

Thin Brick: Making Design Waves, Delivering Speed and Reducing Costs for Architects, Owners and Developers

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“Thin Brick.” The name sounds strange. Bricks, by definition are big, thick and heavy. “Thin” has never been a part of their description or an image you’d associate with a brick. That is, until now.

Thin Brick refers to slim wedges of a real brick bonded to a base material like concrete, metal or wood, and installed in a variety of manners. They are making waves among architects and in the construction and development industry. It’s also turning the ages-old brickmaking industry itself on its head.

What’s the secret behind thin brick’s growing popularity? It can be boiled down into one adjective: faster. Thin Brick has increased the speed of installation and these corresponding reductions in total construction time are proving to be major drivers in reducing total construction costs and is helping gain wide market acceptance. In addition to helping speed the construction process and compressing timelines, Thin Brick offers the some innovation in building design.

The history of thin brick parallels the evolving nature of the construction industry itself, and its continuing search for products and techniques that are better, faster and more cost effective.

Thin brick construction scores highly on all three counts, and is part of a major shift in the building industry away from more labor-intensive building materials and processes to new and better ways of delivering comparably reliable, durable, and attractive appearance and structure.

This without the high cost—in time and labor—of historically accepted construction methods.

The idea of using “skinny” brick had its origins in California in the late ‘80s, primarily in decorative interior uses. By the early ‘90s, interest had grown across the country to the point that a major producer, Endicott, established a separate division for its manufacture. Initially focused mainly on supplying job-applied installations such as metal panel systems with a thin brick facing, the product was later adopted by the pre-cast concrete panel market. This was used primarily in tilt-up wall systems.

In those tilt-up wall systems, the brick is placed manually in plastic form-liners and cast along with the wall on the jobsite, with the concrete serving as the mortar. Such pre-cast wall systems continue to make up a major part of the thin brick market. There are some limitations, however, in terms of size, weight and the vulnerability of the casting process to local conditions, a primary culprit which are the weather conditions as the time of casting.

As acceptance grew, more advanced types of application systems have been developed, among them Fullerton Building Systems’ “BrikWal.” This system entails having the thin brick epoxied to lightweight prefabricated cementitious panels. This is done in a FBS factory to very precise tolerances and under controlled conditions, fully protected from the elements of the weather, and then delivered to the jobsite for rapid installation.

Gary Davis, vice president of sales for

Endicott, believes owners, architects and other parties are increasingly drawn to thin brick because of its great versatility.

“There are many things you can do with thin brick that cannot be achieved inexpensively with full face brick,” he said. In its early days, the palette of colors was fairly limited. That has evolved along with the popularity and today Endicott offers 54 colors and a variety of textures. This versatility has proven popular from a design perspective as the product line can meet contemporary design needs and tastes. Davis estimates his firm “gets calls every day from architects and designers who have learned about thin brick construction and want to use it in a project for the very first time.”

In addition to its versatility and the speed of installation, thin brick construction of job-applied or prefab panels offer some significant special cost savings, especially in the case of new construction “where the architect goes into the process committed to designing around thin brick from the outset,” Davis says.

In those cases, unlike with full brick, no huge footings or heavy lintels are required. Lighter gauge wall studs can be used and in the case of a full four-wall installation, the architect can remove six inches around the entire perimeter in terms of wall width. This amounts to a significant reduction in the amount of square footage available for calculating lease rates. The prefab systems are also much easier to work with in cold weather which yields savings on energy and weather enclosure costs. There are also labor considerations given the elimination of needing to rely on expensive, and

increasingly scarce, mason labor. Thin brick can be set by carpenters or tile-setters.

Thin brick offers more indirect cost savings as well. For example, Endicott calculates that one load of thin brick is the equivalent of seven loads of the full size product. This significantly reduces delivery time and transportation costs to a panel fabricator or to a pre-cast jobsite.

High visibility applications of thin brick, some of them very large-scale, including the New Jersey Devils Hockey Arena and the Colts Stadium in Indianapolis, have also caught the attention of the construction industry. There is a fast growing acceptance by major retail and fast food chains, including HyVee Stores, Starbucks, Pizza Hut and

McDonald's.

Thin brick is especially well-suited for the remodeling industry, especially for the franchised restaurant and convenience store sectors where facelifts to meet changing market tastes are often made on a 7-9 year cycle. Re-skinning with thin brick adds very little weight, and can be installed quickly, generally without disturbing ongoing daily operations or inconveniencing customers.

The growth in the number and type of applications in place has also led to a much greater comfort level among potential users. "Thin brick has now been in place in thousands of installations long enough that it has proven its reliability and durability," Davis says. "The fact is, it is made from the same

raw materials and fired in the same ovens as full brick. There simply is no difference between today's thin brick and the traditional brick people are familiar with."

In his opinion, the future for thin brick construction continues to be bright. "In no way has it topped out in terms of market acceptance, style options or techniques," he says. "And astute architects are increasingly discovering that, with thin brick, they have a new freedom to design with a degree of vision that has never been available to them before."