

TRANSITMASTER™ 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:

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 | 10 mm tempered glass with offset handrail profile Brushed stainless steel solid inclined and solid vertical balustrade panels Balustrade extension of 400, 700 and 900 mm | | | |
| 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

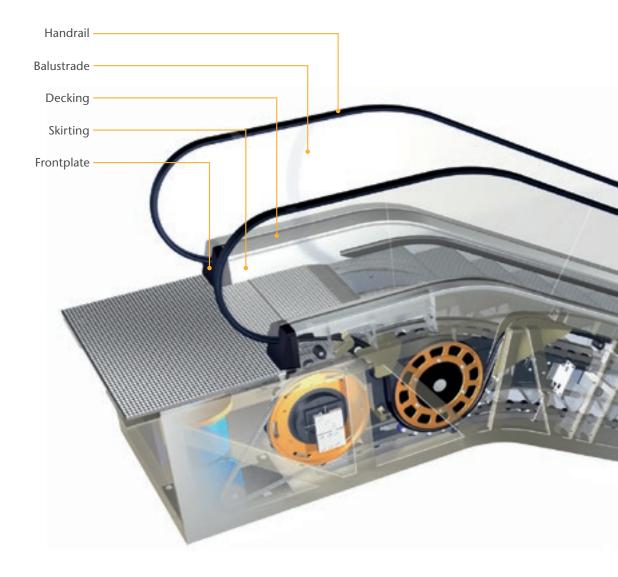
^{**** 24} hours duty cycle is possible with additional maintenance

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



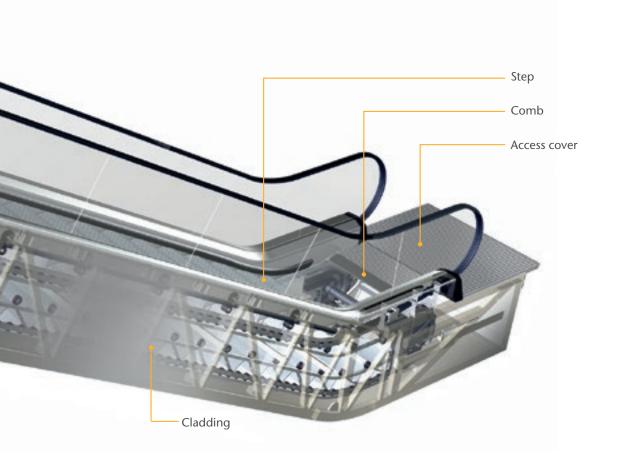
SAFETY OPTIONS

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.

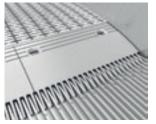


Natural ribbed aluminum

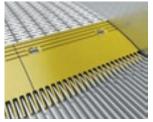


Ribbed aluminum with black grooves

COMB



Aluminum comb segments



Aluminum comb segments with yellow coating

SKIRT

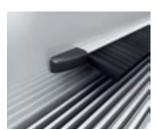


Brushed satin stainless steel skirt with clear anti-friction coating

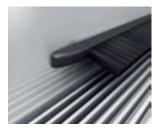


Sheet steel skirt with black antifriction coating

SKIRT BRUSH HOLDER

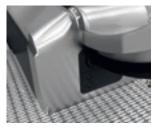


Clear anodized aluminum



Black anodized aluminum

FRONTPLATE



Satin polished stainless steel



Black plastic



Stainless steel frontplate for solid balustrades



Black plastic flat frontplate for solid balustrades

DECKING



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.



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

BALUSTRADE



Clear glass balustrade panels



Brushed stainless steel solid inclined balustrade panels



Brushed stainless steel solid vertical balustrade panels



Balustrade extension of 400, 700 or 900 mm



Glass balustrade and newel end with wheel



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



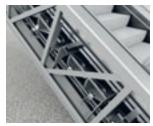
Grey primed sheet steel cladding (RAL7036) *



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



Brushed satin stainless steel cladding ***



Side cladding fitted by the customer **

Note:

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



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™ STEP



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







LED LIGHTING

Continuous LED handrail lighting



White

Yellow







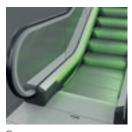
Continuous LED skirt lighting











LED skirt spot lighting LED cove lighting









LED soffit spot lighting

LED options specification

LED handrail lighting

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

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)

