



# 777-8F Airport Compatibility Brochure

Specific airport compatibility questions concerning Boeing commercial aircraft should be forwarded to:

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# Introduction

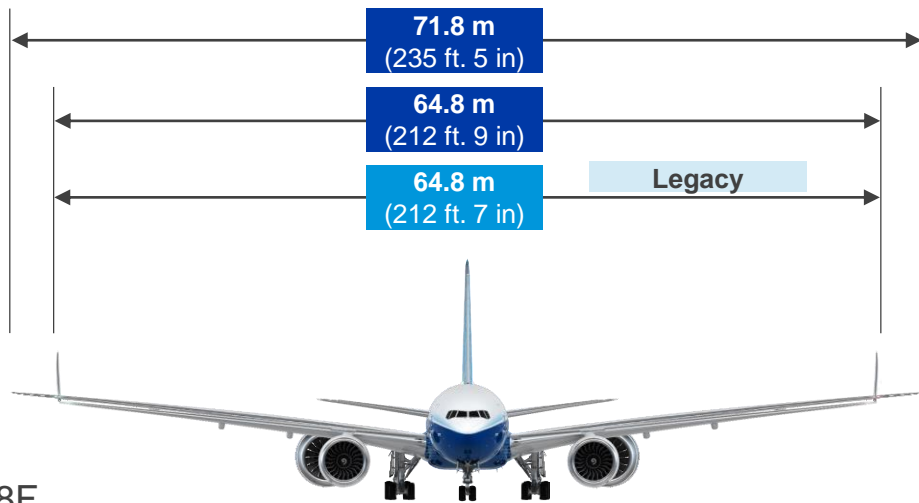
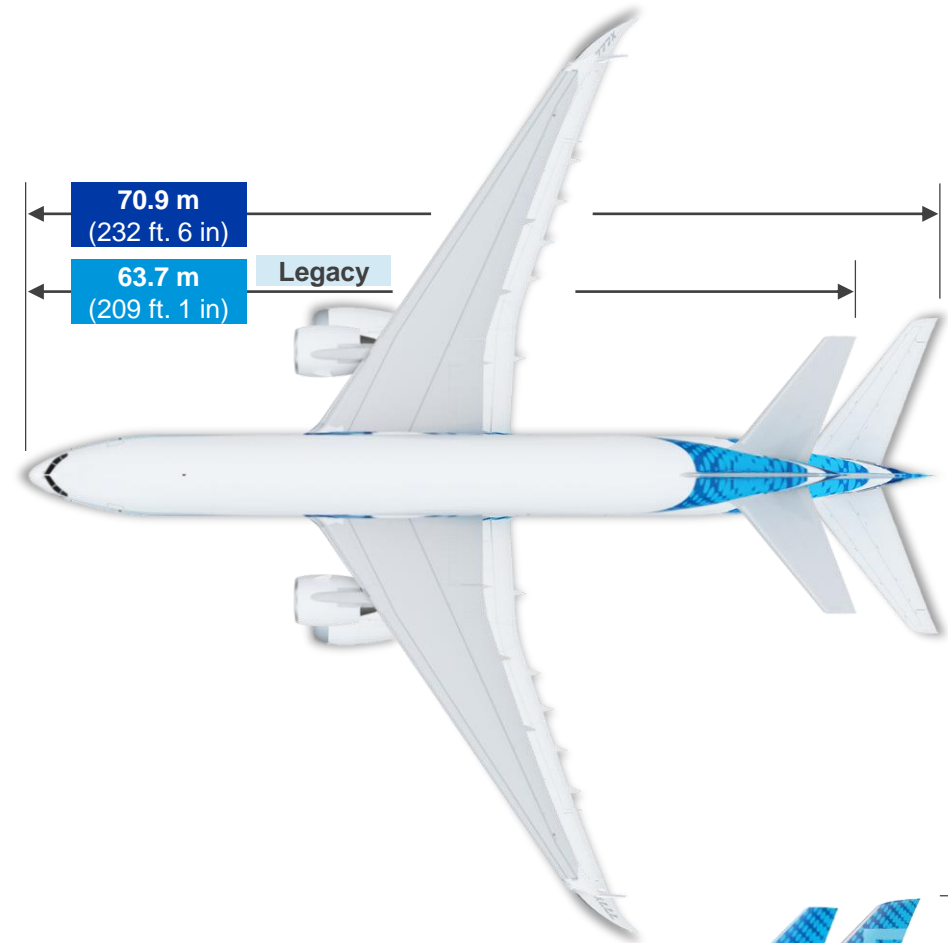
The 777-8F information in this brochure is intended solely for airport planning purposes. All information for the 777-8F models is preliminary and subject to change during development and testing.

