

# KONE TRANSITMASTER™ PRODUCT RANGE

Well designed and manufactured escalators are a must for today's highly demanding public areas. They are key to ensuring the smooth, efficient and safe flow of people traveling within a building's environment.

KONE prides itself on delivering the 'low risk' option to customers. We offer 'peace of mind' in terms of product design, customer support and project management, combined with the highest levels of efficiency and safety during the installation phase.

The versatile KONE TransitMaster escalator and autowalk range is ideal for new installations, and incorporates five specific models:

- TransitMaster 120 escalator
- TransitMaster 140 escalator
- TransitMaster 165 horizontal autowalk
- TransitMaster 185 horizontal autowalk
- InnoTrack horizontal autowalk

Each one is specifically designed to meet the exact demands and needs of the market sector, whether it's a more standard solution for the retail areas of an airport, or a mass transit airport or railway station system.

# TRANSITMASTER<sup>™</sup> 140 – BUILT FOR RELIABLE AND LONG-TERM OPERATION

The KONE TransitMaster 140 is a heavy-duty escalator targeted primarily towards the infrastructure segment. This segment covers metro/underground systems as well as airports, rail systems and other transit centers. Here it is part of the total KONE solution offering together with other KONE products such as:

- Commercial escalators ----- e.g. KONE TravelMaster<sup>™</sup> 110
- Mid high duty escalator ----- e.g. KONE TransitMaster<sup>™</sup> 120
- Horizontal autowalk ------ e.g. KONE TransitMaster<sup>™</sup> 165 and TransitMaster<sup>™</sup> 185
- Passenger elevators------ e.g. KONE MonoSpace<sup>®</sup>
- Goods elevators ------ e.g. KONE TranSys<sup>™</sup>
- Scenic elevators ------ based on KONE MonoSpace® or KONE MonoSpace® Special
- Modernization solutions ------ e.g. KONE EcoMod<sup>™</sup>2
- Automatic building doors

The versatile TransitMaster 140 is a public transportation escalator for the highest people flow and long, even continuous operating hours. Our heavy-duty escalators are designed to enable the seamless flow of large numbers of passengers.

The KONE TransitMaster 140 is fulfilling the main customer, from both a technical and visual point of view, to fulfill the main customer requirements of the target segments:

- Safety and reliability
- Optimized total cost of ownership
- High quality in terms of technical performance, without compromising on visual appearance
- Flexible offering and order engineering to meet customers' various needs

Overview of technical specifications

KONE TRANSITMASTER 140 BASIC DATA*				
Inclination	27.3°, 30°**			
Horizontal steps	2/2, 3/3, 4/4			
Transition radii (top/bottom)	1.5/1.0, 2.7/2.0 and 3.6/2.0			
Maximum rise	18 m			
Operational environment	Indoor, full-outdoor			
Step width	1000 mm			
Balustrade type	<ul> <li>10 mm tempered glass with offset handrail profile</li> <li>Brushed stainless steel solid inclined and solid vertical balustrade panels</li> <li>Balustrade extension of 400, 700 and 900 mm</li> </ul>			
Balustrade height	1000 mm, 1100 mm			
Speed	0.4 m/s with inverter, 0.5 m/s, 0.65 m/s and 0.75 m/s			
Step chains	Outside roller chains (Ø 100 x 25 mm)			
Duty cycle	20–24 hours/day****			
Typical service life	Up to 150,000 hours***			

\* Other custom-built specifications available on request

\*\* Other inclinations such as 24.5° are available on request

\*\*\* Actual service life is directly related to operation hours and load profile.

Contact your KONE representative for more information

\*\*\*\* 24 hours duty cycle is possible with additional maintenance

# ECO-EFFICIENCY

KONE firmly believes that sustainable buildings are our future. We are committed to helping customers achieve their environmental objectives by providing environmentally responsible products and services.

- Stand-by speed operation reduces the escalator speed when no passengers are traveling, thus further reducing energy consumption and increasing equipment lifetime.
- The availability of a lubrication-free step chain means no oil, a cleaner escalator and environment, reduced fire hazard, simpler cleaning and easier maintenance.
- Various LED lighting solutions allows an energy saving of up to 80% compared to conventional lighting.

