

Hello Mr. Lipps,

I have been searching for information regarding stone cutting. This search has been going on for years. I finally hit gold when I saw a part of your letter via a search through google.com. I quickly joined the Stone Group in Freelists. This site took me to your Stone Foundation Site. I have printed your application and will send it soon.

I am the grandson of a stone cutter and thought this trade was all but lost. I have broken many chisels trying to hone stone. Also have been searching for plans to build a wire saw. No one I have contacted has any idea how these saws operate or are built. Can you point me in the right direction?

I am looking to use simple parts that were used years ago.

Sincerely,
Dan Condon
Tomkins Cove, NY

to <Tomas@stonefoundation.org>

nice page

just wanted to say hello, from schoharie co. ny. im a local stone mason carver ,sculptor, and all around stone effienado(?) been at this since i was a young kid. built stone forts as apposed totree houses. my first col-lapsedon me , tony depasqually came to my rescue.

mark swanberry
New York

to <Tomas@stonefoundation.org>

At last! Your web site is like an unexpected oasis in a desert of despair. I would love to get more information about the work you are doing and about your 2001 symposium.

I work for a municipal government in a large shelter for homeless men. On the weekends and holidays I practice blacksmithing and stone masonry. Thanks for the web page, it is wonderful.

Toby Druce
Toronto

The following is an exchange between the Stonexus editor and a professor of architecture and an advocate of sustainable building materials:

Hello Tom Hahn,

I was interested to visit your site (you seem to have been as busy as three people), but it left me wondering: do you not consider stone to be a sustainable architectural material? particularly in the desert regions of which you speak where it is often abundant? where straw bales must be imported?

Respectfully,

Tomas Lipps

Hello Tomas - Thanks for contacting me about stone and sustainability. I have several thoughts to share with you...

Yes, stone is an incredibly durable, plentiful, natural and naturally beautiful material. It is time-tested and weathers with grace (generally). It is, perhaps, the most structurally strong building material (in compression) known to humans, the capability of which has been shown throughout time in many of the greatest ancient buildings. It makes a great deal of sense where zero-maintenance for the life of a building is essential (in a high-rise, for example). It also has vast potential as aggregate in both structural and finish materials, when mixed with various cementitious and adhesive binders, and can be very simply and attractively used when "seeded" as a finish into and onto a variety of panelized building systems.

However, though it is a natural, plentiful material, it is a non-renewable resource, whose supply will reach its practical limit eventually. And the quarrying and mining necessary to extract most stone can be terribly destructive to the landscape, to watersheds and natural habitats, leaving scars that will long outlive the buildings for which the stone was extracted.

And it is more and more frequently used on buildings where the intended life-span for occupancy is much, much less than the stone itself, meaning it is demolished before its durability value even becomes an issue. Stone can also be very difficult to recycle or reuse in any meaningful way,

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often being demolished and simply dumped as landfill for erosion control.

Furthermore, stone is often heavy and costly - in money, energy, and pollution - to transport. And though often quarried locally, it is also often shipped long distances for processing and finishing. I have heard the story of a "green" building project in the north central states where the architect conscientiously wanted to use stone from a local quarry, a few miles down the road from the site, to clad the building. When the finished stone arrived, he was dismayed to find out it had, indeed, been quarried a few miles away, but was then loaded on a train, taken to the Great Lakes, loaded on a ship, taken to Italy, where it was milled to his specifications (which weren't extravagant), then shipped back to New York, taken by rail to Pittsburgh for anchor attachment, then finally returned to the project site by truck. Granted, this story may well be "urban legend" but it's not necessarily implausible or unique.

Lastly, "traditional" stone is now often limited (by building codes and structural engineers) to a single purpose in contemporary buildings - simply being used as a "cosmetic" veneer over another building system. In smaller scale buildings, this other building system is often concrete block, or pre-cast or site-cast concrete, both of which can be made "beautiful" as a finish themselves, and thereby serve multiple purposes for a building (structure, finish, even insulation). In larger buildings, stone is often used over steel and concrete structural frames, both of which can employ a wide array of other cladding systems that are lighter, more flexible in detailing, more insulative, more recyclable, and in certain cases, just as durable.