Soffit spot lighting

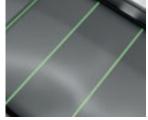


* Same colour options as in continuous LED handrail and skirt lighting

ADDITIONAL LIGHTING



LED traffic lights located in the decking



Under step demarcation lighting

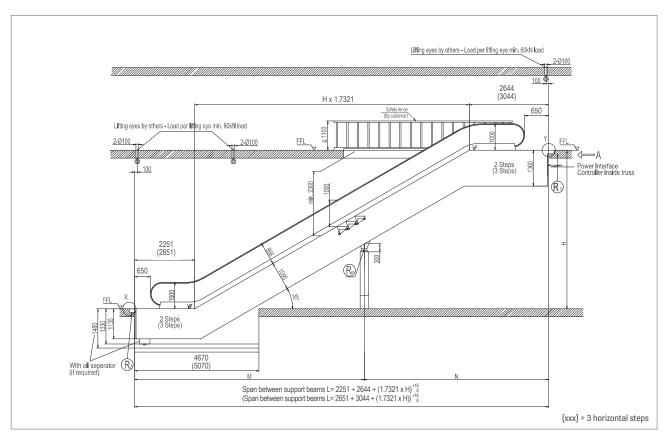
ADDITIONAL OPTIONS

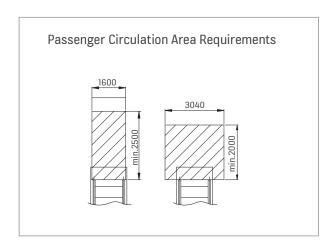


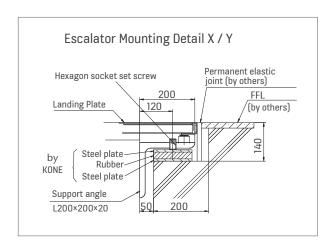
Diagnostic display

Architectural planning data

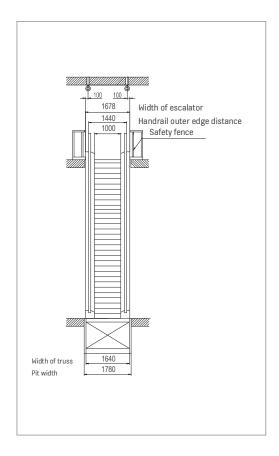
30° inclination / 1.5 transition radii / 1000 mm step width / 2 or 3 horizontal steps at each landing







| 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 |

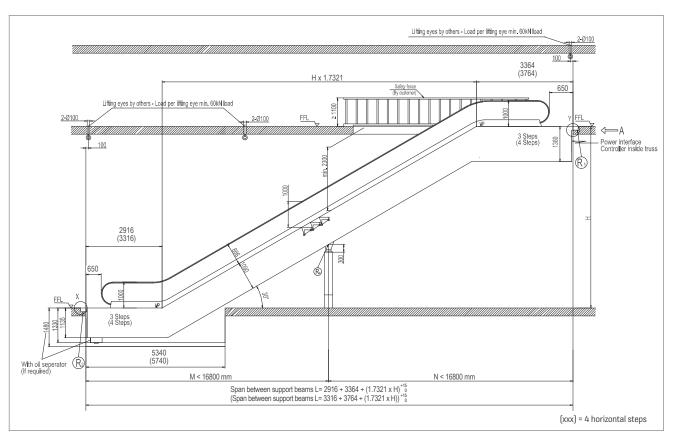


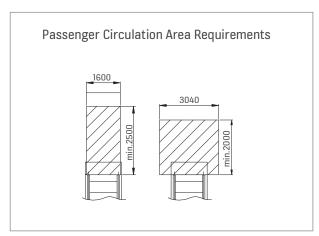
- All dimensions are in millimeters
- Maximum vertical rise:
 2 horizontal steps H = 6000 mm
 3 horizontal steps H = 18000 mm*
- One intermediate support is required when the span
 (L) exceeds L = 16800 mm. Second intermediate support required when span (L) exceeds L = 30000 mm
- If intermediate support 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/m²

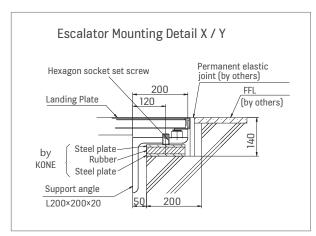
Note:

Architectural planning data

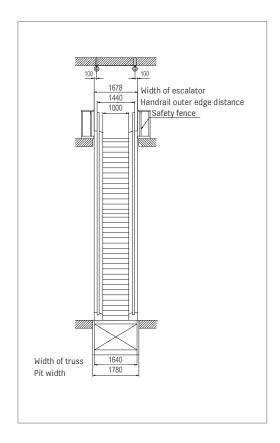
30° inclination / 2.7 transition radii / 1000 mm step width / 3 or 4 horizontal steps at each landing







| 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 |

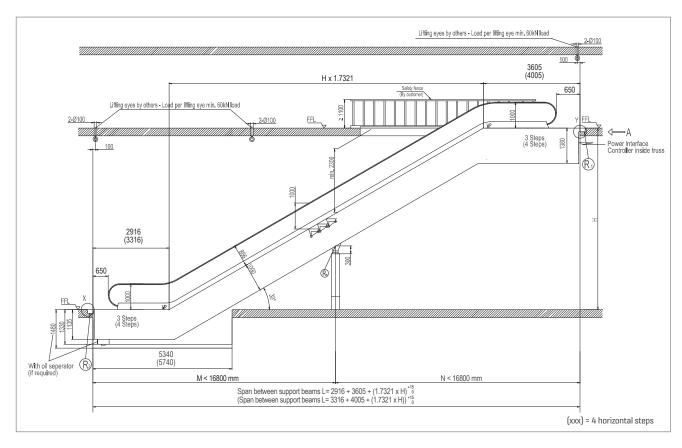


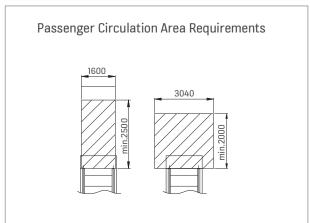
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- Truss extensions are required when either the rise requires the use of double drives or the use of inverter.
 For these dimensions please contact your local sales organization
- Additional cladding material maximum 15 kN/m²
- * For rises above 18000 mm please contact your local KONE Sales organization.

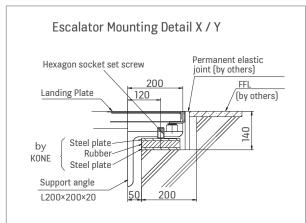
Note:

Architectural planning data

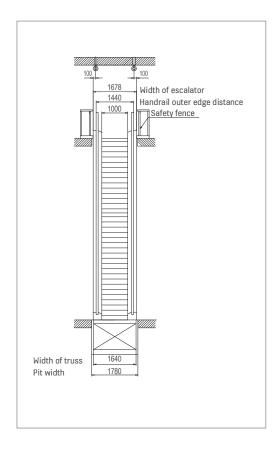
30° inclination /3.6 transition radii / 1000 mm step width / 3 or 4 horizontal steps at each landing







| 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 |



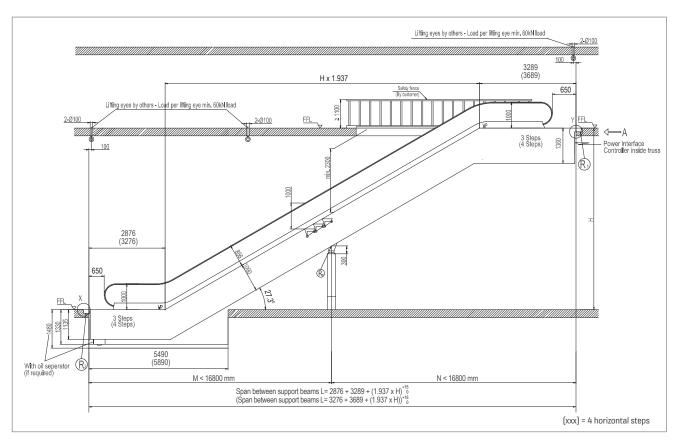
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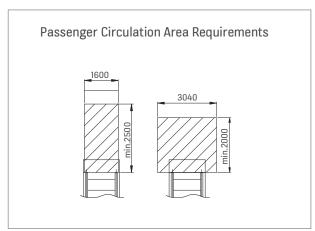
Note:

