

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

MWFRS – Roof
V = 110–120 mph
h = 90–120 ft.

V (MPH)		Load Case	110					115					120				
h (ft)	Roof Slope		1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
120	Flat < 2:12 (9.46 deg)	1	NA	NA	-36.7	-32.7	-26.8	NA	NA	-40.1	-35.8	-29.3	NA	NA	-43.7	-38.9	-31.9
		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	-36.0	-24.5	-36.7	-32.7	-26.8	-39.4	-28.3	-40.1	-35.8	-29.3	-42.9	-29.1	-43.7	-38.9	-31.9
		2	5.2	-7.3	0.0	0.0	0.0	5.7	-8.0	0.0	0.0	0.0	6.2	-8.7	0.0	0.0	0.0
	4:12 (18.4 deg)	1	-29.6	-23.9	-36.7	-32.7	-26.8	-32.4	-26.1	-40.1	-35.8	-29.3	-35.2	-28.4	-43.7	-38.9	-31.9
		2	10.2	-10.5	0.0	0.0	0.0	11.2	-11.5	0.0	0.0	0.0	12.2	-12.5	0.0	0.0	0.0
	5:12 (22.6 deg)	1	-23.8	-23.9	-36.7	-32.7	-26.8	-26.0	-26.1	-40.1	-35.8	-29.3	-28.3	-28.4	-43.7	-38.9	-31.9
		2	13.6	-11.4	0.0	0.0	0.0	14.9	-12.5	0.0	0.0	0.0	16.2	-13.6	0.0	0.0	0.0
	6:12 (26.6 deg)	1	-19.1	-23.9	-36.7	-32.7	-26.8	-20.9	-26.1	-40.1	-35.8	-29.3	-22.7	-28.4	-43.7	-38.9	-31.9
		2	15.1	-11.4	0.0	0.0	0.0	16.5	-12.5	0.0	0.0	0.0	17.9	-13.6	0.0	0.0	0.0
	9:12 (36.9 deg)	1	-11.0	-23.9	-36.7	-32.7	-26.8	-12.1	-26.1	-40.1	-35.8	-29.3	-13.1	-28.4	-43.7	-38.9	-31.9
		2	18.0	-11.4	0.0	0.0	0.0	19.7	-12.5	0.0	0.0	0.0	21.4	-13.6	0.0	0.0	0.0
	12:12 (45.0 deg)	1	-6.2	-23.9	-36.7	-32.7	-26.8	-6.8	-26.1	-40.1	-35.8	-29.3	-7.4	-28.4	-43.7	-38.9	-31.9
		2	18.0	-11.4	0.0	0.0	0.0	19.7	-12.5	0.0	0.0	0.0	21.4	-13.6	0.0	0.0	0.0
110	Flat < 2:12 (9.46 deg)	1	NA	NA	-36.0	-32.1	-26.3	NA	NA	-39.4	-35.1	-28.8	NA	NA	-42.9	-38.2	-31.4
		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
	3:12 (14.0 deg)	1	-35.4	-24.0	-36.0	-32.1	-26.3	-38.6	-27.8	-39.4	-35.1	-28.8	-42.1	-28.6	-42.9	-38.2	-31.4
		2	5.1	-7.2	0.0	0.0	0.0	5.6	-7.8	0.0	0.0	0.0	6.1	-8.5	0.0	0.0	0.0
	4:12 (18.4 deg)	1	-29.1	-23.5	-36.0	-32.1	-26.3	-31.8	-25.6	-39.4	-35.1	-28.8	-34.6	-27.9	-42.9	-38.2	-31.4
		2	10.1	-10.3	0.0	0.0	0.0	11.0	-11.3	0.0	0.0	0.0	12.0	-12.3	0.0	0.0	0.0
	5:12 (22.6 deg)	1	-23.3	-23.5	-36.0	-32.1	-26.3	-25.5	-25.6	-39.4	-35.1	-28.8	-27.8	-27.9	-42.9	-38.2	-31.4
		2	13.4	-11.2	0.0	0.0	0.0	14.6	-12.3	0.0	0.0	0.0	15.9	-13.4	0.0	0.0	0.0
	6:12 (26.6 deg)	1	-18.7	-23.5	-36.0	-32.1	-26.3	-20.5	-25.6	-39.4	-35.1	-28.8	-22.3	-27.9	-42.9	-38.2	-31.4
		2	14.8	-11.2	0.0	0.0	0.0	16.2	-12.3	0.0	0.0	0.0	17.6	-13.4	0.0	0.0	0.0
	9:12 (36.9 deg)	1	-10.8	-23.5	-36.0	-32.1	-26.3	-11.9	-25.6	-39.4	-35.1	-28.8	-12.9	-27.9	-42.9	-38.2	-31.4
		2	17.7	-11.2	0.0	0.0	0.0	19.3	-12.3	0.0	0.0	0.0	21.0	-13.4	0.0	0.0	0.0
	12:12 (45.0 deg)	1	-6.1	-23.5	-36.0	-32.1	-26.3	-6.7	-25.6	-39.4	-35.1	-28.8	-7.3	-27.9	-42.9	-38.2	-31.4
