

## **Escalators and Power Walks**



For over a century, Montgomery Elevator Company has maintained the highest standards of quality in vertical transportation equipment. We devote ourselves exclusively to the design, manufacture, installation, service and modernization of people-moving equipment.

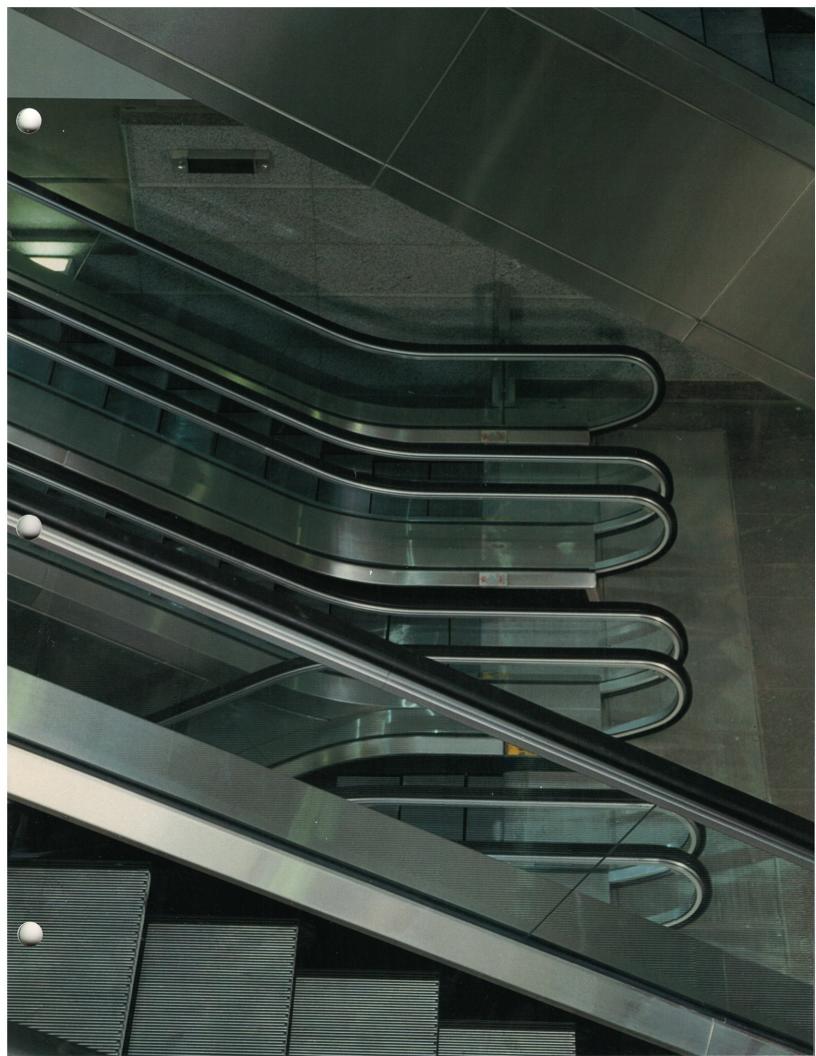
Montgomery is the largest independent company of its kind in North America. Over 3,900 employees are located in 7 factories and more than 200 Sales, Installation and Service Branch Offices throughout the United States. Montgomery is also an International Company, operating as a partner in a Canadian joint venture and through Montgomery Representatives, worldwide.

The selection of vertical transportation equipment involves careful analysis of project requirements. Consideration must be given to the type, location and size of the building's population along with projected traffic patterns. Escalators are often selected for use because they move people at a lower cost "per passenger" than any other form of vertical transportation. For many years, *Montgomery Escalators* have been the industry leading choice.

Power Walks and Power Ramps satisfy a very specialized need for the movement of passengers. Where long horizontal distances are required and efficient movement of passengers is a necessity... *Montgomery Walks and Ramps* are the perfect solution.

