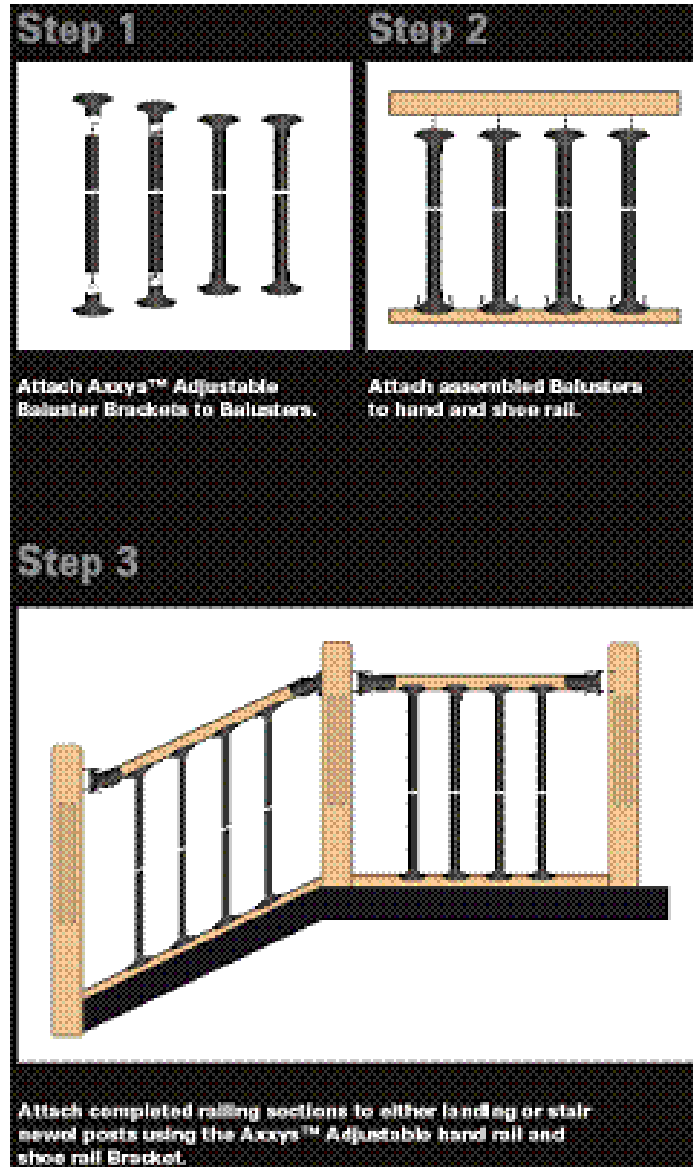


AXXYS™ RAILING INSTALLATION GUIDE



This document is a detailed step-by-step installation guide for the Axxys™ rail system.

These instructions may not cover all scenarios that may arise. Before beginning your installation take time to read all instructions thoroughly. A fundamental understanding of carpentry and a basic knowledge of power tools is essential. Please call our technical support line for any assistance required. 1-800-667-8247

Building codes are constantly changing and they can vary by province, state, county, city, town, and/or borough. In order to learn which codes are being used and how they will affect you and your construction project, contact your local building inspection department, office of planning and zoning, and/or department of permits.

STEP 1 NEWEL POST INSTALLATION GUIDE

1

Install Newel Posts

- A) Install starting and landing newels. Various newel attachment methods are described in detail 1-C.

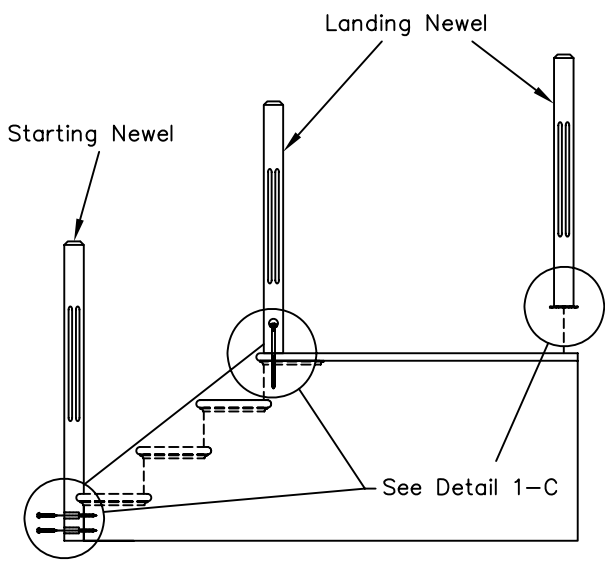


Diagram 1

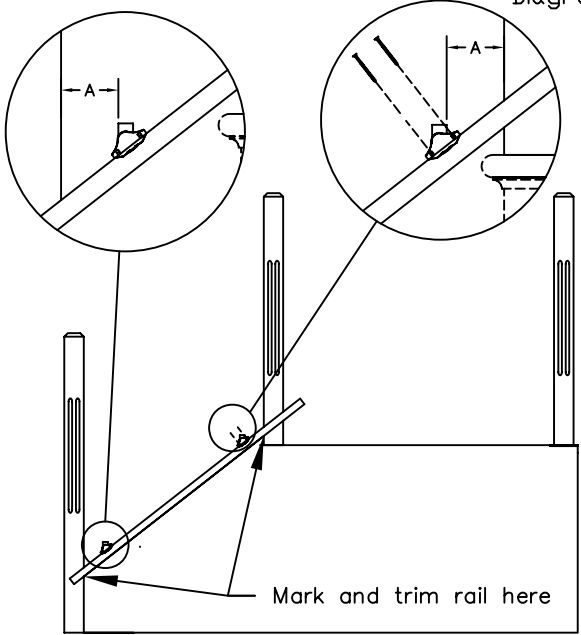
STEP 2 AXXYS™ STAIR RAILING INSTALLATION GUIDE

