

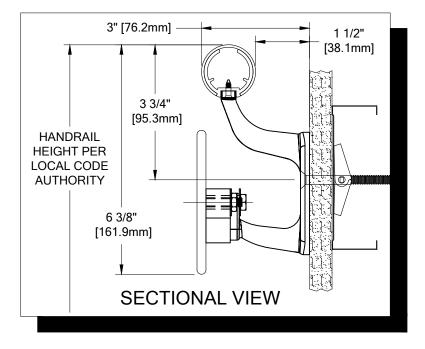
### PLEASE READ

PLEASE READ THESE INSTRUCTIONS THOROUGHLY PRIOR TO BEGINNING THE <u>P-RASN HANDRAIL</u> INSTALLATION!

THIS INSTRUCTION SHEET IS INTENDED TO PROVIDE A SPECIFIC GUIDE TO FOLLOW FOR THE INSTALLATION OF THIS <u>P-RASN HANDRAIL</u>. 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 FOR CUSTOMER SERVICE.

<u>P-RASN HANDRAIL</u> MUST BE INSTALLED IN ACCORDANCE WITH THESE INSTRUCTIONS! <u>FAILURE</u> <u>TO FOLLOW THESE INSTRUCTIONS MAY VOID ANY</u> <u>PRODUCT WARRANTIES AND RESULT IN AN</u> <u>UNSUCCESSFUL INSTALLATION.</u> FOR SPECIFIC QUESTIONS REGARDING THE INSTALLATION OF THIS <u>P-RASN HANDRAIL</u> PLEASE CALL THE FACTORY IN THE USA AT (800) 233-8493 OR EMAIL IWPTECHSUPPORT@C-SGROUP.COM. IN CANADA CALL (888) 895-8955.

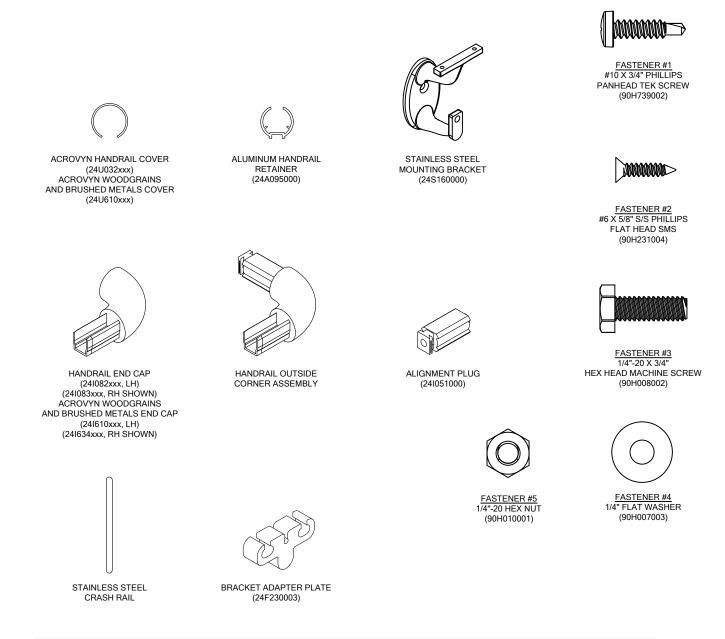


#### IMPORTANT NOTES

- 1. THIS HANDRAIL HAS BEEN MANUFACTURED TO CUSTOMER SPECIFIED DIMENSIONS AND CAN NOT BE CUT OR MODIFIED ON SITE. TO DO SO COULD VOID THE WARRANTY.
- 2. ALL DIMENSIONS ARE TYPICAL.
- 3. 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 JURISDICTION.
- 4. INSTALL OUTSIDE CORNERS FIRST.
- 5. INSTALL LONGEST RUN OF HANDRAIL FIRST.
- 6. ALUMINUM RETAINER SPLICE SHOULD NOT EXCEED 3" [76.2mm] DISTANCE FROM A BRACKET.
- 7. THE DISTANCE BETWEEN AN ACROVYN SPLICE JOINT AND AN ALUMINUM RETAINER SPLICE JOINT SHOULD NOT BE LESS THAN 12" [304.8mm].
- 8. MATERIAL MUST REACH 65°F MIN. TO 75° MAX. 24 HOURS PRIOR TO INSTALLATION. THIS IS ESSENTIAL TO MINIMIZE EXPANSION AND CONTRACTION.
- 9. MAY REQUIRE USE OF FIRE PUTTY WHEN INSTALLED ON FIRE WALL WITH TOGGLE BOLTS. REFERENCE INSTRUCTIONS <u>24FIREPUTTY</u> FOR FIRE PUTTY INSTALLATION.
- 10. THIS HANDRAIL REQUIRES A <u>MINIMUM</u> OF 2 MOUNTING BRACKETS PER UNIT. THE <u>MINIMUM</u> END CAP-TO-END CAP HANDRAIL LENGTH IS 14" [355.6mm].
- 11. FOR MORE INFORMATION ON P-RASN HANDRAIL SEE OUR WEBSITE AT www.c-sgroup.com.



