WITH INTERNATIONAL OFFSET

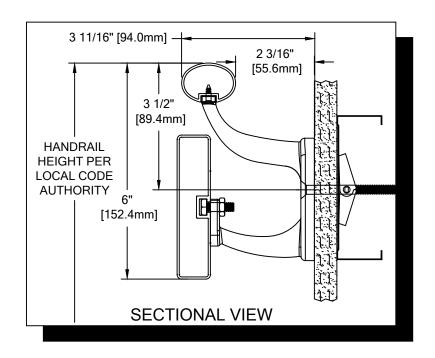
PLEASE READ

PLEASE READ THESE INSTRUCTIONS THOROUGHLY PRIOR TO BEGINNING THE P-OMM-INT HANDRAIL INSTALLATION!

THIS INSTRUCTION SHEET IS INTENDED TO PROVIDE A SPECIFIC GUIDE TO FOLLOW FOR THE INSTALLATION OF THIS P-OMM-INT HANDRAIL. 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.

P-OMM-INT HANDRAIL 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 P-OMM-INT HANDRAIL 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

- ALL LINEAL MATERIAL TO BE SUPPLIED IN STOCK LENGTHS. POWDER COATED HANDRAIL IN 12'-0" LENGTHS. 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. 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 STUDS PLEASE CONSULT THE LOCAL AUTHORITY HAVING JURISDICTION.
- 4. INSTALL OUTSIDE CORNERS FIRST.
- 5. INSTALL LONGEST RUN OF HANDRAIL FIRST.
- HANDRAIL AND CRASH RAIL SPLICE SHOULD NOT EXCEED 3" [76.2mm] DISTANCE FROM A BRACKET.
- 7. MATERIAL MUST REACH 65°F MIN. TO 75° MAX. 24 HOURS PRIOR TO INSTALLATION. THIS IS ESSENTIAL TO MINIMIZE EXPANSION AND CONTRACTION.
- 8. MAY REQUIRE USE OF FIRE PUTTY WHEN INSTALLED ON FIRE WALL WITH TOGGLE BOLTS. REFERENCE INSTRUCTIONS 24FIREPUTTY FOR FIRE PUTTY INSTALLATION.
- 9. 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 13 3/4" [349.1mm].
- 10. FOR MORE INFORMATION ON P-OMM HANDRAIL SEE OUR WEBSITE AT www.c-sgroup.com.

WITH INTERNATIONAL OFFSET

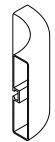
COMPONENTS & WALL FASTENERS



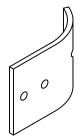
POWDER COATED HANDRAIL (24A220xxx)



POWDER COATED CRASH RAIL (24A223xxx)



POWDER COATED CRASH RAIL ENDCAP/ OUTSIDE CORNER (24M067xxx)



CRASH RAIL ENDCAP MOUNTING PLATE (90H181010)



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



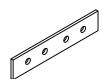
FASTENER #2 1/4-20 HEX NUT (90H010001)



POWDER COATED HANDRAIL ENDCAP/ OUTSIDE CORNER (24M066xxx)



STAINLESS STEEL MOUNTING BRACKET (24S171000) ALUMINUM POWDER COATED BRACKET (24M994XXX)



CRASH RAIL RETAINER SPLICE BAR (241976000)



END CAP MOUNTING PLATE (90H142010)



FASTENER #3 #6 X 5/8" S/S PHILLIPS FLAT HEAD SMS (90H231004)



FASTENER #4 #6-32 X 3/4" S/S PHILLIPS FLAT HEAD MACHINE SCREW (90H811002)



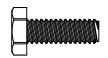
HANDRAIL SPLICE PLATE (90H150010)



END CAP SUPPORT PLATE (90H180010)



FASTENER #5 1/4" FLAT WASHER (90H007003)

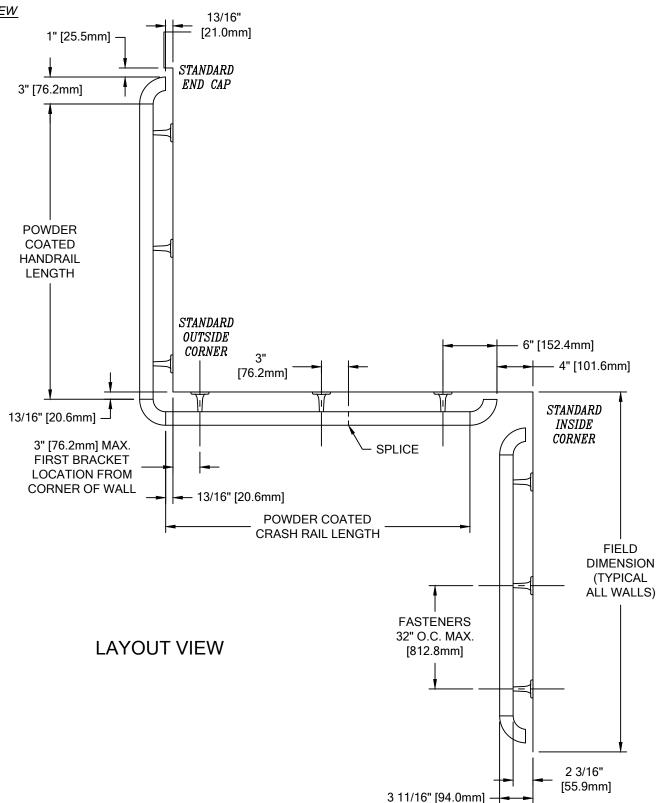


FASTENER #6 1/4-20 X 3/4" S/S HEX HEAD MACHINE SCREW (90H008006)

