

OPTIONS AND PLANNING DIMENSIONS

KONE TravelMaster™ 110 escalators

KONE TravelMaster™ product range

Well designed and manufactured escalators are a must for today's highly demanding public areas. They are key to ensuring the smooth, uninterrupted 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 TravelMaster escalator and autowalk range is ideal for new installations, and incorporates two specific models:

- **TravelMaster 110 escalator**
- **TravelMaster 115 inclined autowalk**

They are specifically designed to meet the exact demands and needs of the commercial market sector, whether it's a low rise escalator you are looking for, or an inclined autowalk.

TravelMaster™ 110 – the best solution for commercial buildings

The KONE TravelMaster 110 is a commercial escalator targeted primarily towards the retail segment – supermarkets, hypermarkets, department stores and shopping centers. Here it is part of the total KONE solution offering together with other KONE products such as:

- Commercial inclined autowalks ---------- **e.g. KONE TravelMaster™ 115**
- Passenger elevators ---------- **e.g. KONE MonoSpace®**
- Goods elevators ---------- **e.g. KONE TranSys™**
- Scenic elevators ---------- **based on KONE MonoSpace® or KONE MonoSpace® Special**
- Modernization solutions ---------- **e.g. KONE EcoMod™ 2**
- Automatic building doors

Secondary focus areas for the KONE TravelMaster 110 include airports, hotels, hospitals and offices.

The KONE TravelMaster 110 is designed, from both a technical and visual point of view, to fulfill the main customer requirements of the target segments:

- Cost competitiveness
- High quality in terms of technical performance and visual appearance
- Large standard offering with some engineering flexibility
- Elegant and modern design which is harmonised across our product portfolio

Overview of technical specifications

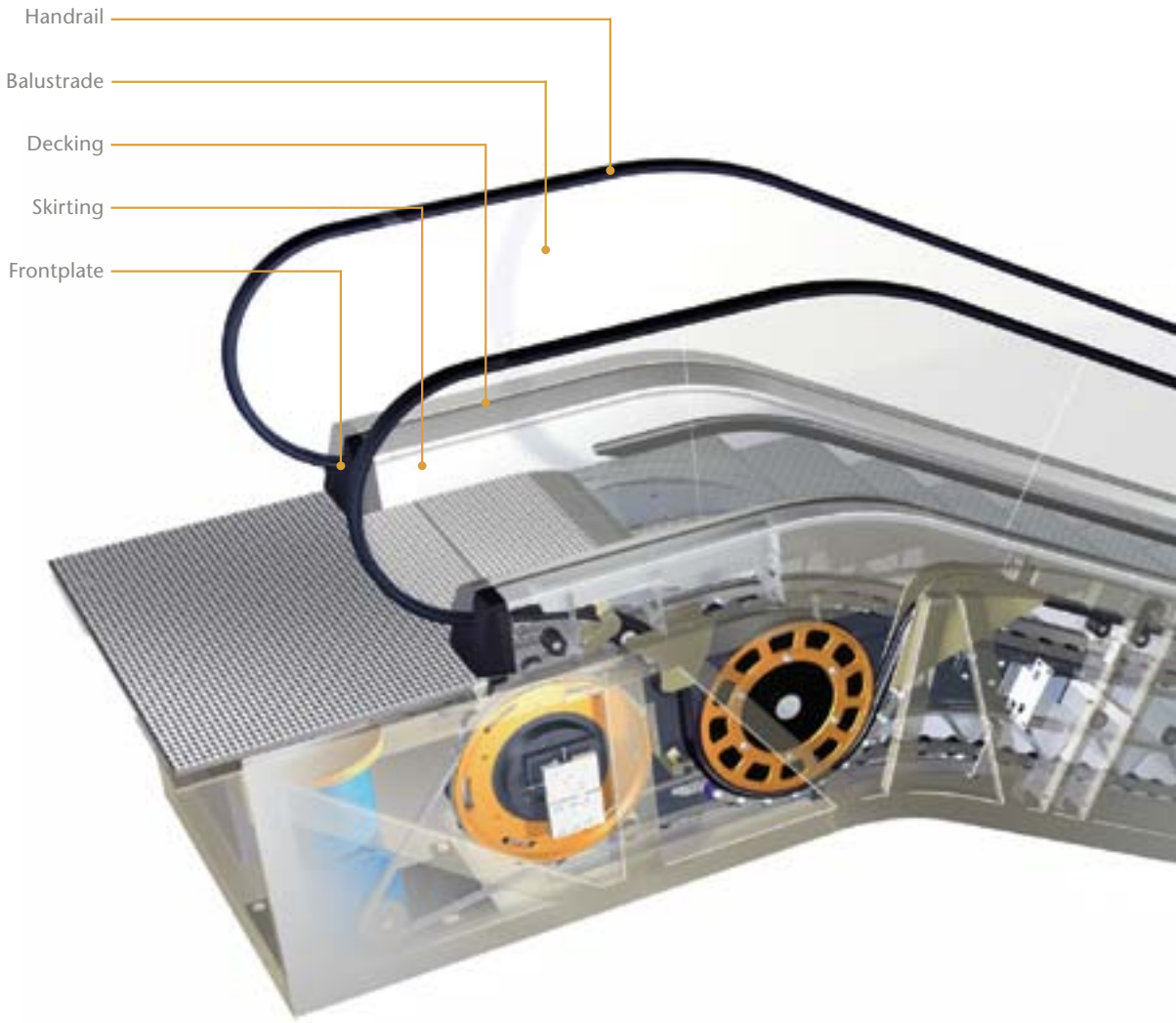
KONE TravelMaster 110 basic data	
Inclination	30° or 35°
Horizontal steps	2/2 or 3/3
Transition radii (top/bottom)	1.0/1.0 and 1.5/1.0
Maximum rise	9.5 m
Operational environment	Indoor, semi-outdoor, full-outdoor
Step width	600 mm, 800 mm, 1000 mm
Balustrade type	• 10 mm tempered glass with slim handrail profile • Stainless steel sandwich panel balustrade • Balustrade extension of 400 mm or 700 mm
Balustrade height	900 mm, 1000 mm, 1100 mm
Speed	0.4 m/s with inverter, 0.5m/s
Step chains	Inside roller chains
Duty cycle	12-16 hours/day
Typical service life	100,000 hour*

