

ANSI A137.1 & ISO 13006

KEY DIFFERENCES



Bond Strength

ANSI A137.1 adds this essential test method, while ISO does not. Bond strength is an important evaluation to ensure the proper bond of the tile to a substrate can be achieved. If not tested, bond issues can arise years after installation.



Breaking Strength

There is no way to determine if a product will meet ANSI A137.1 breaking strength criteria from the ISO 13006 test result because they use two different methodologies. Strength is of upmost importance when it comes to ensuring the durability of an installation.



Crazing Resistance

ANSI A137.1 requires testing at double the pressure of ISO 13006. This more stringent test requirement can avoid problems with crazing once installed, something that can't be fixed without ripping old tile out and replacing it completely.



Freeze/Thaw Resistance

The ASTM method, specified in ANSI A137.1, uses 3x as many freeze/thaw cycles as ISO and requires full saturation of the tile before testing. The tile is then frozen in a water bath to replicate conditions experienced in freeze/thaw applications.



Dynamic Coefficient of Friction

Slip resistance is not addressed in ISO 13006. It is essential to understand slip resistance characteristics of a flooring material. Without this information, the product may be used in an inappropriate application, leading to potentially dangerous conditions.



Dimensional Tolerances

ANSI A137.1 requires tighter limits on variation, while ISO 13006 requires broader tolerances. Less stringent tolerances may lead to difficulties when installing the tile and even failures due to lippage or other spacing problems.



Mosaic Tiles

This is a very popular product category that isn't covered in ISO 13006. ANSI A137.1 has a table of criteria for mosaics that has requirements like all other tile categories. Mosaic products should be held to the same level of scrutiny as other tile products.