

Aacer Anchored PowerSleeper Series

Job Site Conditions

Before start of project, the steps outlined below must be taken to protect you the flooring contractor and to ensure a quality project.

- 1) The wood flooring and all of its components shall not be delivered or installed until all overhead and wet trades are complete. This includes but is not limited to electrical, masonry, painting, plaster, tile, marble, and terrazzo.
- 2) The building shall be fully enclosed and weather tight. Permanent windows and doors shall be installed; the H.V.A.C. system should be complete, operational, and conditioning air to be within specifications (55/75 degrees with humidity between 35/50 percent) or to conditions expected following installation and during occupancy.
- 3) Flooring contractor shall verify slab tolerance (+/- 1/8" in 10' radius) and report to owner, general contractor, or architect in writing, any and all discrepancies. All high spots will need to be ground and low spots filled with approved leveling compound by the concrete contractor to meet the approval of flooring contractor.
- 4) Flooring contractor shall document working conditions on site both prior to and during installation. This document shall become part of any warranty, and may affect fulfillment of said warranty. To include but not limited to ambient temperature, humidity, and moisture content of strip flooring. These readings should be taken a minimum of twice a day at several locations each time and more often when site conditions warrant.
- 5) The concrete substrate shall be deemed fully cured by industry standards. Field test moisture content of concrete using Relative Humidity (RH) testing. Relative humidity levels for non-glue down systems need to be at 85% or lower and the relative humidity for glue down systems should be at 75% or lower. A RH reading above 85% means that not only can the floor *not* be installed but the materials i.e. plywood, sleepers, strip flooring cannot be brought to the job site. One of the three following tests can be used as pre-tests only and should not be used to determine if the concrete slab has reached acceptable levels for installation. Polyethylene Film Test, Phenolphthalein test or the Calcium Chloride test. These tests should be taken in several locations and an average taken to determine accuracy, in addition to clearly identifying any and all problem areas. A moisture content reading higher than 5% means the concrete is not ready for installation.
- 6) Flooring must be stored on site in a dry, well-ventilated area not in direct contact with concrete while acclimating to site conditions. Moisture content of wood shall be consistent with the ambient conditions of the building, as they will be maintained when occupied.

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- 7) Concrete slab depressions shall be consistent with total height of sub floor and strip wood floor combined. Any and all discrepancies will be addressed prior to material being delivered.

NOTE: THIS MANUAL PROVIDES A FUNDAMENTAL REFERENCE GUIDE FOR THE INSTALLATION OF THE AACER ANCHORED POWERSLEEPER FLOOR SYSTEMS. WHILE AACER SPORTS FLOORING BELIEVES THAT FOLLOWING THESE INSTRUCTIONS WILL RESULT IN THE BEST INSTALLATION, IT MAKES NO WARRANTY OR REPRESENTATION OF ANY NATURE, TYPE, OR DESCRIPTION EXPRESSED, IMPLIED, OR PROVIDED BY LAW RESPECTING THE INSTALLATION PROCESS OR THE RESULTS ACHIEVED. ALTHOUGH VALUABLE INFORMATION IS PROVIDED IN THIS GUIDE, IT IS NOT INTENDED AS SUBSTITUTE FOR ON SITE TRAINING BY QUALIFIED AND EXPERIENCED PERSONNEL. ALL SPECIFICATIONS MUST BE FOLLOWED.

Anchored Power Sleeper Series Required System Installation Tools

PowerSleeper DIN, SE & PowerSleeper II (Former AacerCush 1+ anchored)

- 10 or 12' metal straight edge (for checking flatness)
- Marking paint (to mark areas to fill or grind)
- Dolly (for moving material)
- Shim material for floor
- Chalk line
- Visqueen
- Duct tape or adhesive
- Concrete hammer drill
- 3/16" masonry bits
- 3 or 5# hammer
- Chop saw
- Table saw
- Jigsaw
- Air compressor & hoses
- Extension cords
- Pneumatic stapler & 1" staples (for stapling sub floor)
- Pneumatic nailer & 2" nails (for nailing strip floor)
- Hand drive coated finish nails 6d or 8d (for nailing strip floor)
- General carpentry tools
- *True Set* steel shim & drive tool (for anchoring sleepers)
- Moisture meter (for checking sub floor and strip flooring)
- Humidity meter
- Expansion spacers
- Wide, fine bristle broom
- Sanding and finishing equipment

