Agility Ladder Fundamentals

Getting Started
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. Buy 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.
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.
**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.
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 trial foot. Step into the second square with the lead foot followed by the trail foot. Repeat the exercise leading with the other foot.
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

<table>
<thead>
<tr>
<th>LINEAR HOPS NO.1</th>
<th>LINEAR HOPS NO.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Diagram of Linear Hops No.1]</td>
<td>![Diagram of Linear Hops No.2]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1 LEG LINEAR HOPS NO.1</th>
<th>1 LEG LINEAR HOPS NO.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Diagram of 1 Leg Linear Hops No.1]</td>
<td>![Diagram of 1 Leg Linear Hops No.2]</td>
</tr>
</tbody>
</table>
al 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

<table>
<thead>
<tr>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

2 FT LATERAL HOPS NO.2

<table>
<thead>
<tr>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

WIDE 2 FT LATERAL HOPS NO.1

<table>
<thead>
<tr>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

WIDE 2 FT LATERAL HOPS NO.2

<table>
<thead>
<tr>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

1 FT LATERAL HOPS NO.1

<table>
<thead>
<tr>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>

1 FT LATERAL HOPS NO.2

<table>
<thead>
<tr>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>
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 PATTERNS

**ZIG-ZAG PATTERN NO.1**

<table>
<thead>
<tr>
<th></th>
<th>L</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>3</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ZIG-ZAG PATTERN NO.2**

<table>
<thead>
<tr>
<th></th>
<th>L</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

**HOP SCOTCH PATTERNS**

**HOP SCOTCH PATTERN NO.1**

<table>
<thead>
<tr>
<th></th>
<th>L</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**HOP SCOTCH PATTERN NO.2**

<table>
<thead>
<tr>
<th></th>
<th>L</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>3</th>
<th>5</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>5</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

**LATERAL HOP PATTERNS**

**LATERAL HOP PATTERN NO.1**

<table>
<thead>
<tr>
<th></th>
<th>L</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>3</th>
<th>5</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>5</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**LATERAL HOP PATTERN NO.2**

<table>
<thead>
<tr>
<th></th>
<th>L</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Go To [www.PssAthletics.com](http://www.PssAthletics.com) and Get Your Free Comprehensive Six Week Strength Training Program Right Now
SIDE TO SIDE LINEAR HOPS

1 LEG SIDE TO SIDE HOPS NO.1

LINEAR SCISSORS

1 LEG SIDE TO SIDE HOPS NO.2
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 in front to back. Like the other drill, skip a square to increase the elastic response.

ELASTIC RESPONSE: LATERAL/DIAGONAL

<table>
<thead>
<tr>
<th>FRONT TO BACK NO.1</th>
<th>FRONT TO BACK NO.2</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Front to Back No. 1 Diagram" /></td>
<td><img src="image2.png" alt="Front to Back No. 2 Diagram" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FRONT TO BACK ACROSS NO.1</th>
<th>FRONT TO BACK ACROSS NO.2</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3.png" alt="Front to Back Across No. 1 Diagram" /></td>
<td><img src="image4.png" alt="Front to Back Across No. 2 Diagram" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>V-PATTERN</th>
<th>1 LEG FRONT TO BACK NO.1</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image5.png" alt="V-Pattern Diagram" /></td>
<td><img src="image6.png" alt="1 Leg Front to Back No. 1 Diagram" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1 LEG FRONT TO BACK NO.2</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image7.png" alt="1 Leg Front to Back No. 2 Diagram" /></td>
</tr>
</tbody>
</table>
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

<table>
<thead>
<tr>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

180 DEGREE ROTATION

<table>
<thead>
<tr>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

90 DEG. ROTATION WIDE NO.1

<table>
<thead>
<tr>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

90 DEG. ROTATION WIDE NO.2

<table>
<thead>
<tr>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

SERPENTINE

<table>
<thead>
<tr>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

LATERAL SCISSORS NO.1

<table>
<thead>
<tr>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
</tr>
</tbody>
</table>

LATERAL SCISSORS NO.2

<table>
<thead>
<tr>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

Go To www.PssAthletics.com and Get Your Free Comprehensive Six Week Strength Training Program Right Now.
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
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 SHIFFLE
- 1 FT HOPS LT
- 1 FT HOPS RT
THE ULTIMATE AGILITY LADDER GUIDE
Go To www.PssAthletics.com and Get Your Free Comprehensive Six Week Strength Training Program Right Now

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
Agility Ladder Fundamentals

