

**PHENOM<sup>®</sup> 100**  
BY EMBRAER

SPECIFICATION

A WHOLE NEW CONCEPT  
IN EXECUTIVE JET DESIGN.

The Phenom 100 is an entry level jet with next generation technology that brings a whole new definition of style, comfort, performance and reliability.

GENERAL DATA

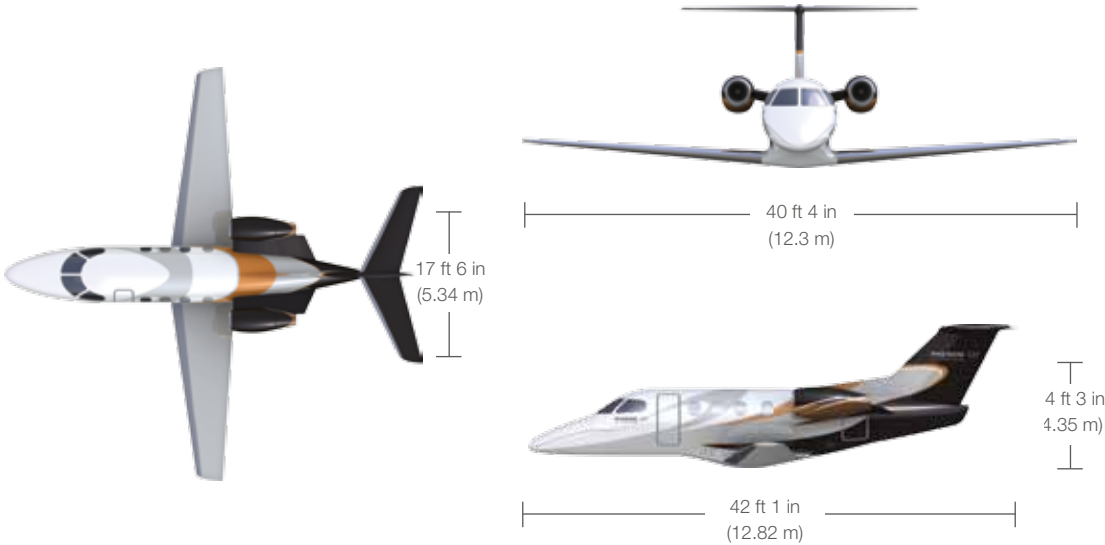
|                                         |                          |
|-----------------------------------------|--------------------------|
| Range @ 4 occupants (LRC, NBAA IFR res) | 1,178 nm / 2,182 km      |
| Maximum Operating Speed                 | M 0.70                   |
| High Speed Cruise                       | 390 kt / 722 km/h        |
| Take-off Distance (MTOW, SL, ISA)       | 3,125 ft / 953 m         |
| Landing Distance (MLW, SL, ISA)         | 2,699 ft / 823 m         |
| Maximum Operating Altitude              | 41,000 ft / 12,497 m     |
| Propulsion                              | Pratt & Whitney PW617F-E |
| Engine Thrust / Flat Rating             | 1,695 lb / ISA + 10°C    |
| Avionics                                | Prodigy™ Flight Deck 100 |
| Block Fuel for 1,000 nm                 | 1,870 lb / 848 kg        |
| External Noise                          | 33 EPNdB below stage 4   |
| Seating Capacity (crew/max occupants)   | 1 / 8                    |
| Main Baggage Compartment                | 53 cu.ft / 1.5 m³        |



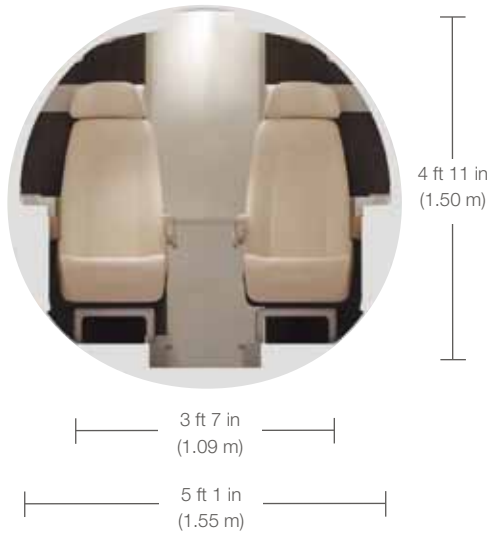
MORE SPACE, MORE COMFORT.

