

Marble Soundness Classification

The assessment of physical properties in natural stone products is a challenging task. The challenge is not unique to the stone industry in that producers of all natural materials are charged with developing a system of classifying and categorizing those materials within their industry. The Marble Soundness Classification System has been with us, essentially unmodified, for more than half of a century (originating with the National Association of Marble Producers who merged with the Marble Institute in 1963). Its long, established use is definitely a result of its simplicity and effectiveness, but perhaps the greatest strength of this system is that it is linked only to material working properties, and specifically excludes any relationship with the market value of the materials. The intentional disassociation with market value has encouraged the objective review of natural stone materials for technical purposes, while avoiding the temptation to publish inappropriate classifications in the interest of inflating the cost of these materials. The recent incorporation of the Marble Classification data by ASTM into the C503 Standard Specification prompted the publication of this technical bulletin to educate MIA members about this system. Since this system has been so successful with marble and marble-like stones, the MIA is currently working on a similar classification system for granite and granite-like products.

This bulletin contains five sections:

1. Marble Soundness Classification definitions and descriptions (revised since the publication of the *Dimension Stone Design Manual, VI*)—pages 1-2.
2. How Marbles receive their Soundness Classification—pages 2-3.
3. What is on the horizon for a Granite Soundness Classification System—page 3.
4. Listing of Marbles with Soundness Classification designations—pages 3-10.
5. Understanding Stone Test Reports of Group C Marbles (this is the last article that Vincent Migliore wrote for the Marble Institute)—pages 11-12.

Section 1: Marble Soundness Classification

(This text is a revision to that referenced on pages 82-83 of the *Dimension Stone Design Manual, VI*, and will be incorporated into next version of the Design Manual)

As a result of knowledge gained from extensive practical experience in the dimension stone industry, marbles have been classified into four groups known as the Marble Soundness Classification.

The groupings—A, B, C, and D—should be taken into account when specifying or using marble, for all marbles are not suitable for all building applications. This is particularly true of the comparatively fragile marbles classified under Groups C and D, which may require additional fabrication before or during installation.

The basis of this classification is the characteristics encountered in fabricating, and has no reference whatsoever to the comparative merits or value of each type of marble (e.g. an A class marble is not necessarily more valuable than a D class marble). The classification indicates what method of fabrication is considered necessary and acceptable in each instance

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as based on standard trade practice, and applies only to marble and limestone/marble.

The four groups of Marble Soundness Classification are:

Group A Marbles

Sound marbles with uniform and favorable working qualities, containing no obvious geological voids or fissures. They include completely metamorphosed (recrystallized) limestone or dolostone, in which non-carbonate minerals associated with clay and silt have been recrystallized or altered into other minerals. These stones have uniform working qualities, can be used on the exterior or interior, and do not require any filling or patching.

Group B Marbles

Marbles similar in character to Group A, but some geological imperfections could be evident. Group B Marbles are similar in quality to limestone or dolostone of Group A, except all the non-carbonate minerals associated with clay and silt have not been recrystallized or altered into other minerals. These marbles may contain holes or voids which are filled with epoxy, shellac, or polyester resin by “waxing,” “sticking,” or “filling”. Filling is not intended to be noticeable to a great degree, nor is it expected to be perfectly color matched or “glass” smooth. Group B Marbles are suitable for exterior or interior applications.

Waxing, *sticking* and *filling* (common industry terms) are defined below:

Waxing refers to the practice of filling minor surface imperfections such as voids or sand holes with melted shellac, cabinet-maker’s wax or certain polyester compounds. It does not refer to the application of paste wax to make surfaces shinier.

Sticking describes the butt edge repair of a broken piece, now generally done with dowels, cements, or epoxies. The pieces are “stuck” together; thus “sticking.”

Filling describes the filling of natural voids in stone units with cements or synthetic resins and similar materials.

Group C Marbles

Group C Marbles comprise the largest and most colorful group of marbles. They may contain all or some of the following features: holes, voids, lines of separation and structural flaws. Group C Marbles have variations in working qualities. Many of the non-carbonate minerals associated with clay and silt have not been recrystallized or altered into other minerals due to incomplete metamorphism.

It is standard practice to repair these variations by use of reinforcing backing, liners, sticking together, filling with resin or cement, fabricating corners or missing stone with compounds of similar nature, color and texture. Any other work necessary to hold the stone together is performed to yield a finished product that is usable for architectural purposes. Upon completion, most repairs can be visible and apparent given a difference in light reflection. Quality of the repair work will vary in this group. With several exceptions, these marbles are not suitable for exterior application.

Group D Marbles

Marbles which are very similar to Group C, but contain a larger proportion of natural faults, maximum variations in working qualities and require more methods of finishing. Few stones carry this designation; it is reserved for only very laborious Group C stones.

Section 2: How Marbles Receive Their Soundness Classification

The actual classification (A, B, C, or D) is determined by the quarry/producer based on the definitions described above. The Marble Institute of America confirms the designation and publishes the listing.

