**SECONDARY HANDRAIL INSTALL DIAGRAM**

### Handrail Components

1. **End Cap**
2. **90° Outside Corner**
3. **90° Post Return**
4. **Straight Aluminum Wall Mount**
5. **Inside Corner Mounting Bracket**
6. **Adjustable Joiner**
7. **Aluminum Joiner Kit**
8. **Handrail with Aluminum Insert**
9. **13.5° Wall Return**
10. **180° Post Return**
11. **Handicap Loop**
12. **36° Stair Elbow**
13. **34° Stair Elbow**
14. **32° Stair Elbow**
15. **90° Inside Corner**
16. **5° Handicap Elbow**

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Prior to construction, check with your local regulatory agency for special code requirements in your area.

Start with an inside corner piece when applicable.

### Guidelines

- The height of the secondary handrail must be installed between 34" and 38" above the surface, regardless of the height of the rail.
- We recommend that handrails be dry-fit prior to final installation to eliminate cutting and fastening errors.
- **IMPORTANT:** The secondary handrail must be attached to a structural support. When installing mounting brackets on post sleeves, ensure the hardware is securely attached to the structural support.
- For maximum strength, brackets should be used at every post and as close as possible to every joint.
- An adhesive may be applied to further reinforce construction.
- Handrails must be supported every 6' on-center by a mounting bracket.
1. **End Cap**
Finish the secondary handrail or handicap loop with a matching end cap for a clean, professional appearance. Attaches to various open ends of the railing.

2. **90° Outside Corner**
Create continuous graspability and seamless turns with this PVC corner fitting.

3. **90° Post Return**
This post return slides into the secondary handrail making a nearly seamless connection; secure with included screws. Recommended for use with post or wall returns to create a clean transition between assembled components.

4. **Straight Aluminum Wall Mount**
Use this handrail fitting to connect the secondary handrail to a wall.

5. **Inside Corner Mounting Bracket**
This durable bracket secures secondary handrail components to a post creating clean 90-degree turns while ensuring stability.

6. **Aluminum Bracket (Line Post Mounting Bracket)**
Use this bracket to add stability to the secondary handrail while maximizing strength. Install brackets at every post and as close as possible to every joint.

7. **Adjustable Joiner**
This aluminum handrail fitting is actually two joiners fastened together with a bolt. You can easily make an angled connection by adjusting the joiners to form angles from 90 to 270 degrees.

8. **Aluminum Joiner Kit**
Join secondary handrail components with this joiner kit to create a straight and stable connection. Includes 3/4" screws.

9. **Handrail with Aluminum Insert**
Easy-to-grasp 104" secondary handrail made of durable PVC and strengthened with a heavy-gauge aluminum insert. Elegant design blends well with most deck applications.

10. **180° Post Return**
PVC post return extends past the final post and curves back to connect to the post’s adjacent side at an easy-to-grasp, 180-degree angle. Connects almost seamlessly to the handrail.

11. **Handicap Loop**
Excellent graspability; the PVC fitting extends the secondary handrail past the post and returns back, connecting to the same side of the post. Finish the return with an end cap. The lower section of the loop can be supported with an aluminum bracket, sold separately.

12. **32° Stair Elbow or 34° Stair Elbow or 36° Stair Elbow**
When installing the secondary handrail on deck stairs, use this durable PVC fitting for a smooth, uninterrupted installation.

13. **13.5° Wall Return**
Add this durable PVC fitting to the secondary handrail for a seamless termination connection to a wall.

14. **90° Inside Corner**
The inside corner fitting allows continuous graspability when secondary handrails are installed at corners.

15. **5° Handicap Elbow**
Provides additional angled graspability to accommodate specific needs or requirements when installing the secondary handrail.

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