SECTION 09 72 16.16 – RIGID-SHEET VINYL WALL COVERING
(Commercial Vinyl Wall Covering)

PALRAM PALCLAD PRO RIGID-SHEET VINYL WALL COVERING

NOTE:

• In order to ensure the best specification for your application we recommend that you consult with your local PALRAM representative for assistance.

• Delete optional/unnecessary items which are not related to your application. The mark of ➔ in left margin denotes option(s).

• To be certain that you are using the most recent available PALRAM specification, please visit our website at www.palram.com and download the current version.

PALRAM INDUSTRIES (1990) Ltd. IS ENGAGED IN CONTINUING RESEARCH TO IMPROVE ITS PRODUCTS. THEREFORE, THE RIGHT IS RESERVED TO MODIFY OR CHANGE MATERIAL IN THIS SPECIFICATION WITHOUT NOTICE
PART 1 – GENERAL

1.01 SECTION INCLUDES
A. This section includes labor, materials and other services necessary to complete vinyl wall coverings.
B. Conform with requirements of all Sections of Division 1, General Requirements, as it applies to the work of this Section.

1.02 RELATED SECTIONS
A. Section 03300 - Cast-in-Place Concrete: Concrete finishing.
B. Section 06100 - Rough Carpentry: Plywood floor sheathing.
C. Division 7 - Thermal and Moisture Protection.
D. Division 15 - Mechanical.

1.03 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):
   1. ASTM E 84-17 - Standard Test Method for Surface Burning Characteristics of Building Materials. CLASS A
   2. ASTM D543-14 - Standard Practice for Evaluating the Resistance of Plastics to Chemical Reagents
C. International Organization for Standardization
   1. ISO 6603/1 E50 - Determination of puncture impact behavior of rigid plastics:
      Exceeds 94 Joules
D. Japanese Standards Association
   1. JIS Z2801 / ISO 22196 – Test for Antimicrobial activity and efficacy
      Bacteria not detected or significantly reduced after 24 hrs

1.04 SYSTEM DESCRIPTION
A. Performance Requirements: Provide hygienic Palclad Pro wall covering which has been manufactured by Palram Americas, Inc. and installed to maintain performance criteria stated by manufacturer without defects, damage or failure.

1.05 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. Installer to Submit a layout diagram indicating the location of each panel and joining method as per the requirements of this specification.
C. Samples: Submit duplicate sample pieces of Palclad 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.

1.06 QUALITY ASSURANCE

A. Installer Qualifications: Installer experienced in installing PVC panels (not fiber reinforced plastic) for a minimum of 5 years and who has specialized in installation of work similar to that required for this project.

B. 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.

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

1.07 DELIVERY, STORAGE & HANDLING

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

B. Deliver, store and handle Palclad 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 film on panel until ready to use.

1.08 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.
1.09 PROJECT CONDITIONS
A. Temperature Requirements: If storage temperature is below 65F (18C), the Palclad 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 Palclad Pro shall be 20 years commencing on Date of Sale of material.

1.11 EXTRA MATERIALS
A. Provide extra materials of product and adhesives in accordance with Section 01780 - Closeout Submittals.
B. Provide [_____] sq.ft ([_____] m2) of each color, pattern and type material required for project for maintenance use.
C. Provide [_____] sq.ft ([_____] 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

2.01 MANUFACTURERS
A. Manufacturer (no substitutions)
  1. Palram Americas, Inc.
     9735 Commerce Circle, Kutztown, PA 19530
     Toll-free: 800.999.9549
     Fax: 610.285.9928
     E-mail: sales.usa@palram.com
     Web Site: www.palram.com/us