Nearly 80,000 Montgomery units have been installed throughout the world. Of these, nearly 11,000 installed units have been Montgomery Escalators, Power Walks & Power Ramps. We believe that continued preference for Montgomery equipment is proof of our recognized excellence in quality, design innovation and dependability.

You will find Montgomery equipment in major airports and other transportation-related terminals, office and retail buildings, schools, civic centers, shopping centers, corporate headquarter buildings...wherever quality vertical transportation is required. The quality of our equipment and its dependable performance reflect the continued commitment of our people to our over **century-long tradition of excellence.** 



## Truss

Montgomery's tubular design used in the manufacture of Escalators, Power Walks and Power Ramps produces a truss which is stronger yet lighter in weight than other types of truss construction, such as angular steel. The entire truss for each unit is produced in our U.S. factory.

The truss is fabricated from structural steel tubes by certified welders and protected by a corrosion-resistant powder coat process to ensure long life. The total truss design is based on the provision of rigidity along with the required strength to carry the passenger capacity load, machinery components including balustrades along with the weight of the exterior covering (normally provided and installed by other contractors).

Power Walks and Power Ramps use a truss construction which is similar to that used for Montgomery Escalators. In some cases, such units incorporate both a truss along with tubular stanchion type construction. When this combination is used, the individual stanchions are located every three feet (on center) in the intermediate run. This allows a Power Walk or Power Ramp of almost any length.

Continued technological improvements pioneered by Montgomery now offer Power Walks of extremely wide dimensions with rated pallet width up to 56"!



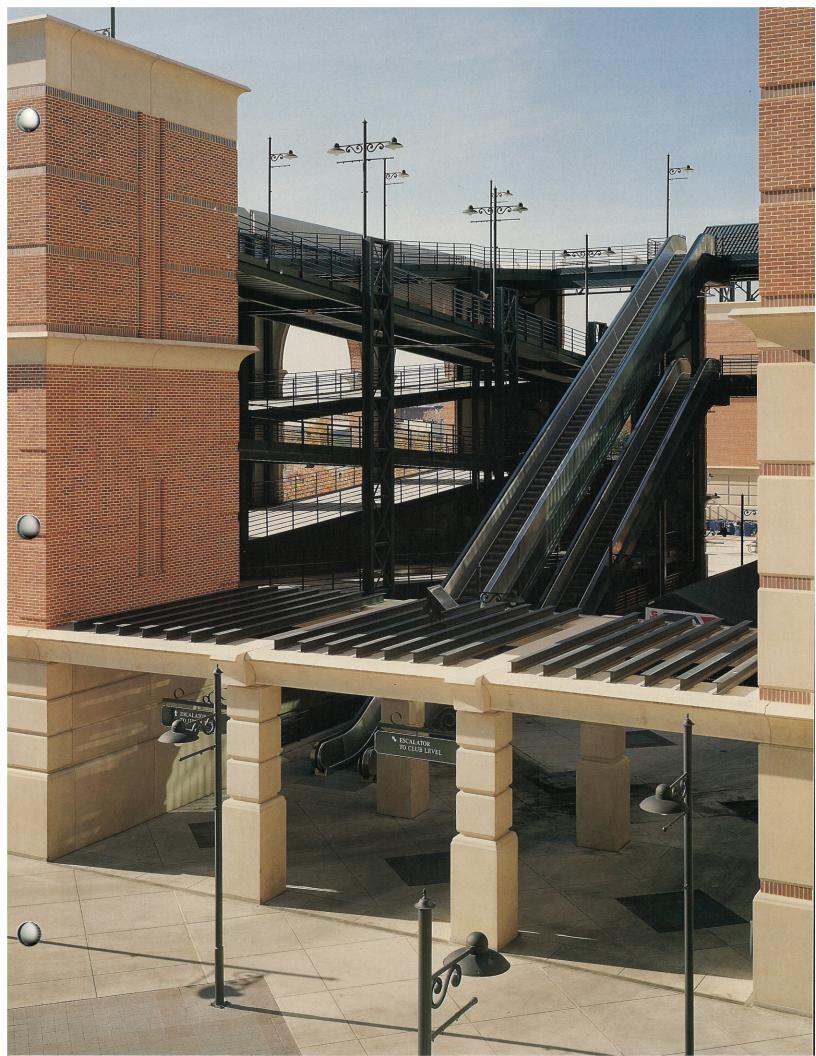








- A: Precision welding on an escalator truss being fabricated at the Montgomery Escalator Division.
- B: Escalator truss alignment is critical. Montgomery uses lasers to assure such alignment during fabrication in the Montgomery factory.
- C: A laser beam is used to ensure proper alignment during
  Montgomery Power Walk installation. (from construction video)

