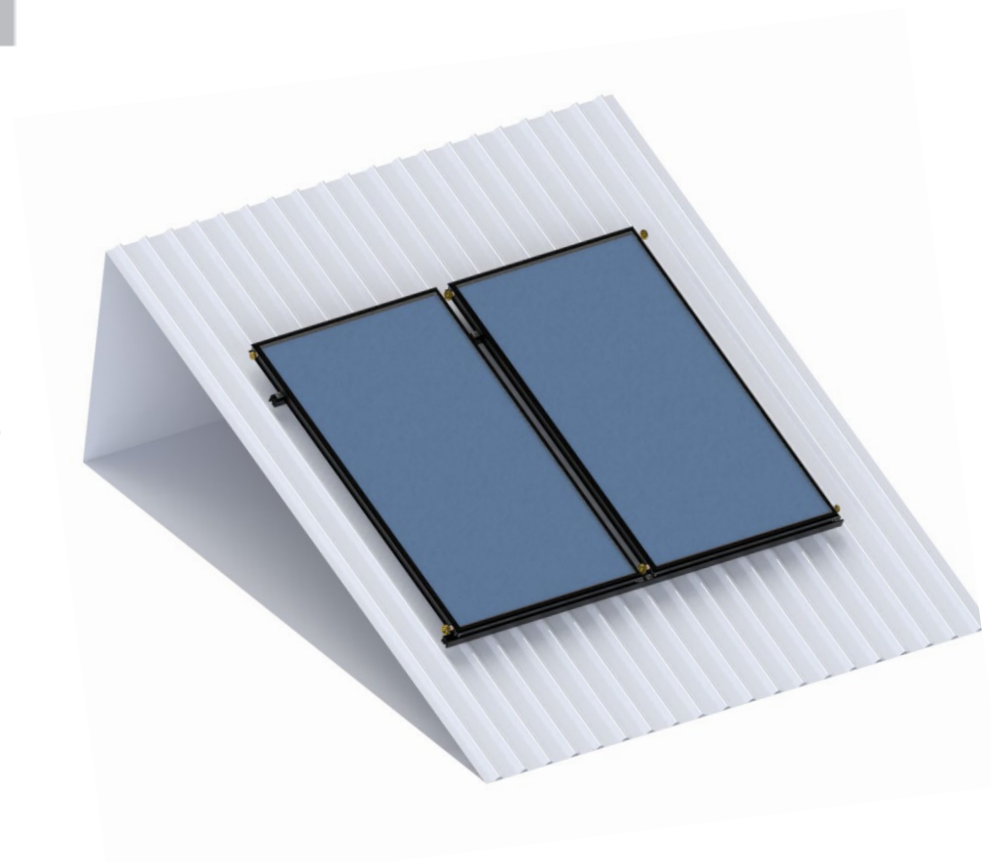


INSTALLATION GUIDE

heliodyne
SOLAR HOT WATER

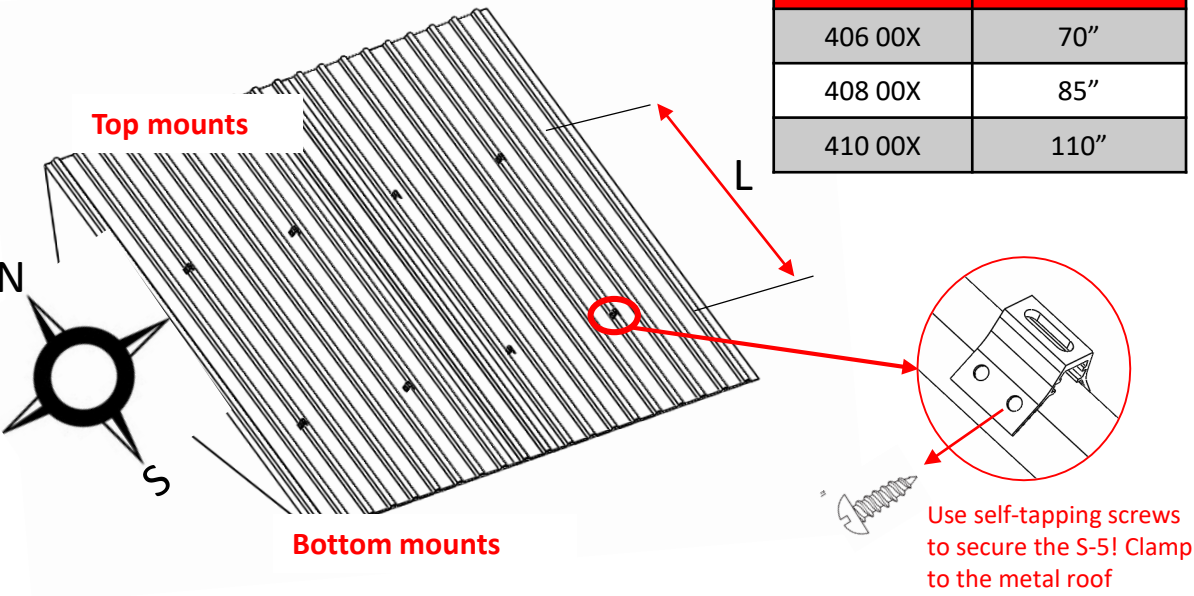
Flush mount for metal roofs
using Helio Rail- Dual
collector

RAIL 002 000B & LBMR 000 000



**EXCELLENCE
BY DESIGN**

Step 1 -Mark the point where the S-5! will be mounted on the roof *



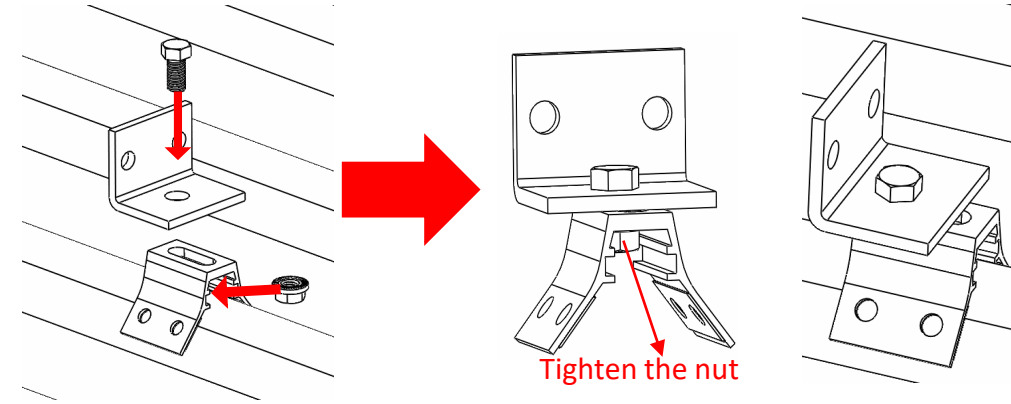
*Ensure the placement of the S-5! on the roof secures them to the roof rafters/ structure or as per the PE recommendation** to maintain structural integrity.

