

November 28, 2018

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

Dear Mr. Nogueira,

Re: Roof Tech E Mount AIR - Structural Review - Saskatchewan Province -

**NBCC 2015** 

**Project No: 18017-T1** 

Thank you for retaining our office to carry out the structural review of the Roof Tech E Mount AIR rail-less photovoltaic (PV) panel roof mount system.

The purpose of the review was to assess the range of snow and wind loadings for which the Roof Tech E Mount AIR can be safely connected to roof structures for Saskatchewan Province according to National building Code of Canada 2015 requirements for various site conditions and arrangements.

The review consisted of calculating the factored connection resistance of the Roof Tech E Mount AIR 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 roof, number of mounts per PV panel, wind roof zones, terrains, and roof slopes. The maximum corresponding wind and snow environmental site parameters were then determined.

Review parameters and results are summarized below:

#### 1. Summary

Three roof substrates were reviewed: 7/16" thick OSB on 2x4 SPF No. 2 rafter, 7/16" thick OSB only, and 15/32" thick plywood. The Roof Tech E-Mount Air is connected at each mount to the substrates as per Table 1 on the following page. The number of mounts and their orientation are summarized in Appendix A. Load tests data from Western Technologies Inc. for each of these connection types was used to assess the allowable range of regional climatic parameters from the National Building Code 2015.

Table 1: Roof Wood Substrates and Number of Screws per Mount

Wood Substrate	Number of 5.0 mm x 60 mm stainless steel wood screws per mount
7/16" thick OSB on 2x4 SPF No. 2 rafter	2
7/16" thick OSB only	4
15/32" thick plywood	4

# 2. System Description

The Roof Tech E Mount AIR system is composed of an aluminum E Mount Air base, middle clamp, end clamp, panel spacer, shim(s), and stainless steel bonding plate. The mounting system is fastened together with an 8 mm diameter bolt complete with nut and washer. The system is attached to the roof wood substrate with stainless steel (SS304) wood screws 5.0 mm x 60 mm.

#### 3. Connection Load Tests

Load tests conducted by Western Technologies Inc. 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. The associated number of screws required for attachment to the wood substrate is shown on the previous page in Table 1.

In order to establish connection capacities, the average value of each failure mechanism for each wood substrate was multiplied by a material resistance factor of 0.55. The resistance factor was based on formulas presented in CAN/CSA-086-09 (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 is multiplied by a test reliability factor of 0.91 for a minimum of three tests. These values are shown in Table 2 below. The factored connection resistance was compared to factored loads as per National Building Code 2015.

Table 2: Factored Test Resistance of Roof Wood Substrates

				esistance = st result), (kN)
Orientation	Material	Uplift	Shear	Downforce
	7/16" OSB sheathing over 2x4 SPF #2 rafter	4.0	2.83	-
	7/16" sheathing only	1.02	1.02	1.83
Landscape	15/32" plywood with 2 layers asphalt shingles	1.49	1.3	3.95
	7/16" sheathing over 2x4 SPF #2 rafter	3.47	1.03	-
	7/16" OSB sheathing only	1.278	0.76	1.83
Portrait	15/32" plywood with 2 layers asphalt shingles	2.02	0.95	3.95

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

## 4. Connection Load Analysis

### Codes:

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

## Test Data from Western Technologies Inc.:

- Job No. 2163XD260:
  - Event no. G260-3, dated January 3, 2014: OSB only and OBS on rafter, compression.
  - Event no. G260-4, dated April 1, 2014 (revised May 30, 2014): OSB only and OBS on rafter, tension and shear.
  - Event no. G260-5, dated June 14, 2014: plywood, tension and shear.
  - Event no. G260-6, dated May 30, 2014: plywood, compression.

# **Design Loads and Parameters:**

- Importance Category: Normal importance
- Dead Loads: 0.14 kPa photovoltaic (PV) panel self-weight. Sheathing self-weight included within test result capacities.
- Wind Loads: 1 in 50 year wind pressure as per Tables 1 to 6.
  - 10 m maximum building height.
  - Single span gable and hipped roofs considered.
  - Topography assumed is flat (no increase in exposure factor due to hill or crest).
  - Solar panels not permitted to be installed on roof overhangs.
- Live Loads: 1 kPa live load on roof adjacent to PV cells; no live load on top of cells.
- Snow Loads: 1 in 50 year snow load as per Tables 4 to 9.
  - No obstructions or parapets causing snow accumulation.
  - No adjacent upper roofs causing snow drift or sliding snow.
- Seismic Loads: excluded; does not govern by inspection.

### Materials and Geometry:

- Roof rafters to be SPF No. 2 spaced at 24" on center 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 maximum area = 1.75 square meters (1.727 meters by 1.016 meters).
- 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.

Table 3: Roof Slope to Roof Angle Conversion

Poof Slope (m/m)	Poof Anglo (°)
Roof Slope (m/m)	Roof Angle (°)
0:12	0
1:12	4.8
2:12	9.5
3:12	14
4:12	18.4
5:12	22.6
6:12	26.6
7:12	30.3
8:12	33.7
9:12	36.9
10:12	39.8
11:12	42.5
12:12	45

#### 5. Results

The tables below summarize the maximum allowable unfactored 1 in 50 year snow and wind pressures for each roof wood substrate that will produce factored reaction loads below the factored member capacity. It is the responsibility of the contractor to verify that the building conditions and material meet the minimum criteria specified in this report and that all members of the roof framing can safely support the maximum imposed connection loads for the PV cells as per Table 2 according to National Building Code 2015 requirements.

Results in each table are summarized based on the location of the panels for the wind roof zone (refer to National Building Code 2015), terrain, roof slope, orientation of PV panel on roof, and number of mounts per PV panel. Refer to Appendix A for roof mount attachment details. An individual who is competent and familiar with National Building Code 2015 will be required for the use of the tables, prior to installation of the roof connections.

