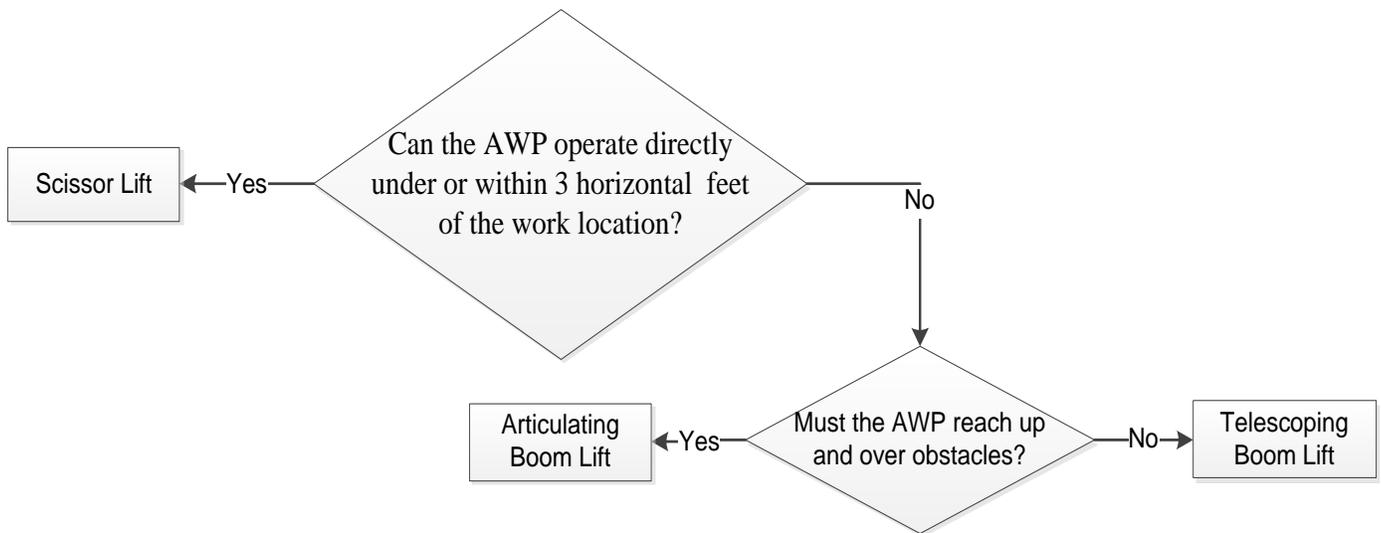


Selection of the Proper Aerial Work Platform for the Job



Choosing the appropriate Aerial Work Platform (AWP) for a given job involves many variables. First, a worksite analysis should be conducted by personnel with experience and expertise using an AWP to safely reach a work area and perform the task at hand. Employers or their representatives should refer to the manufacturer’s AWP operating envelope charts to assist with AWP selection; contacting the dealer or manufacturer for guidance when selecting an AWP is also recommended. Below is some very basic guidance on the factors to consider when selecting an AWP.

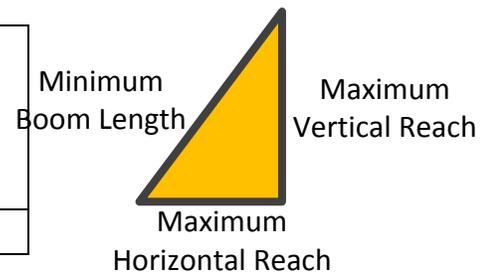
1. How can I reach the work location?



2. What is the required working height?

- a. Select the proper height scissor lift based on the maximum working height required.
- b. Select the proper articulating boom lift based on the height of the obstacle or obstacles and the manufacturer’s operating envelope charts.
- c. Select the proper telescoping boom lift based on the calculations in the table below and the manufacturer’s operating envelope charts.

Enter the maximum vertical reach required, in feet, below	Enter the maximum horizontal reach in feet (closest distance that the boom can be positioned to the structure) below	Calculate the minimum boom length (minimum boom length = square root of C)
A= Altitude	B= Base	$A^2 + B^2 = C^2^*$



*Refer to Minimum Boom Length Table Below

3. How much does the AWP have to lift? Keep in mind that generally, scissor lifts have higher lifting capacities and larger platforms than boom lifts.

- a. What is the required capacity?
- b. How many people need to be on the platform?
- c. How much equipment will be on the platform?

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What kind of environment will the AWP be operated in? The following questions help determine if the AWP should be internal combustion engine or electric powered and what kind of terrain capability it must have.

- d. Is the work being performed inside or outside?
- e. Is the surface finished, graded, or rough?
- f. If the surface is finished, does it require special consideration, i.e. non-marking tires?

There are many other factors to consider when selecting an AWP including weight limits on surfaces, site hazards, the need to move AWP on elevators, access to worksites, special considerations for environment, and accessories to complete job tasks, just to name a few. It is always important to refer to the manufacturer specifications and guidance when selecting an AWP.

For additional assistance, visit www.SAIA.org to access a free copy of guidance material entitled: *Statement of Best Practices for Workplace Risk Assessment and Aerial Work Platform Equipment Selection*.

Minimum Boom Length Table

Please Note: recommended minimum boom length for straight boom calculation. Always refer to the working envelope of the boom you intend to use for actual range and capacity within that range.

A	B	Boom	C	A	B	Boom	C
Altitud	Bas	Size	Actual	Altitud	Base	Size	Actual
30	10	45/46	32	80	30	85/86	85
30	20	45/46	36	80	40	120	89
30	30	45/46	42	80	50	120	94
30	40	60	50	80	60	120	100
30	50	60	58	80	70	120	106
40	10	45/46	41	90	10	120	91
40	20	45/46	45	120	10	120	120
40	30	60	50	120	20	135	122
40	40	60	57	120	30	135	124
40	50	65/66	64	120	40	135	126
50	10	60	51	120	50	135	130
50	20	60	54	120	60	135	134
50	30	60	58	120	70	150	139
50	40	65/66	64	130	10	135	130
50	50	80	71	130	20	135	132
60	10	65/66	61	130	30	135	133
60	20	65/66	63	130	40	150	136
60	30	80	67	130	50	150	139
60	40	80	72	130	60	150	143
60	50	80	78	130	70	150	148
70	10	80	71	130	80	160/180/185	153
70	20	80	73	140	10	150	140
70	30	80	76	140	60	160/180/185	152
70	40	85/86	81	150	60	180/185	162
70	50	86	86	160	20	180/185	161
70	60	120	92	160	70	180/185	175
80	10	85/86	81	170	50	180/185	177
80	20	85/86	82	170	60	180/185	180

Under the Occupational Safety and Health Act, [employers are responsible](#) for providing a safe and healthy workplace and [workers have rights](#). OSHA can help answer questions or concerns from employers and workers. OSHA's [On-site Consultation Program](#) offers free and confidential advice to small and medium-sized businesses, with priority given to high-hazard worksites. For more information, contact your [regional or area OSHA office](#), call 1-800-321-OSHA (6742), or visit www.osha.gov.

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Through the OSHA and Scaffold & Access Industry Association (SAIA) Alliance, SAIA developed this fact sheet for informational purposes only. It does not necessarily reflect the official views of OSHA or the U.S. Department of Labor.