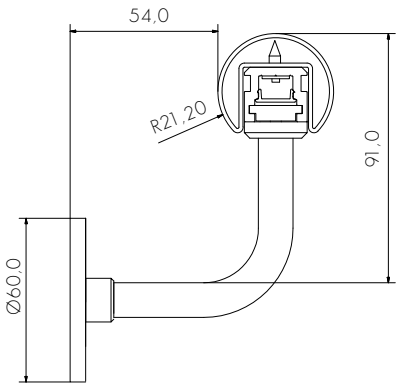
Offspring Profiles®
LIGHTING SYSTEMS

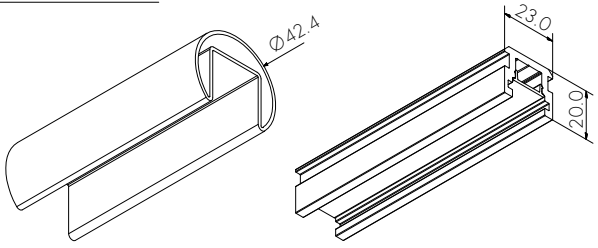
INSTRUCTIONS FOR INSTALLING MODULAR ASSEMBLIES OF:
RICHIE RAIL 20, RICHIE RAIL 26

1 PRODUCT OVERVIEW

RICHIE RAIL 20

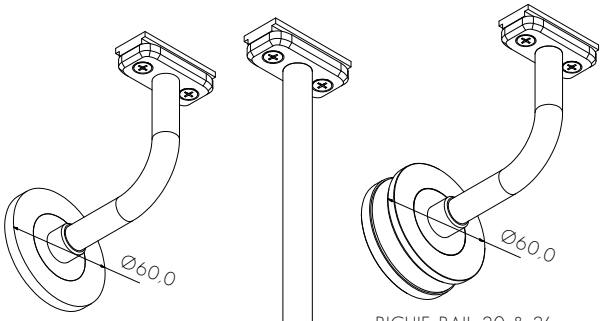


COMPONENTS:



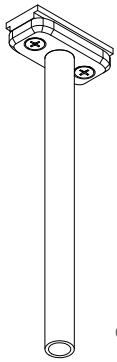
RICHIE RAIL 20 HANDRAIL

RICHIE RAIL 20 EXTRUSION WITH DIFFUSER

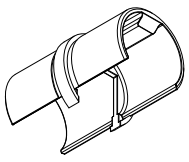


RICHIE RAIL 20 & 26 WALL BRACKET

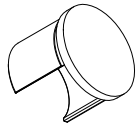
RICHIE RAIL 20 & 26 GLASS MOUNT BRACKET



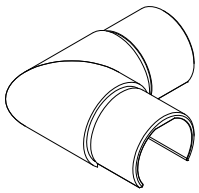
RICHIE RAIL 20 & 26 POST-TOP BRACKET



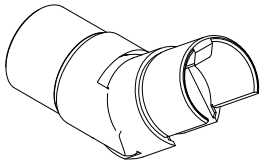
RICHIE RAIL 20 STRAIGHT JOINER



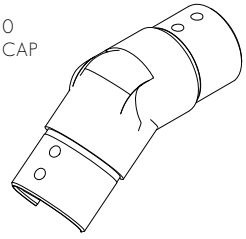
RICHIE RAIL 20 HANDRAIL END CAP



RICHIE RAIL 20 90 DEGREE JOINER

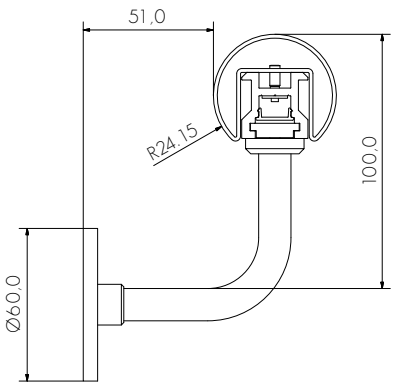


RICHIE RAIL 20 25-55 DEGREE UP VARIABLE ANGLE JOINER

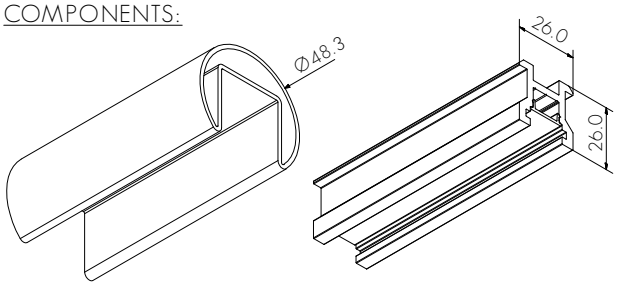


RICHIE RAIL 20 25-55 DEGREE DOWN VARIABLE ANGLE JOINER

RICHIE RAIL 26

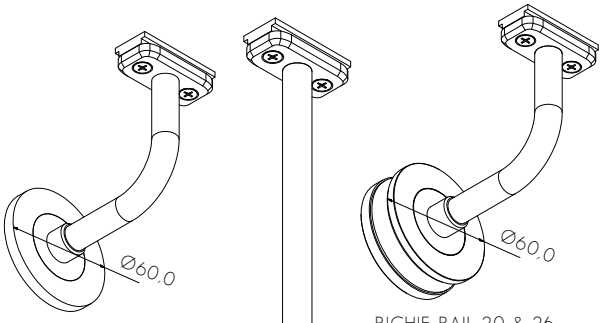


COMPONENTS:



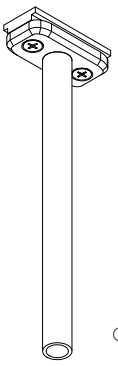
RICHIE RAIL 26 HANDRAIL

RICHIE RAIL 26 EXTRUSION WITH DIFFUSER

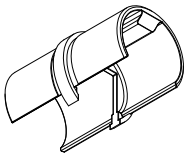


RICHIE RAIL 20 & 26 WALL BRACKET

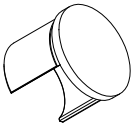
RICHIE RAIL 20 & 26 GLASS MOUNT BRACKET



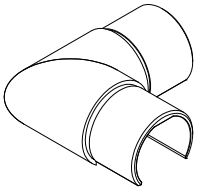
RICHIE RAIL 20 & 26 POST-TOP BRACKET



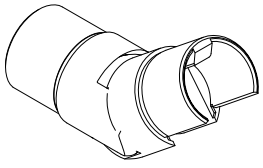
RICHIE RAIL 26 STRAIGHT JOINER



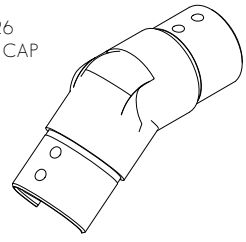
RICHIE RAIL 26 HANDRAIL END CAP



RICHIE RAIL 26 90 DEGREE JOINER



RICHIE RAIL 26 25-55 DEGREE UP VARIABLE ANGLE JOINER



RICHIE RAIL 26 25-55 DEGREE DOWN VARIABLE ANGLE JOINER

2 PLAN AND SET OUT HANDRAIL

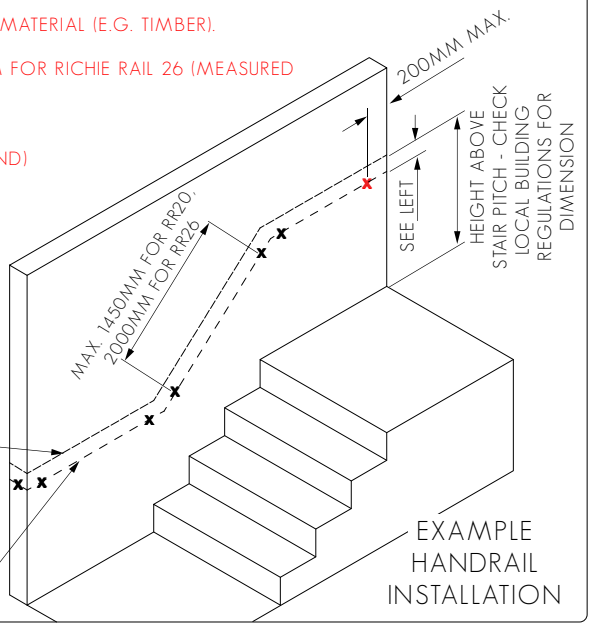
IMPORTANT NOTE: WALL BRACKETS SHOULD ALWAYS BE FIXED TO A SOLID MATERIAL (E.G. TIMBER).
MAXIMUM SPAN/DISTANCES:
- BETWEEN WALL BRACKETS IS 1450MM FOR RICHIE RAIL 20 AND 2000MM FOR RICHIE RAIL 26 (MEASURED PARALLEL WITH THE PITCH OF THE HANDRAIL)
- FROM A JOIN IS 100MM (AT LEAST ONE SIDE OF A JOIN)
- FROM AN END IS 200MM
- FROM A VARIABLE ANGLE BEND IS 100MM (AT LEAST ONE SIDE OF A BEND)
- FROM A 90° BEND IS 100MM (AT LEAST ONE SIDE OF A BEND)

