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Trailer mounted access platforms

A users guide

We have covered the trailer mounted access market on several occasions in the past and this year have decided to produce a buyer's guide covering the types, specifications and use of these versatile machines.

The trailer mounted platform continues to be a very popular cost-effective access solution, especially for first time users looking to comply with the new Work At Height Rules. Although there is strong evidence that light truck mounts and crawler mounted self propelled booms are being chosen in favour of trailer lifts by some users, there is still a healthy and growing demand for the products worldwide.

Is it the right product for me?

Trailer mounted lifts have the following positive characteristics:

- The most height for a given investment
- Easy transport over long distances
- Relatively light weight - low bearing pressures
- Simple low-cost maintenance
- Narrow transport dimensions
- Can be used on uneven or sloping terrain

The Dino 260XT features a sigma riser

These must be offset against certain disadvantages:

- Relatively time consuming to be set up
- Cannot be moved when elevated
- Can be difficult to move around site
- Large operating footprint

As described later in the article, manufacturers have introduced a number of innovations which reduce the impact of some or all of these drawbacks, but there is no doubt that trailers are better suited to some applications than others. These include property maintenance, tree trimming, CCTV/security camera installation and maintenance, sign installation and cleaning and other work in or around public, industrial and commercial premises.

Chart 1

Comparison of approximate UK purchase costs for various types of boom lift

Working height	Trailer	Self propelled	Vehicle mounted
12m	£10,000	£28,000	£30,000
17m	£19,000	£38,000	£35,000
21m	£32,000	£56,000	£42,000
25m	£38,000	£75,000	£75,000

Chart 2

Comparison of approximate UK weekly hire rates for various types of boom lifts

Working height	Trailer	Self propelled	Vehicle mounted
12m	£200	£250	£300
17m	£300	£270	£450
21m	£450	£360	£750
25m	£525	£580	£2200*

** with operator only*

Charts 1 and 2 show that competitive UK/Ireland hire rates for self-propelled booms makes them very good value compared to renting a trailer lift. However the cost of delivery must be taken into account, especially if the machine will be used at more than one location as must any weight restriction implications since self propelled booms are much heavier than trailer lifts. If contemplating purchase there is no doubt that trailers offer the lowest cost per metre of height.

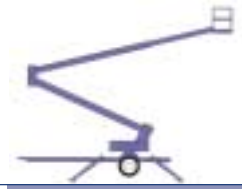
Choosing a machine – key specification issues

As for all boom lifts, the most significant feature is the boom configuration. This will, to a greater or lesser extent, govern all of the other characteristics of the machine so must be carefully considered. In our summary of available models, we have classified the products under four types:

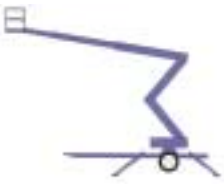
1. Articulating fixed boom

2. Telescopic

3. Articulating - Telescopic



4. Articulating Telescopic with dual or Sigma riser



All of theses configurations can be enhanced by the inclusion of an articulating jib, (also known as a fly boom). A jib can typically offset through an arc of between 90 and 180 degrees, significantly improving versatility, reducing overall length and making cage entry easier.

It is important to decide early on which physical characteristics are important for your work, ensuring that the most appropriate design is selected:

Aerial's articulating boom K13 has a jib for extra versatility

***Chart 3** Summary of boom configuration characteristics*

Boom configuration	Benefits	Drawbacks
Articulating	Simple rugged construction Low cost Easy maintenance Light weight	Long travel length Limited versatility Poor outreach at low heights
Telescopic	Short overall length Good outreach Simple operation	Heavier More expensive No 'up & over' capability
Articulating - telescopic	Versatile Good combination of height and reach Up & over capability	Heavier weight More complexity
Articulating-Telescopic with Sigma riser	Short overall length Good up & over capability Good outreach at low to medium height Easy to work on face of buildings	Expensive Heavier weight More complexity

Articulating-telescopic machines like this Genie are great when you need to get up and over

Working height & outreach.

