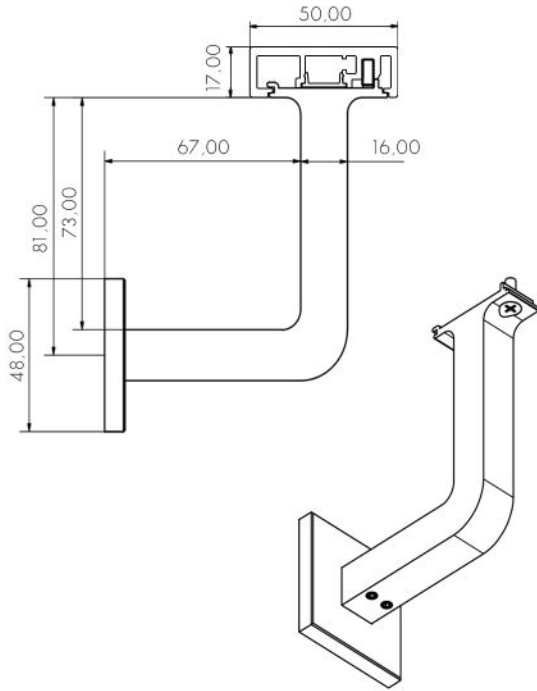


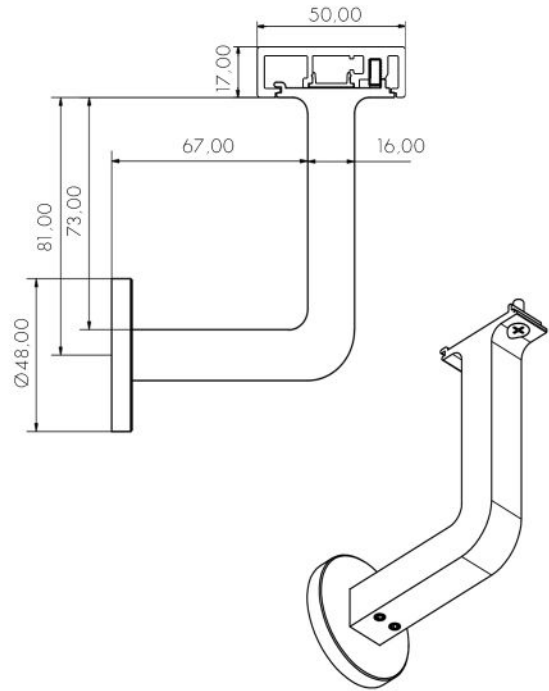
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PRODUCT OVERVIEW

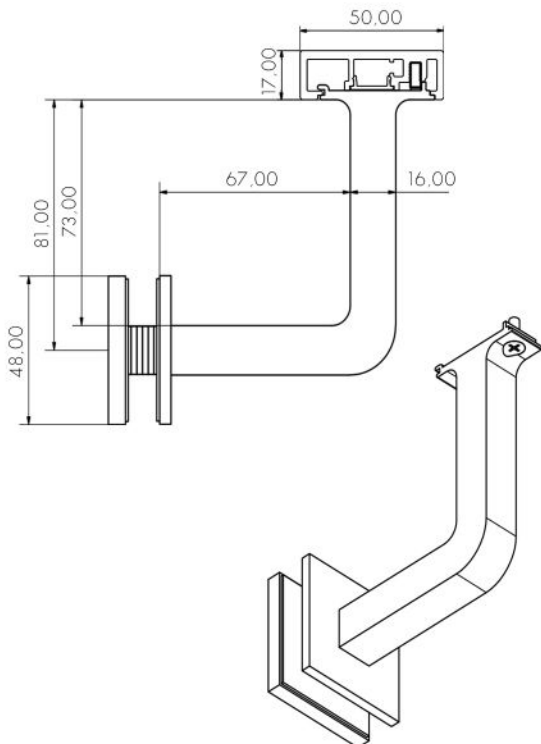
RICHIE RAIL 17 WALL BRACKET WITH SQUARE COVER  
(ELEVATION & 3D VIEW SHOWN)



