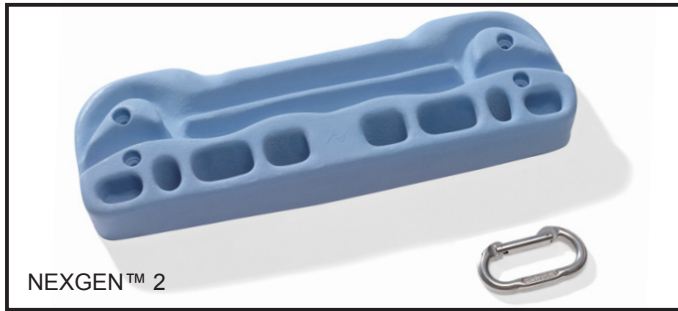


NICROS HANGBOARD



Tools Needed

Drill with phillips bit
Tape Measure
Wood Saw
Level

Included Materials

1 Hangboard
4 SPAX WoodScrews

PLEASE NOTE

**IT IS IMPORTANT TO SECURELY MOUNT
THIS HANGBOARD ONTO A SOLID SURFACE.
THIS SURFACE SHOULD BE STRONG ENOUGH TO
SUPPORT AT LEAST DOUBLE YOUR BODY WEIGHT.**

This board is designed to be attached to a solid surface such as wood using the included SPAX Wood screws. There are numerous ways this board may be installed; for example, to studs above a doorway, on the side of an exposed ceiling joist, to a secured plywood backing between two or more studs, or to anything strong enough to support double body weight. Below are instructions for a typical installation, however there are other methods of attachment.

- Step One: Identify placement of NICROS Hangboard. Note: If your installation requires mounting onto a standard sheetrock wall with studs behind, you may first need to add a piece of plywood to attach the hangboard. If this is the case, cut a piece of 3/4" plywood 6" x 19" and attach plywood to studs using (4) #8 x 3" wood screws.
- Step Two: Hold hangboard to desired position and with the drill, drive the first SPAX woodscrews into one of the four corner holes taking care to ensure that the hangboard is level.
- Step Three: Doublecheck that the hangboard is still level, and drive the other three SPAX Woodscrews through the board and into the substrate. Make sure it is tight.
- Step four: Climb and have fun!

BE CAREFUL, OVERTIGHTENING MAY STRIP LAG SCREW FROM WOOD.

NEXGEN™ 21" LONG X 8" HIGH X 3" DEEP APPROXIMATELY 12 LBS.
V10 23" LONG X 6" HIGH X 2.5" DEEP APPROXIMATELY 11 LBS



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Nicros NEXGEN™ 2 Hangboard and V10 Training Board™

Training Guide

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by Eric J. Hörst

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It is well recognized that climbing performance is a function of finger strength, as well as your mental, technical and overall fitness level. Although all of these areas deserve your constant attention, many climbers "obsess" over their finger strength (or lack thereof) and are always on the lookout for a "killer burn."

This article is a primer on hangboard training—next to a home wall, the most convenient, climbing-specific indoor finger workout you can get. But, before I describe the details of a safe, effective hangboard workout, let me begin with a bit of theory on training for finger strength.

CRITERIA FOR EFFECTIVE FINGER TRAINING

Effective finger training must be: 1.) focused on contact strength over endurance, 2.) varied in position, 3.) progressive and 4.) specific to climbing.

1.) Favor finger exercises which work contact strength (your ability to hang on small holds) over those which train endurance. Do this because gains in your contact strength also yield improved forearm endurance. Unfortunately, the opposite is not true—endurance training of the forearms does just about zero, zilch, zippo for your contact strength.

2.) Rock climbing involves an infinite number of hand positions and grips, and contact strength is somewhat related to which position/grip is in use. Therefore, you are best served by finger exercises which work many different hand positions (one reason climbing is a pretty good workout for climbing!).

3.) About the only thing which physiology text books and muscle mags all agree on is that effective strength training must be progressive. In other words, today's workout should stretch the bounds of your last workout, not necessarily in terms of volume (length) but more importantly with respect to intensity and resistance.

So if your workout at the gym is the same as last month's flavor, don't be surprised when your cragging ability stales like a month old bagel that just surfaced from the bottom of your pack.

4.) Specificity of training is the final word on the effectiveness of your finger workouts. Specific in terms of position and intensity, as discussed above, but it also must have mirror-like similarity in the actual application and use during climbing performance.

