TECHNIQUE & MOVEMENT
TUTORIALS

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INDEX

IMPORTANT!

Parkour is not a set of moves or tricks, there are base techniques that are used regularly but are not the "moves of Parkour". They can be varied and changed to suit a particular situation or environment. These are designed to give you the building blocks to go out and innovate and find your own way of doing things.

As long as the application of speed and efficiency are observed, you are applying the principles of Parkour. Remember, Parkour is more than just the movement, it's the philosophy that makes it unique.

QUADRUPEDAL MOVEMENT

PURPOSE

As well as being excellent for building strength, endurance and coordination, the ability to move around effectively on all four limbs can be quite useful.

METHOD

- The base technique to quadrupedal movement should have you assuming a position where:
- Your hands are placed shoulder width apart directly underneath your shoulders.
- Your back should be parallel to the ground
- Your shins parallel to the ground.
- Knee's off the ground, toes in contact with the ground.

- Next you should start to move forward!
- When moving you should move alternate arms and legs.
- When the right hand goes forward the left leg should move forward at the same time.
- When the left hand moves forward the right leg should move as well.
- Keep the knees at approximately the same distance from the ground at all times, keep the back parallel with the ground.

Try not to stretch your self out too far, crowd yourself by bringing the knees in too close to the body or stick your backside into the air. Avoid resting the knees on the ground, if you wish to rest then assume a crouched position or stick your backside in the air.

The reason for this particular movement pattern is that it forces the mind to coordinate the body in such a way that it increases your overall body control and awareness; it is also more balanced in a physiological sense.

PROGRESSION

Once you have a firm grounding in the base technique of quadrupedal start to experiment with making it more difficult. Varying the shape and alignment of the body when doing it. Move up and down stairs, on rails, sideways, backwards, get down really low to the ground, do it on your elbows and knees like soldiers under barbed wire, use your imagination. There are many different ways to move on all fours. This is an opportunity to do some of the things that initially should be avoided; sticking the backside in the air, stretching yourself out or crowding yourself. But you only want to do this once you have mastered the base technique.

PURPOSE

Running generally makes up the majority of your movement in Parkour. When getting from one place to another, you use various movements (vaulting, climbing, rolling, etc), but in between all of that you are running.

Considering this, it is a good idea to consider the way you run and attempt to make it as effective as possible, as bad technique can cause long lasting damage.

METHOD

> Most importantly when running, you should be touching the ground on the balls of your feet or mid-foot (between your toes and the arch of your foot). This means no heel striking!

> If you are intent on heel striking and believe it's the 'correct' or 'natural' way to run, try this experiment:

Take off your shoes, and run barefoot for a little while. 50 metres will do.

It is highly unlikely that by the end of it, you are touching your heel to the ground first. It hurts. Your body absorbs the impact by passing the shock of landing through the ball of the foot, the arch, then the ankle and muscles of the leg. When landing on your heel, your body can't do this, and the shock gets taken more in the joints than the muscles. Over time this will likely lead to injury.

> It is important to develop the ability to strike forefoot first correctly. When running with a forefoot striking technique it is important **not** to land with the heel inches above the ground.

> When the foot lands on the ball of the foot you do not want the heel to be any more than an inch from the ground, with the foot rolling from ball to heel, so the heel contacts the ground when you are running over longer distances.

> Be aware of the foot rolling from side to side when running, you should aim to land with the foot square to the ground, avoid landing on the inside or outside of the foot and rolling.

When running try and be as silent as possible, noise is a good indication that you are doing damage to the joints. By focusing on keeping out landings silent you use your muscles more effectively to absorb impact, rather than using the bone structure, which damages joints

Use of the arms – The rate and power at which you swing your arms has a direct relation to the power from your legs and the overall speed at which you run. The arms are not simply there for balance, but to help propel you forward.

Unless you have professional coaching, running is much like any other skill for Parkour. It involves a lot of experimentation, trial and error on your part. Play with it; find ways to run as fast as possible (sprinting), and also how to comfortably run for long periods without becoming out of breath, and without using too much energy.

REFERENCES & FURTHER INFORMATION

> www.runners-corner.com

> www.posotech.com

> www.yourrunning.com

PURPOSE

A safe landing assist in reducing the wear and tear on joints associated with jumping and vaulting consistently. Landings without rolling are only advised on smaller drops. Once you start to add momentum and height into the equation it becomes necessary to roll.

METHOD

You might think landing is fairly self-explanatory. However, like any fundamental movement used in Parkour, landings are a crucial technique that need vigilant practice and an examination of technique, in order to be both safe and effective.

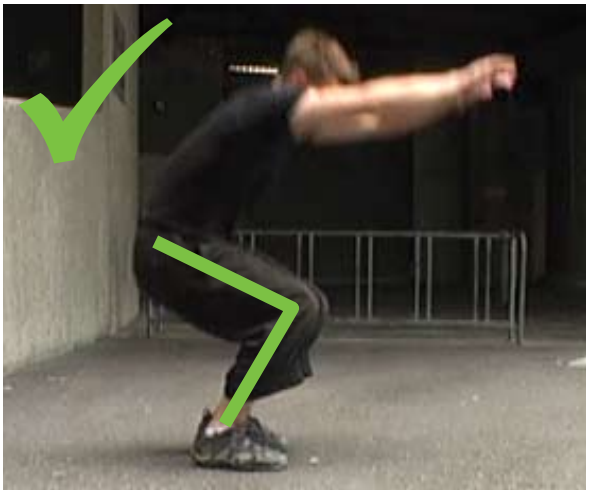
> A focus on the placement of the feet on the ground is important. You aim to land on the ball of the foot down (between the toes and the arch of the foot).

Not the toes, **not** the heels, and **no** flat feet.

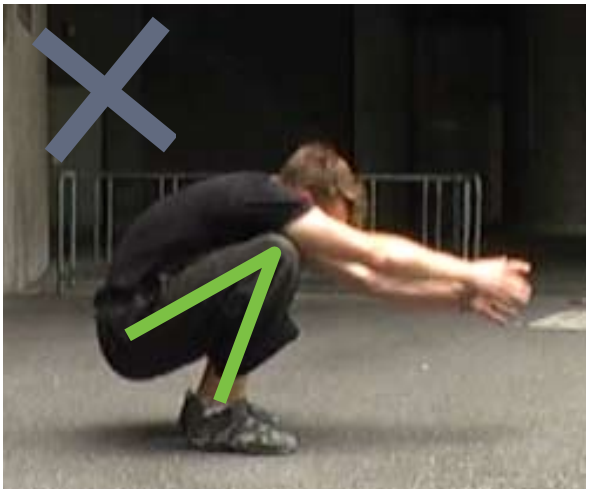
> From the ball of the foot being placed down, the heels can roll down towards the ground. Depending on the impact you are taking through the feet, this may or may not be necessary (a drop, for example, would be a good time to roll the heel down, as opposed to landing from a vault without a significant drop afterwards, where it may not be quite as important).

There is no strict rule about this; it's an awareness you have to build within yourself over time.

> Another point for consideration is bending in the knees. As a general rule, the knees should never bend to an angle less than 90 degrees, assuming straight legs are 180 degrees.



> This is because at such an angle, a great amount of shearing force is placed on the knee joint, which can cause damage over time.



> This does, however, depend on the movement involved. For example, when performing a roll, your knees will naturally travel past the angle of the foot. But your body will be at such an angle that the forces upon the knee are not so much in play. You cannot perform a roll without the knees going past the toes.

> When using hands in a landing be aware of not using them to absorb large amounts of shock, they are for guidance for the most part.

When landing with precision (upon a thin wall, for example), a great amount of control is required. This takes time to develop.

If you are aiming to stop on the object in question without toppling forward you may need to sink down through your feet. Instead of letting your body weight carry you forward. If you keep your centre of balance high, it is much more difficult to control any momentum carried over from the jump, than it is if you sink down, bending the knees.

With regards to the 90 degree rule, you will find many differing opinions on whether it is accurate or not. We are providing one here. You are encouraged to do your own research and come to your own conclusions regarding what you will chose to do in the end.

