

THE ULTIMATE AGILITY LADDER GUIDE

Included in this Guide:

Included in this Guide:.....	3
Foreword.....	4
SAQ-A Developmental Prospective.....	5
Preparing For Battle.....	8
The Warm-Ups.....	9
Medball Warm-Up	11
Jump Rope Warm-Up.....	14
Movement Prep. Warm-Up	16
Agility Ladder Fundamentals.....	19
Getting Started	19
The Basics	19
Steady State and Burst Speed Drills	20
Elastic Response Drills	23
The Linear Response Drills	23
The Lateral Response Drills	24
The Linear/Diagonal Response Drills.....	25
The Lateral/Diagonal Response Drills.....	26
Rotational Response Drills.....	27
Sample Ladder Workouts	28
SAMPLE QUICK WORKOUT 1	28
SAMPLE QUICK WORKOUT 2	28
PROTOCOL NO. 1: LEVEL 1	28
PROTOCOL NO. 2: LEVEL 1	29
PROTOCOL NO. 3: LEVEL 2	29
PROTOCOL NO. 4: LEVEL 2	29
PROTOCOL NO. 5: LEVEL 3	30
Thinking Outside of the BOX.....	31
Individual Vs Partner Drills.....	31
Basic Drills.....	31
Ladder Drills	33
Advanced Drills	33
www.TrainerClipart.com.....	35

THE ULTIMATE AGILITY LADDER GUIDE

Foreword

Foremost, I would like to say that every coach has a different perspective on how and why they implement their programs. Each coach has been handed a different blend of experiences that they utilize to create their unique coaching palate. It is from this palate that they create their masterpieces. With experience these palates have a tendency to change. As they change, so does the scope of their programs.

Although each coach must try to expand their horizons, they must learn to stay within their means. Implementation of elements that are not understood will do nothing more than create problems. Education should always precede implementation.

Finally, never forget that there are many paths to the same destination. Many are vastly dissimilar, but they all end at the same location. By this I mean that if the philosophies presented within this article do not fit your mind set, keep shopping until you find ones that do.

THE ULTIMATE AGILITY LADDER GUIDE

SAQ-A Developmental Prospective

Speed, agility, and quickness (SAQ) training is something that tends to become a topic of heated discussion. Many coaches feel that the effort put forth while practicing the sport is sufficient to improve these motor skills.

Their theory is that you cannot get any more sport specific than performing the sport itself. Therefore, by training that sport, you are developing the set of athletic skills specifically related to that sport and not wasting time on unnecessary activities.

By participating in your sport at game intensity, you will learn and develop Jumping and landing mechanics, acceleration, deceleration, and cutting mechanics, increase foot speed, and develop everything else that goes into well rounded athleticism.

The other school of coaching tends to believe that component training, or breaking complex skills down into trainable pieces, is the best way to go about athletic enhancement. They think that working on each motor skill independently of the sport and then introducing the corrected skill back into the sport is much more efficient.

Without question, dynamic human movement is extremely complex. The simple act of walking involves very in-depth motor programming that functions on a subconscious reflexive level.

By subconscious reflexive I mean that you do not have to think to execute complex motor skills. If you had to think about every muscles action while you walked it would take you days to get from the couch to the

refrigerator and your movements would look very robotic.

This reflexive motor programming starts to develop as an infant. You learn to do very basic skills, and as you mature, the programming becomes more complicated as does the movement. As the programming becomes more complicated, it becomes increasing more resilient to change.

The problem is that a child is typically never truly guided through the earlier stages of development. As infants they learn to move by trail and error. Walking, standing, sitting, reaching, rolling over, and all the other things that are being learned and developed are all self taught.

THE ULTIMATE AGILITY LADDER GUIDE

In North America, as children age and enter preadolescents, they are typically steered away from programs that focus on physical development. These children now start to build more complex programming on top of already faulty self instructed programming.

Developmentally, it is at this age when children are the most "plastic". Unfortunately it is also at this age that the introduction to structured practice results in them repetitiously ingraining incorrect movement mechanics.

As a result, we start to see more and more non contact injuries at younger and younger ages. We also find that correcting these reflexive problems becomes increasing more difficult.

These types of kids typically face more developmental problems as they get older. Motor learning research tells us that you go through progressive stages of learning as you acquire new skill. Some skills are similar to others, so we are able to skip various initial stages along the way.

When issues exist within these skipped stages, the latter stages of Development will be negatively affected. When this happens, time must then be spent fixing the foundational issues, before efficient motor programming can continue to occur.

As I mentioned earlier, most motor skills are designed to function without cognitive control. Once again you do not have to think to walk or run. Your body will automate the process dependant upon its programming regardless of right or wrong.

My question than becomes...If your body is running off of reflexive automated motor programming, how are you going to fix these developmental issues by playing your sport?

The average human brain does not possess the capacity to multi-task and efficiently refine or learn distinct foreign skills. Most individuals are not and can not think about improving a specific motor skill while they are in a confrontation situation (which is truly the essence of most sport).

If you asked most athletes what they were thinking during such a confrontational activity (such as being guarded during a lay up)they would more than likely say, I don't really remember thinking of anything. I just did what was natural.

THE ULTIMATE AGILITY LADDER GUIDE

They functioned on preprogrammed information. They functioned reflexively, maybe not efficiently, but definitely reflexively. Did this athlete actually develop or correct any specific motor skill during this situation?

He may have learned how to better cope with the psychological stresses involved in confrontation. He may have developed a greater efficiency in coordinating multiple motor skills, which is important if the components are sound, but he undoubtedly did not improve an individual motor skill.

If the athlete depended on trial and error as a process of learning movement motor skills throughout his whole life, he probably didn't know that a problem existed. If this is the case, then there was definitely no effort made for correction.

By using SAQ drills, we can isolate problems and try to fine tune erroneous preprogrammed information while we increase their overall warehouse of skills. We can break down gross movement skills into components that allow an athlete to cognitively address issues that tend to be combined into complex reflexive compound skills.

Each motor skill should then be optimized before the athlete progresses. If they lack the coordination or ability to perform certain motor skills as an isolated component, which is many times the case, they lack the ability to perform them when they are integrated into chaotic confrontational sporting situation.

Fixing these erroneous motor skills may require 1 repetition or 1000 repetitions depending on the skill and the athlete. Once the athlete demonstrates proficiency for each individual motor skill, the skills can then be combined into motor skill clusters, or small subsets of motor skills.

When the athlete demonstrates proficiency for coordination of skills within a subset, subsets can be combined and the process continued.

