

TRT BASE RACKING SYSTEM TRT02

GENERAL NOTES:

1. THIS SYSTEM MEETS ALL OF THE REQUIREMENTS OF THE 8TH EDITION (2023) FLORIDA BUILDING CODE, INCLUDING THE HVHZ PROVISIONS.
2. THIS SYSTEM HAS BEEN TESTED PER TAS 100(A) AND ASTM D7147.
- IT IS NOT A PART OF THE BUILDING ENVELOPE, AND IMPACT RESISTANCE IS NOT REQUIRED.
3. THIS SYSTEM SHALL BE INSTALLED PER THE IRONRIDGE AIRE INSTALLATION MANUAL.
4. THE PV PANELS ARE BY OTHERS AND ARE NOT A PART OF THIS APPROVAL.
5. RAIL SPACING TO BE AS SPECIFIED BY THE PV PANEL MANUFACTURER'S INSTALLATION INSTRUCTIONS.
6. THE DESIGN OF THE ROOF SUBSTRATE IS THE RESPONSIBILITY OF THE ENGINEER OF RECORD OR OTHER SPECIALTY ENGINEER, AND IS NOT A PART OF THIS APPROVAL.
- THE SUBSTRATE MUST SAFELY TRANSMIT THE LOADS APPLIED TO THIS SYSTEM TO THE BUILDING STRUCTURE.
7. FIRE RATINGS OR FIRE RESISTANCE IS NOT A PART OF THIS REVIEW.
8. ALL ANCHORS SECURING THE SYSTEM TO PRESSURE TREATED WOOD SHALL BE CAPABLE OF RESISTING CORROSION CAUSED BY THE CHEMICALS IN THE WOOD.
9. MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL BE PROTECTED PER FBC REQUIREMENTS.
10. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS PRODUCT.
- Cd=1.6 WAS USED FOR WOOD SCREWS ONLY.
- THREE RAIL SYSTEM:

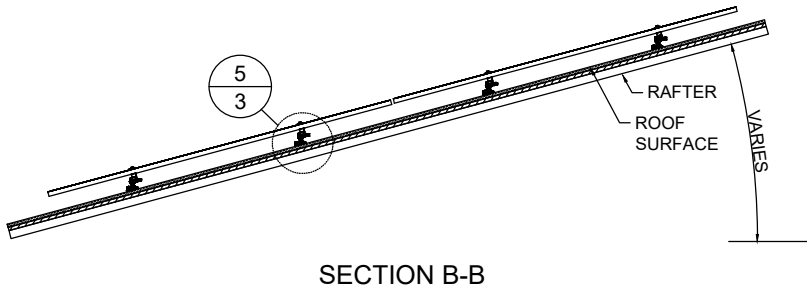
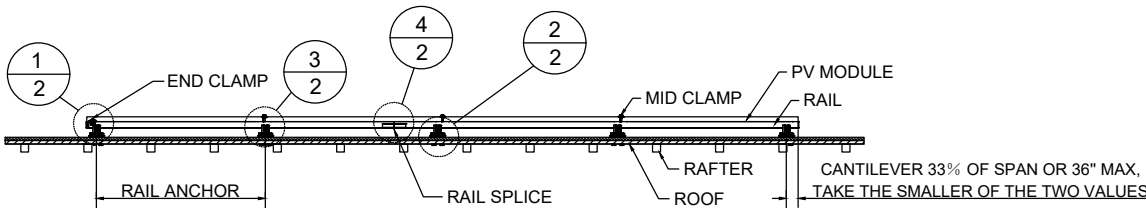
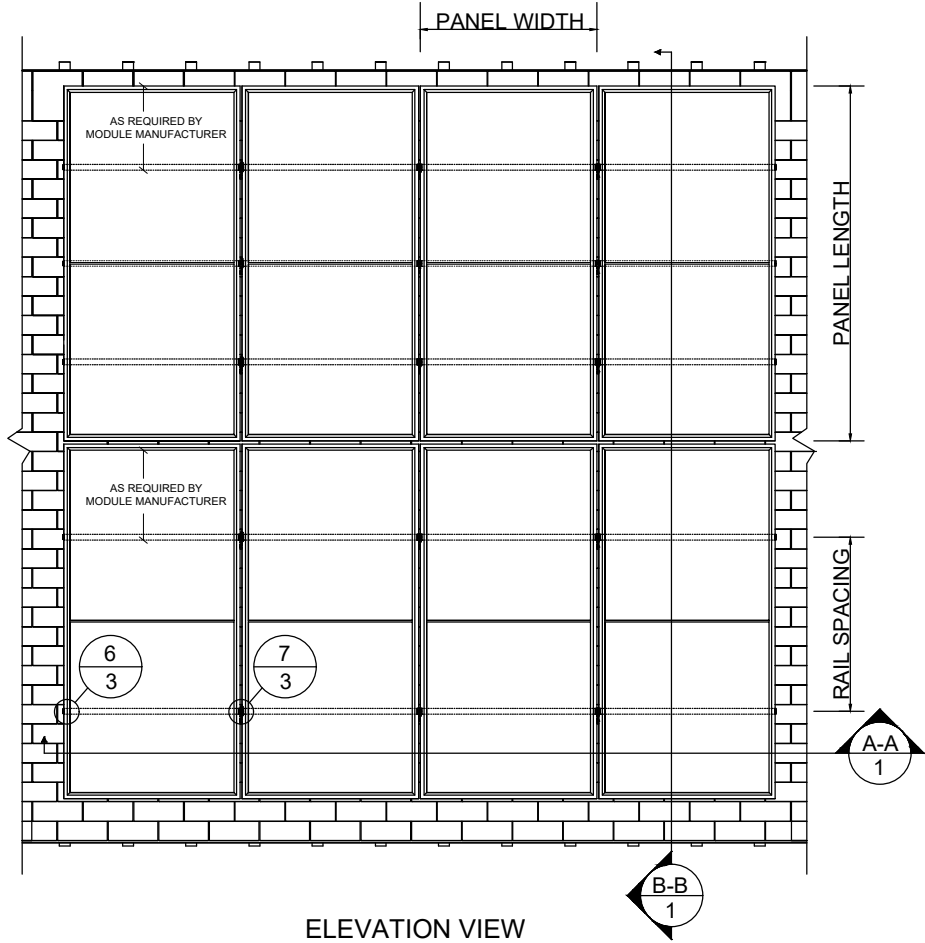
WINDLOAD NOTES:

