

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

**MWFRS – Roof**  
**V = 110–120 mph**  
**h = 50–80 ft.**

V (MPH)			110					115					120								
h (ft)	Roof Slope	Load Case	1	2	Zone	3	4	5	1	2	Zone	3	4	5	1	2	Zone	3	4	5	
80	Flat < 2:12 (9.46 deg)	1	NA	NA	-33.7	-30.0	-24.6	NA	NA	-36.8	-32.8	-26.9	NA	NA	-40.1	-35.8	-29.3	NA	NA	-35.8	-29.3
		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	NA	NA	0.0	0.0
	3:12 (14.0 deg)	1	-33.1	-22.5	-33.7	-30.0	-24.6	-36.1	-26.0	-36.8	-32.8	-26.9	-39.4	-26.8	-40.1	-35.8	-29.3	-39.4	-26.8	-40.1	-35.8
		2	4.8	-6.7	0.0	0.0	0.0	5.2	-7.3	0.0	0.0	0.0	5.7	-8.0	0.0	0.0	0.0	5.7	-8.0	0.0	0.0
	4:12 (18.4 deg)	1	-27.2	-21.9	-33.7	-30.0	-24.6	-29.7	-24.0	-36.8	-32.8	-26.9	-32.4	-26.1	-40.1	-35.8	-29.3	-32.4	-26.1	-40.1	-35.8
		2	9.4	-9.6	0.0	0.0	0.0	10.3	-10.5	0.0	0.0	0.0	11.2	-11.5	0.0	0.0	0.0	11.2	-11.5	0.0	0.0
	5:12 (22.6 deg)	1	-21.8	-21.9	-33.7	-30.0	-24.6	-23.8	-24.0	-36.8	-32.8	-26.9	-26.0	-26.1	-40.1	-35.8	-29.3	-26.0	-26.1	-40.1	-35.8
		2	12.5	-10.5	0.0	0.0	0.0	13.7	-11.5	0.0	0.0	0.0	14.9	-12.5	0.0	0.0	0.0	14.9	-12.5	0.0	0.0
	6:12 (26.6 deg)	1	-17.5	-21.9	-33.7	-30.0	-24.6	-19.1	-24.0	-36.8	-32.8	-26.9	-20.8	-26.1	-40.1	-35.8	-29.3	-20.8	-26.1	-40.1	-35.8
		2	13.8	-10.5	0.0	0.0	0.0	15.1	-11.5	0.0	0.0	0.0	16.5	-12.5	0.0	0.0	0.0	16.5	-12.5	0.0	0.0
	9:12 (36.9 deg)	1	-10.1	-21.9	-33.7	-30.0	-24.6	-11.1	-24.0	-36.8	-32.8	-26.9	-12.1	-26.1	-40.1	-35.8	-29.3	-12.1	-26.1	-40.1	-35.8
		2	16.5	-10.5	0.0	0.0	0.0	18.1	-11.5	0.0	0.0	0.0	19.7	-12.5	0.0	0.0	0.0	19.7	-12.5	0.0	0.0
	12:12 (45.0 deg)	1	-5.7	-21.9	-33.7	-30.0	-24.6	-6.3	-24.0	-36.8	-32.8	-26.9	-6.8	-26.1	-40.1	-35.8	-29.3	-6.8	-26.1	-40.1	-35.8
		2	16.5	-10.5	0.0	0.0	0.0	18.1	-11.5	0.0	0.0	0.0	19.7	-12.5	0.0	0.0	0.0	19.7	-12.5	0.0	0.0
70	Flat < 2:12 (9.46 deg)	1	NA	NA	-32.8	-29.2	-24.0	NA	NA	-35.8	-31.9	-26.2	NA	NA	-39.0	-34.8	-28.5	NA	NA	-39.0	-34.8
		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	NA	NA	0.0	0.0
	3:12 (14.0 deg)	1	-32.1	-21.9	-32.8	-29.2	-24.0	-35.1	-25.3	-35.8	-31.9	-26.2	-38.3	-26.0	-39.0	-34.8	-28.5	-38.3	-26.0	-39.0	-34.8
