

February 21, 2019

Mr. Milton P. Nogueira Jr.
Roof Tech Inc.
333 H Street, Suite 5000
Chula Vista, CA, 91910

Dear Mr. Nogueira,

Re: Roof Tech RT-[E]-Mount Mini – Structural Review - for Nova Scotia, Canada – NBCC 2015
Project No: 18017-T4

Thank you for retaining our office to carry out the structural review of the Roof Tech RT-[E]-Mount Mini for use with the Rail Option to install Photovoltaic (PV) panels.

The purpose of the review was to assess the spacing requirement for the Roof Tech RT-[E]-Mount Mini photovoltaic (PV) panel roof mount system used with the Rail Option. Our determination is that the system can be safely connected to roof structures in Nova Scotia according to National Building Code of Canada (NBCC) 2015 requirements for various site conditions and arrangements as detailed in the attached tables. The provisions of National Building Code of Canada (NBCC) 2015 have also been incorporated in the design, and the more severe loading has been considered.

The review consisted of calculating the factored connection resistance of the Roof Tech RT-[E]-Mount Mini for shear, downward force and tension based on load test results. These resistances were compared to the factored loading on the connection for various roof substrates, orientations of PV panel on a roof using the Rail Option, for various wind roof zones, terrains, and roof slopes. The maximum corresponding wind and snow environmental site parameters were then determined and the spacings of the mounts determined from an analysis of the capacities observed in load tests.

The analyses presumes that all connections and associated hardware are installed according to Roof Tech RT-[E]-Mount Mini Installation Manual and accepted standards of practice for construction. All materials used shall be free of defects and wood substrates shall be according to the minimum thicknesses and grades specified in this report. The installation contractor is responsible for verifying the strength of the roof framing, the structural strength of the PV panels and the capacities of all materials supplied by others as a pre-condition for determining the suitability of use of these tables. Refer to Exhibit A for connection and panel mount orientation as prepared by Starling Madison Lofquist, Inc., for SML project report 471-13.

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If you require any further information please contact the undersigned.

Prepared by:
Mohamed Gaafar, Msc, P.Eng



21-February-2019

Reviewed by:
Wayne Kassian, P.Eng



Project Name:	ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW FOR NS (NBCC 2015)		Date :	22/02/2019	Design:	AM
Project No.:	18017-T4	Description	Calculation of mount capacities		Checker:	

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Summary

Three roof substrates were reviewed: a) 7/16" thick OSB on 2x4 SPF No. 2 rafter, b) 7/16" thick OSB only, and c) 15/32" thick plywood. The Roof Tech RT-[E]-Mount Mini is connected at each mount to the substrates as shown in Exhibit A. Load tests data from Institute of Building Technology (IBT) and Western Technologies Inc. (WTI) for each of these connection types was used to assess the spacing requirements of the mounts for the allowable range of regional climatic parameters from [the NBCC 2015](#).

System Description

The Roof Tech RT-[E]-Mount Mini Photovoltaic Panel Roof Mount System consists of a 6000 Series aluminum [E]-Mount Mini base. An appropriately rated "L-Foot", by others, may be attached to the [E] Mount Mini base with a stainless steel SS304 8.0Ømm bolt and flange nut. An appropriately rated Rail, by others, may be attached to the "L-Foot" per the Rail manufacturer's installation instructions. The installation of the RT-[E]-Mount Mini must be with the long direction parallel to the roof framing, and in accordance with Roof Tech's Installation Manual. The system is attached to the wood substrate with SS304 5.0Ø mm x 60 mm long wood screws. **Two** (2) wood screws are required at the "Rafter" installations, and **five** (5) wood screws are required at the "OSB only" and "Plywood only" installations.

Connection Load Tests

Load tests conducted by IBT and WTI measured the failure capacity of the connection assembly with 3 different roof wood substrates. In these tests, failure occurred by pullout of the screws for OSB or plywood only cases, shear failure for the OSB or plywood only cases, or shear failure for OSB on rafter.

Tests showed that critical failure occurs in one of three ways:

1. Pullout of wood screws from the 2x Rafter
2. Yielding of attached components in shear
3. Pullout of nails attaching the OSB/ Plywood to the rafter

In order to establish connection capacities, the lowest value of each failure mechanism for each wood substrate was multiplied by a material resistance factor of 0.55 for tension loads, 0.72 for shear loads and 0.81 for compression loads. The resistance factor was based on formulas presented in CAN/CSA-086-14 (Engineering Design in Wood) for similar proprietary wood connection products where the capacity is assessed through load testing. The material resistance factor of 0.6 for tension, 0.8 in shear and 0.9 in compression/bending is multiplied by a test reliability factor of 0.91 for a minimum of three tests. These values are shown in Table 1 below. The factored connection resistance was compared to factored loads as per NBCC 2015.

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Table 1: Factored test resistance of roof wood substrates

Serial No.	Substrate Material	Factored test resistance =		
		$\phi \times$ (minimum test result) kN		
		Tension	Shear	Compression
1	7/16" OSB Sheathing over 2x4 SPF #2 Rafter	2.695	1.943	5.40
2	7/16" OSB Sheathing only	1.091	1.091	1.794
3	15/32" Plywood with 2 layers Asphalt Shingles	1.164	1.712	3.236

The parameters and results of our review are summarized below. Refer to Exhibit A for details of the roof mount attachment and mount orientation diagrams.

Connection Load Analysis

Codes:

- Design load and climatic data ranges as per National Building Code of Canada 2015 (NBCC 2015).
- Design codes as per Engineering Design in Wood (CSA 086-14) and Strength Design in Aluminum (CSA S157-05).

Institute of Building Technology:

- Report Number 2426-18005, Project Number 29702, Report Issued March 21, 2018, for Tensile and Shear capacities of RT-[E]-Mount Mini on all the three wood substrates.

Test Data from Western Technologies Inc.:

- Job No. 2163XD260:
 - o Event no. G260-3, dated January 3, 2014: OSB only and OBS on Rafter, Compression.
 - o Event no. G260-6, dated May 30, 2014: Plywood, Compression.

Design Loads and Parameters:

- Dead Loads: 0.19 kPa (4 psf) photovoltaic (PV) panel self-weight including assumed weight of rails.
- Wind Loads: 1 in 50 year wind pressure "q" per NBCC 2015. In determining the external wind pressure "p" acting statically and normal to the surface, the following factors have been used per Clause 4.1.7.3 of NBCC 2015:
 - o I_w = Importance factor for wind = 1.0 for the ULS loading cases;
 - o q = Reference velocity pressure based on a probability of exceedance in any one year of 1 in 50, and which values are used in the Tables;

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- o C_e = Exposure factor = 1.0 for Open terrain and 0.7 for Rough terrain;
- o C_t = Topographic factor = 1.0, assuming that the building is not located on a hill or escarpment with a slope greater than 10%;
- o C_g = Gust factor = 2.5 as required for secondary members;
- o C_p = External pressure coefficient = -1.0 for the main roof R zone, -2.3 for the corner C zone and -1.50 for the roof edge and side S zone.
- o $p = I_w \cdot q \cdot C_e \cdot C_t \cdot C_g \cdot C_p$, where p is as mentioned above.
- o If any of the above factors are different for a particular situation, the Tables can still be used by appropriately modifying wind load and using the corresponding value of the “q” listed. Such modification must be done by a person familiar with the requirements of NBCC 2015.
- Snow and Rain Loads: 1 in 50 year combined snow and rain load calculated per NBCC 2015. In order to use the Tables, the total snow and rain loads have to be calculated by a person familiar with the requirements of NBCC 2015 based on the formulae mentioned in the Tables. Importance factor $I_s = 1.0$ for the ULS loading cases.
- Live Loads: No live load on top of PV cells.
- Seismic Loads: excluded; does not govern by inspection.

Materials and Geometry:

- Roof rafters to be SPF No. 2 spaced at 24” on centre maximum.
- OSB to be minimum 7/16” (11.1 mm) thick, CSA O437 O1 grade with panel edges supported.
- Plywood to be minimum 15/32” (11.9 mm) thick, tongue and groove, Douglas Fir conforming to CSA O121 with panel edges supported.
- Solar panels to be compliant with UL 1703.
- A range of slopes were considered for the roof loads. A conversion table between slopes and angles is provided below for reference.

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Table 2: Roof Slope to Roof Angle Conversion

Roof Slope	(m/m)	0 : 12	1 : 12	2 : 12	3 : 12	4 : 12	5 : 12	6 : 12	7 : 12	8 : 12	9 : 12	10 : 12	11 : 12	12 : 12
Roof angle	(deg)	0.0	4.8	9.5	14.0	18.4	22.6	26.6	30.3	33.7	36.9	39.8	42.5	45.0

Wind Roof Zones

The following notation is used in the report in line with NBCC 2015 Clause 4.1.7.5. 4 c) which corresponds to similar zones according to NBCC 2015 :

- R = roof in general, except as follows:
- S = within a distance distance equal to the larger of 0.1D and 0.1W from the roof edge,
- C = within a distance equal to the larger of 0.2W and 0.2D from the roof corner,
where *D* and *W* are the widths of the building.

Results

The tables in the following pages summarize the maximum spacing of RT-[E]-Mount Mini clamps for 1 in 50 year snow and wind loads for each roof wood substrate. The installation contractor is responsible for verifying the strength of the roof framing, the structural strength of the PV panels and the capacities of all materials supplied by others as a pre-condition for determining the suitability of use of these tables.

An individual who is competent and familiar with NBCC 2015 will be required for the use of the tables, prior to installation of the roof connections.

Table 3: Metres to feet conversion

Metres	0.00	0.30	0.61	0.91	1.22	1.52	1.83	2.13	2.44	2.74	3.05
Feet	0	1	2	3	4	5	6	7	8	9	10

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Provincial Range Of Environmental Loads

Province		Ss kPa	Sr kPa	q (1/50) kPa
Nova Scotia	MIN	1.4	0.60	0.53
	MAX	3.1	0.60	0.74

Table Notes for Tables RT1 to RT9

The tabulated values are based on the following criteria in addition to the notes above:

1. Building mean roof height = 10m (30 ft) maximum.
2. Importance factor 1.0.
3. Solar panel maximum dimensions as follows:
 - a. 1.02m (40 in) for Panel width,
 - b. 1.73m (68 in) Panel length for 60 Cell, and
 - c. 1.97m (77.5 in) Panel length for 72 Cell.
4. Solar panel & rail dead load = approximately 0.19 kPa (4.0 psf).
5. OSB shall be 24/16 APA rated sheathing minimum (7/16" thick).
6. Plywood shall be 32/16 APA rated sheathing minimum (15/32" thick).
7. Sheathing shall be free of defects including, but not limited to water damage and delamination.
8. Roof rafters or trusses spaced at 0.61m (24") on centre maximum.
9. The maximum rail cantilever shall be the lesser of 40% of the maximum rail span/ spacing in the Tables below, and the maximum recommended by the rail manufacturer. Provide thermal expansion splices at spacing not exceeding 4.25 metres (14 feet) per rail manufacturer's instructions.
10. PV panels must be supported per the PV manufacturer's required orientation, location and/or spacing. Loads shall be limited to the recommended values of PV manufacturer.
11. The mounts are attached through a maximum of 2 layers of composite asphalt roof shingles or maximum 20 gage metal decking, provided the metal is pre-drilled as wood screws are not designed to penetrate the metal decking. Tables not valid on concrete roof tile.
12. Maximum height from bottom of base mount to top of rail shall not exceed 125mm (5") for the OSB & Plywood only installation options and 175mm (7") for the rafter installation option. Ref. Exhibit 'A' Detail 2.
13. The capacities of the mounts have been checked for interaction of shear and compression, and interaction of shear and tension, and the sum of the (factored actual/ factored allowable) is < 1.0.
14. The blanks in the tables are inadmissible loading for the particular mount in that location and loads.

