

ILLUSIONS® VINYL RAILING SYSTEM™

Effective April 04, 2010



Terms & Conditions

Freight and Delivery

All deliveries within our delivery area will be made FREE of charge unless the nature of the delivery is unusual due to special handling, and for timing requirements. Unless prior arrangements have been made, we require the customer's presence and assistance with receiving our delivery. All products must be inspected upon receipt and issues relating to shortages, condition, and damage must be indicated on the shipping documents at the time of delivery.

Order Process

Orders may be submitted; on-line at **www.illusionsfence.com**, faxed to (631) 698-6408 or 1(800) 788-0411, e-mailed to **sales@illusionsfence.com** or verbally by calling (631) 698-0900 or 1(800) 339-3362. Stock orders received by 5:00 pm should ship the following business day if required.

DISCOUNT QUALIFIERS

Pallet	Any combination of full pallets.
10 Case	Any combination of accessories, caps and gate hardware which totals 10 cases.

Full Trailer Loads......Eligible for maximum discount on any combination of full pallets, bundles and cases only. Call for quote.

Special Orders

Any orders for items that are not stocking items are considered special orders. Special orders may require a sign off by the customer and/or a deposit of 50% of the special ordered items. Once a special order item is placed, the item cannot be cancelled.

Return Policy

There is no return policy for Illusions® Vinyl Railing System™. Returns will only be made if there is an issue related to the material concerning its condition and that condition must be indicated on the shipping documents at the time of delivery. Any customer returning material must first contact the sales office for a return authorization within five days of the delivery. Any returns shipped without authorization will not be accepted. All returns must be properly packaged and in the same condition as originally received. We reserve the right to inspect all returned items prior to approving the final credit memo.

Account Setup

We are not an installer, contractor or retailer, therefore we require all customers to properly complete an account application prior to being set up and prior to receiving any pricing, catalogs or literature to ensure that we do not give pricing or information to an end user. You may request a credit line from us within the account application. You may also assign your password and give us your email address so you may access your account on our website.

Catalog Changes and Omissions

As you will notice, this catalog is comprehensive and even though we go to extreme efforts to keep it updated, it would be impossible to update it for every change that may occur. Therefore, product information and prices shown are subject to change without notice. We are also not responsible for typographical errors.



TABLE of CONTENTS

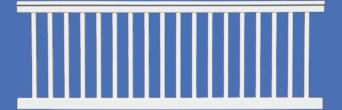
Railing Sections	Н5
Brackets/Accessories	Н7
Accessories/Posts	Н8
Posts	Н9
Post Caps	H10
Gates/Components	H12
Gate Hardware	H13
ADA Hand Railing	H14
Brochures/Specs/Instructions	H15+



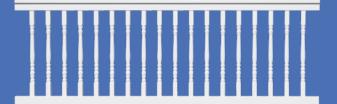
"Musions" Vinyl Railing System"

DuickShip 4 STYLES! 2 WIDTHS! IN STOCK! ALL THE TIME!

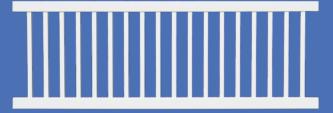
ASSEMBLED PANELS



VRT6/8-3 - Traditional Blstr. 1.5" x 1.5", T-Rail Top and 2"x3.5" Bottom Rail, 6' or 8' Wide



VRT6/8C-3 - Colonial Spindle Blstr., T-Rail Top and 2"x3.5" Bottom Rail, 6' or 8' Wide



VR6/8-3 - Traditional Blstr. 1.5" x 1.5", 2"x3.5" Top and Bottom Rail, 6' or 8' Wide



VR6/8C-3 - Colonial Spindle Blstr., 2" x 3.5" Top and Bottom Rail, 6' or 8' Wide

STAIR RAILS





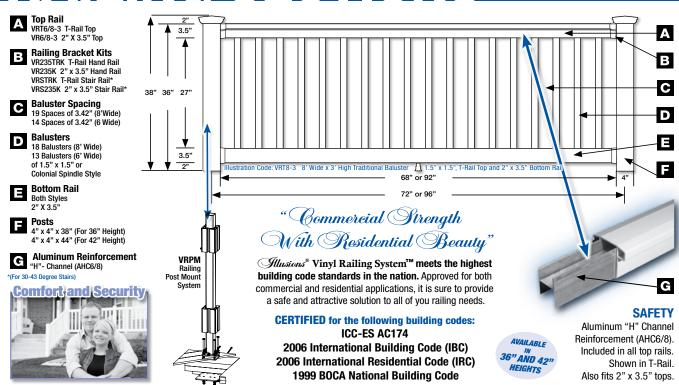
Illusions® Vinyl Railing System™ 040410

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Page H4



RAILING SECTIONS



RAILIN	ŀ	S							
Item No.		Description		Color	Bundle Count	Loose Ea.	4 Pallet Ea.	8 Pallet Ea.	T/L Ea.
		▼ 36" High Railing Section	ons ▼		ĺ				
VRT6-3	*	3' High Traditional Blstr. 1-1/2" x 1-1/2", T-Rail Top and 2"x3.5" Bottom Rail	6' Wide	White	12				
VRT8-3	*	3' High Traditional Blstr. 1-1/2" x 1-1/2", T-Rail Top and 2"x3.5" Bottom Rail	8' Wide	White	12				
VR6-3	*	3' High Traditional Blstr. 1-1/2" x 1-1/2", 2"x3.5" Top and Bottom Rail	6' Wide	White	12				
VR8-3	*	3' High Traditional Blstr. 1-1/2" x 1-1/2", 2"x3.5" Top and Bottom Rail	8' Wide	White	12				
VRT6C-3	*	3' High Colonial Spindle Blstr., T-Rail Top and 2"x3.5" Bottom Rail	6' Wide	White	12				
VRT8C-3	*	3' High Colonial Spindle Blstr., T-Rail Top and 2"x3.5" Bottom Rail	8' Wide	White	12				
VR6C-3	*	3' High Colonial Spindle Blstr., 2"x3.5" Top and Bottom Rail	6' Wide	White	12				
VR8C-3	*	3' High Colonial Spindle Blstr., 2"x3.5" Top and Bottom Rail	8' Wide	White	12				
		▼ 36" High Stair Railing Se	ctions	▼					
VRST6-3	*	3' High Traditional Stair Rail Section, T-Rail Top and 2"x3.5" Bottom Rail	6' Wide	White	12				
VRST8-3	*	3' High Traditional Stair Rail Section, T-Rail Top and 2"x3.5" Bottom Rail	8' Wide	White	12				
VRS6-3	*	3' High Traditional Stair Rail Section 2"x3.5" Top and Bottom Rail	6' Wide	White	12				
VRS8-3	*	3' High Traditional Stair Rail Section 2"x3.5" Top and Bottom Rail	8' Wide	White	12				
VRST6C-3	*	3' High Colonial Stair Rail Section, T-Rail Top and 2"x3.5" Bottom Rail	6' Wide	White	12				·
VRST8C-3	*	3' High Colonial Stair Rail Section, T-Rail Top and 2"x3.5" Bottom Rail	8' Wide	White	12				
VRS6C-3	*	3' High Colonial Stair Rail Section, 2"x3.5" Top and Bottom Rail	6' Wide	White	12				
VRS8C-3	*	3' High Colonial Stair Rail Section, 2"x3.5" Top and Bottom Rail	8' Wide	White	12				