**As per the Design Basis – Provided by Honolulu Plumbing Department, calculations by the PE recommend the following attachment configurations:

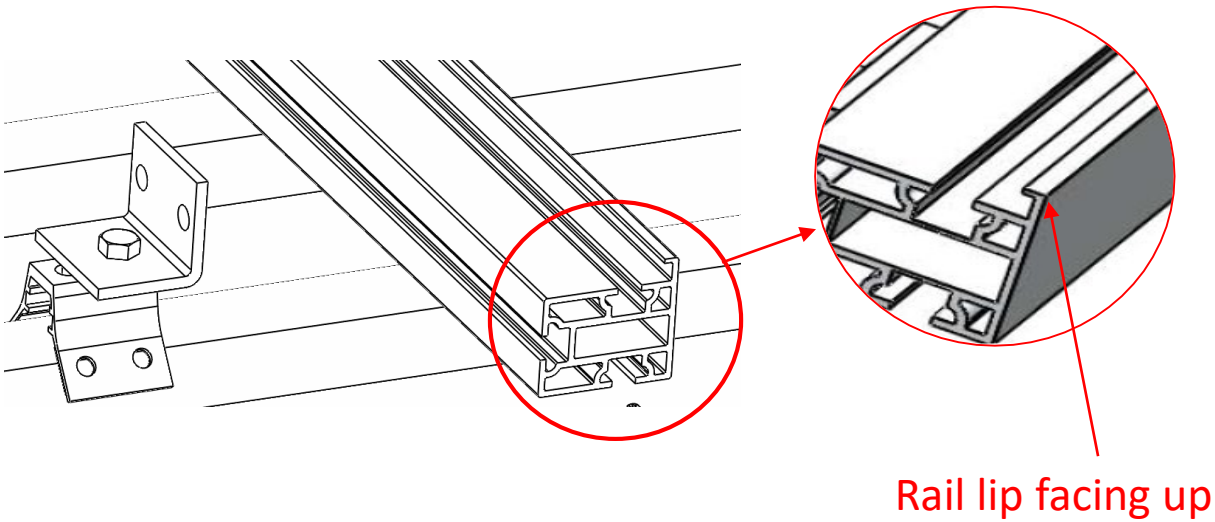
EXPOSURE CATEGORY	TOTAL NUMBER OF ATTACHMENTS
EXPOSURE B	8
EXPOSURE C	10
EXPOSURE D	12

Step 2 – Install the S-5! on the roof, refer to the S-5! Installation manual, for roof attachment detail refer to [Appendix A](#)

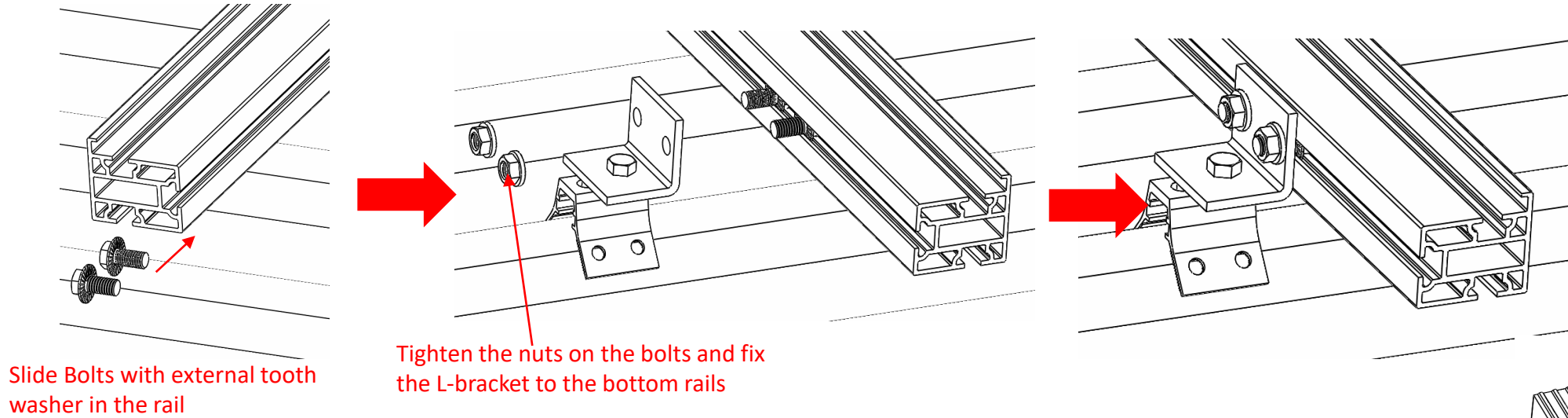
Step 3 – Connect the L- Bracket to the S-5! Clamps



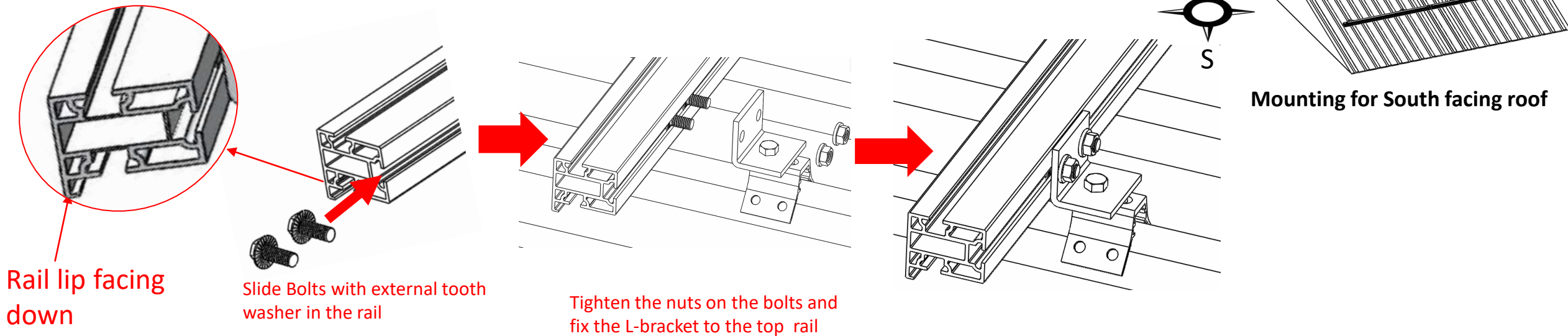
Step 4 –Rail set up for Bottom mounts



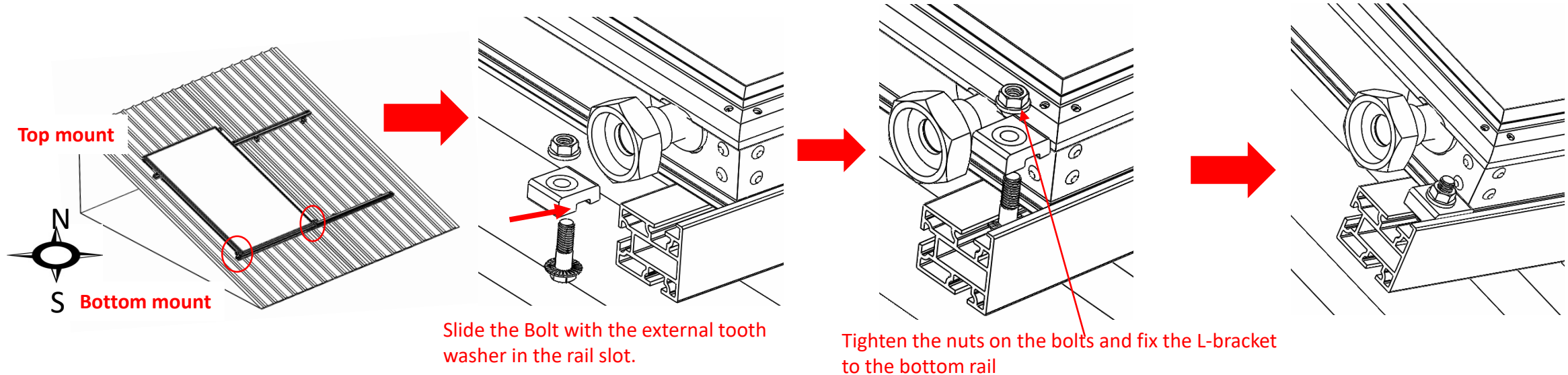
Step 5 – Installing the L bracket bottom rail