	Table: RT1: RT-Air-Mount - Rafter - Landscape Orientation  ROOF SLOPE ALLOWED  SNOW & RAIN LOAD   TERRAIN   NO. oF Mounts   ROOF   BASIC WIND PRESSURE q (1 IN 50) kPa													
				RO	OF SLOPE	ALLOWED	)							
SNOW & RAIN LOAD	TERRAIN	NO. oF Mounts	ROOF				BASIC WI	ND PRESS	URE q (1 II	N 50) kPa				
(kPa)			ZONE	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	
0.50	OPEN	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
S = Is(Ss*Cb*Cw*Ca + Sr)			С	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45					
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
Suggested values			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
Is = 1.0			С	0 TO 45	0 TO 45	0 TO 45	15 TO 45	30 TO 45						
Note:	ROUGH	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
Do not include Cs in Snow Calculations			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			С	0 TO 45	0 TO 45	15 TO 45	30 TO 45	30 TO 45						
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			C	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
4.00	OPEN	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
1.00	OPEN	4			1 1 1					0 TO 45				
0 - 1- (0-+0)-+0+0 + 0			S C	0 TO 45 0 TO 45	0 TO 45 30 TO 45	30 TO 45	0 TO 45 30 TO 45	0 TO 45 30 TO 45	0 TO 45 30 TO 45					
S = Is(Ss*Cb*Cw*Ca + Sr) Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
Suggested values		Ů	S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
Is = 1.0			C	0 TO 45	0 TO 45	0 TO 45	15 TO 45	30 TO 45						
Note:	ROUGH	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
Do not include Cs in Snow Calculations			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			С	0 TO 45	0 TO 45	15 TO 45	30 TO 45	30 TO 45						
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			С	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
1.50	OPEN	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
S = Is(Ss*Cb*Cw*Ca + Sr) Ss and Sr from Code Tables			С	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45					
Suggested values		6	R S	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45						
ls = 1.1			C	0 TO 45	0 TO 45	0 TO 45	15 TO 45	30 TO 45						
Note:	ROUGH	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
Do not include Cs in Snow Calculations	ROSOIT	1	S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			C	0 TO 45	0 TO 45	15 TO 45	30 TO 45	30 TO 45						
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			С	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
2.00	OPEN	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
S = Is(Ss*Cb*Cw*Ca + Sr)			С	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45					
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
Suggested values			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
Is = 1.1 Note:	DOLLOLI		С	0 TO 45 0 TO 45	0 TO 45	0 TO 45	0 TO 45 0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45 0 TO 45	15 TO 45	30 TO 45	
Do not include Cs in Snow Calculations	ROUGH	4	R S	0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	
			C	0 TO 45	0 TO 45	15 TO 45	30 TO 45	30 TO 45						
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
		j	S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			C	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45						

			Table: RT	1: RT-Air-I	Mount - Ra	after - Land	Iscape Orie	entation					
				RO	OF SLOPE	ALLOWED	)						
SNOW & RAIN LOAD	TERRAIN	NO. oF Mounts	ROOF				BASIC WI	ND PRESS	SURE q (1 II	N 50) kPa			
(kPa)			ZONE	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
2.50	OPEN	4	R	0 TO 45									
			S	0 TO 45									
S = Is(Ss*Cb*Cw*Ca + Sr)			С	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45				
Ss and Sr from Code Tables		6	R	0 TO 45									
Suggested values			S C	0 TO 45 0 TO 45	0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 15 TO 45	0 TO 45 30 TO 45				
Is = 1.2 Note:	ROUGH	4	R	0 TO 45									
Do not include Cs in Snow Calculations	ROOGII	7	S	0 TO 45									
			C	0 TO 45	15 TO 45	30 TO 45	30 TO 45						
		6	R	0 TO 45									
			S	0 TO 45									
			С	0 TO 45									
3.00	OPEN	4	R	0 TO 45									
			S	0 TO 45									
S = Is(Ss*Cb*Cw*Ca + Sr)			С	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45				
Ss and Sr from Code Tables		6	R	0 TO 45									
Suggested values			S C	0 TO 45 0 TO 45	0 TO 45 15 TO 45	0 TO 45 30 TO 45							
Is = 1.2 Note:	ROUGH	4	R	0 TO 45									
Do not include Cs in Snow Calculations	ROUGH	7	S	0 TO 45									
			C	0 TO 45	15 TO 45	30 TO 45	30 TO 45						
		6	R	0 TO 45									
			S	0 TO 45									
			С	0 TO 45									
3.50	OPEN	4	R	0 TO 45									
			S	0 TO 45									
S = Is(Ss*Cb*Cw*Ca + Sr)			С	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45				
Ss and Sr from Code Tables		6	R	0 TO 45									
Suggested values			S	0 TO 45	0 TO 45	0 TO 45 0 TO 45	0 TO 45	0 TO 45 0 TO 45	0 TO 45	0 TO 45 0 TO 45	0 TO 45	0 TO 45	0 TO 45 30 TO 45
Is = 1.3 Note:	ROUGH	4	C R	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45	0 TO 45 0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45 0 TO 45	15 TO 45 0 TO 45	0 TO 45
Do not include Cs in Snow Calculations	ROUGH	4	S	0 TO 45									
			C	0 TO 45	15 TO 45	30 TO 45	30 TO 45						
		6	R	0 TO 45									
			S	0 TO 45									
			С	0 TO 45									
4.00	OPEN	4	R	0 TO 45									
			S	0 TO 45									
S = Is(Ss*Cb*Cw*Ca + Sr)			С	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45				
Ss and Sr from Code Tables		6	R	0 TO 45									
Suggested values			S	0 TO 45									
Is = 1.3 Note:	DOLLOLI	4	С	0 TO 45	15 TO 45	30 TO 45							
Do not include Cs in Snow Calculations	ROUGH	4	R S	0 TO 45 0 TO 45									
Do not include of in onew odiculations			C	0 TO 45	15 TO 45	30 TO 45	30 TO 45						
		6	R	0 TO 45									
			S	0 TO 45									
			С	0 TO 45									
4.50	OPEN	4	R	20 TO 45									
			S	20 TO 45	45 TO 45	45 TO 45							
S = Is(Ss*Cb*Cw*Ca + Sr)			С	20 TO 45	45 TO 45								
Ss and Sr from Code Tables		6	R	0 TO 45									
Suggested values			S	0 TO 45									
Is = 1.4	DOLLOL	,	С	0 TO 45	15 TO 45	30 TO 45							
Note:  Do not include Cs in Snow Calculations	ROUGH	4	R	20 TO 45									
DO HOL HIGHAGO OS III OHOW CAICUIALIONS			S C	20 TO 45 20 TO 45	20 TO 45 45 TO 45	20 TO 45 45 TO 45							
		6	R	0 TO 45									
			S	0 TO 45									
			C	0 TO 45									