PROGRESSION

Adding height and speed. You will find as you add these elements to the landings you will need to roll to absorb the shock.

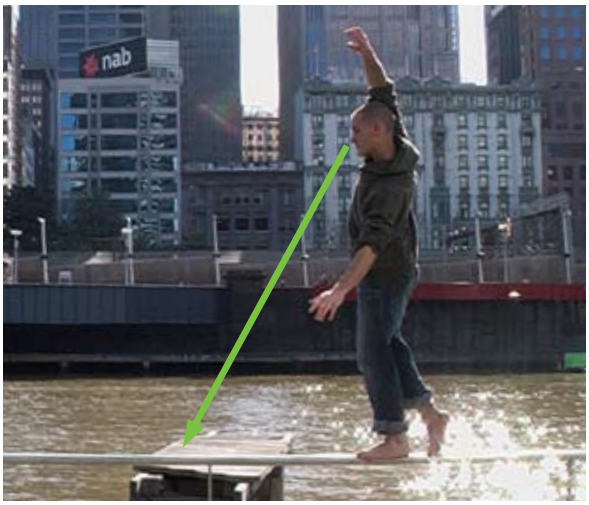
PURPOSE

As well as being useful for body awareness and to reduce the chances of injury, the ability to balance allows us to move in places and ways that others would find difficult.

METHOD

> An important thing to remember in balance is that the line of balance in the foot runs down through the heel along the arch and out through the second toe.

> When balancing one needs to remember to just stand up straight and walk. Do not focus on where you are, rather, where you are going. Ideally at least a couple of feet in front of where your feet are.



> When balancing keep they knees slightly bent and as you walk along be ready to lower yourself if you feel unsteady. Lowering yourself by bending the knees creates a lower centre of gravity that is easier to control.

Balance for most is purely a mental thing. If you can stand on two feet you can balance. If a rail is two inches off the ground most people could walk along it quite easily. But put that rail 10 feet in the air and suddenly it's not so easy.

One of the biggest factors is telling yourself you "will keep your balance" even when it seems there is no saving yourself. By simply changing a mindset balance will often improve straight away. Many people fall off a rail because they tell themselves they have lost their balance when in fact they were never at risk of falling. People have come back from seemingly impossible positions to regain balance simply because they refused to admit defeat.

When you start working on balance you will find there are some days where it is a continual battle to stay in balance, every few steps along a rail you have to stop and focus before you can move on. Other days it is easy and balance comes with little effort at all. As with most things, the more you practice the easier and more natural it becomes.

PROGRESSION

You can continue to challenge your balance as it improves by looking for surfaces that are thinner, more unstable or at different heights. You can also change things like how much you use your arms (arms at your side rather than reaching out for balance). Close your eyes to make it harder, crouch down. Your imagination is the limit, as long as you are challenging your body neurally you will be improving your balance.

PURPOSE

Used to assist in absorption and spreading out of impact upon landing.

When used correctly the roll will save your body from wear and tear suffered from trying to absorb all the impact from a landing with the legs alone.

When executed correctly the roll can be performed painlessly on concrete at high speeds.

The technique described below is the one that works for most people. There are many different was of rolling that work. **A good roll is one that allows you to roll on concrete painlessly and without damaging yourself**. So if you find a different method that works for you then that is the right one for you.

METHOD

Find a place that has some grass to roll on. The grass allows you to roll without hurting yourself but at the same time allows you to feel where you would hurt yourself if rolling on concrete.

For the purposes of this explanation the roll will be done over the **left** shoulder. If you are rolling over the right shoulder then change instructions to suit.

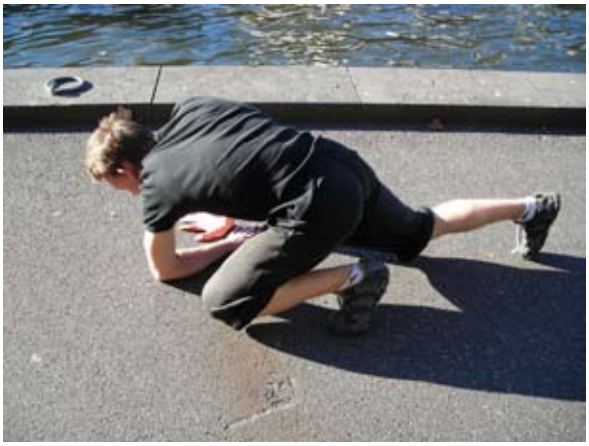
> Begin by assuming the stance shown in the photo opposite. The leading foot should be on the same side as the shoulder you wish to roll over. So in this case the left foot is facing forward, while the right foot is slightly to the right and facing about 120 degrees away from the direction you are facing.

> From here crouch and place the hands as shown opposite. The hands go down in line with the right foot as shown with the dotted line. The right hand facing forward and the left hand placed behind, or anywhere in the blue circle, pointing 90° from the direction you are rolling in.

> Note the arrows opposite. Make sure to put space between your hands and left foot, putting your right hand in front of the left foot, **not** beside it, and keeping the left leg on the outside of the left arm. Some people let it sit inside the arm. This can result on you kneeling on your arm, which can be painful.

> Allow the forearm to lower to the ground.

This should stop a common mistake people make, where they fall onto and hurt the shoulder. Make sure to keep the left leg on the **outside** of the left arm as if you let it track inwards you run the risk of kneeling on your forearm.



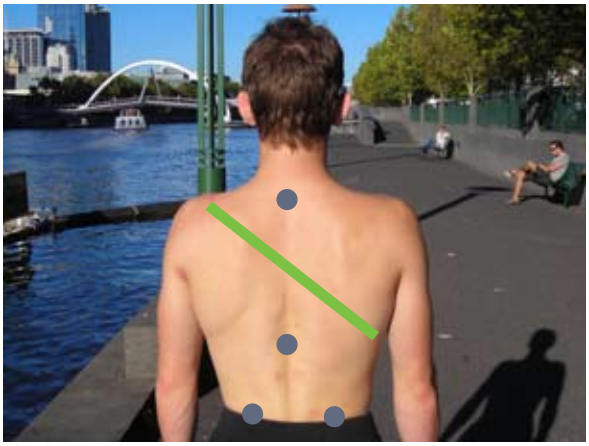
> From here **push** with the left leg to give yourself forward momentum. You will roll over the left arm and onto your shoulder. As the back of your shoulder makes contact with the ground tuck your right heel to your backside. Roll diagonally across the back, from left shoulder to right hip and then onto your feet.

> Do not let your head hit the ground!

> The left foot should make contact with the ground first. The right foot should come up still tucked under the buttocks.

> From here you continue the motion until you are upright and are able use the momentum to take of running.

> See the picture opposite for where you should feel the ground as you roll (green line), and also the danger points where you should not roll (blue dots). If you are hitting the points indicated then you need to modify the roll to avoid them.



BE AWARE. When you start to progress with this roll off heights and with speed the technique will need to change, you will need to land with feet closer together and be more adaptable and dynamic with the arms. The majority of people need to learn this basic technique before they can move onto the more advanced form. Be aware of your body as you progress and be careful.

PROGRESSION

When you start to feel confident that your roll is good enough to attempt on concrete then start training it on there. You may get some bruises initially as you iron out your technique, but if you are consistent you will start to master it.

Make sure to practice rolling over **both** shoulders

As you start to master the concrete start to practice jumping off low heights and rolling.

As you improve off heights progressively add speed into the equation as well.

Practice rolling backwards and sideways as well. You never know when you might land at an odd angle and need to be able to save yourself with a roll rather than falling in a heap.

PURPOSE

Used to move vertically (in the majority of cases), both up and down. Climbing is a fundamental skill of Parkour, and, as with other fundamentals, you can always improve. Climbing builds general strength, endurance, agility and coordination.

METHOD

Climbing is not something we can teach you through a tutorial. However, we can offer tips for safety, which are vitally important as you learn.

