

## Section 5 – PERFORMANCE

### 170A, 170B

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

When operating at weights above the original gross weight limit, the stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

**CESSNA 170A, 170B WingX (145HP)**  
 TAKOFF DISTANCE  
 CONDITIONS: Zero Wind  
 Flaps UP  
 Full Throttle Prior to Brake Release Speed at 50 ft: 76 mph TIAS  
 Paved, level, dry runway

WEIGHT	Press Alt in Feet	0°F		20°F		40°F		60°F		80°F		100°F	
		Grnd Roll Ft	Clear 50 Ft Obst Ft	Grnd Roll Ft	Clear 50 Ft Obst Ft	Grnd Roll Ft	Clear 50 Ft Obst Ft	Grnd Roll Ft	Clear 50 Ft Obst Ft	Grnd Roll Ft	Clear 50 Ft Obst Ft	Grnd Roll Ft	Clear 50 Ft Obst Ft
2250 lbs	0	610	1525	660	1655	710	1780	760	1905	805	2020	860	2145
	2000	745	1860	800	2000	860	2145	915	2290	980	2450	1045	2615
	4000	895	2240	960	2395	1025	2565	1090	2730	1165	2920	1255	3140
	6000	1065	2665	1145	2865	1225	3065	1315	3285	1405	3515	1515	3785
	7000	1180	2950	1270	3180	1365	3410	1465	3660	1570	3920	1690	4225
2200 lbs	0	584	1460	632	1580	680	1700	728	1820	772	1930	820	2050
	2000	712	1780	764	1910	820	2050	876	2190	936	2340	1000	2500
	4000	856	2140	916	2290	980	2450	1044	2610	1116	2790	1200	3000
	6000	1020	2550	1096	2740	1172	2930	1256	3140	1344	3360	1448	3620
	7000	1128	2820	1216	3040	1304	3260	1400	3500	1500	3750	1616	4040

Shaded values are original (unchanged) Cessna data and are supplied for reference.

#### Landing Performance

Increase landing distance by 10% with WingExtensions installed.

Section 6 – WEIGHT AND BALANCE

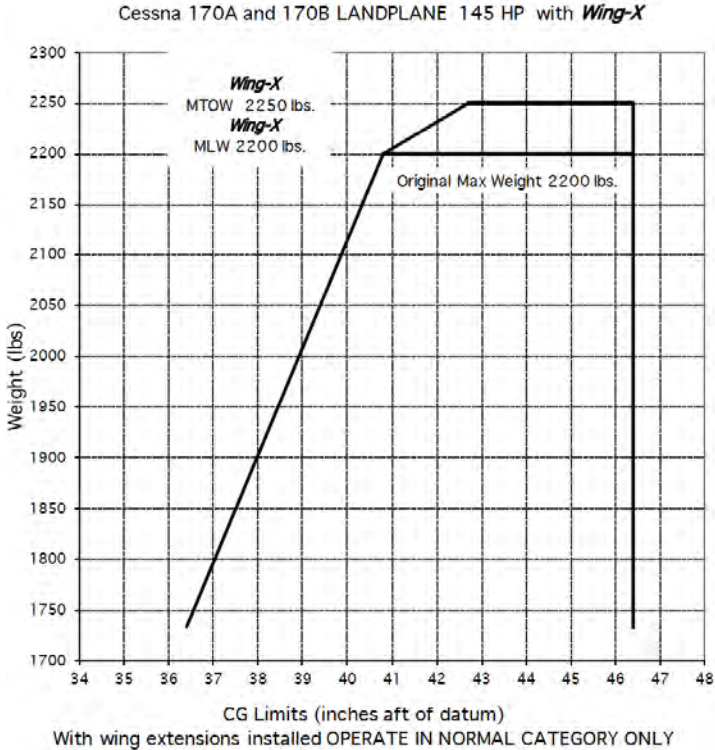
170A, 170B

CAUTION: USE PAGE APPLICABLE TO YOUR MODEL

Installation of WingExtensions has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
WingExtensions (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult WingExtension and Spar Reinforcement Installation Guide #172 for details.



## Section 5 – PERFORMANCE

### 172

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

When operating at weights above the original gross weight limit, the stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

**TAKE-OFF DISTANCE WITH FLAPS UP, FROM HARD SURFACE RUNWAY WITH FLAPS UP  
CESSNA 172**

SHADED CELLS ARE AFM DATA

GROSS WEIGHT POUNDS	IAS AT 50' MPH	HEAD WIND KNOTS	AT SEA LEVEL & 59°F		AT 2500 FT & 50°F		AT 5000 FT & 41°F		AT 7500 FT & 32°F	
			GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS
1600	56	0	355	805	420	965	505	1145	610	1390
		10	230	525	275	630	335	765	375	950
		20	130	290	160	360	200	455	255	580
1900	63	0	515	1175	615	1400	750	1710	955	2175
		10	350	790	420	960	525	1190	675	1535
		20	210	475	260	590	330	745	435	990
2200	69	0	725	1650	880	2000	1080	2455	1365	3100
		10	505	1145	620	1405	775	1760	990	2255
		20	315	720	400	910	510	1160	675	1530
2250	70	0	765	1740	930	2115	1145	2595	1440	3270
		10	535	1215	660	1490	820	1870	1045	2390
		20	335	765	425	970	545	1240	720	1635

NOTES: 1. Increase distance 10% for each 25°F above standard temperature for a particular altitude.  
2. Shaded values are original (unchanged) Cessna data and are supplied for reference.

#### Landing Performance

Increase landing distance by 10% with WingExtensions installed.

## Section 6 – WEIGHT AND BALANCE

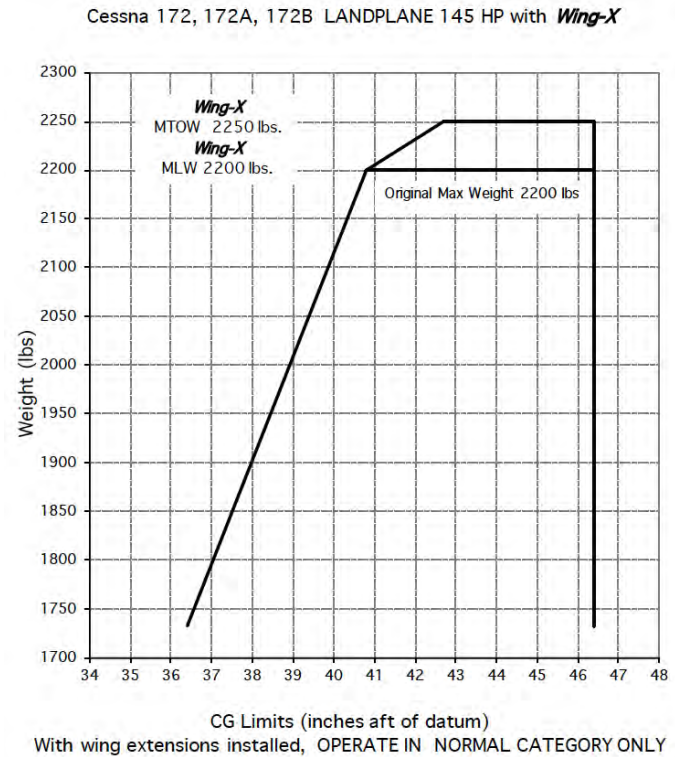
### 172

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

Installation of *WingExtensions* has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
<i>WingExtensions</i> (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult *WingExtension* and Spar Reinforcement Installation Guide #172 for details.



## Section 5 – PERFORMANCE

### 172A, 172B

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

When operating at weights above the original gross weight limit, the stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

**TAKE-OFF DISTANCE WITH FLAPS UP, FROM HARD SURFACE RUNWAY WITH FLAPS UP  
CESSNA 172A and 172B**

SHADED CELLS ARE AFM DATA

GROSS WEIGHT POUNDS	IAS AT 50' MPH	HEAD WIND KNOTS	AT SEA LEVEL & 59°F		AT 2500 FT & 50°F		AT 5000 FT & 41°F		AT 7500 FT & 32°F	
			GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS
1600	56	0	380	725	460	845	555	1000	680	1205
		10	215	470	285	560	330	670	415	820
		20	95	265	125	320	160	395	210	495
1900	61	0	560	1000	675	1185	820	1420	1015	1755
		10	335	675	415	805	515	980	645	1230
		20	165	400	210	490	275	610	360	785
2200	66	0	780	1370	945	1615	1155	1995	1425	2495
		10	490	945	605	1130	750	1410	950	1805
		20	260	590	330	710	425	915	560	1205
2250	67	0	820	1430	995	1710	1220	2100	1520	2650
		10	520	995	640	1205	795	1500	1010	1920
		20	280	625	355	770	455	985	600	1290

NOTES: 1. Increase distance 10% for each 25°F above standard temperature for a particular altitude.  
2. Shaded values are original (unchanged) Cessna data and are supplied for reference.

#### Landing Performance

Increase landing distance by 10% with WingExtensions installed.

## Section 6 – WEIGHT AND BALANCE

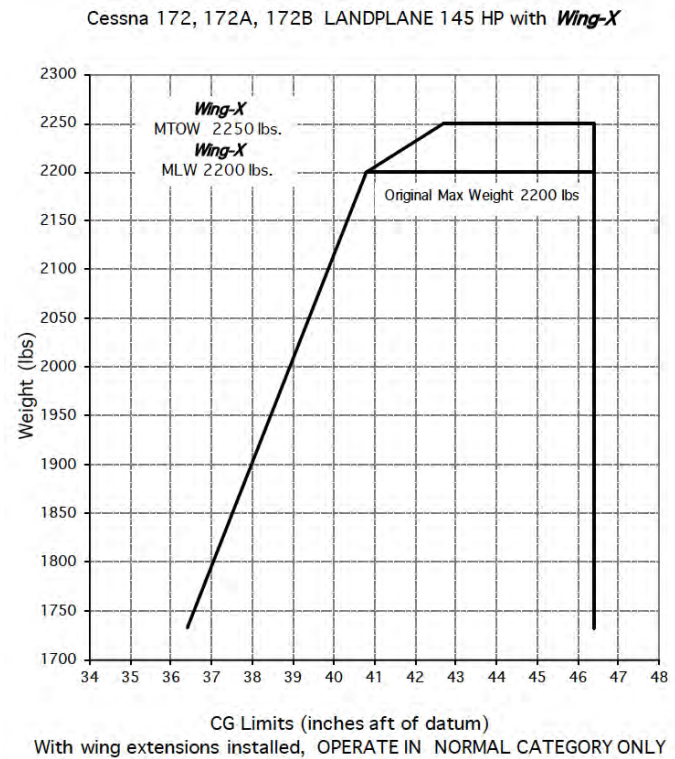
### 172A, 172B

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

Installation of *WingExtensions* has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
<i>WingExtensions</i> (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult *WingExtension* and Spar Reinforcement Installation Guide #172 for details.



