

New York Landmarks Conservancy

COMMON BOND

Volume 18, No. 1 and 2
Fall - Winter 2003

Restoring Scagliola to Glory

- *Saving America's Religious Treasures*
- *Keeping the Congregation Informed*
- *Replacing a Slate Roof*
- *How to Interview an Architect*
- *Cutting-Edge Fire Protection*
- *Get Heat Under Control*



COMMON BOND

Volume 18, Numbers 1 and 2 Fall-Winter 2003

The Sacred Sites Program of the New York Landmarks Conservancy is the only initiative of its kind to offer congregations throughout New York State financial and technical assistance to maintain, repair, and restore their buildings. In addition to providing hundreds of thousands of dollars in matching grants each year, the Conservancy offers technical help, workshops for building caretakers, and publications.

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A copy of the Conservancy's latest financial report may be obtained upon request from the New York State Attorney General, Charities Bureau, 120 Broadway, New York, NY 10271 or from the Landmarks Conservancy, 141 Fifth Avenue, New York, NY 10010.

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On the Cover



Congregation Shearith Israel, on Central Park West at 70th Street in Manhattan, has restored its sanctuary, which features a magnificent scagliola ensemble and stained glass designed by Tiffany Studios.

This photo and several others illustrating this issue were taken by award-winning photographer Joanne Savio, best known for her portraits and dance photography. You can visit her website at the following address: www.joannesavio.com

photography by Joanne Savio

Message from the President

Dear Common Bond Reader,

We are pleased to be back with this exciting double issue of *Common Bond*, which features many helpful articles and a new section, titled “News and Notes.” We are very proud of this issue and hope you will find it informative and helpful.

Helping people maintain religious buildings is one of the most important missions we have at the Landmarks Conservancy. Our pioneering Sacred Sites Program was the first program anywhere to offer loans, grants, and technical services to religious buildings and is still the only statewide program of its kind. Since 1986, the Sacred Sites Fund has given out almost **\$4 million to more than 700 properties across the state.**

And since the beginning, we have been pleased to be able to send *Common Bond* to a nationwide audience of over 6,000 readers without charging a formal subscription fee.

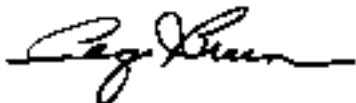
As you know, *Common Bond* remains the most comprehensive periodical in the country dealing with the maintenance and restoration of historic religious architecture. Our staff experts work hard to present clear and useful information in each issue. Articles on such practical topics as paint analysis, basic repair techniques for plaster, and administering shared space give you useful tips, designed to save your congregation time and many thousands of dollars over the life of a project.

But it costs a lot of money to write, design, produce, print, and mail *Common Bond*. A few loyal foundations help underwrite the journal each year, and we have begun accepting limited advertising from respected preservation companies. Unfortunately, it's still not enough. The Conservancy runs a deficit producing *Common Bond*. Although we face ever-increasing costs, we still do not wish to enforce what has always been a suggested subscription fee. So we are asking for your help.

We cannot afford to publish *Common Bond* and send it for free without financial help from readers like you. If only 25 percent of our subscribers made a \$25 contribution, we could completely cover the cost of publishing *Common Bond* for an entire year. Your contribution also helps demonstrate to foundations that our many are interested in our articles and care about preserving their religious buildings. This is something foundations specifically look for and it makes them much more likely to support *Common Bond* themselves.

We are delighted so many people find *Common Bond* so helpful. We hope you'll help us continue making it available to congregations throughout the country by renewing your support. Please return the enclosed reply card with your tax-deductible gift today. Thank you for your continued interest and support.

Sincerely,



Peg Breen
President

What Our Readers Say About Common Bond

“*Common Bond* is a wonderful resource for clergy, Parish Councils, building committees, and anyone interested in historic houses of worship. Descriptions of styles of architecture, practical advice on building repairs, hints on working with contractors, suggestions about fundraising – articles on these and other topics have been immensely valuable. *Common Bond* is attractive, easy to read, and well organized. Those of us working to preserve historic houses of worship are blessed to have this publication!”

– Kathleen Urbanic, Chair of Restoration Committee, St. Stanislaus Kostka Parish, Rochester, New York

“Thank you for *Common Bond*. I am responsible for watching over All Souls in Biltmore, NC, Richard Morris Hunt’s only remaining church. Your publication really helps!”

– Martha W. Fullington, Arden, North Carolina

“Thank you so much for the article on church restoration from *Common Bond*. NY Landmarks Conservancy always provides such helpful and clear information for us citizens who rally around our old community buildings. Many thanks.”

– Mary McTamanev, Hudson River Resource Center, Newburgh Free Library, Newburgh, New York

“Historic Denver, Inc. has found *Common Bond* to be an invaluable resource. As Coordinator for Denver’s effort to preserve sacred landmarks, I have reprinted several of the technical articles from *Common Bond* for our constituents and they have been a critical tool for our preservation education.”

– Nicole Hernandez, Sacred Landmarks Preservation Coordinator, Historic Denver, Inc., Denver Colorado

“Many thanks for a really great issue of *Common Bond*. The article on Lightning Protection Systems was especially pertinent. Also of particular interest were Understanding Contracts, Cemetery Advocacy, and Historic Recognition. One of your best issues. Keep up the good work.”

– Donald B. Derr, Regional Commissioner of State Office of Parks, Recreation and Historic Preservation, Somers, New York



Tom Galliher / Allen County Courthouse Preservation Trust

The Allen County Courthouse in Fort Wayne, Indiana (1901), has the largest collection of scagliola in the nation. Twenty-eight different kinds cover over 15,000 square feet. Its multi-year restoration by a team of ten artisans, completed in 2002, illustrates sound preservation practice.

Reviving a Nearly Lost Art: *The Restoration and Maintenance of Scagliola*

by Kim Lovejoy

Many churches, cathedrals, and synagogues built at the turn of the 20th century feature elaborate columns, pilasters, wall cladding, and door surrounds that appear to be marble, but are actually scagliola, a very convincing handcrafted imitation made of highly polished pigmented plaster. Pronounced sca-lee-oh-la, scagliola was the highest art form of ornamental plasterers and had a short-lived heyday in the U.S. from the 1890s to the 1920s.

Good-quality scagliola in a hospitable environment retains its beauty indefinitely with occasional buffing and cleaning of fingerprints. However, few people recognize it, so scagliola is often neglected and mistreated. It may be yellowed from inappropriate coatings; soiled, cracked, and chipped from impact or expansion; badly patched; or painted over to hide the dirt and damage.

Only experienced craftsmen should repair and conserve scagliola, but this article can help congregations understand their buildings and the process that repairs will take.

An Ancient Art

References to highly polished and colored plaster in Egyptian tombs, Greece, Rome, India, and elsewhere suggest that scagliola originated in ancient times. In the Renaissance, artisans in Italy,

Central Europe, and Russia decorated churches and luxurious residences with imitation marble columns, pilasters, walls, and other features. Baroque and Rococo Roman Catholic churches in southern Germany are among the most fantastic examples, with columns in swirling patterns leading the eye to frescoed ceilings encrusted with plaster ornament.

Few people recognize scagliola, so it is often neglected and mistreated.

Scagliola was brought to America in the mid-nineteenth century by European ornamental plasterers hired to decorate the palaces of the people: the U.S. Capitol, statehouses, courthouses, railway stations, theaters, libraries, banks, and hotels. Scagliola was ideal for large monolithic columns, because natural marble in large blocks was difficult to obtain and costly. It was also economically advantageous for repetitive cast elements.

In New York City, some of the most spectacular scagliola is inside Congregation Shearith Israel on Central Park West (1897). Other examples can be found in Judson Memorial Baptist Church in Washington Square (1888-93); Church of the Ascension in Washington Heights (1895); Holy Trinity

Lutheran Church on Central Park West (1905); Old First Reformed Church in Park Slope, Brooklyn (1891); and St. Jerome's Church in Mott Haven, Bronx (1900).

Demand for scagliola fell in the 1930s and the art nearly became extinct in the U.S. Today, a small coterie of artisans are reviving this nearly lost art in restoration projects and new production for connoisseurs.

How Scagliola is Made

Jeff Greene, President of EverGreene Painting Studios in New York City, has been researching scagliola materials and methods since the 1980s and applying them in restoration projects across the country. When making scagliola, the nuances involved in achieving the right colors, patterns, durability, molded shapes, and polished finish require years of experimentation and practice. According to Greene, "the process is unbelievably labor-intensive, 95 percent perspiration, three percent inspiration, and two percent alchemy."

Scagliola stays at room temperature and is typically warmer to the touch than natural stone indoors.

American scagliola is dominated by a liquid method, known as *marezzo*, suitable for flat panels or curved molds. Keene's Cement, a form of gypsum plaster that rehydrates slowly, is mixed with water and mineral pigments to create a ground color, then poured over skeins of color-soaked raw silk fiber spread out on a surface to resemble veins. The silk is carefully drawn out, leaving behind the coloring, and more pigmentation may be added. After smoothing and blotting, a backing of wet Keene's Cement that bonds with the facing is poured on the surface.

After the material sets hard, multiple polishings by hand are performed over a period of several weeks. Honing, using ever-finer grades of stone and water, produces a denser and smoother surface each time. Repeated "stopping" or rubbing in pigmented putty fills in pinholes. At the final stage, a perfectly smooth, brilliant shine is achieved. This stone-like polish is a key characteristic of scagliola.

How to Identify Scagliola

Made of pigmented plaster, scagliola stays at room temperature and is typically warmer to the touch than natural stone indoors, which retains cooler nighttime temperatures longer. Greene advises looking for other tell-tale signs:

Holy Trinity Lutheran Church, at Central Park West and 65th Street, features scagliola columns.



30-ft-high scagliola columns at Roman Catholic Church of the Ascension in Washington Heights.



Terry Hudak

Old First Reformed Church, Park Slope, Brooklyn (1891) features scagliola colonnettes in the clerestory.





Jeff Greene

Cracking and staining are frequently found in surveys, as shown on the shaft and bases of green scagliola columns at Holy Trinity.

- Monolithic columns with a vertical seam;
- A different sound than dense stone when gently tapped;
- Water damage, chips, or large cracks that reveal the internal plaster structure;
- Hairline crack patterns like plaster.

Assessing the Condition

If scagliola is deteriorated, a survey should be performed by a knowledgeable conservator, preservation consultant, or craftsman. Few preservation consultants have training or expertise in scagliola, so congregations need to review their consultant's credentials. Scaffolding may be required for access during survey and testing.

