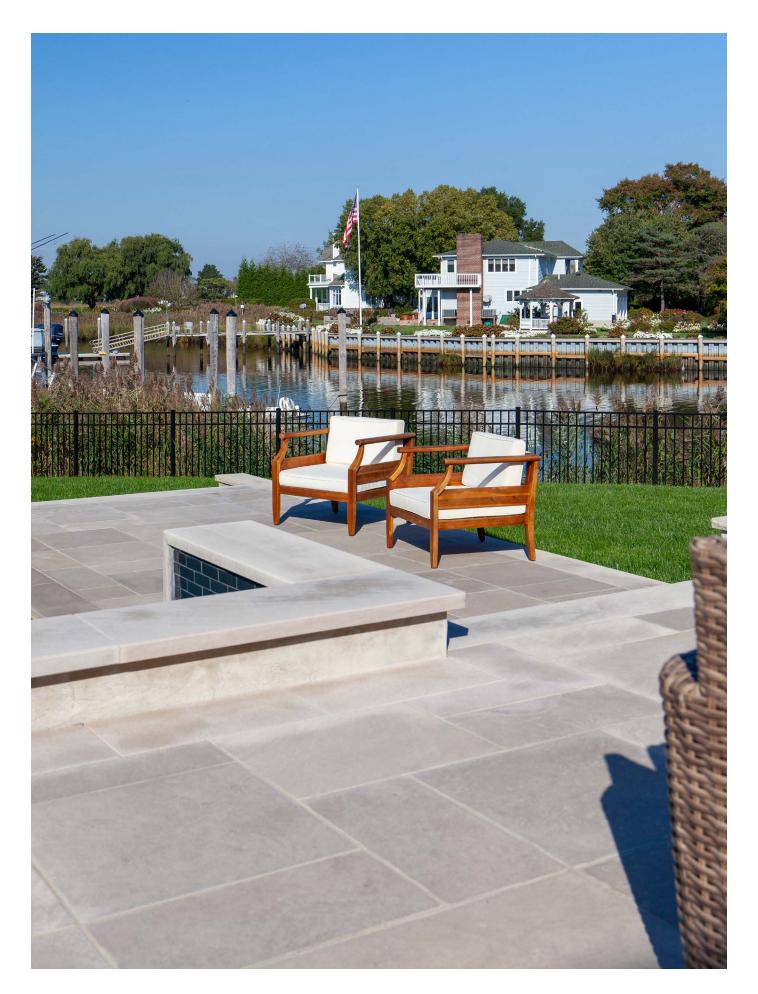
#### **Case Study**



## OUTDOOR LIVING WITH INDIANA LIMESTONE

ONE STONE, MANY APPLICATIONS





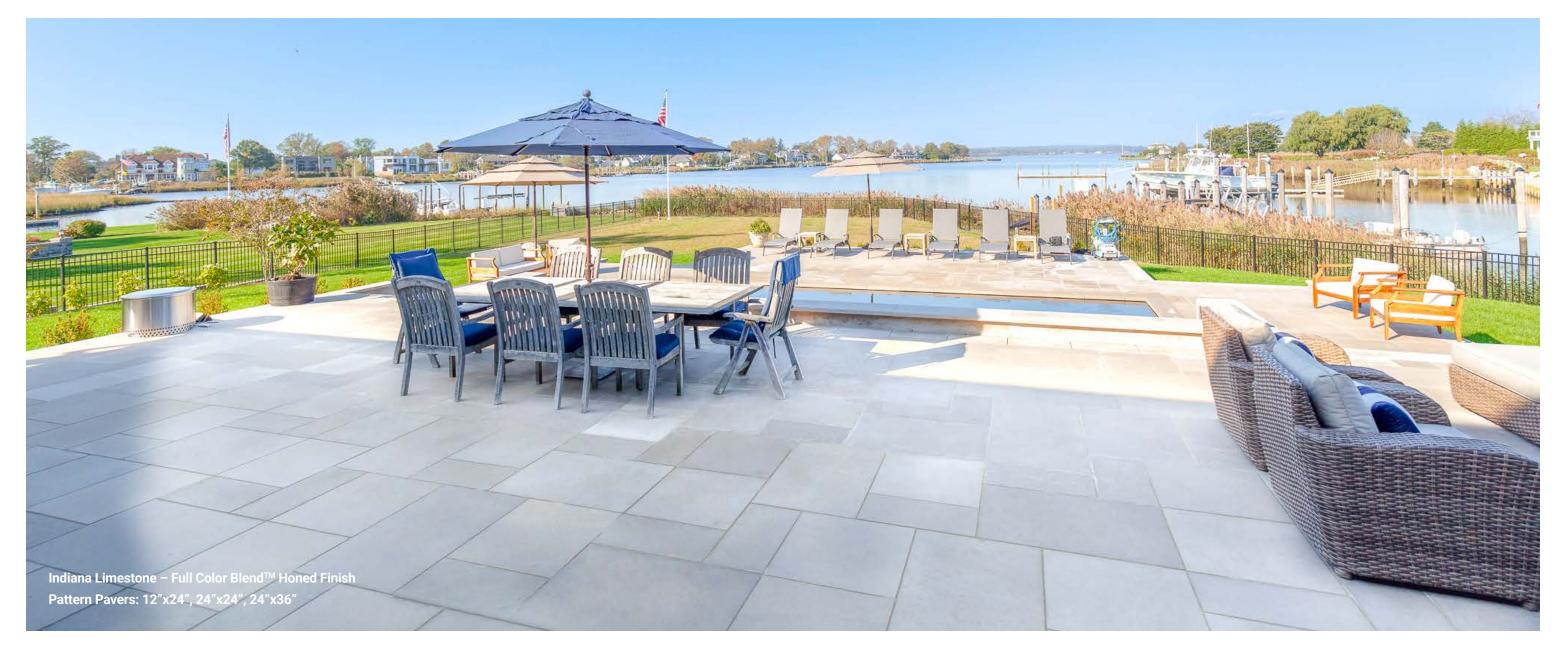
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Architect: Shorepoint Architecture, Ocean Grove, NJ

**Builder:** Padula Builders, Manasquan, NJ **Fabricator:** Bedrock Granite, Shrewsbury, NJ

## MADE BY THE EARTH, FOR THE EARTH

Nestled along the picturesque Shrewsbury River in Oceanport, NJ, sits a stunning coastal home that exemplifies the marriage of natural beauty and architectural prowess. This residence, crafted by Padula Builders and Town & Country Design Studio, showcases natural stone's enduring appeal and versatility, seamlessly blending interior luxury with exterior elegance. This project is exceptional because it's not just another high-end client project – it's the personal home of Lou and Ginny Padula, the couple behind this remarkable design-build collaboration.



## THE PROJECT TEAM

#### **Interior Designer**

#### **GINNY PADULA**

Founder of <u>Town & Country Design Studio</u>

- Known for her updated take on Shaker, Farmhouse, and Cape Cod Coastal design aesthetics
- Emphasizes craftsmanship and custom elements in her projects





Builder/Construction Expert

LOU PADULA

Founder of Padula Builders

- Over 39 years of experience in the construction industry
- Specializes in high-end residential builds in coastal New Jersey

Lou and Ginny Padula each brought their professional expertise and personal vision together to create their dream home. This unique perspective – as both the project team and the end-users – allowed them to approach the design and construction process with a level of care and attention to detail built upon their combined experiences.

## PROJECT OVERVIEW

This coastal residence showcases the multi-faceted use of natural stone, utilizing a variety of Polycor products in different applications, both horizontal and vertical, inside and out. From the INDIANA LIMESTONE − FULL COLOR BLEND™ adorning the exterior to the diverse marble and granite surfaces in the interior, every stone element was carefully chosen to create cohesive and luxurious living spaces.

