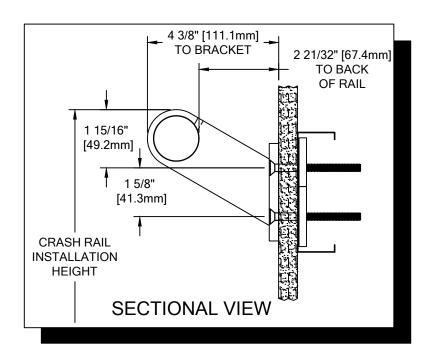
#### PLEASE READ

PLEASE READ THESE INSTRUCTIONS THOROUGHLY PRIOR TO BEGINNING THE <u>ECR-6S CRASH RAIL</u> INSTALLATION!

THIS INSTRUCTION SHEET IS INTENDED TO PROVIDE A SPECIFIC GUIDE TO FOLLOW FOR THE INSTALLATION OF THIS ECR-6S 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 FOR CUSTOMER SERVICE.

ECR-6S 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 THIS ECR-6S CRASH RAIL 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**

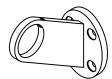
- 1. THIS MATERIAL HAS BEEN MANUFACTURED TO CUSTOMER SPECIFIED DIMENSIONS AND CAN NOT BE CUT OR MODIFIED ON SITE. TO DO SO COULD VOID THE WARRANTY.
- 2. ALL DIMENSIONS ARE TYPICAL.
- 3. FOR DRYWALL/PLASTER WALL CONSTRUCTION, IT IS RECOMMENDED FOR FASTENERS TO BE ENGAGED INTO METAL/WOOD STUDS TO MAINTAIN MAXIMUM PULLOUT STRENGTH. IF DURING INSTALLATION YOU ENCOUNTER SPECIAL WALL CONDITIONS THAT DO NOT ALLOW FOR DIRECT ATTACHMENT INTO THE STUDS PLEASE CONSULT THE LOCAL AUTHORITY HAVING JURISDICTION.
- 4. INSTALL LONGEST RUN OF CRASH RAIL FIRST.
- 5. STAINLESS STEEL CRASH RAIL SPLICE SHOULD NOT EXCEED 3" [76.2mm] DISTANCE FROM A BRACKET.
- 6. 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.
- 7. MAY REQUIRE USE OF FIRE PUTTY WHEN INSTALLED ON FIRE WALL WITH TOGGLE BOLTS. REFERENCE INSTRUCTIONS 24FIREPUTTY FOR FIRE PUTTY INSTALLATION.
- 8. THIS CRASH RAIL REQUIRES A <u>MINIMUM</u> OF 2 MOUNTING BRACKETS PER UNIT. THE <u>MINIMUM</u> END CAP-TO-END CAP CRASH RAIL LENGTH IS 12-1/2" [317.5mm]. IF USING OPTIONAL STAINLESS STEEL END PLUGS THE <u>MINIMUM</u> END PLUG-TO-END PLUG LENGTH IS 5-1/8" [130.18mm].
- 9. FOR MORE INFORMATION ON ECR-6S CRASH RAIL SEE OUR WEBSITE AT www.c-sgroup.com



# **COMPONENTS & WALL FASTENERS**



STAINLESS STEEL CRASH RAIL (80M160001)



STAINLESS STEEL MOUNTING BRACKET (24S316000)



ALUMINUM SPLINE (24F220000)



OPTIONAL STAINLESS STEEL END PLUG (24S317000)



STAINLESS STEEL END CAP (24S315000)



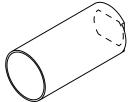
STAINLESS STEEL INSIDE/OUTSIDE CORNER (24S120000)



FASTENER #1 M5 X 0.8 X 8mm STAINLESS STEEL SET SCREW (90H811004)



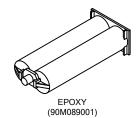
CAULKING GUN CONVERSION KIT PLUNGER (90M023000)



CAULKING GUN CONVERSION KIT SLEEVE (90M023000)