Problems are frequently encountered in two areas:

- **Structural:** Cracks; warping; detachment from backing, walls or support structure; missing pieces; and water damage that dissolves plaster.
- **Cosmetic:** Soiling; stains; discolored coatings; overpaint; hairline cracks, and conspicuous or poorly matching patches and crack repairs.

If scagliola is extensive and there are many defects, it is useful to mark up drawings keyed to a list of defects. Photographic documentation is essential.

The survey should determine structural stability, and then quantify the amount and type of work needed. It will detail the number of square feet of stripping old coatings or paint; the necessity of polishing, reattachment, and crack repair; whether patching will be minor or whether sections of matching new scagliola have to be made; and recommend necessary replacement of elements, such as columns, panels, or moldings. Once the extent of the problems is recognized and the benefits of restoration understood, a scope of work is tailored to the building's needs and costs can be determined.



EverGreene

Scagliola columns with horizontal crack. St. Jerome's Church

The Restoration Process

Scagliola restoration brings the theory and standards of architectural and fine arts conservation together with the practice of the ornamental plasterer and decorative artist. Specialists are rare, but can be found in a few ornamental plaster and decorative painting conservation and restoration companies.

Mock-ups

The specialist will produce mockups or *in situ* samples of the different repair methods that illustrate the standard of



Terry Hudak

Scagliola columns with a failed, discolored coating at the Church of the Ascension

Left: Structurally unsound scagliola is reattached by pins.

Right: Large, unstable cracks are channeled out to a V-shape and patched with infill.



Jeff Greene



Jeff Greene

Unstable scagliola at risk of detaching and falling is the first priority for repairs.

workmanship. If coatings are to be removed, small-scale stripping tests should be performed. The mock-up should be left in place throughout the job. It's important to define the desired outcome, especially the quality of the surface finish.

Structural Repairs

Structural conditions where scagliola is at risk of coming off a wall or column are the first priority for repairs. The first step is to secure adjacent sections with tape or straps that won't scratch or rust, then temporarily remove the detached section. After cleaning out loose debris and preparing the substrate, the material is mechanically reattached by pinning and followed by crack repair and refinishing. Small pieces of scagliola, such as cracked wainscoting, can also be reattached with stainless steel pins.

Crack Repair, Patching, and Replacement Sections

Patches and infill should blend seamlessly with the pattern, coloration, and sheen of the adjacent original material. The surface should be brought to a perfectly even plane, with no dips and no crooked edges on mitered corners or moldings. There should be no voids, gaps, or holes. If a patch is conspicuous, it should be cut out and redone.

To match original scagliola, artisans mix many batches of samples. Colors change as samples dry over 2-3 weeks, but an experienced artisan can foresee how a wet mix will look when dry.

To repair large, unstable cracks, craftsmen carve V-shaped grooves around the cracks, then fill them in with plaster. Scagliola is painstakingly applied to continue the pattern and veining that surrounds it. Colors are "touched in" over small repaired cracks with artist's brushes. Loose scagliola around cracks and patches can be reattached using plaster consolidation and adhesion techniques. Sanding, honing, and polishing is crucial to making patches or infill blend in.

Jeff Greene



Scagliola is painstakingly applied to continue the pattern and veining that surrounds it.

Jeff Greene



Sanding, honing, and polishing are crucial to making patches or infill blend in.

Jeff Greene



Removal of Coatings

Greene remarks that among the coatings he has found on scagliola are shellac, linseed oil, mastics, polyurethane, acrylics, and paint. Damage to the surface of the scagliola, such as burning, bleaching, or scratching, must be avoided as coatings are removed. Environmentally safe, non-caustic chemical strippers can be used to remove paint. Shellac finishes that have yellowed over time can be wiped off with denatured alcohol. Spattered paint can often be peeled off with a razor blade.

Cleaning and Polishing

Not all scagliola requires major restoration. If scagliola is sound, with minor hairline cracks and scratches and no problematic coatings, it may just need cleaning and polishing to regain its brilliance.

Just as masonry cleaning is carefully specified, tested, and supervised, so too should the cleaning of scagliola. Mock-ups should be prepared using the proposed cleaning agents, honing compounds, rubbing stones, sanding supplies, and equipment. It is imperative that no scratching, discoloration, or other damage occurs as a result of cleaning attempts.

The technique is messy but not difficult. The scagliola is rubbed down with fine grit sandpaper and water, polished with powders, and buffed to bring back the brilliant glossy sheen. Superficial stains, such as from incense smoke, may be sanded out. Stains that have penetrated deeply may need to be cut out and patched. Custom poultices are sometimes useful in stain removal.

Maintenance

Maintaining restored scagliola is like caring for fine furniture. Occasional dusting, buffing, and cleaning of fingerprints with furniture polish or lemon oil and a soft cloth is all that is needed. The best finish is to restore and maintain the natural sheen produced with honing, stopping, and polishing scagliola.

A non-yellowing, transparent microcrystalline wax, such as carnauba wax or marble wax, may be applied to protect surfaces subject to fingerprints or liquid spills, such as columns adjacent to pews, or altars. In some buildings, French polishing with shellac was the historic treatment, and a decision may be made to continue with it after removal of the yellowed coating. However, new shellac will yellow again over time. Coatings without historic precedent, such as lacquer, varnish, polyurethane or acrylics, should be avoided.

Protection during Construction

Scagliola is prone to damage during interior construction work, such as electrical and mechanical upgrades, painting, or even from moving furniture. Explicit responsibility for protection of scagliola should be part of a general construction contract. Procedures should be communicated to all parties working on the site. Avoid impact from equipment such as scaffolding, tools, or floor polishers. Protect scagliola from caustic paint strippers and other potentially damaging chemicals used elsewhere in the space by covering it with plastic sheets.

“As a historic building material and decorative finish component, the intrinsic qualities and beauty of scagliola are unlike any other natural or man-made material,” describes Greene. While scagliola restoration has been most visible in major public buildings like state capitols and theaters, houses of worship are beginning to identify and restore this distinctive artistic form.

With 25 years of experience as a preservation professional, Kim Lovejoy manages marketing and technical communications for



photography by Joanne Savio



photography by Joanne Savio

Scagliola pilasters at Congregation Shearith Israel after structural repairs and refinishing by EverGreene.

EverGreene Painting Studios, Inc. She holds degrees in architectural history, preservation planning, and architectural conservation from Harvard, Boston University, and the University of York, England.

Technical information for this article has been generously provided by Jeff Greene and project managers, architectural conservators, and artisans at EverGreene Painting Studios, Inc., who have restored scagliola in over 30 buildings across the country in the last 15 years. Some of the material has been adapted from previous articles published in *Traditional Building*.



Laura Stofanovic



Laura Stofanovic

Imitation porphyry columns at Judson Memorial Baptist Church in Greenwich Village were stripped of overpaint, patched, and polished by EverGreene in 1998.

Resources

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Greene, Jeff, "Architectural Scagliola in Significant American Interiors," in *The Interiors Handbook for Historic Buildings, Vol. II*. Washington, DC: Historic Preservation Education Foundation, 1993. Limited copies are available from EverGreene Painting Studios, tel. (212) 244-2800.

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Website: www.haylesandhowe.com
(Restoration contracting and consulting; Training workshops in scagliola techniques)

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-----, "American Scagliola: Preserving the Legacy," *Traditional Building*, November/December 2000.

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"Ornamental Plaster," a 30-minute instructional video on making American scagliola features the late Earle Felber. \$39.95 postpaid from Building Conservation International, 1901 Walnut Street, Suite 902, Philadelphia, PA 19103.

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Traditional Building Magazine
www.traditional-building.com
www.traditional-building.com/RTEscagliola.htm



Stephen Tilly, Architect

Built in 1897, Congregation Shearith Israel stands on Central Park West at 70th Street.

The Restoration of Congregation Shearith Israel

Prominently located on Central Park West at 70th Street, Congregation Shearith Israel presents a commanding façade to the City. Inside is an even more magnificent sanctuary, rich with finishes and stained glass. Architect Arnold Brunner was inspired by newly-discovered Greco-Roman synagogues when he designed the Neo-classical Congregation Shearith Israel in 1897.

Planning a Major Restoration

In 1999, the congregation began planning exterior and interior restoration. Architect Stephen Tilly was brought on board to oversee the project. “We wanted to provide the best possible contemporary protection and infrastructure for a landmark historic structure and to accomplish that goal invisibly, while

The elaborate lamp fixtures – during and after restoration.



Stephen Tilly, Architect



photography by Joanne Savio

restoring the grandeur and decorative complexity of the original design,” explained Tilly. “The successful restoration required contributions from ten specialized consulting firms and numerous artisans expert in century-old building crafts, all directed by highly professional and dedicated construction managers.”

For the exterior, gentle mist cleaning and repair restored the limestone façade. New copper and membrane roofs and flashings secured the envelope. Inside, the drab paint scheme and tarnished light fixtures were transformed.

An Amazing Discovery

“We always knew that the beautiful stained glass windows were Tiffany,” says Alan Singer, Executive Director of the Synagogue, “But we had no idea that the entire sanctuary was designed by Tiffany Studios.” That fact was discovered during the process of investigating the interior decorative finishes.

Archival research uncovered a cryptic note in the 1898 Minute Book of the Congregation: Tiffany Glass & Decoration, Louis Comfort Tiffany’s firm, was paid \$2,600 for the stained glass windows and \$3,000 for interior “painting.” The note galvanized the architects to pursue microscopic paint analysis and paint testing compulsively, and a radiant palette of dove gray, cream, amber, and gold was revealed on the walls and hierarchies of moldings in the sanctuary. Together with restored scagliola, an architectural plaster resembling marble, and the Tiffany windows in shades of clear, amber, pale green and ice blue glass, the sanctuary now glows as if it were harboring the sun. The six massive chandeliers were restored to glowing brass, gold, and silver.

In addition, the synagogue’s systems were overhauled, with ducts, pipes, and wires located unobtrusively within the historic building. New York City’s first installation of a high-pressure, mist fire suppression system required extensive reviews with the New York Fire Department. [See article on next page for more information.] A state-of-the-art sound system meets strict religious requirements against work on the Sabbath by using a passive approach. New wiring, sprinklers, fire detection, security sensors, preset scene dimming, HVAC controls, and new heating and air conditioning completed the work.

