

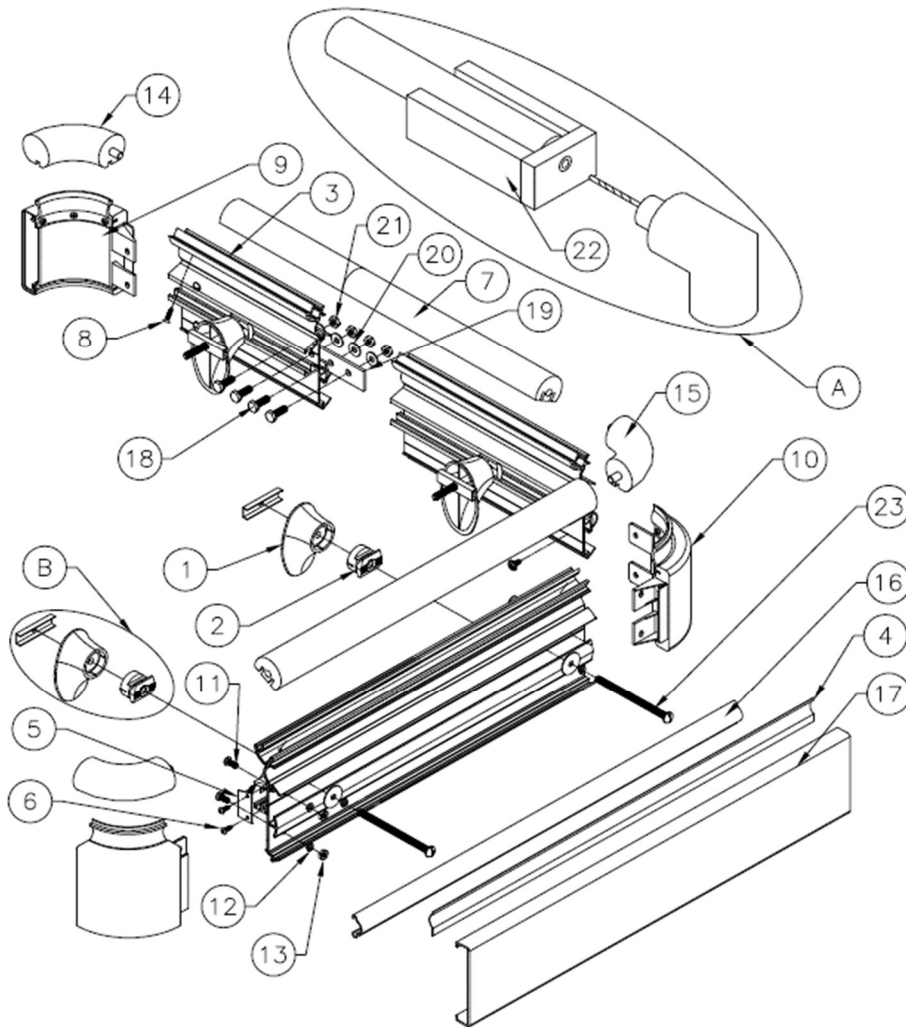
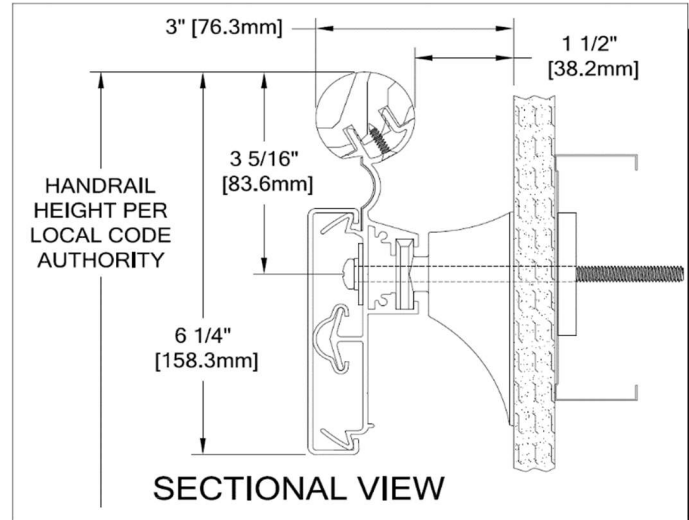
ATTENTION

Please read these instructions thoroughly prior to beginning the **HRBW-10CQLHLN HANDRAIL** installation.

This instruction sheet is intended to provide a specific guide to follow for the installation of the **HRBW-10CQLHLN HANDRAIL**. Contained within is the technical information and installation techniques required to complete an efficient, neat, and long-lasting installation.

See "**HANDRAIL**– Supplemental Information" sheet for additional notes and other helpful installation tips.

Minimum length of **HRBW-10CQLHLN HANDRAIL** is **15-3/4" [400.3mm]** and requires at least 2 brackets per unit.