* Actual service life is directly related to operation hours and load profile. Contact your KONE representative for more information

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.
- Escalator packaging and timber protection are examples of our commitment to using wood taken from sustainable forests.
- Reduced escalator running speed of 0.4 m/s not only enhances passenger safety but also saves up to 16% energy depending on passenger traffic.
- 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 black 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 TravelMaster 110 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.

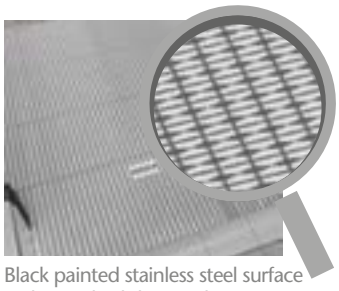


Visual options

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

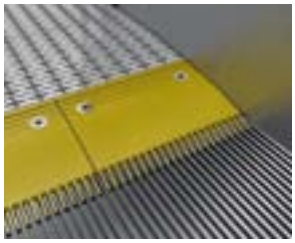


Ribbed aluminum with black grooves

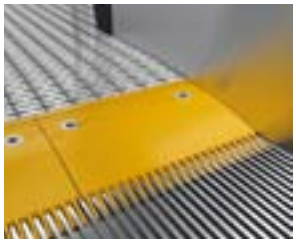
Comb



Aluminum comb segments



Aluminum comb segments with yellow coating



Yellow plastic comb segments



Black plastic comb segments

Skirt



Brushed satin stainless steel skirt with clear anti-friction coating



Sheet steel skirt with black anti-friction coating

Skirt brush holder



Clear anodized aluminum



Black anodized aluminum

Frontplate



Satin polished stainless steel



Black plastic

Decking

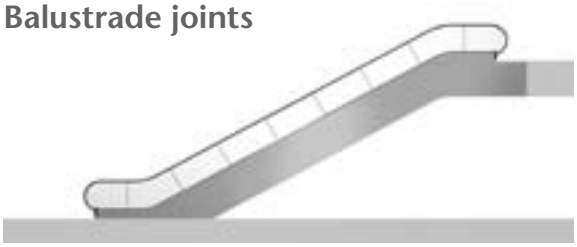

Silver powder coating (RAL9007)


Natural anodized aluminum


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.


Optional:

- The inclined panel widths can be equalized with joints arranged perpendicular to the floor or the truss.
- The balustrade panel joints can be perpendicular to the floor or the truss with even length glass panels which are aligned with the decking.

Balustrade


Clear glass balustrade panels


Stainless steel sandwich panels


Balustrade extension of 400 or 700 mm


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

Handrail


Black


Black with white demarcation inserts


Red


Blue


Green


Brown


Beige


Grey

Cladding



Grey primed sheet steel cladding (RAL7036) *



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



Brushed satin stainless steel cladding *****



Glass side cladding **/***



Side cladding fitted by the customer ****

Note:

* If needed this can be used for local on site decoration.

** It is recommended to have a lubrication-free chain with glass side cladding.
Options such as a painted truss in various colors as well as internal lighting are available.

*** Glass cladding is not available for outdoor application.

**** The truss is designed to allow a maximum weight of 15 kg/m².

***** Cladding joints perpendicular to truss and floor available.

Step color



Silver aluminum



Black aluminum with metal color ribs

Step demarcation



Yellow painted (RAL1004)



Yellow plastic insert (RAL1023)



Yellow painted with center line (RAL1004)

Horizontal steps



2 horizontal steps



3 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 compliance).

KONE MovingMedia™ step







MovingMedia distribution:
One sign on every step, every six steps or as specified by customers

LED lighting

Continuous LED handrail lighting


White


Yellow


Red


Blue


Green

Continuous LED skirt lighting


White


Yellow


Red


Blue


Green

LED skirt spot lighting


LED skirt spotlighting

LED cove lighting


Side cladding*


Soffit cladding*


Side and soffit cladding*

LED soffit spot lighting


Soffit spot lighting

LED options specification

LED handrail lighting
- Static continuous lighting
- Several color options available (see above)
- Add-on solution for existing units

LED skirt lighting
- Static continuous lighting
- Several color options available (see above)

LED skirt spot lighting
- Decorative lighting
- White light

LED cove lighting
- Static continuous cove lighting, direct and indirect solutions
- Can be installed to light up the soffit and/or the side cladding
- Several color options available (white, blue, green, yellow and red)
- Decorative lighting

LED soffit spot lighting
- Round spot lighting in various layouts (single row, double row)
- Decorative lighting
- White light