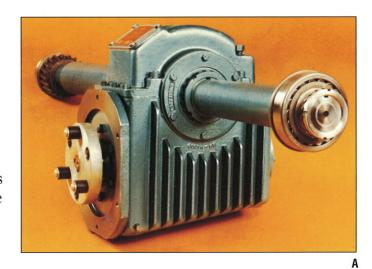


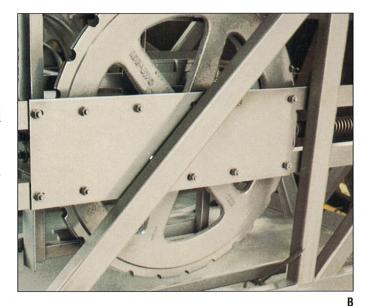
## Drive

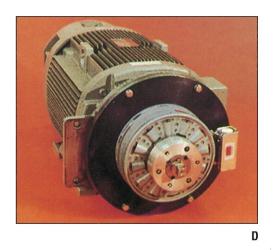
Montgomery Escalators, Power Walks and Power Ramps offer an exceptionally smooth and quiet ride. The direct drive is a unique Montgomery feature. The motor is mounted through a self-aligning sound and vibration absorbing coupling to the speed-reducing worm gearbox.

The steps are driven by a heavy precision roller flat link type chain on which proper tension is maintained by means of a heavy-duty tensioning sprocket. At the lower end of the escalator, the tensioning and reversing sprocket station places tension on the step band.

The ball bearing, squirrel cage, low RPM drive motor is a Montgomery special design for escalator use. Drive ratios are designed to produce synchronized handrail and step speeds. The electro-mechanical Montgomery Permanent Magnet Ceramic Brake is a standard feature on all Montgomery Escalators. It is designed to provide positive-controlled, smooth stopping whenever power is interrupted or any safety device is activated.