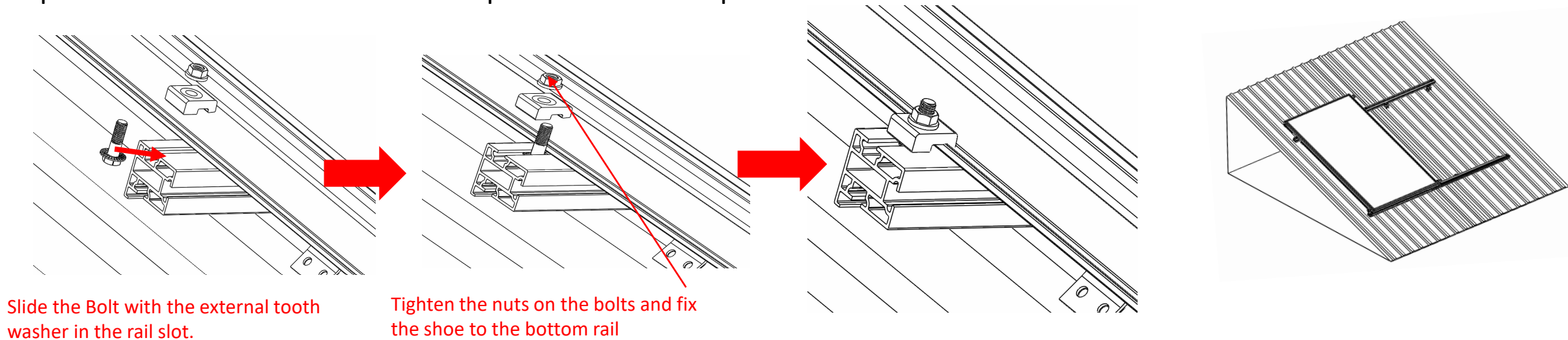
Step 6 – Rail set up for Top mounts and installing the L- bracket to the top rail



Step 5 – Slide in the 1st Gobi collector on the bottom rail and rest it on the top rail, secure the collector with the bottom rail using the helio-clip

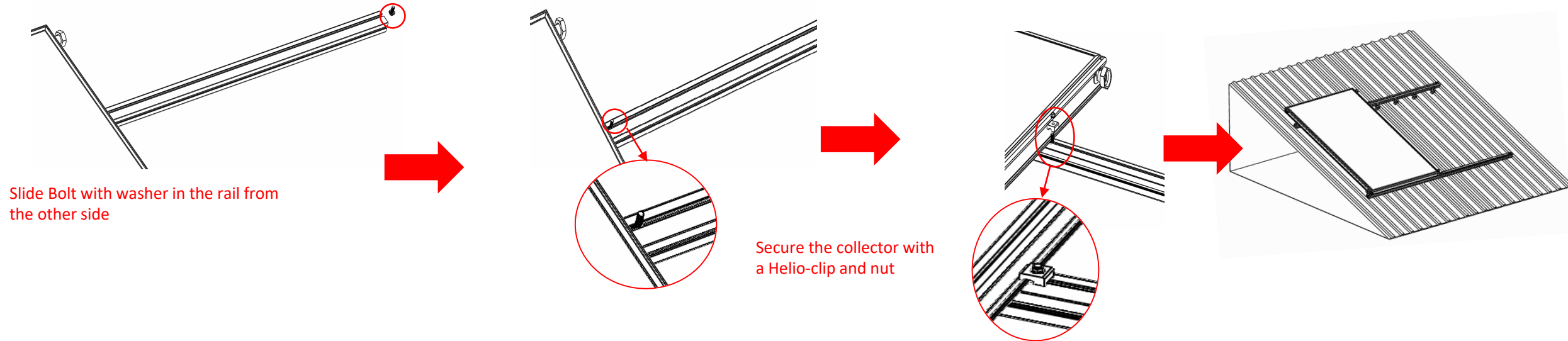


Step 6 – Secure the collector to the top rail with helio-clip

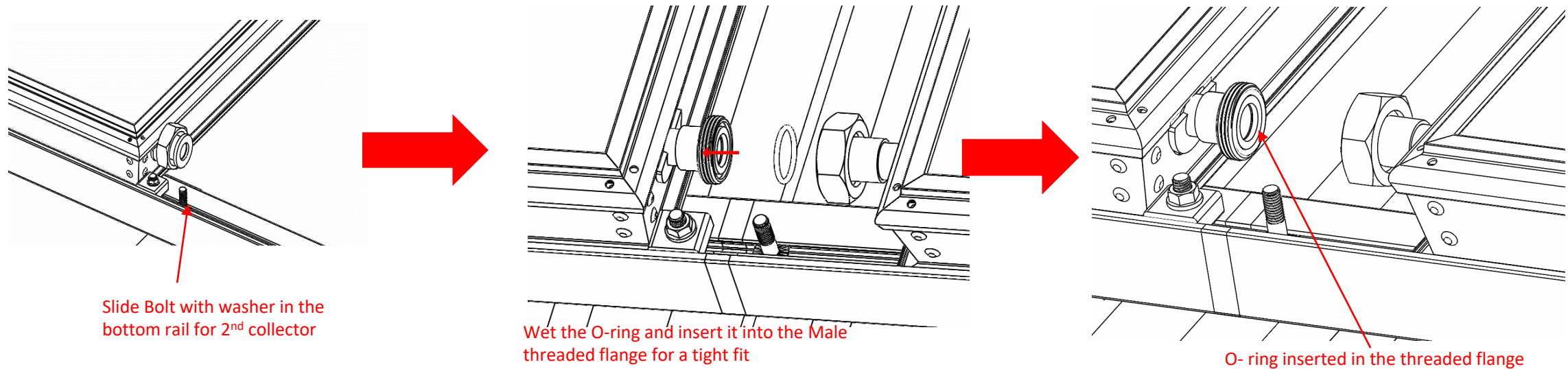


Mounting for South facing roof

Step 10 –Fixing the other side of the collector

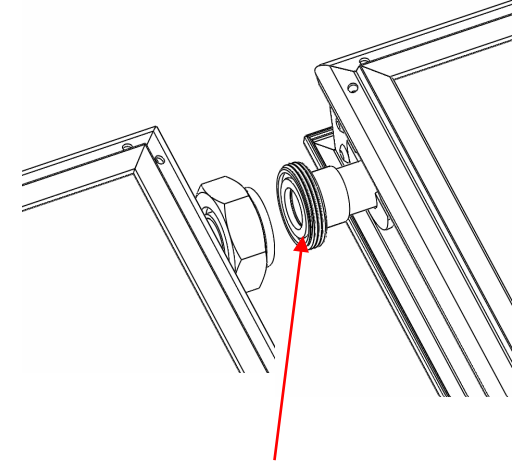
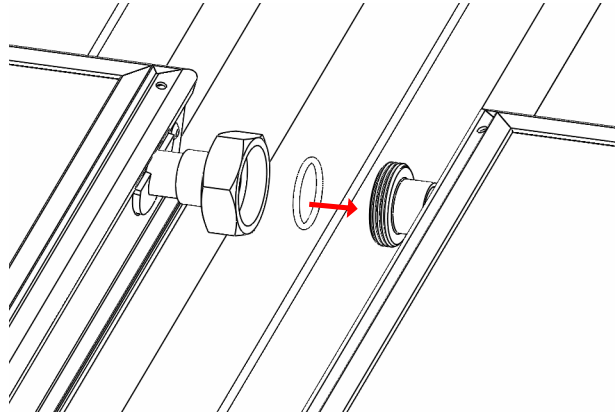
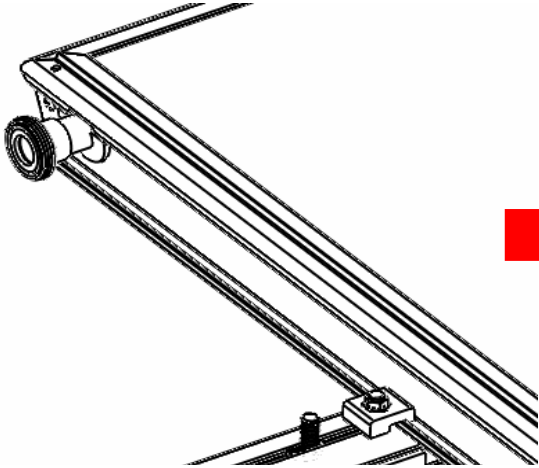


Step 11 – Slide the 2nd collector on the bottom rail and add O-rings* between the two collectors



**Do not over-tighten or use Teflon tape to tighten the DOS unions. If the O-rings are correctly placed and tightened, they will ensure a watertight seal.*

Step 12 – Rest the 2nd collector on the top rail and add O-ring* between the two collectors



Slide Bolt with washer in the top rail for 2nd collector and rest the 2nd collector on the top rail