Quarry/Producer Members desiring that a marble be added or re-classified to this listing should follow this process:

Step 1: Designate the marble with one of the classifications (using the definitions published in this technical bulletin and/or *Dimension Stone Design Manual, VI*).

Step 2: Request that the MIA Technical Department verify the quarry/producer designation. The sup-

porting documentation should include the following:

- A letter to the MIA Technical Department stating the classification, stone name, origin, and reason for the designation.
- 12"x12" (300 mm x 300 mm) sample
- 2-3 photographs featuring close-up images of the vein the stone was taken from.
- Payment of \$250 USD (payable to the Marble Institute of America) to cover review and report fees.
- Quarry/producer pays all costs associated with shipping samples, photos, etc.

Step 3: MIA Technical Department issues a report. The classification given in this report is a point of reference only. To work with stone is to work with a product of nature, and products of nature vary from sample to sample. Further research and testing is normally done to substantiate the stone's worthiness for particular applications.

Section 3: Granite Soundness Classification System

Currently there is no soundness classification system established for granite. Similar to marble, the unique properties and characteristics found in various granites also require specific measures to be employed in the fabrication, handling, and installation practices to ensure quality applications of the material. The Marble Institute is developing a classification system for granite for use by the stone industry in 2005.

Section 4: Listing of Marbles with a Soundness Classification Designation

Many marbles have received a Marble Soundness Classification designation since the inception of this system. The most recent listing of marbles was featured in both *Dimension Stone Design Manual, IV* (1991), and the *Dimension Stones of the World* (2-volume set). Several dozen marbles have received a designation since these publications were first printed. This technical bulletin includes the most recent list. It is important to note that many of the classifications were originally established by the producer. Therefore consumers are encouraged to investigate a stone's classification and request documentation about the classification from the supplier of the product.

Key to Color Range Abbreviations

Black	Blk
Blue-Gray	Bl/Gy
Brecciated, Black & White	Brc-Blk/W
Brown	Brw
Buff-Brown-Yellowish	Bf-Brw-Y
Buff-Cream or Light	Bf-C/L
Buff-Dark	Bf-Dk
Gray	Gy
Gray-Bluish	Gy-Bl
Green	Gr
Pink	P
Orange	O
Red	R
Red-Reddish Brown.....	R-RBrw
Rose.....	Rs
Veined, Brecciated (Bluish or Gray Background).....	V, Brc (Bl-Gy)
Veined, Brecciated (Tan or Yellowish Background).....	V, Brc (T-Y)
White	W
White-Bluish.....	W-BI
White-Brownish.....	W-Brw
White-Creamy	W-Cr
White-Goldish	W-Go
White-Grayish	W-Gy
White-Greenish.....	W-Gr
Yellow or Gold.....	Y/G