Integrating a specific range of locally quarried stones, produced with varying finishes and sizes, each repeated throughout the home, resulted in a well-balanced compositional arrangement.

I don't like the man-made products. I don't think they hold up well, the appearance seems to fade.

And, you know, they may look okay when they go in, but they don't last long. I am a big advocate for natural stone. We rarely use anything else on our projects

**LOU PADULA** 



#### SALT, SAND AND STONE

# OVERCOMING CONSTRUCTION HURDLES WITH INDIANA LIMESTONE



Lou Padula and his team at Padula Builders faced numerous challenges in bringing this high-end project to life. The coastal location demanded materials that would withstand harsh weather conditions while maintaining aesthetic appeal. Constant sun exposure necessitated an exterior that would remain cool to the touch, reducing the heat island effect and ensuring comfort for the homeowners. Additionally, the team needed to integrate various stone finishes in different applications throughout the property for a unified look, balancing aesthetic appeal with functionality in both indoor and outdoor spaces.

The seaside location presented a unique set of obstacles that called for innovative solutions:

#### COASTAL WATER RESISTANCE

The mid-Atlantic property's proximity to the ocean and frontage along the Shrewsbury River meant constant exposure to salt air, high humidity, snow, and ice in winters, as well as potential storm damage and surges from noreasters, tropical storms, and hurricanes. Padula needed materials that could withstand these harsh conditions without compromising on aesthetics.

#### HEAT MANAGEMENT

The home's orientation resulted in continuous sun exposure throughout the day, especially the patio area. This called for exterior surfaces that would maintain a cool temperature, ensuring comfort for residents and guests.

#### **DESIGN COHESION**

Integrating various stone finishes throughout the property while maintaining a unified look presented unique design challenges.

#### BALANCING FORM AND FUNCTION

The project required a delicate balance between creating visually stunning spaces and ensuring practical functionality in indoor and outdoor areas.

#### MATERIAL COORDINATION

Consolidating the stone sourcing to one supplier was needed to keep the project timeline on track, reduce lead times, improve efficiency, and reduce supply chain complexities.

To address these challenges, Padula turned to Polycor and Indiana Limestone as the primary material for the home's exterior. The stone's natural properties, domestic production, and resilience proved ideal for tackling the challenges head-on.



Rockford Estate Blend™ thin stone veneer

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# COOL UNDER PRESSURE INDIANA LIMESTONE PAVERS

Indiana Limestone's durability and resistance to weathering made it the practical choice for withstanding the ever-changing coastal conditions. From the Rockford Estate Blend™ thin stone veneer foundation walls to the <u>pattern pavers</u> and <u>pool coping</u> in the backyard patio and pool area, the limestone provided a robust defense against the elements.

The heat management issue, in particular, was resolved thanks to limestone's high solar reflectance index (SRI) which reflects the heat from the sun - a welcoming benefit for hot summer days.

The various ways Indiana Limestone can be cut, fabricated, and installed allow for a seamless integration throughout the property. Steps, treads, and wall caps, all cut from the same stone blocks, create a balanced look while serving distinct functional purposes.

This unified approach resolved the challenge of balancing aesthetics with practicality and eliminated having to introduce different materials.

"I like limestone for a couple of reasons. When it gets hot outside, limestone doesn't absorb the heat. It's lighter in color and more walkable when barefoot. Other stones like bluestone heat up a lot; unless you hose them down often, they can be very hot.

The property receives full sun all day — morning, afternoon, and evening. You need something that doesn't absorb as much heat because that would be blistering. The solar reflectance is just better with limestone.

