CS Acrovyn by Design® Sheet with up to 50% Post-Consumer Recycled Content

Suggested Specifications | Section 10 26 00

**Part 1 - General**

1. **Summary**
	1. This section includes the following types of wall protection systems:
		1. Wall Covering
	2. Related sections: The following sections contain requirements related to this section:
		1. Handrails, Corner Guards, Bumper Guards, Crash Rails, Accent Rails, Wall Panels, Door Protection; refer to section 10 26 00 “Wall and Door Protection”
2. **References**
	1. National codes (IBC, UBC, SBCCI, BOCA and Life Safety)
	2. American Society for Testing and Materials (ASTM)
	3. Underwriters Laboratories (UL)
	4. California 01350 specification
3. **Submittals**

General: Submit the following in accordance with conditions of contract and Division 1 specification section 01 33 00 “Submittal Procedures”:

* 1. Product data and detailed specifications for each system component and installation accessory required, including installation methods for each type of substrate.
	2. Shop drawings showing locations, extent and installation details of wall covering products. Shop drawings for Acrovyn by Design Pattern Collections show the direction of the pattern. Shop drawings for Acrovyn by Design with Custom Imagery will show full elevations including dimensions, seams and installation order.
	3. Samples for verification purposes: Submit the following samples, as proposed for this work, for verification of color, texture, pattern and thickness:
		1. Sample of Acrovyn by Design Pattern Collections available in 8” x 8” standard size.
		2. Samples of Acrovyn by Design with Custom Imagery will be 24”x24” printed at full scale to show resolution, DPI and color output. Construction Specialties drafting and Production team will select the 24”x24” sample area. Up to two (2) 24”x24” samples are included in the process of review/approval of the project. If more are required due to changes or updates additional charges may apply.
	4. Product test reports from a qualified independent testing laboratory showing compliance of each component with requirements indicated.
	5. Maintenance data for wall protection system components for inclusion in the operating and maintenance manuals specified in Division 1.
1. **Quality Assurance**
	1. Installer qualifications: Engage an installer who has no less than 3 years’ experience in installation of systems similar in complexity to those required for this project.
	2. Manufacturer’s qualifications: Not less than 5 years’ experience in the production of specified products and a record of successful in-service performance.
	3. Code compliance: Assemblies should conform to all applicable codes including IBC, UBC, SBCCI, BOCA, Life Safety and CA 01350.
	4. Fire performance characteristics: Provide engineered PVC FREE wall protection system components identical to those tested in accordance with ASTM E84 for Class A/1 characteristics listed below:
		1. Flame spread: 25 or less
		2. Smoke developed: 450 or less
	5. Impact strength: Provide wall protection components that have been tested for impact using a ram-type impact test in accordance with the applicable provisions of ASTM F476 -84.
	6. Chemical and stain resistance: Provide wall protection system components with chemical and stain resistance in accordance with ASTM D543.
	7. Color match: Provide wall protection components that are computer controlled within manufacturing tolerances and typical limitations of digital printing color matching.
	8. Single source responsibility: Provide all components of the wall protection system manufactured by the same company to ensure compatibility of color, texture and physical properties.
2. **Delivery, Storage and Handling**
	1. Deliver materials to the project site in unopened original factory packaging clearly labeled to show manufacturer.
	2. Store materials in original, undamaged packaging in a clean, dry place out of direct sunlight and exposure to the elements. A minimum room temperature of 40ºF (4ºC) and a maximum of 100ºF (38ºC) should be maintained.
	3. Materials must be stored flat.
3. **Project Conditions**
	1. Materials must be acclimated in an environment of 65-75ºF (18-24ºC) for at least 24 hours prior to beginning the installation.
	2. Installation areas must be enclosed and weatherproofed before installation commences.
4. Warranty
	1. **Acrovyn 5-year Limited Warranty**
* Applies to Interior Wall Protection orders that do not include recommended components or accessories
	+ Accessories = Primer, Adhesive, Caulk, Trims & Moldings
	1. **Limited Lifetime Systems Warranty**
* Applies to CS Interior Wall Protection projects that include all recommended components and accessories related to CS Interior Wall Protection Products.
	+ Accessories = Primer, Adhesive, Caulk, Trims & Moldings