Name	Color	Origin	S.C.	Name	Color	Origin	S.C.
A				A (continued)			
Abancado Laranja	O	Portugal	C	Aurisina Chiara	Gy	Italy	B
Abancado Laranja Claro	O	Portugal	C	Aurisina Fiorito	Gy	Italy	B
Acquabianca	W-BI	Italy	A	Aurisina Granitello	Gy	Italy	B
Adair Marble	W-BI	Canada	B	Avorio Beta	Bf-C/L	Italy	C
Adria Grigio	Gy	Yugoslavia	C	Avorio di Siena	Y/G	Italy	C
Aegean Crystal	W	Greece	B	Avorio Siena	Y/G	Italy	C
African Rose	Brw	Morocco	C	B			
African Rose Light	Brw	Morocco	C	Baker Dark Cedar	Brw	U.S.A.	A
Afyon	Bf-C/L	Turkey	B	Bardiglietto	Gy-BI	Italy	B
Afyon White	W	Turkey	A	Bardiglio Cappella	BI/Gy	Italy	C
Ajax	W-Cr	Greece	A	Bardiglio Carrara	Gy	Italy	B
Alagao Beige	O	Philippines	C	Bardiglio Carrara Chiaro	Gy-BI	Italy	B
Alba Pallida	Bf/CI	Italy	C	Bardiglio Carrara Scuro	BI/Gy	Italy	B
Alexander White	W	Guatemala	A	Bardiglio Costa	Gy	Italy	D
Almiscado	Rs	Portugal	C	Basaltina	Gy	Italy	A
Alpinina Clara*	Bf-C/L	Portugal	C	Beige Classic*	Bf-C/L	Philippines	C
Alpinina Rosada*	Bf-C/L	Portugal	C	Beige Maya	Bf-C/L	Mexico	C
Andies Grey	Gy	U.S.A.	A	Beige Peach*	O	Philippines	C
Apache Gold Vein	Gy	U.S.A.	C	Beige Serpentina	Bf-C/L	Spain	C
Aphrodisias Cloudy	W-BI	Turkey	A	Belgium Black	Blk	Belgium	B
Aphrodisias White	W	Turkey	A	Belgium Blue*	Blk	Belgium	B
Apollo	Gr	Taiwan	B	Belgium Red Light	R	Belgium	C
Arebescato	V, Brc(Cr-W)	Italy	B	Belice Verde	Gr	Guatemala	C
Arabescato Alga Marina				Bettogli Vein	V, Brc(Cr-W)	Italy	A
Stazzema	V, Brc(Cr-W)	Italy	C	Bianco Arni	W-Gy	Italy	A
Arabescato Arni	V, Brc(Cr-W)	Italy	C	Bianco Carrara B	W	Italy	A
Arabescato Arni Corchia	V, Brc(Cr-W)	Italy	B	Bianco Carrara C	W	Italy	A
Arabescato Calacatta				Bianco Carrara C/D	W	Italy	A
Resceto	V, Brc(Cr-W)	Italy	C	Bianco Carrara D	W	Italy	A
Arabescato Carcaraia	V, Brc(Cr-W)	Italy	C	Bianco Cristal	W	Greece	B
Arabescato Cervaiolo	V, Brc(Cr-W)	Italy	B	Bianco de Nieve	W	Yugoslavia	B
Arabescato Colletino	V, Brc(Cr-W)	Italy	C	Bianco P	W	Italy	A
Arabescato Corchia	V, Brc(Cr-W)	Italy	B	Bianco Pentelicon	W	Greece	A
Arabescato Faniello	V, Brc(Cr-W)	Italy	C	Bianco Venato Gioia	W-Gy	Italy	A
Arabescato Garfagnana	V, Brc(Cr-W)	Italy	B	Biancospino	W-Gy	Italy	A
Arabescato la Mossa	V, Brc(Cr-W)	Italy	B	Black and Gold	Blk	Italy	D
Arabescato M	V, Brc(Cr-W)	Italy	B	Black and Gold Extra	Blk	Italy	D
Arabescato Orobico	V, Brc(Cr-W)	Italy	C	Black Levadias	Blk	Greece	B
Arabescato Orobico				Black Marquina*	Blk	Spain	C
Grigio Nuvolato	V, Brc(Cr-W)	Italy	C	Black Principessa	Blk	Spain	D
Arabescato Orobico				Black Saint Laurent	Blk	France	D
Rosso	V, Brc(Cr-W)	Italy	C	Blanc Bleute de Savoie	BI/Gy	France	C
Arabescato Rosso				Blanco Macael	W	Spain	A
Garfagnana	V, Brc(Cr-W)	Italy	C	Blanco Macael			
Arabescato Siena	V, Brc(Cr-W)	Italy	C	Heavy Veined	W	Spain	A
Arabescato Tombaccio	V, Brc(Cr-W)	Italy	C	Blanco Marfil	Bf-C/L	Mexico	C
Arabescato Vagli	V, Brc(BI-Gy)	Italy	B	Bleu Belge	Blk	Belguim	C
Arabescato	Bf-Brw-Y	Spain	B	Blue Savoy	BI/Gy	France	C
Ardesia	Blk	Italy	D	Boardman Brown	W-Brw	U.S.A.	A
Arta Pink	P	Greece	B	Boardman Vein	W-Gy	U.S.A.	A
Asbury Pink	P	U.S.A.	A	Bois Jourdan	V, Brc(BI-Gy)	France	C
Athos White	W	Greece	A				

