

H-RAIL

RAIL SYSTEM FOR HORIZONTAL AND VERTICAL USE

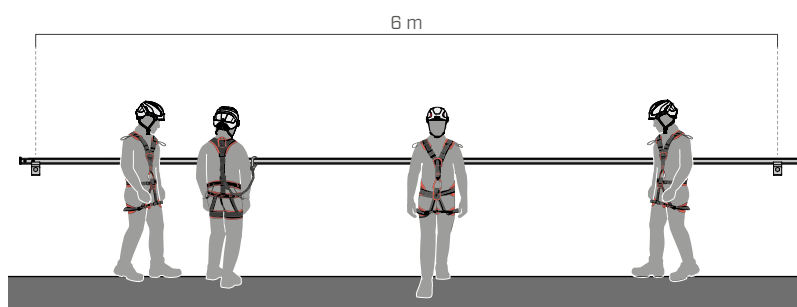
TO ALWAYS WORK ON THE RIGHT RAIL.

The H-RAIL rail system is safe and versatile. It can be used to create rigid horizontal or vertical anchor lines with minimal fastenings. Either curved or straight rigid anchor lines can be developed thanks to the system's modularity. H-RAIL is also suitable for rope access work on building façades. Sliding devices are available for different applications: choose the one that suits you and operate safely with H-RAIL!



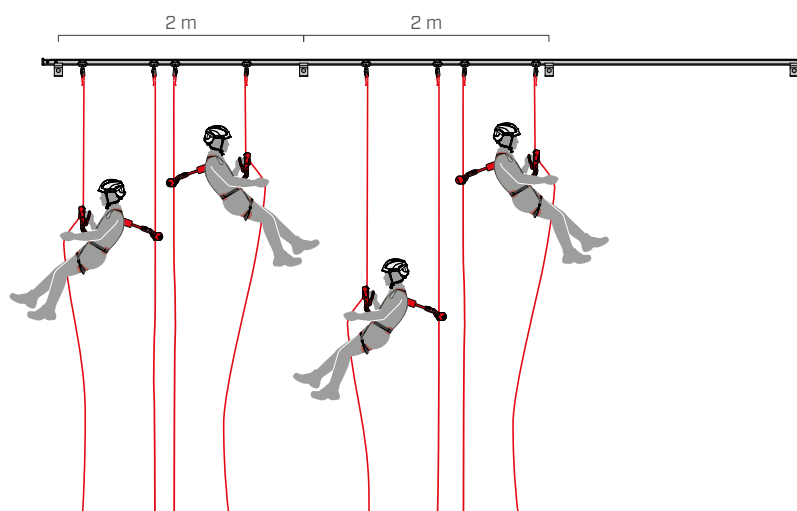
FASTENING BRACKETS SPAN

FALL PROTECTION WORK









The distance between fastening brackets for fall protection or restraint work can reach up to 6 metres, allowing 4 operators to use the system simultaneously on the same span.

ROPE ACCESS WORK



For rope access work, the maximum distance between the fastening brackets is 2 m, allowing 4 operators to use the system simultaneously and 2 on the same span.


SLIDING DEVICE

| | RAILSLIDE RAILSLIDEA4 | RAILSLIDEWALL RAILSLIDEWA4 | RAILSLIDE0H RAILSLIDE0HA4 | RAILSLIDERA RAILSLIDERA4 | RAILSLIDEV RAILSLIDEVA4 | RAILSLIDEVH RAILSLIDEVHA4 |
|------------------|---|---|---|--|---|---|
| |  |  |  |  |  |  |
| horizontal | ✓ | ✓ | ✓ | ✓ | | ✓ |
| vertical | | | | | ✓ | ✓ |
| inclined | | | | | | ✓ |
| universal | | | | | | ✓ |
| material | A2 AISI 304 A4 AISI 316 | A2 AISI 304 A4 AISI 316 | A2 AISI 304 A4 AISI 316 | A2 AISI 304 A4 AISI 316 | A2 AISI 304 A4 AISI 316 | A2 AISI 304 A4 AISI 316 |
| certification | EN 795 Type D | EN 795 Type D | EN 795 Type D | EN 795 Type D | EN 353-1:2014 + A1:2018 | EN 353-1:2014 + A1:2018 EN 795 Type D |
| removable | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| overhead | | | ✓ | | | |
| on wall | ✓ | ✓ | | ✓ | | ✓ |
| rope access work | | | ✓ | ✓ | | |

KEY POINTS

COLOUR AND ANODISING

On request, the system can be personalised with RAL colours.
Anodising is similarly available in a range of colours.




WHAT DOES THE CLIENT NEED?

CORROSION PROTECTION

| ANODIZING | |
|----------------------|---------------------------|
| CORROSIVITY CATEGORY | CORROSION PROTECTION |
| C ₁ | 10 µm |
| C ₂ | 15 µm |
| C ₃ | 20 µm |
| C ₄ | 210 µm |
| C ₅ | 20 or 25 µm |
| C _x | special analysis required |

CORROSION PROTECTION + COLOR

| POWDER COATING | | |
|----------------------|--------------------------------------|---|
| CORROSIVITY CATEGORY | LOW SOLAR RADIATION | HIGH SOLAR RADIATION |
| C ₁ | powder CLASS 1 | powder CLASS 2 or 3 |
| C ₂ | powder CLASS 1 | powder CLASS 2 or 3 |
| C ₃ | powder CLASS 1 | powder CLASS 2 or 3 |
| C ₄ | powder CLASS 1 and Oxidation (FLASH) | powder CLASS 2 or 3 and Oxidation (FLASH) |
| C ₅ | powder CLASS 1 and Oxidation (FLASH) | powder CLASS 2 or 3 and Oxidation (FLASH) |
| C _x | special analysis required | |



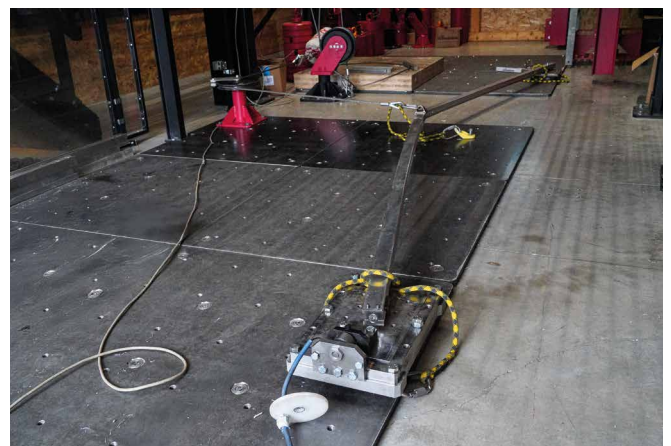
CUSTOM CURVES AND ANGLES

The rail can be custom curved, with a minimum curvature radius of 200 mm and curvature angle ranging from 90° to 180°.



LOADS

The loads on the substructure can range from a minimum of 6 kN to a maximum of 31 kN.



I H-RAIL OVERHEAD

HORIZONTAL OVERHEAD RAIL SYSTEM

ADAPTABLE

The rail can be mounted on different types of substructures using specific plates.

FUNCTIONAL

The rail allows operators to work with their hands free and in safety by using sliding and retractable devices.

SAFE

The system has been tested for use in rope access work with multiple operators.

| | | | | | |
|---------------------|----------------------|------------------------|-----------------------|-----------------------|---|
| EN 795:2012 D | CEN/TS 18415:2013 | UNI 11578:2015 D | AS/NZS 1891.4:2009 | AS/NZS 1891.2:2001 | BS 8610:2017 01 - 02 - 03 - 05 |
|---------------------|----------------------|------------------------|-----------------------|-----------------------|---|



