





A Different Type of Success on the Court

GYM EQUIPMENT INSTALLATION

BY DAVE SMITH

For campus planners who are considering a new sports facility or similar building project, this article can help keep the project on budget, avoid embarrassing delays being reported in the local news, and help to propel the school's dream through to reality.

This article offers an overview of the little-known installation process for a typical gymnasium construction or renovation project. In addition to the design and financing teams, planners must develop a relationship with a third-party contractor who partners with an equipment manufacturer; developing these relationships will be time well invested.

The first step the local installer will complete is called a field check. Accurate field checks are critical to a successful project. An incomplete or inaccurate field check will always result in problems and additional costs and delays. Planners should share their knowledge of the facility with the design professionals to prevent surprises. The installer should note any unusual situations such as conduit on beams, sprinkler lines, hidden beams, and so on.

When the time comes for the actual installation, the installer will unload and count the equipment when they arrive at site. If the

equipment was delivered early, on-campus personnel can prevent delays by inspecting for damage and comparing the delivered items to the delivery receipt to identify lost items. The driver should wait to allow recipients to note discrepancies or potential damage on the paperwork. If missing or damaged items are reported after the first day onsite, it is often too late for the manufacturer to provide custom components on a rush schedule, and expedited shipping costs and delayed installations can be expensive.

Before beginning installation, the area must be clean and the facility protected from damage with plastic, OSB, Masonite, or other material. Such protection is especially important if the installer is working over a finished floor. The installer should have included this cost in the estimate unless the floor installation gets moved up earlier than when the gym equipment is installed.

The most crucial step in any installation is the initial layout. It is critical that the

entire gym be laid out to find any possible discrepancies. This layout also includes a trip to the job trailer and a review with the superintendent to make sure that all of the latest design changes have been incorporated into the installation drawings supplied by the manufacturer.

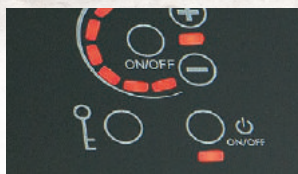
Safety is important at every step, but especially before any work done above floor level. For example, on-campus personnel should require hard hats for everyone onsite and have extra available for visitors. Safety lines must be used. Scaffolding, if used, must be safety pinned at all times. Scaffolding should never be moved with someone on it. In the long run, it is always faster to do the job safely. At most job sites, the general contractor will have very specific safety requirements that all onsite subcontractors must follow.

All ceiling-mounted units should always be attached where and how the drawings show. The installers should not try to “redesign”

