

ASTM (AMERICAN SOCIETY for TESTING and MATERIALS) SPECIFICATION and METHODS

2020

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PRODUCTS:4X4"/2X2"INSERTS - METALS:BRONZE/PEWTER/B.NICKEL@OPPER/O.R.BRONZE SERIES:URBAN/MOOD/VERTICAL/REFLECTION/FOCUS/HANDCRAFT/WESTERN/RETRO/CUSTOM/VINTAGE/DOT/FLORANCE

ASTM (AMERICAN SOCIETY for TESTING and MATERIALS) SPECIFICATION and METHODS

| TECHNICAL CHARACTERISTICS TEST | SPECIFICATION SUMMARY ASTM STANDARTS | ASTM TEST METHOD | Niche tiles ASTM TEST RESULTS |
|--------------------------------|--------------------------------------|---------------------------|-------------------------------------|
| Abrasion Resistance | Class 0 – Class V | C1027 | Class 0 |
| Surface Resistivity | N/A | N/A | Non Conductive |
| Scratch Resistance | MOHS 1-10 | MOHS Scale | 5 |
| Breaking Strength | A137.1 ANSI 90 lbs ≤ | C648 | 165 – 173 lbs |
| Frost Resistance | As Reported | C1026 | Not Resistant |
| Chemical Resistance | Class A - Class E | C650 | Class B |
| Bond Strength | A137.1 ANSI | C482 | 136 |
| (Portland Cement with | 50 PSI ≪ | | |
| Polymer Mixed) | | | |
| Water Absorption | 2.0%to 5.0% | C373 | 0.5%to 3.0% |
| Surface Burning | N/A | E84-95B | Class B |
| Stain Resistance | Class A – Class E | C1378 | Class A |
| Wedging Test | A137.1 ANSI 0.6% | C502 | < 0.594% |
| Facial Dimensions | A137.1 ANSI | C499 | Range – Max ≤ 0.59% |
| | | | Avarage ≤ 3% |
| DCOF-Dynamic Coefficient | As Reported | DCOF AcuTest ² | 0.42 |
| of Friction (Wet Areas Only) | | | |
| SCOF-Static Coefficient | As Reported | C1028 | Pass |
| of Friction (Dry) | | | |
| SCOF-Static Coefficient | As Reported | C1028 | N/A (Floor Tile Only) |
| of Friction (Wet) | | | |

¹⁻ Dynamic Coefficient of Friction (DCOF) - Water, oil, grease or other fluids create slippery conditions. When installing floors in areas with exposure to these conditions, a minimum D.C.O.F. volue of 0.42 is required. Additionally, extra caution is required with regards to product selection and proper maintenance. Visit www.tcnatile.com for complete information regarding the DCOF Acutest test method and values.

Document Number: QAD2020-24 REPORT DATE:10/11/2020

Tested Product Thickness: 1/3" Installed and Used in Wet Areas

^{2–} DCOF AcuTest is the industry designation for the test procedure contained in ANSI A137.1 Section 9.6, which has been extensively researched, allows for in-situ field measurements, and is in use at tile manufacturing facilities. It was so named to distinguish it from other DCOF measurements using different instruments and/or protocols.



PRODUCTS:2X12"/1 1/5X12"/0.5X12"/3X9" LINERS – METALS:BRONZE/PEWTER/B.NICC L/COPPER/O.R.BRONZE
SERIES:HERITAGE/IN STYLE CHAIR RAIL & PENCIL LINER/MIXED/DOT/CHIC/LINEAR/FOCUS/HANDCRAFT LINERS