Part II of this series will deal with the actual neural acceleration (quickness) elements I utilize in my protocols. I will give you several exercises using one of my favorite tools...the agility ladder

THE ULTIMATE AGILITY LADDER GUIDE

Preparing For Battle

Multi-directional training is here in full force. For many individuals the key to athletic development lies in the development of multi-planar strength, power, and movement. Focusing on linear single joint activities and unidirectional movement is no longer considered optimal in the performance enhancement paradigm.

Although the importance of multi-directional training is supported by many of the top strength coaches, how to implement this training still tends to elude many individuals in the field.

The elements of strength, power, balance, agility, coordination, proprioception, core and joint stability foot/hand speed, hand eye coordination, reaction time, energy systems development, mobility, and flexibility need to be addressed in a periodized fashion. Each component should be integrated into each daily training session.

The daunting task of throwing all of these elements into a pot and coming out with some semblance of a program can be very challenging. Coaches should take time to learn about each of these elements and its relationship to their sport. This will give them a starting point from which the growth process can begin.

Within this chapter I have included information about one of the most ignored and misunderstood components of training-the dynamic multidirectional warm up. I have also included sample drills that can be utilized prior to performing your agility ladder drills. You can use these drills in any athletes training program regardless of age, gender, sport, or experience

The intention of this chapter is not just to produce a protocol that coaches and athletes can blindly implement, rather to provide examples that can be used as a learning tool. As with designing any portion of your training protocol, a full understanding of where and why each drill is implemented must be present. Once this understanding is achieved, coaches will be able to modify protocols to meet specific needs much more efficiently.

THE ULTIMATE AGILITY LADDER GUIDE

The Warm-Ups

Warming up for any type of training is vital to injury prevention and for maximizing performance. Warm-ups prime the systems of the body preparing them for vigorous and intense activity. A well-developed warm-up serves many purposes. It:

- Elevates core temperature
- Increases muscle and connective tissue elasticity
- Improves movement mechanics
- Increases proprioceptive awareness
- Strengthens the stabilizers of the joints and spine
- Increases dynamic flexibility
- Primes the nervous system
- Psychologically prepares you for activity

Each warm-up should prepare the athlete for the activities presented in the workout. This means that different types of workouts should utilize different types of warm-ups. Always be aware of the focus of your training session and make sure you target those elements during your warm-up.

Make sure that your warm-up is challenging. If you can perform the warm-up on “auto pilot”, it is not optimally preparing you for the workout. Every warm-up should necessitate focus and concentration. You should not be able to hold a conversation or pay attention to the activities of others while you work.

Rather than using all uniaxial single plane activities incorporate multidirectional movements. Perform lots of rotation that involves full ranges of motion. Utilize a unilateral base of support through portions of your warm up (whether using your arms or legs for support),

Many of the joint stabilizers are submaximally stimulated when using bilateral support. By performing unilaterally based activities, these stabilizers can be engaged and developed.

Use dynamic rather than static activities during your warm up. You are preparing your body for motion. The best way to do this is by using motion. Static stretching activities do little for movement preparation and can lead to muscle fatigue.

Furthermore most static stretches are narrow in scope. These stretches only stretch the muscles in the specific joint configuration utilized during the stretch. Movement on the other hand, uses a seemingly endless variety of joint configurations and muscle contractions (Note: Static

THE ULTIMATE AGILITY LADDER GUIDE

stretching can be used post warm-up if you have excessively tight muscles or imbalances. Stretch those areas and move on).

Finally, break a sweat!!! If you are not sweating by the end of your warm-up, you probably are not that warm.

THE ULTIMATE AGILITY LADDER GUIDE

Medball Warm-Up

Due to their design, medicine balls allow you to work any possible range of motion in its entirety. This promotes the development of specific strength and power more precisely than any other type of weighted activity. With medballs, you can work the exact multi-planar range of motion that is utilized in sport. This allows for the extensive orchestration of the stabilizers, neutralizers, and prime movers within the same neuro-patterns as the targeted activity.

When performing the medball warm-up, choose a medball that is 2-3 kg in weight. If a medball is not available you can use a 5 or 10 lb plate or dumbbell.

- **Squat and Press**- Assume a stance that is approximately 1.5 times shoulder width with your feet pointed forward (changing the angle of your foot stance will shift the stretch within the hip. You can change your stance periodically to change the stretch). Hold a medball at chin level. Push your knees out to the sides and shift your weight to the back side of your heels. Keep your head up and your back arched as you push your hips back, drop your shoulders forward, and bend at the knees (hip movement should precede bending at the knees). Descend into a full squat. Push your knees out to the sides during the entire descent. Your weight should reside on the back side of your foot. Your lower legs should be perpendicular to the ground (do not let the knee track forward or inward as this is a common mistake). You should maintain a constant arch in the lower back. If your back is rounding decrease the depth of the squat to a depth where you can control your posture. Reverse the motion and return to the top. At the end of the ascent, press the ball overhead maximally, and then return it to chin height. If you are having problems learning this technique, start by assuming the bottom position while sitting on a bench or box that places your thighs parallel to the ground. Perform the ascent and the press and then return to the seated position. Make sure to push your hips back (as if you are reaching with your glutes) during the descent sit in the same location you started from.
- **1 Leg Chop**- Hold the medball over head at arms length while standing on one leg with a slight bend at the knee. Chop the medball down to the ankle of the base leg by bending at the hip. As you are chopping down, kick the free leg and the hips back. Keep your back flat and your body weight on the back half of your foot. Work on maintaining

THE ULTIMATE AGILITY LADDER GUIDE

your balance and control. Do not let the base leg hip push out to the side, or the lower back round.

- **Lunge and Reach**- Take a maximal step forward with either foot. As you step reach out with the same side arm (use a palm up grip on the medball). Reach the medball as far in front as possible and touch the back of the hand to the floor. Lower your shoulders as deep as possible. (Note: the front knee angle should be 90 degrees or greater). Return and switch sides.
- **Chop and Twist**- Assume a slightly wider than shoulder width stance. Hold a medball between your hands above your head at arms length. Chop the ball down between your knees flexing at the hips and rounding the back. Reverse the motion and twist to one side as you ascend. Chop again and twist to the other side.
- **Figure 8**- Holding the medball between your hands at arms length, twist from the hips and torso and draw a maximally sized horizontal sweeping figure eight with the medball. Perform the prescribed number of repetitions, and then reverse the direction of the pattern.
- **Lat Lunge and Twist**- Hold a medball between your hands with your arms resting in front of your body. Lunge laterally by stepping to the side. Keep the trail leg straight, push the hips back and bend at the knee until the front thigh is parallel to the floor (if you have tight hips you may not be able to get this low, just go as deep as you can). Extend your arms (and the medball) out fully in front of your body in a "front raise" fashion as you descend into the lunge. Keep your shoulders square to the front. Keep your weight on the back half of your bent legs foot and the trail legs foot flat on the ground. The lower leg of the bent knee should be perpendicular to the floor and you should not flex the knee joint to any less than 90 degrees. At the bottom of the lunge, twist maximally over the knee that is in front, and then toward the trail leg. Keep your spine tall during the twist (try not to lean forward or to either side). Return to the center and then back to the top by stepping back toward the trail leg. Repeat stepping to the other side. If you have a problem getting this technique assume the bottom position while sitting on a bench or box that puts your bent legs thigh around parallel to the floor. Perform the rotations and then extend the bent leg until it is straight. Bend that knee again and return

