



**ALTEC**

**Aluminium  
Loading ramps**

# ALTEC GmbH Singen.

## ALTEC GMBH

An innovative company from an innovative country.

Altec is a well established, medium sized manufacturing company situated in the south of Baden Wurttemberg close to Lake Konstanz and the Swiss border.

A perfect environment to put ideas in action.

**For every loading situation there is a correct solution.**

Only Altec have a product range wide enough to suit most applications. If you can't find what you need we will design and manufacture the best solution for you.

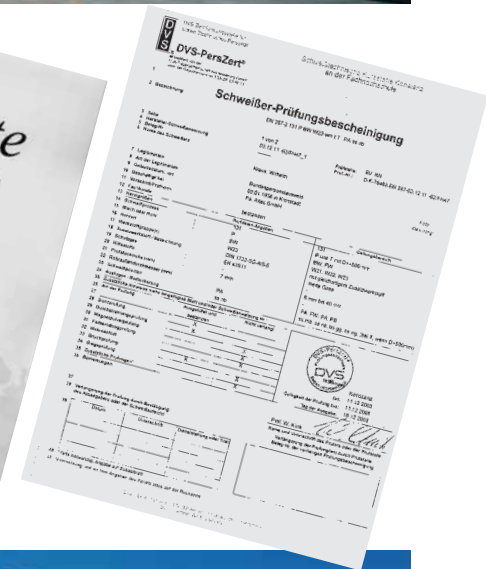
At Altec we believe the most important factors are experience, cost and safety. All of our products are certified and agree with the rules laid down by our chamber of commerce.

The capacities shown in this brochure are calculated for two axle vehicles with a weight distribution of 40% to 60%. For single axle vehicles the capacity is reduced to 60% of that shown.

All capacities are calculated with a safety factor of 2.1.

From design to production we offer top quality, **made in Germany!**

All Altec products are made to European standards. However, please note, loading ramps are not covered by CE regulations and should not show CE certification.



Altec loading ramps in manufacture. In the background is our automatic storage and selection system. Also shown is our capacity testing apparatus which is used as part of our in house quality control system.



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up to 2300 kgs  
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up to 600 kgs  
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Ramps for  
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Type AVS 130/150  
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Type AVS 170/200  
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For steel tracks  
type AVS  
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Type VFR 120/134  
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Type VFR 185  
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Type RRK  
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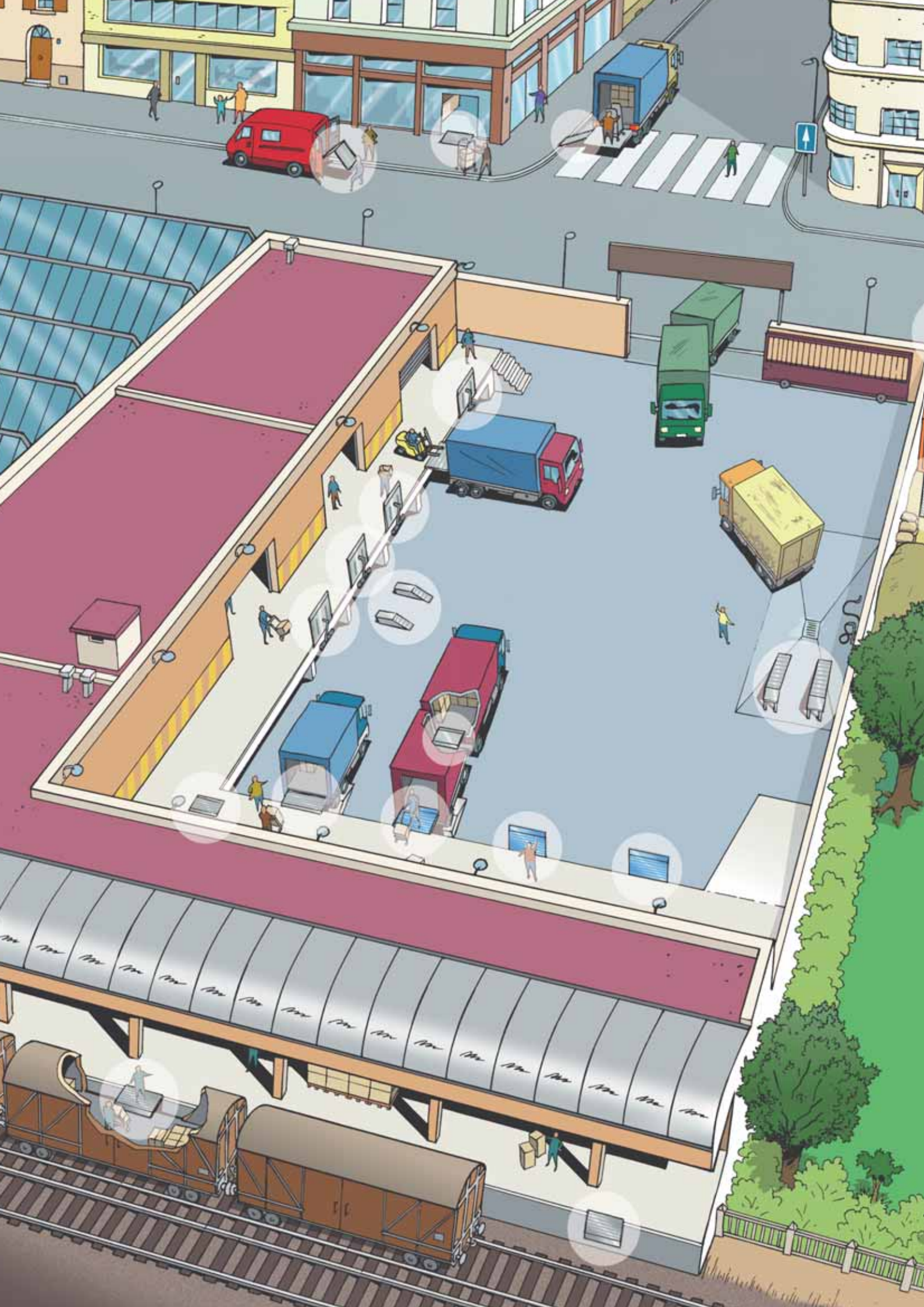
Tailgate  
type RWB/RPB  
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# Type AOS



Small wheeled equipment such as trolleys, pallet trucks etc. are involved in many thousand of loading and unloading operations everyday. The aluminium profile used in the manufacture of AOS ramps is perfect for this type of equipment due to its perforated hi-grip anti-slip surface. The perforations allowing water and snow to drain very easily from the running surface, providing excellent traction for both pedestrians and equipment whatever the weather.

AOS ramps are not fitted with safety curbs as standard, but they can be fitted as an option. They are also available in a folding version.



Length mm	Width mm	Thickness mm	Bed Height 30 % gradient mm	Capacity (kgs/pair) axle distance 1,0 m	Weight (kgs/ea)	Order code
1500	200 (+15)	60	450	870	7	081.01.008
2000	200 (+15)	60	600	550	8	081.01.009
2500	200 (+15)	60	750	400	9	081.01.010
3000	200 (+15)	60	900	310	11	081.01.011
1500	300 (+15)	60	450	1340	10	081.01.020
2000	300 (+15)	60	600	890	12	081.01.021
2500	300 (+15)	60	750	650	14	081.01.022
3000	300 (+15)	60	900	510	16	081.01.023
3500	300 (+15)	60	1050	410	18	081.01.024
1500	300 (+15)	70	450	1920	14	081.01.026
2000	300 (+15)	70	600	1620	17	081.01.027
2500	300 (+15)	70	750	1480	21	081.01.028
3000	300 (+15)	70	900	1330	25	081.01.029
3500	300 (+15)	70	1050	1090	29	081.01.030
4000	300 (+15)	70	1200	930	32	081.01.031
1500	400 (+15)	60	450	1680	13	081.01.035
2000	400 (+15)	60	600	1060	16	081.01.036
2500	400 (+15)	60	750	770	19	081.01.037
3000	400 (+15)	60	900	600	22	081.01.038
3500	400 (+15)	60	1050	490	25	081.01.039
1500	400 (+15)	70	450	2390	17	081.01.041
2000	400 (+15)	70	600	2020	21	081.01.042
2500	400 (+15)	70	750	1850	26	081.01.043
3000	400 (+15)	70	900	1750	30	081.01.044
3500	400 (+15)	70	1050	1530	35	081.01.045
4000	400 (+15)	70	1200	1290	39	081.01.046

Length mm	Width mm	Thickness mm	Bed Height 30 % gradient mm	Capacity (kgs/pair) axle distance 1,0 m	Weight (kgs/ea)	Order code
1500	600 (+15)	60	450	1230	19	081.01.047
2000	600 (+15)	60	600	870	23	081.01.048
2000	600 (+15)	70	600	1210	31	081.01.050
2500	600 (+15)	70	750	1100	38	081.01.051
3000	600 (+15)	70	900	1040	44	081.01.052
1500	800 (+15)	70	450	1520	32	081.01.053
2000	800 (+15)	70	600	1280	41	081.01.054
2500	800 (+15)	70	750	1170	50	081.01.055
3000	800 (+15)	70	900	1110	59	081.01.056

## Foldable version

Length mm	Width mm	L 1	L 2	Bed Height 30 % gradient mm	Capacity (kgs/pair) axle distance 1,0 m	Weight (kgs/ea)	Order code
2000	200 (+15)	940	1105	600	500	8	081.55.009
2500	200 (+15)	1185	1350	750	400	9	081.55.010
3000	200 (+15)	1430	1595	900	300	11	081.55.011
2000	300 (+15)	940	1105	600	650	12	081.55.021
2500	300 (+15)	1185	1350	750	500	14	081.55.022
3000	300 (+15)	1430	1595	900	400	16	081.55.023

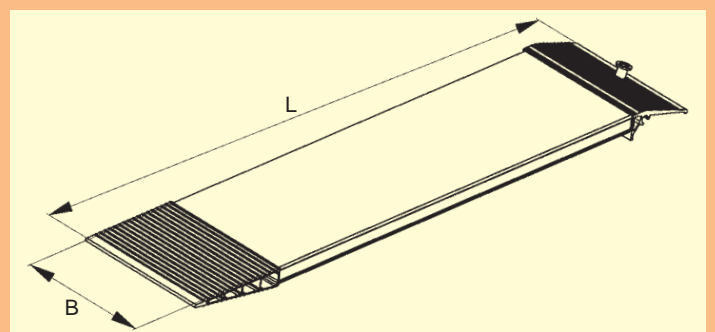
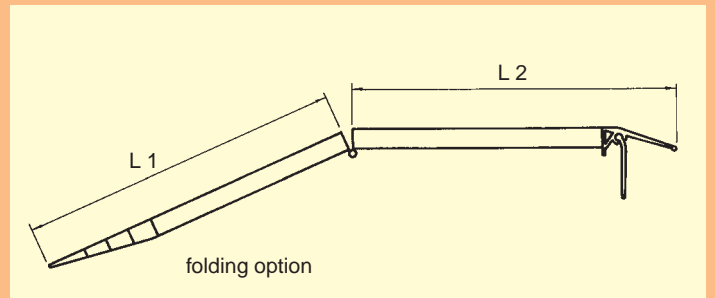
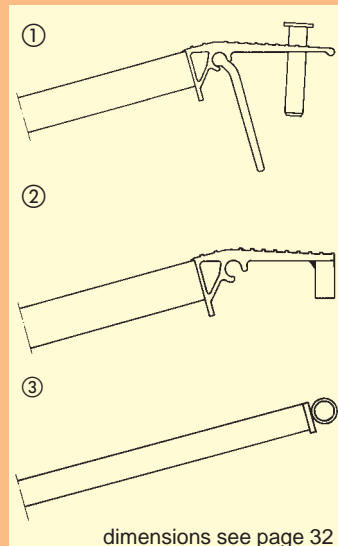
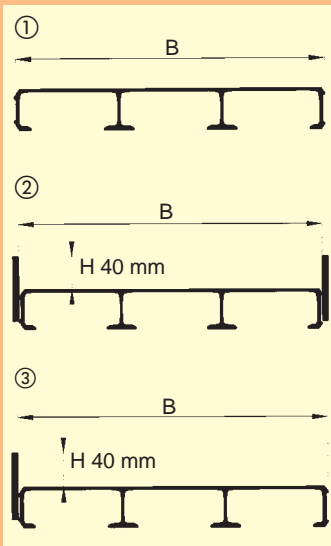
Other dimensions on request





**Construction:**

AOS ramps have been designed to provide the maximum load capacity in their range, with the slimmest of profiles and with the lowest possible unit weight in maintenance free aluminium. The standard AOS design includes integral reinforcement. The slim design of the bottom section of AOS ramps which comes into contact with the ground, ensures a smooth transition from the horizontal surface to the ramp running surface with a maximum 5mm step.

