What is Dynamic Tape®?

Dynamic Tape is a revolution in biomechanical taping. It is designed to:

Manage load. Manage movement patterns. Manage function.

The aims and therefore the properties of the tape are completely different to kinesiology tapes and rigid athletic tapes. Very strong elastic resistance and recoil combined with 200% stretch and 4-way stretch allow taping in a way that can resist and decelerate, store energy and then assist motion without limiting range of movement essential for athletic performance or ADLs.

As illustrated below, Dynamic Tape is capable of generating 10-15kg of resistance through range with only a small amount of stretch on the tape. Kinesiology tapes only register significant resistance when they reach the rigid endpoint at maximum stretch. Originally developed to provide solutions in sports medicine, it is now becoming an essential tool for clinicians of all disciplines.



	Dynamic Tape	Kinesiology Tapes	Rigid Athletic Tapes
Material % Elongation Rigid end point Resistance and recoil Direction of stretch Application position Primary mode of action	Nylon/Lycra or Recycled PET/Lycra > 200% No Strong (double layer measuredat 10-15 kg) Longitudinal and transverse Shortened Mechanical - deceleration, load absorption and assistance of movement	Cotton or Lycra 140-180% Yes Weak Longitudinal only Lengthened (generally) Neurophysiological	Rayon/Cotton & may contain natural rubber latex Nil Yes Nil Nil Neutral/corrected/shortened Mechanical - restrictive
Secondary mode of action	Neurophysiological	Mechanical - resistive/restrictive with weak recoil and rigid end point	Neurophysiological

Fundamentals of Biomechanical Taping

Biomechanical Taping is based on sound clinical reasoning incorporating the large evidence base on the influence of load and kinematics on pathology, physiology, function and performance.

Vector summation dictates that if some of the required force can be contributed externally by the tape, the workload on the structures of the body must be reduced.

In order to achieve this the technique must satisfy three fundamental criteria:

- 1. Cross a joint or joints
- 2. Be applied with the joint or musculotendinous unit in the shortened position
- 3. Have good purchase on the lever that is to be influenced

<u>Watch This Video:</u>
"A Biomechanical Way
of Thinking"

If we do not extend our tape over a joint we cannot mechanically affect motion at that joint. If we apply the tape with the joint or muscle on stretch it is like bungy jumping with a rope the same length as the jumper is high. There is no opportunity to stretch and to provide a deceleration force during lengthening and an assistance during the shortening stage. Applications often just move soft tissue around so particular techniques are employed to ensure that we have good hold of the lever and can genuinely influence motion of that lever. Emerging research is demonstrating the importance of these aspects in achieving changes in peak range, reductions in velocity, changes in position and in muscle activity.

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Fundamentals of Biomechanical Taping

Biomechanical Taping is based on sound clinical reasoning and thorough assessment incorporating the large evidence base on the influence of load and kinematics on pathology, physiology, function and performance.

Vector summation dictates that if some of the required force can be contributed externally by the tape, the workload on the structures of the body must be reduced and/or motion must be affected.

In order to achieve this the technique must satisfy three fundamental criteria

- 1. Cross a joint or joints
- 2. Be applied with the joint or musculotendinous unit in the shortened position
- 3. Obtain good purchase on the lever in order to genuinely impart a force

And the tape must have specific properties

- 1. Stretch a long way with no rigid end point (to allow application in the short position yet full range to be achieved)
- 2. Have very strong resistance and recoil properties
- 3. Stretch in all directions to more closely mimic muscle function and to permit full range
- 4. Have strong adhesive properties to stay in place despite large mechanical forces (correct application is essential here)

Dynamic Tape



To Watch a video on Quad Taping with Dynamic Tape

CLICK HERE

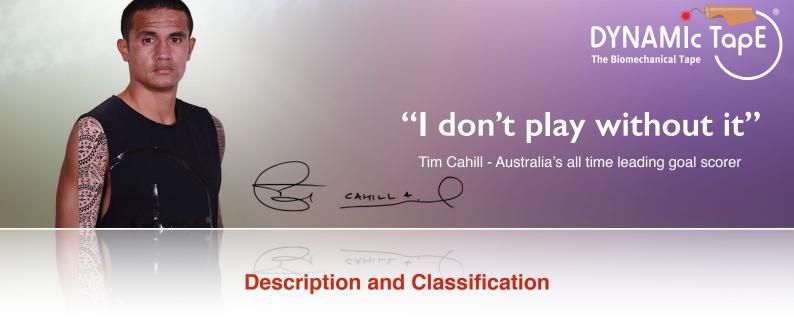
Kinesiology Tape



Uses the patella as a pulley and attaches will away from the joint to maximize leverage.

Provides a mechanical effect by resisting the knee collapsing into flexion thereby reducing load on the quadriceps mechanism

Creates convolutions in the tape to lift skin and create space, reduce pressure on painful structures and possibly have an effect on muscle activity via contact of the tape with the skin.



General Description:

DYNAMIC TAPE ® – A MULTI-TIERED APPROACH TO BIOMECHANICAL TAPING The "Original" Biomechanical Tape ®

Dynamic Tape is not a kinesiology or athletic tape. It is a Biomechanical Tape, an entirely new category of sports and therapeutic taping. These innovative, 4-way stretching tapes with strong elastic resistance and recoil of varying grades, absorb and inject force to reduce the workload on the body. The taping methodology aims to directly manage load, movement patterns and function. Dynamic Tape does all this with a soft, breathable tape that is of such high quality and strength that professional athletes around the world trust our product everyday. From rehabilitation to the World Cup, Dynamic Tape is changing the way we look at sports and therapeutic taping.

A Graded Approach:

Specific properties are required to obtain a mechanical effect and this may vary depending on the aim of the technique, the size of the client and the forces to be attenuated. Dynamic Tape comes in three grades with differing resistance and recoil attributes.

Dynamic Tape Original

Beige with Beige Tattoo - has strong elastic resistance and recoil suitable for biomechanical taping. Of course, it can also be laminated into a PowerBand to create very strong resistance and recoil when required.



Beige with Black Tattoo - generally exhibits stronger resistance and recoil properties. It has very good energy storage and release capacity which is enhanced as a PowerBand. This makes it ideal for musculotendinous applications like muscle tears and tendinopathies and also for large multi-joint applications.



Dynamic Tape Eco

Black with Grey Tattoo - has a higher elastic modulus so hits a much higher resistance much sooner in its range (i.e. with less stretch). This makes it ideal for applications where there is little movement but high resistance is desirable e.g. joint glides and ligaments. It also has slightly less recoil to allow for stabilising applications which enhance force closure but with less risk of compromising circulation and neural function.

