard, framed edges. Eligibility for LEED Credits is available with this product.

AVL Systems' products and technologies are aligned with the highest social consciousness and environmental standards for green, earth friendly, sustainable practices.

## **Features**

- · Highest Sound Absorption Efficiency & Performance
- · Durable and Resistant to Damage
- Wide Selection of Standard Colors, Textures & Finishes
- Custom-Printed Digital Imaging Available
- Easy to Install with Fully-Concealed Mounting Hardware Included
- Edge Profile Options Include Square, Bevel, Radius, Miter
- Standard and Custom Sizes
- Fire Performance Class 1/A, UL 723 and ASTM E-84
- Indoor Air Quality (IAQ) and Low VOC Meets GREENGUARD Children & Schools Certification and California Title 24
- LEED Credit Eligibility With Installation of These Products



## 79% Total Recycled Content

43% post-consumer recycled, balance (36%) pre-consumer recycled



## **Applications**

Suitable for walls and ceilings in new construction and renovation of interior spaces. Applications include auditoriums, worship space and sanctuaries, convention centers, schools, music and performance spaces, cinemas, home theaters, offices, public buildings, or any area where acoustics, aesthetics and value are a consideration.



AVL Systems, Inc.

5540 SW 6th Place · Ocala, FL 34474 · www.AVLonline.com

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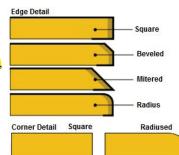
# AcousTech™ Wall & Ceiling Panels are a

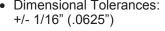
decorative, high-performance, sound absorption product for interior spaces. At its 2" IN TRAINING substrate that is manufactured frROOM

and/or recycled materials using rapidly-renewable raw materials and bio-based technology. It will not support mold or mildew, is inert, non-combustible, dimensionally stable with solid edges that will not warp or separate. Panels may be installed individually as an accent of color and shape, or together as a grouping. Standard or client-specified facings are factory applied to the face, sides and back-returned to provide a finished product with fully-tailored edges and corners. AcousTech™ panels are manufactured to any size specified and come with totally concealed mounting hardware. If changes should occur during installation, alterations are easily performed in the field by the installer.

## **Technical Features & Information**

- Lightweight Systems for Ceiling & Wall Installations
- Decorative Fabric Facings or Designer Selection/ C.O.M.
- Core: 6-7 lb./cu. ft. fiberglass
- Thickness: <sup>3</sup>/<sub>4</sub>", <sup>1</sup>/<sub>1</sub>, 1-<sup>1</sup>/<sub>2</sub>", 2", 3", 4"
- Sizes: Any Size Up To 48" x 120"
- Special Sizes: Available **Upon Request**
- Edge Profile: Square, Bevel, Radius, Miter
- Fasteners: Z-Clip, Impaling. Velcro, Magnet
- Dimensional Tolerances:





- Fire Performance: Class 1/A, UL 723 / ASTM E-84
- Indoor Air Quality (IAQ) and Low VOC Meets GREEN-GUARD Children & Schools Certification and California Title 24
- LEED Credit Eligibility with Installation of these Products

**Acoustical Performance - Absorption Coefficients** 

# **Interactive Product Performance**

USE ATP 2.0 IN TRAINING ROOM The AcousTech™ family of interactive

performance products is designed to provide the acoustical engineer and specifier with a ATP 4.0 4" Panel complete "toolbox" of technically compatible products for any application. These engineered products can be used individually or as an interactive system, working together to optimally enhance the interior design, functionality and acoustics of the architectural space. AVL Systems, Inc. is pleased to offer a full range of standard and custom architectural acoustical products for virtually every application and technical requirement.

					•			
Frequen	cy (Hz)	125	250	500	1K	2K	4K	NRC
ATP .75	¾" Panel	0.08	0.26	0.71	0.98	1.01	1.03	0.75
ATP 1.0	1" Panel	0.07	0.45	0.95	1.07	1.07	1.18	0.9
ATP 1.5	1½" Panel	0.29	0.73	1.13	1.16	1.1	1.18	1.05
ATP 2.0	2" Panel	0.38	0.96	1.16	1.16	1.11	1.28	1.1
ATP 3.0	3" Panel	0.49	1.12	1.23	1.07	1.01	1.05	1.1
ATP 4.0	4" Panel	0.67	1.16	1.37	1.21	1.19	1.22	1.15

## Warranty

AVL Systems' Limited Warranty extends for ONE FULL YEAR from the original date of shipment. AVL Systems' literature, presentations and published data are correct to the best of our knowledge at time of publication. AVL Systems, Inc. reserves the right to change or amend any of the products or the information presented or published without liability or notice.