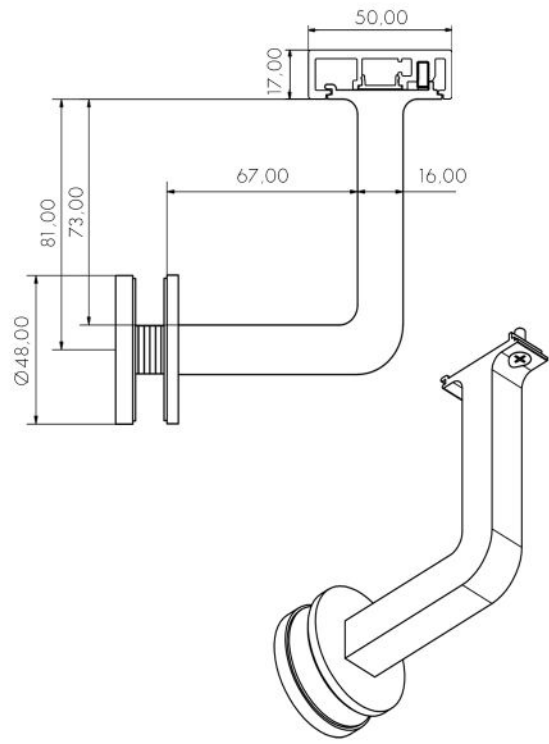
RICHIE RAIL 17 WALL BRACKET WITH ROUND COVER  
(ELEVATION & 3D VIEW SHOWN)



RICHIE RAIL 17 GLASS MOUNT BRACKET WITH SQUARE COVER  
(ELEVATION & 3D VIEW SHOWN)



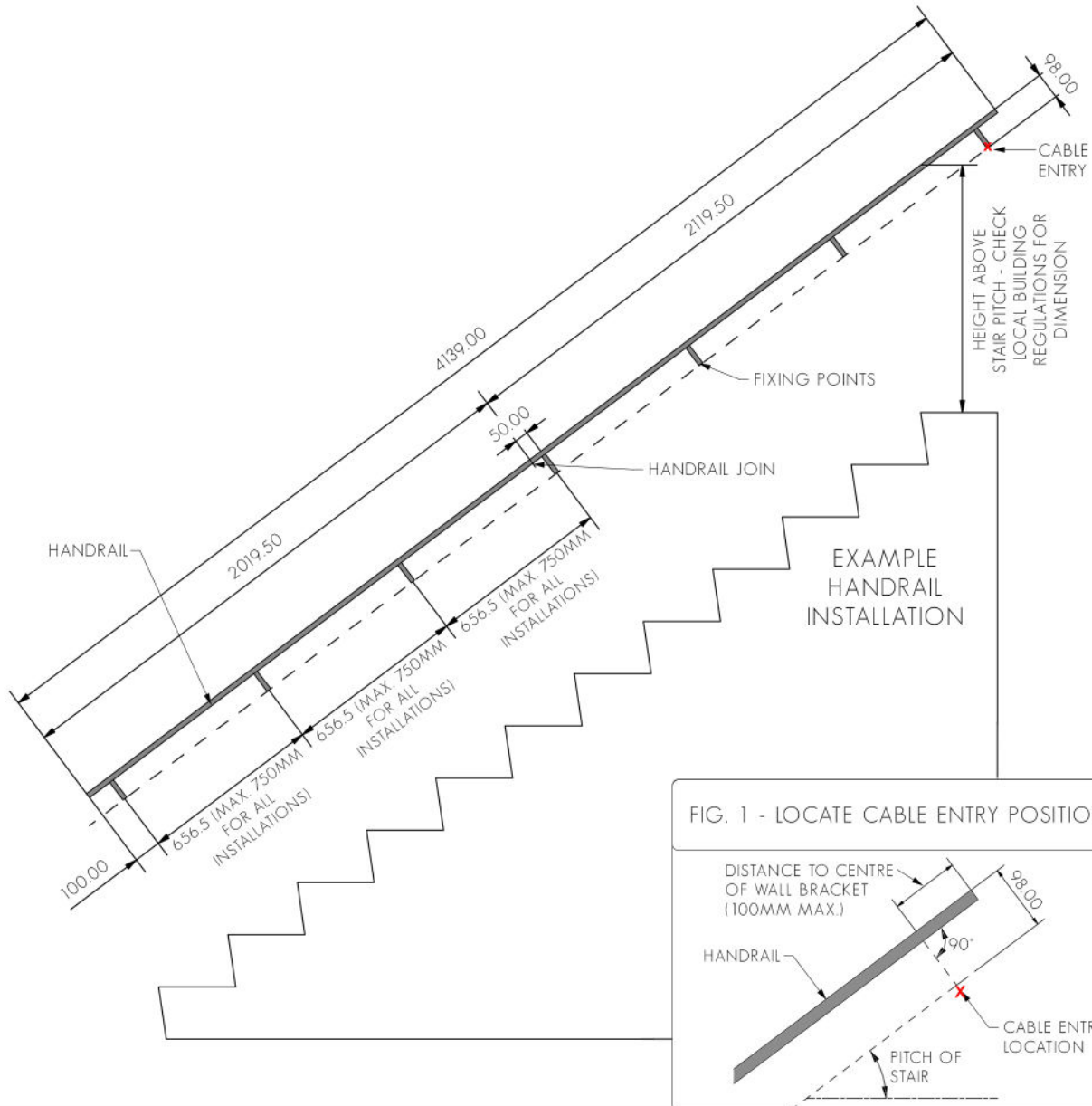
RICHIE RAIL 17 GLASS MOUNT BRACKET WITH ROUND COVER  
(ELEVATION & 3D VIEW SHOWN)



