

## Properly Securing Scaffold Planks and Decking

Many factors determine the wind forces acting upon scaffolding and scaffold components. Scaffold design begins at the scaffold site where common factors such as topography, prevailing wind conditions, and local regulations play an important part.

*Caution: A jobsite-specific safety plan should be developed and implemented for each job. This plan should address actions and procedures that account for severe wind events.*

As wind forces are imposed on the scaffolding, many different forces are introduced into the system. A scaffold on the leeward side of a building will experience a negative pressure while a scaffold on the windward side of a building will experience positive pressure. These positive and negative pressures are the reason wall ties are critical to a scaffold's ability to withstand the compression and tension forces that move the scaffold.

When an air stream encounters a building wall perpendicularly, the air only has two directions of travel. The air can flow around the building, or it can go vertically up the face of the wall and down the backside of the building, eventually reemerging with the air stream. There will be upward pressure on the planks and decking, with the amount of pressure being dependent on the shape of the building. This upward pressure is why wind clips or tie downs are recommended on all planks and decking.

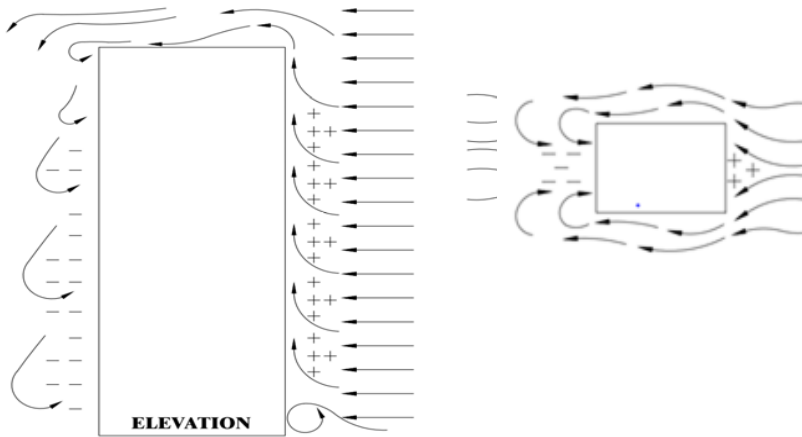


Fig.1-Images of Air Flow as it Travels Around a Typical Building

This Technical Bulletin was prepared by members of the Scaffold & Access Industry Association SSFI Committee.

SSFI is a committee comprising manufacturers of shoring, scaffolding, forming, and suspended scaffolding. The committee focuses on engineering and safety aspects of scope products.

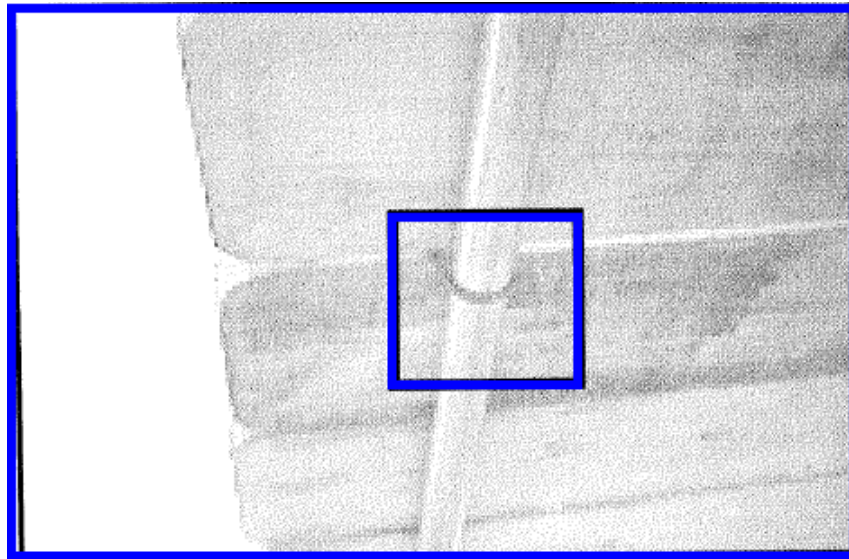
This bulletin does not purport to be all-inclusive nor to supplant or replace other additional safety and precautionary measures to cover usual or unusual conditions. If this bulletin conflicts in any way with a state, local, federal, or other government statute or regulation, said statute or regulation shall supersede this bulletin and it shall be the responsibility of each user to comply therewith. This bulletin has been developed as an aid to users of various types of scaffolding equipment. The Scaffold & Access Industry Association or their SSFI Committee members are not responsible for the use of this bulletin.