THE ULTIMATE AGILITY LADDER GUIDE

to the seated position. Repeat all the reps on this side before performing the reps on the other side of the body. Once this feels natural try performing the same motion with out the box and starting at the top. Stay in the stepped out position and perform all of the reps on one side before moving to the other. Once this is comfortable, try performing the activity as described above.

- **Twist**- Hold a medball in one hand (palms up) at arms length. Keeping your eyes on the ball (keeping the head forward as you rotate anchors the top of the spine minimizing its ability to fully rotate) rotate using your hips and torso maximally to the side of the arm holding the medball. Keep a tall spine and do not lean forward or to the side. Reverse the motion, switch hands when directly in the front, and repeat on the other side.
- **Squat and Reach**- Hold a medball in one hand, palm up, with the arm fully extended in front of the body. Perform a wide stance squat as described in the squat and press (without the medball at your chin). During the decent reach out maximally with the medball. Sit as low in the squat as your hips will allow. Return to the top, and repeat with the other arm.

THE ULTIMATE AGILITY LADDER GUIDE

Jump Rope Warm-Up

The jump rope is a long forgotten tool that is priceless. Not only does it serve as a great way to warm up, it helps to develop timing and reaction. Many athletes lack these valuable assets, and can benefit greatly from this type of training. I also feel that it is a great way to prepare the body for more dynamic plyometric type activities.

When performing the jump rope warm-up, find a rope that rotates easily without twisting. Cheaper jump ropes have a tendency to twist and inhibit the exercise. If you find that your rope does this periodically switch hands so the handle that was in the right hand is in the left and the left is now in the right. This will untwist the rope as you go.

To calibrate the length of the rope, step onto the middle of the rope and bring the handles together (make sure the ends of the rope are even). Stand tall and adjust the rope until the bottom of the handles are even with your armpit.

While performing these drills, jump only high enough to clear the rope. Many individuals jump excessively high and have to slow the rope speed to compensate. Assume a good rhythm and stay relaxed.

- **2 Feet-** Keep your feet together and bounce using the ankle joint and calf musculature without letting your heels touch the floor. Keep a slight bend in the knee and hip joints and keep your head up.
- **1 Foot Right/Left-** Using the same criteria as above, stay on your right or left foot for the entire drill. Focus on your balance. You should not deviate from your starting point.
- **Alt. Feet-** Alternate feet on each rope rotation. Try to stay relaxed and keep your feet close to the ground
- **High Knees-** Drive the knee up until you achieve a 90-degree hip angle. When you drive the knee up dorsiflex the foot. The foot should stop directly under the knee creating a 90 degree angle at the knee joint (a common mistake is to either kick the foot out in front of the knee or to tuck it under the hip). Keep a tall spine and do not lean or round your back with the knee drive. If you have trouble maintaining your posture lower the height of the knee drive until your mobility

THE ULTIMATE AGILITY LADDER GUIDE

improves. Make sure the knees come directly up in front of the body and return to their original start location.

- **Side To Side**- Keep your feet together as if they are in one shoe. Jump side to side (1 direction per rotation) without any linear deviation. Try to stay tall and maintain a good posture.
- **Linear Scissors**- Start with one foot in front of the other. Switch every rotation.
- **Backward**- Use the same criteria as the 2 Feet drill except rotate the rope backwards. Be sure to stay tall (many times individuals tend to lean forward at the hip during this drill).

THE ULTIMATE AGILITY LADDER GUIDE

Movement Prep. Warm-Up

- **Jog**- jog for 3-5 minutes. Start at a comfortable pace, and increase until you perspire.
- **High Knees**-Drive the knee up until the thigh is parallel to the floor and dorsiflex the ankle. There should be a 90-degree angle at the hip and knee. Keep the head up and maintain a hips/spine tall posture during the entire drill (do not lean forward at the hip as this is a common flaw that will decrease the ability to fully flex the hip). The arm action should oppose the leg action. As you drive the high knee leg back down the concomitant elbow should drive down and back. Rotate the arm about the shoulder and avoid excessive extension of the elbow joint. Maintain approximately 90 degrees of flexion at the elbow joint and use a range of motion where the hand travels from the lower face to hip pocket (minimize lateral deviation of the arms). The arm action should oppose the leg action but should be equally aggressive. Aggressive drive the leg down and through the floor.
- **Butt Kickers**- Start with an aggressive jog. Keep your spine tall and you're your eyes forward. Concentrate on an aggressive arm drive (down and back) keeping your elbows bent to 90 degrees and rotating at your shoulders. Forcefully snap your heels back until they comes in contact with the buttocks (if you have tight quads you may not be able to touch (do not lean forward at the hip as this is a common flaw in the drill)).
- **Sumo Squat Walk**- Squat into a deep squat as described in the squat and press (minus the medball) with the arms fully extended in front of the body for balance. Push your knees out laterally until they are directly over you heels (if you have tight hips you may have to bring your stance in to accomplish this). Keeping your weight on you heels, toes forward and maintaining this squatted position walk forward.
- **Lunge and Twist**- Roughly measure the distance from the bump directly under you knee cap to the floor. Mark this distance on the floor. Stand with your toes just before the beginning of the mark and step forward until your heal is just past the end of the mark. Make sure the front foot points forward. Kneel down until the back knee is touching the ground (If you are on a hard surface place a small pad

THE ULTIMATE AGILITY LADDER GUIDE

under your knee). Avoid forcefully contacting your knee to the ground. The toes of the back foot should be down and the heel directly above. Keep your spine straight and your head up (Do not let the hip of the down knee push out to the side). This should create a straight line that is perpendicular to the ground and that runs from your heel through your hip to your shoulder. Your front knee should form a 90 degree angle. If the angle is less slide your front foot forward until you have this angle. Hold your arms forward and twist over the knee that is in front. Keep your spine tall and do not lean in any direction. Return to the center and perform the twist to the other side. Return to the center and push through your front heel to return to the top. Avoid letting your shoulders drop forward when you push with your front foot. Step back so your feet are together behind the mark. Step out with the other foot and perform the same action on the other side. Once you can comfortably perform this activity with proper form, lunge without letting the knee touch the ground. Assume a bottom position that places the down knee approximately 1 inch off of the ground before twisting. Pay particular attention to your balance. Keep the weight centered between your front foot and the toes of your back foot.