1. MEASURE REQUIRED HEIGHT OF TOP OF HANDRAIL ABOVE STAIR PITCH (CHECK LOCAL BUILDING REGULATIONS FOR HEIGHT), FOR RICHIE RAIL 20, RUN A STRING OR LASER LINE 98MM BELOW THE REQUIRED FINISHED HEIGHT OF THE HANDRAIL. FOR RICHIE RAIL 26, RUN THE LINE AT 106MM BELOW. USE THIS LINE TO MARK THE FIXING POINTS. THIS LINE IS THE CENTRE LINE OF THE WALL BRACKET.

2. MARK FIXING POINT LOCATIONS ALONG THE STRING LINE, BASED ON THE MAXIMUM SPANS/DISTANCES AS OUTLINED ABOVE.

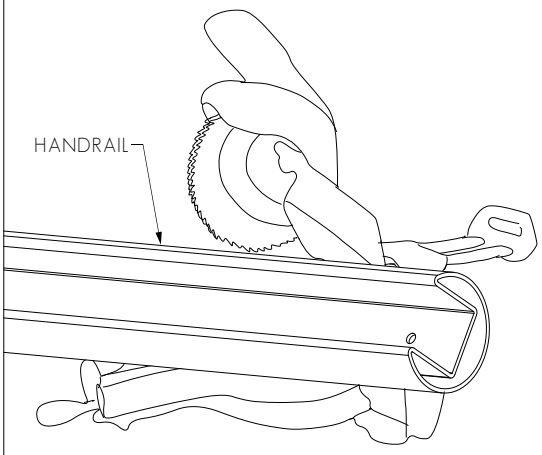
3. BRING POWER CABLE THROUGH WALL AT THE CENTRE OF THE FIXING POINT. THIS WOULD TYPICALLY BE AT ONE END OF THE HANDRAIL.