LED comb light
- Static or flashing option
- Several color options available (white, blue, green, yellow and red)

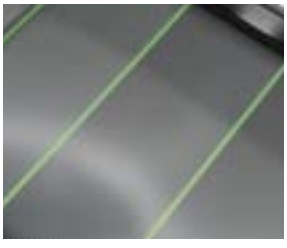
LED comb light*



* 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

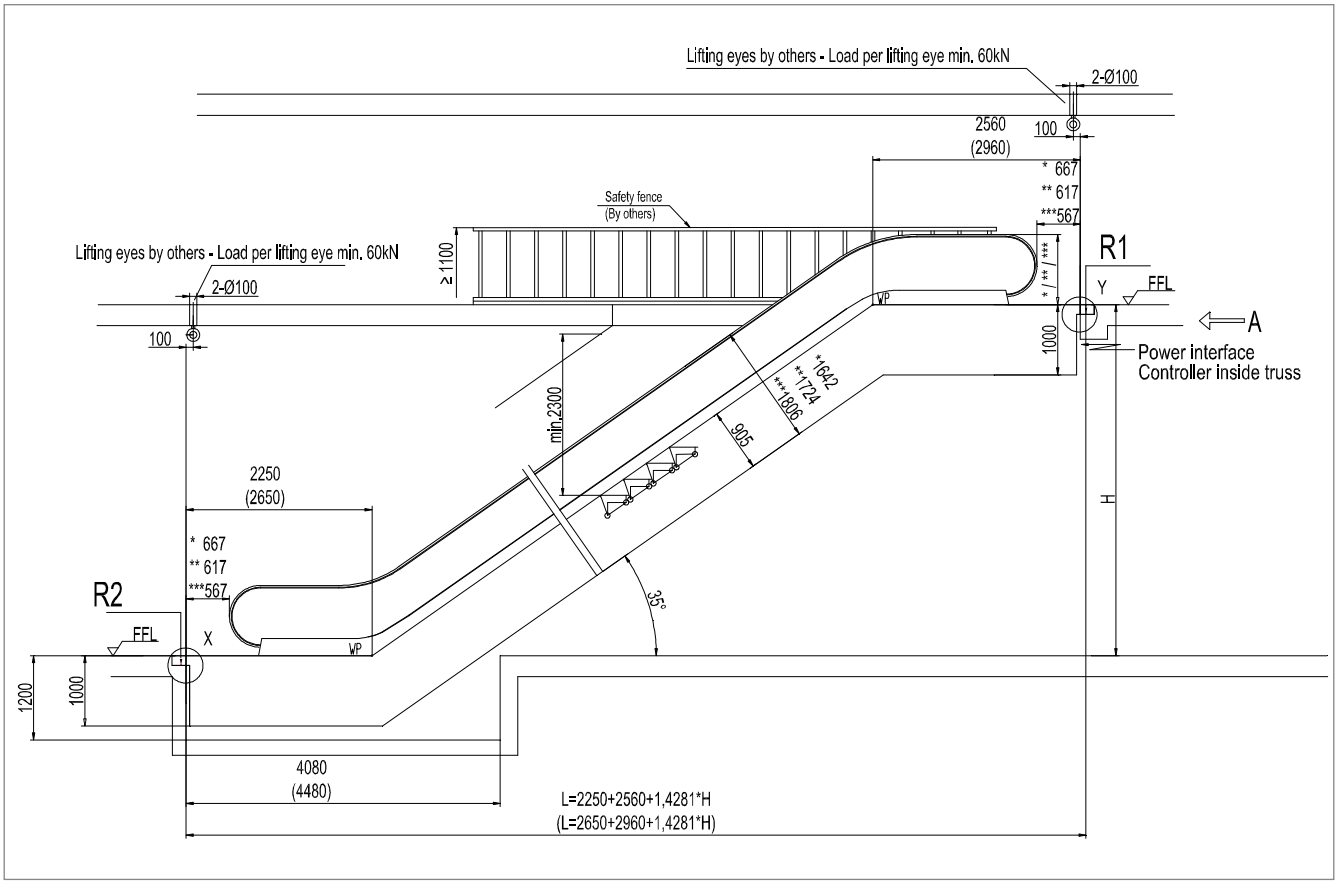

Diagnostic display

KONE TravelMaster™ 110 planning dimensions

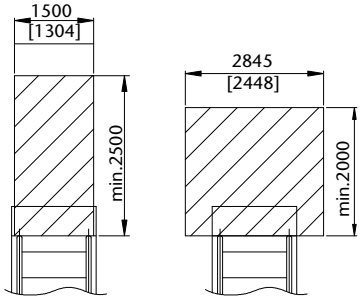
Architectural planning data

35° inclination / 1.0 transition radii / 2 or 3 horizontal steps at each landing / vertical rise up to 6 m

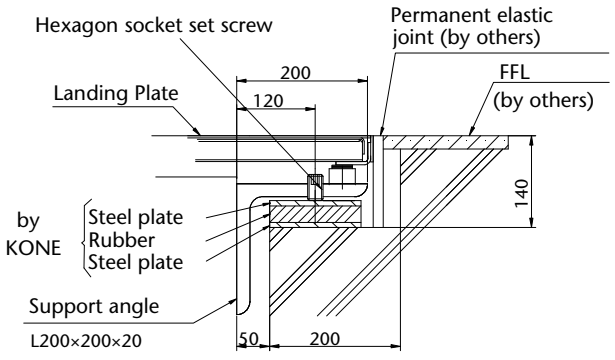
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Passenger Circulation Area Requirements