## Section 5 – PERFORMANCE 172C

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

### Stall Speeds

When operating at weights above the original gross weight limit, the stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

### Takeoff Performance

**TAKE-OFF DISTANCE WITH FLAPS UP, FROM HARD SURFACE RUNWAY WITH FLAPS UP  
CESSNA 172C**

GROSS WEIGHT POUNDS	IAS AT 50' MPH	HEAD WIND KNOTS	SHADED CELLS ARE AFM DATA							
			AT SEA LEVEL & 59°F		AT 2500 FT & 50°F		AT 5000 FT & 41°F		AT 7500 FT & 32°F	
			GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS
1600	56	0	380	725	460	845	555	1000	680	1205
		10	215	470	285	560	330	670	415	820
		20	95	265	125	320	160	395	210	495
1900	61	0	560	1000	675	1185	820	1420	1015	1755
		10	335	675	415	805	515	980	645	1230
		20	165	400	210	490	275	610	360	785
2250	67	0	825	1430	995	1710	1220	2100	1520	2650
		10	520	995	640	1205	795	1500	1010	1920
		20	280	625	355	770	455	985	600	1290
2300	68	0	870	1500	1045	1795	1285	2215	1600	2800
		10	550	1050	680	1270	840	1590	1070	2035
		20	300	665	380	815	485	1050	640	1375

NOTES: 1. Increase distance 10% for each 25°F above standard temperature for a particular altitude.  
2. Shaded values are original (unchanged) Cessna data and are supplied for reference.

### Landing Performance

Increase landing distance by 10% with WingExtensions installed.

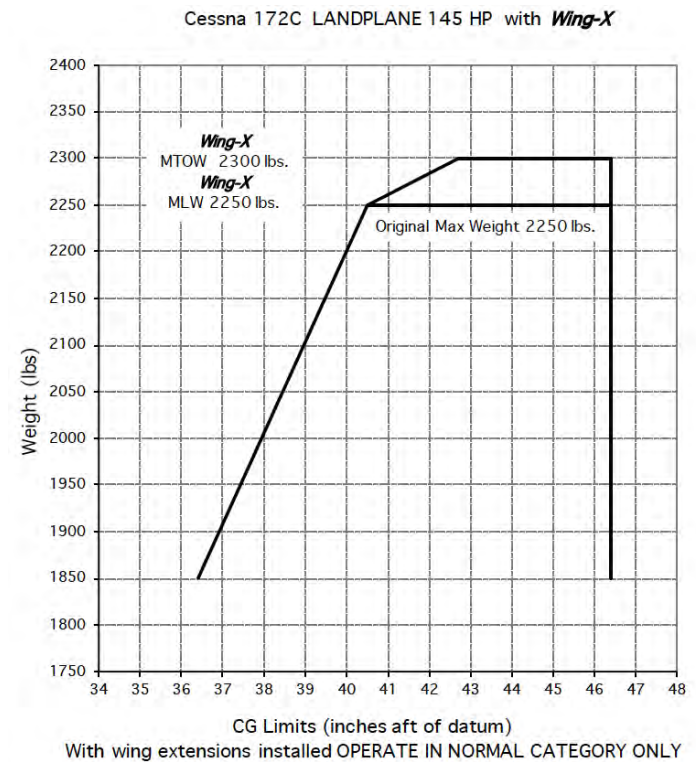
## Section 6 – WEIGHT AND BALANCE 172C

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

Installation of *WingExtensions* has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
<i>WingExtensions</i> (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult *WingExtension* and Spar Reinforcement Installation Guide #172 for details.





## Section 5 – PERFORMANCE

### 172D, 172E, 172F, 172G, 172H

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

When operating at weights above the original gross weight limit, the stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

**TAKE-OFF DISTANCE FROM HARD SURFACE RUNWAY WITH FLAPS UP**  
**CESSNA 172D, 172E, 172F, 172G, 172H**  
 SHADED CELLS ARE AFM DATA

GROSS WEIGHT POUNDS	IAS AT 50' MPH	HEAD WIND KNOTS	AT SEA LEVEL & 59°F		AT 2500 FT & 50°F		AT 5000 FT & 41°F		AT 7500 FT & 32°F	
			GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS
2350	71	0	910	1610	1090	2025	1320	2655	1650	4225
		10	650	1240	790	1580	970	2110	1225	3425
		20	430	910	535	1175	670	1600	970	2685
2300	70	0	865	1525	1040	1910	1255	2480	1565	3855
		10	615	1170	750	1485	920	1965	1160	3110
		20	405	850	505	1100	630	1480	910	2425
2000	65	0	630	1095	755	1325	905	1625	1120	2155
		10	435	820	530	1005	645	1250	810	1685
		20	275	560	340	720	425	910	585	1255
1700	60	0	435	780	520	920	625	1095	765	1370
		10	290	570	355	680	430	820	535	1040
		20	175	385	215	470	270	575	345	745

- NOTES:
1. Increase distance 10% for each 25°F above standard temperature for a particular altitude.
  2. For operation on a dry, grass runway, increase distance (both "ground run" and "total to clear a 50 ft. obstacle") by 7% of the "Total to clear 50 ft obstacle" figure.
  3. Shaded values are original (unchanged) Cessna data and are supplied for reference.

#### Landing Performance

Increase landing distance by 10% with WingExtensions installed.

Section 6 – WEIGHT AND BALANCE

172D, 172E, 172F, 172G, 172H

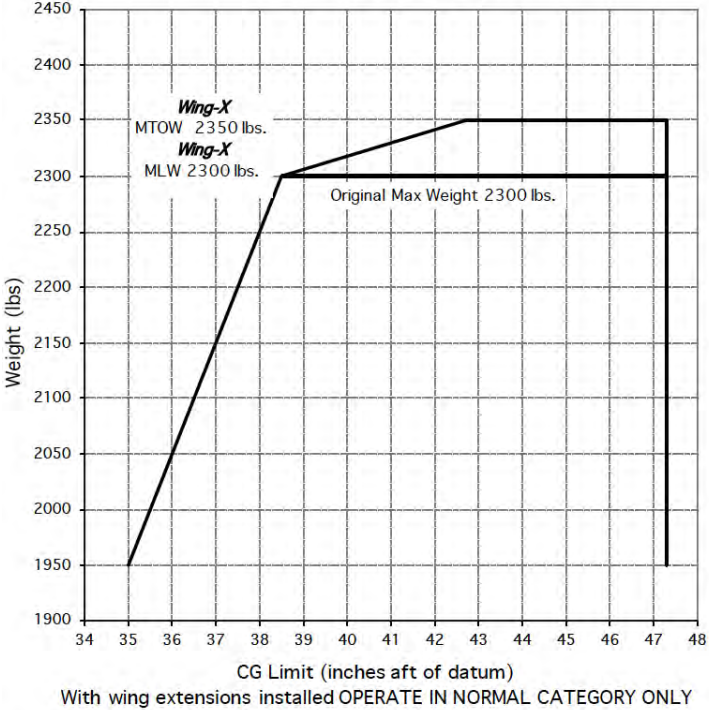
CAUTION: USE PAGE APPLICABLE TO YOUR MODEL

Installation of WingExtensions has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
WingExtensions (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult WingExtension and Spar Reinforcement Installation Guide #172 for details.

Cessna 172D, 172E, 172F, 172G, 172H LANDPLANE  
145 HP with Wing-X



## Section 5 – PERFORMANCE

### 172I, 172K, 172L

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

When operating at weights above the original gross weight limit, the stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

**TAKE-OFF DISTANCE FROM HARD SURFACE RUNWAY WITH FLAPS UP  
CESSNA 172I, 172K, 172L, 172M  
SHADED CELLS ARE AFM DATA**

GROSS WEIGHT POUNDS	IAS AT 50' MPH	HEAD WIND KNOTS	AT SEA LEVEL & 59°F		AT 2500 FT & 50°F		AT 5000 FT & 41°F		AT 7500 FT & 32°F	
			GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS
2400	70	0	950	1695	1145	2145	1385	2835	1735	4625
		10	685	1310	835	1680	1025	2265	1295	3760
		20	455	970	570	1255	710	1720	1035	2960
2300	68	0	865	1525	1040	1910	1255	2480	1565	3855
		10	615	1170	750	1485	920	1965	1160	3110
		20	405	850	505	1100	630	1480	910	2425
2000	63	0	630	1095	755	1325	905	1625	1120	2155
		10	435	820	530	1005	645	1250	810	1685
		20	275	560	340	720	425	910	585	1255
1700	59	0	435	780	520	920	625	1095	765	1370
		10	290	570	355	680	430	820	535	1040
		20	175	385	215	470	270	575	345	745

- NOTES:
1. Increase distance 10% for each 25°F above standard temperature for a particular altitude.
  2. For operation on a dry, grass runway, increase distance (both "ground run" and "total to clear a 50 ft. obstacle") by 7% of the "Total to clear 50 ft obstacle" figure.
  3. Shaded values are original (unchanged) Cessna data and are supplied for reference.

#### Landing Performance

Increase landing distance by 10% with WingExtensions installed.

## Section 6 – WEIGHT AND BALANCE

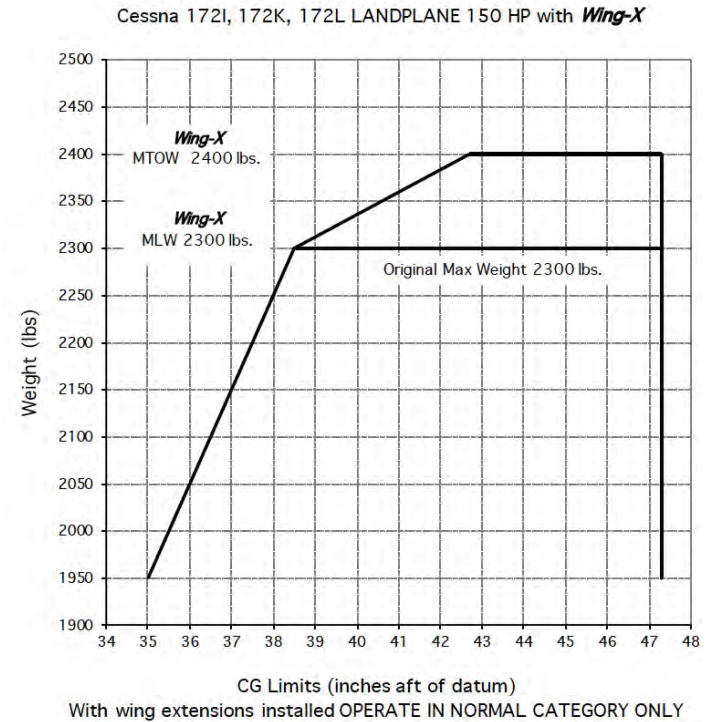
### 172I, 172K, 172L

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

Installation of *WingExtensions* has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
<i>WingExtensions</i> (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult *WingExtension* and Spar Reinforcement Installation Guide #172 for details.