When it comes to space, the Phenom 100 leaves the competition behind. Not only does it have the largest cabin and windows in its class, it also has the largest baggage compartment.

DIMENSIONS



CROSS SECTION



TYPICAL INTERIOR CONFIGURATION



AVIONICS.

Prodigy™ Flight Deck 100 was exclusively developed for the Phenom 100's needs and takes advantage of Embraer's extensive experience developing cockpits for commercial and defense aircraft. Human factors, enhanced situational awareness, glass cockpit with large displays, state-of-the-art avionics and single-pilot operation are the design drivers behind every detail of this flight deck. Pilots will experience one of the most advanced avionics suites in the market.



- Three widescreen 12.4" interchangeable displays
- Soft keys on displays minimize navigation time on menus
- No overhead panel and reduced number of switches
- Reduced pilot checklists thanks to smart systems automatism
- Engine Indication and Crew Alerting System (EICAS)
- Electronic checklist and system synoptics
- Weather radar with vertical scan capability
- Coupled VNAV (Vertical Navigation) and RNP 1 (Required Navigation Performance)
- WAAS (Wide Area Augmentation System) / LPV (Localizer Performance with Vertical Guidance)
- Data link via SATCOM
- Central Maintenance Computer (CMC): quick fault location and isolation
- Synthetic Vision System

(Some items optional)

SYNTHETIC VISION SYSTEM (SVS)



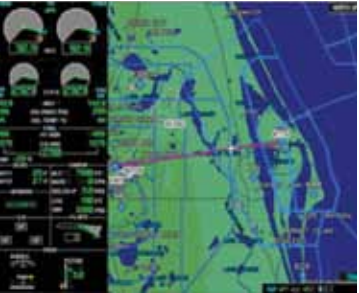
SYNOPTIC VIEWS



ELECTRONIC STAND-BY INSTRUMENT (IES)



GRAPHICAL FLIGHT MANAGEMENT SYSTEM



ELECTRONIC CHARTS



# OUTSTANDING PERFORMANCE WITH HIGH DEPENDABILITY.

With the same DNA as our commercial jets, the Phenom 100 is designed to perform like a pro and offers lower per mile cost than a turboprop.

## PW617F-E ENGINE

- 'Maintenance by design' concept
- Easy and fast to maintain
- High fuel efficiency with low carbon emissions

## FADEC ADVANTAGES

- Ease of operation: reduced workload
- Intelligent health monitoring and diagnostics
- Designed for efficient integration with aircraft electronics



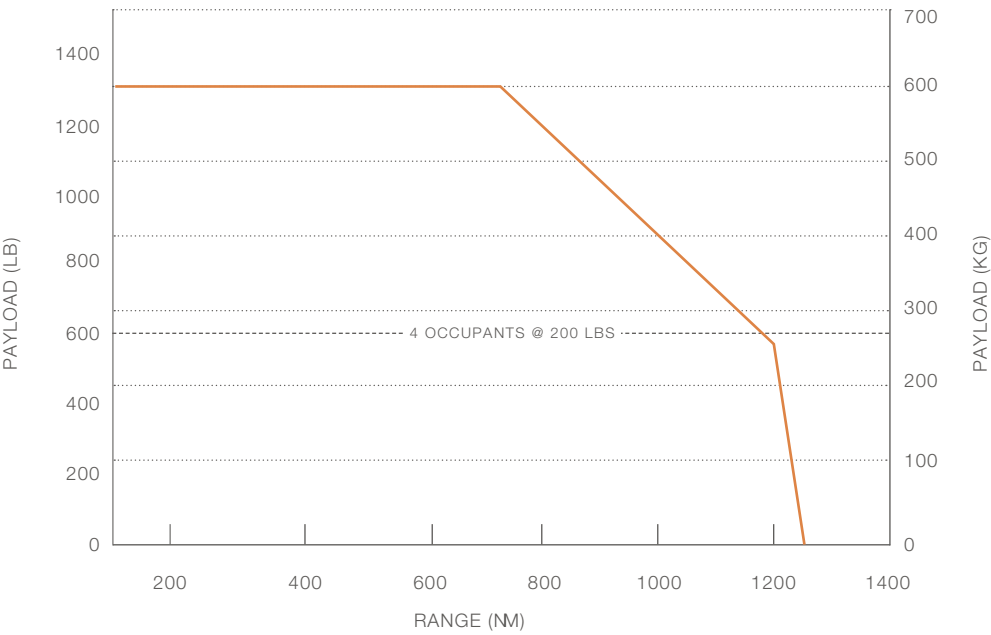
## BRAKE-BY-WIRE SYSTEM: UNIQUE FOR ITS CLASS