Since the larger wingspan places the 777-8F into ICAO Aerodrome Reference Code 4F, the 777-8F model includes folding wing tips, allowing the 777-8F to operate in airport taxiway and apron/gate system as a Code 4E aircraft with wingtips folded.

The 777-8F is a shortened-body derivative, freighter version, of the 777-9, retaining the same wingspan and folding wing tip. The folded wing has the same wingspan as the legacy 777-200LR/F/-300ER.

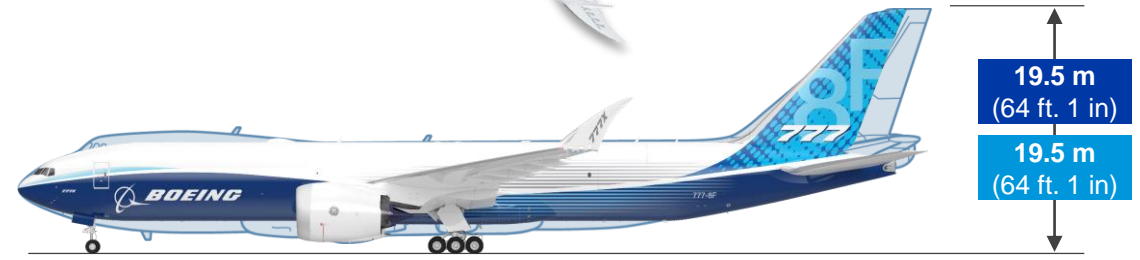
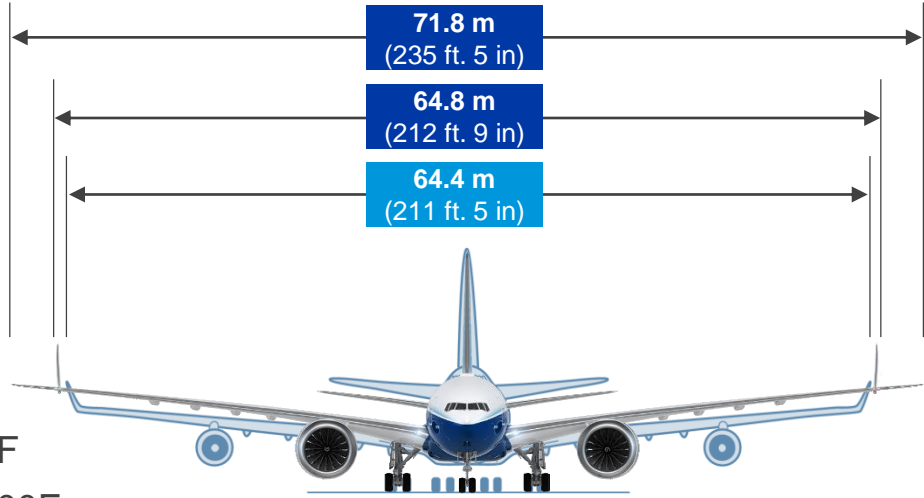
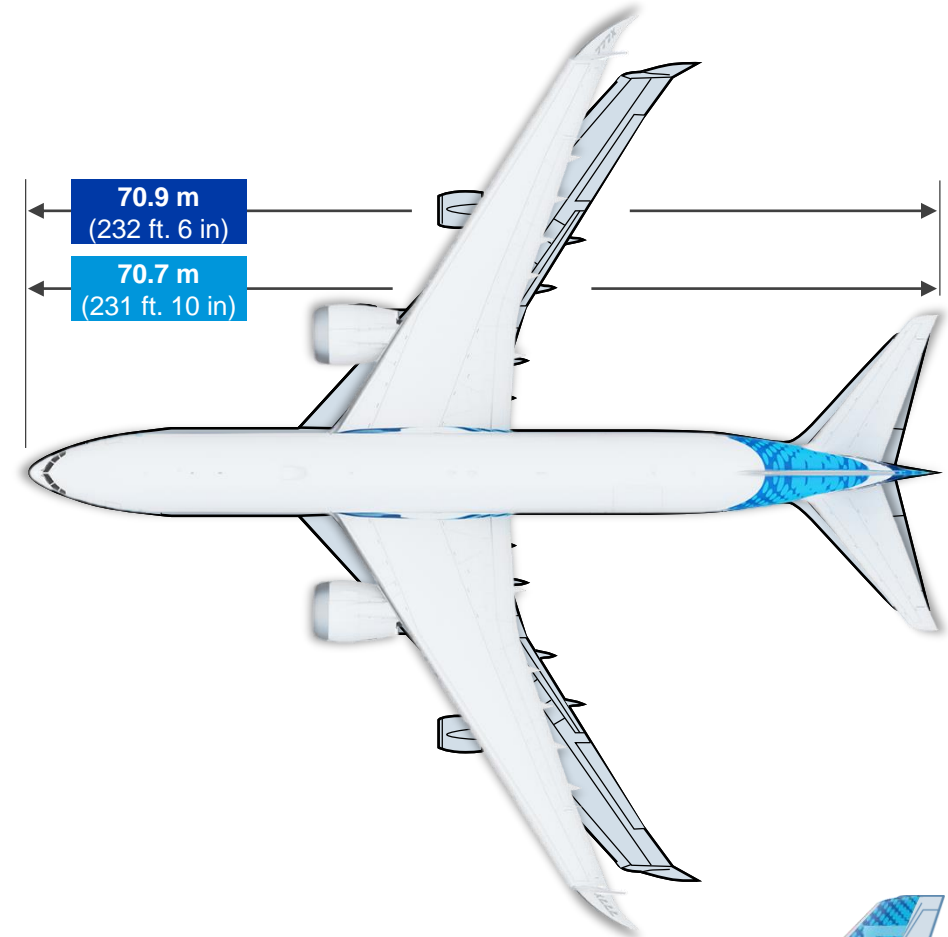
For information about folding wing tip operations and the 777-9, please see the [777-9 Airplane Characteristics for Airport Planning Manual](#).