Name	Color	Origin	S.C.	Name	Color	Origin	S.C.
B (continued)				C (continued)			
Botticino Clasico	Bf-C/L	Puerto Rico	A	Cedar Tavernelle	R-RBrw	U.S.A.	A
Botticino Classico	Bf-C/L	Italy	C	Cevenol	Gy	France	C
Botticino Fiorito	Bf-C/L	Italy	C	Champlain Black	Blk	U.S.A.	A
Botticino Magnus	Bf-C/L	Puerto Rico	A	Chandolin*	R	France	C
Botticino Perlato	Bf-C/L	Puerto Rico	A	Chanteuil	Bf-Brw-Y	France	B
Botticino Royal	Bf-C/L	Italy	C	Charcoal Saint Jean	Brc-Blk/W	France	C
Botticino Sicilia	Bf-C/L	Italy	C	Chassagne Beige	Bf-Brw-Y	France	A
Botticino Sicilia Royal	Bf-C/L	Italy	C	Chassagne Rose	P	France	A
Botticino Standard	Bf-C/L	Italy	C	Chassagne Violine	P	France	C
Branco Mar*	W-Cr	Portugal	B	Cherokee	W	U.S.A.	A
Branco Rosal*	W-Cr	Portugal	B	Chiampo Mandorlaro	Bf-C/L	Italy	C
Brazilian Rose	Rs	Brazil	C	Chiampo Paglierino	Rs	Italy	C
Brazilian White	W	Brazil	A	Chiampo Perlato	bf-C/L	Italy	C
Breccia Aurora	V, Brc(T-Y)	Italy	D	Chiampo Porfirico	Rs	Italy	C
Breccia Aurora IMV	V, Brc(T-Y)	Italy	D	Chiampo Rosa	P	Italy	C
Breccia Carsica	Bf-Dk	Italy	C	Chocolate Brun Amazone	Bf-Brw-Y	Brazil	A
Breccia Karnezeika	V, Brc(T-Y)	Greece	C	Cipollino Dorato	W-Go	Italy	C
Breccia Novella	Gy	France	D	Cipollino Verde Apuano	Gr	Italy	B
Breccia Oniciata	Bf-C/L	Italy	D	Claro	W	Taiwan	B
Breccia Pernice	V, Brc(T-Y)	Italy	D	Cliffdale "A" Dark	Br-Brw-Y	U.S.A.	C
Brecha da Ota*	Brw	Portugal	C	Cliffdale "B" Light	Bf-Brw-Y	U.S.A.	C
Brecha Lioz*	R-RBrw	Portugal	C	Collemandina	R	Italy	D
Brecha Perola *	R-RBrw	Portugal	C	Colorado Yule	W	U.S.A.	C
Brecha Portuguesa*	Brw	Portugal	C	Connemara Marble	Gr	Ireland	C
Brecha Tavira Dourada*	Brw	Portugal	C	Coral Rouge Fleuri	R-RBrw	U.S.A.	D
Brecha Tavira Vermelha*	R-RBrw	Portugal	C	Coralito	Rs	Spain	C
Breche Maritime	Bf-C/L	Portugal	C	Craig Pink Tennessee	P	U.S.A.	A
Breche Noire	Brc-Blk/W	France	C	Cream Wombeyan	Bf-C/L	Australia	A
Breche Nouvelle	Brw	France	C	Crema Espanol	Y/G	Spain	C
Breche Ronceveaux	Brc-Blk/W	France	C	Crema Levante	Bf-C/L	Spain	C
Bronceado	Y/G	Spain	C	Crema Marfil*	Bf-C/L	Spain	C
Brown Beige*	Brw	Philippines	C	Crema Nuevo	Brw	Spain	C
Brown Chios	Brw	Greece	C	Crème Perla	Bf-C/L	Italy	C
Brown Terra	Brw	Venezuela	B	Crema Delicato	W-Cr	Italy	B
Brown Tourmalion	Brw	France	C	Creole	E-BI	U.S.A.	A
C				Crocidolite	R	Italy	C
Café Goleta	Brw	Mexico	B	Crystal Stratus Danby	W-Gr	U.S.A.	A
Calacata Campo Cecina	V, Brc(Cr-W)	Italy	C	Crystal Stratus			
Calacata Crema	V, Brc(Cr-W)	Italy	C	Veined Danby	W-Gr	U.S.A.	A
Calacata Crema Massa	V, Brc(Cr-W)	Italy	C	Crystalina White	W	Greece	A
Calacata di Siena	Y/G	Italy	C	D			
Calacatta	V, Brc(Cr-W)	Italy	B	Dark Emperador*	Brw	Spain	C
Calacatta Tirreno	V, Brc(Cr-W)	Italy	B	Dark Green Antique	Gr	Taiwan	C
Calacatta Vagli	W-Cr	Italy	C	Dark Hualian Jade	Gr	Taiwan	C
Calacatta Vagli Rosato	W-Cr	Italy	C	Desert Peach	O	Greece	C
Caliza Capri	Bf-C/L	Spain	C	Desert Pink	P	Greece	B
Campan Rose Vert	Gr	France	C	Dolcetto Perlato	Bf-C/L	Italy	C
Campan Rouge	R	France	C	Doppio Nero	Blk	China	C
Capistrano	Bf-C/L	Philippines	C	Dove	V, Brc(BI-Gy)	Turkey	C
Cassino Rosa	Rs	Italy	D	Duchessa Rosa	Rs	Spain	C
Cedar Rose	R-RBrw	U.S.A.	A	Duquesa Gris	Gy	Spain	C

Name	Color	Origin	S.C.
D (continued)			
Duquesa Rosa	Rs	Spain	C
E			
Edward Pink	P	U.S.A.	A
Emperador Light	Brw	Spain	C
Eretria Red	R	Greece	C
Estremoz Branco	W	Portugal	A
Estremoz Crème	Bf-C/L	Portugal	A
Estremoz Vergadas	W	Portugal	A
Estremoz Vergadas Catanhas	W-Brw	Portugal	A
Estremoz Vergado	W	Portugal	A
Estremoz Vergado Escuro	W	Portugal	A
Etawah Fleuri	P	U.S.A.	A
Etawah Pink	P	U.S.A.	A
Eureka Danby	W-Brw	U.S.A.	A
F			
Fantastico Arni	Gr	Italy	D
Farges*	Bf-C/L	France	C
Fawntan*	Brw	Philippines	C
Filleto America	Bf-C/L	Italy	C
Filleto Rosso	Bf-C/L	Italy	C
Filetto Rosso Classico	Bf-C/L	Italy	C
Fior di Mare	Gy	Italy	B
Fior di Pesco	V, Brc(BI-Gy)	Italy	D
Fior di Pesco Carnico	V, Brc(BI-Gy)	Italy	D
Florido*	Blk	Spain	C
Forest Green	Gr	Italy	C
Formosa Black	Blk	Taiwan	B
Formosa White	W	Taiwan	A
French Antique Gray	Gy	France	C
French Red	R	France	C
French Rouge Antique	R-RBrw	France	C
G			
Galaxy	W-Cr	Greece	A
Giallo di Siena	Y/G	Italy	C
Giallo Mori	Y/G	Italy	C
Giallo Siena	Y/G	Italy	C
Giallo Siena Avorio	Y/G	Italy	C
Giallo Siena Unito	Y/G	Italy	C
Gold Black	Blk	Honduras	A
Gray St. Anne Alpha	V, Brc(BI-Gy)	France	B
Gray St. Anne Basque	V, Brc(BI-Gy)	France	B
Gray/White Wombeyan	Gy	Australia	B
Greek White	W	Greece	A
Grey Duchess	Gy	Spain	C
Grigio Carnico	V, Brc(BI-Gy)	Italy	D
Grigio Romano	Gy	Italy	C
Grimaldi	Gy	France	C