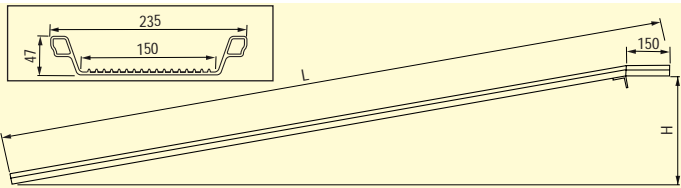


- |                       |                   |                 |                   |
|-----------------------|-------------------|-----------------|-------------------|
| ① without curbs       | <b>standard</b>   | ① lip support   | <b>standard</b>   |
| ② curbs on both sides | <b>on request</b> | ② hooked lip    | <b>on request</b> |
| ③ curb on one side    | <b>on request</b> | ③ hinged fitted | <b>on request</b> |

# Type ABS



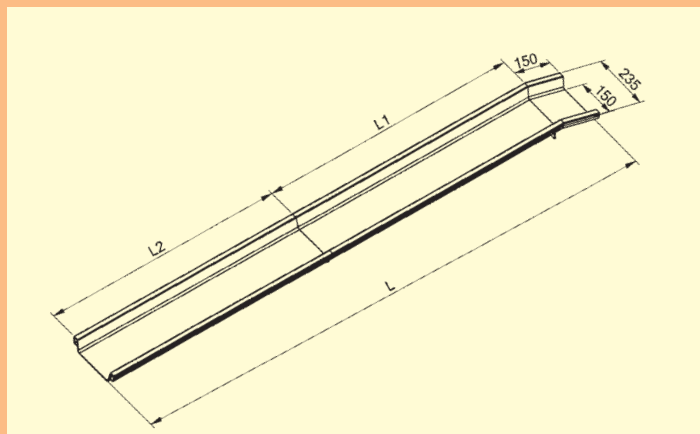
This aluminium ramp offers an excellent balance between a very low weight and a high load capacity. Robust and easy to handle, they are engineered to take up to 400 kg a pair with a maximum height difference of 900 mm. These ramps are fabricated from an extruded profile which is cut to length and angled as required. With an internal width of 150mm, and an overall width of 235 mm, these ramps are ideal for loading/unloading items such as motor-bikes, high pressure cleaners, generator sets, wheelchairs etc... Their profile allows them to be stacked one inside the other for ease of storage, and the 45 mm high safety curbs on each side prevent any lateral slippage.



Length mm	Internal width mm	External width mm	Capacity (kgs/pair) axle distance 1,0 m	Bed Height 30 % gradient mm	Weight (kgs/ea)	Type	Order code
1000	150	235	700	300	5	ABS 04	082.00.004
1500	150	235	600	450	6	ABS 05	082.00.005
2000	150	235	500	600	8	ABS 01	082.00.001
2500	150	235	400	750	10	ABS 02	082.00.002
3000	150	235	350	900	12	ABS 03	082.00.003

# Type ABS folding

A foldable option is also available.



Length mm	Internal width mm	External width mm	Capacity (kgs/pair) axle distance 1,0 m	Bed Height 30 % gradient mm	Weight (kgs/ea)	Dimension		Order code
						L 1	L 2	
2000	150	235	400	600	9	950	900	082.55.001
2500	150	235	350	750	11	1200	1150	082.55.002
3000	150	235	300	900	13	1450	1400	082.55.003

Other dimensions on request

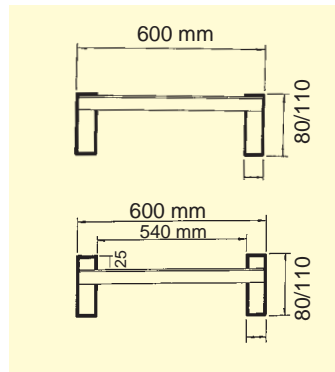


# Ramps for sack trucks



This type of ramp is mainly used for sack trucks with pneumatic tyres. Removal firms, furniture companies or beverage carriers are the main users of this lightweight, nonslip loading ramp

Options include a moveable lip and foldable versions.



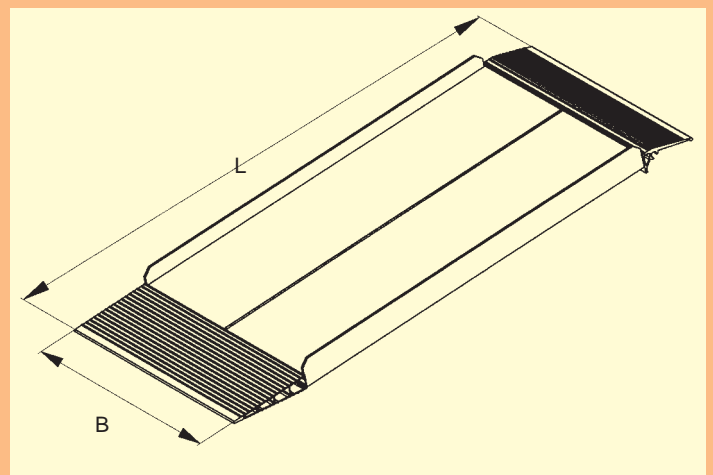
Length mm	Internal width mm	External width mm	Capacity (kgs/pair) axle distance 1.0 m	Bed Height 30 % gradient mm	Weight (kgs/ea)	Order code	
						without curbs	with curbs
3000	540	600 (+20)	350	900	29	080.01.050	080.00.050
3900	540	600 (+20)	500	1170	36	110.01.050	110.00.050



# Event ramp

The event ramp has been designed especially for the loading of trolleys or cases with small wheels. Probably used by musicians, event engineers or those loading flight cases.

KVS coating surface ensures minimal vibration.



Length mm	Internal width mm	External width mm	Capacity (kgs/pair) axle distance 1,0 m	Bed Height 30 % gradient mm	Weight (kgs/ea)	Order code
3000	900	920 (+15)	400	900	63	081.00.001
4000	900	920 (+15)	350	1170	80	081.00.002

Other dimensions on request

# Type AVS 80

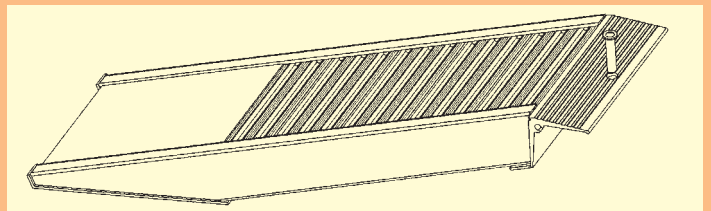
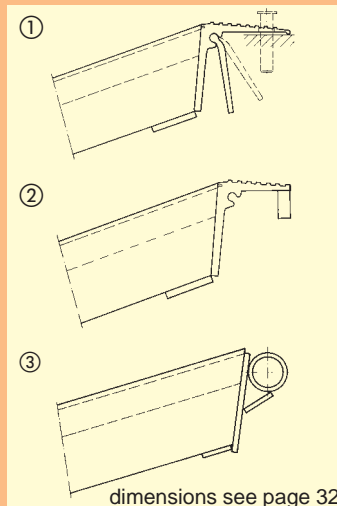
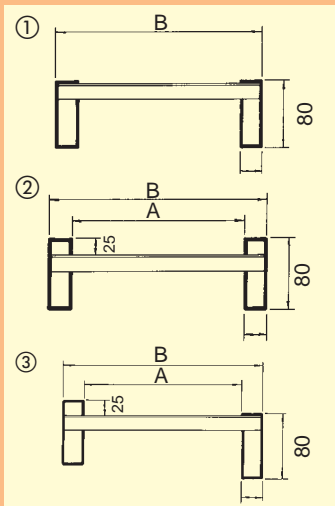
up to 2620 kgs/pair



These ramps are ideal for loading smaller rubber track and pneumatic tyre vehicles.  
 The surface profile is extruded from a high quality aluminium alloy which guarantees longevity even with constant use.  
 As with all AVS ramps, these are available with or without curbs or with curbs on one side only.



Length mm	Internal width (A) mm	External width (B) mm	Capacity (kgs/pair) axle distance 1,5 m	Bed Height 30 % gradient mm	Weight (kgs/ea)	Order code	
						no curbs	with curbs
1620	245	305 (+20)	2630	500	10	080.01.000	080.00.000
1980	245	305 (+20)	2150	590	12	080.01.002	080.00.002
2340	245	305 (+20)	1660	720	14	080.01.005	080.00.005
3240	245	305 (+20)	1000	950	19	080.01.010	080.00.010
3960	245	305 (+20)	750	1175	23	080.01.015	080.00.015



- ① without curbs                    **standard**
- ② curbs on both sides           **standard**
- ③ curbs on one side            **on request**
- ① lip support                      **standard**
- ② hooked lip                      **on request**
- ③ hinged fitted                  **on request**

Other dimensions on request





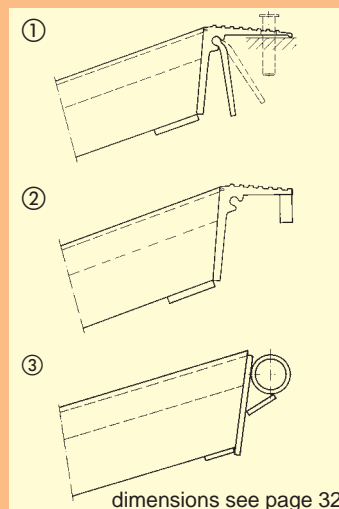
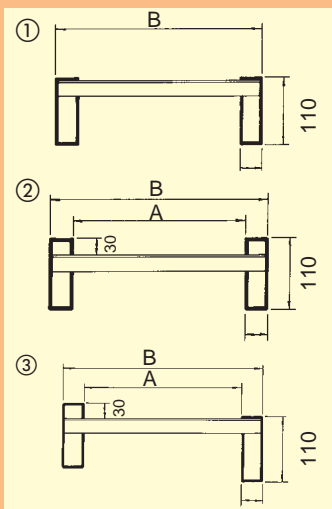
# Type AVS 110

up to 4050 kgs/pair

Made for loading rubber track and pneumatic tyre plant the AVS 110 is an ideal ramp for use with most plant trailers and 3,5 tonne trucks.  
The robust surface ensures minimal wear even with constant use.  
Curb and folding options are also available.