- **Elbow To Instep**- Take a maximal step forward with either foot. As you step reach out with the same side arm and touch the elbow as close as you can to the ground at the instep of the front foot. Try to lower your shoulders as deep as possible. Your front knee angle should be greater than 90 degrees. Return to the top and step back so your feet are together. Step out with the other foot and repeat. If you do not feel a stretch slide the front foot forward.
- **Lateral Lunge**- Place your thumbs and pointer fingers together, lift your arms and push your palms out in front of your body. Create a diamond in the space created between your thumbs and pointer fingers. Maintain this position and lower your arms until they are resting in front of your body. Lunge laterally by stepping to the side. Keep the trail leg straight, push the hips back drop the shoulders forward (by flexing at the hip not rounding the back) and bend at the knee until the front leg is parallel to the floor. Extended your arms out fully in front of your body in a "front raise" fashion as you descend into the lunge. Keep your weight on the back half of your lead foot and your shoulders square to the front. The lower leg of the bent knee should be perpendicular to the floor and you should not flex the knee joint to any less than 90 degrees. Keep your spine tall and head up.

THE ULTIMATE AGILITY LADDER GUIDE

Return to the top by stepping back toward the trail leg. Repeat stepping to the other side. If you have a problem getting this technique, assume the bottom position while sitting on a bench or box that puts your bent legs thigh around parallel to the floor. Push through the heel of the bent knee, straighten the leg and stand up. Bend that knee again and return to the seated position. Repeat all the reps on this side before performing the reps on the other side of the body. Once this feels natural try performing the same motion with out the box and starting at the top. Stay in the stepped out position and perform all of the reps on one side before moving to the other. Once this is comfortable, try performing the activity as described above.

- **Feet To Hands-** Start in a push up position. Keep your core tight and maintain a straight line from your shoulder through your hip to your heel. Keep your knees locked as you use your ankles to walk your feet as close to your hands as your hamstring and calf flexibility will allow. You should end with your heels and the palms of your hands flat on the ground. If your hamstrings are too tight to allow this, bend your knees slightly until it is possible. Try to straighten your legs which should put your hamstrings and calf muscles into a stretch. If you do not feel the stretch move your feet forward or lower your shoulders by bending slightly at the elbows. Once you have achieved the stretch, contract your quadriceps maximally for 2 seconds. Use this contraction to further stretch your posterior leg musculature. Relax your quads and try to straighten your legs a little more. Walk your hands forward until you have resumed a perfect push-up position.

THE ULTIMATE AGILITY LADDER GUIDE

Agility Ladder Fundamentals

Getting Started

There is no need to go out and spend \$60-\$100 on a ladder. If you have tape or even sidewalk chalk, you can make your own for pennies. Your typical ladder is made up of 18-inch squares that cover a 16-foot distance. This is not biblical in nature, so feel free to adjust the length and size of the ladder and or squares.

Although drawing your ladder on the ground is much cheaper, I prefer to use ladders that present a little more physical presence than tape or chalk. I find that athletes tend to be a little more accurate when using something that creates a physical barrier.

Many times athletes will cheat and step directly on the tape which minimizes movement distance. With a ladder they can feel when they are not accurately stepping and adjust accordingly.

The Basics

Ladder drills are fun and functional ways to teach movement skills. Although linear and lateral movements are biomechanical simple, their combination can be complex and many times overwhelming for the athlete. By teaching the mind and body to understand a variety of foot combinations, the chance for confusion and subsequent error decreases.

Ladder drills should be learned in a slow controlled environment. Introducing movement skills too rapidly can ingrain poor motor patterns that may be difficult to override. Skilled movement should be optimized before the drill is advanced.

I try to incorporate 3 different types of drills. The first type of drills are steady state drills. These drills focus on quickness endurance and utilize a constant rhythm throughout the ladder.

The second types of drills are burst drills. These drills focus on the ability to turn on rapid burst of foot movement. The third types of drills are elastic response drills. These drills focus on improving the reactive speed components of the lower leg.

THE ULTIMATE AGILITY LADDER GUIDE

Steady State and Burst Speed Drills

As with all movement drills, stay relaxed and focused during each drill. Try to use a normal arm action (which will change according to the nature of the drill) and avoid the frozen arm syndrome that often times accompany these drills.

Minimize foot contact time (do not let your feet squeak on the floor as this is a sign of increased contact time). Remember...Start slow, work on accuracy, and learn the drills before you speed them up

1 Foot In Each



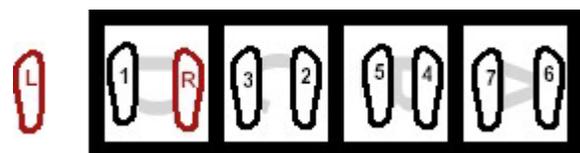
Start behind the ladder facing down it. Lead with either foot stepping 1 foot per square.

2 Feet In Each



Start behind the ladder facing down it. Step with either foot into the first square, followed by the second foot into the same square. Repeat the drill leading with the other foot.

1 In Lateral



Start by facing to the side with one foot in and one foot out. Lead with the foot that is in the ladder and step into the next square. Follow with the trail leg by placing that foot into the first square. Repeat the exercise leading with the other foot.

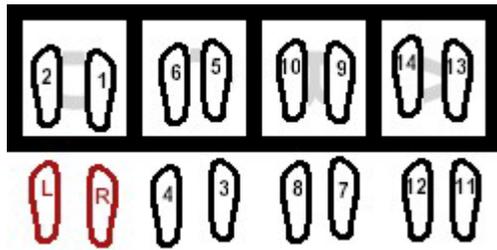
2 In Lateral



Start by facing to the side with both feet outside the ladder. Step into the first square with the closest foot, followed by the second foot. Repeat the exercise leading with the other foot.