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RT-E-Mount Mini - TABLES

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017- T4

Description

Calculation of mount capacities

Checker:

Table: RT1: RT-E-Mount Mini - Rafter - 60 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
0.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.0$ $C_b = 0.8$ $C_w = 1.0$ $C_a = 1.0$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.219	1.219	0.914
			S	2.438	2.438	2.438	1.829	1.524	1.219	0.914	0.914	0.914	0.610
			C	2.134	1.219	0.914	0.610	0.610	-	-	-	-	-
		7 TO 27	R	2.438	2.438	2.438	1.829	1.524	1.219	0.914	0.914	0.914	0.610
			S	2.438	2.134	1.524	1.219	0.914	0.914	0.610	0.610	0.610	-
			C	2.438	1.524	0.914	0.914	0.610	0.610	-	-	-	-
		28 TO 45	R	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.219	1.219	0.914
			S	2.438	2.438	2.438	2.134	1.829	1.524	1.219	1.219	0.914	0.914
			C	2.438	2.438	2.438	2.134	1.829	1.524	1.219	1.219	0.914	0.914
	ROUGH	0 TO 6	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524
			S	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219	1.219
			C	2.438	2.134	1.524	1.219	0.914	0.610	0.610	0.610	-	-
		7 TO 27	R	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219	1.219
			S	2.438	2.438	2.438	1.829	1.524	1.219	0.914	0.914	0.914	0.610
			C	2.438	2.134	1.524	1.219	0.914	0.914	0.610	0.610	0.610	-
		28 TO 45	R	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.829	1.524
			S	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219
			C	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219	1.219
1.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.1$ $C_b = 0.9$ $C_w = 1.1$ $C_a = 1.1$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.219	1.219	0.914
			S	2.438	2.438	2.438	1.829	1.524	1.219	0.914	0.914	0.914	0.610
			C	2.134	1.219	0.914	0.610	0.610	-	-	-	-	-
		7 TO 27	R	2.438	2.438	2.438	1.829	1.524	1.219	0.914	0.914	0.914	0.610
			S	2.438	2.134	1.524	1.219	0.914	0.914	0.610	0.610	0.610	-
			C	2.438	1.524	0.914	0.914	0.610	0.610	-	-	-	-
		28 TO 45	R	1.829	1.829	1.829	1.829	1.829	1.829	1.524	1.219	1.219	0.914
			S	1.829	1.829	1.829	1.829	1.829	1.524	1.219	1.219	0.914	0.914
			C	1.829	1.829	1.829	1.829	1.829	1.524	1.219	1.219	0.914	0.914
	ROUGH	0 TO 6	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524
			S	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219	1.219
			C	2.438	2.134	1.524	1.219	0.914	0.610	0.610	0.610	-	-
		7 TO 27	R	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219	1.219
			S	2.438	2.438	2.438	1.829	1.524	1.219	0.914	0.914	0.914	0.610
			C	2.438	2.134	1.524	1.219	0.914	0.914	0.610	0.610	0.610	-
		28 TO 45	R	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.524
			S	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.524	1.524	1.219
			C	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.524	1.524	1.219
1.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.2$ $C_b = 0.10$ $C_w = 1.2$ $C_a = 1.2$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.219	1.219	0.914
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			S	1.829	1.829	1.524	1.219	0.914	0.914	0.610	0.610	0.610	-
			C	1.829	1.524	0.914	0.914	0.610	0.610	-	-	-	-
		28 TO 45	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914
			S	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914
			C	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914
	ROUGH	0 TO 6	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524
			S	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219	1.219
			C	2.438	2.134	1.524	1.219	0.914	0.610	0.610	0.610	-	-
		7 TO 27	R	1.829	1.829	1.829	1.829	1.829	1.829	1.524	1.524	1.219	1.219
			S	1.829	1.829	1.829	1.829	1.524	1.219	0.914	0.914	0.914	0.610
			C	1.829	1.829	1.524	1.219	0.914	0.914	0.610	0.610	0.610	-
		28 TO 45	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			S	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			C	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219

- Denotes "Not Permissible"

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Date : 21/02/2019

Design: AM

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Description

Calculation of mount capacities

Checker:

Table: RT1: RT-E-Mount Mini - Rafter - 60 Cells PV Panels - Portrait Orientation													
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				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
2.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.3$ $C_b = 0.11$ $C_w = 1.3$ $C_a = 1.3$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.829	1.829	1.829	1.829	1.829	1.829	1.524	1.219	1.219	0.914
			S	1.829	1.829	1.829	1.829	1.524	1.219	0.914	0.914	0.914	0.610
			C	1.829	1.219	0.914	0.610	0.610	-	-	-	-	-
		7 TO 27	R	1.524	1.524	1.524	1.524	1.524	1.219	0.914	0.914	0.914	0.610
			S	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610	-
			C	1.524	1.524	0.914	0.914	0.610	0.610	-	-	-	-
		28 TO 45	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
	ROUGH	0 TO 6	R	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.524
			S	1.829	1.829	1.829	1.829	1.829	1.524	1.524	1.219	1.219	-
			C	1.829	1.829	1.524	1.219	0.914	0.610	0.610	0.610	-	-
		7 TO 27	R	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.219	1.219
			S	1.524	1.524	1.524	1.524	1.524	1.219	0.914	0.914	0.914	0.610
			C	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610	-
		28 TO 45	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
2.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.4$ $C_b = 0.12$ $C_w = 1.4$ $C_a = 1.4$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.219	1.219	0.914
			S	1.524	1.524	1.524	1.524	1.524	1.219	0.914	0.914	0.914	0.610
			C	1.524	1.219	0.914	0.610	0.610	-	-	-	-	-
		7 TO 27	R	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.914	0.610
			S	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610	-
			C	1.219	1.219	0.914	0.914	0.610	0.610	-	-	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
	ROUGH	0 TO 6	R	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524
			S	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.219	1.219
			C	1.524	1.524	1.524	1.219	0.914	0.610	0.610	0.610	-	-
		7 TO 27	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			S	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.914	0.914	0.610
			C	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
3.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.5$ $C_b = 0.13$ $C_w = 1.5$ $C_a = 1.5$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914
			S	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.914	0.610
			C	1.219	1.219	0.914	0.610	0.610	-	-	-	-	-
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	-
			C	0.914	0.914	0.914	0.914	0.610	0.610	-	-	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
	ROUGH	0 TO 6	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			S	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			C	1.219	1.219	1.219	1.219	0.914	0.610	0.610	0.610	-	-
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610
			C	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT1: RT-E-Mount Mini - Rafter - 60 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
3.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.6$ $C_b = 0.14$ $C_w = 1.6$ $C_a = 1.6$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610
			C	0.914	0.914	0.914	0.610	0.610	-	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-
			C	0.610	0.610	0.610	0.610	0.610	0.610	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
4.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.7$ $C_b = 0.15$ $C_w = 1.7$ $C_a = 1.7$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610
			C	0.914	0.914	0.914	0.610	0.610	-	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-
			C	0.610	0.610	0.610	0.610	0.610	0.610	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
4.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.8$ $C_b = 0.16$ $C_w = 1.8$ $C_a = 1.8$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	-	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-
			C	0.610	0.610	0.610	0.610	0.610	0.610	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT1: RT-E-Mount Mini - Rafter - 60 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
5.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.9$ $C_b = 0.17$ $C_w = 1.9$ $C_a = 1.9$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	-	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-
			C	0.610	0.610	0.610	0.610	0.610	0.610	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
5.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.10$ $C_b = 0.18$ $C_w = 1.10$ $C_a = 1.10$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
6.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.10$ $C_b = 0.18$ $C_w = 1.10$ $C_a = 1.10$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT2: RT-E-Mount Mini - Rafter - 72 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
0.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.0$ $C_b = 0.8$ $C_w = 1.0$ $C_a = 1.0$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.438	2.438	2.438	2.438	1.829	1.524	1.219	1.219	0.914	0.914
			S	2.438	2.438	2.134	1.524	1.219	0.914	0.914	0.914	0.610	0.610
			C	1.829	1.219	0.914	0.610	0.610	-	-	-	-	-
		7 TO 27	R	2.438	2.438	2.134	1.524	1.219	0.914	0.914	0.914	0.610	0.610
			S	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.610	-	-
			C	2.134	1.219	0.914	0.610	0.610	-	-	-	-	-
		28 TO 45	R	2.438	2.438	2.438	2.134	1.829	1.524	1.219	1.219	0.914	0.914
			S	2.438	2.438	2.438	1.829	1.524	1.219	1.219	0.914	0.914	0.610
			C	2.438	2.438	2.438	1.829	1.524	1.219	1.219	0.914	0.914	0.610
	ROUGH	0 TO 6	R	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524
			S	2.438	2.438	2.438	2.438	1.829	1.524	1.524	1.219	0.914	0.914
			C	2.438	1.829	1.219	0.914	0.610	0.610	0.610	-	-	-
		7 TO 27	R	2.438	2.438	2.438	2.438	1.829	1.524	1.524	1.219	0.914	0.914
			S	2.438	2.438	2.134	1.524	1.219	0.914	0.914	0.610	0.610	0.610
			C	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.610	-	-
		28 TO 45	R	2.438	2.438	2.438	2.438	2.438	2.438	1.829	1.829	1.524	1.219
			S	2.438	2.438	2.438	2.438	2.438	1.829	1.524	1.524	1.219	1.219
			C	2.438	2.438	2.438	2.438	2.438	1.829	1.524	1.524	1.219	1.219
1.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.1$ $C_b = 0.9$ $C_w = 1.1$ $C_a = 1.1$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.438	2.438	2.438	2.438	1.829	1.524	1.219	1.219	0.914	0.914
			S	2.438	2.438	2.134	1.524	1.219	0.914	0.914	0.914	0.610	0.610
			C	1.829	1.219	0.914	0.610	0.610	-	-	-	-	-
		7 TO 27	R	2.438	2.438	2.134	1.524	1.219	0.914	0.914	0.914	0.610	0.610
			S	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.610	-	-
			C	2.134	1.219	0.914	0.610	0.610	-	-	-	-	-
		28 TO 45	R	1.524	1.524	1.524	1.524	1.524	1.524	1.219	1.219	0.914	0.914
			S	1.524	1.524	1.524	1.524	1.524	1.219	1.219	0.914	0.914	0.610
			C	1.524	1.524	1.524	1.524	1.524	1.219	1.219	0.914	0.914	0.610
	ROUGH	0 TO 6	R	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524
			S	2.438	2.438	2.438	2.438	1.829	1.524	1.524	1.219	0.914	0.914
			C	2.438	1.829	1.219	0.914	0.610	0.610	0.610	-	-	-
		7 TO 27	R	2.438	2.438	2.438	2.438	1.829	1.524	1.524	1.219	0.914	0.914
			S	2.438	2.438	2.134	1.524	1.219	0.914	0.914	0.610	0.610	0.610
			C	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.610	-	-
		28 TO 45	R	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.219
			S	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.219	1.219
			C	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.219	1.219
1.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.2$ $C_b = 0.10$ $C_w = 1.2$ $C_a = 1.2$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.134	2.134	2.134	2.134	1.829	1.524	1.219	1.219	0.914	0.914
			S	2.134	2.134	2.134	1.524	1.219	0.914	0.914	0.914	0.610	0.610
			C	1.829	1.219	0.914	0.610	0.610	-	-	-	-	-
		7 TO 27	R	1.524	1.524	1.524	1.524	1.219	0.914	0.914	0.914	0.610	0.610
			S	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610	-	-
			C	1.524	1.219	0.914	0.610	0.610	-	-	-	-	-
		28 TO 45	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610
	ROUGH	0 TO 6	R	2.134	2.134	2.134	2.134	2.134	2.134	2.134	1.829	1.524	1.524
			S	2.134	2.134	2.134	2.134	1.829	1.524	1.524	1.219	0.914	0.914
			C	2.134	1.829	1.219	0.914	0.610	0.610	0.610	-	-	-
		7 TO 27	R	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.219	0.914	0.914
			S	1.524	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610
			C	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610	-	-
		28 TO 45	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT2: RT-E-Mount Mini - Rafter - 72 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
2.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.3$ $C_b = 0.11$ $C_w = 1.3$ $C_a = 1.3$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.524	1.524	1.524	1.524	1.524	1.524	1.219	1.219	0.914	0.914
			S	1.524	1.524	1.524	1.524	1.219	0.914	0.914	0.914	0.610	0.610
			C	1.524	1.219	0.914	0.610	0.610	-	-	-	-	-
		7 TO 27	R	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.914	0.610	0.610
			S	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610	-	-
			C	1.219	1.219	0.914	0.610	0.610	-	-	-	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
	ROUGH	0 TO 6	R	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524
			S	1.524	1.524	1.524	1.524	1.524	1.524	1.219	0.914	0.914	0.914
			C	1.524	1.524	1.219	0.914	0.610	0.610	-	-	-	-
		7 TO 27	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914
			S	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610
			C	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
2.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.4$ $C_b = 0.12$ $C_w = 1.4$ $C_a = 1.4$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914
			S	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.914	0.610	0.610
			C	1.219	1.219	0.914	0.610	0.610	-	-	-	-	-
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	-	-
			C	0.914	0.914	0.914	0.610	0.610	-	-	-	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
	ROUGH	0 TO 6	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			S	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914
			C	1.219	1.219	1.219	0.914	0.610	0.610	0.610	-	-	-
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610
			C	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
3.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.5$ $C_b = 0.13$ $C_w = 1.5$ $C_a = 1.5$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610
			C	0.914	0.914	0.914	0.610	0.610	-	-	-	-	-
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	-	-
			C	0.914	0.914	0.914	0.610	0.610	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.610	0.610	0.610	-	-	-
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610
			C	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT2: RT-E-Mount Mini - Rafter - 72 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
3.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.6$ $C_b = 0.14$ $C_w = 1.6$ $C_a = 1.6$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610
			C	0.914	0.914	0.914	0.610	0.610	-	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-	-
			C	0.610	0.610	0.610	0.610	0.610	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.610	0.610	0.610	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
4.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.7$ $C_b = 0.15$ $C_w = 1.7$ $C_a = 1.7$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	-	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-	-
			C	0.610	0.610	0.610	0.610	0.610	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
4.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.8$ $C_b = 0.16$ $C_w = 1.8$ $C_a = 1.8$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	-	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-	-
			C	0.610	0.610	0.610	0.610	0.610	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT2: RT-E-Mount Mini - Rafter - 72 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
5.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.9$ $C_b = 0.17$ $C_w = 1.9$ $C_a = 1.9$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
5.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.10$ $C_b = 0.18$ $C_w = 1.10$ $C_a = 1.10$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
6.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.10$ $C_b = 0.18$ $C_w = 1.10$ $C_a = 1.10$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017- T4