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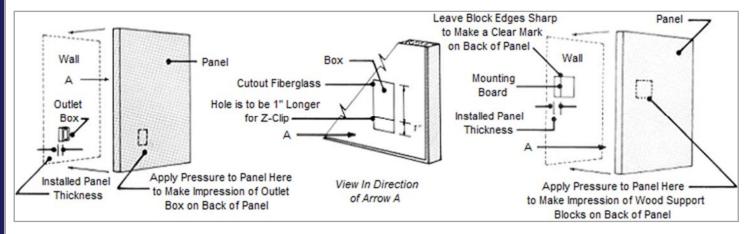
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# Field Measurements & Cut Outs

## **ELECTRICAL OUTLETS**

- The electrical contractor mounts the outlet box so it extends outward from the wall at the same depth as the installed thickness of the panel. If the outlet is in place, a sleeve may be used to extend the box out to the panel face.
- The panel is then positioned on the wall in its final installed location so the outlet makes a slight impression on the back of the panel when pressure is applied.
- 3. The panel is then removed and from the back, using the impression as a guide, the fiberglass board is cut out and removed to accommodate the outlet box. Take care not to cut the fabric facing. (Cut the hole the size of the box plus an extra 1" at the bottom of the hole if Z-Clip fasteners are used.)

- 4. Attach the panel to the wall. (See appropriate installation instructions.)
- 5. Carefully cut the fabric by making a diagonal slit in the fabric on the centerline of the hole, about ½ the distance from the top and bottom. From each corner hole, slit the fabric to intersect with the centerline slit.
- 6. Apply contact adhesive to the inside of the electrical box about a ½ inch.
- 7. Wrap fabric over the edge of the box and slightly inside.
- 8. Replace the face plate of the outlet.



# SURFACE MOUNTED FIXTURES (Thermostats, Signs, Heavy Pictures, Etc.)

- Prior to mounting panels, an appropriate sized wood board, the same thickness as the wall panel, should be placed on the wall. Care should be taken to keep the board within 6" if the perimeter of the wall panel. (Where the object to be mounted spans two panels, two boards should be used in keeping the perimeter of the panels intact.)
- 2. The panel is positioned on the wall and pressed against the board, making a slight impression of the board on the panel back.
- 3. The fiberglass panel is then carefully cut out to that size, avoiding cutting through the fabric facing. (If the panel will be installed with Z-Clips, cut out an additional 1" at the bottom.)

- 4. The panel is now mounted on the wall. (See appropriate installation instructions.)
- 5. Where wiring or other services must pass through the panel, the fabric should be stapled to the board. The fabric may then be cut out, exposing the opening. Wiring for thermostats, alarms, clocks, etc. can be coiled and placed in a recess cut into the wood block until the panel is mounted. X-cuts in the fabric should be made for screws.
- 6. Heavy items may be mounted by nailing or screwing through the fabric into the wood support blocks.

**NOTE:** These instructions serve only as a guide. As there are many variable field conditions, the responsibility for recognizing these conditions and compensating for them, lies with the installer.



