

**PERMIT ISSUED**

**City of Portland, Maine - Building or Use Permit Application**  
 389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No: 03-0758	Issue Date: <b>JUL 22 2003</b>	CBL: 153 A025001
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<del>191 State St</del> Location of Construction:	Owner Name: Nial Construction Inc	Owner Address: 191 State Rd St <b>CITY OF PORTLAND</b>	Phone: 752-0091
Business Name: <b>Bldg #1 &amp; 2</b>	Contractor Name: Applicant	Contractor Address: Portland	Phone:
Lessee/Buyer's Name	Phone:	Permit Type: Multi Family	Zone: <b>R3</b>

Past Use: Vacant Lot	Proposed Use: Radcliff Glen/Phase 1B Units 1 & 2	Permit Fee: \$3,036.00	Cost of Work: \$409,000.00	CEO District: 2	INSPECTION: Use Group: <b>R3</b> Type: <b>SB</b> <b>BOLA 1999</b> Signature: <b>JMB 7/22/03</b>
Proposed Project Description: Construct Phase 1B-Units 1 & 2		FIRE DEPT: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Denied Signature: <i>[Signature]</i>			

PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)		Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Signature: _____ Date: _____	
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Permit Taken By: gad	Date Applied For: 06/27/2003	<b>Zoning Approval</b>	
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1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal Rules.  2. Building permits do not include plumbing, septic or electrical work.  3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..	Special Zone or Reviews <input type="checkbox"/> Shoreland <b>N/A</b> <input type="checkbox"/> Wetland <input type="checkbox"/> Flood Zone <b>Panel 7</b> <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan Maj <input type="checkbox"/> Minor <input type="checkbox"/> MM <input checked="" type="checkbox"/> Date: <b>7/20/03</b>	Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied Date: _____	Historic Preservation <input checked="" type="checkbox"/> Not in District or Landmark <input type="checkbox"/> Does Not Require Review <input type="checkbox"/> Requires Review <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/Conditions <input type="checkbox"/> Denied Date: <i>[Signature]</i>
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**CERTIFICATION**

I hereby certify that I am the owner of record of the named property, or that the proposed work is authorized by the owner of record and that I have been authorized by the owner to make this application as his authorized agent and I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in the application is issued, I certify that the code official's authorized representative shall have the authority to enter all areas covered by such permit at any reasonable hour to enforce the provision of the code(s) applicable to such permit.

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE		DATE	PHONE

**City of Portland, Maine - Building or Use Permit**

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

<b>Permit No:</b> 03-0758	<b>Date Applied For:</b> 06/27/2003	<b>CBL:</b> 153 A025001
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<b>Location of Construction:</b> Kimberly Court	<b>Owner Name:</b> Nial Construction Inc	<b>Owner Address:</b> 191 State Rd Ste # 2	<b>Phone:</b> ( ) 752-0091
<b>Business Name:</b>	<b>Contractor Name:</b> Applicant	<b>Contractor Address:</b> Portland	<b>Phone:</b>
<b>Lessee/Buyer's Name</b>	<b>Phone:</b>	<b>Permit Type:</b> Duplex	

<b>Proposed Use:</b> Radcliff Glen/Phase 1B Units 1 & 2	<b>Proposed Project Description:</b> Radcliff Glen: Construct Phase 1B-Units 1 & 2
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**Dept:** Zoning      **Status:** Approved      **Reviewer:** Marge Schmuckal      **Approval Date:** 07/02/2003  
**Note:**      **Ok to Issue:**

**Dept:** Building      **Status:** Approved      **Reviewer:** Jeanine Bourke      **Approval Date:** 07/22/2003  
**Note:**      **Ok to Issue:**

- 1) Guardrails & handrails will be required if the change of grade is more than 15-1/2" or more than 2 risers
- 2) Exterior guardrail detail will be submitted - it is a composite product pre-manufactured
- 3) Separate permits are required for any electrical or plumbing work.
- 4) Application approval based upon information provided by applicant. Any deviation from approved plans requires separate review and approval prior to work.

**Dept:** Fire      **Status:** Approved      **Reviewer:** Lt. MacDougal      **Approval Date:** 07/03/2003  
**Note:**      **Ok to Issue:**

03-0758

# All Purpose Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: <u>Vicinity of 267 Harvard St / 191 Harvard</u>		
Total Square Footage of Proposed Structure <u>15040 units 1-2</u>	Square Footage of Lot <u>369,789 8.48 A/C</u>	
Tax Assessor's Chart, Block & Lot Chart# <u>153</u> Block# <u>A</u> Lot# <u>025</u>	Owner: <u>NIAL CONSTRUCTION</u> <u>191 STATE ROAD SUITE #2</u> <u>Kittery, ME 04103</u>	Telephone: <u>207 752-0091</u>
Lessee/Buyer's Name (if Applicable)	Applicant name, address & telephone: <u>NIAL CONSTRUCTION</u> <u>191 STATE ROAD SUITE #2</u> <u>Kittery, ME 04103</u>	Cost Of Work: \$ <u>489,000</u> Fee: \$ <u>3006</u>
Current use: <u>WOOD LOT</u>	BIR Fee <u>2886.00</u>	
If the location is currently vacant, what was prior use: <u>WOOD LOT</u>	C of O <u>150.00</u>	
Approximately how long has it been vacant: _____	<u>\$ 3,036.00</u>	
Proposed use: <u>33 PRUD</u>	<u>for units # 1+2</u>	
Project description:		
Contractor's name, address & telephone:		
Who should we contact when the permit is ready: <u>Larry Sturdivant</u>		
Mailing address: <u>15 GORSON DRIVE</u> <u>PORTLAND, ME 04103</u>		
We will contact you by phone when the permit is ready. You must come in and pick up the permit and review the requirements before starting any work, with a Plan Reviewer. A stop work order will be issued and a \$100.00 fee if any work starts before the permit is picked up. PHONE: <u>207-752-0091</u>		

IF THE REQUIRED INFORMATION IS NOT INCLUDED IN THE SUBMISSIONS THE PERMIT WILL BE AUTOMATICALLY DENIED AT THE DISCRETION OF THE BUILDING/PLANNING DEPARTMENT, WE MAY REQUIRE ADDITIONAL INFORMATION IN ORDER TO APPROVE THIS PERMIT.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature of applicant: <u>[Signature]</u>	Date: <u>6/24/03</u>
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This is NOT a permit, you may not commence ANY work until the permit is issued. If you are in a Historic District you may be subject to additional permitting and fees with the Planning Department on the 4th floor of City Hall

DEPT. OF BUILDING INSPECTION  
CITY OF PORTLAND, ME  
JUN 27 2003

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

Please Read Application And Notes, If Any, Attached

BUILDING INSPECTION

PERMIT ISSUED

PERMIT

Permit Number: 030758

JUL 22 2003

This is to certify that Nial Construction Inc /Applic

has permission to Construct Phase 1B-Units 1 & 2

CITY OF PORTLAND

AT 10111 1st Kimberly Ct - Bldg # 200 153 A025001

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes of Maine and of the Ordinances of the City of Portland regulating the construction, maintenance and use of buildings and structures, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.

Notification of inspection must be given and work on permit must be completed before this building or part thereof is occupied or enclosed-in. HEAVY NOTICE IS REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS

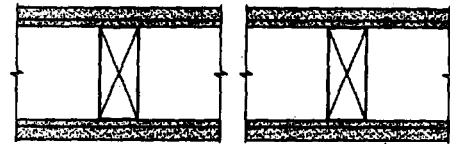
Fire Dept. [Signature]
Health Dept.
Appeal Board
Other

[Signature] 7/22/03
Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

**GYPSUM WALLBOARD, WOOD STUDS**

Base layer 1/4" gypsum wallboard applied parallel to each side of 2 x 4 wood studs 16" o.c. with 4d coated nails, 1 1/2" long, 0.099" shank, 1/4" heads, 12" o.c. Joints staggered 16" on opposite sides. Face layer 1/2" type X plain or predecorated gypsum wallboard or gypsum veneer base applied parallel to each side with 1/4" beads of adhesive 2" o.c. and 6d coated nails, 1 7/8" long, 0.0915" shank, 1/4" heads, 6" o.c. at top and bottom plates only. Offset joints 24" from base layer joints. (LOAD-BEARING)

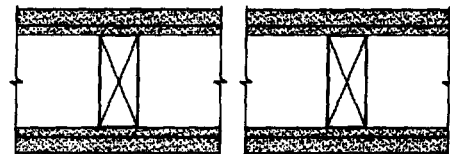


Thickness: 5 1/8"  
 Approx. Weight: 7 psf  
 Fire Test: FM WP-147, 1-2-69  
 Sound Test: NGC 2321, 8-29-68

**GYPSUM WALLBOARD, WOOD STUDS**

Base layer 3/8" gypsum wallboard or gypsum veneer base applied parallel to each side of 2 x 4 wood studs 16" o.c. with 5d coated nails, 1 3/4" long, 0.082" shank, 7/32" heads, 12" o.c. Face layer 5/8" type X gypsum wallboard or gypsum veneer base applied parallel to each side with 6" wide strips of laminating compound combed along edges and intermediate studs and 6d finish nails, 2" long, 0.0915" shank, 0.135" heads driven at 45° angle 24" o.c. at intermediate studs.

Joints staggered 16" o.c. each layer and side. (LOAD-BEARING)

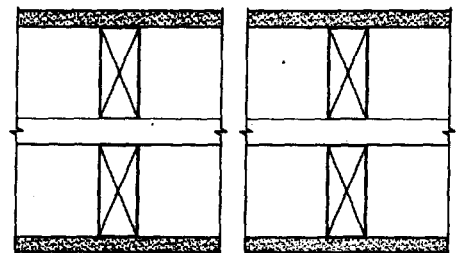


Thickness: 5 5/8"  
 Approx. Weight: 8 psf  
 Fire Test: UC, 2-4-65  
 Field Sound Test: ACI 7-1152004a, 12-21-64

**GYPSUM WALLBOARD, WOOD STUDS**

One layer 5/8" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to each side of double row of 2 x 4 wood studs 16" o.c. on separate plates 1" apart with 6d coated nails, 1 7/8" long, 0.0915" shank, 1/4" heads, 7" o.c.

Joints staggered 16" on opposite sides. Horizontal bracing required at mid height. (LOAD-BEARING)



Thickness: 9 1/2"  
 Approx. Weight: 8 psf  
 Fire Test: See WP 3605  
 (UL R1319-4, 6, 6-17-52;  
 UL R2717-39, 1-20-66;  
 UL R3501-52, 3-15-66,  
 UL Design U305;  
 ULC Design W301)  
 Sound Test: Estimated



*Separation  
 wall  
 Detail*

**This Space Left Blank**

Kimberly et 142 #03-758  
153-A-25

		Soil type/Presumptive Load Value (Table 401.4.1) 3000 PSF
		<b>STRUCTURAL</b> Footing Dimensions/Depth (Table 403.1.1 & 403.1.1(1), Section 403.1.2) 4' 1' x 22" / Fire wall 1' x 24" / 12" wall 10" wall
	ok	ok
		Foundation Drainage Dampproofing (Section 406)
	ok	Ventilation (Section 409.1) Crawls Space ONLY
	3/4" x 8" 4' o.c.	Anchor Bolts/Straps (Section 403.1.4)
	HSS 4,000 x 0.226 TP Footing Schedule	Lally Column Type, Spacing and footing sizes (Table 502.3.4(2))
	3-2x10 Footing Schedule	Built-Up Wood Center Girder Dimension/Type (Table 502.3.4(2))
	5 1/4 x 11 7/8 LVL + 3 1/2 x 9 1/4 LVL	
		Sill/Band Joist Type & Dimensions
	2x6 JT 2 x 10 continuous	First Floor Joist Species Dimensions and Spacing (Table 503.3.1(1) & Table 503.3.2(1))
	2x10 16 o.c.	

		Second Floor Joist Species Dimensions and Spacing Table(503.3.1(1) & Table 503.3.2(1) )
	2 x 10 @ 6 O.C.	
	Truss Chord	Attic or additional Floor Joist Species Dimensions and Spacing Table 802.4.2 or 503.3.1(1) & Table 503.3.2(1) )
	Trusses 24 O.C. 2x10 Gables	Roof Rafter: Pitch, Span, Spacing & Dimension (Table 802.3.2(7) )
	2x8 Dormers 16 O.C.	Sheathing: Floor, Wall and roof (Table 503.2.1(1) )
	1/2" 5/8" clips	Fastener Schedule (Table 602.3(1) & (2) )
	OK	

	<p>Walls/Ceiling 1hr</p>	<p><b>Private Garage</b>          Section 309 and Section 407 1999 BOCA)          Living Space ?          (Above or beside)          Fire separation</p>
	<p>Basement          Bulkhead, 2nd Fl.</p>	<p><b>Stairs</b>          Number of Stairways          Interior          Exterior          Treads and Risers (Section 314)          Width          Headroom          Guardrails and Handrails (Section 315)</p>
<p>will submit detail          pre-manufactured</p>	<p>Basement          Bulkhead, 2nd Fl.  <math>7\frac{3}{4}</math>" max 10" min          36" clear          7'</p>	<p>Fire rating of doors to living space          Door Sill elevation (407.5 BOCA)          Egress Windows (Section 310)</p>



See Chimney Summary Checklist

Roof Covering (Chapter 9)	Asphalt	
Safety Glazing (Section 308)	2nd Floor OK	
Attic Access (BOCA 1211.1)	22 x 30 OK	
Draft Stopping around chimney	2" min.	
Header Schedule	OK	
Type of Heating System	Chimney gas oil	
Smoke Detectors Location and type/interconnected	All BR's & protecting all levels →	

**TABLE 1003.1  
SUMMARY OF REQUIREMENTS FOR MASONRY FIREPLACES AND CHIMNEYS**

**NOTE:** This table provides a summary of major requirements for the construction of masonry chimneys and fireplaces. Letter references are to Figure 1003.1, which shows examples of typical construction. This table does not cover all requirements, nor does it cover all aspects of the indicated requirements. For the actual mandatory requirements of the code, see the indicated section of text.

