

## ECR-40N CRASH RAIL

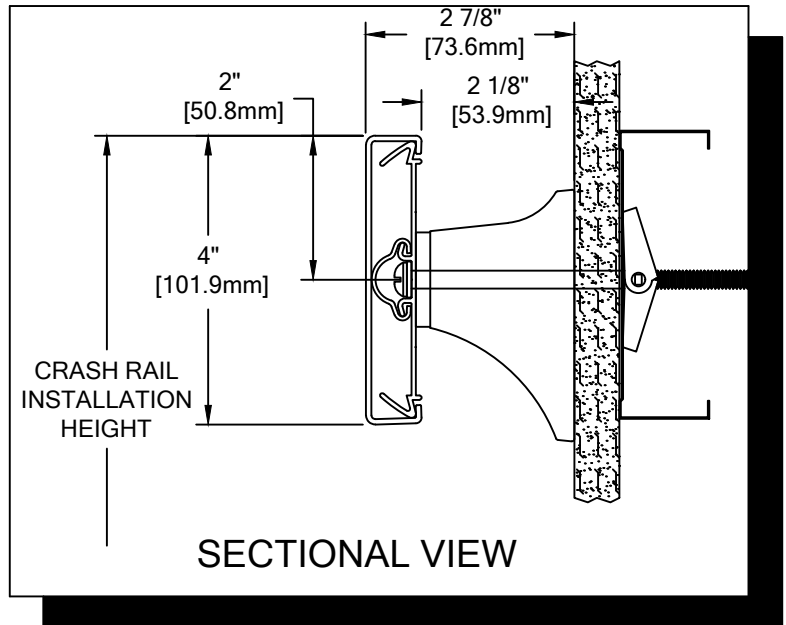
### PLEASE READ

PLEASE READ THESE INSTRUCTIONS THOROUGHLY PRIOR TO BEGINNING THE ECR-40N CRASH RAIL INSTALLATION!

THIS INSTRUCTION SHEET IS INTENDED TO PROVIDE A SPECIFIC GUIDE TO FOLLOW FOR THE INSTALLATION OF ECR-40N CRASH RAIL. CONTAINED WITHIN IS THE TECHNICAL INFORMATION AND INSTALLATION TECHNIQUES REQUIRED TO COMPLETE AN EFFICIENT, NEAT AND LONG-LASTING INSTALLATION.

INSPECT ALL MATERIALS FOR DAMAGE OR MISSING PARTS. IF YOU DISCOVER DAMAGED OR MISSING MATERIALS, IN THE USA PLEASE NOTIFY THE FACTORY AT (800) 233-8493, AND IN CANADA (888) 895-8955.

ECR-40N CRASH RAIL MUST BE INSTALLED IN ACCORDANCE WITH THESE INSTRUCTIONS! FAILURE TO FOLLOW THESE INSTRUCTIONS MAY VOID ANY PRODUCT WARRANTIES AND RESULT IN AN UNSUCCESSFUL INSTALLATION. FOR SPECIFIC QUESTIONS REGARDING THE INSTALLATION OF ECR-40N CRASH RAIL PLEASE CALL THE FACTORY AT (800) 233-8493 EMAIL [IWPTECHSUPPORT@C-SGROUP.COM](mailto:IWPTECHSUPPORT@C-SGROUP.COM). IN CANADA CALL (888) 895-8955.



