

**Range**

**Escalator  
Moving walks**













## Superb, artistry, exquisite escalator, moving walks

Sodimas serial escalator and moving walks use the human design ideas. It integrates aesthetic, safety and environmental protection into one. It provides vast customers base with the designed outline, the reliable quality, the outstanding performance.

- The truss adopts the robotic welding technology greatly enhances the manufacturing process. It is high quality, and it is sturdy and durable, beauty and elegance.
- The integral aluminium frontier plate is tough and rugged, stylish and lightweight, and easy for maintenance.
- The diameter of the contact roller is  $\geq 70$ mm. This can effectively reduce the roller pressure, and improve the step chain breaking force.
- The B-type escalator adopts the stylish and beautiful stainless handrail bracket suitable for large lifting heights.
- Outside the skirting panel, there is a transparent friction-reducing coating, effectively reducing the friction loss between the step and the skirting panel.
- The wedge has a spring structure and glass bracket. By tightening the spring, users can ensure that the wedge and glass are closely laminated, which is sturdy and steady and easy to be installed.
- According to EN115-2010, Directive machine 2006/42/EC



Marked



The diameter of the contact roller increases



Reduce roller pressure



Step chain breaking force increase greatly



Safety factor improves



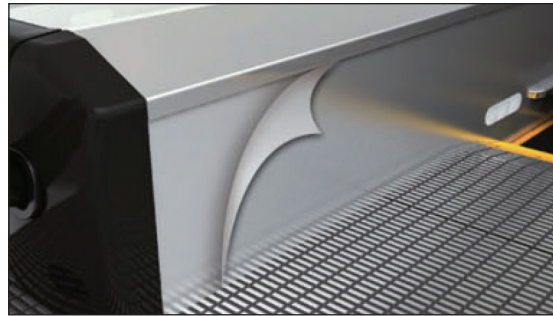


## ENS800 escalator / ENA 900 moving walks

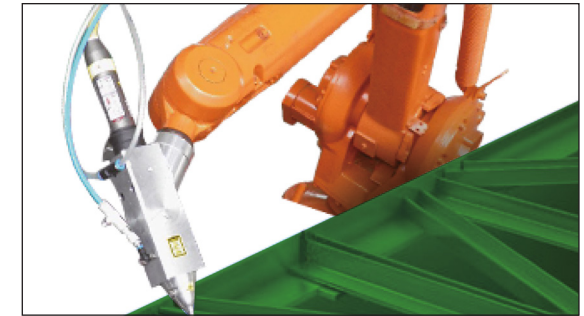
Integrated design



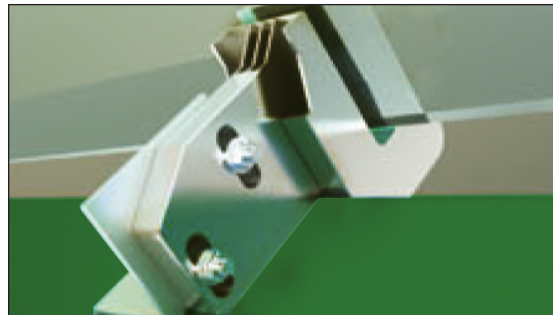
The integrated design of the upper and lower drive and the step track will avoid step moving to ensure a smooth transition to the curve track and drive, and reduce the vibration when the step is running.



Wear-resisting painted skirt panel



Robotic welding



Wedge with spring structure and glass bracket (optional)



Stainless steel handrail bracket



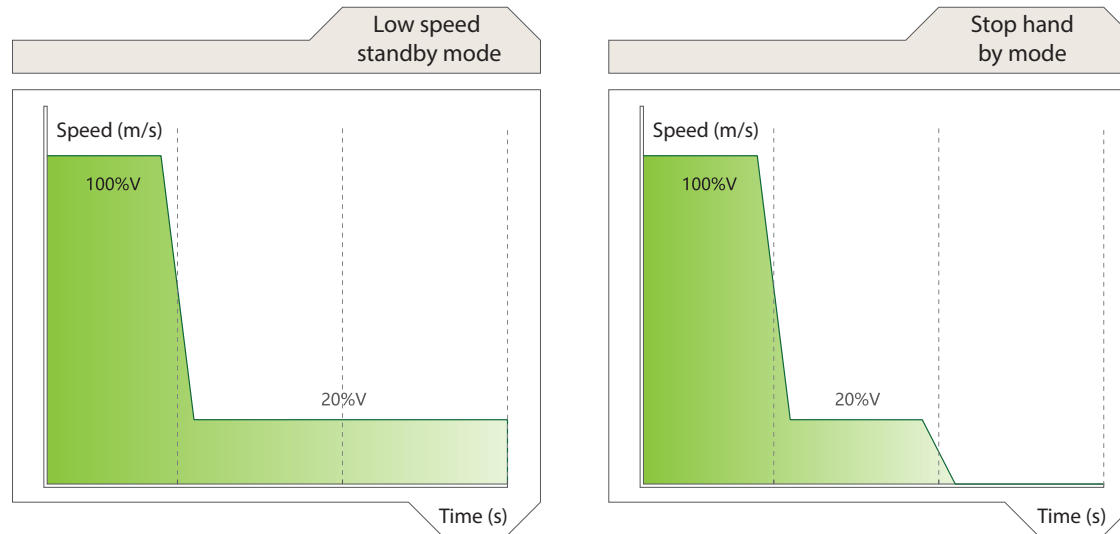


# Green technology, energy-saving

The intellectual control system drives the electric motor into ECO economic running conditions can save 30% - 70% of the energy.



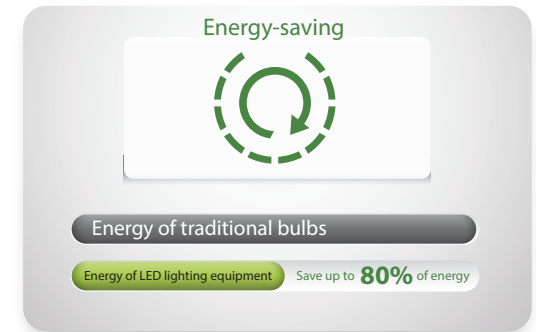
## Frequency converter, reduce electricity



When choosing the frequency converter, it can realize the escalator intermittent operation and standby effectively reduces the energy consumption.

## LED energy-saving lighting system

All lighting equipment uses LED lighting technology. Compared with traditional bulbs, it can save up to 80% more energy, and its life is 10 times longer that of the conventional bulbs.



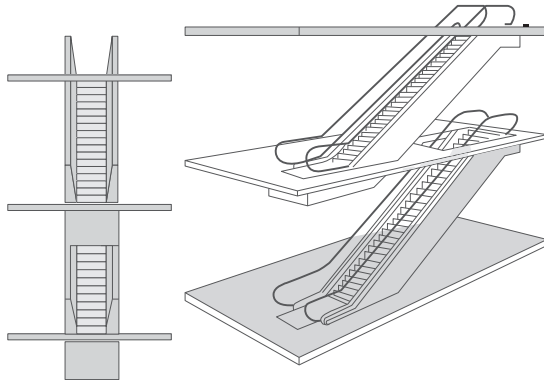




## Arrangement planning guide

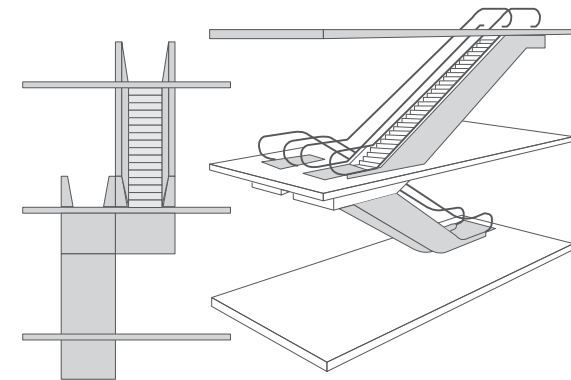
**Diverse products, reasonable layout and technical planning.**

### **Interrupted arrangement (one travel direction)**



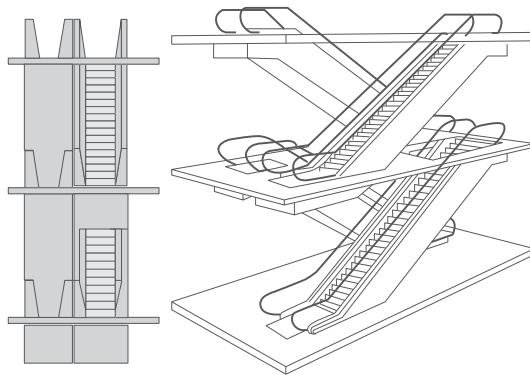
This arrangement will allow the passengers to view the shops around the escalator.

