

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

MWFRS – Roof
V = 130–150 mph
h = 50–80 ft.

V (MPH)		Load Case	130					140					150				
h (ft)	Roof Slope		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	-47.1	-42.0	-34.4	NA	NA	-54.6	-48.7	-39.9	NA	NA	-62.7	-55.9	-45.8
		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
	3:12 (14.0 deg)	1	-46.2	-31.4	-47.1	-42.0	-34.4	-53.6	-36.4	-54.6	-48.7	-39.9	-61.5	-41.8	-62.7	-55.9	-45.8
		2	6.7	-9.4	0.0	0.0	0.0	7.7	-10.9	0.0	0.0	0.0	8.9	-12.5	0.0	0.0	0.0
	4:12 (18.4 deg)	1	-38.0	-30.6	-47.1	-42.0	-34.4	-44.0	-35.5	-54.6	-48.7	-39.9	-50.5	-40.8	-62.7	-55.9	-45.8
		2	13.1	-13.5	0.0	0.0	0.0	15.2	-15.6	0.0	0.0	0.0	17.5	-17.9	0.0	0.0	0.0
	5:12 (22.6 deg)	1	-30.5	-30.6	-47.1	-42.0	-34.4	-35.3	-35.5	-54.6	-48.7	-39.9	-40.6	-40.8	-62.7	-55.9	-45.8
		2	17.5	-14.7	0.0	0.0	0.0	20.3	-17.0	0.0	0.0	0.0	23.3	-19.5	0.0	0.0	0.0
	6:12 (26.6 deg)	1	-24.5	-30.6	-47.1	-42.0	-34.4	-28.4	-35.5	-54.6	-48.7	-39.9	-32.6	-40.8	-62.7	-55.9	-45.8
		2	19.3	-14.7	0.0	0.0	0.0	22.4	-17.0	0.0	0.0	0.0	25.7	-19.5	0.0	0.0	0.0
	9:12 (36.9 deg)	1	-14.2	-30.6	-47.1	-42.0	-34.4	-16.4	-35.5	-54.6	-48.7	-39.9	-18.9	-40.8	-62.7	-55.9	-45.8
		2	23.1	-14.7	0.0	0.0	0.0	26.8	-17.0	0.0	0.0	0.0	9.9	-19.5	0.0	0.0	0.0
	12:12 (45.0 deg)	1	-8.0	-30.6	-47.1	-42.0	-34.4	-9.3	-35.5	-54.6	-48.7	-39.9	-10.6	-40.8	-62.7	-55.9	-45.8
		2	23.1	-14.7	0.0	0.0	0.0	26.8	-17.0	0.0	0.0	0.0	30.7	-19.5	0.0	0.0	0.0
70	Flat < 2:12 (9.46 deg)	1	NA	NA	-45.8	-40.8	-33.5	NA	NA	-53.1	-47.3	-38.8	NA	NA	-60.9	-54.3	-44.5
		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	-44.9	-30.5	-45.8	-40.8	-33.5	-52.1	-35.4	-53.1	-47.3	-38.8	-59.8	-40.6	-60.9	-54.3	-44.5
		2	6.5	-9.1	0.0	0.0	0.0	7.5	-10.6	0.0	0.0	0.0	8.6	-12.1	0.0	0.0	0.0
	4:12 (18.4 deg)	1	-36.9	-29.8	-45.8	-40.8	-33.5	-42.8	-34.6	-53.1	-47.3	-38.8	-49.1	-39.7	-60.9	-54.3	-44.5
		2	12.8	-13.1	0.0	0.0	0.0	14.8	-15.2	0.0	0.0	0.0	17.0	-17.4	0.0	0.0	0.0
	5:12 (22.6 deg)	1	-29.6	-29.8	-45.8	-40.8	-33.5	-34.4	-34.6	-53.1	-47.3	-38.8	-39.4	-39.7	-60.9	-54.3	-44.5
		2	17.0	-14.2	0.0	0.0	0.0	19.7	-16.5	0.0	0.0	0.0	22.6	-19.0	0.0	0.0	0.0
	6:12 (26.6 deg)	1	-23.8	-29.8	-45.8	-40.8	-33.5	-27.6	-34.6	-53.1	-47.3	-38.8	-31.7	-39.7	-60.9	-54.3	-44.5
		2	18.8	-14.2	0.0	0.0	0.0	21.8	-16.5	0.0	0.0	0.0	25.0	-19.0	0.0	0.0	0.0
	9:12 (36.9 deg)	1	-13.8	-29.8	-45.8	-40.8	-33.5	-16.0	-34.6	-53.1	-47.3	-38.8	-18.3	-39.7	-60.9	-54.3	-44.5
		2	22.5	-14.2	0.0	0.0	0.0	26.0	-16.5	0.0	0.0	0.0	9.6	-19.0	0.0	0.0	0.0
	12:12 (45.0 deg)	1	-7.8	-29.8	-45.8	-40.8	-33.5	-9.0	-34.6	-53.1	-47.3	-38.8	-10.3	-39.7	-60.9	-54.3	-44.5