1. DESIGN WINDLOADS MUST BE CALCULATED BY A LICENSED PROFESSIONAL ENGINEER OR ARCHITECT FOR EACH PROJECT, PER ASCE 7-22 SECTION 29.4.4. DESIGN (ASD) WINDLOADS MAY NOT EXCEED THE ALLOWABLE WINDLOADS SHOWN IN THE CHARTS ON THIS SHEET OR SHEET 5.
2. PANEL SYSTEM LOCATION, HEIGHT, AND SPACING MUST MEET THE REQUIREMENTS OF ASCE 7-22 SECTION 29.4.4. WINDLOADS ACT NORMAL TO THE SURFACE OF THE PV PANEL SYSTEM.
3. OTHER CONFIGURATIONS REQUIRE PROJECT SPECIFIC ANALYSIS BY A LICENSED PROFESSIONAL ENGINEER OR ARCHITECT.
4. ALLOWABLE (ASD) WINDLOADS BELOW ARE BASED ON ANCHORING IN WOOD RAFTERS WITH S.G.=0.42 MIN. SEE SHEET 5 FOR ALLOWABLE LOADS BASED ON RAFTERS WITH OTHER SPECIFIC GRAVITY VALUES.

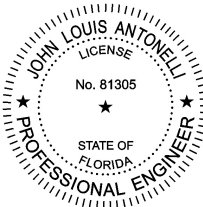
TWO RAIL SYSTEM:

TRT-02 - TRUSS MOUNT (FASTENER PATTERN #1) - ALLOWABLE WIND LOADS (PSF)							
PORTRAIT ORIENTATION							
TWO RAIL SYSTEM				THREE RAIL SYSTEM			
MODULE WIDTH (IN.)	MODULE LENGTH (IN.)	ANCHOR SPAN (IN.)	DESIGN PRESSURE (PSF)	MODULE WIDTH (IN.)	MODULE LENGTH (IN.)	ANCHOR SPAN (IN.)	DESIGN PRESSURE (PSF)
45.0	67.5	16.0	66.4	45.0	67.5	16.0	99.7
		24.0	52.4			24.0	78.7
		32.0	39.3			32.0	59.1
		36.0	35.0			36.0	52.5
		48.0	26.2			48.0	39.4
		64.0	19.7			64.0	29.5
		72.0	17.5			72.0	26.2
	80.0	16.0	56.0		80.0	16.0	84.1
		24.0	44.3			24.0	66.4
		32.0	33.2			32.0	49.8
		36.0	29.5			36.0	44.3
		48.0	22.1			48.0	33.2
		64.0	16.6			64.0	24.9
		72.0	14.8			72.0	22.1
	86.0	16.0	52.1		86.0	16.0	78.2
		24.0	41.2			24.0	61.8
		32.0	30.9			32.0	46.4
		36.0	27.4			36.0	41.2
		48.0	20.6			48.0	30.9
		64.0	15.4			64.0	23.2
		72.0	13.7			72.0	20.6
	92.5	16.0	48.4		92.5	16.0	72.7
		24.0	38.3			24.0	57.5
		32.0	28.7			32.0	43.1
		36.0	25.5			36.0	38.3
		48.0	19.1			48.0	28.7
64.0		14.4	64.0	21.5			
72.0		12.8	72.0	19.2			
LANDSCAPE ORIENTATION							
TWO RAIL SYSTEM				THREE RAIL SYSTEM			
45.0	92.5	16.0	48.4	45.0	92.5	16.0	72.7
		24.0	48.4			24.0	72.7
		32.0	48.4			32.0	72.7
		36.0	48.4			36.0	72.7
		48.0	39.3			48.0	59.1
		64.0	29.5			64.0	44.3
		72.0	26.2			72.0	39.4

NOTE: TABLE ABOVE PROVIDES ALLOWABLE UPLIFT WIND LOADS (ASD) FOR THE TRT-02 MOUNT USING FASTENER PATTERN #1 AND TRT STANDARD RAIL. SEE SHEET 4 FOR ALLOWABLE LOADS FOR TRT-02 MOUNT.



