AWS Lineage Pro

Wall Protection for Commercial Kitchens

SECTION 09 72 00

WALL COVERINGS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. This section includes labor, materials and other services necessary to complete PVC wall coverings.

B. Conform with requirements of all Sections of Division 1, General Requirements, as it applies to the work of this Section.

1.2 RELATED SECTIONS

A. Section [_____] – Gypsum (Cementitious) substrate board.

B. Section [_____] – Wood (Metal) Stud Framing.

C. Section [_____] – Painting & Transparent Finishes

1.3 REFERENCES

A. General: Standards listed by reference, including revisions by issuing authority, form a part of this specification section to extent indicated. Standards listed are identified by issuing authority, authority abbreviation, designation number, title or other designation established by issuing authority. Standards subsequently referenced herein are referred to by issuing authority abbreviation and standard designation.

B. American Society for Testing & Materials (ASTM):

AST ASTM E 84-05 Standard Test Method for Surface Burning Characteristics of Building Materials. **CLASS A**

ASTM D5420 Gardner Impact Exceeds 80 inch pounds

Physical property's

Property	**Conditions**	**ASTM Method**	**Units - SI**	**Value**
Physical				
Density	D-792 g/cm³	1.4		
Mechanical				
Tensile strength at yield	10 mm/min	D-638	MPa	50
Tensile strength at break	10 mm/min	D-638	MPa	>80
Tensile Modulus of Elasticity	1 mm/min	D-638	MPa	2900
Flexural Modulus	1.3 mm/min	D-790	MPa	2700
Flexural Strength	1.3 mm/min	D-790	MPa	80
Impact Falling Weight	3 mm Sheet	ISO 6603/1 E50	J	95
Rockwell Hardness		D-785	R scale	97R
Thermal				
Service Temperature		°C	-10 to +50	
Heat Deflection Temperature	Load: 1.82 Mpa	D-648	°C	65 - 68
Coefficient of Linear				
Thermal Expansion		D-696	cm/cm °C	6.7 x 10^{-5}
Thermal Conductivity		C-177	W/m K	0.15

Hygienic properties

Test Results (CFU Reduction after 24H)

Microbes	Reduction % of viable microbes after 24H
Clostridium difficile	95.00%
Klebsiella pneumoniae	87.38%
VRE	87.57%
Listeria monocytogenes	99.90%
Streptococcus faecalis	97.91%
Staphylococcus aureus	99.96%
Aspergillus niger	99.68%
Legionella pneumophila	98.50%
Salmonella typhimurium	96.11%
MRSA	99.98%

1.4 SYSTEM DESCRIPTION

A. Performance Requirements: Provide Advanced Wall Solutions Lineage Pro wall covering which has been manufactured by AWS to maintain performance criteria stated by manufacturer without defects.

1.5 SUBMITTALS

A. Product Data: Submit manufacturer's current printed product literature, specifications, installation instructions, and field reports in accordance with Section 01330 - Submittal Procedures.

B. Shop Drawings: Submit shop drawings to indicate materials, details, and accessories in accordance with Section 01330 - Submittal Procedures including but limited to the following:

1. Submit a layout diagram indicating the location of each panel and joining method.

C. Samples: Submit duplicate sample pieces of AWS Lineage Pro material, as well as accessory pieces in accordance with Section 01330 - Submittal Procedures.

D. Quality Assurance Submittals: Submit the following:

1. Test Reports: Certified test reports showing compliance with specified performance characteristics and physical properties.

2. Manufacturer's Instructions: Current published manufacturer's installation and maintenance instructions.

3. Manufacturer's Field Reports: Specified herein.

E. Closeout Submittals: Submit the following:

1. Operation and Maintenance Data: Operation and maintenance data for installed products in accordance with Division 1 Closeout Submittals (Maintenance Data and Operation Data) Section. Include methods for maintaining installed products and precautions against cleaning materials and methods detrimental to finishes and performance.

2. Warranty: Warranty documents specified herein.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: Installer experienced in performing work of this section who has specialized in installation of work similar to that required for this project.

1. Training: Installer who has a min. of five years of experience installing wall covering.

C. Mock-ups: Install at project site a job mock-up using acceptable products and manufacturer approved installation methods. Obtain Owner's and Consultant's acceptance of finish color, texture and pattern, and workmanship standards.