Length mm	Internal width (A) mm	External width (B) mm	capacity (kgs/pair) axle distance 1,5 m	Bed Height 30 % gradient mm	Weight (kgs/ea)	Order code	
						no curbs	with curbs
1610	245	305 (+20)	4050	500	13	110.01.000	110.00.000
1970	245	305 (+20)	3310	590	15	110.01.002	110.00.002
2330	245	305 (+20)	2800	720	17	110.01.005	110.00.005
3230	245	305 (+20)	1810	950	23	110.01.010	110.00.010
3950	245	305 (+20)	1360	1175	27	110.01.015	110.00.015
4670	245	305 (+20)	1090	1400	31	110.01.020	110.00.000
1610	340	400 (+20)	4050	500	15	110.01.024	110.00.024
1970	340	400 (+20)	3310	590	17	110.01.026	110.00.026
2330	340	400 (+20)	2800	720	20	110.01.029	110.00.029
3230	340	400 (+20)	1810	950	26	110.01.034	110.00.034
3950	340	400 (+20)	1360	1175	31	110.01.039	110.00.039



dimensions see page 32

- ① without curbs            **standard**
- ② curbs on both sides    **standard**
- ③ curbs on one side      **on request**
- ① lip support                **standard**
- ② hooked lip                **on request**
- ③ hinged fitted             **on request**

Other dimensions on request



# Type AVS 130

up 5150 kgs/pair



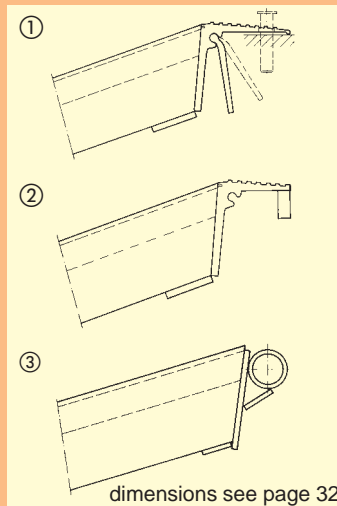
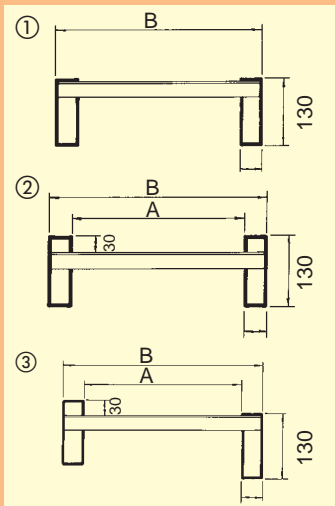
Made for loading rubber track and pneumatic tyre plant the AVS 130 is an ideal ramp for use with most large plant trailers and 7.5 tonne trucks. The robust surface ensures minimal wear even with constant use. Curb and folding options are also available.



Drop bolts supplied as standard.



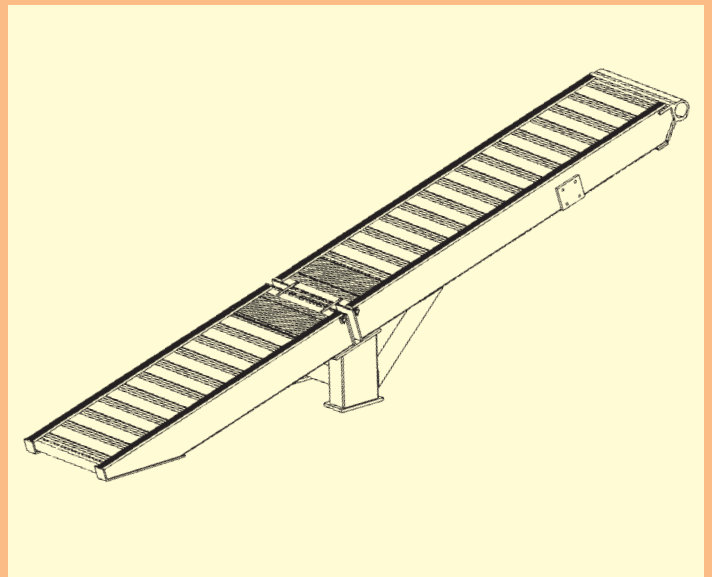
Length mm	Internal width (A) mm	External width (B) mm	Capacity (kgs/pair) axle distance 1,5 m	Bed Height 30 % gradient mm	weight (kgs/ea)	Order code	
						no curbs	with curbs
2510	325	405 (+20)	5150	750	26	130.01.003	130.00.003
3050	325	405 (+20)	4390	915	31	130.01.006	130.00.006
3590	325	405 (+20)	3470	1080	35	130.01.009	130.00.009
4130	325	405 (+20)	2860	1240	40	130.01.012	130.00.012
4670	325	405 (+20)	2430	1400	45	130.01.015	130.00.015
5210	325	405 (+20)	2120	1560	50	130.01.028	130.00.018



dimensions see page 32

- ① without curbs **standard**
- ② curbs on both sides **standard**
- ③ curbs on one side **on request**

- ① lip support **standard**
- ② hooked lip **on request**
- ③ hinged fitted **on request**



All loading ramps are available in a folding version.

Other dimensions on request





# Type AVS 150

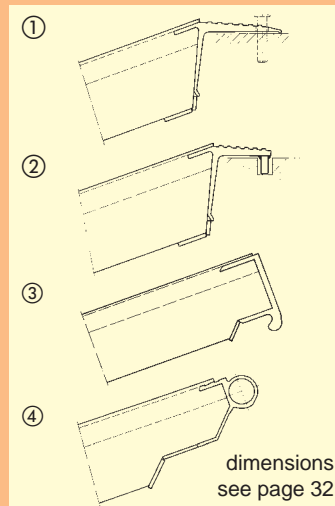
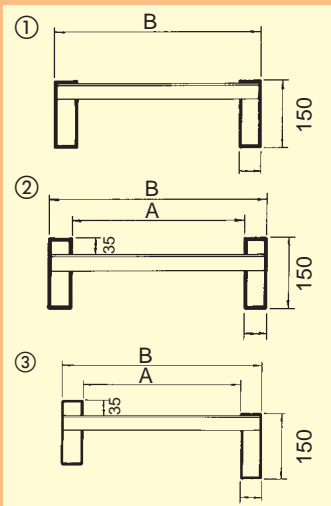
up to 7350 kgs/pair



Made for loading mid range to heavy equipment the AVS 150 has a larger and wider track than its smaller cousins. Folding and curb options are available. Although still very light weight, given the capacities offered, we are able to offer spring assistance when used with the hinged option.  
(shown on page 22)



Length mm	Internal width (A) mm	External width (B) mm	Capacity (kgs/pair) axle distance 2,0 m		Bed Height 30 % gradient mm	Weight (kgs/ea)	Order code	
			no curbs	with curbs			no curbs	with curbs
2640	360	460 (+20)	7840	7350	790	36	150.01.002	150.00.002
3040	360	460 (+20)	6810	6380	910	41	150.01.004	150.00.004
3640	360	460 (+20)	5400	5250	1090	48	150.01.007	150.00.007
4040	360	460 (+20)	4610	4470	1210	53	150.01.009	150.00.009
4440	360	460 (+20)	4010	3890	1330	58	150.01.011	150.00.011
5040	360	460 (+20)	3350	3260	1510	65	150.01.014	150.00.014



- ① without curbs                    **standard**
- ② curbs on both sides           **standard**
- ③ curbs on one side             **on request**
- ① lip support                       **standard**
- ② hooked lip                       **on request**
- ③ hooked lip                       **on request**
- ④ hinged fitted                    **on request**

Other dimensions on request



# Type AVS 170

up to 8270 kgs/pair

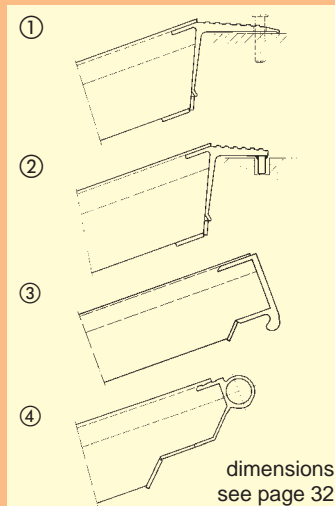
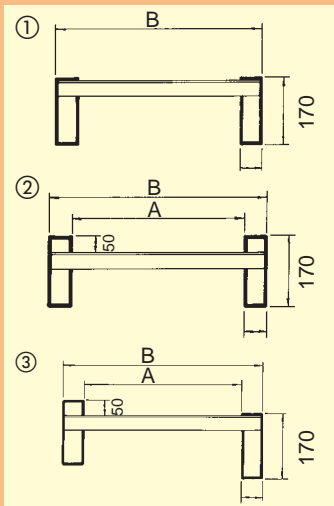


Made for loading mid range to heavy equipment the AVS 170 Has a larger and wider track than its smaller cousins. Although capacities are not much greater than the AVS 150 the extra width is useful for wider track or tyre vehicles. Folding, curb and spring assistance options are available.

(shown on page 22)



Length mm	Internal width (A) mm	External width (B) mm		Capacity (kgs/pair) axle distance 2,0 m		Bed Height 30 % gradient mm	Weight (kgs/ea)	Order code	
		no curbs	with curbs	no curbs	with curbs			no curbs	with curbs
2840	400	520 (+20)	500 (+20)	7840	7990	850	41	170.01.003	170.00.003
3240	400	520 (+20)	500 (+20)	6870	6970	970	46	170.01.005	170.00.005
3840	400	520 (+20)	500 (+20)	5790	5320	1150	54	170.01.008	170.00.008
4240	400	520 (+20)	500 (+20)	5250	4590	1270	58	170.01.010	170.00.010
4640	400	520 (+20)	500 (+20)	4790	4030	1390	64	170.01.012	170.00.012
5240	400	520 (+20)	500 (+20)	4250	3400	1570	71	170.01.015	170.00.015
5440	400	520 (+20)	500 (+20)	4090	3230	1645	74	170.01.016	170.00.016



- ① without curbs **standard**
- ② curbs on both sides **standard**
- ③ curbs on one side **on request**

- ① lip support **standard**
- ② hooked lip **on request**
- ③ hooked lip **on request**
- ④ hinged fitted **on request**



As an option these ramps can be supplied hinged, foldable and with a spring system.

Other dimensions on request





# Type AVS 200

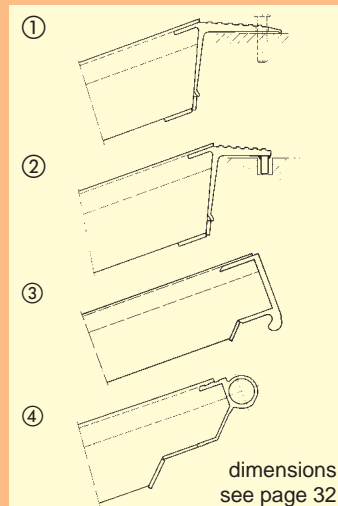
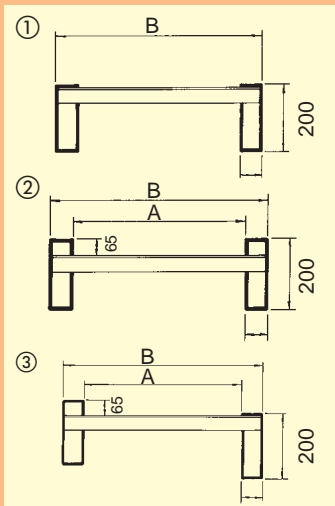
up to 11250 kgs/pair

The biggest and strongest of the AVS ramps and ideal for loading large excavators and tractors. They also make useful yard ramps for unloading containers. As with all AVS ramps, the high quality alloy used ensures that these ramps will last for years even with constant use. Folding, curb and spring assistance options are available.

(shown on page 22)



Length mm	Internal width (A) mm	External width (B) mm	Capacity (kgs/pair) axle distance 2,0 m	Bed Height 30 % gradient mm	Weight (kgs/ea)	Order code	
						no curbs	with curbs
2840	450	580 (+20)	11240	850	59	200.01.003	200.00.003
3440	450	580 (+20)	11180	1030	70	200.01.006	200.00.006
4240	450	580 (+20)	8500	1270	85	200.01.010	200.00.010
4440	450	580 (+20)	7950	1330	89	200.01.011	200.00.011
5040	450	580 (+20)	6650	1510	100	200.01.014	200.00.014
5240	450	580 (+20)	6310	1570	104	200.01.015	200.00.015



- ① without curbs **standard**
- ② curbs on both sides **standard**
- ③ curbs on one side **on request**

- ① lip support **standard**
- ② hooked lip **on request**
- ③ hooked lip **on request**
- ④ hinged fitted **on request**

All ramps are fitted with a reinforced surface, suitable for vehicles with rubber tracks.

