

2005 Freestyle Exterior/Interior

"The new Ford Freestyle offers the best of all worlds - the presence and command seating position of a sport utility vehicle, the driving ease and comfort of a passenger car and the people-friendly flexibility of a minivan. It truly was designed around its occupants. We looked carefully at the way families actually used their vehicles and how they would love to use them. Our computerized tools helped us achieve a more flexible design than anything we've ever done, with generous interior space and storage options."

- George Bucher, Chief Designer

Ford Freestyle - Industry's First Purpose-Built Crossover

The all-new Ford Freestyle has a critical advantage over its competitors: It was designed from the ground up to be a crossover vehicle. Because it wasn't derived from an existing minivan or sport utility platform, there are no compromises in its design, drivability and packaging versatility.

By engineering Freestyle with buyers in mind, Ford is the first to fully deliver on the crossover's mission: to provide the confidence and capability of a sport utility vehicle, the versatile interior of a minivan and the drivability and comfort of a premium sedan.

Because it is purpose-built, designers weren't faced with the impossible task of disguising a minivan or sport utility vehicle in creating the Freestyle. As a result, the new model takes its natural place among Ford's other showroom leaders - the new Freestar minivan and best-selling Explorer - without excessively overlapping either one. It is instantly recognizable inside and out as a Ford, with design, comfort and package features that resonate with the brand's loyal customers.

Freestyle is designed to appeal to growing families, as well as those who appreciate the image of a sport utility vehicle but don't do the kind of rugged off-roading or heavy towing better suited to a body-on-frame design. The emphasis is on functionality and comfort, with seating for six or seven passengers available in all trim levels.

Among Freestyle's design highlights are:

- A purpose-built architecture meant to satisfy the emerging crossover market, melding the best attributes of sport-utilities, sedans and minivans
- A road presence that evokes Ford's rugged sport utility vehicle family but combines the comfort and accessibility of a sedan
- An innovative platform inspired by Volvo that enabled breakthrough interior features like the fold-flat third-row seat and myriad creative storage solutions
- Dozens of interior seat configurations, for complete flexibility when hauling people, cargo or a combination of the two
- A natural, upright seating position in all three rows, providing good outward visibility for up to seven passengers and maximum comfort for all on long drives
- Lower entry height than a sport utility vehicle, for ease of entry and exit
- Best-in-class legroom in second-row seats - captain's chairs or split bench
- Best-in-class third-row legroom and knee clearance to accommodate two adult passengers
- Best-in-class cargo volume with all seats folded
- Measurably improved quality, thanks to the Total Vehicle Geometry protocol used during the design process

Interior Combines Comfort, Capability

Flexibility is the mantra of the all-new Ford Freestyle, which offers innovative storage solutions and dozens of different seating configurations that handle nearly any combination of passengers and cargo. This versatility is wrapped in a design that communicates the road-going confidence of a sport utility vehicle with the roominess of a minivan, while carving out a whole new niche of its own.

Comfort is measured in many ways. In the all-new Freestyle, it comes through in the naturally upright seating position, great outward view available to all occupants, soft and supportive seats, easy-access storage that cleans up clutter and surprisingly generous interior dimensions.

Freestyle offers best-in-class legroom in the second and third rows, and the middle-row seats recline up to 12 additional degrees for added comfort. Hip and shoulder room are among the most generous in the crossover class.

By mounting front seats on the safety-related cross-car beam, Freestyle engineers found a clever way to enhance footroom for second-row passengers. Second-row legroom can be enhanced with optional track-mounted seating. The third row also has the most overall seating room in the class.

The design provides more than enough space for the 95th-percentile American male - who stands 6-feet-2-inches - to find comfort in every row. This is increasingly important as the population moves toward larger-size adults. At the other end of the spectrum, Freestyle's adjustable seating, tilt steering wheel and optional power-adjustable pedals make it possible for smaller-stature people closer to 5 feet in height find a safe, comfortable driving position.