ITEM	LETTER	REQUIREMENTS		
		Summary	See Section	
Hearth and hearth extension thickness	A	4-inch minimum thickness for hearth.	1003.9.1	
		2-inch minimum thickness for hearth extension.	1003.9.2	
Hearth extension (each side of opening)	B	8 inches for fireplace opening less than 6 square feet.	1003.10	
		12 inches for fireplace opening greater than or equal to 6 square feet.		
Hearth extension (front of opening)	C	16 inches for fireplace opening less than 6 square feet.	1003.10	
		20 inches for fireplace opening greater than or equal to 6 square feet.		
Hearth and hearth extension reinforcing	D	Reinforced to carry its own weight and all imposed loads.	1003.9	
Firebox dimensions	E	20-inch minimum firebox depth.	1003.11	
		12-inch minimum firebox depth for Rumford fireplaces.		
Thickness of wall of firebox	F	10 inches solid masonry or 8 inches where firebrick lining is used.	1003.5	
Distance from top of opening to throat	G	8 inches minimum.	1003.7	
Smoke chamber	H	Wall thickness	6 inches lined; 8 inches unlined.	1003.8
Dimensions		Not taller than opening width; walls not inclined more than 45 degrees from vertical for prefabricated smoke chamber linings or 30 degrees from vertical for corbeled masonry.	1003.8.1	
Chimney vertical reinforcing <sup>a</sup>	I	Four No. 4 full-length bars for chimney up to 40 inches wide. Add two No. 4 bars for each additional 40 inches or fraction of width, or for each additional flue.	1003.3.1	
Chimney horizontal reinforcing <sup>a</sup>	J	1/4-inch ties at each 18 inches, and two ties at each bend in vertical steel.	1003.3.2	
Fireplace lintel	K	Noncombustible material with 4-inch load-bearing length of each side of opening.	1003.7	
Chimney walls with flue lining	L	4-inch-thick solid masonry with liner.	1001.7;	
		1/2-inch grout or airspace between liner and wall.	1001.9	
Effective flue area (based on area of fireplace opening and chimney)	M	See Section 1001.12.	1001.12	
Clearances	N	From chimney	2 inches interior, 1 inch exterior.	1001.15
From fireplace		2 inches front, back or sides.	1003.12	
Combustible trim or materials		6 inches from opening.	1003.13	
Above roof		3 feet above roof penetration, 2 feet above part of structure within 10 feet.	1001.6	
Anchorage <sup>a</sup>	O	Strap	3/16 inch by 1 inch.	1003.4
Number		Two.		
Embedment into chimney		12 inches hooked around outer bar with 6-inch extension.		
Fasten to		Four joists.		
Bolts		Two 1/2-inch diameter.		
Footings	P	Thickness	12-inch minimum.	1003.2
Width		6 inches each side of fireplace wall.		

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 square foot = 0.0929 m<sup>2</sup>, 1 degree = 0.01745 rad.

<sup>a</sup> Required only in Seismic Zones 3 and 4.

**From:** "Michael R. Charek" <mcharek1@maine.rr.com>  
**To:** Portland.CityHall(JMB)  
**Date:** Tue, Jul 22, 2003 10:15 AM  
**Subject:** Radcliffe Glen deck railings

Ms. Bourke:

Thank you for agreeing to accept this email to follow up our telephone conversation from this morning. Attached are three documents from Certainteed providing details about the railing system being used at Radcliffe Glen:

Code\_Approval.pdf describes the NER-605 code certification of the product  
EverNew\_Wood\_Mount.pdf shows the attachment system being used at Radcliffe Glen  
EverNew\_Install.pdf is the complete installation manual for the product

I hope these documents will answer your questions about the deck railing. If you need to know anything else, don't hesitate to call or email me.

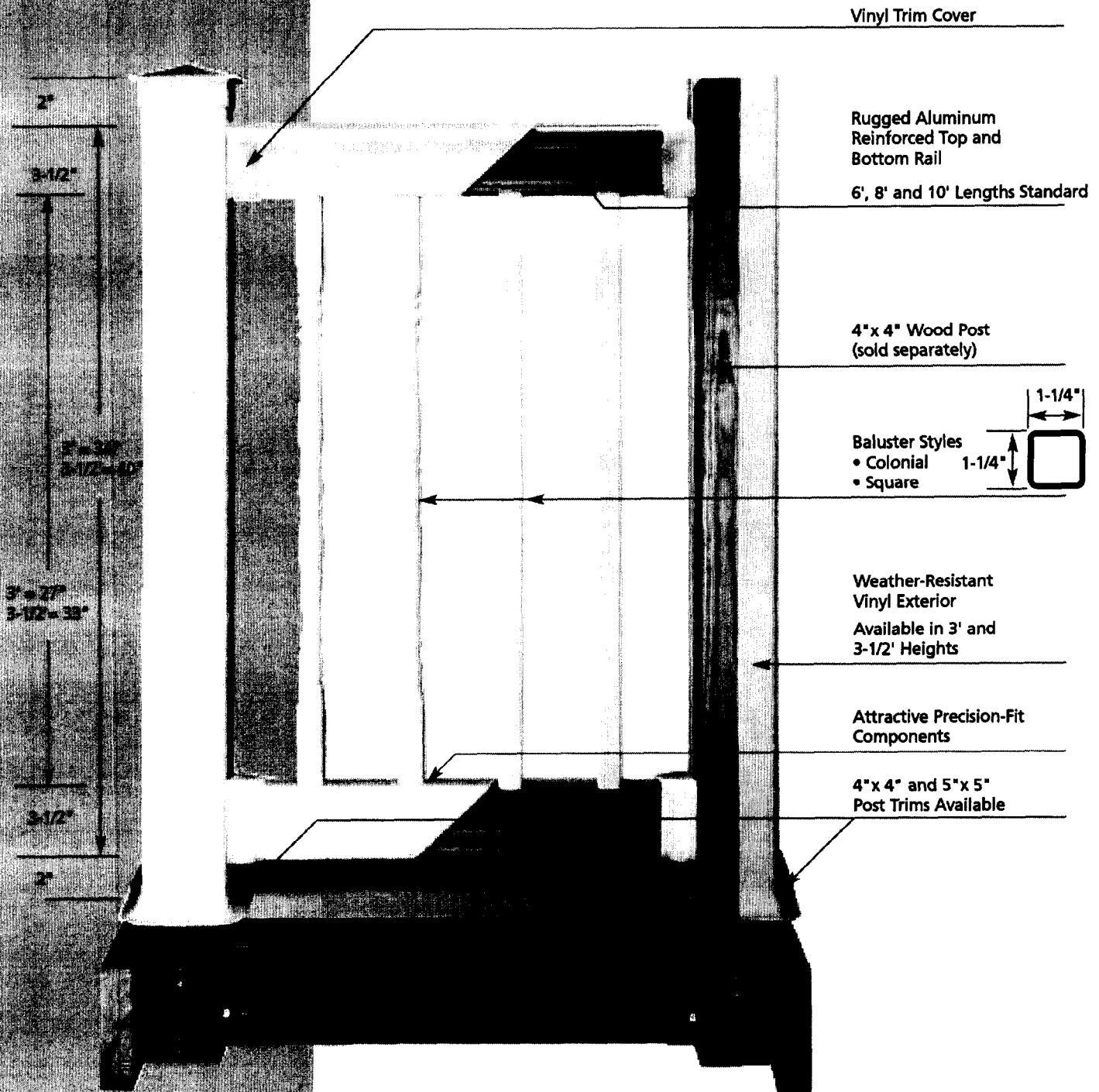
Thank you.

Michael R. Charek

# Metal-to-Wood System

## Aluminum Bracket, Sleeve Over Installations

For use with existing wood posts, porch posts or columns.



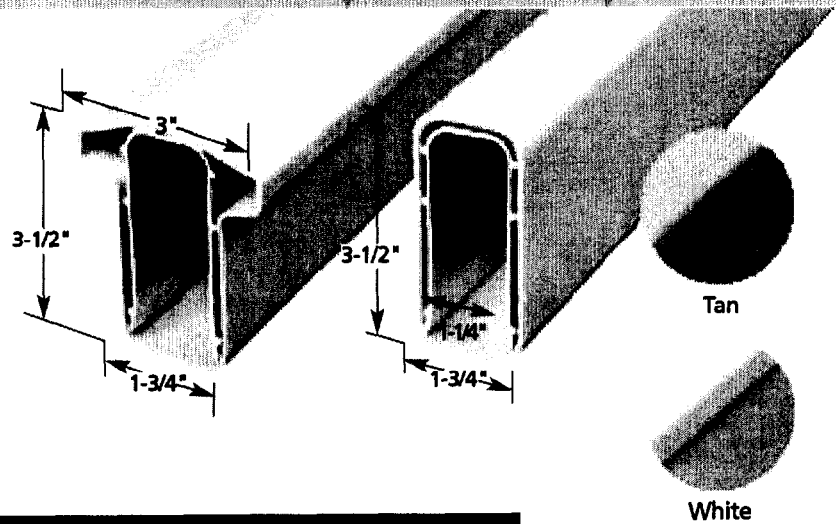
Refer to pages 8 and 9 for post and cap options.

The easy to install Oxford and Cambridge rail mount brackets provide a secure metal rail to post connection. They are versatile for flat, stair, column and 45° installations and are appealing with or without vinyl trim covers.

## Top Rail

Oxford

Cambridge



## Trim Covers

Decorative slide over trim covers conceal screws and streamline the appearance



Oxford Flat



Cambridge Flat



Oxford Column  
(minimum 8" round column)



Cambridge Column  
(minimum 8" round column)



Oxford 45°



Cambridge 45°

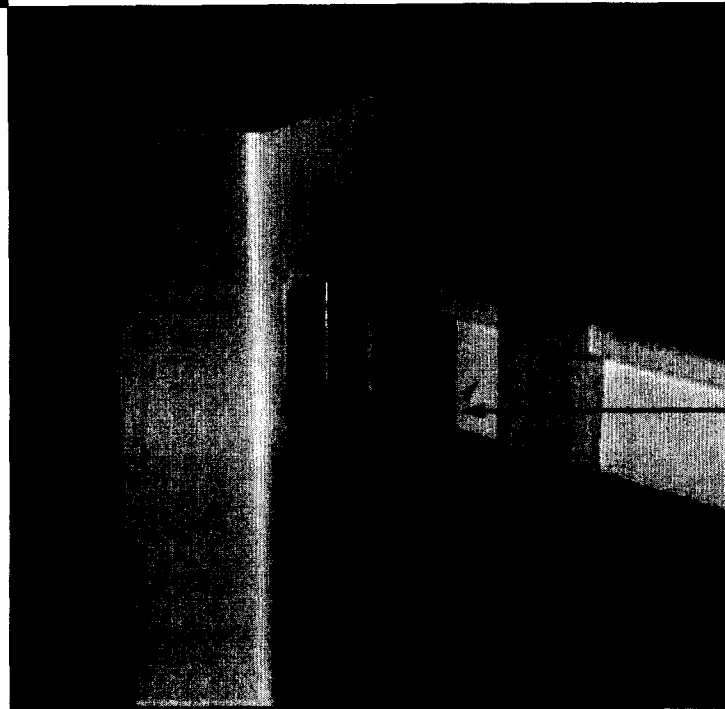


Oxford Stair



Cambridge Stair

Field Cut



Aluminum bracket screws to post or wall providing a solid, durable connection

Screws secure rail to bracket

### Rail Mount Bracket System

- Aluminum interior brackets
  - The critical rail to post stress point is secured by corrosion resistant aluminum
  - Mounts to any post or wall
- Vinyl trim cover
  - Sleek design to conceal screws
  - Easily altered for close baluster applications

### Alternate Rail Mount Bracket

(Concealed bracket for use without covers)



Standard mounting bracket works for both flat and stair applications in either Oxford and Cambridge Railing Systems. Made of corrosion resistant aluminum.