x = CABLE ENTRY FIXING POINT x = FIXING POINTS

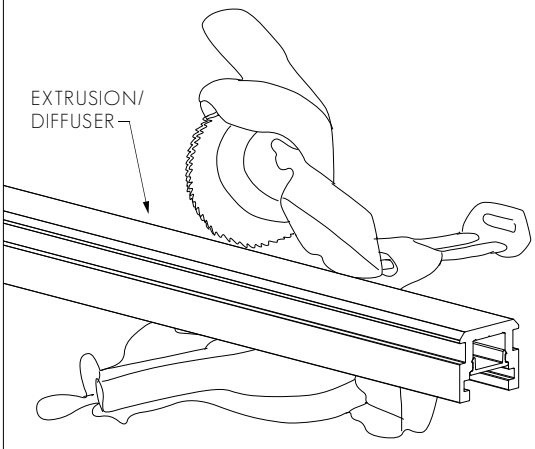


EXAMPLE HANDRAIL INSTALLATION

3 CUT HANDRAIL TO REQUIRED LENGTH

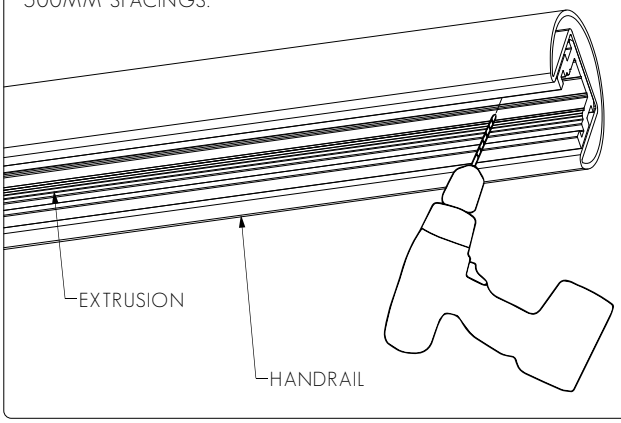


4 CUT EXTRUSION AND DIFFUSER TO REQUIRED LENGTHS

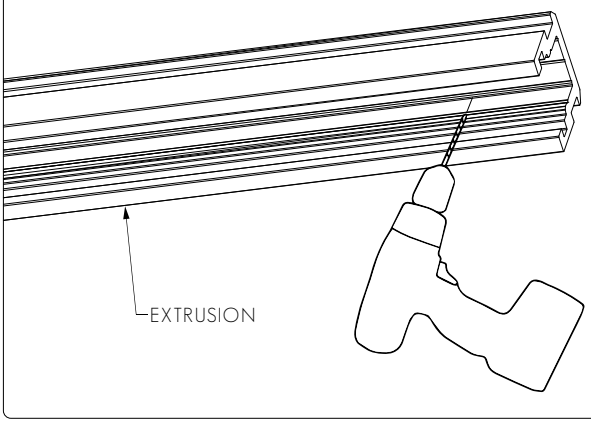


5 DRILL 3.5MM PILOT HOLES THROUGH EXTRUSION AND HANDRAIL

MOUNTING HOLES SHOULD BE DRILLED AT APPROXIMATELY 500MM SPACINGS.



6 RE-DRILL 4.5MM HOLES IN EXTRUSION ONLY, THEN COUNTERSINK



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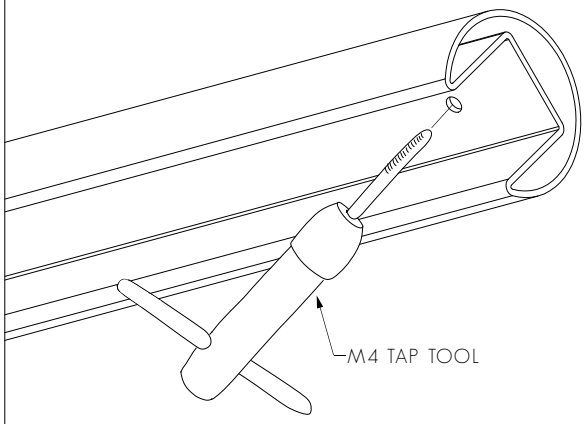
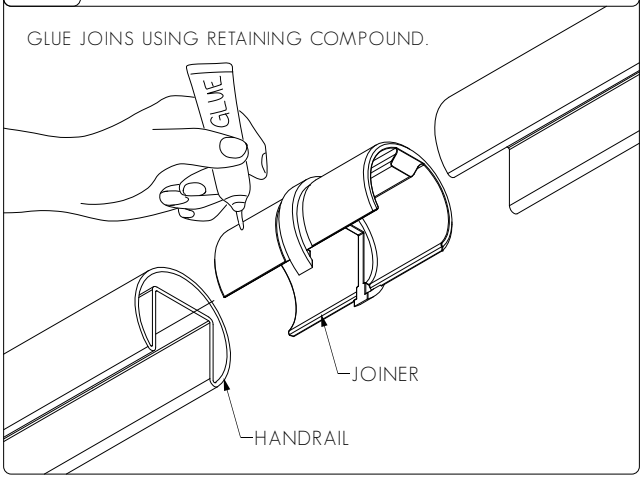
7 TAP M4 THREADS IN HANDRAIL HOLES



8 JOIN HANDRAILS

GLUE JOINS USING RETAINING COMPOUND.