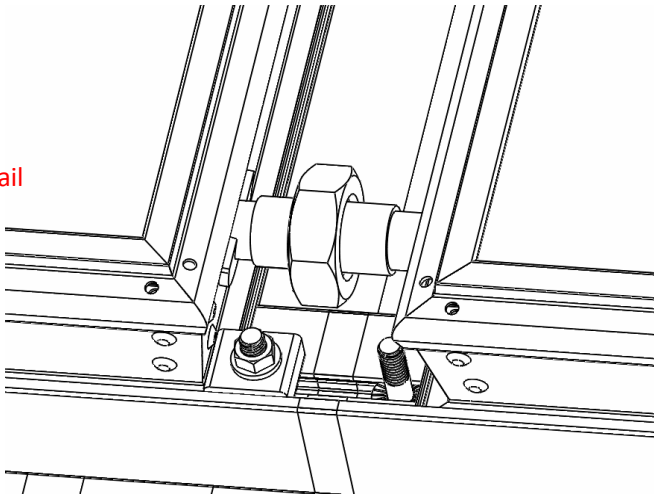
Wet the O-ring and insert it into the Male threaded flange for a tight fit

O-ring inserted in the threaded flange

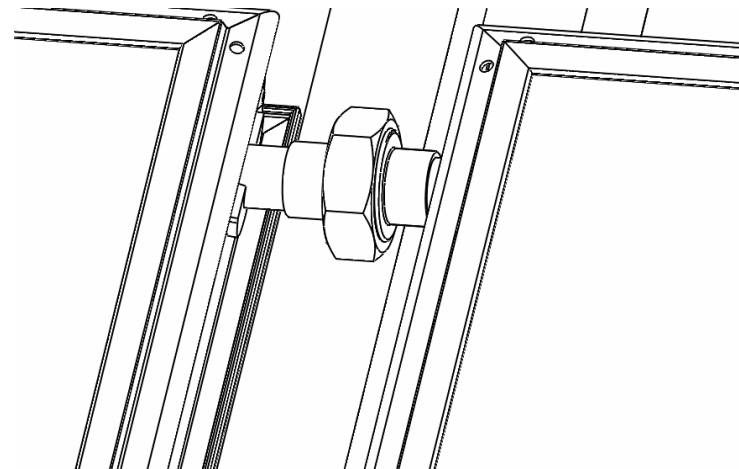
**Do not over-tighten or use Teflon tape to tighten the DOS unions. If the O-rings are correctly placed and tightened, they will ensure a watertight seal.*

Step 13 – Secure the both the DOS nut on the bottom and on the top

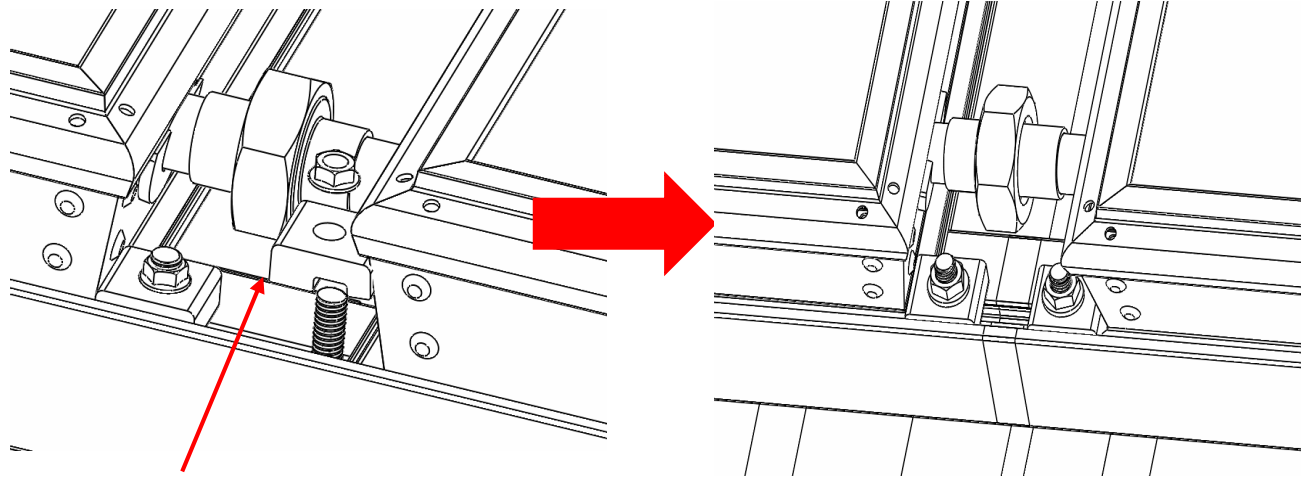
Bottom Rail



Top Rail

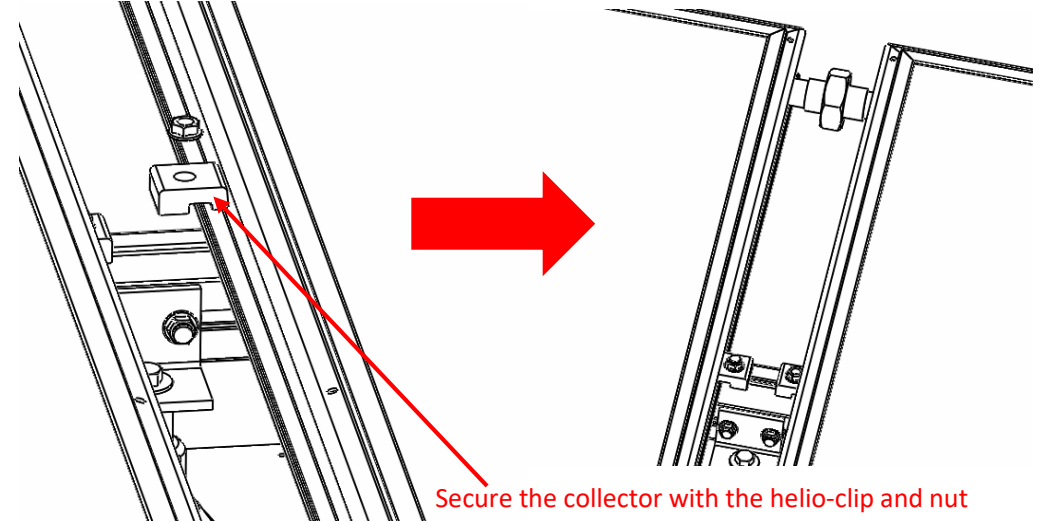


Step 14 – Secure the 2nd collector with the helio-clip



Secure the collector with the helio-clip and nut

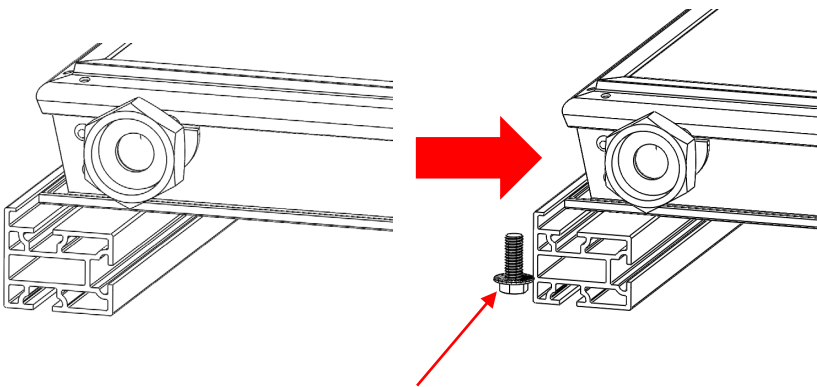
Bottom rail



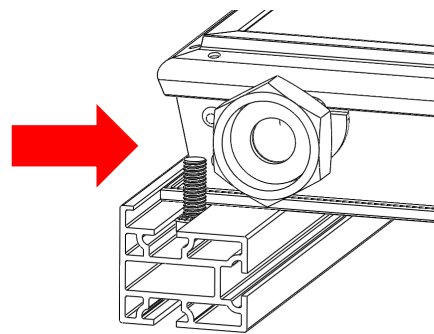
Secure the collector with the helio-clip and nut