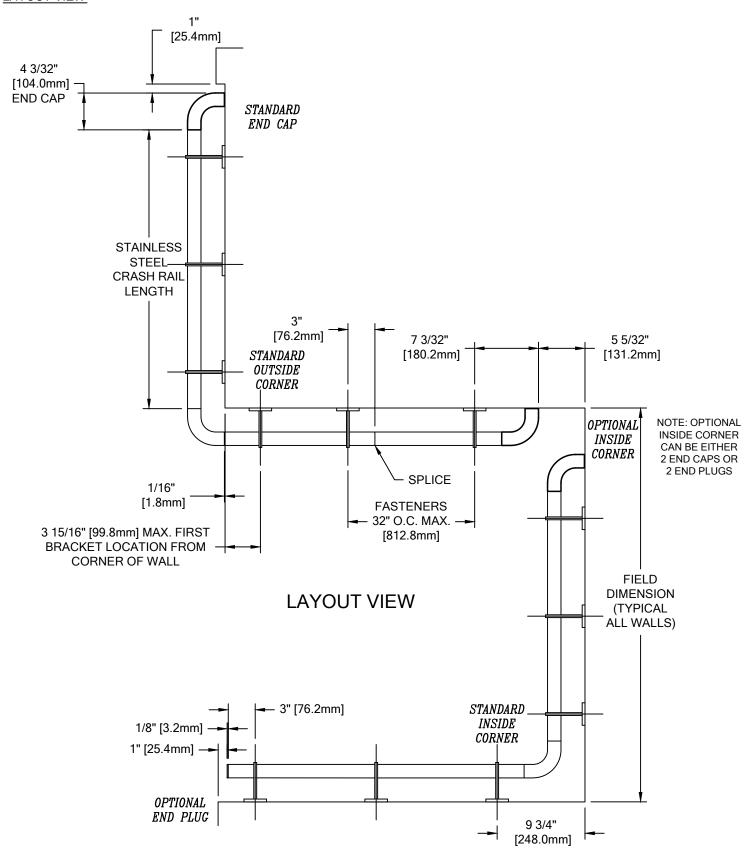


MIXING NOZZLE (90M022000)



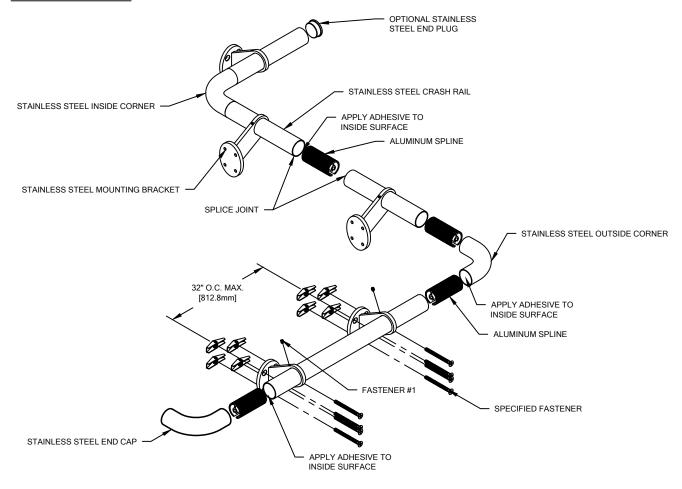
WALL CONDITION	SPECIFIED FASTENER	DRILL DIAMETERS		CS PART
		WALL	RETAINER	NUMBER
STEEL STUD/GYPSUM WALL	1/4-20 X 3" S/S FLAT HEAD BOLT 1/4" TOGGLER WING	1/2"	N/A	90H063002 90H062004
CONCRETE/CONCRETE BLOCK	1/4" X 1 3/4" S/S FLAT HEAD MASONRY ANCHOR	3/16"	N/A	90H390000
WOOD STUD/GYPSUM WALL	#14 X 3" S/S PHILLIPS FLAT HEAD WOOD SCREW	7/32"	N/A	90H538004