## Section 5 – PERFORMANCE

### 172M

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

When operating at weights above the original gross weight limit, the stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

**TAKE-OFF DISTANCE FROM HARD SURFACE RUNWAY WITH FLAPS UP**  
**CESSNA 172I, 172K, 172L, 172M**  
 SHADED CELLS ARE AFM DATA

GROSS WEIGHT POUNDS	IAS AT 50' MPH	HEAD WIND KNOTS	AT SEA LEVEL & 59°F		AT 2500 FT & 50°F		AT 5000 FT & 41°F		AT 7500 FT & 32°F	
			GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS
2400	70	0	950	1695	1145	2145	1385	2835	1735	4625
		10	685	1310	835	1680	1025	2265	1295	3760
		20	455	970	570	1255	710	1720	1035	2960
2300	68	0	865	1525	1040	1910	1255	2480	1565	3855
		10	615	1170	750	1485	920	1965	1160	3110
		20	405	850	505	1100	630	1480	910	2425
2000	63	0	630	1095	755	1325	905	1625	1120	2155
		10	435	820	530	1005	645	1250	810	1685
		20	275	560	340	720	425	910	585	1255
1700	59	0	435	780	520	920	625	1095	765	1370
		10	290	570	355	680	430	820	535	1040
		20	175	385	215	470	270	575	345	745

- NOTES:
- Increase distance 10% for each 25°F above standard temperature for a particular altitude.
  - For operation on a dry, grass runway, increase distance (both "ground run" and "total to clear a 50 ft. obstacle") by 7% of the "Total to clear 50 ft obstacle" figure.
  - Shaded values are original (unchanged) Cessna data and are supplied for reference.

#### Landing Performance

Increase landing distance by 10% with WingExtensions installed.

## Section 6 – WEIGHT AND BALANCE

### 172M

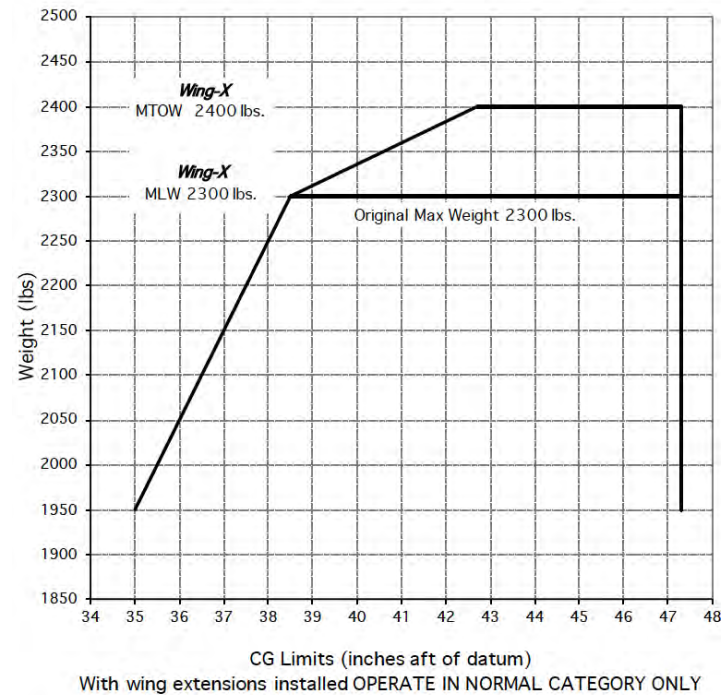
**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

Installation of *WingExtensions* has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
<i>WingExtensions</i> (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult *WingExtension* and Spar Reinforcement Installation Guide #172 for details.

Cessna 172M LANDPLANE 150 HP with *Wing-X*



## Section 5 – PERFORMANCE 172N

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

### Stall Speeds

When operating at weights above the original gross weight limit, the stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

### Takeoff Performance

**TAKE-OFF DISTANCE FROM HARD SURFACE RUNWAY WITH FLAPS UP  
CESSNA 172N**

GROSS WEIGHT POUNDS		TAKEOFF SPEED		PRESS ALT FT		SHADED CELLS ARE AFM DATA															
						0°C				10°C				20°C				30°C			
		LIFT OFF KIAS	AT 50' KIAS		GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS					
2400	53	60	0	795	1425	855	1525	920	1640	990	1750	1060	1870								
			1000	875	1560	940	1680	1010	1795	1080	1925	1160	2055								
			2000	955	1715	1025	1840	1105	1975	1190	2115	1275	2270								
			3000	1050	1885	1130	2025	1215	2180	1315	2340	1405	2505								
			4000	1155	2075	1245	2235	1335	2410	1440	2590	1550	2785								
			5000	1270	2295	1375	2480	1480	2675	1590	2885	1705	3110								
			6000	1395	2560	1515	2765	1635	2985	1755	3230	1890	3495								
			7000	1550	2855	1675	3085	1805	3350	1945	3635	2100	3950								
			8000	1720	3190	1860	3480	2000	3785	2160	4135	2325	4515								
2300	52	59	0	720	1300	775	1390	835	1490	895	1590	960	1700								
			1000	790	1420	850	1525	915	1630	980	1745	1050	1865								
			2000	865	1555	930	1670	1000	1790	1075	1915	1155	2055								
			3000	950	1710	1025	1835	1100	1970	1185	2115	1270	2265								
			4000	1045	1880	1125	2025	1210	2175	1300	2335	1400	2510								
			5000	1150	2075	1240	2240	1335	2410	1435	2595	1540	2795								
			6000	1265	2305	1365	2485	1475	2680	1585	2895	1705	3125								
			7000	1400	2565	1510	2770	1630	3000	1755	3245	1890	3515								
			8000	1550	2860	1675	3110	1805	3375	1945	3670	2095	3990								
2100	50	56	0	585	1070	630	1140	680	1220	725	1300	780	1390								
			1000	640	1165	690	1245	740	1330	795	1420	850	1520								
			2000	700	1270	755	1360	810	1455	870	1555	935	1665								
			3000	770	1390	830	1490	890	1595	955	1710	1025	1830								
			4000	845	1525	910	1640	980	1755	1050	1880	1130	2015								
			5000	930	1680	1000	1805	1075	1935	1155	2075	1240	2230								
			6000	1025	1850	1100	1990	1185	2140	1275	2300	1370	2475								
			7000	1130	2050	1215	2210	1310	2380	1410	2560	1515	2755								
			8000	1245	2275	1345	2460	1450	2655	1560	2865	1680	3090								
1900	47	54	0	470	865	505	920	540	985	580	1045	620	1115								
			1000	515	940	550	1005	590	1070	635	1140	680	1215								
			2000	560	1025	605	1095	645	1170	695	1245	745	1330								
			3000	615	1115	660	1195	710	1275	760	1365	815	1455								
			4000	670	1220	725	1305	780	1400	835	1495	895	1595								
			5000	740	1340	795	1435	855	1535	920	1640	985	1755								
			6000	810	1470	875	1575	940	1690	1010	1810	1085	1940								
			7000	895	1620	965	1740	1035	1865	1115	2000	1195	2145								
			8000	985	1790	1065	1925	1145	2065	1230	2220	1320	2385								

- NOTES:
1. Short field technique as specified in Section 4 of AFM.
  2. Prior to takeoff from fields above 3000 ft elevation, the mixture should be leaned to give maximum RPM at full throttle, static runup.
  3. Decrease distances 10% for each 9 knots headwind. For operation with tailwinds to 10 knots increase distances by 10% for each 2 knots.
  4. For operation on a dry, grass runway, increase distances by 15% of the "ground roll" figure.

### Landing Performance

**Increase landing distance by 10% with WingExtensions installed.**

## Section 6 – WEIGHT AND BALANCE

### 172N

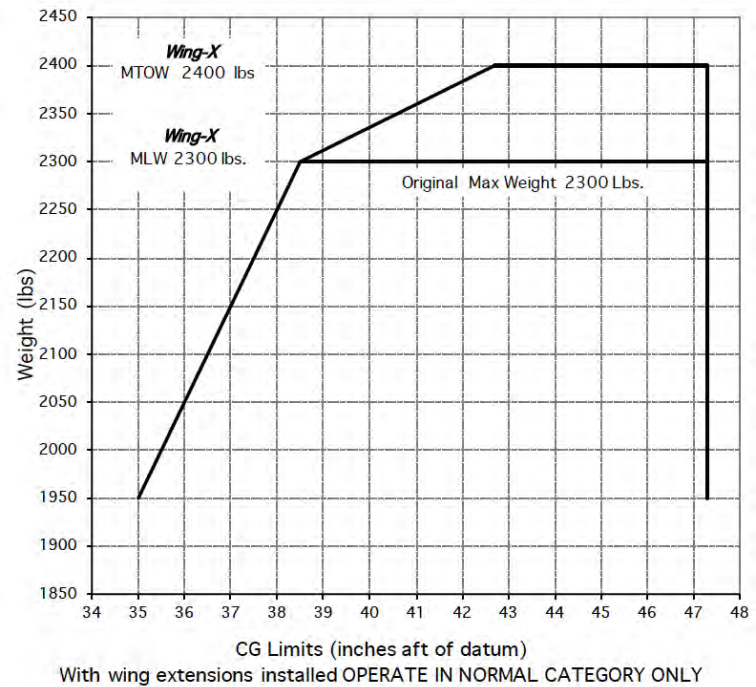
**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

Installation of *WingExtensions* has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
<i>WingExtensions</i> (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult *WingExtension* and Spar Reinforcement Installation Guide #172 for details.