A proud congregation returned to the restored sanctuary for Sabbath services on September 6, 2002, the eve of Rosh Hashanah. With the spectacular restoration, the Congregation continues to steward the symbol of 350 years of Jewish worship in Manhattan.

The magnificently restored sanctuary, especially the ceiling, could be damaged by a traditional sprinkler system in the attic.

photography by Joanne Savio



Innovative Fire Protection Comes to New York

Conventional attic sprinklers, if activated by fire, might threaten or even destroy the ceiling of the magnificent sanctuary.

by Jay Blossom

After an enormous investment in restoration, leaders of Congregation Shearith Israel were troubled by the building's lack of fire protection. It wasn't easy to forget the devastating effects of the 1998 fire at Central Synagogue across town. While looking for a new fire protection system, they realized that conventional attic sprinklers, if activated by fire, might destroy the ceiling and decorative finishes of the magnificent sanctuary. After considering the options, they chose to install the first mist-based fire-suppression system in a New York house of worship.

Developing a Fire Protection System

Congregation Shearith Israel needed a fire protection system that could address the challenges of the building. The sanctuary

is large, and installing smoke detectors on the high ceiling would be ineffective. They would not be activated until a fire had already done severe damage. The solution was an infrared-beam, smoke detection system that invisibly criss-crosses the sanctuary space, combined with unobtrusive ceiling sprinklers under the balcony and in other low places.

Another challenge was the 8,000-square-foot attic above the sanctuary. For fire detection, the congregation chose a high-tech VESDA system, which reduces false alarms by distinguishing between mere dust and the products of combustion, as well as detects fire early. However, sprinklers for fire suppression wouldn't work. If activated, they would saturate the ornate lathe and plaster ceiling beneath the attic, possibly causing collapse into the sanctuary below. The solution: the first mist system installed in a historic religious structure in New York.



HI-FOG SPRINKLER

At the heart of the HI-FOG technology is the patent protected HI-FOG sprinkler, comprising a mounting adapter, sprinkler body, spool valve, water filter, nozzles and a breakable glass bulb.

The solution: the first mist system installed in a historic religious structure in New York.

A New Development in Fire Suppression

The Marioff Corp. originally developed the mist suppression system for use in marine applications, but it has also been installed at more than a dozen historic churches and museums in Europe. It is distinctive in its ability to extinguish a fire without water saturation.

The system consists of heat-sensitive bulbs that “pop” when heated by fire, opening water mist nozzles. Then water is delivered at very high pressure through stainless steel tubing, and the nozzles themselves atomize the water into a fine mist, which quickly fills the space immediately around the fire only, displacing oxygen, and putting out the fire. More than half a dozen bulbs can pop at once without significantly reducing the atomizing pressure.

The system uses banks of nitrogen-filled canisters to deliver continuous pressure without electricity for at least half an hour—long enough for the fire department to arrive.

The Cost of Peace of Mind

Nick Artim of Fire Safety Network, designer of the mist system in concert with Marioff Corp., and Bob Gabalski of the firm of Stephen Tilly, Architect, advised the congregation throughout the process of selecting and installing the fire protection system.

Gabalski reports that the mist fire-suppression system at Shearith Israel cost considerably more than a conventional sprinkler system, and it was a challenge to obtain approval from the fire department. The first of its kind, the congregation had to prove that it met code requirements. The cost could be prohibitive for many congregations. But, not many houses of worship steward irreplaceable, museum-quality interiors. For those that do, fire suppression without saturation may be worth a look.

Resources

Congregation Shearith Israel: www.shearith-israel.org

National Fire Protection Association: www.nfpa.org

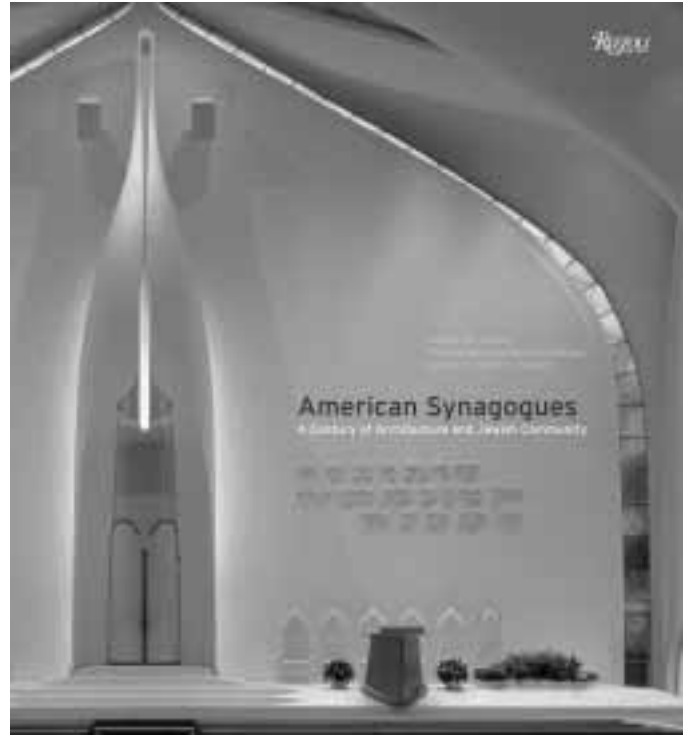
Marioff Corp.: www.hi-fog.com

Stephen Tilly, Architect: www.stillyarchitect.com
“An Introduction to Fire Detection, Alarm, and Automatic Fire Sprinklers” www.nedcc.org/plam3/tleaf32.htm

Fire Safety Network, firesafe@gmavt.net or 802-388-1064

Vesda Corporation: www.vesda.com

“American Synagogues: A Century of Architecture and Jewish Community” by Samuel Gruber, with photography by Paul Rocheleau, edited by Scott J. Tilden. Rizzoli International, New York, 2003.



Book Review: American Synagogues

Review by Anthony Robins

This is a gorgeous volume. The photos by Paul Rocheleau are stunning. The text is by Sam Gruber – Director of the Jewish Heritage Research Center among many other accomplishments, and an expert on the world’s surviving synagogues. This book belongs on the shelf of anyone who loves synagogue architecture – or modern architecture.

That said, however, this is also a somewhat perplexing book, for two reasons: first, because the photographs and the text don’t completely jibe, and second, because the book’s chronological focus – the 20th century – doesn’t entirely make sense.

Two Books in One Cover

On the first point: This is really two books, packaged as one. The first is a photographic study, by a contemporary photographer, of 31 American 20th-century synagogues – the choice of those 31 being, of necessity, a question of personal taste. The second is a general history of 20th-century American synagogue architecture that focuses on those 31 synagogues, but also mentions many dozens of others – none of which is shown – and includes no drawings, plans, historic views, or photos of architectural sources. Would that the publisher had been able to finance two books.

Defining Modern

On the second point: Scott Tilden writes that he developed the book as a response to his discovery that America is full of remarkable modern synagogues by such major architects as Frank Lloyd Wright, Minoru Yamasaki, Pietro Belluschi, Walter Gropius, Eric Mendelsohn, and so on, and he wanted to devote a book to “modern American synagogues.” “Modern” can mean many things, but for the purposes of this book, it was interpreted as “20th-century.” So while 24 of the illustrated buildings date from 1953 or later, five date from 1923 to 1931, and three predate the First World War, including a handsome Beaux-Arts Classic example, in Syracuse, New York, designed in 1910 by Arnold Brunner. Though definitely a product of the twentieth century, Brunner’s synagogue is not “modern” in the sense that work by Wright, Yamasaki or Gropius is “modern.” As a result, the first group of photos doesn’t seem to have much to do with the rest of the book. Still, the book more than meets Tilden’s goal: Anyone who thinks post-World War II-synagogues are all bland, identical suburban beige brick complexes is in for quite a shock. The buildings shown here may be, for the most part, suburban, but none could be called bland: undulating concrete walls holding stained glass windows by Ben Shahn at Temple Beth Zion; a 65-foot tall, twelve-sided



Paul Rocheleau / Rizzoli

Temple Society of Concord, Syracuse, New York, Arnold Brunner, 1910.



Paul Rocheleau / Rizzoli

Temple Beth Zion, Buffalo, New York, Harrison & Abramovitz, 1967



Paul Rocheleau / Rizzoli

Temple B'rith Kodesh, Rochester, New York, Pietro Belluschi, 1962



Paul Rocheleau / Rizzoli

Park Synagogue, Cleveland, Ohio, Eric Mendelsohn, 1953

domed sanctuary lined with concave redwood panels at Temple B'rith Kodesh; a great parabolic dome set in 30 acres of woodland at Park Synagogue.

Though the early 20th century synagogues are so different from such marvels, by including them Gruber is able to trace the latter-day evolution of synagogue design, considered as a response to surrounding cultural influences on the one hand, and internal imperatives on the other. He identifies several distinct design phases, and points out the impact of, among other things, such ritual requirements as the location of the Ark (the receptacle that holds the Torah scrolls), and such sociological / ideological issues as the location of women's seating (traditionally separate from the men's section but, since the 19th century, in non-Orthodox synagogues, generally not). Gruber also includes a number of telling quotations from the architects.

Liberating Synagogue Design

But perhaps the most interesting aspect of the design of modern – specifically, post-World War II, non-traditional – synagogues is that the Modern movement liberated this building type from a particularly sensitive dilemma. In Europe and America over the centuries, the design of synagogues – often by non-Jewish architects – invariably related in some way to church architecture.

Synagogues either looked like neighboring Christian buildings, or they deliberately did not. This led to such curiosities as early-19th-century Egyptian Revival synagogues. Imagine a Passover service, celebrating the Exodus from Egypt, in a building modeled on an ancient Egyptian tomb. Or imagine having to choose between Gothic (medieval Christian) and Classic (pagan Roman). Or consider: to meet a requirement that they appear different from churches, many 19th-century European and American synagogues look Moorish – in other words, like mosques. With the advent of the Modern movement – avowedly secular and determined to abandon all attempts at historical imitation – the problem appeared to be solved. And, as this book amply demonstrates, solved with style.

Anthony Robins is a writer and historian who formerly served as Deputy Director of Research and Director of Survey at the New York Landmarks Commission. He is also a former Trustee of Congregation Habonim, a Conservative synagogue on Manhattan's Upper West Side.

Left: The project architect inspects new copper flashing at Convent Avenue Baptist Church.



Right: At the Gil Studio in Brooklyn, project architect Dan Allen and Bojana Ilievski from Cutsogeorge & Tooman Architects work with Paul Radensky, President of Old Broadway Synagogue, and congregation member Eliot Kahn to plan the recreation of a stained glass window.