Other dimensions on request

# Type AVS

for steel tracked vehicles up to 8500 kgs/pair



These ramps are designed for use by all equipment including steel tracked vehicles. The ramps can be supplied with or without safety curbs. The running surface has been engineered with steel tracked equipment in mind, and is of a much harder wearing and heavier construction than the standard design. As an option these ramps can be supplied hinged, foldable, and with or without springing to balance the weight of the ramps.

## Type AVS 150

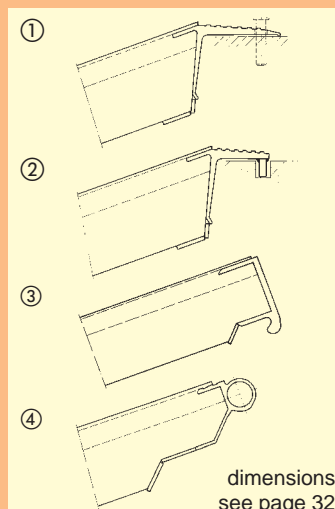
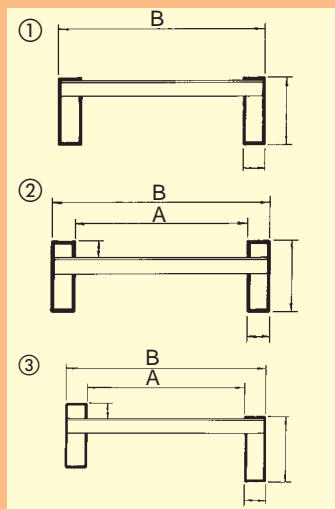
Length mm	Internal width (A) mm	External width (B) mm	Capacity (kgs/pair) axle distance 2,0 m	Bed Height 30 % gradient mm	Weight (kgs/ea)	Order code	
						no curbs	with curbs
2640	400	500 (+20)	7300	790	44	150.11.002	150.10.002
3040	400	500 (+20)	6300	910	49	150.11.004	150.10.004
3640	400	500 (+20)	5200	1090	57	150.11.007	150.10.007
4040	400	500 (+20)	4400	1210	64	150.11.009	150.10.009
4440	400	500 (+20)	3800	1330	70	150.11.011	150.10.011
5040	400	500 (+20)	3250	1510	79	150.11.014	150.10.014

## Type AVS 170

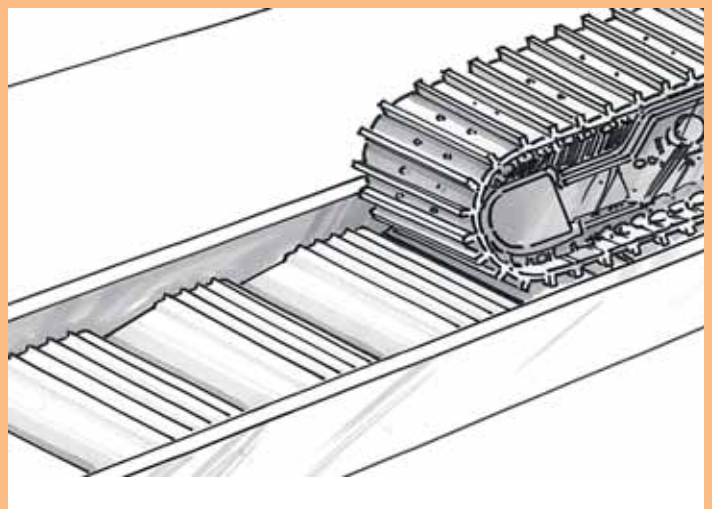
Length mm	Internal width (A) mm	External width (B) mm		Capacity (kgs/pair) axle distance 2,0 m	Bed Height 30 % gradient mm	Weight (kgs/ea)	Order code	
		no curbs	with curbs				no curbs	with curbs
2840	400	520 (+20)	500 (+20)	8000	850	51	170.11.003	170.10.003
3240	400	520 (+20)	500 (+20)	6900	970	58	170.11.005	170.10.005
3840	400	520 (+20)	500 (+20)	5300	1150	68	170.11.008	170.10.008
4240	400	520 (+20)	500 (+20)	4600	1270	73	170.11.010	170.10.010
4640	400	520 (+20)	500 (+20)	4000	1390	81	170.11.012	170.10.012
5240	400	520 (+20)	500 (+20)	3400	1570	90	170.11.015	170.10.015
5440	400	520 (+20)	500 (+20)	3200	1645	94	170.11.016	170.10.016

## Type AVS 200

Length mm	Internal width (A) mm	External width (B) mm	Capacity (kgs/pair) axle distance 2,0 m	Bed Height 30 % gradient mm	Weight (kgs/ea)	Order code	
						no curbs	with curbs
2840	450	580 (+20)	8500	850	65	200.11.003	200.10.003
3440	450	580 (+20)	8500	1030	78	200.11.006	200.10.006
4240	450	580 (+20)	8200	1270	95	200.11.010	200.10.010
4440	450	580 (+20)	7700	1330	100	200.11.011	200.10.011
5040	450	580 (+20)	6400	1510	110	200.11.014	200.10.014
5240	450	580 (+20)	6100	1570	115	200.11.015	200.10.015



dimensions  
see page 32



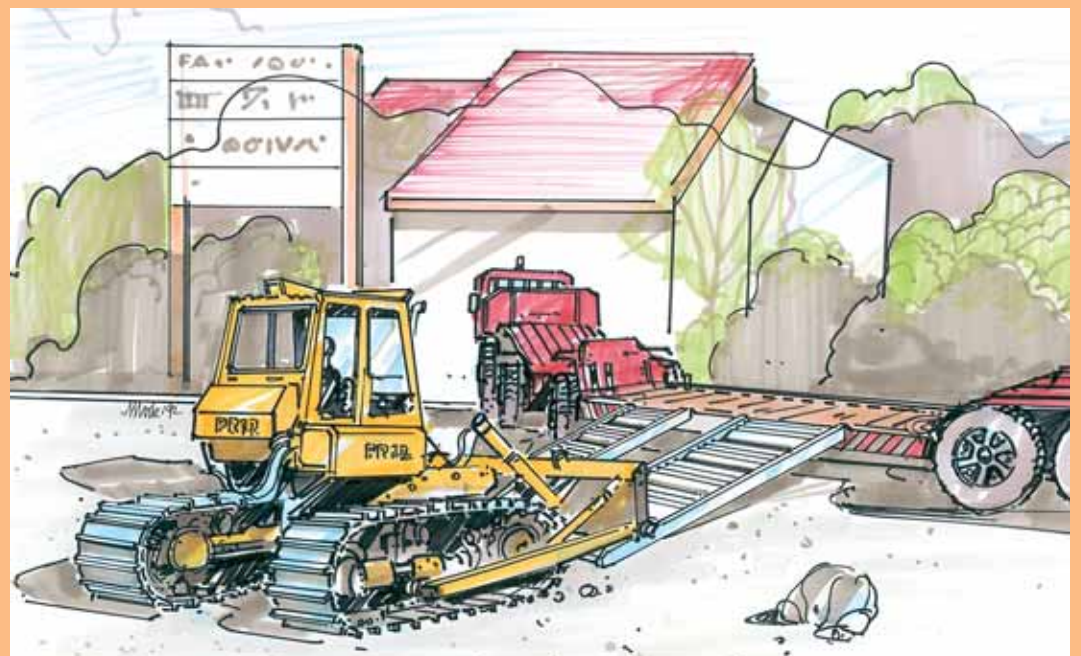
- ① without curbs **standard**
- ② curbs on both sides **standard**
- ③ curbs on one side **on request**

- ① lip support **standard**
- ② hooked lip **on request**
- ③ hooked lip **on request**
- ④ hinged fitted **on request**

Special steel track preparation giving grip without scabbling.

Other dimensions on request







# Typ VFR 120

up to 22700 kgs/pair

These ramps are for use by machines equipped with pneumatic tyres, solid wheels, and rubber or steel tracks. They use a special aluminium construction for strength, durability and weather-resistance. These ramps can be supplied with a hinged end, or with a hook, which fits into a guide rail.

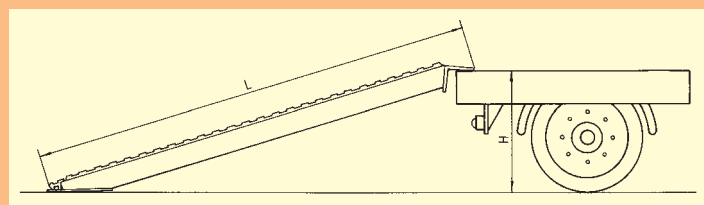
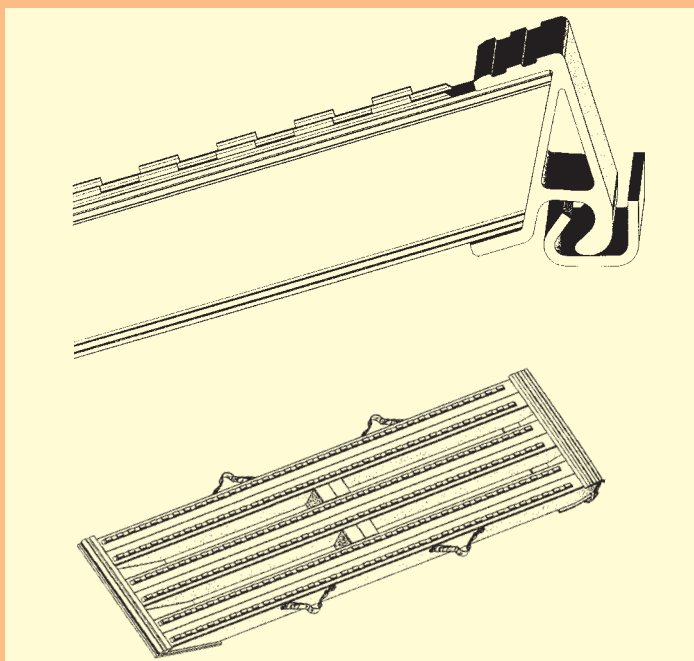
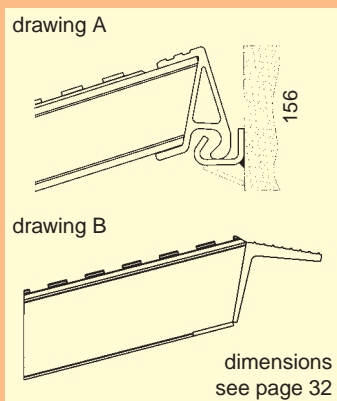
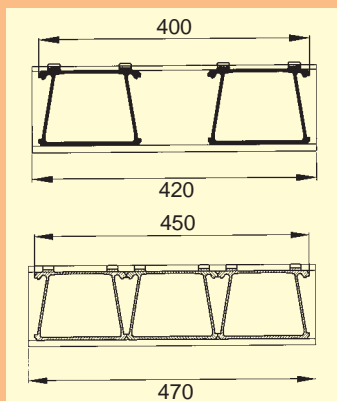


As an option, the ramps can be fitted with a spring system.