2 PLAN INSTALLATION

**IMPORTANT NOTE: MAX. DISTANCE BETWEEN WALL BRACKETS IS 750MM (MEASURED PARALLEL WITH THE PITCH OF THE HANDRAIL). WALL BRACKETS SHOULD BE WITHIN 100MM OF AN END. MAX. DISTANCE FROM A JOIN IS 50MM. I.E. THERE MUST BE AT LEAST ONE WALL BRACKET NO FURTHER THAN 50MM FROM A JOIN. WALL BRACKETS SHOULD ALWAYS BE FIXED TO A SOLID MATERIAL (E.G. TIMBER). DO NOT USE ON TEXTURED SURFACES SUCH AS ROUGH CAST WALLS OR TEXTURED WALL PAPER.**

1. DETERMINE TOTAL LENGTH OF HANDRAIL - CHECK LOCAL BUILDING REGULATIONS FOR HANDRAIL LENGTH REQUIREMENTS. IF THE HANDRAIL REQUIRES JOINS, DO NOT CUT HANDRAIL UNTIL STEP 4.
2. MEASURE REQUIRED HEIGHT OF TOP OF HANDRAIL ABOVE STAIR PITCH (CHECK LOCAL BUILDING REGULATIONS FOR HEIGHT), THEN RUN A STRING LINE 98MM BELOW THE REQUIRED FINISHED HEIGHT OF THE HANDRAIL. USE THIS LINE TO MARK THE FIXING POINTS. THIS LINE IS ALSO THE CENTRE LINE OF THE MOUNT FLANGE (SEE PAGE 2 FOR MORE DETAIL).
3. FIXING POINTS MUST BE WITHIN 100MM OF EACH END OF THE HANDRAIL. TO WORK OUT THE REMAINING FIXING POINTS, DIVIDE THE DISTANCE BETWEEN THE FIRST AND LAST FIXING POINTS INTO EQUAL LENGTHS, MAKING SURE THEY ARE NO FURTHER APART THAN 750MM. MARK THE LOCATIONS.
4. IF THE HANDRAIL REQUIRES NO JOINS, GO TO STEP 5. IF THE HANDRAIL REQUIRES JOINS, ENSURE THE JOIN WILL BE 50MM FROM A FIXING POINT. CUT HANDRAIL LENGTHS ACCORDINGLY. ONLY USE A VERY SHARP BLADE SUITABLE FOR ALUMINIUM. CUT MUST BE ACCURATE AND CLEAN.
5. BRING POWER CABLE THROUGH WALL AT THE CENTRE OF THE FIXING POINT. THIS WOULD TYPICALLY BE AT ONE END OF THE HANDRAIL - SEE FIG.1.