How to Interview an Architect

Preservation architects make good building consultants for a wide range of projects. Among their strengths are background and experience in project planning, knowledge of traditional construction techniques and materials, ability to design appropriate additions to historic buildings, and access to experienced contractors. They have the expertise to help plan and administer construction projects from foundation to roof.

After prequalification and site visits, a congregation will have proposals from several architects in hand. Whether soliciting architectural services for an initial conditions survey or to plan a specific construction project, the next step is to interview each of them to determine which architect will best suit the project. In addition to specific questions about their proposals, Common Bond offers these general questions to use in interviewing an architect:

Contract and Proposal

- Is the price quoted a not-to-exceed figure or an estimate dependent on hourly rates? How will extras be billed?
- If an unanticipated problem develops during the course of the project that requires additional design services, how will

additional services be billed – hourly? Will there be a cap on fees?

- Does your proposal include an allowance for reimbursable expenses?
- If needed, has an estimate for the services of a structural or mechanical engineer been included in your proposal? Are there other sub-consultants, such as stained glass consultant or masonry conservator, whose services you will include in your proposal or investigation?
- Please give an estimated start date and number of weeks needed to complete the report (or prepare plans and specifications)? Is this a realistic estimate?

Plans and Specifications

- Will schematic or scale drawings be prepared and included as part of the initial conditions survey? Will accurate, scaled drawings or large-scale, detailed photographs be used as the basis for plans and specifications?



Project architect Kai Woo and consulting engineer Evan Axelrod, of Anchor Consulting, investigate interior column steel and terra cotta at Mt. Morris Ascension Presbyterian Church.



Building conservator Kandace Simmons and Andrzej Kaczmarek of Midtown Restoration discuss masonry restoration at Chambers Memorial Baptist Church.



An architect will lead contractors through the site, as at St. Ambrose Church.

- Will you provide several copies or a reproducible disc of the final report or plans and specifications?
- Will you be able to make a presentation to the entire congregation once the survey or construction documents are completed? Would you prepare a slide or digital presentation for potential funders?

Project Management

- How do you envision your role once a project has been established, especially in terms of contract administration and working with the contractor?
- Will you help us identify contractors to bid on the project?
- Who from your office would manage the project?
- How often would you expect to meet with the building committee? Could you attend evening or weekend meetings?
- Would you be able to offer advice about fundraising or assist the congregation in preparing grant or loan applications?
- In working with buildings of a similar age and construction type, what were the challenges involved?

Referrals

In addition to interviewing the architects, several questions can be asked of the architects' references.

- Was the architect responsive to the congregation's needs?
- Did they work with the same staff person, project manager, or project team throughout the project?
- Did the architects submit a project schedule, and was the schedule met?
- If they were hired to prepare construction documents, were they quick to address problems that arose during construction?
- Were the projects completed on time and within budget?
- Did the project meet their expectations?
- Would they hire this architect again?

For more helpful information like this, order *Managing Repair & Restoration Projects: A Congregation's How-to Guide* from the Conservancy for \$20.00. Order forms are available by visiting www.nylandmarks.org or calling 212-995-5260

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The Old North Church in Boston was the first religious institution to receive a Save America's Treasures grant.

It was at Old North that a Revolutionary hung two lamps to warn that the British were advancing to Lexington and Concord.



Eric Gradoia, Massachusetts Historical Commission



Eric Gradoia, Massachusetts Historical Commission

Saving America's Religious Treasures

Recent Changes in Federal Funding for Historic Religious Properties By Erin Tobin Bearden

On May 27, 2003, Secretary of the Interior, Gale A. Norton, announced that Old North Church in Boston, Massachusetts, would receive a grant from Save America's Treasures, a federally funded program. This announcement marked a change in federal policy and opened the doors for the Save America's Treasures program to award grants to other qualified religious institutions.

A Partnership for Preservation

A 1998 Executive Order from the office of President Clinton established the Save America's Treasures grant program as a public-private partnership among the White House, the National Park Service, and the National Trust for Historic Preservation. Its mission is to recognize and rescue the enduring symbols of American tradition that define us as a nation. For the first few years of the program, the National Trust and the White House Millennium Council worked together to designate the official projects of the program. In that time, Congress approved \$95 million of funding for the Save America's Treasures program. Since 2001, President Bush has proposed

\$30 million to fund the Save America's Treasures program. Prior to April 30, 2003, historic religious properties and collections were not eligible for Save America's Treasures funding, based on a 1995 Justice Department opinion that such funding would violate the Establishment Clause of the *United States Constitution*. This year, the Office of Legal Counsel within the Justice Department revisited its previous view and determined that historic structures used for religious purposes could receive Save America's Treasures funding.

The Old North Church in Boston was the first to receive a \$317,000 grant to repair and restore their historic, clear-paned,

Save America's Treasures

grants are administered by the National Park Service, along with the National Endowment for the Arts, the National Endowment for the Humanities, the Institute of Museum and Library Services, and the President's Committee on the Arts and the Humanities. The National Trust for Historic Preservation provides support through public advocacy for the program, project assistance, and fundraising.



Eric Gradoia, Massachusetts Historical Commission

A National Historic Landmark, Old North gives tours to the public.

windows and make the building more accessible to the public. Old North Church has a significant role in Revolutionary War history, dating to April 18, 1775, when the church sexton, Robert Newman, hung two lamps in the belfry to warn that the British were advancing to Lexington and Concord. Mr. Newman left the church after hanging the lanterns through one of the windows being restored with the Save America’s Treasures grant. According to the Old North Church’s website, this window now houses the Third Lantern lit by President Ford on April 18, 1975, as a symbol of freedom and renewed resolve for the next century of the Nation’s life.

The opinion opened the path for other religious institutions housed in nationally significant historic buildings to apply for funding, as long as their buildings met the requirements of the program. However, this program only funds a highly select group of nationally significant projects.

“A change in federal policy opened the doors for Save America’s Treasures to award grants to other qualified religious institutions.”

Funding Priorities

Save America’s Treasures focuses on the preservation of cultural resources of national importance. These resources can include historic structures and sites (known as historic properties), as well as a wide variety of artifacts, documents, and artworks with intellectual or cultural significance (referred to as collections).

In order to qualify, a collection or historic property must have national significance and be threatened, endangered, or have some urgent preservation need. The significance of a collection is evaluated separately from the building in which it is housed. Therefore, an organ housed within a National Historic Landmark property would not qualify for restoration funds

unless that organ possessed its own cultural or historical significance on a national level. The collection or object must also not have explicit religious symbolism. For example, a gold-plated cross or Star of David would not qualify. One of the National Park Service’s partner organizations – the National Endowment for the Arts, the National Endowment for the Humanities, or the Institute of Museum and Library Services – evaluate the collections applications for national significance.

Defining “National Significance”

For the purposes of the Save America’s Treasures program, national significance means that a historic property must have one of two designations: National Historic Landmark status or listing on the National Register of Historic Places with a national historic context. The National Register of Historic Places categorizes all of its listed properties as significant within a local, state, or national context.

A nationally significant property does not need to belong to a property type found nationwide. Rather, it has to be of exceptional value in illustrating or representing an important theme in our country’s history. The property must help explain or have had an impact on national history, either through a person associated with it or its architectural type or style. In contrast, a locally significant property represents an aspect of the history of a town, city, county, or region, while a property of statewide significance represents an aspect of the history of the state as a whole.

National Historic Landmarks are a special category of the National Register. Not all properties of significance within a national context are listed as National Historic Landmarks. National Historic Landmark listing is contingent upon very strict criteria. If a religious property derives its primary national significance from architectural or artistic distinction or historical importance within a national context, it may be considered for National Historic Landmark Status. The *National Register Bulletin* states that these properties must have “exceptional

2002 Grant Examples

Examples of recently awarded grants to historic properties in 2002 included \$250,000 to restore the windows of the 1844 Wadsworth Athenaeum Museum of Art in Hartford, Connecticut, and \$175,000 restore the roof and masonry of the 1737 Luykas Van Alen House in Kinderhook, New York. Grants to collections include \$63,000 to the Academy of Natural Sciences in Philadelphia to stabilize Thomas Jefferson’s “Fossil Collection of North American Ice Age Mammals” and \$64,000 for archival storage of the LOOK Magazine Photographic Collection in New York City.

value or quality in illustrating or interpreting the United States in history, architecture, archeology, engineering, and culture and possess a high degree of integrity of location, design, setting, materials, workmanship, feeling, and association.” In short, National Historic Landmarks are incredibly special properties with an extremely high level of significance to the country, as in the case of Old North Church, which played a major role in our Revolutionary War history.

Applying for Funding

Sacred sites that are considering an application to Save America’s Treasures should contact their State Historic Preservation Office (SHPO) to determine the significance designation of their property. Some SHPOs have websites where properties’ register listings can be searched. Applicants must work with their SHPO early in the application process. Even if the SHPO submits a letter stating that the subject property meets eligibility requirements for a nationally significant listing on the National Register, that application will not be evaluated as highly as one from a property that is already listed as a National Historic Landmark or as nationally significant on the National Register.

Applicants should contact the National Park Service (NPS) or the National Trust for Historic Preservation (NTHP) to determine whether the proposed project falls within the parameters of the Save America’s Treasures program. Particularly with the recent opinion allowing funding for religious properties, applicants need to make certain that they have an eligible project and that their property meets the significance requirements of the program.

*Religious National Historic Landmarks in New York State**

- Central Synagogue, New York City
- Church of the Ascension, New York City
- Dutch Reformed Church, Tarrytown
- Dutch Reformed Church, Newburgh
- Eldridge Street Synagogue, New York City
- First Presbyterian Church (Old Whalers), Sag Harbor
- Grace Church, New York City
- Old Quaker Meetinghouse, Flushing
- Plymouth Church of the Pilgrims, Brooklyn
- St. George's Episcopal Church, New York City
- St. Ann-Holy Trinity Church, Brooklyn
- St. Patrick's Cathedral, New York City
- St. Paul's Cathedral, Buffalo
- St. Paul's Chapel, New York City
- St. Peter's Episcopal Church, Albany
- Trinity Church and Graveyard, New York City

*As of 2001

The Friends Meeting House in Flushing, Queens, dating from 1694, is the oldest religious building in continuous use in New York City.



A National Historic Landmark, Grace Church in New York City was designed by James Renwick, Jr. in 1846.