- Weight reduction compared to traditional systems
- Fewer maintenance tasks – better economics
- Enhanced safety

## CLEAN-SHEET WING DESIGN

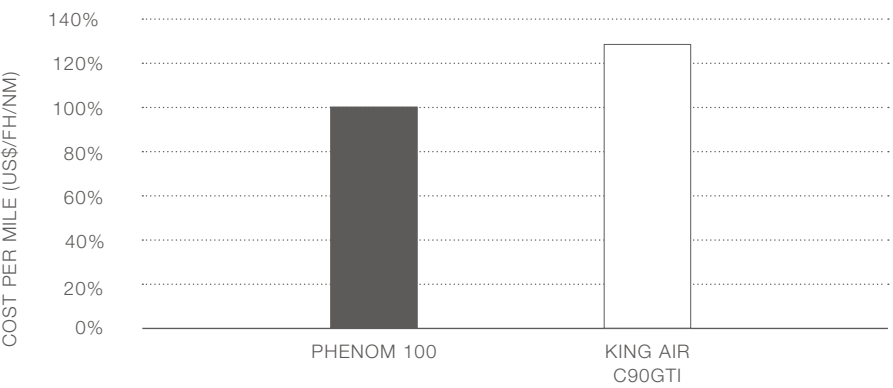
- Docile flying characteristics
- Capable of flying fast (390 kts) and still maintaining low stall speeds ( $V_{ref} \sim 90$  kt)
- High wing loading (51.9 lb/sq.ft) for more passenger comfort

## PAYLOAD VS RANGE



LRC, ISA, Sea Level, NBAA IFR reserves, 1 pilot @ 200 lb, FAA baseline

## DIRECT OPERATING COST MORE ECONOMIC THAN A TURBOPROP

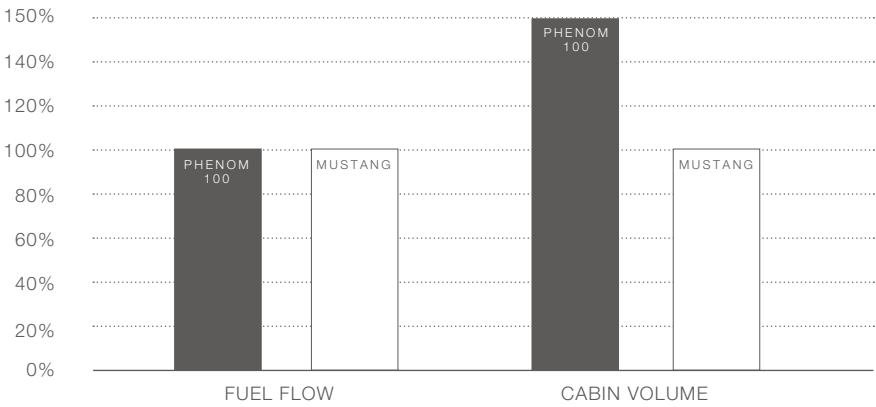


Source: Conklin & de Decker – Aircraft Cost Evaluator 2012 Volume 2



## SAME FUEL FLOW AS SMALLER JETS

44% more cabin volume for only 0.2% more fuel consumption



Assumptions: same speed (338 kts), Mid-cruise weight, ISA

GETS YOU TO MORE PLACES IN LESS TIME.

