

Type III Dolomitic Limestone

Testing Data

Stone Type Dolomitic Limestone

ASTM C97	Water Absorption	.36%
ASTM C97	Density	174.2 pcf
ASTM C99	Modulus of Rupture	1,470 psi
ASTM C170	Compressive Strength w/ Rift	29,040 psi
ASTM C170	Compressive Strength Across Rift	34,240 psi
ASTM C880	Flexural Strength	1,740 psi
ASTM C482	Shear Bond Strength	239 psi

DOLOMITE PAVING ASTM TESTING DATA

ASTM C 568-03 Limestone Classification Criteria by Type/Performance					
Physical Property	Test Method	Type	Classification	Performance Requirements	Dolomite Paving Average Result
Absorption by Weight, Maximum %	C 97	I	Low Density	12% or less	.75 of 1%
		II	Med. Density	7.5% or less	
		III	High Density	3% or less	
Density, Minimum lbs./ft ³	C 97	I	Low Density	110 lbs. / ft ³	165 lbs. / ft ³
		II	Med. Density	135 lbs. / ft ³	
		III	High Density	180 lbs. / ft ³	
Compressive Strength, Minimum psi	C 170	I	Low Density	1800 psi min.	15,000-32,600 PSI
		II	Med. Density	4000 psi min.	
		III	High Density	8000 psi min.	
Modulus of Rupture, Minimum psi	C 99	I	Low Density	400 psi min.	1,669 psi
		II	Med. Density	500 psi min.	
		III	High Density	1000 psi min.	
Abrasion Resistance, Minimum Hardness	C 241 C 1353	I	Low Density	R10 or greater	18 to 29.75
		II	Med. Density	R10 or greater	
		III	High Density	R10 or greater	
A ranking of Type III is the highest classification that any natural limestone can receive per ASTM standards					

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Why Type III Dolomitic Limestone is Preferred for Projects

Natural stone is among the most visually appealing building elements you can use, especially when you choose Type III Dolomitic Limestone for your building, landscape or cut stone project. Its unique characteristics originate deep underground in regions of Wisconsin like Eden, Chilton, Oakfield and Valders, which are known for superior limestone, and the quarried product does not disappoint in areas you're likely considering as you explore your stone options:

Appearance

The beauty of Type III Dolomitic Limestone is that no two pieces are exactly alike in **color** or texture.

Mineral content, how the stone formed in the ground and exposure to elements largely dictate basic color and how that color may change — or **patina** — over time.

The same holds true for texture. Concentration of mineral deposits influence the stone's surface, leading to unique and desirable aesthetic variations. Veining, for example, may streak the stone with varying widths of colorful lines and pitting is characterized by small holes running throughout the stone's surface.

Performance

Classified as High Density Limestone by the American Society for Testing and Materials (ASTM), Type III Dolomitic Limestone outperforms lesser Type II stone that isn't as dense or durable. For your commercial or residential project, the ASTM

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Type III certification is significant as it speaks to superior performance in a wide range of scenarios:

- **Freeze-Thaw Durability:** Outdoor projects in harsh climates, particularly those that experience hard freezes, benefit from the fact that the limestone loses none of its mass and is not unduly distressed when repeatedly frozen and thawed.
- **Longevity:** Historically best in class performance in density (165 lbs./cu.ft.), compressive strength (15,000-32,600 psi), bending strength (1,669 psi) and abrasion resistance (18-29.75) speak to the durability of Type III Dolomitic Limestone. Flooring, stairwells, porches, patios, pavers, countertops and any other project that may be exposed to continual or above average wear and tear are ideal applications.
- **Safety:** For pool pavers and coping or other outdoor gathering areas, solar reflectivity and slip resistance (known as coefficient of friction) are key in preventing injury. Unlike concrete and other materials that absorb heat, limestone is naturally solar reflective and stays cool to the touch. In fact, it rates a 62 on the solar reflectance index (SRI), a 100-point system that ranks materials' ability to reflect solar heat. Simply put, the higher the ranking the more reflective the material. As for slip resistance, Type III Dolomitic Limestone static tests returned safety rating averages ranging from 0.65-0.95., depending on **finish** chosen.

Uses

As versatile as it is beautiful and durable, how Type III Dolomitic Limestone is used is basically limited only by your imagination. Popular projects include **pools, landscapes**, and a wide range of **custom cut stone projects**.

Whatever the use, natural stone is an investment sure to last a lifetime. To experience the beauty and durability of Type III Dolomitic Limestone for yourself, please call or stop by our office and request a sample.