Description

Calculation of mount capacities

Checker:

Table: RT3: RT-E-Mount Mini - Plywood Only - 60 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
0.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.0$ $C_b = 0.8$ $C_w = 1.0$ $C_a = 1.0$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.438	2.134	1.524	1.219	0.914	0.610	0.610	0.610	0.305	0.305
			S	2.438	1.524	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.914	0.610	0.305	0.305	0.305	-	-	-	-	-
		7 TO 27	R	2.438	1.524	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	1.524	0.914	0.610	0.305	0.305	0.305	0.305	0.305	-	-
			C	0.914	0.610	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.610	0.305	0.305
			S	2.438	1.524	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
			C	2.438	1.524	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	2.438	2.438	2.438	1.829	1.219	1.219	0.914	0.914	0.610	0.610
			S	2.438	2.134	1.524	1.219	0.914	0.610	0.610	0.610	0.305	0.305
			C	1.219	0.914	0.610	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	2.438	2.134	1.524	1.219	0.914	0.610	0.610	0.610	0.305	0.305
			S	2.438	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	1.524	0.914	0.610	0.305	0.305	0.305	0.305	0.305	-	-
		28 TO 45	R	2.438	2.438	2.134	1.524	1.219	0.914	0.914	0.914	0.610	0.610
			S	2.438	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			C	2.438	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.610	0.610
1.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.1$ $C_b = 0.9$ $C_w = 1.1$ $C_a = 1.1$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.134	2.134	1.524	1.219	0.914	0.610	0.610	0.610	0.305	0.305
			S	2.134	1.524	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.914	0.610	0.305	0.305	0.305	-	-	-	-	-
		7 TO 27	R	2.134	1.524	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	1.524	0.914	0.610	0.305	0.305	0.305	0.305	0.305	-	-
			C	0.914	0.610	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.305	0.305
			S	1.524	1.524	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
			C	1.524	1.524	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	2.134	2.134	2.134	1.829	1.219	1.219	0.914	0.914	0.610	0.610
			S	2.134	2.134	1.524	1.219	0.914	0.610	0.610	0.610	0.305	0.305
			C	1.219	0.914	0.610	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	2.134	2.134	1.524	1.219	0.914	0.610	0.610	0.610	0.305	0.305
			S	2.134	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	1.524	0.914	0.610	0.305	0.305	0.305	0.305	0.305	-	-
		28 TO 45	R	1.524	1.524	1.524	1.524	1.219	0.914	0.914	0.914	0.610	0.610
			S	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			C	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.610
1.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.2$ $C_b = 0.10$ $C_w = 1.2$ $C_a = 1.2$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.219	1.219	1.219	1.219	0.914	0.610	0.610	0.610	0.305	0.305
			S	1.219	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.914	0.610	0.305	0.305	0.305	-	-	-	-	-
		7 TO 27	R	1.524	1.524	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	1.524	0.914	0.610	0.305	0.305	0.305	0.305	0.305	-	-
			C	0.914	0.610	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.305	0.305
			S	0.914	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
			C	0.914	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610
			S	1.219	1.219	1.219	1.219	0.914	0.610	0.610	0.610	0.305	0.305
			C	1.219	0.914	0.610	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	1.524	1.524	1.524	1.219	0.914	0.610	0.610	0.610	0.305	0.305
			S	1.524	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	1.524	0.914	0.610	0.305	0.305	0.305	0.305	0.305	-	-
		28 TO 45	R	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610	0.610
			C	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610	0.610

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT3: RT-E-Mount Mini - Plywood Only - 60 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
2.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.3$ $C_b = 0.11$ $C_w = 1.3$ $C_a = 1.3$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.305	0.305
			S	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.914	0.610	0.305	0.305	0.305	-	-	-	-	-
		7 TO 27	R	1.219	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	1.219	0.914	0.610	0.305	0.305	0.305	0.305	0.305	-	-
			C	0.914	0.610	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.305	0.305
			C	0.914	0.914	0.610	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	1.219	1.219	1.219	1.219	0.914	0.610	0.610	0.610	0.305	0.305
			S	1.219	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	1.219	0.914	0.610	0.305	0.305	0.305	0.305	0.305	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
2.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.4$ $C_b = 0.12$ $C_w = 1.4$ $C_a = 1.4$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.305	0.305
			S	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.914	0.610	0.305	0.305	0.305	-	-	-	-	-
		7 TO 27	R	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	0.914	0.914	0.610	0.305	0.305	0.305	0.305	0.305	-	-
			C	0.914	0.610	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.305	0.305
			C	0.914	0.914	0.610	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.305	0.305
			S	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.914	0.914	0.610	0.305	0.305	0.305	0.305	0.305	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
3.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.5$ $C_b = 0.13$ $C_w = 1.5$ $C_a = 1.5$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.305	0.305	0.305	-	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-	-
			C	0.610	0.610	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305
			C	0.610	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT3: RT-E-Mount Mini - Plywood Only - 60 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
3.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.6$ $C_b = 0.14$ $C_w = 1.6$ $C_a = 1.6$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.305	0.305	0.305	-	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-	-
			C	0.610	0.610	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305
			C	0.610	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
4.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.7$ $C_b = 0.15$ $C_w = 1.7$ $C_a = 1.7$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	-	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-	-
			C	0.610	0.610	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
4.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.8$ $C_b = 0.16$ $C_w = 1.8$ $C_a = 1.8$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-
			C	0.305	0.305	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT3: RT-E-Mount Mini - Plywood Only - 60 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
5.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.9$ $C_b = 0.17$ $C_w = 1.9$ $C_a = 1.9$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-
			C	0.305	0.305	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
5.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.10$ $C_b = 0.18$ $C_w = 1.10$ $C_a = 1.10$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-
			C	0.305	0.305	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
6.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.10$ $C_b = 0.18$ $C_w = 1.10$ $C_a = 1.10$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-
			C	0.305	0.305	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017- T4

