

# stone identification marble, limestone, travertine

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How do I tell the difference between marble, travertine and limestone? I have seen the same stone tile at different stores, one store called it marble the other said it was a high grade travertine. Does travertine always have "holes" on the back side of the tile? Does marble always have veins? I am looking for a stone tile for my shower and want to make sure I select the correct stone. Thanks!

Dear Laurie:

True geological marble is a calcareous rock with a content of at least 60% of Calcium Carbonate (a.k.a. calcite) derived from the metamorphosis of limestone. In other words, marble comes from limestone and, though now physically different because of the metamorphosis (transformation), is chemically still the same.

Travertine is clastic-chemical limestone that was formed in a very particular way and, because of that, is the only stone in the world that's (relatively) consistent, no matter in which country it is found and quarried. And yes, it has holes all the time.

Limestone is too wide of a classification to be summarized in a couple of sentences, but in general it is a sedimentary rock derived from the calcification of marine microorganisms. It could also go through a chemical alteration, by which it becomes dolostone (dolomitic limestone), from which, through further metamorphism it could turn into dolomitic marble.

But now that you know all this, how "intelligent" are you to make the "right" selection for your shower?

For instance, by saying limestone you're saying very little "if anything at all. There are many different (and I do mean **different**) kinds of limestone that span from dense and acceptable rocks, to limestone that will actually fall apart under running water or "powder" or "bleach" (all problems with no solution), and everything in between.

So which limestone do you have in mind? And please, don't tell me some fancy name and country of origin: I need a technical sheet of your stone (which most likely doesn't even exist) with its mineralogy analysis, and all that kind of goodies.

And about marble? Beside the calcareous and dolomitic marbles, we have a whole bunch of stones traded as marble that do not meet its geological classification. In fact, the vast majority of stones traded as marble are compact or micritic limestones and dolostones, which if the stone is right and the grading is right, are even "better" than true marble. And then there are serpentinite and ophalcalcite traded as marble!

As mentioned before, travertine is the (relatively) most consistent and therefore (relatively again) predictable stone. It

also just so happen to be at the top of the list together with the best stones to be installed in a wet environment. But then again, even this doesn't mean much. The grading is paramount (or, better said, alas, it *should be* paramount “ if there were any official mandatory grading, which does not exist). And then there's the installation issue. You put the “bestest” stone on planet Earth in the hands of some “Michelangelo” to install it in your stall, and before you know it you're gonna be in a world of hurt with a jackhammer as the only possible solution!

So, as you can see, there's not much that I could possibly learn from the answers to a few questions. Stone is inherently complicated and it can't be kept simple through ignorance like the stone industry establishment has been complacently doing for over 60 years.

Should you then give up stone in your shower stall altogether?

Not if you ask me, you should not. But, very definitely, you need a guidance that, unfortunately, you can't expect from most stone industry operators.

So then, what could you do?

You could use our convenient “1-on-1” consultation service that's available in the [http://www.mbstone.com/training/training\\_&\\_consultation.htm](http://www.mbstone.com/training/training_&_consultation.htm). Bear in mind that by purchasing that service you will be supporting the cause of this site, which is **your** cause, because not a single penny of the consultation fee will end up in the pockets of any of the experts participating to this forum. All money will be reinvested for the promotion of the site, which represents your only possible tool to have your voice heard within the stone industry.

I hope you can appreciate that.

Also, will you please read and e-sign our Statement of Purpose at: <http://www.marblecleaning.org/purpose.htm?>

By spreading the word about this valuable site among your friend & family and the stone trades' people you've been dealing with, you will be rendering everybody a valuable service!

Thank you

Ciao and good luck,

Maurizio Bertoli

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