# 777-8F and 777F size comparison



- 777-8F
- 777F

# 777-8F and 747-400F size comparison



- 777-8F
- 747-400F

777-8F length dimension to H-stab; 747-400F length dimension to V-stab

# 777-8F general characteristics

CHARACTERISTICS	UNITS	777-8F
Max Design Taxi Weight	LB	807,000
	KG	366,049
Max Design Takeoff Weight	LB	805,000
	KG	365,141
Max Landing Weight	LB	649,000
	KG	294,381

CHARACTERISTICS	UNITS	777-8F
Cargo – Main Deck*	CUBIC FT	21,061
	CUBIC M	596
Cargo – Lower Deck**	CUBIC FT	5291
	CUBIC M	150
Cargo – Bulk Compartment	CUBIC FT	600
	CUBIC M	17

\* 31 Pallets – (26) 96 x 125 Pallets, (4) 96 x 125 x 116 Pallets, (1) 96 x 125 x 95 Pallet

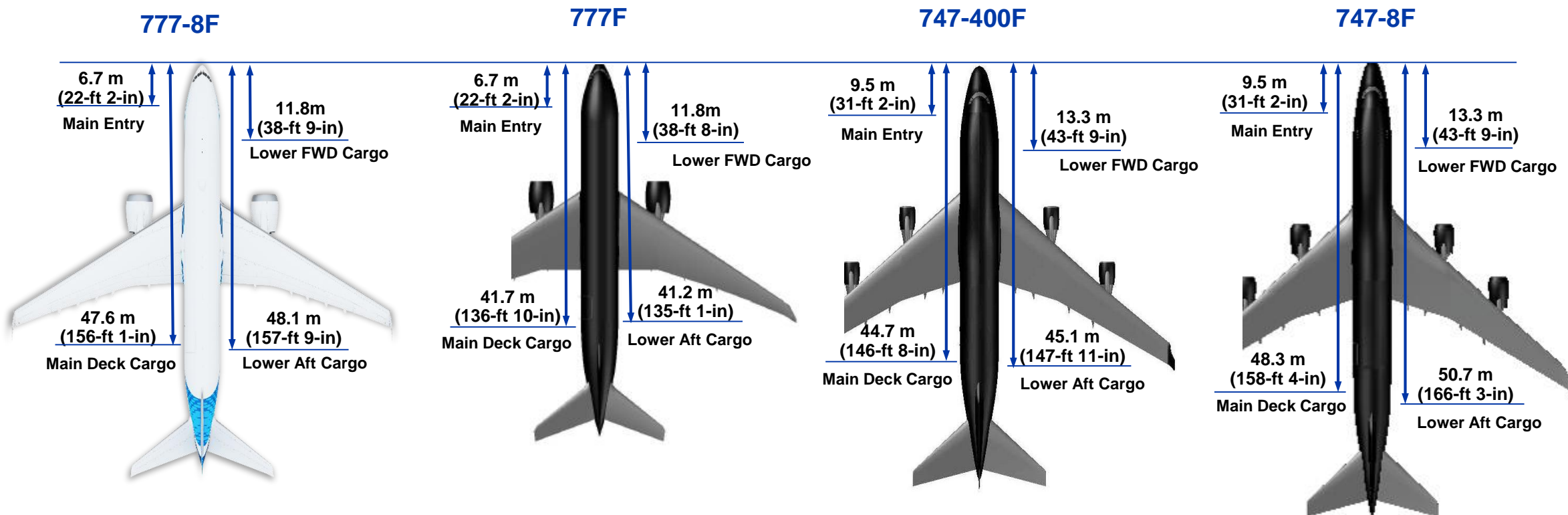
\*\* (13) 96 x 125 Pallets

# 777-8F at today's airports

	777-8F (FT/M)	777-9 (FT/M)	777F (FT/M)	777-300ER (FT/M)	747-400F (FT/M)	747-8F (FT/M)
Wingspan, Wing Tips Extended	235.4 / 71.8	235.4 / 71.8	N/A	N/A	N/A	N/A
ICAO Code Letter	4F	4F				
FAA Design Group	VI	VI				
Wingspan, Wing Tips Folded	212.8 / 64.8	212.8 / 64.8	212.6 / 64.8*	212.8 / 64.8*	211.4 / 64.4*	224.4 / 68.4*
ICAO Code Letter	4E	4E	4E	4E	4E	4F
FAA Design Group	V	V	V	V	V	VI
FAA Taxiway Design Group	TDG-6	TDG-6	TDG-5	TDG-6	TDG-5	TDG-6
Overall Length	232.5 / 70.9	251.8 / 76.7	209.1 / 63.7	242.3 / 73.9	231.9 / 70.7	250.2 / 76.3
RFF Category (ICAO)	9	10	9	9	9	10
ARFF Index (FAA)	E	E	E	E	E	E

\* Airplane Wingtips do not fold. Airplane does not have a folding wingtip system.