### **Multi-level criss-cross arrangement (continious traffic flow, two travel directions)**



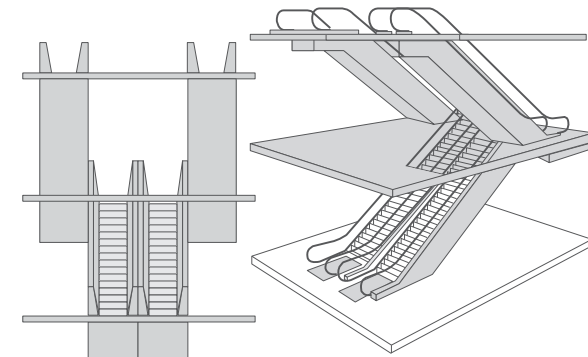
This arrangement is mainly used for small department stores. This intermittent arrangement requires more space.

### **Continious arrangement (one travel direction)**



This arrangement is mainly used in large department stores, public buildings and places of public transport.

### **Parallel arrangement (continious traffic flow, two travel directions)**



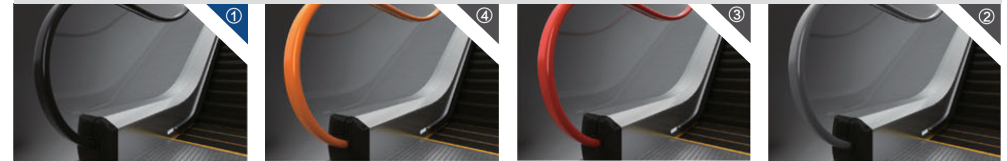
This arrangement is mainly used for large traffic shopping malls and public transport facilities. When there are three or more escalators, it should be possible to change the direction of movement in accordance with the traffic.





## Different types of styles, mobile landscape

### Handrail colors



Black

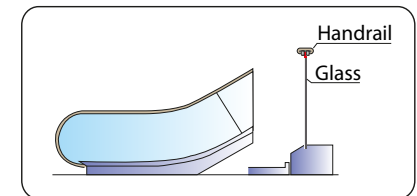
Yellow

Red

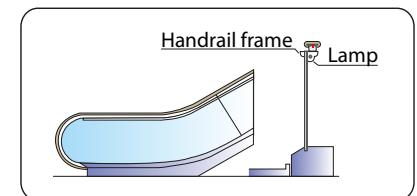
Grey

- Standard  
 Optional

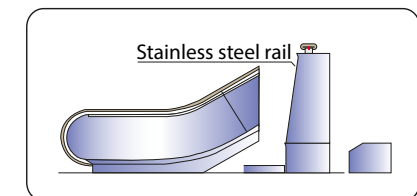
### Balustrade design



Type-I (slim)



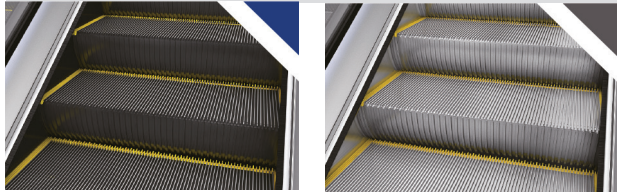
Type-P (normal)  
with lighting (inclined)



Type-T (inclined) public

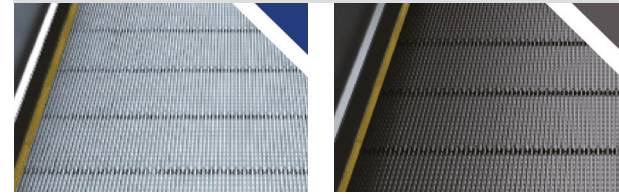


**Escalator step**



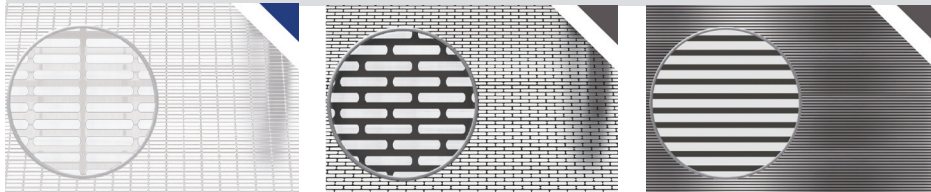
- Black stainless steel with yellow line
- Aluminium with yellow line

**Moving walk pallet**



- Aluminium alloy with the yellow line
- Black stainless steel with the yellow line

**Front panel**



- Square groove black painting
- Brick design
- Striped groove black painting

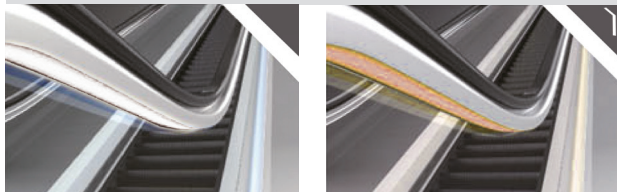
**Inner and outer decking**



- Hairline stainless steel
- Aluminium alloy

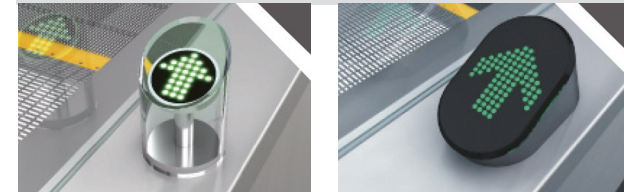
Standard  
 Optional

**Handrail lighting**



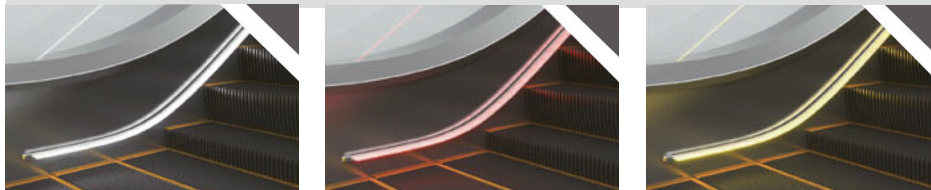
- White
- Yellow

**Running direction indicator**



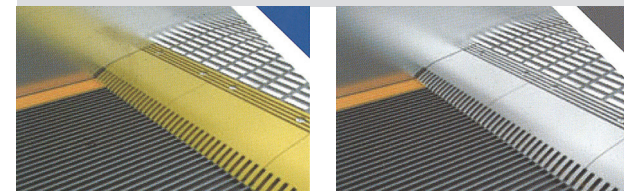
- Transparent plastic Led display
- Black plastic dot matrix display

