

DECONSTRUCTION

Sticky business

If you're into Spider Man (or Spider Pig) and you like muscles, you'll be right at home on the Bodywall. Chris Toal's invention consists of a special Velcro-like surface paired with a high-density carpet, to create a sticky wall that doubles as sports training equipment.

But it's not just for superheroes and the superfit. Toal, a fitness trainer and former massage therapist for Team New Zealand, came up with the idea in 1999 while dealing with patients with repetitive strain injury. "Because the body was in a protective state, there were limited things I could do to fix it," he says. "There had to be a way to release the muscles without twisting them."

Toal began to work on a prototype in his basement. After working on several climbing-type frames, he came up with the idea for Bodywall. He made a cardboard and stick model, showed it to Dr Patria Hume, AUT University's head of sport and recreation. Hume, he says, said "I think you might be onto something." From there, Toal experimented with different materials until he came up with the right combination—a wall that can hold more than 300 kilograms.

He's been working with local companies such as High Modulus to produce specifications for a frame light enough to be transported easily, but strong enough to withstand an All Black tackle. The result is a high-strength frame made from material used in superyachts. The next step was designing accessories for various sporting codes. After experimenting with everything from gardening gloves with Velcro stuck on them to a tennis racket on a rope, Toal teamed up with the 3D design department at Massey University to perfect the details. "The final product might look simple, but it's taken hundreds of hours and thousands of dollars to get it right."

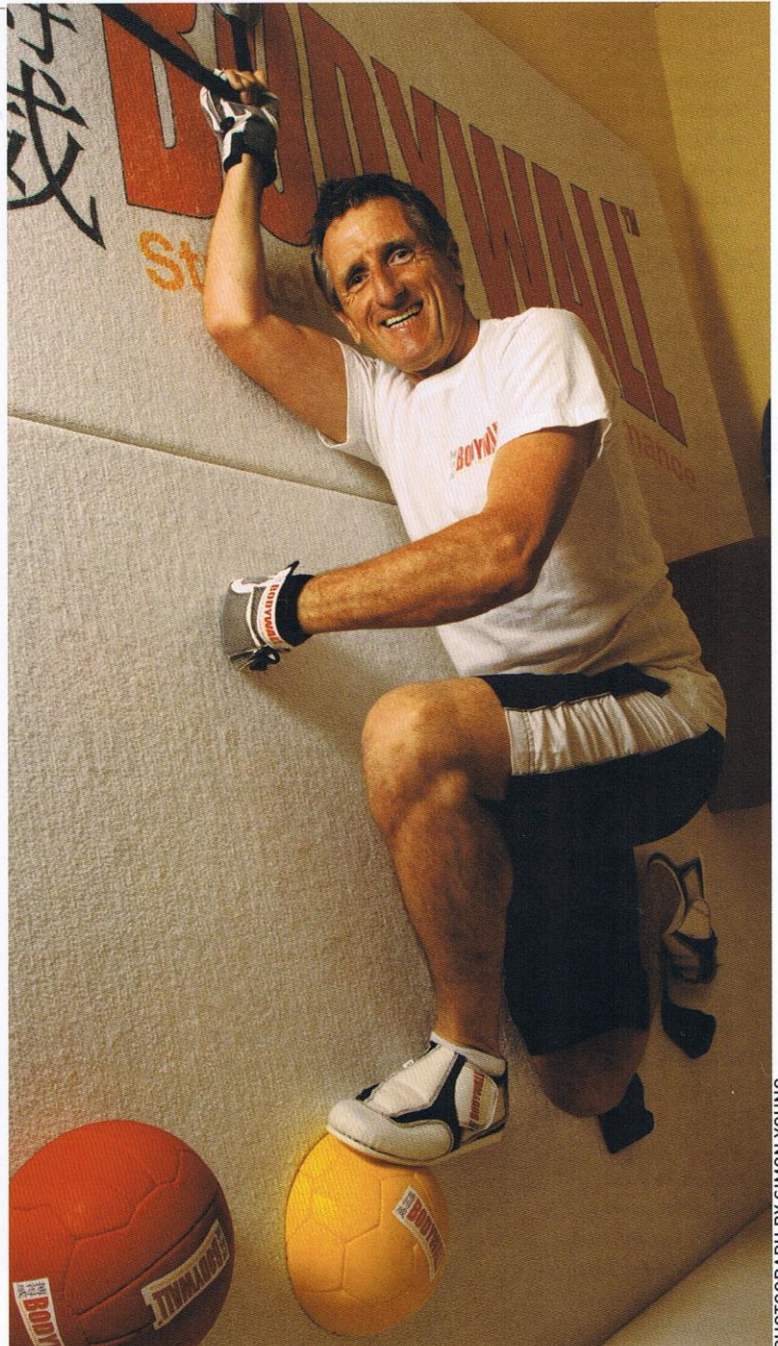
Now, of course, he has to sell it. Toal has patented the Bodywall in 109 countries, including branding it in both Chinese and English for the Asian market. A host of high-profile Kiwis from the All Blacks to opera singers are currently training on the wall, but the plan for 2008 is to work on corporate branding and franchising. There are around 400 fitness clubs in New Zealand and, says Toal, if companies emblazon their logos and slogans on the wall there's potential for the equipment to branch into areas other than gyms—ads can even be printed at billboard size and used to promote sporting events or products.

The goal is to have 1,000 Bodywall sites operating within five years, and Toal says he's talking to large retailers in the US and Europe.

After all, it's more than just a gym kit. "It's not just about fitness, it's also a rehab tool," Toal says. And a brand opportunity, too.

— Lauren Bartlett

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PHOTOGRAPH BY SIMON YOUNG

PADDLES—used to train for sports as diverse as golf and weightlifting. Kiwi sailmakers Doyle Sails made the paddles especially for Bodywall, using carbon fibre and resin with a coating of Dual Lock

GLOVES—mesh pasted with Dual Lock tape and Amara synthetic leather, designed for breathability and performance without shrinkage, with cotton mesh between the finger and wrist strap

CARPET—high-density Cavalier Bremworth nylon carpet designed specifically for the Bodywall. It interlocks with the Dual Lock to increase engagement security and loading potentials. It also allows for rapid release and disengagement required for safety reasons once lateral pressure is removed

ROPE—sail halyard capable of bearing an eight-tonne load

BRAND PLACEMENT—Toal plans to market the wall as an advertising medium

WALL—the wall and floor are set at a five-degree angle from vertical and horizontal. The 65-kilogram base is lightweight plywood reinforce with a Nida-Core honeycomb polymer, normally used in racing and superyachts. The frame is held together with Dual Lock

SHOES—made with flexible neoprene to allow all the surfaces covered with Dual Lock to connect to the wall. Machine stitched upper with a hand-worked sole

BALL—Polymer Developments-patented ball made from modified, self-skinning polyurethane foam and Dual Lock

3M DUAL LOCK—a special 'Velcro-like' material made from polypropylene. The surface resembles thousands of microscopic, mushroom-shaped nodes that interlock with specific surfaces—in this case, high-density carpet