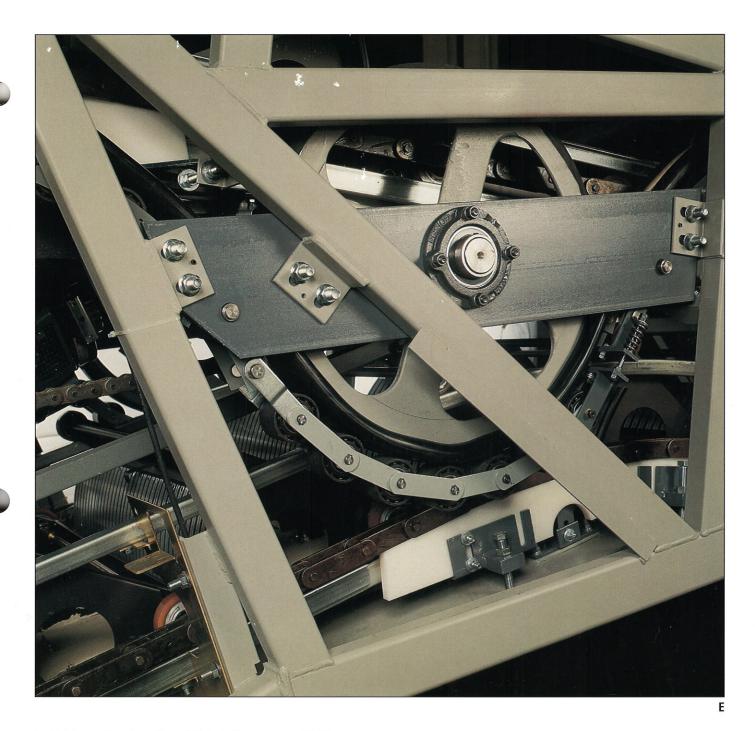








C



- A: Quiet operation, long life and high efficiency are provided by a speed reducing gearbox of worm-gear design.
- B: Heavy-duty lower sprockets, a standard feature on all Montgomery Escalators, ensure long roller life and quiet, smooth return of escalator steps.
- C: Typical truss assembly, with the gearbox, main and lower drive sprockets and track system, produces excellent alignment for quiet operation, smooth step movement and long life of equipment.
- D: Low RPM motor and Permanent Magnet Ceramic Brake assure quiet operation and long motor and gear drive life.
- E: The Montgomery handrail drive is designed to provide positive, non-slip handrail movement and long handrail life.

The terms "exclusive" and "unique" are often used to describe Montgomery Escalator, Walk and Ramp designs. Montgomery's longstanding success results from maintaining a leadership position in design innovation along with the highest standards of quality in manufacture, installation and continuing service maintenance.

Many safety features are integral to Montgomery's design. Montgomery's pioneering application of "two-steps level" provides a secure escalator platform of two horizontal steps at the levels of both entry and exit. This produces greater ease along with safety for the passenger.

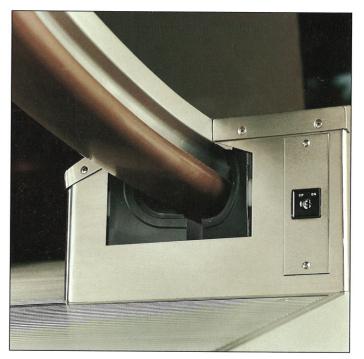
Montgomery's twin system of handrail inlet guards is another significant design characteristic. These twin guards, with integrated electrical switch, are designed to stop the escalator should an obstruction enter the handrail inlet.

Our concern for safety is fundamental. With so many Montgomery units throughout the world...not only our customers but our families are transported by Montgomery.









В

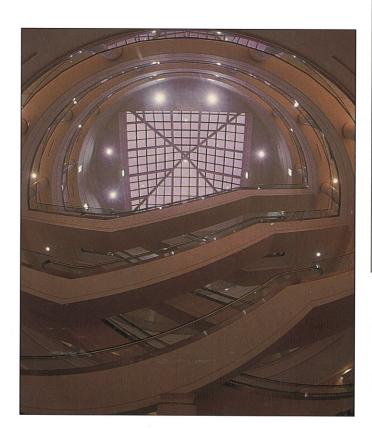


## STEPS AND PALLETS

The standard Montgomery Escalator Step incorporates a ONE-PIECE CAST ALUMINUM BODY providing greater strength and reliability while also offering improved power efficiencies through reduced weight. This step has been designed to provide an extremely attractive and contemporary look. Montgomery uses an advanced thermosetting acrylic powder coating which affords unsurpassed finish uniformity and durability.

The step rollers, which support and move the steps, are resilient to ensure long roller and track life with superior ride quality. Plus, an advanced **step demarcation** approach is part of the Montgomery Step. Side and rear perimeter edge inserts (Black, Red or Yellow) are precision formed from fiber-reinforced composite material. Step demarcation can now be accomplished in the color to suit varying Code and design criteria.

Montgomery Walks and Ramps use heavy chain-connected pallets having formed steel bodies, precision assembled and welded, with replaceable polished special alloy aluminum treads. Again, the latest in advanced thermosetting acrylic powder coatings are used. Pallets provide a smooth, solid and comfortable ride. In the event of damage, pallets can be quickly replaced, thus saving "down-time" and money.