- Regenerative solutions recover energy created when the escalator is used and feed it back into the system.
- All of our production operations are certified according to the ISO 14001 standard



# SAFETY OPTIONS

The standard safety features of the KONE TransitMaster 140 according to the EN 115-1:2008 + A1:2010 safety code are the following:

- Emergency stop buttons for passengers in the top left and bottom right handrail inlet front plates
- Auxiliary brake is standard for units above 6 m vertical rise and is available as an option for units below 6 m
- Broken step chain (chain tension) switches in the return station which stop the escalator in case of failure of the step chain
- Handrail inlet switches with contacts at the handrail inlets into the balustrade heads
- Comb plate impact device switches which stop the escalator in case objects become trapped between the comb teeth and the moving step band
- Step sag switches, which stop the escalator if a step sags by more than 5 mm before it enters the comb
- Step guards at the top and bottom
- Step band locking device

- Speed sensor system, which electronically monitors the motor for over/under speeds and step band reversal
- Motor thermal protection for temperature monitoring
- Main switch with thermal and magnetic release
- Stop switches for engineers' use within upper and lower end pits
- Sockets for inspection use installed in the upper and lower machine compartments
- Skirt deflector brushes
- Access cover contacts
- Handrail speed monitor
- Missing step monitor
- Diagnostic display

Other safety and monitoring functions, such as KONE Remote Monitoring and E-link, are available on request.



# **VISUAL OPTIONS**

#### ACCESS COVER



Stainless steel surface with punched diamond pattern (available in 304# and 443#)



Black painted stainless steel surface with punched diamond pattern (available in 304# and 443#). Floor numbering is available.



Natural ribbed aluminum



Ribbed aluminum with black grooves

#### СОМВ



Aluminum comb segments



Aluminum comb segments with yellow coating

#### SKIRT



Brushed satin stainless steel skirt with clear anti-friction coating



Sheet steel skirt with black antifriction coating

#### SKIRT BRUSH HOLDER



Clear anodized aluminum



Black anodized aluminum

#### FRONTPLATE



Satin polished stainless steel



Black plastic



Stainless steel frontplate for solid balustrades



Black plastic flat frontplate for solid balustrades

#### DECKING

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Silver powder coating (RAL9007)



Brushed satin stainless steel



Center decking in same material as decking

#### **BALUSTRADE JOINTS**



As standard, joints between glass balustrade panels are arranged perpendicular to the truss. Inclined panels are 1200 mm wide except for one make-up panel at the upper end which is used to compensate for the vertical rise.

#### BALUSTRADE



Clear glass balustrade panels



Glass balustrade and newel end with wheel



Brushed stainless steel solid inclined balustrade panels



Passenger fall protection barrier height up to 1300 mm. Recommended when a fall greater than 6 m is possible



The inclined panel widths can be equalized with joints arranged perpendicular to the floor or the truss.



Brushed stainless steel solid vertical balustrade panels



Balustrade extension of 400, 700 or 900 mm

#### HANDRAIL



Black



Green



Black with white demarcation inserts



Brown



Red



Beige



Blue



Grey

#### CLADDING



Grey primed sheet steel cladding (RAL7036) \*

Note:

- \* If needed this can be used for local on site decoration.
- \*\* The truss is designed to allow a maximum weight of 15 kg/m<sup>2</sup>.
- \*\*\* Cladding joints perpendicular to truss and floor available.



Brushed satin stainless steel cladding \*\*\*



Side cladding fitted by the customer \*\*

#### STEP COLOR



Silver aluminum



Black aluminum with metal color ribs

Grey powder coated sheet steel cladding (RAL7036) \*\*\*

#### STEP DEMARCATION



Yellow painted (RAL1004)



Yellow plastic insert (RAL1023)



Yellow painted with center line (RAL1004)

#### HORIZONTAL STEPS



2 horizontal steps



3 horizontal steps



4 horizontal steps

Note: If the vertical rise exceeds 6 m or the step speed exceeds 0.5 m/s, there must be a minimum of 3 horizontal steps at each landing (EN 115-1 compliance).