**Skirting lighting**



- White
- Red
- Yellow

**Combs**



- Yellow polyester
- Aluminium

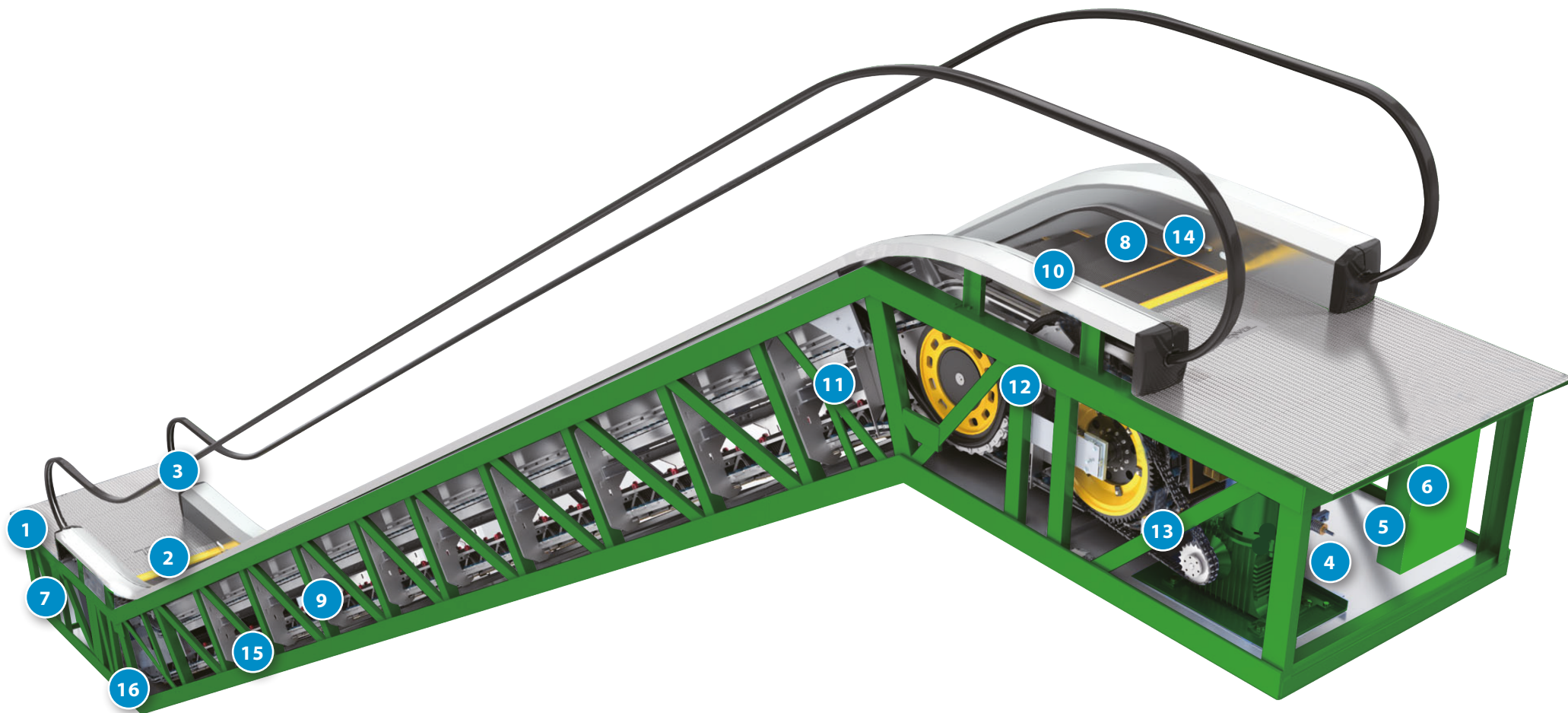


## Multiple safety protection functions for escalator and moving walk

| Function name                                      | Function description  |
|--|---|
| 1 <b>Emergency stop button</b>                     | Emergency stop device in an emergency, stop immediately if pressed.                                     |
| 2 <b>Comb plate safety device</b>                  | Comb plate safety device stop if objects are caught between comb plate and step treads.                 |
| 3 <b>Protective device for handrail</b>            | Handrail entry safety device stops if a hand or object is pulled into the handrail entry.               |
| 4 <b>Phase (fault phase) protection</b>            | Phase monitoring device stops if missing phase or wrong phase occurs.                                   |
| 5 <b>Over speed protection device</b>              | Over-speed detector stops if operating above normal speed.  |
| 6 <b>Non operation reversal protection device</b>  | Non-reversing safety device stops if its direction of operation is reversed.                            |
| 7 <b>Cascade chain protection device</b>           | Step chain safety device stops if the step chain breaks or becomes loose.                               |
| 8 <b>Apron protection device</b>                   | Skirting panel safety device stops if objects are caught between the step and skirting panel.           |
| 9 <b>Step and pallet protection device</b>         | Step safety device stops if steps are operating in abnormal manner due to fractured step.               |
| 10 <b>Step gap lighting</b>                        | Step gap green light under the horizontal steps ease passengers to ride safe.                           |
| 11* <b>Additional brake device</b>                 | Auxiliary brake stops if the driving chain breaks or over-speeds.                                       |
| 12 <b>Safety device of brake shoe wear</b>         | Brake lining wear safety device stops if the lining of main break is worn abnormally.                   |
| 13 <b>Drive chain protection device</b>            | Driving chain safety device stops if the driving chain breaks are excessively loosed.                   |
| 14* <b>Comb plate lighting</b>                     | Comb plate light lighting on both sides of comb plate ease passengers to ride safety.                   |
| 15 <b>Handrail speed detection device</b>          | Handrail speed detector stops if handrail is below normal speed due to handrail breakage or elongation. |
| 16 <b>Protection device with a broken handrail</b> | Handrail broken safety device stops if the handrail breaks or stops.                                    |

