

Part 1 General

1.1 SECTION INCLUDES

- .1 Rigid-sheet hygienic vinyl wall covering (referred to on the Drawings as "RVW").

1.2 RELATED REQUIREMENTS

- .1 Section 09 91 00 - Painting: for priming gypsum board surfaces before installing wall covering

1.3 REFERENCES

- .1 ASTM D5420 Standard Test Method for Impact Resistance of Flat, Rigid Plastic Specimen by Means of a Striker Impacted by a Falling Weight (Gardner Impact), 2021.

1.4 ADMINISTRATIVE REQUIREMENTS

- .1 Coordination:
 - .1 Coordinate cut-outs with mechanical and electrical fixtures and devices.
- .2 Sequencing:
 - .1 Prime gypsum board surfaces before installation of rigid-sheet vinyl wall coverings.

1.5 SUBMITTALS

- .1 See Section 01 33 00 - Submittal Procedures.
- .2 Product data: Submit manufacturer's printed product literature, specifications and data sheets.
- .3 Shop Drawings: Indicate layout indicating location of each panel and joining method.
- .4 Samples:
 - .1 Duplicate 300 by 300 mm panels of colour and texture selected with specified seam in centre of samples
 - .2 150 mm long sample of accessories.
- .5 Installer's qualification statement.
- .6 Test reports.
- .7 Warranty.
- .8 Maintenance materials: Supply the following for City's use in maintenance of project.
 - .1 See Section 01 78 00 - Closeout Submittals, for additional provisions.
 - .2 Rigid-sheet vinyl wall panels (RVW): One panel, full width and height, supplied in one piece; same dye lot or production run as installed materials.
 - .3 Adhesives: One unopened 1 litre can of each type of adhesive.
- .9 Maintenance data: For each type of product. Include information regarding recommended and potentially detrimental cleaning materials and methods; surface repair recommendations, and recommended schedule for cleaning.

1.6 QUALITY ASSURANCE

- .1 Installer qualifications: Company specializing in performing the work of this section with minimum five years documented experience, and approved by the manufacturer.
- .2 Test reports: Certified test reports showing compliance with specified performance characteristics and physical properties.

1.7 DELIVERY, STORAGE AND HANDLING

- .1 Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- .2 Store materials protected from exposure to harmful weather conditions, at temperature and humidity conditions recommended by manufacturer.
- .3 Store panels in temperature-controlled environments. Leave protective film on panel until ready to use.

1.8 AMBIENT CONDITIONS

- .1 Maintain air temperature and substrate temperature between 14 and 26 deg C for 48 hours before, during and 24 hours after installation.
- .2 Unwrap rigid-sheet vinyl wall covering and allow to acclimate in installation area for minimum 48 hours before application.

1.9 WARRANTY

- .1 Manufacturer's standard form in which manufacturer agrees to repair or replace components of rigid-sheet vinyl wall covering defects in materials within specified warranty period.
 - .1 Warranty Period: 10 years from date of Substantial Performance of the Work.

Part 2 Products

2.1 SUSTAINABILITY REQUIREMENTS

- .1 At least 90 percent of ceilings, 75 percent of wall panels, and 75 percent of insulation building products must be tested and determined compliant in accordance with CAL (CDPH SM), or recognized by one of the following equivalent programs:
 - .1 UL (GGG)
 - .2 SCS (CPD) Indoor Advantage Gold
 - .3 Blue Angel
 - .4 MAS Certified Green
 - .5 Berkeley Analytical ClearChem
 - .6 EMICODE EC1 or EMICODE EC1 Plus
 - .7 Intertek ETL Environmental VOC+
 - .8 Eco-INTITUT-Label
 - .9 CHPS (HPPD) Collaborative for High Performance Schools (CHPS)

- .2 The wall panels product category includes all finish wall treatments (wall coverings, wall paneling, wall tile), surface wall structures such as gypsum or plaster, cubicle/curtain/partition walls, trim, doors, frames, windows, and window treatments. Removable/interchangeable fabric panels, built-in cabinetry, and vertical structural elements are excluded.
- .3 At least 75 percent of all adhesives, sealants, paints, and coatings, by volume or surface area, applied on site and within the weatherproofing barrier must be tested and determined compliant in accordance with the California Department of Public Health (CDPH) Standard Method v1.2-2017, EN 16516:2017 or complies with the LCI values from Table 1 of the German AgBB Testing and Evaluation Scheme (2015) and a formaldehyde limit of 10 micrograms per cubic meter or recognized by one of the following equivalent programs:
 - .1 UL (GGG)
 - .2 SCS (CPD) Indoor Advantage Gold
 - .3 Blue Angel
 - .4 MAS Certified Green
 - .5 Berkeley Analytical ClearChem
 - .6 EMICODE EC1 or EMICODE EC1 Plus
 - .7 Intertek ETL Environmental VOC+
 - .8 Eco-INTITUT-Label
 - .9 CHPS (HPPD) Collaborative for High Performance Schools (CHPS)