THREE POINTS OF CONTACT

Always try to have three points of your body secure as you climb. For example, two hands and one foot are securely placed as you move the second foot, or two feet and one hand are secure as you move the second hand as shown below. This ensures a steady base, and should you slip, you are ready to catch yourself, thereby preventing a fall.

TESTING SURFACES

Before applying your weight to a hand/foot hold, test it out to make sure it will hold you safely without slipping or breaking. This way you keep yourself secure, so that if the object you are moving towards is too fragile, it won't cause you to fall, because you'll realise the danger before you apply your weight.

STRENGTH

A good base of all-over body strength, endurance and stamina is important before doing any climbing in particularly dangerous situations (heights, for example). Wherever you go, you need to be able to get down again. It's no use getting half-way up a rock-face or the wall of a building, only to tire or run out of strength.

PROGRESSION

Attempt more challenging climbs, ones that have fewer points to hold onto. Climb for longer periods of time. Change the directions you go in, increase the challenges you give yourself when climbing.

CLIMB UP – LEVEL ONE (OVER GRIP)

PURPOSE

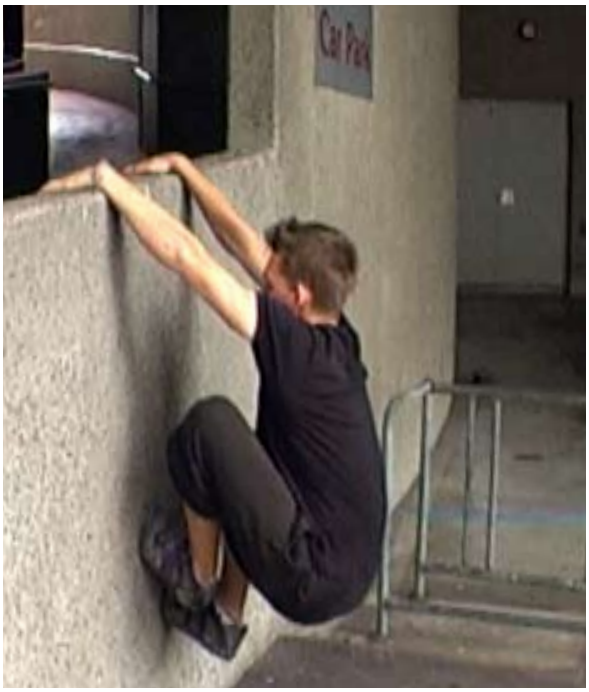
Used to get up over a wall either with a run up, a dead hang or from a Saut de Bras. Correct climb up technique will allow you to get up and over a wall quickly when applied correctly.

METHOD

Initially, most people will need to find a wall that provides an over grip (first image) to begin learning this technique. This allows you to concentrate on how to use the feet correctly.

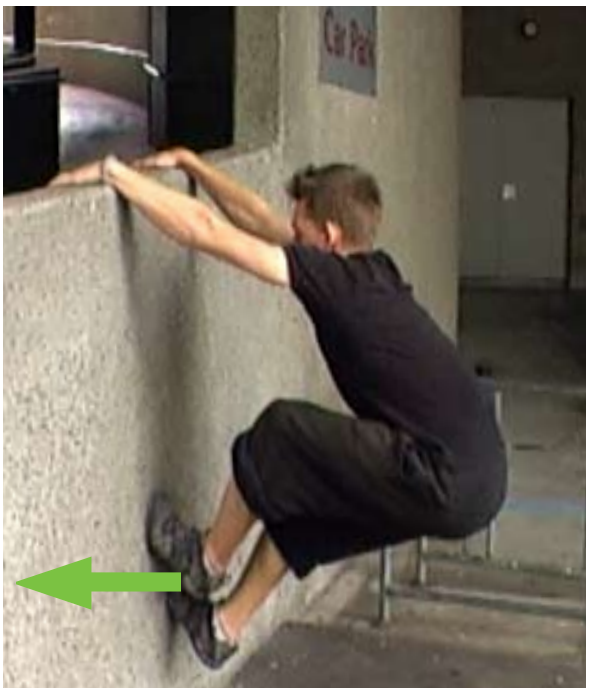
> Whilst hanging by the hands place the feet on the wall in a split foot position, one foot slightly above the other.

> From here you need to use the legs to start the movement. It is common misconception that a climb up is all in the arms. **That is wrong!** The majority of your power comes from the legs. (You can do climb ups using just the arms, but that is an advanced technique.)



> Hold tightly to the wall and push hard with the feet, actually pushing **into** the wall. A common mistake many people make is to push **down** the wall, this results in the feet slipping down the wall and the individual failing to climb up.

> Because your arms anchor the body, you will pendulum out and up, this technique allows you to use the most powerful muscles in your body (your legs) to get you most of the way up the wall before you need to engage the use your arms.



- Once the legs have straightened you need to pull yourself up over the wall with your shoulders and arms. Depending on strength and technical ability the need to actually bend the arms to pull yourself up varies.
- Make sure to get your head and chest over the wall, do not try and keep them away from the wall.
- Do this explosively, do not try and pull yourself up slowly. If you lack strength and control you will slip down the wall.
- This can be the most difficult part for most people, the transition between using the legs to start and the arms to finish off the movement.

If you do not have the coordination or strength to complete the move then practice it in reverse. Doing this consistently WILL get you strong enough to eventually do a proper Climb Up.

Start from the upright position and lower into the arm jump position. Make sure that when you lower yourself that your feet do not slip more than a couple of inches down the wall. If your feet are sliding down the wall too far you will find it difficult to master the climb up. By doing this you build strength and coordination. It assists the body in understanding the movement needed to get back up the wall.

While this movement requires a degree of strength to complete you do not need to be a muscle man/woman to be capable of performing it.

PROGRESSION

Move onto walls that have no over grip. Try walls with different surfaces: grippy, slippery etc. Use the legs less and less, until you can climb up using just your arms.

CLIMB UP – LEVEL TWO (NO OVER GRIP)

PURPOSE

Used to get up over a wall either with a run up, a dead hang or from an arm jump. Correct climb up technique will allow you to get up and over a wall quickly when applied correctly.

METHOD

After you have mastered climb ups with an over grip you will eventually need to learn them on walls that do not allow you to start with an over grip.

The technique is much the same, but there are a few minor variations to assist in helping you. Unfortunately this is a technique that will require a degree of strength from the fingers. Something you will have to train by practicing hanging off walls.

- Whilst hanging by the hands place the feet on the wall in a split foot position, one foot slightly above the other.
- Make sure to hang at full stretch.
- Many people start with the arms flexed. This actually makes it more difficult as you cannot push into the wall very well, and as you will be using your legs to start the movement you want to be able to use them effectively.
- From here you need to use the legs to start the movement. It is common misconception that a climb up is all in the arms. The majority of your power comes from the legs. (You can do climb ups using just the arms, but that is an advanced technique.)

CLIMB UP – LEVEL TWO (NO OVER GRIP)

- Hold tightly to the wall and push hard with the feet, actually pushing **into** the wall. A common mistake many people make is to push **down** the wall, this results in the feet slipping down the wall and a failed climb up.
- Make sure that when you pull up the wall you do so explosively, do not try and pull yourself up slowly. If you lack strength and control you will slip down the wall.
- Once you reach a certain point in the pull you will need to reposition the hands to complete the climb up.
- The most common method is to hop the hands forward as you reach the point illustrated opposite.
- Make sure as you reach this point that the head and chest are moving over the top of the wall. You will not be able to climb up if you hold your upper body away from the top of the obstacle.

If you do not have the coordination or strength to complete the move then practice it in reverse.

Start from the upright position and lower into the arm jump position. Make sure that when you lower yourself that your feet do not slip more than a couple of inches down the wall. If your feet are sliding down the wall too far you will find it difficult to master the climb up. By doing this you build strength and coordination. It assists the body in understanding the movement needed to get back up the wall.

Avoid placing elbows on the wall to help you up, this is a bad habit that leads to damaged elbows.

PROGRESSION

Try walls with different surfaces: grippy, slippery etc. Use the legs less and less, until you can climb up using just your arms.