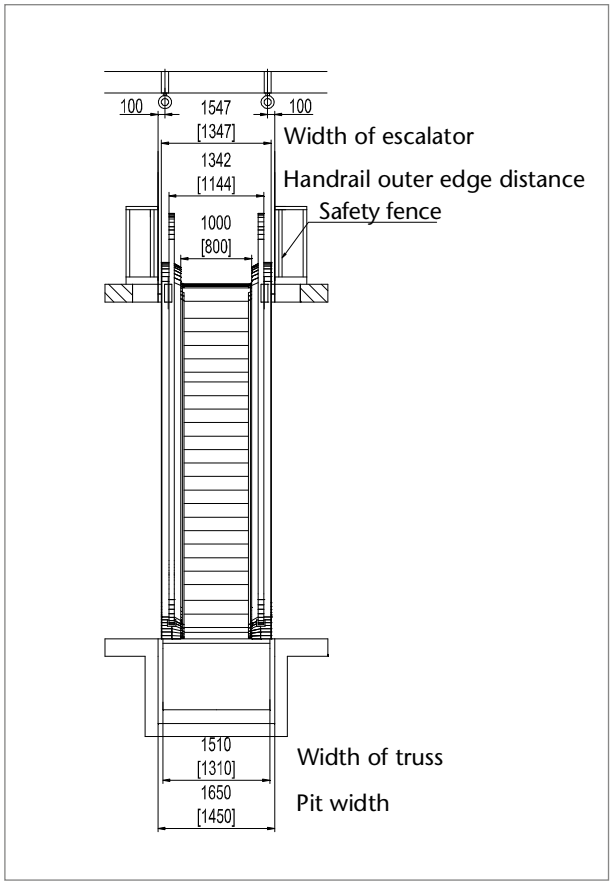


Detail Y (Mirror image of X)



Reaction force (kN)				
	800 mm step width		1000 mm step width	
2 steps	R1=4.8L/1000 + 11	R2=4.8L/1000 + 2.5	R1=5.5L/1000 + 11	R2=5.5L/1000 + 2.6
3 steps	R1=4.8L/1000 + 11.3	R2=4.8L/1000 + 3.1	R1=5.5L/1000 + 11.9	R2=5.5L/1000 + 3.3

[1)] Other local codes dimensional requirements are available upon request, please contact your local KONE Sales representative for more information.



- All dimensions are in millimeters
- Maximum vertical rise: H = 6000 mm
- Upper truss extension maximum 700 mm
- Lower truss extension maximum 700 mm
- Additional cladding material maximum 15 kg/m^2
- (XXX) = Three horizontal steps

  * = Balustrade height 900 mm
  ** = Balustrade height 1000 mm
  *** = Balustrade height 1100 mm
- (XXX) = Step width 800 mm
- For escalator with step width of 600 mm please contact your KONE sales office

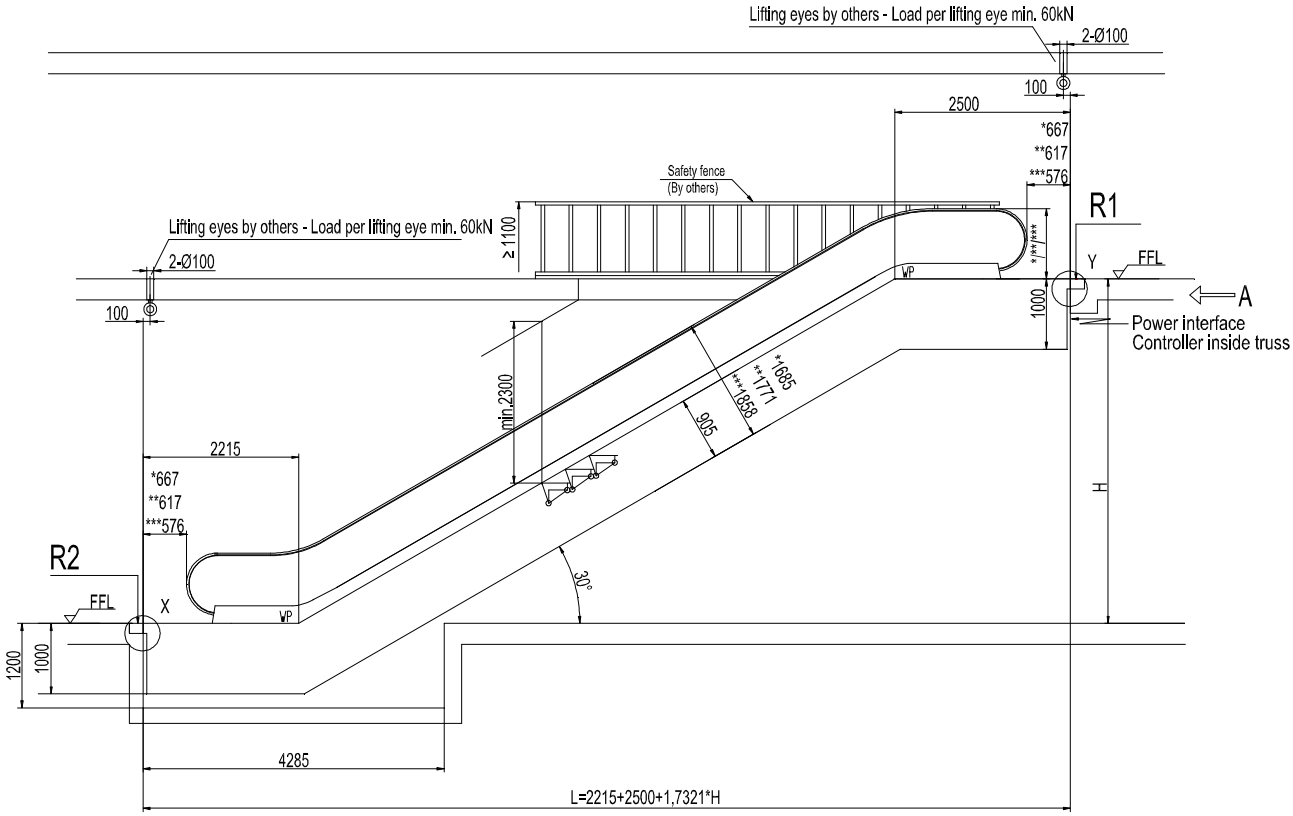
Note:
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KONE TravelMaster™ 110 planning dimensions