PowerSleeper SE

- Pneumatic gun and 1 to 1-1/2" pins

Anchored Power Sleeper Installation Instructions

- 1) Two to three weeks prior to materials being delivered to the project, the foreman should visit the site and verify conditions. This would include making a 5' grid and checking slab tolerances using a 10' straight edge, moving it perpendicular to the plotted grid in both directions to identify all areas requiring correction. (Note: The use of a transit or laser alone does not include measurements between the grid points.) If conditions are not satisfactory the general contractor should be informed to make appropriate corrections. Concrete moisture tests should be taken at several spots in work area to determine average moisture content. Verify jobsite is on schedule and all requirements are going to be or have been met, this would include but is not limited to, the building being fully enclosed, H.V.A.C. system working and conditioning air to manufacturers specifications, overhead trades complete, wet trades complete, etc. Start project documentation to include moisture content of slab, humidity levels and any problems with job site.
- 2) When materials are delivered to site, make sure there is an adequate means to handle and place materials. This storage site should be in the proposed work site and resting in the four corners of the project. Do not place directly on concrete. Allow enough time for materials to be acclimated to site conditions.
- 3) Your installation begins by first having proper job documentation (temperature, humidity, moisture content, progress and problems) Job documentation needs to be done twice every day, once in the morning and once at the end of the day. This process must be done throughout the duration of the project.
- 4) Sweep entire project using a sweeping compound to control dust. Then drag metal straight edge over entire surface to determine all high and low spots. Mark and fill all low spots with appropriate filler. Grind all high spots.
- 5) Install a 6mil, clear plastic vapor barrier to entire floor terminating at all outside walls. (clear allows you to see the chalk line thru the plastic) Overlap all joints by a minimum 6" and seal joints with 2" duck tape or adhesive.
- 6) With flooring running the long dimension all sleepers will run the short dimension.
- 7) From near the center of the room start installing sleepers along chalk lines. Allow a 1/4" void at ends where sleepers abut. Each subsequent row will be staggered 2' as to create a stair step pattern. When plywood is used, it will run in tandem with the sleepers, you will need to space each new sleeper row 16-1/8" o.c. to allow for the 1/4" gap needed between each sheet of plywood. All sleepers will maintain a 1 1/2" void at all walls and permanent obstructions. Each sleeper has five factory drilled holes for concrete anchor pins. Start

Anchored Power Sleeper Installation Instructions (Cont.)

the first row with a 3' sleeper, the second row with a 5' sleeper and the third row with a full 8' sleeper. For the shorter sleepers, only two (2) of the anchor holes need to be used, and for the full 8' sleepers, only three (3) of the anchor holes need to be used. Align sleepers in rows and drill a 3/16" hole thru the sleeper and into the concrete. Slide steel

7.) (cont.) *True Set Block* under sleeper and using the drive tool, drive concrete anchor with washer (rubber side up) until pin is fully engaged and a slight tension is on the block. Pin heads should be 1/8" below surface of the sleeper. (System can be loose laid if spec'ed.) Remove setting block and repeat with each new pin as required. Small lengths of sleepers measuring 24" or more will require a minimum of two anchors, one located at each end. Additional blocking will be needed at all transitions, under bleachers and anywhere heavy load areas may be present to guarantee floor integrity. Because of the design of the SE version of this system, the solid blocking is to be placed between the sleepers in all needed areas to guarantee floor integrity.

- 8) When plywood is used over sleepers, plywood will run parallel with sleepers or at 45 degrees to the sleepers. When butting sheets of plywood together, allow a 1/4" gap at all edges. Plywood seams should be staggered 4' creating a stair step pattern. Take care NOT to allow plywood and sleeper seams to align. Fasten plywood with 1" nails or staples at 12"oc nominal.
- 9) Install maple strip flooring running the long dimension of the room, Aacer Flooring recommends starting near the center of the room. Snap a chalk line near the center of the room running the long dimension of the work area. (adjusting of line may be required to have flooring run parallel with court and game lines) Install straight stop block along chalk line to begin installation. You may remove stop block after 10 rows are installed to allow simultaneous installation in both directions. Use of spline is required. When nailing flooring, work in a left to right direction nailing 10"-12" O.C. and at each sleeper. Wood end joints should be driven up tight. Near the perimeter hand nailing will be required. Face nail with 6d or 8d coated nails. Expansion rows may be required intermittently throughout the floor. Requirements will be determined by site and geographical location. Provide a minimum 1 1/2" void at all walls and permanent obstructions.
- 10) Sanding: Inspect entire floor for defects and correct as required. Fill all small voids with wood filler then machine sand entire floor using course, medium and fine grit sandpaper to a smooth uniform surface free of drum drops and edger marks. Remove all sanding dust and lint from entire surface by vacuum and/or tack cloth.
- 11) Examine entire surface for imperfections and repair as required to make sure floor is ready for finish. Apply seal coats per manufacturer's instructions. Apply game lines and logos as required. Floor shall be buffed, cleaned and tacked between coats. Paint shall

Anchored Power Sleeper Installation Instructions (Cont.)

be compatible with finish. Apply finish per manufacturer's directions. General contractor or owner shall take steps to secure gym until finish is cured and flooring contractor allows foot traffic.

- 12) Install vent cove base with adhesive or mechanical fasteners to walls. Using pre-molded outside corners as needed. NOTE: when using adhesive take care not to block air cavities.
- 13) Thresholds and transitions shall be designed and installed to adequately allow for expansion and contraction of the wood floor. The flooring contractor shall install thresholds and transitions. At no time should the threshold be fastened to the wood floor.

Instructions for PowerSleeper II (Formerly anchored AacerCush 1+)

Sleepers are 2x3's 8 foot long and are spaced 12" OC. (12-1/8" OC with plywood)
There are 3 anchor pockets per sleeper.
All else is the same.

Instructions for PowerSleeper SE

This system is the standard PowerSleeper in a steel sleeve.

The sleeper has 5 larger 1" diameter access holes, factory drilled, through the sleeper. The sleeper is anchored by shooting or drilling and pounding a 1" minimum length pin through the steel into the concrete using the access holes.
All else is the same.

System may also be installed unanchored.

The SE version may also be shimmed or have a "truss" attached for use in very deep slab depressions. If using a "truss" all five (5) of the anchor holes should be used. Consult Aacer if great than 3" height is required. Truss systems are custom designed for each application.