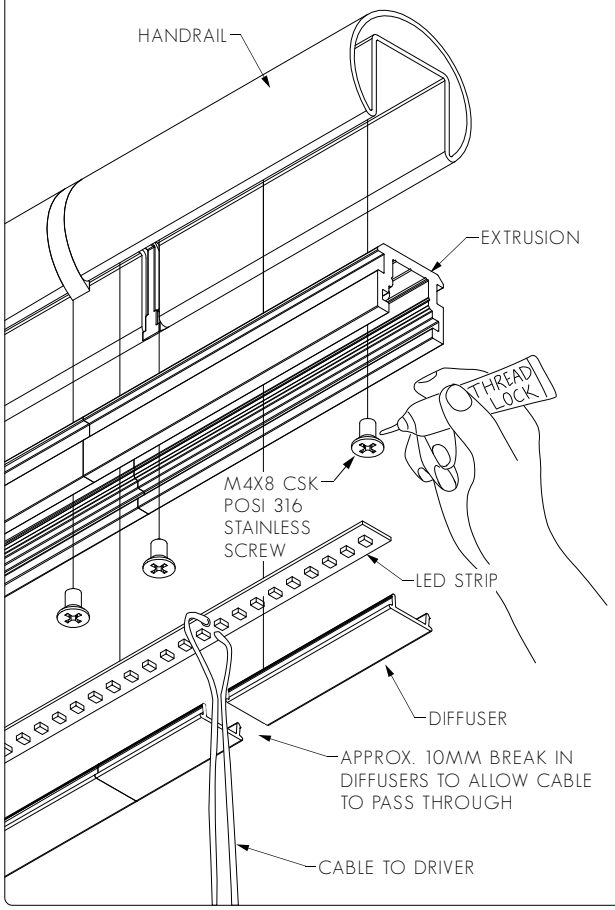
9 MOUNT EXTRUSION, LED STRIP, DIFFUSER

1. SCREW ALUMINIUM EXTRUSION INTO HANDRAIL USING M4X8 CSK POSI 316 STAINLESS SCREW. USE A THREAD LOCK COMPOUND TO SECURE SCREWS.

2. IMPORTANT: BEFORE MOUNTING LED STRIP, CLEAN EXTRUSION USING AN ALCOHOL-BASED CLEANER.

3. REMOVE BACKING FROM LED STRIP TO EXPOSE STICKY SURFACE. LAY LED STRIP INTO EXTRUSION.

4. CLIP DIFFUSERS INTO EXTRUSION. SEE FIG. 1 ON FOLLOWING PAGE FOR MORE INFO.



10 INSERT WALL BRACKET SLIDERS, END CAPS OR VARIABLE ANGLE JOINERS

1. INSERT WALL BRACKET SLIDERS INTO EXTRUSION.

2. GLUE END CAPS, 90 DEGREE JOINERS AND/OR VARIABLE ANGLE JOINERS TOGETHER WITH RETAINING COMPOUND. SEE FIG. 1 ON FOLLOWING PAGE FOR MORE INFO.

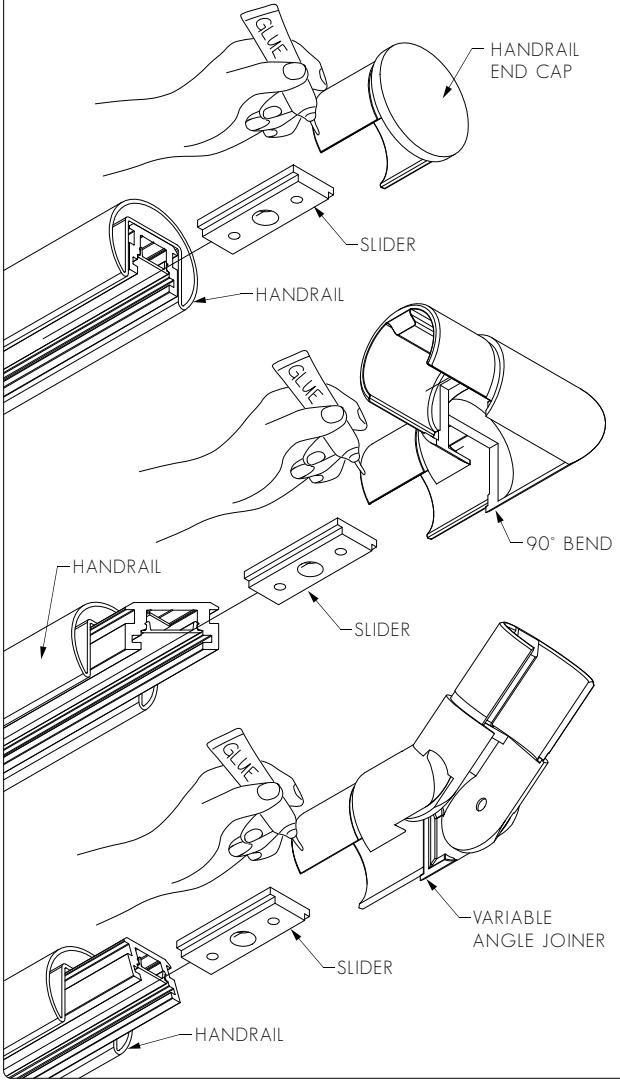
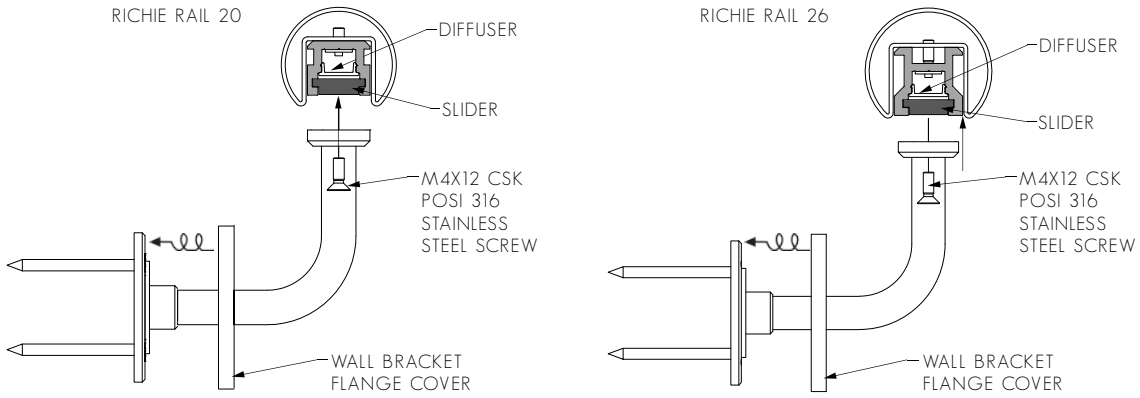