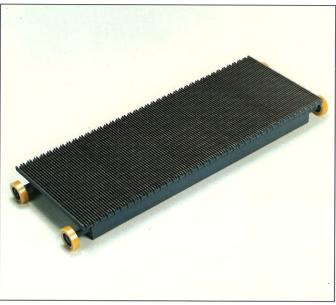




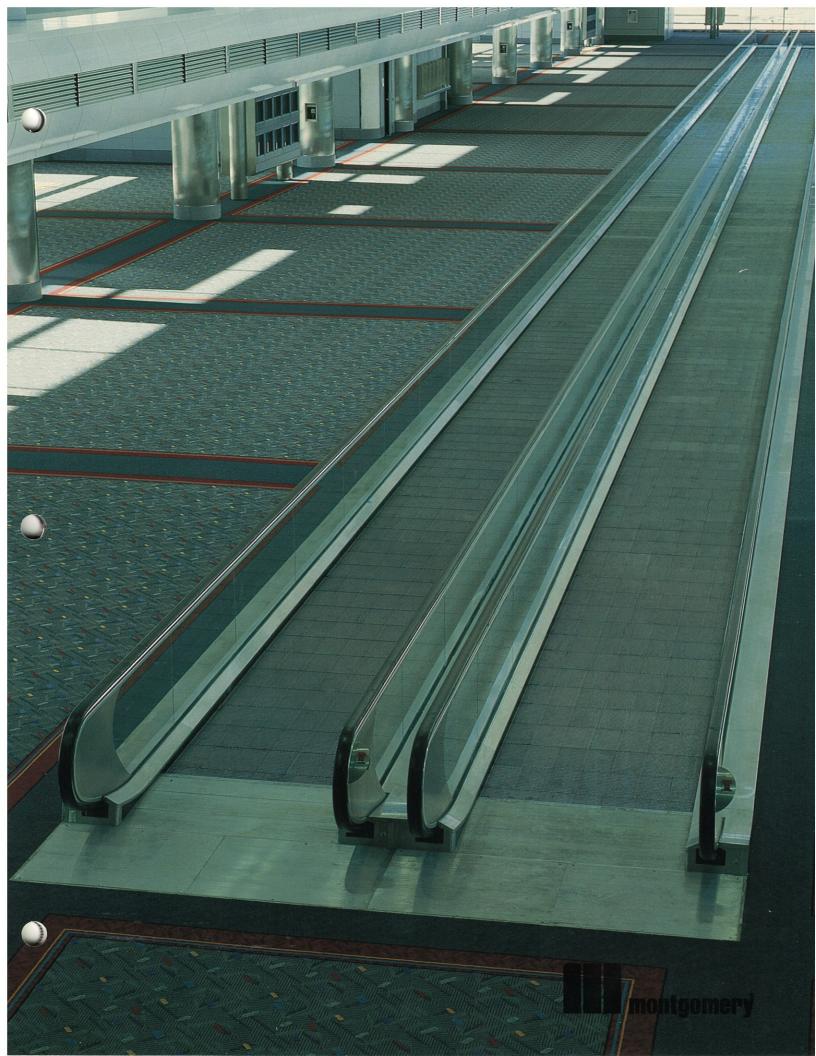


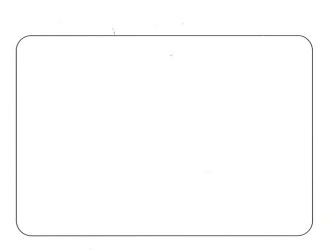






- A: The latest in escalator-step design, from Montgomery, provides an attractive and contemporary look along with a uniform and durable finish.
- B: Knurled special alloy aluminum is designed to provide safe, sure footing on Montgomery Power Walks and Ramps.







ELEVATORS • ESCALATORS • POWER WALKS • POWER RAMPS • MODERNIZATION • SERVICE

SF 2084 Rev 0194 ©1994 Montgomery Elevator Company, One Montgomery Court, Moline, Illinois 61265 Offices in principal cities of North America/Representatives Worldwide

All specifications, dimensions and illustrations comply with product design and materials used as of date of publication. The right to make changes to product design and material used, without notice, is reserved. All hardware and software referenced in this publication and/or used in conjunction with equipment described herein is the exclusive property of Montgomery Elevator Company whether or not protected by U.S. and/or International Trademark, copyright and/or patent laws.