LOU PADULA

#### SOLAR REFLECTANCE INDEX

Solar Reflectance Index (SRI) is a composite measure that combines a surface's solar reflectance and emittance. Essentially, the SRI indicates how well a surface reflects (reflectance) and releases absorbed solar radiation (emittance). High SRI surfaces, such as Indiana Limestone, can help reduce the urban heat island that causes cities to stay warmer. Learn more about SRI



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#### THE POLYCOR DIFFERENCE:

## ONE SOURCE FOR STONE, ENDLESS POSSIBILITIES

I knew I wanted to use natural stone for my project, and I had previously worked with Polycor products for clients. I love the selection of stone they offer from their North American quarries and knew I would be able to have a cohesive look throughout all the areas of this project.

**GINNY PADULA** 

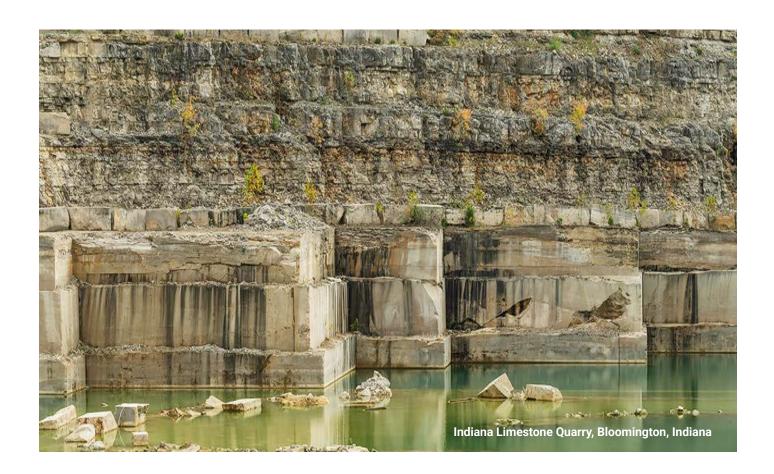
One key advantage of working with a single quarry source like Polycor is the ability to design with stone across multiple applications utilizing material from the same quarries in a blend of finishes, shapes, and sizes. This approach allows designers to customize stone products extensively on a project while maintaining a seamless aesthetic. It also cuts down on travel time to multiple distributors, dealers, fabricator showrooms, and warehouses to source slabs, tiles, hardscape, or masonry products.

When all the stone products come from the same blocks out of the same quarries and points of origin, the result is a superior match in color, veining, texture, and overall character. This consistency is particularly valuable when implementing stone in different areas of the home — from hardscaping details like steps, pavers, veneer stones, and sills, or even kitchen countertops and bathroom tiles.

Relying on Polycor as a single supplier provided numerous advantages:

- Cost savings through streamlined logistics and bulk ordering
- Simplified communication and project management
- Expert knowledge on stones and installation
- Reduced lead time and increased efficiencies
- Consistent quality across all stone products
- Cohesive design elements throughout the home





By leveraging Polycor's diverse stone offerings from North

American quarries, the Padulas created a home that feels both

varied and balanced – a delicate interplay that elevates the

entire design to a new level of sophistication.

Using one supplier saves time, especially when they offer everything I want. I did not have to settle for materials. Coordinating delivery was also a plus.

**GINNY PADULA** 

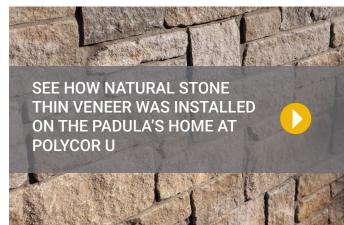
## A STONE FOR EVERY SPACE

#### FROM FOUNDATION TO PATIO: KEEPING IT NATURAL WITH STONE

From the street, the residence has all the hallmarks of a classic New England Colonial – gabled dormers, flat roof-covered entry with railings, a brick chimney, and a rusticated natural stone foundation. The warm buff tones and split-faced finish of the Rockford Estate Blend™ thin veneer contrast nicely with the bright white clapboard siding. Splitting the blocks of Indiana Limestone - Full Color Blend™ at the quarry produces a natural cleft texture on the veneer face that catches sunlight and makes for interesting shadow play on the walls throughout the day, creating a solid and elegant base. No two faces of veneer are ever the same, unlike manmade engineered veneers made from molds that are repetitive. This choice adds visual interest and provides practical benefits in the coastal climate. And because they are free of artificial dyes and pigments they resist UV fading, water, heavy winds, snow, and ice.



