

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

**MWFRS – Roof**  
**V = 160–200 mph**  
**h = 50–80 ft.**

V (MPH)				160					180					200				
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	-71.3	-63.6	-52.1	NA	NA	-90.2	-80.5	-66.0	NA	NA	-111.4	-99.3	-81.5	
		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	-70.0	-50.4	-71.3	-63.6	-52.1	-88.5	-60.2	-90.2	-80.5	-66.0	-109.3	-74.3	-111.4	-99.3	-81.5	
		2	10.1	-14.2	0.0	0.0	0.0	12.8	-18.0	0.0	0.0	0.0	15.8	-22.2	0.0	0.0	0.0	
	4:12 (18.4 deg)	1	-57.5	-46.4	-71.3	-63.6	-52.1	-72.8	-58.7	-90.2	-80.5	-66.0	-89.9	-72.5	-111.4	-99.3	-81.5	
		2	19.9	-20.4	0.0	0.0	0.0	25.2	-25.8	0.0	0.0	0.0	31.1	-31.8	0.0	0.0	0.0	
	5:12 (22.6 deg)	1	-46.1	-46.4	-71.3	-63.6	-52.1	-58.4	-58.7	-90.2	-80.5	-66.0	-72.1	-72.5	-111.4	-99.3	-81.5	
		2	26.5	-22.2	0.0	0.0	0.0	33.5	-28.1	0.0	0.0	0.0	41.4	-34.7	0.0	0.0	0.0	
	6:12 (26.6 deg)	1	-37.1	-46.4	-71.3	-63.6	-52.1	-46.9	-58.7	-90.2	-80.5	-66.0	-57.9	-72.5	-111.4	-99.3	-81.5	
		2	29.3	-22.2	0.0	0.0	0.0	37.0	-28.1	0.0	0.0	0.0	45.7	-34.7	0.0	0.0	0.0	
	9:12 (36.9 deg)	1	-21.5	-46.4	-71.3	-63.6	-52.1	-27.2	-58.7	-90.2	-80.5	-66.0	-33.5	-72.5	-111.4	-99.3	-81.5	
		2	35.0	-22.2	0.0	0.0	0.0	44.3	-28.1	0.0	0.0	0.0	54.7	-34.7	0.0	0.0	0.0	
	12:12 (45.0 deg)	1	-12.1	-46.4	-71.3	-63.6	-52.1	-15.3	-58.7	-90.2	-80.5	-66.0	-18.9	-72.5	-111.4	-99.3	-81.5	
		2	35.0	-22.2	0.0	0.0	0.0	44.3	-28.1	0.0	0.0	0.0	54.7	-34.7	0.0	0.0	0.0	
70	Flat < 2:12 (9.46 deg)	1	NA	NA	-69.3	-61.8	-50.7	NA	NA	-87.7	-78.2	-64.2	NA	NA	-108.3	-96.6	-79.2	
		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	-68.0	-49.0	-69.3	-61.8	-50.7	-86.1	-58.5	-87.7	-78.2	-64.2	-106.3	-72.2	-108.3	-96.6	-79.2	
		2	9.8	-13.8	0.0	0.0	0.0	12.4	-17.5	0.0	0.0	0.0	15.3	-21.6	0.0	0.0	0.0	
	4:12 (18.4 deg)	1	-55.9	-45.1	-69.3	-61.8	-50.7	-70.8	-57.1	-87.7	-78.2	-64.2	-87.4	-70.5	-108.3	-96.6	-79.2	
		2	19.4	-19.8	0.0	0.0	0.0	24.5	-25.1	0.0	0.0	0.0	30.2	-31.0	0.0	0.0	0.0	
	5:12 (22.6 deg)	1	-44.9	-45.1	-69.3	-61.8	-50.7	-56.8	-57.1	-87.7	-78.2	-64.2	-70.1	-70.5	-108.3	-96.6	-79.2	
		2	25.8	-21.6	0.0	0.0	0.0	32.6	-27.3	0.0	0.0	0.0	40.3	-33.7	0.0	0.0	0.0	
	6:12 (26.6 deg)	1	-36.0	-45.1	-69.3	-61.8	-50.7	-45.6	-57.1	-87.7	-78.2	-64.2	-56.3	-70.5	-108.3	-96.6	-79.2	
		2	28.4	-21.6	0.0	0.0	0.0	36.0	-27.3	0.0	0.0	0.0	44.5	-33.7	0.0	0.0	0.0	
	9:12 (36.9 deg)	1	-20.9	-45.1	-69.3	-61.8	-50.7	-26.4	-57.1	-87.7	-78.2	-64.2	-32.6	-70.5	-108.3	-96.6	-79.2	
		2	34.0	-21.6	0.0	0.0	0.0	43.0	-27.3	0.0	0.0	0.0	53.1	-33.7	0.0	0.0	0.0	
	12:12 (45.0 deg)	1	-11.8	-45.1	-69.3	-61.8	-50.7	-14.9	-57.1	-87.7	-78.2	-64.2	-18.4	-70.5	-108.3	-96.6	-79.2	