It is always necessary to consider these two things together. Never choose a machine on maximum work height alone, always ask "How far will I have to reach out at the height I need to work comfortably?" Especially with a trailer mount where the machine's stability comes from the physical spread of the stabilisers, consider how near you can typically get to the work measured from the edge of the fully deployed stabiliser.

Manufacturers always quote working outreach from the centreline of rotation, so every centimetre of outrigger spread eats into your effective outreach. Also very significant is the need to clear obstacles such as parked vehicles, hedges, flat roofed extensions etc. This is where the machine's 'up & over' characteristics become important.

A dual/sigma riser adds up and over capability to telescopic booms without increasing length

Travel length

Manufacturers do their best to ensure trailer mounted lifts are easy to tow. However there is no denying that some special driving skill is required, so the shorter and less unwieldy the machine is when stowed, the better – especially for occasional users. Short length is also highly desirable for urban tasks such as CCTV and shop signage, both for manoeuvrability and to find a parking space large enough to set up in!

Telescopic booms like this Bil-Jax give excellent low-level outreach

A telescopic upper boom gives the Matilsa Parma 120T a very short travel length

Width

Width falls into two categories: Travel width and Minimum width. A number of machines offer some kind of retractable axle, providing stability for travel with the ability to pass through narrow openings. Although this feature is not always easy to use it can be very significant if the only means of access to the worksite is through a narrow door or gateway, a situation often encountered in residential applications. If this is not important for your own application, it is generally best to opt for a fixed axle.

The retractable axle on Nifty's 90 allows it to fit through a single personnel door

Weight

The total weight of the machine in travel condition (GVW) is very significant for two reasons:

1) Limitations on site, for example allowable floor loadings, elevator capacity etc.

2) Towing restrictions (see 'Can I tow it?')

Note that manufacturer's specifications often quote the lightest available version of a machine

(e.g. AC power, manual stabilisers) so if you add options such as DC battery power, a generator and hydraulic stabilisers etc… make sure you understand the impact on total weight. In addition to the total weight, the maximum outrigger pad loadings are also important. The use of nylon mats can reduce ground bearing pressure and protect delicate flooring few machines are supplied with these as standard.

Other significant specification features

Power Source

Popularity of the alternative power sources for trailer lifts varies with geography. In the UK the DC (battery) powered machine with an on-board battery charger (often with diesel bi-energy option) is the most popular, whereas in continental Europe a majority of purchasers opt for AC (mains) power. Increasingly, manufacturers offer all of these as options so the user can select the power source most appropriate to their specific application, sometimes at no extra cost. A summary of the pros and cons of these are given in chart 4.

Stabilisers / Outriggers

Machines up to 13 metres have typically been supplied with manual outriggers which require the user to either pull out or fold down the four legs, then level the machine with individual screw jacks. There is no doubt that this is a time consuming and increasingly unpopular process.

Fortunately hydraulically operated outriggers are now widely available, either as an option or even as standard equipment. The control levers are positioned centrally adjacent to the level bubble so that each outrigger can be lowered and level adjusted without the operator having to move or exert himself. Auto levelling is also rapidly becoming a standard feature making outrigger set up fast and easy. If the lift you are considering does not have hydraulic outriggers as standard, you should seriously consider specifying them as an option not only to improve your productivity, but to ensure a better resale value. Be aware of the extra weight though.

Whether manual or hydraulic, the outrigger system must include interlock switches to prevent boom operation without the legs being correctly set.

On some machines, 'spider' type double-jointed outrigger legs are provided. These allow more versatile jacking options including set-up on a kerb or severely sloping ground.

Controls

Trailers are among the simplest machines to use with typically not more than two or three boom functions plus rotation. Two basic approaches are taken to control systems; in the UK the slightly old fashioned 'live' or full pressure hydraulic system is still popular, whereas on the continent electric/hydraulic controls are more prevalent.

UK manufacturers believe rental customers like the simplicity and ease of repair of this system despite its weight penalties and risk of hose leaks. Electric/hydraulic systems have the control valves located at the base of the machine with only light cables routed to push-buttons or joystick controls in the cage. In some cases a circuit board electronic processor modifies inputs from the controls to give proportional or progressive operation of the valves.