★ - In Stock Item

10% Additional for Beige, Gray and Mix 'n' Match™



RAILINGS SECTIONS (cont).

RAILING	S							
Item No.	Description		Color	Bundle Count	Loose Ea.	4 Pallet Ea.	8 Pallet Ea.	T/L Ea.
	▼ 42" High Railing Se	ctions	▼					
VRT6-42	42" High Traditional Blstr. 1-1/2" x 1-1/2", T-Rail Top and 2"x3.5" Bottom Rail	6' Wide	White	12				
VRT8-42	42" High Traditional Blstr. 1-1/2" x 1-1/2", T-Rail Top and 2"x3.5" Bottom Rail	8' Wide	White	12				
VR6-42	42" High Traditional Blstr. 1-1/2" x 1-1/2", 2"x3.5" Top and Bottom Rail	6' Wide	White	12				
VR8-42	42" High Traditional Blstr. 1-1/2" x 1-1/2", 2"x3.5" Top and Bottom Rail	8' Wide	White	12				
VRT6C-42	42" High Colonial Spindle Blstr., T-Rail Top and 2"x3.5" Bottom Rail	6' Wide	White	12				
VRT8C-42	42" High Colonial Spindle Blstr., T-Rail Top and 2"x3.5" Bottom Rail	8' Wide	White	12				
VR6C-42	42" High Colonial Spindle Blstr., 2"x3.5" Top and Bottom Rail	6' Wide	White	12				
VR8C-42	42" High High Colonial Spindle Blstr., 2"x3.5" Top and Bottom Rail	8' Wide	White	12				
	▼ 42" High Stair Railing	Sectio	ns ▼	,				
VRST6-42	42" High Traditional Stair Rail Section, T-Rail Top and 2"x3.5" Bottom Rail	6' Wide	White	12				
VRST8-42	42" High Traditional Stair Rail Section, T-Rail Top and 2"x3.5" Bottom Rail	8' Wide	White	12				
VRS6-42	42" High Traditional Stair Rail Section 2"x3.5" Top and Bottom Rail	6' Wide	White	12				
VRS8-42	42" High Traditional Stair Rail Section 2"x3.5" Top and Bottom Rail	8' Wide	White	12				
VRST6C-42	42" High Colonial Stair Rail Section, T-Rail Top and 2"x3.5" Bottom Rail	6' Wide	White	12				
VRST8C-42	42" High Colonial Stair Rail Section, T-Rail Top and 2"x3.5" Bottom Rail	8' Wide	White	12				
VRS6C-42	42" High Colonial Stair Rail Section, 2"x3.5" Top and Bottom Rail	6' Wide	White	12				
VRS8C-42	42" High Colonial Stair Rail Section, 2"x3.5" Top and Bottom Rail	8' Wide	White	12				

^{★ -} In Stock Item

10% Additional for Beige, Gray and Mix 'n' Match™



BRACKETS/ACCESORIES

T-RA	IL HAN	D RAIL 2" x 3.5" KI						
Item No.		Description	Color	Case Count	Loose Ea.	Case Ea.	10 Case Ea.	000
VR235TRK	*	T-Rail Hand Rail 2" x 3.5" Kit (2 pair each) Brackets	White	15				0000
2" x	3.5" H	AND RAIL KIT						
Item No.		Description	Color	Case Count	Loose Ea.	Case Ea.	10 Case Ea.	
VR235K	*	2" x 3.5" Hand Rail Kit (4 pcs.) Brackets	White	15				10 = 600
T-RA	IL STA	IR RAIL KIT						
Item No.	•	Description	Color	Case Count	Loose Ea.	Case Ea.	10 Case Ea.	000
VRSTRK	*	T-Rail Stair Rail Kit (2 pair each) Brackets	White	15				4000
2" x	3.5" S	TAIR RAIL KIT						
Item No.	•	Description	Color	Case Count	Loose Ea.	Case Ea.	10 Case Ea.	PPDE
VRS235K	*	2" x 3.5" Stair Rail Kit (4 pcs.) Brackets	White	15				0000
SCRE	W KIT	WITH REQUIRED INS	TALLA	TION IN	ISTRU	CTIONS		
Item No.		Description	Case Count	Loose Each	Case Each	8 Case Ea.	10 Case Ea.	Installation Instructions Installation Instructions Instructions Instruction Instructions Instruction
VRSSK ★		with Instructions or ICC-ES AC174 Certified Installation)	48					THE PROPERTY OF THE PROPERTY O
45 D	EGREE	ADAPTER KIT						4-61-
Item No.	•	Description	Color	Case Count	Loose Ea.	Case Ea.	10 Case Ea.	30 00 00
VRT45AK	*	T-Rail 45 Degree Adapter Kit (2 pr. each) Brackets. 4 pcs.	White	30				VRT45AK
VR23545A	K *	2" x 3.5" 45 Degree Adapter Kit (2 pr. each) Brackets. 4pcs.	White	30				VRT23545AK