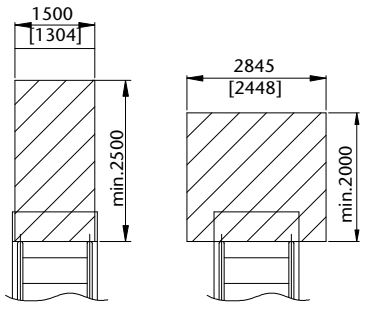
Architectural planning data

30° inclination / 1.0 transition radii / 2 horizontal steps at each landing / vertical rise up to 6 m

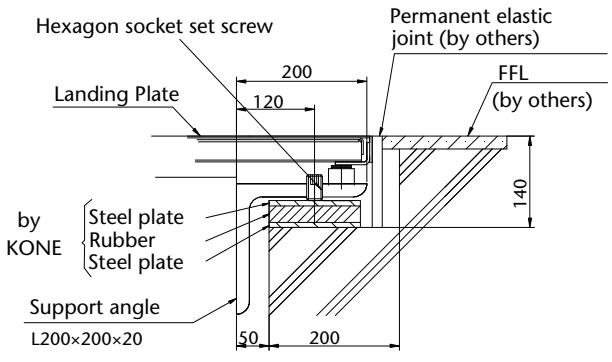
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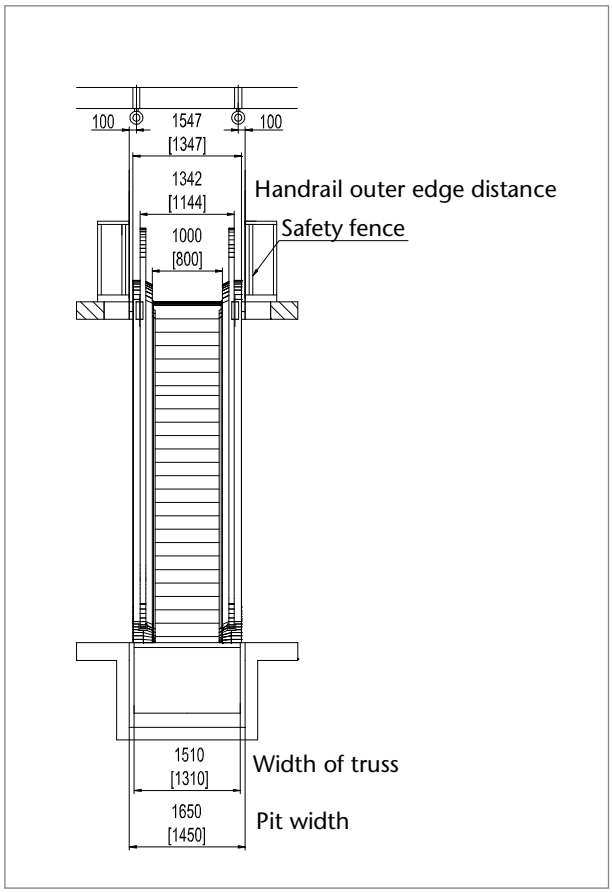


Detail Y (Mirror image of X)



Reaction force (kN)				
	800 mm step width		1000 mm step width	
2 steps	R1=4.8L/1000 + 10.4	R1=4.8L/1000 + 2.5	R1=5.5L/1000 + 11	R2=5.5L/1000 + 2.6

[1)] Other local codes dimensional requirements are available upon request, please contact your local KONE Sales representative for more information.



- All dimensions are in millimeters
- Maximum vertical rise: H = 6000 mm
- Upper truss extension maximum 700 mm
- Lower truss extension maximum 700 mm
- Additional cladding material maximum 15 kg/m^2

  * = Balustrade height 900 mm
  ** = Balustrade height 1000 mm
  *** = Balustrade height 1100 mm

- (XXX) = Step width 800 mm
- For escalator with step width of 600 mm please contact your KONE sales office