### IMPORTANT NOTES

1. ALL LINEAL MATERIAL TO BE SUPPLIED IN STOCK LENGTHS. ALUMINUM AND ACROVYN IN LENGTHS UP TO 20'-0". THIS MATERIAL IS TO BE FIELD CUT USING QUALITY EQUIPMENT TO INSURE THAT ALL CUTS ARE SQUARE. WHEN CUTTING MATERIAL SECTIONS, CS RECOMMENDS USING AN 80-100 TOOTH CARBIDE TIPPED SAW BLADE OR EQUIVALENT, TO MINIMIZE CHIPPING AND MAINTAIN JOINT ALIGNMENT.
2. RADIAL MATERIAL MAY BE SUPPLIED FACTORY FORMED OR IN STRAIGHT LENGTHS FOR FIELD FORMING. CONSULT FACTORY FOR OPTIONS.
3. ALL DIMENSIONS ARE TYPICAL.
4. FOR DRYWALL/PLASTER WALL CONSTRUCTION, IT IS RECOMMENDED FOR FASTENERS TO BE ENGAGED INTO METAL/WOOD STUDS TO MAINTAIN MAXIMUM PULLOUT STRENGTH. IF DURING INSTALLATION YOU ENCOUNTER SPECIAL WALL CONDITIONS THAT DO NOT ALLOW FOR DIRECT ATTACHMENT TO THE STUDS PLEASE CONSULT THE LOCAL AUTHORITY HAVING JURSDICTION.
5. MATERIAL MUST REACH 65°F MIN. TO 75°F MAX. 24 HOURS PRIOR TO INSTALLATION. THIS IS ESSENTIAL TO MINIMIZE EXPANSION AND CONTRACTION OF MATERIAL.
6. ALUMINUM RETAINER SPLICE SHOULD NOT EXCEED 4" [101.6mm] DISTANCE FROM A BRACKET.
7. THE DISTANCE BETWEEN AN ACROVYN SPLICE JOINT AND AN ALUMINUM RETAINER SPLICE JOINT SHOULD BE STAGGERED 4" [101.6mm].
8. TANGENT POINTS ON FACTORY FORMED MATERIAL WILL BE MARKED APPROXIMATELY AND SHOULD BE CUT TO SUIT FIELD CONDITIONS.
9. THIS CRASH RAIL REQUIRES A MINIMUM OF 2 MOUNTING BRACKETS PER UNIT. THE MINIMUM END CAP-TO-END CAP HANDRAIL LENGTH IS 7 1/2" [190.5mm].
10. FOR MORE INFORMATION ON ECR-40N CRASH RAIL SEE OUR WEBSITE AT [www.c-sgroup.com](http://www.c-sgroup.com).

**ECR-40N CRASH RAIL**

COMPONENTS & WALL FASTENERS



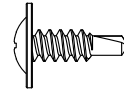
ACROVYN 4000 COVER  
(24U009xxx)  
ACROVYN CHAMELEON  
(24U616xxx)



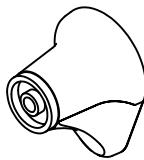
ALUMINUM RETAINER  
(24A293000)



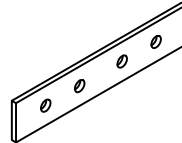
RC-10 CUSHION  
(24U952108)



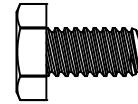
**FASTENER #1**  
#8 X 1/2"  
PHILLIPS WAFER  
HEAD TEK SCREW  
(90H086002)



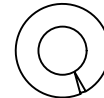
MOUNTING BRACKET  
(241007xxx)



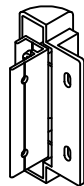
RETAINER SPLICE BAR  
(241976000)



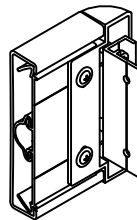
**FASTENER #2**  
1/4-20 X 1/2"  
HEX HEAD  
MACHINE SCREW  
(90H052002)