★ - In Stock Item

★10% Additional for Beige, Gray and Mix 'n' Match™



ACCESSORIES / POSTS

3 PIECE	FO	DT BLOCK KIT						
Item No.		Description	Color	Case Count	Loose Ea.	Case Ea.	T/L Each	1
VRFBK	*	3 Pc. Ft. Block Kit, Bottom Rail Stabilizer	White	50				•
POST SK	(IRI	'S						
Item No.		Description	Color	Case Count	Loose Ea.	Case Ea.	T/L Each	
V44PS	*	4" x 4" Post Skirt		32				
V44PSBG	*	4" x 4" Post Skirt Beige		32				
V44PSGY	*	4" x 4" Post Skirt Gray		32				
V55PS	*	5" x 5" Post Skirt		56				
V55PSBG	*	5" x 5" Post Skirt Beige		56				
V55PSGY	*	5" x 5" Post Skirt Gray		56				
POST IN	SER	RTS						
Item No.		Description	Color	Case Count	Loose Ea.	Case Ea.	T/L Each	VRPM
VRPM436	*	Railing Post Mount System - 4" x 4" x 36"						- RAILING POST MOUNT SYSTEM
VRPM442	*	Railing Post Mount System - 4" x 4" x 42"						
VRPM536	*	Railing Post Mount System - 5" x 5" x 36"						- VRPMHC
VRPM542	*	Railing Post Mount System - 5" x 5" x 42"						HARDWARE-CONCRETE
VRPMHC	*	Post Mount Hardware for Concrete Installation						***************************************
VRPMW	*	Post Mount Hardware for Wood/Composite Installation						VRPMHW HARDWARE-WOOD
4" x 4"	x 1	08" PORCH POST						
Item No.		Description	Color	Bundle Count	Loose Ea.	Bundle Ea.	T/L Each	
VRPP44-108	*	4" x 4" x 108" Porch Post	White	24				
4" x 4"	x 4	8" NEWEL POST						
Item No.		Description	Color	Bundle Count	Loose Ea.	Bundle Ea.	T/L Each	
VRNP44-48	*	4" x 4" x 48" Newel Post	White	24				

★ - In Stock Item

★10% Additional for Beige, Gray and Mix 'n' Match™



POSTS

4" x 4"							
Item No.	Profile	Color	Bundle Count	Loose Ea.	Bundle Ea.	T/L Ea.	
V4438B ★	Post Blank 4" x 4" x 38"	White	55				1
V4444B	Post Blank 4" x 4" x 44"	White	55				
V444B ★	Post Blank 4" x 4" x 4'	White	55				
V448B ★	Post Blank 4" x 4" x 8'	White	55				
5" x 5"							
Item No.	Profile	Color	Bundle Count	Loose Ea.	Bundle Ea.	T/L Ea.	
V558B ★	Post Blank 5" x 5" x 8'	White	63				
V559B ★	Blank 5" x 5" x 9'	White	63				
5" x 5" Hea	vy Duty						
Item No.	Profile	Color	Bundle Count	Loose Ea.	Bundle Ea.	T/L Ea.	
VH559B ★	H.D. Post Blank 5" x 5" x 9'	White	63				
8" x 8"							
Item No.	Profile	Color	Bundle Count	Loose Ea.	Bundle Ea.	T/L Ea.	
V8812B ★	Majestic Post Blank 8" x 8" x 12'	White	25				

^{★ -} In Stock Item

10% Additional for Beige, Gray and Mix 'n' Match™



POST CAPS

FLAT CAP

Item No.		Сар	Color	Case Count	Loose Ea.	Case Ea.	10 Case Ea.
V44FO	*	Flat Outside Cap 4" x 4"	White	120			
V44FOBG	*	Flat Outside Cap 4" x 4"	Beige	120			
V44FOGY	*	Flat Outside Cap 4" x 4"	Gray	120			
V55FO	*	Flat Outside Cap 5" x 5"	White	160			
V55FOBG	*	Flat Outside Cap 5" x 5"	Beige	160			
V55FOGY	*	Flat Outside Cap 5" x 5"	Gray	160			



FRENCH GOTHIC CAP

Item No.	Сар	Color	Case Count	Loose Ea.	Case Ea.	10 Case Ea.
V44FG ★	French Gothic Cap 4" x 4"	White	45			
V44FGBG ★	French Gothic Cap 4" x 4"	Beige	45			
V44FGGY ★	French Gothic Cap 4" x 4"	Gray	45			
V55FG ★	French Gothic Cap 5" x 5"	White	45			
V55FGBG ★	French Gothic Cap 5" x 5"	Beige	45			
V55FGGY ★	French Gothic Cap 5" x 5"	Gray	45			



NEW ENGLAND CAP

Item No.	Сар	Color	Case Count	Loose Ea.	Case Ea.	10 Case Ea.
V44NE ★	New England Cap 4" x 4"	White	32			
V44NEBG ★	New England Cap 4" x 4"	Beige	32			
V44NEGY ★	New England Cap 4" x 4"	Gray	32			
V55NE ★	New England Cap 5" x 5"	White	60			
V55NEBG ★	New England Cap 5" x 5"	Beige	60			
V55NEGY ★	New England Cap 5" x 5"	Gray	60			
V88NE ★	New England Cap 8" x 8"	White	24			
V88NEBG ★	New England Cap 8" x 8"	Beige	24			
V88NEGY ★	New England Cap 8" x 8"	Gray	24			



PALACE SOLAR LIGHT CAP

Item No.	Сар	Color	Case Count	Loose Ea.	Case Ea.	10 Case Ea.		
V55P ★	Palace Solar Light Cap 5" x 5" or 4" x 4"	White	24					
V55PBG ★	Palace Solar Light Cap 5" x 5" or 4" x 4"	Beige	24					
V55PGY ★	Palace Solar Light Cap 5" x 5" or 4" x 4"	Gray	24					



★ - In Stock Item



POST CAPS (Continued)

SOLAR LIGHT CAP

Item No.		Cap	Color	Case Count	Loose Ea.	Case Ea.	10 Case Ea.
V44SO	*	Solar Light Cap 4" x 4"	White	24			
V55SO	+	Solar Light Cap 5" x 5"	White	24			



BALL CAP

Item No.	Сар	Color	Case Count	Loose Ea.	Case Ea.	10 Case Ea.
V44BC ★	Ball Cap 4" x 4"	White	60			
V44BCBG ★	Ball Cap 4" x 4"	Beige	60			
V44BCGY ★	Ball Cap 4" x 4"	Gray	60			
V55BC ★	Ball Cap 5" x 5"	White	32			
V55BCBG ★	Ball Cap 5" x 5"	Beige	32			
V55BCGY ★	Ball Cap 5" x 5"	Gray	32			