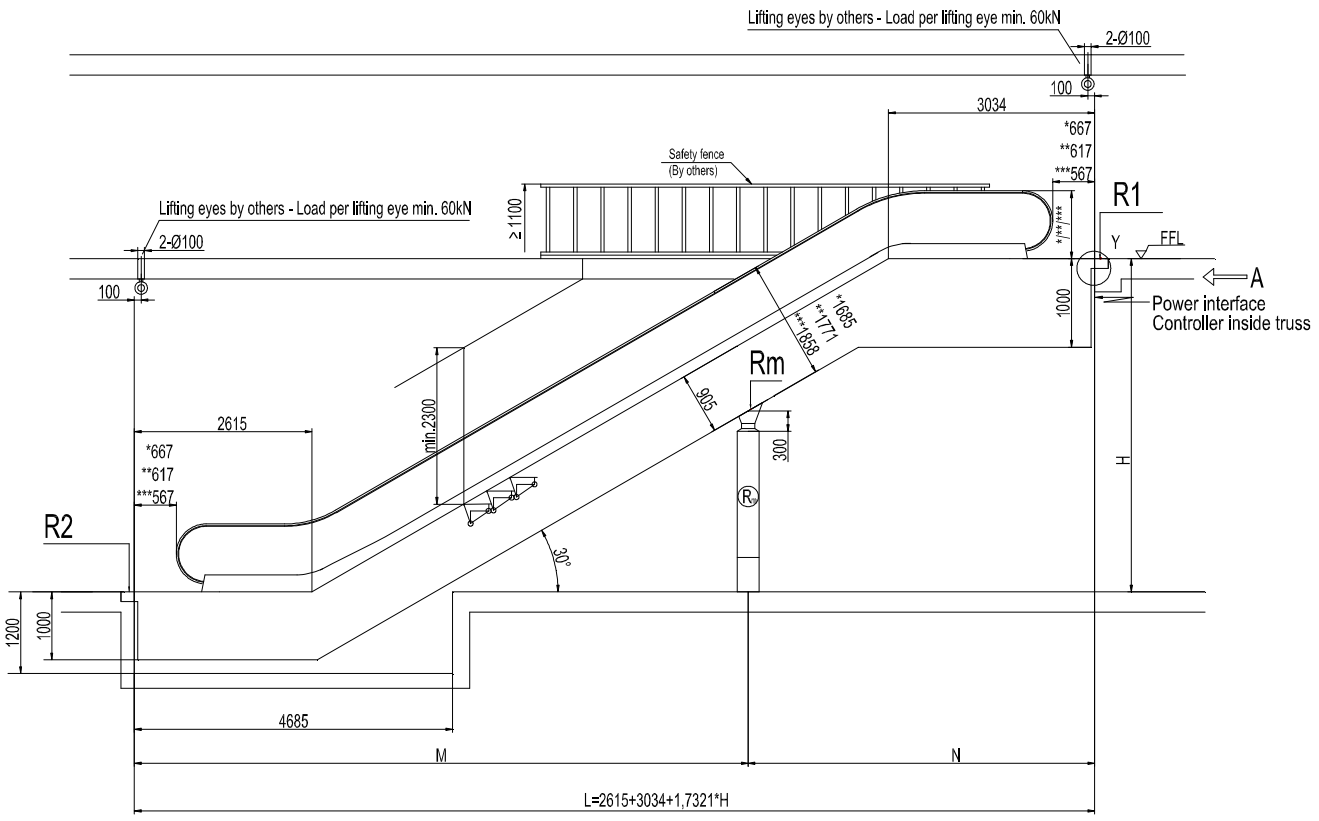
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KONE TravelMaster™ 110 planning dimensions

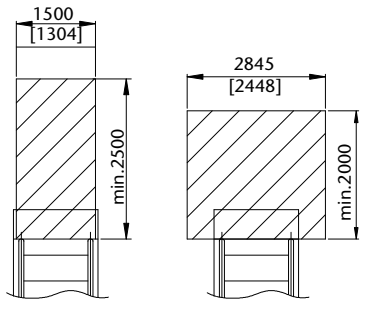
Architectural planning data

30° inclination / 1.5 transition radii / 3 horizontal steps at each landing / vertical rise up to 6 m

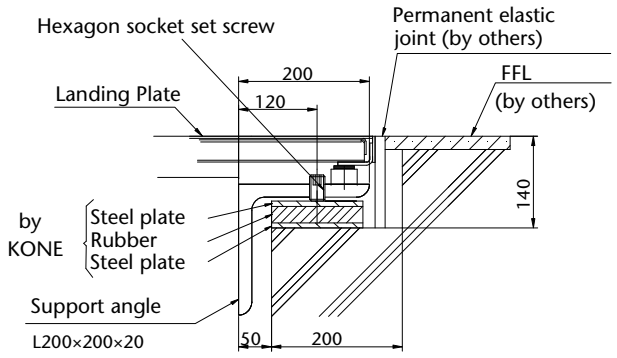
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Passenger Circulation Area Requirements

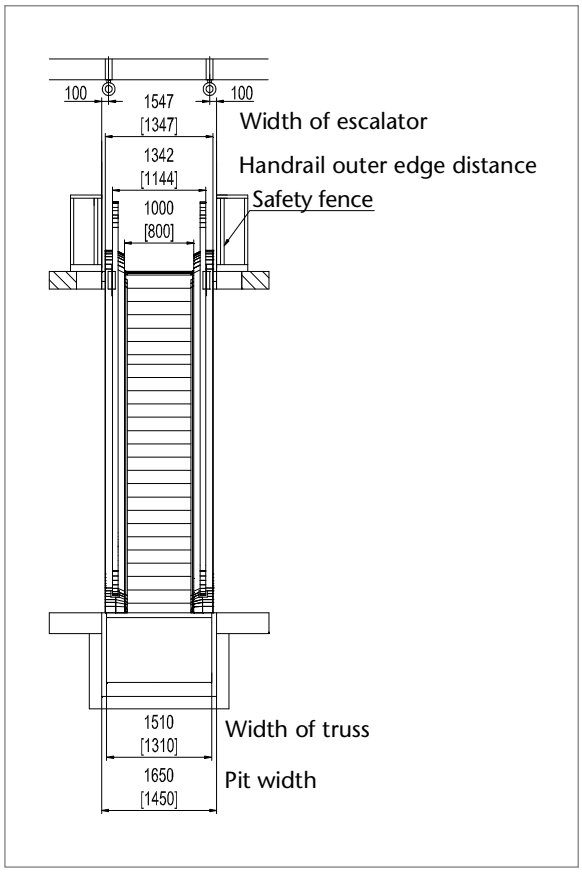


Detail Y (Mirror image of X)