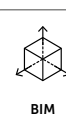
MAXIMUM NUMBER
OF USERS



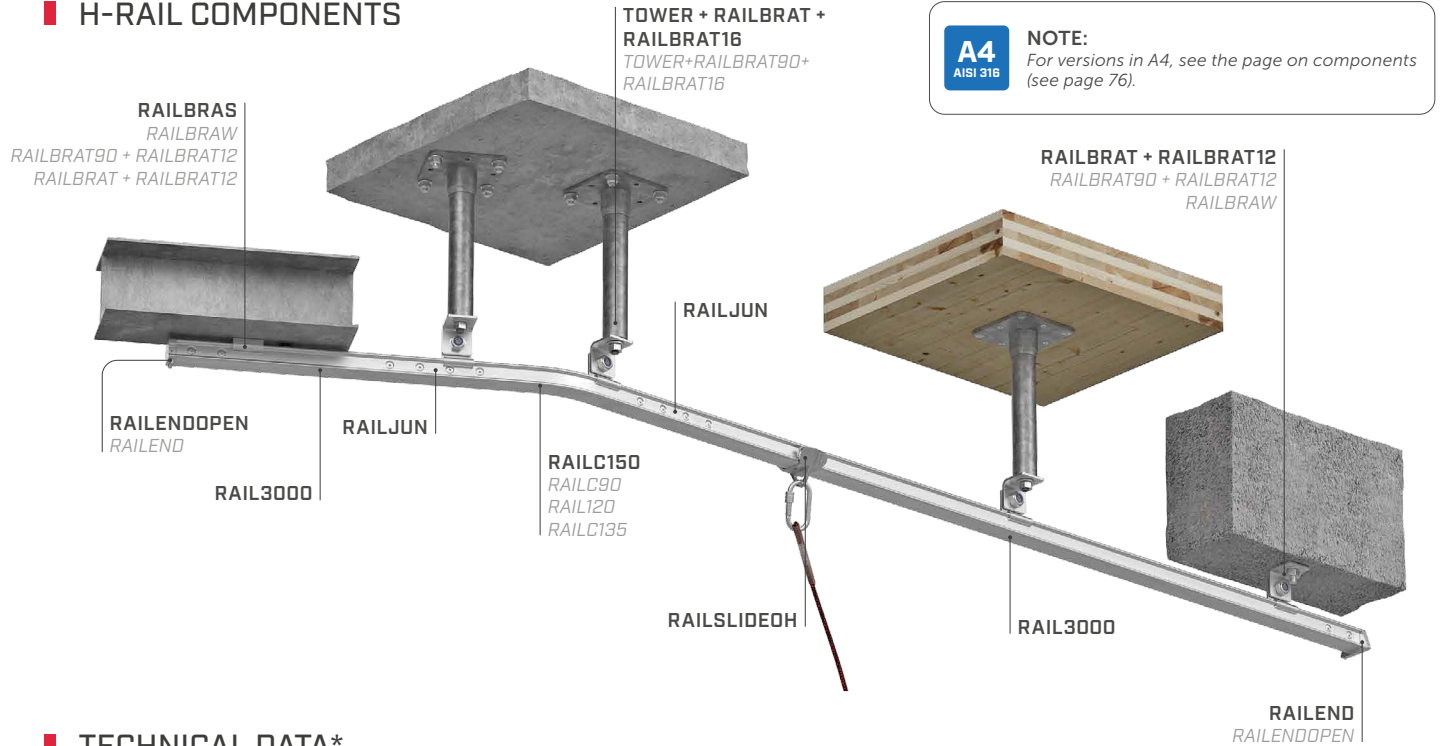
LOAD DIRECTION



TYPES OF
APPLICATION



H-RAIL COMPONENTS



TECHNICAL DATA*

| substructure | minimum thickness | support | fasteners | substructure | minimum thickness | support | fasteners |
|--------------|-------------------|--|--|----------------------|-------------------|--|---|
| GL24h | 160 mm | RAILBRAT + RAILBRATW RAILBRAT90 + RAILBRATW RAILBRAU | VGS (EVO) Ø11 | S235JR | 5 mm | RAILBRAT + RAILBRAT12 RAILBRAT90 + RAILBRAT12 RAILBRAU RAILBRAS | DIN 933 M12 MUT AI 985 M12 DIN 7991 M10 |
| CLT | 160 mm | RAILBRAT + RAILBRATW RAILBRAT90 + RAILBRATW RAILBRAU | VGS (EVO) Ø13 | TOWER ⁽¹⁾ | 5 mm | RAILBRAT + RAILBRAT16 RAILBRAT90 + RAILBRAT16 | - |
| C20/25 | 140 mm | RAILBRAT + RAILBRAT12 RAILBRAT90 + RAILBRAT12 RAILBRAU | AB1 M12 INA 5.8 M12 VIN-FIX SKR Ø12 | | | | |

* The values indicated are the result of experimental tests carried out under the supervision of third parties in accordance with the standard referred to. For a correct calculation report with minimum distances according to the standard requirements, the substructure must be checked by a qualified engineer before installation.

⁽¹⁾ For TOWER fastening, see page 30.

| fall protection restraint | | EN 795:2012 0 | CEN/TS 18415:2013 | UNI 11578:2015 0 | AS/NZS 1891.2:2001 | AS/NZS 1891.4:2009 | BS 8610:2017 01 - 02 - 05 |
|---------------------------|---------------|---------------|-------------------|------------------|--------------------|--------------------|---------------------------|
| users (system) | no. | | | | N.A. | | |
| users (span) | no. | | | | | | |
| maximum span | x_{max} [m] | 6 | | | 6 | | 6 |

| suspension | | EN 795:2012 0 | CEN/TS 18415:2013 | UNI 11578:2015 0 | AS/NZS 1891.2:2001 | AS/NZS 1891.4:2009 | BS 8610:2017 03 - 05 |
|----------------|---------------|---------------|-------------------|------------------|--------------------|--------------------|----------------------|
| users (system) | no. | | | | N.A. | | |
| users (span) | no. | | | | | | |
| maximum span | x_{max} [m] | 2 | | | 2 | | 2 |

For H-RAIL OVERHEAD components, see page 76.

I H-RAIL ON WALL

HORIZONTAL WALL-MOUNTED RAIL SYSTEM

AESTHETICS

Supports with minimal visual impact are available for direct fastening to the structure.

FUNCTIONAL

It can be used with special sliding devices both for fall protection work and rope access work.

SIMPLE

It is compatible with various substructures, including timber, concrete and steel, effectively addressing all construction site requirements.

EN
795:2012
D

CEN/TS
18415:2013

UNI
11578:2015
D

AS/NZS
1891.4:2009

AS/NZS
1891.2:2001

BS
8610:2017
01-02-03
-05



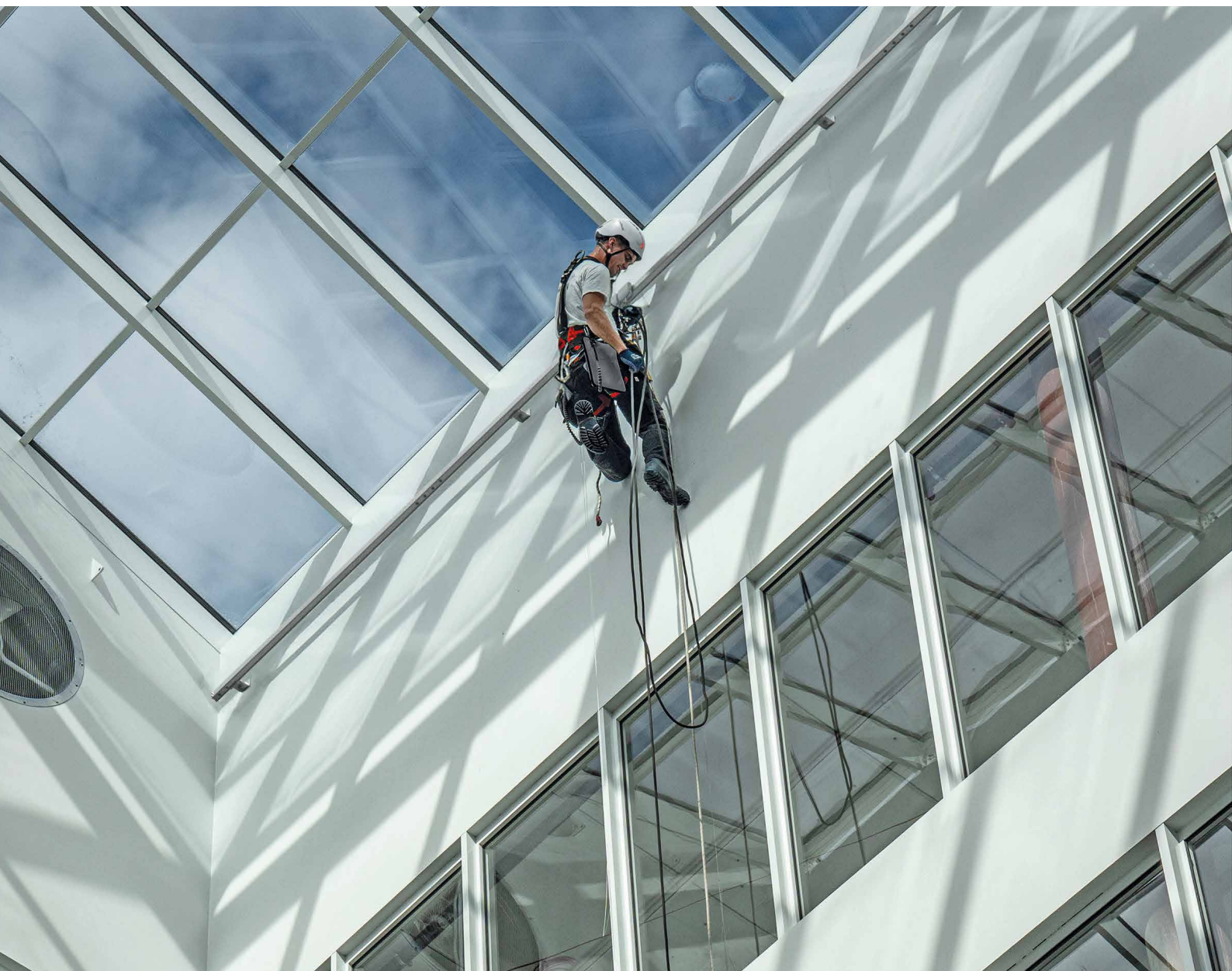
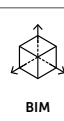
MAXIMUM NUMBER
OF USERS



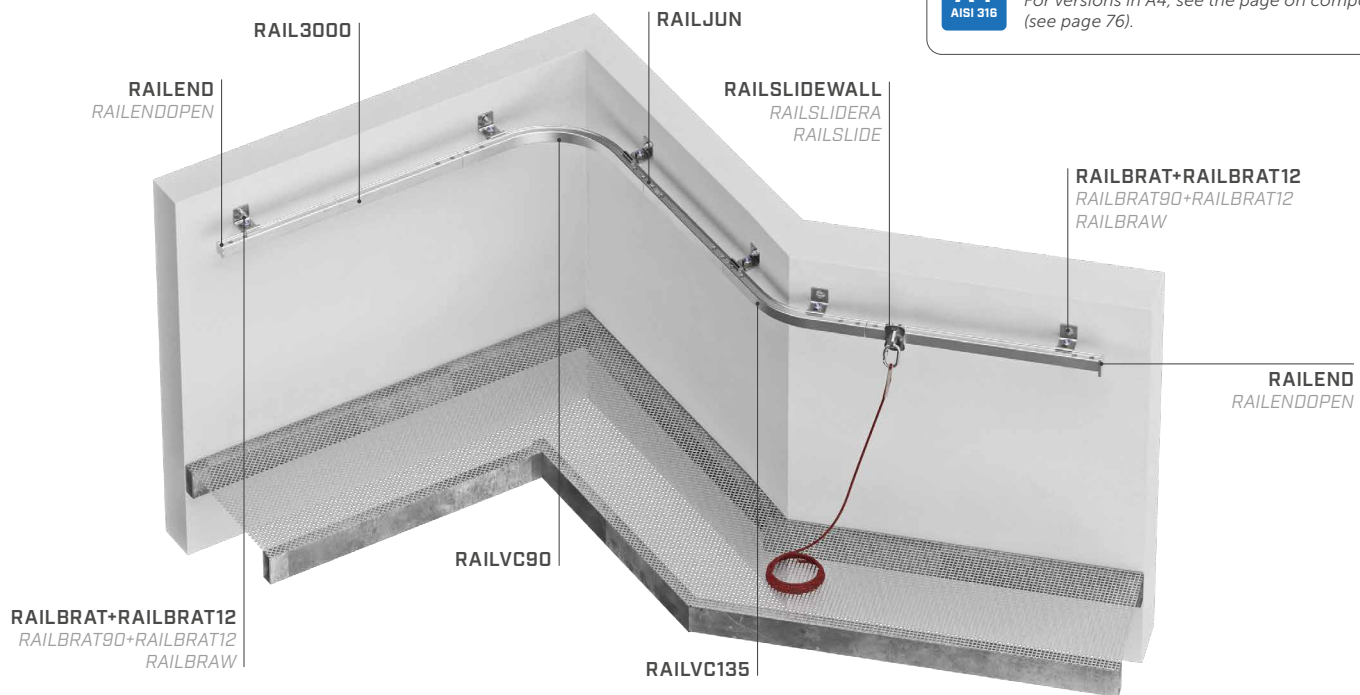
LOAD DIRECTION



TYPES OF
APPLICATION



H-RAIL COMPONENTS



A4
AISI 316

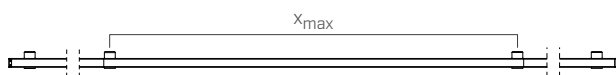
NOTE:

For versions in A4, see the page on components (see page 76).