Most fundamental is what I call the "grip-relax repeating sequence" (GRRS). It's good climbing tactic to move quickly through cruxes and to get on and off of difficult holds (grip-relax) as fast as possible. This conserves energy reserves and even allows for brief, but invaluable steps in recovery between each "grip."

Remember that blood flow in the forearms stops during even medium-intensity gripping of a hold, and only resumes the recovery process during relaxed periods. Hang on any given hold too long and you're history. But with brief "relax" periods between each "grip" (the few seconds while your other hand grips is all it takes), you can climb on for a surprisingly long time.

Top climbers use the GRRS with supreme effectiveness on their rad ascents. It's also the secret to effective, low-risk hangboard training. (More on the application of the GRRS to training in the Workout section).

Applying this theory, you now see why low-intensity, non-specific exercises like hand-held squeezers, donuts, and gripmasters are useless for developing climbing strength. Relegate such devices to your warm-up routine.

Next, consider more-specific, yet still low-intensity, exercises like low-weight finger rolls, long-duration hangs and climbing laps on vertical or slabby gym walls. While of some use to beginner-level climbers, these exercises flunk the test when comes down to their validity as developers of finger strength for the higher grades.

So what exercises hit the mark for serious finger training? Get cranking on a steep home wall or find a gym with a good bouldering cave, pump some laps on steep routes and experiment with some campus training on NICROS specialized Campus Holds(tm). (A 16-page campus training guide to maximum power is available from NICROS for \$5.00. Call 1-800-699-1975 to order one.)

If gym or home wall aren't available—and even if one is—then NICROS NEX-GEN™ 2 hangboard or V10 Training Board™ is the ticket for an excellent climbing-specific, high-intensity workout!

THE Hangboard WORKOUT

No fluff here, just the basics you need to begin safe, effective hangboard training. At the gym, do all your climbing and bouldering first while you're fresh, then finish with a brief (10 to 15 minute), but intense, session on the board. At home (with no climbing available), your hangboard workout may be 30 - 60 minutes in length.

A complete warm-up is imperative. In the gym scenario you'll already be well-warmed from climbing, so proceed. In the home setting, begin with a few sets of pull-ups on large holds, along with some stretches for the fingers, forearms, arms and back. Self massage to the fingers and forearms will also help you loosen up for the main part of the workout. This warm-up should be a full 15 minutes in length.

Finally, in my opinion the main segment of your hangboard workout should consist mostly of hang exercises—the focus here is on the fingers and forearms. If you plan to train pull-ups, do them later on a pull-up bar or on NICROS free-hanging PUMP ROCKS™.

TRAINING CONTACT STRENGTH

The top strength training exercise on a hangboard are series of brief hangs on small- to mid-sized holds (intermediate and advanced climbers need to add weight for these hangs). Perform them using one of the two programs detailed in the side-bar boxes: "repeaters" and "pyramids."

Beginners should work with bodyweight (or less) for the first year. Standing in loops of bungee cord is a popular means of lowering resistance, although I am not an advocate of this method. A better, safer alternative is to rest your feet on the edge of a chair placed beyond the plain of the hangboard. This way you can easily vary the resistance by shifting your body weight forward (more on the chair and less on your fingers) or back into the plain of the board.

If you can hang easily for more than 15 seconds on a given hold, then you need to add weight for the exercise to be effective. Such weighted exercises should be introduced gradually over months and years. Start with five pounds added to your harness or belt, and build toward 20% of your body weight over two years. (I like to use a fanny pack, into which I add/remove pea gravel or river rocks as ballast.)

ENDURANCE TRAINING

There are two main methods of training endurance on a hangboard: the lowly straight-arm hang, and what I call "moving hangs."

"STRAIGHT-ARM HANGS"

Straight-arm hangs are nothing new. For decades climbers have done endurance hangs (commonly minutes in length) on everything from pull-up bars to doorjambs. Then in the 1980s the hangboard arrived as the prime medium for enduro hangs.

The problem with high volume endurance hangs is two fold. First, repeatedly hanging on the same small hold for minutes at a time can lead to injury—this is the main reason for the bum rap some have laid on hangboards. Second, while long hangs do build some local endurance, it's not very specific to climbing (unless you plan to hangout on a single hold on a route for minutes at a time).

As described earlier, experienced climbers know the importance of using the GRRS to optimize their strength on a route. Again, your training must mirror the way your endurance will be tested on a route—alternating brief right and left hand grips in a long repeating sequence. The "moving hang" program is the ticket here.