Description

Calculation of mount capacities

Checker:

Table: RT4: RT-E-Mount Mini - Plywood Only - 72 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
0.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.0$ $C_b = 0.8$ $C_w = 1.0$ $C_a = 1.0$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.438	1.829	1.219	0.914	0.610	0.610	0.610	0.305	0.305	0.305
			S	2.134	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.610	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	2.134	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	1.219	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
			C	0.914	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	2.438	1.829	1.219	0.914	0.610	0.610	0.610	0.305	0.305	0.305
			S	2.438	1.524	0.914	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			C	2.438	1.524	0.914	0.610	0.610	0.610	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	2.438	2.438	2.134	1.524	1.219	0.914	0.914	0.610	0.610	0.610
			S	2.438	1.829	1.219	0.914	0.610	0.610	0.610	0.305	0.305	0.305
			C	1.219	0.610	0.305	0.305	0.305	0.305	-	-	-	-
		7 TO 27	R	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.305	0.305	0.305
			S	2.134	1.219	0.914	0.610	0.305	0.305	0.305	0.305	0.305	0.305
			C	1.219	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	2.438	2.438	1.829	1.524	1.219	0.914	0.914	0.610	0.610	0.610
			S	2.438	2.134	1.524	1.219	0.914	0.610	0.610	0.610	0.610	0.305
			C	2.438	2.134	1.524	1.219	0.914	0.610	0.610	0.610	0.610	0.305
1.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.1$ $C_b = 0.9$ $C_w = 1.1$ $C_a = 1.1$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.829	1.829	1.219	0.914	0.610	0.610	0.610	0.305	0.305	0.305
			S	1.829	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.610	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	1.829	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	1.219	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
			C	0.914	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	1.219	1.219	1.219	0.914	0.610	0.610	0.610	0.305	0.305	0.305
			S	1.219	1.219	0.914	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			C	1.219	1.219	0.914	0.610	0.610	0.610	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	1.829	1.829	1.829	1.524	1.219	0.914	0.914	0.610	0.610	0.610
			S	1.829	1.829	1.219	0.914	0.610	0.610	0.610	0.305	0.305	0.305
			C	1.219	0.610	0.305	0.305	0.305	0.305	-	-	-	-
		7 TO 27	R	1.829	1.829	1.219	0.914	0.914	0.610	0.610	0.305	0.305	0.305
			S	1.829	1.219	0.914	0.610	0.305	0.305	0.305	0.305	0.305	0.305
			C	1.219	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610
			S	1.219	1.219	1.219	1.219	0.914	0.610	0.610	0.610	0.610	0.305
			C	1.219	1.219	1.219	1.219	0.914	0.610	0.610	0.610	0.610	0.305
1.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.2$ $C_b = 0.10$ $C_w = 1.2$ $C_a = 1.2$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.219	1.219	1.219	0.914	0.610	0.610	0.610	0.305	0.305	0.305
			S	1.219	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.610	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	1.219	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	1.219	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
			C	0.914	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.305	0.305	0.305
			S	0.914	0.914	0.914	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			C	0.914	0.914	0.914	0.610	0.610	0.610	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610
			S	1.219	1.219	1.219	0.914	0.610	0.610	0.610	0.305	0.305	0.305
			C	1.219	0.610	0.305	0.305	0.305	0.305	-	-	-	-
		7 TO 27	R	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.305	0.305	0.305
			S	1.219	1.219	0.914	0.610	0.305	0.305	0.305	0.305	0.305	0.305
			C	1.219	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610	0.305
			C	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610	0.305

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT4: RT-E-Mount Mini - Plywood Only - 72 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
2.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.3$ $C_b = 0.11$ $C_w = 1.3$ $C_a = 1.3$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.305	0.305	0.305
			S	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.610	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	0.914	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
			C	0.914	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610
			S	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.305	0.305	0.305
			C	0.914	0.610	0.305	0.305	0.305	0.305	-	-	-	-
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305
			S	0.914	0.914	0.914	0.610	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.914	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305
2.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.4$ $C_b = 0.12$ $C_w = 1.4$ $C_a = 1.4$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.610	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	0.914	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
			C	0.914	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305
			C	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-	-
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305
			S	0.914	0.914	0.914	0.610	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.914	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305
3.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.5$ $C_b = 0.13$ $C_w = 1.5$ $C_a = 1.5$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.610	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
			C	0.610	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305
			C	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT4: RT-E-Mount Mini - Plywood Only - 72 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
3.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.6$ $C_b = 0.14$ $C_w = 1.6$ $C_a = 1.6$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.305	0.305	0.305	-	-	-	-
			C	0.610	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
4.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.7$ $C_b = 0.15$ $C_w = 1.7$ $C_a = 1.7$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
4.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.8$ $C_b = 0.16$ $C_w = 1.8$ $C_a = 1.8$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT4: RT-E-Mount Mini - Plywood Only - 72 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
5.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.9$ $C_b = 0.17$ $C_w = 1.9$ $C_a = 1.9$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
5.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.10$ $C_b = 0.18$ $C_w = 1.10$ $C_a = 1.10$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
6.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.10$ $C_b = 0.18$ $C_w = 1.10$ $C_a = 1.10$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT5: RT-E-Mount Mini - OSB Only - 60 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
0.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.0$ $C_b = 0.8$ $C_w = 1.0$ $C_a = 1.0$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.829	1.829	1.219	0.914	0.914	0.610	0.610	0.305	0.305	0.305
			S	1.829	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.914	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	2.134	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	1.219	0.914	0.610	0.305	0.305	0.305	0.305	-	-	-
			C	0.914	0.610	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	1.524	1.524	1.219	0.914	0.610	0.610	0.610	0.305	0.305	0.305
			S	1.524	1.524	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
			C	1.524	1.524	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	1.829	1.829	1.829	1.524	1.219	0.914	0.914	0.610	0.610	0.610
			S	1.829	1.829	1.524	0.914	0.914	0.610	0.610	0.610	0.305	0.305
			C	1.219	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	2.134	2.134	1.524	0.914	0.914	0.610	0.610	0.610	0.305	0.305
			S	2.134	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	1.524	0.914	0.610	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	1.524	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610
			S	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.305
			C	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.305
1.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.1$ $C_b = 0.9$ $C_w = 1.1$ $C_a = 1.1$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305
			S	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.914	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	1.219	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	1.219	0.914	0.610	0.305	0.305	0.305	0.305	-	-	-
			C	0.914	0.610	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.305	0.305	0.305
			S	0.914	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
			C	0.914	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.305	0.305
			C	0.914	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610	0.305	0.305
			S	1.219	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	1.219	0.914	0.610	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610	0.305
			C	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610	0.305
1.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.2$ $C_b = 0.10$ $C_w = 1.2$ $C_a = 1.2$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.610	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	0.914	0.914	0.610	0.305	0.305	0.305	0.305	-	-	-
			C	0.914	0.610	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305
			C	0.610	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.305	0.305
			S	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.914	0.914	0.610	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT5: RT-E-Mount Mini - OSB Only - 60 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
2.00 $S = I_s(S_s C_b C_w C_s C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.3$ $C_b = 0.11$ $C_w = 1.3$ $C_a = 1.3$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.610	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
			C	0.610	0.610	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305
			C	0.610	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
2.50 $S = I_s(S_s C_b C_w C_s C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.4$ $C_b = 0.12$ $C_w = 1.4$ $C_a = 1.4$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
			C	0.305	0.305	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
3.00 $S = I_s(S_s C_b C_w C_s C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.5$ $C_b = 0.13$ $C_w = 1.5$ $C_a = 1.5$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
			C	0.305	0.305	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT5: RT-E-Mount Mini - OSB Only - 60 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
3.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.6$ $C_b = 0.14$ $C_w = 1.6$ $C_a = 1.6$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
			C	0.305	0.305	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
4.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.7$ $C_b = 0.15$ $C_w = 1.7$ $C_a = 1.7$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
			C	0.305	0.305	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
4.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.8$ $C_b = 0.16$ $C_w = 1.8$ $C_a = 1.8$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
			C	0.305	0.305	0.305	0.305	0.305	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT5: RT-E-Mount Mini - OSB Only - 60 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
5.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.9$ $C_b = 0.17$ $C_w = 1.9$ $C_a = 1.9$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
5.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.10$ $C_b = 0.18$ $C_w = 1.10$ $C_a = 1.10$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
6.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.10$ $C_b = 0.18$ $C_w = 1.10$ $C_a = 1.10$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT6: RT-E-Mount Mini - OSB Only - 72 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
0.50 $S = I_s(S_s C_b C_w C_s C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.0$ $C_b = 0.8$ $C_w = 1.0$ $C_a = 1.0$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.829	1.829	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
			S	1.829	1.219	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
			C	0.610	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	1.829	1.219	0.610	0.610	0.305	0.305	0.305	0.305	0.305	0.305
			S	1.219	0.610	0.305	0.305	0.305	-	-	-	-	-
			C	0.610	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	1.524	1.524	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
			S	1.524	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	1.524	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	1.829	1.829	1.829	1.524	1.219	0.914	0.610	0.610	0.610	0.610
			S	1.829	1.829	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
			C	1.219	0.610	0.305	0.305	0.305	-	-	-	-	-
		7 TO 27	R	1.829	1.829	1.219	0.914	0.610	0.610	0.610	0.305	0.305	0.305
			S	1.829	1.219	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
			C	1.219	0.610	0.610	0.305	0.305	0.305	-	-	-	-
		28 TO 45	R	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.305
			S	1.524	1.524	1.524	1.219	0.914	0.610	0.610	0.610	0.305	0.305
			C	1.524	1.524	1.524	1.219	0.914	0.610	0.610	0.610	0.305	0.305
1.00 $S = I_s(S_s C_b C_w C_s C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.1$ $C_b = 0.9$ $C_w = 1.1$ $C_a = 1.1$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.914	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
			S	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
			C	0.610	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.914	0.610	0.305	0.305	0.305	0.305	-	-	-	-
			C	0.610	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610
			S	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.305	0.305	0.305
			C	0.914	0.610	0.305	0.305	0.305	0.305	-	-	-	-
		7 TO 27	R	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.305	0.305	0.305
			S	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
			C	0.914	0.610	0.610	0.305	0.305	0.305	-	-	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305
1.50 $S = I_s(S_s C_b C_w C_s C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.2$ $C_b = 0.10$ $C_w = 1.2$ $C_a = 1.2$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
			C	0.610	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-	-
			C	0.610	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305
			C	0.610	0.610	0.305	0.305	0.305	0.305	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
			C	0.610	0.610	0.610	0.305	0.305	0.305	-	-	-	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017- T4