TECHNICAL DATA*







| substructure | minimum thickness | support | fasteners |
|--------------|-------------------|--|------------------|
| GL24h | 160 mm | RAILBRAT + RAILBRATW RAILBRAT90 + RAILBRATW RAILBRAW | VGS (EVO) Ø11 |
| CLT | 160 mm | RAILBRAT + RAILBRATW RAILBRAT90 + RAILBRATW RAILBRAW | VGS (EVO) Ø13 |

| substructure | minimum thickness | support | fasteners |
|--------------|-------------------|--|--|
| C20/25 | 140 mm | RAILBRAT + RAILBRAT12 RAILBRAT90 + RAILBRAT12 RAILBRAW | AB1 M12 INA 5.8 M12 VIN-FIX SKR Ø12 |
| S235JR | 5 mm | RAILBRAT + RAILBRAT12 RAILBRAT90 + RAILBRAT12 RAILBRAW RAILBRAS | DIN 933 M12 MUT AI 985 M12 DIN 7991 M10 |



* The values indicated are the result of experimental tests carried out under the supervision of third parties in accordance with the standard referred to. For a correct calculation report with minimum distances according to the standard requirements, the substructure must be checked by a qualified engineer before installation.

|  <div>fall protection restraint</div> | | EN 795:2012 D | CEN/TS 16415:2013 | UNI 11578:2015 D | AS/NZS 1891.2:2001 | AS/NZS 1891.4:2009 | BS 8610:2017 01 - 02 - 05 |
|--|----------------|---|-------------------|---------------------|---|--------------------|---|
| users (system) | no. |  | | | N.A. | |  |
| users (span) | no. |  | | |  | |  |
| maximum span | x_{\max} [m] | 6 | | | 6 | | 6 |

|  | suspension | <div>EN 795:2012 D</div> | <div>CEN/TS 16415:2013</div> | <div>UNI 11578:2015 D</div> | <div>AS/NZS 1891.2:2001</div> | <div>AS/NZS 1891.4:2009</div> | <div>BS 8610:2017 03 - 05</div> |
|---|----------------|---|----------------------------------|-------------------------------------|---|-----------------------------------|---|
| users (system) | no. |  | | | N.A. | |  |
| users (span) | no. |  | | |  | |  |
| maximum span | x_{\max} [m] | 2 | | | 2 | | 2 |

For H-RAIL ON WALL components, see page 76.

I H-RAIL + SOLID

RAIL SYSTEM ON RIGID SUPPORT FOR ROPE ACCESS WORK

DESIGNED FOR ROPE ACCESS WORK

The highly rigid and very strong support, combined with the jaw-plate anchor system, ensures safety and comfort during rope access work.

LIGHT

Made from aluminium alloy, the lightweight support is easy to handle and install.

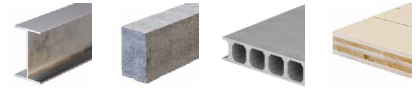
ADAPTABLE

Available in heights between 400 and 1000 mm, it adapts to different roofing thicknesses.

| | | | | | | |
|---------------------|----------------------|------------------------|-----------------------|-----------------------|----------------------------|---------------------|
| EN 795:2012 D | CEN/TS 18415:2013 | UNI 11578:2015 D | AS/NZS 1891.4:2009 | AS/NZS 1891.2:2001 | BS 8610:2017 A3/A5/D | AS/NZS 5532:2013 |
|---------------------|----------------------|------------------------|-----------------------|-----------------------|----------------------------|---------------------|

ANSI*
Z359.18
-2017 A

*The system has been developed and tested in full accordance with the static, dynamic and residual strength requirements outlined in the relative ANSI standard.



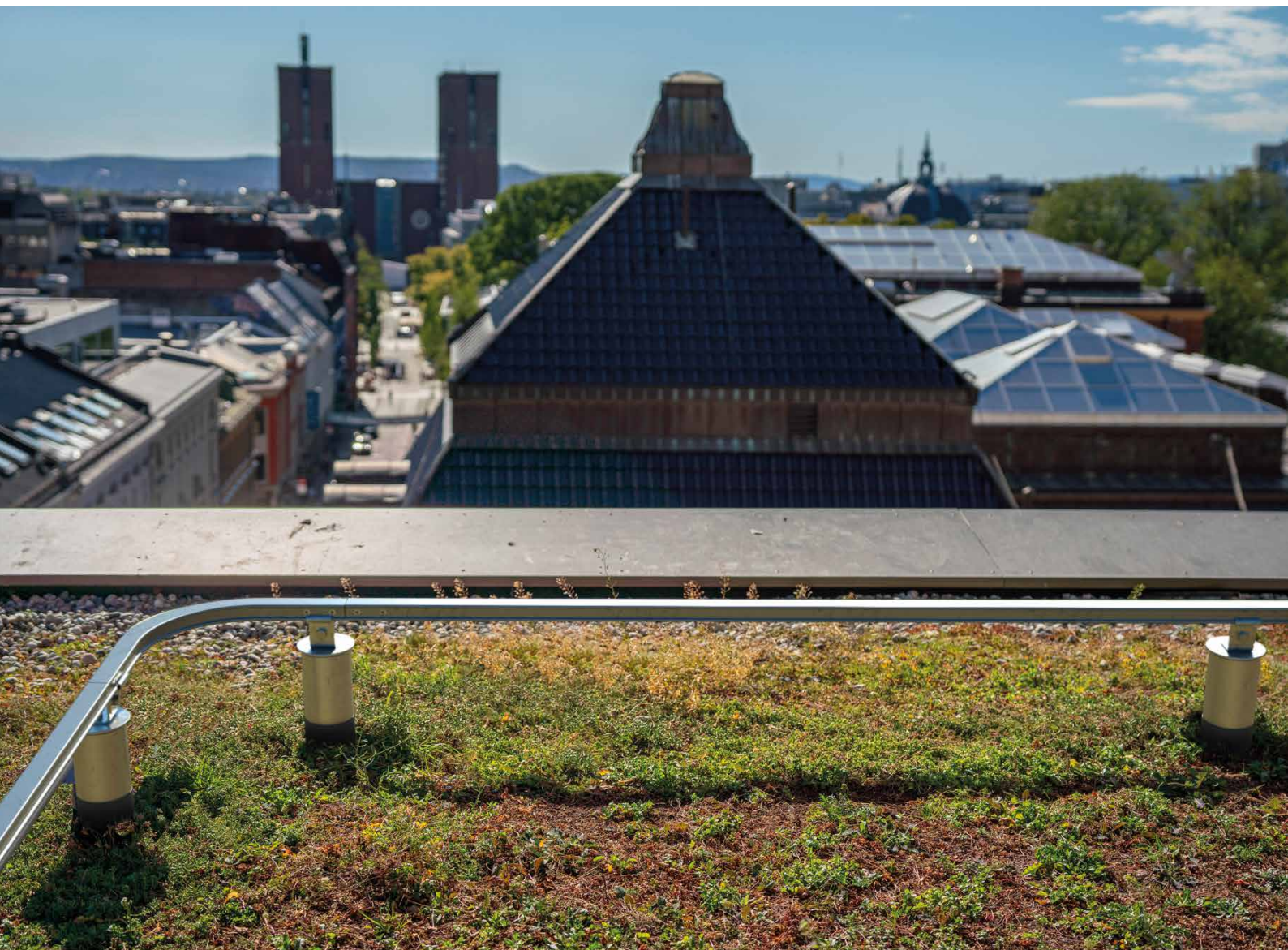
MAXIMUM NUMBER
OF USERS

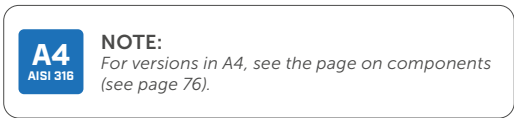




LOAD DIRECTION

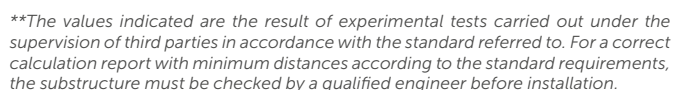








TYPES OF
APPLICATION






| substructure | minimum thickness | fasteners |
|---|-------------------|--|
|  C20/25 | 140 mm | AB1 Ø12  |
| | | SKR (EVO) Ø12  |
| | | INA Ø12 8.8 VIN-FIX  |



|  fall protection restraint | | EN 795:2012 D | CEN/TS 18415:2013 | UNI 11578:2015 D | AS/NZS 1891.2:2001 | AS/NZS 1891.4:2009 | BS 8810:2017 D1-D2-D5 |
|--|----------------|---|----------------------|------------------------|---|-----------------------|---|
| users (system) | no. |  | | | N.A. | |  |
| users (span) | no. |  | | |  | |  |
| maximum span | x_{\max} [m] | 6 | | | 6 | | 6 |

| <div>suspension</div> | | | | | | | with SOLIDRIG | | |
|--|----------------------|---------------|-------------------|------------------|--------------------|--------------------|--------------------|------------------|--------------------|
| | | EN 795:2012 D | CEN/TS 18415:2013 | UNI 11576:2015 D | AS/NZS 1891.2:2001 | AS/NZS 1891.4:2009 | BS 8810:2017 D3-D5 | AS/NZS 5532:2013 | BS 8810:2017 A3/A5 |
| users (system) | no | 🧑🧑🧑🧑 | | N.A. | | 🧑 | 🧑🧑 | | 🧑 |
| users (span) | no. | 🧑🧑 | | 🧑🧑 | | 🧑 | - | | - |
| maximum span | x _{max} [m] | 2 | | 2 | | 2 | - | | - |

For SOLID components, see page 36.