Name	Color	Origin	S.C.
G (continued)			
Gris Antique	Blk	Belgium	B
Gris Duquesa	Gy	Spain	C
Gris Goleta	Gy-Bl	Mexico	B
Gris Macael	Gy	Spain	A
Gris Paloma	Gy	France	C
Gris Perla	Gy-Bl	Mexico	B
Gris Tellez	W-Gy	Mexico	B
Gris Tepeaca	Gy	Mexico	B
Gris Terrazo	Gy	Mexico	B
Guatemala Antique Green	Gr	Guatemala	C
Guatemala Emerald Green	Gr	Guatemala	C
Guatemala Extra White	W	Guatemala	A
Guatemala Gold	Y/G	Guatemala	A
Guatemala Gray	Gy	Guatemala	A
Guatemala Standard White	W	Guatemala	A
Guatemala Veined Gray	Gy	Guatemala	A
Guatemala White	W	Guatemala	A

H			
Hauteville	Bf-C/L	France	B
Highland Danby	Gy	U.S.A.	A
Hualian Jade	Gr	Taiwan	C
Hualien Green	Gr	Taiwan	C
Hualien Jewel	Gr	Taiwan	C
Hualien White B	V, Brc(Cr-W)	Taiwan	B
Hualien White C	V, Brc(Cr-W)	Taiwan	C

I			
Ilios	W-Gy	Greece	A
Imperial Black	Blk	U.S.A.	B
Imperial Brown	V, Brc(T-Y)	Spain	B
Imperial Calacata	V, Brc(Cr-W)	Italy	C
Imperial Danby	W	U.S.A.	A

Imperial Emperador Brown	Brw	Spain	C
Incarnat Turquin	Gy	Spain	C
Italian Crema	W-Cr	Italy	C
Italian Pearl*	Bf-C/L	Philippines	C
Italian Pink	P	Italy	B

J			
Jade Green	Gr	Taiwan	C
Jaspe Gris	C, Brc(BI-Gy)	Mexico	B
Jaspe Rosa	V, Brc(BI-Gy)	Mexico	B
Jerusalem Stone*	Bf-C/L	Israel	B
Juane Rose	Rs	Norway	B
Jura	Brw	Germany	A
Jura Beige	Bf-C/L	Germany	A
Jura Giallo	Bf-C/L	Germany	A

Name	Color	Origin	S.C.
J (continued)			
Jura Gray	Gy-Bl	Germany	A
Jura Melange	Bf-C/L	Germany	A
K			
K-Beige*	Bf-C/L	Philippines	C
L			
Lambery Cedar	R-RBrw	U.S.A.	B
Larrys	Bf-C/L	France	B
Lasa Bianco Vena Oro	W-Go	Italy	A
Lasa Bianco Venato	W	Italy	A
Lee White	W	U.S.A.	A
Light Beige	Bf-C/L	Philippines	B
Light Verde Jade	Gr	Taiwan	C
Lido	Gy	Morocco	B
Lioz	Rs	Portugal	C
Lioz Crème	Bf-Brw-Y	Portugal	C
Loredo Chiaro	V, Brc(T-Y)	Italy	D
Loredo IMV	V, Brc(T-Y)	Italy	D
Loredo Rubane	Bf/Dk	Italy	C
Luck Dark Cedar	R-RBrw	U.S.A.	B
Luck Dark Cedar Tavernelle	R-RBrw	U.S.A.	B
Luck Dark Rose	Rs	U.S.A.	A
Luck Light Rose	Rs	U.S.A.	A
Luck Medium Rose	Rs	U.S.A.	A
M			
Macchiavecchia	V, Brc(T-Y)	Italy	D
Manyas White	W	Turkey	A
Marblehaus Beige	Bf-C/L	Philippines	B
Marbre du Roi	R	France	C
Mariposa Alagao*	O	Philippines	C
Mariposa Danby	W-Gr	U.S.A.	A
Marron Braun*	Brw	Spain	C
Marron Emperador*	Brw	Spain	C
Marron Imperial*	Brw	Spain	C
Maya	Bf-C/L	Mexico	C
Mezzotint	Gy	U.S.A.	A
Mink Black	Brw	Honduras	A
Mino Nero Antique	Blk	Mexico	C
Moca Crème*	Bf-C/L	Portugal	B
Montclair Danby	W-Gr	U.S.A.	A
N			
Napoleon Grand Melange	Bf-C/L	France	C
Napoleon Grey	Gy	U.S.A.	A
Napoleon Tigre	Bf-C/L	France	C
Naxos	W	Greece	A
Negro Marquina*	Blk	Spain	C
Negro Monterrey	Blk	Mexico	B

