

HR-6CN (AU) and HRO-6N (AU)

Product Data

A single line Acrovyn® 4000 handrail.



Technical Data:

- 38.1mm grip
- 88.1mm wall offset
- 1.98mm thick Acrovyn® 4000 cover with Acrovyn® 4000 end caps; maximum 6.1m length
- Aluminum retainer; maximum 6.1m length
- Minimum handrail length is 279.4mm
- Acrovyn® 4000 mounting brackets

Features:

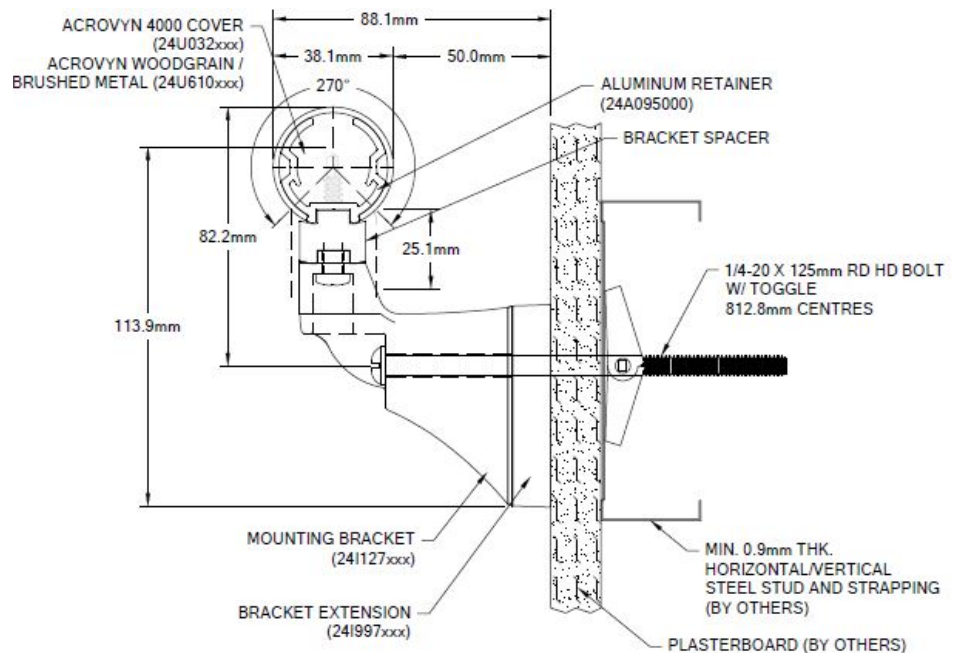
- AS 1428.1:2009 (section 12b,c & h) compliance
- Acrovyn® 4000 Group No. 1 NCC 2019 (Amendment. 1) – C1.10
- Shadowgrain texture
- Engineered PETG free of PVC and PBTs
- CA 01350 protocol for low VOC
- 5 year product warranty
- Acrovyn® 4000 Woodgrains/Brushed Metals

Options:

- Factory-formed radius (round grip only) and ramp transitions
- 90 degree and factory-mitered odd degree inside and outside corners
- HR-6CN - round grip
- HR-6CRBN - stainless steel brackets
- HR-6CNSS - stainless steel end caps
- HR-6CRBNSS - stainless steel brackets and end caps
- Stainless steel continuous 90 degree inside and outside corners and 76.2mm splices available for round handrail models
- HRO-6N - with oval grip; optional vertical accent reveal
- HRO-6RBN - high with oval grip and stainless steel brackets; optional vertical accent reveal

Solid
Colours

Acrovyn® 4000 Woodgrains/
Brushed Metals



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SUGGESTED SPECIFICATIONS
SECTION 10 26 00

**CS Acrovyn® 4000 Models HR-6CN, HR-6CRBN,
HR-6CNSS, HR-6CRBNSS, HRO-6CN and
HRO-6CRBN**

Part 1 - General

1.01 Summary

A. This section includes the following types of wall protection systems:

1. Handrails

B. Related sections: The following sections contain requirements related to this section:

1. Corner Guards, Bumper Guards, Crash Rails, Accent Rails, Wall Covering, Wall Panels, Door Protection; refer to section 10 26 00 "Wall and Door Protection"
2. Blocking in walls for fasteners; refer to section 09 22 00 "Supports for Plaster and Gypsum Board"

1.02 References

- A.** NCC 2019 (Amendment. 1) – C1.10
- B.** AS1428.1:2009 (Section 12b,c &h) Compliance
- C.** American Society for Testing Materials (ASTM)

1.03 Submittals

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

- A.** Product data and detailed specifications for each system component and installation accessory required, including installation methods for each type of substrate.
- B.** Shop drawings showing locations, extent and installation details of handrails. Show methods of attachment to adjoining construction.
- C.** Samples for verification purposes: Submit the following samples, as proposed for this work, for verification of color, texture, pattern and end cap attachment and alignment:
 1. 300mm long sample of each model specified including end cap.
- D.** Product test reports from a qualified independent testing laboratory showing compliance of each component with requirements indicated.
- E.** Maintenance data for wall protection system components for inclusion in the operating and maintenance manuals specified in Division 1.