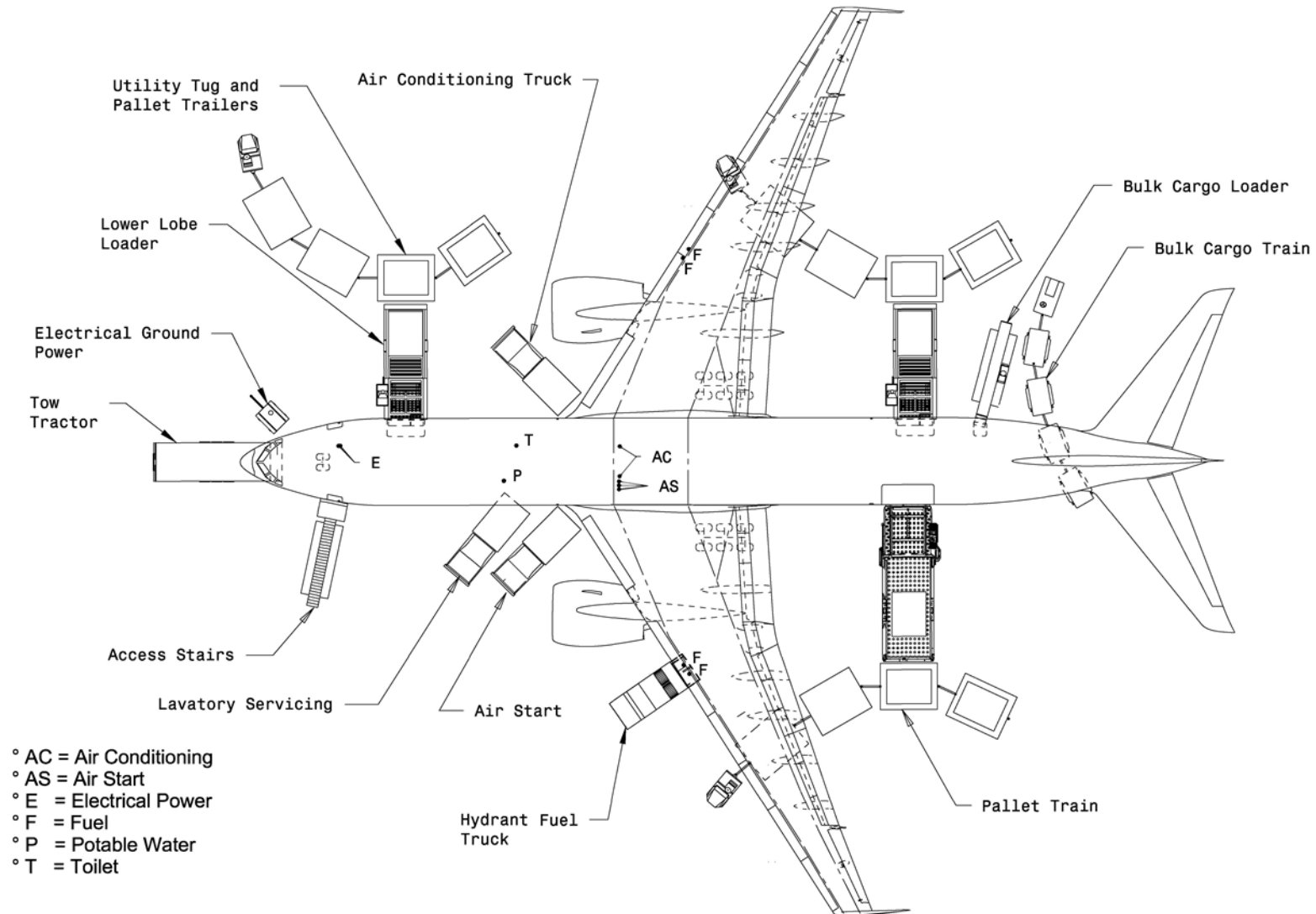
# 777-8F door location comparisons



Door distance is measured from the nose tip to the centerline of the door

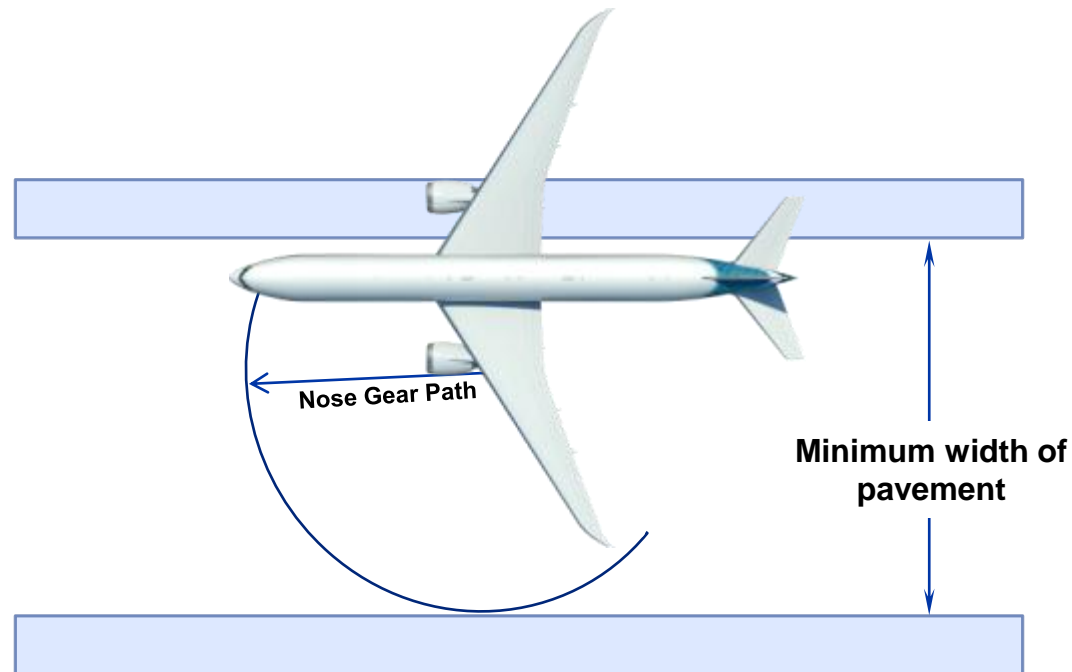
# 777-8F servicing arrangement

Compatible with today's 777F GSE (ground servicing equipment)





# 777-8F 180° turn capability



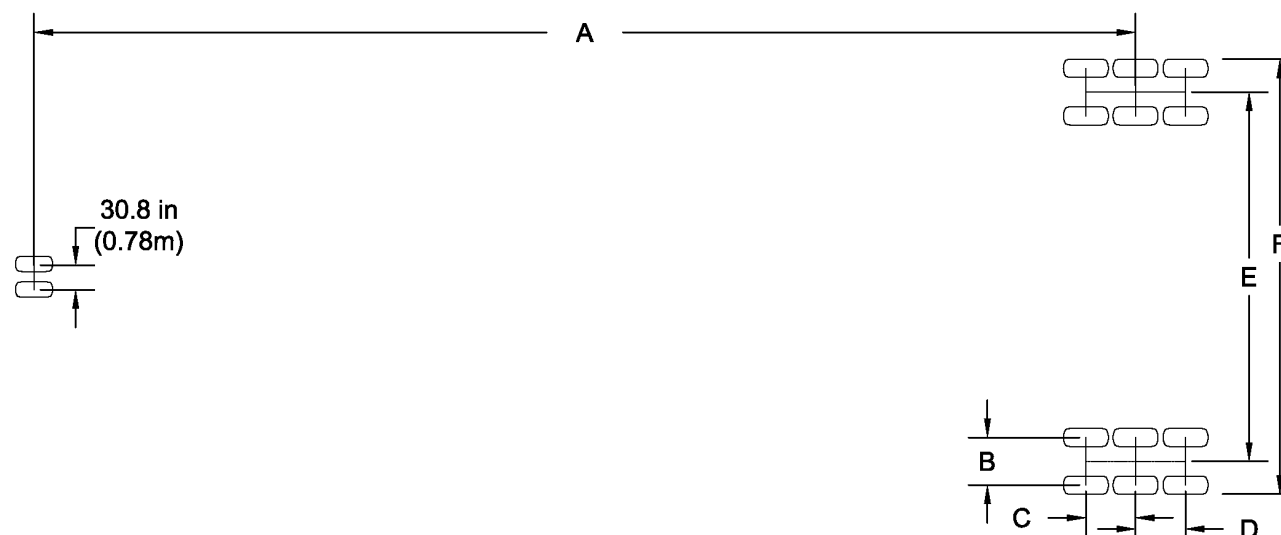
- U-turn width can be reduced by using differential braking and/or asymmetrical thrust
- Minimum widths are calculated based on data from available airport planning manuals – values may vary during operations

	777-8F <sup>1</sup>	777-9 <sup>1</sup>	777F	777-300ER	747-400F	747-8F
ICAO Aerodrome Reference Code (ARC)	4F	4F	4E	4E	4E	4F
FAA Aerodrome Design Group (ADG)	VI	VI	V	V	V	VI
Pavement width (m/ft) – 180° turn <sup>2</sup>	170FT 52M	190FT 58M	156FT 48M	187FT 57M	152FT 51M	172FT 52M

<sup>1</sup> Preliminary, ICAO ARC 4E / FAA ADG V when wingtips are folded.