Name	Color	Origin	S.C.
N (continued)			
Nero Marquina*	Blk	Spain	C
Nero St. Laurent	Blk	France	D
Noir Cihigue	Blk	France	C
Noir Fleuri	Blk	France	C
Norwegian Rose	Rs	Norway	B
Norwegian Rose (M.L)	Rs	Norway	B
Norwegian Rose (M.S.)	Rs	Norway	B
Notre Dame	Bf-C/L	France	C
Notre Dame A	Bf-C/L	France	C
Nowshera Maroon	R	Pakistan	C
Nuovo Brocatello	V, Brc(T-Y)	Italy	B
Nuvoltao Apuano	Gy-Bl	Italy	B
O			
Olho de Sapo	Bf-C/L	Portugal	B
Ozark Famosa	Brw	U.S.A.	C
Ozark Fleuri	Gy	U.S.A.	A
Ozark Grey Vein	Gy	U.S.A.	A
P			
Paonazetto	V, Brc(Cr-W)	Italy	C
Paradiso	Brw	Italy	D
Paradiso D	Brw	Italy	D
Pardais	Rs	Portugal	A
Pavonazzo	V, Brc(Cr-W)	U.S.A.	A
Pearl Beige	Bf-C/L	Italy	C
Pearl Gray	W-Gy	Guatemala	A
Pearl Grey	Gy	U.S.A.	A
Pentelicon White	W	Greece	A
Penuela	Bf-Dk	Mexico	B
Peperino Grigio	Gy	Italy	C
Peperino Rosato	R	Italy	C
Perla Marina	W-Cr	Italy	C
Perlato d'Italia	Bf-C/L	Italy	C
Perlato Philippines*	Bf-C/L	Philippines	C
Perlato Royal	Bf-C/L	Italy	C
Perlato Sicilia	Bf-C/L	Italy	C
Perlato Suevo	Bf-C/L	Italy	C
Perlino Rosato	P	Italy	C
Petit Granit	Blk	Belgium	B
Piastraccia	V, Brc(Cr-W)	Italy	B
Pietra del Cardoso	Gy	Italy	B
Pietra di Luserna	Gr	Italy	B
Pilion Pink	P	Greece	A
Pink Dutchess	Rs	Spain	C
Pink Ioannina	P	Greece	B
Pink Tennessee	Rs	U.S.A.	A
Plateau Danby	W-Gy	U.S.A.	A
Porto Extra	Blk	Italy	D
Portoro Macchia Fine	Blk	Italy	D
Portoro Macchia Larga	Blk	Italy	D

Name	Color	Origin	S.C.
P (continued)			
Pouillenay	Bf-C/L	France	A
Primavera	Bf-Brw-Y	Philippines	B
Pumpokha White	W	Pakistan	A
Q			
Quetzal Green	Gr	Guatemala	C
R			
Radio Black	Blk	U.S.A.	A
Rainbow	Gy	Honduras	A
Rasotica	Brw	Yugoslavia	D
Red Duquesa	Rs	Spain	C
Red Dutchess	Rs	Spain	C
Red Eretria	R	Greece	C
Red Levanto	R	Italy	D
Red Levanto Rai	R	Italy	D
Red Royale	R	France	C
Red Verona	R	Italy	C
Regal Blue	Bl/Gy	U.S.A.	A
Regal White Danby	W-Cr	U.S.A.	A
Repen Classico Chiaro	Gy	Italy	B
Repen Classico Zolla	Gy	Italy	B
Revermont	Bf-C/L	France	B
Roc Argent	Gy	France	C
Rochebelle Beige*	Bf-C/L	France	B
Rochebelle Rose*	P	France	B
Rocheret*	Y/G	France	B
Rojo Alicante*	R	Spain	C
Rojo Bilbao	R	Spain	C
Rojo Coralito	R	Spain	C
Roman Stone	Gy	Italy	B
Rosa Aurora A	W	Portugal	A
Rosa Aurora B	Bf-C/L	Portugal	A
Rosa Aurora C	W	Portugal	A
Rosa Clasico	Rs	Mexico	C
Rosa de Borba	Rs	Portugal	A
Rosa del Garda	Rs	Italy	C
Rosa do Monte	O	Portugal	A
Rosa do Monte A	Rs	Portugal	A
Rosa do Monte B	Rs	Portugal	A
Rosa Duquesa	Rs	Spain	C
Rosa Emperador	Bf-C/L	Mexico	B
Rosa Imperial	V, Brc(Cr-W)	Mexico	B
Rosa Mexico	R	Mexico	D
Rosa Norvegia	Rs	Norway	B
Rosa Portogallo	Rs	Portugal	B
Rosa Salmon	Rs	Puerto Rico	C
Rosa Surpi	Rs	Greece	C
Rosa Vergado	Rs	Portugal	A
Rosalit	Rs	Yugoslavia	C
Rosato	V, Brc(T-Y)	Italy	C