COACHMAN CAP

Item No.		Cap	Color	Case Count	Loose Ea.	Case Ea.	10 Case Ea.
V44CM	*	Coachman Cap 4" x 4"	White	48		·	
V44CMBG	*	Coachman Cap 4" x 4"	Beige	48			
V44CMGY	*	Coachman Cap 4" x 4"	Gray	48			
V55CM	*	Coachman Cap 5" x 5"	White	45			
V55CMBG	*	Coachman Cap 5" x 5"	Beige	45			
V55CMGY	*	Coachman Cap 5" x 5"	Gray	45			



TEAR DROP CAP

Item No.	Сар	Color	Case Count	Loose Ea.	Case Ea.	10 Case Ea.
V44TD ★	Teardrop Cap 4" X 4"	White	48			
V44TDBG ★	Teardrop Cap 4" X 4"	Beige	48			
V44TDGY ★	Teardrop Cap 4" X 4"	Gray	48			
V55TD ★	Teardrop Cap 5" X 5"	White	48			
V55TDBG ★	Teardrop Cap 5" X 5"	Beige	48			
V55TDGY ★	Teardrop Cap 5" X 5"	Gray	48			



GLUE

Item No.	Description	Case Count	Loose Ea.	Case Ea.	10 Case Ea.
GLUE15	PVC Adhesive 1.5 oz.	24			
GLUE8	PVC Adhesive 8 oz.	64			
GLUE8BG 7	PVC Adhesive 8 oz. Beige	64			
GLUE8GY 7	PVC Adhesive 8 oz. Gray	64			



★ - In Stock Item



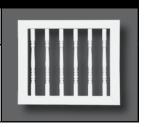
GATES / COMPONENTS

		REINFORCEMENT IN	CED'	7	MDN	π.				
Item No.	UM	Description	91 - 111	Col	or B	ase/ undle ount	Loose Ea.	Case/ Bundle Ea.	10 Case T/L Ea.	
AHC6	*	Aluminum Reinforcement Insert 6'			72					
AHC8	*	Aluminum Reinforcement Insert 8'			72					
RAILS T	OP A	AND BOTTOM (INDIVI	IDUA	L)						
Item No.		Description		Col	or B	ase/ indle ount	Loose Ea.	Case/ Bundle Ea.	10 Case T/L Ea.	
/2356TR	*	T-Rail Top Rail 6' (Blank)		White	90					
/2358TR	*	T-Rail Top Rail 8' (Blank)		White	90					
/2358-701	*	Railing Rail Top or Bottom		White	13	2				
1.5" x 1	1.5"	x 32" TRADITIONAL	BAL	LUS	TER	(IN	DIVID	DUAL B	ALUS	TERS)
Item No.		Description		Col	or B	ase/ indle ount	Loose Ea.	Case/ Bundle Ea.	10 Case T/L Ea.	
V151532	*	1.5"x1.5"x32" Traditional Baluster		Whit	e 18)				
1.5" x 1	1.5"	x 32" COLONIAL SP	IND	Ħ	BALU	ST	ER (II	NDIVID	UAL E	BALUSTERS)
Item No.		Description		Col	or B	ase/ indle ount	Loose Ea.	Cacol	10 Case T/L Ea.	
V151532CS	*	1.5"x1.5"x32" Colonial Spindle Baluster		Whit	e 50					
TRADIT	ION.	AL 1.5" X 1.5" BALU	STE	R G	ATE					
item No.		Description	Cole		Pallet Count	L	oose Ea.	Pallet Ea.	T/L Each	
VRG-43	*	Traditional 1.5" x 1.5" Spindle Picket 48" Wide x 34" High	Whi	te	12					

COLONIAL SPINDLE BALUSTER GATE

48" Wide x 34" High

Item No.	Description	Color	Pallet Count	Loose Ea.	Pallet Ea.	T/L Each
VRGC-43 ★	Colonial Spindle Picket Gate 48" Wide x 34" High	White	12			



★ - In Stock Item

★10% Additional for Beige, Gray and Mix 'n' Match™



GATE HARDWARE

	S					
item No.	Description	Case Count	Loose Ea.	Case Ea.	10 Case Ea.	MLS I
MLS ★	Magnetic Gate Latch (Small)	20				
V21SS ★	Gravity Latch w/ Plate S.S.	25				V21LL
V21LL ★	Gravity Lock Latch Keyed Both Sides	20				V21SS
DROP R	ODS					
Item No.	Description	Case Count	Loose Ea.	Case Ea.	10 Case Ea.	
DRAS ★	Drop Rod Assembly S.S. 24"	20				
HINGES						
Item No.	Description	Case Count	Loose Ea.	Case Ea.	10 Case Ea.	CPH55S
CPH55S ★	Corner Plate Hinge S.S.					Alla Tella
0111000	Spring Loaded	12 pr.				
THSL **		12 pr. 40pr.				THSL
THSL ★★	Spring Loaded True-Close Spring Hinge S.S.					THSL
THSL ★★	Spring Loaded		Loose Ea.	Case Ea.	10 Case Ea.	THSL
THSL **	Spring Loaded True-Close Spring Hinge S.S. LANEOUS	40pr.				

^{★ -} In Stock Item

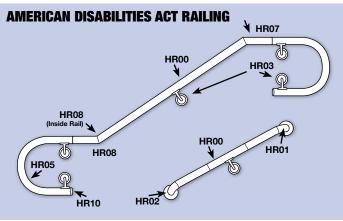
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^{★★ -} In Stock and Available in Black Only. (All others on this page are available in both black or white)



ADA HAND RAILING







ADA RA	AILING					
Item No.	Description	Case Count	Loose Ea.	Case Ea.	10 Case Ea.	HR00 HR01
HR00	Rail with Stiffener - 104"	12				
HR01	90 Degree Wall Return Kit	12				HR02 HR03
HR02	Straight Wall Return Kit	12				
HR03	Hand Rail Bracket Kit	12				HR04
HR04	90 Degree Corner	12				HR05
HR05	End Loop 18" x 12" x 18"	12				
HR06	Post Return (Candy Cane)	12				HR06
HR07	Straight Joiner	12				HR07
HR08	Adjustable Joiner	12				
HR09	Joint Ring	12				HR11 HR09 HR10
HR10	Rail End Cap	12				
HR11	Bracket/Wall Return Cover Plate	12				

★ - In Stock Item

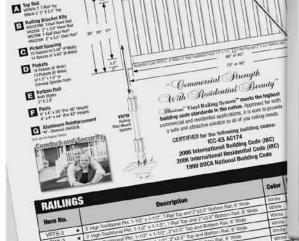
WEBSITE





RAILINGS

Illusions' Vinyl Railing System



Installation Instructions

Installation Instructions

Tools Needed to Complete Installation:

- Branchill Bore
- Branchill Bo



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ICC-ES AC174

1CC-ES-2995

CCRR-0143



ILLUSIONS® VINYL RAILING SYSTEM™ IS FULLY ICC-ES AC174 CERTIFIED

Evaluation Scope

- Compliance with the following codes:
 2006 International Building Code® (IBC)
- 2006 International Residential Code® (IRC)

Properties Evaluated

- · Surface-burning characteristics

Uses

The Illusions Vinyl Railing System™ described in this report is for exterior use as guards for balconies, porches, decks and stairs in buildings of Type V-B (IBC) construction and other types of construction in applications where untreated wood is permitted by IBC Section 1406.3 or in buildings constructed in accordance with the IRC.