Length L (mm)	Width B (mm)	Capacity (kgs/pair) axle distance 2,0 m		Bed Height 30 % gradient mm	Weight (kgs/ea)	Order code	
		drawing A	drawing B			drawing A	drawing B
3000	400 (+20)	10110	7370	900	50	120.00.000	120.01.000
2000	450 (+20)	22750	10820	600	51	120.00.001	120.01.001
2400	450 (+20)	18960	9390	720	59	120.00.002	120.01.002
3000	450 (+20)	15170	8300	900	71	120.00.003	120.01.003
3500	450 (+20)	13000	7780	1050	81	120.00.004	120.01.004
4000	450 (+20)	10660	7430	1200	90	120.00.005	120.01.005

VFR guide rail, length 2600 mm, black order code 134.22.000; galvanised order-code 134.22.001



Other dimensions on request



The heavy duty profile and high grade aluminium used in our VFR 134 ramps ensures durability even when loading steel track machinery.

These ramps are available with a hook on option or hinged to take a 60 mm bright steel bar.

For heavier hinged ramps we recommend our spring counter-balance system.

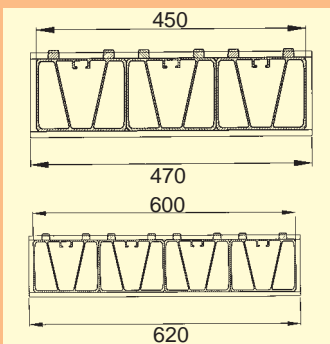
## Type VFR 134 up to 32000 kgs/pair



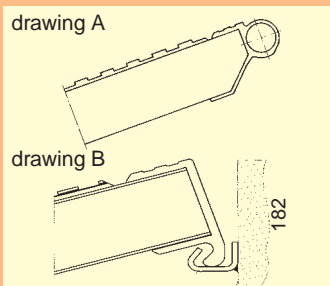
Length L (mm)	Width B (mm)	Bed Height 30 % gradient mm	Capacity (kgs/pair) axle distance 2,0 m	Weight (kgs/ea)	Order code	
					drawing A	drawing B
2400	450 (+20)	720	24000	76	134.04.000	134.00.000
2800	450 (+20)	840	20000	86	134.04.001	134.00.001
3000	450 (+20)	900	18000	91	134.04.007	134.00.007
2400	600 (+20)	720	32000	104	134.04.002	134.00.002
2800	600 (+20)	840	26000	114	134.04.003	134.00.003
3000	600 (+20)	900	22000	118	134.04.004	134.00.004

VFR guide rail, length 2600 mm, black order-code 134.22.000; galvanised order-code 134.22.001

Other dimensions on request.



drawing A



drawing B



# Type VFR 185

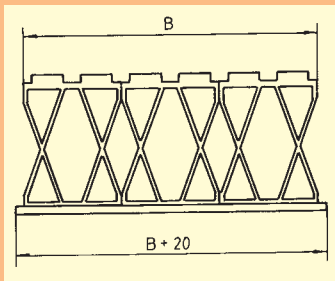
up to 80000 kgs/pair

Our extra heavy duty profiles enable us to produce special ramps with capacities up to 80,000 kgs.

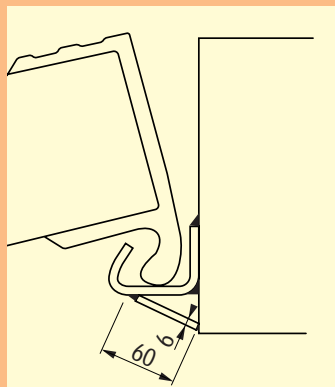
Ramp in two parts with pedestal



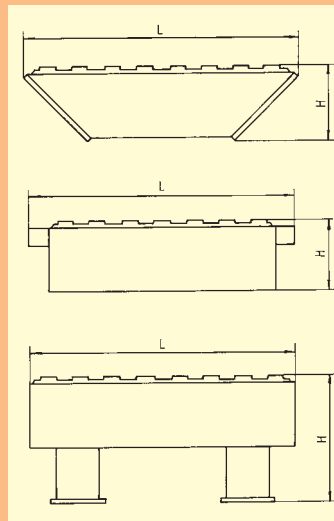
These profiles have been designed specifically for us to offer design solutions for low loader manufacturers.



Cross-section VFR 185



Hooked version



Various applications for low loader

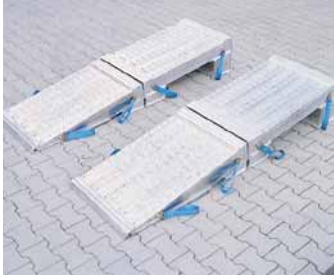




## Type VFR wheel ramps up to 50000 kgs/pair



These ramps are used mainly on trailers and low loaders. The profile used in the construction of these ramps maximises its dimensions and load bearing capacity. These ramps are for use by machines with pneumatic tyres, solid wheels, and rubber or steel tracks.



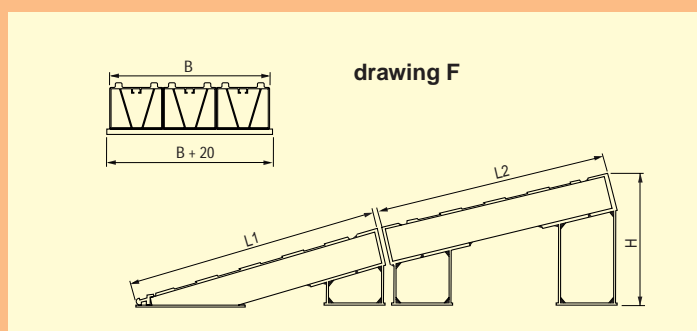
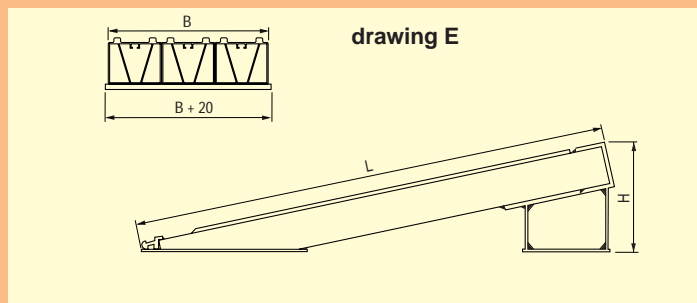
They use a special aluminium construction for strength, durability and weather-resistance. These ramps can be supplied with a hinged end, or as a foldable version (spring counterbalancing is also an option).

For ease of handling, several units can be positioned adjacent to each other. The height difference, dimension "H", is required.



Length L (mm)	Width B (mm)	Bed Height 30 % gradient mm	Capacity (kgs/pair)	Weight (kgs/ea)	Order code drawing E
1450	450	350	30000	70	134.80.000
1450	600	350	35000	92	134.80.001
1450	690	350	50000	110	134.80.002

Models, shown in drawing "F", on request.

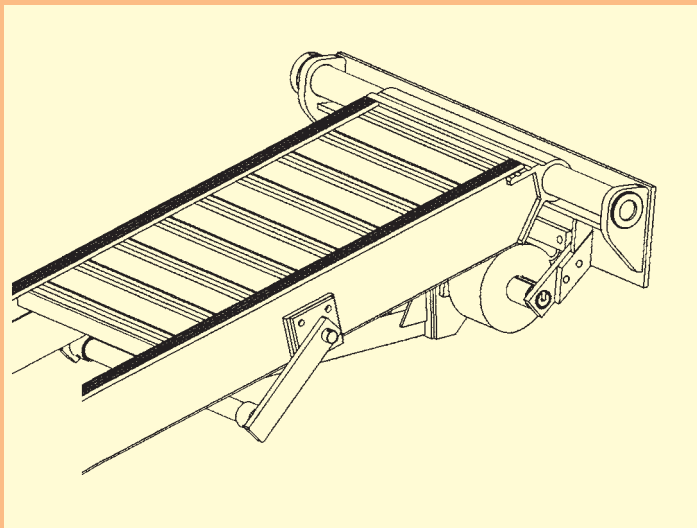


# Spring system for ramps

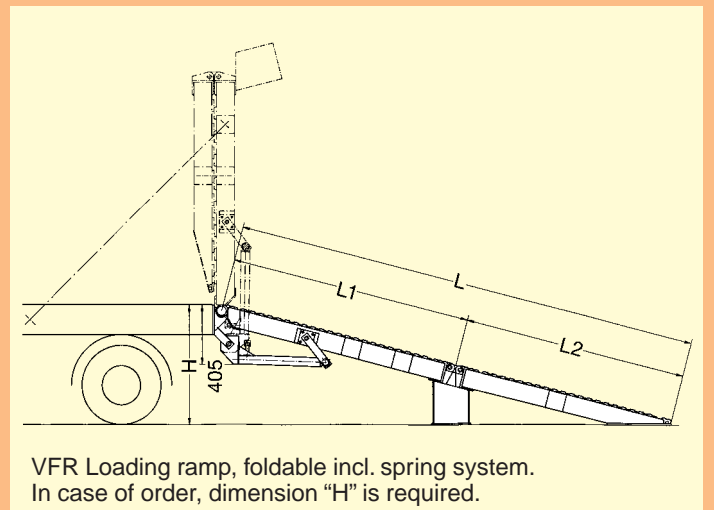
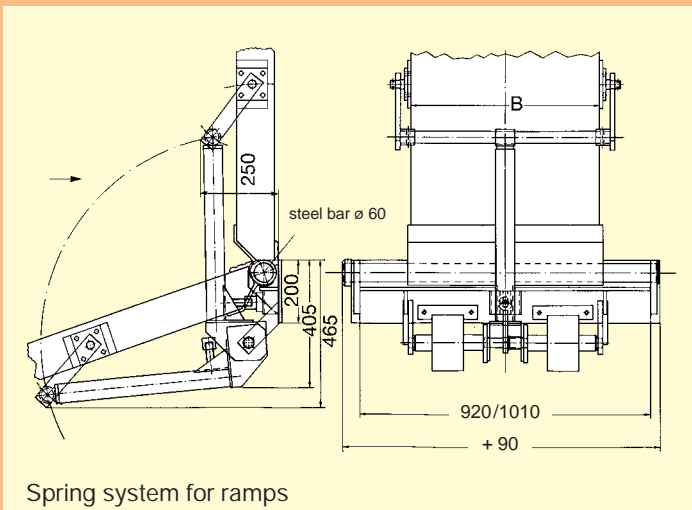
With the optional spring system, the ramp types AVS 150, 170, 200, VFR 120/134 are easily placed into position by one person.



Order code	Model	Weight (kgs/ea)
134.00.901	Spring system for width 450 mm lateral movement 920 mm	82
134.00.902	Spring system for width 600 mm lateral movement 1010 mm	82







Easy handling!

Our counterbalance system allows heavy loading ramps to be positioned by one person.

# Type RRK



## Construction:

This aluminium ramp is designed for easy one man operation. The folding and unfolding of the ramp is made almost effortless by the use of gas struts to balance the weight of the ramp. The ramp surface is fabricated from extruded aluminium profiles which are perforated and embossed to give a perfect anti-slip surface. This also allows rain and snow to disperse very easily. The light weight of the ramp allows most of the payload of the vehicle to be retained. The RRK is held in the vertical position by two latches, mounting blocks are used to keep the assembly rigid and prevent any vibration during transport.

## Other advantages:

- Virtually maintenance free
- Fitted with 30 mm high safety curbs along both edges.
- Robust hinges (guaranteed for life).

## Installation:

The ramp is both removable and versatile, and can be mounted on different vehicles of identical dimensions, either as a rear or side loading ramp. If the vehicle is to be used for other purposes, the ramp is easily dismantled by unscrewing the thumb screws supplied. The ramps are supplied with a complete mounting kit including a base plate, and a reinforcing counter plate.