PURPOSE

The passement is used to quickly and smoothly pass over medium sized obstacles. It can be applied to obstacles when approaching them directly or at angles.

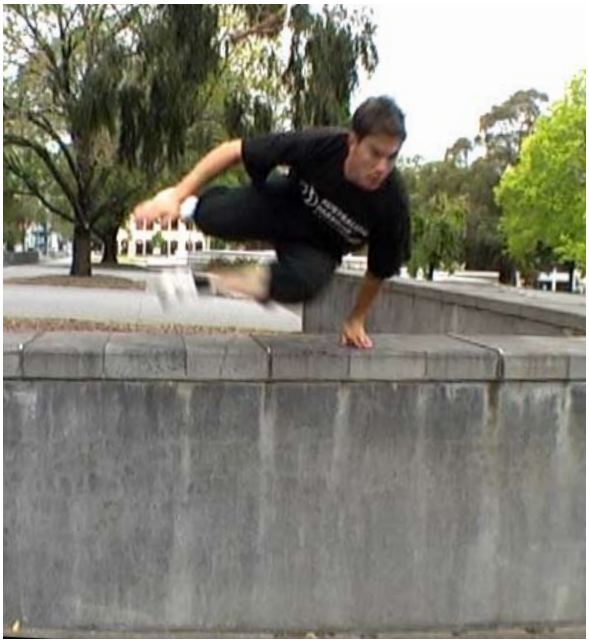
METHOD

While learning approach the obstacle directly at a slow to medium pace. For this explanation the legs will be going to the right, reverse the information for left side.

> As you approach the obstacle you want to leave the ground from your left foot, kicking the right leg upwards to assist the body in clearing the obstacle, reach your left arm out to prepare to make contact with the obstacle. Both feet should have left the ground before your hand makes contact with the obstacle.

> Avoid placing your hand on the obstacle before you take off. The reason for this is that it usually means you will 'ride' the obstacle, as explained below.

- As the left hand comes down to make contact with the obstacle the momentum from the initial jump should be enough to get you over the obstacle.
- The left hand comes down not as a pivot point or an extra push for momentum (though you can do this) but to assist with stabilisation to control the movement and allow you to exit the vault in the correct position.



- Be very aware of whether you use the hand as a pivot, it will become apparent as to whether this is happening by the manner in which you exit the vault. If you are exiting the vault on a crooked angle, not in the direction you took off from, then it is usually because you are 'riding' the obstacle with your arm.

- As you exit the other side of the obstacle correct your posture back to vertical by dropping your left foot towards the ground this will naturally pull the body to the left and you can land upright, and continue in the same direction as you took off from.
- Come down one foot at a time so you can continue into a run afterwards.

- If the obstacle is a bit higher than you are comfortable vaulting you may find a need to tap the outside foot on the obstacle for balance and stability. As you improve and gain mastery of the vault you will then be able to remove the foot tap and clear the obstacle cleanly.

With slight variation this same technique can be used to vault obstacle's on an angle as well, usually referred to as a lazy vault.

PROGRESSION

Start with small, low obstacles.

Avoid the urge to place the hand on the obstacle before taking off; this isn't a progression as the body mechanics and use of momentum are completely different.

Practice both sides, at a faster pace, eventually a sprint and practice at different angles.

PASSEMENT – LAZY VAULT

PURPOSE

To overcome obstacles that you approach at an angle.

METHOD

The base technique is the same as a direct or straight passement. Vault by kicking up the outside leg and tucking the inside leg. The difference when progressing to this vault is that you swap your hands as you pass over the obstacle. If vaulting from the right side of the body, your right hand initially makes contact with the obstacle and changes to your left as you pass over it.

The advantage of kicking up the outside leg as opposed to the inside leg for this vault is greater control. The hips end up pointing in the direction you wish to go, rather than the opposite direction of your trajectory. You can guide your body's direction with your hips, so having them pointing in your direction of travel is beneficial.

In this example we are vaulting to the right. Change instructions to suit if coming from the left.

> As you approach the obstacle jump from the right foot, kick the left foot up and across the obstacle, reach for the top of the obstacle with the right hand.

> As you start to get up and over the obstacle tuck the right leg under the body to avoid it clipping the obstacle.

> As you pass over the obstacle you need to level the hips out. Bring the backside parallel to the ground, as you do this the left hand will naturally drop down on to the obstacle, allowing you to control your exit on the other side.

> As you exit the obstacle land on one leg and run out of the vault.

Many people have a natural tendency to kick up the inside leg rather than the outside leg when attempting this vault. This is not 'incorrect', but through experimentation we have found the outside leg technique to allow more control and height to be gained from the vault in the long term. Try and learn both as they can both be applied in different situations.

PROGRESSION

Adding height and speed to the vault. Trying the vault on different surfaces; slippery and rough. Vault rails.

PASSEMENT – DASH VAULT

PURPOSE

The Dash Vault is used to quickly pass over medium sized obstacles. It is usually applied to obstacles when approaching them front on.

METHOD

The vault commonly referred to as the Dash is another vault that uses the direct passement technique with minor variation.

The difference is in how you exit the vault, starting it off as a normal passement then bringing the second hand down to land on the obstacle to assist with balance and finally bringing the feet around to land facing in the direction of travel. There is a distinct advantage of approaching the dash in this manner in the alternated placement of the hands ie. one hand placed on the obstacle before the other, as opposed to both at the same time. The advantage being that you have a split second to test the surface before committing full body weight to it. This is especially important when there is any possibility of the surface moving because it provides time for the body to react to unforeseen movement in the obstacle surface or slipping of the hand.

The other method of leaping over the wall and committing the whole body weight to both hands at the same time can be attempted if you wish, but be aware that the odds of saving yourself if something goes wrong are reduced. Secondly when many people attempt the two hands at the same technique they have a tendency to land on the hands heavily, which is not good for the wrists. The choice is yours as to what technique you go with. If nothing else, this technique is a good way to build up to doing the two handed variation.

> The approach to this vault is the same as the direct passement. All the same things should be kept in mind, do not ride the obstacle at take off! That comes a little later.

> The difference between the direct passement and the dash being that as you start to pass over the obstacle you need to bring your backside parallel to the ground, this will allow you to reach down and place the trailing hand on the obstacle.

> You can push off with your hands if you wish, or just ride the obstacle

> Land and continue running.

Initially you may feel the need to do a foot tap for stability, much like the Direct passement. But as you gain confidence you should be able to remove this from the technique.

PROGRESSION

Height, speed and different surfaces can be attempted.

PRECISION JUMP

PURPOSE

To jump from one point to another safely.

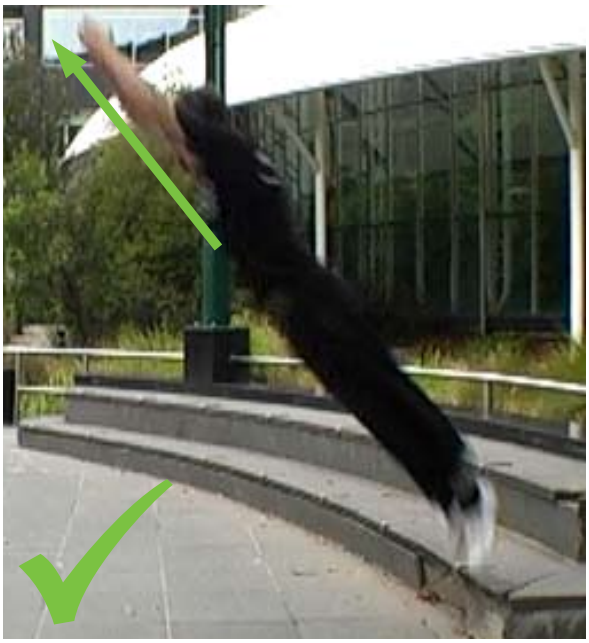
METHOD

Precision jumps are standing jumps from a stationary position used to 'jump from' and 'jump to' a finite point with control and balance.

- Start with feet together on the edge of your take off point.
- As you prepare to jump, you bring yourself own to a semi crouch.
- Your arms move behind you and your weight is shifted to the balls of the feet.