			Table: R1	1: RT-Air-I	Mount - Ra	after - Land	Iscape Orie	entation							
	ROOF SLOPE ALLOWED     SNOW & RAIN LOAD (kPa)   TERRAIN   NO. of Mounts   ROOF   ZONE														
	TERRAIN	NO. oF Mounts					BASIC WI	ND PRESS	URE q (1 II	N 50) kPa					
(kPa)			ZONE	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10		
5.00	OPEN	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
S = Is(Ss*Cb*Cw*Ca + Sr)			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45		
Suggested values			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45		
Is = 1.4			С	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	15 TO 45	30 TO 45		
Note:	ROUGH	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Do not include Cs in Snow Calculations			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45		
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45		
			С	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45		
5.50	OPEN	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
S = Is(Ss*Cb*Cw*Ca + Sr)			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45		
Suggested values			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45		
Is = 1.4			С	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	15 TO 45	30 TO 45		
Note:	ROUGH	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Do not include Cs in Snow Calculations			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45		
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45		
			С	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45		
6.00	OPEN	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
S = Is(Ss*Cb*Cw*Ca + Sr)			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45		
Suggested values			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45		
Is = 1.4			С	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	15 TO 45	30 TO 45		
Note:	ROUGH	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Do not include Cs in Snow Calculations			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45		
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45		
			С	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45		

			Table: F	RT2: RT-Ai	r-Mount -	Rafter - Poi	rtrait Orien	tation					
				RO	OF SLOPE	ALLOWED	)						
SNOW & RAIN LOAD	TERRAIN	NO. oF Mounts	ROOF				BASIC WI	ND PRESS	URE q (1 II	N 50) kPa			
(kPa)			ZONE	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
0.50	OPEN	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
0.50	0. 2	·	S	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
S = ls(Ss*Cb*Cw*Ca + Sr)			C	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
Suggested values		O	S	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			C	0 TO 45	30 TO 45	30 TO 45	30 TO 45						
Is = 1.0 Note:	DOLLOLI	4		0 TO 45	0 TO 45	0 TO 45	0 TO 45						
	ROUGH	4	R										
Do not include Cs in Snow Calculations			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			С	0 TO 45	15 TO 45	30 TO 45	30 TO 45	30 TO 45					
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			С	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
1.00	OPEN	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
S = Is(Ss*Cb*Cw*Ca + Sr)			С	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
Suggested values			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
Is = 1.0			С	0 TO 45	30 TO 45	30 TO 45	30 TO 45						
Note:	ROUGH	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
Do not include Cs in Snow Calculations			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
		6	C R	0 TO 45 0 TO 45	15 TO 45 0 TO 45	30 TO 45 0 TO 45	30 TO 45 0 TO 45	30 TO 45 0 TO 45					
		0	S	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			C	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
1.50	OPEN	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
1.30	OI LIV	·	S	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
S = ls(Ss*Cb*Cw*Ca + Sr)			C	0 TO 45	0 TO 45	0 TO 45	0 TO 45	40 TO 45	40 TO 45	40 TO 45	40 TO 45	40 TO 45	40 TO 45
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
Suggested values		Ů	S	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
Is = 1.1			С	0 TO 45	30 TO 45	30 TO 45	30 TO 45						
Note:	ROUGH	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
Do not include Cs in Snow Calculations			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			С	0 TO 45	15 TO 45	40 TO 45	40 TO 45	40 TO 45					
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			С	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
2.00	OPEN	4	R	0 TO 20	0 TO 20	0 TO 20	0 TO 20						
			S	0 TO 20	0 TO 5	0 TO 5	0 TO 5						
S = Is(Ss*Cb*Cw*Ca + Sr)			С	0 TO 20	0 TO 20	0 TO 20	0 TO 20	N/A	N/A	N/A	N/A	N/A	N/A
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
Suggested values			S	0 TO 45 0 TO 45	0 TO 45	0 TO 45	0 TO 45 0 TO 45	0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45	0 TO 45	0 TO 45
Is = 1.1 Note:	ROUGH	4	C R	0 TO 20	0 TO 45 0 TO 20	0 TO 45 0 TO 20	0 TO 20	0 TO 45 0 TO 20	0 TO 20	0 TO 20	30 TO 45 0 TO 20	30 TO 45 0 TO 20	30 TO 45 0 TO 20
Do not include Cs in Snow Calculations	ROUGH	4	S	0 TO 20	0 TO 20	0 TO 20	0 TO 20						
31011 04104140110			C	0 TO 20	15 TO 20	N/A	N/A	N/A					
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45						
			C	0 TO 45	0 TO 45	0 TO 45	0 TO 45						