- 1 Ramp in folded position
- 2 Easily manoeuvred by one person
- 3 Ramp being unfolded
- 4 Pedestal for weights more than 450 kp



Length L (mm)	Width B (mm)	Height H (mm)	Height difference HD		a (mm)	c (mm)	Capacity (kgs/pair)	Weight (kgs/ea)	Type	Order code
			min (21%)	max (30%)						
1400	800	800	220	340	95	285	450	37	RRK 02	081.01.102
1400	1000	800	220	340	95	285	450	43	RRK 03	081.01.103
1600	800	875	240	380	100	290	450	39	RRK 04	081.01.104
1600	1000	875	240	380	100	290	450	46	RRK 05	081.01.105
1800	800	980	285	460	100	290	450	41	RRK 06	081.01.106
1800	1000	980	285	460	100	290	450	50	RRK 07	081.01.107
2000	800	1045	310	500	100	290	450	44	RRK 08	081.01.108
2000	1000	1045	310	500	100	290	450	53	RRK 09	081.01.109
2000	1200	1045	310	500	100	290	450	64	RRK 10	081.01.110
2200	800	1150	355	570	100	290	450	46	RRK 11	081.01.111
2200	1000	1150	355	570	100	290	450	56	RRK 12	081.01.112
2400	800	1250	400	640	100	290	450	51	RRK 00	081.01.100
2400	1000	1250	400	640	100	290	450	60	RRK 01	081.01.101
2400	1200	1250	400	640	100	290	450	72	RRK 14	081.01.114
2600	800	1360	440	700	100	290	450	53	RRK 15	081.01.115
2600	1000	1360	440	700	100	290	450	63	RRK 16	081.01.116
2600	1200	1360	440	700	100	290	450	73	RRK 17	081.01.117
2800	800	1465	485	760	100	290	430	56	RRK 18	081.01.118
2800	1000	1465	485	760	100	290	430	66	RRK 19	081.01.119
3000	800	1570	530	840	100	290	400	58	RRK 20	081.01.120
3000	1000	1570	530	840	110	300	400	68	RRK 21	081.01.121

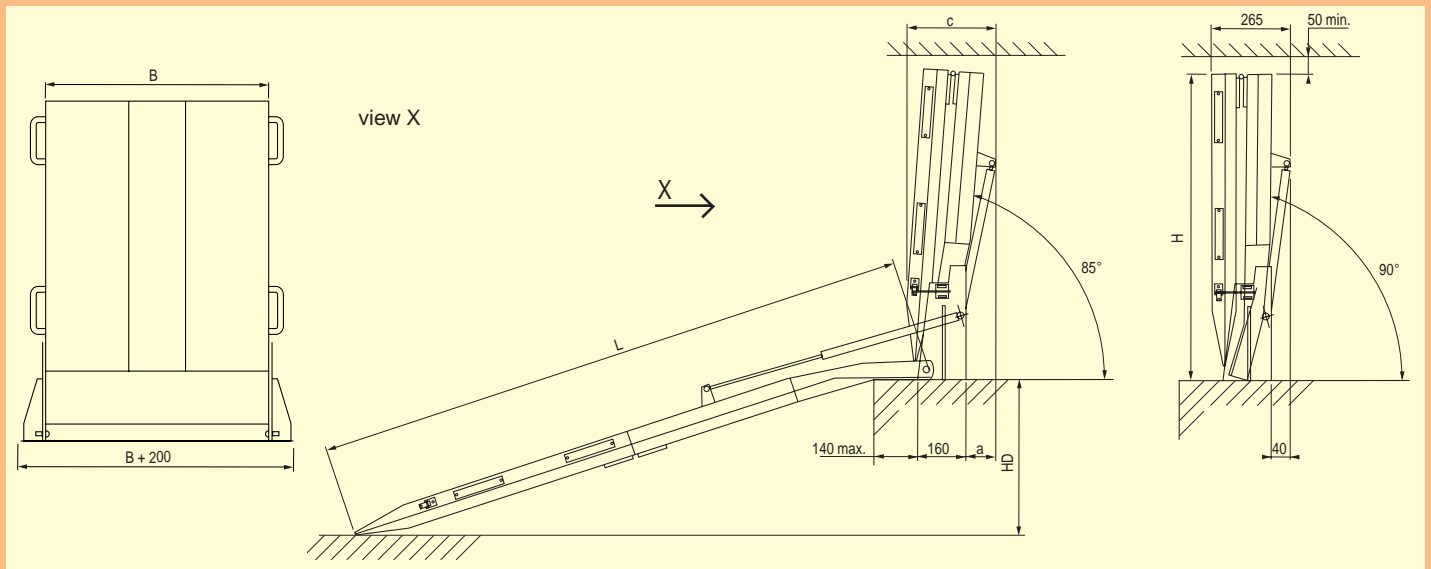
Higher capacities and other dimensions on request.





5 Side mounting

6 Locking latch



# Type RRD

## rotatable

The RRD is a logical development from the RRK. Basically the same ramp but with the facility to swivel back against the side panels of your van. An optional locking latch is available to keep the unit in the swivelled position. Perfect for parcel delivery firms.



Length L (mm)	Width B (mm)	Height H (mm)	Height difference HD		a (mm)	c (mm)	Capacity (kgs/pair)	Weight (kgs/pair)	Type	Order code
			min (21%)	max (30%)						
1400	800	865	220	340	95	285	450	37	RRD 02	081.01.302
1400	1000	865	220	340	95	285	450	43	RRD 03	081.01.303
1600	800	940	240	380	100	290	450	39	RRD 04	081.01.304
1600	1000	940	240	380	100	290	450	46	RRD 05	081.01.305
1800	800	1045	285	460	100	290	450	41	RRD 06	081.01.306
1800	1000	1045	285	460	100	290	450	50	RRD 07	081.01.307
2000	800	1115	310	500	100	290	450	44	RRD 08	081.01.308
2000	1000	1115	310	500	100	290	450	53	RRD 09	081.01.309
2200	800	1220	355	570	100	290	450	46	RRD 11	081.01.311
2200	1000	1220	355	570	100	290	450	56	RRD 12	081.01.312
2400	800	1325	400	640	100	290	450	51	RRD 00	081.01.300
2400	1000	1325	400	640	100	290	450	60	RRD 01	081.01.301
2600	800	1430	440	700	100	290	450	53	RRD 15	081.01.315
2600	1000	1430	440	700	100	290	450	63	RRD 16	081.01.316
2800	800	1535	485	760	100	290	430	56	RRD 18	081.01.318



Locking latch for fixing the ramp inside.



The RRD can rotate inside and outside of the vehicle



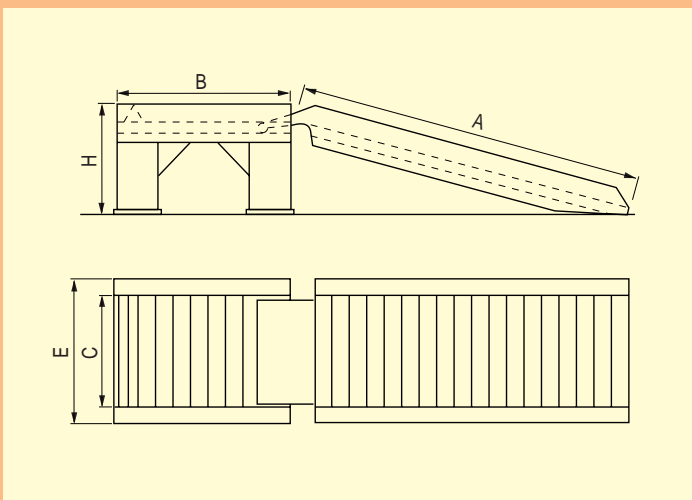
# Maintenance ramps



Ideal for the maintenance of vehicles (inspection, cleaning etc.). These ramps are manufactured mostly as required, and can be supplied with or without safety curbs.



Length A (mm)	Width C (mm)	Width E (mm)	Height H (mm)	Capacity (kgs/pair) axle distance 2,0 m	Dimension B (mm)	Weight stand / ramp (kgs)		Order code
1970	340	400	400	3310	500	14	17	140.01.100
2330	340	400	600	2790	500	18	20	140.01.101
2040	360	460	400	7850	700	19	29	140.01.102
2440	360	460	600	7850	700	23	33	140.01.103



# Ramps for tail-lifts

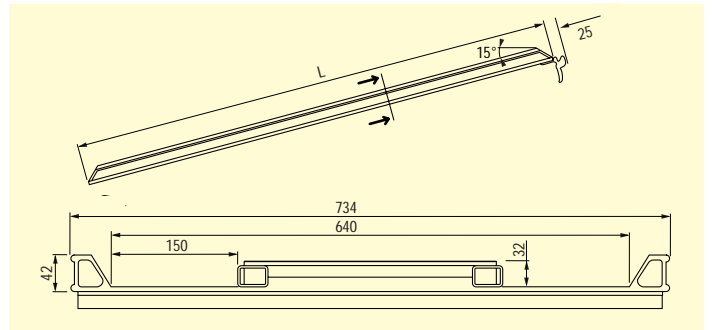
Side ramps for tail-lifts and tail-boards. These ramps facilitate the loading/unloading operations from vehicles alongside the kerb.

They bring security and quicker unloading times for carriers who have to deliver within a town centre using vehicles equipped with hydraulic tail-lifts.



## Type LBGM

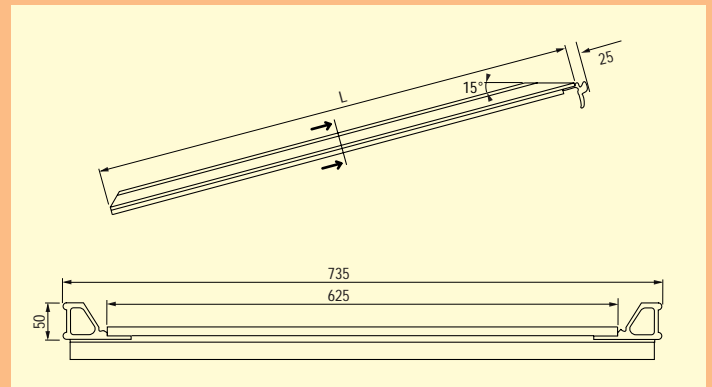
Removable model for fixing to an aluminium rail integrated within the tailboard. Includes wheel guides, and safety curbs both sides.



Order code	Model	Length (L) mm	Capacity kgs	Weight kgs
083.09.000	LBGM 1	980	600	13
083.09.001	LBGM 2	1.180	600	15
083.09.003	LBGM 4	1.480	600	18
083.09.002	LBGM 3	1.980	600	24

## Type LBWM

A removable model for fixing to an aluminium rail integrated within the tailboard. No wheel guides. Safety curbs on both sides.

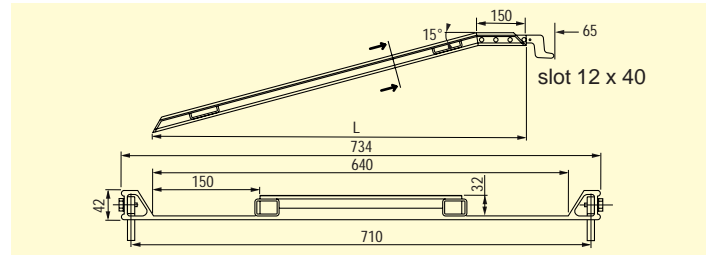


Order code	Model	Length (L) mm	Capacity kgs	Weight kgs
083.10.000	LBWM 1	1.000	600	15
083.10.001	LBWM 2	1.200	600	18
083.10.002	LBWM 3	2.000	600	30



## Type LBK

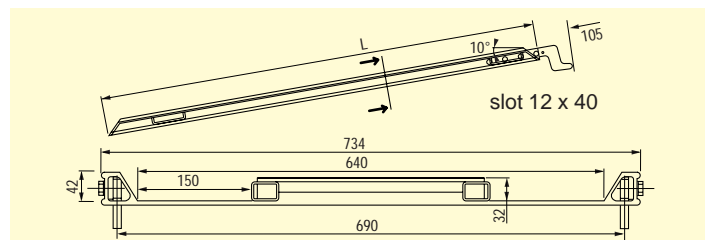
Removable model with a horizontal platform, galvanised hook fixing to the tail-board through 12 x 40 mm slots. Includes wheel guides, safety curbs both sides, and adjustable hooks.