3 INSTALL WALL BRACKETS

**IMPORTANT NOTE: MAX. DISTANCE BETWEEN WALL BRACKETS IS 750MM (MEASURED PARALLEL WITH THE PITCH OF THE HANDRAIL). WALL BRACKETS SHOULD BE WITHIN 100MM OF AN END. MAX. DISTANCE FROM A JOIN IS 50MM. I.E. THERE MUST BE AT LEAST ONE WALL BRACKET NO FURTHER THAN 50MM FROM A JOIN. WALL BRACKETS SHOULD ALWAYS BE FIXED TO A SOLID MATERIAL (E.G. TIMBER). DO NOT USE ON TEXTURED SURFACES SUCH AS ROUGH CAST WALLS OR TEXTURED WALL PAPER.**

1. IF USING PLASTERBOARD SPACERS (RECOMMENDED FOR ANY INSTALLATION ONTO PLASTERBOARD), USE A 38MMØ HOLE SAW TO DRILL HOLE THROUGH PLASTERBOARD AND REMOVE CUT-OUT TO REVEAL TIMBER FIXING BEHIND. IF SPACER IS NOT REQUIRED, GO TO STEP 3.
2. FEED LOW VOLTAGE CABLE FROM WALL THROUGH PLASTERBOARD SPACER AND INSERT SPACER INTO HOLE IN PLASTERBOARD.
3. FEED LOW VOLTAGE CABLE THROUGH MOUNT FLANGE AND SCREW-FIX MOUNT FLANGE (SEE FIG.2 FOR MOUNT FLANGE ORIENTATION) TO WALL. ENSURE O-RING IS PROPERLY POSITIONED IN MOUNT FLANGE GROOVE.
4. PUSH COVER PLATE A SHORT WAY ONTO WALL BRACKET, THEN PUSH WALL BRACKET OVER MOUNT FLANGE. PUSH COVER PLATE OVER MOUNT FLANGE SO IT SITS TIGHT AGAINST WALL. LOCK WALL BRACKET TO MOUNT FLANGE USING THE 2X M4X5 GRUB SCREWS.
5. REPEAT STEPS FOR SOLID BRACKETS (THOSE WHICH DO NOT HAVE A POWER FEED).

