

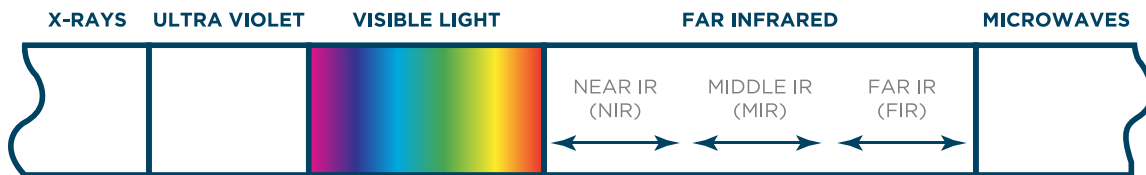


THERMOTEX

COMPANY TECHNOLOGY

Thermotex specializes in patented processes for the creation and application of therapeutic far infrared light waves. The company's vision is to produce products that enhance quality of life by helping users cope with pain and inflammation on an ongoing, day-to-day basis, noninvasively.

The company's products are based on the use of far infrared light waves that were discovered in the 1800s. This was the first experiment to show that heat could be transferred by an invisible form of light, now known as infrared light.



The energy produced by Thermotex Therapy Systems is radiant and studies show that this energy in the form of heat is absorbed in the body at depths of 2.36 inches after just 20 minutes. This results in a rising of local body temperature, which promotes increased blood flow through vasodilatation. The increased blood flow assists in the reduction of inflammation and delivers an analgesic effect, resulting in pain relief.

Thermotex products produce a peak wavelength of 9.37 ± 0.03 microns (Q) as validated at the Astrophysics lab at the University of Lethbridge in Alberta, Canada.

By way of independent third party assays, three important factors have become rank when determining the effectiveness of a FAR infrared unit. They are: the length of the wavelength being emitted, the operating temperature of the unit and the percentage of wavelengths being radiated, known as emissivity.

Optimal Requirements:

- 1) Wavelength that pivots at 9.4 microns (Peak Emission Wavelength)
- 2) An operating temperature (Black Body Temperature), that is as close to the human body temperature as possible
- 3) 100% emissivity

Independent evaluation completed at the Astronomical Instrumentation Laboratory, University of Lethbridge concluded the following for the Thermotex Platinum Pad:

- 1) Peak Emission Wavelength- $9.37 \pm$
- 2) Operating temperature of $36^{\circ}\text{C} \pm 1$
- 3) Emissivity- 0.99 ± 0.05

Conclusively, Thermotex Platinum was proven to meet the criteria ascertained through independent assessment for optimal performance and results.

Recently published Chronic Low Back Pain Study: Far infrared wavelength treatment for low back pain: Evaluation of a non-invasive device.
Authors: Dr. F. Ervolino, Dr. R. Gazze
Publication: WORK: A Journal of Prevention, Assessment and Rehabilitation.
Year Published: 2015

Background:

Chronic pain is very common and more often than not, underdiagnosed. Chronic pain and its inherent psychological belongings have the potential to negatively affect one's quality of life and if we think about it, the psychosomatic effects of this continuous pain can actually outlast the chronic pain itself. For example, mismanagement of chronic pain may lead to less sleep, exhaustion, increased stress, anxiety, social withdrawal and depression.

In a recently published study, Thermotex measured not only the physical aspects of chronic pain and the improvements seen using FIR therapy, but examined the emotional and mental facets as well.

Forty-five patients experiencing chronic low back pain for at least 6 months and who had sought medical advice on their condition were entered as participants in order to evaluate the efficacy of the Thermotex Platinum Pad, a registered medical device with Health Canada and the US Food and Drug Administration.

Assessment:

Patients were asked to complete a SF36v2 Health Survey to measure functional health and well-being from the patient's point of view. It is a practical, reliable and valid measure of physical and mental health states before and after treatment.

The survey is meaningful to patients, clinicians, researchers and administrators across the health care spectrum and has various applications. These include:

- 1) Measuring health improvement or decline
- 2) Predicting medical expenses
- 3) Assessing treatment effectiveness
- 4) Comparing disease burden across populations

Usage: applying to treated area (lower back) for a minimum of once per day for a minimum of 45 minutes. Patients were allowed to use multiple times per day. Duration of the study was 4 weeks.

Parameters Measured: Physical functioning, physical role, bodily pain, general health, vitality, social functioning, emotional impacts/role, mental health and summarized as two sub-scales: Mental Component Summary and Physical Component Summary.

Results:

Norm Based Score for General Health: study respondents viewed their overall health as being improved after 4 weeks of therapy

Norm Based Score for Physical Functioning: At the start of the study participants were more than four points below the national mean for the U.S. population but by the end of the study was slightly above it, improvement of nearly 5 points. This scale score represents one of the most dramatic results of the study because it indicates that an injured individual could treat themselves at work or home at minimal cost and get relief comparable to or better than other forms of longer, more expensive, potentially invasive treatment modalities.

Norm Based Score for Role Physical: After 4 weeks of therapy, index rose to over 6 points with patients ranking above the National Mean

Norm Based Role for Bodily Pain: After 4 weeks of therapy, patients progressed to just below the national mean. Significant finding due to the test group having far greater pain profile than the average person prior to therapy. Patients experienced a jump of 7 points from baseline.

Norm Based Score for Vitality: Baseline was nearly 3 points below the national mean and after 4 weeks of therapy, patients rose by 7 points and finished higher than the national mean

Norm Based score for Social Functioning: Participants jumped 4 points from baseline- 2 points below the national mean to 2 points above the national mean after 4 weeks. The effectiveness of pain reduction enables the patients to re-enter their social lives

Norm Based Score for Mental Health: Patients jumped nearly 6 points. Registered just below the national mean and ending up 5 points above the national mean.

Norm Based Score for Emotional State: At baseline, patients were recorded just below the national mean and after 4 weeks, rose to almost 3 points above the national mean. The results indicate that once pain was improved, mental outlook improved and so did the motivation to return to or increase daily activities.

Physical Component Summary: Patients were well below the mean score for the US population, indicating an inability to perform physical activities as they relate to work and/or daily activities. The patients jumped nearly 8 points after 4 weeks of therapy to meet the median score for the US population, a significant finding indicating they were at the same level as the average person.

Mental Component Summary: Patients jumped nearly 5 points from baseline ending just the national mean.

Conclusion:

After 4 weeks of Thermotex FAR Infrared therapy, 45 people with chronic, refractory low back pain, experienced significant clinical improvements in measured pain (physical) and quality of life (social and mental health) parameters.

To view the complete study as published see [Clinical Trials & Studies on Thermotex Website](#)

The following is a list of just a few of the conditions our customers have told us they have successfully treated with their Thermotex products:

Osteoarthritis	Rheumatoid Arthritis	Bursitis
Tendonitis	Fibromyalgia	Back Problems
Carpal Tunnel Syndrome	Migraines	Sinus problems
Constipation	Crohn's Disease	Earaches
Golfers/Tennis elbow	Hemorrhoids	Hip Pain
Hypertension	Intestinal Cramps	Lactic Acid Build-up
Menstrual Cramps	Muscle Spasms	Plantar Fasciitis
Repetitive Strain injury	Rotator Cuff	Sciatica
Shoulder problems	Spastic Bowel	Sports Injuries
TMJ	Fallen Arches	Tension and Stress
Stem Cell replacement	Diabetic Neuropathy	Hammer Toes
Fallen Arches	Tension and Stress	Whiplash