1

Trimming The Pre-drilled Stair Shoerail

- A) Place the shoerail on the kneewall beside the newel posts and attach 2 adjustable baluster brackets using 2-#6 x 1" (25mm) screws as shown in diagram 1-A
- B) Slide the shoe rail till the distances between the brackets and the posts are equal distances measured horizontally. Dimension A equal at both ends.
- C) Mark a vertical line where it intersects the newel posts
- D) Remove adjustable brackets from shoerail.
- E) Trim the rail.

Diagram 1-A



2

Alignment Of Pre-drilled Stair Rails

- A) Place the trimmed pre-drilled shoerail on a flat surface.
- B) Place pre-drilled handrail beside trimmed shoerail aligning pre-drilled holes. See diagram 2-A

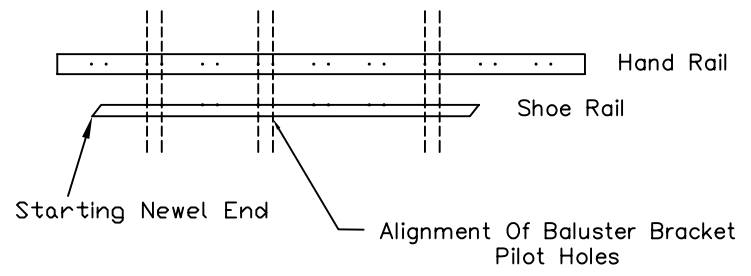


Diagram 2-A

3

Transfer Of Dimensions To Handrail

- A) Measure the distance from the starting newel end of the shoerail to the first pre-drilled hole (A1) and transfer this measurement to (A2) on the handrail. Mark handrail Do not cut. See diagram 3-A.
- B) Measure the distance from the last pre-drilled hole on the shoerail to the end of the rail, (B1) and transfer this measurement to (B2) on the handrail. Mark handrail Do not cut. See diagram 3-A.

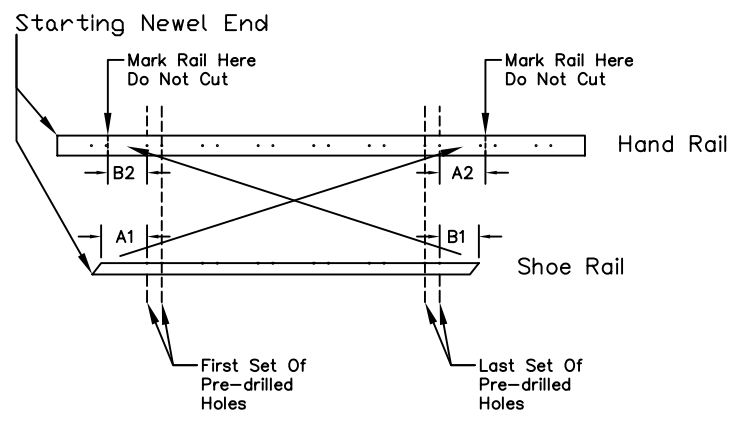


Diagram 3-A

4

Trimming The Stair Handrail

- A) From the B2 mark line on the handrail measure in 2 11/16" (68mm) and mark the cut line. See diagram 4-A
- B) From the A2 mark line on the handrail line measure in 1 1/8" (28mm) and mark the cut line. See diagram 4-A
- D) Trim the rail square at the cut lines. Do not cut handrail at an angle.

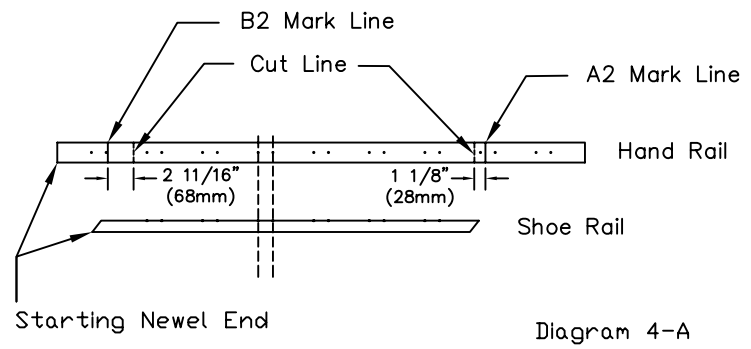


Diagram 4-A

5 Attachment Of Handrail Bracket

- A) Paint, stain or varnish railings at this point.
- B) Slide handrail bracket over end of handrail.
- C) Attach handrail brackets using 2-#6 x 1 3/4" (45mm) screws as shown in diagram 5-A.
- D) For detailed installation drawing see Detail 1-A

