CS Acrovyn**™** Dimensional Moldings

Suggested Specifications | Section 10 26 00

**Part 1 - General**

1. **Summary**
	1. This section includes the following types of wall protection systems:
		1. Wall Panels
	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)
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.
	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 each product specified. Standard size 4” W 12” L x ½” D, standard color Smokey Elm.
	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 and Life Safety.
	4. Fire performance characteristics: Provide engineered PVC FREE wall protection system assembled from components that are identical to those tested in accordance with ASTM E84 for Class B/2 characteristics listed below:
		1. Flame spread: 75 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. Abrasion Resistance: Provide Acrovyn Wall Protection that shows resistance to withstand more than 10,000 cycles with 2 lb. weight when tested by the Taber Abraser with the applicable provisions of ASTM D 4060-07.
	7. Chemical and stain resistance: Provide wall protection system components with chemical and stain resistance in accordance with ASTM D543.
	8. Color match: Provide wall protection components that are color matched in accordance with the following:
		1. Delta Ecmc of no greater than 1.0 using CIELab color space. (Specifier note: Construction Specialties’ colors are matched under cool white fluorescent lighting and computer controlled within manufacturing tolerances. Color may vary if alternate lighting sources are present.)
	9. 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 Limited Lifetime Warranty**
* Applies to CS Interior Wall Protection projects that include all recommended components and accessories related to CS Interior Wall Protection Products.
	+ Assemblies = Brackets, Hardware
	+ Accessories = Primer, Adhesive, Caulk, Trims & Moldings

 **B. Acrovyn 5-year Limited Warranty**

* Applies to Interior Wall Protection orders that do not include recommended components or accessories
	+ Assemblies = Brackets, Hardware
	+ Accessories = Primer, Adhesive, Caulk, Trims & Moldings

**Part 2 - Products**

1. **Manufacturers**
	1. Interior surface protection products specified herein 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: High-impact Acrovyn 4000 sheet with Suede texture, nominal .040" (1.02mm) thickness. Chemical and stain resistance should be per ASTM D543 standards as established by the manufacturer. Colors to be indicated in the finish schedule from one of manufacturer’s available colors and patterns.
	2. Medium Density Fiber (MDF): 3/4" (19.1mm) board material with no added urea formaldehyde.
3. **Wall System**
	1. Engineered PVC FREE Wall System to be CS Acrovyn: Consisting of Acrovyn 4000 rigid sheet and surface mounted trims to achieve desired panelized design.
		1. Nominal .040" (1.02mm) thick rigid sheet supplied in standard 4' x10' (1.2m x 3.0M) 4’ x 8’ also available (1.22m x 2.4m) 4' x 8' or 10’ (1.2m x 2.4m or 3.0m) standard Suede texture. Optional textures should be 43" x 90" or 114" (1.1m x 2.3m or 2.9m). Select from one of Acrovyn Solid Colors, Acrovyn Woodgrains or Acrovyn Brushed Metals. Standard Acrovyn Woodgrains and Brushed Metals sheet size is 4' x 10' (1.2m x 3.0m); pattern direction runs parallel to 10' (3.0m) side of sheet.
		2. Trims to be nominal .040" (1.02mm) thick rigid sheet formed over shaped MDF board supplied in 9' 6" (2.9m) lengths and field mitered. Specify trim thicknesses to minimize exposure of selected components.
			1. Wainscot trims are 1/2" or 5/8" (12.7mm or 15.9mm) thick in 2", 4", 6" or 8" (50.8mm, 101.6mm, 152.4mm or 203.2mm) widths; optional wainscot trims available
			2. Vertical trims are 3/8", 1/2" or 5/8" (9.5mm, 12.7mm or 15.9mm) thick in 2", 4", 6" or 8" (50.8mm, 101.6mm, 152.4mm or 203.2mm) widths
			3. Horizontal trims are 3/8", 1/2" or 5/8" (9.5mm, 12.7mm or 15.9mm) thick in 2", 4", 6" or 8" (50.8mm, 101.6mm, 152.4mm or 203.2mm) widths
			4. Inside/outside corner trims are 3/8", 1/2" or 5/8" (9.5mm, 12.7mm or 15.9mm) thick in 2", 4", 6" or 8" (50.8mm, 101.6mm, 152.4mm or 203.2mm) widths; odd degree inside and outside corner trims available
			5. Wall base trims are 1/2" or 5/8" (12.7mm or 15.9mm) thick in 4", 6" or 8" (101.6mm, 152.4mm or 203.2mm) widths; optional plinth block available in 5/8" (15.9mm) thickness
		3. Engineered PVC FREE Feature Rails to be CS Acrovyn: Surface mounted assembly consisting of nominal .040” (1.02mm) thick Acrovyn rigid sheet formed over shaped MDF board. Supplied in 9’6” (2.9m) lengths and field mitered. Select from one of Acrovyn Solid Colors, Acrovyn Woodgrains, or Acrovyn Brushed Metals
		4. Neoclassic Rail (Model FR-251) 2 ½” (63.5mm) high Traditional style feature rail with a ¾” (19.1mm) wall offset
		5. Colonial Rail (Model FR-252) 2 ½” (63.5mm) high Traditional style feature rail with a ¾” (19.1mm) wall offset
		6. Federal Rail (Model FR-253) 2 ½” (63.5mm) high Traditional style feature rail with a ¾” (19.1mm) wall offset
		7. Tudor Rail (Model FR-260) 2 ¼” (57.2MM) high Traditional style feature rail with a ¾” (19.1mm) wall offset. Specify FR-260VN for optional feature insert; select from Acrovyn solid colors (limited options)
		8. Victorian Rail (Model FR-451) 4 ½” (114.3mm) high Traditional style feature rail with a 1” (25.4mm) wall offset
		9. Stepdown Rail (Model FR-254) 4” (101.6mm) high Transitional style feature rail with a ¾” (19.1mm) wall offset
		10. Gothic Rail (Model FR-255) 4” (101.6mm) high Transitional style feature rail with a ¾” (19.1mm) wall offset
		11. Square Rail (Model FR-259) 4” (101.6mm) high Transitional style feature rail with a ¾” (19.1mm) wall offset
		12. Reveal Rail (Model FR-256) 4” (101.6mm) high Transitional style feature rail with a ¾” (19.1mm) wall offset
		13. Angle Rail (Model FR-257) 4” (101.6mm) high Contemporary style feature rail with a ¾” (19.1mm) wall offset
		14. Slab Rail (Model FR-258) 4” (101.6mm) high Contemporary style feature rail with a ¾” (19.1mm) wall offset
4. **Fabrication**
	1. General: Fabricate wall covering to comply with requirements indicated for design, dimensions, detail, finish, and sizes.
5. **Accessories**
	1. CS Acrovyn Dimensional Moldings shall be furnished as a complete packaged system, containing all adhesive. Adhesive shall be non-hazardous. Water based primer is also available for purchase.

**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 and locating all components firmly into position, level and plumb.
	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 wall covering and accessories 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.