1. Mock-Up Size: [Specify mock-up size.].

2. Maintenance: Maintain mock-up during construction for workmanship comparison; remove and legally dispose of mock-up when no longer required.

3. Incorporation: Mock-up may be incorporated into final construction upon Owner's approval.

D. Pre-installation Meeting: Conduct pre-installation meeting to verify project requirements, substrate conditions, manufacturer's installation instructions and manufacturer's warranty requirements.

1.7 DELIVERY, STORAGE & HANDLING

A. Ordering: Comply with manufacturer's ordering instructions and lead time requirements to avoid construction delays.

B. Deliver, store and handle AWS Lineage Pro wall panels in accordance with Section 01610 - Basic Material Requirements.

C. Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

D. Store materials protected from exposure to harmful weather conditions, at temperature and humidity conditions recommended by manufacturer.

E. Store panels in temperature controlled environments. Leave protective blue film on panel until ready to use.

1.8 WASTE MANAGEMENT AND DISPOSAL

A. Deposit all packaging materials in appropriate container on site for recycling or reuse.

B. Avoid using landfill waste disposal procedures when recycling facilities are available.

C. Keep all discarded packaging away from children.

1.9 PROJECT CONDITIONS

A. Temperature Requirements: If storage temperature is below 65F (18C), the AWS Lineage Pro wall panel must be moved to a warmer place and allowed to reach this temperature before installation. For further information, refer to current Installation Guide.

B. Maintain air temperature and structural base temperature at installation area between 65F (18C) and 80F (26C) for 48 hours before, during and 24 hours after installation.

1.10 WARRANTY

A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.

B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under Contract Documents.

C. Warranty Period for AWS Lineage Pro shall be 1 year commencing on Date of Substantial Completion. Please see current AWS Lineage Pro Warranty online at www.awsbp.com

1.11 EXTRA MATERIALS

A. Provide extra materials of product and adhesives in accordance with Section 01780 - Closeout Submittals.

B. Provide [_____]sqft ([_____]m2) of each color, pattern and type material required for project for maintenance use.

C. Provide [_____]sqft ([_____]m2) of extra materials in one piece and from same production run as installed materials.

D. Clearly identify each wall panel and each container of adhesive.

E. Deliver to Consultant, upon completion of the work of this section and store where directed.

PART 2 PRODUCTS

Note: For information on AWS Lineage Pro , contact Advance Wall Solution directly to obtain information and assistance.

2.1 MANUFACTURERS

A. Manufacturer: Advanced Wall Solutions

1. USA: 22611 Markey Court, Suite 109

Sterling, VA 20166

E-mail: mc@awsbp.com Web Site: www.awsbp.com.

2.2 PVCu WALL COVERING

A. AWS Lineage Pro is a semi-rigid PVCu panel. AWS Lineage Pro contains no plasticizers or fillers. AWS Lineage Pro is homogenous.

B. Acceptable material: AWS Lineage Pro (measurements and product weights given below are approximate):

1. White: Thickness: 0.080" (2.0 mm); Panel Width: 4’ (1.22m) Panel Height 9’ (2.44m) Weight per panel: 21.05 lbs (9.5 kg)

2. White: Thickness: 0.080" (2.0 mm); Panel Width: 4’ (1.22m) Panel Height 10’ (3.05m) Weight per panel: 23.37 lbs (10.6 kg)

2.3 ACCESSORIES

PVC or anodized aluminum trim

A. Divider Strips

B. Edge Trim

C. Inside corner

D. Outside corner

E. Stainless Steel corner 16 gauge 2”x2”10’

F. Acrylic Adhesive: For dry, climate controlled areas, use AWS Bond 007, a one-part, water-based, acrylic adhesive as recommended by manufacturer.

G. Polyurethane Adhesive: The default adhesive for non-climate controlled areas, and non-absorbent surfaces, use AWS Secret DNA, a one-part resin-based polyurethane adhesive as recommended by manufacturer.

H. Sanitary Sealant and Mastic Compounds and Tools:

1. AWS Sanitary Sealant –10.5 oz

2.4 SOURCE QUALITY

A. Source Quality: Obtain wall products from a single manufacturer.

PART 3 EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

A. Compliance: Comply with manufacturer's product data, including product technical bulletins, product catalog, installation instructions and product label instructions for installation.