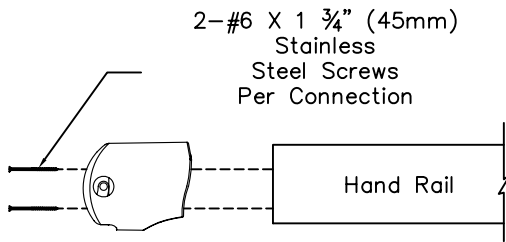


Diagram 5-A

6 Assemble Balusters

- A) Determine height of handrail and cut balusters to length.
- B) Install plugs into each end of balusters.
- C) OPTIONAL DESIGN Add decorative baluster ring/spiral collars before attaching brackets. Collars sold separately.
- D) Place adjustable brackets over baluster ends and fasten using #6 x 1 3/4" (45mm) screw. See diagram 6-A

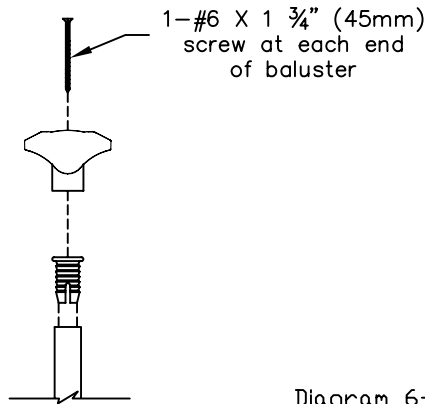


Diagram 6-A

7 Attach Assembled Balusters To Handrail

- A) Note If any pre-drilled holes are covered by the handrail bracket the end baluster will have to be repositioned. Using the baluster bracket as a template, mark the location of the new holes. Drill 1/8" (6mm) pilot holes. Repeat repositioning process for the shoerail.
- B) Lay handrail on a flat surface then starting at one end of handrail attach assembled balusters to the handrail using 2-#6 x 1"(25mm) screws. Diagram 7-A

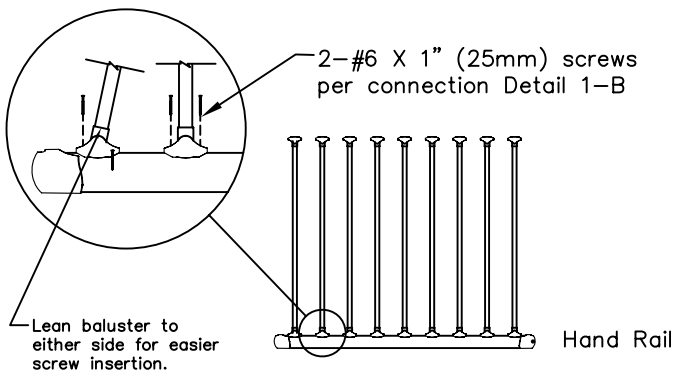


Diagram 7-A

8 Attachment Of Shoerail

- A) Lay shoerail on a flat surface then starting at one end of shoerail attach assembled balusters using 2-#6 x 1" (25mm) screws. Diagram 8-A
- B) For detailed installation drawing see Detail 1-B

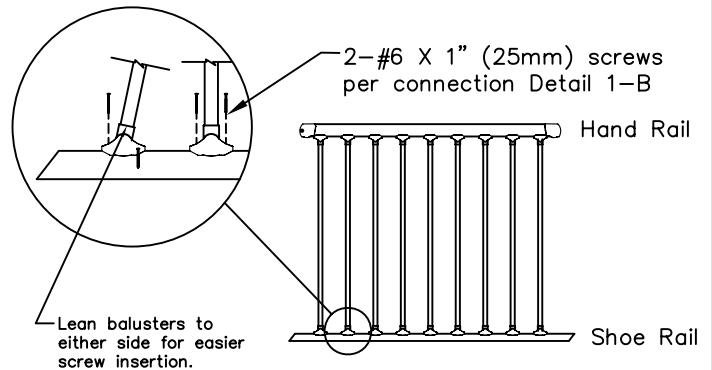


Diagram 8-A

9 Installation Of Adjustable Handrail Brackets

- A) Attach post brackets to handrail brackets using 1/4" x 1 3/8" Hex socket bolt. Do not tighten. NOTE Direction of post bracket slot must be angled correctly. Diagram 9-A
- B) Shift the railing to the desired angle. Place assembled railing between posts.