#### KONE MOVINGMEDIA<sup>™</sup> STEP







#### LED LIGHTING **Continuous LED handrail lighting**







Red

Red



Blue

Blue



Green

Continuous LED skirt lighting





White

White

Yellow

Yellow

#### LED skirt spot lighting LED cove lighting







Side cladding\*

#### LED options specification

#### LED handrail lighting

- Static continuous lighting
- Several color options available (see above)
- Àdd-on solution for existing units
- Only available with glass balustrade

#### LED skirt lighting

- Static continuous lighting
- Several color options available (see above)
- Only available with glass balustrade
- LED skirt spot lighting
- Decorative lighting
- White light
- Only available with glass balustrade





Soffit cladding\*

• Static continuous cove lighting,

• Can be installed to light up the soffit and/or

direct and indirect solutions

• Several color options available (white, blue, green, yellow and red)

• Round spot lighting in various layouts

(white, blue, green, yellow and red)

LED cove lighting

the side cladding

• Decorative lighting

• White light

LED comb light

LED soffit spot lighting

(single row, double row) Decorative lighting

• Static or flashing option

• Several color options available



Side and soffit cladding\*

# Green

#### LED soffit spot lighting



Soffit spot lighting

#### LED comb light\*



\* Same colour options as in continuous LED handrail and skirt lighting

#### ADDITIONAL LIGHTING



LED traffic lights located in the decking



Under step demarcation lighting

#### ADDITIONAL OPTIONS



Diagnostic display



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#### Architectural planning data

### $30^\circ$ inclination / 1.5 transition radii / 1000 mm step width / 2 or 3 horizontal steps at each landing







REACTION FORCE (KN)				
	R1	R2	RM1	RM2
Without intermediate support	6.0L / 1000 + 28	6.0L / 1000 + 8		
With one intermediate support	6.0M / 1000 + 28	6.0N / 1000 + 8	6.8L / 1000	
With two intermediate supports	6.0L1 / 1000 + 28	6.0L3 / 1000 + 8	6.8 (L1+L2) / 1000	6.8 (L2 + L3) / 1000



- All dimensions are in millimeters
- Maximum vertical rise:
   2 horizontal steps H = 6000 mm
   3 horizontal steps H = 18000 mm\*
- One intermediate support is required when the span (L) exceeds L = 16800 mm. Second intermediate support required when span (L) exceeds L = 30000 mm
- If intermediate support is required, please contact your KONE sales organization
- Truss extensions are required when either the rise requires the use of double drives or the use of inverter.
   For these dimensions please contact your local sales organization
- Additional cladding material maximum 15 kN/m<sup>2</sup>

#### Architectural planning data

### $30^\circ$ inclination / 2.7 transition radii / 1000 mm step width / 3 or 4 horizontal steps at each landing







REACTION FORCE (KN)				
	R1	R2	RM1	RM2
Without intermediate support	6.0L / 1000 + 28	6.0L / 1000 + 8	-	-
With one intermediate support	6.0M / 1000 + 28	6.0N / 1000 + 8	6.8L / 1000	-
With two intermediate supports	6.0L1 / 1000 + 28	6.0L3 / 1000 + 8	6.8 (L1+L2) / 1000	6.8 (L2 + L3) / 1000



- All dimensions are in millimeters
- Maximum vertical rise H = 18000 mm\*
- One intermediate support is required when the span (L) exceeds L= 16800 mm. Second intermediate support required when span (L) exceeds L= 30000 mm
- If intermediate support is required, please contact your KONE sales organization
- Truss extensions are required when either the rise requires the use of double drives or the use of inverter.
   For these dimensions please contact your local sales organization
- Additional cladding material maximum 15 kN/m<sup>2</sup>
- \* For rises above 18000 mm please contact your local KONE Sales organization.