- Lean forward as you start to drive explosively with the legs. The degree to which you will lean forward will be determined by the length of the jump, the greater the distance the greater the lean will need to be.

- As you jump throw your arms forwards and upwards.
- When using the arms be aware of where the energy from the feet is going.
- The energy should travel up the legs, through the torso and into the hands.

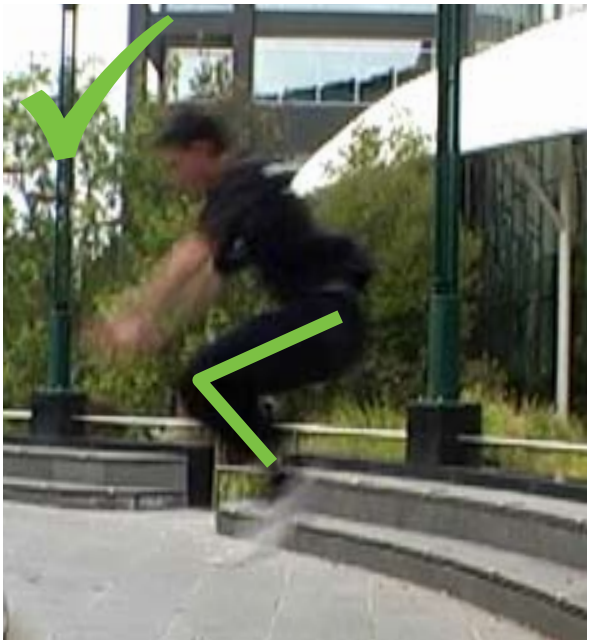


- Many people stop the energy at their shoulders. This reduces the distance that you can jump!
- Make sure you throw your hands up and allow the energy from the jump to travel upwards. Otherwise the distance you can jump is reduced.

- You don't want to be jumping straight at the object. Instead attempt to arc up and then come down on to the landing area. This helps control the landing. By doing this the energy from your landing is directed into the object rather than across it. When the energy is directed across the top of the object the likelihood of a slip is greatly increased.

> After your feet have left the take off point bring the heels to the backside.

> From that point bring the knees forward and push the feet towards the landing point.



- Some people have the habit of keeping their legs straight when they jump, this reduces the distance and control you have.
- Try not to jump with straight or stiff legs.
- Mastering the ability to move the legs dynamically through the jump will increase control and jump distance.

- Maintain balance as you come into land. Remember try to land on the target, don't jump so the energy travels across it.

> As you make contact with the destination you want to land on the balls of your feet, the reason for this being that if you happen to slip across the landing surface you can drop your heel and avoid further slippage and possible falls.

> Landing as demonstrated in the photo opposite can increase the chances of an accident.

Make sure landings are quiet, as this demonstrates control. It also ensures that the shock is being absorbed through the muscles, rather than placing undue strain on the joints.

When training to jump onto a higher landing point consider your shins! Many people overconfident of their abilities have scraped off skin from the shins because they couldn't quite make the distance!

PROGRESSION

- Start on objects very low to the ground so if you fall the risks are minimised.
- Vary surfaces whether through grip, shape, width, landing area, etc.
- Vary distances and heights, practice jumping up onto obstacles and down onto them.
- Vary angles; the object you're jumping onto doesn't always need to be directly in front or parallel.
- Start running jumps. Pay attention to landings as you won't always need to land on the edge of the obstacle now.

SAUT DE BRAS – ARM JUMP

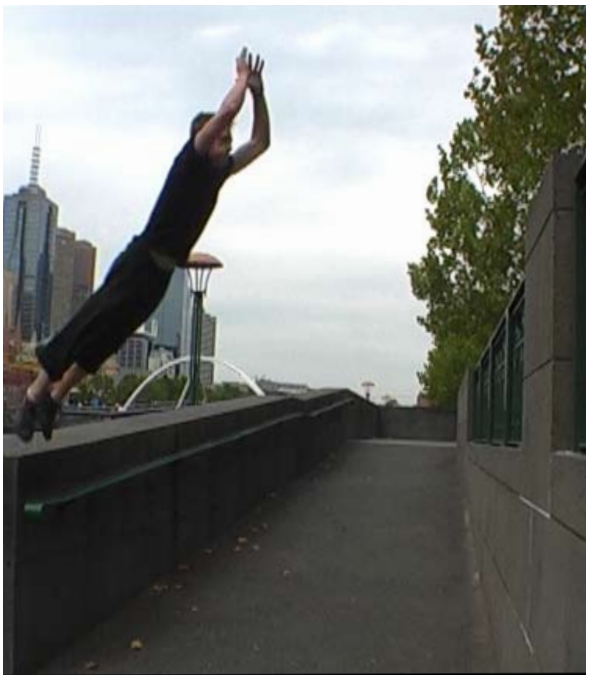
PURPOSE

The arm jump is a technique used when the distance/height between the take off point and the intended destination is too far to simply jump onto. They can be performed from standing start or a running jump, onto walls that are level with the take off point or higher.

METHOD

Can be performed running or standing, for this demonstration it will be performed standing.

> Begin by positioning yourself on the edge of the take off point and perform a standing jump towards the obstacle (see precision jumps for correct standing jump demonstration).



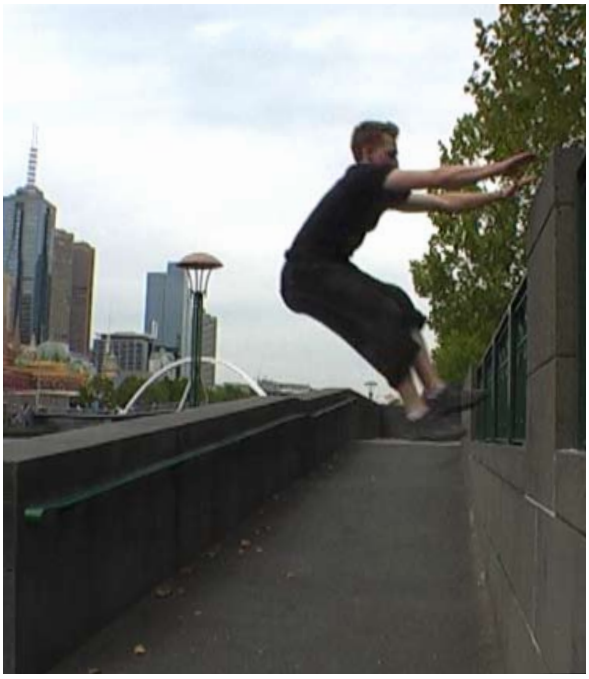
> As with Precision jumps you need to correct your posture in the air so as to affect a safe landing.

> Bring the knees forward and start to prepare to bring the feet forward of the body.

> Your arms should be positioned in front of you prepared to grip the lip of the wall.

- The legs should ideally be in a forward position, leading the body and making first contact with the wall. Though this can be dependant upon the distance you need to cover. Shorter distances tend to have you making contact with hands and feet simultaneously.

  However on longer jumps your legs should contact with the wall first, as they are the most effective limbs for absorbing impact in this movement.



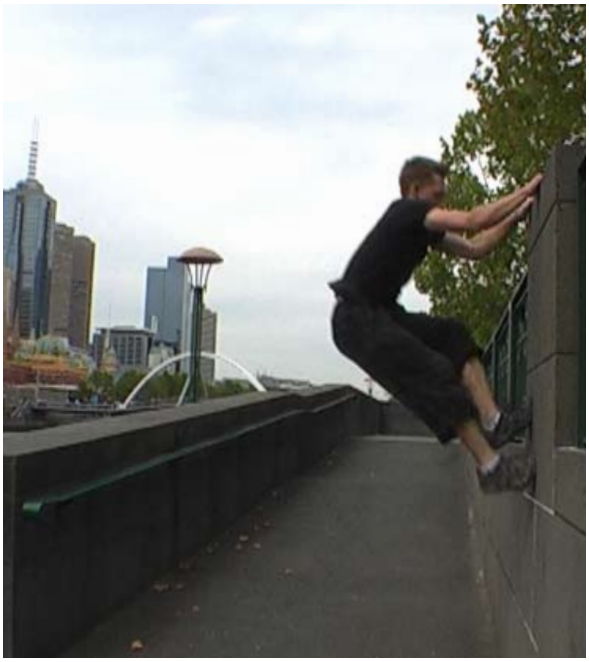
- As your fingers grip the lip of the wall, you feet may either stick to the wall or slide.