Cessna 172N LANDPLANE 160 HP with *Wing-X*





## Section 5 – PERFORMANCE

### 172P

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

When operating at weights above the original gross weight limit, the stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

TAKE-OFF DISTANCE FROM HARD SURFACE RUNWAY WITH FLAPS 10°  
CESSNA 172P

SHADED CELLS ARE AFM DATA

GROSS WEIGHT POUNDS	TAKEOFF SPEED		PRESS ALT FT	0°C		10°C		20°C		30°C		40°C	
	LIFT OFF KIAS	AT 50' KIAS		GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS
2450	52	57	0	835	1535	905	1650	975	1770	1050	1905	1120	2045
			1000	920	1685	990	1815	1065	1955	1145	2105	1230	2270
			2000	1010	1860	1090	2010	1170	2170	1260	2340	1360	2530
			3000	1110	2065	1200	2235	1295	2425	1395	2620	1500	2840
			4000	1225	2305	1325	2495	1425	2720	1545	2955	1660	3215
			5000	1350	2585	1465	2815	1580	3070	1705	3360	1840	3685
			6000	1500	2920	1625	3205	1755	3515	1900	3865	2045	4275
			7000	1665	3340	1800	3680	1950	4075	2110	4535		
			8000	1850	3865	2010	4310	2175	4830				
2400	51	56	0	795	1460	860	1570	925	1685	995	1810	1065	1945
			1000	875	1605	940	1725	1015	1860	1090	2000	1170	2155
			2000	960	1770	1035	1910	1115	2060	1200	2220	1290	2395
			3000	1055	1960	1140	2120	1230	2295	1325	2480	1425	2685
			4000	1165	2185	1260	2365	1355	2570	1465	2790	1575	3030
			5000	1285	2445	1390	2660	1500	2895	1620	3160	1745	3455
			6000	1425	2755	1540	3015	1665	3300	1800	3620	1940	3990
			7000	1580	3140	1710	3450	1850	3805	2000	4220		
			8000	1755	3615	1905	4015	2060	4480				
2200	49	54	0	650	1195	700	1280	750	1375	805	1470	865	1575
			1000	710	1310	765	1405	825	1510	885	1615	950	1735
			2000	780	1440	840	1545	905	1660	975	1785	1045	1915
			3000	855	1585	925	1705	995	1835	1070	1975	1150	2130
			4000	945	1750	1020	1890	1100	2040	1180	2200	1270	2375
			5000	1040	1945	1125	2105	1210	2275	1305	2465	1405	2665
			6000	1150	2170	1240	2355	1340	2555	1445	2775	1555	3020
			7000	1270	2440	1375	2655	1485	2890	1605	3155	1730	3450
			8000	1410	2760	1525	3015	1650	3305	1785	3630	1925	4005
2000	46	51	0	525	970	565	1035	605	1110	650	1185	695	1265
			1000	570	1060	615	1135	665	1215	710	1295	765	1385
			2000	626	1160	675	1240	725	1330	780	1425	840	1525
			3000	690	1270	740	1365	800	1465	860	1570	920	1685
			4000	755	1400	815	1500	880	1615	945	1735	1015	1865
			5000	830	1545	900	1660	970	1790	1040	1925	1120	2070
			6000	920	1710	990	1845	1070	1990	1150	2145	1235	2315
			7000	1015	1900	1095	2055	1180	2225	1275	2405	1370	2605
			8000	1125	2125	1215	2305	1310	2500	1410	2715	1520	2950

- NOTES:
1. Short field technique as specified in Section 4 of AFM.
  2. Prior to takeoff from fields above 3000 ft elevation, the mixture should be leaned to give maximum RPM at full throttle, static runup.
  3. Decrease distances 10% for each 9 knots headwind. For operation with tailwinds to 10 knots increase distances by 10% for each 2 knots.
  4. For operation on a dry, grass runway, increase distances by 15% of the "ground roll" figure.

#### Landing Performance

**Increase landing distance by 10% with WingExtensions installed.**

## Section 6 – WEIGHT AND BALANCE

### 172P

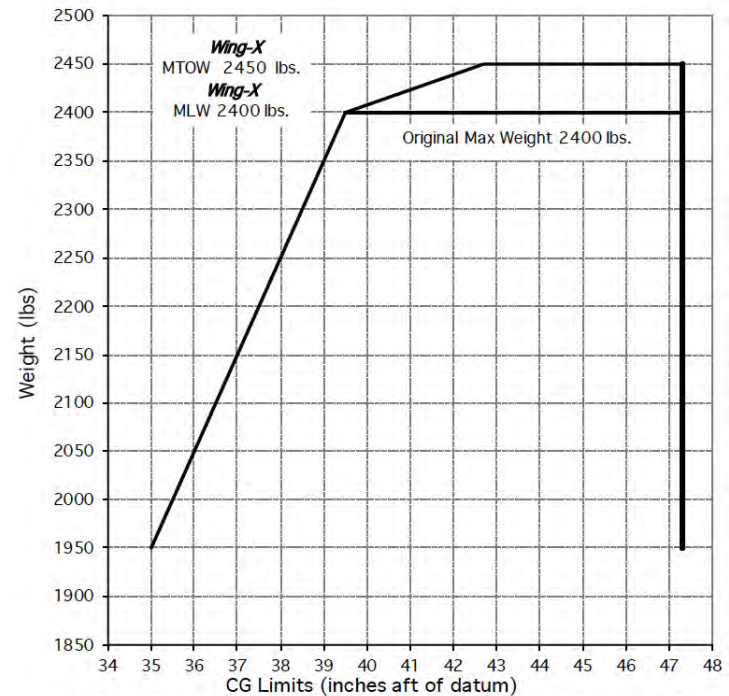
**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

Installation of *WingExtensions* has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
<i>WingExtensions</i> (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult *WingExtension* and Spar Reinforcement Installation Guide #172 for details.

Cessna 172P LANDPLANE 160 HP with *Wing-X*



With wing extensions installed OPERATE IN NORMAL CATEGORY ONLY

## Section 5 – PERFORMANCE

### 172Q

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

When operating at weights above the original gross weight limit, the stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

TAKE-OFF DISTANCE FROM HARD SURFACE RUNWAY WITH FLAPS 10°  
CESSNA 172Q

GROSS WEIGHT POUNDS	TAKEOFF SPEED		PRESS ALT FT	SHADED CELLS ARE AFM DATA																																																																																																										
	LIFT OFF KIAS	AT 50' KIAS		0°C				10°C				20°C				30°C				40°C																																																																																										
				GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS																																																																																													
2675	49	58	0	965	1705	1030	1825	1110	1955	1205	2115	1290	2260	1000	1055	1865	1135	2010	1220	2160	1320	2335	1415	2510	2000	1150	2050	1235	2210	1340	2395	1450	2580	1560	2785	3000	1265	2265	1370	2450	1480	2650	1585	2875	1705	3120	4000	1400	2515	1515	2735	1635	2965	1755	3230	1885	3500	5000	1535	2805	1670	3060	1795	3335	1930	3635	2080	3975	6000	1695	3150	1840	3450	1990	3785	2140	4140	2315	4575	7000	1880	3580	2030	3940	2195	4335	2375	4795	2560	5330	8000	2090	4085	2255	4530	2445	5045	2650	5655	2855	6410									
			2550	48	57	0	860	1520	925	1630	995	1750	1070	1880	1150	2015	1000	940	1665	1015	1790	1090	1925	1175	2070	1260	2225	2000	1030	1830	1110	1970	1195	2125	1290	2285	1385	2460	3000	1130	2015	1220	2175	1315	2350	1415	2535	1520	2740	4000	1245	2320	1345	2415	1450	2615	1560	2830	1675	3060	5000	1370	2480	1480	2690	1595	2920	1720	3170	1850	3450	6000	1510	2770	1635	3015	1765	3290	1900	3585	2050	3925	7000	1670	3120	1805	3410	1950	3735	2105	4100	2270	4520	8000	1850	3535	2000	3890	2165	4295	2340	4760	2525	5315						
						2400	47	55	0	745	1320	805	1415	865	1520	925	1625	995	1745	1000	815	1445	880	1550	945	1665	1015	1785	1090	1915	2000	895	1585	965	1705	1035	1830	1115	1965	1195	2110	3000	980	1740	1055	1875	1135	2020	1225	2170	1315	2335	4000	1075	1920	1160	2070	1250	2235	1345	2405	1445	2595	5000	1185	2125	1275	2295	1375	2480	1485	2680	1595	2900	6000	1305	2360	1410	2555	1520	2770	1635	3005	1760	3260	7000	1440	2635	1555	2860	1680	3115	1810	3390	1950	3700	8000	1590	2960	1720	3230	1860	3530	2005	3865	2165	4245			
									2200	45	53	0	610	1090	660	1165	705	1245	760	1335	815	1425	1000	670	1190	720	1270	775	1360	830	1460	890	1560	2000	730	1295	785	1390	845	1490	910	1600	975	1710	3000	800	1420	860	1525	930	1635	995	1755	1070	1885	4000	875	1560	945	1675	1020	1800	1095	1935	1175	2080	5000	965	1715	1040	1850	1120	1990	1205	2140	1295	2305	6000	1060	1895	1145	2045	1235	2205	1325	2300	1425	2565	7000	1170	2100	1260	2270	1360	2455	1465	2655	1575	2870	8000	1290	2335	1395	2535	1505	2745	1620	2980	1745	3235

- NOTES: 1. Short field technique as specified in Section 4 of AFM.  
 2. Prior to takeoff from fields above 3000 ft elevation, the mixture should be leaned to give maximum RPM at full throttle, static runup.  
 3. Decrease distances 10% for each 9 knots headwind. For operation with tailwinds to 10 knots increase distances by 10% for each 2 knots.  
 4. For operation on a dry, grass runway, increase distances by 15% of the "ground roll" figure.

#### Landing Performance

**Increase landing distance by 10% with WingExtensions installed.**

Section 6 – WEIGHT AND BALANCE

172Q

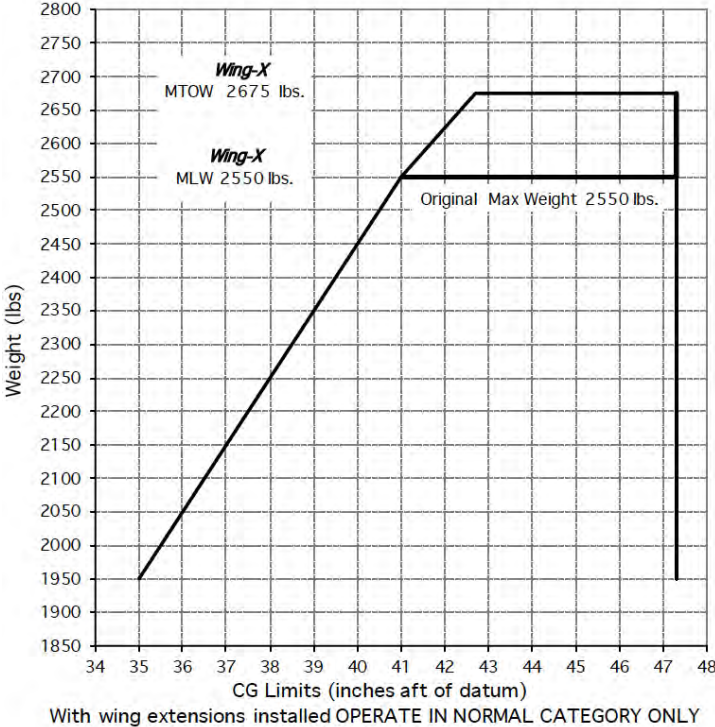
CAUTION: USE PAGE APPLICABLE TO YOUR MODEL

Installation of WingExtensions has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
WingExtensions (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult WingExtension and Spar Reinforcement Installation Guide #172 for details.