		2	4.6	-6.5	0.0	0.0	0.0	5.1	-7.1	0.0	0.0	0.0	5.5	-7.8	0.0	0.0	0.0	5.5	-7.8	0.0	0.0
	4:12 (18.4 deg)	1	-26.4	-21.3	-32.8	-29.2	-24.0	-28.9	-23.3	-35.8	-31.9	-26.2	-31.5	-25.4	-39.0	-34.8	-28.5	-31.5	-25.4	-39.0	-34.8
		2	9.2	-9.4	0.0	0.0	0.0	10.0	-10.2	0.0	0.0	0.0	10.9	-11.1	0.0	0.0	0.0	10.9	-11.1	0.0	0.0
	5:12 (22.6 deg)	1	-21.2	-21.3	-32.8	-29.2	-24.0	-23.2	-23.3	-35.8	-31.9	-26.2	-25.2	-25.4	-39.0	-34.8	-28.5	-25.2	-25.4	-39.0	-34.8
		2	12.2	-10.2	0.0	0.0	0.0	13.3	-11.1	0.0	0.0	0.0	14.5	-12.1	0.0	0.0	0.0	14.5	-12.1	0.0	0.0
	6:12 (26.6 deg)	1	-17.0	-21.3	-32.8	-29.2	-24.0	-18.6	-23.3	-35.8	-31.9	-26.2	-20.3	-25.4	-39.0	-34.8	-28.5	-20.3	-25.4	-39.0	-34.8
		2	13.4	-10.2	0.0	0.0	0.0	14.7	-11.1	0.0	0.0	0.0	16.0	-12.1	0.0	0.0	0.0	16.0	-12.1	0.0	0.0
	9:12 (36.9 deg)	1	-9.9	-21.3	-32.8	-29.2	-24.0	-10.8	-23.3	-35.8	-31.9	-26.2	-11.7	-25.4	-39.0	-34.8	-28.5	-11.7	-25.4	-39.0	-34.8
		2	16.1	-10.2	0.0	0.0	0.0	17.6	-11.1	0.0	0.0	0.0	19.1	-12.1	0.0	0.0	0.0	19.1	-12.1	0.0	0.0
	12:12 (45.0 deg)	1	-5.6	-21.3	-32.8	-29.2	-24.0	-6.1	-23.3	-35.8	-31.9	-26.2	-6.6	-25.4	-39.0	-34.8	-28.5	-6.6	-25.4	-39.0	-34.8
		2	16.1	-10.2	0.0	0.0	0.0	17.6	-11.1	0.0	0.0	0.0	19.1	-12.1	0.0	0.0	0.0	19.1	-12.1	0.0	0.0
60	Flat < 2:12 (9.46 deg)	1	NA	NA	-31.7	-28.3	-23.2	NA	NA	-34.7	-30.9	-25.3	NA	NA	-37.8	-33.7	-27.6	NA	NA	-37.8	-33.7
		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	NA	NA	0.0	0.0
	3:12 (14.0 deg)	1	-31.1	-21.2	-31.7	-28.3	-23.2	-34.0	-24.5	-34.7	-30.9	-25.3	-37.0	-25.2	-37.8	-33.7	-27.6	-37.0	-25.2	-37.8	-33.7
		2	4.5	-6.3	0.0	0.0	0.0	4.9	-6.9	0.0	0.0	0.0	5.3	-7.5	0.0	0.0	0.0	5.3	-7.5	0.0	0.0
	4:12 (18.4 deg)	1	-25.6	-20.6	-31.7	-28.3	-23.2	-28.0	-22.6	-34.7	-30.9	-25.3	-30.4	-24.6	-37.8	-33.7	-27.6	-30.4	-24.6	-37.8	-33.7
		2	8.9	-9.1	0.0	0.0	0.0	9.7	-9.9	0.0	0.0	0.0	10.5	-10.8	0.0	0.0	0.0	10.5	-10.8	0.0	0.0
	5:12 (22.6 deg)	1	-20.5	-20.6	-31.7	-28.3	-23.2	-22.4	-22.6	-34.7	-30.9	-25.3	-24.4	-24.6	-37.8	-33.7	-27.6	-24.4	-24.6	-37.8	-33.7
		2	11.8	-9.9	0.0	0.0	0.0	12.9	-10.8	0.0	0.0	0.0	14.0	-11.8	0.0	0.0	0.0	14.0	-11.8	0.0	0.0
	6:12 (26.6 deg)	1	-16.5	-20.6	-31.7	-28.3	-23.2	-18.0	-22.6	-34.7	-30.9	-25.3	-19.6	-24.6	-37.8	-33.7	-27.6	-19.6	-24.6	-37.8	-33.7