The Phenom 100 is able to get you to more places 50 ktas faster than the closest competitor's jet with excellent fuel efficiency. It also has the flexibility to take-off and land on short runways.



NEW YORK



LOS ANGELES



ASPEN



PANAMA CITY



SÃO PAULO



BEIJING



LONDON



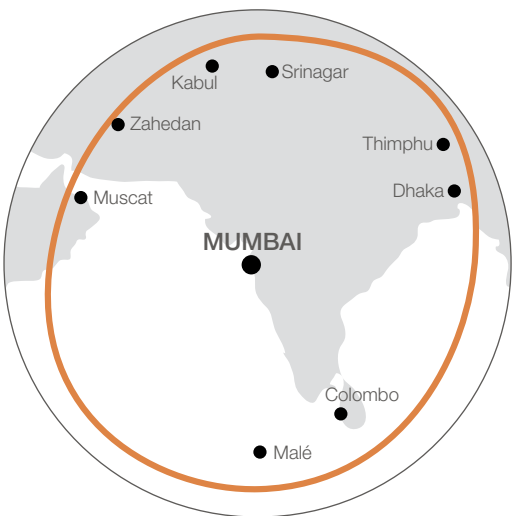
DUBAI



MOSCOW



JOHANNESBURG



MUMBAI



SYDNEY

4 occupants @ 200 lb (91 kg) each, LRC, ISA temperature in route, 85% annual winds, 85% takeoff temperatures, 3% airways allowances, NBAA IFR reserves – 100 nm alternate airport, 35 min holding at 5,000 ft.

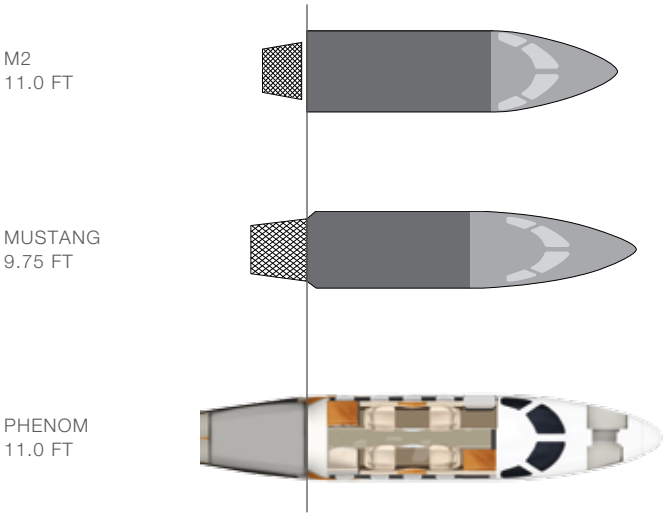
A NEW DIMENSION IN SPACE.

CROSS SECTION

With BMW Group DesignworksUSA we have created the highest and widest cross section in the category which offers up to 8 occupants unprecedented head and leg-room.

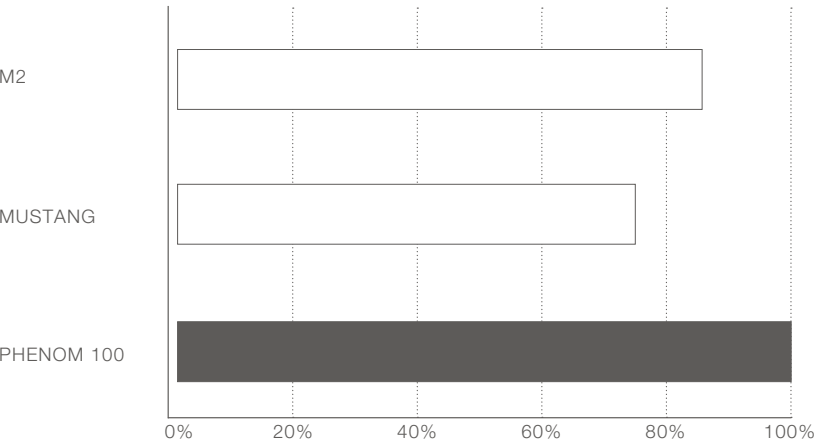


CABIN LENGTH



AIRSTAIR DOOR AREA

The only jet in its class with an airstair door.