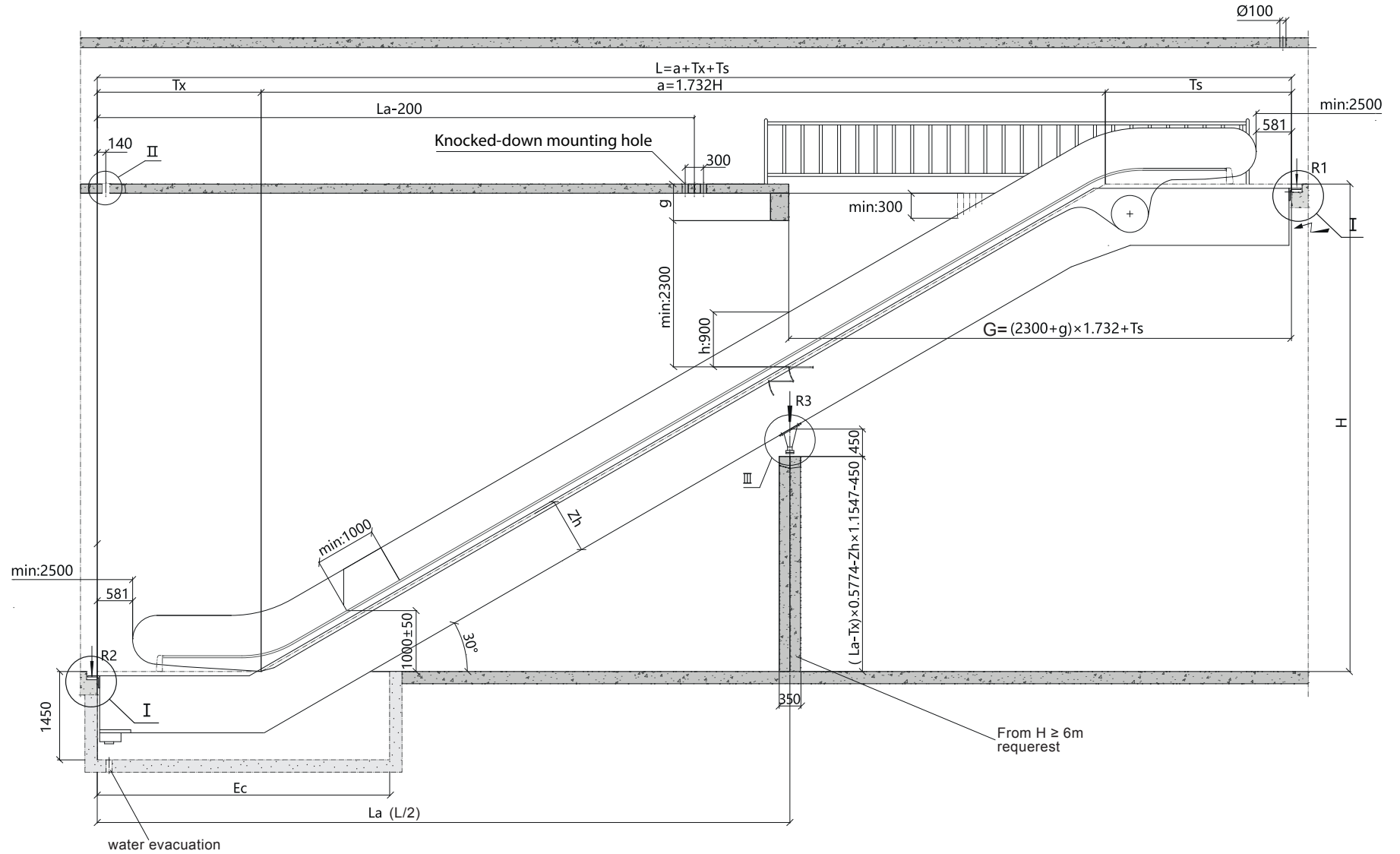
\* optional





**30° ENS 800 outdoor / ENS 801 indoor**

I II III : p.24



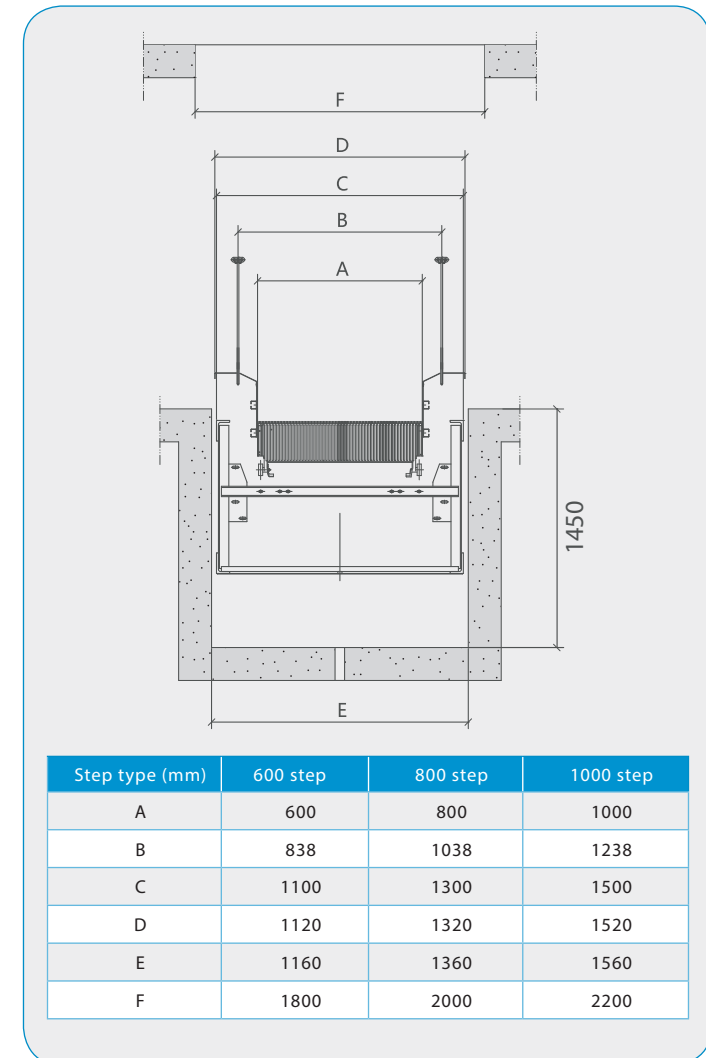


## 30° ENS 800 outdoor / ENS 801 indoor

| Horizontal step | TS - Up step lenght (mm) |            |            | TX - Down step lenght (mm) | EC - Pit lenght (mm) |
|-----------------|--------------------------|------------|------------|----------------------------|----------------------|
|                 | 600 step                 | 800 step   | 1000 step  |                            |                      |
| 2               | 2815                     | 2565       | 2565       | 2200                       | 4300                 |
| 3               | 3305                     | 3055       | 3055/3722  | 2690                       | 5000                 |
| R1 (kN)         | 4,1xL2+15,5              | 4,1xL1+7,8 | 4,25xL+9,5 |                            |                      |
| R2 (kN)         | 4,5xL2+16,1              | 4,5xL1+7,8 | 4,5xL+10,5 |                            |                      |
| R3 (kN)         | 5xL2+17,5                | 5xL1+8,5   | 5,2xL+11,5 |                            |                      |

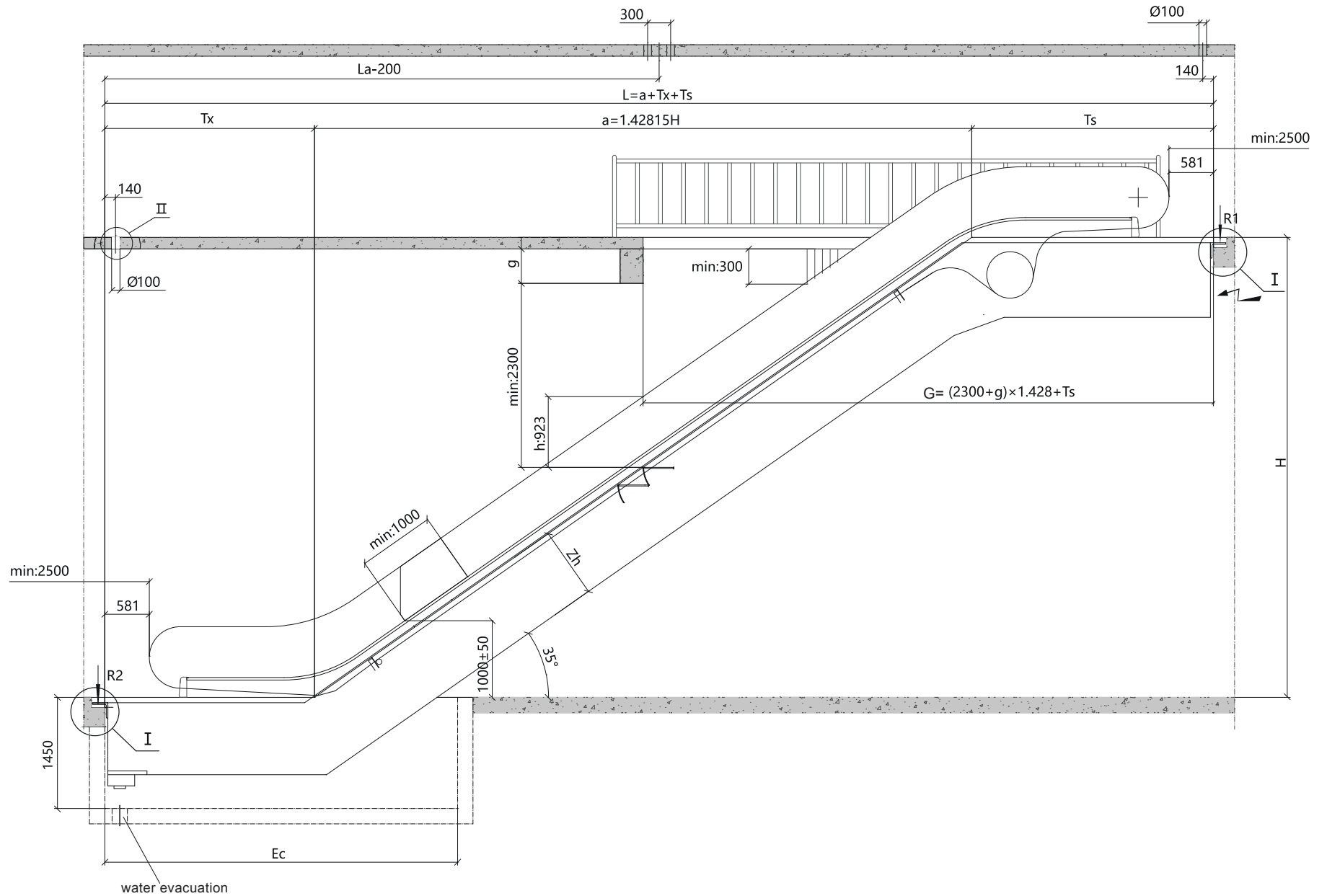
| Machine power (kw) | H - Rise (m) |          |           |
|--------------------|--------------|----------|-----------|
|                    | 600 step     | 800 step | 1000 step |
| 5,5                | H ≤ 7,1      | H ≤ 4,9  | H ≤ 3,7   |
| 7,5                | H ≤ 9,2      | H ≤ 6,6  | H ≤ 5     |
| 11                 | H ≤ 11       | H ≤ 9,1  | H ≤ 7,3   |
| 15                 |              | H ≤ 11   | H ≤ 9,2   |
| 2 X 11             |              |          | H ≤ 11    |

| Specifications        |              | Rise       |     |
|-----------------------|--------------|------------|-----|
| Degree of inclinaison | 30°          | Max. (H,m) | 11  |
| Speed                 | 0,5 m/s      |            |     |
| Horizontal steps      | 2 (standard) | Min. (H,m) | 1,2 |
|                       | 3 (optional) |            |     |



# 35° ENS 800 outdoor / ENS 801 indoor

I II III : p.24



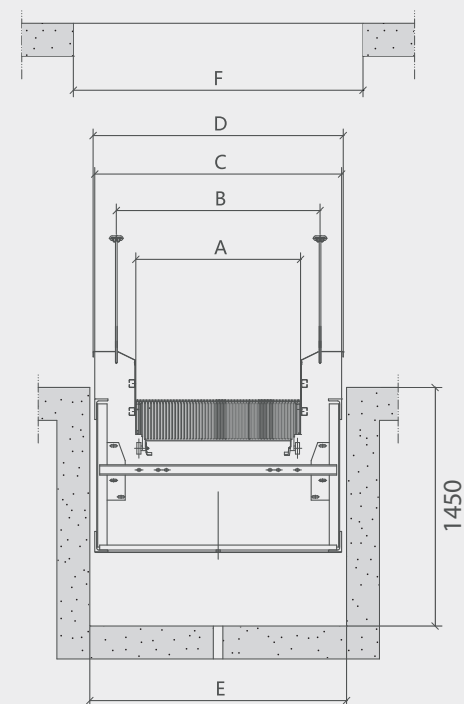


## 35° ENS 800 outdoor / ENS 801 indoor

| Horizontal step | TS - Up step length (mm) |            |             | TX - Down step length (mm) | EC - Pit length (mm) |
|-----------------|--------------------------|------------|-------------|----------------------------|----------------------|
|                 | 600 step                 | 800 step   | 1000 step   |                            |                      |
| 2               | 2912                     | 2662       | 2662        | 2243                       | 4100                 |
| 3               | 3402                     | 3152       | 3152        | 2733                       | 4600                 |
| R1 (kN)         | 4,1xL2+16,5              | 4,1xL1+8,8 | 4,25xL+10,5 |                            |                      |
| R2 (kN)         | 4,5xL2+17,1              | 4,5xL1+8,8 | 4,5xL+11,5  |                            |                      |

| Machine power (kw) | H - Rise (m) |          |           |
|--------------------|--------------|----------|-----------|
|                    | 600 step     | 800 step | 1000 step |
| 5,5                | H ≤ 6        | H ≤ 5    | H ≤ 3,8   |
| 7,5                |              | H ≤ 6    | H ≤ 6     |