From the operator's point of view, live hydraulic controls are easy to understand, smoothly proportional and several functions can be operated at once. The best electronic controls can duplicate this with the added benefit of greater machine performance, but simple push button controls without proportional facility can give an uncomfortably jerky ride. There does not appear to be much evidence that modern electric controls are less reliable or more expensive to maintain than full pressure hydraulic.

***Chart 4** Alternative power sources for trailer mounted platforms*

Power Source	Benefits	Drawbacks
DC Battery	Clean, quiet for indoor use Can be used on sites with no AC power No trailing cables during operation	Needs to be charged at end of shift Batteries must be maintained Risk of running flat Heavier weight
AC (mains) 220V / 110V	Clean, quiet for indoor use Can be used continuously Light weight Usually cheapest option	Can't be used if no mains supply Trailing power cord is trip hazard
IC Engine (petrol/diesel)	Self-contained, can be used anywhere Can be used continuously	Noisy, cannot be used indoors
Bi-Energy (DC + generator)	Can be used on batteries only indoors Can be used continuously on generator or recharge batteries	Heavier weight Most expensive

Hydraulic outriggers are quick and easy to set up, especially with auto levelling

Have it your way – optional equipment

Manufacturers generally like to keep the headline price of machines as low as possible, so frequently there is a whole list of options available which may or may not be significant depending on your application. It is definitely worthwhile considering what you are likely to need and adding these at the time of order – it is always cheaper than trying to upgrade the machine later. Typical options to consider are a mains power line to the cage, warning beacons, a self drive system to help on-site manoeuvring (especially on heavier models), electrical generator and hydraulic outriggers.

Spanish manufacturer Matilsa offers an easy to use configurator.

One company that has introduced a way to simplify this process is Spanish company Matilsa, whose web site now features a handy configurator allowing you to interactively build the perfect machine for your needs and see the cost impact of various options.

Probably the most sophisicated trailer lift controls are seen on large Dino lifts.

So what is available?

Trailer mounted platforms are produced all over the world by manufacturers ranging from tiny one-person operations to the largest players in the access business. We have also highlighted those machines which perform best in various areas which may be of interest for your application. These are not recommendations but will help guide you towards producing your own shortlist.

Greatest height

1. Denka DL30	30.0m
2. Omme 2900E	29.0m
3. Dino 260XT	26.0m
4. Omme 2500E	25.1m
5. Denka DL/DK25	25.0m

Not surprisingly, this section is dominated by Scandinavian manufacturers, all straight telescopic except the Dino which has a sigma riser. The tallest non-Scandinavian trailer in our summary is the UK-manufactured Niftylift 210 with a 21.0m working height.

Best outreach

1. Omme 2500E	12.6m
2. Omme 2900E	12.3m
3. Denka DL25	12.0m
4. Niftylift 210	12.0m

Note that it is not always the highest machines which offer the most outreach, the Denka DL30 actually has less outreach than smaller units in their range.

Lightest weight

1. Niftylift 90	595kg
2. Thomas 100NW	900kg
3. Custers / Ateco HL9	960kg
4. Denka Junior 12	985kg
5. Omme 1050EZ	995kg

The lightest machines, as may be expected, are those with the lowest working heights. Even so, the extremely low weight of the Niftylift 90 is remarkable and allows towing by very small vehicles and transport in freight elevators.
Only one of these machines features a two-person platform (Ateco), but the Denka's 12m work height is remarkable for such a light machine.

Shortest length

1. Niftylift 90	3.8m
2. Custers / Ateco HL9	4.2m
3. Niftylift 120T	4.5m
4. Matilsa Parma 12T	4.6m
5. Thomas 100NW	4.6m

The Nifty 120T and Matilsa 12T have a very short length for a 12 metre trailer lift thanks to their articulating telescopic configuration.

Narrowest width

1. Ateco HL9	0.71m
2. Denka Junior 12	0.75m
3. Niftylift 90	0.75m
4. Dino 105T	0.78m
5. Omme 1050EZ	0.78m

All five of these machines will nominally pass through a single personnel door.