Cessna 172Q LANDPLANE 180 HP with Wing-X



## Section 5 – PERFORMANCE

### 172R (160 HP)

#### CAUTION: USE PAGE APPLICABLE TO YOUR MODEL

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

The stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

The takeoff distances are approximately the same as the basic aircraft. Refer to the applicable Pilot / Flight Operating Manual.

#### Landing Performance

Increase landing distance by 10% with *WingExtensions* installed.

## Section 6 – WEIGHT AND BALANCE

### 172R (160 HP)

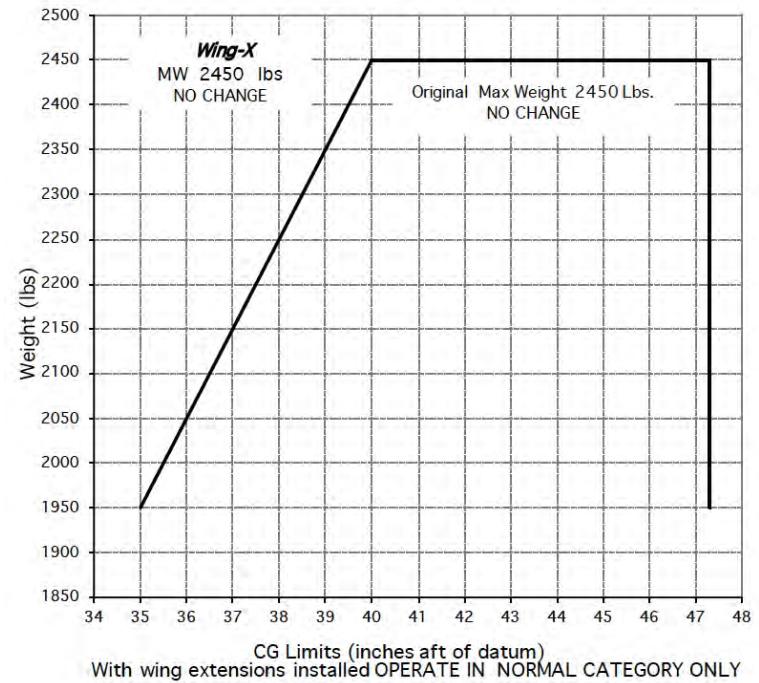
**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

Installation of *WingExtensions* has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
<i>WingExtensions</i> (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult *WingExtension* and Spar Reinforcement Installation Guide #172 for details.

Cessna 172R LANDPLANE 160 HP with *Wing-X*



## Section 5 – PERFORMANCE

### 172R (180 HP)

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

When operating at weights above the original gross weight limit, the stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

**TAKE-OFF DISTANCE FROM HARD SURFACE RUNWAY WITH FLAPS 10°**  
**CESSNA 172R (180 HP), 172S**  
 SHADED CELLS ARE AFM DATA

GROSS WEIGHT POUNDS	TAKEOFF SPEED		PRESS ALT FT	0°C		10°C		20°C		30°C		40°C	
	LIFT OFF KIAS	AT 50' KIAS		GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS
2675	54	58	0	965	1640	1040	1760	1120	1885	1205	2030	1290	2180
			1000	1060	1790	1135	1925	1230	2070	1320	2240	1425	2400
			2000	1155	1970	1255	2125	1350	2285	1445	2465	1555	2650
			3000	1270	2165	1365	2340	1475	2525	1590	2730	1710	2955
			4000	1390	2385	1505	2590	1625	2800	1750	3050	1870	3275
			5000	1525	2650	1645	2885	1795	3125	1930	3395	2060	3670
			6000	1690	2950	1820	3225	1970	3510	2120	3810	2275	4130
			7000	1855	3325	2025	3625	2170	3950	2340	4310	2505	4695
			8000	2065	3750	2230	4125	2405	4495	2590	4930	2780	5430
2550	51	56	0	860	1465	925	1575	995	1690	1070	1810	1150	1945
			1000	940	1600	1010	1720	1090	1850	1170	1990	1260	2135
			2000	1025	1755	1110	1890	1195	2035	1285	2190	1380	2355
			3000	1125	1925	1215	2080	1310	2240	1410	2420	1515	2605
			4000	1235	2121	1335	2295	1440	2480	1550	2685	1660	2880
			5000	1355	2345	1465	2545	1585	2755	1705	2975	1825	3205
			6000	1495	2605	1615	2830	1745	3075	1875	3320	2010	3585
			7000	1645	2910	1785	3170	1920	3440	2065	3730	2215	4045
			8000	1820	3265	1970	3575	2120	3880	2280	4225	2450	4615
2400	48	54	0	745	1275	800	1370	860	1470	925	1570	995	1685
			1000	810	1390	875	1495	940	1605	1010	1720	1085	1845
			2000	885	1520	955	1635	1030	1760	1110	1890	1190	2030
			3000	970	1665	1050	1795	1130	1930	1215	2080	1305	2230
			4000	1065	1830	1150	1975	1240	2130	1335	2295	1430	2455
			5000	1170	2015	1265	2180	1360	2355	1465	2530	1570	2715
			6000	1285	2230	1390	2410	1500	2610	1610	2805	1725	3015
			7000	1415	2470	1530	2685	1650	2900	1770	3125	1900	3370
			8000	1560	2755	1690	3000	1815	3240	1950	3500	2095	3790
2200	44	50	0	610	1055	655	1130	705	1205	760	1290	815	1380
			1000	665	1145	720	1230	770	1315	830	1410	890	1505
			2000	725	1250	785	1340	845	1435	905	1540	975	1650
			3000	795	1365	860	1465	925	1570	995	1685	1065	1805
			4000	870	1490	940	1605	1010	1725	1090	1855	1165	1975
			5000	955	1635	1030	1765	1110	1900	1195	2035	1275	2175
			6000	1050	1800	1130	1940	1220	2090	1310	2240	1400	2395
			7000	1150	1985	1245	2145	1340	2305	1435	2475	1540	2650
			8000	1270	2195	1370	2375	1475	2555	1580	2745	1695	2950

- NOTES: 1. Short field technique as specified in Section 4 of AFM.  
 2. Prior to takeoff from fields above 3000 ft elevation, the mixture should be leaned to give maximum RPM at full throttle, static runup.  
 3. Decrease distances 10% for each 9 knots headwind. For operation with tailwinds to 10 knots increase distances by 10% for each 2 knots.  
 4. For operation on a dry, grass runway, increase distances by 15% of the "ground roll" figure.

#### Landing Performance

**Increase landing distance by 10% with WingExtensions installed.**

## Section 6 – WEIGHT AND BALANCE

### 172R (180 HP)

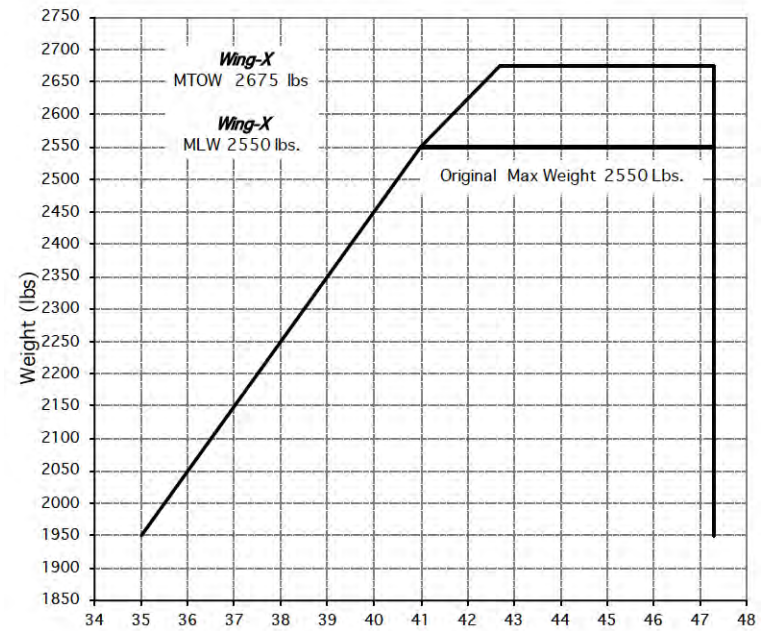
**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

Installation of *WingExtensions* has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
<i>WingExtensions</i> (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult *WingExtension* and Spar Reinforcement Installation Guide #172 for details.

Cessna 172R LANDPLANE 180 HP with *Wing-X*



CG Limits (inches aft of datum)  
With wing extensions installed OPERATE IN NORMAL CATEGORY ONLY



## Section 5 – PERFORMANCE 172S

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

### Stall Speeds

When operating at weights above the original gross weight limit, the stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