Table: RT2: RT-Air-Mount - Rafter - Portrait Orientation  ROOF SLOPE ALLOWED														
SNOW & RAIN LOAD (kPa)   TERRAIN NO. of Mounts   ROOF ZONE														
	TERRAIN	NO. oF Mounts					BASIC WI	ND PRESS	URE q (1 II	N 50) kPa				
(kPa)			ZONE	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	
2.50	OPEN	4	R	0 TO 15										
			S	0 TO 15	0 TO 5	0 TO 5	0 TO 5							
S = Is(Ss*Cb*Cw*Ca + Sr)			C	0 TO 15	0 TO 15	0 TO 15	0 TO 15	N/A	N/A	N/A	N/A	N/A	N/A	
Ss and Sr from Code Tables		6	R	0 TO 45										
Suggested values			S	0 TO 45										
Is = 1.2			С	0 TO 45	45 TO 45	45 TO 45	45 TO 45							
Note:	ROUGH	4	R	0 TO 15										
Do not include Cs in Snow Calculations			S	0 TO 15										
		_	С	0 TO 15	15 TO 15	N/A	N/A	N/A						
		6	R	0 TO 45 0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45 0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	
			S	0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	
2.00	OPEN	4	C R	0 TO 5										
3.00	OPEN	4		1 1 1										
			S	0 TO 5 0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5 N/A						
S = Is(Ss*Cb*Cw*Ca + Sr) Ss and Sr from Code Tables		6	C R	0 TO 20										
Suggested values		0	S	0 TO 20										
ls = 1.2			C	0 TO 20	N/A	N/A	N/A							
Note:	ROUGH	4	R	0 TO 5										
Do not include Cs in Snow Calculations	1100011	·	S	0 TO 5										
			C	0 TO 5	N/A	N/A	N/A	N/A						
		6	R	0 TO 20										
			S	0 TO 20										
			С	0 TO 20										
3.50	OPEN	4	R	0 TO 5										
			S	0 TO 5										
S = Is(Ss*Cb*Cw*Ca + Sr)			С	0 TO 5	0 TO 5	0 TO 5	0 TO 5	N/A	N/A	N/A	N/A	N/A	N/A	
Ss and Sr from Code Tables		6	R	0 TO 15										
Suggested values			S	0 TO 15										
Is = 1.3		_	C	0 TO 15	N/A	N/A	N/A							
Note:  Do not include Cs in Snow Calculations	ROUGH	4	R	0 TO 5										
Do not include os in Silow Calculations			S C	0 TO 5 0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5 N/A	0 TO 5 N/A	0 TO 5 N/A	0 TO 5 N/A	
		6	R	0 TO 15										
		U	S	0 TO 15										
			C	0 TO 15										
4.00	OPEN	4	R	0 TO 5										
4.00			S	0 TO 5										
S = Is(Ss*Cb*Cw*Ca + Sr)			C	0 TO 5	0 TO 5	0 TO 5	0 TO 5	N/A	N/A	N/A	N/A	N/A	N/A	
Ss and Sr from Code Tables		6	R	0 TO 15										
Suggested values			S	0 TO 15										
Is = 1.3			C	0 TO 15	N/A	N/A	N/A							
Note:	ROUGH	4	R	0 TO 5										
Do not include Cs in Snow Calculations			S	0 TO 5										
			С	0 TO 5	N/A	N/A	N/A	N/A						
		6	R	0 TO 15										
			S	0 TO 15										
			С	0 TO 15										

Table: RT2: RT-Air-Mount - Rafter - Portrait Orientation  ROOF SLOPE ALLOWED  SNOW & RAIN LOAD   TERRAIN   NO. of Mounts   ROOF   ROOF														
ROOF SLOPE ALLOWED   SNOW & RAIN LOAD (kPa)   TERRAIN   NO. of Mounts   ROOF   ZONE														
	TERRAIN	NO. oF Mounts					BASIC WI	ND PRESS	URE q (1 II	N 50) kPa				
(kPa)			ZONE	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	
4.50	OPEN	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
S = Is(Ss*Cb*Cw*Ca + Sr)			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Ss and Sr from Code Tables		6	R	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
Suggested values			S	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
Is = 1.4			С	0 TO 5	0 TO 5	N/A	N/A	N/A						
Note:	ROUGH	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Do not include Cs in Snow Calculations			S C	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	
		6	R	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
		0	S	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
			C	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
5.00	OPEN	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
5.00			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
S = Is(Ss*Cb*Cw*Ca + Sr)			C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Ss and Sr from Code Tables		6	R	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
Suggested values		Ü	S	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
Is = 1.4			C	0 TO 5	0 TO 5	N/A	N/A	N/A						
Note:	ROUGH	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Do not include Cs in Snow Calculations			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		6	R	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
			S	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
			С	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
5.50	OPEN	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
S = Is(Ss*Cb*Cw*Ca + Sr)			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Ss and Sr from Code Tables		6	R	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
Suggested values			S	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
Is = 1.4 Note:	DOLLOLI	4	С	0 TO 5	0 TO 5	N/A	N/A	N/A						
Do not include Cs in Snow Calculations	ROUGH	4	R	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	
DO NOT INCIDITE OF ITI OTIOW CAICUIDING			S C	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	
		6	R	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
		3	S	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
			C	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
6.00	OPEN	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
0.00			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
S = Is(Ss*Cb*Cw*Ca + Sr)			C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Ss and Sr from Code Tables		6	R	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
Suggested values			S	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
Is = 1.4			С	0 TO 5	0 TO 5	N/A	N/A	N/A						
Note:	ROUGH	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Do not include Cs in Snow Calculations			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		6	R	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
			S	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						
			С	0 TO 5	0 TO 5	0 TO 5	0 TO 5	0 TO 5						