  This is usually dependant on the surface you are jumping onto and the angle you jump onto the wall.

- Depending on the specifics of the arm jump slides can vary between a few centimetres to a full extension of the body and arms.

- Try and use the arms and any friction from the feet sliding to slow and control your descent.

- Slides are not a sign of poor technique, with practice you will start to understand when they are appropriate to use.

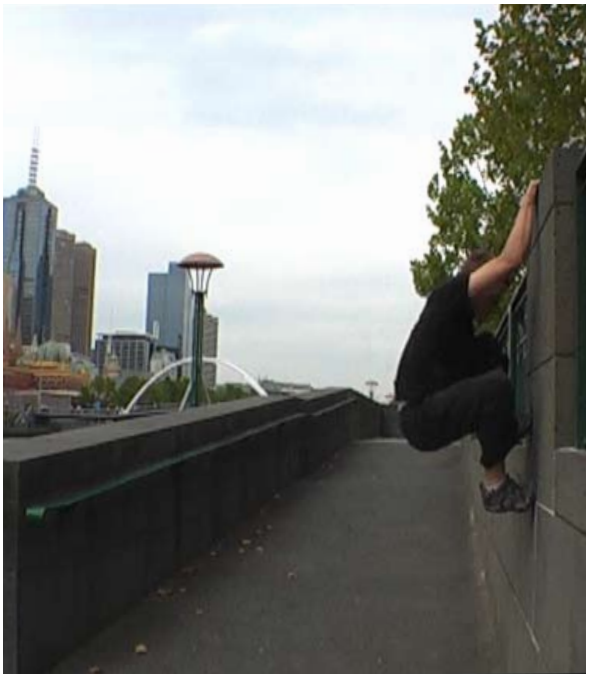


Be wary of landing with the feet too high on the wall. Landing with the feet very close to the hands tends to compress the body tightly, leading to you falling off the wall.

When jumping to the wall also make sure that you arc into the landing as you do with a precision jump. Failing to do so usually leads to increased impact on the ankles and possible injuries.

As you can see from the picture above, the feet are landing split apart. When you land like this it helps absorb impact more effectively and lets you slide more easily if your feet end up landing high. By sliding you reduce the chance of falling because you do not end up compressing the body so much that it rebounds off the wall

- When the feet do stick and there is no slide avoid knocking your knees into the wall by hanging from your arms. Trying to cling close to the wall will result in you knocking your knees.
- Landing with split feet or feet together is personal preference, some people feel safer lading with split feet as demonstrated in the picture.



- When landing also be aware of how you knees track. Try and keep them in front of the body. Avoid twisting them to the side. On larger jumps this can cause damage to the body and the larger impacts run the risk of hurting you if the body isn't well aligned for a landing.

After you've successfully performed the arm jump perform a climb up and continue on your way (see climb ups).

PROGRESSION

Initially train with no gap, find flat ground with a wall in front and arm jump from the flat to the wall, increase the distance until you're comfortable with the technique.

Practice both standing and running arm jumps. Also practice running arm jumps taking off your on your 'other' foot as well as your favoured foot. Practice on all angles and surfaces, these can greatly alter the technique. Land with the use of only one arm, try and climb up with just one arm. Try arm jumps that have a take of point that is level with the grip point on the other side.

PASSE MURAILLE – WALL RUN / POP VAULT

PURPOSE

Used to overcome obstacles that are too high to simply vault. There are many variations that all use the same basic method to get the initial height and momentum.

METHOD

- Approach the obstacle at a pace comfortable to you and gauge which foot is going to hit the wall (in this demonstration the right). Try and avoid favouring a foot.
- When approximately one stride away from the wall raise your right leg up and prepare to jump off the left.
- The point at which you contact the wall is important. Too high or low and you will not get optimum height from the technique.
- As a general rule you should contact the wall with your foot the same distance up the wall as the distance your take off foot is away from the wall.

- Landing the foot on the wall too low can lead to your foot slipping and your chest and face slapping into the wall. This is usually caused by either taking off too close to the wall, or too far away.

  Aiming too low on the wall is a common mistake made by beginners.

- Aiming too high on the wall reduces the ability of your legs to generate power and propel you up the wall.

  As with most things, experimentation will reveal to you the optimum point to aim for on the wall.

- For some people attempting higher walls it is usually beneficial to not even worry about trying to grip the top of the wall.
- Start at a slower pace and slowly build it up, rather than trying to sprint at the wall.
- Rather than trying to grab the wall just push upwards and get a feel for the height you can get, maintain body control while doing this, don't use so much power that you cannot perform a controlled landing.
- You don't have to keep the hands by the side as the picture demonstrates, you can raise them towards the target if you wish.

- This initial push from the foot will gain the majority (if not all) of your upward momentum. It is therefore important that the foot strikes the wall correctly.
- Attempt to get the ball of the foot on the wall.
- After the initial push, depending on the obstacle and your own skill/preference, you may be able to get one or two subsequent steps on the wall that can increase your height.

- Avoid hitting the wall with just the toes.
- When the first foot hits the wall take note of how much sound it makes. If you are hearing a loud thump it usually indicates that all of your energy is being directed into the wall, rather than being used to propel you up the wall. If you do not hear much sound at all it is a good indication that you are taking your energy and directing it to push you up the wall.

What you are attempting to accomplish with the Passé Muraille is using the energy you generated running at the wall and redirecting it up the wall.

Dependant upon the height of the wall you will now either be in the full hang Saut de Bras or various Saut de Bras positions. Try to avoid pausing in any positions or getting your body up a wall and dropping back into the Saut de Bras position to reset. Keep going over the wall as quickly as you can.

Perform a Climb Up and continue on your way (see Climb Ups)

On obstacles that are slightly too big to vault, you can use the Passé Muraille to gain height and then simply vault over.

PROGRESSION

Practice on a high flat wall and just try tapping it as high as you can, trying to beat the height reached each time.

Try the technique on all different surfaces and shaped obstacles.

When doing Passe Murialle try doing all sorts of vaults when you get to the top of the obstacle: Saut du Chat, Passement, Demi Tour, etc

SAUT DE CHAT – CAT PASS

PURPOSE

The purpose of the Saut de chat is to overcome high and long obstacles. It is also very useful when tired, or attempting to precision or Saut de Bras onto another obstacle immediately after the Saut de Chat.

METHOD

The first aspect of the technique is the split foot takeoff. It is very important that you learn to use this technique early on as many people stick to the double foot, punch jump take off. While the punch jump becomes more useful on higher obstacles it can be downright dangerous when used on lower obstacle as the mechanics of the movement point your head at the ground when vaulting. If anything goes wrong your body usually travels where the head points, in this case, the ground.

The first thing to do is find an obstacle. The height of the obstacle you choose will be dependent on what you feel confident with. Many people start off with walls as low as their knee height. While this isn't practical in a 'real' situation it is sometimes necessary to start like this so as to learn some specifics of technique that will assist you as you start to apply the technique in more practical heights.

A flat wall that goes up to your knee height will be suitable.

For some people you will not need a small wall, a larger one will be fine. Regardless of what size wall you are capable of vaulting try and focus on learning the split foot take off.