Peter Aaron / Esto

Central Synagogue, a National Historic Landmark in New York City, was recently restored to the glorious, original condition as designed by Henry Fernbeck in 1871.





*Eldridge Street
Synagogue now
houses a non-profit
program that offers a
variety of cultural and
educational programs
for tourists, families,
and school groups.*

Eligible scopes of work for Save America's Treasures are preservation and/or conservation projects with a clear public benefit, which means there must be public access to the resource. Save America's Treasures does not fund acquisition, property surveys, long-term maintenance, interpretive programs, reconstruction of historic properties, moving historic properties or work associated with a relocated building, new construction, historic structure reports or conditions assessments, endowments, fundraising campaigns, or work performed prior to the announcement of the award. All projects must address the threat to the historic property and preserve the historic structure. All Save America's Treasures grantees – known as "Official Projects" – must have a one-to-one match of cash (non-federal funds) or donated services. A project focusing on a historic property must request no less than \$250,000 and no more than \$1,000,000 in grant funds. Collections projects are funded for between \$50,000 and \$1,000,000. The average awards in 2002 were \$258,000 for historic properties and \$135,000 for collections preservation.

Preservation for the Public Good

To ensure the public benefit of the awarded project, the National Historic Preservation Act, Section 102(a)(5), requires that all grantees assume, upon completion of the project, "the total cost of the continued maintenance, repair, and administration of the property in a manner satisfactory to the Secretary (of the Interior)."

To meet this requirement, grantee property owners must give their State Historic Preservation Office a preservation easement or covenant that runs with the land for 50 years. The easement or covenant requires that the property owner and any successors preserve their property's nationally significant features, materials, appearance, workmanship, and setting, thereby maintaining the historical integrity of the historic resource. The SHPO holds this easement or covenant, enforcing it for the term.

Because the program preserves these historic resources for the public benefit, all grantees must make any work not visible from the street open to the public for at least 12 days a year for the 50 year term of the easement or covenant. Religious properties must have public access at times when no services are held. Events open to the community, such as concerts, lectures, and town meetings, would count towards this requirement.

Resources

Institute of Museum and Library Services,
202-606-4641, sshartzman@imls.gov, www.imls.gov.
[For Collections Projects]

National Endowment for the Arts, 202-682-5516,
jeffersk@arts.endow.gov, www.arts.gov.
[For Collections Projects]

National Endowment for the Humanities,
202-606-8570, bpaulson@neh.gov, www.neh.gov.
[For Collections Projects]

National Historic Landmark Program, National Historic
Landmarks Survey 1849 C Street, NW (Org. 2280),
Washington, D.C. 20240, 202-354-2216,
Fax: 202-371-2229, www.cr.nps.gov/nhl.

National Park Service, 202-513-7270 then press 6,
NPS_treasures@nps.gov, www2.cr.nps.gov/treasures.
[For Historic Properties Projects]

National Register Bulletin 15, "How to Apply the
National Register Criteria for Evaluation." Washington
D.C.: U.S. Department of the Interior, National Park
Service Cultural Resources: 1995.

National Register of Historic Places, National Park
Service, 1201 Eye St., NW, 8th Floor (MS 2280),
Washington, DC 20005, 202-354-2213, nr_info@nps.gov,
www.cr.nps.gov/nr.

National Trust for Historic Preservation, Bobbie Greene
McCarthy, Director of Save America's Treasures at NTHP,
202-588-6202, sat@nthp.org.

Save America's Treasures General Information,
www.saveamericastreasures.org



St. Stanislaus Kostka Church in Rochester has spent the past 13 years and \$900,000 on two major restoration campaigns. The local landmark is a source of pride to the Polish community and the city of Rochester. A dome tops the 102-foot steeple of the Lombardy Romanesque Revival-style building, complete with gargoyles. The altar is framed by an elaborate mural.

The End Is In Sight:

Restoring St. Stanislaus Kostka Church

By Jane Cowan

Thirteen years and almost \$1 million later, the congregation and community are justifiably proud of their local landmark.

A familiar Chinese proverb states, “The journey of 1,000 miles begins with one step.” For the congregation of St. Stanislaus Kostka Church in Rochester, this aphorism is all too true. It has spent the past 13 years overseeing two major restoration campaigns: a first to restore the 44, original, Austrian stained-glass windows, and a second, more comprehensive building restoration that repaired cracked masonry, restored deteriorated metal-work, replaced failing (and falling) slate roof tiles, performed electrical upgrades and asbestos removal, restored original interior artwork, and replicated the church’s cupola.

After an investment of nearly \$900,000, the congregation and community are justifiably proud of their achievement. The local landmark – nearing its centennial – is again a gem, a source of pride to the Polish community and the city of Rochester. More important, the building will be able to continue to fulfill its spiritual, educational, social, and cultural mission well into the 21st century.

Unwavering Faith

Built in 1907-1909 by a local firm, Gordon and Madden, the Lombardy Romanesque Revival-style building features a 102-foot domed steeple, complete with gargoyles. Like many urban churches, St. Stanislaus Kostka’s congregation was dwindling as the population changed. Continuing lack of funds led to deferring maintenance work. By 1991, the 82-year-old church was suffering from age, as well as vandalism. The congregants knew that if they wanted their beloved St. Stan’s to continue to be the spiritual heart of Rochester’s Polish and Slavic community, they would have to halt the rapidly accelerating deterioration.

The 44 stained-glass windows were hand-painted by the Tyrolese Art Glass Company in Innsbruck, Germany, and portray images of Polish and Slavic saints. Restoring these windows – price tag \$120,000 – served as the critical first step

of the “1,000 mile journey,” although the congregation didn’t realize that at the time. The campaign to restore the windows was viewed as a discrete project. Work began in 1991 and lasted four years.

Although restoring the windows seemed confusing, daunting, and prohibitively expensive, the congregation rolled up their sleeves and dug in. Spearheading the effort was life-long parishioner Kathleen Urbanic, who observed, “We believed we could do it.” This unwavering belief was a key ingredient in the congregation’s success.

Conditions Surveys are Key

Another important component was a conditions survey report that not only documented existing conditions and made recommendations for repair, but also prioritized these restoration and preservation goals. Urbanic says, “I would strongly recommend that any congregation considering work on its church begin by having a conditions report prepared. We have used ours as a bible for our restoration program, drawing upon it continually to understand the need for specific repairs, prioritize projects, and estimate costs. A plan of action proved invaluable for us, in regard to both our fundraising campaign and our program of repairs.”

St. Stanislaus Kostka began each campaign with just such a conditions survey report prepared by their architect for each phase of work, and Urbanic stresses the importance of turning to professionals for these, “If we were going to do it, we were going to use the highest preservation standards. People saw that work was going to be done right, and that inspired confidence.”

Architect John Bero, who has worked on the church since the launch of its second restoration campaign in 1997, echoes Urbanic’s sentiments: “Many parishioners, some of whom may be building professionals, are not necessarily trained in standard preservation practices. Therefore there is a period of education, when the congregation learns that replacing the slate roof tiles with asphalt may be cost-efficient, but ultimately deleterious in terms of the building’s long-term preservation and integrity. Building committee members must be willing to listen to professionals and learn from them.”

The Challenge of Fundraising

Always a challenge, funding is another crucial component. Urbanic cites the importance of reaching out to a wider base than just the parishioners. The roots of St. Stanislaus run deep and extend beyond the boundaries of Rochester, and many friends of the church contributed handsomely to the fundraising campaign. Recognizing the church’s importance to Rochester’s Polish community, the congregation reached out to the city’s 20 Polish community organizations, all of which contributed

generously. Momentum built as this generosity inspired more enthusiasm and donations.

Rather than one all-or-nothing fundraising push, the congregation focused on a sustained campaign of mini-fundraisers. Creativity counts! Food sales that featured Polish delicacies like pirogi and hand-made sausages; sales of Christmas ornaments from Poland; countless dinner dances; a school alumni reunion that drew 700 people; and perhaps the most original and meaningful for supporters: sales of Christmas ornaments fashioned from pieces of the original copper cupola that is to be replaced. These mini-campaigns all helped sustain the restoration project. During the stained glass restoration, the church received \$5,000 from the New York Landmarks Conservancy, plus a combined \$3,500 from the National Trust for Historic Preservation and the Arts & Cultural Council for Greater Rochester. While these grants amounted to a small amount of the final cost, they played a critical role in the larger fundraising campaign: they served to place the imprimatur of legitimacy and significance on the restoration project. “When we were able to announce that outside agencies believed in what we were doing, it generated enthusiasm. This enthusiasm bred more enthusiasm,” notes Urbanic. Grants during the second restoration campaign increased to \$43,200, including \$37,200 from the New York Landmarks Conservancy for the tower restoration, a detailed investigation of the cupola, and the removal and replication of the copper cupola. Other contributing organizations included the National Trust for Historic Preservation and the Louis Skalny Foundation.

Each milestone encouraged continuing commitment. “There was just such overwhelming support. It was heart-warming,” says Urbanic. St. Stanislaus holds a cherished place in the hearts of its parishioners, larger community members, and residents of Rochester. Restoring the tower, which included masonry work, redoing copper decks and flashing, cost \$310,000. Work on the roof came to \$250,000, and the cupola and domes cost \$130,000. “The entire experience was very rewarding. As the end approaches, it feels even more rewarding. I know we’ve done something very important for the community and the building.”

One Step at a Time

Even now, Urbanic realizes that the end has not truly arrived. To prevent “slipping back to where we were,” the congregation’s plans include a permanent restoration fund and ongoing maintenance. They are committed to continuing the periodic checks and assessments that are detailed in the conditions survey. Bero offers the point of view of the church building itself: “I’m a living church. On-going maintenance is part of affirming my spiritual life. If you stop working on me, I will die.”

And so, the journey continues. One step at a time.

*Serbian Orthodox
Cathedral of St. Sava
needed to replace
its slate roof.*



LZA Technologies



To Slate or Not to Slate?

Making Decisions About Slate Roof Replacement

By Jackie Peu-Duvallon

The slate roofs of historic houses of worship often feature prominently in their design, and in many cases define character. Unfortunately, the aesthetic is but one factor congregations must consider when faced with the need for slate roof replacement. Economic and design issues must also be addressed. For many, it comes down to replacement in kind vs. synthetic slate or asphalt alternatives.