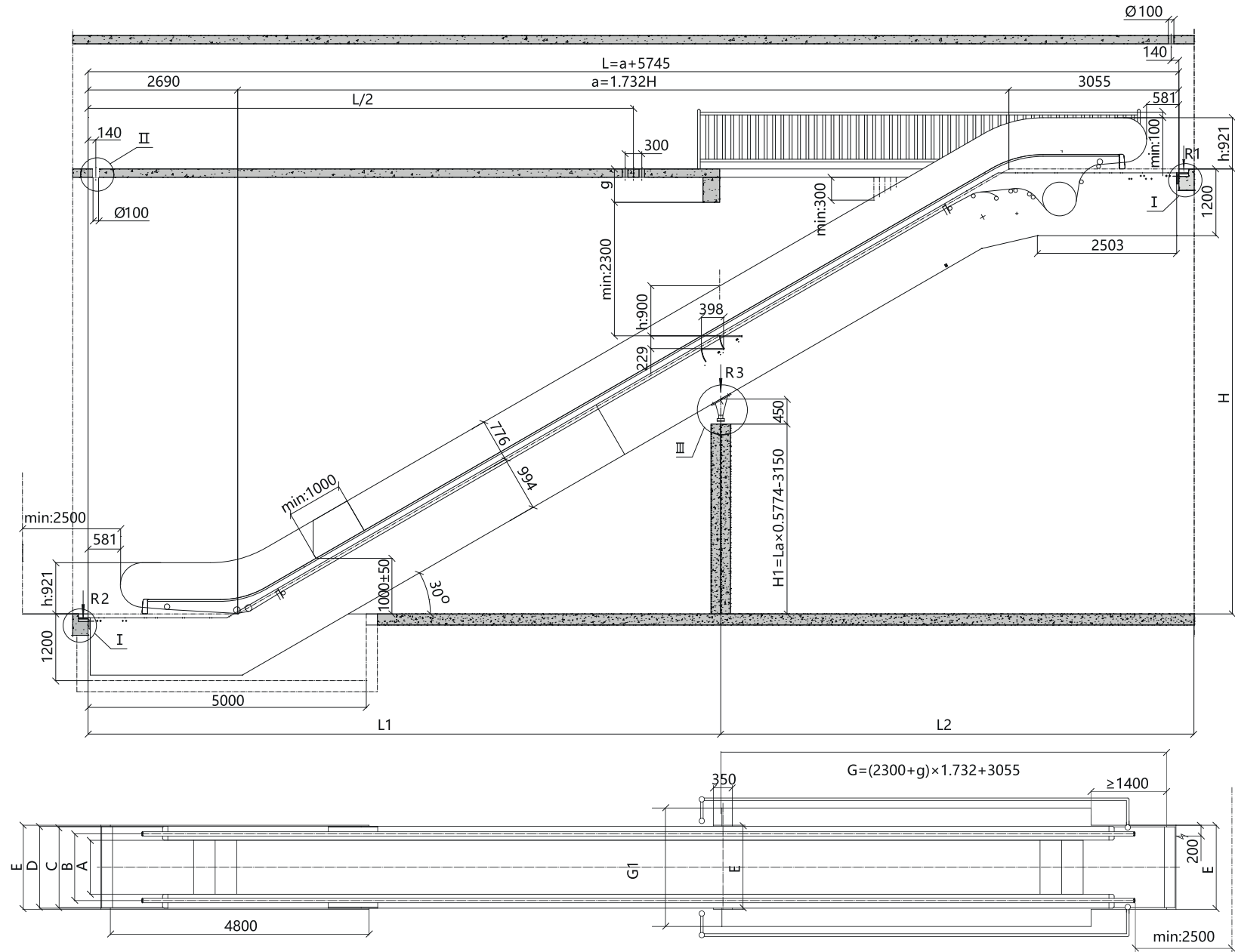
| Specifications        |              | Rise       |     |
|-----------------------|--------------|------------|-----|
| Degree of inclination | 35°          | Max. (H,m) | 6   |
| Speed                 | 0,5 m/s      |            |     |
| Horizontal steps      | 2 (standard) | Min. (H,m) | 1,4 |
|                       | 3 (optional) |            |     |



| Step type (mm) | 600 step | 800 step | 1000 step |
|----------------|----------|----------|-----------|
| A              | 600      | 800      | 1000      |
| B              | 838      | 1038     | 1238      |
| C              | 1100     | 1300     | 1500      |
| D              | 1120     | 1320     | 1520      |
| E              | 1160     | 1360     | 1560      |
| F              | 1800     | 2000     | 2200      |

# 30° ENS 803 indoor

I II III : p.24



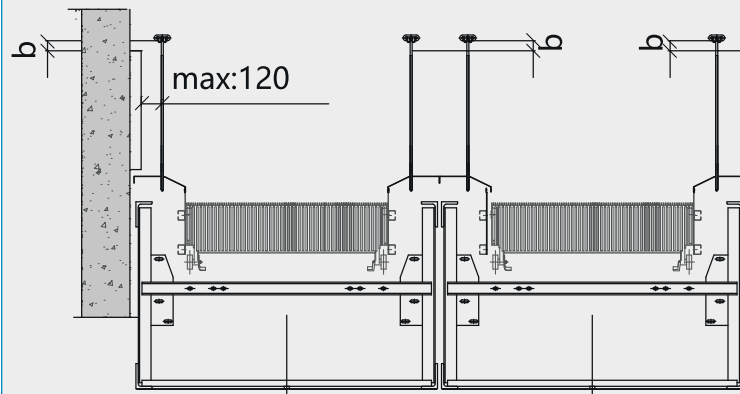


## 30° ENS 803 indoor

| Type           | Motion speed (m/s) | Rise   | Reaction force R1 | Reaction force R2 | Reaction force R3 | Step width A | Balustrade spacer B | Truss width C | Decoration width D | Construction layout opening width E | Construction layout opening width G1 |
|----------------|--------------------|--------|-------------------|-------------------|-------------------|--------------|---------------------|---------------|--------------------|-------------------------------------|--------------------------------------|
| ENS803-30-600  | 0,5                | H = mm | 4,1xL2+15,5       | 4,1xL1+7,8        | 4,25xL+9,5        | 600          | 838                 | 1100          | 1120               | 1160                                | 1800                                 |
| ENS803-30-800  |                    |        | 4,5xL2+16,1       | 4,5xL1+7,8        | 4,5xL+10,5        | 800          | 1038                | 1300          | 1320               | 1360                                | 2000                                 |
| ENS803-30-1000 |                    |        | 5xL2+17,5         | 5xL1+8,5          | 5,2xL+11,5        | 1000         | 1238                | 1500          | 1520               | 1560                                | 2200                                 |