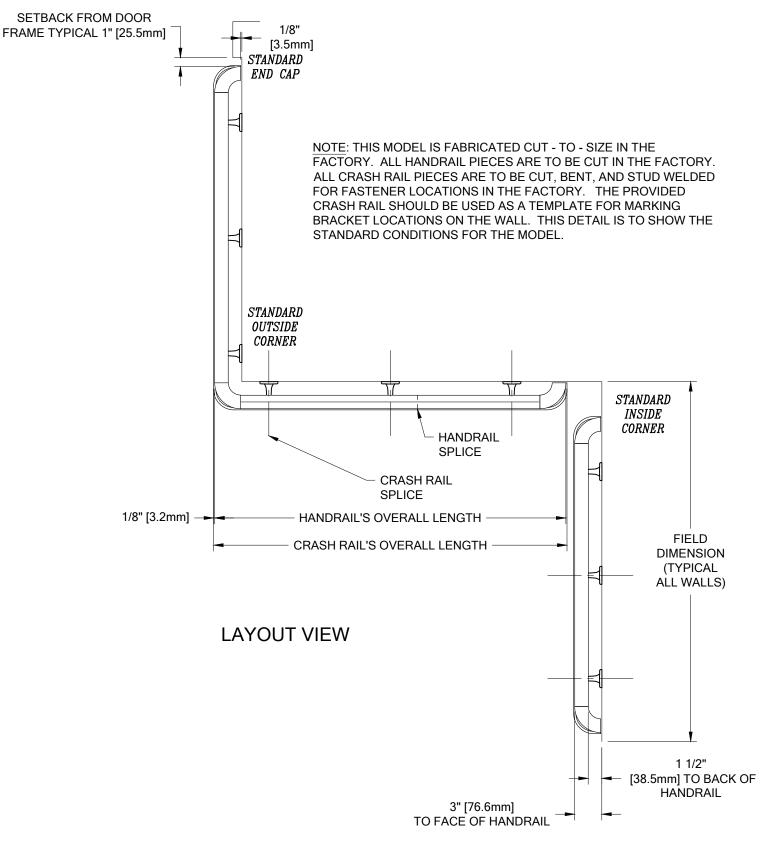
# COMPONENTS & WALL FASTENERS



WALL CONDITION	SPECIFIED FASTENER	DRILL DIAMETERS		CS PART
		WALL	RETAINER	NUMBER
STEEL STUD/GYPSUM WALL	1/4-20 X 3" S/S FLAT HEAD BOLT WITH TOGGLE	3/4"	N/A	90H184002
CONCRETE/CONCRETE BLOCK	1/4" X 1 3/4" S/S FLAT HEAD MASONRY ANCHOR	3/16"	N/A	90H390000
WOOD STUD/GYPSUM WALL	#14 X 3" S/S PHILLIPS FLAT HEAD WOOD SCREW	7/32"	N/A	90H538004
20 GA. STEEL STUD/GYPSUM WALL (OSHPD)	1/4-20 X 3" S/S FLAT HEAD BOLT 1/4" TOGGLER WING 3M MOLDABLE FIRE PUTTY	1/2"	N/A	90H063002 90H062004 90M012000
16 GA. MIN. STEEL STUD AND 16 GA. MIN. STEEL STRAPPING / GYPSUM WALL CONSTRUCTION REQUIRED (TEK SCREWS)	#14 X 3" PHILLIPS FLAT HEAD SELF DRILLING S/S TEK SCREW	N/A	N/A	90H230003