Where can I get one?

Purchasing

Trailer-mounted lifts are among the easiest access platforms to own due to their relatively low cost of acquisition and simple design, Transport between sites is easy - so they can be shared between several facilities within an organisation to maximise utilisation.

Electric or hydraulic friction drive is a popular option for heavier machines.

Most of the manufacturers listed in our accompanying table have representation throughout Europe. When selecting a supplier, make sure that they can give you a demonstration at your location, that they provide training and ongoing service, parts and repair facilities. Don't forget that the machines are covered by the requirements of LOLER (Lifting Operations and Lifting Equipment Regulations 1998), so need to be issued with a Certificate of Thorough Examination at six-monthly intervals. Again, a good supplier should be able to take care of this for you

Hiring

Unlike self-propelled booms and scissors, there are relatively few national hire fleets in the UK with significant numbers of trailer mounted platforms. In fact in our 2005 survey of the largest rental companies only three had more than 50 units: HSS (180), Facelift (90) and Hewden (80). The better news is that most towns have a tool hire outlet, either local or national with typically have one or two units available, so a quick check in the phone book should provide a supplier. Unfortunately these companies concentrate on the simpler 12 to 13metre working height machines. If something larger is needed, it will be necessary to contact a specialist.

Check out our Access & Lifting Directory at www.vertikal.net for more information.

Trailer Mounted Access Platforms - *Summary of Products currently available*

Articulating Boom

Manufacturer	Model	Work height m	Outreach m	SWL kg	Jib	GVW	Towing length m	Towing width m	Minimum width m	Operating width m	Outriggers	Power sources DC elec.	Power sources AC elec.	Power sources I.C./gen.
Ateco	HL9	9.4	4.2	200	no	960	4.2	1.22	0.71	2.60	M	standard	option	n/a
Niftylift	90	9.5	3.5	120	no	595	3.8	1.50	0.75	2.10	M	standard	option	n/a
Thomas	100NW	10.0	4.5	150	no	900	4.6	1.40	1.40	2.70	M	option	standard	option
Skyhigh	1200MP/HP	12.0	4.5	215	no	1150	5.9	1.59	1.59	3.85	M/H	option	standard	option
Matilsa	Parma 12	12.1	4.8	200	no	1200	6.0	1.60	1.15	3.24	M/H	option	standard	option
Aerial	E12	12.2	5.0	215	no	1190	5.3	1.48	1.20	2.80	M/H	standard	option	option
Ateco	HL12	12.2	5.2	200	no	1260	5.8	1.55	1.19	2.83	M	standard	option	n/a
Manitou	120TH	12.2	4.9	250	no	1310	5.9	1.77	1.77	3.00	H	n/a	standard	option
Niftylift	120	12.3	5.0	200	no	1160	5.5	1.50	1.10	2.70	M/H	standard	option	option
Genie	TZ34/20	12.4	5.8	227	yes	1411	6.0	1.51	1.51	3.04	M/H	standard	n/a	option
Snorkel	MHP12/34	12.6	5.6	250	yes	1200	6.0	1.58	1.58	3.70	H	option	standard	option
JLG	K13	12.9	5.9	215	yes	1260	6.3	1.50	1.50	3.00	H	n/a	n/a	standard
Haulotte	1300RT	13.0	5.7	210	yes	1500	6.0	1.55	1.20	3.50	H	standard	n/a	n/a
Thomas	130NW	13.0	5.5	250	no	1100	5.6	1.40	1.40	3.10	H	option	standard	option
Bil-Jax	XLB-4319A	13.1	5.8	204	yes	1300	5.9	1.50	1.50	3.00	H	standard	n/a	option
Aerial	K13	13.2	5.9	215	yes	1390	6.3	1.48	1.48	3.00	H	standard	option	option
UpRight	TL38	13.5	5.6	215	yes	1470	6.0	1.52	1.52	3.30	M/H	standard	n/a	option
Niftylift	140	14.3	6.4	225	yes	1390	6.8	1.60	1.60	3.20	H	standard	option	option
Matilsa	Parma 15	14.7	6.4	200	yes	1650	7.1	1.61	1.30	3.77	M/H	option	standard	option
Thomas	160NW	16.0	8.5	250	yes	2000	7.7	1.75	1.75	3.70	H	option	standard	option