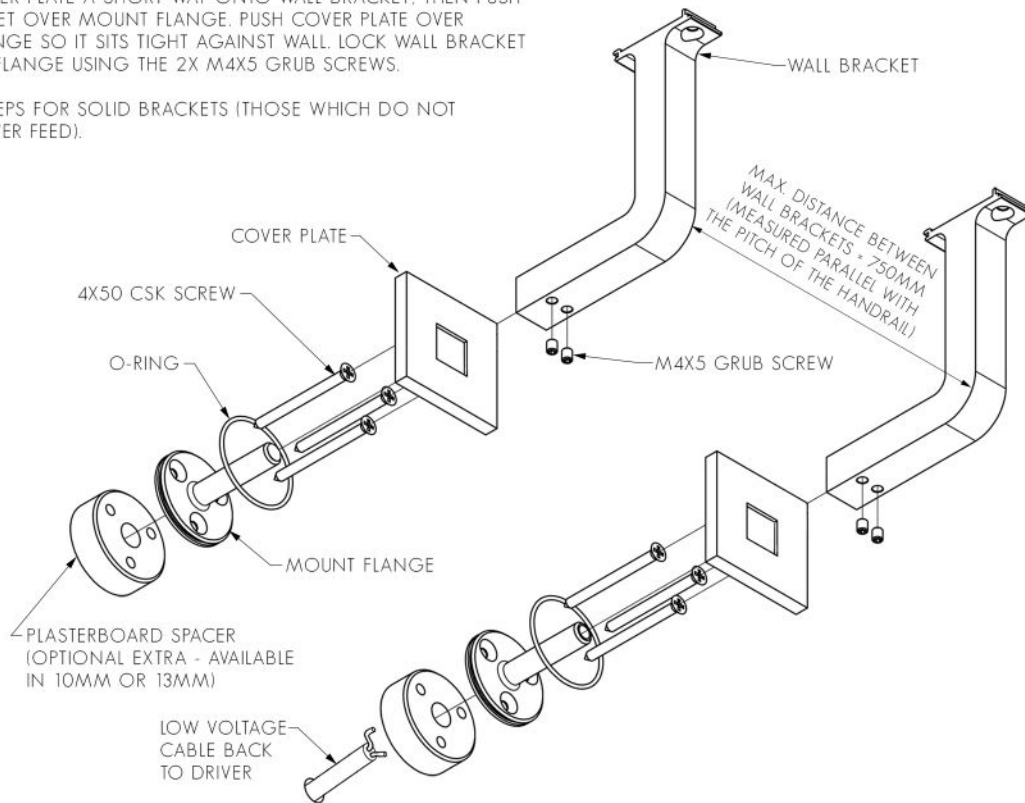


FIG. 2 - MOUNT FLANGE SHOULD BE ORIENTATED WITH TWO SCREWS AT TOP

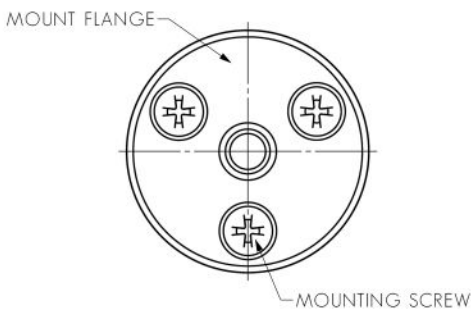


FIG. 3 - ENSURE WALL BRACKETS ARE ASSEMBLED CORRECTLY & FIRMLY.