continued on next page



SMART BUILT-IN SAFETY FOR THE USER AND FACILITY



CHILD SAFETY LOCK-OUT WITH AUTO SHUT-OFF



HEAT LIMITING COOKING SURFACE PROTECTORS



MEETS ADA REQUIREMENTS INCLUDING CA & TX

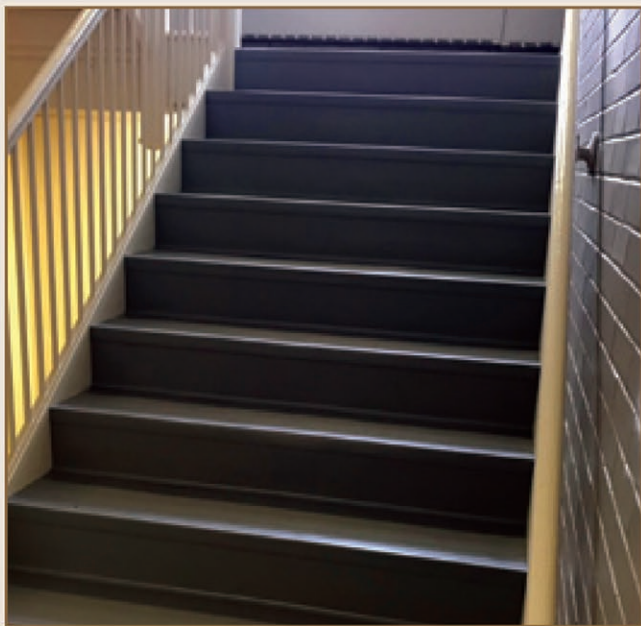


RADIANT & INDUCTION COOKTOPS AVAILABLE

CONTACT US FOR SPECIAL PRICING:
COOKWITHKENYON.COM | 860.664.4906

VINYL STAIR TREADS & LANDING TILES

MAKE STAIRS AND LANDINGS SAFE WITH MUSSON VINYL TREADS AND TILE



- Excellent for commercial, industrial and institutional use
- Vinyl treads are available in four colors and a variety of sizes and styles
- Contrasting 18" x 18" vinyl tiles have a durable 40 mil wear layer

- Matching cove risers are also available

*Visit our website for additional information
or to request samples and literature.*



MUSSON RUBBER CO.

P.O. Box 7038 • Akron, Ohio 44306
800-321-2381 • Fax 330-773-3254
info@mussonrubber.com • www.mussonrubber.com

TOOLBOX TIP TEN MISTAKES TO AVOID IN GYM DESIGN

Careful planning, measuring, and communication can keep the project under budget. We've compiled a list of issues to watch out for when designing and constructing a gym:

1. Not planning for future expansions
2. Not considering flexible spaces to boost revenue
3. Cutting corners on equipment to save money
4. Not designing the building with adequate support to hang goals
5. Ignoring minimum ceiling height requirements for ceiling and wall suspended systems
6. Ordering too late
7. Skipping shipment inspection
8. Over- or under-communicating with the manufacturer
9. Ignoring expert advice
10. Not enjoying the final result

a unit without first consulting the manufacturer. For wall mounted units, the installer will make the final decision on attachment of the unit to the wall. There are significant safety concerns to players and spectators with installation of ceiling and wall suspended structures, so this is an area to ask a lot of questions about and to verify that the plans meet an engineer's approval. Overhead safety belts are recommended for ceiling suspended sports equipment, wrestling mats, batting cages, and wall-mounted basketball systems, especially when such devices are installed over bleachers.

Before the installer cleans up to go to their next project, everyone involved in the project should schedule a complete visual inspection of all equipment for plumb, level, finish quality, etc., as well as a test of final operation and setting of limit switches. All staff should be trained to operate the new equipment safely. A final meeting with the general contractor is recommended before signing off on the job.

continued on next page

AMERICAN SLIP METER® SLIP AND FALL PREVENTION SINCE 1993

SALES, SERVICE & RENTALS OF SCOF & DCOF TRIBOMETERS



ASM 925

Our ASM 925DCOF meter is perfect for the new NFSA B101.4-2023 wet barefoot testing standard. Our 925 is an NFSA Approved Tribometer for DCOF testing. Our 925 is, also, an automated DCOF meter that tests to NFSA B101.3 and ANSI A326.3. No drive wheels to slip on ramps, bathtubs or grout lines. Test stairs in four directions.

Our 825A is an economical manual SCOF meter that tests to ANSI/NFSA B101.1-2009 Easy to operate for both dry and wet tests. Used across the globe for many years.



825A

For more information on both meters visit
www.americanslipmeter.com

Questions? Contact us at
info@americanslipmeter.com or 941-681-2431

WP® Wooster Products Inc.
Making every step a safe one!

**Stairmaster®
Safety Treads**



Stairmaster® Safety Renovation Treads:

- Designed for the modernization and restoration of all stair types
- High quality to assure long tread life under heavy pedestrian traffic
- Durable and long lasting treads for both indoor and outdoor use



Wooster Products Inc.
Anti-slip safety stair and walkway products

For more information contact us today!
woosterproducts.com | 800-321-4936





CHILLED HYDRATION ON TAP

Promote hydration in students throughout the school day while helping reduce the use of single-use, plastic water bottles – a win for the planet!

Visit manitowocice.com to learn more.



CNF0202 Countertop Nugget
Ice Maker and Dispenser



CNF0201 Countertop Nugget
Ice Maker and Dispenser



2110 South 26th Street | Manitowoc, WI 54220 | United States
920.682.0161 Main | 920.682.0161 Sale | manitowocice.com

All indicated Pentair trademarks and logos are property of Pentair.
Third party registered and unregistered trademarks and logos are
the property of their respective owners.