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	90Н390000
WOOD STUD/GYPSUM WALL	#14 X 3" S/S PHILLIPS FLAT HEAD WOOD SCREW	7/32"	N/A	90H538004

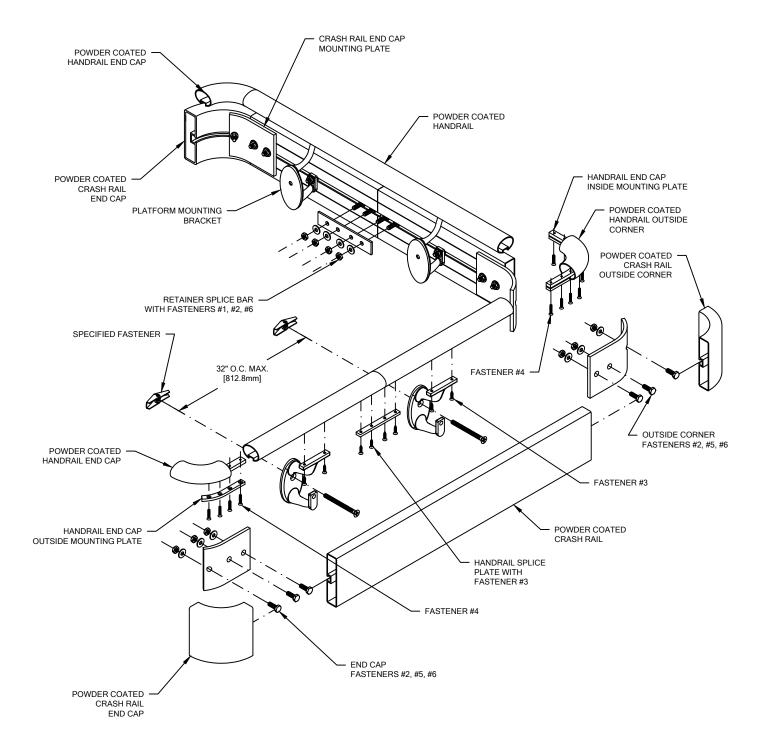
WITH INTERNATIONAL OFFST

LAYOUT VIEW



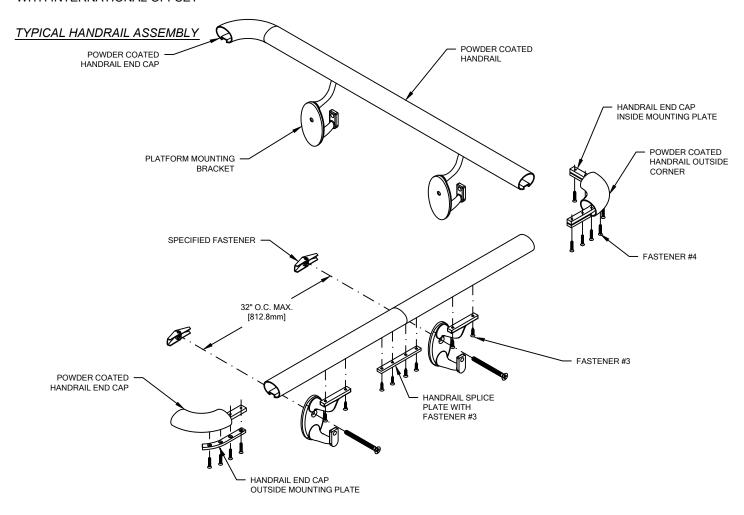
P-OMM HANDRAIL WITH INTERNATIONAL OFFSET

TYPICAL ASSEMBLY





WITH INTERNATIONAL OFFSET



- USING "LOCAL CODE" REQUIREMENTS, ESTABLISH HANDRAIL HEIGHT ABOVE FINISH FLOOR. DEDUCT 3 3/8" [85.7mm] 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.
- 3. INSTALL MOUNTING BRACKETS USING APPROPRIATE FASTENERS. USE A LEVEL TO ENSURE THAT THE BRACKETS ARE LEVEL.