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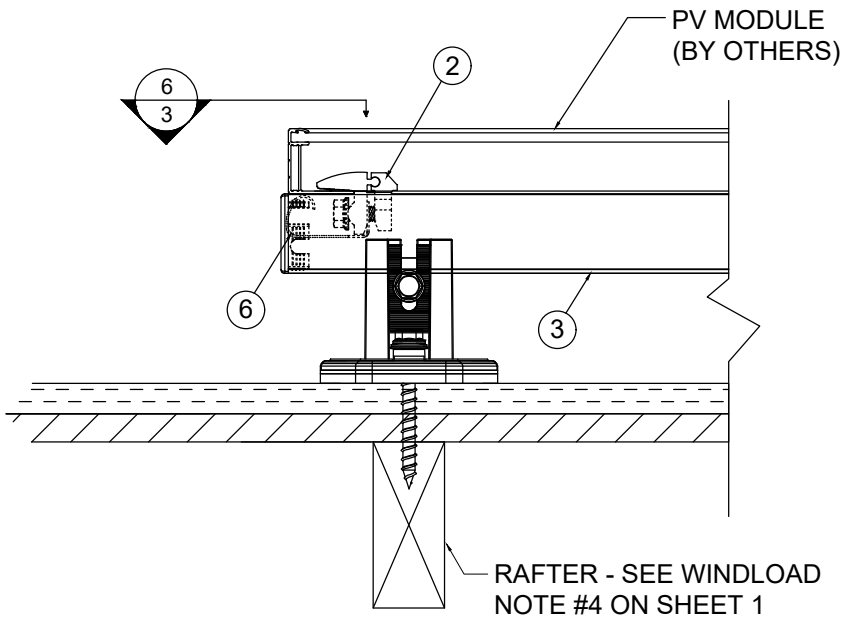
DWG:

TRT 02

SHEET:

1/8

TRT BASE RACKING SYSTEM TRT02

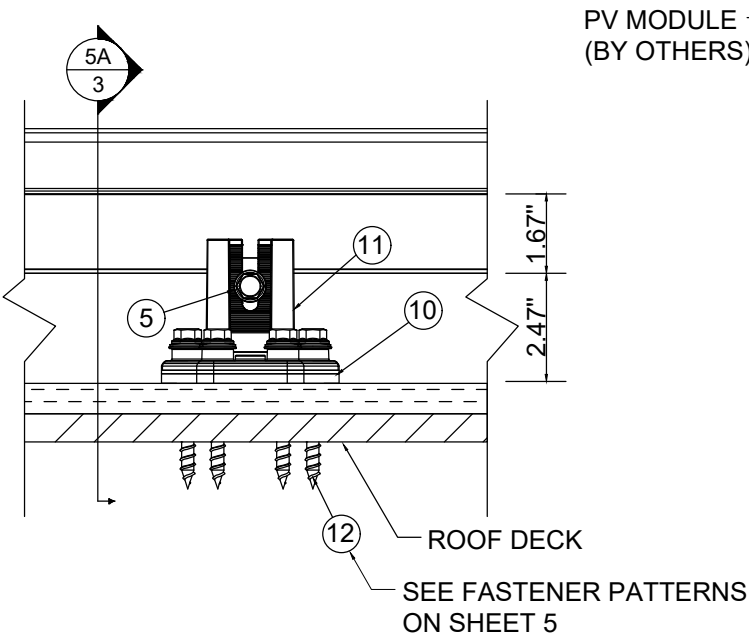


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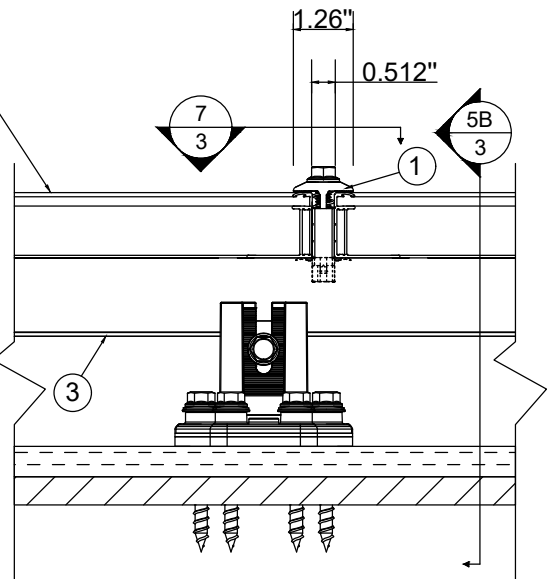
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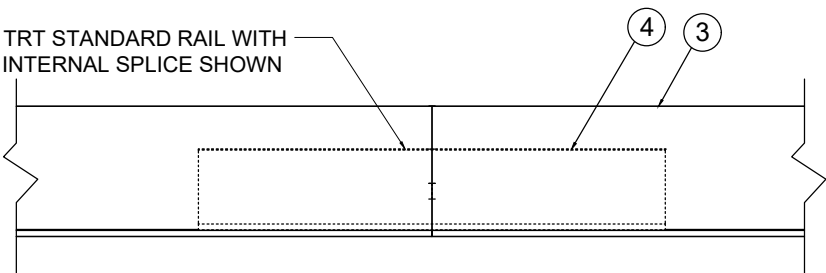
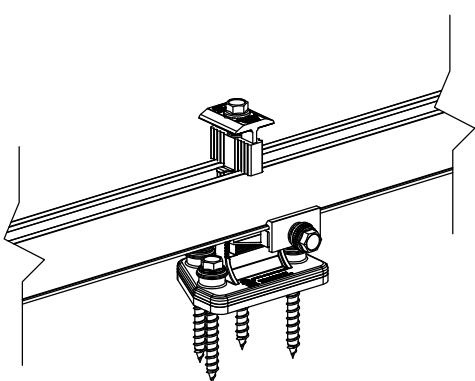
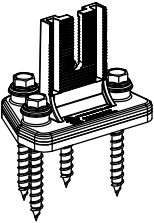
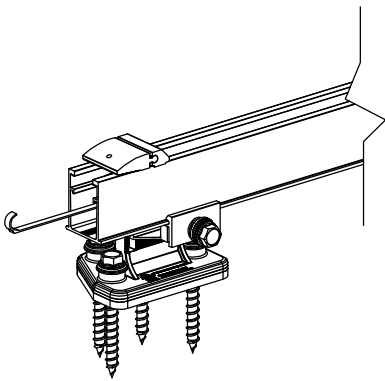
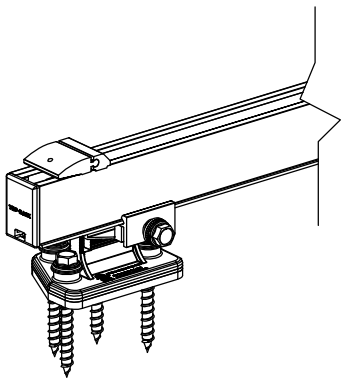
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TRT CAST ALUMINUM
RAIL BASE DETAIL