H-RAIL + TOWER

HORIZONTAL RAIL SYSTEM ON SUPPORTS

COMPATIBLE

It can be assembled in combination with all TOWER brackets.

FUNCTIONAL

The combination with TOWER supports allows to raise the rail to overcome obstacles in the roof.

SIMPLE

The special mounting plate ensures quick and simple installation of the rail on the TOWER supports.

| | | | | | |
|---------------------|----------------------|------------------------|-----------------------|-----------------------|------------------------------------|
| EN 795:2012 D | CEN/TS 16415:2013 | UNI 11578:2015 D | AS/NZS 1891.4:2009 | AS/NZS 1891.2:2001 | BS 8610:2017 01-02-03 -05 |
|---------------------|----------------------|------------------------|-----------------------|-----------------------|------------------------------------|



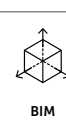
MAXIMUM NUMBER
OF USERS



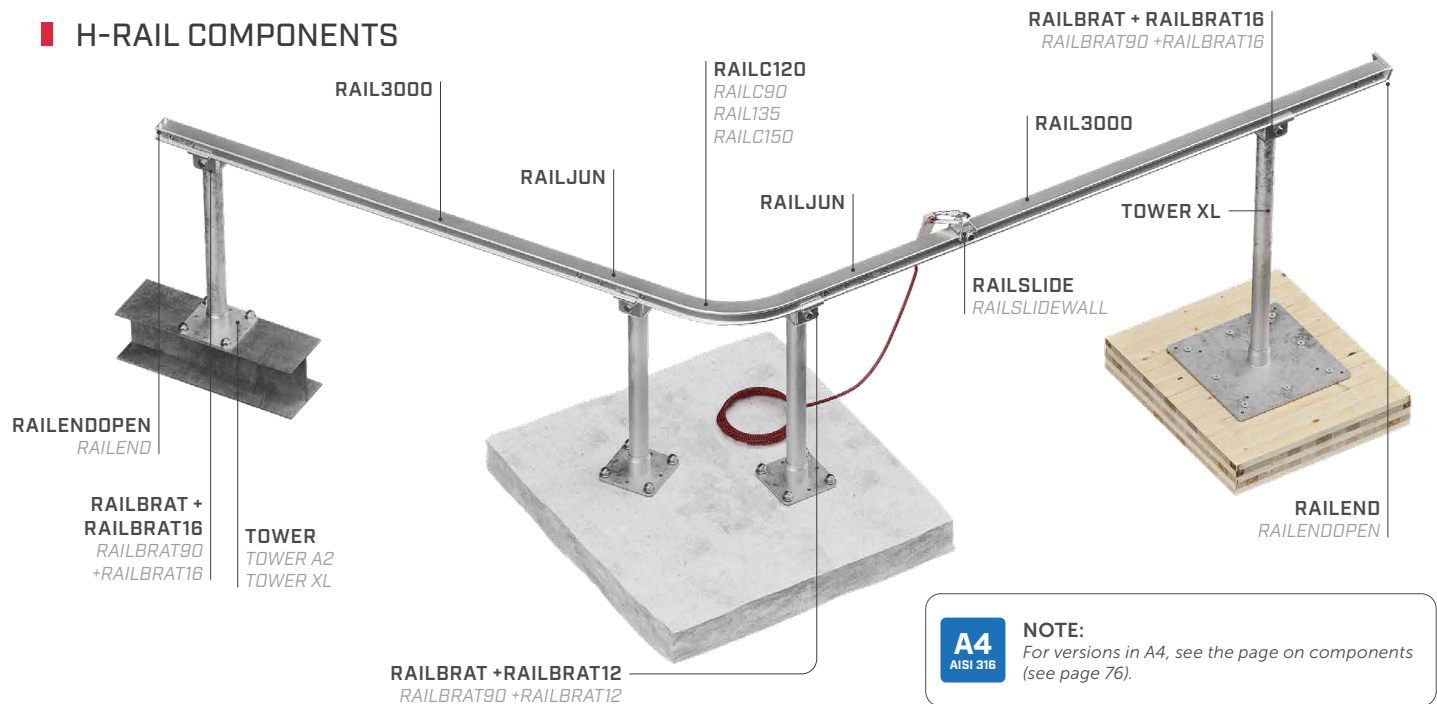
LOAD DIRECTION



TYPES OF
APPLICATION



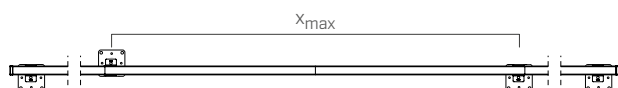
H-RAIL COMPONENTS



TECHNICAL DATA*

H-RAIL ON TOWER | TOWERA2 | TOWER22

| substructure | minimum thickness | support | fasteners |
|--------------|-------------------|--|---|
| GL24h | 160mm | RAILBRAT + RAILBRAT16 RAILBRAT90 + RAILBRAT16 | VGS (EVO) Ø9 ULS Ø10 |
| CLT | 200 mm | | VGS (EVO) Ø9 ULS Ø10 |
| C20/25 | 140 mm | | AB1 M12 SKR Ø12 INA 5.8 M12 VIN-FIX HYB-FIX |
| S235JR | 6 mm | | DIN 933 M12 DIN 125-1A M12 MUT AI 985 M12 |



H-RAIL ON TOWERXL

| substructure | minimum thickness | support | fasteners |
|--------------|-------------------|--|--|
| CLT | 100 mm | RAILBRAT + RAILBRAT16 RAILBRAT90 + RAILBRAT16 | VGS (EVO) Ø11 HUS Ø10 |
| C20/25 | 110 mm | | AB7 Ø10 SKR Ø12 INA 5.8 M10 VIN - FIX |
| C45/55 | 30 mm | | BEF TOWERXL1 Ø10 |
| | 0,75 mm | | TRAPO SET |

* The values indicated are the result of experimental tests carried out under the supervision of third parties in accordance with the standard referred to. For a correct calculation report with minimum distances according to the standard requirements, the substructure must be checked by a qualified engineer before installation.

| fall protection restraint | | EN 795:2012 D | CEN/TS 18415:2013 | UNI 11578:2015 D | AS/NZS 1891.2:2001 | AS/NZS 1891.4:2009 | BS 8610:2017 01 - 02 - 05 |
|---------------------------|---------------|---------------|-------------------|------------------|--------------------|--------------------|---------------------------|
| users (system) | no. | ■■■■ | | | N.A. | | ■■ |
| users (span) | no. | ■■■■ | | | ■■ | | ■■ |
| maximum span | x_{max} [m] | 6 | | | 6 | | 6 |

TOWER

| suspension | | EN 795:2012 D | CEN/TS 18415:2013 | UNI 11578:2015 D | AS/NZS 1891.2:2001 | AS/NZS 1891.4:2009 | BS 8610:2017 03 - 05 |
|----------------|---------------|---------------|-------------------|------------------|--------------------|--------------------|----------------------|
| users (system) | no. | ■■■■ | | | N.A. | | ■■ |
| users (span) | no. | ■■ | | | ■■ | | ■■ |
| maximum span | x_{max} [m] | 2 | | | 2 | | 2 |

For H-RAIL + TOWER components, see page 76.

I H-RAIL ON FLOOR

HORIZONTAL RAIL SYSTEM

LOW PROFILE

The rail occupies minimal space on the roof and has a low visual impact.

COMPLETE

The system can be used for different applications (horizontal, vertical and overhead) by using the specific sliding devices.

FAST INSTALLATION

The wide fastening span (6 m) ensures rapid assembly due to the limited number of fastening points.

| | | | | | |
|---------------------|----------------------|------------------------|-----------------------|-----------------------|------------------------------------|
| EN 795:2012 D | CEN/TS 18415:2013 | UNI 11578:2015 D | AS/NZS 1891.4:2009 | AS/NZS 1891.2:2001 | BS 8610:2017 01-02-03 -05 |
|---------------------|----------------------|------------------------|-----------------------|-----------------------|------------------------------------|



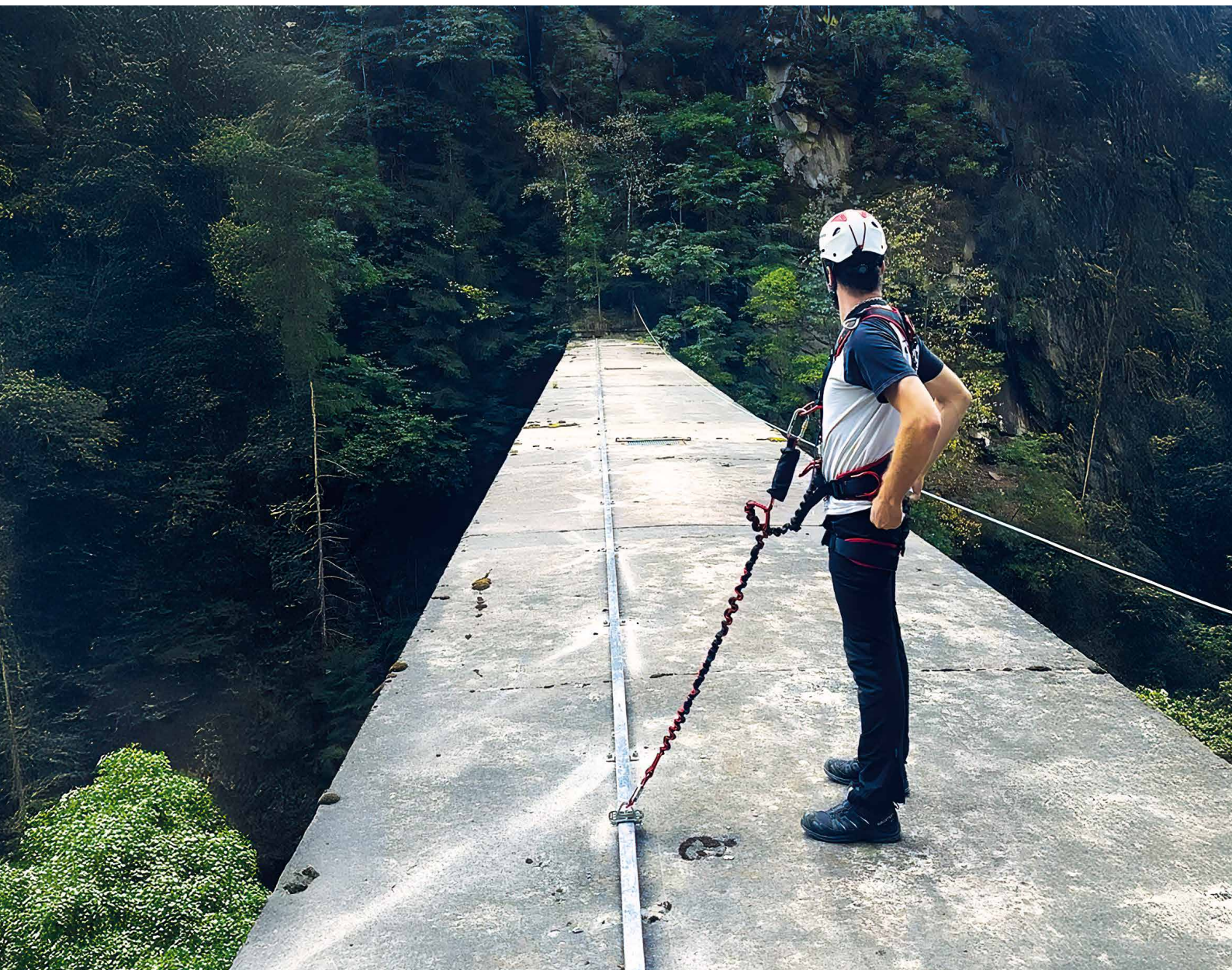
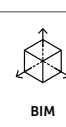
MAXIMUM NUMBER
OF USERS