Description

Calculation of mount capacities

Checker:

Table: RT6: RT-E-Mount Mini - OSB Only - 72 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
2.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.3$ $C_b = 0.11$ $C_w = 1.3$ $C_a = 1.3$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.610	0.610	0.305	0.305	0.305	-	-	-	-	-
			C	0.610	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	-	-	-	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305
			S	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
			C	0.610	0.610	0.610	0.305	0.305	0.305	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
2.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.4$ $C_b = 0.12$ $C_w = 1.4$ $C_a = 1.4$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-	-
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-
			C	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
3.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.5$ $C_b = 0.13$ $C_w = 1.5$ $C_a = 1.5$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-	-
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-
			C	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT6: RT-E-Mount Mini - OSB Only - 72 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
3.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.6$ $C_b = 0.14$ $C_w = 1.6$ $C_a = 1.6$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-	-
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-
			C	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
4.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.7$ $C_b = 0.15$ $C_w = 1.7$ $C_a = 1.7$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-	-
			C	0.305	0.305	0.305	0.305	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-
			C	0.305	0.305	0.305	0.305	0.305	0.305	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
4.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.8$ $C_b = 0.16$ $C_w = 1.8$ $C_a = 1.8$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT6: RT-E-Mount Mini - OSB Only - 72 Cells PV Panels - Portrait Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
5.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.9$ $C_b = 0.17$ $C_w = 1.9$ $C_a = 1.9$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
5.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.10$ $C_b = 0.18$ $C_w = 1.10$ $C_a = 1.10$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
6.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.10$ $C_b = 0.18$ $C_w = 1.10$ $C_a = 1.10$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		7 TO 27	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017- T4

Description

Calculation of mount capacities

Checker:

Table: RT7: RT-E-Mount Mini - Rafter - - Landscape Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
0.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.0$ $C_b = 0.8$ $C_w = 1.0$ $C_a = 1.0$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829
			S	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219
			C	2.438	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.610	0.610
		7 TO 27	R	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219
			S	2.438	2.438	2.438	2.134	1.829	1.524	1.219	0.914	0.914	0.914
			C	2.438	2.438	1.829	1.524	1.219	0.914	0.914	0.610	0.610	0.610
		28 TO 45	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829
			S	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.829	1.524
			C	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.829	1.524
	ROUGH	0 TO 6	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438
			S	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829
			C	2.438	2.438	2.438	2.134	1.524	1.219	0.914	0.914	0.914	0.914
		7 TO 27	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829
			S	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219
			C	2.438	2.438	2.438	2.134	1.829	1.524	1.219	1.219	0.914	0.914
		28 TO 45	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438
			S	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438
			C	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438
1.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.1$ $C_b = 0.9$ $C_w = 1.1$ $C_a = 1.1$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829
			S	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219
			C	2.438	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.610	0.610
		7 TO 27	R	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219
			S	2.438	2.438	2.438	2.134	1.829	1.524	1.219	0.914	0.914	0.914
			C	2.438	2.438	1.829	1.524	1.219	0.914	0.914	0.610	0.610	0.610
		28 TO 45	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829
			S	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.829	1.524
			C	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.829	1.524
	ROUGH	0 TO 6	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438
			S	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829
			C	2.438	2.438	2.438	2.134	1.524	1.219	1.219	0.914	0.914	0.914
		7 TO 27	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829
			S	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219
			C	2.438	2.438	2.438	2.134	1.829	1.524	1.219	1.219	0.914	0.914
		28 TO 45	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438
			S	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438
			C	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438
1.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.2$ $C_b = 0.10$ $C_w = 1.2$ $C_a = 1.2$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829
			S	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219
			C	2.438	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.610	0.610
		7 TO 27	R	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219
			S	2.438	2.438	2.438	2.134	1.829	1.524	1.219	0.914	0.914	0.914
			C	2.438	2.438	1.829	1.524	1.219	0.914	0.914	0.610	0.610	0.610
		28 TO 45	R	2.134	2.134	2.134	2.134	2.134	2.134	2.134	2.134	2.134	1.829
			S	2.134	2.134	2.134	2.134	2.134	2.134	2.134	1.829	1.829	1.524
			C	2.134	2.134	2.134	2.134	2.134	2.134	2.134	1.829	1.829	1.524
	ROUGH	0 TO 6	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438
			S	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829
			C	2.438	2.438	2.438	2.134	1.524	1.219	1.219	0.914	0.914	0.914
		7 TO 27	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829
			S	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219
			C	2.438	2.438	2.438	2.134	1.829	1.524	1.219	1.219	0.914	0.914
		28 TO 45	R	2.134	2.134	2.134	2.134	2.134	2.134	2.134	2.134	2.134	2.134
			S	2.134	2.134	2.134	2.134	2.134	2.134	2.134	2.134	2.134	2.134
			C	2.134	2.134	2.134	2.134	2.134	2.134	2.134	2.134	2.134	2.134

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW Date : 21/02/2019 Design: AM

Project No.: 18017- T4 Description Calculation of mount capacities Checker:

Table: RT7: RT-E-Mount Mini - Rafter - - Landscape Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
2.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.3$ $C_b = 0.11$ $C_w = 1.3$ $C_a = 1.3$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829
			S	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219
			C	2.438	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.610	0.610
		7 TO 27	R	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219
			S	2.438	2.438	2.438	2.134	1.829	1.524	1.219	0.914	0.914	0.914
			C	2.438	2.438	1.829	1.524	1.219	0.914	0.914	0.610	0.610	0.610
		28 TO 45	R	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524
			S	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524
			C	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524
	ROUGH	0 TO 6	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438
			S	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829
			C	2.438	2.438	2.438	2.134	1.524	1.219	1.219	0.914	0.914	0.914
		7 TO 27	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829
			S	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219
			C	2.438	2.438	2.438	2.134	1.829	1.524	1.219	1.219	0.914	0.914
		28 TO 45	R	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524
			S	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524
			C	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524
2.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.4$ $C_b = 0.12$ $C_w = 1.4$ $C_a = 1.4$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829
			S	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.524	1.219
			C	2.438	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.610	0.610
		7 TO 27	R	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.524	1.524	1.219
			S	1.829	1.829	1.829	1.829	1.829	1.524	1.219	0.914	0.914	0.914
			C	1.829	1.829	1.829	1.524	1.219	0.914	0.914	0.610	0.610	0.610
		28 TO 45	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			S	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			C	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
	ROUGH	0 TO 6	R	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438
			S	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.438	2.134	1.829
			C	2.438	2.438	2.438	2.134	1.524	1.219	1.219	0.914	0.914	0.914
		7 TO 27	R	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.829
			S	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.524	1.524	1.219
			C	1.829	1.829	1.829	1.829	1.829	1.524	1.219	1.219	0.914	0.914
		28 TO 45	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			S	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			C	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
3.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.5$ $C_b = 0.13$ $C_w = 1.5$ $C_a = 1.5$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.134	2.134	2.134	2.134	2.134	2.134	2.134	2.134	2.134	1.829
			S	2.134	2.134	2.134	2.134	2.134	2.134	1.829	1.524	1.524	1.219
			C	2.134	2.134	1.829	1.219	0.914	0.914	0.610	0.610	0.610	0.610
		7 TO 27	R	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.219
			S	1.524	1.524	1.524	1.524	1.524	1.524	1.219	0.914	0.914	0.914
			C	1.524	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610
		28 TO 45	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
	ROUGH	0 TO 6	R	2.134	2.134	2.134	2.134	2.134	2.134	2.134	2.134	2.134	2.134
			S	2.134	2.134	2.134	2.134	2.134	2.134	2.134	2.134	2.134	1.829
			C	2.134	2.134	2.134	2.134	1.524	1.219	1.219	0.914	0.914	0.914
		7 TO 27	R	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524
			S	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.219
			C	1.524	1.524	1.524	1.524	1.524	1.219	1.219	1.219	0.914	0.914
		28 TO 45	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017- T4

Description

Calculation of mount capacities

Checker:

Table: RT7: RT-E-Mount Mini - Rafter - - Landscape Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
3.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.6$ $C_b = 0.14$ $C_w = 1.6$ $C_a = 1.6$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.829
			S	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.524	1.524	1.219
			C	1.829	1.829	1.829	1.219	0.914	0.914	0.610	0.610	0.610	0.610
		7 TO 27	R	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.219
			S	1.524	1.524	1.524	1.524	1.524	1.524	1.219	0.914	0.914	0.914
			C	1.524	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610
		28 TO 45	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
	ROUGH	0 TO 6	R	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.829
			S	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.829
			C	1.829	1.829	1.829	1.829	1.524	1.219	0.914	0.914	0.914	0.914
		7 TO 27	R	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524
			S	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.219
			C	1.524	1.524	1.524	1.524	1.524	1.524	1.219	1.219	0.914	0.914
		28 TO 45	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
4.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.7$ $C_b = 0.15$ $C_w = 1.7$ $C_a = 1.7$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524
			S	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.219
			C	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.610
		7 TO 27	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			S	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.914
			C	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
	ROUGH	0 TO 6	R	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524
			S	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524
			C	1.524	1.524	1.524	1.524	1.524	1.219	1.219	0.914	0.914	0.914
		7 TO 27	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			S	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			C	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
4.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.8$ $C_b = 0.16$ $C_w = 1.8$ $C_a = 1.8$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524
			S	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.219
			C	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.610
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
	ROUGH	0 TO 6	R	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524
			S	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524
			C	1.524	1.524	1.524	1.524	1.524	1.219	1.219	0.914	0.914	0.914
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW Date : 21/02/2019 Design: AM

Project No.: 18017-T4 Description Calculation of mount capacities Checker:

Table: RT7: RT-E-Mount Mini - Rafter - - Landscape Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
5.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.9$ $C_b = 0.17$ $C_w = 1.9$ $C_a = 1.9$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			S	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			C	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610	0.610
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
	ROUGH	0 TO 6	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			S	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			C	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.914
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
5.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.10$ $C_b = 0.18$ $C_w = 1.10$ $C_a = 1.10$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			S	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			C	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610	0.610
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
	ROUGH	0 TO 6	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			S	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			C	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.914
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
6.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.10$ $C_b = 0.18$ $C_w = 1.10$ $C_a = 1.10$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-
	ROUGH	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
		28 TO 45	R	-	-	-	-	-	-	-	-	-	-
			S	-	-	-	-	-	-	-	-	-	-
			C	-	-	-	-	-	-	-	-	-	-