Name	Color	Origin	S.C.
R (continued)			
Rosatta*	R-RBrw	Philippines	C
Rose Aurora	Rs	Portugal	A
Rose De Felines	Bf-Brw-Y	France	D
Rose Gray	Gy	U.S.A.	A
Rose Turquesa	Rs	Spain	C
Rosso Alicante*	R	Spain	C
Rosso Antico d'Italia	R	Italy	D
Rosso Asiago	R	Italy	C
Rosso Collemantina	R	Italy	D
Rosso Coralito	R	Spain	C
Rosso Francia	R	France	C
Rosso Levanto	R	Italy	D
Rosso Magnaboschi	R	Italy	C
Rosso Magnaboschi Fiorito	R	Italy	C
Rosso Rubino	R	Italy	C
Rosso Verona	R	Italy	C
Rosso Verona Broccato	R	Italy	C
Rouge Antique	R-RBrw	France	C
Rouge Incarnat	R	France	C
Rouge Matadof	R	Spain	C
Rouge Turquin	Gy	France	C
Royal Danby	W-Bl	U.S.A.	A
Royal Fleuri	R-RBrw	U.S.A.	D
Royal White	W	Taiwan	A
Rubane	Bf-C/L	France	C
Ruivina Clara	W-Gy	Portugal	B
Ruivina Escura	Gy	Portugal	B
Ruivina Raiado	W-Gy	Portugal	A
S			
Saint Corneille	Bf-C/L	France	B
Saint Florient	Rs	Portugal	C
Saint Florient Rose	Rs	Portugal	C
Saint Jean Fleury	Brc-Blk/W	France	C
Salanti Red	R	Greece	C
Salome/Leopard	V, Brc(Bl-Gy)	Turkey	C
Santo Tomas	R-RBrw	Mexico	A
Selji Cream	Bf-C/L	Yugoslavia	B
Semi-Rijo*	W-Cr	Portugal	B
Serpeggiante Classico	V, Brc(T-Y)	Italy	C
Serpeggiante di Trani	V, Brc(T-Y)	Italy	C
Serpeggiante Silverbella	V, Brc(T-Y)	Italy	C
Serpentine	Gr	Italy	C
Serpentine Verde Scuro	Gr	Italy	C
Serpentino Classico	Gr	Italy	C
Serpentino di Fundres	Gr	Italy	C
Sierra Madre	Bf-Brw-Y	Germany	A
Snow White	W	Greece	A
Spanish Black*	Blk	Spain	C
St. Anne African Vein	Blk	Morocco	C
St. Florient	Rs	Portugal	C

Name	Color	Origin	S.C.
S (continued)			
St. Thomas	R-RBrw	Mexico	A
Stalattite	R	Italy	C
Staro	W	Taiwan	B
Statuario Venato Carrara	W	Italy	B
Statuary Vein	V, Brc(Cr-W)	Italy	B
Ste. Genevieve Golden Vein	V, Brc(T-Y)	U.S.A.	C
Ste. Genevieve Rose	V, Brc(Cr-W)	U.S.A.	C
Sterling Grey	Gy	U.S.A.	A
Sunflower	V, Brc(T-Y)	Italy	B
Sunset	Gy	Honduras	A
Superior Black	Brc-Blk/W	Honduras	B
Supren	Gy	Turkey	C

T			
Taiwan Jade	Gr	Taiwan	C
Taiwan Green	Gr	Taiwan	C
Tavernelle Chiampo			
Mandorlato	Bf-C/L	Italy	C
Tea Rose	Bl/Gy	China	C
Teresa Beige*	Bf-C/L	Philippines	C
Thassos A-1	W	Greece	A
Thassos White	W	Greece	A
Tienshan Jade	Gr	Taiwan	C
Tigre	Bf-C/L	France	C
Tikal Green	Gr	Guatemala	C
Tinos Green	Gr	Greece	B
Tinos Green Dark	Gr	Greece	C
Topaze*	W-Cr	Portugal	C
Trani Chiaro	Bf-C/L	Italy	C
Trani Perlato	Bf-C/L	Italy	C
Trani Unito	Bf-C/L	Italy	C
Trigaxes Claro	Gy	Portugal	A
Trigaxes Escuro	Gy	Portugal	A
Tropical Gray	Gy	Honduras	A
Tropical White	W-Gy	Honduras	B
Tsapolino	Gy-Bl	Greece	B

U			
Uliano Venato	Gy-Bl	Italy	A

V			
Valencia Rose	P	Spain	B
Veined Black B	Brc-Blk/W	Taiwan	C
Veined Black C	Brc-Blk/W	Taiwan	C
Venezuelan Pink	P	Venezuela	B
Verde Acceglio	Gr	Italy	D
Verde Alpi Cesana	Gr	Italy	C
Verde Antique	Gr	U.S.A.	C
Verde Antonio	Gr	Italy	C
Verde Aver	Gr	Italy	C

