



Executive Summary

Hottrok LLC, Newport News, VA



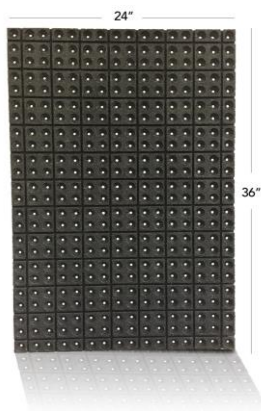
Mission Statement:

Hottrok is committed to providing the simplest, most efficient and user-friendly carrier systems for the radiant heating market, one piece at a time.

Adhering to these principals has driven us to create the simplest, yet most advanced, underlayment in the world. As trade professionals, we dedicate our efforts to providing the highest quality products so installers can enjoy their work and have confidence about suggesting the addition of radiant heating systems for the next project. We strive to help negate industry misconceptions and eliminate unnecessary, and pricey installation costs. By the simplification of the installation process, these heating systems will be more widely installed around the world contributing to a cleaner and greener environment.

Problem:

The global radiant heating industry's potential is crippled by unnecessarily high installation prices and exorbitant remediation costs. Considered to be the number one "upgrade" that most homeowners wish they opted for in hindsight, the under-floor radiant heating industry has a massive potential for growth. Scores of homeowners often desire radiant heating systems for their homes only to be thwarted by high installation quotes from contractors. Others are simply unable to actually find an installer confident enough to handle the work.



Hottrok will generate substantial growth of radiant floor heating because its design and construction eliminate the serious pitfalls and challenges that experienced tile setters know how to avoid. Our product will increase the market size and help standardize the industry resulting in lower installation costs, widespread use, happier tradesmen and global energy savings.

Product:

Hottrok is a substrate panel that readily receives electric (or hydronic) radiant heating systems into a flooring scenario . . . and has an insulating quality: an inclusive product with this unique combination of benefits is not currently available in the world market. To date, there are no tiling underlayments that



accept heating elements, are board-like (simple to install) and have insulating properties (thermal and audible). **Hottrok** will be the simplest and most efficient installation product to integrate radiant heating systems under tile. Due to its design and material of composition, it insulates the finished flooring surface from the subfloor, providing a vastly more efficient system in a way that is unparalleled in today's construction market. It has received "Light Commercial and Residential Use" credentials from the TCNA testing laboratory and is patent pending (Protected by US Patent law and the PCT [International patent treaty]). The usability of **Hottrok** is unsurpassed. It allows the tile setter to forego the costly and timely methods of all current and conventional setting techniques as it maintains a flat tiling surface allowing for an easier, quicker and more beautiful set.

Competition:

Hottrok is in a league of its own, as it is more of a substrate insulator that accepts heating elements. Therefore, we conclude that we have no competitors and feel this is a massive advantage and opportunity to collect as much market share as we can handle with a strong product launch. We do expect that tile industry companies will try to pirate our product idea as we gain traction, however we expect this to take them some time.

Currently, there are only two other methods of radiant heating installation: wire strapping and uncoupling membranes. The use of wire strapping was the first commonly used system. These strapping coils are usually included with electric heating cable kits to offer the tradesmen at least one basic option for installation. This is not a profitable product to market on its own, however, uncoupling membranes are quite lucrative. To date, there are about five uncoupling membrane brands on the market. All are extremely similar in design and construction, and as a result, all have the same inherent flaws. They do vary in shape, color, price and manufacturer as each company competes for its own section of the industry's market.

1. Wire strapping is laborious and time consuming. This method often requires multiple layers of cementitious leveling agents that combine substantial dry times with unpredictability . . . resulting in multiple job-site visits and difficult tiling surfaces.
2. Uncoupling membranes slide, lift, shift, buckle, warp and bend from the subfloor requiring risky and time-consuming repairs (electricity or water is now embedded in the subfloor). Adhesion of the membranes to the subfloor is always slow and weak. This is unacceptable if an installer wishes to work without interruption while maintaining the right conditions for quality results.

Unless the installer has significant experience, height variations usually occur with both of these methods creating further complications during the set. **Hottrok** is the first of its kind in the industry. It simplifies the entire installation process from start to finish with its predictable nature. Its use ensures a consistent, flat surface. . . and it is insulating, too.



Market Size:

The global radiant heat market, which consists of hydronic, electric, underlayment, sensors and controllers, is 4.6 billion USD for 2020. It is maintaining an annual linear growth rate of 7.3%, and is expected to grow to 6.6 billion US by 2025.

Watts Radiant, one of five major distributors of electric radiant heat with 20-25% of market share, sold enough wire to heat approximately 3 million square feet (common denominator for **Hottrok**) during 2019 in the US and Canada—this equates to a total of 12-15 million square feet of warm wire sales for the entire industry. In North America, warm wire maintains an annual linear growth rate of 3-5%..

Market Penetration

The current annual North American radiant heating market is estimated at \$110-\$120 Million in total product (per Watts Radiant) with a growth rate of 3-5%. The electric heating portion of this market is \$36 Million, which equates to approximately 12 million square feet coverage. If **Hottrok** would be used as the installation material for the entire 12 million square feet, 2 million pieces of **Hottrok** would be sold creating approximately 20 million in profits.

A realistic projection would be that **Hottrok** captures about 1% of the market year one, 2% year two, 5% year three, 7.5% year four, 10% year five, and 11.5% for year six. Currently, radiant floor heating is usually sold to higher-end builds performed by higher-end contractors. The introduction and integration of **Hottrok** to the building industry will change the demographics of who can afford radiant floor heating.

In regards to volume product sales, we will approach the market via a multi-level strategy. Immediate growth will be achieved via condominiums builders, custom home builders, remodeling companies, architects, interior designers and high-end tile setters. A bulk of **Hottrok** will be distributed through these means. Concurrently, we will align ourselves with like-minded radiant heat distributors who have direct access to our target audience. We plan to explore joint programs with wire manufacturers in the areas of licensing, piggy-backing on their distribution network, and / or ideas like “kit” packaging. Finally, a focus on reaching professional tile installation companies, many of which have credentials with the National Tile Contractors Association, will be a natural focus for consumer direct **Hottrok** sales.

On the other end of the market, we will target the “pull through” aspect of the market by connecting with the independent, professional tile setter and the homeowners. The tile setters will be the easiest market to connect with because they will fully appreciate the value of **Hottrok**. However, the sales volume will be much smaller until we gain some traction. Lastly, reaching the homeowner is the most difficult and expensive of markets. We expect to put minor emphasis on this audience as we anticipate success in the industry through the development of good relationships and strong acceptance with the previously identified groups.

**Owner/Management:**

Rodger Bennett and Celeste Vaughn are the key directors of the company. Rodger acts as the creative inspiration, designer, manager and product visionary. He is responsible for all technical concepts and application guidelines. Celeste acts as the administrator and marketing pioneer. She documents, organizes, plans and strategizes business concepts with Rodger. Together, they fulfill the yin and yang roles needed to move the business toward financial success.

Financial Information

We are seeking investment capital nearing the sum of \$150,000. This will produce the runway inventory of **Hottrok** needed to achieve a successful market with a sustainable cost/quantity scenario. Our initial start-up cost spreadsheet is attached, along with our pro-forma 6 year projections. To date, we have currently invested close to \$35,000 of our own money to fund CAD drawings, prototypes, test materials, laboratory testing fees, patent legal fees, patent application fees, trademark registration, website development, business legal expenses, office supplies, transportation costs, software/hardware and basic business expenses.