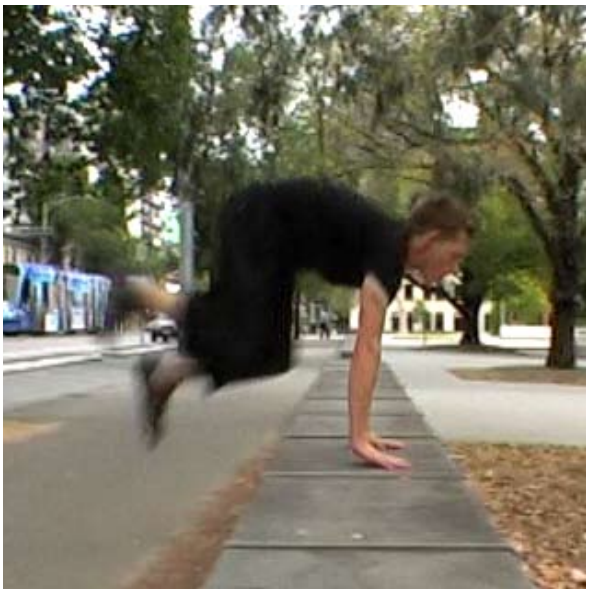
If you can find one, a wall with grass on either side can help a lot (grass is soft, so if you need to fall / roll over it will not hurt.)

One of the main things to consider while learning this is that eventually you want to have the capability to do this at your full running speed.

Initially you should attempt this at walking pace, then slowly build up the speed.

- With this in mind, take a few steps back from the obstacle and stand facing it.
- Take large strides, towards the obstacle, as if you were running at the obstacle.
- At this point you shouldn't be jumping over the obstacle. You are just getting a feel for the approach to it.
- Another thing to remember is do not get into the habit of using one foot over the other (a favored foot) if you start favoring a foot now it will cause you to lose speed and the will make you unable to do certain movements later on.

SAUT DE CHAT – CAT PASS

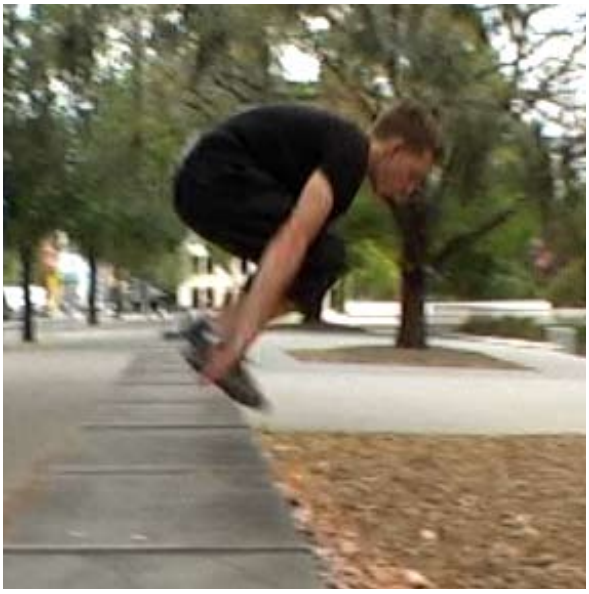


- After you have paced at the obstacle a few times on each foot, start placing your hands on it, without jumping over the obstacle.
- When placing the hands, don't just reach forward, swing the arms back then forward onto the obstacle in rhythm with your approach to the obstacle
- With long strides (as if running) pace up to the obstacle. This time when you get to the obstacle, place your hands on the end of it. As you can see in the pictures, your back legs will have to lift up.
- Remember, putting your hands towards the end of the obstacle means there is very little chance of clipping your feet when you bring your feet through.
- Practice doing this a few times on each foot.

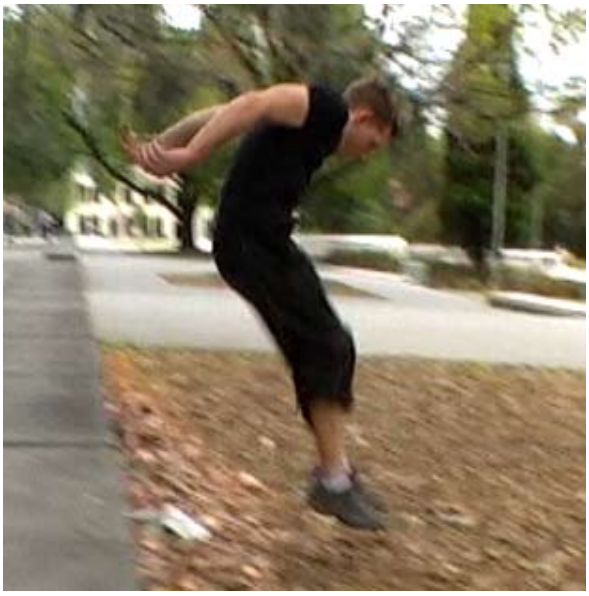
- Once you have the confidence to jump up start to land on the obstacle.

  Do this enough so as you become confident that your feet will not clip the edges.

- Once you feel confident that there will not be any clippage of the feet start to vault over the obstacle without landing on it.
- Keep the knees tucked to the chest as you pass over the obstacle.
- Notice how the hands leave the obstacle and are not planted on the obstacle the whole time. This allows you to avoid clipping the toes.
- When placing the hands on the obstacle pay attention to the sounds that you make, try to avoid 'slapping' the hands down, you need to almost grasp the obstacle and throw it underneath yourself, as opposed to just slapping it with your palms.



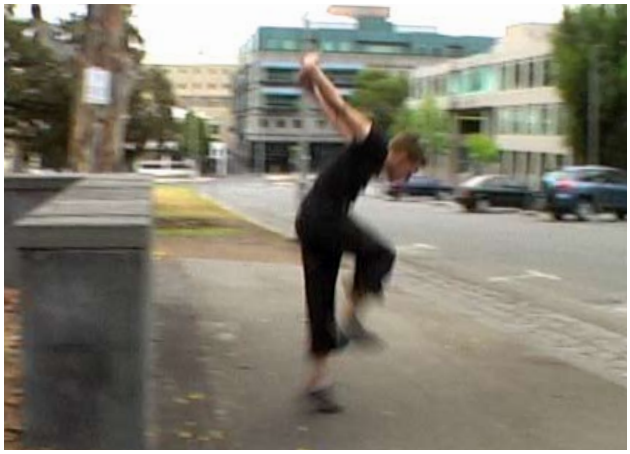
- Extend the legs for landing on the other side.



> The next series of photos depict the saut de chat being done on a higher wall at greater speed.





PROGRESSION

Add height, length or speed to the equation as you gain confidence. Try to do it on different surfaces, over rails, rocks, walls.

DEMI TOUR – TURN VAULT

PURPOSE

A turn vault is used to place yourself on the opposite side of a wall, rail or barrier, allowing you to stop on that side if necessary. This allows you to check the other side if you're not sure what's there rather than blindly vaulting. It also allows you to put yourself in a better position if necessary or simply climb down

METHOD

To begin with it is usually preferable to learn the technique from a standing start and on a rail. Find a rail at the right height for you and at a comfortable drop on the other side (no drop is fine).

For the purposed of this explanation the vault will be over the right side, reverse the information if vaulting over the left.

> With your left hand, grasp the rail with palm facing upwards and your right hand with palm facing down.

> Step over the rail with your right leg. Depending on the height of the rails it may be easy to step over it. If the rail is high, you will need to initially hook the leg over it

> Move the hips to the opposite side of the rail. As you do this you will straddle the rail, try and keep the backside off the rail and support yourself with your hands.

> Place the right foot on the other side of the rail, once you have done this take the right hand and switch it to the other side of the left hand. The left hand should have never moved during the technique. When you start to add speed to this technique make sure to switch the hands quickly to maintain control of the movement.

> Once you have gained confidence with this version of the technique begin to speed it up.

> Take notice of the end position in the first photo here. This is the position you want to land in. Many people have a habit of hanging off the rail in the arm jump position. As in the second photo. This can be dangerous. If you vault the rail with too much momentum you run the risk of falling off. When landing in the first position if there are any slips then your centre of balance is over the rail, meaning that if you slip you can fold over the rail.

> You can now do any number of different things from the turn vault position, climb down, drop down, go back over etc.

PROGRESSION

Start on a rail on flat ground trying to learn the technique and body mechanics. When comfortable find a rail with a drop and start by performing the turn vault from the drop side to the flat side, then the other way around when confident. Practice both sides so of the body so as there's no preferred way. Eventually practice entering at a run and then from all different angles. Practice on all surfaces, round rails, square and thin and thick walls, etc.