Note: Direction of Slot

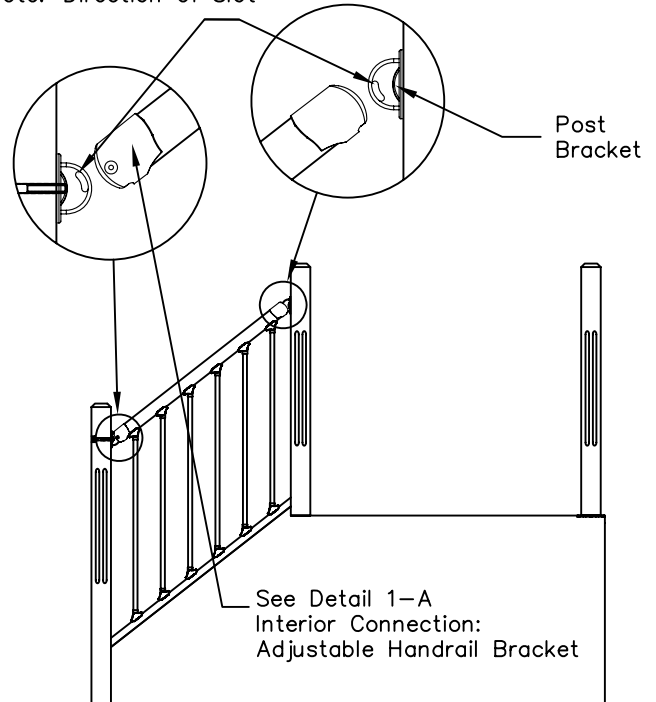


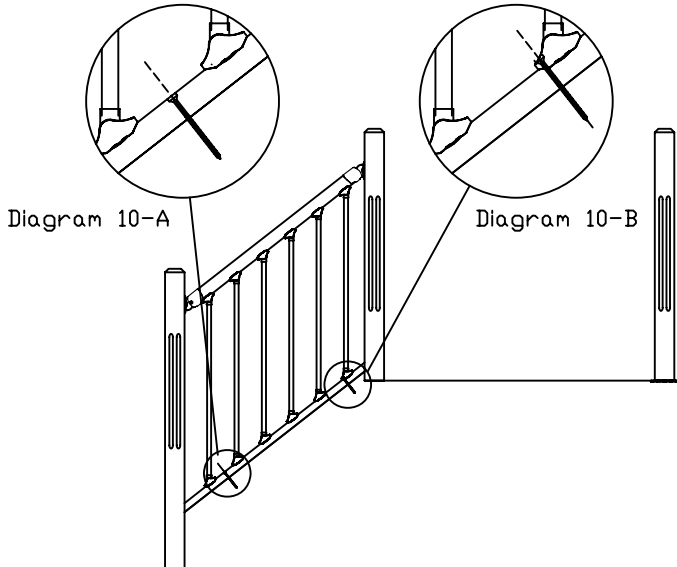
Diagram 9-A

- C) Mark location of post brackets on the posts by marking a line as shown in Detail 1-A (End View).
- D) Remove assembled railing from between posts.
- E) Remove post brackets from assembled railing.
- F) Attach post brackets to post using 2-#6 x 1 3/4" (45mm) screws.
- G) OPTIONAL 5/16" x 3" Bolt through post. See Detail 1-A

10

Installation Of Assembled Railing

- A) Position assembled railing between posts. Attach hand rail brackets to post brackets using 1/4" x 1 3/8" Hex socket bolts. Do not tighten.
- B) Option 1 - Diagram 10A Attach shoerail to kneewall using #8 x 2" (50mm) woodscrews placed at every 4th baluster.
- Option 2 - Diagram 10B Attach shoerail to kneewall using #8 x 3" (76mm) woodscrews and insert through every 4th adjustable baluster bracket to eliminate screw holes.
- C) Tighten Handrail bracket bolts. Insert cap over bolts to complete.



STEP 3
AXXYS™ RAILING INSTALLATION GUIDE

1

Trimming The Pre-drilled Shoerail

- A) Place the shoerail beside the newel posts and attach 2 adjustable baluster brackets using 2-#6 x 1" (25mm) screws as shown in diagram 1-B Place the fewest amount of predrilled holes between posts.
- B) Slide the shoe rail till the distances between the brackets and the posts are equal distances measured horizontally. Dimension A equal at both ends.
- C) Mark a vertical line where it intersects the newel posts
- D) Remove adjustable brackets from shoerail.
- E) Trim the rail.

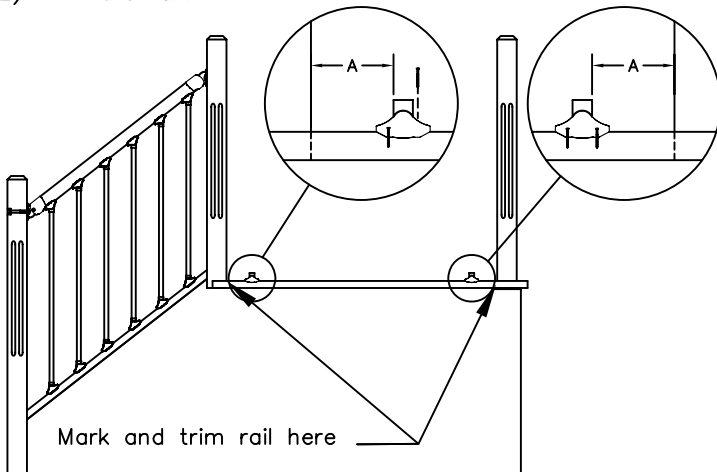


Diagram 1-B

2

Alignment Of Pre-drilled Rails

- A) Place the trimmed pre-drilled shoerail on a flat surface.
- B) Place pre-drilled handrail beside trimmed shoerail aligning pre-drilled holes. See diagram 2-B
- C) With a framing square mark the points where the ends of the shoerail line up with the handrail. Do not cut.