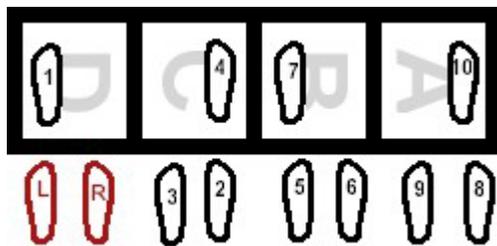
THE ULTIMATE AGILITY LADDER GUIDE

In In Out Out



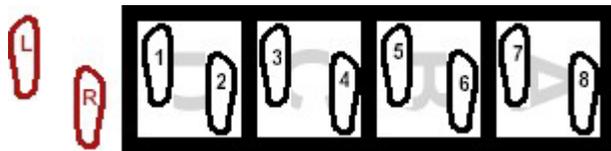
Start by facing the ladder from the side. Step with the inside foot (foot on the long side of the ladder) into the first square followed by the second foot. Step back out with the inside foot to the side of the second square followed by the other foot. Repeat the exercise leading with the other foot.

In Out Out



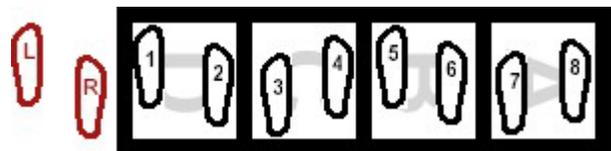
Start by facing the ladder from the side. Step with the outside foot into the first square. Step to the side of square two with the inside foot. Step back out of square one with the outside foot to the outside of square two. Step with the inside foot into square two. Repeat the exercise leading with the other foot.

X-Over Lateral



Start at the end of the ladder facing to the side. Begin with the outside foot slightly in front of the inside foot. Cross the outside foot over in front and into the first square. Next step the inside foot into the first square. Repeat the exercise leading with the other foot.

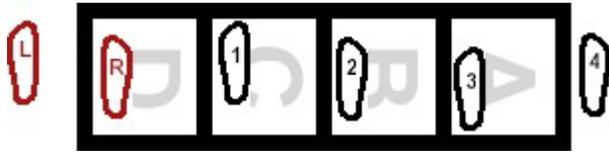
Carioca In Each



Start at the end of the ladder facing to the side. Begin with the outside foot slightly in front of the inside foot. Step across the front into the first square with your outside foot. Trail with your inside foot into the same square. Step behind into the next square with your lead foot followed by your right foot.

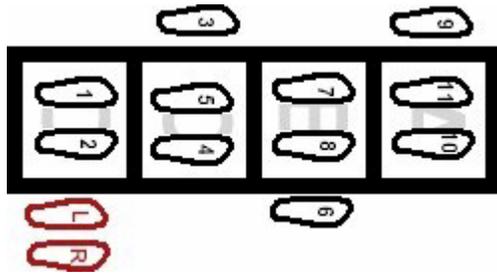
THE ULTIMATE AGILITY LADDER GUIDE

Carioca Every Other



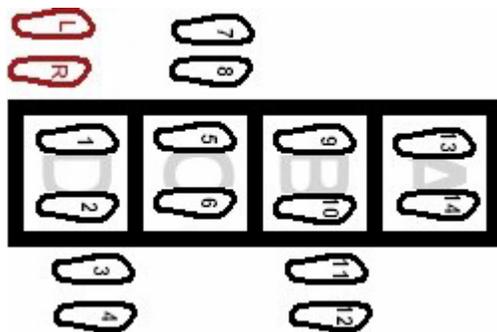
Start by facing to the side with one foot in and one foot out. Begin with the outside foot slightly in front of the inside foot. Step across the front into the first square with your outside foot. Trail with your inside foot into the second square. Step behind into the next square with your lead foot followed by your right foot into the next square.

Ickey Shuffle



Start by facing down ladder and to the side. Using a 1-2-3 rhythm, step into the first square with the inside foot, followed by the outside foot. Next, step to the outside of the second square with the lead foot. Now step into the second square with the trail foot. Step with the lead foot into square two. Repeat the exercise leading with the other foot.

X-Over Zig Zag



Start by facing down ladder and to the side. Step into the first square with the outside followed by the inside foot (across the front of the body). Step to the outside of the first square with the lead foot followed by the trail foot. Step into the second square with the lead foot followed by the trail foot. Repeat the exercise leading with the other foot.

THE ULTIMATE AGILITY LADDER GUIDE

Elastic Response Drills

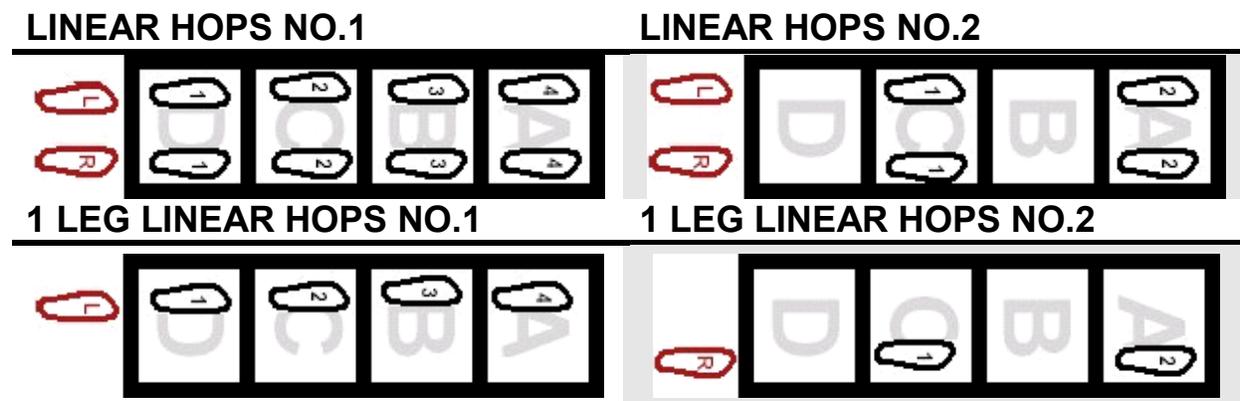
As I discussed earlier, the agility ladder can be an extremely powerful tool for developing foot speed, coordination, agility, proprioception, movement dynamics, and base level conditioning. However, it can also be an excellent way to introduce low intensity plyometric work into your program.

In this chapter, I have introduced 34 elastic response ladder drills. Each is characterized by the directional properties of the response. For each drill, the red feet designate the starting position and illustrate the right and left foot pattern. Each subsequent foot contact is numerically titled in the order that they occur during the drill. Although not illustrated, any drill with a dominant lead direction, should be performed utilizing the other lead to insure symmetry in performance.

The Linear Response Drills

As the name suggests, these drills are primarily linear in nature. They advance in complexity by progressing from a square-to-square pattern to an every other square pattern. This is then performed on a single leg. Each variation increases the intensity of the response.