September 2021 | This Bulletin is reviewed periodically. | Check [www.saiaonline.org](http://www.saiaonline.org) for the latest version

For instance, the taller the building, the more air that accumulates and moves vertically over the building and the scaffolding. The planks and decks at the top of the scaffold are more susceptible to higher wind pressures; however, it should be recognized that all planks and decks are susceptible 100% of the time to vertical pressures. (Note: In addition to wind clips for decking, it is also important to lock frames and system scaffold legs together using a pin lock or some other method of locking legs to prevent the legs from separating due to wind pressure or any other means.)

There are no specific guidelines regarding how much load a wind clip must withstand. The illustrations below show typical methods of securing scaffold planking:

- Wood Planking is commonly attached to the bearer by wrapping tie around the plank and bearer.



**Fig. 2- Wood Plank Lock Against Lift Off**

This Technical Bulletin was prepared by members of the Scaffold & Access Industry Association SSFI Committee.

SSFI is a committee comprising manufacturers of shoring, scaffolding, forming, and suspended scaffolding. The committee focuses on engineering and safety aspects of scope products.

This bulletin does not purport to be all-inclusive nor to supplant or replace other additional safety and precautionary measures to cover usual or unusual conditions. If this bulletin conflicts in any way with a state, local, federal, or other government statute or regulation, said statute or regulation shall supersede this bulletin and it shall be the responsibility of each user to comply therewith. This bulletin has been developed as an aid to users of various types of scaffolding equipment. The Scaffold & Access Industry Association or their SSFI Committee members are not responsible for the use of this bulletin.

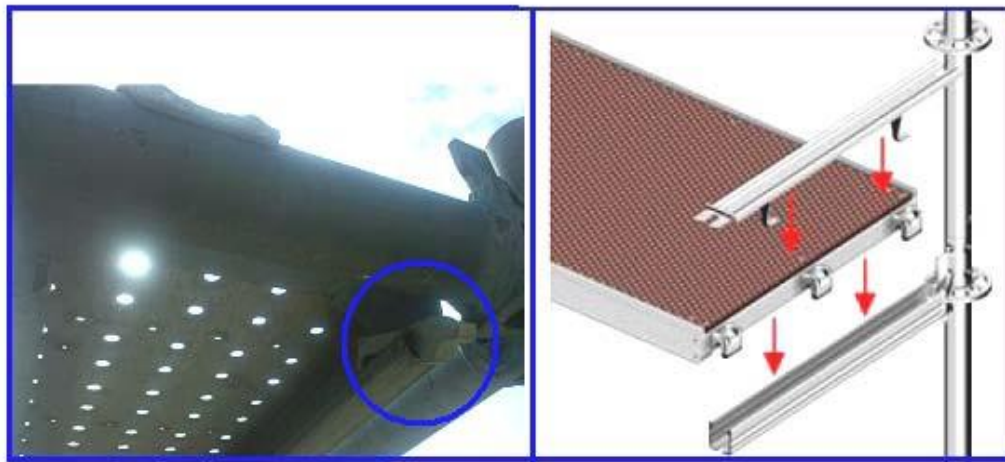
September 2021 | This Bulletin is reviewed periodically. | Check [www.saiaonline.org](http://www.saiaonline.org) for the latest version

- A fabricated deck often has a clip located on the bottom of the deck which can typically withstand loads anywhere from between 50-300 lbs. In instances when no wind clips are provided, tie wire or #9 wire can also be used. The illustration below shows the most common types of wind clips available on fabricated decks:



**Fig. 3- Finger Latch**

**Figure 4- Tab Style Latch**



**Fig. 5- Hidden Pull Out Latch**

**Fig. 6- Lock Against Lift Off Bar for use with channel style bearers typ. found in Europe**

This Technical Bulletin was prepared by members of the Scaffold & Access Industry Association SSFI Committee.

SSFI is a committee comprising manufacturers of shoring, scaffolding, forming, and suspended scaffolding. The committee focuses on engineering and safety aspects of scope products.

This bulletin does not purport to be all-inclusive nor to supplant or replace other additional safety and precautionary measures to cover usual or unusual conditions. If this bulletin conflicts in any way with a state, local, federal, or other government statute or regulation, said statute or regulation shall supersede this bulletin and it shall be the responsibility of each user to comply therewith. This bulletin has been developed as an aid to users of various types of scaffolding equipment. The Scaffold & Access Industry Association or their SSFI Committee members are not responsible for the use of this bulletin.