Designed Around People

"The all-new Ford Freestyle was created from the inside out," said chief designer George Bucher. "Our most important considerations were function and execution because those are the attributes our customers will appreciate most."

Using sophisticated digital modeling tools, designers built a virtual interior to suit the needs of up to seven adults. That's why Freestyle offers class-leading legroom in the second and third rows, places where many competitors skimp.

In fact, no other vehicle in the segment offers as much legroom in the first, second and third rows combined. Head and shoulder room in all three rows is comparable to many, broader competitors on the market.

H-Point Center of Attention

These aren't the only measures of comfort, however. Another dimension helps illustrate the advantages of Freestyle's natural, upright seating position. This measure examines the "H-point," or the position of an occupant's hip in relation to the ground and the vehicle floor. In Freestyle, the H-point is closer to the ground than those of its sport utility-based competitors, easing entry and exit. Occupants don't climb into the Freestyle, they simply sit at a natural height and close the door.

The distance from the H-point to the floor is reflective of Freestyle's more upright seating. In the second row, for example, the distance between the H-point and the heel point - where the occupant's foot touches the floor - is 15.7 inches. This is about 2.5 inches more than the nearest competitor and more than 4 inches greater than some vehicles in its class. This means Freestyle occupants sit comfortably, not at an awkward angle.

The third row similarly is designed around people, with more distance from the H-point to the floor and far more legroom than the competition. In most vehicles in the class, adult-size third-row passengers must sit with their knees snug against the second-row seatbacks. Freestyle gives adult passengers genuinely usable space with real knee clearance.

To enhance third-row comfort, four cup holders and small storage bins are conveniently within reach. The third row is raised slightly, providing a "theater seating" effect that improves sightlines. The optional auxiliary climate control lets second- and third-row passengers create their own heating and air-conditioning zones.

Right Controls, Right Place

Ergonomics are an important contributor to comfort, especially on the kind of long road trips Freestyle invites. This field of study in the science of car design can seem like simple common sense - until you get it wrong. To guard against that, Ford engineers employed a computer design tool called the digital buck to determine optimum locations for door handles, armrests, seat and window regulators, cup holders and other frequently used items and controls.

Driver comfort is enhanced through a power six-way adjustable seat, tilt steering wheel, optional adjustable pedals and (on Limited models) optional two-user memory for seat, pedal and exterior mirror position settings. The Limited offers eight-way power adjustment for the driver's seat, with power recline and fore/aft adjustment for the front passenger. The power driver's window has one-touch operation both up and down. A power moon roof is available on SEL and Limited series.

Ford also used virtual reality technology to develop Freestyle's interior and verify that gauge and control placement would accommodate most drivers and passengers. "We use a tool called the Digital Occupant that allows you to 'sit' in any seat in a virtual car and experience the environment," said Chris Civiero, ergonomics engineer for the Ford Freestyle.

The user wears a video headset and sits in a seat taken from the vehicle. Everything else - buttons, switches, pedals - is generated electronically as part of the virtual environment.

"This software has the ability to scale the user," said Civiero. "For example, I can 'become' the 95th-percentile male and check to see if I can comfortably use all of the controls. Then I can change the program so that I become the 5th-percentile female and make sure everything is still within reach."

Using this tool, Civiero spent hours at every seating position Freestyle offers, studying and refining the vehicle from an occupant's perspective.

Fold-Flat Seating

The ergonomics studies helped refine operation of the flip-and-fold rear seats. The second-row seats fold down and then flip forward to provide easier access to the third row. This function operates using large lever-style hand controls. As the seats flip forward, hydraulic struts support them.

The third-row seat folds, then flips toward the rear of the car for stowage into the cargo floor. This provides a level load surface without having to move the cargo floor. Clearly labeled levers and straps make operation intuitive.

"We have good consumer testing results for the usability of our seats," Civiero said. "We think they're the best in the industry."