Top rail

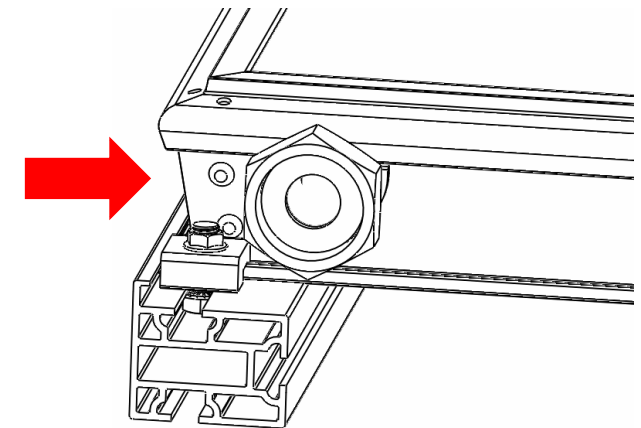
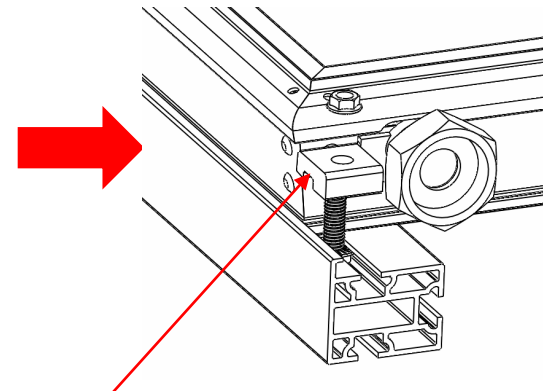
Step 15 – Secure the other side of the 2nd collector with the helio-clip on the bottom rail



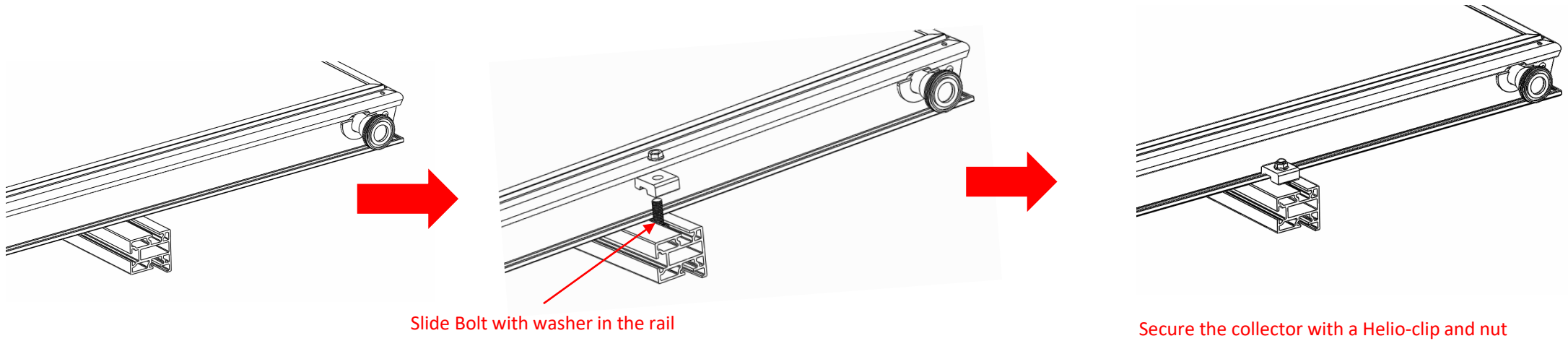
Slide Bolt with washer in the rail



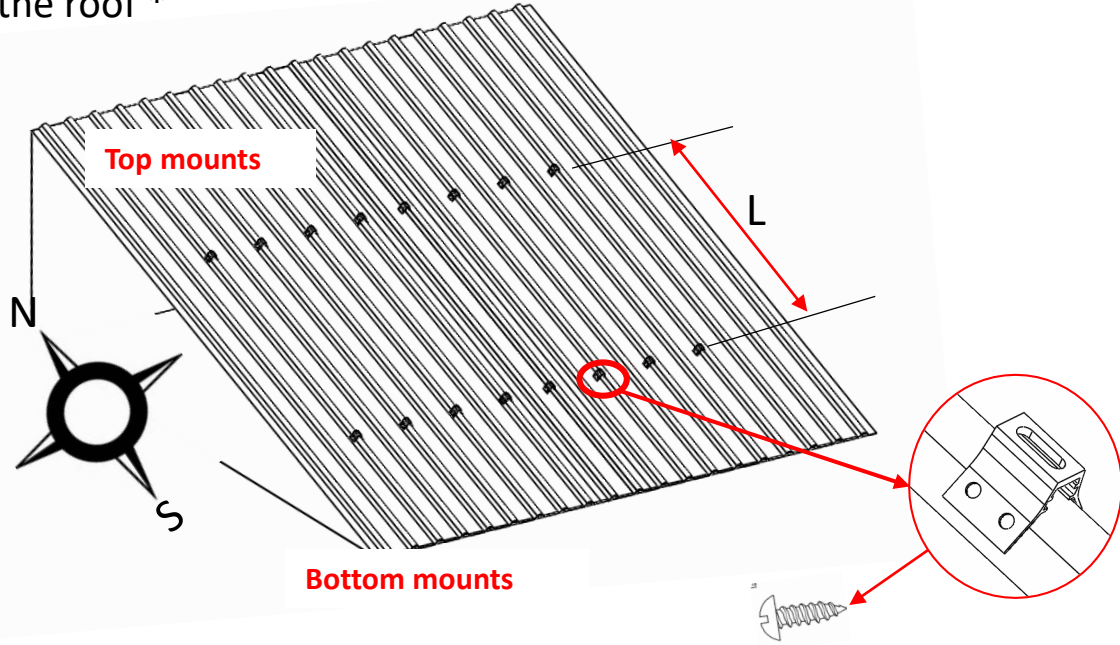
Secure the collector with a Helio-clip and nut



Step 16 – Secure the other side of the 2nd collector with the helio—clip on the top rail



Step 1 -Mark the point where the S-5! will be mounted on the roof *

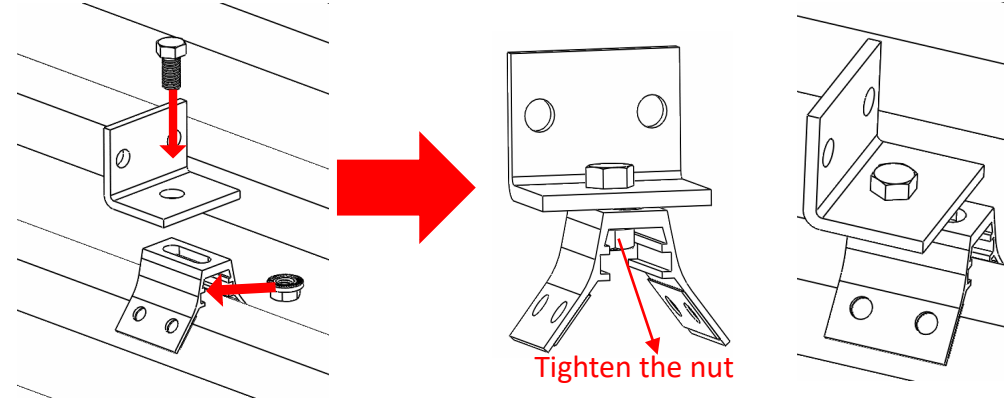


GOBI MODEL	L (INCHES)
406 00X	70"
408 00X	85"
410 00X	110"