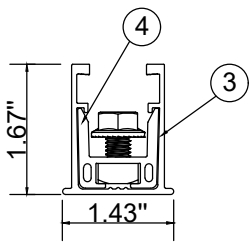
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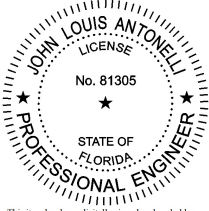


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TRT RAIL SPLICE DETAIL



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SHEET:

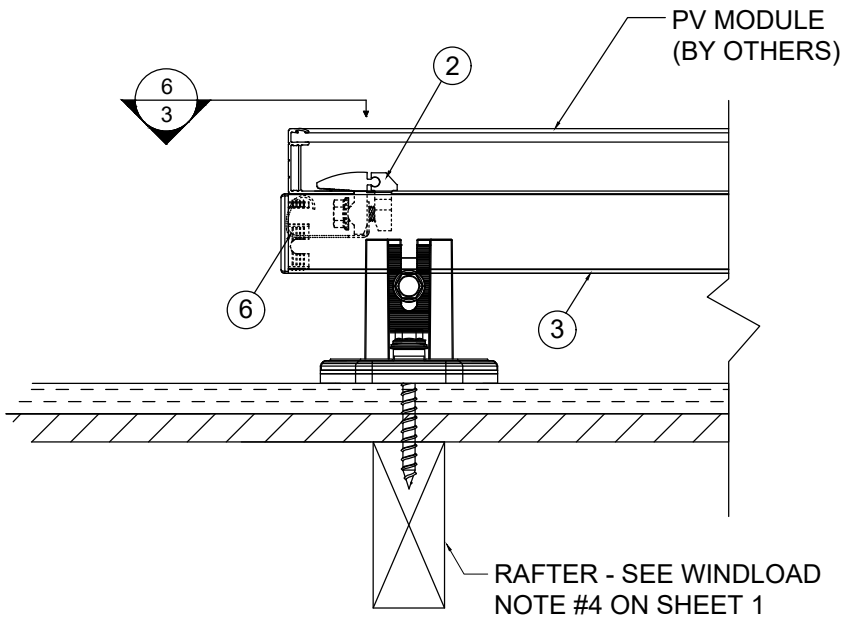
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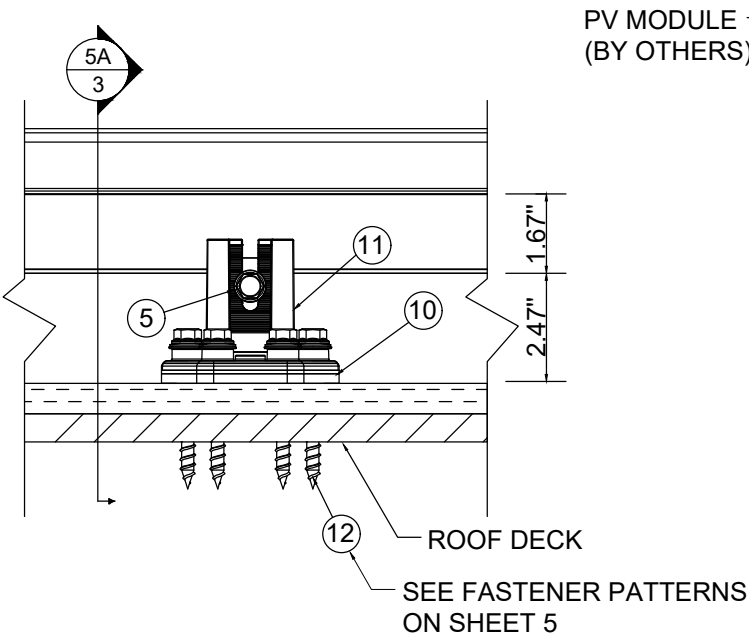