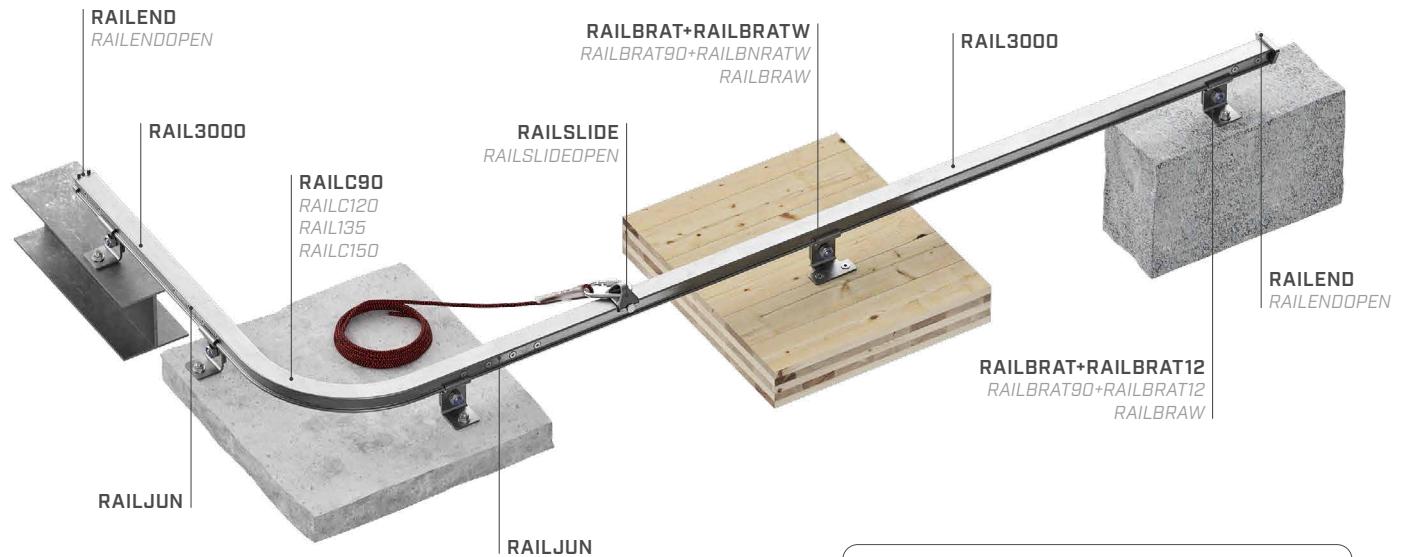
LOAD DIRECTION



TYPES OF
APPLICATION



H-RAIL COMPONENTS



A4
AISI 316

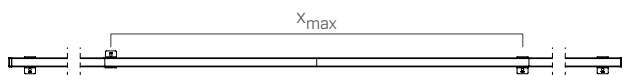
NOTE:

For versions in A4, see the page on components (see page 76).

TECHNICAL DATA*

| substructure | minimum thickness | support | fasteners |
|--------------|-------------------|--|---------------|
| GL24h | 160 mm | RAILBRAT + RAILBRATW RAILBRAT90 + RAILBRATW RAILBRAW | VGS (EVO) Ø11 |
| CLT | 160 mm | RAILBRAT + RAILBRATW RAILBRAT90 + RAILBRATW RAILBRAW | VGS (EVO) Ø13 |

| substructure | minimum thickness | support | fasteners |
|--------------|-------------------|--|---|
| C20/25 | 140 mm | RAILBRAT + RAILBRAT12 RAILBRAT90 + RAILBRAT12 RAILBRAW | AB1 M12 INA 5.8 M12 VIN-FIX SKR Ø12 |
| S235JR | 5 mm | RAILBRAT + RAILBRAT12 RAILBRAT90 + RAILBRAT12 RAILBRAW RAILBRAS | DIN 933 M12 MUT AI 985 M12 DIN 7991 M10 |



* The values indicated are the result of experimental tests carried out under the supervision of third parties in accordance with the standard referred to. For a correct calculation report with minimum distances according to the standard requirements, the substructure must be checked by a qualified engineer before installation.

| fall protection restraint | | EN 795:2012 0 | CEN/TS 16415:2013 | UNI 11578:2015 0 | AS/NZS 1891.2:2001 | AS/NZS 1891.4:2009 | BS 8610:2017 01 - 02 - 05 |
|---------------------------|---------------|---------------|-------------------|------------------|--------------------|--------------------|---------------------------|
| users (system) | no. | | | | N.A. | | |
| users (span) | no. | | | | | | |
| maximum span | x_{max} [m] | 6 | 6 | 6 | 6 | 6 | 6 |

| suspension | | EN 795:2012 0 | CEN/TS 16415:2013 | UNI 11578:2015 0 | AS/NZS 1891.2:2001 | AS/NZS 1891.4:2009 | BS 8610:2017 03 - 05 |
|----------------|---------------|---------------|-------------------|------------------|--------------------|--------------------|----------------------|
| users (system) | no. | | | | N.A. | | |
| users (span) | no. | | | | | | |
| maximum span | x_{max} [m] | 2 | 2 | 2 | 2 | 2 | 2 |

For H-RAIL ON FLOOR components, see page 76.

I H-RAIL VERTICAL



RAIL SYSTEM FOR VERTICAL USE ON LADDER

FUNCTIONAL

The sliding device with integrated energy absorber allows continuous ascent and descent in safe and comfortable conditions.

DURABLE

The elements in AISI 304 stainless steel and aluminium alloy provide excellent resistance to corrosion.

PRACTICAL

It is a user-friendly system comprised of few elements that are easy to install.

| | | |
|-------------------------------|------------|-----------------------|
| EN 353-1:2014 + A1:2018 | RFU 11.119 | AS/NZS 1891.3:2020 |
|-------------------------------|------------|-----------------------|



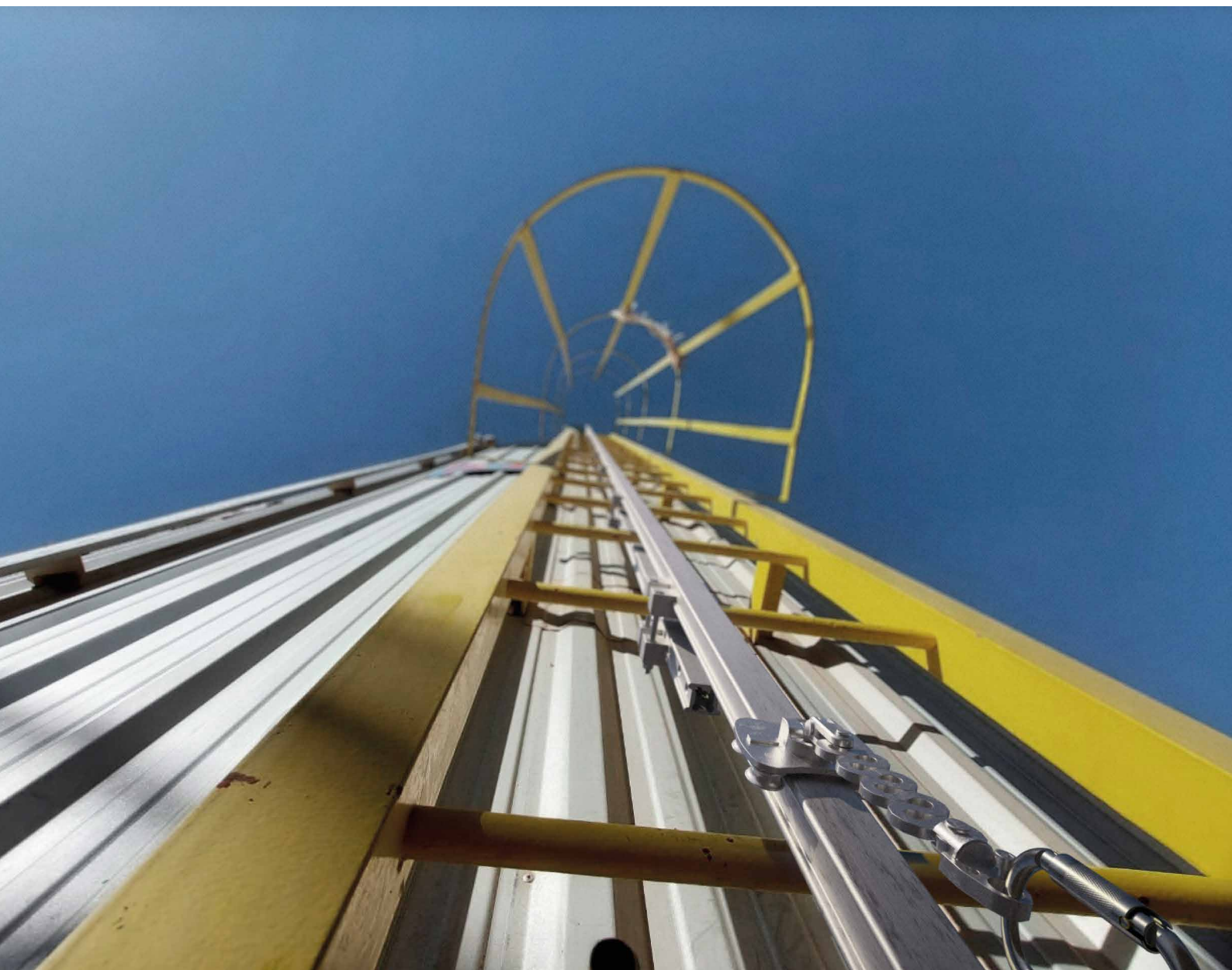
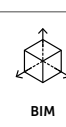
MAXIMUM NUMBER OF USERS