Order code	Model	Length (L) mm	Capacity kgs	Weight kgs
083.07.000	LBK 1	970	600	12
083.07.001	LBK 2	1.170	600	15
083.07.003	LBK 4	1.470	600	18
083.07.002	LBK 3	1.970	600	24

Removable model galvanised hook fixing to the tail-board through 12x40 mm slots. Includes wheel guides, safety curbs both sides, and adjustable hooks.

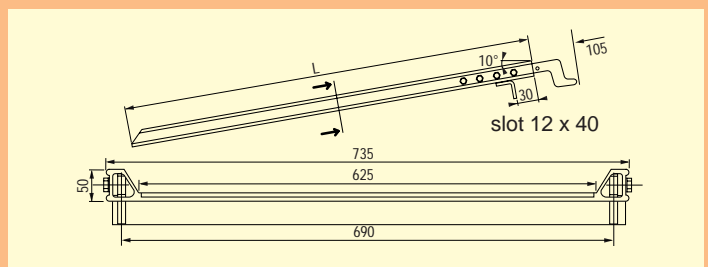
## Type LBG



Order code	Model	Length (L) mm	Capacity kgs	Weight kgs
083.06.000	LBG 1	980	600	13
083.06.001	LBG 2	1.180	600	15
083.06.003	LBG 4	1.480	600	18
083.06.002	LBG 3	1.980	600	24

Removable model galvanised hook fixing to the tail-board through 12x40 mm slots. Includes safety curbs both sides, and adjustable hooks. No wheel guides.

## Type LBW



Order code	Model	Length (L) mm	Capacity kgs	Weight kgs
083.08.000	LBW 1	1.000	600	15
083.08.001	LBW 2	1.200	600	18
083.08.003	LBW 3	2.000	600	30

# Hinged tailboard ramps

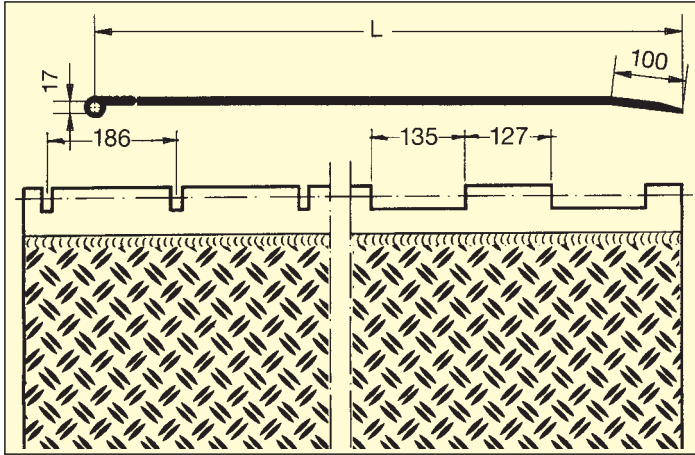
Hinged tailboard ramps are used between the rear deck of commercial vehicles and the loading dock, or as an access ramp when the vehicle platform is at ground level. When fitted to the rear of a commercial vehicle, they can serve as a tailboard and a load bearing access ramp. The tailboard ramps are fabricated from a honeycombe aluminium extrusion (model RPB) or in a five bar treadplate design plate (model RWB), both gives an anti-slip surface. Fitting kits are available as per figures 1, 2 or 3 and the hinge shaft is included.

form is at ground level. When fitted to the rear of a commercial vehicle, they can serve as a tailboard and a load bearing access ramp. The tailboard ramps are fabricated from a honeycombe aluminium extrusion (model RPB) or in a five bar treadplate design plate (model RWB), both gives an anti-slip surface. Fitting kits are available as per figures 1, 2 or 3 and the hinge shaft is included.



## Type RWB

Hinged tailboard with a five-bar treadplate surface.

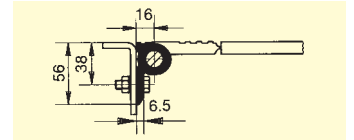


fitting kits model 3

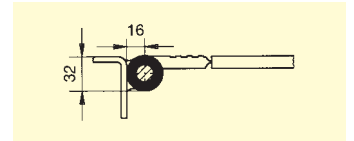
fitting kits model 1 and 2

## Fitting kits

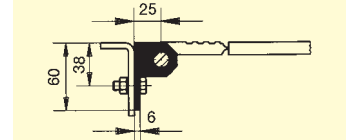
model 1



model 2

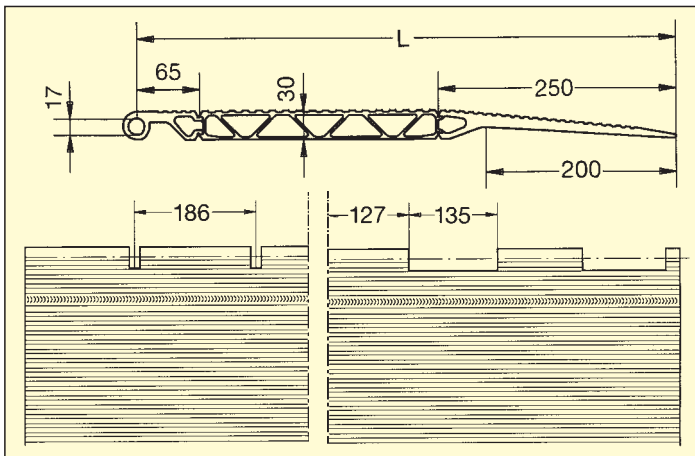


model 3



## Type RPB-30

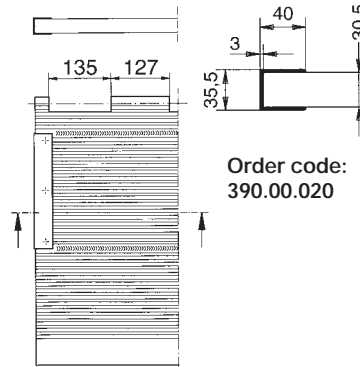
Hinged tailboard with 30 mm honeycombe profile.



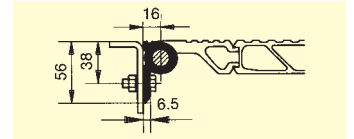
fitting kits model 3

fitting kits model 1 and 2

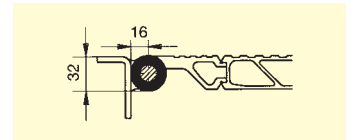
Profile of edge closer -30 (offered as an option)



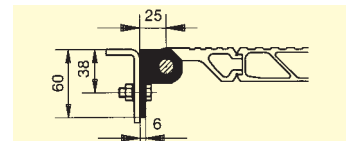
model 1



model 2

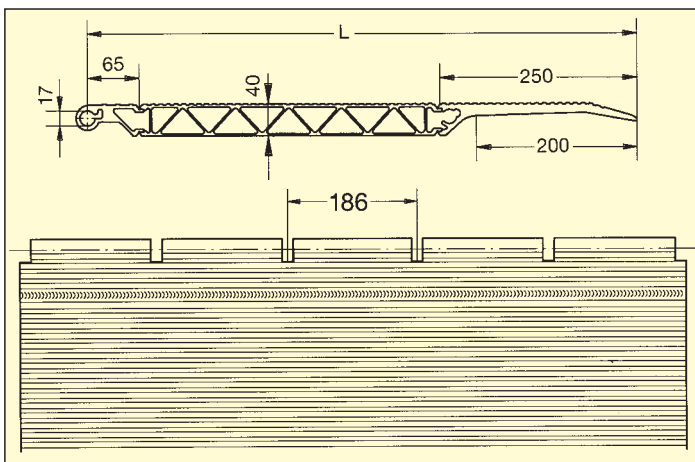


model 3

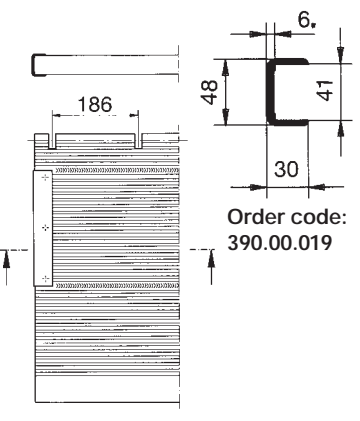


## Type RPB-40

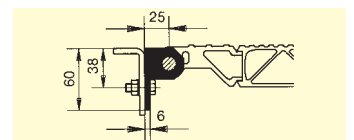
Hinged tailboard with 40 mm honeycombe profile.



Profile of edge closer -40 (offered as an option)



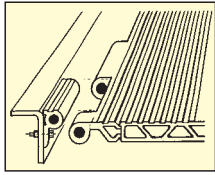
model 3



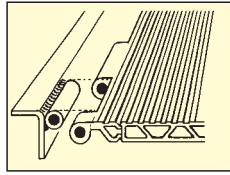


# Connection design

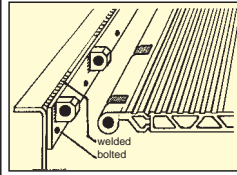
**Figure 1**  
Bolted aluminium profile



**Figure 2**  
Welded steel tube



**Figure 3**  
Bolt or welded hinge



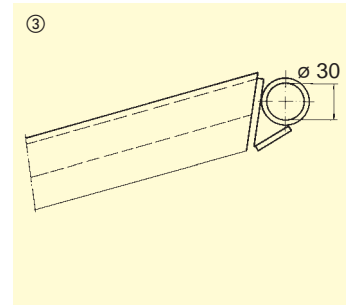
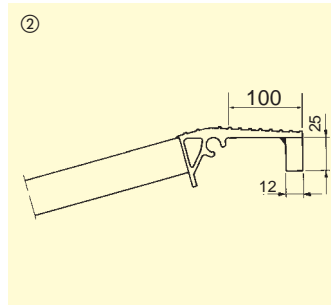
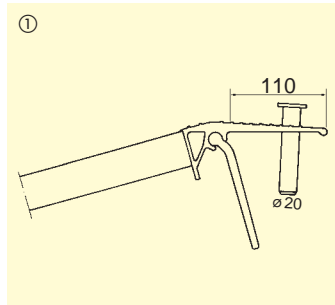
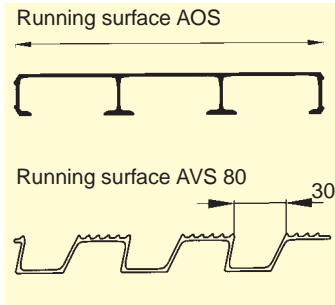
Order code model 1	Order code model 2	Order code model 3	Length (L) mm	Width (B) mm	Capacity kgs	Weight kgs
391.31.000	391.32.000	391.30.000	600	2300	2500	40
391.31.001	391.32.001	391.30.001	600	2500	2500	44
391.31.002	391.32.002	391.30.002	800	2300	1900	53
391.31.003	391.32.003	391.30.003	800	2500	1900	58
391.31.004	391.32.004	391.30.004	900	2300	1700	59
391.31.005	391.32.005	391.30.005	900	2500	1700	65
391.31.006	391.32.006	391.30.006	1000	2300	1500	66
391.31.007	391.32.007	391.30.007	1000	2500	1500	72

Order code model 1	Order code model 2	Order code model 3	Length (L) mm	Width (B) mm	Capacity kgs	Weight kgs(m)
390.31.000	390.32.000	390.30.000	565	a s a n o p t i o n	3500	16
390.31.001	390.32.001	390.30.001	690		3000	19
390.31.002	390.32.002	390.30.002	815		2500	22
390.31.003	390.32.003	390.30.003	940		2300	26
390.31.004	390.32.004	390.30.004	1065		2100	29
390.31.005	390.32.005	390.30.005	1190		1900	32
390.31.006	390.32.006	390.30.006	1315		1600	35
390.31.007	390.32.007	390.30.007	1565		1300	42
390.31.008	390.32.008	390.30.008	1690		1100	45
390.31.009	390.32.009	390.30.009	1815		900	48
390.31.010	390.32.010	390.30.010	2065	700	54	