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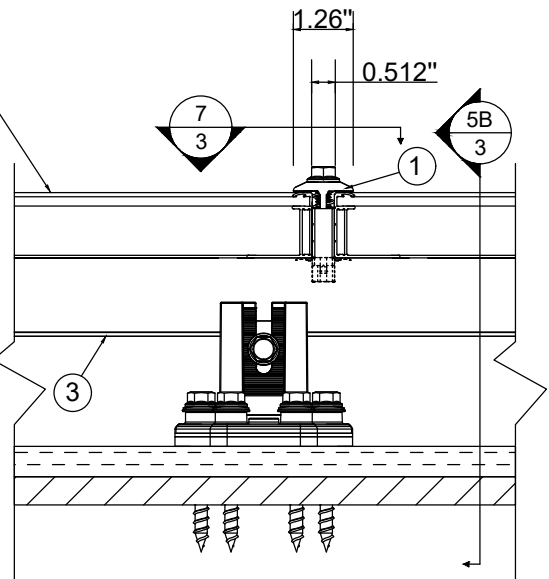
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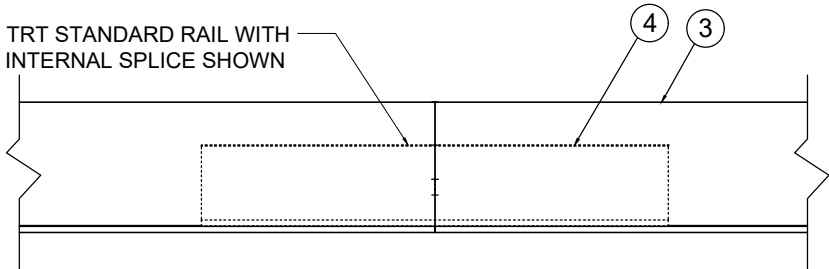
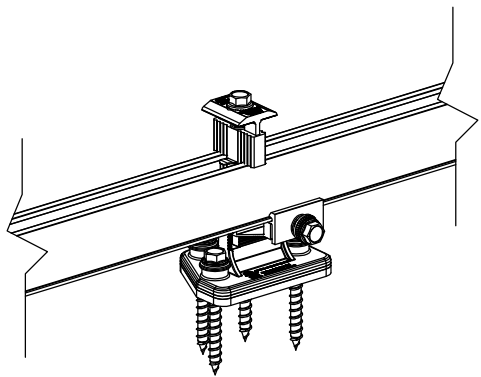
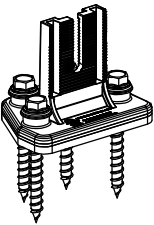
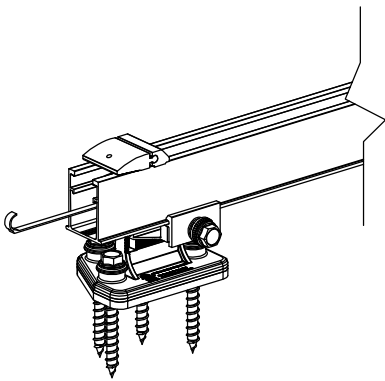
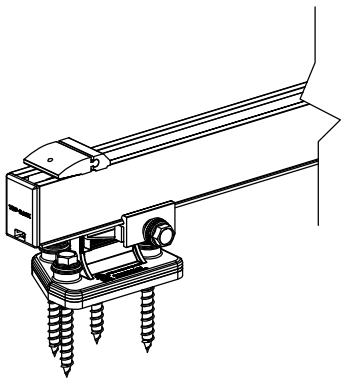
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TRT CAST ALUMINUM
RAIL BASE DETAIL



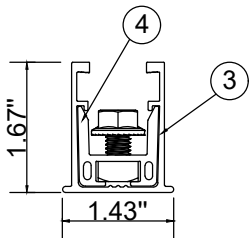
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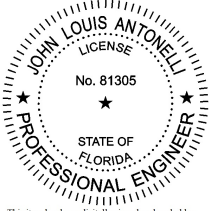


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TRT RAIL SPLICE DETAIL



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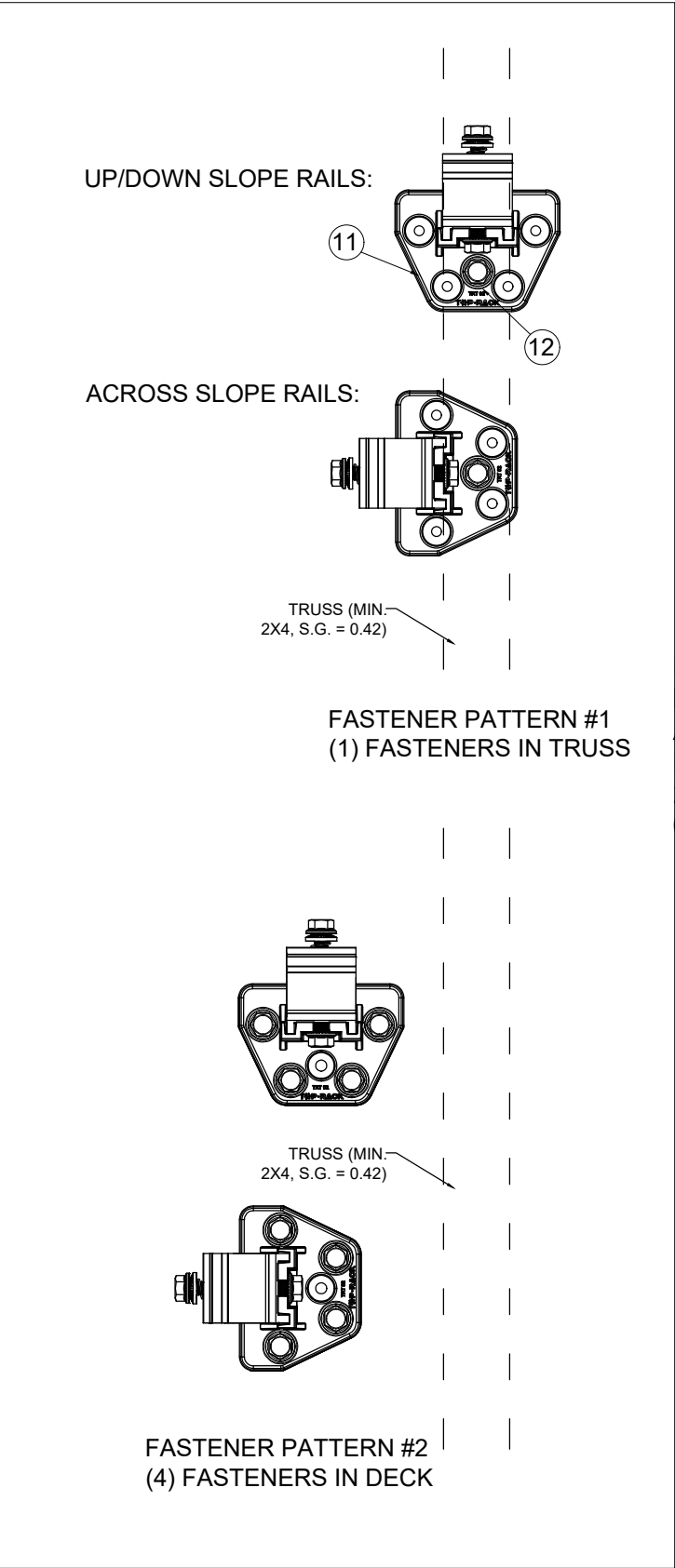
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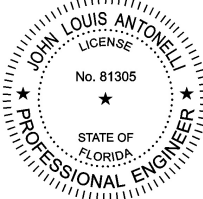
TRT BASE RACKING SYSTEM TRT02