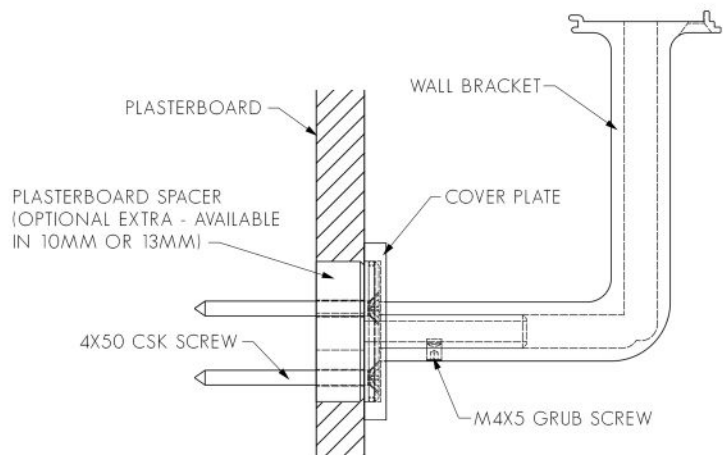
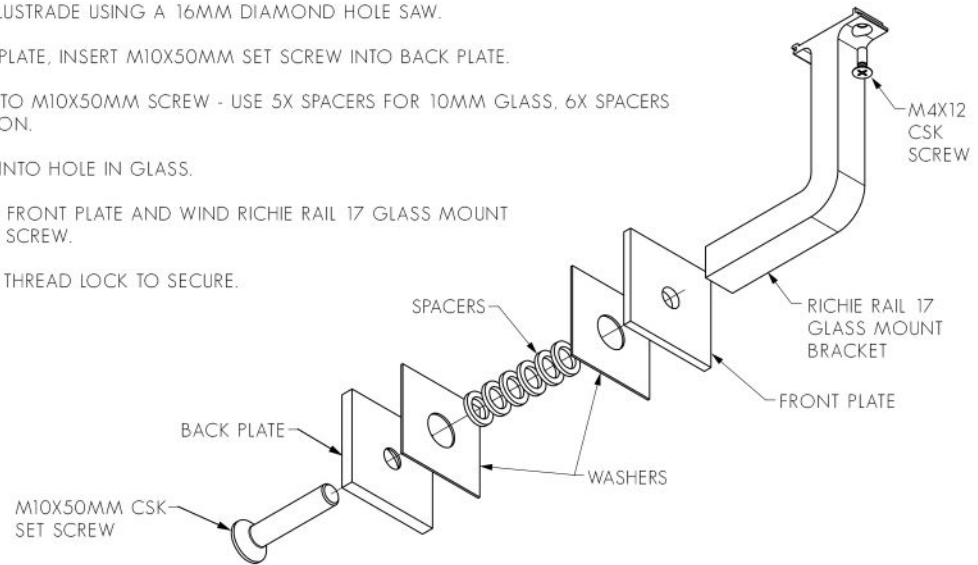




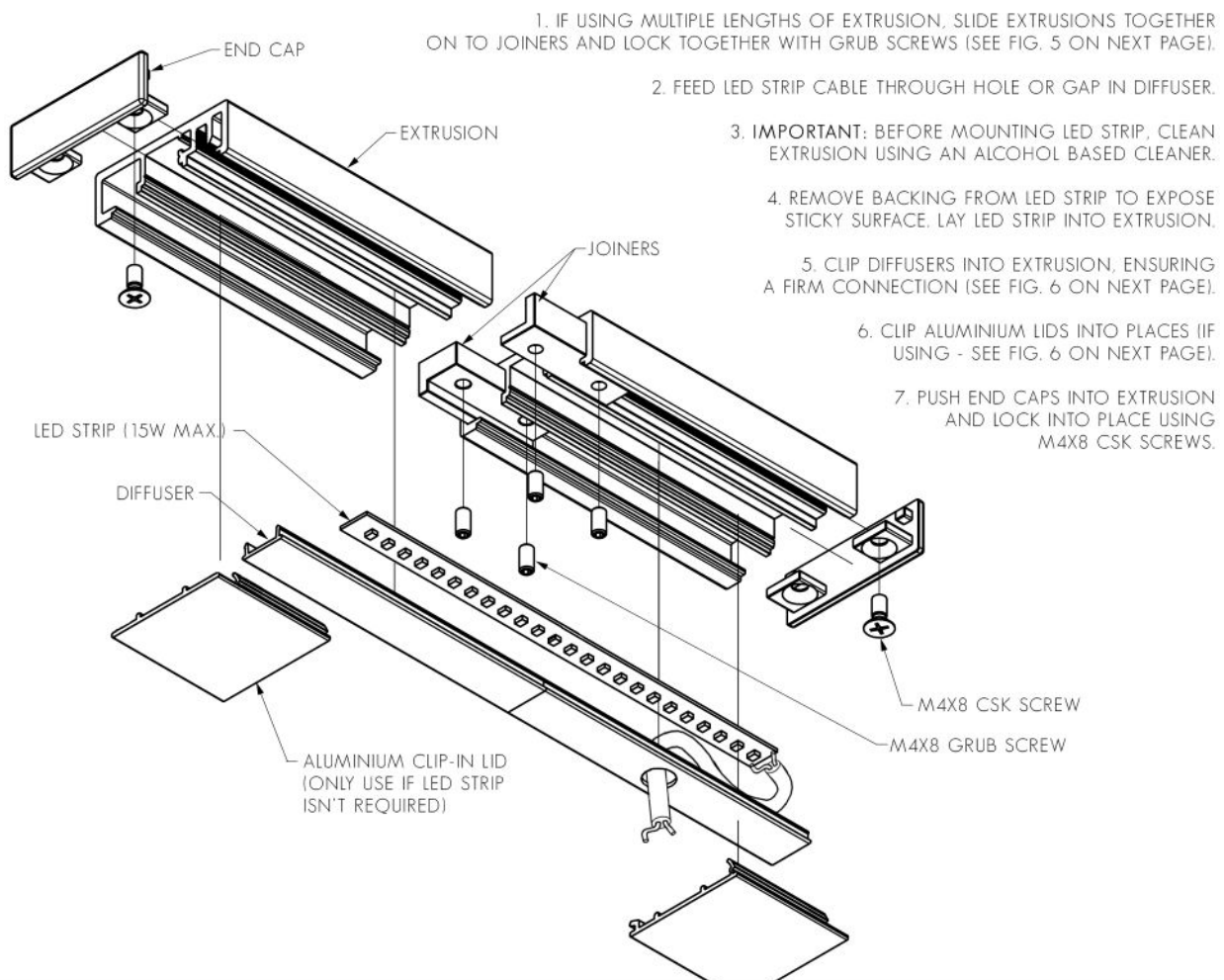
FIG. 4 - INSTALL GLASS MOUNT BRACKETS, IF REQUIRED