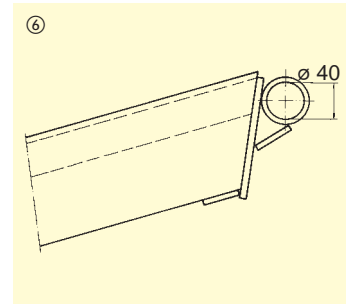
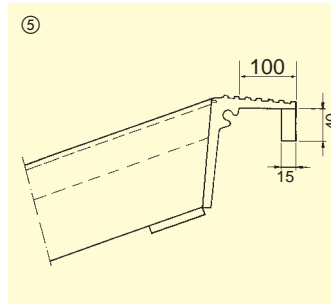
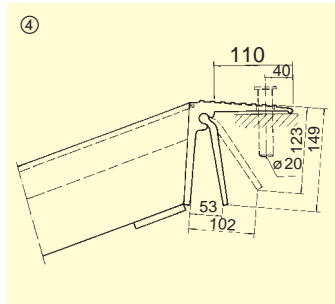
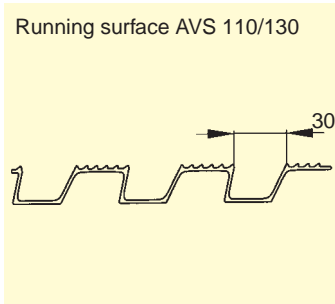
	Order code model 3	Length (L) mm	Width (B) mm	Capacity kgs	Weight kgs(m)
	392.30.000	565	a s a n o p t i o n	4500	21
	392.30.001	690		4000	23
	392.30.002	815		3500	27
	392.30.003	940		3000	31
	392.30.004	1065		2800	33
	392.30.005	1190		2600	37
	392.30.006	1315		2500	41
	392.30.007	1565		2400	47
	392.30.008	1690		2100	51
	392.30.009	1815		1800	53
	392.30.010	2065	1400	60	

# The different support- and connection options with safety device.

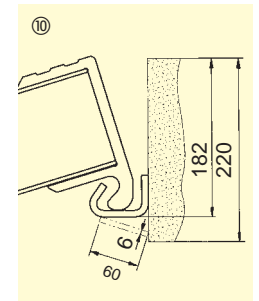
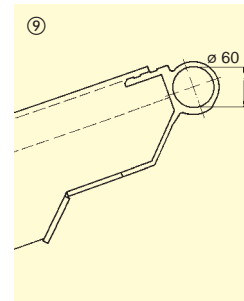
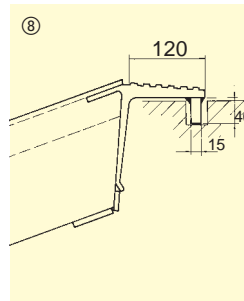
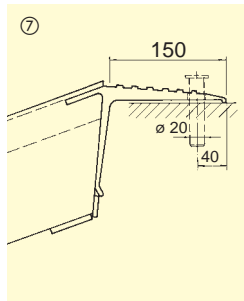
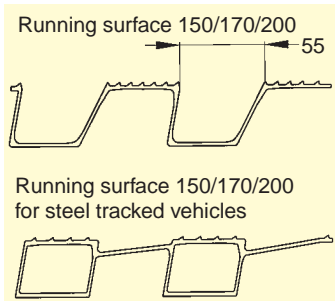
## AOS/AVS 80



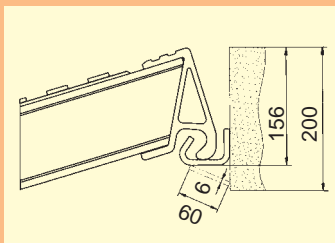
## AVS 110/130



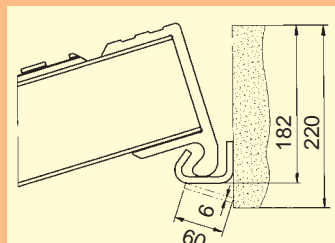
## AVS 150/170/200



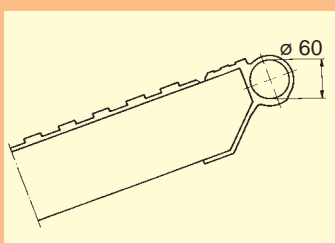
## VFR 120



## VFR 134

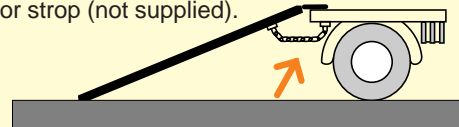


## VFR 120/134



### Underside hook/bar:

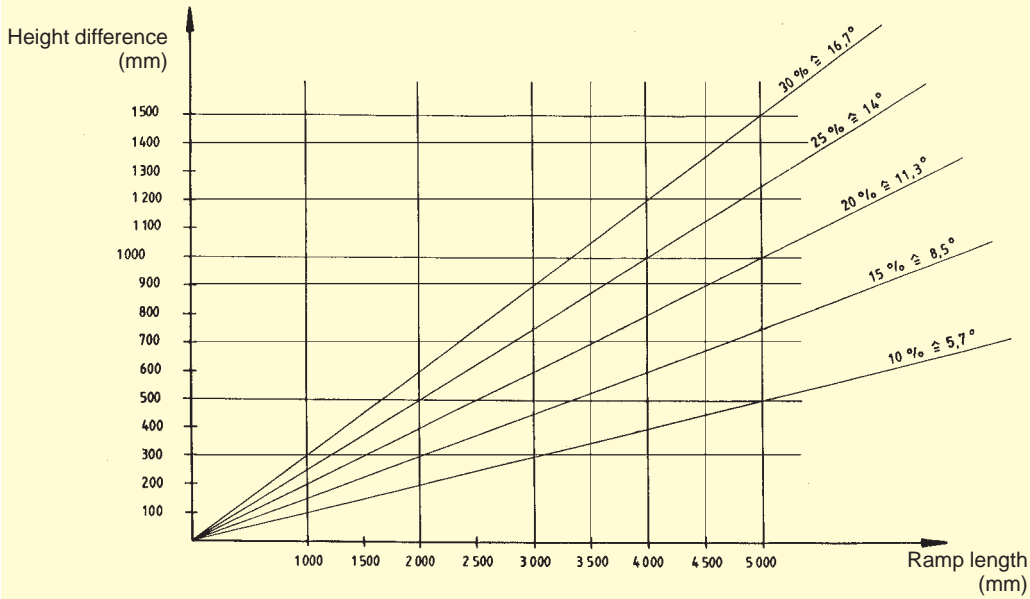
An underside hook/bar is welded under the ramp to allow the attachment of a chain or stop (not supplied).



- ① Lip with steel pin and movable safety device
- ② Lip with flat material underneath for hang in.
- ③ Tube connection for steel shaft
- ④ Lip with steel pin and movable safety device
- ⑤ Lip with flat material underneath for hang in.
- ⑥ Tube connection for steel shaft
- ⑦ Lip with steel pin and underside hook bar.
- ⑧ Lip with flat material underneath for hang in.
- ⑨ Tube connection for steel shaft.
- ⑩ Hang in profile



# Diagram



# Length determination

In the margin diagram, you'll find dimensions, which are used for loading or unloading. They are: length of loading ramps gradient and height difference and how they are in relation to each other.

**Example:**

At a height difference of 1200 mm and a gradient of 30%,

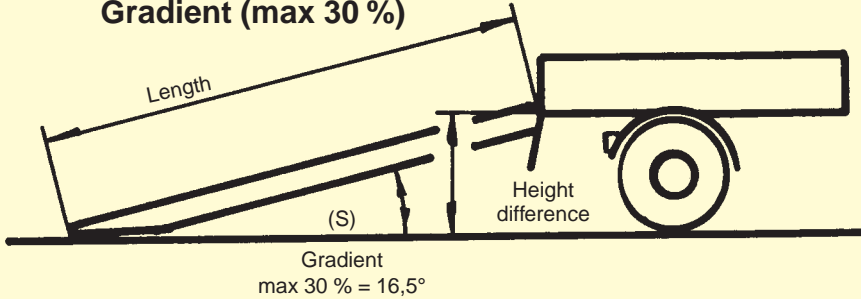
How long the ramps have to be?

**Calculation:**

$$\frac{1200 \text{ mm}}{30} \times 100 = \text{length } 4000 \text{ mm}$$

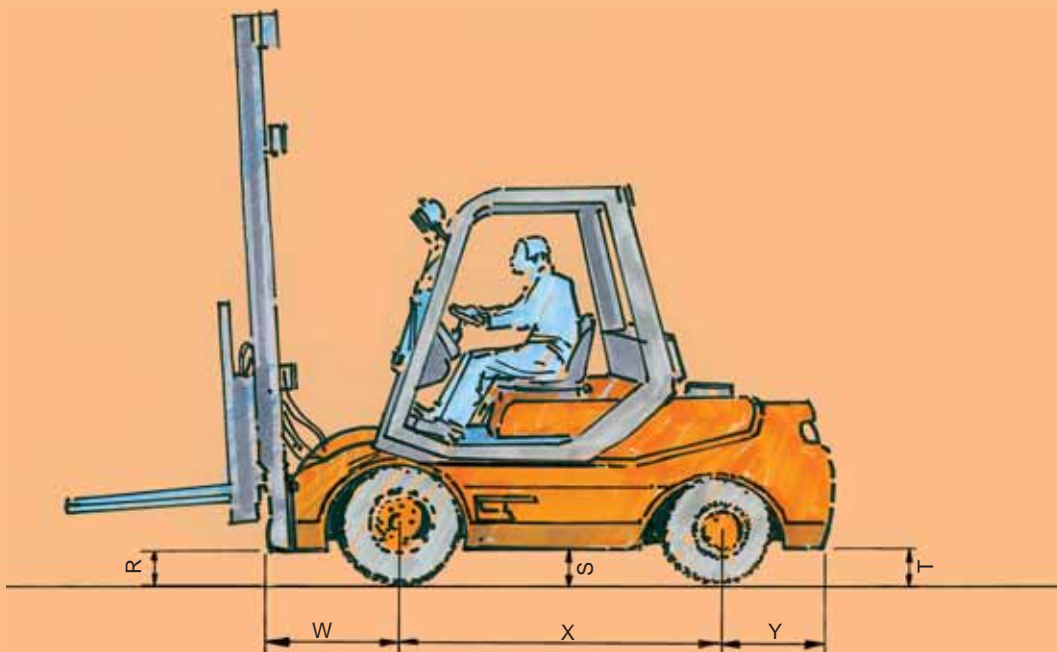
It is not advisable to use ramps, which have a gradient of more than 30%.

$$\text{Length} = \frac{\text{Height difference}}{\text{Gradient (max 30\%)}} \times 100$$



# There are exceptions to every rule.

This rule is not valid for vehicles with a small ground clearance, like fork lifts, car lifts or other machines with small wheels.



- vehicle weight
- wheel load
- diameter and width of wheels

Please check these datas, as well as the dimensions at the fork lift.

# Examples of use



- ① AOS loading ramps
- ② AOS loading ramps - special version
- ③ RRK-ramp and ABS loading ramps in combination
- ④ Light weight ABS – ramps.
- ⑤ For heavy duty, triple track vehicles
- ⑥ Foldable with pedestal
- ⑦ AVS 150 in use
- ⑧ RRK-ramp
- ⑨ Wheel ramps to balance height differences
- ⑩ VFR-ramps, hinged with counter balance system.
- ⑪ Special tailgate ramps
- ⑫ VFR-ramps with lip support





⑦



⑪



⑧



⑫



⑨



⑩

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