PURPOSE

Used for passing through obstacles where there is a gap between the bar and ground or between two or more rails.

METHOD

There are two main variants of the Underbar, ‘Straight’ and ‘Reverse’.

STRAIGHT UNDERBAR

Ideally try and find a bar that has a small drop on one side. You can approach the bar from either side.

> As you approach the bar you step off one foot while launching the other through the space you wish to send your body through.

> The take off foot is brought up to the same place as the launched leg.

> Reach forward for the bar with the hands. At this point you should almost look like you are sitting straight legged in the air, reaching for the bar.

> As you grasp the bar immediately begin to pull yourself through the gap.

> As you pull through: lay back so the upper torso and head can pass through the gap without hitting the bar.

> Direct the legs upwards to allow your back side to clear the bottom of the obstacle.

> Once the body is clear of the obstacle, release the hands and run off.

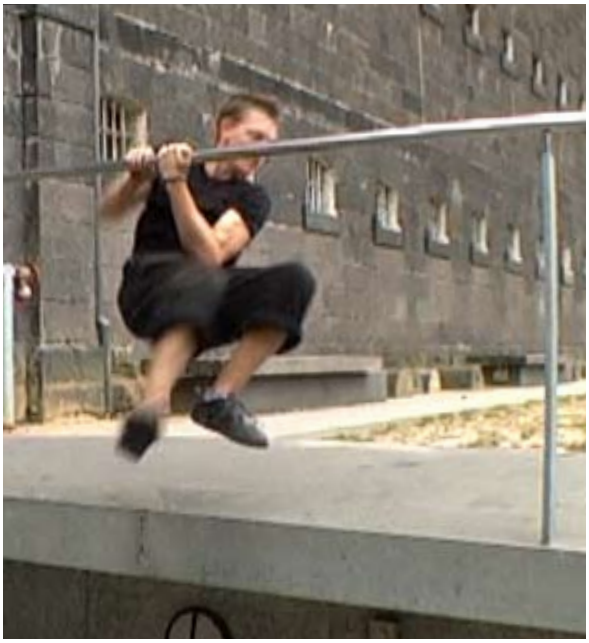
Depending on the obstacle your feet may contact the ground before you release the hands, sometimes you may get some free fall, either way is ok. Experimentation will reveal which obstacles will require different techniques.

REVERSE UNDERBAR

In this variation you approach the gap head first. Find an area where there is a small drop on the other side of the rail.

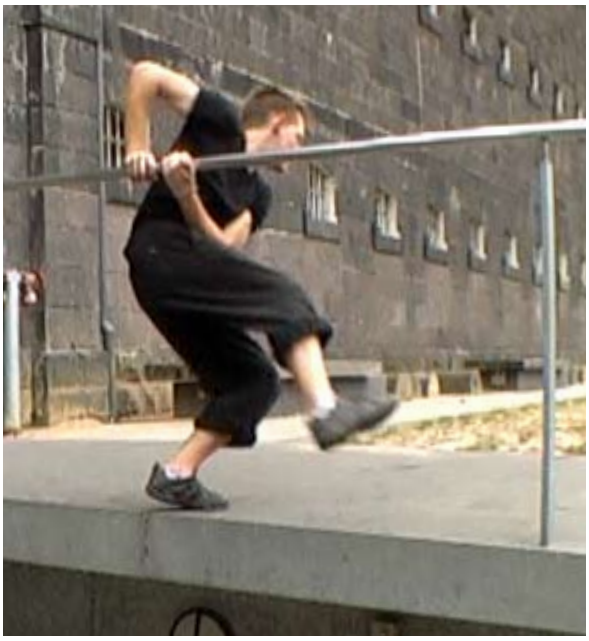
- Approach the rail from the side with the drop, reach forward for the bar.
- If you reach the obstacle with the right foot leading, cross arms, with the Right underneath the left. Right hand palm facing towards you, left hand palm facing away. Or vice versa if the left food leads.

- Pull yourself upwards through the gap. Pull your chest towards the bar as you do so your body will unwind, leaving you facing the way you came from.

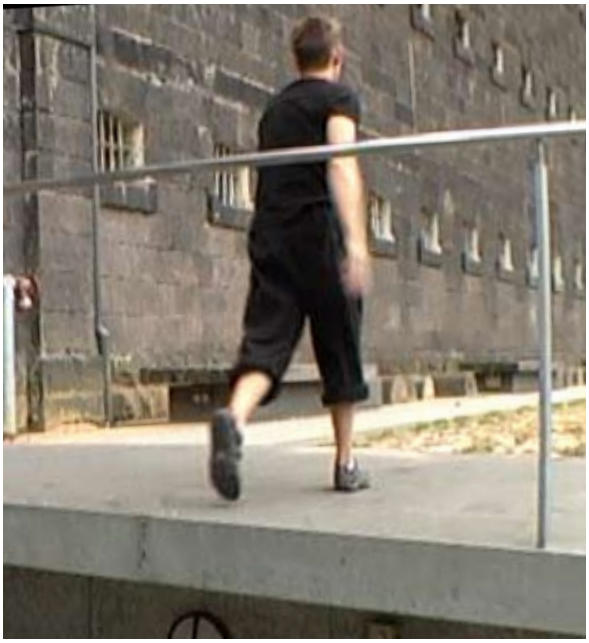


> As you reach this point drive the right knee up and around the body so as you continue to twist around, place the left foot on the ground and release the left hand, this will place the body in a position to continue travelling in the correct direction.

> Take note of the right arm in this picture. ` It is raised like that to give support when pulling the body up and around.



> As your body comes around to face the correct direction release the trailing hand and run.



PROGRESSION

Some methods of building up to the Franchissement between two rails are:

Start with just putting your feet on the bottom rail first then pulling yourself through rather than going straight through. Then try to get your feet through until you are sitting on it. This gets your body familiar with the position it has to be in. From there onwards it's just about committing to the obstacle.

A few other things you could try until you get your confidence up are entering at an angle, this gives more clearance for your legs to go through more sideways. Also start with wider and lower rails.

Another handy trick that you could use is the Duct tape/Occy strap method; find a bar roughly about head height with little or nothing underneath it (gymnastics bars are ideal). Use a line of duct tape or similar to simulate the bottom of the gap. Start with a big gap and get progressively smaller.

Train both sides for the reverse underbar.

Increase speed.

Decrease gap sizes.

Increase height up to the underbar.

PURPOSE

Often used to gain height by jumping from one wall to another, to clear objects and to allow quick redirection of momentum.

METHOD

Find two walls close together or a wall that has an obstacle next to it that you can vault.

> Approach the wall at a controlled pace on an angle of approximately 30 – 60°, choose a point you want to jump for and place your foot. The higher you the foot placement you choose the more lift and distance you will achieve.

> It will take some experimentation to find the optimal foot placement height for your body and ability level. Too high and you will not get very much lift, too low and you will not get much distance.

> From here it is important to propel yourself up with the jump off the wall.

- A common habit people fall unto is that of redirecting themselves directly at their target. This increases the impact/force you will hit with. Notice how the trajectory is lower in the picture opposite.
- Try not to jump directly at the target, you need to try and arc onto the target. Much the same as precision or Saut de bras.

- In this example the trajectory is higher because the head is pointing in the direction you wish the body to go and the drive from the leg off the wall is stronger as there is greater commitment to the movement.
- Make sure to point the chest and shoulder at the target you are aiming for, this allows for a clean landing.

> Another common fault is that of 'spanning'. This involves the individual getting their hands on the opposite wall before their feet have even left the first wall.

By giving yourself some lift with your Tic Tac you allow for a better landing and more time to prepare and adjust for the obstacle should you need it.

PROGRESSION

Train both sides of the body, there should be no 'bad side'. As you get more confident try and push up the height and distance of your Tic Tacs. Practice on different surfaces. Do not isolate your training to just 'nice' surfaces. Learn to adapt to all types of surface.