Embraer's estimate based on source Conklin & de Decker – Aircraft Performance Comparator 2009/2010

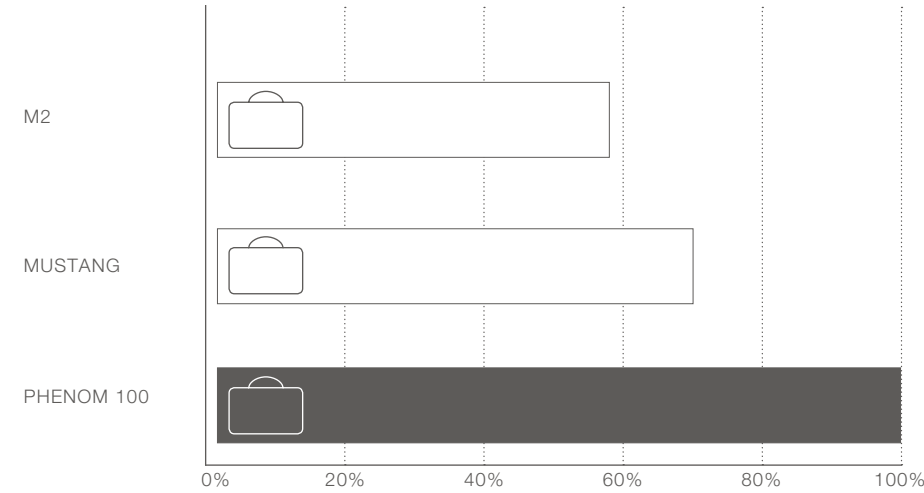


BAGGAGE COMPARTMENT.

The Phenom 100 baggage compartment is large enough to hold 4 golf bags or 2 pairs of skis, plus 4 garment bags, 4 roll-on bags and 4 laptop bags.



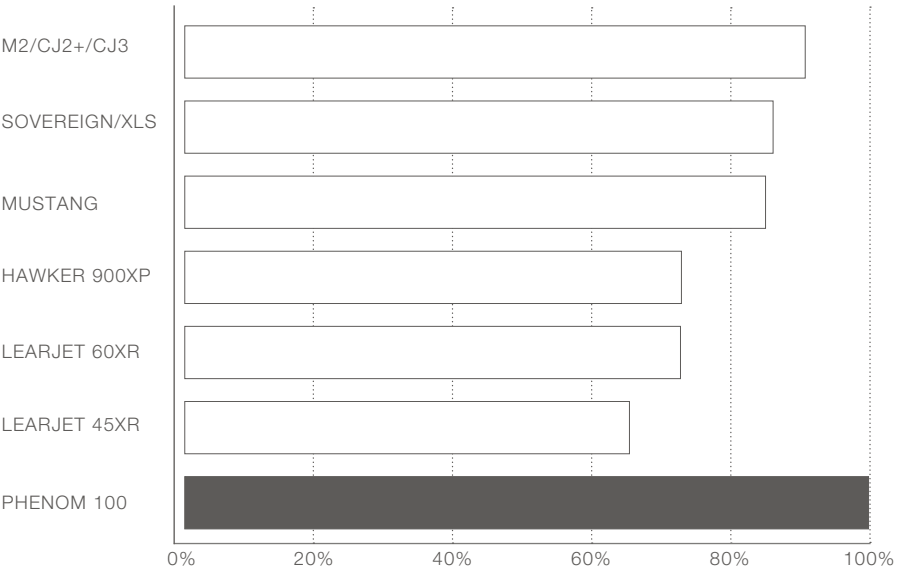
MAIN BAGGAGE VOLUME



Source: Public information

WINDOW AREA.