R1, R2, R3 Unit = kN

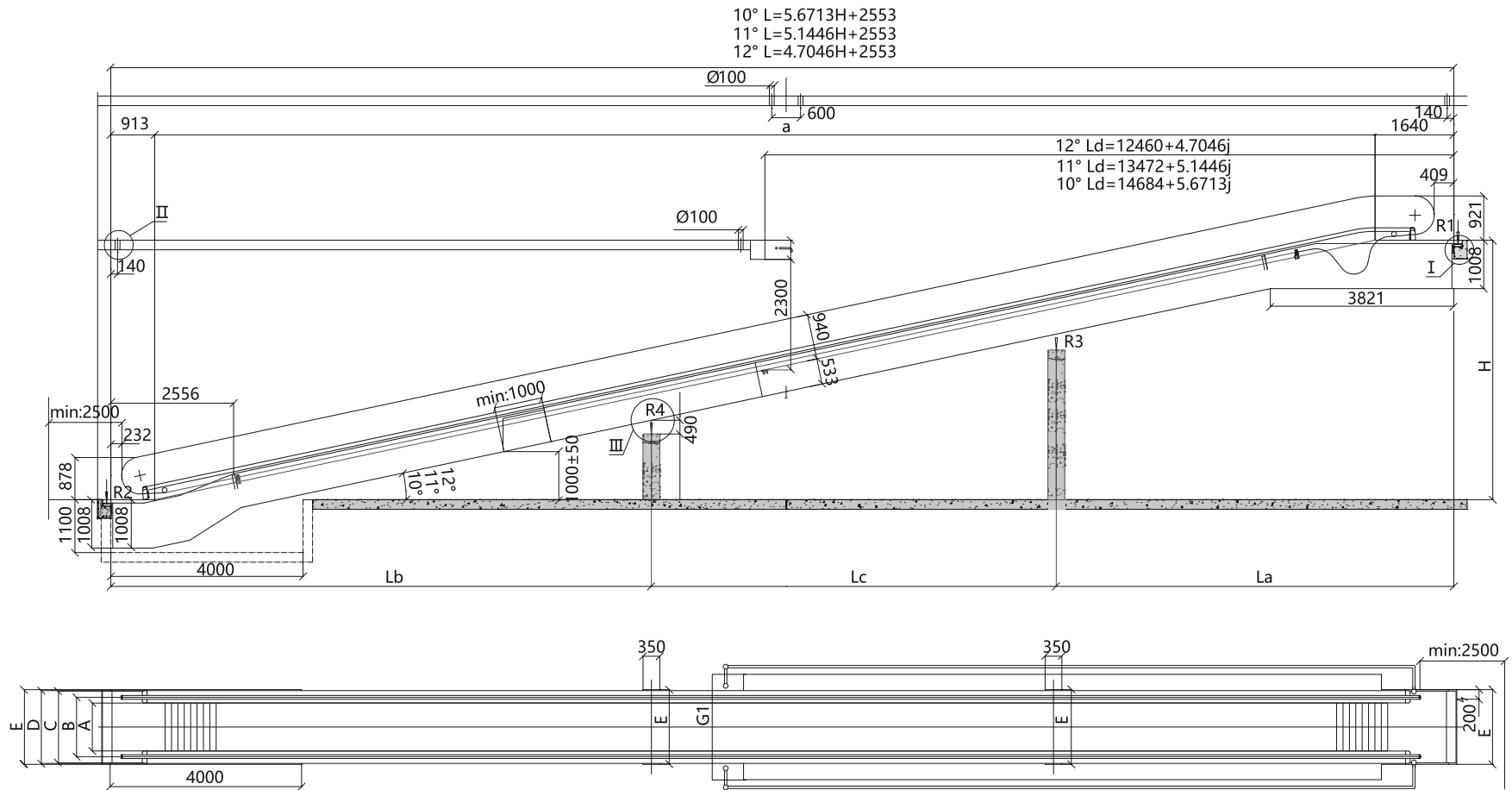
User protection picture



- This drawing is fit for the construction of 12 m and below single mounted escalators.
- It chooses step width 600 mm. Upper truss shall be extended 300 mm.
- It chooses double-drive; Upper truss shall be extended 417 mm.
- Size unit: mm. It is possible to change some individual size. If there is any alterations, advance notice won't be given then.

# MOVING WALKS ENA900-A ENA901-A indoor

I II III : p.24

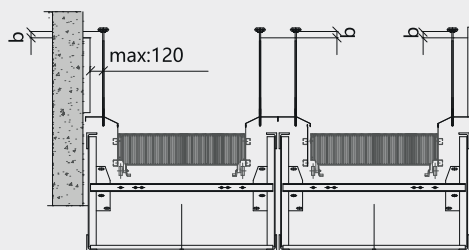


## MOVING WALKS ENA900-A ENA901-A indoor

| Type*                                | Motion speed (m/s) | Rise   | Inclinaison | Reaction force |        |                   |                  | Reacting force parameters |     |     | Pallet widths |      |      |      |      |      |
|--------------------------------------|--------------------|--------|-------------|----------------|--------|-------------------|------------------|---------------------------|-----|-----|---------------|------|------|------|------|------|
|                                      |                    |        |             | R1             | R2     | R3                | R4               | q                         | M   | N   | A             | B    | C    | D    | E    | G1   |
| ENA900-A-a-800*<br>ENA901-A-a-800*   | 0,5                | H = mm | 10°         | Laxq+M         | Lbxq+N | (La+Lc)<br>x1,3xq | Lb+Lc)<br>x1,3xq | 0,0039                    | 9,5 | 4,5 | 800           | 1038 | 1300 | 1320 | 1360 | 2000 |
| 11°                                  |                    |        | 12°         |                |        |                   |                  |                           |     |     |               |      |      |      |      |      |
| ENA900-A-a-1000*<br>ENA901-A-a-1000* |                    |        |             |                |        |                   |                  |                           |     |     |               |      |      |      |      |      |

R1, R2, R3,R4 Unit = kN

User protection picture



| Degree of inclinaison | Rise |      | Inte. support |    | La  | Lb  | Lc  |
|-----------------------|------|------|---------------|----|-----|-----|-----|
|                       | From | To   | R3            | R4 |     |     |     |
| 10°                   | 1297 | 2178 | -             | -  | -   | -   | -   |
|                       | 2179 | 4823 | 1             | -  | L/2 | L/2 | -   |
|                       | 4824 | 6000 | 1             | 1  | L/3 | L/3 | L/3 |
| 11°                   | 1449 | 2420 | -             | -  | -   | -   | -   |
|                       | 2421 | 5335 | 1             | -  | L/2 | L/2 | -   |
|                       | 5336 | 6000 | 1             | 1  | L/3 | L/3 | L/3 |
| 12°                   | 1601 | 2663 | -             | -  | -   | -   | -   |
|                       | 2664 | 5851 | 1             | -  | L/2 | L/2 | -   |
|                       | 5852 | 6000 | 1             | 1  | L/3 | L/3 | L/3 |

- This graph is applied to the construction of the civil engineering construction of 6m and the following one.
- It chooses double-drive; Upper truss shall be extended 417 mm.
- Size unit: mm. It is possible to change some individuals sizeq. If there is any alterations, advance notice won't be given then.

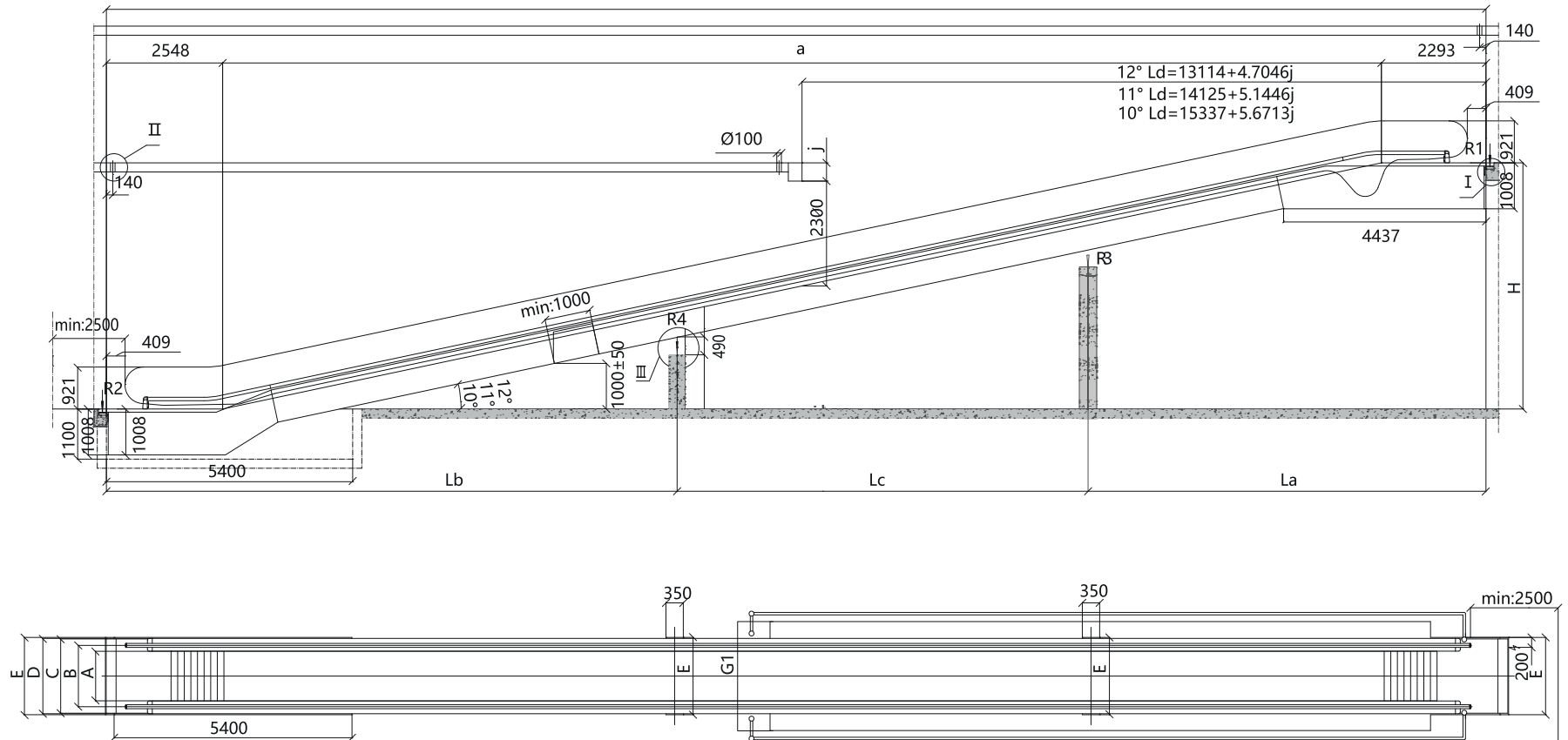
\* All indicates that the inclination angle of sidewalk is 10°, 11° and 12°.