The third row is available as a solid bench seat or with optional 50/50 split. Stowing the third row into the floor and folding the second-row seats creates a flat loading surface and the largest cargo area in the crossover class. The front passenger seat also folds forward for additional cargo room. On vehicles equipped with second-row captain's chairs, the center console lid flips forward to complete the flat load floor.

The ability to fold the second- and third-row seats and the front passenger seat in Freestyle provides over 9.5 feet of open, pass-through storage capability. For everyday shopping, the cargo area features grocery bag hooks.

Two Suits Tell Story

Getting even closer to real life, the ergonomics team also dressed Freestyle engineers in two specially designed suits so they could experience the vehicle the way specific consumer groups might.

The Third Age Suit simulates the limited mobility of the elderly or others with physical handicaps. It includes special goggles that give a sense of the vision challenges faced by those with cataracts. The Third Age Suit helped spawn such design elements as Freestyle's upright seating, oversized strap-style exterior door and hatch handles and crisp, clear instrument panel graphics. Strap-style handles allow users to grab from above or below the handle - whichever is more comfortable and convenient - and use more of their large muscle groups to pull the door open - important for people with reduced hand strength.

The Pregnancy Suit allows anyone to get a feel for how late-stage pregnancy can affect mobility. "We call it the 'empathy belly,'" Civiero said. "It even puts pressure on the bladder."

The Pregnancy Suit helped illustrate the benefits of the Freestyle's upright seating, easy entry and exit and adjustable steering wheel, accelerator and brake pedals. It also was used extensively to evaluate ease of access to Freestyle's second- and third-row seats.

Look, Feel Communicate Freestyle's High-Quality Message

"My job is all about execution," Bucher said. "You can't separate the two - appearance and execution are linked. You communicate quality immediately by starting with things like materials, colors, texture and graphics. These attributes will be apparent to consumers the moment they open the door."

Studies guided Freestyle's engineers in rating interior and exterior design elements. The things people use most often - turn signals and radio and climate controls - must be placed correctly, offer reassuring operation and be pleasing to the touch. Metal plating on key controls provides durability and a positive "feel." A new graining pattern results in a more random, modern look. Special paints create soft-touch surfaces on the instrument panel and doors.

Wood-grain appliqué feature a contemporary random burl pattern - a light color in tan interiors and a red-tone in gray interiors - that communicates quality. Straight grains can look dated or artificial, which would clash with Freestyle's contemporary styling.

In general, lighter tones create an open, inviting atmosphere inside the Freestyle's generous cabin.

Clever Nooks, Crannies

One result of designing Freestyle around its users is the abundance of clever storage solutions. Within easy reach of the driver are:

- A recessed storage bin atop the instrument panel that opens at the touch of a finger and holds items like plane tickets, maps, clipboards, cell phones or calculators
- A door pocket that can accommodate a collapsible umbrella or three-ring binder
- A bottle holder, molded into the door, suitable for 20-ounce drink containers
- A center console storage bin, large enough for paperwork and a laptop computer, includes a provision for routing the computer's recharger cord to one of two front-row 12-volt outlets

- A shallow coin tray near the console-mounted shifter
- Holders for coins and CDs inside the center console
- Two cup holders on the center console
- An optional overhead console with storage for sunglasses and garage door openers, plus a convex "conversation mirror" that lets the driver see passengers in the rear seats

Other storage includes:

- A lighted glove box, with damped door for quiet operation
- A second-row console (available with six-passenger seating)
- Map pockets incorporated into the backs of front seats
- Storage pockets in all doors, with molded-in bottle holders
- A storage bin in the rear quarter panel trim (standard on most models)
- A third 12-volt power outlet in the rear cargo area
- Four tie-down loops in the cargo area, with cargo net optional
- A total of 12 cup and bottle holders, wide at the top and narrow at the bottom to accommodate giant-size convenience store soft drinks and ensure smaller drink containers stay planted

Easy-to-Grasp Controls

The radio and instrument panel typically get a lot of attention from the driver, putting them high on the Freestyle design team's list as well.