LOAD DIRECTION



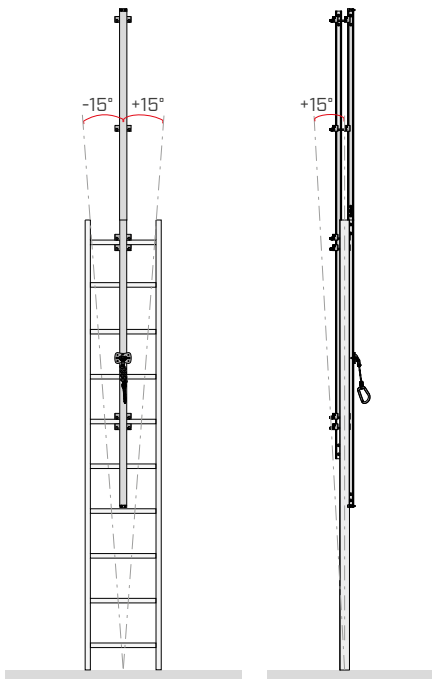
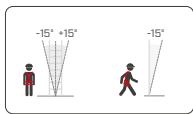
TYPES OF APPLICATION



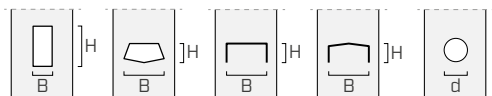
■ TECHNICAL DATA

| | | | |
|--|----------------|---|---|
|  fall protection | |  | |
| | | EN 353-1:2014 • A1:2017 | AS/NZS 1891.3:2020 |
| | | RFU 11.119 | |
| maximum number of users | no. |  |  |
| minimum distance between operators | z_{\min} [m] | 3 | 3 |
| minimum span | x_{\min} [m] | 0,5 | 0,5 |
| maximum span | x_{\max} [m] | 3 | 3 |

