

MJC8 Q400 TAKEOFF SPEEDS CARD



1. Look up the Vr/V2 from the appropriate **Vr/V2 table** below. Assume V1=Vr
2. In Vr exceeds V2 , assume V2 = Vr
3. If **icing protection** is ON above 500 ft AGL, add 20 kts to V2
4. For **wet runway** reduce V1 by 8kts - 0.1kts for each kt headwind, or 8 kts + 0.3kts for each kt tailwind
5. Check Vr **not below** 108kts for Flaps 5, 104kts for Flaps 10, 100 kts for Flaps 15
6. Check V1 **not below** 97 kts for Flaps 5, 96 kts for Flaps 10 and Flaps 15

Flap Retraction Initiation Speed (VFRI)
Final Takeoff Speed (V CLMB)

When flying in icing conditions:
Above 400ft AGL, add 20 kts to VFRI
Add 20 kts to V CLMB

WEIGHT	V FRI Flap 5°	V FRI Flap 10°	V FRI Flap 15°	V CLMB
39.500 LB	116	110	107	130
44.000 LB	120	112	109	131
48.500 LB	126	118	115	137
53.000 LB	132	123	120	143
57.000 LB	137	128	125	148
62.000 LB	142	134	130	154
64.000 LB	146	137	133	158

FLAPS 5° Vr/V2

WEIGHT/ ALTITUDE	AT OR BELOW 20° C OAT						ABOVE 20° C OAT					
	0	2000	4000	6000	8000	10000	0	2000	4000	6000	8000	10000
39.500 LB	102/116	102/115	102/114	102/113	102/112	103/111	102/114	102/113	102/112	103/111	103/110	105/109
44.000 LB	105/115	106/114	107/113	107/112	108/112	110/111	107/113	108/112	108/112	110/111	110/111	112/111
48.500 LB	112/117	113/117	113/117	114/117	115/117	116/117	113/117	114/117	115/117	116/117	117/117	118/117
53.000 LB	118/122	119/122	120/122	120/122	121/122	122/122	120/122	120/122	121/122	122/122	123/122	124/122
57.000 LB	124/127	125/127	126/127	126/127	127/127	128/127	126/127	126/127	127/127	128/127	129/127	130/127
62.000 LB	130/132	131/132	131/132	132/132	133/132	134/132	131/132	132/132	133/132	134/132	135/132	136/132
64.000 LB	133/135	134/135	135/135	136/135	137/135	138/135	135/135	136/135	137/135	138/135	138/135	140/135

FLAPS 10° Vr/V2

WEIGHT/ ALTITUDE	AT OR BELOW 20° C OAT						ABOVE 20° C OAT					
	0	2000	4000	6000	8000	10000	0	2000	4000	6000	8000	10000
39.500 LB	100/111	100/110	100/110	100/109	100/108	100/107	100/109	100/109	100/109	100/107	---/106	---/105
44.000 LB	100/110	100/109	100/109	100/108	100/107	101/106	100/108	100/108	100/107	100/106	---/105	---/105
48.500 LB	103/109	105/109	105/108	105/108	106/108	108/108	104/108	106/108	106/108	106/108	---/108	---/108
53.000 LB	109/113	110/113	111/113	111/113	112/113	113/113	110/113	111/113	112/113	112/113	---/113	---/113
57.000 LB	115/118	116/118	116/118	117/118	118/118	119/118	116/118	117/118	117/118	118/118	---/118	---/118
62.000 LB	120/122	121/122	122/122	122/122	123/122	124/122	121/122	122/122	123/122	123/122	---/122	---/122
64.000 LB	124/125	125/125	125/125	126/125	127/125	128/125	125/125	125/125	126/125	127/125	---/125	---/125

FLAPS 15° Vr/V2

WEIGHT/ ALTITUDE	AT OR BELOW 20° C OAT						ABOVE 20° C OAT					
	0	2000	4000	6000	8000	10000	0	2000	4000	6000	8000	10000
39.500 LB	98/106	98/106	98/105	98/104	98/103	98/102	98/105	98/104	98/103	98/102	98/102	98/102
44.000 LB	98/105	98/105	98/104	98/103	98/102	98/102	98/103	98/103	98/102	98/102	99/102	99/102
48.500 LB	100/104	101/104	101/104	102/104	103/104	104/104	101/104	102/104	103/104	104/104	104/104	104/104
53.000 LB	106/109	106/109	107/109	108/109	108/109	109/109	107/109	108/109	108/109	109/109	110/109	110/109
57.000 LB	111/113	112/113	112/113	113/113	114/113	114/113	112/113	113/113	114/113	114/113	115/113	115/113
62.000 LB	116/118	117/118	117/118	118/118	118/118	119/118	117/118	118/118	119/118	119/118	120/118	120/118
64.000 LB	119/120	120/120	120/120	121/120	122/120	122/120	120/120	121/120	121/120	122/120	123/120	123/120

MJC8 Q400 APPROACH AND LANDING SPEEDS CARD



FLAPS 5°

WEIGHT	V app	V ref	V ga
39.500 LB	115	---	109
44.000 LB	120	---	110
48.500 LB	126	---	115
53.000 LB	131	---	120
57.000 LB	137	---	125
62.000 LB	142	---	130
64.000 LB	146	---	134

FLAPS 10°

WEIGHT	V app	V ref	V ga
39.500 LB	109	108	108
44.000 LB	112	112	108
48.500 LB	117	117	108
53.000 LB	122	122	112
57.000 LB	127	127	117
62.000 LB	132	132	122
64.000 LB	136	136	125

FLAPS 15°

WEIGHT	V app	V ref	V ga
39.500 LB	106	105	105
44.000 LB	106	117	105
48.500 LB	112	112	105
53.000 LB	117	117	107
57.000 LB	122	121	111
62.000 LB	126	126	116
64.000 LB	129	129	119

FLAPS 35°

WEIGHT	V app	V ref	V ga
39.500 LB	---	101	---
44.000 LB	---	102	---
48.500 LB	---	107	---
53.000 LB	---	112	---
57.000 LB	---	116	---
62.000 LB	---	120	---
64.000 LB	---	123	---

* When flying in icing conditions,
Add 20 kts to V app, V ref, V ga for flaps 10°, 15° and 35°