# MOVING WALKS ENA900-B ENA901-B indoor

I II III: p.24

10° L=5.6713H+4841  
11° L=5.1446H+4841  
12° L=4.7046H+4841

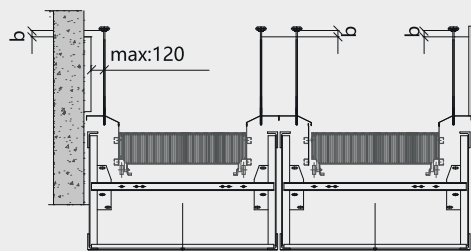


## MOVING WALKS ENA900-B ENA901-B indoor

| Type*                                | Motion speed (m/s) | Rise   | Inclinaison | Reaction force |        |                   |                  | Reacting force parameters |     |     | Pallet widths |      |      |      |      |      |
|--------------------------------------|--------------------|--------|-------------|----------------|--------|-------------------|------------------|---------------------------|-----|-----|---------------|------|------|------|------|------|
|                                      |                    |        |             | R1             | R2     | R3                | R4               | q                         | M   | N   | A             | B    | C    | D    | E    | G1   |
| ENA900-B-a-800*<br>ENA901-B-a-800*   | 0,5                | H = mm | 10°         | Laxq+M         | Lbxq+N | (La+Lc)<br>x1,3xq | Lb+Lc)<br>x1,3xq | 0,0039                    | 9,5 | 4,5 | 800           | 1038 | 1300 | 1320 | 1360 | 2000 |
| 11°                                  |                    |        | 12°         |                |        |                   |                  |                           |     |     |               |      |      |      |      |      |
| ENA900-B-a-1000*<br>ENA901-B-a-1000* |                    |        |             |                |        |                   |                  |                           |     |     |               |      |      |      |      |      |

R1, R2, R3,R4 Unit = kN

User protection picture



| Degree of inclinaison | Rise |      | Inte. support |    | La  | Lb  | Lc  |
|-----------------------|------|------|---------------|----|-----|-----|-----|
|                       | From | To   | R3            | R4 |     |     |     |
| 10°                   | 1297 | 2178 | -             | -  | -   | -   | -   |
|                       | 2179 | 4823 | 1             | -  | L/2 | L/2 | -   |
|                       | 4824 | 6000 | 1             | 1  | L/3 | L/3 | L/3 |
| 11°                   | 1449 | 2420 | -             | -  | -   | -   | -   |
|                       | 2421 | 5335 | 1             | -  | L/2 | L/2 | -   |
|                       | 5336 | 6000 | 1             | 1  | L/3 | L/3 | L/3 |
| 12°                   | 1601 | 2663 | -             | -  | -   | -   | -   |
|                       | 2664 | 5851 | 1             | -  | L/2 | L/2 | -   |
|                       | 5852 | 6000 | 1             | 1  | L/3 | L/3 | L/3 |

• This graph is applied to the construction of the civil engineering construction of 6 m and the following one.

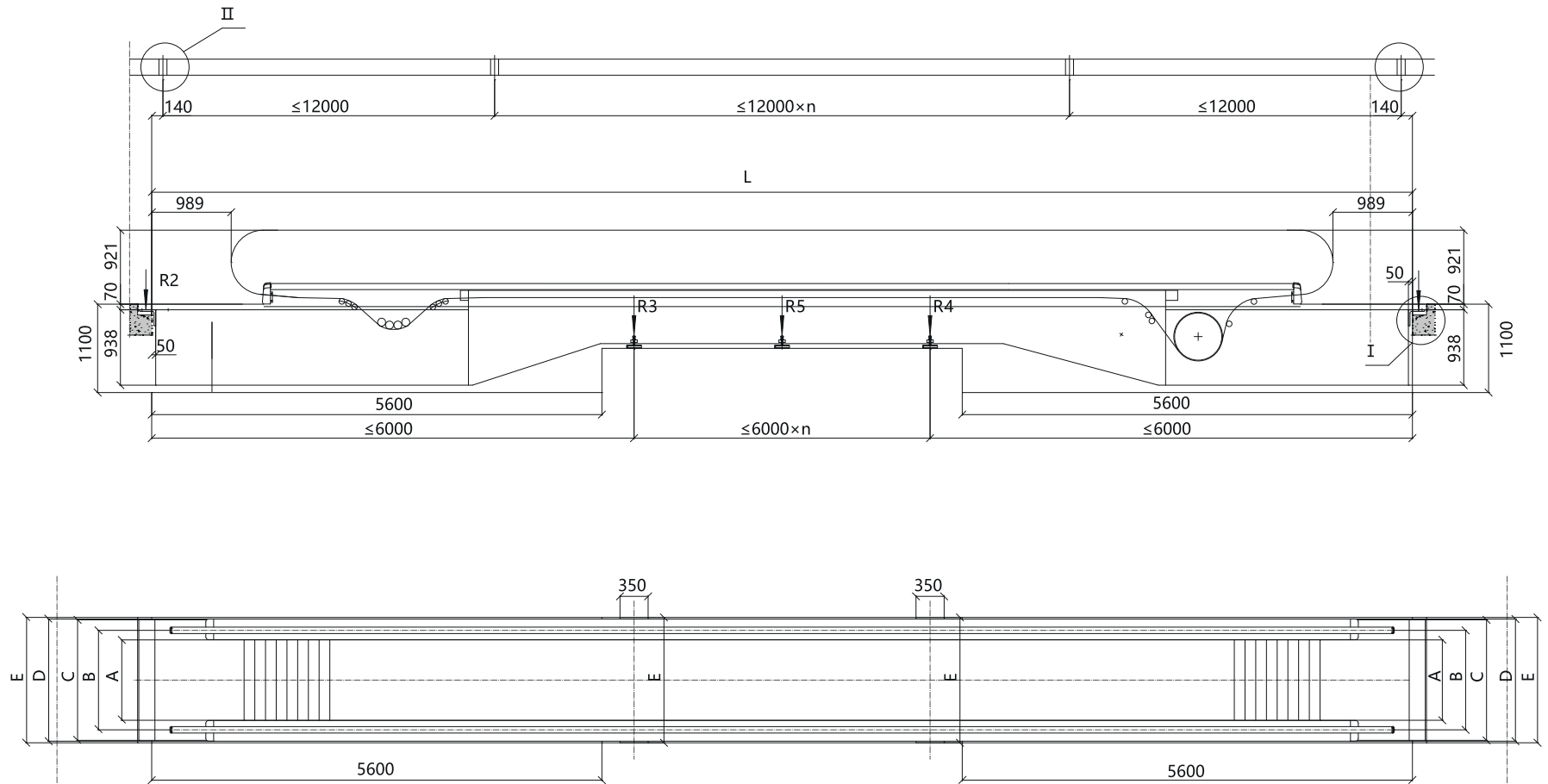
• It chooses double-drive; Upper truss shall be extended 417 mm.

• Size unit: mm. It is possible to change some individuals sizes. If there is any alterations, advance notice won't be given then.

\* All indicates that the inclination angle of sidewalk is 10°, 11° and 12°.