Articulating / Telescopic Boom

Manufacturer	Model	Work height m	Outreach m	SWL kg	Jib	GVW	Towing length m	Towing width m	Minimum width m	Operating width m	Outriggers	Power sources DC elec.	Power sources AC elec.	Power sources I.C./gen.
Dino	105T	10.5	6.0	120	no	1010	5.6	1.48	0.78	3.20	H	n/a	standard	n/a
Denka	Junior 12	12.0	6.7	120	no	985	5.7	1.40	0.75	3.20	H	n/a	standard	n/a
Matilsa	Parma 12T	12.2	6.1	200	no	1500	4.6	1.60	1.17	3.88	H	option	standard	option
Niftylift	120T	12.2	6.1	200	no	1400	4.5	1.50	1.10	3.55	H	standard	option	option
Skyhigh	1200TC	12.2	6.0	215	no	1250	5.2	1.40	0.99	2.80	H	option	standard	option
Genie	TZ34/20	12.4	6.1	227	no	1432	5.1	1.45	1.45	3.60	H	standard	n/a	option
Bil-Jax	3522A	13.3	6.9	227	yes	1397	5.0	1.66	1.66	3.00	H	standard	n/a	option
Denka	DLX15	15.0	9.0	200	yes	1675	6.4	1.63	1.44	4.08	H	option	standard	option
Skyhigh	1500	15.0	7.8	215	no	1800	7.0	1.59	1.59	4.36	H	option	standard	option
Thomas	150NW	15.0	7.5	250	no	1650	6.2	1.50	1.50	3.70	H	option	standard	option
Bil-Jax	4527A	15.7	8.2	227	yes	1760	5.9	1.66	1.66	3.50	H	standard	n/a	option
Aerial	K17T	17.0	9.1	215	yes	2250	7.1	1.75	1.75	4.65	H	standard	option	option
Matilsa	Parma 17	17.0	9.0	200	yes	2430	7.3	1.94	1.94	4.23	H	option	standard	option
Niftylift	170	17.1	8.7	200	no	1900	6.2	1.60	1.60	4.37	H	standard	option	option
Bil-Jax	5031A	17.2	9.3	215	yes	2350	6.9	1.80	1.80	4.65	H	standard	n/a	option
Genie	TZ50	17.2	9.1	227	yes	2087	6.7	1.65	1.65	4.30	H	standard	n/a	option
UpRight	TL50	17.2	8.5	215	no	2150	5.9	1.60	1.60	3.70	H	standard	n/a	option
Skyhigh	1800	18.0	8.5	215	no	2250	8.0	1.59	1.59	4.00	H	option	standard	option
Bil-Jax	5534A	18.8	10.2	227	yes	1996	7.0	1.68	1.68	3.90	H	standard	n/a	option
Thomas	190NW	19.0	10.5	250	no	2100	8.0	1.85	1.85	3.80	H	option	standard	option

Articulating-Telescopic with Sigma Riser

Manufacturer	Model	Work height m	Outreach m	SWL kg	Jib	GVW	Towing length m	Towing width m	Minimum width m	Operating width m	Outriggers	Power sources DC elec.	Power sources AC elec.	Power sources I.C./gen.
JLG	T350	12.7	6.1	227	no	1542	6.4	1.44	1.44	3.20	H	standard	n/a	option
Omme	1550EZ	15.3	8.5	200	fixed	1940	7.1	1.60	1.60	4.10	H	option	standard	n/a
Dino	160XT	16.0	9.1	215	no	1950	5.9	1.78	1.78	3.80	H	n/a	standard	option
JLG	T500J	17.2	9.6	227	yes	2177	8.2	1.70	1.70	3.75	H	standard	n/a	option
Dino	180XT	18.0	10.9	215	no	2100	6.6	1.78	1.78	3.80	H	n/a	standard	option
Omme	1830E	18.3	10.2	200	fixed	2450	6.7	1.60	1.60	4.21	H	option	standard	n/a
Dino	210XT	21.0	11.7	215	no	2440	7.9	1.92	1.92	4.30	S	n/a	standard	standard
Niftylift	210	21.2	12.0	225	no	3300	6.6	1.80	1.80	4.50	S	n/a	standard	option
Dino	260XT	26.0	11.7	215	no	3450	8.3	2.04	2.04	4.40	S	n/a	standard	option