In contrast, you mention straw-bale construction in your message. Interestingly enough, crops that produce suitable "straw" for building (wheat, oats, barley, rice, rye grass) are grown in nearly every region of the country, including throughout southwestern Arizona. Further, straw is a renewable resource, with enough straw grown every year in the US to build the walls of every house built every year in America, five times over. Straw is also a recovered waste resource, being the by-product of the growing of grains for other uses including bread, cereal, beer, etc., unlike wood (and stone) and other materials, which are extracted for a

single purpose - building. Straw has amazing thermal and sound insulation properties, and has basic structural capabilities, suitable for most small scale buildings. It is relatively light, and very inexpensive. It is, however, susceptible to moisture degradation, its thickness takes up substantial space on a site, as a system it requires extensive plastering/stuccoing for finish, and takes considerable effort to detail properly, among other challenges it faces when used in buildings.

In the end, however, straw and stone are just two of many materials and systems to consider when designing a building, about which the decision should be based on environment, place, culture, cost, program and a whole host of other factors. I strive, in my practice and university teaching, to consider and present the pros and cons, as I understand them, of those many systems and materials, and I carry an ongoing commitment to learn as much as possible about every building system I come across.

If you have more to share with me about stone as a building material relative to the environment, please feel free to reach me at any of the contact points listed in the signature block below. Thanks again for writing to me.

Best regards,

Tom Hahn
University of Arizona

Dear Editor:

The Dry Stone Conservancy is collecting information from dry stone masons, engineers, landscape architects, and architects on the subject of canted foundations in retaining walls. We would like to request of your readers whether they ever build a canted, or sloped, foundation? And if so, under what conditions? Thanks very much for giving us the opportunity to request this information. We will be glad to send a report to all who would like to have one.

Very sincerely yours,

Carolyn Murray-Wooley,
Director, Dry Stone Conservancy
Lexington, KY

To the Editor,

In an age, when the marketplace is constantly reacting to the latest trend, it is refreshing to see that excellent stonework perpetually remains in style. However, defining what constitutes quality stone and excellent stonework is something that is not clearly documented or understood. I have been involved in the stone masonry industry for the last 32 years and have seen a lot of stonework that includes a variety of different styles and methods of stone construction. Questions arise as to what comprises quality work in terms of the use and selection of materials as well as the setting style and the look of the finished product. The answer to these questions for the end user is usually what the architect, builder, or mason presents. While stonemason's who regularly work with stone can visualize what the finished project will look like, it is often a time-consuming and frustrating educational process when working with end users and other professionals as to what is acceptable in stone construction.

Stonemasons are by nature independent, and up until this point as a group have not identified or communicated what constitutes quality stonework. The Stone Foundation has an excellent opportunity to set the bar and define the standards for acceptable material selection and workmanship. While there are bits and pieces of information available about stone installation, and what makes up good stone for specific applications; there is nothing that I am aware of, that pulls all of this together in a comprehensive set of standards. We have a real opportunity as an organization to adopt best practices for installation, quality for stones, and selection of stone for the right applications. While some aspects of stonework are subjective and may not be easily documented, creating such standards will reinforce the best practices that are currently being used and educate architects, specifiers, and end-users. Furthermore, the awareness that this education will bring will most certainly increase the use of stone in construction as professionals and consumers grow more familiar and comfortable with the concept of stone in their environment.

I currently buy stone products from different areas throughout the country and am very interested in setting higher standards for all of our stone products. Our company supports this effort by the creation of written specs on the products we market. These specs are used to educate our employees and sales representatives and are also an excellent tool for architects, spec-

ifies, and end users. I know how critical this work is to our business and I am sure that many of you are also frustrated by the lack of consolidated information on stone masonry in the marketplace.

I propose that the Stone Foundation adopt a set of standards that would include characteristics of quality stone, recommended and approved installation practices, and best practices of workmanship and style. Perhaps interested members of the foundation can create a standards team that evaluates existing practices, determines a best practices in stone masonry reference guide, and publishes this work nationally. I welcome any and all feedback on these areas.

David Hisey

Director of Procurement
Architectural Stone Division
Luck Stone Corporation

Letter FROM the editor:

Does anyone know of a book written by a couple who built a stone residence from a Frank Lloyd Wright design. This was somewhere in the midwest, Wisconsin perhaps. The stone mason in charge was an interesting character named Jimmy, or Johnny - something like that. He had the fastidiousness of an ex-navy man or a Japanese artisan; every day when he began work he would don a new pair of white cloth gloves and at the end of each day's work would toss them in the trash. When the job was finished the owners noticed a spot of white high up on a wall. When asked, Jimmy (or Johnny) identified it as a cube of white marble the like of which he incorporated in every wall he built as a sort of signature or trademark. I'd like to read more about this guy and make it possible for others to do so by reprinting portions of this book.

Tomas

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