		2	17.7	-11.2	0.0	0.0	0.0	19.3	-12.3	0.0	0.0	0.0	21.0	-13.4	0.0	0.0	0.0
100	Flat < 2:12 (9.46 deg)	1	NA	NA	-35.3	-31.5	-25.8	NA	NA	-38.6	-34.4	-28.2	NA	NA	-42.0	-37.5	-30.7
		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
	3:12 (14.0 deg)	1	-34.7	-23.6	-35.3	-31.5	-25.8	-37.9	-27.3	-38.6	-34.4	-28.2	-41.2	-28.0	-42.0	-37.5	-30.7
		2	5.0	-7.0	0.0	0.0	0.0	5.5	-7.7	0.0	0.0	0.0	5.9	-8.4	0.0	0.0	0.0
	4:12 (18.4 deg)	1	-28.5	-23.0	-35.3	-31.5	-25.8	-31.1	-25.1	-38.6	-34.4	-28.2	-33.9	-27.4	-42.0	-37.5	-30.7
		2	9.9	-10.1	0.0	0.0	0.0	10.8	-11.0	0.0	0.0	0.0	11.7	-12.0	0.0	0.0	0.0
	5:12 (22.6 deg)	1	-22.9	-23.0	-35.3	-31.5	-25.8	-25.0	-25.1	-38.6	-34.4	-28.2	-27.2	-27.4	-42.0	-37.5	-30.7
		2	13.1	-11.0	0.0	0.0	0.0	14.4	-12.0	0.0	0.0	0.0	15.6	-13.1	0.0	0.0	0.0
	6:12 (26.6 deg)	1	-18.4	-23.0	-35.3	-31.5	-25.8	-20.1	-25.1	-38.6	-34.4	-28.2	-21.9	-27.4	-42.0	-37.5	-30.7
		2	14.5	-11.0	0.0	0.0	0.0	15.8	-12.0	0.0	0.0	0.0	17.3	-13.1	0.0	0.0	0.0
	9:12 (36.9 deg)	1	-10.6	-23.0	-35.3	-31.5	-25.8	-11.6	-25.1	-38.6	-34.4	-28.2	-12.7	-27.4	-42.0	-37.5	-30.7
		2	17.3	-11.0	0.0	0.0	0.0	18.9	-12.0	0.0	0.0	0.0	20.6	-13.1	0.0	0.0	0.0
	12:12 (45.0 deg)	1	-6.0	-23.0	-35.3	-31.5	-25.8	-6.6	-25.1	-38.6	-34.4	-28.2	-7.1	-27.4	-42.0	-37.5	-30.7
		2	17.3	-11.0	0.0	0.0	0.0	18.9	-12.0	0.0	0.0	0.0	20.6	-13.1	0.0	0.0	0.0
90	Flat < 2:12 (9.46 deg)	1	NA	NA	-34.5	-30.8	-25.3	NA	NA	-37.8	-33.7	-27.6	NA	NA	-41.1	-36.7	-30.1
		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	-33.9	-23.0	-34.5	-30.8	-25.3	-37.0	-26.7	-37.8	-33.7	-27.6	-40.3	-27.4	-41.1	-36.7	-30.1
		2	4.9	-6.9	0.0	0.0	0.0	5.3	-7.5	0.0	0.0	0.0	5.8	-8.2	0.0	0.0	0.0
	4:12 (18.4 deg)	1	-27.9	-22.5	-34.5	-30.8	-25.3	-30.5	-24.6	-37.8	-33.7	-27.6	-33.2	-26.8	-41.1	-36.7	-30.1
		2	9.6	-9.9	0.0	0.0	0.0	10.5	-10.8	0.0	0.0	0.0	11.5	-11.8	0.0	0.0	0.0
	5:12 (22.6 deg)	1	-22.4	-22.5	-34.5	-30.8	-25.3	-24.4	-24.6	-37.8	-33.7	-27.6	-26.6	-26.8	-41.1	-36.7	-30.1
		2	12.8	-10.8	0.0	0.0	0.0	14.0	-11.8	0.0	0.0	0.0	15.3	-12.8	0.0	0.0	0.0
	6:12 (26.6 deg)	1	-18.0	-22.5	-34.5	-30.8	-25.3	-19.6	-24.6	-37.8	-33.7	-27.6	-21.4	-26.8	-41.1	-36.7	-30.1
		2	14.2	-10.8	0.0	0.0	0.0	15.5	-11.8	0.0	0.0	0.0	16.9	-12.8	0.0	0.0	0.0
	9:12 (36.9 deg)	1	-10.4	-22.5	-34.5	-30.8	-25.3	-11.4	-24.6	-37.8	-33.7	-27.6	-12.4	-26.8	-41.1	-36.7	-30.1
		2	16.9	-10.8	0.0	0.0	0.0	18.5	-11.8	0.0	0.0	0.0	20.2	-12.8	0.0	0.0	0.0
	12:12 (45.0 deg)	1	-5.9	-22.5	-34.5	-30.8	-25.3	-6.4	-24.6	-37.8	-33.7	-27.6	-7.0	-26.8	-41.1	-36.7	-30.1
		2	16.9	-10.8	0.0	0.0	0.0	18.5	-11.8	0.0	0.0	0.0	20.2	-12.8	0.0	0.0	0.0