### Takeoff Performance

**TAKE-OFF DISTANCE FROM HARD SURFACE RUNWAY WITH FLAPS 10°  
CESSNA 172R (180 HP), 172S  
SHADED CELLS ARE AFM DATA**

GROSS WEIGHT POUNDS	TAKEOFF SPEED		PRESS ALT FT	0°C		10°C		20°C		30°C		40°C	
	LIFT OFF KIAS	AT 50' KIAS		GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS
2675	54	58	0	965	1640	1040	1760	1120	1885	1205	2030	1290	2180
			1000	1060	1790	1135	1925	1230	2070	1320	2240	1425	2400
			2000	1155	1970	1255	2125	1350	2285	1445	2465	1555	2650
			3000	1270	2165	1365	2340	1475	2525	1590	2730	1710	2955
			4000	1390	2385	1505	2590	1625	2800	1750	3050	1870	3275
			5000	1525	2650	1645	2885	1795	3125	1930	3395	2060	3670
			6000	1690	2950	1820	3225	1970	3510	2120	3810	2275	4130
			7000	1855	3325	2025	3625	2170	3950	2340	4310	2505	4695
			8000	2065	3750	2230	4125	2405	4495	2590	4930	2780	5430
2550	51	56	0	860	1465	925	1575	995	1690	1070	1810	1150	1945
			1000	940	1600	1010	1720	1090	1850	1170	1990	1260	2135
			2000	1025	1755	1110	1890	1195	2035	1285	2190	1380	2355
			3000	1125	1925	1215	2080	1310	2240	1410	2420	1515	2605
			4000	1235	2121	1335	2295	1440	2480	1550	2685	1660	2880
			5000	1355	2345	1465	2545	1585	2755	1705	2975	1825	3205
			6000	1495	2605	1615	2830	1745	3075	1875	3320	2010	3585
			7000	1645	2910	1785	3170	1920	3440	2065	3730	2215	4045
			8000	1820	3265	1970	3575	2120	3880	2280	4225	2450	4615
2400	48	54	0	745	1275	800	1370	860	1470	925	1570	995	1685
			1000	810	1390	875	1495	940	1605	1010	1720	1085	1845
			2000	885	1520	955	1635	1030	1760	1110	1890	1190	2030
			3000	970	1665	1050	1795	1130	1930	1215	2080	1305	2230
			4000	1065	1830	1150	1975	1240	2130	1335	2295	1430	2455
			5000	1170	2015	1265	2180	1360	2355	1465	2530	1570	2715
			6000	1285	2230	1390	2410	1500	2610	1610	2805	1725	3015
			7000	1415	2470	1530	2685	1650	2900	1770	3125	1900	3370
			8000	1560	2755	1690	3000	1815	3240	1950	3500	2095	3790
2200	44	50	0	610	1055	655	1130	705	1205	760	1290	815	1380
			1000	665	1145	720	1230	770	1315	830	1410	890	1505
			2000	725	1250	785	1340	845	1435	905	1540	975	1650
			3000	795	1365	860	1465	925	1570	995	1685	1065	1805
			4000	870	1490	940	1605	1010	1725	1090	1855	1165	1975
			5000	955	1635	1030	1765	1110	1900	1195	2035	1275	2175
			6000	1050	1800	1130	1940	1220	2090	1310	2240	1400	2395
			7000	1150	1985	1245	2145	1340	2305	1435	2475	1540	2650
			8000	1270	2195	1370	2375	1475	2555	1580	2745	1695	2950

- NOTES: 1. Short field technique as specified in Section 4 of AFM.  
 2. Prior to takeoff from fields above 3000 ft elevation, the mixture should be leaned to give maximum RPM at full throttle, static runup.  
 3. Decrease distances 10% for each 9 knots headwind. For operation with tailwinds to 10 knots increase distances by 10% for each 2 knots.  
 4. For operation on a dry, grass runway, increase distances by 15% of the "ground roll" figure.

### Landing Performance

**Increase landing distance by 10% with WingExtensions installed.**

### Section 6 – WEIGHT AND BALANCE 172S

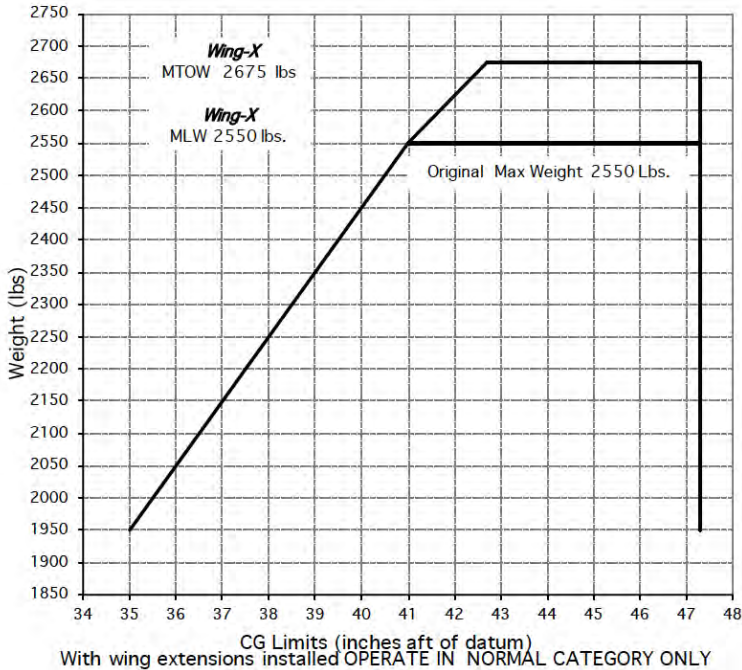
**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

Installation of *WingExtensions* has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
<i>WingExtensions</i> (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult *WingExtension* and Spar Reinforcement Installation Guide #172 for details.

Cessna 172S LANDPLANE 180 HP with *Wing-X*



## Section 5 – PERFORMANCE

### P172D

#### CAUTION: USE PAGE APPLICABLE TO YOUR MODEL

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

The stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

The takeoff distances are approximately the same as the basic aircraft. Refer to the applicable Pilot / Flight Operating Manual.

#### Landing Performance

Increase landing distance by 10% with *WingExtensions* installed.

## Section 6 – WEIGHT AND BALANCE

### P172D

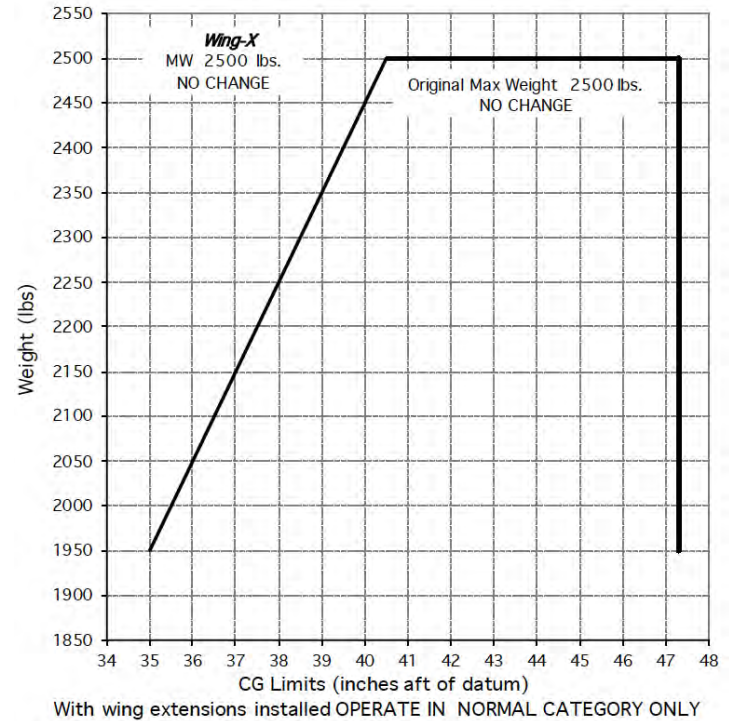
**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

Installation of *WingExtensions* has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
<i>WingExtensions</i> (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult *WingExtension* and Spar Reinforcement Installation Guide #172 for details.

Cessna P172D LANDPLANE 175 HP with *Wing-X*



## Section 5 – PERFORMANCE

### 175

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

When operating at weights above the original gross weight limit, the stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

**TAKE-OFF DISTANCE FROM HARD SURFACE RUNWAY WITH FLAPS UP  
CESSNA 175, 175A, 175B  
SHADED CELLS ARE AFM DATA**

GROSS WEIGHT POUNDS	IAS AT 50' MPH	HEAD WIND KNOTS	AT SEA LEVEL & 59°F		AT 2500 FT & 50°F		AT 5000 FT & 41°F		AT 7500 FT & 32°F	
			GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS
1700	51	0	345	680	410	805	490	940	595	1130
		10	180	420	220	505	265	600	335	735
		20	65	210	85	265	110	320	145	405
2000	55	0	495	950	595	1120	715	1330	870	1560
		10	270	625	335	725	410	880	515	1045
		20	110	330	145	405	185	505	245	615
2350	60	0	735	1340	875	1595	1040	1980	1295	2570
		10	420	875	515	1065	630	1345	800	1720
		20	190	535	245	630	315	820	415	1090
2450	61	0	815	1465	970	1750	1145	2205	1435	2960
		10	470	950	575	1180	705	1505	895	1975
		20	220	605	280	705	360	930	475	1270

NOTES: 1. Increase distance 10% for each 25°F above standard temperature for a particular altitude.  
2. Shaded values are original (unchanged) Cessna data and are supplied for reference.

#### Landing Performance

Increase landing distance by 10% with WingExtensions installed.

Section 6 – WEIGHT AND BALANCE

175

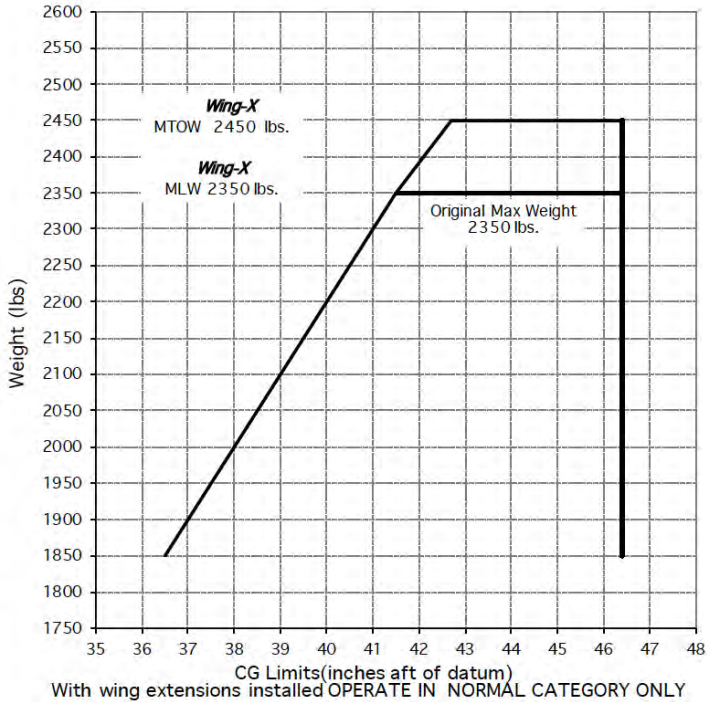
CAUTION: USE PAGE APPLICABLE TO YOUR MODEL

Installation of WingExtensions has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
WingExtensions (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult WingExtension and Spar Reinforcement Installation Guide #172 for details.

Cessna 175 LANDPLANE 175 HP with Wing-X



## Section 5 – PERFORMANCE

### 175A, 175B

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

When operating at weights above the original gross weight limit, the stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

**TAKE-OFF DISTANCE FROM HARD SURFACE RUNWAY WITH FLAPS UP  
CESSNA 175, 175A, 175B  
SHADED CELLS ARE AFM DATA**

GROSS WEIGHT POUNDS	IAS AT 50' MPH	HEAD WIND KNOTS	AT SEA LEVEL & 59°F		AT 2500 FT & 50°F		AT 5000 FT & 41°F		AT 7500 FT & 32°F	
			GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS
1700	51	0	345	680	410	805	490	940	595	1130
		10	180	420	220	505	265	600	335	735
		20	65	210	85	265	110	320	145	405
2000	55	0	495	950	595	1120	715	1330	870	1560
		10	270	625	335	725	410	880	515	1045
		20	110	330	145	405	185	505	245	615
2350	60	0	735	1340	875	1595	1040	1980	1295	2570
		10	420	875	515	1065	630	1345	800	1720
		20	190	535	245	630	315	820	415	1090
2450	61	0	815	1465	970	1750	1145	2205	1435	2960
		10	470	950	575	1180	705	1505	895	1975
		20	220	605	280	705	360	930	475	1270

NOTES: 1. Increase distance 10% for each 25°F above standard temperature for a particular altitude.  
2. Shaded values are original (unchanged) Cessna data and are supplied for reference.