installation range

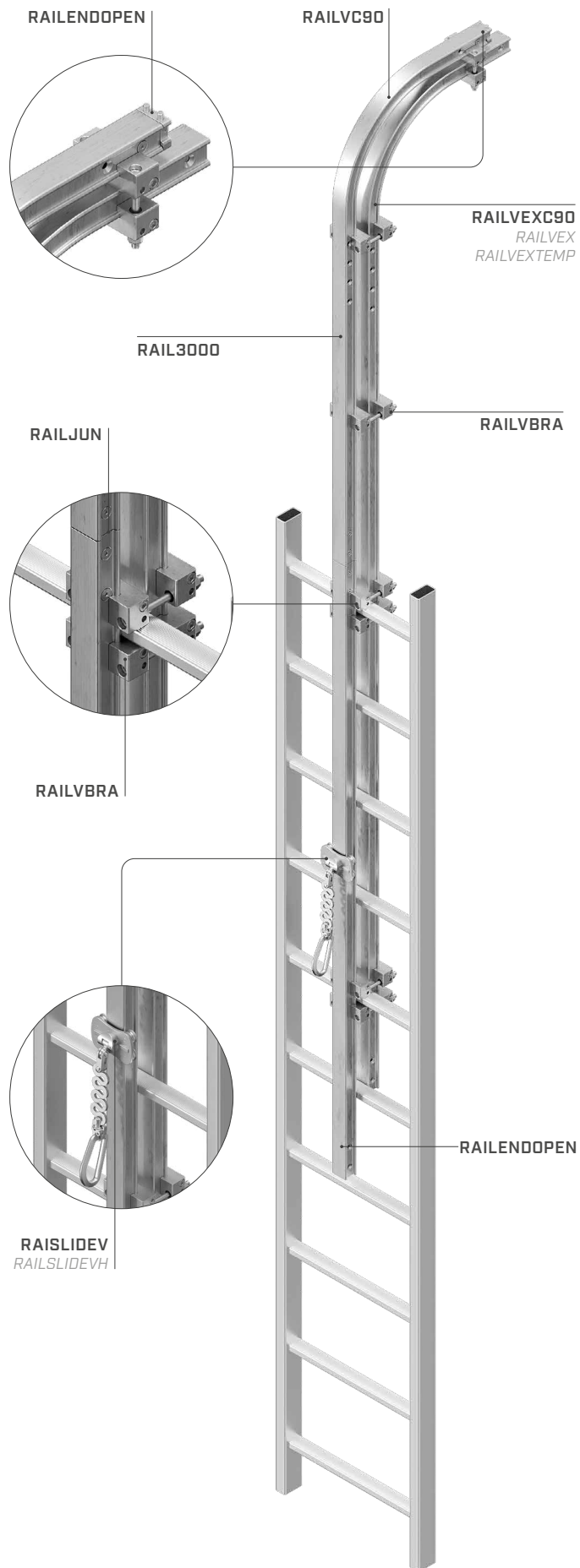


step shape



B from 20 to 100 mm
H from 10 to 60 mm
d max 60 mm

H-RAIL VERTICAL COMPONENTS

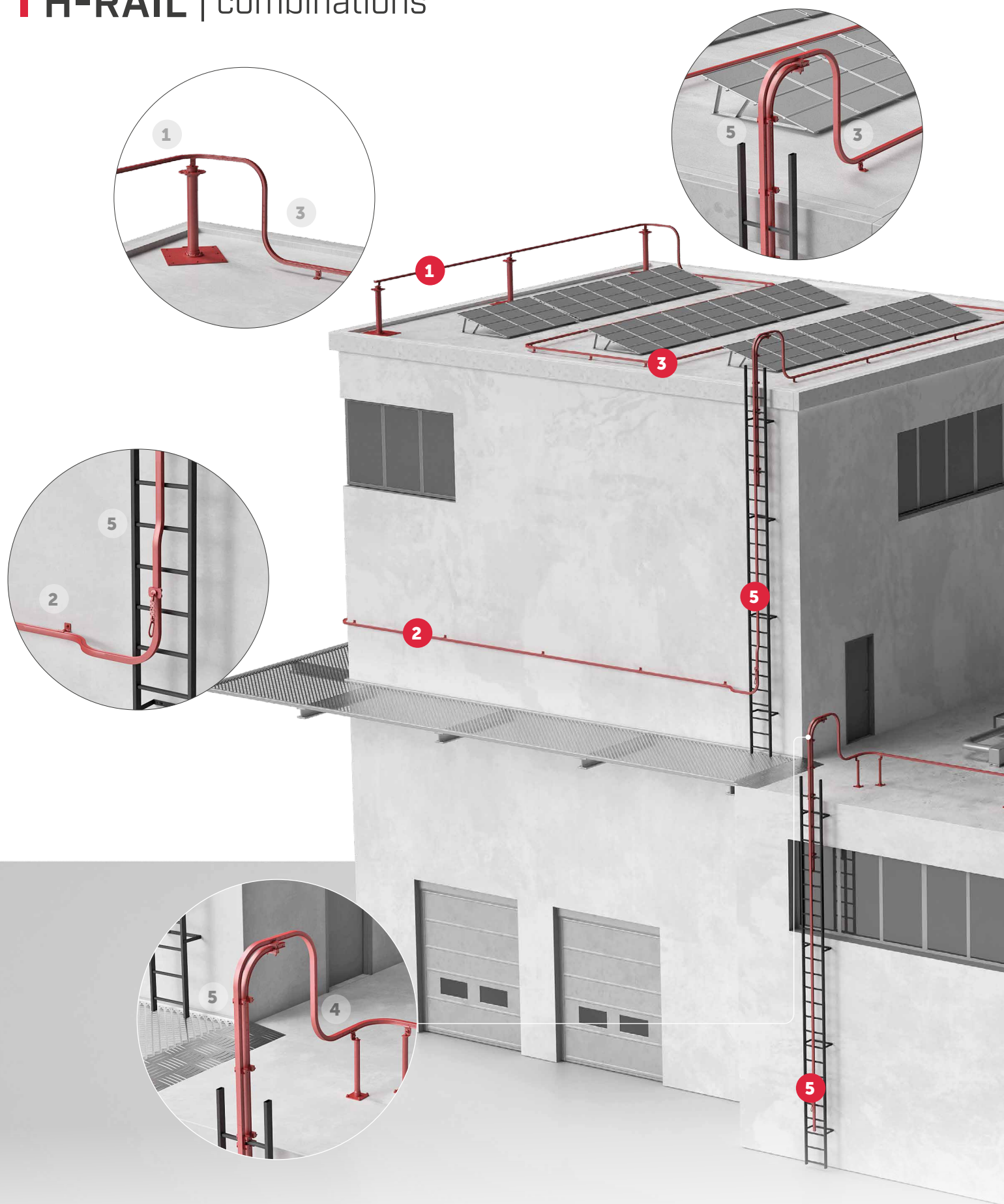


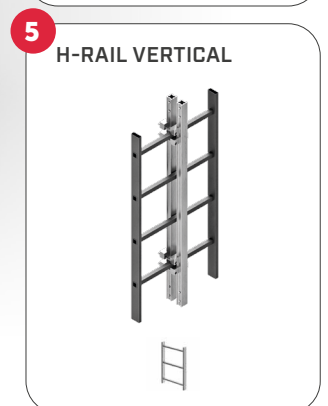
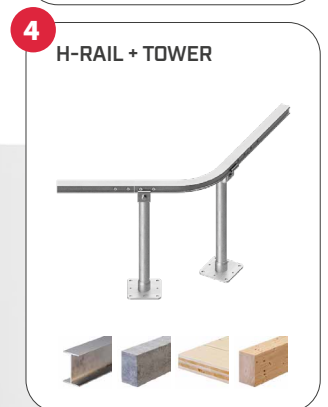
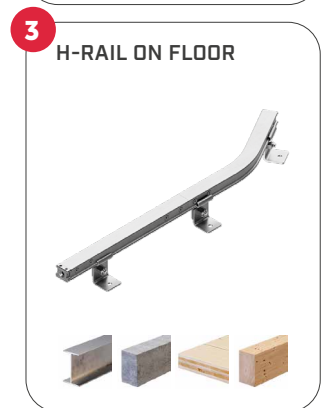
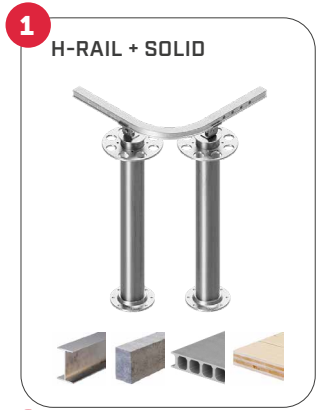
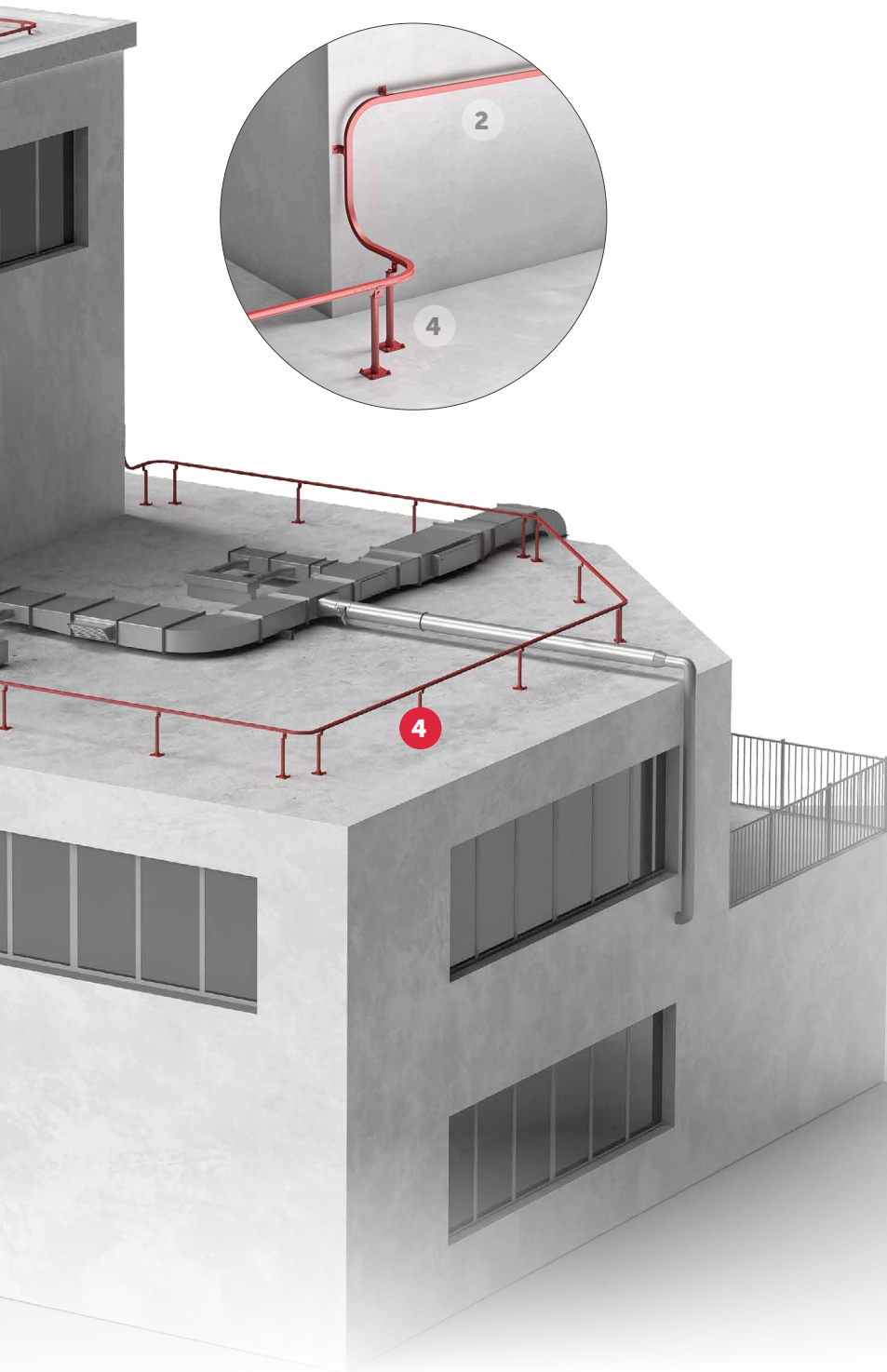
A4
AISI 316

NOTE:

For versions in A4, see the page on components (see page 76).

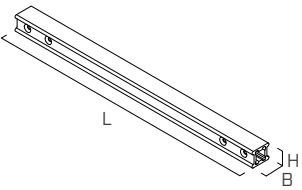
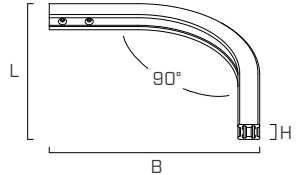
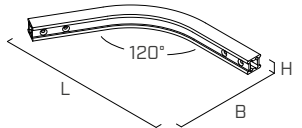

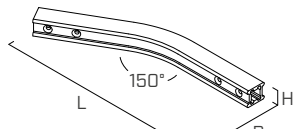
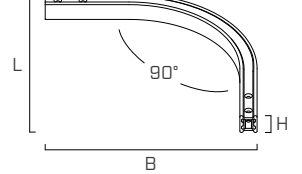
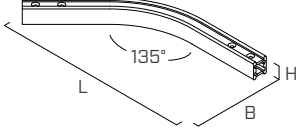
I H-RAIL | combinations



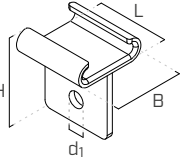
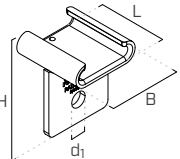
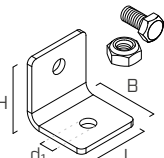
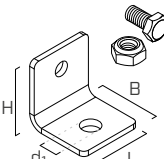
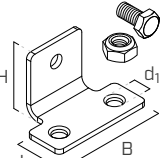
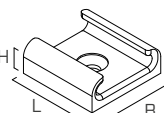
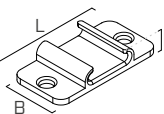
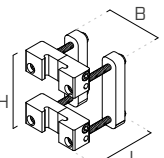


H-RAIL | components

RAILS | CODES AND DIMENSIONS

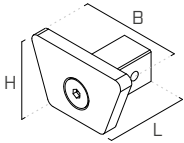
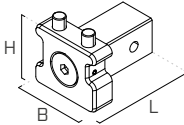
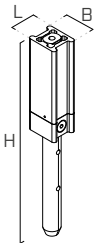
| CODE | description | material | B [mm] [in] | H [mm] [in] | L [mm] [in] | pcs | |
|-----------|---------------------------------------|-----------------|-------------------|-------------------|-------------------|-----|---|
| RAIL3000 | 3 m aluminium rail | EN AW 6063 (T6) | 49 1 15/16 | 41 1 5/8 | 3000 118 1/8 | 1 |  |
| RAILC90 | aluminium 90° bend for rail | EN AW 6063 (T6) | 475 18 11/16 | 41 1 5/8 | 475 18 11/16 | 1 |  |
| RAILC120 | aluminium 120° bend for rail | EN AW 6063 (T6) | 335 13 1/4 | 41 1 5/8 | 538 21 3/16 | 1 |  |
| RAILC135 | aluminium 135° bend for rail | EN AW 6063 (T6) | 257 10 1/8 | 41 1 5/8 | 536 21 1/8 | 1 |  |
| RAILC150 | aluminium 150° bend for rail | EN AW 6063 (T6) | 180 7 | 41 1 5/8 | 511 20 3/16 | 1 |  |
| RAILVC90 | aluminium vertical 90° bend for rail | EN AW 6063 (T6) | 506 19 15/16 | 49 1 15/16 | 506 19 15/16 | 1 |  |
| RAILVC135 | aluminium vertical 135° bend for rail | EN AW 6063 (T6) | 260 10 1/4 | 49 1 15/16 | 558 21 15/16 | 1 |  |