Getting Started
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. Buy 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 intrain 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.
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.
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 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.
**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 trial foot. Step into the second square with the lead foot followed by the trail foot. Repeat the exercise leading with the other foot.
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

<table>
<thead>
<tr>
<th>LINEAR HOPS NO.1</th>
<th>LINEAR HOPS NO.2</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Linear Hops No.1 Diagram" /></td>
<td><img src="image2" alt="Linear Hops No.2 Diagram" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1 LEG LINEAR HOPS NO.1</th>
<th>1 LEG LINEAR HOPS NO.2</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3" alt="1 Leg Linear Hops No.1 Diagram" /></td>
<td><img src="image4" alt="1 Leg Linear Hops No.2 Diagram" /></td>
</tr>
</tbody>
</table>
al 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

<table>
<thead>
<tr>
<th></th>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

2 FT LATERAL HOPS NO.2

<table>
<thead>
<tr>
<th></th>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

WIDE 2 FT LATERAL HOPS NO.1

<table>
<thead>
<tr>
<th></th>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

WIDE 2 FT LATERAL HOPS NO.2

<table>
<thead>
<tr>
<th></th>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

1 FT LATERAL HOPS NO.1

| R | 1 | 2 | 3 | 4 |
|---|---|---|---|
|   |   |   |   |

1 FT LATERAL HOPS NO.2

<table>
<thead>
<tr>
<th>R</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
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

HOP SCOTCH PATTERN NO.1

LATERAL HOP PATTERN NO.1

ZIG-ZAG PATTERN NO.2

HOP SCOTCH PATTERN NO.2

LATERAL HOP PATTERN NO.2
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 in front to back. Like the other drill, skip a square to increase the elastic response.

ELASTIC RESPONSE: LATERAL/DIAGONAL

FRONT TO BACK NO.1
1 1 3 3 5 5 7 7
L R 2 2 4 4 6 6

FRONT TO BACK NO.2
1 1 2 4
L R 3 6

FRONT TO BACK ACROSS NO.1
1 1 3 3 5 5 7 7
L R 2 2 4 4 6 6

FRONT TO BACK ACROSS NO.2
1 1 3 3
L R 2 2

V-PATTERN
1 1 5 5
L R 2 2 4 4 6 6
3 3 7 7

1 LEG FRONT TO BACK NO.1
1 2 4 6 8
1 3 5 7

1 LEG FRONT TO BACK NO.2
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

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>R</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

180 DEGREE ROTATION

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>R</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

90 DEG. ROTATION WIDE NO.1

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>R</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

90 DEG. ROTATION WIDE NO.2

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>R</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

SERPENTINE

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>R</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

LATERAL SCISSORS NO.1

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>R</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>7</td>
<td>6</td>
</tr>
</tbody>
</table>

LATERAL SCISSORS NO.2

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>R</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
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
Go To www.PssAthletics.com and Get Your Free Comprehensive
Six Week Strength Training Program Right Now

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 SHUFFLE
☐ 1 FT HOPS LT
☐ 1 FT HOPS RT
THE ULTIMATE AGILITY LADDER GUIDE

Go To www.PssAthletics.com and Get Your Free Comprehensive Six Week Strength Training Program Right Now

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
Agility Ladder Fundamentals

Getting Started
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. Buy 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.
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.
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 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.
**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.
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

<table>
<thead>
<tr>
<th>LINEAR HOPS NO.1</th>
<th>LINEAR HOPS NO.2</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Diagram of Linear Hops No.1" /></td>
<td><img src="image2" alt="Diagram of Linear Hops No.2" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1 LEG LINEAR HOPS NO.1</th>
<th>1 LEG LINEAR HOPS NO.2</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3" alt="Diagram of 1 Leg Linear Hops No.1" /></td>
<td><img src="image4" alt="Diagram of 1 Leg Linear Hops No.2" /></td>
</tr>
</tbody>
</table>
**ELASTIC RESPONSE: LATERAL**

**2 FT LATERAL HOPS NO.1**

L | R
---|---
1 | 1
2 | 2
3 | 3
4 | 4

**2 FT LATERAL HOPS NO.2**

L | R
---|---
1 | 1
2 | 2

**WIDE 2 FT LATERAL HOPS NO.1**

L | R
---|---
1 | 1
2 | 1
3 | 2
4 | 3

**WIDE 2 FT LATERAL HOPS NO.2**

L | R
---|---
1 | 1
2 | 2

**1 FT LATERAL HOPS NO.1**

R
---
1 | 2 | 3 | 4

**1 FT LATERAL HOPS NO.2**

R
---
1 | 2
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**

```
1  3  5  7
2  4  6
```