# Part 2 - Products

1. **Manufacturers**
	1. Interior surface protection products specified “Acrovyn by Design” and included on the submittal drawings shall be manufactured by Construction Specialties, Inc., 3 Werner Way, Lebanon, NJ 08833 USA 800-233-8493; email: cet@c-sgroup.com
	2. Drawings and specifications are based on manufacturer’s literature from Construction Specialties, Inc. drawings and specifications unless otherwise indicated. Other manufacturers must be approved equal by Architect/Owner.
2. **Materials**
	1. Engineered PVC FREE: Rigid sheet to be high-impact Acrovyn by Design with up to 50% post-consumer recycled content: Nominal .040" (1.02mm) thick rigid sheet supplied in standard 4' x10' (1.2m x 3.0M) or 4’ x 8’ (1.22m x 2.4m) sheet sizes in standard Suede texture. Chemical and stain resistance should be per ASTM D543 standards as established by the manufacturer.
	2. Aluminum: Optional aluminum trims to be alloy 6063 T5 with clear or colored anodized finish; minimum strength and durability properties as specified in ASTM B221. The colored anodized finish is available in three colors and is not covered under 1.04.G.
	3. Cured ColorFlex” ® has a Shore A value of greater than 55 (product considered “pick-resistant” based on industry standards) testing conducted by independent lab in accordance with ASTM C661 and ASTM C920.
	4. Acrovyn trim offering is available for .040” thickness. Vertical, Wainscot, inside and outside corner trims are available in 10’ lengths. Visible trim width is 3/8” (9.53mm).
3. **Wall Covering**
	1. Engineered PVC FREE rigid sheet to be Acrovyn by Design with up to 50% post-consumer recycled content: High-definition graphic file digitally printed on reverse side of clear sheet and sealed with protective backer. Either to be customer provided artwork with copyright clearance file, or one of Acrovyn by Design Pattern Collections. Specify color-matched caulk, clear caulk, Acrovyn trims or aluminum trims as needed for joints/transitions**.** Specific files used on the project are noted below. See floor plans and finish schedule for coordinating locations.

\*\*Note to Specifier – update appropriate section in red below and delete\*\*

* + 1. Acrovyn by Design Pattern Collection (s): \_\_\_\_\_ *(update with AbD Pattern or delete section)*
			1. Other patterns will not be accepted as “closest standard pattern” must match exactly.
		2. Acrovyn by Design with Custom Imagery File (s): \_\_\_\_\_ *(update with specific custom file information or delete section)*
	1. Manufactured suggested trim is clear caulk.
1. **Fabrication**
	1. General: Fabricate wall covering to comply with requirements indicated for design, dimensions, detail, finish, and sizes.
2. **Finishes**
	1. General: Comply with NAAMM "Metal Finishes Manual" for recommendations relative to applications and designations of finishes.
3. **Accessories**
	1. Adhesive and Primer: Acrovyn wall covering shall be furnished as a complete packaged system, including appropriate standard adhesive and primer.
	2. Bacteria resistant caulk and trims available for purchase. [*Specifier note: ColorFlex II bacteria resistant caulk, used to cover seams in Acrovyn sheet installation, is resistant to bacteria/mold when subjected to ASTM G21 & ASTM G22 requirements.  ZERO bacteria or fungal growth was observed.]*

# Part 3 - Execution

1. **Examination**
	1. Verification of conditions: Examine areas and conditions under which work is to be performed and identify conditions detrimental to proper or timely completion.
		1. Do not proceed until unsatisfactory conditions have been corrected.
2. **Preparation**
	1. Surface preparation: Prior to installation, clean substrate to remove dirt, debris and loose particles. Perform additional preparation procedures as required by manufacturer's instructions. Minimum Level 3 wall finish is required; for surfaces with Level 5 finish, ensure the surface and any surface coatings are fully dry and cured.
	2. Protection: Take all necessary steps to prevent damage to material during installation as required in manufacturer's installation instructions.
3. **Installation**
	1. Install the work of this section in strict accordance with the manufacturer's recommendations using approved adhesive. Note there are special installation instructions for non-standard conditions: radius walls, tile, CMU block, etc.
	2. Temperature at the time of installation must be between 65-75ºF (18-24ºC) and be maintained for at least 48 hours after the installation to allow for proper adhesive set-up.
	3. Relative humidity shall not exceed 80%.
	4. Do not expose wall covering to direct sunlight during or after installation. This will cause the surface temperature to rise, which in turn will cause bubbles and delamination.
4. **Cleaning**
	1. General: Immediately upon completion of installation, clean material in accordance with manufacturer's recommended cleaning method.
	2. Remove surplus materials, rubbish and debris resulting from installation as work progresses and upon completion of work.
5. **Protection**
	1. Protect installed materials to prevent damage by other trades. Use materials that may be easily removed without leaving residue or permanent stains.