M = Manual H = Hydraulic S = Spider

Straight Telescopic boom

Manufacturer	Model	Work height m	Outreach m	SWL kg	Jib	GVW	Towing length m	Towing width m	Minimum width m	Operating width m	Outriggers	Power sources DC elec.	Power sources AC elec.	Power sources I.C./gen.
Omme	1050EZ	10.5	6.8	125	fixed	995	4.9	1.20	0.78	3.40	H	n/a	standard	n/a
Omme	Mini 12EZ	11.9	7.9	125	yes	1200	6.0	1.50	0.99	3.60	H	option	standard	n/a
Thomas	120NWT	12.0	9.0	250	no	1500	6.7	1.40	1.40	3.30	H	option	standard	option
Dino	125T	12.5	8.3	215	no	1450	6.8	1.65	1.65	3.60	H	n/a	standard	n/a
Omme	1250EZ	12.5	8.5	200	fixed	1500	7.1	1.60	1.60	4.10	H	option	standard	n/a
Bil-Jax	3632T	13.4	9.8	227	no	1905	6.7	1.65	1.65	3.40	H	standard	n/a	option
Dino	135T	13.5	9.1	215	no	1580	5.9	1.78	1.78	3.80	H	n/a	standard	n/a
Dino	150T	15.0	10.0	215	no	1650	6.4	1.78	1.78	3.80	H	n/a	standard	option
Omme	1650EZ	16.5	10.4	200	fixed	1925	6.8	1.70	1.70	4.25	H	option	standard	option
Teupen	Gepard 17T	17.2	12.7	200	fixed	2200	8.0	1.78	1.78	4.34	H	n/a	standard	option
Denka	DK18	18.0	11.3	200	no	1925	6.6	2.06	1.86	3.90	H	standard	option	option
Denka	DL18	18.0	10.5	200	no	2100	7.4	2.06	1.86	3.75	H	standard	option	option
Dino	180T	18.0	10.7	215	no	1780	7.4	1.78	1.78	3.80	H	n/a	standard	option
Omme	1850E	18.6	11.7	200	fixed	2180	7.2	1.70	1.70	4.25	H	option	standard	option
Denka	DL21	21.0	10.0	200	no	2500	8.1	2.06	1.86	4.35	H	standard	option	option
Omme	2100E	21.1	11.1	200	fixed	2335	7.4	1.70	1.70	4.25	H	option	standard	option
Teupen	Gepard 22T	22.2	12.2	200	fixed	2250	8.4	1.78	1.78	4.34	H	n/a	standard	option
Dino	230T	23.0	11.7	215	no	2930	8.3	2.04	2.04	4.40	S	n/a	standard	standard
Denka	DK25	25.0	11.4	200	no	2450	9.1	1.69	1.69	5.50	H	standard	n/a	n/a
Denka	DL25	25.0	12.0	200	no	3200	8.1	1.72	1.72	4.30	H	standard	option	option
Omme	2500E	25.1	12.6	200	fixed	2900	8.4	1.70	1.70	4.25	H	option	standard	option
Teupen	Gepard 25T	25.2	12.0	200	fixed	2570	8.4	1.78	1.78	4.34	H	n/a	standard	option
Omme	2900E	29.0	12.3	200	fixed	3500	9.2	1.70	1.70	4.25	H	option	standard	option
Denka	DL30	30.0	11.6	200	no	3500	8.9	1.72	1.72	4.30	H	standard	option	option

M=Manual H=Hydraulic S=Spider

Can I tow it?