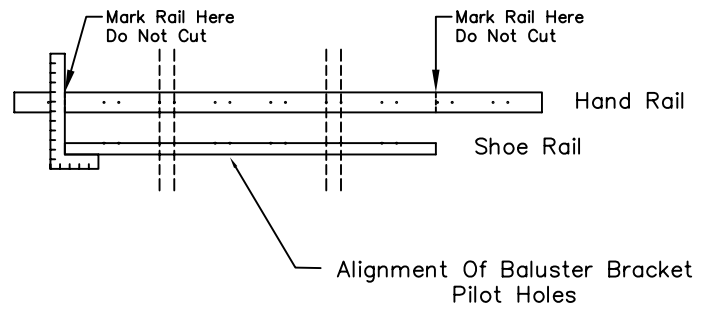


Diagram 2-B

3

Trimming The Handrail

- A) From each mark line on the handrail, measure in 1 11/16" (43mm) and mark the cut line. See diagram 3-B
- B) Trim the rail at the cut lines.

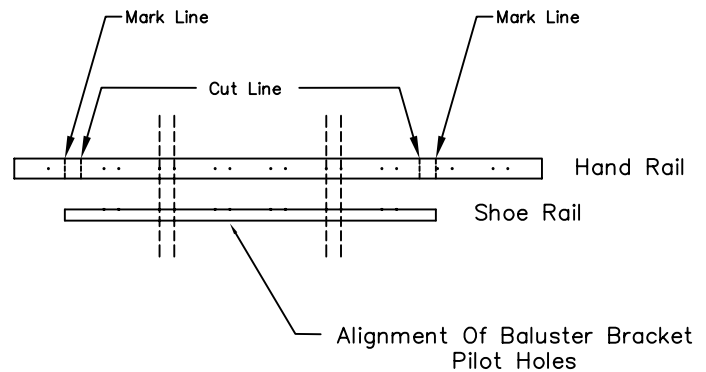


Diagram 3-B

4

Attachment Of Handrail Bracket

- A) Paint, stain or varnish railings at this point.
- B) Slide handrail bracket over end of handrail.
- C) Attach handrail brackets using 2-#6 x 1 3/4" (45mm) screws as shown in diagram 4-B
- D) For detailed installation drawing see Detail 1-A

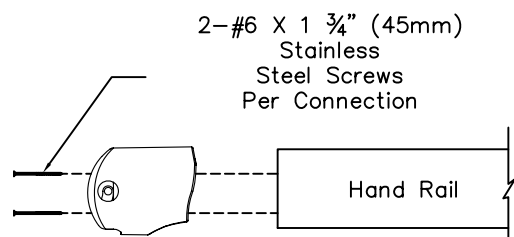


Diagram 4-B

5

Assemble Balusters

- A) Install plugs into each end of balusters.
- B) OPTIONAL DESIGN Add decorative baluster ring/spiral collars before attaching brackets. Collars sold separately.
- C) Place adjustable brackets over baluster ends and fasten using #6 x 1 3/4" (45mm) screw. See diagram 5-B

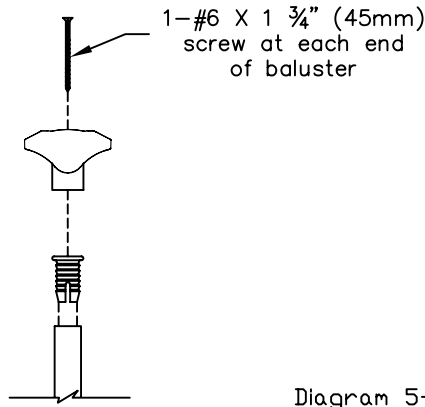


Diagram 5-B

6

Attach Assembled Balusters To Handrail

- A) Note If any pre-drilled holes are covered by the handrail bracket the end baluster will have to be repositioned. Using the baluster bracket as a template, mark the location of the new holes. Drill 1/8" (6mm) pilot holes. Repeat repositioning process for the shoerail.
- B) Lay handrail on a flat surface then starting at one end of handrail attach assembled balusters to the handrail using 2-#6 x 1" (25mm) screws. Diagram 6-B

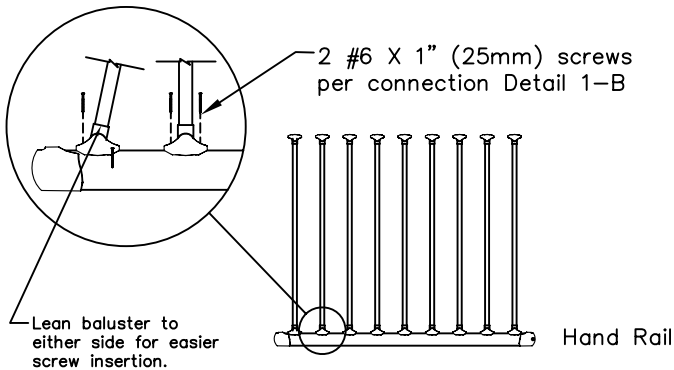


Diagram 6-B

7

Attachment Of Shoerail

- A) Lay shoerail on a flat surface then starting at one end of handrail attach assembled balusters to the handrail using 2-#6 x 1" (25mm) screws. Diagram 7-B
- B) For detailed installation drawing see Detail 1-B