TRT-02 - DECK MOUNT (FASTENER PATTERN #2) - ALLOWABLE WIND LOADS (PSF)							
PORTRAIT ORIENTATION							
TWO RAIL SYSTEM				THREE RAIL SYSTEM			
MODULE WIDTH (IN.)	MODULE LENGTH (IN.)	ANCHOR SPAN (IN.)	DESIGN PRESSURE (PSF)	MODULE WIDTH (IN.)	MODULE LENGTH (IN.)	ANCHOR SPAN (IN.)	DESIGN PRESSURE (PSF)
45.0	67.5	16.0	66.4	45.0	67.5	16.0	99.7
		24.0	66.4			24.0	99.7
		32.0	51.9			32.0	78.0
		36.0	46.2			36.0	69.3
		48.0	34.6			48.0	52.0
		64.0	26.0			64.0	39.0
		72.0	21.5			72.0	32.2
		80.0	16.0			56.0	80.0
	24.0		56.0		24.0	84.1	
	32.0		43.8		32.0	65.8	
	36.0		39.0		36.0	58.5	
	48.0		29.2		48.0	43.9	
	64.0		21.9		64.0	32.9	
	72.0		18.1		72.0	27.2	
	86.0		16.0		52.1	86.0	
		24.0	52.1		24.0		78.2
		32.0	40.8		32.0		61.2
		36.0	36.2		36.0		54.4
		48.0	27.2		48.0		40.8
		64.0	20.4		64.0		30.6
		72.0	16.8		72.0		25.3
		92.5	16.0		48.4		92.5
	24.0		48.4		24.0	72.7	
	32.0		37.9		32.0	56.9	
	36.0		33.7		36.0	50.6	
	48.0		25.3		48.0	37.9	
	64.0		18.9		64.0	28.5	
	72.0		15.7		72.0	23.5	
LANDSCAPE ORIENTATION							
TWO RAIL SYSTEM				THREE RAIL SYSTEM			
45.0	92.5	16.0	48.4	45.0	92.5	16.0	72.7
		24.0	48.4			24.0	72.7
		32.0	48.4			32.0	72.7
		36.0	48.4			36.0	72.7
		48.0	48.4			48.0	72.7
		64.0	39.0			64.0	58.5
		72.0	32.2			72.0	48.3

NOTE: TABLE ABOVE PROVIDES ALLOWABLE UPLIFT WIND LOADS (ASD) FOR THE TRT-02 MOUNT USING FASTENER PATTERN #2 AND TRT STANDARD RAIL. SEE SHEET 4 FOR ALLOWABLE LOADS FOR TRT-02 MOUNT.