FIG. 1



11 INSTALL WALL BRACKETS (SEE FIGS. 2 & 3 FOR GLASS MOUNT & POST TOP BRACKETS)

1. PLACE WALL BRACKET FLANGE COVER OVER WALL BRACKET AND LEAVE LOOSE.

2. FEED LED STRIP TAILS DOWN THROUGH WALL BRACKET.

3. SCREW WALL BRACKETS TO WALL BRACKET SLIDERS USING M4X12 CSK POSI 316 STAINLESS STEEL SCREWS AND SECURE SCREWS WITH THREAD LOCK COMPOUND.

4. CONNECT LED STRIP TAILS TO DRIVER.

5. SCREW WALL BRACKETS TO WALL USING 8GX50 CSK 316 STAINLESS STEEL SCREWS.

6. SCREW WALL BRACKET FLANGE COVER ONTO WALL BRACKET FLANGE.

7. SEE FIG. 1 ABOVE FOR MORE INFO. SEE FIGS. 3 & 4 FOR GLASS MOUNT AND POST TOP BRACKETS)

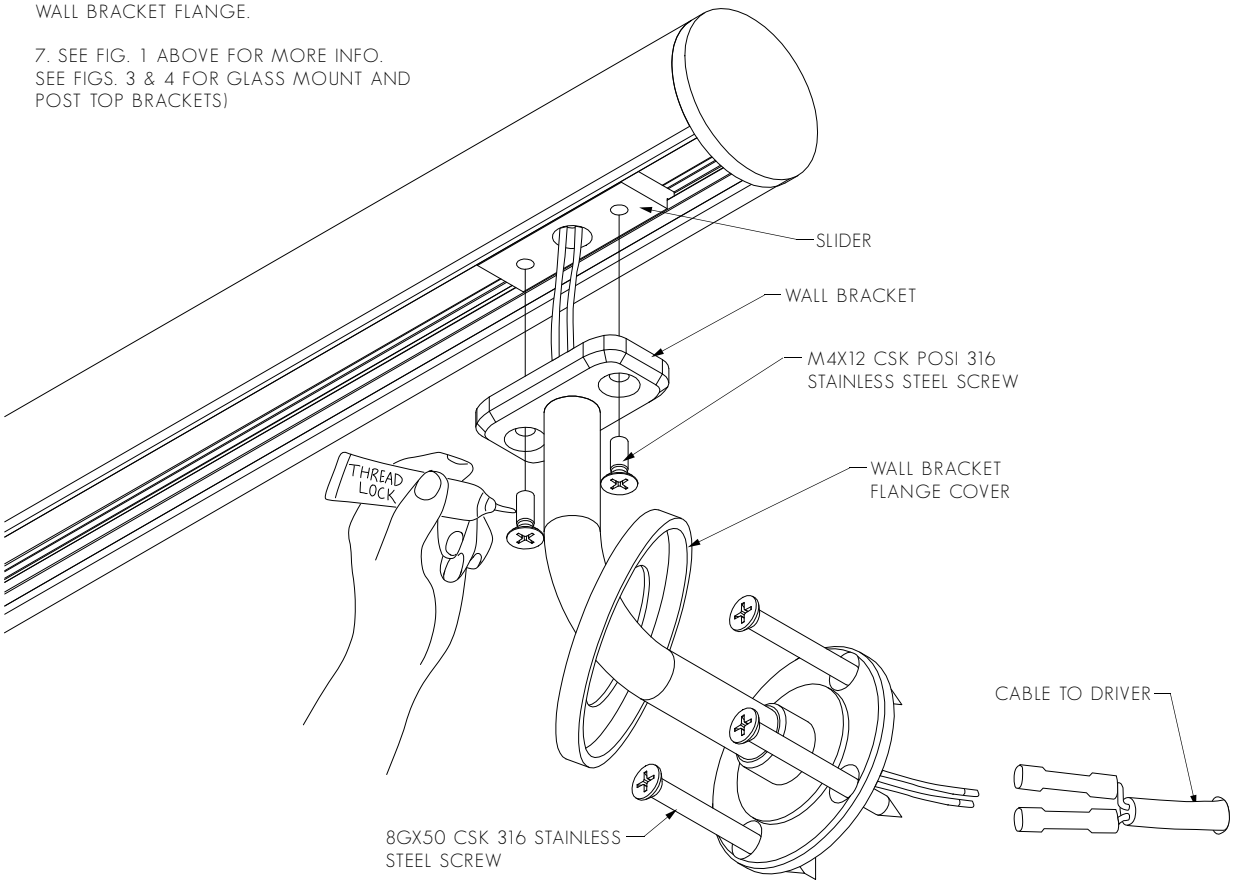


FIG. 2 - INSTALL GLASS MOUNT BRACKETS, IF REQUIRED

1. DRILL HOLES IN GLASS BALUSTRADE USING A 22MM DIAMOND HOLE SAW.

