

## C1895-19C1895-20 Standard

### Test Method for Determination of Mohs Scratch Hardness of Ceramic Tile

This standard is issued under the fixed designation C1895; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval. Scope

This test method covers

the procedures to determine the Mohs scratch hardness of ceramic ~~tile~~, tile, ~~glass tile, and other hard surfaces.~~ Units—The

values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard. This

standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use. This

international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee. Significance and Use Mohs scratch hardness

is a useful tool for determining a ceramic tile's resistance to scratching.

The resistance to scratching is determined based on a visual observation of the ceramic tile surface after an attempt to scratch the surface using a pick of known hardness. Apparatus

#### Picks: 2: Hardness

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~~Hardness Pick Sled~~, a A fixture

used to hold the hardness pick at a  $70 \pm 5^\circ$  angle (see Fig. 1a, Fig.

1b, and Fig. 1c).

The sled shall be capable of applying a force of  $7 \pm 0.5$  lb. ( $3.2 \pm 0.2$  kg) where the hardness point contacts the test specimen (see Fig.

2). This may be accomplished by adding

an auxiliary weight to the top of the sled. The sled shall be equipped with a handle to aid in pulling the hardness pick across the test specimen. Note 1 The

total weight necessary to apply the required force will vary based on the overall weight of the sled and location of the weight on the sled, if an auxiliary weight is used. Jeweler's

Loupe or other suitable magnification device. Jeweler's

Loupe or Other Suitable Magnification Device. Sharpening

Stone or Whetstone—Sharpening stone or whetstone, a A

surface constructed of suitable material to sharpen the hardness picks. Diamond