# STEP-BY-STEP INSTALLATION INSTRUCTIONS

# EverNew DECK AND RAILING

## TABLE OF CONTENTS

Tools You Will Need .....	1
Before You Begin .....	2
1. Locate and Install Post Supports .....	5
2. Install Vinyl Decking .....	9
3. Trim the Deck .....	12
4. Install Railing Sections .....	14
5. Install the Stair Railing .....	17
6. Install Rail Connectors and Post Caps .....	20
7. Wall or Column Mounting .....	22
Care and Maintenance .....	24

### IMPORTANT:

**ALWAYS WEAR SAFETY GLASSES  
WHEN CUTTING OR DRILLING  
COMPONENTS.**



## TOOLS YOU WILL NEED

### REQUIRED FOR INSTALLATION

- 2" hole saw
- Carbide tipped multi-purpose blade
- Carpenter's pencil
- Chop (mitre) saw
- Circular saw
- Drill bits
  - ½" (wood post support)
  - ½" masonry (concrete post support)
  - ⅜" (rail plate)
  - ⅜" (post cap)
  - ¼" (end cover fastener)
  - ⅜" spade (fascia plug)
- Drop cloth
- Level
- Power Drill
- Safety glasses
- Screwdrivers
  - Phillips and slotted
- Square
- Tape rule
- Wood clamps
- Wrenches (sockets)
  - ¾" (post support)
  - ⅜" (E-Z Set bracket)
  - ⅜" (rail plate)

### OPTIONAL – MAY BE HELPFUL

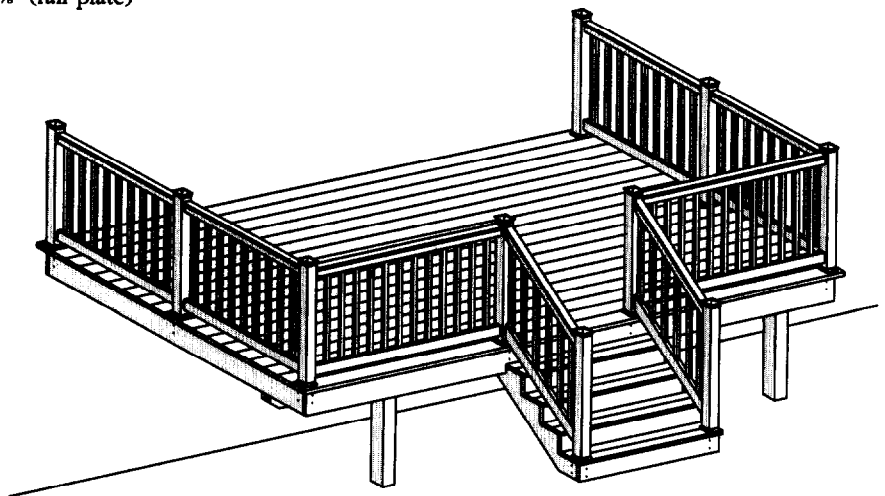
- Bevel guide
- Chalk line
- File
- Jigsaw/Hacksaw
- Post Router Template Kit\*
- Quick Drive® screw gun\*
- Rotary hammer drill
- Utility knife

\*Available from CertainTeed



CertainTeed Corporation has received confirmation by the National Evaluation Service, Inc. (NES) at [www.nateval.org](http://www.nateval.org) that its vinyl deck and railing systems comply with the provisions of the three U.S. model building codes (BOCA National, ICBO Uniform, and SBCCI Standard), in addition to the new 2000 International Building and Residential Codes of the International Code Council. This confirmation, as evidenced in the NES evaluation report NER-605, provides guidance to code officials faced with approving the use of CertainTeed vinyl deck and railing systems under these codes.

**CertainTeed** ■

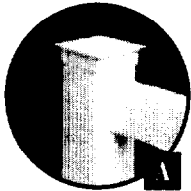


# BEFORE YOU BEGIN

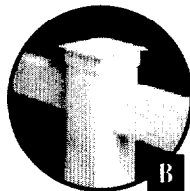
MAKE SURE YOU HAVE ALL THE PIECES YOU NEED TO COMPLETE THE JOB.  
SEPARATE YOUR FLAT AND STAIR PIECES TO AVOID USING THE WRONG ONES.

## 1 POSTS

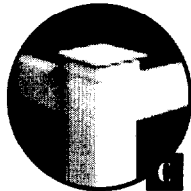
### FLAT POSTS



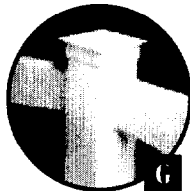
END POST



LINE POST



CORNER POST



45° LINE POST

### POST OPTIONS

There are two post styles, Square and Newel.

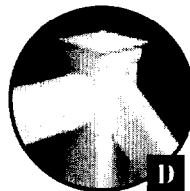


SQUARE

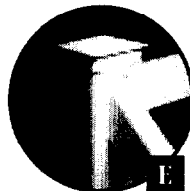


NEWEL

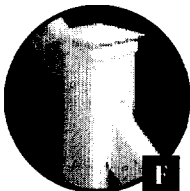
### STAIR POSTS



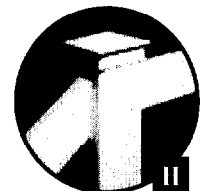
FLAT TO STAIR CORNER LEFT



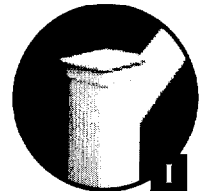
FLAT TO STAIR CORNER RIGHT



LINE POST STAIR

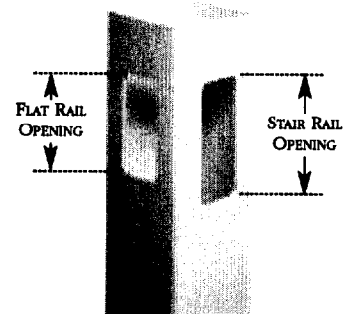
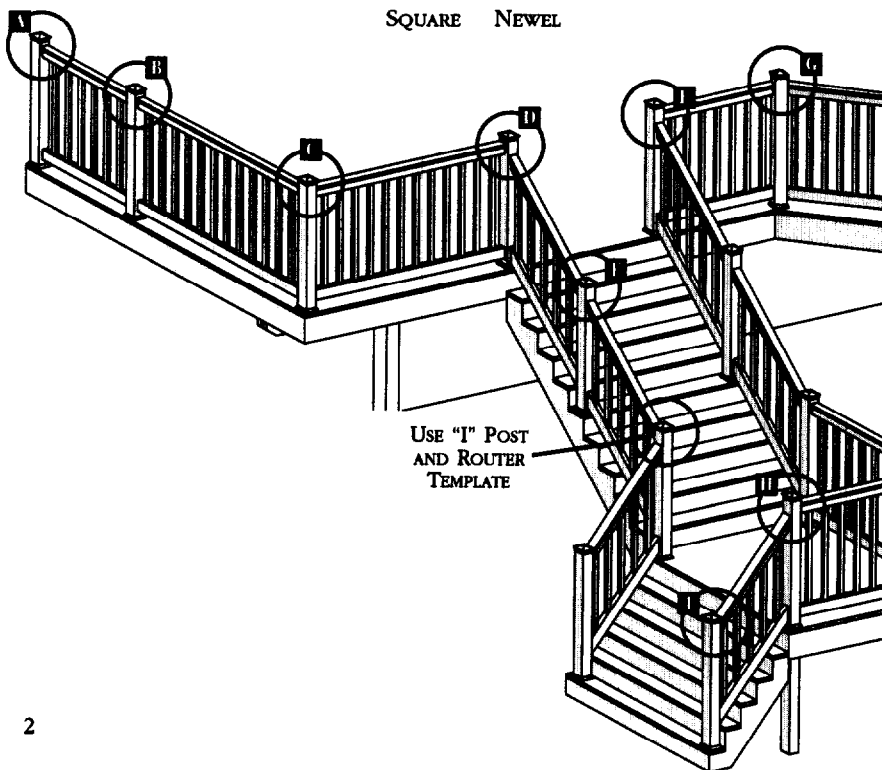


FLAT TO STAIR LINE POST



END POST STAIR

Stair posts have widened openings to accept stair angles. See post photo below for detail.

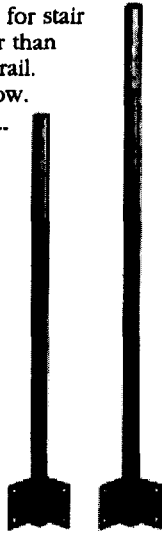


For an all-vinyl system, white Porch Post cover is fitted over conventional load-bearing porch posts.

## 2 POST SUPPORTS

FLAT STAIR

Post supports for stair rail are longer than those for flat rail. See table below.

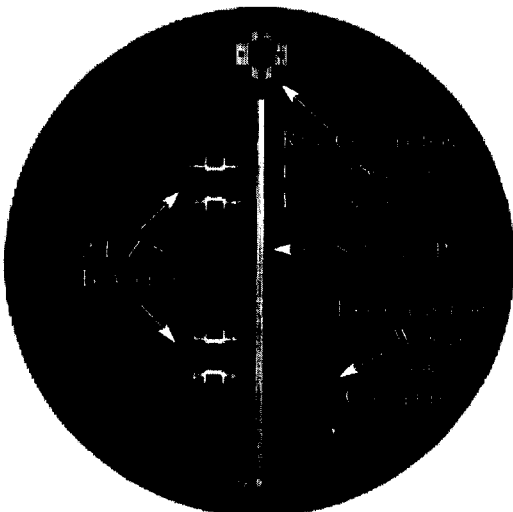


Stair post supports are for F, H, and I posts

POST SUPPORT LENGTHS

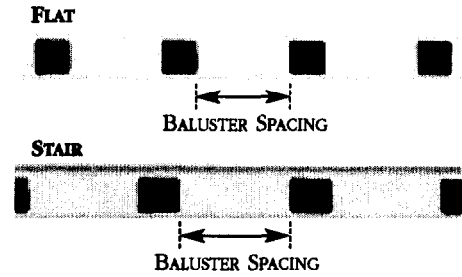
Deck & Railing System	Flat	Stair
3' on Wood	43"	53"
3' on Concrete	37"	48"
3½' on Wood	49"	53"
3½' on Concrete	43"	48"

YOUR POST SUPPORT KIT SHOULD INCLUDE:

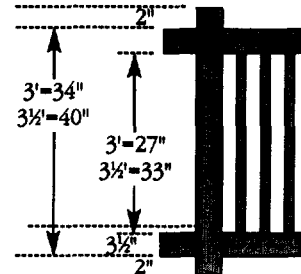


## 3 RAILS

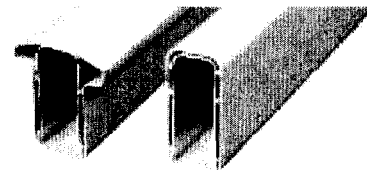
Stair baluster spacing and holes are wider to account for racking. Racking is the tendency of stair balusters to come closer together as the angle of the stairs increases.



RAIL DIMENSIONS



TOP RAIL STYLES



Oxford Rail

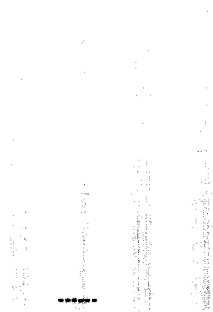
Cambridge Rail



## 4 BALUSTERS

Flat rail balusters are 1½" longer than stair rail balusters. See table below.

FLAT	STAIR
¾"	1½"



SQUARE AND COLONIAL BALUSTERS

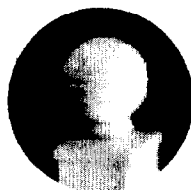
You can cut flat rail balusters down to make stair rail balusters. Do not cut on an angle; cut as shown above. **When cutting Colonial balusters, cut ¾" off each end.**

Railing System	BALUSTER LENGTH	
	Flat	Stair
3" Square/Colonial	33¾"	31¾"
3½" Square/Colonial	39¾"	37¾"

## 5 POST CAPS

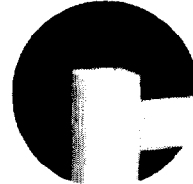


KING NEWEL CAP

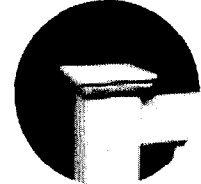


QUEEN NEWEL CAP

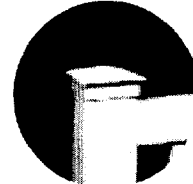
## 5 POST CAPS CONTINUED



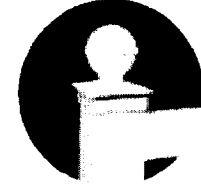
FLAT CAP - INTERNAL



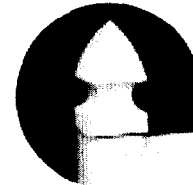
NEW ENGLAND CAP



FLAT CAP - EXTERNAL



BALL CAP



GOTHIC CAP



Attach with two PVC Snap Cap fasteners. No fastener is necessary for internal flat caps.

## 6 OPTIONAL TRIM



TWO PIECE

POST TRIM



ONE PIECE



FLAT RAIL TRIM



STAIR RAIL TRIM

Rail trim is used to cover rail-to-wall (or post) connections. Use only with wall mount brackets without plates. Attach to rail with two PVC Snap Cap fasteners.

# 1 LOCATE AND INSTALL POST SUPPORTS

**Tools Required**  
Saw  
Tape rule  
Carpenter's pencil  
Safety glasses



## INSTALLING THE RAILING SYSTEM

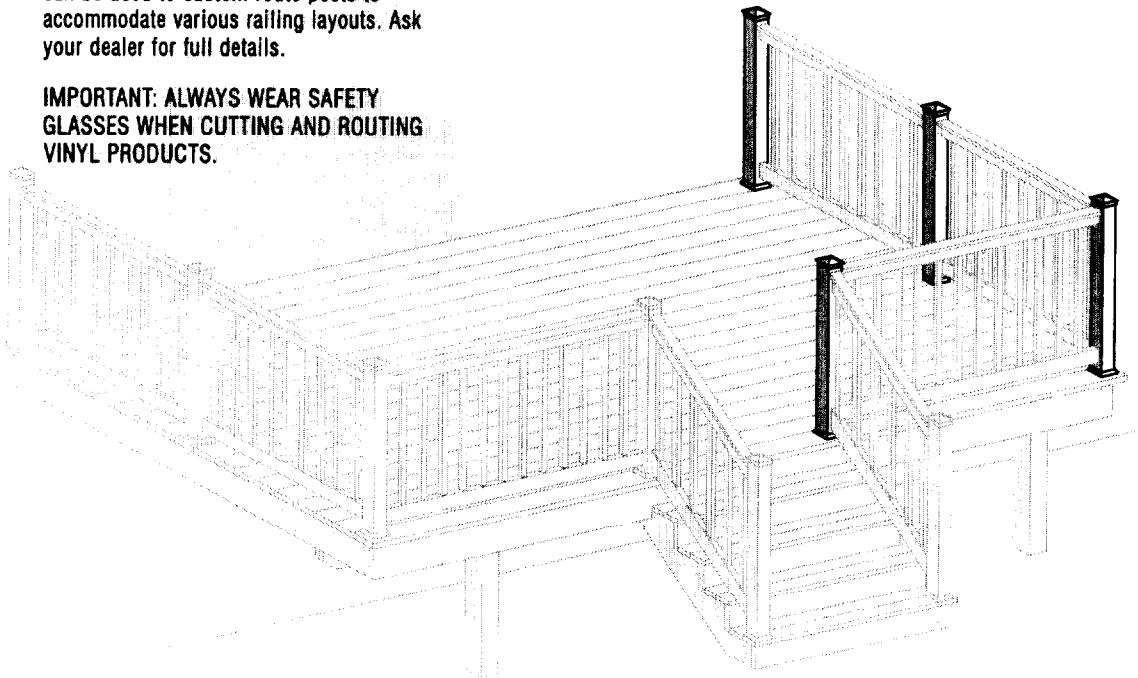
Mark the post locations. Wood post supports are mounted directly to the joists and secured in two directions: to the rim joist and perpendicular to the rim. If there is not a perpendicular joist where the post support will be located, insert a bridge between the rim and the next joist.