**FASTENER #3**  
1/4" LOCK WASHER  
(90H006003)



OUTSIDE  
CORNER ASSEMBLY



END CAP ASSEMBLY

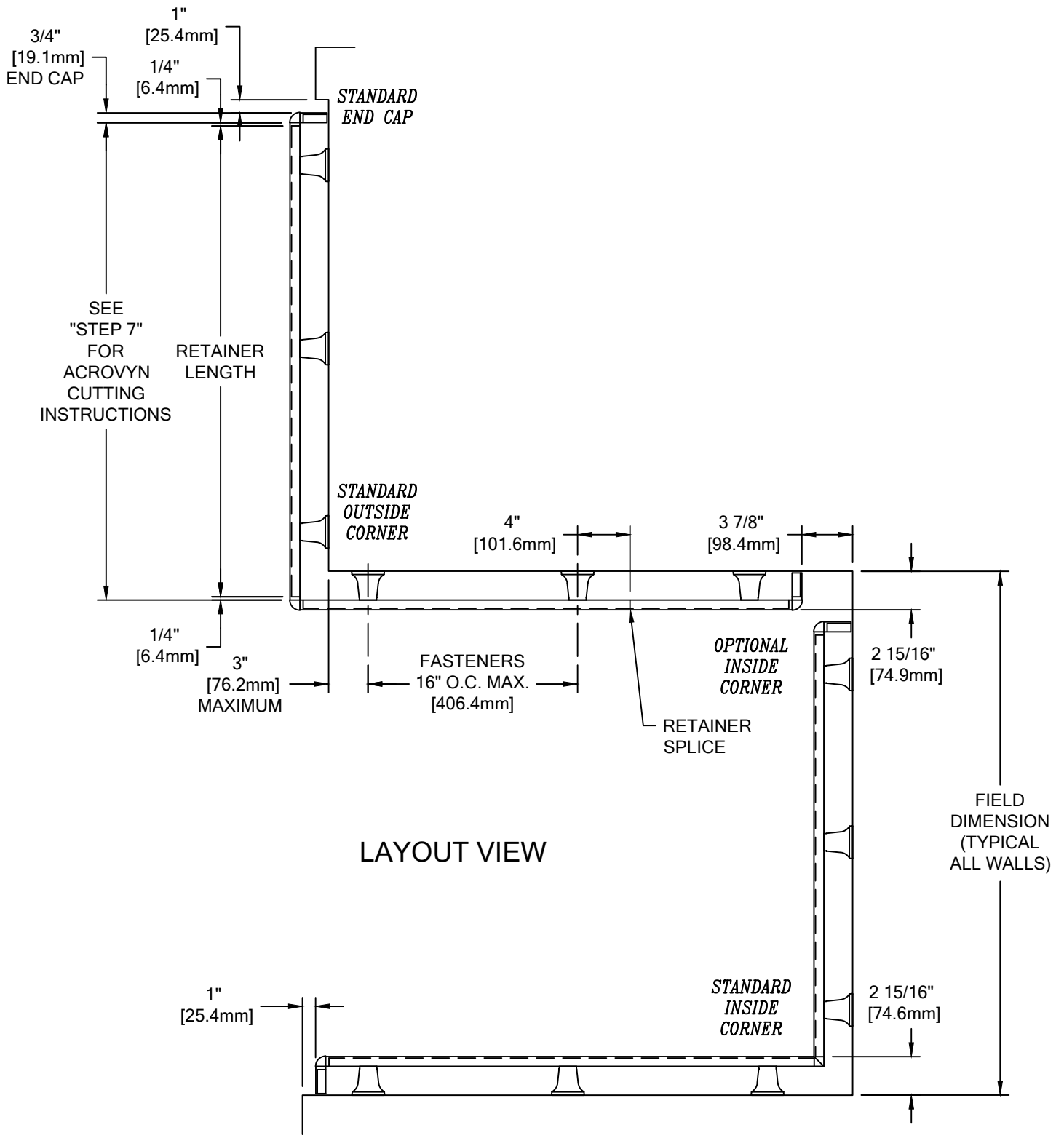


**FASTENER #4**  
1/4-20 HEX NUT  
(90H010001)

WALL CONDITION	SPECIFIED FASTENER	DRILL DIAMETERS		CS PART NUMBER
		WALL	RETAINER	
CONCRETE/CONCRETE BLOCK	#14 X 5" ROUND PAN HEAD ALL-PURPOSE SCREW 1/4" FLAT WASHER STEEL PLATED SAE	7/32"	9/32"	90H287002 90H101002
STEEL STUD/GYPSUM WALL	1/4-20 X 5" ROUND HEAD BOLT/TOGGLE WING 1/4" FLAT WASHER STEEL PLATED SAE	3/4"	9/32"	90H049002 90H101002
WOOD STUD/GYPSUM WALL	#14 X 5" ROUND PAN HEAD ALL-PURPOSE SCREW 1/4" FLAT WASHER STEEL PLATED SAE	7/32"	9/32"	90H287002 90H101002