	Table: RT3: RT-Air-Mount - Plywood Only - Landscape Orientation  ROOF SLOPE ALLOWED  SNOW & RAIN LOAD   TERRAIN INC OF Mounts   ROOF   ROOF													
ROOF SLOPE ALLOWED     SNOW & RAIN LOAD (kPa)   TERRAIN   NO. of Mounts   ROOF   ZONE														
	TERRAIN	NO. oF Mounts					BASIC WI	ND PRESS	URE q (1 II	N 50) kPa				
(kPa)			ZONE	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	
0.50	OPEN	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	N/A	N/A	N/A	
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A	
S = Is(Ss*Cb*Cw*Ca + Sr)			С	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A	
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	
Suggested values			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	
Is = 1.0			С	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	
Note:	ROUGH	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	
Do not include Cs in Snow Calculations			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A	
			С	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	N/A	
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	
		Ů	S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	
			C	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	
4.00	OPEN	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	N/A	N/A	N/A	
1.00	OPEN	4												
			S	0 TO 45 0 TO 45	0 TO 45 30 TO 45	0 TO 45 30 TO 45	0 TO 45 30 TO 45	30 TO 45 30 TO 45	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	
S = Is(Ss*Cb*Cw*Ca + Sr) Ss and Sr from Code Tables		6	C R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A N/A	
Suggested values		O	S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	
Is = 1.0			C	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	
Note:	ROUGH	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	
Do not include Cs in Snow Calculations			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A	
			С	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	N/A	
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	
			С	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	
1.50	OPEN	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	N/A	N/A	N/A	
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A	
S = Is(Ss*Cb*Cw*Ca + Sr)			С	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A	
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	
Suggested values			S	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 30 TO 45	0 TO 45 30 TO 45	0 TO 45 30 TO 45	0 TO 45 30 TO 45	0 TO 45 30 TO 45	30 TO 45 30 TO 45	N/A N/A	N/A	
Is = 1.1 Note:	DOLICH	4	C R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A N/A	
Do not include Cs in Snow Calculations	ROUGH	4	S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A	
			C	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	N/A	
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	
			С	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	
2.00	OPEN	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	N/A	N/A	N/A	
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	45 TO 45	N/A	N/A	N/A	N/A	N/A	
S = Is(Ss*Cb*Cw*Ca + Sr)			С	0 TO 45	45 TO 45	45 TO 45	45 TO 45	45 TO 45	N/A	N/A	N/A	N/A	N/A	
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	
Suggested values			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	
Is = 1.1	B 0/ / 2/ /		С	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	
Note:	ROUGH	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	
Do not include Cs in Snow Calculations			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	45 TO 45	N/A	N/A	N/A	
		6	C R	0 TO 45 0 TO 45	0 TO 45 0 TO 45	45 TO 45 0 TO 45	45 TO 45 0 TO 45	45 TO 45 0 TO 45	45 TO 45 0 TO 45	45 TO 45 0 TO 45	N/A 0 TO 45	N/A 0 TO 45	N/A 0 TO 45	
		O	S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	
			C	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	
			0	0.010	0.010	0.010	1 0.0 10	00.010	00 .0 10	55.515	00 .0 .0	30 .0 10	00 .0 10	

		Tal	ble: RT3:	RT-Air-Mou	nt - Plywo	od Only - L	.andscape	Orientatio	n				
				RO	OF SLOPE	ALLOWED	)						
SNOW & RAIN LOAD	TERRAIN	NO. oF Mounts	ROOF				BASIC WI	ND PRESS	URE q (1 II	N 50) kPa			
(kPa)			ZONE	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
2.50	OPEN	4	R	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 5	0 TO 5	N/A	N/A	N/A	N/A
			S	0 TO 20	0 TO 20	0 TO 5	0 TO 5	N/A	N/A	N/A	N/A	N/A	N/A
S = Is(Ss*Cb*Cw*Ca + Sr)		-	С	0 TO 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ss and Sr from Code Tables  Suggested values		6	R	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 30 TO 45	0 TO 45 N/A	N/A N/A
Is = 1.2			S C	0 TO 45	0 TO 45	30 TO 45	N/A N/A	N/A N/A					
Note:	ROUGH	4	R	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 5	0 TO 5	0 TO 5	N/A
Do not include Cs in Snow Calculations	1100011	7	S	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 5	0 TO 5	N/A	N/A	N/A	N/A
			С	0 TO 20	0 TO 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
			С	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45
3.00	OPEN	4	R	15 TO 15	15 TO 15	15 TO 15	15 TO 15	N/A	N/A	N/A	N/A	N/A	N/A
			S	15 TO 15	15 TO 15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S = Is(Ss*Cb*Cw*Ca + Sr)			С	15 TO 15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A
Suggested values Is = 1.2			S C	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 45 TO 45	45 TO 45 45 TO 45	N/A N/A	N/A N/A				
IS = 1.2 Note:	ROUGH	4	R	15 TO 15	15 TO 15	15 TO 15	15 TO 15	15 TO 15	15 TO 15	N/A	N/A	N/A	N/A
Do not include Cs in Snow Calculations	KOUGH	4	S	15 TO 15	15 TO 15	15 TO 15	15 TO 15	N/A	N/A	N/A	N/A	N/A	N/A
			C	15 TO 15	15 TO 15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
			С	0 TO 45	0 TO 45	0 TO 45	0 TO 45	45 TO 45	45 TO 45	45 TO 45	45 TO 45	45 TO 45	45 TO 45
3.50	OPEN	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S = Is(Ss*Cb*Cw*Ca + Sr)			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ss and Sr from Code Tables		6	R	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 5	0 TO 5	0 TO 5	N/A
Suggested values			S	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 5	0 TO 5	0 TO 5	N/A	N/A	N/A
Is = 1.3			С	0 TO 20	0 TO 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Note:  Do not include Cs in Snow Calculations	ROUGH	4	R	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Do not include as in Snow Calculations			S C	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
		6	R	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20
		O	S	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 5	0 TO 5	0 TO 5	0 TO 5
			C	0 TO 20	0 TO 20	0 TO 20	0 TO 20	N/A	N/A	N/A	N/A	N/A	N/A
4.00	OPEN	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4.00			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S = Is(Ss*Cb*Cw*Ca + Sr)			C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ss and Sr from Code Tables		6	R	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 5	0 TO 5	0 TO 5	N/A
Suggested values			S	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 5	0 TO 5	0 TO 5	N/A	N/A	N/A
Is = 1.3			С	0 TO 20	0 TO 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Note:	ROUGH	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Do not include Cs in Snow Calculations			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		6	R	0 TO 20 0 TO 20	0 TO 20 0 TO 20	0 TO 20 0 TO 20	0 TO 20 0 TO 20	0 TO 20 0 TO 20	0 TO 20 0 TO 20	0 TO 20 0 TO 5	0 TO 20 0 TO 5	0 TO 20 0 TO 5	0 TO 20
			S C	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 10 20 N/A	0 10 20 N/A	0 10 5 N/A	0 10 5 N/A	0 10 5 N/A	0 TO 5 N/A
4.50	OPEN	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4.50	OI LIV	_	S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S = Is(Ss*Cb*Cw*Ca + Sr)			C	N/A N/A	N/A N/A	N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Ss and Sr from Code Tables		6	R	15 TO 15	15 TO 15	15 TO 15	15 TO 15	15 TO 15	15 TO 15	N/A	N/A	N/A	N/A
Suggested values			S	15 TO 15	15 TO 15	15 TO 15	15 TO 15	N/A	N/A	N/A	N/A	N/A	N/A
Is = 1.4			C	15 TO 15	15 TO 15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Note:	ROUGH	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Do not include Cs in Snow Calculations			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		6	R	15 TO 15	15 TO 15	15 TO 15	15 TO 15	15 TO 15	15 TO 15	15 TO 15	15 TO 15	15 TO 15	15 TO 15
			S	15 TO 15	15 TO 15	15 TO 15	15 TO 15	15 TO 15	15 TO 15	N/A	N/A	N/A	N/A
			С	15 TO 15	15 TO 15	15 TO 15	15 TO 15	N/A	N/A	N/A	N/A	N/A	N/A