Description

The Illusions® Vinyl Railing System™ is composed of polyvinyl chloride (PVC) which is extruded, in accordance with the approved quality control manual, into prefinished railing system components. The system components are available in white, beige or gray.

The Illusions® Vinyl Railing System™ is composed of top rails with aluminum "H" shaped inserts, bottom rails, and either square or colonial-shaped balusters. The inserts are 1.73 inches (43.9 mm) wide by 3.18 inches (80.8 mm) deep, and have 0.07-inch-thick (1.78 mm) flanges and a 0.10-inch-thick (2.54 mm) web. The inserts are made of Aluminum Alloy 6005-T5 meeting ASTM B 221. Four styles of Illusions® railings are available: Traditional square balusters with rectangular top rails; Traditional square balusters with T-Rail top rails; Colonial Spindle balusters with rectangular top rails; and Colonial Spindle balusters with T-Rail top rails. The rectangular top rails and the bottom rails are 2 inches (51 mm) wide by 3.5 inches (89 mm) deep. The T-Rail top rails have a wider top, resulting in an overall size of 3.5 inches (89 mm) wide by 3.5 inches (89 mm) deep. The Illusions® Vinyl Railing System™ is recognized for guardrails having a maximum height of 42 inches (107 cm) as shown in Table 1. The railings provide for 3.42-inchwide (86.9 mm) openings between the 1-1/2 inch (38.1 mm) square sections of the thermoformed hollow PVC Colonial balusters and the co-extruded hollow PVC Traditional balusters. The bottom and top rails have a 0.12-inch (3.05 mm) wall thickness, and the Traditional and Colonial balusters have a 0.08-inch (2.03 mm) wall thickness. See Figure 2 for typical component cross sections.

The top and bottom rails are fastened to the supporting structure using 2.5-inch-tall-by-2.75-inch-wide (64 mm by 70 mm) nylon brackets. The brackets have four screw holes used to fasten the brackets to the supports, a resting flange at the bottom, and a fastening flange on each side with three slotted screw holes each. The brackets are designed for mounting deck railings and stair railings to fixed wall surfaces or to braced columns.

Durability

When subjected to weathering, insect attack and other decaying elements, material used to manufacture the Illusions® Vinyl Railing System™ is equivalent to preservative-treated or naturally durable lumber when used in locations described in Section 2.0 of this report. The Illusions® Vinyl Railing System™ has been evaluated for a temperature range of -20°F to 125°F (-29°C to 52°C).

Surface Burning Characteristics

When tested in accordance with ASTM E 84, the Illusions® Vinyl Railing System™ has a flame-spread index of no greater than 200.

Design and Installation

General: Installation of the Illusions® Vinyl Railing System™ must comply with this report and the manufacturer's published installation instructions. A copy of these instructions must be available on the jobsite at all times during installation. When the manufacturer's published installation instructions differ from this report, this report governs.

Design: The Illusions® Vinyl Railing System™ is satisfactory to resist the loads specified in IBC Section 1607.7.1 and IRC Table R301.5, when installed at a maximum edge-of-structure-to-edge-of-structure spacing as prescribed in Table 1 of this report.

Installation: The Illusions® Vinyl Railing System™ has been evaluated for installation between two fixed points, such as walls or columns. The top rails must be reinforced with aluminum "H" shaped inserts, which are provided with the rails. The rails must be installed using the mounting plates supplied by Eastern Wholesale Fence Co., Inc., mounted on the supports at the appropriate heights for the bottom and top rails, with four No.10 by 1-1/2 inch-long (38.1 mm) panhead, stainless steel screws per bracket supplied by the manufacturer. The rails must be secured to the mounting brackets with two No. 10 by 3/4-inch (19.1 mm) stainless steel, pan head, self-tapping screws, making sure the screws engage and penetrate through the aluminum "H" shaped inserts. At stairs, the rails are installed in the same manner, with the bottom rail installed 2 inches above the risers. The attachment method described above for brackets to supports is for fasteners embedded into a wood substrate having a specific gravity of 0.50 (minimum), to a minimum depth of 1-3/8 inches (34.9 mm). Additional attachment methods are outside the scope of this report and are required to be submitted to the code official for approval. See Figure 1 for typical railing

Conditions of Use

The Illusions® Vinyl Railing System™ described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

The Illusions® Vinyl Railing System™ described in this report is limited to exterior use as guards for balconies, porches, decks and stairs in buildings of Type V-B (IBC) construction and other types of construction in applications where untreated wood is permitted by IBC Section 1406.3, or in buildings constructed in accordance with the IRC.

Installation must comply with this report, the manufacturer's published installation instructions and the applicable code. Only those fasteners and fastener configurations described in this report have been evaluated for the installation of the Illusions® Vinyl Railing System™. When the manufacturer's published installation instructions differ from this report, this report governs

The determination of compatibility of the fasteners, metal post mount components and other metal hardware with the supporting construction, including chemically treated wood, is subject to approval by the code official.

- 5.4 Adjustment factors outlined in the AF&PA National Design Standard and applicable codes must not apply to the allowable capacity and maximum spans for the Illusions® Vinyl Railing System™.
- 5.5 The Illusions® Vinyl Railing System $^{\text{TM}}$ must be fastened directly to supporting construction. Where required by the code official, engineering calculations and construction documents consistent with this report must be submitted for approval. The calculations must verify that the supporting construction complies with applicable building code requirements and is adequate to resist the loads imparted upon it by the products and systems discussed in this report. The documents must contain details of the attachment to the supporting structure consistent with the requirements of this report. The documents must be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed.
- 5.6 The top rail of the Illusions® Vinyl Railing System™ must not be permitted to be used as a handrail for stairways or ramps.
- 5.7 Posts are outside the scope of this report.
- 5.8 The Illusions® Vinyl Railing System™ components are produced in Calverton, New York, under a quality control program with inspections by Architectural Testing, Inc. (AA-676).