		2	22.5	-14.2	0.0	0.0	0.0	26.0	-16.5	0.0	0.0	0.0	29.9	-19.0	0.0	0.0	0.0
60	Flat < 2:12 (9.46 deg)	1	NA	NA	-44.3	-39.5	-32.4	NA	NA	-51.4	-45.8	-37.6	NA	NA	-59.0	-52.6	-43.1
		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	-43.5	-29.6	-44.3	-39.5	-32.4	-50.4	-34.3	-51.4	-45.8	-37.6	-57.9	-39.3	-59.0	-52.6	-43.1
		2	6.3	-8.8	0.0	0.0	0.0	7.3	-10.2	0.0	0.0	0.0	8.3	-11.7	0.0	0.0	0.0
	4:12 (18.4 deg)	1	-35.7	-28.8	-44.3	-39.5	-32.4	-41.4	-33.4	-51.4	-45.8	-37.6	-47.6	-38.4	-59.0	-52.6	-43.1
		2	12.4	-12.7	0.0	0.0	0.0	14.3	-14.7	0.0	0.0	0.0	16.5	-16.9	0.0	0.0	0.0
	5:12 (22.6 deg)	1	-28.7	-28.8	-44.3	-39.5	-32.4	-33.3	-33.4	-51.4	-45.8	-37.6	-38.2	-38.4	-59.0	-52.6	-43.1
		2	16.5	-13.8	0.0	0.0	0.0	19.1	-16.0	0.0	0.0	0.0	21.9	-18.4	0.0	0.0	0.0
	6:12 (26.6 deg)	1	-23.0	-28.8	-44.3	-39.5	-32.4	-26.7	-33.4	-51.4	-45.8	-37.6	-30.7	-38.4	-59.0	-52.6	-43.1
		2	18.2	-13.8	0.0	0.0	0.0	21.1	-16.0	0.0	0.0	0.0	24.2	-18.4	0.0	0.0	0.0
	9:12 (36.9 deg)	1	-13.3	-28.8	-44.3	-39.5	-32.4	-15.5	-33.4	-51.4	-45.8	-37.6	-17.8	-38.4	-59.0	-52.6	-43.1
		2	21.7	-13.8	0.0	0.0	0.0	25.2	-16.0	0.0	0.0	0.0	9.3	-18.4	0.0	0.0	0.0
	12:12 (45.0 deg)	1	-7.5	-28.8	-44.3	-39.5	-32.4	-8.7	-33.4	-51.4	-45.8	-37.6	-10.0	-38.4	-59.0	-52.6	-43.1
		2	21.7	-13.8	0.0	0.0	0.0	25.2	-16.0	0.0	0.0	0.0	28.9	-18.4	0.0	0.0	0.0
50	Flat < 2:12 (9.46 deg)	1	NA	NA	-42.6	-38.0	-31.2	NA	NA	-49.4	-44.1	-36.2	NA	NA	-56.8	-50.6	-41.5
		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	-41.8	-28.4	-42.6	-38.0	-31.2	-48.5	-33.0	-49.4	-44.1	-36.2	-55.7	-37.9	-56.8	-50.6	-41.5
		2	6.0	-8.5	0.0	0.0	0.0	7.0	-9.8	0.0	0.0	0.0	8.0	-11.3	0.0	0.0	0.0
	4:12 (18.4 deg)	1	-34.4	-27.8	-42.6	-38.0	-31.2	-39.9	-32.2	-49.4	-44.1	-36.2	-45.8	-37.0	-56.8	-50.6	-41.5
		2	11.9	-12.2	0.0	0.0	0.0	13.8	-14.1	0.0	0.0	0.0	15.9	-16.2	0.0	0.0	0.0
	5:12 (22.6 deg)	1	-27.6	-27.8	-42.6	-38.0	-31.2	-32.0	-32.2	-49.4	-44.1	-36.2	-36.7	-37.0	-56.8	-50.6	-41.5
		2	15.8	-13.3	0.0	0.0	0.0	18.4	-15.4	0.0	0.0	0.0	21.1	-17.7	0.0	0.0	0.0
	6:12 (26.6 deg)	1	-22.2	-27.8	-42.6	-38.0	-31.2	-25.7	-32.2	-49.4	-44.1	-36.2	-29.5	-37.0	-56.8	-50.6	-41.5
		2	17.5	-13.3	0.0	0.0	0.0	20.3	-15.4	0.0	0.0	0.0	23.3	-17.7	0.0	0.0	0.0
	9:12 (36.9 deg)	1	-12.8	-27.8	-42.6	-38.0	-31.2	-14.9	-32.2	-49.4	-44.1	-36.2	-17.1	-37.0	-56.8	-50.6	-41.5
		2	20.9	-13.3	0.0	0.0	0.0	24.3	-15.4	0.0	0.0	0.0	8.9	-17.7	0.0	0.0	0.0
	12:12 (45.0 deg)	1	-7.2	-27.8	-42.6	-38.0	-31.2	-8.4	-32.2	-49.4	-44.1	-36.2	-9.6	-37.0	-56.8	-50.6	-41.5
		2	20.9	-13.3	0.0	0.0	0.0	24.3	-15.4	0.0	0.0	0.0	27.8	-17.7	0.0	0.0	0.0