Reaction force (kN)				
	800 mm step width		1000 mm step width	
L > 16370 mm	R1=4.8*N	R2=4.8*M	R1=4*N	R2=4*M
	Rm=5.5L/1000 + 38		Rm=5.5L/1000 + 38	
L ≤ 16370 mm	R1=4.8L/1000 + 11.3	R2=4.8L/1000 + 3.1	R1=5.5L/1000 + 11.9	R2=5.5L/1000 + 3.3

[1)] Other local codes dimensional requirements are available upon request, please contact your local KONE Sales representative for more information.



Position of intermediate support	
Span (mm)	**M (mm)**
16371 - 19330	9053 + X
19331 - 21410	10092 + X
21441 - 23490	11131 + X

X = truss extension at bottom

- All dimensions are in millimeters
- Maximum vertical rise: H = 6000 mm
- Upper truss extension maximum 700 mm
- Lower truss extension maximum 700 mm
- Intermediate support starting from L > 16370 mm
- Additional cladding material maximum 15 kg/m^2

  * = Balustrade height 900 mm
  ** = Balustrade height 1000 mm
  *** = Balustrade height 1100 mm
- (XXX) = Step width 800 mm
- For escalator with step width of 600 mm please contact your KONE sales office

Note:
There is a possibility of having an escalator without intermediate support however a reinforced truss is required. Please contact KONE for more dimensional information.

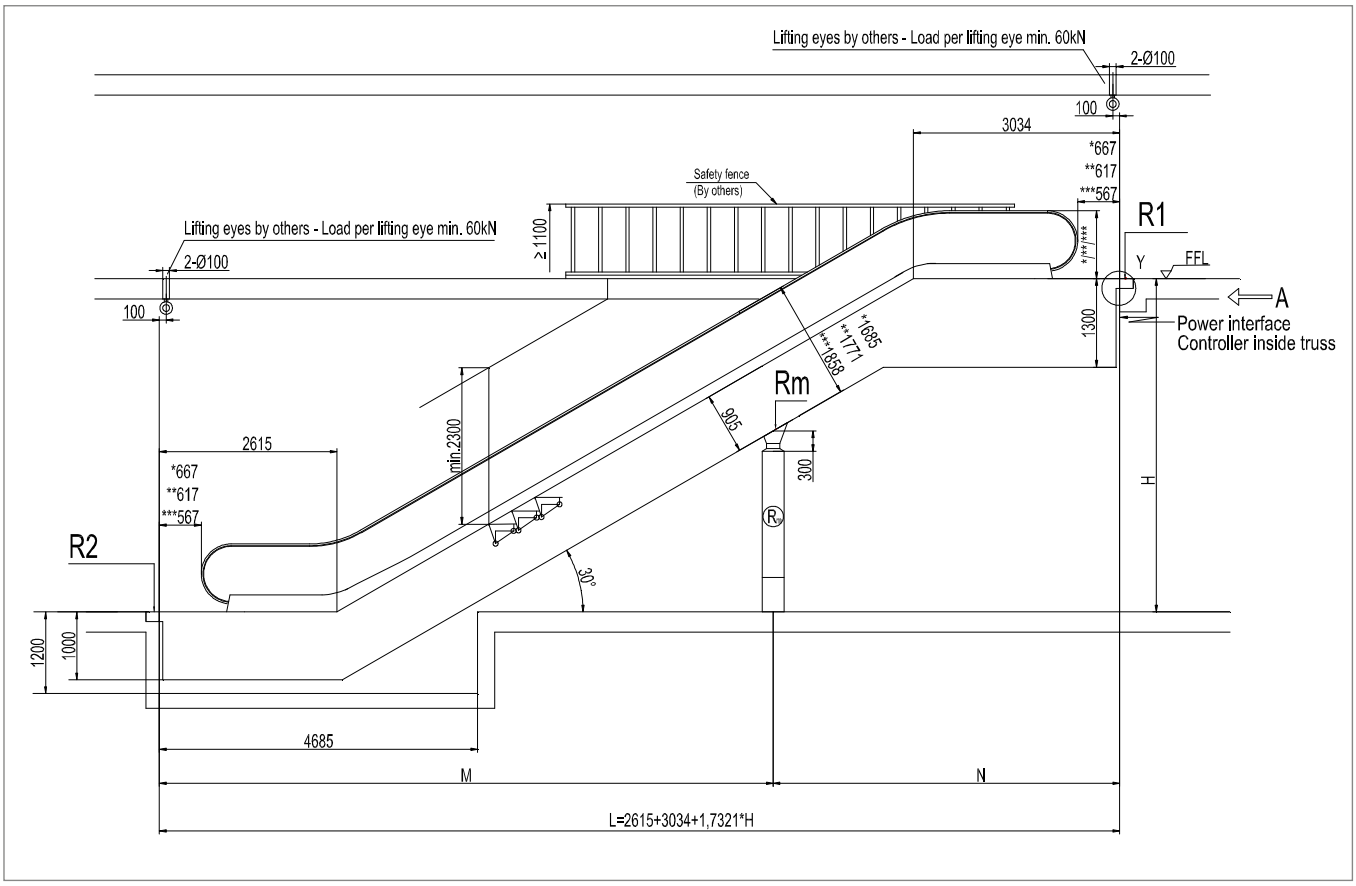
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KONE TravelMaster™ 110 planning dimensions