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017- T4

Description

Calculation of mount capacities

Checker:

Table: RT8: RT-E-Mount Mini - Plywood Only - - Landscape Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
0.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.0$ $C_b = 0.8$ $C_w = 1.0$ $C_a = 1.0$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.438	2.438	2.438	1.829	1.524	1.219	1.219	0.914	0.914	0.610
			S	2.438	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			C	1.524	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		7 TO 27	R	2.438	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			S	2.438	1.524	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
			C	1.829	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	2.438	2.438	2.438	1.829	1.524	1.219	0.914	0.914	0.914	0.610
			S	2.438	2.438	2.134	1.524	1.219	0.914	0.914	0.610	0.610	0.610
			C	2.438	2.438	2.134	1.524	1.219	0.914	0.914	0.610	0.610	0.610
	ROUGH	0 TO 6	R	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.219	1.219
			S	2.438	2.438	2.438	2.134	1.524	1.219	1.219	0.914	0.914	0.610
			C	2.438	1.524	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		7 TO 27	R	2.438	2.438	2.438	2.134	1.524	1.219	1.219	0.914	0.914	0.914
			S	2.438	2.438	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			C	2.438	1.524	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	2.438	2.438	2.438	2.438	2.438	1.829	1.524	1.524	1.219	1.219
			S	2.438	2.438	2.438	2.438	1.829	1.524	1.219	1.219	0.914	0.914
			C	2.438	2.438	2.438	2.438	1.829	1.524	1.219	1.219	0.914	0.914
1.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.1$ $C_b = 0.9$ $C_w = 1.1$ $C_a = 1.1$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.438	2.438	2.438	1.829	1.524	1.219	1.219	0.914	0.914	0.610
			S	2.438	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			C	1.524	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		7 TO 27	R	2.438	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			S	2.438	1.524	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
			C	1.829	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	2.438	2.438	2.438	1.829	1.524	1.219	0.914	0.914	0.914	0.610
			S	2.438	2.438	2.134	1.524	1.219	0.914	0.914	0.610	0.610	0.610
			C	2.438	2.438	2.134	1.524	1.219	0.914	0.914	0.610	0.610	0.610
	ROUGH	0 TO 6	R	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.219	1.219
			S	2.438	2.438	2.438	2.134	1.524	1.219	1.219	0.914	0.914	0.610
			C	2.438	1.524	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		7 TO 27	R	2.438	2.438	2.438	2.134	1.524	1.219	1.219	0.914	0.914	0.914
			S	2.438	2.438	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			C	2.438	1.524	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	2.438	2.438	2.438	2.438	2.438	1.829	1.524	1.524	1.219	1.219
			S	2.438	2.438	2.438	2.438	1.829	1.524	1.219	1.219	0.914	0.914
			C	2.438	2.438	2.438	2.438	1.829	1.524	1.219	1.219	0.914	0.914
1.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.2$ $C_b = 0.10$ $C_w = 1.2$ $C_a = 1.2$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.438	2.438	2.438	1.829	1.524	1.219	1.219	0.914	0.914	0.610
			S	2.438	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			C	1.524	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		7 TO 27	R	2.438	2.438	1.829	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			S	2.438	1.524	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
			C	1.829	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	1.829	1.829	1.829	1.829	1.524	1.219	0.914	0.914	0.914	0.610
			S	1.829	1.829	1.829	1.524	1.219	0.914	0.914	0.610	0.610	0.610
			C	1.829	1.829	1.829	1.524	1.219	0.914	0.914	0.610	0.610	0.610
	ROUGH	0 TO 6	R	2.438	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.219	1.219
			S	2.438	2.438	2.438	2.134	1.524	1.219	1.219	0.914	0.914	0.610
			C	2.438	1.524	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		7 TO 27	R	2.438	2.438	2.438	2.134	1.524	1.219	1.219	0.914	0.914	0.914
			S	2.438	2.438	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			C	2.438	1.524	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	1.829	1.829	1.829	1.829	1.829	1.524	1.524	1.219	1.219	1.219
			S	1.829	1.829	1.829	1.829	1.829	1.524	1.219	1.219	0.914	0.914
			C	1.829	1.829	1.829	1.829	1.829	1.524	1.219	1.219	0.914	0.914

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW Date : 21/02/2019 Design: AM

Project No.: 18017- T4 Description Calculation of mount capacities Checker:

Table: RT8: RT-E-Mount Mini - Plywood Only - - Landscape Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
2.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.3$ $C_b = 0.11$ $C_w = 1.3$ $C_a = 1.3$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.829	1.829	1.829	1.829	1.524	1.219	1.219	0.914	0.914	0.610
			S	1.829	1.829	1.829	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			C	1.524	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		7 TO 27	R	2.134	2.134	1.829	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			S	2.134	1.524	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
			C	1.829	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.914	0.610
			S	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610
			C	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610
	ROUGH	0 TO 6	R	1.829	1.829	1.829	1.829	1.829	1.829	1.829	1.524	1.219	1.219
			S	1.829	1.829	1.829	1.829	1.524	1.219	1.219	0.914	0.914	0.610
			C	1.829	1.524	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		7 TO 27	R	2.134	2.134	2.134	2.134	1.524	1.219	1.219	0.914	0.914	0.914
			S	2.134	2.134	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			C	2.134	1.524	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			S	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914
			C	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914
2.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.4$ $C_b = 0.12$ $C_w = 1.4$ $C_a = 1.4$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.524	1.524	1.524	1.524	1.524	1.219	1.219	0.914	0.914	0.610
			S	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			C	1.524	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		7 TO 27	R	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			S	1.524	1.524	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
			C	1.524	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610
	ROUGH	0 TO 6	R	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.524	1.219	1.219
			S	1.524	1.524	1.524	1.524	1.524	1.219	1.219	0.914	0.914	0.610
			C	1.524	1.524	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		7 TO 27	R	1.524	1.524	1.524	1.524	1.524	1.219	1.219	0.914	0.914	0.914
			S	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			C	1.524	1.524	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
3.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.5$ $C_b = 0.13$ $C_w = 1.5$ $C_a = 1.5$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.610
			S	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			C	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		7 TO 27	R	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			S	1.219	1.219	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
			C	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610
	ROUGH	0 TO 6	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219
			S	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.610
			C	1.219	1.219	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		7 TO 27	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.914
			S	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			C	1.219	1.219	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT8: RT-E-Mount Mini - Plywood Only - - Landscape Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
3.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.6$ $C_b = 0.14$ $C_w = 1.6$ $C_a = 1.6$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610
			C	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		7 TO 27	R	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			S	1.219	1.219	1.219	0.914	0.610	0.305	0.305	0.305	0.305	0.305
			C	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
	ROUGH	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610
			C	0.914	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		7 TO 27	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.914
			S	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610	0.610
			C	1.219	1.219	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
4.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.7$ $C_b = 0.15$ $C_w = 1.7$ $C_a = 1.7$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610
			C	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610
			S	0.914	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
			C	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
	ROUGH	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610
			C	0.914	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610
			C	0.914	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
4.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.8$ $C_b = 0.16$ $C_w = 1.8$ $C_a = 1.8$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610
			C	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610
			S	0.914	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
			C	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
	ROUGH	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610
			C	0.914	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610
			C	0.914	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW Date : 21/02/2019 Design: AM

Project No.: 18017-T4 Description Calculation of mount capacities Checker:

Table: RT8: RT-E-Mount Mini - Plywood Only - - Landscape Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
5.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.9$ $C_b = 0.17$ $C_w = 1.9$ $C_a = 1.9$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610
			S	0.914	0.914	0.914	0.914	0.610	0.305	0.305	0.305	0.305	0.305
			C	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.610
			C	0.914	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
5.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.10$ $C_b = 0.18$ $C_w = 1.10$ $C_a = 1.10$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
6.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.10$ $C_b = 0.18$ $C_w = 1.10$ $C_a = 1.10$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW Date : 21/02/2019 Design: AM

Project No.: 18017- T4 Description Calculation of mount capacities Checker:

Table: RT9: RT-E-Mount Mini - OSB Only - - Landscape Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
0.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.0$ $C_b = 0.8$ $C_w = 1.0$ $C_a = 1.0$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	2.438	2.438	2.438	1.829	1.524	1.219	0.914	0.914	0.610	0.610
			S	2.438	2.438	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.305
			C	1.524	0.914	0.610	0.305	0.305	0.305	0.305	0.305	-	-
		7 TO 27	R	2.438	2.438	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.305
			S	2.438	1.524	0.914	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			C	1.524	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	2.438	2.438	2.134	1.829	1.524	1.219	0.914	0.914	0.610	0.610
			S	2.438	2.438	1.829	1.524	1.219	0.914	0.914	0.610	0.610	0.610
			C	2.438	2.438	1.829	1.524	1.219	0.914	0.914	0.610	0.610	0.610
	ROUGH	0 TO 6	R	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.219	1.219	0.914
			S	2.438	2.438	2.438	1.829	1.524	1.219	0.914	0.914	0.914	0.610
			C	2.134	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
		7 TO 27	R	2.438	2.438	2.438	1.829	1.524	1.219	0.914	0.914	0.914	0.610
			S	2.438	2.134	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.305
			C	2.438	1.524	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	2.438	2.438	2.438	2.438	2.134	1.829	1.524	1.219	1.219	0.914
			S	2.438	2.438	2.438	2.134	1.829	1.524	1.219	1.219	0.914	0.914
			C	2.438	2.438	2.438	2.134	1.829	1.524	1.219	1.219	0.914	0.914
1.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.1$ $C_b = 0.9$ $C_w = 1.1$ $C_a = 1.1$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.829	1.829	1.829	1.829	1.524	1.219	0.914	0.914	0.610	0.610
			S	1.829	1.829	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.305
			C	1.524	0.914	0.610	0.305	0.305	0.305	0.305	0.305	-	-
		7 TO 27	R	2.134	2.134	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.305
			S	2.134	1.524	0.914	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			C	1.524	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	1.524	1.524	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610
			S	1.524	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610
			C	1.524	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610
	ROUGH	0 TO 6	R	1.829	1.829	1.829	1.829	1.829	1.829	1.524	1.219	1.219	0.914
			S	1.829	1.829	1.829	1.829	1.524	1.219	0.914	0.914	0.914	0.610
			C	1.829	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
		7 TO 27	R	2.134	2.134	2.134	1.829	1.524	1.219	0.914	0.914	0.914	0.610
			S	2.134	2.134	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.305
			C	2.134	1.524	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	1.524	1.524	1.524	1.524	1.524	1.524	1.219	1.219	1.219	0.914
			S	1.524	1.524	1.524	1.524	1.524	1.219	1.219	1.219	0.914	0.914
			C	1.524	1.524	1.524	1.524	1.524	1.219	1.219	1.219	0.914	0.914
1.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.2$ $C_b = 0.10$ $C_w = 1.2$ $C_a = 1.2$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610
			S	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610	0.305
			C	1.219	0.914	0.610	0.305	0.305	0.305	0.305	0.305	-	-
		7 TO 27	R	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.305
			S	1.524	1.524	0.914	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			C	1.524	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610
			S	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610
			C	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610
	ROUGH	0 TO 6	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914
			S	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.914	0.610
			C	1.219	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
		7 TO 27	R	1.524	1.524	1.524	1.524	1.524	1.219	0.914	0.914	0.914	0.610
			S	1.524	1.524	1.524	1.219	0.914	0.914	0.610	0.610	0.610	0.305
			C	1.524	1.524	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914
			S	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914
			C	1.219	1.219	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017- T4