Properties of Slate

Slate has a distinctive aesthetic and textural quality. There is no mistaking the appearance of hand-hewn slate tile, with its unique irregular edges and iridescent sheen. Aside from the material's visual appeal, slate is eminently practical, the most durable roofing product there is. Slate roofs are therefore often associated with institutional, ecclesiastical, and government buildings, where longevity is an important consideration in material choice.

An older slate roof requires some annual maintenance, to secure or replace loose slates each spring. Depending on the quality of the original slate and local weather conditions, the annual maintenance required can be substantial. However, the useful life expectancy of a slate roof far exceeds that of any other roofing material. Depending on the type of slate used, roof configuration, and regional climate, a roof will last 60 to 125 years or longer. Some have been known to last over 200 years. The American Society of Testing and Materials (ASTM)

has developed a grading system for slate. The ASTM's C406 "Standard Specification for Roofing Slate" lists 3 grades for slate:

- Grade S1 has properties that provide an expected service life of 75 or more years;
- Grade S2 has a service life of 40 to 75 years;
- Grade S3 has a service life of 20 to 40 years.

This grading system applies across the slate tile color spectrum. By contrast, most synthetic roofing materials will last a maximum of 40 to 80 years.

Being the best, slate is also the most expensive product to use, in part due to the cost of skilled labor. Slate tile installation is a labor-intensive process, and one that must be done by skilled workers using specialized tools and methods. As the saying goes in the business, "All slaters are roofers, but not all roofers are slaters." Material costs for natural slate range with color, grade, and shingle size, from about \$270 to \$400 per square, which is 100 square feet, or 10' by 10'. Installed, the price of natural slate ranges from about \$1,200 to \$3,000 per square*.

*Pricing is given for relative comparison purposes only. Installed prices will vary depending on regional labor costs and availability of experienced contractors; material delivery costs; roof complexity and pitch; condition of roof structure and sheathing or underlayment; cost of demolition or asbestos abatement at preexisting roof(s); and ease of access and scaffolding. Costs do not include the substantial cost of demolition, substrate preparation, and associated metal drainage systems. Roof pricing in this article is based on recent New York City examples, where labor and material costs are high relative to most other U.S. markets.



LZA Technologies

Slate workers cut slate tiles, then place them on the roof over waterproofing.



LZA Technologies



LZA Technologies



LZA Technologies

A distinctive window, before and after slate replacement.

The First Line of Defense: Ongoing Slate Repairs

It is therefore most economical for congregations to keep pace with necessary maintenance and spot repairs, such as replacement of individual slate tiles and supporting elements. “Slate is easily repaired,” says New York City architect and preservationist Dan Allen, of Cutsogorge, Tooman & Allen Architects. “A good slater can get up there and replace slates locally.”

Problems that arise are often due to failure of the support systems rather than the slate itself. For example, water from clogged gutters can creep up under slate tiles, and during a winter freeze, create a build up of ice that will pop them off. In addition, the failure of rusted nails will cause slates to loosen and detach. For this reason, stainless steel or copper nails are recommended to fasten slate tiles. The other major support system, flashing, will eventually require maintenance. Flashing is the metal sheet that prevents water infiltration at the intersection of roof slopes, dormers, and where chimneys come up through the roof. Attention must be paid to using flashing of comparable durability to survive the useful life of the slate. Sixteen- to 20-ounce copper sheet and terne-coated stainless steel are recommended flashing materials.

The Best Solution: Replacing Slate with Slate

Preserving a historic slate roof should be a priority, because it is essential to the building’s architectural design. “Replace slate in kind,” says Allen, “because it is integral to the systems that the original architects and engineers put in place, to the way the building is supposed to be ventilated and drained.” If congregations must consider synthetic replacement, they should look for compatibility with the old slate roof in design, as well as installed appearance.

The Smart Decision: Long-Term Planning

As a slate roof nears the end of its useful life, a wise congregation begins planning for full, in-kind replacement. Awareness of a slate roof’s advanced age, not a leak in the sanctuary, should trigger a congregation to take action. Michael Rebic, Director of the Property Support Program of the Episcopal Diocese of New York, has worked with congregations to foster fiscal preparedness. Holy Trinity in Pawling and the Property Support Program have both agreed to set aside funds each year for ten years in an interest bearing account, which will then be used to replace Holy Trinity’s aging slate roof. Of this innovative model, Rebic says, “We want to fund long-term solutions rather than short-term fixes.”

A Successful Congregation

In 2000, the congregation of St. James Episcopal Church (Henry M. Dudley, 1865) in the Fordham section of the Bronx was faced with deciding how to replace their slate roof. Their 135-year-old, Pennsylvania slate roof was badly delaminating and creating extensive leaks within the building. Previous inappropriate repairs had included tar patching, which proved ineffectual and marred the appearance of the building.

At the recommendation of Sacred Sites Program staff, preservation consultant Ed Kamper was retained to objectively evaluate the roof conditions and provide recommendations with cost estimates. Kamper's report recommended full replacement of the slate roof, restoration of the copper work, and associated masonry repairs with a project cost of \$460,000.

The congregation also considered asphalt shingle, which would have reduced the cost of to an estimated \$420,000. However, says Kamper, the less expensive option would not have had the same longevity, and therefore would not have been a good value. He says, "Replacing in kind has more value to a church, which will not be sold but will be passed on to generations of worshippers."

Michael Rebic concurs, "The cost of slate replacement is less when amortized over the lifetime of the roof. The church would have to replace an asphalt roof three times in the same span of time. One slate roof is much cheaper, especially when you account for the increasing cost of labor."

The congregation didn't want to lose the character and patina of their old slate roof, and the church's historic significance affected the decision as well. St. James is a New York City Landmark, and many local landmark ordinances, including New York City's, establish a regulatory process requiring review and approval of replacement roofing materials. The removal of a slate roof and the installation of a synthetic or asphalt shingle roof may trigger extended review by the permitting agency.

The congregation decided to maintain the architectural integrity of the building and enthusiastically embraced fundraising for the project. The Reverend Brother Tobias Haller says that "they recognize their custodial role in preserving the church for the future." St. James was able to finance the project through congregational fundraising, grants and a low-interest loan from the Property Support Program of the Episcopal Diocese of New York, and a Robert Wilson Sacred Sites Grant from the New York Landmarks Conservancy. Of the finished product, Father Haller says, "The slate and copper work is beautiful. It's wonderful to see what it ought to have looked like but didn't for fifty years."

Ed Kamper



Ed Kamper



St. James Episcopal Church in the Fordham section of the Bronx deciding to replace their 135-year-old, Pennsylvania slate roof with slate.

Ed Kamper



Ed Kamper



The work in progress and the final result.

Alternatives to Slate

Congregations often consider various roof-replacement options in an effort to save money. Synthetic materials and asphalt shingle are generally lighter, cheaper, and easier to install than natural stone, although they do not have comparable durability. Other substitute materials, including clay and cement tile, are equivalent in weight or even heavier than slate, raising structural considerations which can substantially effect feasibility and cost. Some common alternatives to slate are:

- **Asphalt Shingle:** Asphalt shingle is one of the most widely used materials for pitched roofs because of its low cost and ease of installation. It comes in two basic types, asphalt saturated mats made from either organic felts or fiberglass. Most are expected to have a useful life of 20 to 30 years, but premium shingles are generally warranted for 30 to 40 years.

Congregations should bear in mind that although asphalt shingle is available in a variety of colors and textures, it does not resemble the textural quality of slate. When used to replace historic slate, asphalt shingle will change the aesthetic quality of a roof. However, laminated asphalt shingle, often referred to as “architectural grade,” offers greater variety in textural quality, shape, and color, and more closely resembles slate. Material costs for asphalt shingle generally run from \$55 to \$150 per square. Installed costs for asphalt shingle range from about \$200 to \$800, but prices rise steeply for replacement roofs depending on the costs of demolition of the existing roof(s) and the condition of the underlying structure and sheathing. For more information, visit www.asphaltroofing.org

- **Rubber and Plastic Synthetic Slate:** Rubber and plastic shingles are made to resemble real slate and are becoming popular among people interested in maintaining the historical integrity of buildings. These shingles are made from recycled rubber and plastic and bear the closest resemblance to authentic slate. Though some manufacturers create a variety of tile molds to vary the texture of individual tiles, these products have been criticized as having a flat, monolithic appearance. The manufacture of this type of synthetic slate is about fifteen years old, and it is expected to have a useful life of 40 to 50 years. However, congregations should be aware that because the technology is relatively new, there is no track record for these products. Further, though durable and pleasing in appearance compared to other synthetic roofing materials, the labor costs for installing these substitute shingles are surprisingly close to that of real slate. Rubber and plastic slate costs vary widely, from \$200 to \$300 per square material cost, and from \$500 to \$1,500 per square installed. For more information, visit www.buildinggreen.com/products/shingles.cfm

- **Clay Tile:** Flat interlocking clay tile is a promising slate alternative. While it does not resemble slate in texture, it does acquire its own patina over time. These tiles can be laid in similar patterns and are available in a variety of shapes and colors. Clay is durable, and useful life expectancy ranges from 80 to 100 years. An important point to remember when considering clay roof materials is that they have to be matched to an area’s climate. Vitreous clay tile, so called because of its smoothness and reflectivity, is recommended for use in the

Cost Comparison for Slate and Replacement Material

Material	Natural Slate (Vermont Slate, ASTM C406 Grade S1)	Asphalt Shingle	Rubber / Plastic Tile	Clay / Ceramic Tile	Concrete Tile: Standard	Concrete Tile: Handmade
Material Cost, Per Square	\$270 to \$400	\$55 to \$150	\$200 to \$300	\$300 to \$750	\$80 to \$250	\$375 to \$400
Installed Price, Per Square	\$1,200 to \$3,000	\$200 to \$800	\$400 to \$600	\$1,200 to \$3,000	\$1,000 to \$1,200	\$1,300 to \$1,350
Relative Weight, Per Square	700 to 800 lbs.	200 to 400 lbs.	200 to 350 lbs.	500 to 800 lbs. (lightweight clay tile) 900 to 1200 lbs. (standard clay tile)	500 to 1200 lbs.	500 to 1200 lbs.

northeast. This type of tile is manufactured to absorb no more than three percent moisture and is therefore suitable for climates where precipitation and freezing occur regularly. Clay roof costs are similar to those of slate; the material cost is slightly lower, but because of breakage, the installed price is similar. Tile averages \$300 to \$750 material costs per square (the price per square goes down with larger quantities), and \$1,200 to \$3,000 installed per square. For more information, visit www.ntrma.org or www.ludowici.com

- **Concrete Tile:** Concrete roofing tiles are widely produced and are made to resemble a range of roofing materials, including slate. Concrete tile is generally machine made and, unlike clay tile, does not require kiln firing. It is therefore less expensive to produce than clay tile, and can be sold at lower prices. It is as durable as clay tile and absorbs less moisture than even vitreous clay tile. However, concrete tile has been criticized for not having the same aesthetic quality as clay. Hand made concrete tile, which has a more varied texture, is said to have greater visual appeal. Standard machine-made concrete tiles will average about \$80 to \$250 per square in material cost, and about \$1,000 to \$1,200 per square installed. Hand-made concrete tiles average \$375 to \$400 per square in material cost, or about \$1,300 per square installed. For more information, visit www.concretehomes.com/buildingsystems/rooftiles/sys-roofingtiles.htm.