The Phenom 100 has the largest windows in its class – in fact they're even larger than those of a midsize jet.



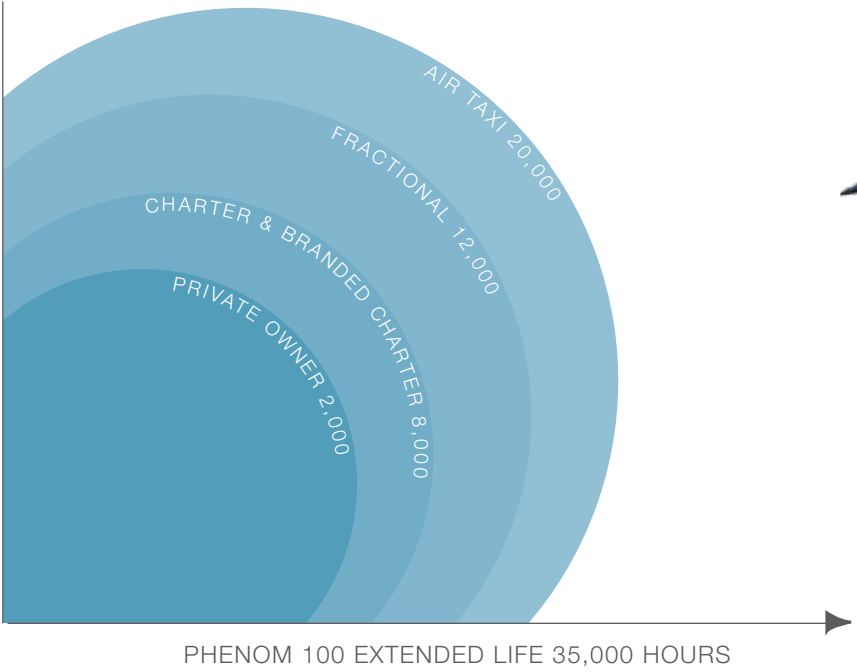
Embraer's estimate based on source Conklin & de Decker – Aircraft Performance Comparator 2009/2010



ENJOY THE BENEFITS OF OUR COMMERCIAL DNA.

- The Phenom 100 is the only entry level jet designed for high utilization.
- All main electronic equipment is inside pressurized areas
  - Avionic displays have interchangeability
  - All antennas, pitot tubes and ADS sensors are externally replaceable
  - Electric fuel pumps and flight control actuators are brushless
  - Wide use of LED lights – 10 to 20 times better MTBF than filament lights
  - Engine replacement by two mechanics in 2-4 hours
  - Windshield replaced from outside by only one person

- Standardized screws and grease types
- Low intervention philosophy (MSG-3)
- Quick fault location and isolation to component level (Central Maintenance Computer)
- All systems synoptic
- Integrated EICAS
- MSG-3 philosophy ensures a scheduled plan of 600 hours or 12 months between inspections



WE’RE HERE FOR YOU.

Our heritage in commercial aircraft since 1969 means we have many years of experience in delivering excellent customer support. We have used this to develop a specific program for the executive jets market, which is customized to each client’s needs. There are Embraer Executive Jet Service Centers located around the world, which means you will never be far away from a service center dedicated to executive jets.

EMBRAER EXECUTIVE JETS SERVICE CENTER NETWORK

- ◀ EMBRAER EXECUTIVE JETS OWNED SERVICE CENTER
- AUTHORIZED SERVICE CENTER
- ★ PARTS DISTRIBUTION CENTER



New locations for Embraer Executive Jets Authorized Service Centers under development.

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**Latin America**

Tel.: +55 12 3927 3399

Fax: +55 12 3927 8468

**U.S., Canada & Caribbean**

Tel.: +1 954 359 5387

Fax: +1 954 359 4724

**Europe, Middle East & Africa**

Tel.: +44 1252 379 270

Fax: +44 1252 379 271

**Asia Pacific**

Tel.: +65 6734 4321

Fax: +65 6734 8255

**China**

Tel.: +86 10 6598 9988

Fax: +86 10 6598 9986

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FOR THE JOURNEY