The front entry makes a grand statement with limestone steps and treads, leading up to an oversized landing complete with additional <u>pavers</u> and framed with limestone coping. The entire landing, as well as the stair risers, are wrapped in Rockford Estate Blend™ thin veneer, offering a preview of the elegance that awaits inside.





For the patio, large limestone pavers create a sophisticated, low-maintenance centerpiece for outdoor living. With the home situated on sandy soil, Padula constructed the patio using a combination of pilings, block foundations, and masonry walls to elevate the patio above the flood line. Should there be a future storm event, the patio and pool would not be flooded.

After hauling and placing ninety yards of crushed stone and R-blend into the foundation, the patio was backfilled high and dry resulting in a panoramic view of the bay.

The two-level masonry patio area further highlights the adaptability of the limestone:

- Pattern pavers extend from the patio to the pool surround producing a clean look using a 3-size paver pattern made up of 24" x 36", 24" x 24" and 12" x 24" size pavers.
- Pool coping in limestone provides both safety and style, staying cool to the touch even under direct sunlight.
- Limestone steps and treads create seamless transitions
   between levels, leading from the upper deck to the pool area
   and down to the lawn and river beyond.

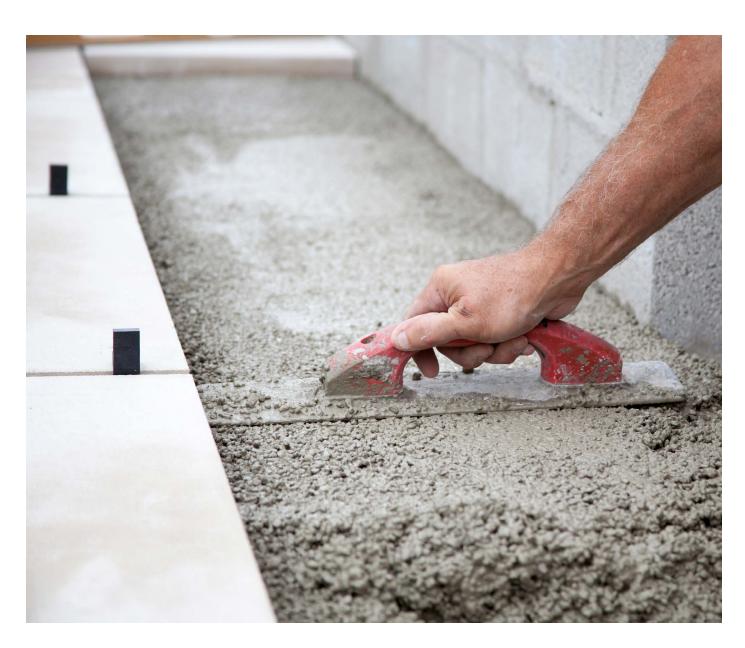
#### PERMEABLE PAVERS: A WINNING INSTALLATION METHOD

The base prep for this paver installation included pouring a concrete slab over the crushed stone aggregate for the pavers to be installed onto. Drainage and moisture control measures were important considerations to ensure a high-performing finished project. Whereas an open-graded base would have been typical for at-grade installations of stone pavers, these were wet-set using mortars because of the elevated patio and slab. A trass mortar bed was employed, along with a polymer-

modified adhesion elutriant that was troweled onto the back of the pavers, which provides maximum adhesion as well as permeability. Limestone can be sensitive to alkalis found in concrete and mortars which the trass bed and elutriant help combat. Typically, limestone requires a dampproofing application to help manage contact with alkalis and avoid potential efflorescence in the future, but the products used for this project served double-duty as dampproofing in the process.



Permeable paving systems offer many advantages, and permeable bonded systems, in particular, provide even more - such as eliminating frost heave from trapped water and creating a rigid, stable structure that is even suitable for vehicular loads.