Before you install a post on a wood step, finish the riser kick plate so that there are two perpendicular surfaces for mounting the post supports.

If you are mounting posts on a concrete surface or patio, use the concrete post support system. For in-ground installation, use the **"ground mount"** stair end post.

CertainTeed provides a template kit that can be used to custom route posts to accommodate various railing layouts. Ask your dealer for full details.

**IMPORTANT: ALWAYS WEAR SAFETY GLASSES WHEN CUTTING AND ROUTING VINYL PRODUCTS.**



### STEP 1. LOCATE THE POST SUPPORTS

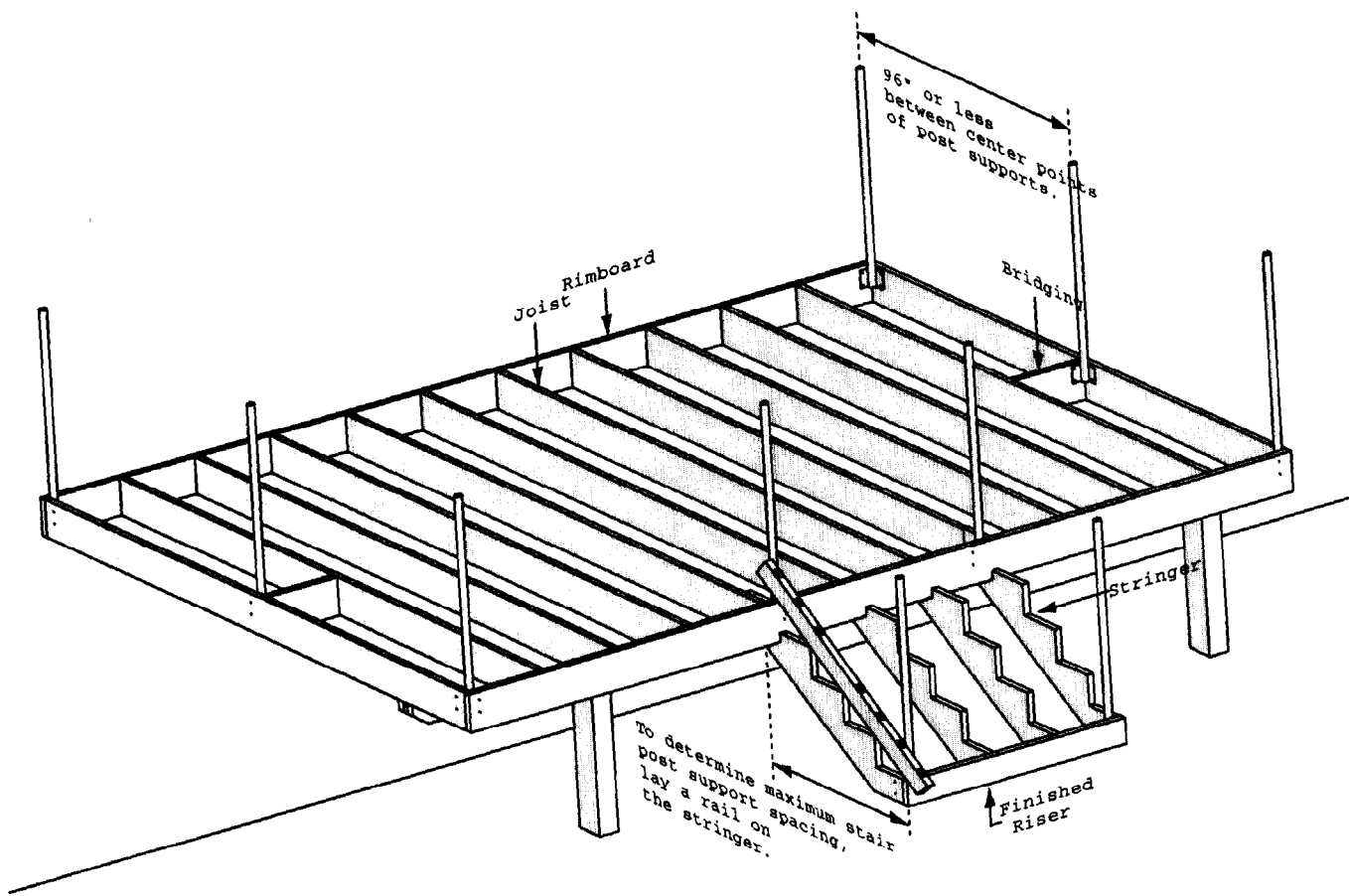
Locate and mark the post centers. For flat sections, make sure the post centers are no more than 96" apart.

For stair sections, determine if the rail will reach the bottom of the steps (or the landing). Place a rail on the stringer (make sure the rail extends beyond the top post support). If the rail does not reach the end of the stairs, you will need to use an intermediate post. For a standard 7" rise/11" run, a 6' rail measures 57" horizontally between post centers. An 8' rail measures 78" horizontally between post centers. Center the top stair post within 4" of the edge of the deck.

Railings can also be mounted to walls or structural columns with wall mount brackets.

### STEP 2. CHECK THE SUBSTRUCTURE

Once you have laid out the location of the posts, check the substructure to make sure there are two surfaces available to mount the post support. For example, if you run along the length of a 12' deck and put a post in the middle, attach a bridge board in the middle of that run from the rim joist to the inner. Attach one side of the post support "L"-shaped bracket to the outside face; attach the other to the bridge.



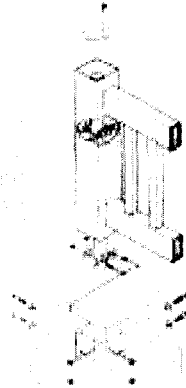
# MOUNTING OPTIONS

## POST SUPPORT APPLICATION ON WOOD JOIST

### Tools Required

3/8" drill  
1/2" wood drill bit  
Clamps  
Level  
Safety glasses

Tape rule  
Two 3/4" wrenches  
Saw  
Two 1/4" wrenches

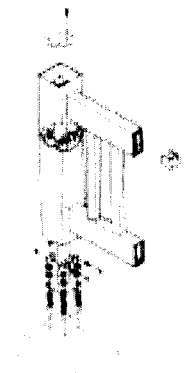


## POST SUPPORT APPLICATION ON CONCRETE

### Tools Required

3/8" drill  
1/2" masonry drill bit  
Level  
Tape rule  
Safety glasses

One 1/2" wrench  
Carpenter's pencil  
1/2" washers  
Saw  
Two 3/4" wrenches

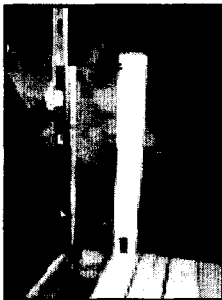


## STEP 3. DETERMINE POST HEIGHT

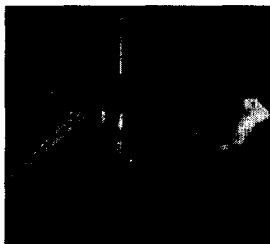
Posts are supplied in two standard heights, 38" (3' railing) and 44" (3 1/2' railing). Stair post supports are purposely supplied longer than needed to accommodate various post positions.

## STEP 4. INSTALL POST SUPPORTS

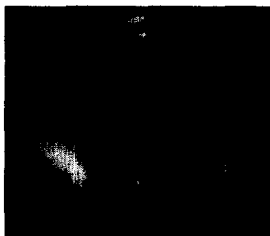
**Wood Structure:** For all post supports, the top of the "L"- shaped plate must be **LEVEL WITH THE TOP OF THE JOISTS**. If you mount them at the bottom, the pipe may not extend far enough to attach the rail lock plate later in the installation.



Clamp the post support in place. Make sure it's level. Check its height relative to the vinyl post. It must rise approximately 3/8" above the routed opening of the top rail. Remember to allow for the thickness of the deck plank.



Use the post support as a guide and drill four 1/2" holes through the joists.



Insert all four fasteners. Tighten.

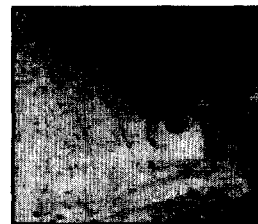


Recheck level; if the joists are not plumb, use a washer as a shim to level the post support.

**Concrete Surface:** You can also attach railing to a concrete surface using the concrete post mount system. Concrete post supports have a flat bottom plate. Position them a minimum of 3 1/2" on center from the edge of the concrete pad.



To install the posts on concrete, use the concrete mounting plate as a guide to mark holes.

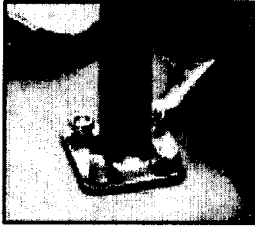


Drill the four 1/2" holes 3 1/4" deep.



Attach a nut to the top of the anchor to protect the threads and hammer it into the concrete. Leave approximately 3/8" of the thread above the ground.

#### STEP 4. INSTALL POST SUPPORTS CONT.

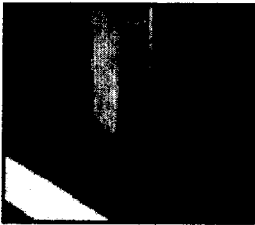


After all anchors are in place, replace the post support and tighten the nuts. Recheck that the post is level. If not, shim the base.

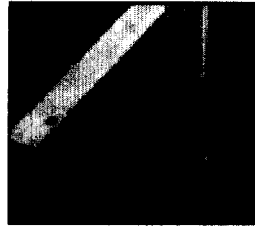
**In Ground:** For a 3' rail, use a 72" ground mount stair post. For a 3½' rail, use a 76" post.



Dig a 10" diameter hole approximately 30" deep or to the frost line in your area. Place 4" of gravel or dirt in the hole for drainage.



Position the post support in the hole. Install the stair rail section as described on pages 17, 18, and 19.



Check the height and fill the hole with concrete until it is approximately 2" from the top of the hole. Check that the post is square and level. Tamp the concrete with a wood 2 x 4 to eliminate air pockets.

Put two pieces of rebar in opposing corners inside the post. The rebar should extend from the bottom of the hole to 12" from the top of the post. Fill the post with concrete to just above the rebar. Tamp the post with a rubber mallet to eliminate air pockets. Allow 72 hours for the concrete to set.

# 2 INSTALL VINYL DECKING

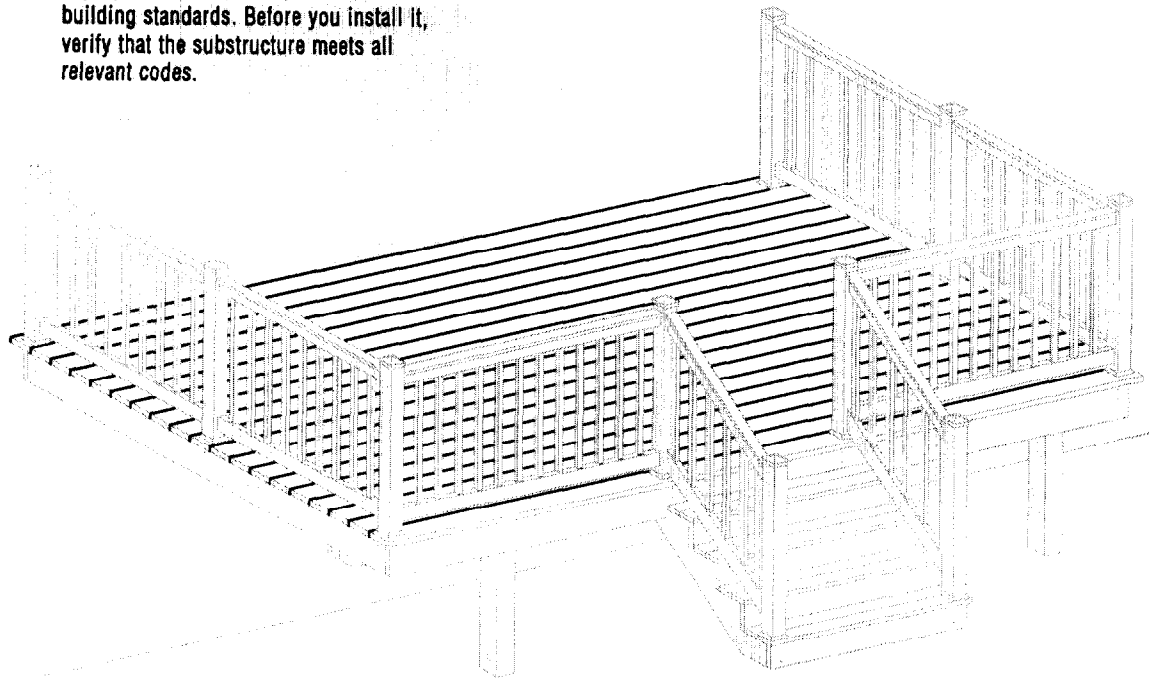
**Tools Required**  
Utility knife  
1/4", 3/8" drill bits  
2" hole saw  
Quick Drive® Screw Gun  
Block of wood  
Safety glasses



## APPLICATION TECHNIQUES

The substructure for vinyl deck is the same as for a wood deck. It should be substantial and built with high quality lumber. In general, the substructure for a vinyl deck is built on 16" centers. All stairs and all decks designed with diagonal layouts should be installed on 12" centers.