Name	Color	Origin	S.C.
V (continued)			
Verde Dorato	Gr	Italy	C
Verde Fraye	Gr	Italy	C
Verde Giada	Gr	Italy	C
Verde Gressoney	Gr	Italy	C
Verde Imperiale	Gr	Italy	C
Verde Issorie	Gr	Italy	C
Verde Patrizia	Gr	Italy	C
Verde Smeraldo	Gr	Italy	C
Verde St. Denis	Gr	Italy	C
Verde Svezia	Gr	Sweden	B
Verde Tiffany	Gy	Italy	C
Verde Tinos	Gr	Greece	C
Verde Viana Claro	Gr	Portugal	A
Verde Viana Cristal	Gr	Portugal	A
Verde Viana Escuro	Gr	Portugal	A
Veria White	W	Greece	A
Vermont Verde Antique	Gr	U.S.A.	C
Vert d'Estours	Gr	France	C
Vert d'Irlande	Gr	Ireland	C
Vert Jade	Gr	Italy	C
Vert Racega	Gr	Italy	C
Villa Gray	V, Brc(Bl-Gy)	China	C
Villebois*	Gy	France	C
Vize Pink	P	Turkey	A
Volou Pink	P	Greece	B
Vulcano	Bf-Dk	Italy	C

W			
Waterloo White	W-Gy	Canada	B
White Alabama	W	U.S.A.	A
White Carrara	W	Italy	A
White Carrara C	W	Italy	A
White Carrara C/A	W	Italy	A
White Carrara D	W	Italy	A
White Cherokee	W-Gy	U.S.A.	A
White Georgia	W-Go	U.S.A.	A
White Georgia Golden Vien	W-Go	U.S.A.	A
White Veined Statuary	W	Italy	B

X			
Xita*	P	Portugal	C

Y			
Yellow Siena	Y/G	Italy	C
Yellow Verona	Y/G	Italy	C

* Denotes hard or dolomitic limestones capable of taking a polish and known commercially as marble.

Onyx Varieties

Name	Color	Origin	S.C.
A			
Agata Malaga	Brw	Spain	C
Arabescato Vittoria	V, Brc(Cr-W)	Norway	D
C			
Cabrino	Bl/Gy	Peru	D
H			
Honey Onyx	Bf-C/L	Spain	C
M			
Mexican Onyx	V, Brc(Cr-W)	Mexico	C
O			
Onice Pakistan	Gr	Pakistan	D
Onyx Carbino	Bl/Gy	Peru	D
P			
Pakistan Onyx	Gr	Pakistan	D
V			
Vista Grande Onyx	W-Brw	U.S.A.	C
Vista Grande Onyx Vein	W-Brw	U.S.A.	C

Travertine Varieties

The soundness classification of “C” for most travertines is the result of the filling process used. Unfilled travertines would be classified in either group “A” or “B.” Contact your travertine producer for additional information.

C			
Caesar (Roman Classic Travertine)	Bf-C/L	Italy	C
Classico (Roman Classic Travertine)	Bf-C/L	Italy	C
Colosseo (Roman Classic Travertine)	Bf-C/L	Italy	C
Continental Buff Travertine	Bf-C/L	U.S.A.	C
D			
Denizli Travertine	Bf-C/L	Turkey	C
Desert Crème Travertine	Bf-Dk	U.S.A.	C
Desert Gold Fleuri Travertine	Y/G	U.S.A.	C
Desert Gold Veined Travertine	Y/G	U.S.A.	C

Name	Color	Origin	S.C.
I			
Imperial Travertine	Y/G	Spain	C
Incas Golden Travertine	Y/G	Peru	C
M			
Montemerano Travertine	Bf-Dk	Italy	C
N			
Navona Travertine	Bf-C/L	Italy	C
O			
Oniciato (Roman Travertine)	Brw	Italy	C
Osso Travertine	Bf-C/L	Italy	C
P			
Pantheon (Roman Classic Travertine)	Bf-C/L	Italy	C
Peruvian Golden Travertine	Y/G	Peru	C
Pueblo Travertine	Bf-C/L	Mexico	D
R			
Remo (Roman Classic Travertine)	W-Cr	Italy	C
S			
Scheherazade Fleuri Travertine	P	U.S.A.	C
Scheherazade Vein Travertine	P	U.S.A.	C
St. Peter Travertine	Brw	Italy	C
Striato Travertine	Bf-Dk	Italy	C
T			
Temple Crème Travertine	Bf-C/L	U.S.A.	C
Travertine “N”	Bf-C/L	Italy	C
Travertine BS Larry Light	Bf-C/L	Italy	C
Travertine Light	Bf-C/L	Mexico	C
Travertino	Brw	Portugal	C
Travertino Iberico	Bf-C/L	Spain	C
Travertino Moonlight	Bf-C/L	Italy	C
Travertino Nole	Brw	Italy	C
Travertino Paglierino	Bf	Italy	C
Travertino Rojo	R-RBrw	Spain	C
Travertino Silver	Gr-Bl	Italy	C
W			
Walnut Travertine	Brw	Italy	C