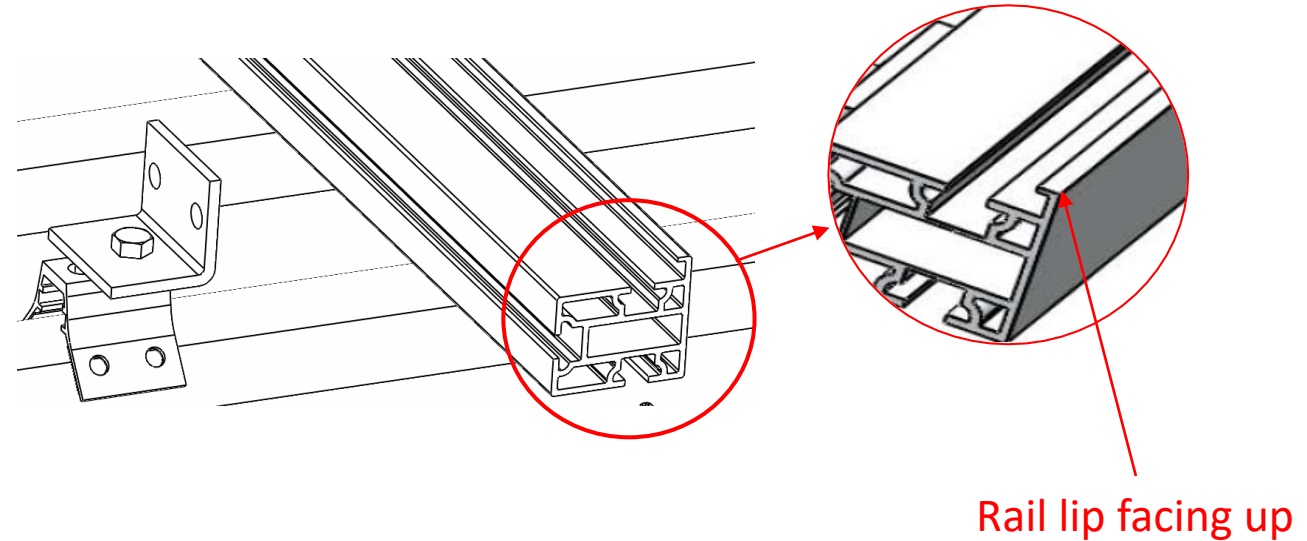
*Ensure the placement of the S-5! on the roof secures them to the roof rafters/ structure or as per the PE recommendation to maintain structural integrity.

Step 2 – Install the S-5! on the roof, refer to the S-5! Installation manual, for roof attachment detail refer to **Appendix A**

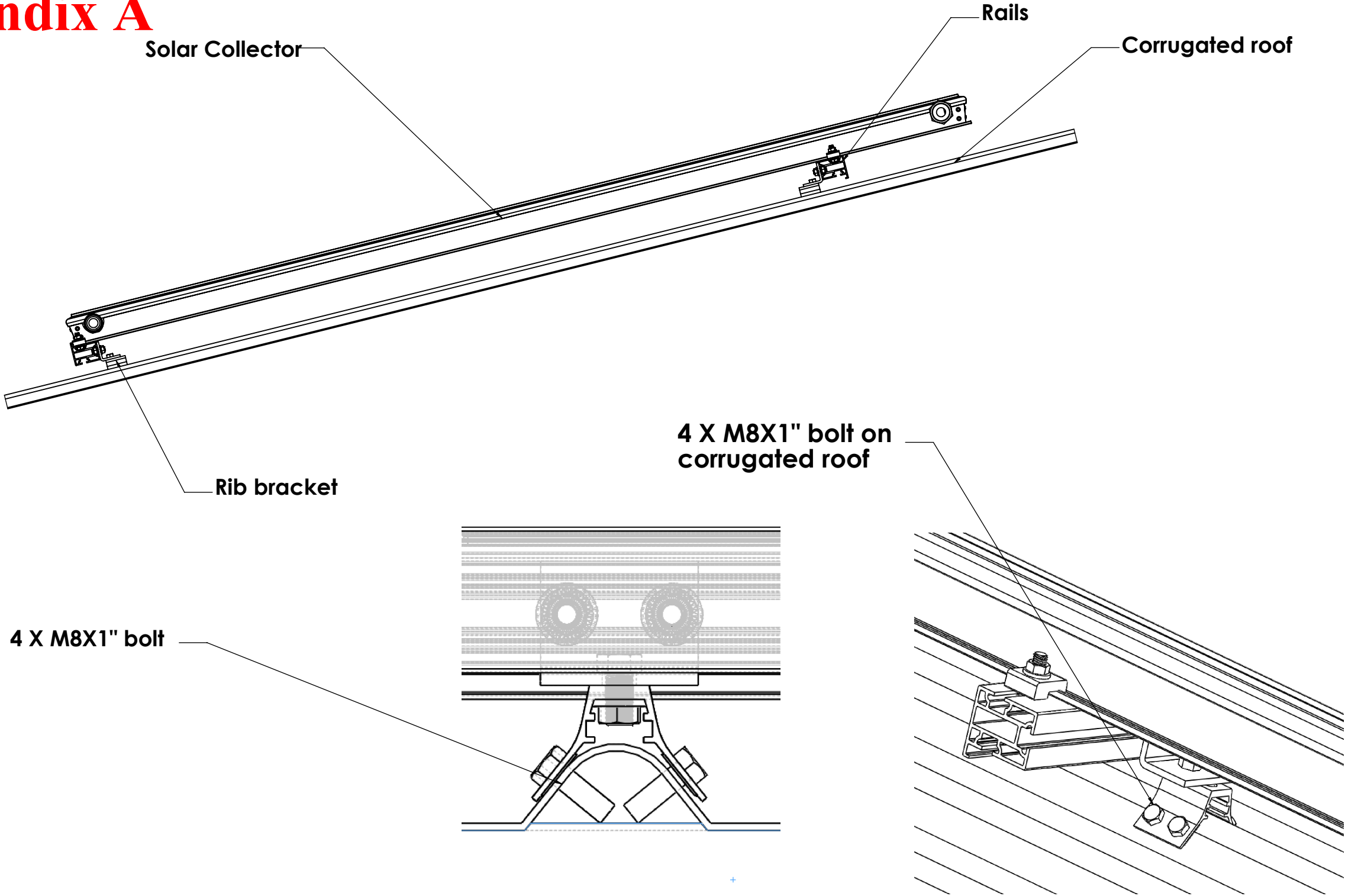
Step 3 – Connect the L- Bracket to the S-5! Clamps



Step 4 –Rail set up for Bottom mounts



Appendix A

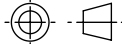


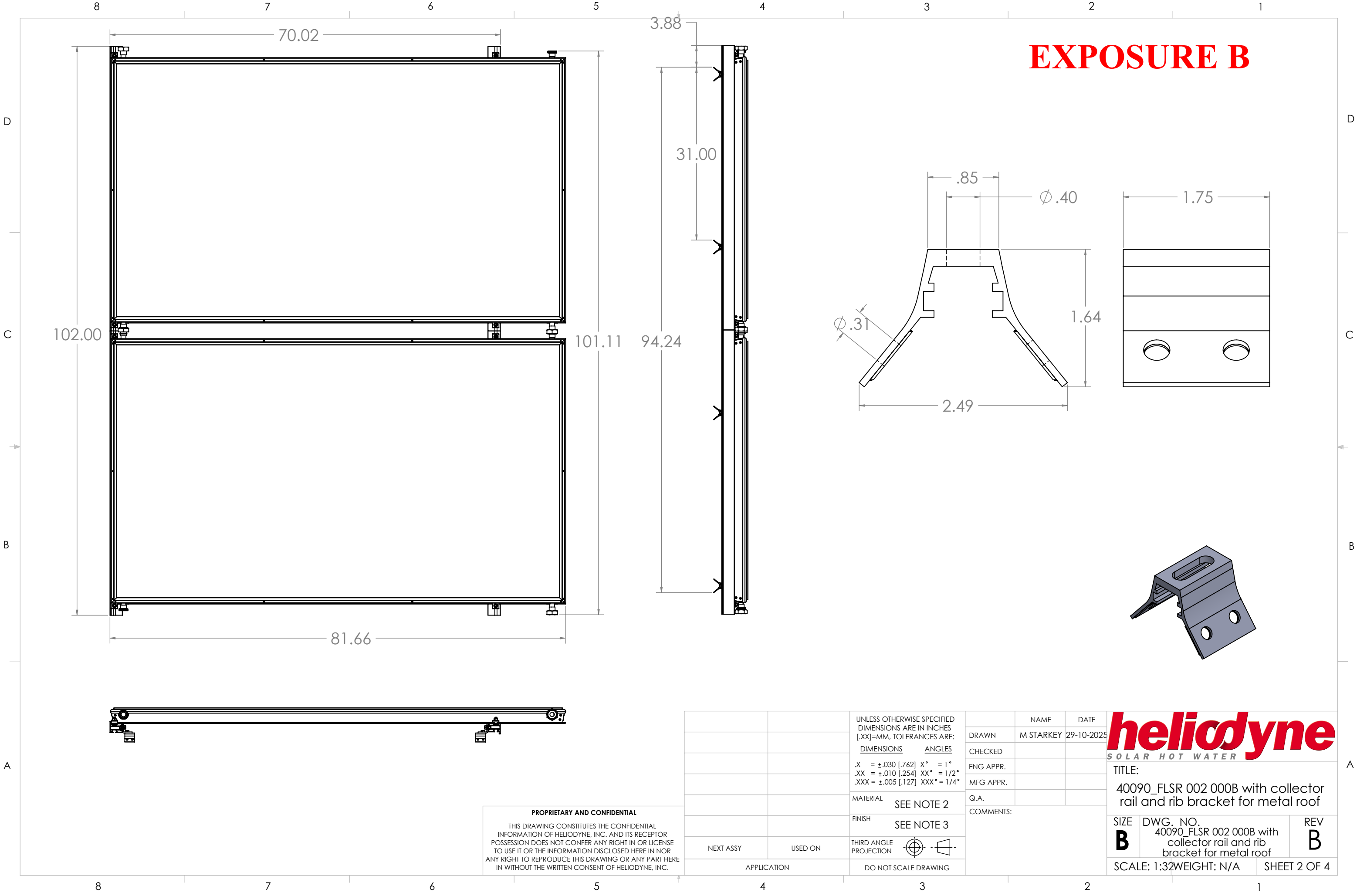
- 4 FINISH:
3. REMOVE ALL BURRS AND SHARP EDGES (R.076 MAX).
- 2 MATERIAL:
1. INTERPRET DRAWING PER ANSI/ASME Y14.5 & Y14.35M. DIMENSIONS AND TOLERANCES PER ANSI/ASME Y14.5M-1994.