**ZIG-ZAG PATTERN NO.2**

```
1  3  5  7
2  4  6
```

**HOP SCOTCH PATTERN NO.1**

```
1  3  4
2  4
```

**HOP SCOTCH PATTERN NO.2**

```
1  3  5  7
2  4  6  8
```

**LATERAL HOP PATTERN NO.1**

```
1  3  5  7
2  4  6
```

**LATERAL HOP PATTERN NO.2**

```
1  3  5  7
2  4  6
```
SIDE TO SIDE LINEAR HOPS

1 LEG SIDE TO SIDE HOPS NO.1

LINEAR SCISSORS

1 LEG SIDE TO SIDE HOPS NO.2
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 in 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
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**

<table>
<thead>
<tr>
<th>90 DEGREE ROTATION</th>
<th>180 DEGREE ROTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Diagram" /></td>
<td><img src="image2" alt="Diagram" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>90 DEG. ROTATION WIDE NO.1</th>
<th>90 DEG. ROTATION WIDE NO.2</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3" alt="Diagram" /></td>
<td><img src="image4" alt="Diagram" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SERPENTINE</th>
<th>LATERAL SCISSORS NO.1</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image5" alt="Diagram" /></td>
<td><img src="image6" alt="Diagram" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LATERAL SCISSORS NO.2</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image7" alt="Diagram" /></td>
</tr>
</tbody>
</table>
THE ULTIMATE AGILITY LADDER GUIDE

Go To www.PssAthletics.com and Get Your Free Comprehensive Six Week Strength Training Program Right Now

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
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 SHIFFLE
☐ 1 FT HOPS LT
☐ 1 FT HOPS RT
THE ULTIMATE AGILITY LADDER GUIDE
Go To www.PssAthletics.com and Get Your Free Comprehensive
Six Week Strength Training Program Right Now

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
Agility Ladder Fundamentals

Getting Started
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.
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.
**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 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.
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 trial foot. Step into the second square with the lead foot followed by the trail foot. Repeat the exercise leading with the other foot.
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

<table>
<thead>
<tr>
<th>LINEAR HOPS NO.1</th>
<th>LINEAR HOPS NO.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>R</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1 LEG LINEAR HOPS NO.1</th>
<th>1 LEG LINEAR HOPS NO.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>R</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
al 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**

<table>
<thead>
<tr>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

**2 FT LATERAL HOPS NO.2**

<table>
<thead>
<tr>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

**WIDE 2 FT LATERAL HOPS NO.1**

<table>
<thead>
<tr>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**WIDE 2 FT LATERAL HOPS NO.2**

<table>
<thead>
<tr>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**1 FT LATERAL HOPS NO.1**

<table>
<thead>
<tr>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**1 FT LATERAL HOPS NO.2**

<table>
<thead>
<tr>
<th>L</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
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**

```
L | R
1 | 4
1 | 4
2 | 6
2 | 6
8 | 8
```

**ZIG-ZAG PATTERN NO.2**

```
L | R
1 | 4
2 | 2
1 | 3
3 | 3
4 | 4
```

**HOP SCOTCH PATTERN NO.1**

```
L | R
1 | 4
2 | 2
3 | 3
4 | 4
```

**HOP SCOTCH PATTERN NO.2**

```
L | R
1 | 4
2 | 2
3 | 3
4 | 4
5 | 5
6 | 6
7 | 7
8 | 8
```

**LATERAL HOP PATTERN NO.1**

```
L | R
1 | 4
1 | 4
2 | 6
2 | 6
8 | 8
```

**LATERAL HOP PATTERN NO.2**

```
L | R
1 | 4
2 | 2
1 | 3
3 | 3
4 | 4
6 | 6
8 | 8
```
SIDE TO SIDE LINEAR HOPS

1 LEG SIDE TO SIDE HOPS NO.1

LINEAR SCISSORS

1 LEG SIDE TO SIDE HOPS NO.2
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 in 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
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  180 DEGREE ROTATION

90 DEG. ROTATION WIDE NO.1  90 DEG. ROTATION WIDE NO.2

SERPENTINE  LATERAL SCISSORS NO.1  LATERAL SCISSORS NO.2
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
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

Go To www.PssAthletics.com and Get Your Free Comprehensive Six Week Strength Training Program Right Now

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