DISCLAIMER
Please keep in mind that the information in this article and the processes outlined do not happen in a vacuum. In addition, these are not the only methods available by which to protect your scaffold planks. Feedback from your team and a careful eye on weather will influence other methods that may be effective, as well.

PLANK PROTECTION

The proper safekeeping of planks is an investment you can bank on

By Colby Hubler

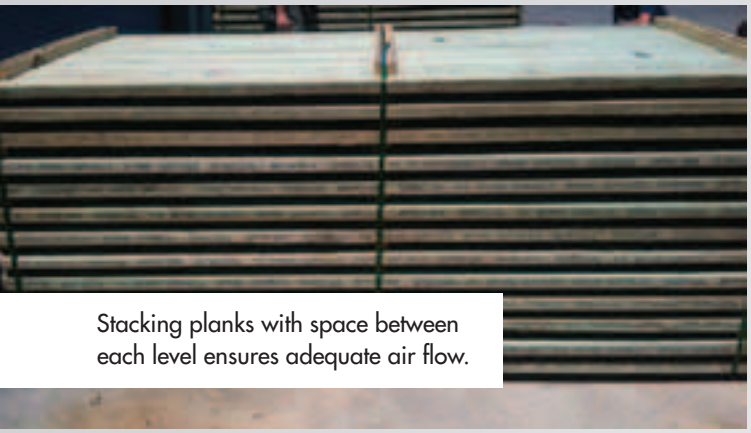
Equipment comes in. Equipment goes out. It is really a simple process, and most scaffold companies have a specific protocol on how they inspect, repair and reassign material to the next revenue-generating task.

Over the years, the Scaffold and Access Industry Association (SAIA) Plank and Platform Council has developed tools to assist in these endeavors: plank-inspection handbooks, inspection CDs, purchasing guidelines and numerous meetings on what the industry consensus is when handling the material. This information is of great value and use to you and your crews. Even so, many SAIA members who refer to this information continue to ask us questions on one particular topic: the storage of wood scaffold planks. Before you write off this article as just another on "keep planks under cover and out of moisture," keep reading. You are bound to find at least a few tips and suggestions that will result in a significantly longer life for your investment.

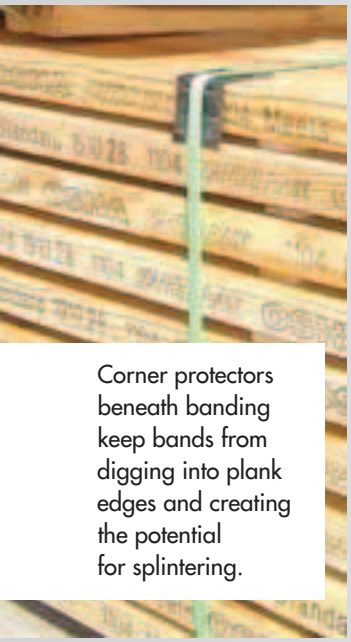
WOOD SCIENCE

Why is proper storage important? Although solid-sawn scaffold planks are cut from a tree and processed, they are, in a sense, still somewhat alive. They have the ability to absorb/dispel moisture and expand/contract in the process. All solid-sawn scaffold planks are dried to a moisture content of 19 percent or less as required by the grade and won't support mold growth.

When wood becomes wet, it is a different story. The cells of the wood and the long grain that contribute to the density



Stacking planks with space between each level ensures adequate air flow.



Corner protectors beneath banding keep bands from digging into plank edges and creating the potential for splintering.

SOME MIGHT MAKE THE ARGUMENT THAT STORING UNITS ON THE LEEWARD SIDE OF A BUILDING OFFERS MORE PROTECTION; HOWEVER, IF YOU STICKER THE UNIT PROPERLY, WIND WILL BE MORE BENEFICIAL.

Blocks (cauls) between plank layers keep them from twisting or bowing if planks dry out too quickly.

and strength of the plank absorb moisture. As mentioned, they also can dispel that moisture when exposed to air or heat. It is this flexibility that helps support the product's long life. However, when planks absorb considerable moisture—exceeding 19 percent—and you need to place them into storage, that's when concerns arise, because—basically—how you maintain planks in the yard equates to how long they will last in the field.

CARING FOR PLANKS

When planks (new or used) arrive in the yard, you have two approaches to their storage:

1) After a competent inspection, load the material onto a truck and send it to a job site. There, direct crews to immediately set the planks on frames. This step will ensure air circulation around the planks and keep moisture content in check.

2) Set the material in the scaffold yard for use at a later time.

It is scenario two that introduces the potential for increased moisture in the plank. In this situation, the first two questions to ask in relation to how you establish your storage process are:

1) Is covered storage available to protect the planks from the elements?

2) If you don't have covered storage, what methods are necessary to protect the planks while they are exposed in the yard?

Don't have the answers? Then follow these tips:

- *Never* store planks flat-packed (stacked face to face without separation) in the unit. This is rule No. 1. Doing so is a surefire way to increase moisture in the unit and decrease longevity. Maintaining adequate airflow is *the* most important factor in outside lumber storage.

- Place stickers (narrow strips of wood about 1 inch wide by ¾ inch thick) or laths between layers to allow airflow between planks. Place the wood in perfect vertical alignment with one another on each end, in the middle and about every 4-5 feet on longer lengths; otherwise, sagging may occur, causing planks to touch and decreasing airflow.

- Use cauls (blocks placed on top of the units) to keep the top layer of planks from twisting or bowing if the materials dry out too quickly. (See photo at bottom left.) If you don't use cauls, place corner protectors beneath the banding to keep bands from digging into the plank edges and creating the potential for splintering. (See photo at middle left.)