		2	34.0	-21.6	0.0	0.0	0.0	43.0	-27.3	0.0	0.0	0.0	53.1	-33.7	0.0	0.0	0.0	
60	Flat < 2:12 (9.46 deg)	1	NA	NA	-67.1	-59.8	-49.1	NA	NA	-84.9	-75.7	-62.1	NA	NA	-104.9	-93.5	-76.7	
		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	-65.8	-47.4	-67.1	-59.8	-49.1	-83.3	-56.7	-84.9	-75.7	-62.1	-102.9	-69.9	-104.9	-93.5	-76.7	
		2	9.5	-13.4	0.0	0.0	0.0	12.0	-16.9	0.0	0.0	0.0	14.8	-20.9	0.0	0.0	0.0	
	4:12 (18.4 deg)	1	-54.1	-43.7	-67.1	-59.8	-49.1	-68.5	-55.3	-84.9	-75.7	-62.1	-84.6	-68.3	-104.9	-93.5	-76.7	
		2	18.7	-19.2	0.0	0.0	0.0	23.7	-24.3	0.0	0.0	0.0	29.3	-30.0	0.0	0.0	0.0	
	5:12 (22.6 deg)	1	-43.4	-43.7	-67.1	-59.8	-49.1	-55.0	-55.3	-84.9	-75.7	-62.1	-67.9	-68.3	-104.9	-93.5	-76.7	
		2	24.9	-20.9	0.0	0.0	0.0	31.6	-26.4	0.0	0.0	0.0	39.0	-32.6	0.0	0.0	0.0	
	6:12 (26.6 deg)	1	-34.9	-43.7	-67.1	-59.8	-49.1	-44.2	-55.3	-84.9	-75.7	-62.1	-54.5	-68.3	-104.9	-93.5	-76.7	
		2	27.5	-20.9	0.0	0.0	0.0	34.9	-26.4	0.0	0.0	0.0	43.0	-32.6	0.0	0.0	0.0	
	9:12 (36.9 deg)	1	-20.2	-43.7	-67.1	-59.8	-49.1	-25.6	-55.3	-84.9	-75.7	-62.1	-31.6	-68.3	-104.9	-93.5	-76.7	
		2	32.9	-20.9	0.0	0.0	0.0	41.7	-26.4	0.0	0.0	0.0	51.4	-32.6	0.0	0.0	0.0	
	12:12 (45.0 deg)	1	-11.4	-43.7	-67.1	-59.8	-49.1	-14.4	-55.3	-84.9	-75.7	-62.1	-17.8	-68.3	-104.9	-93.5	-76.7	
		2	32.9	-20.9	0.0	0.0	0.0	41.7	-26.4	0.0	0.0	0.0	51.4	-32.6	0.0	0.0	0.0	
50	Flat < 2:12 (9.46 deg)	1	NA	NA	-64.6	-57.6	-47.2	NA	NA	-81.7	-72.9	-59.8	NA	NA	-100.9	-90.0	-73.8	
		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	-63.4	-45.6	-64.6	-57.6	-47.2	-80.2	-54.5	-81.7	-72.9	-59.8	-99.0	-67.3	-100.9	-90.0	-73.8	
		2	9.1	-12.9	0.0	0.0	0.0	11.6	-16.3	0.0	0.0	0.0	14.3	-20.1	0.0	0.0	0.0	
	4:12 (18.4 deg)	1	-52.1	-42.0	-64.6	-57.6	-47.2	-65.9	-53.2	-81.7	-72.9	-59.8	-81.4	-65.7	-100.9	-90.0	-73.8	
		2	18.0	-18.5	0.0	0.0	0.0	22.8	-23.4	0.0	0.0	0.0	28.2	-28.8	0.0	0.0	0.0	
	5:12 (22.6 deg)	1	-41.8	-42.0	-64.6	-57.6	-47.2	-52.9	-53.2	-81.7	-72.9	-59.8	-65.3	-65.7	-100.9	-90.0	-73.8	
		2	24.0	-20.1	0.0	0.0	0.0	30.4	-25.4	0.0	0.0	0.0	37.5	-31.4	0.0	0.0	0.0	
	6:12 (26.6 deg)	1	-33.6	-42.0	-64.6	-57.6	-47.2	-42.5	-53.2	-81.7	-72.9	-59.8	-52.5	-65.7	-100.9	-90.0	-73.8	
		2	26.5	-20.1	0.0	0.0	0.0	33.5	-25.4	0.0	0.0	0.0	41.4	-31.4	0.0	0.0	0.0	
	9:12 (36.9 deg)	1	-19.4	-42.0	-64.6	-57.6	-47.2	-24.6	-53.2	-81.7	-72.9	-59.8	-30.4	-65.7	-100.9	-90.0	-73.8	
		2	31.7	-20.1	0.0	0.0	0.0	40.1	-25.4	0.0	0.0	0.0	49.5	-31.4	0.0	0.0	0.0	
	12:12 (45.0 deg)	1	-11.0	-42.0	-64.6	-57.6	-47.2	-13.9	-53.2	-81.7	-72.9	-59.8	-17.1	-65.7	-100.9	-90.0	-73.8	
		2	31.7	-20.1	0.0	0.0	0.0	40.1	-25.4	0.0	0.0	0.0	49.5	-31.4	0.0	0.0	0.0	