The permeable trass paver base is comprised of a mixture of %" aggregate, comparable to ASTM #8 stone, combined with water and a binding agent product that contains trass minerals. Once the bed is placed and leveled in a 1 ½" layer, the thin-set product is then applied in a ½" - ¼" layer on the back of each paver to form a wet-on-wet, bonded connection with the trass bed.





This 4-component set of products, when used together, forms a bonded construction system with an incredible permeability rating. The result is a fully permeable paving system that contributes to sustainability and environmental objectives in landscape construction while providing a long-lasting, load-bearing surface.

#### THIN VENEER FOUNDATION WALLS



Natural thin stone veneer lends a home instant curb appeal with dimensional impact and the immediate impression of high quality and sophistication. Nothing can compare to the organic beauty and performance of natural materials such as limestone, marble and granite.

Padula's contractors enjoy working with thin stone veneers because they're a welcome alternative to the heavy, labor-intensive standard veneer and brick that require brick ledge foundations, wall ties and other system components. Adhered masonry veneers are lightweight, simple to cut, and adhere directly to the masonry wall which makes them much easier to install than full bed veneer materials.

Despite being thinner and easier to install, natural stone veneers give the impression of something thicker, heavier and identical in appearance to an installation achieved through traditional masonry methods using larger stones.









Adhered masonry veneers benefit from the use of polymer fortified setting materials available at local building material supply centers. Companies like Laticrete have done a great job at testing their products and providing outstanding warranties. For Padula's job, Laticrete's Masonry Veneer Installation System was used, directly adhered to the block foundation wall. Simply key in a ½" - ¾" thick scratch coat using the flat side of a ½" x ½" notched trowel onto the wall, then flip and rake through with the notched side. Back-butter the veneer pieces and slide them into placel, wet on wet, for strong and permanent bond.

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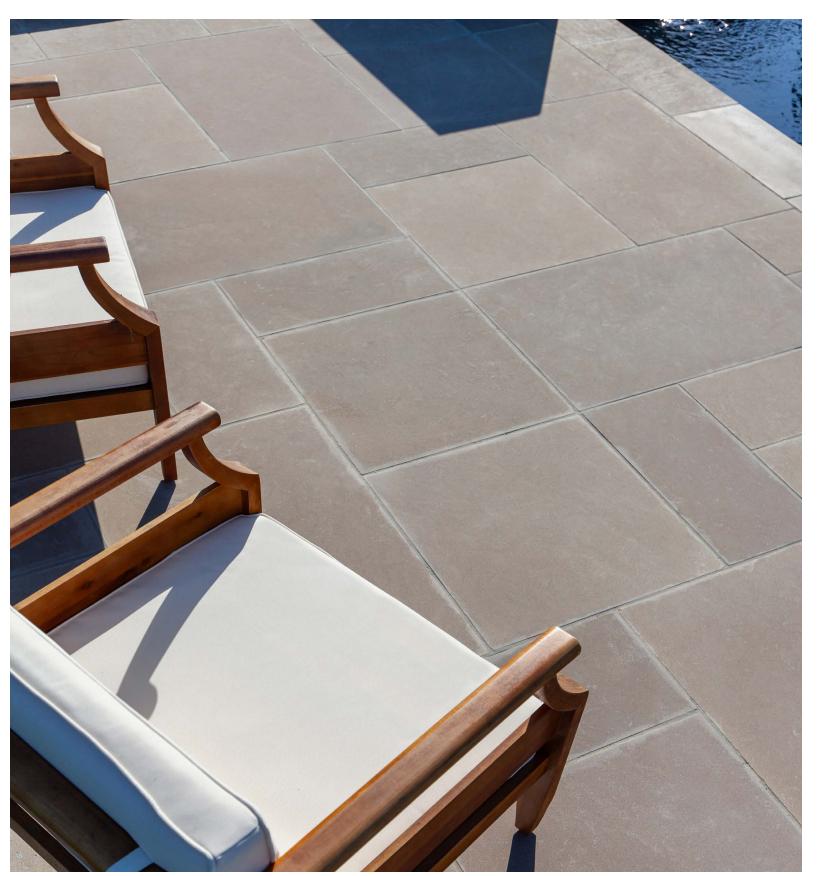
#### ELEVATING COASTAL LIVING WITH LIMESTONE