Description

Calculation of mount capacities

Checker:

Table: RT9: RT-E-Mount Mini - OSB Only - - Landscape Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
2.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.3$ $C_b = 0.11$ $C_w = 1.3$ $C_a = 1.3$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.305
			C	0.914	0.914	0.610	0.305	0.305	0.305	0.305	0.305	-	-
		7 TO 27	R	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610	0.305
			S	1.219	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
			C	1.219	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610
	ROUGH	0 TO 6	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610
			C	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305
		7 TO 27	R	1.219	1.219	1.219	1.219	1.219	1.219	0.914	0.914	0.914	0.610
			S	1.219	1.219	1.219	1.219	0.914	0.914	0.610	0.610	0.610	0.305
			C	1.219	1.219	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
			C	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914
2.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.4$ $C_b = 0.12$ $C_w = 1.4$ $C_a = 1.4$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305
			C	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-	-
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.305
			S	0.914	0.914	0.914	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			C	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
		7 TO 27	R	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.914	0.610
			S	0.914	0.914	0.914	0.914	0.914	0.914	0.610	0.610	0.610	0.305
			C	0.914	0.914	0.914	0.914	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
3.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.5$ $C_b = 0.13$ $C_w = 1.5$ $C_a = 1.5$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305
			C	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305
			C	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
		28 TO 45	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT9: RT-E-Mount Mini - OSB Only - - Landscape Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
3.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.6$ $C_b = 0.14$ $C_w = 1.6$ $C_a = 1.6$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305
			C	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			C	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
4.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.7$ $C_b = 0.15$ $C_w = 1.7$ $C_a = 1.7$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
			C	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
		7 TO 27	R	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610
			S	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.610	0.305
			C	0.610	0.610	0.610	0.610	0.610	0.610	0.305	0.305	0.305	0.305
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
4.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.8$ $C_b = 0.16$ $C_w = 1.8$ $C_a = 1.8$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305

- Denotes "Not Permissible"

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW

Date : 21/02/2019

Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

Table: RT9: RT-E-Mount Mini - OSB Only - - Landscape Orientation													
MAXIMUM SPACING OF RT-E MOUNT MINI (m)													
SPACING OF MOUNTS MUST NOT EXCEED THE MAXIMUM RECOMMENDED SPACING FOR THE RAILS USED AND THE RAFTER CAPACITY													
SNOW & RAIN LOAD (kPa)	TERRAIN	ROOF ANGLE α (deg.)	ROOF ZONE	BASIC WIND PRESSURE q (1 IN 50) kPa									
				0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
5.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.9$ $C_b = 0.17$ $C_w = 1.9$ $C_a = 1.9$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
5.50 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.10$ $C_b = 0.18$ $C_w = 1.10$ $C_a = 1.10$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
6.00 $S = I_s(S_s \cdot C_b \cdot C_w \cdot C_s \cdot C_a + S_r)$ S_s and S_r from Code Tables Suggested values $I_s = 1.10$ $C_b = 0.18$ $C_w = 1.10$ $C_a = 1.10$ $C_s = 1.0$ for $\alpha \leq 30$ deg $C_s = (70 - \alpha)/40$ for $30 \text{ deg} < \alpha < 70$ deg	OPEN	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-	-
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	-
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
	ROUGH	0 TO 6	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
		7 TO 27	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
		28 TO 45	R	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			S	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305
			C	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305	0.305

- Denotes "Not Permissible"

Project Name:	ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW FOR NS (NBCC 2015)		Date :	22/02/2019	Design:	AM
Project No.:	18017-T4	Description	Calculation of mount capacities		Checker:	

EXHIBIT – A

Project Name: ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW
FOR NS (NBCC 2015)

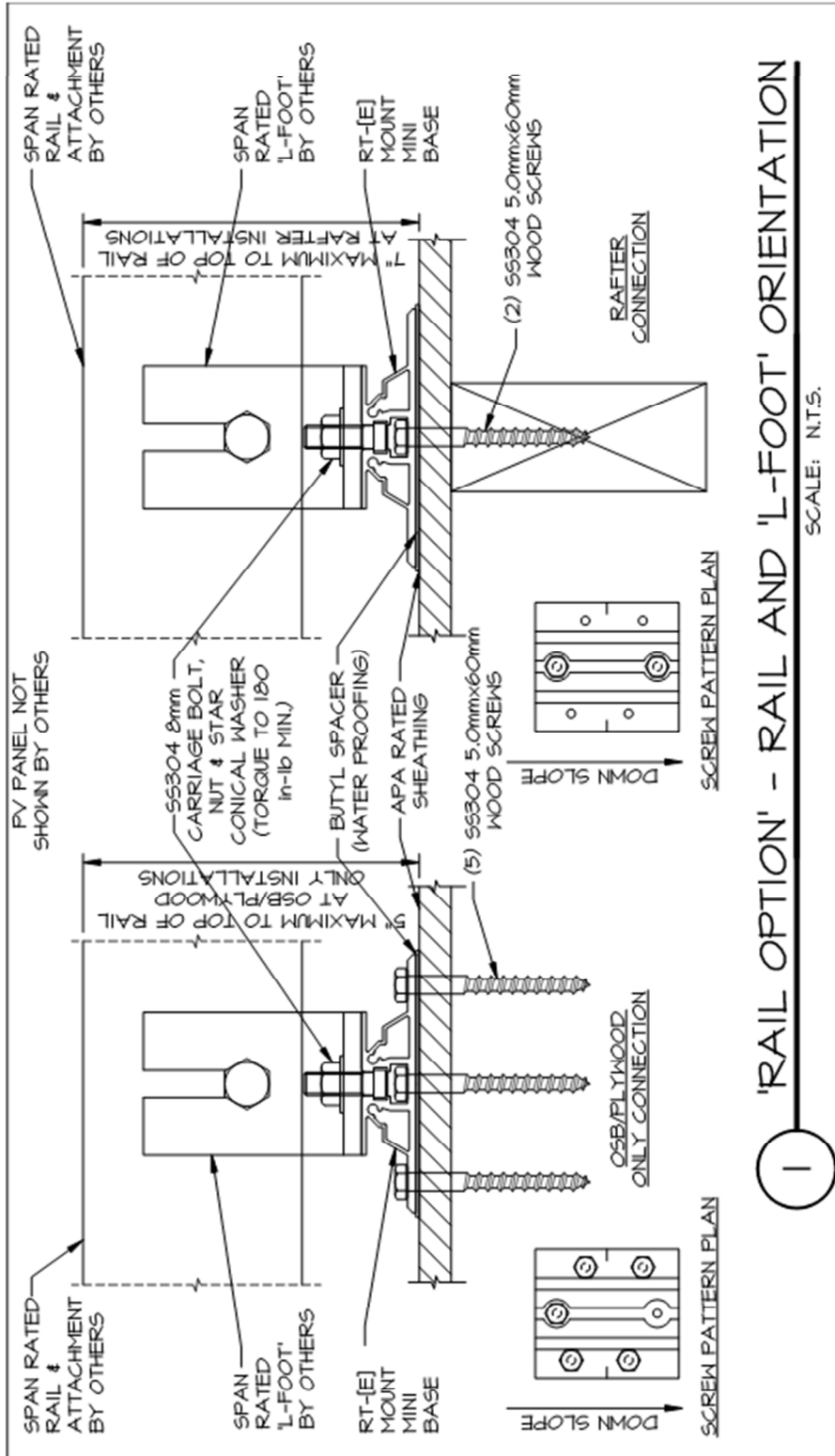
Date : 22/02/2019 Design: AM

Project No.: 18017-T4

Description

Calculation of mount capacities

Checker:

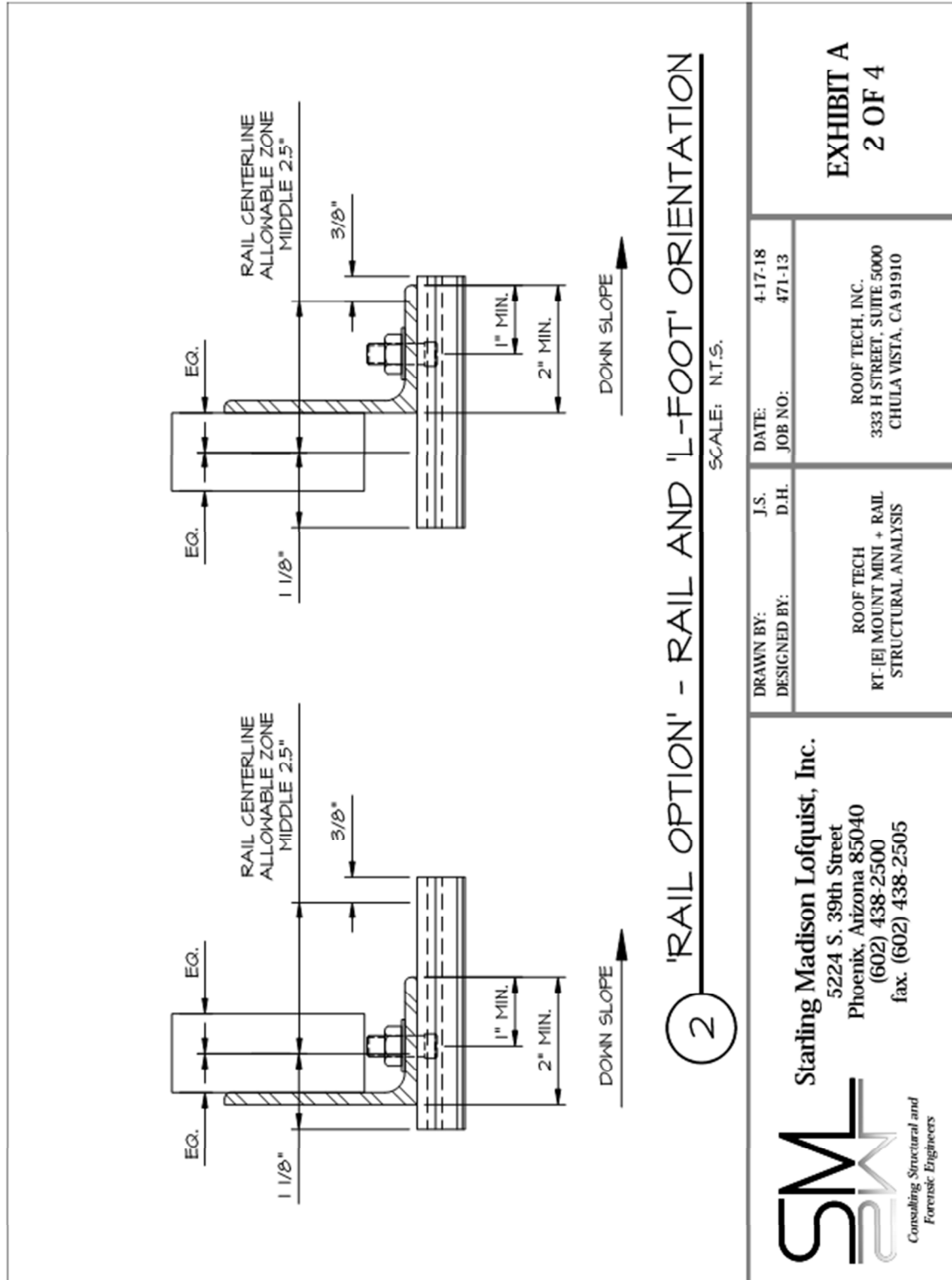


'RAIL OPTION' - RAIL AND 'L-FOOT' ORIENTATION

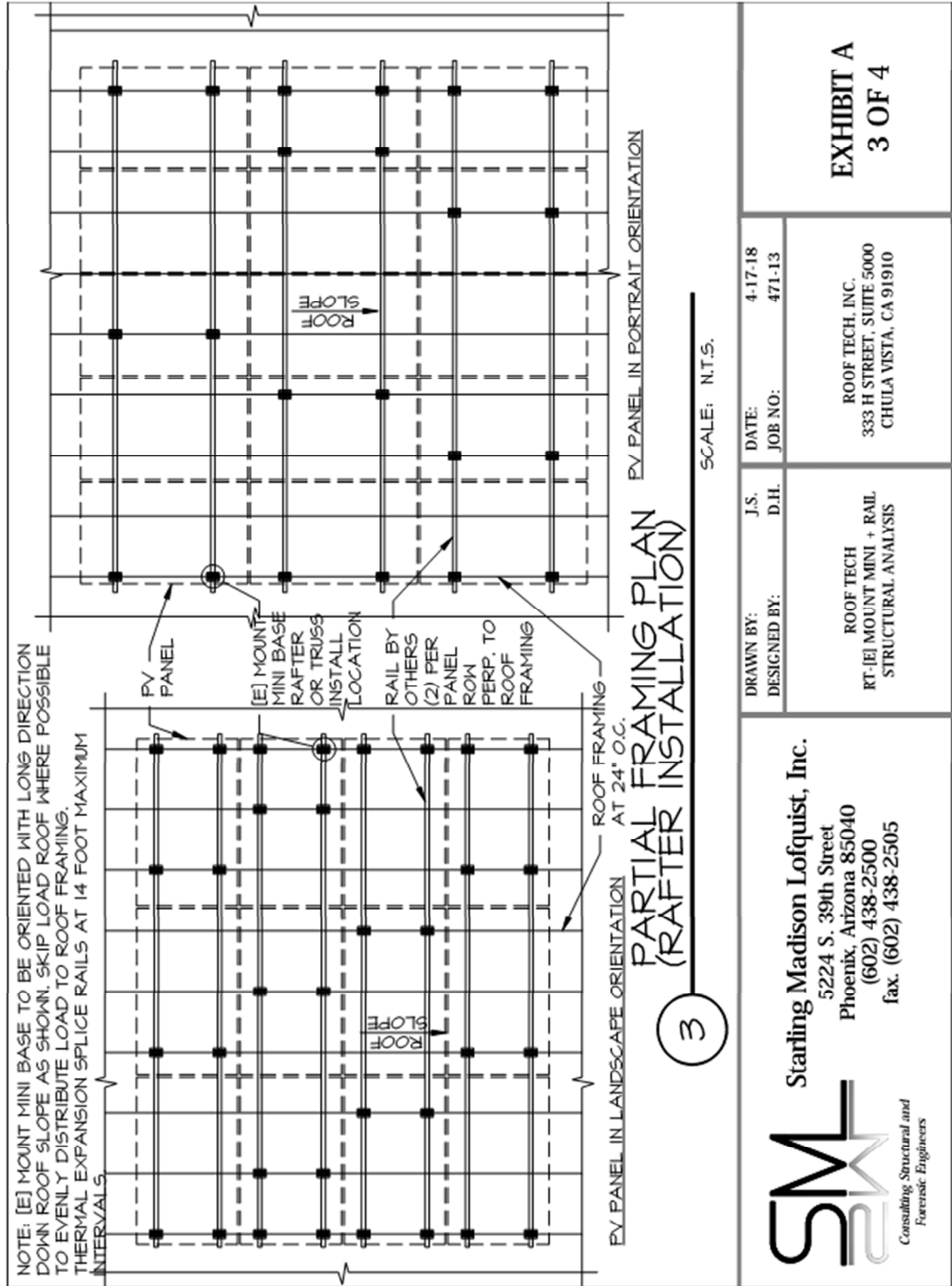
1

 Consulting Structural and Forensic Engineers Starling Madison Lofquist, Inc. 5224 S. 39th Street Phoenix, Arizona 85040 (602) 438-2500 fax. (602) 438-2505		EXHIBIT A 1 OF 4 ROOF TECH, INC. 333 H STREET, SUITE 5000 CHULA VISTA, CA 91910	
DRAWN BY: J.S. DESIGNED BY: D.H.		DATE: 4-17-18 JOB NO: 471-13	
ROOF TECH RT-[E] MOUNT MINI + RAIL STRUCTURAL ANALYSIS			

Project Name:	ROOF TECH RT-[E] MOUNT MINI STRUCTURAL REVIEW FOR NS (NBCC 2015)	Date :	22/02/2019	Design:	AM
Project No.:	18017-T4	Description	Calculation of mount capacities	Checker:	



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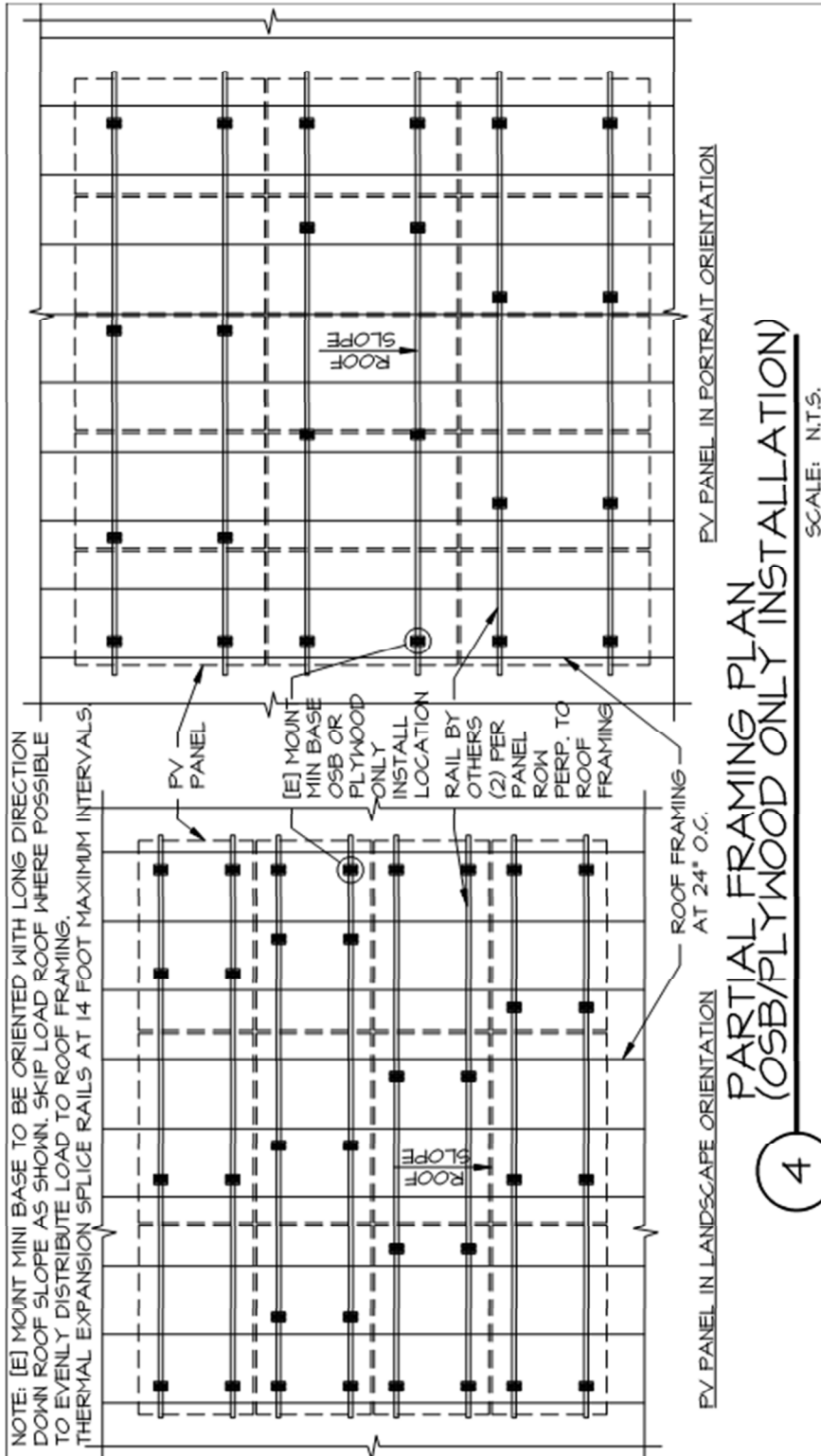


EXHIBIT A 4 OF 4		Starling Madison Lofquist, Inc. 5224 S. 39th Street Phoenix, Arizona 85040 (602) 438-2500 fax. (602) 438-2505	
DRAWN BY: J.S. DESIGNED BY: D.H.	DATE: 4-17-18 JOB NO: 471-13	ROOF TECH RT-[E] MOUNT MINI + RAIL STRUCTURAL ANALYSIS	ROOF TECH, INC. 333 H STREET, SUITE 5000 CHULA VISTA, CA 91910