- **Fiber-Cement:** Fiber-cement roofing products that resemble slate were used successfully from about 1930 to 1980. The original products were made from Portland cement, aggregate, and asbestos-fiber reinforcement, which generally performed well. Beginning in the 1980s, government regulations and concern about the dangers of asbestos prompted manufacturers to change the composition to include cellulose fibers. According to the National Roofing Contractors Association, reports of problems associated with fiber-cement roofing products made from cellulose fiber have been relatively frequent for several years. Consequently the material is no longer widely available. For more information, visit www.professionalroofing.net/past/oct2000/tech.asp

Jackie Peu-Duvallon is a preservation consultant currently finishing her master's degree at Columbia and working on a cultural resources survey for an area in eastern Long Island.

Resources

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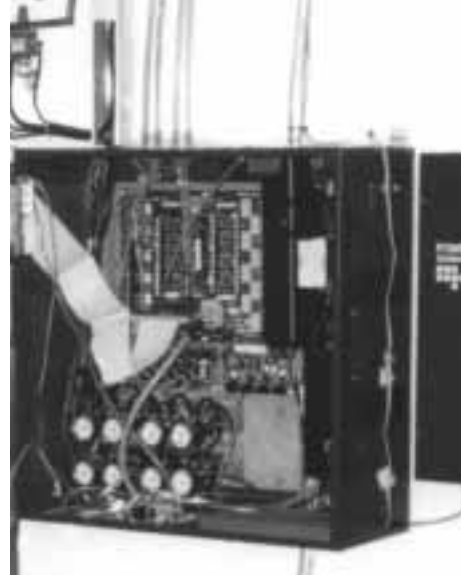
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These temperature controls are in a 32,000 square foot church in suburban Philadelphia. The pneumatic system on the right uses compressed air to control temperature in ten zones. On the left is a digital energy management system to control the pneumatic system. To change the temperature schedule, you need a computer with a modem.

Heat is Getting Out of Control

By Andrew Rudin

I surveyed dozens of churches and synagogues in 2003. In many of them, a contractor has installed some kind of central, digital electronic control that only he understands. Then, congregations become dependent on contractors, like the way we depend on one or another computer operating system. In most instances, I recommend that congregations remove these controls.

Brief History of Temperature Control

The original temperature control was another log on the fire in the cave. Then came shoveling coal into the furnace, followed by automatic stokers. Damper systems were invented in 1885, and Honeywell's first thermostat followed a year later. The clock thermostat was invented in 1906. After the oil price shocks of the 1970s, many congregations installed pairs of these thermostats – one set for comfortable temperature and the other set lower to save heating costs. A clock, often in the basement, shifted control from one thermostat to the other. In 1982, computers married thermostats to produce electronic clock thermostats. In the early 1990s, a Dell Computer poll found that the most intimidating household device was the clock thermostat, showing that our relationship with digital temperature controls has been awkward, to say the least.

Why Digital Controls are Good

Without any hesitation, I recommend seven-day, digital clock thermostats for congregations installed in each heating zone. They bring the clock up from the basement, make two thermostats into one, and provide a lot of scheduling flexibility. They can maintain the temperature as low as 45°F during the week, warm the worship space to perhaps 62°F over Saturday night, and bump it up to 72°F for worship. A really good clock thermostat is now only \$55.

Digital thermostats are, however, not easy to program. Instruction manuals have a half-life of a week or two. After they disappear, congregations are left with a prayer, curse words, and a few lines of small print directions under the thermostat cover. Fortunately, most major thermostat manufacturers now post complete thermostat instructions on their websites.

What's Wrong with Digital Controls

Beyond clock thermostats, electronic controls get very complicated. Examples are:

- Outdoor temperature reset, which varies the temperature of heating water in proportion to outside temperature.

Right: This Lux 9000 7-day clock thermostat is about \$55 from Home Depot, is fairly easy to program, and is about as complicated as you want to get for most heating systems.

Left: No manual, no web support, no diagrams, no clue.



Andrew Rudin



Andrew Rudin

- Cycling timers that cycle steam boilers in proportion to outside temperature.
- Energy management systems that sense temperatures and control various pieces of equipment throughout the building.
- Lead-lag controls to cycle the firing sequence of boilers.

Worship buildings are unique. Most buildings are residential, and most non-residential buildings are commercial. Since there are so few worship spaces, contractors try to apply controls that work well in businesses or homes to our unique buildings. However, congregations usually don't have sophisticated building operators. Our buildings are usually unoccupied most of the time, have variable schedules, are big, and are governed by committees whose members rotate every three years. So, in most cases, I suggest a "controlectomy" to remove complicated temperature controls from the premises.

Here is a list of what is wrong with them:

- Few people understand how they work, other than the installing contractor.
- The instruction book may be larger than a Bible, and in equally small print.
- New models make the older ones obsolete, so you replace rather than repair.
- Hardware and software are proprietary and not interchangeable.
- Hardware outlives software, and you eventually can't get updates.
- Larger systems are vulnerable to power surges, like steeple lightning strikes.

More Basic Problems

The basic problem with the use of electronic controls in worship spaces is that the spaces are only intermittently used and heated. When it is not occupied, the temperature inside a worship

space is usually the same whether the outside temperature is minus 10°F or +50°F. The thermostat sets a baseline low temperature, usually about 50°, and directs the boiler to maintain a moderate temperature in the building at all times. Then they quickly raise the interior temperature to comfortable levels when the building is being used. This is the reason that boilers in Phoenix are about the same size per square foot of heated floor area as those in New York City. There is little relationship with outside weather conditions – quite different from residential buildings or commercial buildings that operate 24/7, with frequent temperature calibrations.

Reset controls work well in 24/7 buildings, but in intermittently heated buildings, I find most of them disabled – a wasted investment. An outdoor temperature reset control changes the temperature of the water that heats the building in proportion to outside temperature. The warmer the outside temperature, the cooler the circulating water. So, on a moderately cool day, a large worship space will not have hot enough water to recover from low interior temperatures.

Further, lead-lag controls for pairs of boilers are inappropriate because they assure equal operating time for both boilers. Congregations should lead with the same boiler almost all the time, so that when it fails, they still have a relatively reliable boiler because the backup boiler is used less and stays in better condition – cheap insurance.

Conclusions

I think that digital clock thermostats are appropriate. They are probably the most complicated temperature control appropriate to worship buildings. Anything more complicated should be avoided because it will be expensive, few if any people will understand how it works, and its manufacturer will likely stop supporting it long before it dies. The key is that the congregation, not the contractor, remain in control of the heat.

Andrew Rudin has examined thousands of buildings belonging to congregations in many parts of this country. He has been Project Coordinator of Philadelphia's Interfaith Coalition on Energy since 1982. Their website is www.interfaithenergy.com. Andrew's phone is 215-635-1122, and his email is andrewrudin@earthlink.net.



Through presentations, newsletters, and letters, congregation members can learn about goals and progress of fundraising and repair campaigns.

Keeping the Congregation Well-Informed

Three Perspectives

The restoration of any historic house of worship will ultimately reap profound rewards for the congregation and the community, but the road towards that goal can be fraught with unexpected curveballs, unforeseen expenses, and frustrations of every stripe. A preservation plan can help avoid surprises during a process that can frequently last years, but not every member of the congregation sees the preservation plan. Congregants who are not on the building committee may wonder why more money needs to be raised or why the scaffolding is still up after a year. Good congregational communication is a crucial component of any successful restoration and fundraising program.

Recently, *Common Bond* spoke with three congregants who have played instrumental roles in the restoration of their houses of worship and have agreed to share the fruits of their experience with readers:

- Alan Price is helping to oversee the second phase of an ambitious tower and façade restoration of Harlem's Gothic Revival-style Ephesus Seventh Day Adventist Church (1894, John R. Thomas).
- In New Kingston, Shirley Davis has played a leading role in replacing the slate-roof shingles on the Queen Anne-style New Kingston Presbyterian Church, designed by Charles E. Hillyer, Esq. in 1900.

- In Brooklyn, replacing the great copper onion-dome roofs of the Russian Orthodox Cathedral of the Transfiguration (1916-21, Louis Allmendinger) might not be underway if not for the efforts of Mary Durniak.

Common Bond: What projects has your congregation undertaken?

Alan Price: We are restoring the façade – cleaning, stone patching and repair, repointing and rebuilding several pinnacles and buttresses – and replacing the steeple. The top 20 feet of the steeple was removed after a fire 25 years ago when it was deemed unstable. The steeple was previously one of the most visible structures in Harlem. The congregation has wanted to replace the steeple since its removal. We have also installed a ramp for the disabled and renovated the interior after the fire, which destroyed most of the main sanctuary and meeting rooms.

Shirley Davis: Our congregation is trying to get the slate roof put back on the church. The roof is original, from 1900. We have patched it as much as we can. The roof must be replaced.

Mary Durniak: We are restoring and replacing the copper on five cupolas. The main cupola has a wooden and steel

Conservator Bill Stivale and congregation member Mary Durniak in front of the Russian Orthodox Cathedral of the Transfiguration in Brooklyn. The congregation is replacing the church's great, copper onion-dome roofs.



Bill Stivale



Bill Stivale

sub-structure inside that has been damaged by the water seepage. The copper sheathing on the outside was damaged by acid fumes from a paint factory near the church. There also are severe leaks from the old clerestory windows in the large cupola that have damaged the plaster arch over the Altar. All the bricks around the cupolas have to be pointed, and the supporting steel beams have to be scraped and painted.

CB: Who planned the projects?