SUPPORTS | CODES AND DIMENSIONS

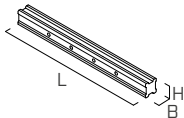
| CODE | description | material | d ₁ [mm] [in] | B [mm] [in] | H [mm] [in] | L [mm] [in] | pcs | |
|--------------|--|---|--------------------------------|-------------------|-------------------|-------------------|-----|---|
| RAILBRAT | support to be combined with RAILBRAT12 - RAILBRAT16 - RAILBRAW | AISI 304 stainless steel grade 1.4301 | 13,5 9/16 | 60 2 3/8 | 74 2 15/16 | 60 2 3/8 | 1 |  |
| RAILBRATA4 | support in A4 to be combined with RAILBRAT12A4 - RAILBRAT16A4 - RAILBRAWA4 | AISI 316 stainless steel grade 1.4401 | | | | | | |
| RAILBRAT90 | support to be combined with RAILBRAT12 - RAILBRAT16 - RAILBRAW | AISI 304 stainless steel grade 1.4301 | 13,5 9/16 | 60 2 3/8 | 74 2 15/16 | 60 2 3/8 | 1 |  |
| RAILBRAT90A4 | support in A4 to be combined with RAILBRAT12A4 - RAILBRAT16A4 - RAILBRAWA4 | AISI 316 stainless steel grade 1.4401 | | | | | | |
| RAILBRAT12 | bottom element to be combined with RAILBRAT or RAILBRAT90 | AISI 304 stainless steel grade 1.4301 | 13,5 9/16 | 60 2 3/8 | 63 2 1/2 | 60 2 3/8 | 1 |  |
| RAILBRAT12A4 | bottom element in A4 to be combined with RAILBRATA4 or RAILBRAT90A4 | AISI 316 stainless steel grade 1.4401 | | | | | | |
| RAILBRAT16 | bottom element to be combined with RAILBRAT or RAILBRAT90 | AISI 304 stainless steel grade 1.4301 | 17 11/16 | 60 2 3/8 | 63 2 1/2 | 60 2 3/8 | 1 |  |
| RAILBRAT16A4 | bottom element in A4 to be combined with RAILBRATA4 or RAILBRAT90A4 | AISI 316 stainless steel grade 1.4401 | | | | | | |
| RAILBRATW | bottom element for timber to be combined with RAILBRAT or RAILBRAT90 | AISI 304 stainless steel grade 1.4301 | 14 9/16 | 103 4 1/16 | 63 2 1/2 | 60 2 3/8 | 1 |  |
| RAILBRATWA4 | bottom element in A4 for timber to be combined with RAILBRATA4 or RAILBRAT90A4 | AISI 316 stainless steel grade 1.4401 | | | | | | |
| RAILBRAS | support for installation on steel | AISI 304 stainless steel grade 1.4301 | 11 7/16 | 60 2 3/8 | 22 7/8 | 60 2 3/8 | 1 |  |
| RAILBRASA4 | A4 support for installation on steel | AISI 316 stainless steel grade 1.4401 | | | | | | |
| RAILBRAW | support for installation on timber and concrete | AISI 304 stainless steel grade 1.4301 | 14 9/16 | 60 2 3/8 | 22 7/8 | 120 4 3/4 | 1 |  |
| RAILBRAWA4 | A4 support for installation on timber and concrete | AISI 316 stainless steel grade 1.4401 | | | | | | |
| RAILVBRA | support for vertical installation on ladder | AISI 304 stainless steel grade 1.4301 EN AW 6082 aluminium | - - | 117 4 3/8 | 139 5 11/16 | 157 4 5/8 | 1 |  |

H-RAIL | components

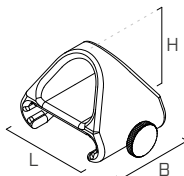
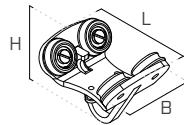
END ELEMENTS | CODES AND DIMENSIONS

| CODE | description | material | B [mm] [in] | H [mm] [in] | L [mm] [in] | pcs | |
|---------------|---|---|-------------------|-------------------|-------------------|-----|--|
| RAILEND | fixed end element | AISI 304 stainless steel grade 1.4301 | 85 3 3/8 | 49 1 15/16 | 55 2 3/16 | 1 |  |
| RAILENDA4 | A4 fixed end element | AISI 316 stainless steel grade 1.4401 | | | | | |
| RAILENDOPEN | opening end element | AISI 304 stainless steel grade 1.4301 | 49 1 15/16 | 49 1 15/16 | 60 2 3/8 | 1 |  |
| RAILENDOPENA4 | A4 opening end element | AISI 316 stainless steel grade 1.4401 | | | | | |
| RAILVEND | opening end element for vertical installation on ladder | AISI 304 stainless steel grade 1.4301 EN AW 6063 aluminium | 49 1 15/16 | 108 4 1/4 | 41 1 5/8 | 1 |  |

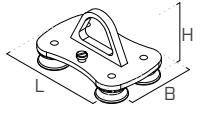
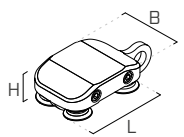
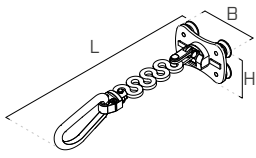
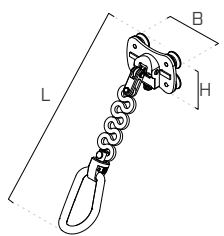
JOINTS | CODES AND DIMENSIONS

| CODE | description | material | B [mm] [in] | H [mm] [in] | L [mm] [in] | pcs | |
|---------|------------------------|----------------------|-------------------|-------------------|-------------------|-----|---|
| RAILJUN | joint element for rail | EN AW 6082 aluminium | 29 1 1/8 | 33 1 5/16 | 340 13 3/8 | 1 |  |



SLIDING DEVICES | CODES AND DIMENSIONS

| CODE | description | material | B [mm] [in] | H [mm] [in] | L [mm] [in] | pcs | |
|---------------|--|---------------------------------------|-------------------|-------------------|-------------------|-----|---|
| RAILSLIDE | sliding device | AISI 304 stainless steel grade 1.4301 | 50 1 15/16 | 50 1 15/16 | 70 2 3/4 | 1 |  |
| RAILSLIDEA4 | A4 sliding device | AISI 316 stainless steel grade 1.4401 | | | | | |
| RAILSLIDEOH | sliding device for overhead applications and rope access work | AISI 304 stainless steel grade 1.4301 | 70 2 3/4 | 72 2 13/16 | 95 3 3/4 | 1 |  |
| RAILSLIDEOHA4 | A4 sliding device for overhead applications and rope access work | AISI 316 stainless steel grade 1.4401 | | | | | |

■ SLIDING DEVICES | CODES AND DIMENSIONS

| CODE | description | material | B [mm] [in] | H [mm] [in] | L [mm] [in] | pcs | |
|---------------|---|---|-------------------|-------------------|-------------------|-----|---|
| RAILSLIDEWALL | sliding device for wall application | AISI 304 stainless steel grade 1.4301 | 69 2 3/4 | 73 2 13/16 | 111 4 3/8 | 1 |  |
| RAILSLIDEWA4 | A4 sliding device for wall application | AISI 316 stainless steel grade 1.4401 | | | | | |
| RAILSLIDERA | sliding device for wall application and rope access work | AISI 304 stainless steel grade 1.4301 EN AW 6082 aluminium | 70 2 3/4 | 43 1 11/16 | 151 5 15/16 | 1 |  |
| RAILSLIDERAA4 | A4 sliding device for wall application and rope access work | AISI 316 stainless steel grade 1.4401 EN AW 6082 aluminium | | | | | |
| RAILSLIDEV | sliding device for vertical application | AISI 304 stainless steel grade 1.4301 | 110 4 3/8 | 73 2 7/8 | 355 14 | 1 |  |
| RAILSLIDEVA4 | sliding device in A4 for vertical application | AISI 316 stainless steel grade 1.4401 | | | | | |
| RAILSLIDEVH | sliding device for combined vertical and horizontal application | AISI 304 stainless steel grade 1.4301 | - | - | - | 1 |  |
| RAILSLIDEVHA4 | sliding device in A4 for combined vertical and horizontal application | AISI 316 stainless steel grade 1.4401 | | | | | |

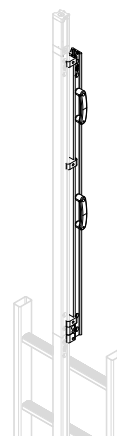
■ FASTENERS | CODES AND DIMENSIONS

| CODE | description | material | d ₁ [mm] [in] | B [mm] [in] | H [mm] [in] | L [mm] [in] | pcs | |
|--------------|---|-----------------------|--------------------------------|-------------------|-------------------|-------------------|-----|---|
| RAILOCKSCREW | screw for RAILBRAT with knurled head for rail clamping | A1-70 stainless steel | 20 0.79 | - - | 14 9/16 | - - | 1 |  |
| RAILSCREW | fastening screws for RAILJUN, RAILEND and RAILENDOPEN DIN 7991 M8 x 16 A2-70 | A2-70 stainless steel | 8 0.31 | - - | 16 5/8 | - - | 50 |  |
| RAILSCREWA4 | fastening screws for RAILJUN, RAILEND and RAILENDOPEN DIN 7991 M8 x 16 A4-70 | A4-70 stainless steel | | | | | | |

H-RAIL | components

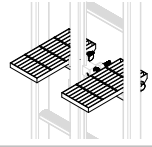
EXIT RAILS | CODES AND DIMENSIONS

| CODE | description | material | pcs |
|-------------|--|---|-----|
| RAILVEX | straight exit rail for vertical installation on ladder | AISI 304 stainless steel grade 1.4301 EN AW 6063 aluminium | 1 |
| RAILVEXC90 | 90° curved exit rail for vertical installation on ladder | AISI 304 stainless steel grade 1.4301 EN AW 6063 aluminium | 1 |
| RAILVEXTEMP | removable exit rail for vertical installation on ladder | AISI 304 stainless steel grade 1.4301 EN AW 6063 aluminium | 1 |



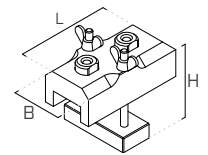
REST | CODES AND DIMENSIONS

| CODE | description | material | pcs |
|-----------|--|---------------------------------------|-----|
| RAILVREST | rest board for vertical installation on ladder | AISI 304 stainless steel grade 1.4301 | 1 |



ACCESSORIES | CODES AND DIMENSIONS

| CODE | description | material | B [mm] [in] | H [mm] [in] | L [mm] [in] | pcs |
|-------------|--|--|-------------------|-------------------|-------------------|-----|
| RAILJUNTOOL | template for rail junction holes | EN AW 6082 1.1191 (C45E) aluminium AISI 304 stainless steel grade 1.4301 | 92 3 5/8 | 116 4 9/16 | 132 5 3/16 | 1 |
| RAILPLATE | identification plate for H-RAIL (languages: Italian, English, German, French, Spanish) | - | 40 1 9/16 | 140 5 1/2 | - - | 1 |
| RAILPLATEBS | identification plate for H-RAIL according to British standards (languages: Italian, English, German, French, Spanish) | - | 41 1 5/8 | 285 11 1/4 | - - | 1 |
| RAILVPLATE | identification plate for vertical installation on ladder | - | - - | - - | - - | 1 |



INFORMATION PLATES | CODES AND DIMENSIONS

| CODE | description | material | pcs |
|--------------------------|---|-------------------------------------|-----|
| TARGA _{xy} * | information plate for fall protection systems | stainless steel (AISI 304), plastic | 1 |
| TARGAHOR _{xy} * | information plate for PATROL and H-RAIL | stainless steel (AISI 304), plastic | 1 |

*xy represents the ISO 639-1 language code, see the table below for reference.

EXAMPLE:

| | |
|---------------------|---|
| TARGAEN | information plate for fall protection systems in EN (English) |
| TARGAHOREN | information plate for PATROL and H-RAIL in EN (English) |
| TARGAVERT EN | information plate for VERTIGRIP in EN (English) |