		1	Table: RT4:	RT-Air-Mo	unt - Plyv	ood Only	- Portrait O	rientation					
				RO	OF SLOPE	ALLOWED	)						
SNOW & RAIN LOAD	TERRAIN	NO. oF Mounts	ROOF				BASIC WI	ND PRESS	URE q (1 II	N 50) kPa			
(kPa)			ZONE	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
0.50	OPEN	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	N/A
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A
S = Is(Ss*Cb*Cw*Ca + Sr)			С	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A				
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
Suggested values			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45
Is = 1.0			С	0 TO 45	0 TO 45	0 TO 45	15 TO 45	30 TO 45					
Note:	ROUGH	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
Do not include Cs in Snow Calculations		·	S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45
			C	0 TO 45	0 TO 45	0 TO 45	15 TO 45	30 TO 45					
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
		O O	S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
			C	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	15 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45
4.00	OPEN	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	N/A
1.00	OPEN	4											
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45 30 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A
S = Is(Ss*Cb*Cw*Ca + Sr) Ss and Sr from Code Tables		6	C R	0 TO 45 0 TO 45	0 TO 45	30 TO 45 0 TO 45	0 TO 45	30 TO 45 0 TO 45	30 TO 45 0 TO 45	30 TO 45 0 TO 45	N/A 0 TO 45	N/A 0 TO 45	N/A 0 TO 45
Suggested values		0	S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45
Is = 1.0			C	0 TO 45	0 TO 45	0 TO 45	15 TO 45	30 TO 45					
Note:	ROUGH	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
Do not include Cs in Snow Calculations		·	S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45
			С	0 TO 45	0 TO 45	0 TO 45	15 TO 45	30 TO 45					
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
			С	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	15 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45
1.50	OPEN	4	R	0 TO 25	0 TO 25	0 TO 25	0 TO 25	0 TO 25	0 TO 25	0 TO 5	0 TO 5	N/A	N/A
			S	0 TO 25	0 TO 25	0 TO 25	0 TO 5	0 TO 5	0 TO 5	N/A	N/A	N/A	N/A
S = Is(Ss*Cb*Cw*Ca + Sr)			С	0 TO 25	0 TO 25	N/A	N/A						
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
Suggested values			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45 30 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45 30 TO 45	30 TO 45
Is = 1.1 Note:	ROUGH	4	C R	0 TO 45 0 TO 25	0 TO 45 0 TO 25	0 TO 45 0 TO 25	15 TO 45 0 TO 25	0 TO 25	30 TO 45 0 TO 25	30 TO 45 0 TO 25	30 TO 45 0 TO 25	0 TO 25	30 TO 45 0 TO 5
Do not include Cs in Snow Calculations	KOUGH	4	S	0 TO 25	0 TO 25	0 TO 25	0 TO 25	0 TO 25	0 TO 5	0 TO 5	0 TO 5	0 TO 5	N/A
			C	0 TO 25	0 TO 25	0 TO 25	15 TO 25	N/A	N/A	N/A	N/A	N/A	N/A
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
			С	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	15 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45
2.00	OPEN	4	R	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 5	0 TO 5	N/A	N/A
			S	0 TO 20	0 TO 20	0 TO 20	0 TO 5	0 TO 5	0 TO 5	N/A	N/A	N/A	N/A
S = Is(Ss*Cb*Cw*Ca + Sr)			С	0 TO 20	0 TO 20	N/A	N/A						
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
Suggested values			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45
Is = 1.1	DOLLOU	,	С	0 TO 45	0 TO 45	0 TO 45	15 TO 45	30 TO 45					
Note:  Do not include Cs in Snow Calculations	ROUGH	4	R	0 TO 20	0 TO 20	0 TO 20	0 TO 20 0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 5
DO HOT INCIDURE OF IN SHOW CARCUIATIONS			S C	0 TO 20 0 TO 20	0 TO 20 0 TO 20	0 TO 20 0 TO 20	15 TO 20	0 TO 20 N/A	0 TO 5 N/A	0 TO 5 N/A	0 TO 5 N/A	0 TO 5 N/A	N/A N/A
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
		U	S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
			C	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	15 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45
			,										