AP: All of the projects were planned by the Building Committee of the church, with the help of the Upper Manhattan Historic Preservation Fund (UMHPF, a \$4 million restoration program administered by the Landmarks Conservancy for the Upper Manhattan Empowerment Zone).

SD: We have a building committee, but it is really made up of the session members. We have a small, elderly congregation, so things can be quite informal. There really was no question that we had to replace the roof. As far as the slate, the church has hardly been altered since it was constructed in 1900. The slate was the original, and we wanted to keep the church as close to the original as possible. There was a strong feeling about the slate.

We had two estimates for the roof. The first estimate was from a local contractor, who really wasn't skilled in working on historic buildings. His price was high. Because New Kingston has a large population of second-home owners from NYC and environs, we were lucky enough to find a fellow who has a second home here who lives near the church and just loves the building. It turned out that he is a preservation architect, so he said he would do it for a much lower price.

MD: It planned itself. During a heavy wind and rain storm, water came pouring down on our main chandelier. We knew

we didn't have a choice. We contacted the New York Landmarks Conservancy for references to conservators.

CB: How did the planners discuss the project with the congregation?

AP: The current exterior restoration project has been in the planning stages since 2000. During this period the Building Committee evaluated and assessed the condition of the exterior. After our investigation phase, the Building Committee presented the findings to the congregation during quarterly business meetings. As the planning progressed, we gave several PowerPoint presentations to inform and educate the congregation about the exterior conditions. The project was kicked off by a \$100,000 grant and \$100,000 loan from UMHPF, and the much of the remaining monies were donated by the congregation.

SD: First we discussed it amongst ourselves, and then we presented it in the newsletter. I wrote an article about the long-range planning. We didn't have a formal meeting to announce the roof replacement.

MD: We had our conservator, Bill Stivale come to give a slide lecture. Actually we had two presentations, and since many of our congregants speak Carpatho-Russian, I translated. The slides showed the damage, and Mr. Stivale explained what had to be done. We also had a letter-writing campaign. You can't ask for money without telling people what is going on. I would personalize the letter to make a connection to the recipient.

CB: What went right with the communication with the congregation?

AP: Contributions increased when presentations were given. Educating the congregation about the project was extremely



Shirley Davis shows the Queen Anne-style New Kingston Presbyterian Church.

New Kingston created a brochure to gather community support and donations.

important. However, just as important to reporting the exterior deficiencies was tying the restoration project to the replacement of the steeple. The steeple replacement has been a source of inspiration for raising contributions.

SD: We got positive feedback. Again, our congregation is so small (only 52 members) that our meetings are very informal. People say what is on their minds. For the most part we got support.

MD: The letter writing has to touch people. Networking is essential and some names that are used in the letter will have more influence than others. Names connect and mean something to people and remind them of their personal connection to the church. Here is one story: I sent a letter to my husband's cousin who had not set foot in the church for 50 or 60 years. She received the letter and called to tell me she wanted to make a donation. She sent a check for \$10,000.

CB: What went wrong?

AP: The architect should have been introduced to the congregation earlier in the process. We are fortunate to have a very talented architect working with us, Page Ayres Cowley. Page gave the last project update for the church. The congregation has expressed confidence and excitement about Page's ability to get this project done correctly.

SD: Since we're so small and informal, I think it would be better to announce the plans to the congregation rather than presenting the information in the newsletter.

MD: So far, we are doing well. I can't stress the importance of the letter writing enough. We are slowly chipping away at the iceberg.

CB: How important is congregational communication to the success of a restoration project?

AP: The project relies heavily on the free will offering given by the congregation. Communication is of utmost importance.

SD: Very important. If you don't have the support of the congregation, you can forget about what you're trying to do.

MD: It is crucial to be specific about what you're doing.

CB: What tips for success would you give to other congregational leaders?

AP: Be repetitive. Many laypersons will not understand some of the complexities of a restoration project. Most of the presentations contained the same information. In between presentations, many parishioners asked about many issues already presented in the quarterly meetings. Use slide shows. Pictures always work well.

SD: We are still in the beginning stages, so I'm not in a position to say that we've been successful yet. We are sending out a color brochure that tells the history of the church and explains about the roof to all homeowners in New Kingston. We were lucky enough to get the printing for these brochures donated, and we hope that reaching out to the larger community will be successful.

MD: The Conservancy sponsors fundraising seminars. Have someone on the building or restoration committee take a course in fundraising. I did. It was very motivating and it helped me get ideas from other parishes. I bought the books that the speaker had written and circulated them amongst the committee.



Alan Price is helping to oversee the tower and façade restoration of Ephesus Seventh Day Adventist Church in Harlem.

CB: What would you warn others against?

AP: The entire church should be in favor of the project. Involve other departments, pastor, etc.

SD: Again, I really can't say yet. We're in the middle of the process.

MD: Asking for money when the congregation doesn't really understand what it's for. Many people don't understand why you are constantly asking for money, because they don't realize that the Sunday collection is usually only sufficient to pay for the operating expenses of a parish. Financial reports should be given frequently in plain language. Better yet, make a collage of pictures taken by the engineer or conservator and put it where people can see the damage up close. A picture is worth a thousand words.

CB: What strategies can leaders use to communicate with the congregation? Bulletin? Meetings? Announcements during services?

AP: Use business/church meetings as a venue for educating the congregation about the project. Donation campaigns were also effective. Solicit parishioners for pledges. Bulletins were used only a few times a year to report on progress and donation campaigns. The project also involved the finance/stewardship committees for fundraising.

SD: The newsletter is a good way of keeping the congregation informed. But I think the best way is to stand up and face the congregation and tell them by word of mouth or a combination of newsletter articles and word of mouth.

MD: All of the above. Make sure the letters are specific and have a personal connection. People will read them and will understand and care. Publish a calendar of fundraising events well in advance, so that the recipients can make advance plans to participate. To get the community involved, who may not attend services, put free notices in the local newspapers. Use

mail merge, and send thank-you letters for donations. Take pictures, write up successful events, and send the report in to the local newspapers.

Common Bond thanks Alan Price, Shirley Davis, and Mary Durniak for their generosity. Each has given invaluable time and energy for this article but also to their congregations and buildings.

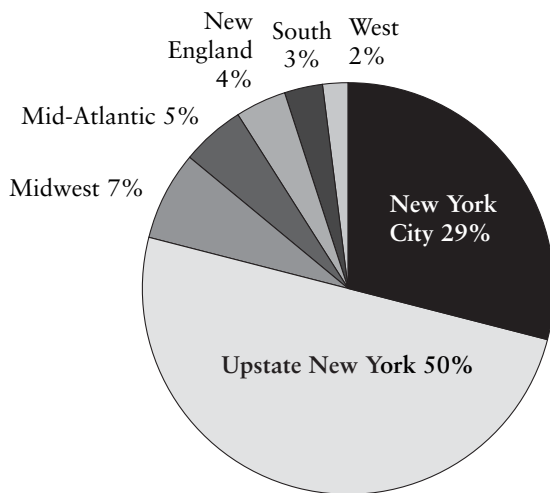
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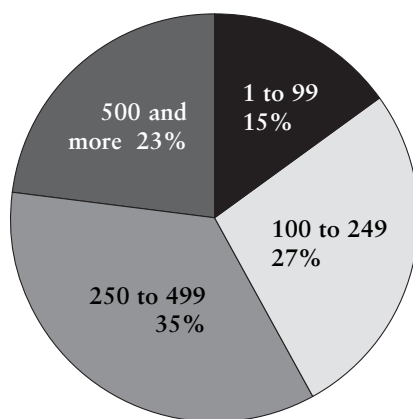
News & Notes

Reader Survey

Common Bond is grateful to the readers who responded to the survey in the last issue. Thanks to the results, we can give you a glimpse at who reads the journal. Respondents also provided valuable information about what articles and topics they'd like to see in *Common Bond*, and we are planning future issues based on that feedback. If you'd like to submit a Reader Survey, you can find it online at: www.nylandmarks.org.



Geographic Location



Number of Members

Helpful Publications

- The Landmarks Conservancy has just published a completely revised guide to the preservation and repair of historic brownstone. The *Brownstone Guide* is a consumer's handbook, designed to help owners of historic properties understand the character of this ubiquitous sandstone and the basic causes of its decay. In addition, it provides an introduction to the various methods and materials for sandstone repair and restoration. With this background, building owners can make more informed choices about maintaining and repairing historic brownstone. The eight-page, illustrated brochure is available for a \$3 postage and handling fee by calling 212-995-5260.

- The Retirement Research Foundation has published *Accessible Faith: A Technical Guide for Accessibility in Houses of Worship* by Elizabeth A. Patterson and Neal A. Vogel. The 50-page guide provides technical guidance on planning, financing, contracting, and incorporating access in houses of worship. It includes advice on navigating building-related code requirements for accessibility and identifying design solutions for common physical, auditory, and visual barriers. The publication is available for download from The Retirement Research Foundation's website, www.rrf.org, or you can purchase hard copies for a nominal fee from Partners for Sacred Places, www.sacredplaces.org or 215-567-3234.

Ask the Technical Services Center

Common Bond would like to bring back the feature "Ask the Technical Services Center," which provides valuable answers to readers' questions about preservation techniques, building repairs, and project management. Please send your preservation questions to: Ask the Technical Services Center, c/o *Common Bond*, New York Landmarks Conservancy, 141 Fifth Avenue, New York, NY 10010 or email to kalyaniglass@nylandmarks.org.

Financial & Technical Assistance

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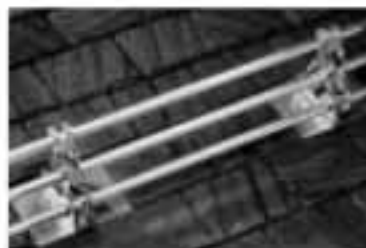
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At Alpine snowguards, we continue to set the standard for manufacturing the highest quality snowguards and delivering the kind of service you've come to expect from our design experts.

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www.alpinesnowguards.com

Sacred Spaces on the Market

As a service to our readers, *Common Bond* is adding a new feature: Sacred Spaces on the Market. This will be a listing of sacred sites for sale or lease or that are seeking to share their space with other congregations or organizations. We hope this feature will provide a wider market for the sale of historic sacred sites and quickly find new uses for them. If you steward or know of a house of worship that meets these criteria, please send address, contact information, and a photograph to:

Sacred Spaces on the Market
New York Landmarks Conservancy
141 Fifth Avenue
New York, NY 10010
kalyaniglass@nylandmarks.org



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