2. PLACE WASHER ON FRONT PLATE, THEN INSERT FRONT PLATE INTO HOLE IN GLASS.

3. INSERT 2MM SPACERS INTO HOLE IN GLASS - USE 5X SPACERS FOR 10MM GLASS, 6X SPACERS FOR 12MM GLASS AND SO ON.

4. ADD SECOND WASHER TO BACK PLATE AND TIGHTEN M8X25MM SET SCREW. USE THREAD LOCKER TO SECURE SCREW.

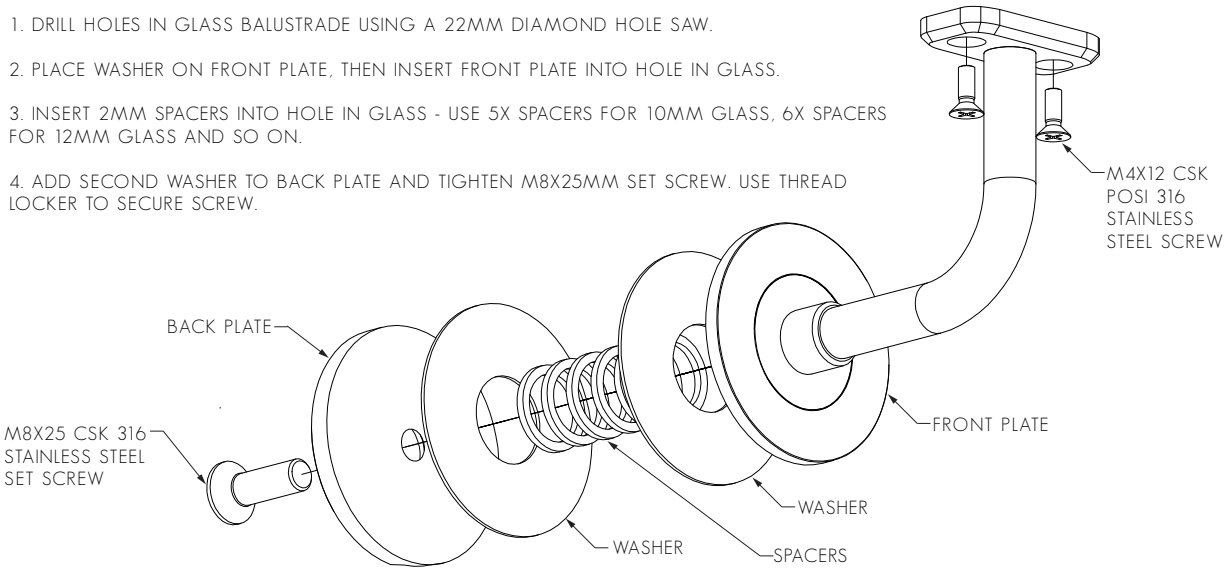


FIG. 3 - INSTALL POST-TOP BRACKETS, IF REQUIRED

1. WELD DISCS TO TOP AND TO DESIRED DEPTH INSIDE POST (BLANK TUBE) TO SUPPORT POST TOP BRACKET.

2. IF REQUIRED, POST TOP BRACKETS CAN BE BENT TO SUIT THE ANGLES OF RAMPS OR STAIRS.

2. FEED LED STRIP TAILS DOWN THROUGH POST TOP BRACKET.

3. SCREW POST TOP BRACKETS TO SLIDERS USING M4X8 CSK POSI 316 STAINLESS STEEL SCREWS AND SECURE SCREWS WITH THREAD LOCK COMPOUND.