CertainTeed vinyl deck meets the appropriate BOCA, ICBO, and SBC building standards. Before you install it, verify that the substructure meets all relevant codes.



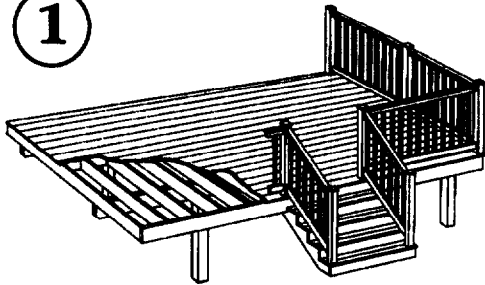
### **WARNING:**

Due to expansion and contraction, installation of vinyl deck planks directly onto Concrete is not recommended.

## STEP 1. SPACING

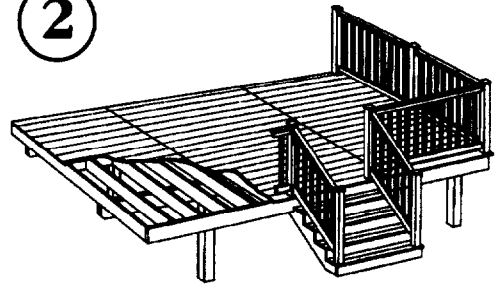
There are five options for laying out the deck.

1



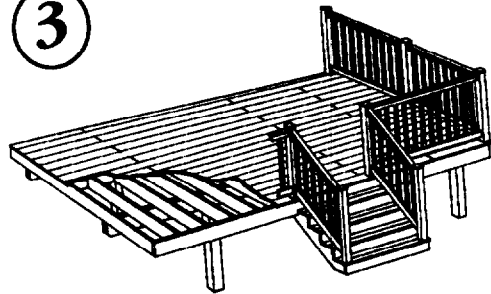
**Full run:** Vinyl planks should be installed on 16" centers. Build the substructure 3" shorter than the plank length for proper overhang, 1½".

2



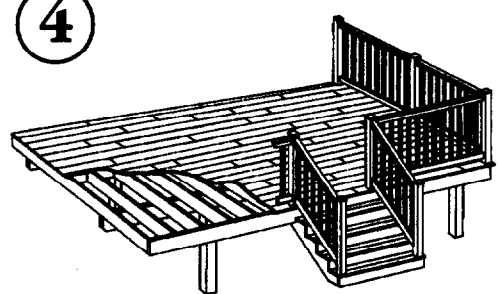
**Aligned seam:** All seams are equidistant from the edge of the deck. Seams must be double joisted.

3



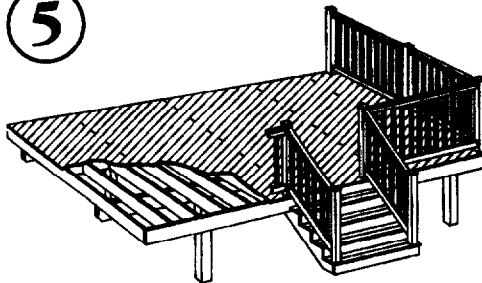
**Uniformly staggered:** Staggered patterns hide seams better than aligned seams. This illustration shows a 4'-12' pattern, followed by a 12'-4' pattern. Repeating the sequence of patterns will create uniformly staggered seams. Seams must be double joisted.

4



**Randomly staggered:** Randomly staggered seams use different lengths of vinyl boards in no particular pattern. All seams must occur over a double joist.

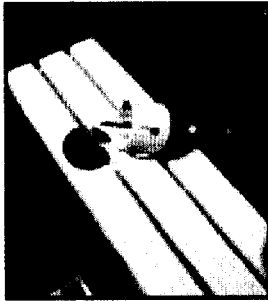
5



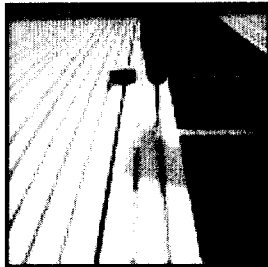
**Diagonal:** Diagonal layouts should be built on substructures with 12" joisting. Seams must be double joisted.

## STEP 2. FASTENING TO THE SUBSTRUCTURE

For all but diagonal layouts and stairs, install vinyl deck planks on substructures built on 16" centers. The unsupported span of vinyl deck planks must not be more than 4" overhang from the edge.



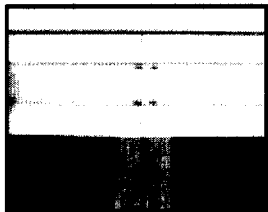
Align the first plank on the substructure. *Overhang the substructure 1½" on each end.* Mark the board for the post supports. With a 2" hole saw, drill the deck board to accept the 1½" post supports. Lay the board over the post supports. Square the board on the deck, and attach the first plank to the substructure.



Boards must be fastened every 16". The deck boards are fastened directly to the substructure with #8 x 2" deck screws. Seat the screws in the channels of the plank and do not over-tighten the screws.



For faster application, use a Quick Drive\* screw gun. Work across the deck.

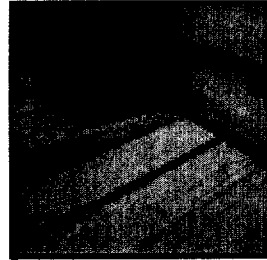


If you are butting two boards, the seam must be double-joined.

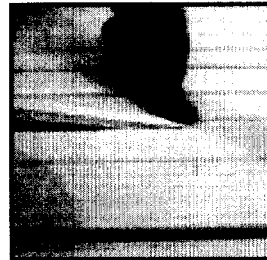


After the first run has been installed, line up the next board. Gap it ⅛". Recheck the alignment and screw the board to the deck.

## STEP 3. INSTALL FILL PIECES



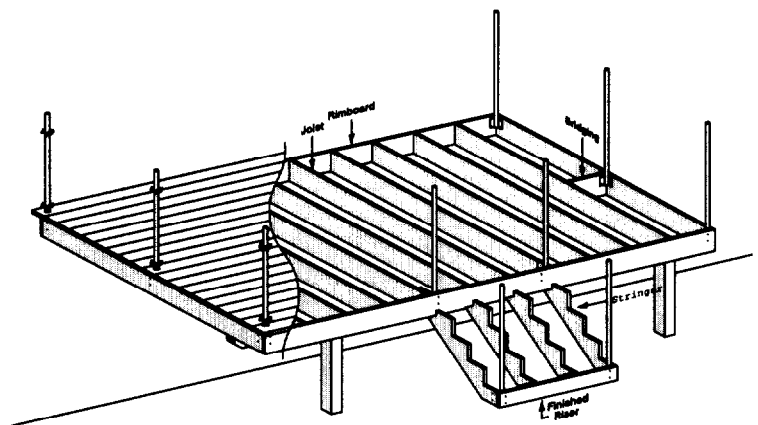
After all the boards have been installed, insert the fill pieces, several at a time, into the channels.



Begin by pressing in the leading edge; then slide a block of wood along the length of the fill strips until they are pressed in place.

Fill pieces should fill the entire channel but not overhang the vinyl deck.

The ends of the fill pieces do not have to coincide with the plank ends. They can be spliced into the deck channel.



\*Available from CertainTeed. Ask your building products supplier for details.



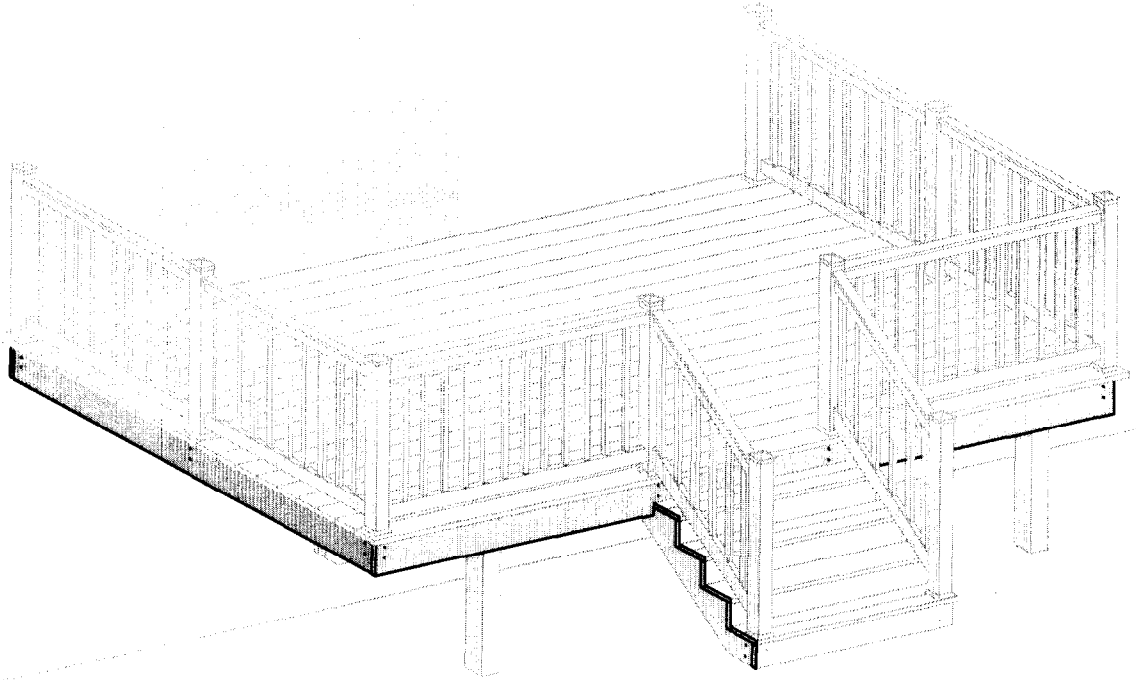
# 3 TRIM THE DECK

**Tools Required**  
Chop saw  
Circular saw  
1/4", 3/4" drill bits  
Utility knife  
Safety glasses



## APPLICATION TECHNIQUES

Measure the edge of the deck. Leave 1 1/2" of overhang for the end cover. Snap a chalk line on the deck to mark your cut. Cut along the line with a circular saw. Make sure the edge of the deck is straight.

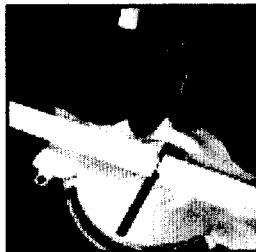


## STEP 1. INSTALL "C" CHANNEL

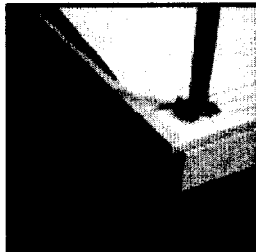
To finish the deck, install vinyl "C" Channel over the open plank ends.



Make sure that the edge of the deck is straight. Trim uneven planks and fill strips. Allow 1½" of overhang for the end cover.



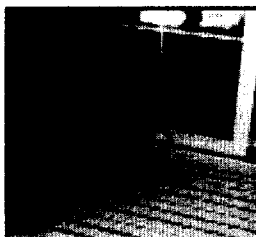
Using a chop saw equipped with a fine tooth carbide blade, cut the length of "C" channel you need.



Fit the channel onto the edge of the planks, ensuring that it is square.

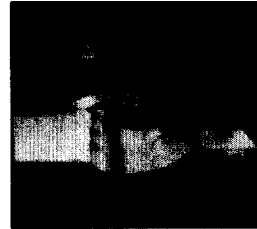


Drill ¼" holes through the top of the "C" channel. Drill at 1' increments (in the center of every other plank). Press the end-cover fasteners through the holes into the deck.

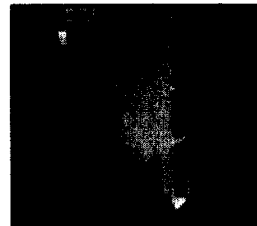


For concealed edges (along the house), or to cover ends of fascia, cut "C" channel into "L" channel with a utility knife and snap off. Install as described above.

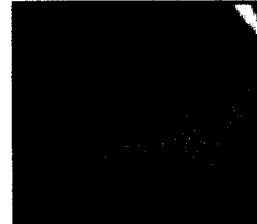
## STEP 2. INSTALL FASCIA



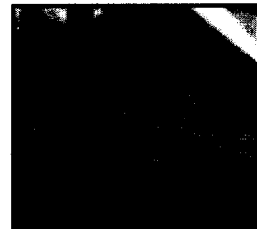
Cut the fascia boards to length.



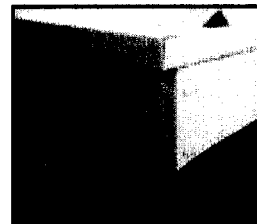
Drill ¾" holes through one side of the fascia until the drill tip touches the other side. **Do not drill a ¾" hole all the way through the board.** For 6" fascia, drill one hole through the top and one at the bottom every 2' along the length of the board. For 3 and 1½" fascia, drill one hole every 2'.



Attach the fascia to the sub-structure with #8 x 1½" screws.



Butt the fascia board as needed to cover the substructure. Miter cut the corners or finish the ends with "L" channel as described earlier.



If using "L" channel, after the entire fascia has been installed, press end cover fasteners into the holes.