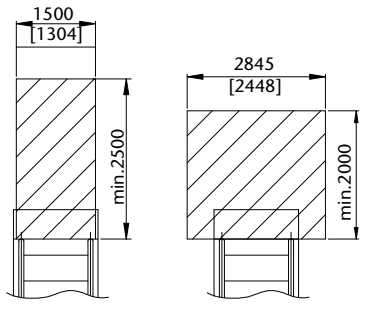
Architectural planning data

30° inclination / 1.5 transition radii / 3 horizontal steps at each landing / vertical rise from 6 m – 9.5 m

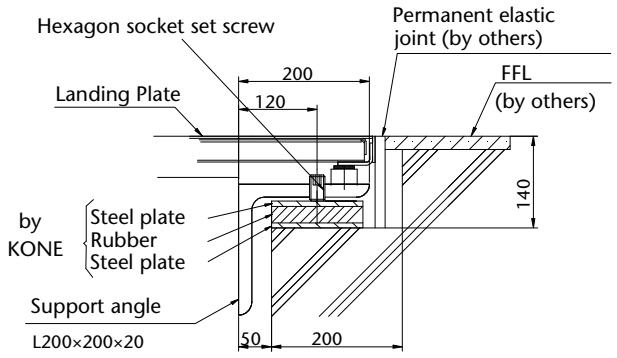
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Passenger Circulation Area Requirements

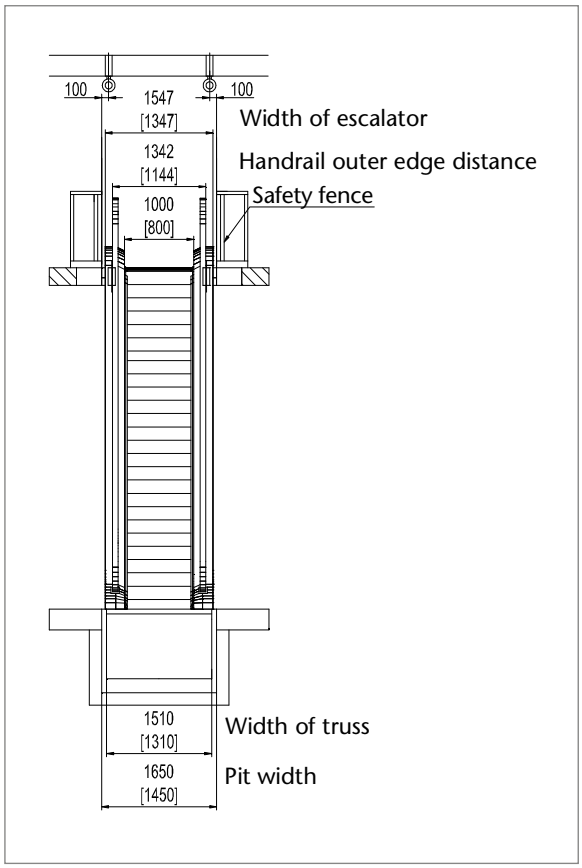


Detail Y (Mirror image of X)



Reaction force (kN)				
	800 mm step width		1000 mm step width	
L > 16370 mm	R1=4.8*N	R2=4.8*M	R1=4*N	R2=4*M
	Rm=5.5L/1000 + 38		Rm=5.5L/1000 + 38	
L ≤ 16370 mm	R1=4.8L/1000 + 11.3	R2=4.8L/1000 + 3.1	R1=5.5L/1000 + 11.9	R2=5.5L/1000 + 3.3

[1)] Other local codes dimensional requirements are available upon request, please contact your local KONE Sales representative for more information.



Position of intermediate support	
Span (mm)	**M (mm)**
16371 - 19330	9053 + X
19331 - 21410	10092 + X
21441 - 23490	11131 + X

X = truss extension at bottom

- All dimensions are in millimeters
- Maximum vertical rise: H = From 6 m to 9.5 m
- Upper truss extension maximum 700 mm
- Lower truss extension maximum 700 mm
- Intermediate support starting from L > 16370 mm
- Additional cladding material maximum 15 kg/m^2

  * = Balustrade height 900 mm
  ** = Balustrade height 1000 mm
  *** = Balustrade height 1100 mm
- (XXX) = Step width 800 mm
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KONE provides innovative and eco-efficient solutions for elevators, escalators and automatic building doors. 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® KONE MaxiSpace™, and KONE InnoTrack™. You can experience these innovations in architectural landmarks such as the Trump Tower in Chicago, the 30 St Mary Axe building in London, the Schiphol Airport in Amsterdam and the Beijing National Grand Theatre in China.

KONE employs approximately 34,000 dedicated experts to serve you globally and locally in over 50 countries.

KONE Corporation
www.kone.com

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7281