ASTM (AMERICAN SOCIETY for TESTING and MATERIALS) SPECIFICATION and METHODS

| SPECIFICATION | ASTM TEST | Niche tiles |
|----------------------|--|---|
| | | ASTM TEST |
| ASTM STANDARTS | | RESULTS |
| Class 0 – Class V | C1027 | Class 0 |
| N/A | N/A | Non Conductive |
| MOHS 1-10 | MOHS Scale | 5 |
| A137.1 ANSI 90 lbs ≤ | C648 | 130 – 147 lbs |
| As Reported | C1026 | Not Resistant |
| Class A – Class E | C650 | Class B |
| A137.1 ANSI | C482 | 129 |
| 50 PSI ≼ | | |
| | | |
| 2.0%to 5.0% | C373 | 0.5%to 3.0% |
| N/A | E84-95B | Class B |
| Class A – Class E | C1378 | Class A |
| A137.1 ANSI 0.6% < | C502 | ≤ 0.597% |
| A137.1 ANSI | C499 | Range – Max ≤ 0.59% |
| | | Avarage < 3% |
| As Reported | DCOF AcuTest ² | 0.42 |
| | | |
| As Reported | C1028 | Pass |
| | | |
| | | |
| As Reported | C1028 | N/A (Floor Tile Only) |
| | Class 0 - Class V N/A MOHS 1-10 A137.1 ANSI 90 lbs As Reported Class A - Class E A137.1 ANSI 50 PSI 2.0%to 5.0% N/A Class A - Class E A137.1 ANSI 0.6% A137.1 ANSI 0.6% A137.1 ANSI | SUMMARY ASTM STANDARTS METHOD Class 0 - Class V C1027 N/A N/A MOHS 1-10 MOHS Scale A137.1 ANSI 90 lbs ≤ C648 As Reported C1026 Class A - Class E C650 A137.1 ANSI C482 50 PSI ≤ C373 N/A E84-95B Class A - Class E C1378 A137.1 ANSI 0.6% ≤ C502 A137.1 ANSI C499 As Reported DCOF AcuTest² |

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2– DCOF AcuTest is the industry designation for the test procedure contained in ANSI A137.1 Section 9.6, which has been extensively researched, allows for in–situ field measurements, and is in use at tile manufacturing facilities. It was so named to distinguish it from other DCOF measurements using different instruments and/or protocols.

Document Number: QAD2020-26 REPORT DATE:10/01/2020

Tested Product Thickness: 1/3" Installed and Used in Wet Areas



PRODUCTS:12X18"/15 3/4"X23 2/3" MURALS/PLAQUES – METALS:BRONZE/PEWTER/O.R.BRONZE

SERIES: CYPRESS/VIOLA

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| TECHNICAL CHARACTERISTICS TEST | SPECIFICATION SUMMARY ASTM STANDARTS | ASTM TEST METHOD | Niche tiles ASTM TEST RESULTS |
|--------------------------------|--------------------------------------|---------------------------|-------------------------------------|
| Abrasion Resistance | Class 0 – Class V | C1027 | Class 0 |
| Surface Resistivity | N/A | N/A | Non Conductive |
| Scratch Resistance | MOHS 1-10 | MOHS Scale | 5 |
| Breaking Strength | A137.1 ANSI 90 lbs ≤ | C648 | 128 – 134 lbs |
| Frost Resistance | As Reported | CT026 | Not Resistant |
| Chemical Resistance | Class A – Class E | C650 | Class B |
| Bond Strength | A137.1 ANSI | C482 | 133 |
| (Portland Cement with | 50 PSI ≪ | | |
| Polymer Mixed) | | | |
| Water Absorption | 2.0%to 5.0% | C373 | 0.5%to 3.0% |
| Surface Burning | N/A | E84-95B | Class B |
| Stain Resistance | Class A – Class E | C1378 | Class A |
| Wedging Test | A137.1 ANSI 0.6% < | C502 | |
| Facial Dimensions | A137.1 ANSI | C499 | Range – Max ≤ 0.58% |
| | | | Avarage ≤ 3% |
| DCOF-Dynamic Coefficient | As Reported | DCOF AcuTest ² | 0.42 |
| of Friction (Wet Areas Only) | | | |
| SCOF-Static Coefficient | As Reported | C1028 | Pass |
| of Friction (Dry) | | | |
| SCOF-Static Coefficient | As Reported | C1028 | N/A (Floor Tile Only) |
| of Friction (Wet) | | | |

¹⁻ Dynamic Coefficient of Friction (DCOF) - Water, oil, grease or other fluids create slippery conditions. When installing floors in areas with exposure to these conditions, a minimum D.C.O.F. volue of 0.42 is required. Additionally, extra caution is required with regards to product selection and proper maintenance. Visit www.tcnatile.com for complete information regarding the DCOF Acutest test method and values.

Document Number: QAD2020-32 REPORT DATE:12/04/2020

Tested Product Thickness: 1/2" Installed and Used in Wet Areas

²⁻ DCOF AcuTest is the industry designation for the test procedure contained in ANSI A137.1 Section 9.6, which has been extensively researched, allows for in-situ field measurements, and is in use at tile manufacturing facilities. It was so named to distinguish it from other DCOF measurements using different instruments and/or protocols.