# Maintenance & Cleaning

- 1. All wall coverings, regardless of finish, are subject to soiling and wear. A regular maintenance program initiated at the earliest possible time after installation will go a long way toward preventing soil and dirt build-up or staining of the panel. Extra cleaning and preventative maintenance is necessary in areas adjacent to air-conditioning or air-return vents.
- 2. *Perforated vinyl* is a *delicate material* and should be handled *very* gently. The surface may be marked or broken with abrasive materials or chemicals.
- 3. Where fabric faced panels are concerned, the fabric manufacturer's instructions should be followed where they do not conflict with the information below.
- 4. Cleaning agents used on the surface should *not* contain alcohol, strong alkalis or solvents which will react to the vinyl or adhesives used in the panels. Warm water with a mild soap should be used for cleaning.
- 5. Care should be taken in using cleaning agents and pesticide control agents as the fumes may contain agents which will react to the adhesives bonding the surface material to the core, causing a loosening of the bond which will result in sagging of the surface material.
- 6. Temperature should be maintained between 50°F and 85°F. Humidity should be maintained between 20% and 50% for maximum life of the panels.
- 7. The panel should never be placed in water or allowed to become wet inside.
- 8. Test any cleaning agents on a piece on the rear of a panel before using on the face.
- 9. Grease or oil should be wiped off immediately upon contact. Remove excess grease or oil by blotting. Use hot water and mild soap to remove any remaining material.
- 10. Do not handle the panels any more than necessary. Avoid bending or flexing panels as it may break the bond between the surface material and the core.
- 11. Avoid contact with any sharp edges on material which may cause a puncture of the surface.
- 12. Avoid excessive heat or moisture as they may affect the finish and adhesives.



# Stain Removal Chart

NOTE: Always Remove Excess	Proprietary Upholstery Shampoo Solution	Proprietary Agents for Removing Stains	Clean, Warm Water	Cold Water	Absorbent Paper and Hot Iron	Chewing Gum Remover (Freezing Agent)	Surgical Alcohol	Nail Polish Remover (Preferably Acetone)	Turpentine or White Spirit	Vacuum	Proprietary Absorbent Powders	Hydrogen Peroxide Diluted to 1 Vol.	Scrape Lightly with Coin
Wine			2nd								1st		
Beer	1st												
Beverages	2nd		1st										
Blood	2nd			1st									
Burn or Scorch Mark												2nd	1st
Butter	2nd	1st											
Chewing Gum						1st							
Chocolate	1st	2nd											
Colas	2nd		1st										
Cooking Oils	2nd	1st											
Cream	1st	2nd											
Egg	1st												
Felt Tip Pen	2nd		1st				3rd						
Fruit Juice	2nd		1st										
Furniture Polish	2nd	1st											
Gravies	2nd		1st										
Ink (Fountain Pen)	2nd		1st										
Ink (Ballpoint Pen)	2nd						1st						
Lipstick	2nd	1st											
Milk	2nd		1st										
Nail Polish		2nd						1st					
Oil & Grease	2nd	1st											
Paint (Emulsion)	2nd			1st									
Paint (Oil)	3rd	2nd							1st				
Salad Dressing	1st	2nd											
Shoe Polish	2nd	1st											
Soot	3rd	2nd								1st			
Urine (Fresh Stain)	1st												
Urine (Old Stain)	2nd		1st										
Vomit	2nd		1st										

1st, 2nd and 3rd means order of steps to be followed.

WHEN IN DOUBT, CALL IN A PROFESSIONAL CLEANER



# White & Light Colored Fabrics

White and light colored fabrics should only be considered for use with acoustical panels with the full understanding of the following:

- 1. Panel fabrics are acoustically "transparent" to allow sound to pass through to the substrate. This also means that the fabric is somewhat transparent <u>visually</u> and the substrate and its physical characteristics can be seen through the fabric covering, especially when white or very light colored fabrics are used.
- 2. Fiberglass substrates are yellow in color and have lighter and darker areas as a result of the manufacturing process. This yellow color is seen throughout the panel fabric, tinting the apparent color of the acoustical panel and is especially noticeable with white or light colored fabrics. In addition, any dark or light areas on the substrate can be noticeable through the white or light facing.

These characteristics are generally recognized and accepted in the architectural design community. All designers and planners should note these conditions, realizing that slight color variations can and will occur.

\* If one or more of the colors listed below are selected, please sign and return this document with your selection.