Architectural planning data

 $30^\circ$  inclination /3.6 transition radii / 1000 mm step width / 3 or 4 horizontal steps at each landing







REACTION FORCE (KN)				
	R1	R2	RM1	RM2
Without intermediate support	6.0L / 1000 + 28	6.0L / 1000 + 8	-	-
With one intermediate support	6.0M / 1000 + 28	6.0N / 1000 + 8	6.8L / 1000	_
With two intermediate supports	6.0L1 / 1000 + 28	6.0L3 / 1000 + 8	6.8 (L1+L2) / 1000	6.8 (L2 + L3) / 1000



- All dimensions are in millimeters
- Maximum vertical rise H = 18000 mm\*
- One intermediate support is required when the span (L) exceeds L = 16800 mm. Second intermediate support required when span (L) exceeds L = 30000 mm
- If intermediate support is required, please contact your KONE sales organization
- Truss extensions are required when either the rise requires the use of double drives or the use of inverter.
   For these dimensions please contact your local sales organization
- Additional cladding material maximum 15 kN/m<sup>2</sup>
- \* For rises above 18000 mm please contact your local KONE Sales organization.

Architectural planning data

27.3° inclination / 2.7 transition radii / 1000 mm step width / 3 or 4 horizontal steps at each landing







REACTION FORCE (KN)				
	R1	R2	RM1	RM2
Without intermediate support	6.0L / 1000 + 28	6.0L / 1000 + 8	-	-
With one intermediate support	6.0M / 1000 + 28	6.0N / 1000 + 8	6.8L / 1000	_
With two intermediate supports	6.0L1 / 1000 + 28	6.0L3 / 1000 + 8	6.8 (L1+L2) / 1000	6.8 (L2 + L3) / 1000



- All dimensions are in millimeters
- Maximum vertical rise H = 18000 mm\*
- One intermediate support is required when the span (L) exceeds L = 16800 mm. Second intermediate support required when span (L) exceeds L = 30000 mm
- If intermediate support is required, please contact your KONE sales organization
- Truss extensions are required when either the rise requires the use of double drives or the use of inverter.
   For these dimensions please contact your local sales organization
- Additional cladding material maximum 15 kN/m<sup>2</sup>
- \* For rises above 18000 mm please contact your local KONE Sales organization.

#### Architectural planning data

### 27.3° inclination / 3.6 transition radii / 1000 mm step width / 3 or 4 horizontal steps at each landing







REACTION FORCE (KN)				
	R1	R2	RM1	RM2
Without intermediate support	6.0L / 1000 + 28	6.0L / 1000 + 8	-	-
With one intermediate support	6.0M / 1000 + 28	6.0N / 1000 + 8	6.8L / 1000	-
With two intermediate supports	6.0L1 / 1000 + 28	6.0L3 / 1000 + 8	6.8 (L1+L2) / 1000	6.8 (L2 + L3) / 1000



- All dimensions are in millimeters
- Maximum vertical rise H = 18000 mm\*
- One intermediate support is required when the span
   (L) exceeds L = 16800 mm. Second intermediate support required when span (L) exceeds L = 30000 mm
- If intermediate support is required, please contact your KONE sales organization
- Truss extensions are required when either the rise requires the use of double drives or the use of inverter.
   For these dimensions please contact your local sales organization
- Additional cladding material maximum 15 kN/m<sup>2</sup>
- \* For rises above 18000 mm please contact your local KONE Sales organization.

If you would like to obtain the exact dimensions for your specific project, we recommend you use the Escalator Design Tools, which can be found on www.kone.com.

# **BALUSTRADE SECTION**

Solid inclined and glass balustrade









KONE provides innovative and eco-efficient solutions for elevators, escalators, automatic building doors and the systems that integrate them with today's intelligent buildings.

We support our customers every step of the way; from design, manufacturing and installation to maintenance and modernization. KONE is a global leader in helping our customers manage the smooth flow of people and goods throughout their buildings.

Our commitment to customers is present in all KONE solutions. This makes us a reliable partner throughout the life cycle of the building. We challenge the conventional wisdom of the industry. We are fast, flexible, and we have a well-deserved reputation as a technology leader, with such innovations as KONE MonoSpace<sup>®</sup>, KONE NanoSpace<sup>™</sup> and KONE UltraRope<sup>®</sup>.

KONE employs close to 50,000 dedicated experts to serve you globally and locally.

#### **KONE** Corporation

#### www.kone.com

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