- Place bands in alignment with the stickers and around the cauls. This step ensures a well-secured unit.

- Place all units on dunnage or on blocks to elevate them from ground water or drainage. (Normally, manufacturers include dunnage on new units.)

- Place units in an open storage area with no trees or buildings close by that can block airflow. Allow large volumes of air to circulate freely around the stacked lumber to help evaporate moisture. (Some might make the argument that storing units on the leeward side of a building offers more protection; however, if you sticker the unit properly, wind will be more beneficial.)

- Remove weeds, grasses and other vegetation from the storage area; they harbor insects and fungal spores that are detrimental to the lumber.

- Place some sort of top protection (plywood, plastic, Tyvek, etc.) on the top of each unit to minimize water entry through the top and within the layers, but don't cover the entire unit. Moisture in completely wrapped units of lumber increases humidity and turns the wrapping into a greenhouse. (If you store units in a shed, you usually don't need top protection.)

- Repair or replace the top protection if it becomes torn or damaged. Dilapidated wrapping allows rainwater entry and may increase moisture inside the unit even more so than if the lumber had no protection.

- Rotate your inventory. If your storage area consists of multiple units stacked on top of each other that are multiple units deep, move front-end units to the back and inner units to the ends to provide equal airflow for all.

SEALING IN PROTECTION

Once you have established your storage method and your materials have dried properly, your next step is to apply a penetrating end sealer. A properly chosen and applied end sealer will prevent moisture entry on the ends of planks while still allowing excess moisture to exit. Coatings such as paint or wax seal the plank but do not allow moisture to exit through the end grain. Instead, choose an oil-based product; this will penetrate deep into the ends of the planks and coat the individual fibers. Application of oil-based products can be as simple as pouring a gallon of the sealer into a pump spray bottle and spraying the ends of the units. If the solution appears to evaporate, it means it is doing its job and getting deep into the wood.

Taking these steps and implementing a storage method may seem daunting, time-consuming and labor-intensive. However, most firms find that they can quickly establish an efficient system. It soon becomes a normal step in their day-to-day yard duties and far outweighs the loss of replacing planks sooner than necessary.

Stretch the life of your planks as far as you can—your bottom line will prove it is a good decision.

ABOUT THE AUTHOR

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ALLEVIATING EXISTING STORAGE WOES

Do you have truckloads of planks in your yard that aren't stored as recommended in this article? Don't worry. You can still take steps to improve the situation even if excessive rain/moisture has entered the units.

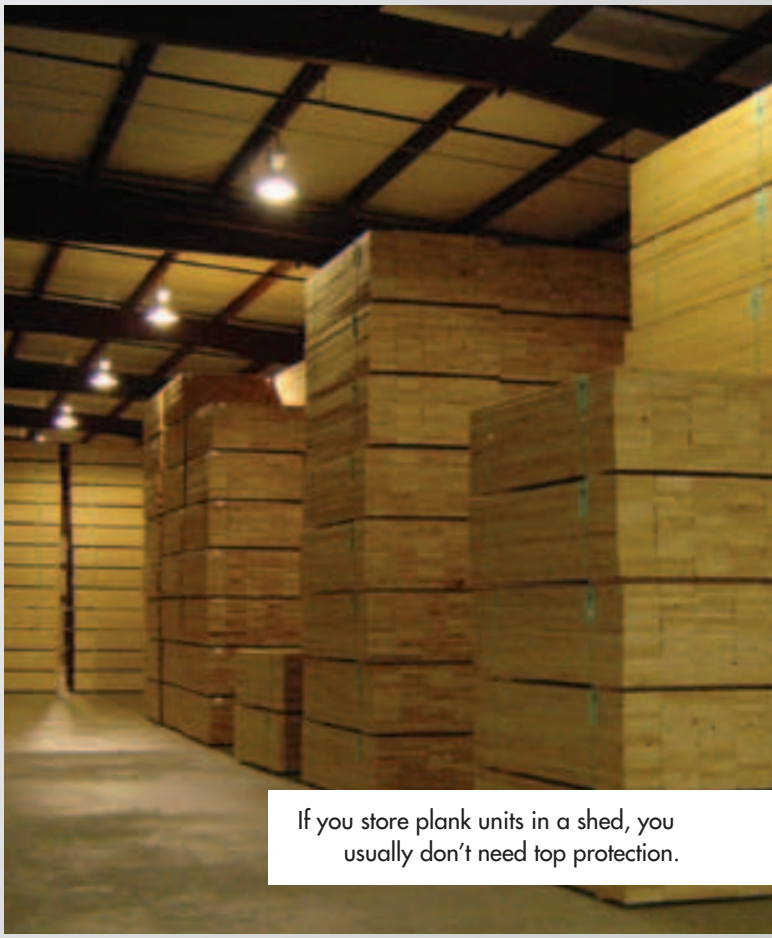
- Follow the layering, blocking, banding and storing recommendations in the accompanying article to create adequate airflow.

- If you find surface mold/mildew, brush it off once weather allows it to dry out or the material dries in storage.

- Dissolve mold/mildew with a solution of one part bleach to one part water. Spray it on, let it stand for a few minutes and then wipe or brush it off.

- Spray planks with a borate solution to retard further growth. Borate is nontoxic to mammals but highly toxic to most wood fungi.

- Lastly, remember that mold is not a defect of the lumber and does not cause loss of strength if you take proactive steps after significantly wet weather.



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