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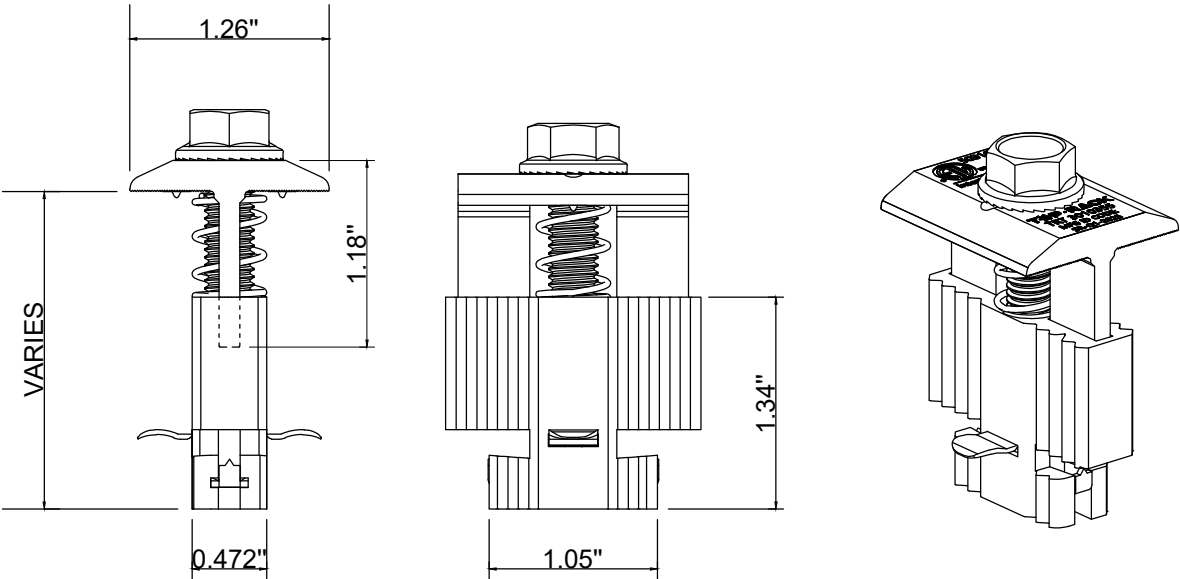
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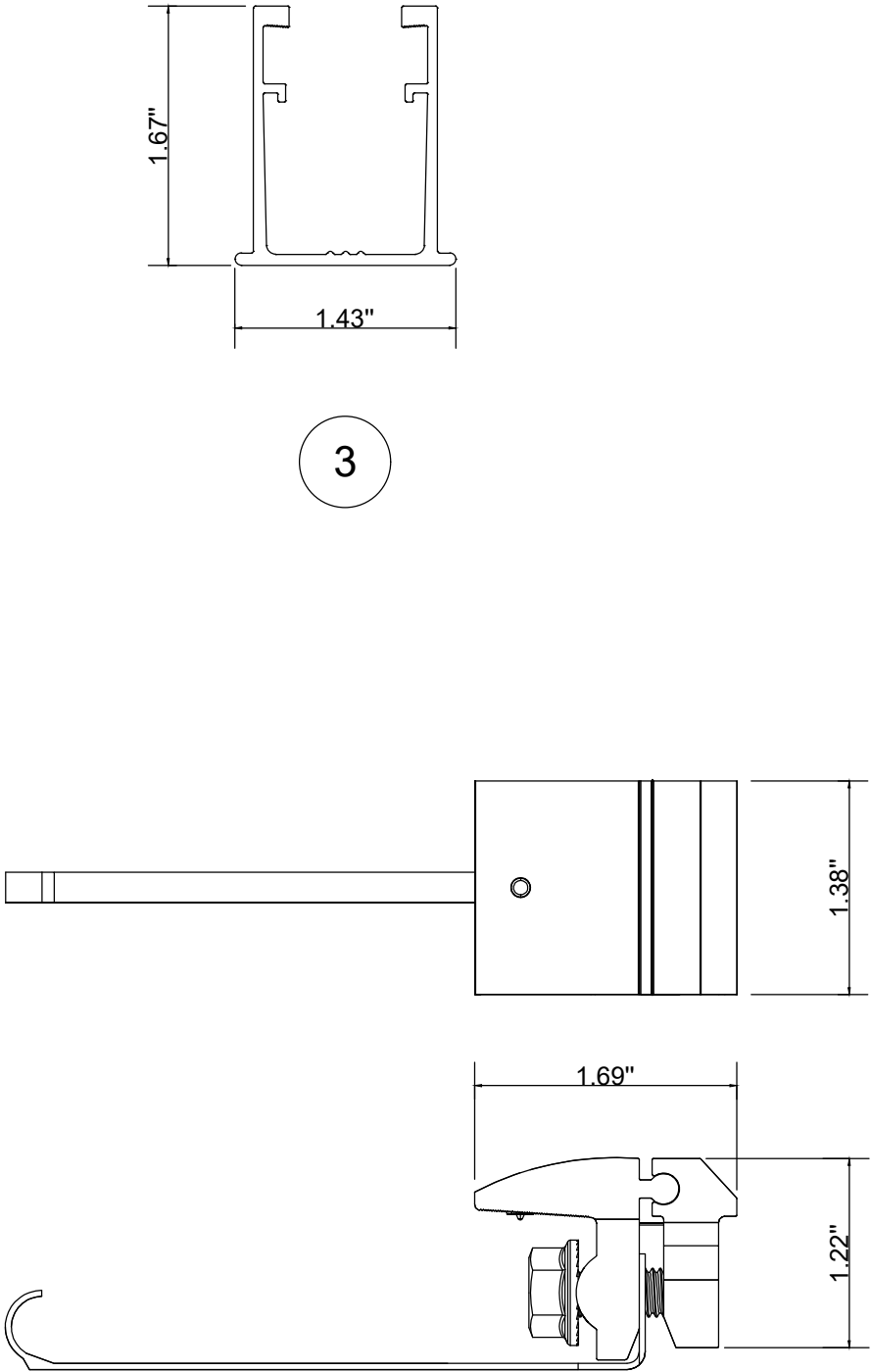
TRT BASE RACKING SYSTEM TRT02

BILL OF MATERIALS-TRT CAST ALUMINUM RAIL BASE		
#	DESCRIPTION	MATERIALS/NOTES
1	TRT MID-CLAMP	6000 SERIES AL
2	TRT HIDDEN END CLAMP	6000 SERIES AL
3	TRT RAIL	6000 SERIES AL
4	TRT RAIL SPLICE	6000 SERIES AL
5	TRT BLACK RAIL FIXTURE 2	6000 SERIES AL
6	TRT END CAP	POLYMERIC
7	TRT SKIRT	6000 SERIES AL
8	TRT SKIRT CLIP	6000 SERIES AL
9	TRT SKIRT CAP	POLYMERIC
10		
11		

FOR 6000 SERIES EXTRUSIONS Fur= 38 ksi min, Fv=34 ksi min.
FOR 300 SERIES STAINLESS STEEL Fv= 65 ksi min.