Evidence Submitted

Data in accordance with the ICC-ES Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems (Guards and Handrails) (AC174), dated February 2008 (editorially revised April 2008).

TABLE 1 — MAXIMUM GUARDRAIL SYSTEM SPANS ¹							
	GUARDRAIL	APPLICABLE B	MAXIMUM				
GUARDRAIL SYSTEM	ТҮРЕ	IBC	IRC	SPAN ^{3,4} (Inches)			
Colonial balusters with maximum 42-inch-high	Level	Yes	Yes	92			
Rectangular or T-Rail top rail	Stair	Yes	Yes	87.5			
Traditional balusters with maximum 42-inch-high	Level	Yes	Yes	92			
Rectangular or T-Rail top rail	Stair	Yes	Yes	87.5			

- 1 The ability of the supporting construction to resist the reaction from guardrail loads must be justified to the satisfaction of the code official.
- 2 Indicates compliance with the respective building codes.
 3 Maximum allowable span has been adjusted for durability. No further increases are permitted.
- 4 Maximum span is measured from edge-of-support-to-edge-of-support. It is recommended that separate specimens be used for each exposure time

ASTM F964-09



WHAT IS ASTM F964-09?

Scope

ASTM F964-09 is considered one of the "end all, beat all" testing specification for vinyl railing and fence quality. The purpose of this specification is to establish a recognized standard of quality for exterior vinyl profiles for use in assembling agricultural, commercial, and residential fencing and railing. This specification covers Illusions® Vinyl Railing System™ sections and the EverStrong® Profiles used to fabricate them.

Materials

Illusions® Vinyl Railing System™ Products are manufactured using rigid poly vinyl chloride (PVC) compounds for exterior-profile extrusions that meet the requirements of ASTM Specification D4216.

Manufacture

Illusions® Vinyl Railing System™ Products are manufactured to meet cell Class 1-32333-3 as defined in Specification D4216. Illusions® compounds have higher cell classification because one or more properties are superior to those used in standard acceptable compounds.

Color/Consistency Testing – The PVC compound in extruded section shall maintain uniform color and be free of any visual surface or structural changes, such as peeling, chipping, cracking, flaking, or pitting after weathering at intervals of six months and one year for white and for six months, one year, and two years for all other colors in hot, dry climate such as Phoenix, AZ; a hot humid climate, such as Miami, FL; and a temperate northern climate, when tested in accordance with ASTM Performance Weathering Requirements (TABLE 1).

Weathering Testing – The PVC compound shall have a minimum impact resistance of 0.6 in.-lb/mil (2670 J/m) after weathering six months and one year in a hot, dry climate such as Phoenix, AZ; a hot, humid climate, such as Miami, FL; and a temperate northern climate, when tested in accordance with ASTM Performance Weathering Requirements. The PVC compound shall have successfully met the weathering requirements prescribed for six months at each climatic testing site prior to use in production of exterior-profile extrusions, when tested in accordance with ASTM Performance Weathering Requirements (TABLE 1).

ASTM Specifications Met

D256 - To determine Izod impact properties

D618 - Practice for Conditioning Plastics for Testing

 ${\bf D635-Test\ Method\ for\ Rate\ of\ Burning\ and/or\ Extent} \\ {\bf and\ Time\ of\ Burning\ of\ Plastics\ in\ a\ Horizontal\ Position}$

D638 - To determine tensile properties

D648 - To determine heat distortion temperature

D696 – Test Method for Coefficient of Linear Thermal Expansion of Plastics Between Ø30°C and 30°C with a Vitreous Silica Dilatometer

D790 - To determine flexural properties

D792 - To determine specific gravity

D883 - Terminology Relating to Plastics

D1435 – Practice for Outdoor Weathering of Plastics D1600 Terminology for Abbreviated Terms Relating to

D1784 – Specification for Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds

D7032 – Standard Specification for Establishing: Performance Ratings for Wood-Plastic Composite Deck Boards and Guardrail Systems (Guards or Handrails)

D1761 – Standard Test Methods for Mechanical Fasteners in Wood: Used to test rail mounting brackets in PVC sleeved pressure treated wood posts.

D1898 - Practice for Sampling of Plastics

D2240 - To determine Shore hardness values

D2244 – Practice for Calculation of Color Tolerances and Color Differences from Instrumentally Measured Color Coordinates

D2565 – Practice for Xenon-Arc Exposure of Plastics Intended for Outdoor Applications

D4216 – Material Class Number1-32333-3. To establish Cell Classification of PVC material. Illusions compounds have higher cell classification because one or more properties are superior to those used in standard acceptable compounds.

D4226 - Test Methods for Impact Resistance of Rigid

Poly-(Vinyl Chloride) (PVC) Building Products

D4726 – Specification for Rigid Poly(Vinyl Chloride) (PVC) Exterior-Profile Extrusions Used for Assembled Windows and Doors

E-84-04 – Used to determine the flame spread value of PVC material; Illusions® burn rate is significantly lower than allowed value

Quality Assurance

Illusions® Vinyl Railing System™ Products are run through a series of dimensional and color tests that are performed at least every two hours. Testing includes; flattening, extrusion quality, impact resistance, warp, color comparison with standard color samples, capstock thickness, and bond testing. All will be done at the startup of a production and once per shift thereafter with a minimum of two tests per 24 hours of production.

TABLE 1 - Required Exposures for PVC Extrusions - In Process

1 TO EXITUSIONS IN 1 100033							
Color of PVC Exposure Climate Extrusions		Required Exposure Times, Months*					
	hot,dry (Phoenix, AZ)	6 and 12					
White	hot, humid (Miami, FL)	6 and 12					
	northern temperate	6 and 12					
	hot, dry (Phoenix, AZ)	6, 12 and 24					
Any other color	hot, humid (Miami, FL)	6, 12 and 24					
55.5.	northern temperate	6, 12 and 24					

'It is recommended that separate specimens be used for each exposure time.