September 2021 | This Bulletin is reviewed periodically. | Check [www.saiaonline.org](http://www.saiaonline.org) for the latest version

- Other methods to prevent uplift include a special style of clamp combination that can be used to counteract uplift. In some frame scaffolds the decks are locked against uplift by the base of the frame above, as shown in the illustration below.



**Fig. 7-Frames Locking Decks Against Lift Off**

Unsecured planks and decks can create a hazard. Wind clips are vital to a safe working environment on scaffolding and should be in compliance to OSHA 1926.451, subpart L as should the entire scaffolding system.

Toe Boards help to secure the ends of platforms against wind lift (if they are locked or tied to the scaffold).

Consider the wind loading of Welding Screens, Shade Cloth, Winterization Covering, Shutter Ply, Plywood or Corrugated or IBR Sheeting on the face of the scaffold as adding to the wind load on a scaffold which then creates huge sideways pressure and adds to the uplift forces generated. In Coastal areas and near water it is advisable to always tie down platforms against wind uplift.

This Technical Bulletin was prepared by members of the Scaffold & Access Industry Association SSFI Committee.

SSFI is a committee comprising manufacturers of shoring, scaffolding, forming, and suspended scaffolding. The committee focuses on engineering and safety aspects of scope products.

This bulletin does not purport to be all-inclusive nor to supplant or replace other additional safety and precautionary measures to cover usual or unusual conditions. If this bulletin conflicts in any way with a state, local, federal, or other government statute or regulation, said statute or regulation shall supersede this bulletin and it shall be the responsibility of each user to comply therewith. This bulletin has been developed as an aid to users of various types of scaffolding equipment. The Scaffold & Access Industry Association or their SSFI Committee members are not responsible for the use of this bulletin.

September 2021 | This Bulletin is reviewed periodically. | Check [www.saiaonline.org](http://www.saiaonline.org) for the latest version

This Technical Bulletin was prepared by members of the Scaffold & Access Industry Association SSFI Committee.

SSFI is a committee comprising manufacturers of shoring, scaffolding, forming, and suspended scaffolding. The committee focuses on engineering and safety aspects of scope products.

This bulletin does not purport to be all-inclusive nor to supplant or replace other additional safety and precautionary measures to cover usual or unusual conditions. If this bulletin conflicts in any way with a state, local, federal, or other government statute or regulation, said statute or regulation shall supersede this bulletin and it shall be the responsibility of each user to comply therewith. This bulletin has been developed as an aid to users of various types of scaffolding equipment. The Scaffold & Access Industry Association or their SSFI Committee members are not responsible for the use of this bulletin.

September 2021 | This Bulletin is reviewed periodically. | Check [www.saiaonline.org](http://www.saiaonline.org) for the latest version

This Technical Bulletin was prepared by members of the Scaffold & Access Industry Association SSFI Committee.

SSFI is a committee comprising manufacturers of shoring, scaffolding, forming, and suspended scaffolding. The committee focuses on engineering and safety aspects of scope products.

This bulletin does not purport to be all-inclusive nor to supplant or replace other additional safety and precautionary measures to cover usual or unusual conditions. If this bulletin conflicts in any way with a state, local, federal, or other government statute or regulation, said statute or regulation shall supersede this bulletin and it shall be the responsibility of each user to comply therewith. This bulletin has been developed as an aid to users of various types of scaffolding equipment. The Scaffold & Access Industry Association or their SSFI Committee members are not responsible for the use of this bulletin.

September 2021 | This Bulletin is reviewed periodically. | Check [www.saiaonline.org](http://www.saiaonline.org) for the latest version

This Technical Bulletin was prepared by members of the Scaffold & Access Industry Association SSFI Committee.

SSFI is a committee comprising manufacturers of shoring, scaffolding, forming, and suspended scaffolding. The committee focuses on engineering and safety aspects of scope products.

This bulletin does not purport to be all-inclusive nor to supplant or replace other additional safety and precautionary measures to cover usual or unusual conditions. If this bulletin conflicts in any way with a state, local, federal, or other government statute or regulation, said statute or regulation shall supersede this bulletin and it shall be the responsibility of each user to comply therewith. This bulletin has been developed as an aid to users of various types of scaffolding equipment. The Scaffold & Access Industry Association or their SSFI Committee members are not responsible for the use of this bulletin.

September 2021 | This Bulletin is reviewed periodically. | Check [www.saiaonline.org](http://www.saiaonline.org) for the latest version