		2	13.0	-9.9	0.0	0.0	0.0	14.2	-10.8	0.0	0.0	0.0	15.5	-11.8	0.0	0.0	0.0	15.5	-11.8	0.0	0.0
	9:12 (36.9 deg)	1	-9.5	-20.6	-31.7	-28.3	-23.2	-10.4	-22.6	-34.7	-30.9	-25.3	-11.4	-24.6	-37.8	-33.7	-27.6	-11.4	-24.6	-37.8	-33.7
		2	15.6	-9.9	0.0	0.0	0.0	17.0	-10.8	0.0	0.0	0.0	18.5	-11.8	0.0	0.0	0.0	18.5	-11.8	0.0	0.0
	12:12 (45.0 deg)	1	-5.4	-20.6	-31.7	-28.3	-23.2	-5.9	-22.6	-34.7	-30.9	-25.3	-6.4	-24.6	-37.8	-33.7	-27.6	-6.4	-24.6	-37.8	-33.7
		2	15.6	-9.9	0.0	0.0	0.0	17.0	-10.8	0.0	0.0	0.0	18.5	-11.8	0.0	0.0	0.0	18.5	-11.8	0.0	0.0
50	Flat < 2:12 (9.46 deg)	1	NA	NA	-30.5	-27.2	-22.3	NA	NA	-33.4	-29.7	-24.4	NA	NA	-36.3	-32.4	-26.6	NA	NA	-36.3	-32.4
		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	NA	NA	0.0	0.0
	3:12 (14.0 deg)	1	-30.0	-20.4	-30.5	-27.2	-22.3	-32.7	-23.6	-33.4	-29.7	-24.4	-35.6	-24.2	-36.3	-32.4	-26.6	-35.6	-24.2	-36.3	-32.4
		2	4.3	-6.1	0.0	0.0	0.0	4.7	-6.6	0.0	0.0	0.0	5.1	-7.2	0.0	0.0	0.0	5.1	-7.2	0.0	0.0
	4:12 (18.4 deg)	1	-24.6	-19.9	-30.5	-27.2	-22.3	-26.9	-21.7	-33.4	-29.7	-24.4	-29.3	-23.6	-36.3	-32.4	-26.6	-29.3	-23.6	-36.3	-32.4
		2	8.5	-8.7	0.0	0.0	0.0	9.3	-9.5	0.0	0.0	0.0	10.1	-10.4	0.0	0.0	0.0	10.1	-10.4	0.0	0.0
	5:12 (22.6 deg)	1	-19.8	-19.9	-30.5	-27.2	-22.3	-21.6	-21.7	-33.4	-29.7	-24.4	-23.5	-23.6	-36.3	-32.4	-26.6	-23.5	-23.6	-36.3	-32.4
		2	11.3	-9.5	0.0	0.0	0.0	12.4	-10.4	0.0	0.0	0.0	13.5	-11.3	0.0	0.0	0.0	13.5	-11.3	0.0	0.0
	6:12 (26.6 deg)	1	-15.9	-19.9	-30.5	-27.2	-22.3	-17.3	-21.7	-33.4	-29.7	-24.4	-18.9	-23.6	-36.3	-32.4	-26.6	-18.9	-23.6	-36.3	-32.4
		2	12.5	-9.5	0.0	0.0	0.0	13.7	-10.4	0.0	0.0	0.0	14.9	-11.3	0.0	0.0	0.0	14.9	-11.3	0.0	0.0
	9:12 (36.9 deg)	1	-9.2	-19.9	-30.5	-27.2	-22.3	-10.0	-21.7	-33.4	-29.7	-24.4	-10.9	-23.6	-36.3	-32.4	-26.6	-10.9	-23.6	-36.3	-32.4
		2	15.0	-9.5	0.0	0.0	0.0	16.4	-10.4	0.0	0.0	0.0	17.8	-11.3	0.0	0.0	0.0	17.8	-11.3	0.0	0.0
	12:12 (45.0 deg)	1	-5.2	-19.9	-30.5	-27.2	-22.3	-5.7	-21.7	-33.4	-29.7	-24.4	-6.2	-23.6	-36.3	-32.4	-26.6	-6.2	-23.6	-36.3	-32.4
		2	15.0	-9.5	0.0	0.0	0.0	16.4	-10.4	0.0	0.0	0.0	17.8	-11.3	0.0	0.0	0.0	17.8	-11.3	0.0	0.0