"MOVING HANGS"

The set-up you need for "moving hangs" requires a bit more work and some modular footholds. Mount your hangboard so it's set out from the wall from between one (easier) and three feet (most difficult). Now screw a dozen or so footholds to the wall. This way you can move your hands and feet in sequences much like on a climb.

Develop long sequences of 10 to 20 hand and foot movements on smallish holds, followed by a quick shake/rest on a large hold. Continue to use the GRRS for another sequence, then hang on for another brief rest. Keep your feet moving around on the wall throughout, and don't step down until you pump out.

This technique for training endurance far surpasses straight-arm hangs because it uses different holds/positions (better training and safer) and it utilizes the GRRS (exactly like real climbing). As icing (low-cal), "moving hangs" will even help your technical skill a bit due to the addition on foot movements and changing body position, and it should improve your awareness of how much recovery you can bag shaking from good holds on a steep wall (important to know!). Some climbers even practice simple deadpoints and hip turns while performing "moving hangs."

INJURY-PREVENTION

If you get injured and can't climb, then even Ben Moon-like finger strength is useless. Here are a few rules to follow: 1.) perform a comprehensive warm-up before all finger training, 2.) end your workout at the first sign of joint or tendon pain, 3.) re-enforce with tape any tendons with history of injury, 4.) give your fingers a minimum of three days off per week, 5.) eat right and drink water regularly throughout the day, and 6.) don't forget to train the antagonistic muscles on the back of your forearms!

The last rule will help prevent the common elbow tendonitis some climbers develop due to muscle imbalances in the forearms. Simple reverse-wrist curls are a powerful means toward prevention of such setbacks. Perform three, twenty-rep sets at the end of each workout. A ten or 15 pound dumbbell is all the resistance needed to make this exercise effective.

WRAP-UP

Without writing my next training book right here and now, I want to stress the importance of evaluating your past and current methods of finger training. Don't be afraid to move on and try some new exercises, be progressive and as Dr. Ruth says "experiment!"

Ideally, hangboard training is just a supplement to other finger workouts (the good ones named earlier). It is, however, the one thing everyone can do at home if no other means of training are available. So get busy on that NEXGEN board—more strength awaits you!

DISCLAIMER OF LIABILITY

Climbing is an inherently dangerous and potentially hazardous activity. Seemingly small and insignificant mistakes may have catastrophic results. Individuals and organizations using products distributed by NICROS, Inc. bear the responsibility of learning the proper techniques and safety procedures required for their safe use. You, the purchaser, by accepting this package, have taken on all responsibilities of ownership and assume all risks and full responsibility for all damages or injury, including death and disfigurement that may result from the use or misuse of our product.

PLEASE NOTE

Indoor climbing is a different sport than outdoor climbing, each requiring their own techniques and safety procedures. While similarities may exist between the two sports, the objective dangers are quite different. The serious consequences of mistakes in either sport makes proper training mandatory.

SIDE BAR BOXES

"REPEATERS"

"Repeaters" involve performing five, maximum-intensity hangs (three to ten seconds per hang separated by a five second rest) on the same pair on holds. Take a one minute rest, and begin the next set of five repeaters on a different hold.

The idea here is to "hit" a specific grip position hard! Intermediate to advanced climbers will need to add weight in order to bring about muscular failure in the required three to ten seconds. A full session of "repeaters" should work five to ten different grips (25 to 50 total hangs).

Work your most problem grips first, finishing up on the larger holds. Also, order the grips you're going to work for maximum variety: two-finger pocket, crimp edge, narrow pinch, sloper, wide pinch, three-finger pocket, medium edge, medium sloper, large hold.

"PYRAMIDS"

Do your first "pyramid" sequence on one of the larger pair of holds. Follow each step exactly, and do not change holds until the start of the next sequence.

4 second hang... 4 second rest,
6 second hang... 6 second rest,
8 second hang... 8 second rest,
10 second hang... 10 second rest,
8 second hang... 8 second rest,
6 second hang... 6 second rest,
4 second hang... 4 second rest,

Rest for one minute, then repeat the pyramid using a different pair of holds (smaller). Do three to ten full pyramids depending on your level of fitness and experience. Advanced climbers may want to add weight for several pyramids.

WARNING: Overtraining on any hangboard (or cliff) can result in acute or chronic injury. Warm-up properly, progress slowly, reinforce your finger tendons with tape, and stop at the first sign of pain in the joints or tendons. We are no more responsible for any injuries you might suffer than we are for the rad routes you'll be sending in the future!