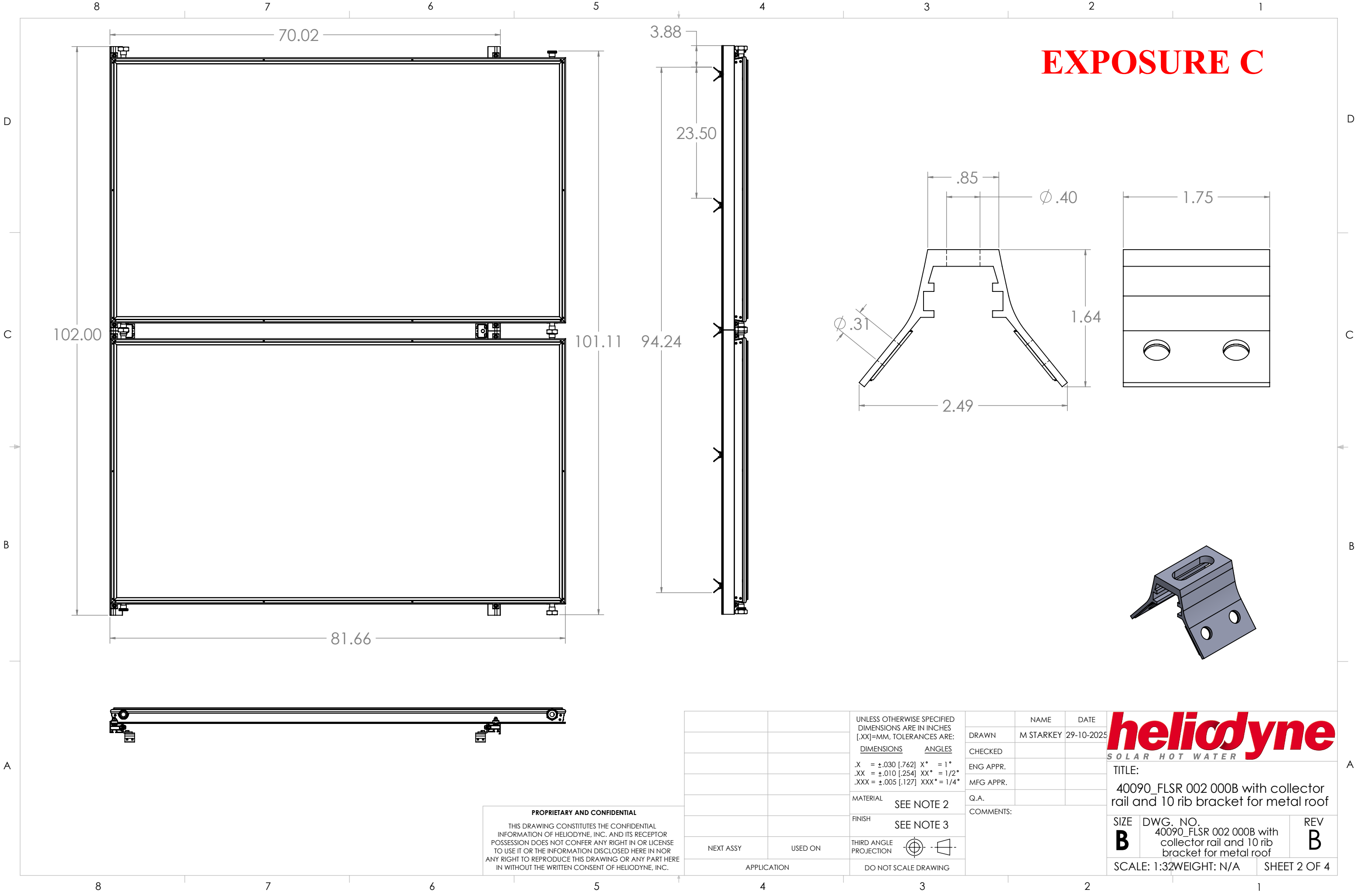
NOTES: (unless otherwise specified)