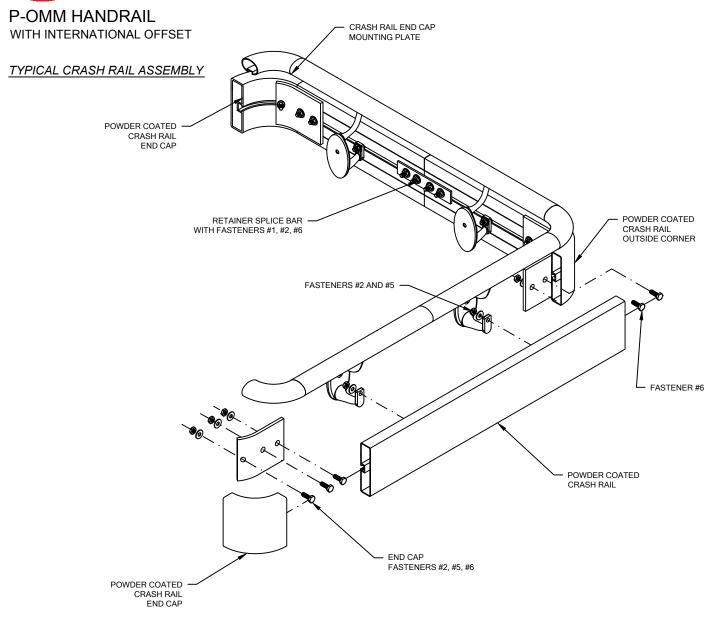
NOTE: SEE LAYOUT VIEW TO AID IN MOUNTING BRACKET LOCATION.

4. CUT THE CONTINUOUS POWDER COATED HANDRAIL TO LENGTH USING THE REQUIRED DEDUCTIONS (SEE LAYOUT VIEW).

NOTE: IT IS RECOMMENDED THAT CONTINUOUS POWDER COATED HANDRAIL BE CUT WITH AN 80-100 TOOTH CARBIDE TIPPED SAW BLADE OR EQUIVALENT.

- 5. ATTACH END CAPS AND OUTSIDE CORNERS:
 - ALIGN HANDRAIL WITH END CAP SO THEY ARE FLUSH TOGETHER.
 - USING OUTSIDE MOUNTING PLATE AS A TEMPLATE, PLACE INTO GROOVE AND MARK LOCATIONS.
 - REMOVE OUTSIDE MOUNTING PLATE AND DRILL HOLES (1/8" DRILLL ϕ).
 - ALIGN HOLES OF INSIDE MOUNTING PLATE, HANDRAIL AND OUTSIDE MOUNTING PLATE.
 - ATTACH USING #6-32 X 3/4" FH MACHINE SCREWS. DO NOT FULLY SECURE.
 - REPOSITION END CAP AND ATTACH USING #6-32 X 3/4" FH MACHINE SCREWS.
 - SECURELY TIGHTEN ALL FASTENERS.
- 6. DRILL 1/16" PILOT HOLES INTO THE POWDER COATED HANDRAIL FOR MOUNTING BRACKET ATTACHMENT. MOUNTING BRACKETS ARE TO BE LOCATED 3" [76.2mm] FROM EACH END OF THE POWDER COATED HANDRAIL AND 32" [612.6MM] ON CENTER ALONG LENGTH, AS REQUIRED.
- FASTEN THE POWDER COATED HANDRAIL TO THE WALL BRACKETS IN SUCCESSION BY INSERTING TWO #6 X 5/8" PHILLIPS FLAT
 HEAD SHEET METAL SCREWS THROUGH THE UNDERSIDE OF BRACKET INTO THE POWDER COATED HANDRAIL. CAUTION:
 OVER-TORQUEING MAY CAUSE THE FASTENERS TO STRIP.





B. $\,$ CUT THE CONTINUOUS POWDER COATED CRASH RAIL TO LENGTH USING THE REQUIRED DEDUCTIONS (SEE LAYOUT VIEW).

NOTE: IT IS RECOMMENDED THAT CONTINUOUS POWDER COATED CRASH RAIL BE CUT WITH AN 80-100 TOOTH CARBIDE TIPPED SAW BLADE OR EQUIVALENT.

- 9. ATTACH POWDER COATED CRASH RAIL END CAPS AND OUTSIDE CORNERS:
 - SLIDE 1/4-20 X 3/4" HEX HEAD BOLTS IN THE RECEIVER SLOT OF THE CRASH RAIL RETAINER FOR ALL WALL BRACKETS.
 - PARTIALLY FASTEN 1/4-20 X 3/4" HEX HEAD BOLTS ONTO MOUNTING PLATE (NOTE THE ORIENTATION IN DRAWING ABOVE).
 - SLIDE HEAD OF BOLTS INTO GROOVES OF THE CRASH RAIL AND END CAP.
 - ALIGN CRASH RAIL WITH END CAP SO THEY ARE FLUSH TOGETHER.
 - SECURELY TIGHTEN ALL FASTENERS.
- 10. ATTACH POWDER COATED CRASH RAIL TO THE WALL BRACKETS:
 - ALIGN HEX HEAD BOLT WITH MOUNTING BRACKETS.
 - INSERT HEX HEAD BOLT INTO THE MOUNTING BRACKET HOLE.
 - PLACE A 1/4" FLAT WASHER AND 1/4-20 HEX NUT ONTO THE HEX HEAD BOLT.
 - TIGHTEN AS REQUIRED.

7/12/17



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