

**Table 27.6-2**  
**MWFRS- Part 2: Wind Loads - Roof**  
**Exposure C**

**MWFRS – Roof**  
**V = 130–150 mph**  
**h = 15–40 ft.**

V (MPH)				130					140					150				
h (ft)	Roof Slope	Load Case			Zone						Zone							
			1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	
40	Flat < 2:12 (9.46 deg)	1	NA	NA	-40.7	-36.3	-29.7	NA	NA	-47.2	-42.1	-34.5	NA	NA	-54.2	-48.3	-39.6	
		2	NA	NA	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	
	3:12 (14.0 deg)	1	-39.9	-27.1	-40.7	-36.3	-29.7	-46.3	-31.5	-47.2	-42.1	-34.5	-53.1	-36.1	-54.2	-48.3	-39.6	
		2	5.8	-8.1	0.0	0.0	0.0	6.7	-9.4	0.0	0.0	0.0	7.7	-10.8	0.0	0.0	0.0	
	4:12 (18.4 deg)	1	-32.8	-26.5	-40.7	-36.3	-29.7	-38.1	-30.7	-47.2	-42.1	-34.5	-43.7	-35.3	-54.2	-48.3	-39.6	
		2	11.4	-11.6	0.0	0.0	0.0	13.2	-13.5	0.0	0.0	0.0	15.1	-15.5	0.0	0.0	0.0	
	5:12 (22.6 deg)	1	-26.3	-26.5	-40.7	-36.3	-29.7	-30.5	-30.7	-47.2	-42.1	-34.5	-35.1	-35.3	-54.2	-48.3	-39.6	
		2	15.1	-12.7	0.0	0.0	0.0	17.5	-14.7	0.0	0.0	0.0	20.1	-16.9	0.0	0.0	0.0	
	6:12 (26.6 deg)	1	-21.1	-26.5	-40.7	-36.3	-29.7	-24.5	-30.7	-47.2	-42.1	-34.5	-28.2	-35.3	-54.2	-48.3	-39.6	
		2	16.7	-12.7	0.0	0.0	0.0	19.4	-14.7	0.0	0.0	0.0	22.2	-16.9	0.0	0.0	0.0	
	9:12 (36.9 deg)	1	-12.2	-26.5	-40.7	-36.3	-29.7	-14.2	-30.7	-47.2	-42.1	-34.5	-16.3	-35.3	-54.2	-48.3	-39.6	
		2	20.0	-12.7	0.0	0.0	0.0	23.1	-14.7	0.0	0.0	0.0	8.5	-16.9	0.0	0.0	0.0	
	12:12 (45.0 deg)	1	-6.9	-26.5	-40.7	-36.3	-29.7	-8.0	-30.7	-47.2	-42.1	-34.5	-9.2	-35.3	-54.2	-48.3	-39.6	
		2	20.0	-12.7	0.0	0.0	0.0	23.1	-14.7	0.0	0.0	0.0	26.6	-16.9	0.0	0.0	0.0	
30	Flat < 2:12 (9.46 deg)	1	NA	NA	-38.3	-34.1	-28.0	NA	NA	-44.4	-39.6	-32.5	NA	NA	-51.0	-45.4	-37.3	
		2	NA	NA	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	
	3:12 (14.0 deg)	1	-37.6	-25.5	-38.3	-34.1	-28.0	-43.6	-29.6	-44.4	-39.6	-32.5	-50.0	-34.0	-51.0	-45.4	-37.3	
		2	5.4	-7.6	0.0	0.0	0.0	6.3	-8.8	0.0	0.0	0.0	7.2	-10.1	0.0	0.0	0.0	
	4:12 (18.4 deg)	1	-30.9	-24.9	-38.3	-34.1	-28.0	-35.8	-28.9	-44.4	-39.6	-32.5	-41.1	-33.2	-51.0	-45.4	-37.3	
		2	10.7	-10.9	0.0	0.0	0.0	12.4	-12.7	0.0	0.0	0.0	14.2	-14.6	0.0	0.0	0.0	
	5:12 (22.6 deg)	1	-24.8	-24.9	-38.3	-34.1	-28.0	-28.7	-28.9	-44.4	-39.6	-32.5	-33.0	-33.2	-51.0	-45.4	-37.3	
		2	14.2	-11.9	0.0	0.0	0.0	16.5	-13.8	0.0	0.0	0.0	18.9	-15.9	0.0	0.0	0.0	
	6:12 (26.6 deg)	1	-19.9	-24.9	-38.3	-34.1	-28.0	-23.1	-28.9	-44.4	-39.6	-32.5	-26.5	-33.2	-51.0	-45.4	-37.3	
		2	15.7	-11.9	0.0	0.0	0.0	18.2	-13.8	0.0	0.0	0.0	20.9	-15.9	0.0	0.0	0.0	
	9:12 (36.9 deg)	1	-11.5	-24.9	-38.3	-34.1	-28.0	-13.4	-28.9	-44.4	-39.6	-32.5	-15.3	-33.2	-51.0	-45.4	-37.3	
		2	18.8	-11.9	0.0	0.0	0.0	21.8	-13.8	0.0	0.0	0.0	8.0	-15.9	0.0	0.0	0.0	