3.2 EXAMINATION

A. Site Verification of Conditions: Verify substrate conditions, which have been previously installed under other sections, are acceptable for product installation in accordance with manufacturer's instructions.

3.3 SUBSTRATE PREPARATION

A. Walls should be smooth and level. High points must be removed and low points filled with filler intended for the substrate and environmental conditions.

B. Surfaces must be permanently dry and free from all substances that may contribute to adhesive bond failure.

C. Remove loose paint and conduct an adhesive bond test with paint.

D. Exterior walls must be adequately damp-proofed and insulated.

E. Dry wall substrates should be paint ready.

3.4 PREPARATION

A. All surfaces must be free from dust and cleaned prior to AWS Lineage Pro installation. The working environment must also be dust free. Failure to comply with these conditions will reduce the bond strength between the adhesive and substrate, and may cause the AWS Lineage Pro panels to de-bond.

B. All electrical switches, power points etc., should be in a first fix / installation state. All electrical equipment should only be moved or altered by a qualified electrician.

C. All plumbing should have pipe-work removed to a first fix or installation state and “tails” left protruding from the substrate. AWS Lineage Pro panels can then be drilled and slid over the pipe tails. All holes should be drilled 1/8” (3mm) oversize to allow for expansion, then sealed with AWS Sanitary Sealant. Plumbing should always be done by a qualified plumber.

D. Hot pipes and steam pipes should be insulated and a 1/8” to 1/4” (3-6mm) expansion gap should be created when installing panels around these pipes, then sealed with Sanitary Sealant.

E. All pipes, fixing bolts, etc. extending through the AWS Lineage Pro panels should have a minimum 1/8” (3mm) expansion gap and be sealed using Sanitary Sealant.

F. If fitting to door frames, these must be in place prior to installation of AWS Lineage Pro .

G. Prior to installation, it is advisable to complete any painting which comes in contact with AWS Lineage Pro , as sealant used at junctions is non-paintable.

H. Panels should be stored flat and be pre-conditioned a minimum of 24 hours in ambient temperatures similar to the prevailing operational conditions.

I. The panels must be stored on a level flat surface off the ground (risk of condensation on the panels if stored on damp surfaces). Storage on uneven surfaces could cause the panels to distort prior to installation.

J. First, check the room using a 6’ (2 m) level to ensure all walls are flat, paying particular attention to the corners, window reveals, and door entrances. These need to be inspected to ensure they are free of any debris or irregularities, which could prevent the panels from laying flat to the substrate after the adhesive has been applied and the panel installed.

3.5 INSTALLATION

A. PVC Wall Installation: AWS Lineage Pro in accordance with the current AWS Lineage Pro Installation Guide.

3.6 FIELD QUALITY REQUIREMENTS

A. Manufacturer’s Field Services: Upon Owner’s request, provide manufacturer’s field service consisting of product use recommendations and periodic site visits for inspection of product installation in accordance with manufacturer’s instructions.

1. Site Visits: [Specify number and duration of periodic site visits.].

3.7 CLEANING

Note: Once all panels and joints are installed, remove protective film and clean all surfaces down with antistatic solution or antistatic wipes. This is required as the panel may have static build up and any dust in the atmosphere will adhere to the surface of the panel.

A. AWS Lineage Pro can be cleaned with a diluted soap/detergent solution, such as AWS Cleaner.

B. When cleaning the AWS Lineage Pro surface, we recommend the temperature of water does not exceed 140° F (60° C).

C. Pressure cleaning with hot water may be used with the pressure nozzle a minimum of 2 feet (600mm) away from the surface, not recommended with acrylic adhesive installations.

D. To reduce the buildup of static, cleaning the panels with an anti-static solution is recommended.

E. For scuff marks, we recommend using a cream cleaner

Specifier Note: If a construction waste separation and disposal work plan is incorporated as part of the project, ensure that this section makes reference to how the excess material can be recycled or otherwise disposed of. Avoid sending construction waste to landfill sites if alternative means of disposal are available.

A. Remove construction debris from project site and legally dispose of debris.

3.8 PROTECTION

A. Do not install near open heat sources (ovens, etc). Stainless steel panels should be used in such areas.

END OF SECTION