The Glusions Vinyl Railing System Advantage

This test is run according to ASTM Standard G-155, Cycle #1. All Illusions® Vinyl Railing products are guaranteed to be made from 100% Pure Virgin Vinyl and assembled according to ASTM F964. Please note the difference in color retention and be assured, Illusions® Vinyl Railing System™ will have uniformed color and be free of any visual surface or structural changes such as: Peeling, chipping, cracking, flaking, or pitting after weathering.

Be assured! Insist on Glusions® Vinyl Pailing Products.

Competitor:

450 Hrs.

(4-5 Years)

Illusions®:
1000 Hrs.

(10-11 Years)



ASSEMBLED PANELS

VRT6/8-3 - Traditional Pkt. 1.5" x 1.5", T-Rail Top and 2"x3.5" Bottom Rail, 6' or 8' Wide



VR6/8-3 - Traditional Pkt. 1.5" x 1.5", 2"x3.5" Top and Bottom Rail, 6' or 8' Wide



VRT6/8C-3 - Colonial Spindle Pkt., T-Rail Top and 2"x3.5" Bottom Rail, 6' or 8' Wide



VR6/8C-3 - Colonial Spindle Pkt., 2" x 3.5" Top and Bottom Rail, 6' or 8' Wide

RAILS STAIR

Also Available in 2" x 3.5" Top Rall. VRST6/8-3 Traditional Stair Rail Section, T-Rail Top and 2"x3.5" Bot. Rail, 6'/8' Wide

VRST6/80-3 Colonial Stair Rail Section, T-Rail Top and 2"x3.5" Bot. Rail, 6'/8' Wide



VRGC-43

VRG-43







2006 INTERNATIONAL RESUBENTAL CODE! 1999 BOCA NATIONAL BUILDING CODE

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Mix 'n' Match

Beige (BG)

White



VR6/8C-3 Colonial Spindle Picket Shown With 2" x 3.5" Top and Bottom Rail Porch Post VRPP44-108 (Short Newel Posts VRNP44-48 Also Available)

Colonial Spindle Picket T-Rail Top and 2" x 3.5" Bottom Rail

VRT6/8C-3



Also fits 2" x 3.5" tops

SOTHIC

TEARDROP

PALACE SOLAR

BALL

XTERNAL FLAT

SOLAR

fraditional Picket 1.5" x 1.5", 2" x 3.5" Top and Bottom Rail /R6/8-3



Installation Instructions

Tools Needed to Complete Installation:

- Measuring Tape
- Wrench Set
- Pencil
- Phillips Head Screwdriver or Screwdriver Bits
- Level
- Circular Saw With Carbide Tip Multi-purpose Blade
- 2" Wood Blocks for Ease of Determining Height of Sections

The following instructions will guide you through the AC174 approved installation of your new **"Illusions® Vinyl Railing System™**. Testing was performed to evaluate compliance with ICC-ES AC174, *Acceptance Criteria for Deck Board Span Ratings and Guardrail Systems (Guards and Handrails)* which is ICC-ES acceptance criteria for recognition of compliance with the following building codes:

- ICC-ES AC174
- 2006 International Building Code (IBC)
- 2006 International Residential Code (IRC)
- 1999 BOCA National Building Code

This installation guide is a recommendation for meeting most code requirements. Always check your local building codes before starting a project and for determining the acceptable installation practices of your area. Read assembly instructions completely before beginning construction. Always wear protective goggles and gloves when installing a vinyl railing system.

IMPORTANT NOTE:

- When installing brackets to post mounts, use 1 inch screws provided.
- When installing brackets to vinyl sleeved over wood, use 1-1/2 inch screws provided.
- When securing rails to brackets, use 3/4 inch screws provided for all applications.

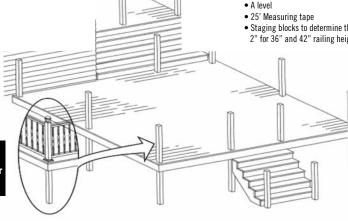
Illusions[®] Vinyl Post Sleeve Over Wood Posts

Typically, square 4" x 4" support posts are placed according to the length of railing desired and extend through the deck and then are cut to a height to receive the railing post. Square vinyl posts are then slid over the wooden posts, ready for railing sections to be installed.

TOOLS NEEDED

- Cut off saw with fine tooth blade, and/or a
- · Circular saw with a carbide tip multi-purpose blade
- 1/2" Masonry drill bit (if mounting a post on concrete)
- #2 Square drive screwdrivers or screwdriver bits
- A wrench set
- . Staging blocks to determine the height of the railing; 2" for 36" and 42" railing heights

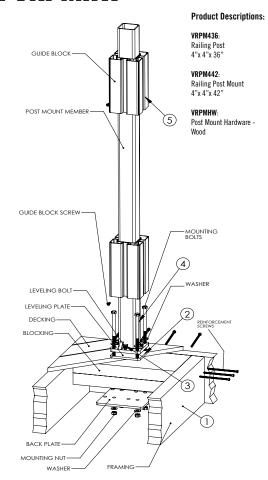




Hlusions®

Wood Post Mount Installation Instructions for VRPM436 and VRPM442 with VRPMHW

- STEP 1 Lay out the location of the post.
 - Install at least 3" of blocking under the mounting location. Securely attach the blocking using reinforcement screws.
- STEP 2 Using the leveling plate as a template, mark the locations of the 4 mounting holes to be drilled.
 - Drill 4 holes through the decking and blocking using a 3/8" diameter drill bit.
- STEP 3 Install the 4 leveling bolts into the post mount member.
 - Place the leveling plate on the decking surface and align over the (4) drilled holes.
 - Place the post mount member on top of the leveling plate and align the (4) holes.
 - Adjust the leveling screws to ensure the post mount member is level.
- STEP 4 Install the 4 mounting bolts with washers as shown.
 - On the underside, place the back plate over the exposed mounting bolts. (Use the centered holes for in-line applications and the offset holes for corner applications).
 - Secure the back plate by using the supplied mounting nuts and washers.
- STEP 5 Install the two guide blocks onto the post mount member. They should be positioned so that the screws from the railing brackets will screw into the guide blocks.
 - Once the proper heights are established, drill a 1/8" dia. hole through both the guide block and the post mount member. Install the supplied guide block screws to hold the guide blocks in place.
- STEP 6 Install the post profile and rail brackets according to *Illusions*® specifications.