1. DRILL HOLES IN GLASS BALUSTRADE USING A 16MM DIAMOND HOLE SAW.
2. PLACE WASHER ON BACK PLATE, INSERT M10X50MM SET SCREW INTO BACK PLATE.
3. PLACE 2MM SPACERS ONTO M10X50MM SCREW - USE 5X SPACERS FOR 10MM GLASS, 6X SPACERS FOR 12MM GLASS AND SO ON.
4. INSERT SCREW ASSEMBLY INTO HOLE IN GLASS.
5. ADD SECOND WASHER TO FRONT PLATE AND WIND RICHE RAIL 17 GLASS MOUNT BRACKET ONTO M10X50MM SCREW.
6. TIGHTEN SCREW AND USE THREAD LOCK TO SECURE.



#### 4 INSTALL JOINERS, END CAPS & LED STRIP

**NOTE: RICHE RAIL 17 EXTRUSION IS NOT SYMMETRICAL. ONE SIDE HAS AN EXTRUDED SCREW RAIL WHICH MUST BE ON THE SIDE FARTHEST FROM THE WALL. SEE FIGURES 3 OR 4 BELOW FOR DIRECTION.**



1. IF USING MULTIPLE LENGTHS OF EXTRUSION, SLIDE EXTRUSIONS TOGETHER ON TO JOINERS AND LOCK TOGETHER WITH GRUB SCREWS (SEE FIG. 5 ON NEXT PAGE).

2. FEED LED STRIP CABLE THROUGH HOLE OR GAP IN DIFFUSER.

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

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

5. CLIP DIFFUSERS INTO EXTRUSION, ENSURING A FIRM CONNECTION (SEE FIG. 6 ON NEXT PAGE).

6. CLIP ALUMINIUM LIDS INTO PLACES (IF USING - SEE FIG. 6 ON NEXT PAGE).

7. PUSH END CAPS INTO EXTRUSION AND LOCK INTO PLACE USING M4X8 CSK SCREWS.

FIG. 5 - ENSURE JOINERS ARE LOCKED TOGETHER TIGHTLY

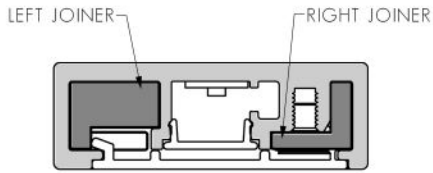
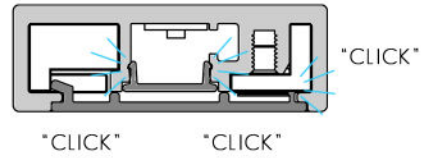