Incorporating limestone into this coastal home's exterior is an investment in both aesthetic appeal and long-term value. From the foundation walls to the pool coping, every element works together to create a harmonious, elegant exterior that withstands the coastal climate while offering comfort and beauty to the homeowners.

The unity in stone selection contributed significantly to the home's overall design aesthetic. The result is a stunning display of how different surface treatments of Indiana Limestone, such as split-faced, tumbled, and honed, can complement each other. This project demonstrates that with thoughtful design and quality materials, it's possible to create an outdoor space that's not just beautiful but also functional and comfortable in a challenging coastal environment.

I wanted to use limestone for the patio and pool area, as well as the foundation of the house. I was able to get all the materials to match from Polycor.

**GINNY PADULA** 



Natural Stone is classic and timeless, and that is the look we were trying to achieve in this home. We wanted a more European look that reflects our lifestyle.

**GINNY PADULA** 



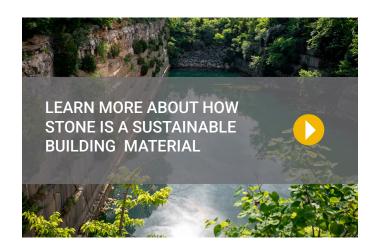
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#### LOCAL STONE, GLOBAL IMPACT

## SMART CHOICES IN HOME CONSTRUCTION

Choosing Polycor's natural stone contributed to sustainable building practices:

- Use of natural, abundant materials with no chemicals or dyes
- Reduced carbon footprint minimal processing required to produce
- Long lifecycle reducing the need for replacement
- Domestic sourcing reduces transportation emissions







 $^{2}$ 

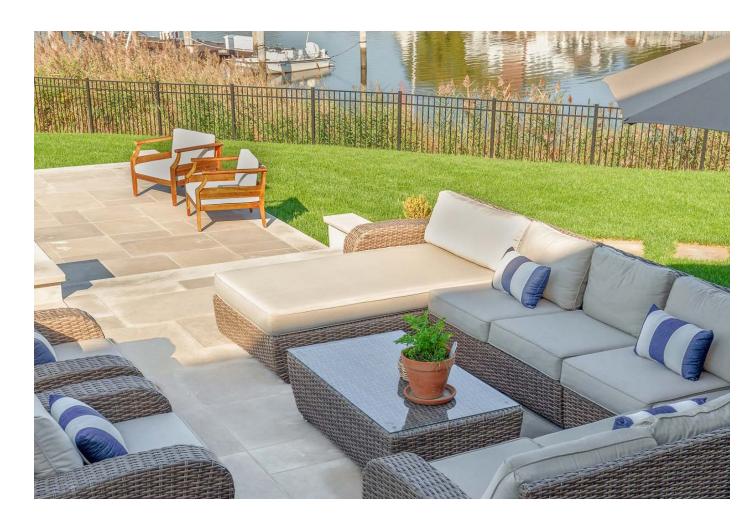
#### ELEGANCE ENDURES

# THE LEGACY OF NATURAL STONE IN MODERN HOME DESIGN



This New Jersey residence is a shining example of how natural stone is suitable for a range of exterior applications in residential construction. By partnering with Polycor, Lou and Ginny Padula overcame various design / build challenges and delivered a stunning family home that will stand the test of time.

The project showcases the versatility of natural stone and how it can inspire future homeowners and builders looking to create enduring, elegant spaces that harmonize with their natural surroundings while meeting the highest standards of quality, design, and performance.



## polycor.com