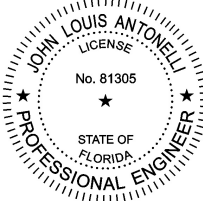


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TRT 02

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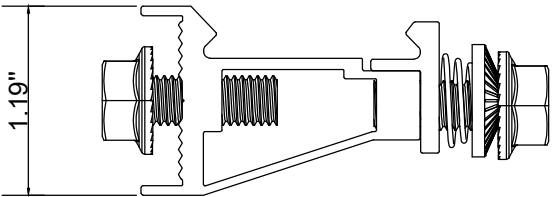
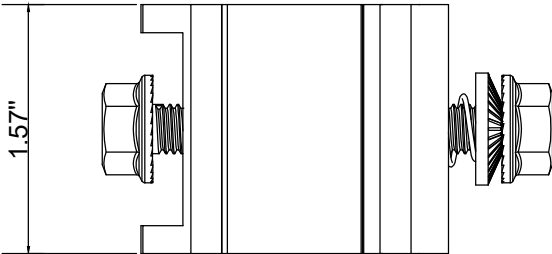
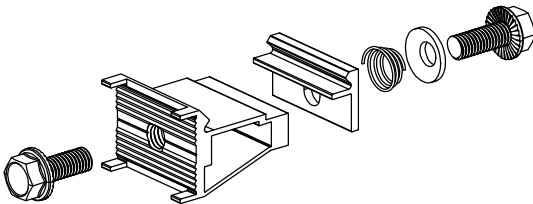
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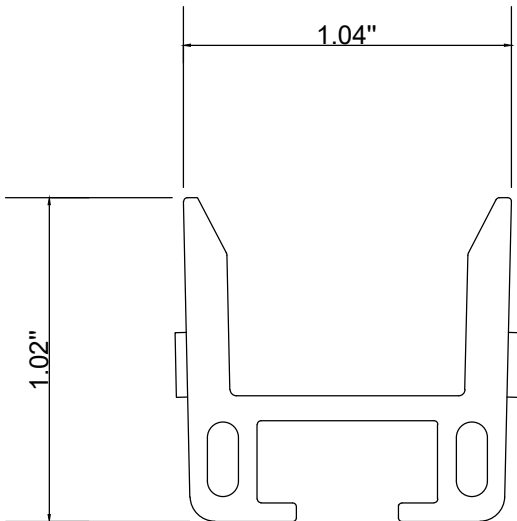
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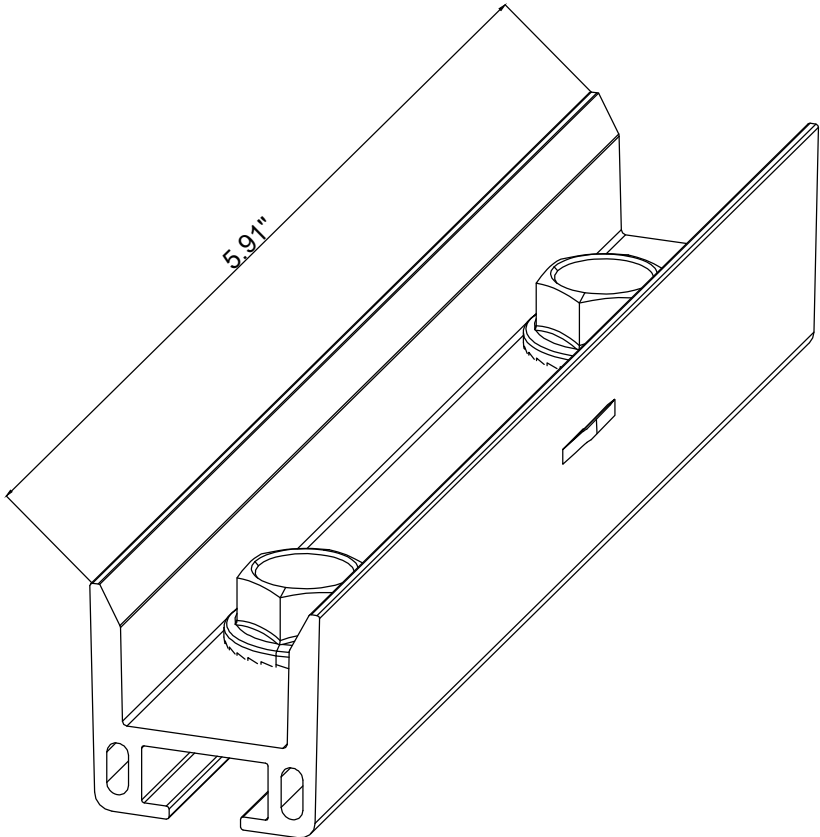
TRT BASE RACKING SYSTEM TRT02



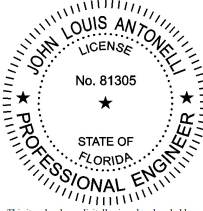
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