ELASTIC RESPONSE: LINEAR



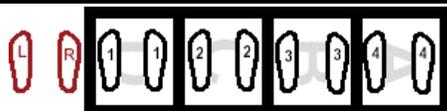
THE ULTIMATE AGILITY LADDER GUIDE

The Lateral Response Drills

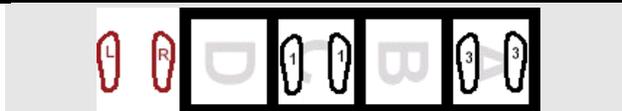
These drills are characterized by their significantly lateral movement. As with the linear response drills, the lateral response drills are progressed by skipping a square and by utilizing a unilateral stance. This drill can also be performed wide, which will closer mimic an "athletic" width stance.

ELASTIC RESPONSE: LATERAL

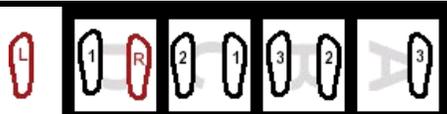
2 FT LATERAL HOPS NO.1



2 FT LATERAL HOPS NO.2



WIDE 2 FT LATERAL HOPS NO.1



WIDE 2 FT LATERAL HOPS NO.2



1 FT LATERAL HOPS NO.1



1 FT LATERAL HOPS NO.2



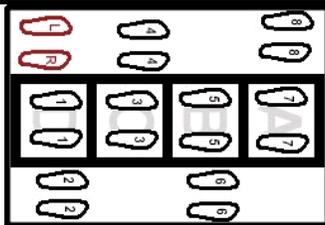
THE ULTIMATE AGILITY LADDER GUIDE

The Linear/Diagonal Response Drills

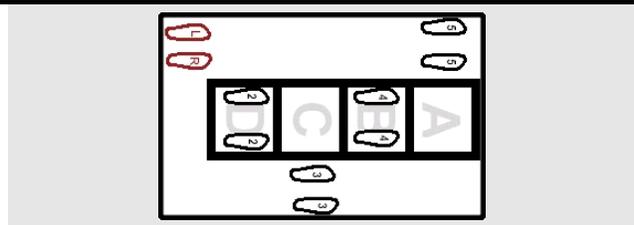
These drills are performed facing down the ladder, but utilize a lateral, or diagonal, movement pattern. Despite the name, each drill focuses on lateral movement. The concentration should be on a side-to-side push, with an added linear movement component. Once again, each drill is advanced by skipping a square to increasing the distance between landings.

ELASTIC RESPONSE: LINEAR/DIAGONAL

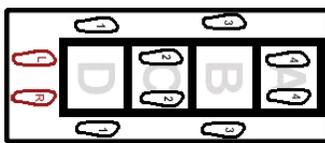
ZIG-ZAG PATTERN NO.1



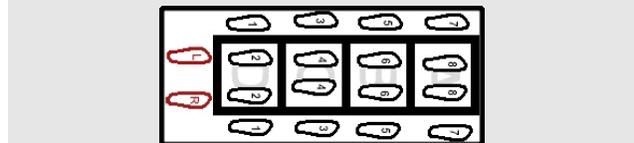
ZIG-ZAG PATTERN NO.2



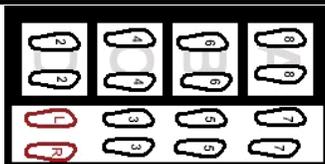
HOP SCOTCH PATTERN NO.1



HOP SCOTCH PATTERN NO.2



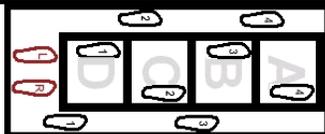
LATERAL HOP PATTERN NO.1



LATERAL HOP PATTERN NO.2



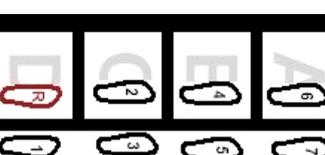
SIDE TO SIDE LINEAR HOPS



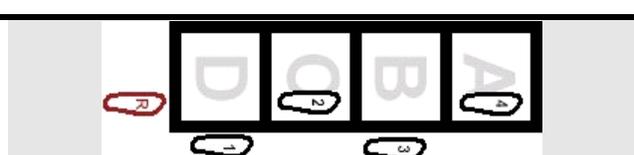
LINEAR SCISSORS



1 LEG SIDE TO SIDE HOPS NO.1



1 LEG SIDE TO SIDE HOPS NO.2



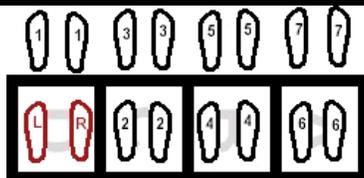
THE ULTIMATE AGILITY LADDER GUIDE

The Lateral/Diagonal Response Drills

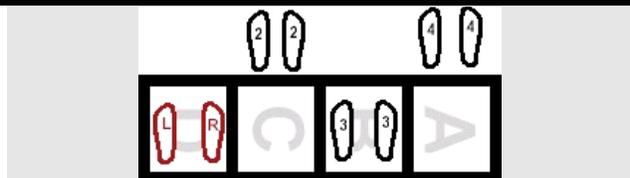
Much like the linear/diagonal drills, lateral/diagonal drills may be misrepresented by their title. Although the body does move laterally down the ladder, the primary movement pattern is front to back. Like the other drill, skip a square to increase the elastic response.