"My top priority is the driving task - the ability of the driver to operate the vehicle safely, to operate in the driving environment," Civiero said.

As a result, Freestyle offers intuitive controls, uncluttered by fancy graphics or requiring a lot of study to operate.

"On the sound system, we know people use their radio preset buttons more than the scan button for finding stations," Civiero said. "You design the faceplate layout with that in mind. You definitely don't want to force someone to go through a deep menu on the radio display while they're driving."

Short arms were on Civiero's mind when it came to the optional ceiling-mounted DVD player.

"An adult could easily reach the video controls if they were mounted on the overhead DVD unit, but a child couldn't," he said. "That's why we have a hand-held remote control. Kids as young as 5 years old are very comfortable with using remote controls - they're probably better at it than their parents!"

Volvo's influence is apparent in Freestyle's use of two steering-column stalks - one on the left for turn signals, one on the right for wipers.

Other important controls are placed in intuitive locations - the rocker switch for adjustable pedals is on the instrument panel near the headlamps, and the remote mirror control is on the "sail" panel at the front of the driver's door. Each seating position gets a reading lamp that provides even, glare-free lighting.

The window controls use an intuitive "push down, pull up" design.

For driver comfort, the Freestyle has a tilt steering wheel and a six-way adjustable seat that allows up-down, fore-aft and tilt-forward-and-back movement. A short-throw lever makes it easy to dial in lumbar support.

"We really made an effort to improve access and usability of that lumbar support control," Civiero said. "Just 90 degrees of movement gives you adjustment from zero support to full support."

Capable Design

"Offering as much interior space as most full-size sport utility vehicles, Freestyle is synonymous with roominess and flexibility," said J Mays, Ford group vice president, Design. "But we know that versatile transportation doesn't have to look dull. So we design this crossover to have a dash of the aspirational look of a sport utility vehicle and enough athleticism to convey that Freestyle is capable of taking you - and enough people and gear to make it interesting - wherever life may lead."

Exterior Design

Freestyle's upright stance is suggestive of a sport utility vehicle. Its front fascia features a classic trapezoidal, diamond-patterned Ford grille, with aggressive lower ducting and integral fog lamps on SEL and Limited models. The grille features bright trim on SEL and Limited, while the SE model gets a body-color surround. The lower fascia suggests a grille-guard type effect without being overly aggressive.

Large, prominent exterior mirrors enhance side visibility. Door handles are body color on SEL and Limited models and black on the SE. Side moldings are body color.

The standard 17-inch, aluminum wheels - painted, seven-spoke on SE and polished, fifteen-spoke on SEL - and optional five-spoke 18-inch bright alloy wheels (standard on Limited) provide rugged cues and are framed by large, flared wheel arches.

Contrasting lower body cladding and rocker panels on the SE and SEL series reinforce this rugged theme, while the Limited's body-color cladding offers a more refined appearance. The large, sturdy roof rack provides a convenient place to tie down cargo, while complementing the Freestyle silhouette.

The rear emphasizes the step bumper and split hatch. Taillights follow the same simple geometric lines as the headlights, with rounded top corners and sharply angled bottom edges.

Insider Information

Inside, the grab bar over the glove box and metal surfaces around the dash vents reinforce the theme of confident capability.

Perforated leather seating surfaces with built-in heating elements for cold-weather comfort give Freestyle Limited a unique European look and feel. Seats in the SE and SEL are cloth-trimmed.

On the Limited series, the center stack is faced in a burl-pattern wood grain. On the SEL and SE series, a carbon-fiber-like texture lends a high-tech flare to the instrument panel.

The mid- and high series offer a leather-wrapped steering wheel with redundant audio controls and leather-clad console-mounted shifter. Chrome door handles add to the interior's elegant appearance.

Bucher sees the Freestyle defining this new consumer segment in much the same way Explorer set the bar for the SUV market in the 1990s. "There's nothing like it out there. There are sporty vans, but there's nothing like our capable, adventurous Freestyle, with three seats and room for six or seven passengers."