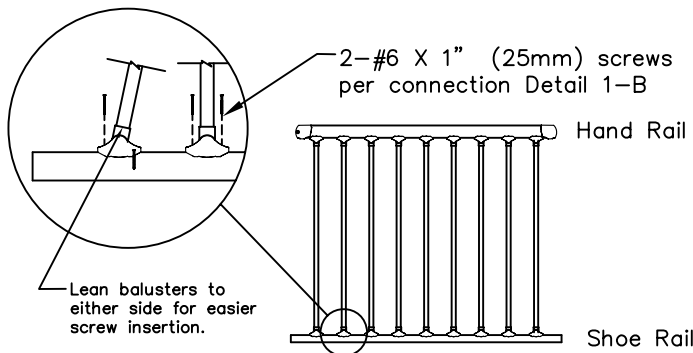


Diagram 7-B

8

Installation Of Adjustable Handrail Brackets

- A) Attach post brackets to handrail brackets using 1/4" x 1 3/8" Hex socket bolt. Do not tighten. Diagram 8-B
- B) Place assembled railing between posts.
- C) Mark location of post brackets on the posts by marking a line as shown in Detail 1-A (End View).
- D) Remove assembled railing from between posts.
- E) Remove post brackets from assembled railing.
- F) Attach post brackets to post using 2-#6 x 1 3/4" (45mm) screws.
- G) OPTIONAL 5/16" x 3" Bolt through post. See Detail 1-A

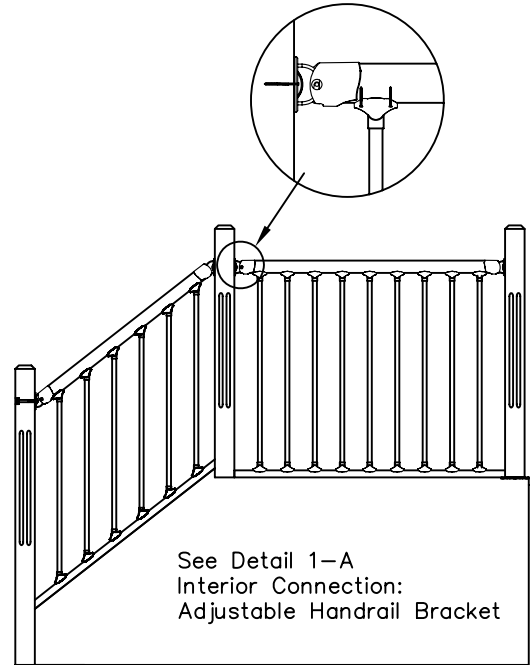


Diagram 8-B

9

Installation Of Assembled Railing

- A) Position assembled railing between posts. Attach hand rail brackets to post brackets using 1/4" x 1 3/8" Hex socket bolts. Do not tighten.
- B) Option 1 - Diagram 9A Attach shoerail to floor using #8 x 2" (50mm) woodscrews placed at every 4th baluster. Option 2 - Diagram 9B Attach shoerail to floor using #8 x 3" (75mm) woodscrews and insert through adjustable baluster bracket to eliminate screw holes.
- C) Tighten Handrail bracket bolts. Insert cap over bolts to complete.