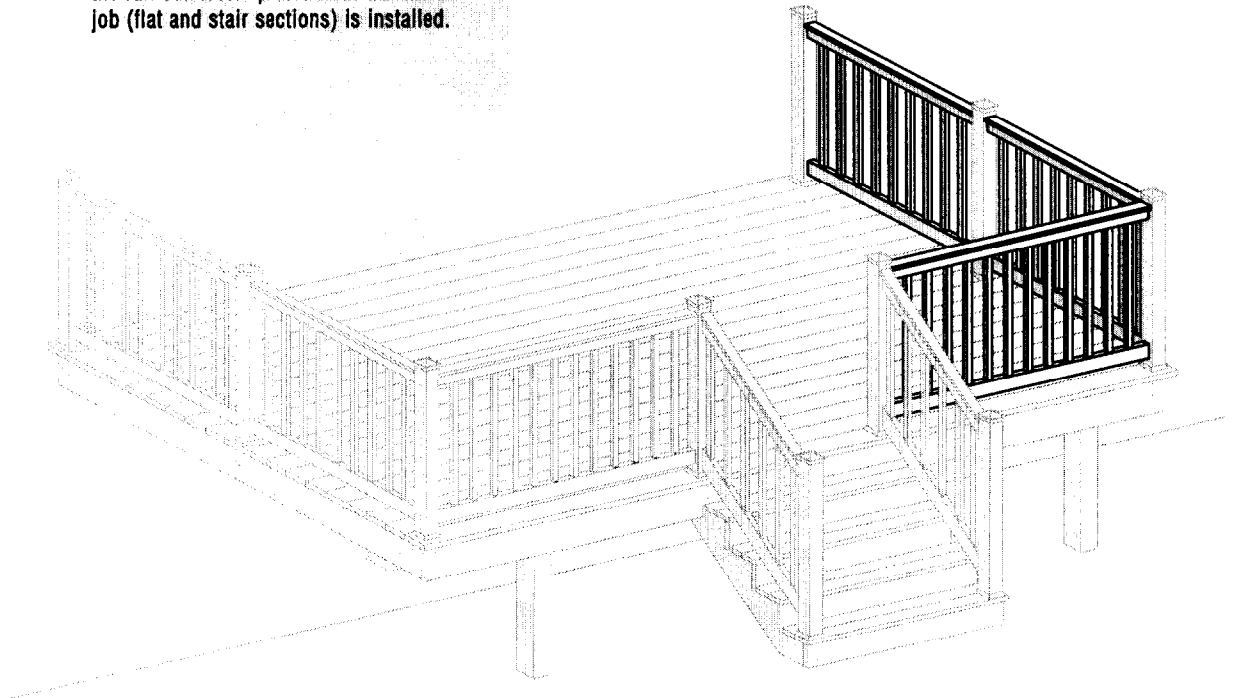
# 4 INSTALL RAILING SECTIONS

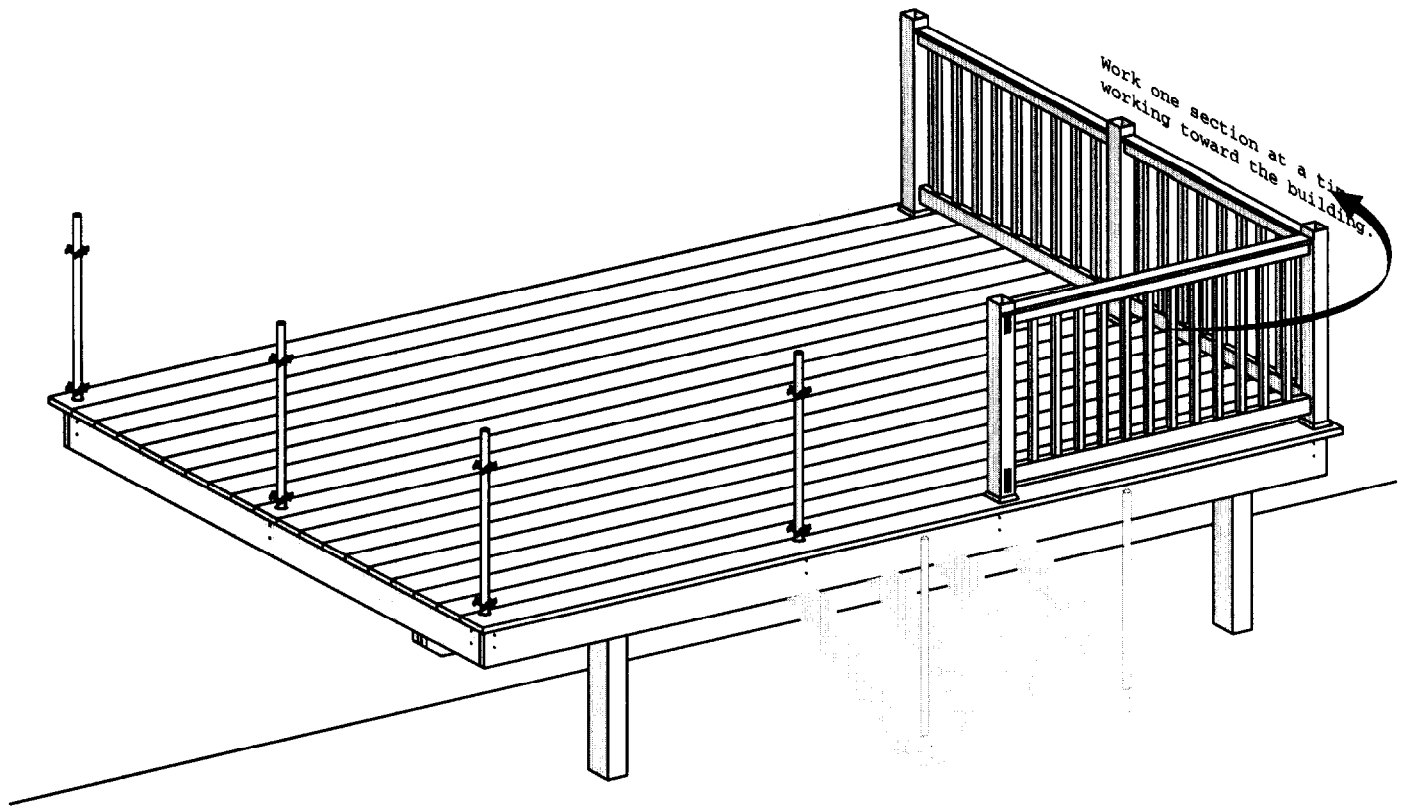
**Tools Required**  
Bevel guide  
Saw  
Tape rule  
Carpenter's pencil  
3/4" wrench  
Safety glasses



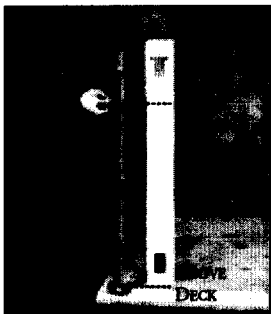
## APPLICATION TECHNIQUES

Begin the railing project by first installing the flat sections. Complete one section at a time, working your way towards the building. The post centers may vary slightly, so cut the rails **ONLY** for the section you are working on. Do not fasten the rail connector plates until the entire job (flat and stair sections) is installed.





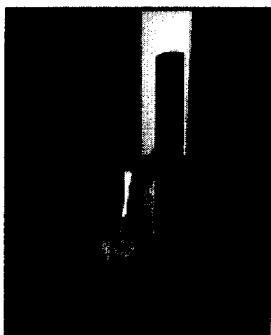
### STEP 1. INSTALL E-Z SET BRACKETS



Assemble the E-Z Set brackets with the nuts and bolts provided. Stand the vinyl post up against the post support. Using the vinyl post as a guide, position one E-Z Set bracket  $\frac{1}{4}$ " above the deck and the second 3" below the upper routed opening of the vinyl post. Hand tighten the brackets on the post support.



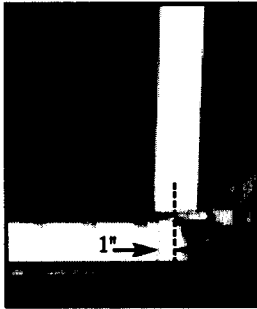
Slide the vinyl post over the brackets. If you intend to use the post trim pieces at the bottom of the post, install them now. Snap them together and slide the assembled trim down the post to the deck.



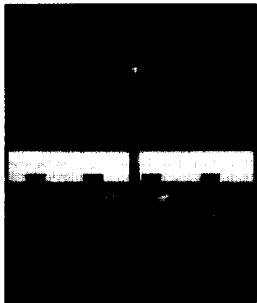
Pressing the post against the side of the brackets will help make sure they are square relative to the deck. Tighten the brackets with a wrench.

**Note:** When installing newel posts or for added security, the top E-Z Set bracket can be installed on top of the rail and the rail lock plate after the entire railing section has been assembled.

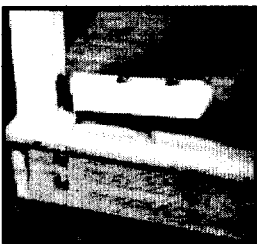
## STEP 2. INSTALL RAILING SECTIONS



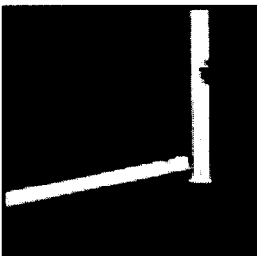
Measure the rail by laying the bottom rail between the posts with both end holes clear of the posts and equally spaced. Mark the rail 1" longer than the points where the rail and post meet.



Cut the bottom rail, keeping the aluminum approximately  $\frac{1}{4}$ " shorter than the vinyl. Use the bottom rail as a guide to cut the top rail. To prevent interference when installing T-rail top rails on a corner post, cut off  $\frac{1}{4}$ " at a  $45^\circ$  angle on the inside corner of each rail. Cut only the vinyl "T" portion of the rail.



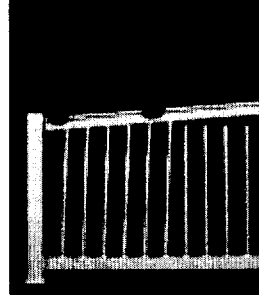
Insert the bottom rail into the post.



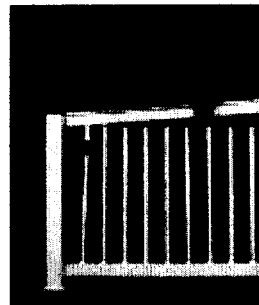
Lift the next post and insert the rail into opening. Push the post and rail down to the deck.



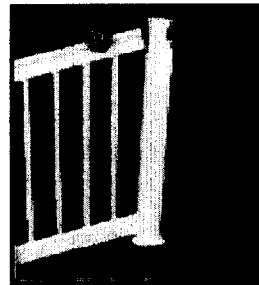
Insert the balusters into the bottom rail.



Position the top rail over the balusters. It's easier if you rest the high end of the rail on the next post.



Pull up on the first few balusters and insert them into the top rail holes. Push down on the top rail and position it next to the opening in the post. The rail may not easily push into the post opening until you have inserted several balusters.



Once all balusters are inserted, lift the partially assembled section and insert the top rail into the post opening. Push the completed section down to the deck.

*Repeat this step for all flat rail sections.*

**Installing railing sections at a  $45^\circ$  angle.** Place the E-Z Set brackets over the post supports as described earlier. To accommodate the  $45^\circ$  angle cut of the deck, a bevel guide may be useful because each bracket will need to be rotated to a  $22.5^\circ$  angle on the post support. Place the vinyl post over the post support (and attach the trim pieces if you're using them). Verify the alignment. Measure and then cut the bottom rail on a  $22.5^\circ$  angle at each end. Use the bottom rail as a template and cut the top rail. Assemble the railing section as described earlier.

# 5 INSTALL THE STAIR RAILING

**Tools Required**  
Saw  
Tape rule  
Carpenter's pencil  
Square (optional)

Jigsaw or router  
Bevel guide  
Safety glasses

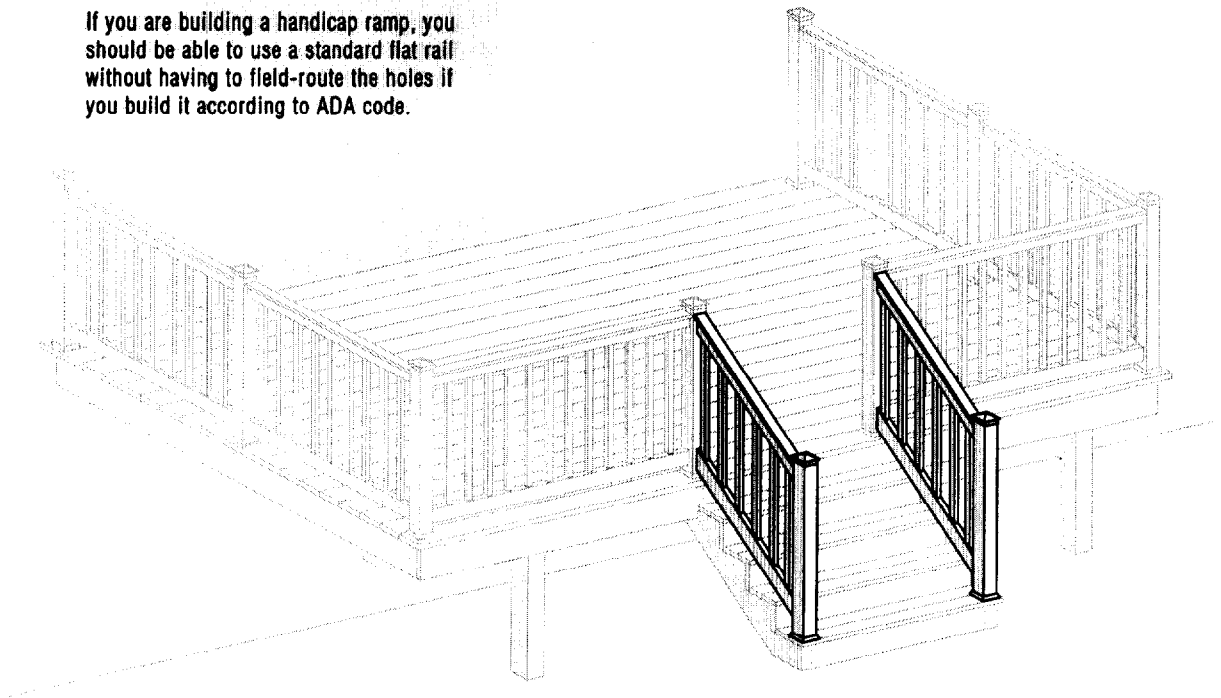


## APPLICATION TECHNIQUES

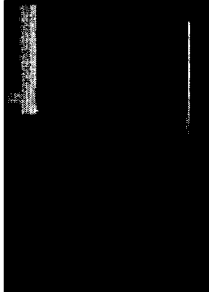
When planning for steps, be sure that the top step of the stairs is lower than the deck surface because if you extend the deck as the top step, the angle will be too steep to attach the railing as a standard installation and will require an additional post. Also, check that the length of the rail will extend between the top and bottom post supports. If it doesn't, you will need to add an intermediate stair line post.