2.02 HYGIENIC WALL COVERINGS
A. Palclad Pro™ is 100% pure vinyl, extruded, semi-rigid PVC sheet. Palclad Pro is homogenous.
B. Acceptable material: Palclad Pro™ (measurements and product weights given below are approximate). Other colors available upon request, minimum order quantities will apply.
  1. White: Thickness: 0.08” (2.0 mm); Panel Width: 4’ (1.22m) Panel Height: Either 8’ or 10’ (2.4m or 3m); Weight 4’ x 8’ Panel: 18.2 lbs (8.25kg) Weight 4’ x 10’ Panel: 22.8 lbs (10.3 kg).
  2. Beige: Thickness: 0.08” (2.0 mm); Panel Width: 4’ (1.22m) Panel Height: Either 8’ or 10’ (2.4m or 3m); Weight 4’ x 8’ Panel: 18.2 lbs (8.25kg) Weight 4’ x 10’ Panel: 22.8 lbs (10.3 kg).
3. Green Grape: Thickness: 0.08” (2.0 mm); Panel Width: 4’ (1.22m) Panel Height: 10’ (3m);
   Weight 4’ x 10’ Panel: 22.8 lbs (10.3 kg).
4. Ocean Blue: Thickness: 0.08” (2.0 mm); Panel Width: 4’ (1.22m) Panel Height: 10’ (3m);
   Weight 4’ x 10’ Panel: 22.8 lbs (10.3 kg).
5. White: Thickness: 0.100” (2.5 mm); Panel Width: 4’ (1.22m) Panel Height: Either 8’ or 10’ (2.4m or 3m);
   Weight 4’ x 8’ Panel: 23.0 lbs (10.4 kg) Weight 4’ x 10’ Panel: 28.8 lbs (13.1 kg).
6. Beige: Thickness: 0.100” (2.5 mm); Panel Width: 4’ (1.22m) Panel Height: Either 8’ or 10’ (2.4m or 3m);
   Weight 4’ x 10’ Panel: 28.8 lbs (13.1 kg).
7. Green Grape: Thickness: 0.100” (2.5 mm); Panel Width: 4’ (1.22m) Panel Height: 10’ (3m);
   Weight 4’ x 10’ Panel: 28.8 lbs (13.1 kg).
8. Ocean Blue: Thickness: 0.100” (2.5 mm); Panel Width: 4’ (1.22m) Panel Height: 10’ (3m);
   Weight 4’ x 10’ Panel: 28.8 lbs (13.1 kg).

2.03 ACCESSORIES
A. Vinyl welding rod: Supplied by Palram Americas, Inc.
B. A non-flammable water-based adhesive suitable for PVC wall panel installations with no solvents or VOC's for climate
   controlled areas or a two part resin based polyurethane adhesive for wet area, non climate controlled areas and non
   absorbent surfaces. As approved by the manufacturer.

2.04 SOURCE QUALITY
A. Source Quality: Obtain PVC wall panels from a single manufacturer.

PART 3 EXECUTION

3.01 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.

3.02 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.

3.03 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. Wall tiles must be fixed firmly to the wall. As long as the tile edges do not protrude you do not have to skim grout joints.
C. Surfaces must be permanently dry and free from all substances that may contribute to adhesive bond failure.
D. Remove loose paint and conduct an adhesive bond test with paint.
E. Exterior walls must be adequately damp-proofed and insulated.
F. Dry wall substrates should be paint ready.
3.04 PREPARATION
A. All surfaces must be free from dust and cleaned prior to Palclad 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 Palclad Pro panels to de-bond.

B. Very absorbent / porous substrates (particularly plaster finishes and unprimed sheetrock) must have a sealer e.g. PVA primer or similar, applied to the surface a minimum of 12 hours prior to the installation.

C. 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.

D. All plumbing should have pipe-work removed to a first fix or installation state and “tails” left protruding from the substrate. Palclad 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 a compatible sanitary sealant. Plumbing should always be done by a qualified plumber.

E. 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 a compatible sanitary sealant.

F. All pipes, fixing bolts, etc. extending through the Palclad Pro panels should have a minimum 1/8” (3mm) expansion gap and be sealed using a compatible sanitary sealant.

G. If fitting to door frames, these must be in place prior to installation of Palclad Pro.

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

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

J. 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.

K. 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 lying flat to the substrate after the adhesive has been applied and the panel installed.

3.05 INSTALLATION
A. Hygienic Wall Installation: Install Palclad Pro in accordance with the current published Palram Americas, Inc. Installation Guide. All joints should be joined by approved methods as detailed in the installation guide. Failure to install Palclad Pro in accordance with recommended procedures will void the Palram Americas, Inc. Limited Product Warranty.

3.06 CLEANING
A. Palclad Pro can be cleaned with a diluted soap/detergent solution. For stubborn stains use an alkaline cleaner compatible with PVC.

B. When cleaning the Palclad 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.

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

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

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