4. CONNECT LED STRIP TAILS TO DRIVER.

5. FIX POSTS TO FLOOR / GROUND.

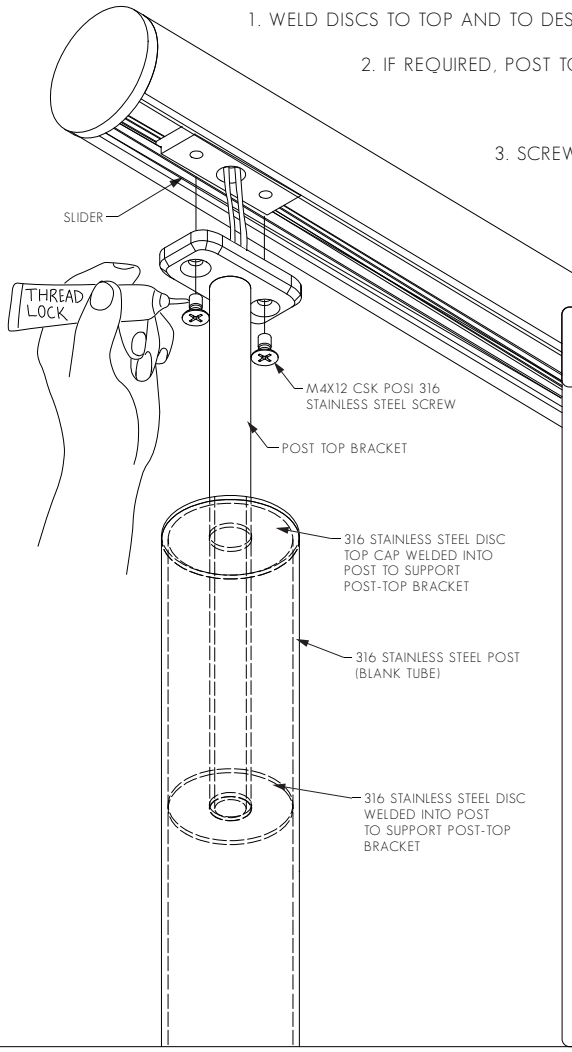
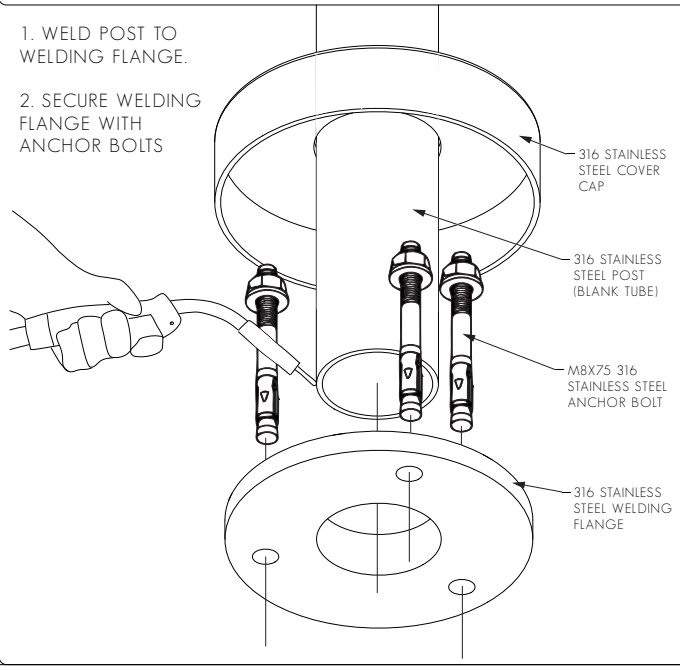


FIG. 4 - INSTALL POST FOOTING, IF REQUIRED

1. WELD POST TO WELDING FLANGE.

2. SECURE WELDING FLANGE WITH ANCHOR BOLTS