FIG. 6 - ENSURE DIFFUSER & LID ARE MOUNTED SECURELY



5 INSTALL EXTRUSION ON TO WALL BRACKETS

1. MAKE ELECTRICAL CONNECTION - SOLDER AND SHRINK LOW VOLTAGE CABLES TOGETHER AND PUSH INTO WALL BRACKET.
2. AFFIX RICHIE RAIL 17 EXTRUSION TO WALL BRACKETS USING M4X12 CSK SCREWS PROVIDED. ENSURE THEY ARE TIGHT. SEE FIG. 7.

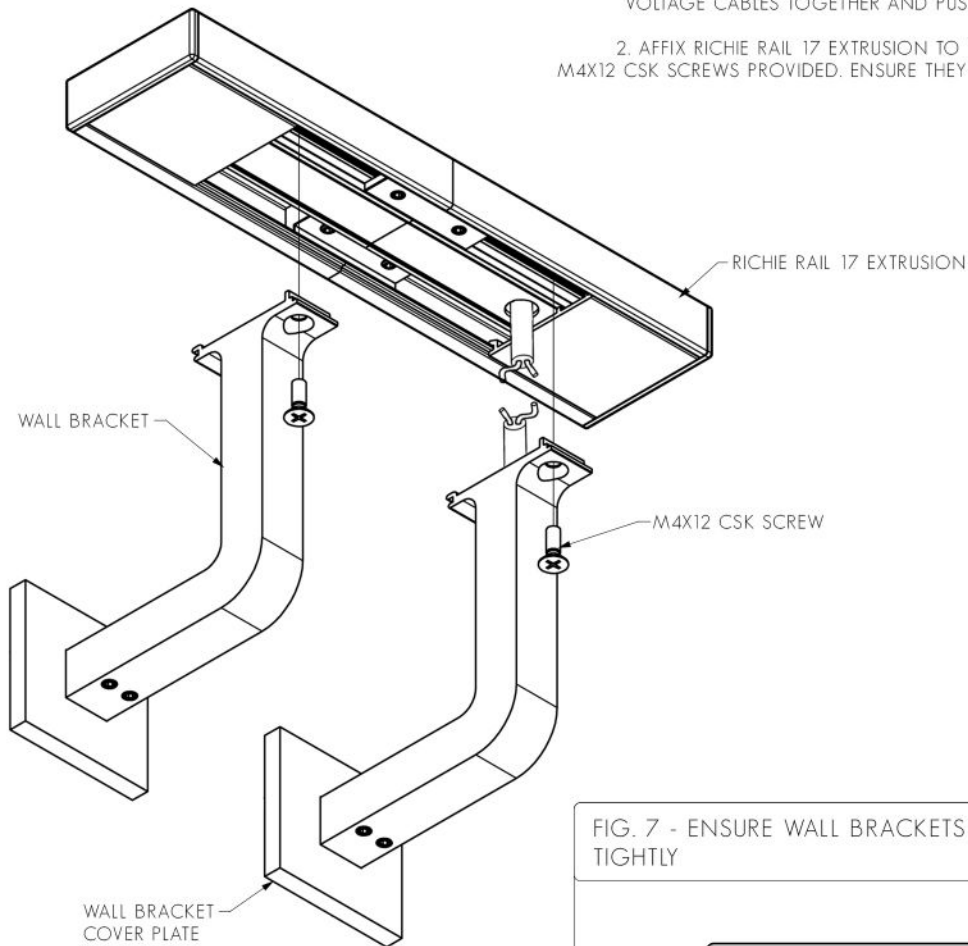


FIG. 7 - ENSURE WALL BRACKETS ARE SECURED TIGHTLY