<sup>2</sup> Maximum steering angle. Minimum widths do not take into account tire-edge clearance of 4.0m (13.1 ft) at both pavement edges, nor differential braking or asymmetrical thrust

# Landing gear footprint



	UNITS	777-8F	777-9	777F
Maximum Design Taxi Weight	LB / KG	807,000 / 366,049	777,000 / 352,441	768,800 / 352,441
Nose Gear Tire Size	IN	43 x 17.5 R17 (32PR)		
Nose Gear Tire Pressure	PSI / MPa	218 / 1.50		
Main Gear Tire Size	IN	52.5 x 21.0 R23 (37PR)	52.0 x 21.0 R22 (38PR)	52 x 21 R22 (36 PR)
Main Gear Tire Pressure	PSI / MPa	224 / 1.54		218 / 1.50
Wheelbase (A)	FT-IN / M	93-10 / 28.6	106-1 / 32.3	84-11 / 25.9
MLG Truck Width (B)	IN / mm	55 / 140		
MLG Truck Length (C)	IN / mm	57.2 / 145		
MLG Track Length (D)	IN / mm	58.0 / 148		
MLG Maximum Width (E)	FT-IN / M	35-6 / 10.8		36-0 / 11.0
MLG Maximum Tire Edge to Tire Edge width (F)	FT-IN / M	41-10 / 12.8		42-4 / 12.9

# 777-8F pavement loading

## ACN/PCN Reporting System

				ACN FOR RIGID PAVEMENT SUBGRADES –pci (MN/m <sup>3</sup> )				ACN FOR FLEXIBLE PAVEMENT SUBGRADES - CBR			
AIRCRAFT TYPE	MAXIMUM TAXI WEIGHT ----- MAXIMUM LANDING WEIGHT	LOAD ON ONE MAIN GEAR LEG (%)	TIRE PRESSURE  psi (MPa)	HIGH	MEDIUM	LOW	ULTRA LOW	HIGH	MEDIUM	LOW	ULTRA LOW
	lb (kg)			550 (150)	300 (80)	150 (40)	75 (20)	15	10	6	3
777-8F	807,000 (366,049)	46.5	224 (1.54)	71	93	118	141	68	76	96	128
	645,000 (292,567)	44.9		51	64	83	101	49	55	67	93

## ACR/PCR Reporting System

				ACR FOR RIGID PAVEMENT SUBGRADES				ACR FOR FLEXIBLE PAVEMENT SUBGRADES			
AIRCRAFT TYPE	MAXIMUM TAXI WEIGHT ----- MAXIMUM LANDING WEIGHT	LOAD ON ONE MAIN GEAR LEG (%)	TIRE PRESSURE  psi (MPa)	HIGH	MEDIUM	LOW	ULTRA LOW	HIGH	MEDIUM	LOW	ULTRA LOW
	lb (kg)			E = 200 MPa	E = 120 MPa	E = 80 MPa	E = 50 MPa	E = 200 MPa	E = 120 MPa	E = 80 MPa	E = 50 MPa
777-8F	807,000 (366,049)	46.5	224 (1.54)	850	1090	1270	1450	610	670	860	1340
	645,000 (292,567)	44.9		580	740	880	1030	480	500	580	860

# 777-8F Airport Compatibility Summary

- For information about Folding Wing Tip (FWT) operations see:
  - [777-9 Airplane Characteristics for Airport Planning](#) Appendices A and B.
- [ICAO FWT recommendations for airport design and operations](#):
  - ICAO Annex 14 Aerodrome Design Document refers to PANS-Aerodrome (ICAO Doc 9981), and Annex 4 (Ground Maneuvering Charts)
  - Doc 8697 Aeronautical Chart Manual
  - PANS-AIM (Data Catalogue)
- [FAA EB94](#) describes FWT operations at US airports