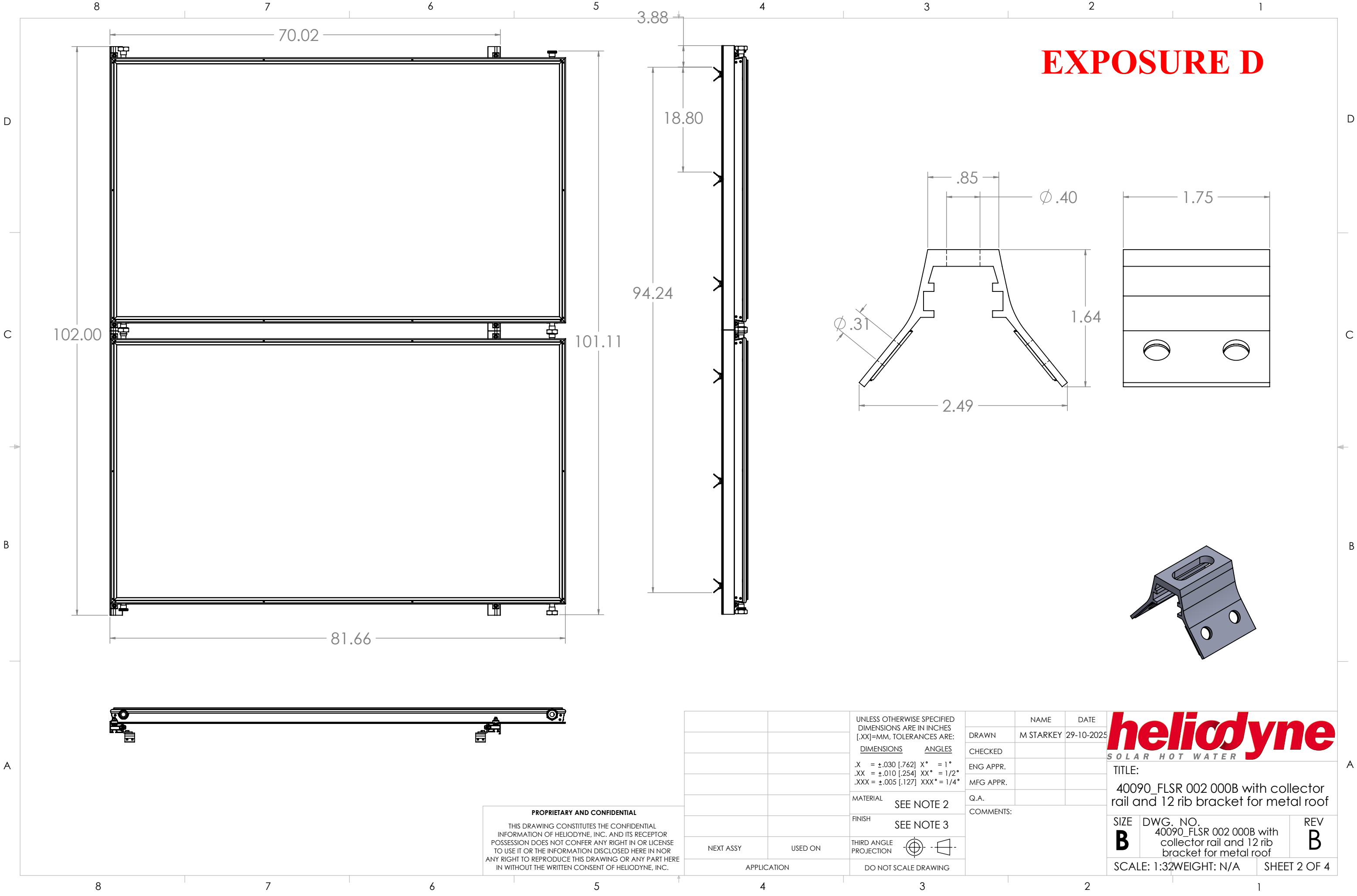
PROPRIETARY AND CONFIDENTIAL

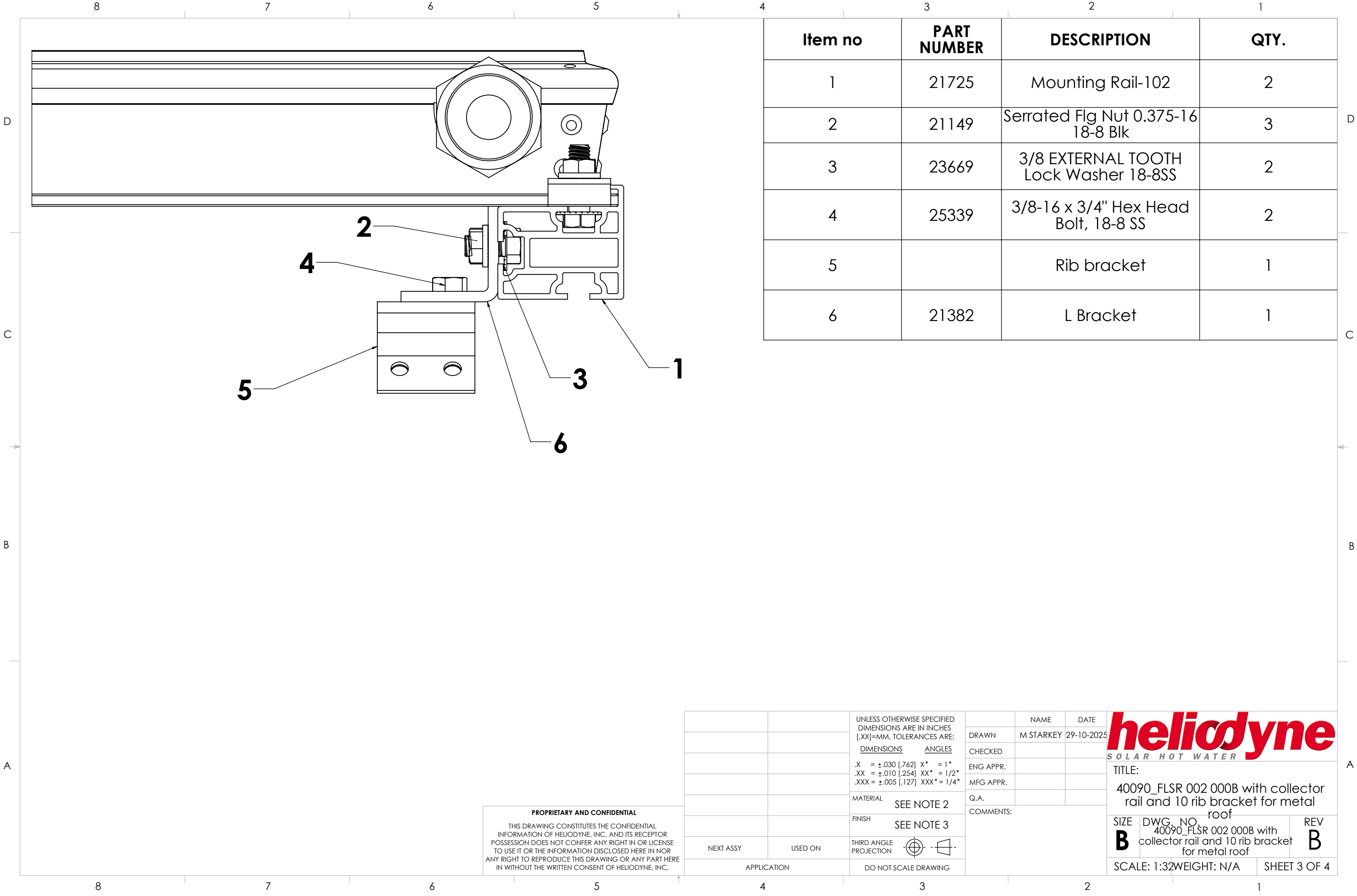
THIS DRAWING CONSTITUTES THE CONFIDENTIAL INFORMATION OF HELIODYNE, INC. AND ITS RECEPTOR POSSESSION DOES NOT CONFER ANY RIGHT IN OR LICENSE TO USE IT OR THE INFORMATION DISCLOSED HERE IN NOR ANY RIGHT TO REPRODUCE THIS DRAWING OR ANY PART HERE IN WITHOUT THE WRITTEN CONSENT OF HELIODYNE, INC.

		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES [.XX]=MM, TOLERANCES ARE: DIMENSIONS ANGLES .X = ±.030 [.762] X° = 1° .XX = ±.010 [.254] XX° = 1/2° .XXX = ±.005 [.127] XXX° = 1/4° MATERIAL SEE NOTE 2 FINISH SEE NOTE 3 THIRD ANGLE PROJECTION 	NAME	DATE		
			DRAWN	M STARKEY	29-10-2025	TITLE: 40090_FLSR 002 000B with collector rail and rib bracket for metal roof
			CHECKED			
			ENG APPR.			
			MFG APPR.			
			Q.A.			
			COMMENTS:			
NEXT ASSY	USED ON			SIZE B	DWG. NO. 40090_FLSR 002 000B with collector rail and rib bracket for metal roof	REV B
APPLICATION		DO NOT SCALE DRAWING	SCALE: 1:32		WEIGHT: N/A	SHEET 4 OF 4





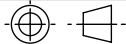




Item no	PART NUMBER	DESCRIPTION	QTY.
1	21725	Mounting Rail-102	2
2	21149	Serrated Flg Nut 0.375-16 18-8 Blk	3
3	23669	3/8 EXTERNAL TOOTH Lock Washer 18-8SS	2
4	25339	3/8-16 x 3/4" Hex Head Bolt, 18-8 SS	2
5		Rib bracket	1
6	21382	L Bracket	1

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			DRAWN	M STARKEY	29-10-2025		
			CHECKED				
			ENG APPR.				
			MFG APPR.				
			Q.A.			TITLE: 40090_FLSR 002 000B with collector rail and 10 rib bracket for metal roof	
			COMMENTS:				
				SIZE	DWG. NO.	REV	
				B	40090_FLSR 002 000B with collector rail and 10 rib bracket for metal roof	B	
				SCALE: 1:32			WEIGHT: N/A
NEXT ASSY	USED ON						
APPLICATION		DO NOT SCALE DRAWING					