ELASTIC RESPONSE: LATERAL/DIAGONAL

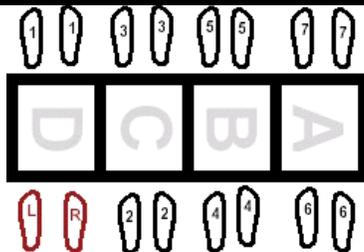
FRONT TO BACK NO.1



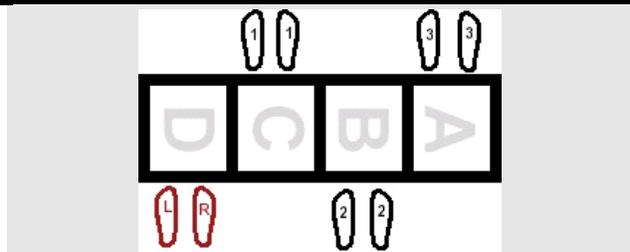
FRONT TO BACK NO.2



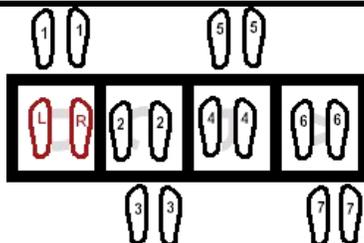
FRONT TO BACK ACROSS NO.1



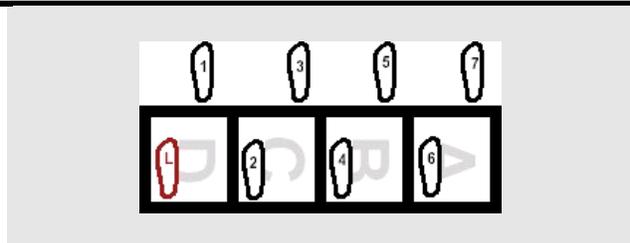
FRONT TO BACK ACROSS NO.2



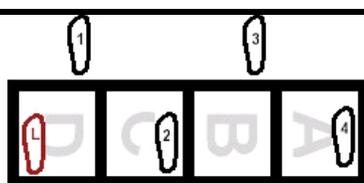
V-PATTERN



1 LEG FRONT TO BACK NO.1



1 LEG FRONT TO BACK NO.2



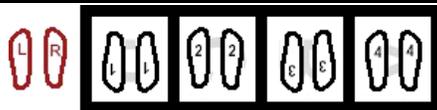
THE ULTIMATE AGILITY LADDER GUIDE

Rotational Response Drills

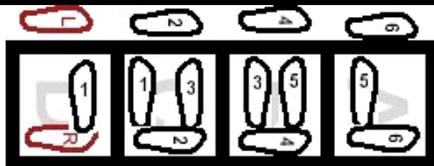
These drills utilize a large rotational component. Once again, these drills can be progressed by skipping a square, or by increasing the degree of the rotation.

ELASTIC RESPONSE: ROTATIONAL

90 DEGREE ROTATION



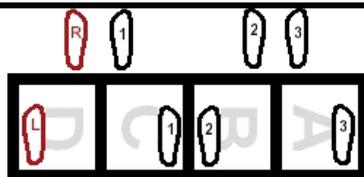
90 DEG. ROTATION WIDE NO.1



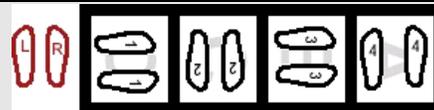
SERPENTINE



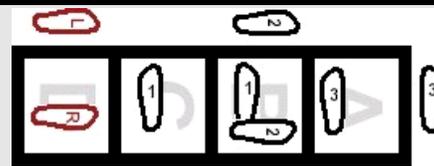
LATERAL SCISSORS NO.2



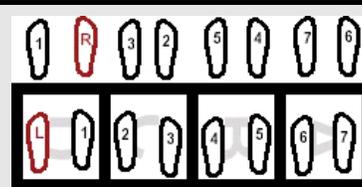
180 DEGREE ROTATION



90 DEG. ROTATION WIDE NO.2



LATERAL SCISSORS NO.1



THE ULTIMATE AGILITY LADDER GUIDE

Sample Ladder Workouts

Here are some sample ladder workouts you can play around with.
Remember...QUALITY BEFORE QUANTITY!!!

SAMPLE QUICK WORKOUT 1

PERFORM 3-6 REPS ON EACH DEPENDING ON PROFICIENCY

- IN IN OUT OUT LN
- LATERAL SCISSORS
- LATERAL X OVER
- 1 FOOT LATERAL
- 1 FOOT LINEAR

SAMPLE QUICK WORKOUT 2

PERFORM 3-6 REPS ON EACH DEPENDING ON PROFICIENCY

- Z DRILL
- IN IN OUT OUT LATERAL
- ICKEY SHUFFLE
- IN OUT OUT

PROTOCOL NO. 1: LEVEL 1

Perform 3-6 reps on each depending on proficiency

- WALK THRU-SHUFFLE LEFT
- WALK THRU-SHUFFLE RIGHT
- SHUFFLE LEFT
- SHUFFLE RIGHT
- IN IN OUT OUT LEFT
- IN IN OUT OUT RIGHT
- ROTATIONAL TWIST LEFT
- ROTATIONAL TWIST LEFT

THE ULTIMATE AGILITY LADDER GUIDE

PROTOCOL NO. 2: LEVEL 1

Perform 3-6 reps on each depending on proficiency

- SHUFFLE LEFT
- SHUFFLE RIGHT
- SHUFFLE COACH COD
- IN IN OUT OUT LEFT
- IN IN OUT OUT RIGHT
- IN IN OUT OUT COACH COD
- ROTATIONAL TWIST RIGHT
- ROTATIONAL TWIST LEFT

PROTOCOL NO. 3: LEVEL 2

Perform 3-6 reps on each depending on proficiency

- 1 FOOT IN EACH
- 2FT LT 1ST
- 2FT RT 1ST
- UP AND SWITCH 1 IN EACH
- UP AND SWITCH 2 IN EACH
- HOP SCOTCH IN ON ALL
- HOP SCOTCH EVERY OTHER
- ICKEY
- 1 FOOT HOP LEFT
- 1 FOOT HOP RIGHT

PROTOCOL NO. 4: LEVEL 2

Perform 3-6 reps on each depending on proficiency

- 2 FT LEFT 1ST
- 2 FT RIGHT 1ST
- 2 FOOT JUMPS
- ALT 1 FT JUMPS
- UP AND SWITCH
- HOP SCOTCH
- ICKY SHFFLE
- 1 FT HOPS LT
- 1 FT HOPS RT

THE ULTIMATE AGILITY LADDER GUIDE

PROTOCOL NO. 5: LEVEL 3

Perform 3-6 reps on each depending on proficiency

- 2 IN LATERAL
- 1 IN LATERAL
- IN IN OUT OUT
- IN OUT OUT
- X-OVER LATERAL
- CARIOCIA
- SNAPIOCIA

THE ULTIMATE AGILITY LADDER GUIDE

Thinking Outside of the BOX

In the final chapter of the **ULTIMATE AGILITY LADDER GUIDE**, I am going to discuss the use of the hand walk and its many variations. The hand walk series is a creative way to train the shoulders. I have incorporated many of these drills into my warm-up and workout proper. Usually, I use the ladder, but sometimes I like to play around with some of the other toys I have laying around. Therefore I have included a little of both.

Individual Vs Partner Drills

These drills typically fall into two categories. First are the individual drills. These drills are done without the aid of a training partner. With individual drills, the upper body is used to drag the lower body, or more specifically the feet, across the floor. These drills utilize greater horizontal and smaller vertical force manipulation than the partner drills.

Partner drills require the feet to be held by a partner. This increases the vertical loading of the shoulder and core musculature while changing the angle of the loading forces. All of the drills in this chapter can be performed as either partner or individual drills.

Basic Drills

These are the base drills that I used to prepare the athletes for the more strenuous drills discussed later in this article. I would incorporate these drills into the warm up on the upper body days. I would typically use 4-6 of these exercises for 2-3 sets of 20 yards. These are nothing more than guidelines, and can be adjusted to fit your needs. A good rule of thumb is to stay around ten minutes.