#### Landing Performance

Increase landing distance by 10% with WingExtensions installed.

## Section 6 – WEIGHT AND BALANCE

### 175A, 175B

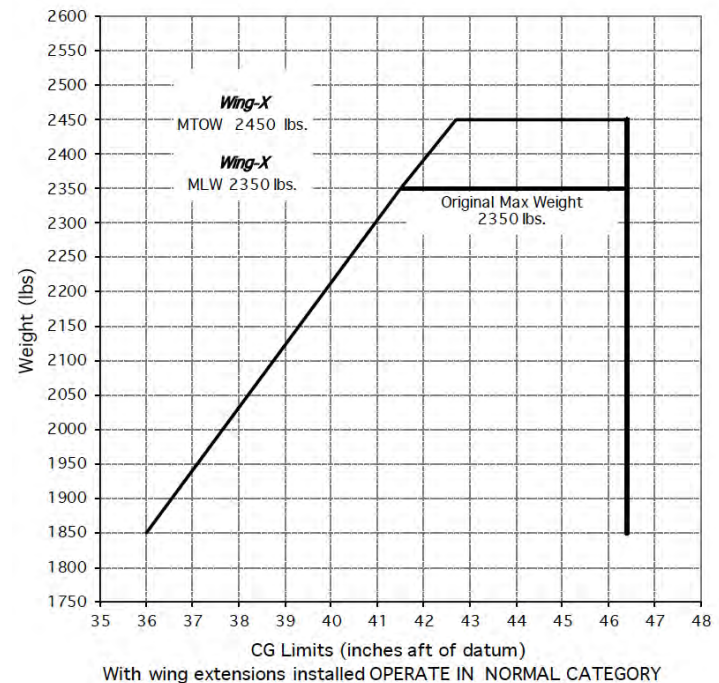
**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

Installation of *WingExtensions* has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
<i>WingExtensions</i> (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult *WingExtension* and Spar Reinforcement Installation Guide #172 for details.

Cessna 175A and 175B LANDPLANE 175 HP with *Wing-X*





## Section 5 – PERFORMANCE

### 175C

#### CAUTION: USE PAGE APPLICABLE TO YOUR MODEL

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

The stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

The takeoff distances are approximately the same as the basic aircraft. Refer to the applicable Pilot / Flight Operating Manual.

#### Landing Performance

Increase landing distance by 10% with *WingExtensions* installed.

## Section 6 – WEIGHT AND BALANCE

### 175C

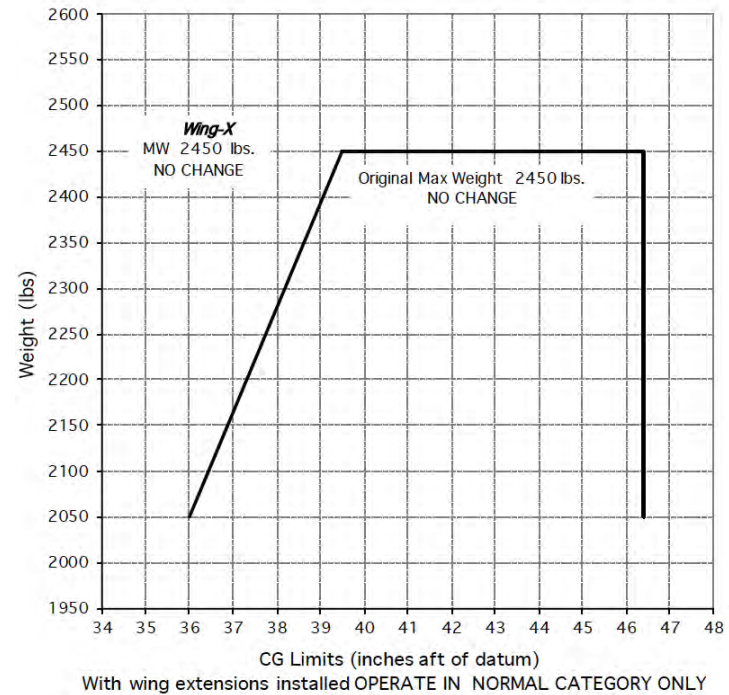
**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

Installation of *WingExtensions* has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
<i>WingExtensions</i> (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult *WingExtension* and Spar Reinforcement Installation Guide #172 for details.

Cessna 175C LANDPLANE 175 HP with *Wing-X*



## Section 5 – PERFORMANCE

### R172E, R172F

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

When operating at weights above the original gross weight limit, the stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

**TAKE-OFF DISTANCE FROM HARD SURFACE RUNWAY WITH FLAPS 10°  
CESSNA R172E, R172F**

SHADED CELLS ARE AFM DATA data source: T-41C page A7

GROSS WEIGHT POUNDS	IAS AT 50' MPH	HEAD WIND KNOTS	AT SEA LEVEL & 59°F		AT 2500 FT & 50°F		AT 5000 FT & 41°F		AT 7500 FT & 32°F	
			GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS
2625	72	0	960	1505	1115	1720	1270	1965	1605	2490
		10	685	1130	800	1315	925	1515	1165	1960
		20	445	810	535	945	630	1110	840	1445
2500	70	0	860	1360	1000	1555	1135	1765	1435	2225
		10	605	1020	710	1175	820	1350	1050	1730
		20	390	720	470	840	550	980	730	1270
2200	66	0	645	1055	750	1200	845	1340	1070	1670
		10	440	780	520	890	595	1005	785	1265
		20	275	535	330	620	385	715	505	910
1900	61	0	470	805	540	905	610	1000	770	1230
		10	310	580	365	680	415	740	535	915
		20	180	390	220	445	260	510	340	640

NOTES: 1. Increase distance 10% for each 25°F above standard temperature for a particular altitude.  
2. Shaded values are original (unchanged) Cessna data and are supplied for reference.  
These values were adjusted from AFM table because provided values were illogical.

#### Landing Performance

Increase landing distance by 10% with WingExtensions installed.

## Section 6 – WEIGHT AND BALANCE

### R172E, R172F

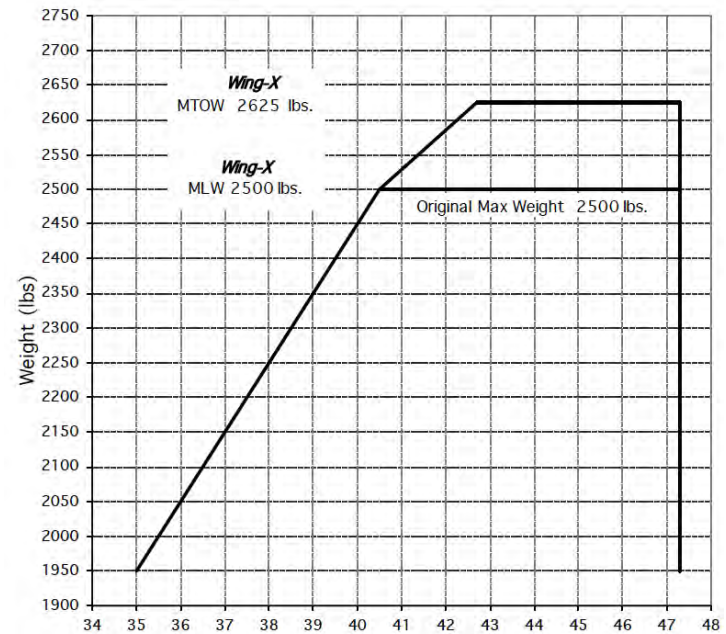
**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

Installation of *WingExtensions* has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
<i>WingExtensions</i> (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult *WingExtension* and Spar Reinforcement Installation Guide #172 for details.

Cessna R172E and R172F LANDPLANE 210 HP with *Wing-X*



CG is depicted in (inches aft of datum)

With wing extensions installed OPERATE IN NORMAL CATEGORY ONLY

## Section 5 – PERFORMANCE

### R172G, R172J

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

When operating at weights above the original gross weight limit, the stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

**TAKE-OFF DISTANCE FROM HARD SURFACE RUNWAY WITH FLAPS 10°  
CESSNA R172G, R172J**

SHADED CELLS ARE AFM DATA data source: T-41D page A9

GROSS WEIGHT POUNDS	IAS AT 50' MPH	HEAD WIND KNOTS	AT SEA LEVEL & 59°F		AT 2500 FT & 50°F		AT 5000 FT & 41°F		AT 7500 FT & 32°F	
			GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS	GROUND RUN	TOTAL TO CLEAR 50 FT OBS
2675	73	0	830	1360	985	1590	1190	1920	1445	2345
		10	585	1020	710	1225	870	1490	1065	1835
		20	380	735	475	895	595	1100	750	1385
2550	71	0	740	1230	880	1440	1065	1725	1290	2095
		10	520	925	630	1100	770	1330	945	1630
		20	335	660	415	795	520	975	655	1215
2200	66	0	525	920	625	1070	755	1255	910	1495
		10	360	685	435	800	530	950	650	1140
		20	225	475	275	560	345	680	430	825
1900	61	0	380	710	450	810	540	940	650	1105
		10	250	515	305	595	370	700	450	825
		20	150	350	185	410	230	485	285	585

NOTES: 1. Increase distance 10% for each 25°F above standard temperature for a particular altitude.  
2. Shaded values are original (unchanged) Cessna data and are supplied for reference.

#### Landing Performance

Increase landing distance by 10% with WingExtensions installed.