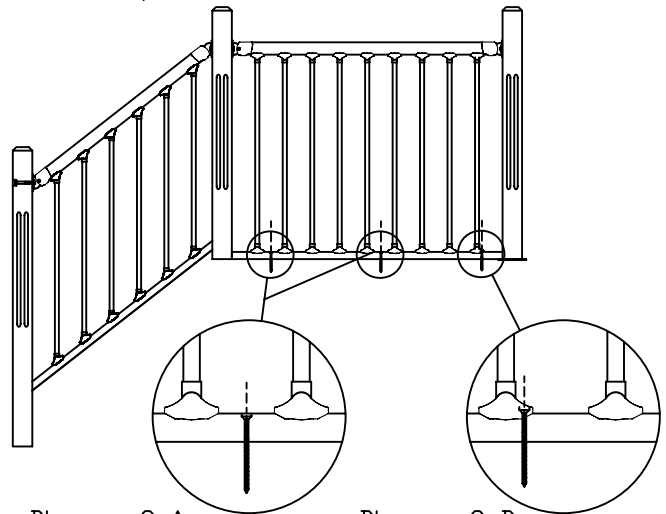
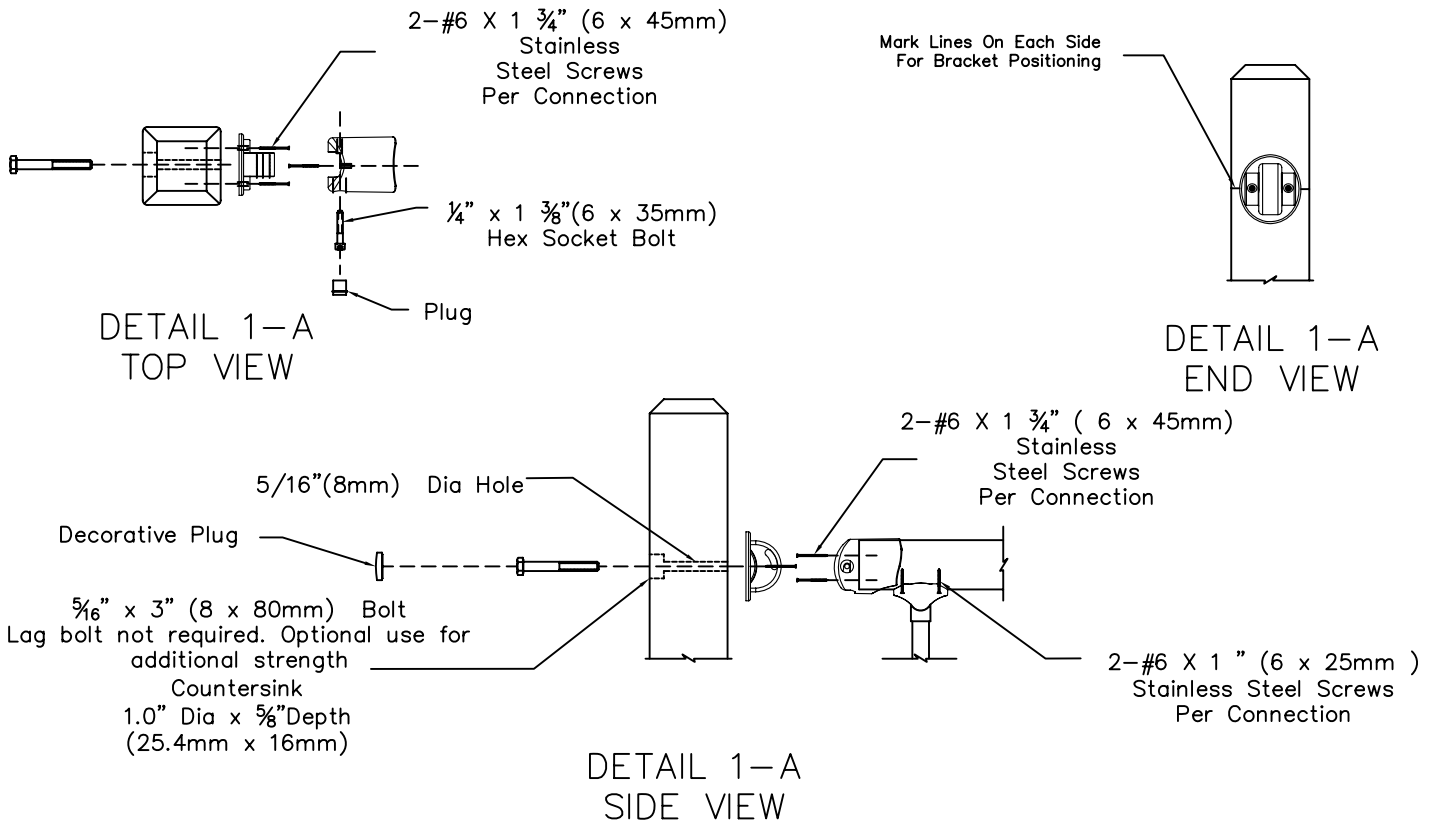