Table: RT4: RT-Air-Mount - Plywood Only - Portrait Orientation															
ROOF SLOPE ALLOWED															
SNOW & RAIN LOAD	TERRAIN	NO. oF Mounts	ROOF	BASIC WIND PRESSURE q (1 IN 50) kPa											
(kPa)			ZONE	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10		
2.50	OPEN	4	R	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 5	0 TO 5	N/A	N/A		
			S	0 TO 15	0 TO 15	0 TO 15	0 TO 5	0 TO 5	0 TO 5	N/A	N/A	N/A	N/A		
S = Is(Ss*Cb*Cw*Ca + Sr)			C	0 TO 15	0 TO 15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Ss and Sr from Code Tables		6	R	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 5		
Suggested values			S	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 5	0 TO 5	0 TO 5	N/A		
Is = 1.2			С	0 TO 20	0 TO 20	0 TO 20	15 TO 20	N/A	N/A	N/A	N/A	N/A	N/A		
Note:	ROUGH	4	R	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 5		
Do not include Cs in Snow Calculations			S	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 5	0 TO 5	0 TO 5	0 TO 5	N/A		
			С	0 TO 15	0 TO 15	0 TO 15	15 TO 15	N/A	N/A	N/A	N/A	N/A	N/A		
		6	R	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20		
			S	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 5		
	ODEN	4	С	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	15 TO 20	N/A	N/A	N/A	N/A		
3.00	OPEN	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
S = Is(Ss*Cb*Cw*Ca + Sr)			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Ss and Sr from Code Tables		6	R	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 5		
Suggested values			S	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 5	0 TO 5	0 TO 5	N/A		
Is = 1.2 Note:	DOLLOLI	4	С	0 TO 20 N/A	0 TO 20 N/A	0 TO 20 N/A	15 TO 20 N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A		
Do not include Cs in Snow Calculations	ROUGH	4	R	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A		
Do not include as in onlow deliculations			C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		6	R	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20		
		Ŭ	S	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 5		
			C	0 TO 20	0 TO 20	0 TO 20	0 TO 20	0 TO 20	15 TO 20	N/A	N/A	N/A	N/A		
3.50	OPEN	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
0.00			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
S = Is(Ss*Cb*Cw*Ca + Sr)			C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Ss and Sr from Code Tables		6	R	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 5		
Suggested values			S	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 5	0 TO 5	0 TO 5	N/A		
Is = 1.3			С	0 TO 15	0 TO 15	0 TO 15	15 TO 15	N/A	N/A	N/A	N/A	N/A	N/A		
Note:	ROUGH	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Do not include Cs in Snow Calculations		6	S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
			R	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15		
			S	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 5		
			С	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	15 TO 15	N/A	N/A	N/A	N/A		
4.00	OPEN	OPEN 4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
S = Is(Ss*Cb*Cw*Ca + Sr)			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Ss and Sr from Code Tables		6	R	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 5		
Suggested values			S	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 5	0 TO 5	0 TO 5	N/A		
Is = 1.3			C	0 TO 15	0 TO 15	0 TO 15	15 TO 15	N/A	N/A	N/A	N/A	N/A	N/A		
Note:	ROUGH	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Do not include Cs in Snow Calculations			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A 0 TO 15	N/A		
		6	R	0 TO 15 0 TO 15	0 TO 15 0 TO 15	0 TO 15 0 TO 15	0 TO 15 0 TO 15	0 TO 15 0 TO 15	0 TO 15 0 TO 15	0 TO 15 0 TO 15	0 TO 15 0 TO 15	0 TO 15	0 TO 15 0 TO 5		
			S C	0 TO 15	0 TO 15	0 TO 15	0 TO 15	0 TO 15	15 TO 15	0 10 15 N/A	0 10 15 N/A	0 10 15 N/A	0 10 5 N/A		
			U	0 10 10	0 10 10	0 10 10	0 10 10	0 10 13	10 10 13	INIA	МА	INITA	IVA		

				RO	OF SLOPE	ALLOWED	)								
SNOW & RAIN LOAD	TERRAIN	NO. oF Mounts	ROOF	BASIC WIND PRESSURE q (1 IN 50) kPa											
(kPa)			ZONE	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10		
0.50	OPEN	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	N/A	N/A	N/A	N/A	N/A		
			S	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
S = Is(Ss*Cb*Cw*Ca + Sr)			С	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	N/A	N/A	N/A		
Suggested values			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A		
ls = 1.0			С	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A		
Note:	ROUGH	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	N/A	N/A	N/A		
Do not include Cs in Snow Calculations			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A		
			С	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A		
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A		
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 40	N/A	N/A		
			С	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 40	N/A	N/A		
1.00	OPEN	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	N/A	N/A	N/A	N/A	N/A		
			S	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
S = Is(Ss*Cb*Cw*Ca + Sr)			С	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	N/A	N/A	N/A		
Suggested values			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A		
Is = 1.0			С	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A		
Note:	ROUGH	6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	N/A	N/A	N/A		
Do not include Cs in Snow Calculations			S	0 TO 45 0 TO 45	0 TO 45 30 TO 45	0 TO 45 30 TO 45	0 TO 45 30 TO 45	30 TO 45	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A		
			C R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A N/A		
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 40	N/A	N/A		
			C	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 40	N/A	N/A		
1.50	OPEN	4	R	45 TO 45	45 TO 45	45 TO 45	45 TO 45	N/A	N/A	N/A	N/A	N/A	N/A		
1.00			S	45 TO 45	45 TO 45	45 TO 45	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
S = Is(Ss*Cb*Cw*Ca + Sr)			C	45 TO 45	45 TO 45	45 TO 45	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	N/A	N/A	N/A		
Suggested values			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A		
Is = 1.1			С	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A		
Note:	ROUGH	4	R	45 TO 45	45 TO 45	45 TO 45	45 TO 45	45 TO 45	45 TO 45	N/A	N/A	N/A	N/A		
Do not include Cs in Snow Calculations			S	45 TO 45	45 TO 45	45 TO 45	45 TO 45	45 TO 45	N/A	N/A	N/A	N/A	N/A		
			С	45 TO 45	45 TO 45	45 TO 45	45 TO 45	45 TO 45	N/A	N/A	N/A	N/A	N/A		
		6	R	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 30 TO 40	0 TO 45 N/A	N/A N/A		
			S C	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 40	N/A N/A	N/A N/A		
2.00	OPEN	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
2.00	OI LIV	6	S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
S = ls(Ss*Cb*Cw*Ca + Sr)			C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Ss and Sr from Code Tables			R	5 TO 45	5 TO 45	5 TO 45	5 TO 45	5 TO 45	5 TO 45	N/A	N/A	N/A	N/A		
Suggested values			S	5 TO 45	5 TO 45	5 TO 45	5 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A		
Is = 1.1			C	5 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A		
Note:	ROUGH	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Do not include Cs in Snow Calculations			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		6	R	5 TO 45	5 TO 45	5 TO 45	5 TO 45	5 TO 45	5 TO 45	5 TO 45	5 TO 45	5 TO 45	N/A		
			S	5 TO 45	5 TO 45	5 TO 45	5 TO 45	5 TO 45 30 TO 45	5 TO 45	5 TO 45	30 TO 40	N/A	N/A		
0.50	OPEN	4	C R	5 TO 45 N/A	5 TO 45 N/A	30 TO 45 N/A	30 TO 45 N/A	30 TO 45 N/A	30 TO 45 N/A	30 TO 45 N/A	30 TO 40 N/A	N/A N/A	N/A N/A		
2.50	OPEN	4													
C = 1-/C-*Ch*C··*C- · C·			S	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A		
S = Is(Ss*Cb*Cw*Ca + Sr) Ss and Sr from Code Tables		6	C R	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A		
Suggested values		0	S	N/A N/A	N/A N/A	N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A		
ls = 1.2			C	N/A N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Note:	ROUGH	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
Do not include Cs in Snow Calculations		4	S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
			C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
		6	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		