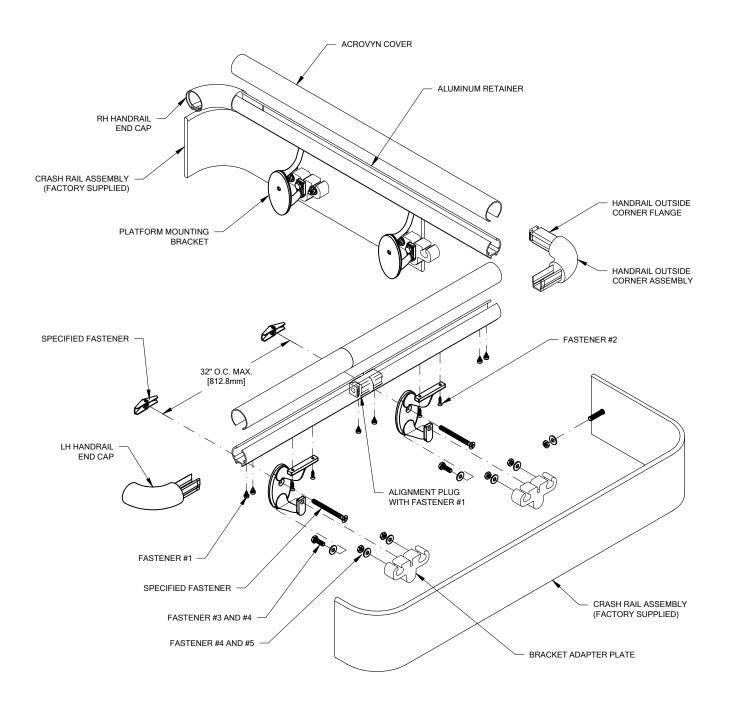


# LAYOUT VIEW



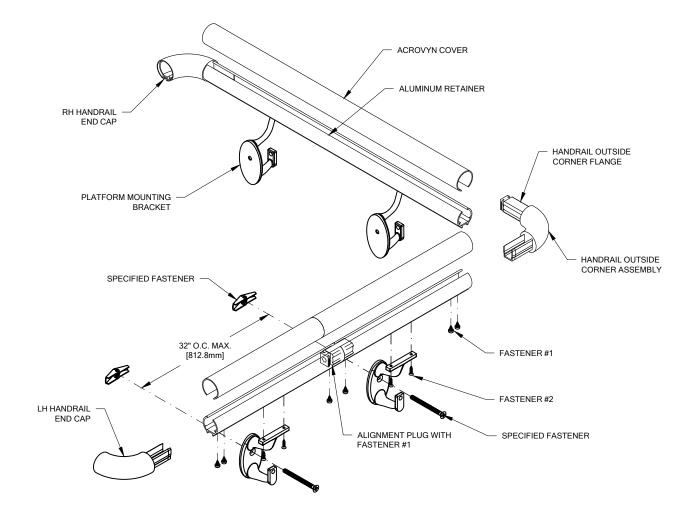


### TYPICAL ASSEMBLY





### TYPICAL HANDRAIL ASSEMBLY



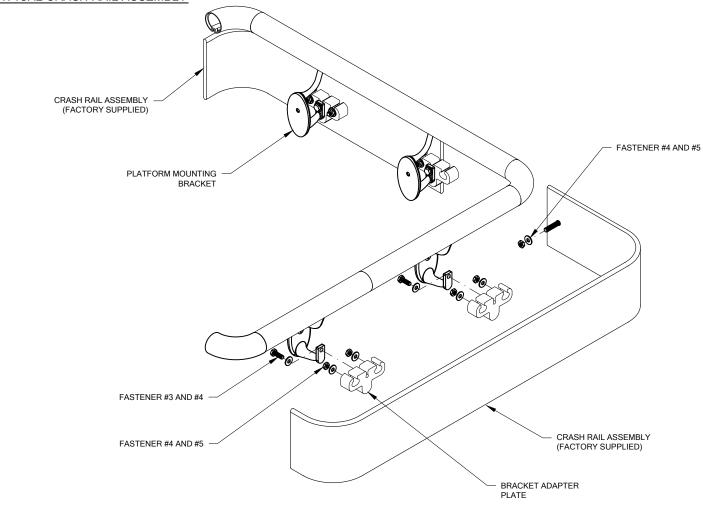
NOTE: THIS MATERIAL HAS BEEN MANUFACTURED TO CUSTOMER SPECIFIED DIMENSIONS AND CAN NOT BE CUT OR MODIFIED ON SITE. TO DO SO COULD VOID THE WARRANTY.