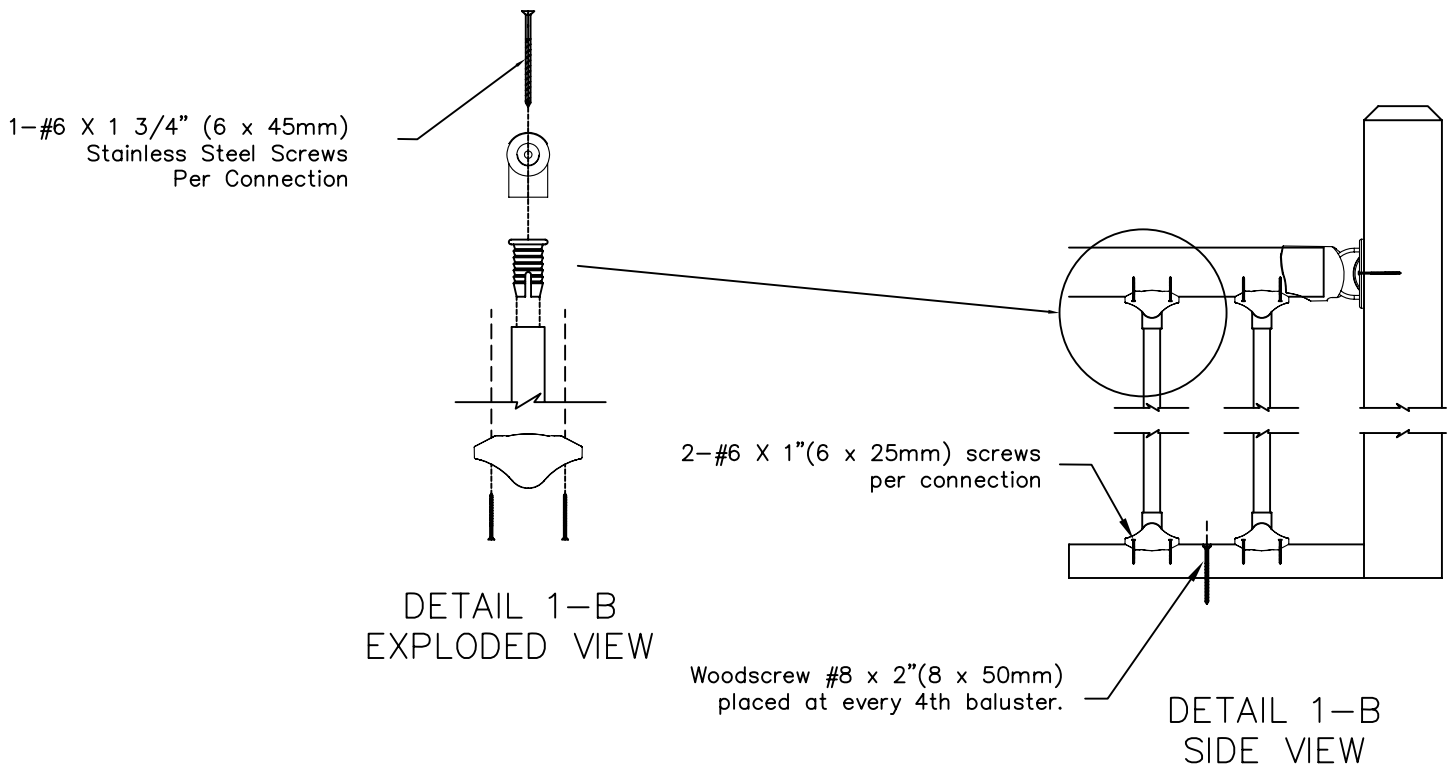
Diagram 9-A

Diagram 9-B

DETAIL 1-A Interior Connection: Adjustable Handrail Bracket



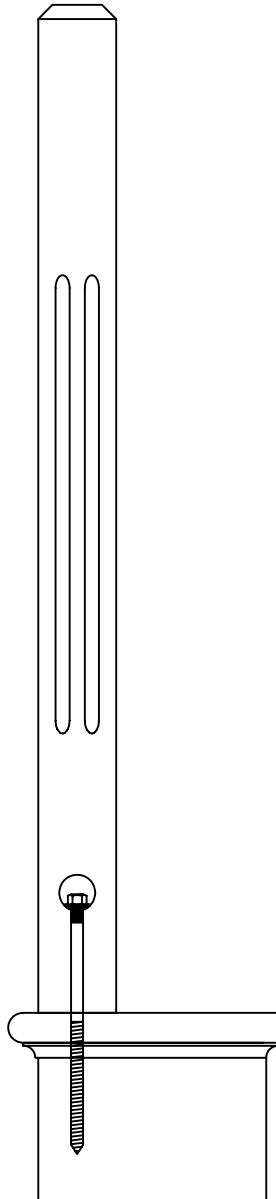
DETAIL 1-B Interior Connection: Adjustable Baluster Bracket



DETAIL 1-C
Interior Fasteners: Newel Fastening Systems

1

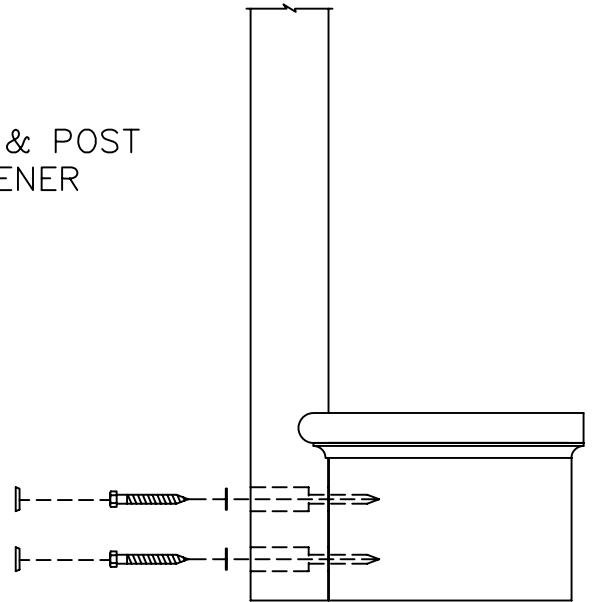
SURE-TITE™
NEWEL
FASTENING
SYSTEM



The Sure-Tite™ Fastening System uses a 11" lag bolt to fasten a newel post to a floor. Detailed instructions are included with the HW9507000W Newel Mounting Bolt.

3

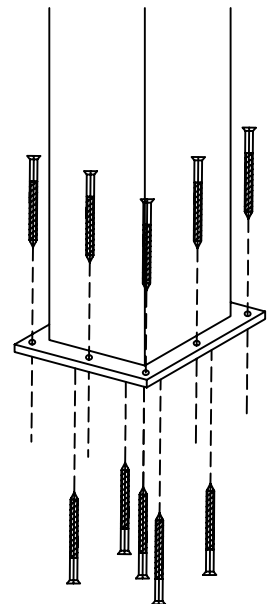
RAIL & POST
FASTENER



Rail and Post Fastener uses a 3/8" lag bolt to fasten handrails to newel posts and also newel posts to stairs. Detailed instructions are included with the HW9516000W Rail and Post Fastener.

5

NEWEL
POST
FASTENER #1™



Newel Mounting Plate, a 3/16" steel plate to fasten newel posts to floors. Detailed instructions are included with the HW9518000W Newel Mounting Plate.

!!!RAILSIMPLE™

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For Technical support
please call

1-800-667-8247

Instructions are also available on
our website www.railsimple.com

Tool List

Hammer
Ratchet Wrench
Tape Measure
Wood Chisel
Miter saw
Level
Clamps
Hand Drill
Wood Screws #8 x 2" / 3" (Drill Bit size 9/64")