# MOVING WALKS ENA900-C ENA901-C indoor

I II III : p.24

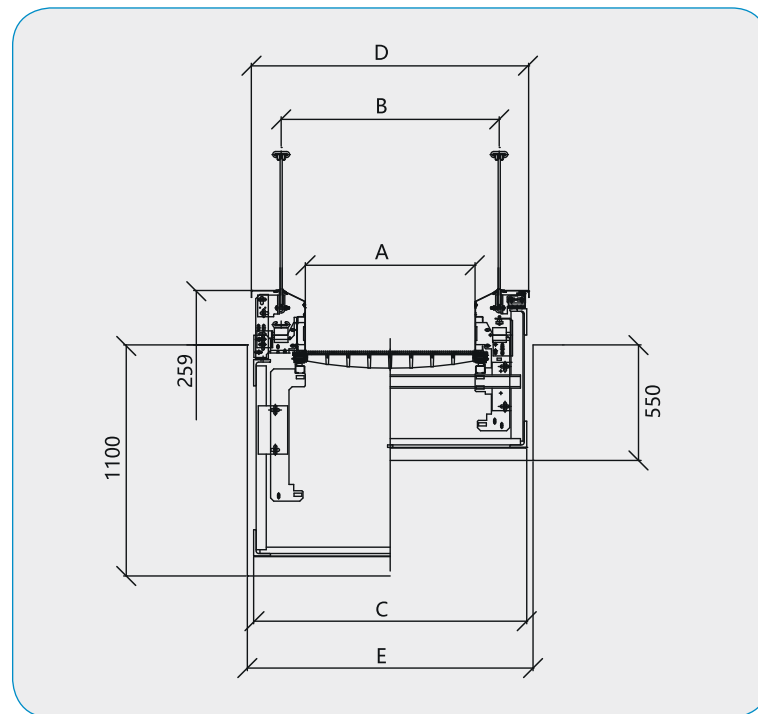




## MOVING WALKS ENA900-C ENA901-C indoor

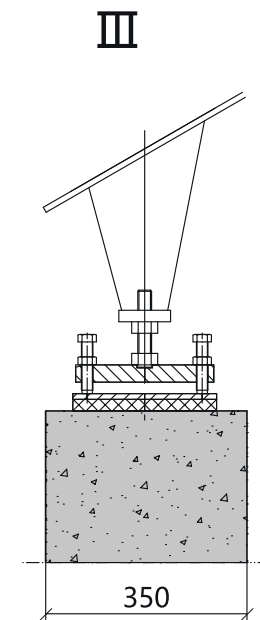
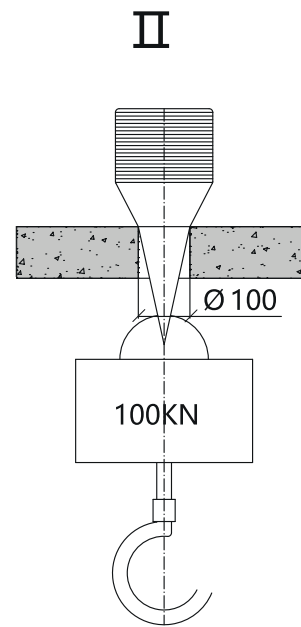
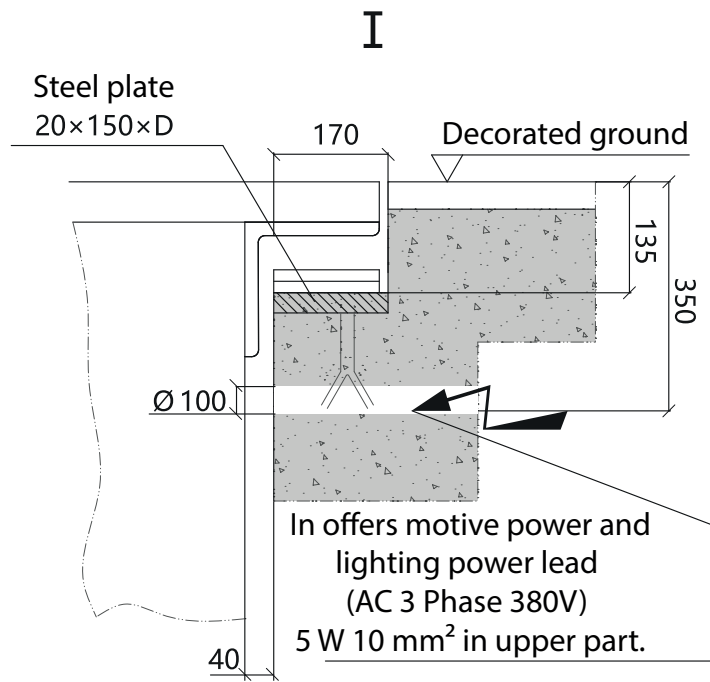
| Type          | Motion speed (m/s) | Reaction force R1 | Reaction force R2 | Reaction force R3 | Reaction force R4 | Reaction force R5 | Palletwidth | Balustrade spacer | Truss width | Decoration width | Construction layout opening width |
|---------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------|-------------------|-------------|------------------|-----------------------------------|
|               |                    |                   |                   |                   |                   |                   | A           | B                 | C           | D                | E                                 |
| ENA900-C-800  | 0,5                | 45                | 31                | 30                | 32                | 44                | 800         | 1038              | 1300        | 1320             | 1360                              |
| ENA900-C-1000 |                    | 49                | 33                | 32                | 34                | 53                | 1000        | 1238              | 1500        | 1520             | 1560                              |
| ENA900-C-1400 |                    | 55                | 38                | 35                | 38                | 66                | 1400        | 1638              | 1900        | 1920             | 1960                              |

R1, R2, R3,R4 and R5 Unit = kN



- Size unit: mm. It is possible to change some individuals sizes. If there is any alterations, advance notice won't be given then.

## Concrete construction



## Technical specification

|   | ESCALATOR                     |                               |                               | MOVING WALKS                  |                               |                               |
|---|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Product line                              | ENS800                        | ENS801                        | ENS803                        | ENA900/901-A                  | ENA900/901-B                  | ENA900/901-C                  |
| Working environment                       | Outdoor                       | Indoor                        | Indoor                        | Indoor                        | Indoor                        | Indoor                        |
| Application                               | Commercial                    | Commercial                    | Public transport              | Public / Commercial           | Commercial type               | Commercial type               |
| Rated speed (m/s)                         | 0,5                           | 0,5                           | 0,5                           | 0,5                           | 0,5                           | 0,5                           |
| Degree on inclination (°)                 | 30/35                         | 30/35                         | 30                            | 10/11/12                      | 10/11/12                      | 0 to 6                        |
| Step/Pallet width (mm)                    | 600/800/1000                  | 600/800/1000                  | 1000                          | 800/1000                      | 800/1000                      | 800/1000/1400                 |
| Theoretical transporting capacity (Per/h) | 4500/6750/9000                | 4500/6750/9000                | 9000                          | 6750/9000                     | 6750/9000                     | 6750/9000/12600               |
| Rise/Lenght (m)                           | 11 (30°) / 6 (35°)            | 11 (30°) / 6 (35°)            | 20                            | -                             | -                             | -                             |
| Horizontal lenght (m)                     | -                             | -                             | -                             | 36                            | 36                            | 36                            |
| Horizontal steps/Pallets                  | 2/3                           | 2/3                           | 3                             | Upper part                    | Upper and lower part          | Horizontal ramp               |
| Power supply                              | AC 3 phase 380 V 50 Hz        | AC 3 phase 380 V 50 Hz        | AC 3 phase 380 V 50 Hz        | AC 3 phase 380 V 50 Hz        | AC 3 phase 380 V 50 Hz        | AC 3 phase 380 V 50 Hz        |
| Lighting supply                           | AC single phase<br>220V 50 Hz | AC single phase<br>220V 50 Hz | AC single phase<br>220V 50 Hz | AC single phase<br>220V 50 Hz | AC single phase<br>220V 50 Hz | AC single phase<br>220V 50 Hz |



|                                       |  | ESCALATOR |        |        | MOVING WALKS     |
|---------------------------------------|--|-----------|--------|--------|------------------|
|                                       |  | ENS800    | ENS801 | ENS803 | ENA900-901 A/B/C |
| <b>Balustrade design</b>              | Type - I (slim)  | ✓         | ✓      | ✓      | ✓                |
|                                       | Type - P (normal) , w. Lighting                          | ○         | ○      | ○      | ○                |
|                                       | Type - T (Inclined)                                      | ○         | ○      | ○      | -                |
| <b>Balustrade panel</b>               | Clear tempered glass                                     | ✓         | ✓      | ✓      | ✓                |
|                                       | Hairline stainless steel                                 | ○         | ○      | ○      | -                |
| <b>Balustrade height</b>              | 900 mm   | ✓         | ✓      | ✓      | ✓                |
|                                       | 1000 mm  | ○         | ○      | ○      | ○                |
| <b>Balustrade section</b>             | Hairline stainless steel                                 | ✓         | ✓      | ✓      | ✓                |
|                                       | Aluminium  | ○         | ○      | -      | ○                |
| <b>Handrail</b>                       | Black  | ✓         | ✓      | ✓      | ✓                |
|                                       | Gray, red, yellow  | ○         | ○      | ○      | ○                |
| <b>Step / Pallet</b>                  | Black stainless steel with yellow resin demarcation line | -         | ✓      | ✓      | ○                |
|                                       | Die casting aluminium with yellow resin demarcation line | ✓         | ○      | ○      | ✓                |
| <b>Inner &amp; outer decking</b>      | Hairline stainless steel                                 | ✓         | ✓      | ✓      | ✓                |
|                                       | Painted steel  | ○         | ○      | ○      | ○                |
|                                       | Aluminium  | ○         | ○      | ○      | ○                |
| <b>Skirt panel</b>                    | Hairline stainless steel                                 | ✓         | ✓      | ✓      | ✓                |
|                                       | Wear-resisting painted steel                             | ○         | ○      | ○      | ○                |
| <b>Landing plate</b>                  | Etched stainless steel with anti-slip pattern            | ✓         | ✓      | ✓      | ✓                |
|                                       | Aluminium  | ○         | ○      | ○      | ○                |
| <b>Step gap lamp *</b>                |  | ○         | ○      | ○      | ○                |
| <b>Footlights *</b>                   |  | ○         | ○      | ○      | ○                |
| <b>Front panel text *</b>             |  | ○         | ○      | ○      | ○                |
| <b>Direction indicator *</b>          |  | ○         | ○      | ○      | ○                |
| <b>Fault display *</b>                |  | ○         | ○      | ○      | ○                |
| <b>Automatic operation function *</b> |  | ○         | ○      | ○      | ○                |
| <b>Frequency conversion control *</b> |  | ○         | ○      | ○      | ○                |

\* on request



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