A very good reason to consider the total weight of the trailer mounted platform is to ensure that you are legal when driving on public roads. Rules vary from country to country, but obviously the chosen tow vehicle must be capable of towing the trailer under consideration. Vehicle manufacturers specify a recommended maximum trailer weight for each of their models, and this is the first check that should be made. The allowable weight will be stated simply as a maximum trailer weight permitted, or as 'MTM' (maximum train mass). MTM is the total of the vehicle weight (to be safe use the GVW figure) plus the trailer weight, so to calculate the permissible trailer weight just deduct GVW from MTM.

Assuming the vehicle is physically capable of towing your selected machine, the next step is to check the driver's entitlement under law. The following summary covers UK regulations:, although most European countries have similar rules.

Trailer lifts are easy to move over long distances without specialist vehicles.

UK driver licensing and entitlement to tow trailers

1. Car licences held before 1st January 1997

Drivers in this category can drive vehicles up to 7,500kg GVW, and a trailer combination with a combined GVW not exceeding 8250kg.

This means if the vehicle selected has a GVW of 7500kg the maximum allowable weight of a trailer is just 750kg. Lighter vehicles can tow heavier trailers, but only up to the manufacturer's specified limits.

Examples:

a) Ford Ranger 4x4 double cab pick-up

GVW = 2845kg

MTM = 5645kg i.e. less than licensing limit of 8250kg, so full capacity can be used.

Therefore maximum allowable trailer weight with this vehicle is 2800kg, so there will be no problems with most units below 20m working height.

b) Ford Transit 350 mwb 115PS panel van

GVW = 3500kg

MTM = 5750kg i.e. less than licensing limit of 8250kg, so full capacity can be used.

Therefore maximum allowable trailer weight with this vehicle is 2250kg, so a maximum 18m working height trailer can be towed

c) Iveco Daily 50C14 mwb van

GVW = 5200kg

MTM = 8700kg which is above the licensing limit of 8250kg, so the vehicle's full capacity cannot be used. In this case, the maximum allowable trailer weight with this vehicle is 8250 - 5200kg = 3050kg allowing most trailer lifts to be towed.

2. Car licences first obtained after 1st January 1997

Drivers in this category can drive vehicles up to 3500kg GVW, and a vehicle and trailer combination with a combined GVW not exceeding 4250kg providing the trailer does not exceed 750kg..

A trailer heavier than 750kg CAN be towed but its weight must not exceed the unladen weight of the towing vehicle, and the combined weight of vehicle and trailer does not exceed 3500kg. Since most trailer mounted lifts are heavier than 750kg, this rule must be clearly understood and considered when selecting tow vehicles and trailers for younger drivers.

Examples:

a) Ford Ranger 4x4 double cab pick-up

Unladen weight (kerb weight) = 1710kg

GVW = 2845kg

MTM = 5645kg i.e. more than licensing limit of 4250kg, so the vehicle's full capacity cannot be used.

If a trailer of over 750kg is required, then the trailer may not exceed the vehicle unladen weight of 1710kg. However, the total combined weight of vehicle and trailer must not exceed 3500kg. If we add a driver and some tools in the tow vehicle (say 150kg), the allowable trailer weight is 3500kg minus 1710kg (vehicle unladen) minus 150kg = 1640kg. This means trailers up to 15m will generally be ok, but be careful about extra crew or materials in the vehicle.

b) Ford Transit 350 mwb 115PS panel van

Unladen weight (kerbweight) = 1898kg

GVW = 3500kg

MTM = 5750kg i.e. more than licensing limit of 4250kg, so the vehicle's full capacity cannot be used.

If a trailer of over 750kg is required, then the trailer may not exceed the vehicle unladen weight of 1898kg. However, the total combined weight of vehicle and trailer must not exceed 3500kg. If we add a driver and some tools in the tow vehicle (say 150kg), the allowable trailer weight is 3500kg minus 1898kg (vehicle unladen) minus 150kg = 1452kg. This really limits this van to trailers up to 13m but care must be taken as some smaller units exceed this weight, and there is always a temptation to fill up the load area of the vehicle.