## Section 6 – WEIGHT AND BALANCE

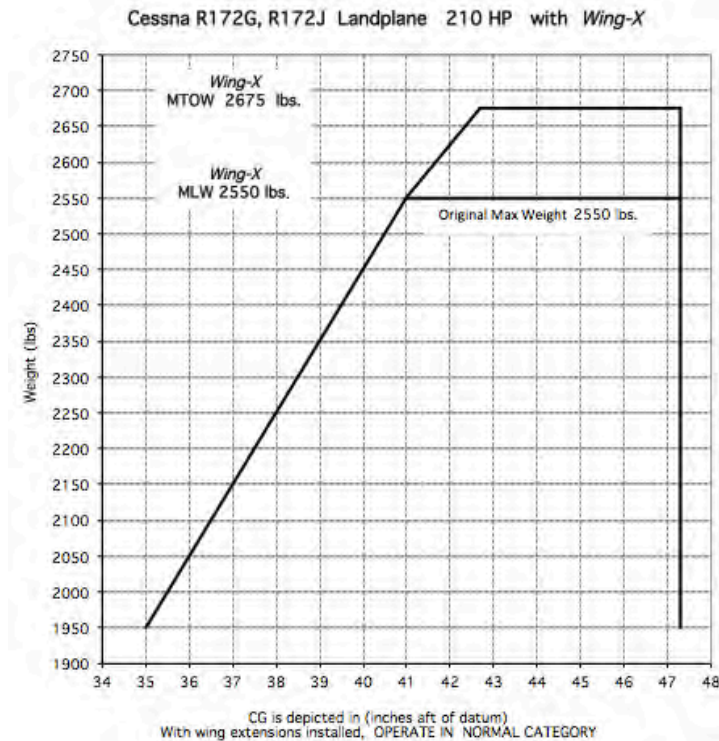
### R172G, R172J

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

Installation of *WingExtensions* has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
<i>WingExtensions</i> (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult *WingExtension* and Spar Reinforcement Installation Guide #172 for details.



## Section 5 – PERFORMANCE

### R172H

#### CAUTION: USE PAGE APPLICABLE TO YOUR MODEL

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

The stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

The takeoff distances are approximately the same as the basic aircraft. Refer to the applicable Pilot / Flight Operating Manual.

#### Landing Performance

Increase landing distance by 10% with *WingExtensions* installed.

## Section 6 – WEIGHT AND BALANCE

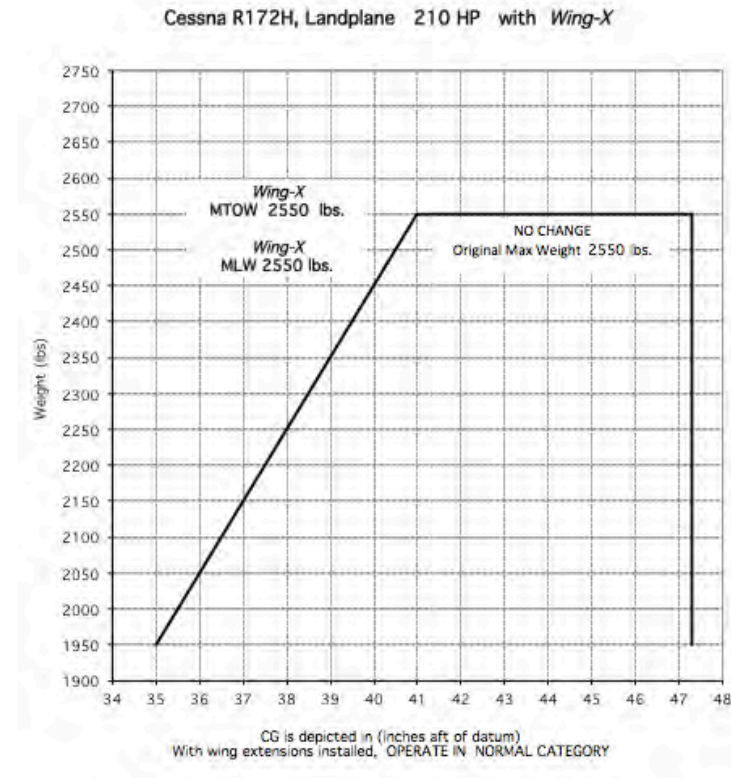
### R172H

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

Installation of *WingExtensions* has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
<i>WingExtensions</i> (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult *WingExtension* and Spar Reinforcement Installation Guide #172 for details.





## Section 5 – PERFORMANCE

### R172K

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

When operating at weights above the original gross weight limit, the stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

TAKE-OFF DISTANCE FROM HARD SURFACE RUNWAY WITH FLAPS 10°  
CESSNA R172K

SHADED CELLS ARE AFM DATA

GROSS WEIGHT POUNDS	TAKEOFF SPEED		PRESS ALT FT	0°C		10°C		20°C		30°C		40°C	
	LIFT OFF KIAS	AT 50' KIAS		GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS	GRND ROLL FT	TOTAL TO CLEAR 50 FT OBS
2675	57	61	0	800	1360	860	1465	930	1575	1005	1680	1070	1815
			1000	865	1485	940	1600	1005	1715	1090	1855	1175	1995
			2000	960	1630	1025	1750	1120	1890	1200	2040	1290	2205
			3000	1045	1785	1130	1930	1220	2090	1320	2250	1415	2440
			4000	1145	1980	1245	2135	1335	2320	1445	2505	1560	2725
			5000	1260	2190	1365	2380	1480	2585	1595	2800	1720	3060
			6000	1395	2430	1500	2650	1630	2885	1760	3155	1900	3460
			7000	1530	2735	1665	2980	1795	3260	1945	3580	2100	3955
			8000	1690	3085	1835	3385	1990	3725	2150	4110	2340	4595
2550	56	60	0	715	1225	770	1315	830	1410	895	1510	960	1625
			1000	780	1335	840	1435	905	1540	975	1655	1050	1780
			2000	855	1460	920	1570	995	1690	1070	1820	1150	1960
			3000	935	1600	1010	1725	1090	1860	1175	2005	1265	2165
			4000	1025	1760	1110	1900	1195	2055	1290	2220	1390	2405
			5000	1125	1945	1220	2105	1315	2280	1420	2470	1530	2685
			6000	1240	2155	1340	2340	1450	2540	1565	2765	1690	3015
			7000	1365	2405	1480	2615	1600	2850	1730	3115	1870	3415
			8000	1510	2695	1635	2945	1770	3225	1915	3545	2075	3920
2400	54	58	0	620	1070	670	1145	720	1225	775	1315	835	1410
			1000	680	1165	730	1250	790	1340	845	1435	910	1540
			2000	740	1270	800	1365	860	1465	925	1575	995	1690
			3000	810	1390	875	1495	945	1605	1015	1730	1095	1860
			4000	890	1520	960	1640	1035	1765	1115	1905	1200	2055
			5000	975	1675	1055	1805	1135	1950	1225	2110	1320	2280
			6000	1070	1850	1160	2000	1250	2165	1350	2345	1455	2540
			7000	1180	2050	1275	2220	1380	2410	1490	2620	1610	2850
			8000	1305	2280	1410	2480	1525	2700	1650	2950	1780	3225
2200	52	56	0	510	880	550	940	590	1005	635	1075	680	1150
			1000	555	955	600	1025	645	1095	690	1175	740	1255
			2000	605	1040	655	1115	705	1195	755	1280	810	1370
			3000	660	1135	715	1215	770	1305	825	1400	890	1500
			4000	725	1240	780	1330	840	1430	905	1535	975	1650
			5000	795	1355	855	1460	925	1570	995	1690	1070	1820
			6000	870	1490	940	1605	1015	1730	1095	1865	1175	2010
			7000	955	1645	1035	1770	1115	1915	1205	2065	1295	2235
			8000	1055	1815	1140	1965	1230	2125	1330	2300	1430	2495

- NOTES: 1. Short field technique as specified in Section 4 of AFM.  
 2. Prior to takeoff from fields above 3000 ft elevation, the mixture should be leaned to give maximum RPM at full throttle, static runup.  
 3. Decrease distances 10% for each 9 knots headwind. For operation with tailwinds to 10 knots increase distances by 10% for each 2 knots.  
 4. For operation on a dry, grass runway, increase distances by 15% of the "ground roll" figure.

#### Landing Performance

Increase landing distance by 10% with WingExtensions installed.

Section 6 – WEIGHT AND BALANCE

R172K

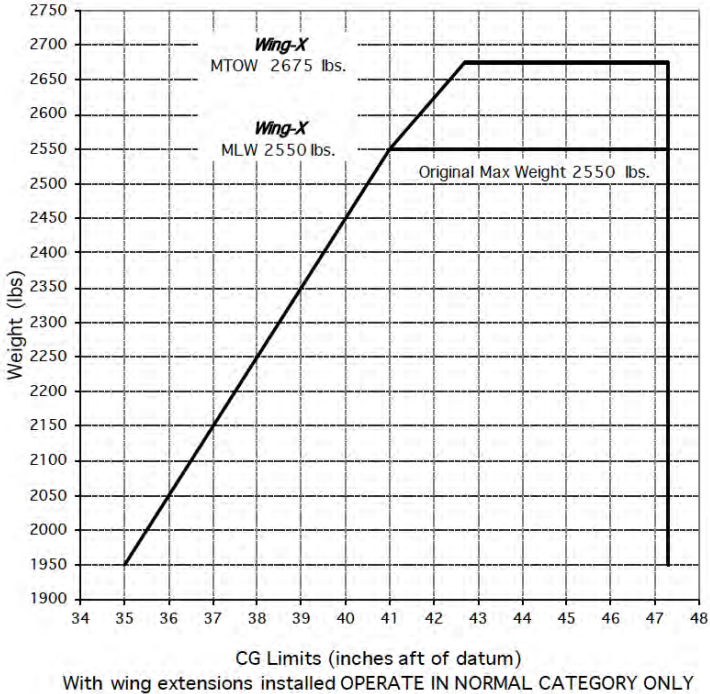
CAUTION: USE PAGE APPLICABLE TO YOUR MODEL

Installation of WingExtensions has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
WingExtensions (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult WingExtension and Spar Reinforcement Installation Guide #172 for details.

Cessna R172K LANDPLANE 195 HP with Wing-X



## Section 5 – PERFORMANCE

### 172RG

#### CAUTION: USE PAGE APPLICABLE TO YOUR MODEL

The information found in the basic airplane Flight / Operating Manual applies for both landplane and seaplane configurations, except as listed below.

#### Stall Speeds

The stalling speeds are approximately the same as the basic aircraft stall speeds. Refer to the applicable Pilot / Flight Operating Manual.

#### Takeoff Performance

The takeoff distances are approximately the same as the basic aircraft. Refer to the applicable Pilot / Flight Operating Manual.

#### Landing Performance

Increase landing distance by 10% with *WingExtensions* installed.

## Section 6 – WEIGHT AND BALANCE 172RG

**CAUTION: USE PAGE APPLICABLE TO YOUR MODEL**

Installation of *WingExtensions* has the following effect on the empty weight of the aircraft.

Item	Weight (lbs)	Arm (in)	Moment (lb.in.)
<i>WingExtensions</i> (LH + RH)	16.0	52.0	832
Internal Reinforcements	1.0	36.0	36
Stainless Steel Straps (if required)*	1.0	36.0	36

\* some wings require installation of an external stainless steel strap at wing station 100. Consult *WingExtension* and Spar Reinforcement Installation Guide #172 for details.