Parts List

1. Mounting Bracket (24I820xxx)
2. Quick Lock (24I821000)
3. Aluminum Retainer (24A369000)
4. Acrovyn Accent Reveal (24N021xxx)
5. 10C Quick Lock Retainer End Plate (24F254004)
6. #6 x 1/2" 18-8 Phillips Pan Head Sheet Metal Screw (90H255002)
7. Wood Handrail (24W001xxx)
8. #6 x 5/8" Phillips Flat Head SMS (90H231002)
9. Crash Rail End Cap Assembly
10. Crash Rail Outside Corner Assembly
11. #10-24 x 1/2" Round Head Slotted Machine Screw (90H369002)
12. #10 Lock Washer (90H370002)
13. #10 Hex Nut (90H368002)
14. Wood Handrail End Cap
 - a. Right Hand (24W012xxx)
 - b. Left Hand (24W013xxx)
15. Wood Handrail Outside Corner (24W019xxx)
16. RC-10 Cushion (24U952108)
17. Acrovyn Crashrail Cover
 - a. Solid Color (24U009xxx)
 - b. Acrovyn Woodgrains and Brushed Metals Color (24U616xxx)
18. 1/4-20 x 1/2" Hex Head Machine Screw (90H052002)
19. Retainer Splice Bar (24I976000)
20. 1/4" Lock Washer (90H006003)
21. 1/4-20 Hex Nut (90H010001)
22. Wood Handrail Drill Jig (90H110010)
23. Specified Fastener (see table on bottom of page 2)
24. #4 x 1/2" HSS Countersink Drill (90H035010)

INSTALLATION INSTRUCTIONS

1. Establish handrail height above finish floor. Deduct 3-5/16" [83.6mm] and snap a chalk line at that height to mark the locations of the fasteners for the handrail brackets.
2. Cut the continuous aluminum retainer to length using the required deductions as noted (see layout view). Pre-drill clearance holes for the specified fasteners in the aluminum retainer 3" [76.2mm] from each end. Reference chart on page 2 for correct drill diameters. All other bracket holes must not exceed 16" [406.4mm] on center.

NOTE: When splicing the aluminum retainer, use the splice bar as a template and pre-drill the aluminum retainer with 9/32" drill bit.

3. Mark fastener locations along v-groove on back of retainer (see sectional view). Fasteners start 2" [50.8mm] from the ends of the retainer and are 24" [609.6mm] on center. Use the supplied countersinking drill bit for holes along v-groove where wood handrail fastens to retainer.
4. Cut accent reveal to length and insert into slot proved in the top section of the aluminum retainer.
5. Where the retainer will have an end cap / outside corner, attached the 10C Quick Lock retainer end plate to the retainer using two (2) #6 x 1/2" Phillips pan head sheet metal screws.
6. Cut wood top rail to exact length of retainer. See figure "A" call out on page 1 for drilling cut end of rail. Bevel the cut edges on handrail end slightly with 150 grit sandpaper to match bevel on wood end caps. Touch up sanded edges with stain marker. Using the holes in the aluminum retainer as a guide, drill 3/32" diameter pilot holes 3/8" dep into the wood handrail. Attach the top rail to the retainer using the #6 x 5/8" Phillips flat head sheet metal screws.
7. Attach all end caps / outside corners:
 - a. Attach crash rail portion of end cap to the retainer:
 - i. Use end cap as template to drill 7/32" pilot holes in retainer.
 - ii. Attach end cap / outside corners by sliding the end cap onto the end of the aluminum retainer and securing into position using two (2) #10-24 x 1/2" round head slotted machine screw with lock washer and #10 hex nut at each end cap and four (4) at each outside corner.

NOTE: To aid in locating the crash rail end caps correctly, cut a 4" [101.6mm] section of cover from scrap and snap it on the retainer. Locate the cap so it aligns flush with the top and bottom of the cover.

- b. Attach handrail portion of end cap to retainer:
 - i. Slide the end cap dowel into the alignment hole in the rail. Wood glue must be applied to the dowel prior to insertion.
 - ii. Apply hot melt glue (not supplied) on the reverse side of the end cap where the adaptor fits into the bottom groove of the top cap.
8. Drill clearance holes in the wall surface for mounting hardware, using the retainer as a template. Reference chart at the bottom of this page for correct drill diameters.
9. Place a quick lock into each bracket base. The quick lock is only used as a spacer in this application. Use the appropriate fasteners and attach the bracket assemblies to the wall at the pre-drilled locations. See figure "B" callout on page 1.

NOTE: The fasteners are to go through the face of the retainer then the quick lock and then mounting bracket.

10. Cut RC-10 cushion to length noting required deductions (see layout view) and install onto aluminum retainer.
11. Cut Acrovyn crash rail cover to length. The cover length is determined by measuring the distance between the installed end caps and / or outside corner assemblies.
12. Complete installation by installing the Acrovyn crash rail cover onto the lower portion of the retainer.

WALL CONDITION	SPECIFIED FASTENER	DRILL DIAMETER		CS PART NUMBER
		WALL	RETAINER	
20. GA. Steel Stud / Gypsum Wall (High Load)	1/4-20 x 5" S/S Phillips Pan Head Machine Screw 1/4" S/S Toggler Wing 1/4" Lock Washer 1/4" Flat Washer	1/2"	9/32"	90H872004 90H873004 90H006003 90H024002

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