- 1. USING "LOCAL CODE" REQUIREMENTS, ESTABLISH HANDRAIL HEIGHT ABOVE FINISH FLOOR. DEDUCT 3 3/4" [95.3mm] AND SNAP A CHALK LINE AT THAT HEIGHT. THIS MARKS THE LOCATION OF THE HOLE FOR THE MOUNTING BRACKET FASTENERS.
- 2. DRILL CLEARANCE HOLES IN WALL SURFACE FOR MOUNTING HARDWARE. REFERENCE CHART ON PAGE 2 FOR CORRECT DRILL DIAMETERS. USE CRASH RAIL WITH ATTACHED BRACKETS AS A TEMPLATE TO MARK BRACKET LOCATIONS ON THE WALL, REFERENCE STEP #8.
- 3. INSTALL MOUNTING BRACKETS USING APPROPRIATE FASTENERS. DO NOT OVER TORQUE THE FASTENERS. USE A LEVEL TO ENSURE THAT THE BRACKETS ARE LEVEL. WARNING: MOUNTING BRACKET LOCATIONS MUST BE IDENTICAL TO THE FACTORY INSTALLED STUDS ON THE BACKSIDE OF THE CRASH RAIL.
- 4. ATTACH END CAPS AND OUTSIDE CORNERS:
  - INSERT THE END CAP INTO THE RETAINER.
  - DRILL 1/8" DIAMETER PILOT HOLES THROUGH THE BOTTOM OF THE RETAINER AND END CAP, 5/8" [15.9mm] AND 1 1/4" [31.8mm] FROM THE END OF THE RETAINER AS SHOWN.
  - REMOVE END CAP AND DRILL 11/64" CLEARANCE HOLES FOR #10 X 3/4" PHILLIPS PANHEAD TEK SCREWS.
  - ATTACH END CAP TO RETAINER WITH THE ABOVE MENTIONED SCREWS, UP THROUGH THE BOTTOM OF THE RETAINER.
- 5. DRILL 1/16" PILOT HOLES INTO THE RETAINER FOR MOUNTING BRACKET ATTACHMENT. MOUNTING BRACKETS ARE TO BE LOCATED 3" [76.2mm] FROM EACH END OF THE RETAINER AND 32" [612.6mm] ON CENTER ALONG LENGTH, AS REQUIRED.
- 6. FASTEN THE ALUMINUM RETAINER TO THE WALL BRACKETS IN SUCCESSION BY INSERTING TWO #6 X 5/8" S/S PHILLIPS FLAT HEAD SHEET METAL SCREWS THROUGH THE UNDERSIDE OF BRACKET INTO THE RETAINER. <u>CAUTION</u>: OVER-TORQUEING MAY CAUSE THE FASTENERS TO STRIP.
- 7. STARTING AT ONE END, SNAP THE ACROVYN COVER ONTO THE RETAINER ALONG THE LENGTH OF THE HANDRAIL.

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.



### TYPICAL CRASH RAIL ASSEMBLY



- 8. ATTACH CRASH RAIL TO THE WALL MOUNTING BRACKETS:
  - DISTRIBUTE MATERIAL. MATCH THE NUMBER ON THE BACK OF THE RAIL TO THE MARK NUMBER ON THE DRAWING. SOME LARGE RUNS
    REQUIRE MORE THAN ONE PIECE OF CRASH RAIL. THESE ARE NOTED WITH A MARK NUMBER AND A LETTER, I.E., 2001A, 2001B.
  - LOCATE A BRACKET ADAPTER PLATE ON EACH SET OF THREADED STUDS ON THE BACKSIDE OF THE CRASH RAIL.
  - SECURE THE BRACKET ADAPTER PLATE BY INSTALLING A 1/4" WASHER AND 1/4-20 NUT ONTO EACH THREADED STUD.
  - ALIGN EACH MOUNTING BRACKET WITH THE BRACKET ADAPTER PLATE'S THREADED HOLE.
  - INSERT 1/4-20 HEX HEAD BOLT AND 1/4" WASHER THROUGH THE MOUNTING BRACKET AND INTO THE MOUNTING BRACKET'S THREADED
    HOLE. THE BRACKET ADAPTER PLATE IS SLOTTED TO ACCOMMODATE ANY SLIGHT MISALIGNMENT.
  - FASTENERS MUST BE TORQUED TO 150 IN/LBS.



Muncy, Pennsylvania • (800) 233-8493 • Fax (570) 546-5169 Mississauga Ontario • (888) 895-8955 • Fax (905) 274-6241 www.c-sgroup.com 09/10/2024