©2023 Pentair. All Rights Reserved.



Ensuring an Accurate Quote

Take-off sheets note attachment heights, spacing, and direction the structural members run in relationship to backstop or curtain systems. This information gives the manufacturer a better idea of how equipment will be installed. If a project doesn't have prints or specs but a quote is needed, dimension sketches and a list of requested products can be submitted. Specific information needed includes, but is not limited to, ceiling height, truss and beam spacing, the overall size of the room, notes on any obstructions (lights, HVAC, sprinkler systems, etc.), and if there are product preferences such as folding or stationary basketball goal systems.

The Importance of Field Checks

Sometimes addendums will occur in the design or construction process that manufacturers are not made aware of, and these changes can interfere with the installation of gym equipment, though such changes to the plan are usually discovered during a field

check. The only information a gym equipment manufacturer has before finalizing a design and beginning production for any project is from the field check process performed by the local manufacturer's representative or installer; the field check matches the actual field conditions to the originally quoted design. Completing an accurate field check will help avoid potential costly delays. If any obstructions are witnessed that will interfere with the installation of the goals, campus planners should work with the contractor and manufacturer to resolve the issues before approving the equipment drawings.

Checklist for Gymnasium Field Checks

- Confirm the room size
- Confirm the location of the goals in that room
- Confirm attachment height
- Confirm truss/support spacing
- Confirm that there are no obstructions on the trusses to be mounted to

- Confirm that all lighting is out of the way
- Confirm that HVAC will not interfere
- Confirm the flooring thickness with prints or contractors
- Confirm that there are no PA speakers or other items affecting the goal location
- Review the provided prints carefully and verify any additional information requested



ABOUT THE AUTHOR: Dave Smith joined Instilled Products Incorporated in 1986 after he graduated from Ball State University, where he studied engineering and architecture. He managed plant operations and order fulfillment until Bison Inc. acquired IPI in 2012 and relocated to Lincoln, Nebraska. As a Project Team Director who manages a team of designers and technical service staff, Smith plays a major role in IPI's success. Smith is also an avid bowler with three hundred games to his credit.

ULINE
READY TO CLEAN

CAUTION
WET FLOOR

ULINE TRASH LINERS

ORDER BY 6 PM FOR SAME DAY SHIPPING

COMPLETE CATALOG 1-800-295-5510

THERE IS NOTHING LIKE STERIFAB®

Nothing!!!

STERIFAB®
MUCH MORE THAN A BED BUG KILLER

800 359-4913 • STERIFAB.COM

We're Still Listening.

Water professionals know that swimmers demand clear and clean water. That's why we continue to work hard to make your job easier. Make chlorination easy with the **ACF Series** Calcium Hypochlorite Feeders.

Clarify with Vantage Poly-A Clarifying Tablets. This unique and powerful tablet water clarifier is not just to clear up cloudy water after a long weekend. As a maintenance product, it works with your filtration system to remove organic and inorganic compounds to prevent dull and cloudy water.

SANITIZE with the **ACF Series** Calcium Hypochlorite Tablet Feeders

- ⌘ Safer than liquid systems
- ⌘ Runs "Clean" - Less Maintenance!
- ⌘ Simple, Efficient, and Durable
- ⌘ Systems available for ANY size pool
- ⌘ NSF/ANSI Standard 50 Certified

CLARIFY with the **VPF-20** Poly-A Tablet Feeder

- ⌘ Unique tablet clarifier
- ⌘ Easier than liquid systems
- ⌘ Removes organic and inorganic compounds
- ⌘ Increases filter effectiveness
- ⌘ Proven cryptosporidium removal



AllChem Performance Products, Inc.
Phone: 352.378.9696
FAX: 866.343.1216
email: vantage@allchem.com
www.vantagewatercare.com

VANTAGE®

Copyright 2015
VANTAGE is a registered trademark of
AllChem Performance Products, Inc.