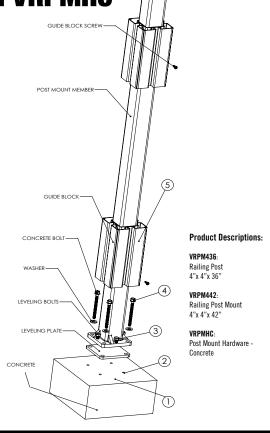
IMPORTANT NOTE:

Installer must consult local code officials for compliance to building code requirements.

Allusions Concrete Post Mount Installation Instructions for VRPM436 and VRPM442 with VRPMHC

STEP 1 - Lay out the location of the post.

- STEP 2 Using the leveling plate as a template, mark the locations of the 4 mounting holes to be drilled.
 - Drill 4 holes into the concrete using a 1/4" diameter masonry drill bit. The hole must be drilled to a minimum depth of 3-1/2".
 - Clean out the holes of all dust and debris.
- STEP 3 Install the 4 leveling bolts into the post mount member.
 - Place the leveling plate on the concrete surface and align over the (4) drilled holes.
 - Place the post mount member on top of the leveling plate and align the (4) holes.
 - Adjust the leveling screws to ensure the post mount member is level.
- STEP 4 Install the 4 concrete bolts with washers as shown by applying downward pressure while turning in a clockwise direction.
 - Continue to tighten the bolts until the heads are firmly seated. (Do not over tighten).
- STEP 5 Install the two guide blocks onto the post mount member. They should be positioned so that the screws from the railing brackets will screw into the guide blocks.
 - Once the proper heights are established, drill a 1/8" dia. hole through both the guide block and the post mount member. Install the supplied guide block screws to hold the guide blocks in place.
- STEP 6 Install the post profile and rail brackets according to *Illusions*[®] specifications.

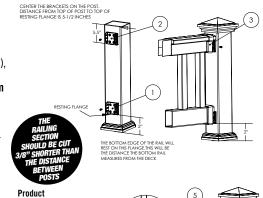


IMPORTANT NOTE:

Installer must consult local code officials for compliance to building code requirements.

Illusions Straight Railing Bracket System Install Instructions for VR235K and VR235TRK

- STEP 1 Using four (4) of the VRSSK provided screws (1 inch screws for post mount applications and 1-1/2 inch screws for vinvl sleeve over wood post applications). install the lower mounting plate to the post. The Mounting Plates should be centered on the post and the resting flange should be at the required height from the deck which is 2 inches.
- STEP 2 Repeat Step 1 for installation of upper Mounting Plate. The distance between the top of the post to the top of resting flange is 5-1/2 inches. Repeat steps 1 and 2 on opposite Post.
- STEP 3 Slide the bracket covers onto the railing section. Install the pre-assembled railing section into the mounting plates. Making sure that the rails sit on the resting flanges.
- STEP 4 Install two (2) of the supplied 3/4 inch side screws into each mounting plate (one on each side) using the best slot location making sure that the screws engage into the aluminum H-channel (Code#-AHC6/8) in the rail. The mounting plates are slotted to allow for thermal expansion and contraction.
- STEP 5 Slide the covers towards the post until they snap onto the mounting plates. You will hear an audible "click."
- STEP 6 Choose any decorative post cap and footblock styles.



T-Rail 2"x 3.5" Rail Bracket Kit (2 of ea.) Also Available in: Beige (VR235TRKBG) Gray (VR235TRKGY)

Descriptions:

2"x 3.5" Hand Rail

Bracket Kit (4 Pc.) Also available in:

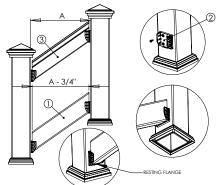
Beige (VR235KBG) Gray (VR235KGY)

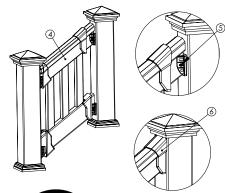
VR235TRK-

VR235K:

Illusions[®] Stair Railing Bracket Installation for VRS235K or VRSTRK

- STEP 1 Cut top and bottom rail to desired length and angle to match the stair angle and the distance between the stair posts minus 3/8". Place a mounting bracket on each end of the rail, make sure the bottom rail sits on the resting flanges. Temporarily place into position at the desired distance above tread risers. The Mounting plates should be centered on the post and the resting flange should be at the required height from the risers which is 2 inches. Mark locations of the bottom of each mounting bracket and remove the section.
- STEP 2 Using Four (4) of the provided VRSSK screws (1 inch screws for post mount applications and 1-1/2 inch screws for vinyl sleeve over wood post applications), install the lower mounting plate to the post. The Mounting plates should be centered on the post and aligned with the locations marked in Step 1.
- STEP 3 Repeat step 1 and 2 for upper rail. The distance between the top of the post to the top of resting flange is 5-1/2 inches.
- STEP 4 Slide the bracket covers onto the railing section. Install the pre-assembled *Allusions*® railing section into the mounting plates. Making sure that the rails sit on the resting flanges.
- STEP 5 Install two (2) of the supplied 3/4 inch side screws into each mounting plate (one on each side) using the best slot location making sure that the screws engage into the aluminum H-channel (Code#-AHC6/8) in the rail. The mounting plates are slotted to allow for thermal expansion and contraction.
- STEP 6 Slide the covers toward the post until they snap onto the mounting plates. You will hear an audible "click."
- STEP 7 Choose any decorative post cap and footblock styles.



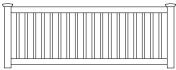


Product Descriptions:

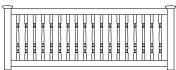
VRS235K-2"x 3.5" Stair Rail Bracket Kit (4 Pc.) Also available in: Beige (VRS235KBG) Gray (VRS235KGY)

VRSTRK-T-Rail 2"x 3 5" Stair Rail Bracket Kit (2 of ea.) Also Available in: Beige (VRS235TRKBG) Gray (VRS235TRKGY)



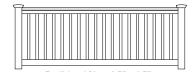


Traditional Blstr. 1.5" x 1.5" 2"x3.5" Top and Bottom Rail, 6' or 8' Wide

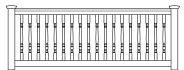


Colonial Spindle Blstr., 2" x 3.5" Top and Bottom Rail, 6' or 8' Wide

QuickShip[™] **Assembled Panels In Stock All The Time**



Traditional Blstr. 1.5" x 1.5". T-Rail Top and 2"x 3.5" Bottom Rail, 6' or 8' Wide



Colonial Spindle Blstr. T-Rail Top and 2"x3.5" Bottom Rail, 6' or 8' Wide









∰llusions® Vinyl Railing System™

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