			Table: R1	6: RT-Air-N	Mount - O	SB Only - P	ortrait Orie	entation					
				RO	OF SLOPE	ALLOWED							
SNOW & RAIN LOAD		BASIC WIND PRESSURE q (1 IN 50) kPa											
(kPa)			ZONE	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10
0.50	OPEN	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	N/A	N/A	N/A	N/A
			S	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A	N/A
S = Is(Ss*Cb*Cw*Ca + Sr)			С	0 TO 45	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A	N/A
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	N/A
Suggested values			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A	N/A
Is = 1.0			С	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	N/A	N/A
Note:	ROUGH	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 5	N/A	N/A
Do not include Cs in Snow Calculations			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A	N/A
			С	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	N/A	N/A
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	30 TO 45
			С	0 TO 45	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45
1.00	OPEN	4	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	N/A	N/A	N/A	N/A
			S	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A	N/A
S = Is(Ss*Cb*Cw*Ca + Sr)			С	0 TO 45	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	N/A	N/A	N/A	N/A
Ss and Sr from Code Tables		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	N/A
Suggested values			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A	N/A
Is = 1.0 Note:	ROUGH	4	C R	0 TO 45 0 TO 45	0 TO 45 0 TO 45	30 TO 45 0 TO 45	N/A 0 TO 45	N/A 0 TO 5	N/A N/A	N/A N/A			
Do not include Cs in Snow Calculations	ROUGH	4	S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	N/A	N/A	N/A	N/A
			C	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	N/A	N/A	N/A	N/A
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	30 TO 45
			С	0 TO 45	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45
1.50	OPEN	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S = Is(Ss*Cb*Cw*Ca + Sr)			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Ss and Sr from Code Tables  Suggested values		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	N/A	N/A
Is = 1.1			S C	0 TO 45 0 TO 45	0 TO 45 0 TO 45	0 TO 45 30 TO 45	0 TO 45 30 TO 45	0 TO 45 30 TO 45	30 TO 45 30 TO 45	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Note:	ROUGH	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Do not include Cs in Snow Calculations	1100011	·	S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		6	R	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45
			S	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	0 TO 45	30 TO 45	30 TO 45
			С	0 TO 45	0 TO 45	0 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45	30 TO 45
2.00	OPEN	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
S = Is(Ss*Cb*Cw*Ca + Sr) Ss and Sr from Code Tables		6	C R	N/A 5 TO 20	N/A 5 TO 20	N/A 5 TO 20	N/A 5 TO 20	N/A 5 TO 20	N/A 5 TO 5	N/A 5 TO 5	N/A 5 TO 5	N/A N/A	N/A N/A
Suggested values		0	S	5 TO 20	5 TO 20	5 TO 20	5 TO 5	5 TO 5	5 10 5 N/A	5 10 5 N/A	5 10 5 N/A	N/A N/A	N/A N/A
Is = 1.1			C	5 TO 20	5 TO 20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Note:	ROUGH	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Do not include Cs in Snow Calculations			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		6	R	5 TO 20	5 TO 20	5 TO 20	5 TO 20	5 TO 20	5 TO 20	5 TO 20	5 TO 20	5 TO 5	5 TO 5
			S	5 TO 20	5 TO 20	5 TO 20	5 TO 20	5 TO 20	5 TO 5	5 TO 5	5 TO 5	N/A	N/A
2.50	OPEN	4	C R	5 TO 20 N/A	5 TO 20 N/A	5 TO 20 N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
2.50	OFEN	4											
S = Is(Ss*Cb*Cw*Ca + Sr)			S C	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Ss and Sr from Code Tables		6	R	N/A N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A N/A
Suggested values		Ů	S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Is = 1.2			C	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Note:	ROUGH	4	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Do not include Cs in Snow Calculations			S	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			С	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		6	R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			S C	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
			U	N/A	IN/A	N/A	IN/A	IN/A	IN/A	N/A	IN/A	IV/A	IV/A

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The capacities listed in the tables above are limited to the conditions as listed in the Analysis Parameters sections. The analyses consider that all connections and associated hardware are installed according to Roof Tech E Mount AIR 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 contractor is responsible for verifying the strength of the roof framing for the maximum loads as per this document. Kassian Dyck & Associates assume no liability beyond what is specifically stated in this report.

Refer to Appendix A for connection and panel mount orientations as prepared by Starling Madison Lofquist, Inc. for SML project report 471-13.

We trust this is the information you require and would be pleased to answer any questions you may have.

Respectfully,

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Association of Professional Engineers & Geoscientists of Saskatchewan

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Philips Cliff

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