2.2 MATERIALS

- .1 Rigid-sheet hygienic vinyl wall covering (RVW): 100% homogeneous vinyl, extruded, semi-rigid PVCu sheet, with integral bacteriostat, containing no plasticizers or fillers; heat-formable, impact-resistant to 18 Nm to ASTM D5420.
 - .1 Panel thickness: 2.5 mm.
 - .2 Panel size: 1220 mm wide by 3050 mm high.
 - .3 Texture: Smooth, satin finish.
 - .4 Colour: One, as selected by Contract Administrator from manufacturer's standard range.
 - .5 Surface burning characteristics: passing CAN/ULC S102; Flame Spread Rating 25 or less and Smoke Developed Classification 50 or less.
 - .6 Basis-of-Design Products:
 - .1 Altro Whiterock Extruded PVCu Wall Panels.
 - .2 True North Premium Wall Cladding Rigid Sheet Paneling.
 - .3 Requests for substitutions will be considered subject to specified requirements and in accordance with *B7 Substitutes of the Bidding Procedures*.
- .2 Accessories:
 - .1 Welding rod: Manufacturer's standard, colour-matched to wall covering.
 - .2 Adhesive: Two-part polyurethane adhesive recommended by wall covering manufacturer.
 - .3 Double-sided tape and primer: in accordance with wall covering manufacturer's recommendation.

- .4 Sealant: Low VOC, mildew resistant as recommended by manufacturer, colour matched to rigid sheet-vinyl wall covering.

Part 3 Execution

3.1 EXAMINATION

- .1 Before installation verify surfaces are suitable for installation.
 - .1 Verify surfaces are firm, smooth, dry, clean, free from loose material as recommended by wall covering manufacturer.
 - .2 Verify work penetrating substrate is completed before installing rigid-sheet vinyl wall covering.
 - .3 Verify gypsum board wall surfaces are sealed with latex sealer or equivalent as recommended by rigid vinyl wall covering manufacturer to promote adhesion.
 - .4 Notify Contract Administrator of conditions detrimental to proper completion of installation.
- .2 Start of work implies acceptance of conditions.

3.2 PREPARATION

- .1 Prepare surfaces according to wall covering manufacturer's instructions.

3.3 WALL COVERING INSTALLATION

- .1 Install wall covering with double-sided tape, adhesive and heat welded joints in accordance with manufacturer's written instructions. Minimize joints.
 - .1 Cut panel to size including penetrations. Dry fit before applying double-sided tape and adhesive.
 - .2 Install panels vertically using full-length pieces. Horizontal joints not permitted.
 - .3 Allow 3 mm expansion gap at abutments.
 - .4 Clean back of panel. Prime and apply double-sided tape on substrate centred along seam location in accordance with manufacturer's instructions.
 - .5 Prepare and spread adhesive with recommended trowel.
 - .6 Remove release film on double-sided tape.
 - .7 Adhere panel to substrate.
 - .8 Apply pressure at double-sided tape locations, and to entire panel face with wall roller working from middle of panel toward edges.
 - .9 Remove excess adhesive.
- .2 Joints:
 - .1 Heat-weld joints in wall covering with colour-matched welding rod.
 - .2 Remove burrs from panel edges and leave slight bevel.
 - .3 Allow 1.5 mm gap between each panel.
 - .4 Allow adhesive to cure minimum 24 hours before welding seams.
 - .5 Clean seam and welding rod with manufacturer's recommended cleaner.
 - .6 Weld seam, allow to cool and trim flush.
- .3 Penetrations:
 - .1 Cut holes neatly for penetrations required through wall covering.

- .2 Drill holes 3 mm oversize to allow for expansion, except as otherwise specified. Seal with manufacturer's recommended sealant.
- .4 Ceiling/wall junctions:
 - .1 At gypsum board and other solid ceilings terminate panels at underside of ceiling. Scribe panels to ceiling profile allowing 1.6 mm gap. Fill gap between wall panel and ceiling with sealant.
- .5 Floor/wall junctions: Scribe panels to floor profile allowing 1.6 mm gap. Fill gap between wall panel and floor with sealant.
- .6 Corners:
 - .1 Inside vertical corners: Heat welded butt seams.

3.4 CLEANING AND PROTECTION

- .1 Remove excess adhesive without damaging wall surfaces.
- .2 Leave protective film on wall cladding until Substantial Performance of the Work.
- .3 Clean wall surfaces in accordance with manufacturer's written instructions.
- .4 Protect finished surfaces from damage.

END OF SECTION