**ECR-40N CRASH RAIL**

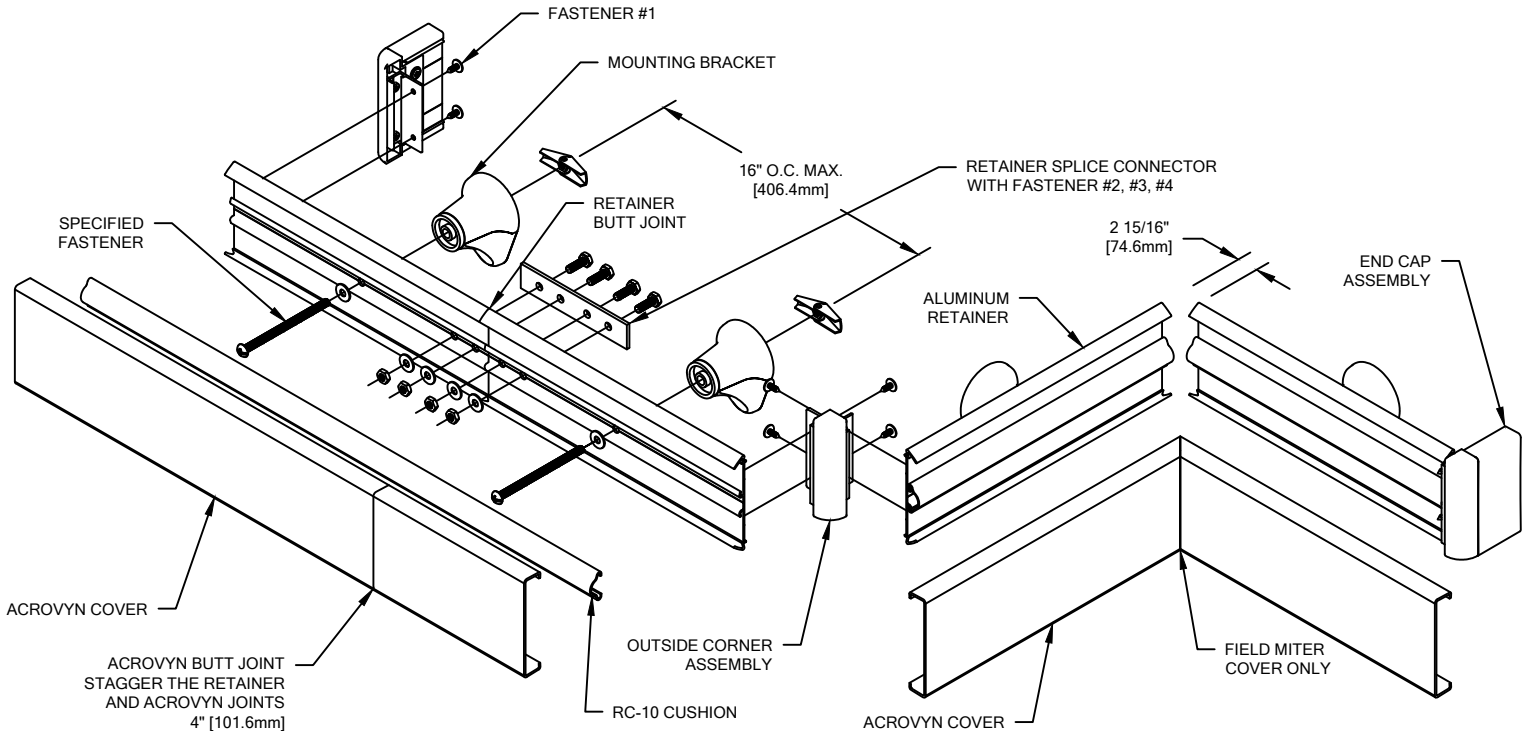
LAYOUT VIEW



LAYOUT VIEW

**ECR-40N CRASH RAIL**

TYPICAL ASSEMBLY



**NOTE:** INSTALLATION OF LINEAL OR RADIAL ECR-40N CRASH RAIL SHOULD BE DONE IN ACCORDANCE WITH THE FOLLOWING INSTRUCTIONS.