# LAYOUT VIEW





#### TYPICAL ASSEMBLY



- 1. ESTABLISH CRASH RAIL HEIGHT ABOVE FINISH FLOOR. DEDUCT 1-15/16" [49.2mm] AND 1-5/8" [41.3mm] AND SNAP A CHALK LINE AT THAT HEIGHT. THIS MARKS THE LOCATION OF THE HOLES FOR THE MOUNTING BRACKET FASTENERS. (SEE SECTIONAL VIEW ON PAGE 1)
- DISTRIBUTE MATERIAL. IF APPLICABLE, MATCH THE NUMBER ON 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.
- 3. DETERMINE AND MARK THE LOCATION OF THE MOUNTING BRACKETS USING THE REQUIRED DEDUCTIONS (SEE LAYOUT VIEW ON PAGE 3). ALIGN THE MOUNTING BRACKET HOLES WITH THE CHALK LINE ESTABLISHED IN "STEP 1". USING THE BRACKET AS A TEMPLATE, MARK THE LOCATION OF THE TOP AND BOTTOM FASTENERS. DRILL CLEARANCE HOLES IN WALL SURFACE FOR THE MOUNTING HARDWARE. REFERENCE CHART ON PAGE 2 FOR CORRECT DRILL DIAMETERS.
- 4. INSTALL MOUNTING BRACKETS USING THE APPROPRIATE HARDWARE. USE A LEVEL TO ENSURE BRACKETS ARE PLUMB.
- 5. SLIDE STAINLESS STEEL CRASH RAIL THOUGH THE BRACKETS AND HOLD IN PLACE TIGHTENING THE SUPPLIED SET SCREW.
- 6. ATTACH END CAPS AND/OR INSIDE/OUTSIDE CORNERS AND/OR OPTIONAL END PLUGS:
  - TO PROTECT FINISHED SURFACES FROM ADHESIVE DURING ASSEMBLY APPLY MASKING TAPE TO END OF CRASH RAILS SURFACE AND ALSO TO EXTERIOR SURFACE OF END CAP (OR INSIDE/OUTSIDE CORNER).
  - USING 100 GRIT SANDPAPER, SAND THE INTERIOR SURFACE OF THE CRASH RAIL. CLEAN THE INTERIOR SURFACE OF CRASH RAIL WITH ISOPROPYL (RUBBING) ALCOHOL.
  - DRY FIT THE ALUMINUM SPLINE BEFORE APPLYING ADHESIVE.
  - ONCE TESTED, REMOVE AND APPLY 1/8" BEAD OF ADHESIVE TO SANDED, INTERIOR SURFACE (REFERENCE CAULKING GUN CONVERSION KIT FIGURES 1 & 2 ON PAGE 5) AND PERMANENTLY ATTACH ALUMINUM SPLINE.
  - USING 100 GRIT SANDPAPER, SAND THE INTERIOR SURFACE OF THE END CAP (OR INSIDE/OUTSIDE CORNER). CLEAN THE INTERIOR SURFACE OF END CAP (OR INSIDE/OUTSIDE CORNER) WITH ISOPROPYL (RUBBING) ALCOHOL. APPLY 1/8" BEAD OF ADHESIVE TO SANDED, ALUMINUM SPLINE. ROTATE END CAP (OR INSIDE/OUTSIDE CORNER) UNTIL PROPERLY ORIENTED. FOR A PROPER SEAM, STAINLESS STEEL END CAP (OR INSIDE/OUTSIDE CORNER) MUST BE TIGHTLY FITTED TO THE CRASH RAIL. PARTS CAN BE HANDLED IN 1 1/2 HOURS AND WILL BE FULLY CURED AFTER 24 HOURS
  - IF CRASH RAIL SPLICE IS REQUIRED, INSTALL SPLICE JOINT BEFORE SECOND END CAP.
  - INSTALL SECOND END CAP (OR INSIDE/OUTSIDE CORNER) AS PREVIOUS DESCRIBED.
  - OPTIONAL END PLUG IS INSTALLED IN THE SAME MANNER, WITHOUT THE USE OF THE ALUMINUM SPLINE.

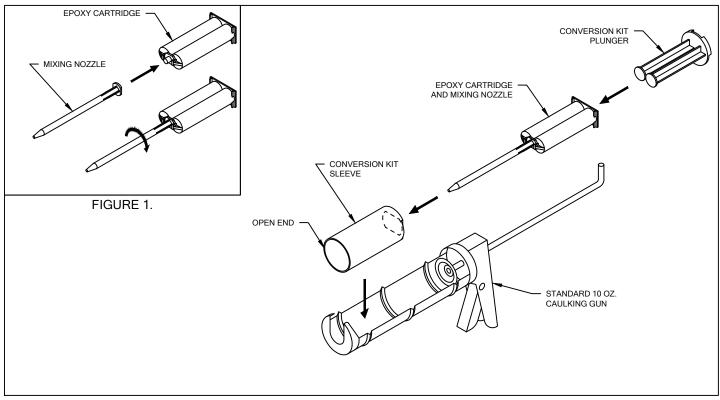


FIGURE 2.
CAULKING GUN CONVERSION KIT

#### EPOXY CARTRIDGE AND MIXING NOZZLE. REFER TO FIGURE 1.

- 1. REMOVE CAP AND GASKET FROM THE END OF EPOXY CARTRIDGE BY TWISTING 90°.
- 2. INSTALL MIXING NOZZLE ON THE FRONT OF EPOXY CARTRIDGE AND LOCK IN PLACE BY TWISTING  $90^\circ.$

#### CAULKING GUN CONVERSION KIT. REFER TO FIGURE 2.

- INSERT EPOXY CARTRIDGE AND MIXING NOZZLE INTO OVAL OPENING OF SLEEVE. NOTE THE LOCATION OF OPEN END.
- PLACE PLUNGER IN THE BACK END OF CARTRIDGE.
- PLACE THE CONVERSION KIT, WITH MIXER NOZZLE AND EPOXY CARTRIDGE, IN A STANDARD 10 OZ CAULKING GUN AS SHOWN IN FIGURE 2. PLUNGER WILL ATTACH TO CIRCULAR PUSH PLATE ON CAULKING GUN.

12/16/16

Rev Date: 12/16/16



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