CertainTeed posts and rails are cut and routed for stairs built at the standard 32° angle, but they can be used for stairs from 27° to 35°. If the stairs will be other than the standard 7" rise/11" run (32°), you may have to shorten the balusters and enlarge the pre-routed holes in the rails and posts. For small modifications, you can use a file. For more substantial changes to the posts, we suggest you use a jigsaw or router and our Post Routing Template Kit.

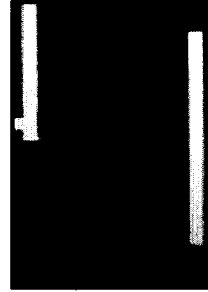
If you are building a handicap ramp, you should be able to use a standard flat rail without having to field-route the holes if you build it according to ADA code.



## STEP 1. INSTALL BOTTOM POST SUPPORT AND POST

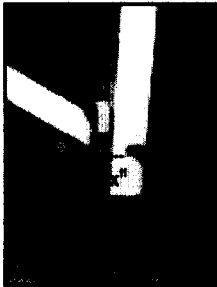


Begin the stair section by installing the stair post support and E-Z Set brackets. **Do not cut the support posts yet.**

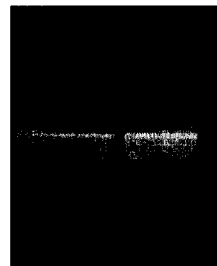


Slide the vinyl post over the support post—**do not cut the vinyl post either.**

## STEP 2. CUT BOTTOM STAIR POST AND POST SUPPORT



Insert the bottom rail into upper post. Clamp the rail to the lower post at the desired height and angle. Measure the distance from the point where the rail and post meet to the stair tread.



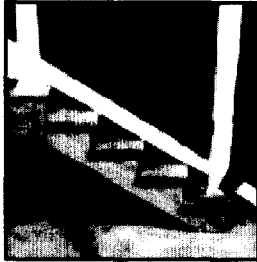
Cut the post along your mark.



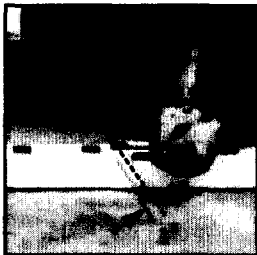
Remove the lower post and transfer your previous measurement as shown.

Use the previously cut stair post as a guide to determine the post support height. Place the stair post on the step next to the steel post support. Mark the support at  $\frac{3}{8}$ " above the top rail opening. Cut off the post support at your mark. Cover any exposed vinyl components that could be damaged by falling cut-offs.

### STEP 3 CUT THE RAIL-TO-STAIR ANGLE AND LENGTH



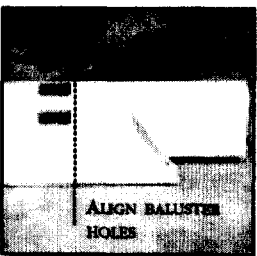
Lay the bottom rail between the posts, with the end holes clear of the posts and equally spaced. Align the rail with the top of the rail on each post. Measure the rail.



Mark vertical lines on both ends of the rail where it meets the posts. Measure over 1" along the angle on both ends of the rail to allow for the extra length inserted into the post. Remark the rail for the cut line.

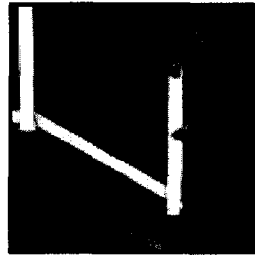


Cut the stair rail to the exact angle that you traced. Make sure the aluminum rail insert is  $\frac{1}{8}$ " shorter than the end of the vinyl rail.

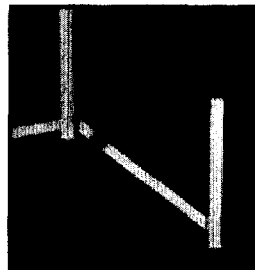


Use the bottom stair rail as a guide for cutting the top rail. Line up the baluster holes, trace the angles, and cut.

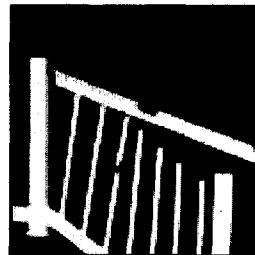
### STEP 4. ASSEMBLE STAIR RAIL SECTION



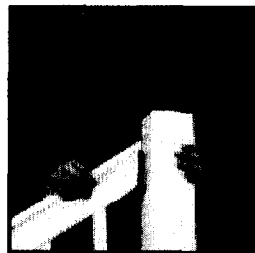
To assemble the rail sections, slide the post over the post support. Insert the bottom rail into the lower post. You may find it easier to lift the lower post, insert the bottom rail, and then lower the post.



Lift the upper post 3-4" until you can insert the bottom rail. Then slide the post and rail back down.



Insert the balusters into the bottom rail. Insert the balusters into the top rail; then insert the top rail into the lower post.



Lift the partially assembled section and insert the top rail into the opening. Push the section down to the deck.



# 6 INSTALL RAIL CONNECTORS AND POST CAPS

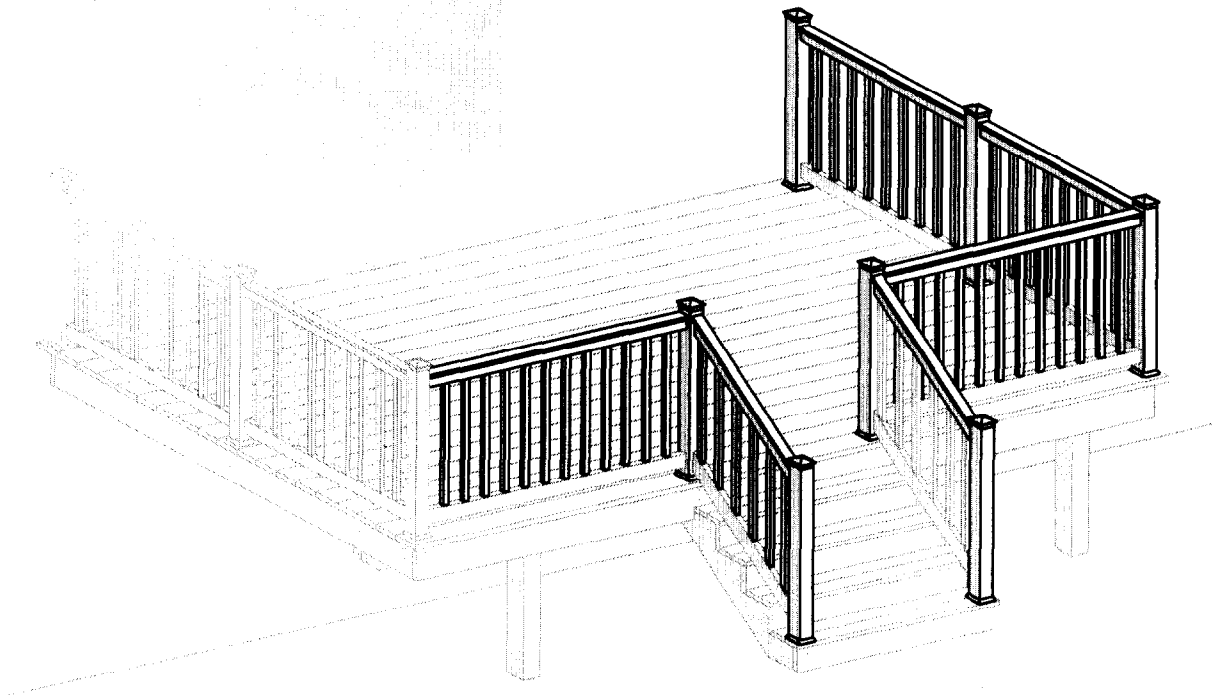
**Tools Required**  
Drill  
3/4", 1/4" drill bits  
Screwdriver or 3/8" wrench  
Safety glasses



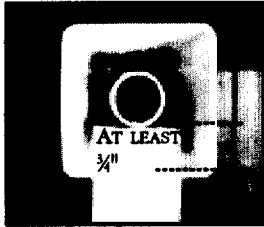
## APPLICATION TECHNIQUES

The rails are connected to post supports only after **all** posts and railings have been installed. Before you connect rails to corner posts, cut 3/4" off the inside corner of each rail at a 45° angle. When connecting a stair rail to a flat section, bend the rail connector plate with pliers to accommodate the angle of the stairs.

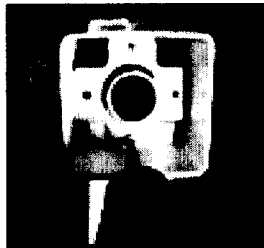
You may prefer to install the top E-Z bracket after the connector plate has been installed.



## STEP 1. INSTALL RAIL CONNECTORS



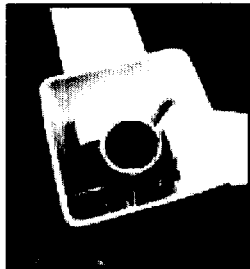
Make sure the vinyl rail and aluminum insert project  $\frac{3}{8}$ " inside the post.



Insert the rail connector plate over the steel post support as shown. Drill a  $\frac{3}{16}$ " hole through the rail and the aluminum insert.

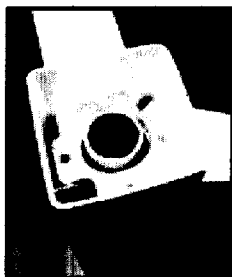
Attach the plate to the rails using the hex head screws provided in the post support kit.

## 1A. CORNER APPLICATION



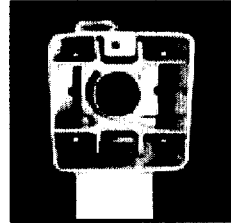
To install a rail connector on a corner post with T-rail, cut off  $\frac{3}{4}$ " at a 45° angle on the inside corner of each rail. You need only cut the vinyl portion of the rail.

## 1B. STAIR APPLICATION



The plate has an oval cutout, so it adapts for stair angles. When moving from a flat section to a stair section, bend the plate with pliers to accommodate the angle.

## 1C. OPTIONAL INSTALLATION: RAIL SYSTEM ANCHOR



For added security or when using newel posts, install the top E-Z Set bracket after the rail plate.

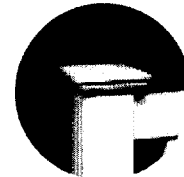
## STEP 2. INSTALL POST CAPS

The internal flat cap simply snaps into the post.

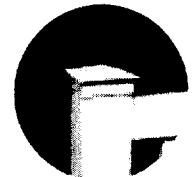
To install the external caps, drill  $\frac{1}{8}$ " pilot holes on two sides of the cap. Insert the screw, washer, and PVC snap cap into each hole.



FLAT CAP - INTERNAL



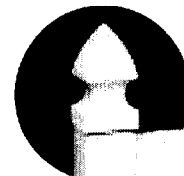
NEW ENGLAND CAP



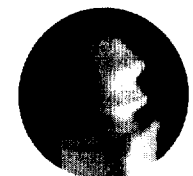
FLAT CAP - EXTERNAL



BALL CAP



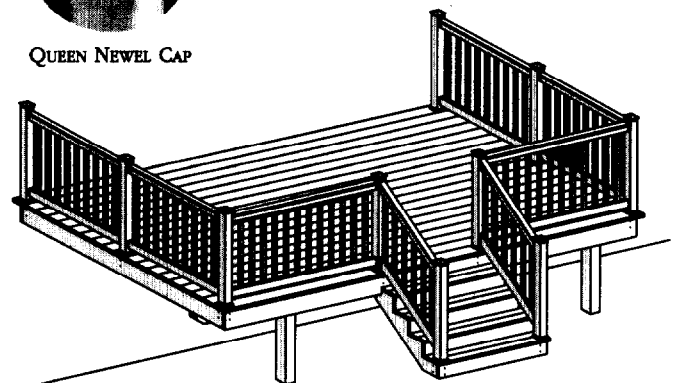
GOthic CAP



KING NEWEL CAP



QUEEN NEWEL CAP



# 7 WALL OR COLUMN MOUNTING

**Tools Required**  
Saw  
Drill  
1/4", 3/8" drill bits  
Screwdriver  
Safety glasses



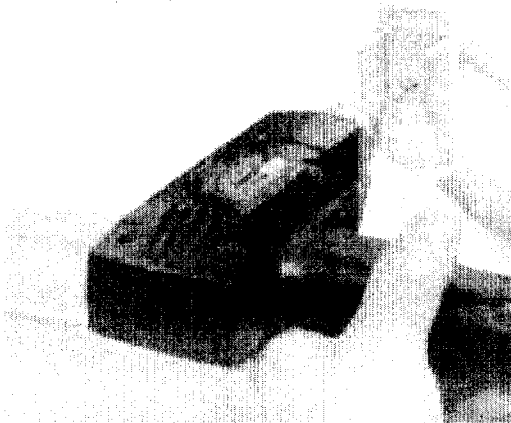
## APPLICATION TECHNIQUES

Railings can be mounted to walls or columns using wall mount brackets. To ensure a safe installation, wall mount brackets must be anchored securely. Before wall mounting the railing, determine that structure is solid and that the fasteners appropriate for the structure are used.