1.04 Quality Assurance

- A.** 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.
- B.** Manufacturer's qualifications: Not less than 5 years experience in the production of specified products and a record of successful in-service performance.
- C.** Code compliance: Assemblies should conform to all applicable codes including AS1428.1:2009.
- D.** Fire performance characteristics: Provide engineered PETG wall protection system components with UL label indicating that they are identical to those tested in accordance with AS/NZS1530.3:1999 characteristics listed below:
 1. Flame spread: 9 or less
 2. Smoke developed: 8 or less
- E.** Impact Strength: Provide assembled wall protection units that have been tested in accordance with the applicable provisions of ASTM F476.
- F.** Chemical and stain resistance: Provide wall protection system components with chemical and stain resistance in accordance with ASTM D543.

G. 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 CIE Lab 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.)

H. 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.

1.05 Delivery, Storage and Handling

- A.** Deliver materials to the project site in unopened original factory packaging clearly labeled to show manufacturer.
- B.** Store materials in original, undamaged packaging in a cool, dry place out of direct sunlight and exposure to the elements. A minimum room temperature of 4°C and a maximum of 38°C should be maintained.
- C.** Material must be stored flat.

1.06 Project Conditions

- A.** Materials must be acclimated in an environment of 18°-24°C for at least 24 hours prior to beginning the installation.
- B.** Installation areas must be enclosed and weatherproofed before installation commences.

Part 2 - Products

2.01 Manufacturers

A. Interior surface protection products specified herein and included on the submittal drawings shall be manufactured by Construction Specialties, Inc.

2.02 Materials

- A.** Engineered PETG: Extruded material should be high-impact Acrovyn 4000 with Shadowgrain texture, nominal 1.98mm 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.
- B. Aluminum: Extruded aluminum retainer should be 6063-T6 alloy with nominal 2.29mm thick for models HR-6CN, HR-6CRBN, HR-6CNSS and HR-6CRBNSS or 6063-T6 alloy with nominal 1.90mm for models HRO-6CN and HRO-6CRBN. Minimum strength and durability properties as specified in ASTM B221.**
- C. Stainless Steel: Components shall be fabricated from type 304 stainless steel with a #4 satin finish, specify model HR-6CRBN, HRO-6CRBN, HR-6CNSS or HRO-6CRBNSS.**
- D.** Fasteners: All fasteners to be non-corrosive and compatible with aluminum retainers. All necessary fasteners to be supplied by the manufacturer.

2.03 Handrails

A. Engineered PETG Handrails to be CS Acrovyn® 4000: Surface mounted assembly consisting of a continuous extruded aluminum retainer with snap-on Acrovyn® 4000 cover. Color matched mounting brackets to be spaced as indicated on installation instructions. Color matched end caps and corners shall be attached to allow post installation adjustment. Attachment hardware shall be appropriate for wall construction.

1. **Model HR-6CN 38.1mm high singular round rail configuration. Select from one of Acrovyn® 4000 solid colors or Acrovyn® 4000 Woodgrain patterns. Specify HR-6CRBN for stainless steel**

round brackets. Specify HR-6CNSS for stainless steel end caps; specify HR-6CRBNSS to add stainless steel brackets. Optional 90 degree stainless steel inside and outside corners and 76.2mm splices available. Optional powder coat finish available for stainless steel end caps, corners and splices; select standard powder coat finish.

2. Model HRO-6 38.1mm high singular oval rail configuration. Select from one of Acrovyn® 4000 solid colors or Acrovyn® 4000 Woodgrain patterns. Specify HRO-6RBN for stainless steel round brackets. Optional vertical accent reveal available for HRO-6CN and HRO-6CRBN; select from Acrovyn® 4000 solid colors.

[Specifier note: refer to the Acrovyn® 4000 Cradle to Cradle Product Summary at www.acrovyn.com/c2c to determine which model variations, colors and patterns are Cradle to Cradle Certified™ Gold or Silver (exceptions: vertical accent reveal and stainless steel end caps, corners and splices). Cradle to Cradle Certified™ is a certification mark licensed by the Cradle to Cradle Products Innovation Institute.]

2.04 Fabrication

A. General: Fabricate wall protection systems to comply with requirements indicated for design, dimensions, detail, finish and member sizes.

Part 3 - Execution

3.01 Examination

- A.** 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.

3.02 Preparation

- A.** Surface preparation: Prior to installation, clean substrate to remove dirt, debris and loose particles. Perform additional preparation procedures as required by manufacturer's instructions.
- B.** Protection: Take all necessary steps to prevent damage to material during installation as required in manufacturer's installation instructions.

3.03 Installation

- A.** Install the work of this section in strict accordance with the manufacturer's recommendations using only approved mounting hardware and locating all components firmly into position, level and plumb.
- B.** Temperature at the time of installation must be between 18°-24°C and be maintained for at least 48 hours after the installation.
- C.** Adjust installed end caps as necessary to ensure tight seams.
- D.** Where splices occur in horizontal runs, splice retainer and rail at different locations along the run.

3.04 Cleaning

- A.** General: Immediately upon completion of installation, clean rails and accessories in accordance with manufacturer's recommended cleaning method.
- B.** Remove surplus materials, rubbish and debris resulting from installation as work progresses and upon completion of work.

3.05 Protection

A. Protect installed materials to prevent damage by other trades. Use materials that may be easily removed without leaving residue or permanent stains.