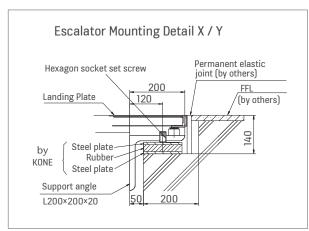
KONE TRANSITMASTER[™] 140 PLANNING DIMENSIONS

Architectural planning data

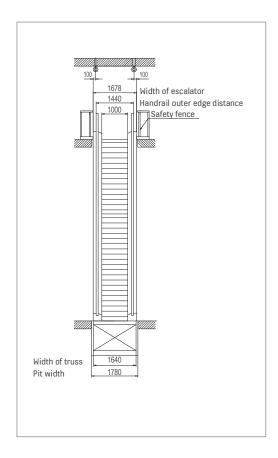
27.3° inclination / 2.7 transition radii / 1000 mm step width / 3 or 4 horizontal steps at each landing







| 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 |

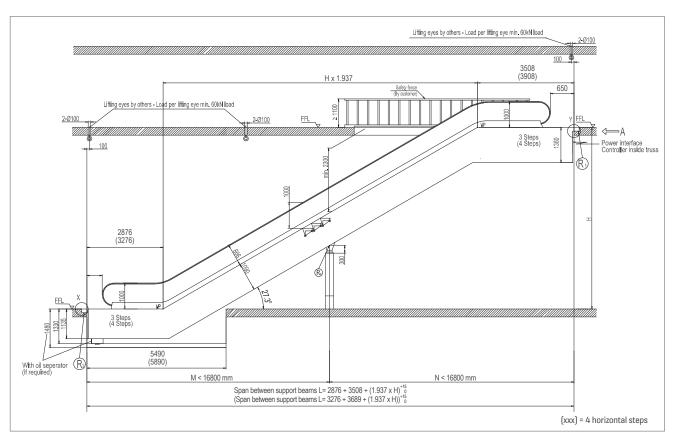


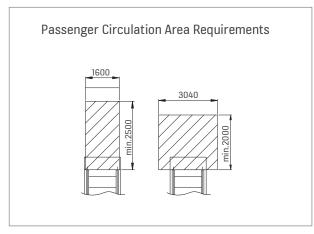
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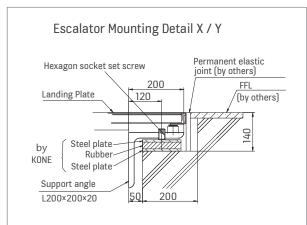
Note

Architectural planning data

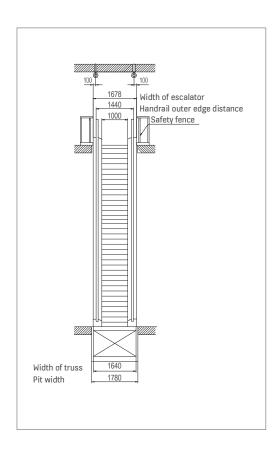
27.3° inclination / 3.6 transition radii / 1000 mm step width / 3 or 4 horizontal steps at each landing







| 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 |



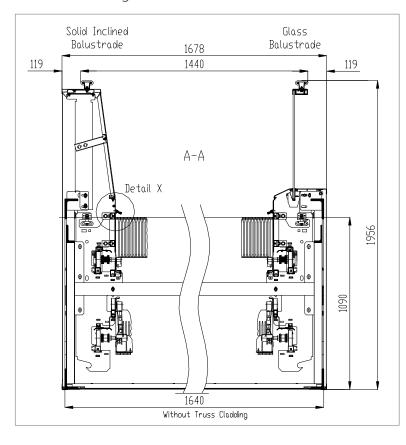
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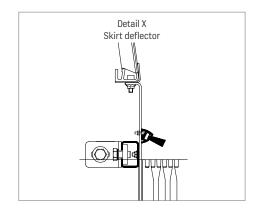
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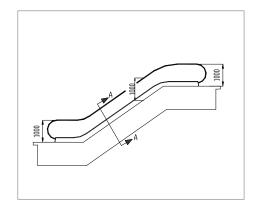
If you would like to obtain the exact dimensions for your specific project, we recommend you use the Escalator Design Tools, which can be found on www.kone.com.

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[®], KONE NanoSpace^{\mathbb{T}} and KONE UltraRope^{\mathbb{S}}.

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

KONE Corporation www.kone.com