# 130 WHEAT	# 403 VANILLA NEUTRAL	# 538 SILVER PA	PIER				
# 144 EGGSHELL	# 460 BUFF	# 748 BONE					
# 224 WHITE	# 468 EUCALYPTUS						
# 380 QUARTZ	# 481 PEARL	2229					
DESIGNTEX "SINGING IN THE F	RAIN" (ALL COLORWAYS)						
MAHARAM CRISP (Light Colore	d Fabrics)						
Customer Name:							
Attn:							
Project Name:							
Color Name & Number:							
Authorized by (please print):							
Oima atura		Data					
Signature:		Date:					

Please fax back to (352) 854-1278



# Fabrics Features, Guidelines & Limitations

### Features and Advantages of Fabric Facings

- Approved fabrics provide good acoustical transparency for performance
- Fabric can be applied to most panel edge profiles
- Corners can be nicely tailored and finished with approved fabrics
- Nap of standard weight fabrics help make nicely fitting panel joints
- · Most "panel fabrics" have Class 1 or A flame spread properties
- Specific fabrics, when applied to AVL Systems' substrates, provide a composite panel Class A flame spread (less than 25) per ASTM E-84

### **Properties and Limitations**

Of the thousands of fabrics available today, many are not suitable for acoustical product applications. All fabrics specified and received are examined by review of the manufacturer's specifications and recommendations, and by product application and short-term evaluation for obvious limitations that make them unsuitable for use. Any limitations found will be disclosed to enable re-selection by the specifier. Fabrics that are determined as acceptable exhibit, as can best be determined, the following properties and characteristics:

- Acoustical transparency and performance
- Dimensional stability (ASTM D6207)
- Tension and stretch capability within necessary range
- Adhesive compatibility
- No adhesive wet-out
- No adhesive bleed-through
- Adhesion and bond to substrate
- No telegraphing of normal core irregularities
- Color suitability and opacity to prevent core color visibility
- Upholstery characteristics that are without residual memory or bulging
- No "pull lines", a recent phenomenon, are visible as sags or wrinkles on fabrics under certain lighting conditions. The fabric is in fact flat, but appears otherwise due to the light reflecting unevenly from the tensioned or stretched fibers. Although there is no conclusive determination as to the cause, fabrics containing unspun fibers, extruded and crepe type weaves are all susceptible to this phenomenon. This is particularly true of fabrics with high recycled content.
- Fire retardant treatments are sometimes requested on fabrics and should remain stable in the intended environment. Some solutions when exposed to high humidity or abnormal environmental conditions greater than 80% RH, is drawn to the fabric surface, evaporates and leaves a deposit that leaves a noticeable light stain known as "blooming". This stain is difficult to remove an may discolor fabric.

### **Specification Considerations**

DIMENSIONAL STABILITY (ASTM D6207): Based on AVL Systems' experience and successes with various fabrics, we have found that polyester, polyolefin, olefin, modacrylic, and blends using these fibers as a base material are the most stable and yield the best result. Although all choices of fabric should be evaluated for dimensional stability, fabrics containing silk, nylon and rayon are less likely to remain stable. Backings, whether acrylic, latex or other will not stabilize a fabric that is already physically and dimensionally stable.

**CUSTOM PRINTS & PATTERNS:** AVL Systems can match patterns and repeating designs, custom prints, artwork, designs, logos, and murals can be matched across abutting panels for an additional charge.

#### MICRO-PERFORATED FABRICS AND BACKINGS:

Fabrics and facings that are micro-perforated, pierced, or porolated will not have increased acoustical performance. Perforations of this type will close or "heal" over time. This process was originally developed to reduce mildew and not to improve acoustics.

### **Purchase Considerations & Order Requirements**

Guilford of Maine, owned by True Textiles, continues to lead the industry in producing and stocking fabrics that are highly suitable for acoustical product applications and require little or no evaluation prior to ordering. Most other producers use independent mills to produce their fabrics and lead times can be substantial. Furthermore, these fabrics and backings can vary from submittal samples when manufactured at different mill locations. In the event that fabrics other than Guilford if Maine/ True Textiles are selected, it will be necessary to adhere to the following:

- Fabrics must be approved by AVL Systems prior to placement of fabric order. In all cases, evaluations will be completed within 3 business days after receipt of sample fabric from specified company.
- Providing a purchase order has been issued to AVL Systems, there is no charge for fabric evaluation. One linear yard minimum for each type specified must be supplied to AVL Systems for use in this evaluation.
- Any fabric requested to be ordered prior to receipt of manufacturer's sample for evaluation, or lacking approval by AVL Systems, must be paid for in advance by the customer.
- Any custom fabric order that has "pro forma" terms must be paid for in advance by customer.
- All lead times are determined by the availability of goods from the specified vendors, NOT AVL Systems.



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