1. ESTABLISH CRASH RAIL HEIGHT ABOVE FINISH FLOOR. DEDUCT 2" [50.8mm] AND SNAP A CHALK LINE AT THAT HEIGHT. THIS MARKS THE LOCATION OF THE RETAINER FASTENERS. (SEE SECTIONAL VIEW)
2. CUT THE CONTINUOUS ALUMINUM RETAINER TO LENGTH, USING THE REQUIRED DEDUCTIONS AS NOTED (SEE LAYOUT VIEW). PRE-DRILL CLEARANCE HOLES IN THE ALUMINUM RETAINER 16" [406.0mm] O.C. AS REQUIRED. REFERENCE CHART ON PAGE 2 FOR DRILL DIAMETERS.

**NOTE:** IT IS RECOMMENDED THAT THE ACROVYN COVERS AND ALUMINUM RETAINERS BE CUT WITH AN 80-100 TOOTH CARBIDE TIPPED SAW BLADE OR EQUIVALENT.

3. DRILL CLEARANCE HOLES IN WALL SURFACE FOR MOUNTING HARDWARE, USING THE RETAINER AS A TEMPLATE. REFERENCE CHART ON PAGE 2 FOR DRILL DIAMETERS.
4. ATTACH END CAPS/OUTSIDE CORNERS BY ALIGNING THE END CAP/OUTSIDE CORNER WITH THE END OF THE ALUMINUM RETAINER AND SECURING INTO POSITION USING TWO 1/2" WAFER HEAD TEK SCREWS AT EACH END CAP AND FOUR AT EACH OUTSIDE CORNER.

**NOTE:** TO AID IN LOCATING THE 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 TOP AND BOTTOM OF THE COVER.

5. INSTALL EACH SECTION OF ASSEMBLED RETAINER, IN SUCCESSION, USING THE MOUNTING BRACKETS AND THE APPROPRIATE HARDWARE. USE A LEVEL TO ENSURE RETAINER IS PLUMB.

**NOTE:** WHEN FIELD FORMING RADIUS CRASH RAIL, BE SURE TO APPLY NEEDED PRESSURE FROM BRACKET TO BRACKET.

6. CUT THE RC-10 CUSHION TO LENGTH NOTING THE REQUIRED DEDUCTIONS (SEE LAYOUT VIEW) AND INSTALL ONTO ALUMINUM RETAINER.
7. CUT THE ACROVYN COVER TO THE PROPER LENGTH. THE COVER LENGTH IS DETERMINED BY MEASURING THE DISTANCE BETWEEN THE INSTALLED END CAPS AND/OR INSIDE/OUTSIDE CORNER ASSEMBLIES.

**NOTE:** IT IS RECOMMENDED THAT THE ACROVYN COVER BE CUT SLIGHTLY LONGER (1/32" UP TO 5'-0", 1/16" OVER 5'-0") THAN THE MEASURED DISTANCE. THIS ADDITIONAL LENGTH WILL PROVIDE FOR A TIGHTER COVER-TO-END CAP FIT.

8. ALIGN THE TOP OF THE ACROVYN COVER WITH THE TOP OF THE ALUMINUM RETAINER AND SNAP THE COVER ONTO THE BOTTOM SECTION OF THE RETAINER.

**NOTE:** MANUFACTURER RECOMMENDS ALL PRINTED "PRODUCT IDENTIFICATION" ON THE REAR OF THE ACROVYN PROFILE SHALL BE ORIENTED IN THE SAME DIRECTION DURING INSTALLATION TO ENSURE PROPER ALIGNMENT AT SPLICE BUTT JOINTS.

10/28/16