	12:12 (45.0 deg)	1	-6.5	-24.9	-38.3	-34.1	-28.0	-7.5	-28.9	-44.4	-39.6	-32.5	-8.7	-33.2	-51.0	-45.4	-37.3	
		2	18.8	-11.9	0.0	0.0	0.0	21.8	-13.8	0.0	0.0	0.0	25.0	-15.9	0.0	0.0	0.0	
20	Flat < 2:12 (9.46 deg)	1	NA	NA	-35.2	-31.3	-25.7	NA	NA	-40.8	-36.3	-29.8	NA	NA	-46.8	-41.7	-34.2	
		2	NA	NA	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	
	3:12 (14.0 deg)	1	-34.5	-23.4	-35.2	-31.3	-25.7	-40.0	-27.2	-40.8	-36.3	-29.8	-45.9	-31.2	-46.8	-41.7	-34.2	
		2	5.0	-7.0	0.0	0.0	0.0	5.8	-8.1	0.0	0.0	0.0	6.6	-9.3	0.0	0.0	0.0	
	4:12 (18.4 deg)	1	-28.4	-22.9	-35.2	-31.3	-25.7	-32.9	-26.5	-40.8	-36.3	-29.8	-37.8	-30.5	-46.8	-41.7	-34.2	
		2	9.8	-10.0	0.0	0.0	0.0	11.4	-11.7	0.0	0.0	0.0	13.1	-13.4	0.0	0.0	0.0	
	5:12 (22.6 deg)	1	-22.8	-22.9	-35.2	-31.3	-25.7	-26.4	-26.5	-40.8	-36.3	-29.8	-30.3	-30.5	-46.8	-41.7	-34.2	
		2	13.1	-10.9	0.0	0.0	0.0	15.2	-12.7	0.0	0.0	0.0	17.4	-14.6	0.0	0.0	0.0	
	6:12 (26.6 deg)	1	-18.3	-22.9	-35.2	-31.3	-25.7	-21.2	-26.5	-40.8	-36.3	-29.8	-24.3	-30.5	-46.8	-41.7	-34.2	
		2	14.4	-10.9	0.0	0.0	0.0	16.7	-12.7	0.0	0.0	0.0	19.2	-14.6	0.0	0.0	0.0	
	9:12 (36.9 deg)	1	-10.6	-22.9	-35.2	-31.3	-25.7	-12.3	-26.5	-40.8	-36.3	-29.8	-14.1	-30.5	-46.8	-41.7	-34.2	
		2	17.2	-10.9	0.0	0.0	0.0	20.0	-12.7	0.0	0.0	0.0	7.4	-14.6	0.0	0.0	0.0	
	12:12 (45.0 deg)	1	-6.0	-22.9	-35.2	-31.3	-25.7	-6.9	-26.5	-40.8	-36.3	-29.8	-7.9	-30.5	-46.8	-41.7	-34.2	
		2	17.2	-10.9	0.0	0.0	0.0	20.0	-12.7	0.0	0.0	0.0	23.0	-14.6	0.0	0.0	0.0	
15	Flat < 2:12 (9.46 deg)	1	NA	NA	-33.1	-29.5	-24.2	NA	NA	-38.4	-34.2	-28.1	NA	NA	-44.1	-39.3	-32.2	
		2	NA	NA	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	NA	NA	0.0	0.0	0.0	
	3:12 (14.0 deg)	1	-32.5	-22.1	-33.1	-29.5	-24.2	-37.7	-25.6	-38.4	-34.2	-28.1	-43.2	-29.4	-44.1	-39.3	-32.2	
		2	4.7	-6.6	0.0	0.0	0.0	5.4	-7.6	0.0	0.0	0.0	6.2	-8.8	0.0	0.0	0.0	
	4:12 (18.4 deg)	1	-26.7	-21.5	-33.1	-29.5	-24.2	-31.0	-25.0	-38.4	-34.2	-28.1	-35.5	-28.7	-44.1	-39.3	-32.2	
		2	9.2	-9.5	0.0	0.0	0.0	10.7	-11.0	0.0	0.0	0.0	12.3	-12.6	0.0	0.0	0.0	
	5:12 (22.6 deg)	1	-21.4	-21.5	-33.1	-29.5	-24.2	-24.8	-25.0	-38.4	-34.2	-28.1	-28.5	-28.7	-44.1	-39.3	-32.2	
		2	12.3	-10.3	0.0	0.0	0.0	14.3	-11.9	0.0	0.0	0.0	16.4	-13.7	0.0	0.0	0.0	
	6:12 (26.6 deg)	1	-17.2	-21.5	-33.1	-29.5	-24.2	-19.9	-25.0	-38.4	-34.2	-28.1	-22.9	-28.7	-44.1	-39.3	-32.2	
		2	13.6	-10.3	0.0	0.0	0.0	15.7	-11.9	0.0	0.0	0.0	18.1	-13.7	0.0	0.0	0.0	
	9:12 (36.9 deg)	1	-10.0	-21.5	-33.1	-29.5	-24.2	-11.5	-25.0	-38.4	-34.2	-28.1	-13.3	-28.7	-44.1	-39.3	-32.2	
		2	16.2	-10.3	0.0	0.0	0.0	18.8	-11.9	0.0	0.0	0.0	6.9	-13.7	0.0	0.0	0.0	
	12:12 (45.0 deg)	1	-5.6	-21.5	-33.1	-29.5	-24.2	-6.5	-25.0	-38.4	-34.2	-28.1	-7.5	-28.7	-44.1	-39.3	-32.2	
		2	16.2	-10.3	0.0	0.0	0.0	18.8	-11.9	0.0	0.0	0.0	21.6	-13.7	0.0	0.0	0.0	