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Technical Article

Cleasby Manufacturing Inc.

Walking the Plank It's Not Kids Play

by Karen and John Cleasby, Western Roofing Magazine, Nov/Dec 2006

(Editor's Note: Karen and John Cleasby are a brother and sister team whom represent Cleasby Manufacturing's third generation of Cleasby's. Together, they share over 37 years of experience working at the manufacturing level. Product development, technical support, safety training, sales and marketing are just a few of the responsibilities they share. John or Karen may be reached at (800) 253-2729.)

The statistic is nearly perfect, 99.9999% of all plank accidents are due to user misuse, according to Jim Howard, general manager, Howard Manufacturing/Green Bull Ladder, a manufacturer of walk planks and scaffolding. This was just the case for contractor X who recently fell 14' from a plank and crushed his left wrist upon impact.

Aluminum planks generally run between 12" and 28" in width and anywhere from 10' to 40' in length. Enough room for one person wearing a personal fall arrest system (PFAS) to walk safely across. But what happens when this person is pushing a wheelbarrow? He doesn't use the plank manufacturers recommended guardrail system because the passage would be too narrow to allow wheelbarrow access. Okay, so he thinks he'll be fine because it is only a short distance from point A to point B and besides he has his PFAS on. That is until he gets halfway across and realizes the lanyard isn't long enough so he unhooks it. "It all happened so fast," said his supervisor. Minutes later the paramedics were there cutting contractor X out of his harness and rushing him to the hospital. Multiple surgeries later and suffering permanent injuries, he knows the accident was his fault and would have never happened had he abided by the plank manufacturer's safety instructions.

What can we all learn from this? It is important to take the time to read and adhere to the manufacturer's safety instructions and recommendations even if the instructions seem extreme, costly, maybe even a little bit ridiculous. Some contractors have argued that the recommendations are simply a ploy to sell more equipment. Others have said that the nature of a particular job simply makes it impossible to comply with all of the safety standards. Case in point is the use of a wheelbarrow on a walk plank - it obviously won't fit if the guardrails are in place. So, does one forgo the guardrails and use the wheelbarrow, or use the guardrails and forgo the wheelbarrow? Guardrails must be used according to OSHA. Given this fact, another contractor asked if he could bolt two planks together side-by-side to widen the walking surface and accommodate the wheelbarrow with guardrails in place. We have yet to be able to verify if this was a permissible solution, and if so, how the OSHA standards would apply to this set-up. In the meantime, we have briefly outlined a number of commonly overlooked safety recommendations for plank use based on instructions provided by Howard Manufacturing/Green Bull Ladder. For a full list and set of instructions call your preferred plank manufacturer, and/or the company from which you purchased or intend to purchase the product from.

- When selecting a plank take into consideration the weight of the person or persons plus the intended weight of the material to be transported across the plank at any given point. Remember, weight of people plus materials equals the working load.

Planks are typically designed with rated working loads of 250, 500, and 750 lbs. Federal OSHA imposes a more rigorous standard. Regulation 1910.28(a)(4) states the following, “scaffolds and their components shall be capable of supporting without failure at least four times the maximum intended load.”

- Toe boards are required in conjunction with guardrails per Federal OSHA safety standard 1910.289b0(15) “... toe boards, shall be installed at all open sides on all scaffolds more than 10 feet above the ground or floor. Toe boards shall be a minimum of 4” in height.”
- Do not overload the plank at anytime for any reason.
- Select planks best suited to the job taking into consideration the required width and length of the plank needed to safely meet the tasks at hand.
- Inspect the plank before each use; check all parts for proper function and check for damage to component parts. Don’t use the plank if parts are damaged or missing or if the plank isn’t functioning properly.
- Planks that have been exposed to excessive heat such as fire should be destroyed immediately. Excessive heat affects the structural integrity of the equipment.
- Never allow oil, grease or any slippery material to accumulate. Clean plank if necessary.
- Do not use planks for cantilever applications. Never stand on any portion of the plank that may extend beyond the supporting point.
- Erect the plank so that it is secure and level at all times.
- Use guardrails, mid rails, and toe boards as required by local, state and federal regulations. Their use is recommended in all cases and required in most. Most planks have pre-drilled holes to make installing the guardrails easy.
- Don’t accumulate or stack materials on the plank.
- Never use a ladder or other device on a plank to access greater heights.
- Never climb onto a plank from a ladder unless both the plank and the ladder are secured from movement in all directions.
- Never use a metal plank near electrical circuits.

Plank accidents are preventable; in fact, they are nearly unheard of when the equipment users adhere to the manufacturer’s instructions, according to Howard. But if the instructions aren’t followed, it only takes a split second to adversely alter a human life forevermore as in the case of contractor X, and this doesn’t account for the \$20,000 plus in OSHA fines the company incurred as a result. That same week contractor X’s supervisor ordered several sets of guardrails with toe boards. “It’s not worth the risk,” he said.

*Article is based on a real accident, but details have been omitted to protect the privacy of those involved. •••