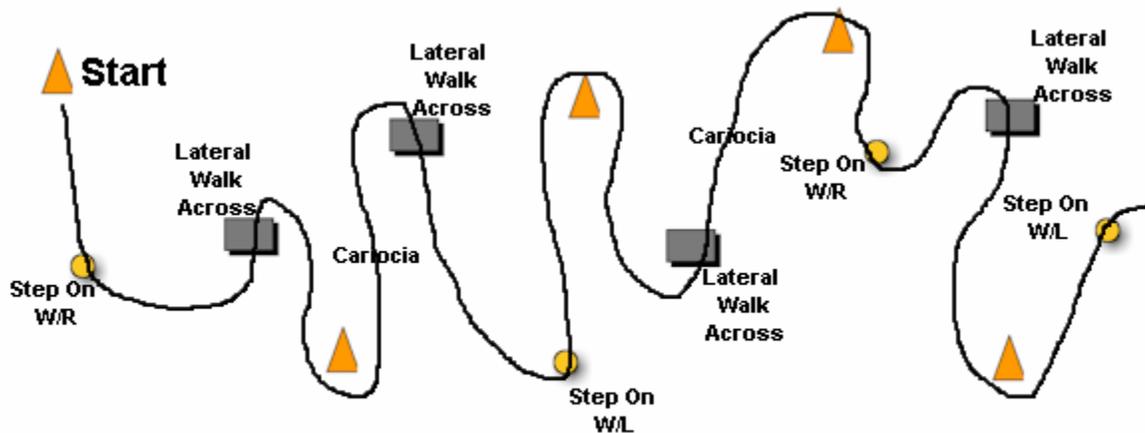
Here are some of the guidelines I use with these drills.

1. Don't get into a hurry; maintain a normal speed of movement.
2. Don't sag through the core.
3. Don't sway side to side or twist as you walk.
4. Try to maintain that pillar posture and let the shoulder function naturally.
5. Do not let your scapula excessively retract or protract. Keep them in a neutral position.

THE ULTIMATE AGILITY LADDER GUIDE

Here are the drills:

1. Forward-walking straight forward in a pulling motion
2. Backward-walking backward in a pushing motion
3. Close to Wide-starting with the hands close and step forward and out to a wide stance. Now step back in to a narrow stance.
4. Lateral shuffle-do not let the hands cross,
5. Crossover-cross the trail arm over front or back. Mix it up, but be consistent within the drill.
6. Carioca-Cross in front for one step and to the back on the next.
7. Obstacle Course-you can set up random obstacles such as cones, medballs, short boxes, etc, and have the athlete maneuver around or over them using any combination of the previous drills. Below is an example I would use for an advanced athlete.



THE ULTIMATE AGILITY LADDER GUIDE

Ladder Drills

I also like to do the traditional ladder drills using hand walks. I have included a few basic ladder drills that you could incorporate into your program.

1 Hand In Each



Start behind the ladder facing down it. Lead with either hand stepping 1 hand per square.

2 Hands In Each



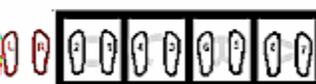
Start behind the ladder facing down it. Step with either hand into the first square, followed by the second hand into the same square. Repeat the drill leading with the other hand.

1 In Lateral



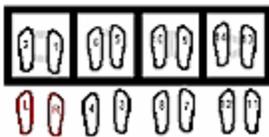
Start by facing to the side with one hand in and one hand out. Lead with the hand that is in the ladder and step into the next square. Follow with the trail leg by placing that hand into the first square. Repeat the exercise leading with the other hand.

2 In Lateral



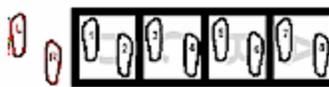
Start by facing to the side with both hands outside the ladder. Step into the first square with the closest hand, followed by the second hand. Repeat the exercise leading with the other hand.

In In Out Out



Start by facing the ladder from the side. Step with the inside hand (hand on the long side of the ladder) into the first square followed by the second hand. Step back out with the inside hand to the side of the second square followed by the other hand. Repeat the exercise leading with the other hand.

X-Over Lateral



Start at the end of the ladder facing to the side. Begin with the outside hand slightly in front of the inside hand. Cross the outside hand over in front and into the first square. Next step the inside hand into the first square. Repeat the exercise leading with the other hand.

Carioca In Each



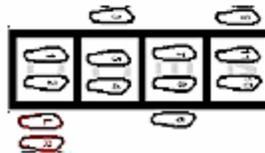
Start at the end of the ladder facing to the side. Begin with the outside hand slightly in front of the inside hand. Step across the front into the first square with your outside hand. Trail with your inside hand into the same square. Step behind into the next square with your lead hand followed by your right hand.

Carioca Every Other



Start by facing to the side with one hand in and one hand out. Begin with the outside hand slightly in front of the inside hand. Step across the front into the first square with your outside hand. Trail with your inside hand into the second square. Step behind into the next square with your lead hand followed by your right hand into the next square.

Ickey Shuffle



Start by facing down ladder and to the side. Using a 1-2-3 rhythm, step into the first square with the inside hand, followed by the outside hand. Next, step to the outside of the second square with the lead hand. Now step into the second square with the trail hand. Step with the lead hand into square two. Repeat the exercise leading with the other hand.

Advanced Drills

I have given you several basic ways to incorporate hand walk drills into your daily routines, and now I would like to give you a few ways to increase their difficulty. You can add these modifications to any of the above drills.

1. Band Around Wrists-You can wrap a tight loop of elastic tubing around to increase muscular recruitment in shoulder.
2. Band Around Back-Wrap a band around your back and put a hand in each end. This will increase the triceps activity considerably.
3. Band To Belt- Feed a band through a weight lifting belt that is around the athlete's waist. Hold both ends of the band into the air and adjust so both halves are the same length. Now Place a hand inside each half. This will cause the band to pull your arms back toward the waist.

THE ULTIMATE AGILITY LADDER GUIDE

4. Stairs-You can utilize stairs or bleachers as another variation. Any of the previous drills (other than the ladder) or modifications can be used on the stairs.
5. Stair Climber and Treadmill-Have the athlete stair step or walk on a treadmill or treadmill.
6. Modified Arm Ergometer-If you have on older bike, you can take the seat apparatus off, and have the athlete pedal the bike in a push-up position. Make the athlete just push or just pull, or both.

Be creative and think outside of the box. There are many variations I didn't cover here, so use your creative juices and see what you can come up with.