There are two types of wall mount brackets:

1. With plate: Use this when you are mounting between two solid structures (e.g., two concrete walls). To account for the thickness of the plate, cut the rail 1/2" shorter than the overall opening.
2. Without plate: Use this when you are mounting the railing between a vinyl post and a solid structure. The rail will slide into the vinyl post and then over the bracket completely.

**Important:** To ensure meeting code requirements, be sure that the space between the last baluster and the wall is not more than 4".

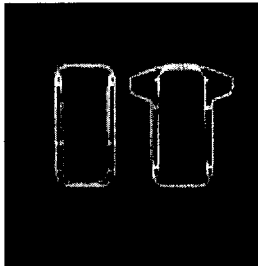


# OXFORD/CAMBRIDGE BRACKETS



FLAT/STAIR  
WORKS FOR BOTH FLAT AND STAIR APPLICATIONS

## WALL MOUNT BRACKETS WITHOUT PLATES



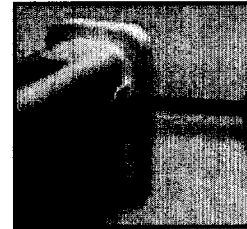
Cut off a 1/4" piece from the top and bottom rail to use as a template for positioning the wall mount bracket.



Drill a 3/4" wide hole through the tab on both sides of the rail. Fasten with a PVC Snap Cap Fastener.



Insert a bracket into the bottom rail template and position the template at the desired railing location. Attach the bracket. Stainless steel wood screws are supplied, but if you are attaching to a different surface, use the appropriate hardware (sold separately). Slide the rail and optional rail trim cover over the bracket.

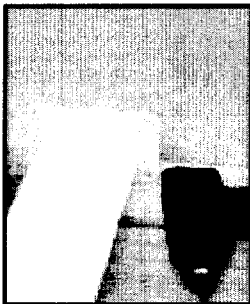


Do not over-tighten the screws.

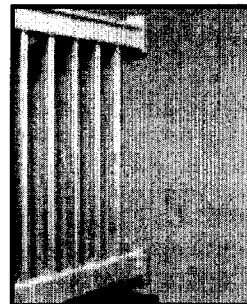


Set the template to the desired top rail location and repeat the previous steps.

## WALL MOUNT BRACKETS WITH PLATES



Insert the wall mount bracket into the bottom rail and center the bracket. Drill and fasten the bracket to the wall. Brackets with plates do not need trim pieces and are fastened in the middle of the rail with screws and snap caps.



Install the bottom rail, insert the balusters, and install the top rail.

# CARE AND MAINTENANCE

## Care & Maintenance

Exterior vinyl building materials require very little maintenance. Nevertheless, common sense dictates that builders and suppliers of vinyl products store, handle, and install vinyl materials in a manner that avoids damage to the product or structure.

CertainTeed deck and railing is not difficult to work with, but there are a few precautions that you should know about before you begin to unload and install the product. Always place planks, posts, rails, and accessories on a non-abrasive surface, such as a drop cloth or cardboard, to avoid scratches. Protect all components during transport. Finally, when assembling the deck and railing, avoid over-tightening the screws.

## Cleaning

CertainTeed vinyl deck and railing resists most common household stains, including oil and grease. But, like any other product, it will get dirty when it is exposed to the atmosphere. Chalk may also accumulate on the surface. This is a normal condition for all pigmented materials that are constantly exposed to sunlight and the elements. Soil, grime, and chalk can be removed with a garden hose and a bucket of soapy water.

In some areas, mildew may be a problem. Mildew appears as black spots on surface dirt and is usually first detected in areas not subjected to rainfall, such as eaves and porch enclosures. You can remove mildew from vinyl deck and railing with the solution below. CAUTION: CLEANING SOLUTION MIXED AT GREATER CONCENTRATIONS MAY HARM THE VINYL.

Mix together:

- ½ cup detergent (Tide, for example)
- ½ cup trisodium phosphate (Soilex, for example)
- 1 qt. 5% sodium hypochlorite (Clorox, for example)
- 3 qt. water

If the above solution does not readily remove the mildew spots, purchase a mildew cleaner from your local hardware store. Before you use any commercial cleaner, test it on an inconspicuous area.

The chemical agents mentioned above may be hazardous to the user or to the environment. Be sure to follow all precautions and warnings on the product label, particularly those that may be necessary to prevent personal injury. Please DISCARD these chemical agents in the manner prescribed by the manufacturer. If you are unsure how to use or dispose of these chemical agents, contact the manufacturer.

## IMPORTANT FIRE INFORMATION

Rigid vinyl deck and railing are made from organic materials that will not burn on their own but melt or burn when exposed to a significant source of flame or heat. Consequently, owners and installers should take a few simple steps to protect vinyl building materials from fire. Building owners, occupants, and outside maintenance personnel should always take normal precaution to keep sources of fire, such as barbecues, and combustible materials, like dry leaves, mulch and trash, away from vinyl deck and railing.



## ATTENTION CONTRACTORS GET A FREE HAT!

If you have a tip, hint, or solution to a difficult installation problem, please send it to us along with your name and address and we'll send you a free hat. We value your experience and appreciate your input!

Send your tip to:

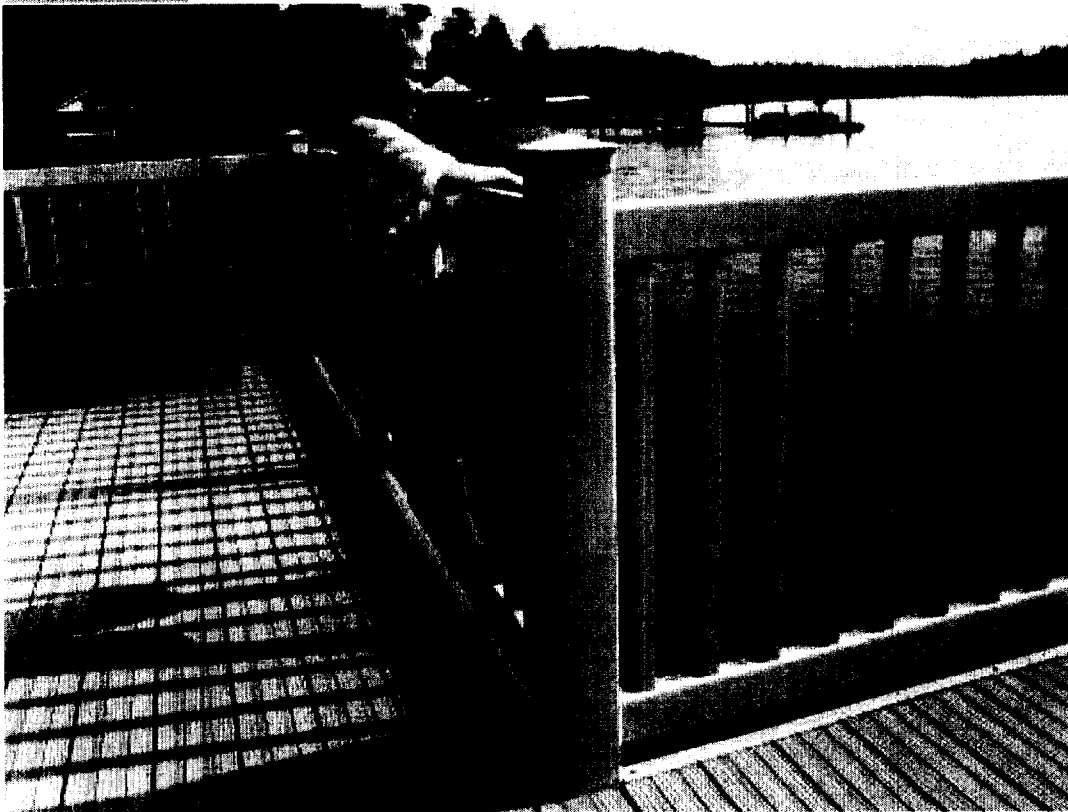
CertainTeed Corporation  
attn: Installation Services  
2525 Walden Avenue  
Buffalo, NY 14225

  
**EverNew**  
DECK AND RAILING  
**CertainTeed** ■

CertainTeed Sales Support Group  
P.O. Box 860 • Valley Forge, PA 19482  
(800) 233-8990 • Fax: (610) 341-7940  
[www.certainteed.com](http://www.certainteed.com)

# worry free.

# EverNew™



## Vinyl deck and railing designed with safety in mind

When it comes to designing deck and railing products, many manufacturers often overlook a fundamental concern to homeowners—that is, safety.

CertainTeed understands how important safety is to today's consumers. That's why every product in our EverNew vinyl deck and railing line is designed and manufactured with safety in mind.

EverNew deck and Oxford/Cambridge railing meets stringent requirements for product quality and safety. In fact, EverNew is recommended by the National Evaluation Service (NES) for complying with national code requirements including BOCA, ICC, SBCCI and UBC.

## EverNew's safety features & benefits

- Two railing heights for deck, balcony, porch, and stair applications
- Aluminum-reinforced top and bottom rails
- Precision fit components for a tight and sleek appearance
- Slip-resistant and splinter-free deck plank surfaces provide barefoot comfort
- Secure rail mounting with metal rail to post connections, not PVC
- Lifetime limited warranty and exclusive SureStart™ protection offer additional peace of mind



**CertainTeed** ■  
OUTDOOR LIVING PRODUCTS

**What is the National Evaluation Services?**

National Evaluation Services (NES) is an independent, not-for-profit organization that conducts a voluntary advisory program of evaluation for both traditional and innovative building materials, products and systems. The NES issues reports of its findings to facilitate the product's acceptance, safe installation and use, as well as the conditions necessary for compliance with each of the Model Building Codes.

**Does CertainTeed Vinyl Deck & Railing have BOCA & SBCCI approval?**

Yes, we have (NES) National Evaluation Services approval. Our approval designation is NER- 605.

**What is the NER - 605?**

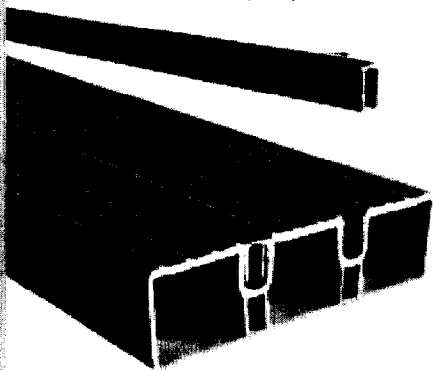
NER stands for National Evaluation Report, 605 is the unique number assigned to CertainTeed Vinyl Deck & Railing. This report is an objective engineering analysis that advises the report user as to the conditions under which the report subject can be used in compliant requirements of the Model Codes (BOCA National, ICC International Building Code, SBCCI Standard Building Code, and Uniform Building Code).

**Do we need BOCA and SBCCI numbers in addition to the NER - 605 number?**

No, the NER - 605 signifies that our deck & railing products are in compliance with all of the model building codes (BOCA National, ICC International Building Code, SBCCI Standard Building Code, and Uniform Building Code). With the NES approval, the BOCA and SBCCI organizations automatically accept our product as being in compliance to their model building codes. Our NER reference number is all that is needed; we do not have/need separate BOCA or SBCCI numbers.

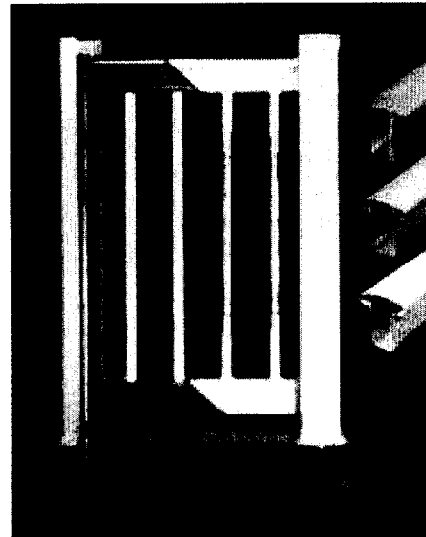
**Does NES approval mean that we have the approval of the ICBO organization?**

No, we do not yet have ICBO approval, but NES has approved our products using the UBC standard that was developed by ICBO. The ICBO organization has recently severed their affiliation with NES, BOCA and SBCCI. ICBO is in the process of developing a separate model code for vinyl deck and railing that they will endorse. We are currently pursuing ICBO approval. According to the ICBO web site, they currently do not endorse any vinyl deck or railing products.



**What is the difference between having an NES approval vs. having tested to "meet or exceed" code?**

A growing number of building code officials nationwide will not accept the use of synthetic decking and railing materials unless they have NES approval (an NER number). Some manufacturers will print "Meets or Exceeds BOCA & SBCCI Codes" on their literature without having actual approvals from NES, BOCA or SBCCI. Because of the strong selling advantage of having NES approval, virtually any manufacturer with approval will include the report number in their literature and advertising materials. To attain NES approval, a manufacturer's product must go through a rigorous evaluation process, which includes:



- a) An evaluation by NES approved testing facilities, and a review board of NES engineers;
- b) Detailed documentation of product specifications, quality assurance process and installation instructions; and
- c) On-site inspections of manufacturing facilities performed by an NES approved third party inspection firm.

The availability of an NER minimizes the need for each enforcing authority to review, evaluate and access documentation in order to ascertain compliance with their adopted code.

**How do I get a copy of the NER - 605 Report?**

Printed information pertaining to our NES approval can be obtained from the following sources: downloaded from [www.certainteed.com](http://www.certainteed.com), [www.bocai.org](http://www.bocai.org), [www.nateval.org](http://www.nateval.org), or request from CertainTeed Fax -on-Demand, phone (800) 947-0057, press 17 ,then press 2.

**What CertainTeed vinyl deck and railing products are covered under the NER - 605?**

All deck & guard railing (Oxford & Cambridge) styles, all sizes, and all railing and post mounting hardware. The only products not covered are our 2" tubular handrail and load bearing porch posts. Porch post products do not fall under any of the model building codes.



**CertainTeed**  
OUTDOOR LIVING PRODUCTS

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